

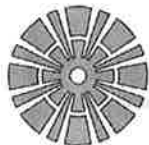
2013 - 2014 Preventive Maintenance Program

Prepared Exclusively For:

Village Of Palos Park
8999 W. 123rd Street
Palos Park, IL 60464
(708) 671-3700

Proposal Date:

January 28, 2013



C.A. HAYES MECHANICAL

I N C O R P O R A T E D

ENERGY MANAGEMENT • HEATING • AIR CONDITIONING • PIPING • VENTILATION • REFRIGERATION • CONTROLS

15311 S. 70TH COURT
ORLAND PARK, IL 60462

TEL (708) 535-9100
FAX (708) 535-9200

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Program Outline

1. Executive Summary

C.A. Hayes Mechanical Inc. would like to thank Village Of Palos Park for this opportunity to propose the following customer tailored mechanical solution for you heating, ventilation and air conditioning (HVAC) equipment. We wish to thank Mr. Steve Manning for their assistance in getting the needed information to make this proposal possible.

In today's economy, organizations like Village Of Palos Park are charged with finding ways to continually improve upon quality service while containing or reducing costs. During this time, effective strategic decision-making is crucial to meeting those higher standards. C.A. Hayes Mechanical Inc. is a resource that offers turnkey, integrated mechanical maintenance solutions designed to help meet those goals. C.A. Hayes Mechanical Inc. is dedicated to identifying, developing and implementing strategies that will reduce your cost structure through the implementation of optimally designed mechanical maintenance programs.

2. Benefits of Programmed Maintenance

The programmed maintenance agreement you are about to review is the optimum choice for Village Of Palos Park to maintain its HVAC equipment operating at peak efficiency. This program is customized to meet all of the unique requirements of your specific HVAC equipment. Village Of Palos Park will derive many benefits from a well-designed and implemented preventive maintenance agreement such as the one we are offering here.

C.A. Hayes Mechanical Inc.'s maintenance program is designed to help you reduce the cost of operating and maintaining your HVAC systems. Studies have shown that our type of maintenance program can help you:

- Avoid excessive downtime and employee productivity losses.
- Avoid energy waste.
- Extend the useful life of your equipment.
- Reduce administrative costs associated with managing HVAC services.

Our goal is to help you control your overall maintenance costs via an optimum blend of predictive, diagnostic and scheduled maintenance tasking services. With this preventive maintenance agreement, Village Of Palos Park will receive the following benefits:

a. Energy Dollar Savings

Programmed maintenance keeps Village Of Palos Park's equipment in peak operating condition, thereby reducing energy consumption.

b. Operating Cost Savings

By implementing a preventive maintenance agreement, system efficiency is returned to an optimum level and operating costs and productivity losses are reduced to a minimum.

c. Elimination of Expensive Down Time

Proper functioning of equipment means money in your pocket. This preventive maintenance agreement provides the manufacturer's recommended maintenance tasking procedures for your equipment on a predetermined schedule. Our program reduces equipment failures and costly equipment down time while increasing employee productivity.

d. Extended Equipment Life

C.A. Hayes Mechanical Inc.'s preventive maintenance agreement keeps your equipment in optimum condition. This maintenance program is custom tailored to increase the life expectancy of your equipment over that of improperly maintained equipment. The result is the deferral of costly replacement expenditures.

e. Improved Indoor Air Quality

This program is designed to allow your equipment to operate within the original design environment specifications they were engineered to provide. The first line of defense against possible, perceived or real environmental complaints is proof of a verifiable maintenance program that provides for proper ventilation and comfort control. Our program will help you meet these challenges while providing an environment that is healthy for your tenants.

f. Increased Comfort Control

Studies have shown that consistent comfort control keeps your occupants happy, which increases productivity levels to peak performances.

3. Program Implementation Team

C.A. Hayes Mechanical Inc. has assembled a specialized equipment maintenance team dedicated to ensure a smooth integration of this maintenance program with Village Of Palos Park's normal business activities. This team will ensure consistency in the delivery of your maintenance program, provide for effective lines of communication and avoid escorting unfamiliar people throughout your facility.

Your original contact will continue to work closely with you along with the implementation team to preserve the integrity of your equipment, reduce energy and operating costs and to maintain occupant comfort.

Patrick Pedota will be your account manager. The primary responsibility of the account manager is to ensure proper coordination of the execution of this maintenance program, as well as, being your direct contact for technical support. Patrick Pedota can be reached at (708) 535-9100 or by e-mail at pat@cahayes.com.

If Patrick Pedota is unavailable, requests for service can be made to our office staff and your request will be handled appropriately.

4. Standard Program Features

The implementation of your preventive maintenance will include the following scope of service to be provided on the equipment described in the list of maintained equipment included with this agreement.

a. Scheduled Inspections

C.A. Hayes Mechanical Inc. will provide annual and operational inspections in accordance with the frequencies identified in the maintenance schedule included with this agreement. The maintenance tasking procedures, which our technicians follow, are determined by the manufacturer's recommendations, equipment application and our own extensive experience. Our program includes all gaskets, oils and lubricants required to perform inspection procedures.

b. Corrective Maintenance Notification

The main objective of this preventive maintenance program is to maintain your equipment at optimum peak efficiency by performing scheduled maintenance procedures. During the course of executing the maintenance tasking procedures, our technicians are trained to identify impending problems before they cause unplanned down time. Village Of Palos Park will be notified of any problems, and any repairs or maintenance required will be performed on a quoted or time and material basis.

c. Trouble Calls and Emergency Calls

Even with the comprehensive care provided in this program, occasional failures can occur. During normal business hours and afterhours, even during peak heating and cooling seasons, you will receive preferential treatment and we will have a technician on site within four (4) hours from receipt of your request. To request afterhours emergency service, please call our main office number at (708) 535-9100 and when prompted, leave a message in our emergency mailbox that includes your name, organization and phone number where we can reach you. The message will be forwarded to a member of our staff and you will receive a call back immediately. Trouble calls and emergency calls will be billed on a time and material basis.

d. Service Documentation

We will document all scheduled and unscheduled service work showing the time, date, name of service technician, equipment identification and brief description of work.

e. Refrigerant Containment Service

Any maintenance tasks performed during our scheduled inspections that are covered in the scope of this agreement requiring the handling of refrigerant will be performed according to federal, state and local regulatory guidelines in addition to EPA guidelines. We will recover, recycle or reclaim your refrigerant as appropriate to minimize costs of replacement refrigerant. Should refrigerant need to be reclaimed and disposed of and / or if additional refrigerant is needed, Village Of Palos Park will be billed for any disposal charges as well as the cost of new refrigerant.

f. Engineering Support

This maintenance program includes engineering support services to include identifying indoor air quality problems, solving comfort complaints and modifications to reduce or add air conditioning, heating or ventilation capacity in your facilities.

g. Performance Assurance Program

We will meet with you annually or more frequently upon request to evaluate and make modifications, if necessary, to this maintenance program to assure that it continues to meet both your business and technical requirements.

5. Optional Program Features

The implementation of your preventive maintenance will include the following scope of optional services to be provided on the equipment describe in the list of maintained equipment and at the frequencies described in the maintenance schedule, both of which are included within this agreement.

Air Filter Maintenance

If checked, air filter changes per the frequency located in the maintenance schedule are included with this agreement. C.A. Hayes Mechanical Inc. will provide the labor and materials required to maintain this agreement. All filters supplied will be standard capacity, pleated filters.

Condenser Coil Cleaning

If checked, condenser coil cleanings for outdoor units per the frequency located in the maintenance schedule are included with this agreement. C.A. Hayes Mechanical Inc. will provide the labor and materials required to maintain this agreement.

Drive Belt Replacement

If checked, units that include drive belts will have the drive belts replaced per the frequency located in the maintenance schedule. C.A. Hayes Mechanical Inc. will provide the labor and materials required to maintain this agreement. Drive belts supplied will be as specified by the equipment manufacturer.

6. Conclusion

C.A. Hayes Mechanical Inc. would like to once again thank Village Of Palos Park for the opportunity to make this proposal. If upon complete review of this proposal there is a change in your needs as an organization, please let us know and we will further tailor this agreement to meet your needs. Thank you for your interest in C.A. Hayes Mechanical Inc.

Standard Terms and Conditions

- A. Planned and / or routine maintenance services provided under this agreement will be performed during normal business hours. Any labor performed outside of normal business hours will be invoiced to Village Of Palos Park at the standard overtime rate. Normal business hours are defined as Monday through Friday, 7 a.m. through 3:30 p.m.
- B. The guarantees and services provided under the scope of this agreement are conditioned upon Village Of Palos Park operating and maintaining systems and equipment. Village Of Palos Park will do so in accordance with industry-accepted practices and in consideration of our recommendations.
- C. Village Of Palos Park will provide and permit reasonable access to all covered equipment. C.A. Hayes Mechanical Inc. will be allowed to start and stop equipment as necessary to perform its services and be permitted use of existing facilities and building services.
- D. Village Of Palos Park agrees to accept the judgment of C.A. Hayes Mechanical Inc. as to the best means and methods to be employed for any corrective or repair work necessary and to have work performed promptly. Failure to do so will release and terminate all obligations of C.A. Hayes Mechanical Inc. as it pertains to this agreement.
- E. This proposal assumes that all pieces of equipment are in proper operating condition. C.A. Hayes Mechanical Inc. shall inspect and report to Village Of Palos Park any malfunctions and defects within thirty (30) days after the first scheduled inspections performed under the scope of this agreement. If the equipment cannot be operated within the thirty (30) day period due to seasonal conditions or other factors beyond C.A. Hayes Mechanical Inc.'s control, the period for initial inspection will be extended for a mutually agreed upon period. Upon completion of the inspection, it shall be the responsibility of C.A. Hayes Mechanical Inc. to make recommendations and to assist Village Of Palos Park in restoring the equipment to its proper operating condition. However, all of the restoration costs shall be borne by Village Of Palos Park unless otherwise stated in this proposal. Any piece of covered equipment will be excluded from this proposal if the reported recommendations from the inspection are not accepted and restoration work not performed. If this is a renewal of an agreement from the prior year, with no gaps in effective periods, the inspections from the prior agreement will serve as the initial inspections for this agreement.
- F. Under no circumstances will C.A. Hayes Mechanical Inc. be responsible for loss of use, loss of profits, increased operating or maintenance expense, claims of Village Of Palos Park's occupants or any special, indirect or consequential circumstances.
- G. This agreement does not include responsibility for system design deficiencies, such as, but not limited to, poor air distribution, water flow imbalances, etc. It does not include responsibility for system, equipment or component obsolescence, electrical failures, unserviceable equipment or operating the system.
- H. C.A. Hayes Mechanical Inc. will not be liable for delays or failures due to fire, flood, strike, lockout, freezing, unavailability of materials, riot, acts of God or any cause beyond reasonable control.
- I. C.A. Hayes Mechanical Inc. will not be responsible for the removal or disposal of any hazardous material or any cost associated with these materials unless otherwise noted in this agreement. Any charges incurred for the removal and / or disposal of hazardous materials will be borne by Village Of Palos Park on a time and material basis.
- J. This agreement does not include any services occasioned by improper operation, negligence, vandalism, alterations, modifications, abuse, misuse or repairs to equipment not performed by C.A. Hayes Mechanical Inc.
- K. C.A. Hayes Mechanical Inc. will not be required to furnish any items of equipment, labor or make special tests recommended or required by insurance companies, federal or state municipalities or other authorities except otherwise noted in this agreement.
- L. This agreement does not include the cleaning of any air passages, ductwork, grilles or air balancing systems.
- M. C.A. Hayes Mechanical Inc. will not be responsible for disarming, disabling, altering or otherwise changing any life safety systems anywhere on Village Of Palos Park's property in order to perform work on any equipment contained within this agreement or any equipment on Village Of Palos Park's property.
- N. In the event either party must commence a legal action in order to enforce any rights under this agreement, the successful party shall be entitled to all court costs and reasonable attorney's fees as determined by the court for prosecuting and defending the claim, as the case may be.
- O. C.A. Hayes Mechanical Inc. will not be liable for the operation of the equipment nor for injuries to persons or damage to property, except those directly due to the negligent acts or omissions of its employees and in no event shall it be liable for consequential or speculative damages.
- P. C.A. Hayes Mechanical Inc. shall not be liable for any expense incurred in removing, replacing or refinishing any part of the building structure necessary to the execution of this agreement.
- Q. C.A. Hayes Mechanical Inc. shall not be liable for any loss by reason of strikes, labor troubles affecting its employees who perform the service called for herein, delays in transportation, delays caused by priority, preference rating, orders, regulations established by any government authority, unusual delays in procuring supplies or for any other cause beyond our reasonable control.
- R. Only C.A. Hayes Mechanical Inc.'s personnel or agents are authorized to perform the work included in the scope of this agreement. C.A. Hayes Mechanical Inc. may, at its option, choose to cancel or waive its obligations under this agreement should any non-authorized individuals perform such work.
- S. This agreement and all rights herein shall not be assignable unless approved in writing and signed by an authorized agent of C.A. Hayes Mechanical Inc.
- T. In the event of additional freight, labor or material cost resulting from Village Of Palos Park's request to avoid delays with respect to equipment warranties or accelerated delivery of parts and supplies, Village Of Palos Park agrees to pay these additional costs at C.A. Hayes Mechanical Inc.'s currently established rates.
- U. C.A. Hayes Mechanical Inc.'s scope of work shall not include the identification, detection, abatement, encapsulation or removal of asbestos or products and materials containing asbestos or similar hazardous materials. In the event that C.A. Hayes Mechanical Inc.'s employees encounter such material in performing its work, C.A. Hayes Mechanical Inc. will have the right to discontinue work and remove its employees until the hazard is corrected or it is determined that no hazard exists. C.A. Hayes Mechanical Inc. shall not be held liable for any loss related to the discovery of asbestos, materials containing asbestos or similar hazardous materials.
- V. This agreement contains the entire contract and the parties hereby agree that this agreement has been agreed to and the entire agreement is then accepted and approved by an authorized agent for both parties, and no statement, remark, agreement or understanding, oral or written, not contained within, will be recognized or enforced.
- W. The maintenance task lists included within this proposal are designed to give a general idea of maintenance procedures performed on certain types of equipment. These task lists are not an indication of what maintenance tasks will be performed on Village Of Palos Park's equipment and will vary based on specific equipment needs.
- X. The hourly rates for service indicated in this proposal are current as of the date of this proposal. These rates do not include fuel and / or truck charges and may change at any time.
- Y. Village Of Palos Park acknowledges and agrees that any purchase order issued by Village Of Palos Park in accordance with this agreement is intended only to establish payment authority for Village Of Palos Park's internal accounting purposes. No purchase order shall be considered to be a counteroffer, amendment, modification or other revision to the terms of this agreement. No term or condition included in Village Of Palos Park's purchase order will have any force or effect.
- Z. Should Village Of Palos Park wish to cancel this agreement, it must be done so in writing with thirty (30) days notice. All cancellations must be sent via certified mail through the U.S. Postal Service.
- AA. Should this agreement be cancelled without due cause, Village Of Palos Park shall pay C.A. Hayes Mechanical Inc. twenty-five percent (25%) of the annual price upon cancellation. This cancellation penalty is in addition to any amounts previously paid under this agreement.
- BB. This proposal and pricing contained within shall remain valid for a period of thirty (30) days from the proposal date indicated within this proposal.
- CC. C.A. Hayes Mechanical Inc. will provide a warranty for any defects in workmanship for a period of one (1) year from the date work was completed.
- DD. All parts and materials supplied by C.A. Hayes Mechanical Inc. to perform any work under this contract carry a warranty as defined by the manufacturer of said parts or materials for the period defined by the manufacturer of said parts or materials. C.A. Hayes Mechanical Inc. will not be responsible for any labor charges required to replace parts or materials found to have defects from the manufacturer.

Proposal Acceptance

Prepared Exclusively For:

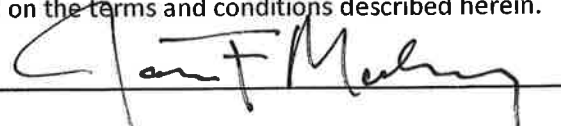
Village Of Palos Park
 8999 W. 123rd Street
 Palos Park, IL 60464
 (708) 671-3700

Contract Price	The total price for labor and material included in this proposal is \$12,360.00 (Twelve Thousand Three Hundred Sixty and 00/100 Dollars).	
Payment Terms	This agreement will be billed in four (4) equal installments billed every three (3) months after the start of this agreement. The first installment of \$3,090.00 (Three Thousand Ninety and 00/100 Dollars) is due upon acceptance of this proposal.	
Effective Period	This agreement will be in effect for a period of one (1) year beginning on the date of May 2, 2013 and ending on the date of April 30, 2014.	
Hourly Service Rates	<u>Through May 31, 2013</u> Normal Business Hours - \$119.00 Afterhours and Saturdays - \$178.50 Sundays and Holidays - \$238.00	<u>June 1, 2013 Forward</u> Normal Business Hours - \$119.00 Afterhours and Saturdays - \$178.50 Sundays and Holidays - \$238.00

This proposal is not an offer to furnish services, but when signed by an authorized agent of Village Of Palos Park at the place indicated below, it becomes Village Of Palos Park's offer to buy the services described herein, at the prices and payment terms described herein and on the terms and conditions indicated herein, which can be accepted only by a written notice of acceptance signed by an authorized officer of C.A. Hayes Mechanical Inc.

Village Of Palos Park

By signing below, I acknowledge that I am an authorized agent of the above listed organization and offer to purchase the services described herein, at the prices and payment terms described herein and on the terms and conditions described herein.

BY: 

TITLE: Mayor

DATE: February 11, 2013

C.A. Hayes Mechanical Inc.

You are hereby notified that the undersigned authorized agent hereby accepts your offer based on the service described herein, the prices and payment terms described herein and on the terms and conditions described herein.

BY: 

TITLE: SERVICE MANAGER

DATE: 2/20/13

Cooling Season Task Lists

AUTOMATIC TEMPERATURE CONTROLS

Air Compressor

- Drain tank and check traps.
- Change oil and check oil pressure.
- Inspect belts and sheaves.
- Inspect unloader and check valves.
- Inspect high pressure safety valves.
- Check motor operating conditions and lubricate.
- Inspect PE switch, starter and alternator.

Refrigerated Air Dryer

- Check refrigerant pressure.
- Check refrigerant temperature.
- Clean condenser and cover grilles.
- Clean drain trap and bypass valves.

Filter and Pressure Reducing Station

- Inspect particle filter.
- Inspect oil filter.
- Inspect pressure reducing valve settings.
- Inspect low pressure safety valve.

Boiler, Chiller, Converter Pumps and Zone Controls

- Calibrate all controllers.
- Calibrate all transmitter and receiver gauges.
- Inspect all control valves.
- Inspect pilot positioners.
- Inspect all PE switches.
- Inspect all auxiliary control devices.

Fan Systems and HVAC Unit Controls

- Review sequence of operation.
- Inspect and lubricate dampers.
- Inspect pilot positioners.
- Inspect all control valves.
- Inspect all controllers.
- Inspect all transmitter and receiver gauges.
- Inspect all solenoid air valves, PE switches and air valves.
- Inspect all auxiliary control devices.
- Inspect all economizer functions.

Room Terminal Unit Controls

- Inspect all room thermostats.
- Inspect all control valves.
- Check operation of unit coil steam traps.
- Inspect and lubricate dampers.
- Inspect all auxiliary control devices.

DDC Controls / Electronic Controls

- Check for failed components.
- Check and set schedules.
- Inspect electronic operators.
- Review sequence of operation.
- Review current programs.
- Change batteries.
- Check remote communication.

COOLING SYSTEMS

Humidifiers

- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect and clean float assembly.
- Clean heating element.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Clean plugged spray nozzles.
- Check unit operating conditions.
- Inspect gas heating section.
- Change pads.

Heat Exchanger

- Visually check for leaks and tighten connections.
- Verify pressure gauge and thermometer are accurate.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect operating / safety controls.
- Clean exterior surfaces as needed.
- Inspect PE switches, solenoid air valves and limit controls.

Chilled Water Cooling

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect and lubricate dampers and linkages.
- Inspect filters.
- Check motor operating conditions.
- Inspect hand valves and steam traps.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect drains and drain pans.
- Inspect heating coils.
- Secure unit panels.

Condensers

Air Cooled - No Compressor

- Remove all debris from within and around unit.
- Visually inspect for leaks.
- Inspect belts, pulleys and mounts.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Check motor operating conditions.
- Inspect fan blades.
- Inspect coil.
- Check operating conditions.

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DX Cooling

RTU / AHU / Split Condenser

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Change belts.
- Inspect coils.
- Clean coils.
- Inspect and lubricate dampers and linkages.
- Inspect drains and drain pans.
- Inspect filters.
- Change filters.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Check compressor oil level.
- Acid test compressor oil.
- Check crankcase heater operation.
- Start compressor and check operating conditions.
- Secure unit panels.
- Visually inspect for refrigerant leaks.

Fans and Central Fan Systems

- Inspect fan assembly.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect motor mounts and vibration pads.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect and lubricate dampers and linkages.
- Check fan operation.
- Clean outside air intake screen.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect filter advancing mechanism.
- Inspect filters.
- Change filters.
- Inspect heating coils.

Reciprocating Chillers

- Visually inspect for leaks.
- Inspect belts, sheaves and coupling alignment.
- Check compressor oil level.
- Acid test compressor oil.
- Check crankcase heater operation and energize.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect vibration eliminators.
- Review manufacturer's recommendation for start up.
- Check auxiliary equipment operation.
- Check refrigerant charge, oil level and oil pressure.
- Log all operating conditions after unit stabilizes.
- Inspect chiller and adjust as necessary.
- Cycle operating controls.
- Inspect unloaders.
- Review chiller operation.

HEATING SYSTEMS

Hot Water Boilers

- Inspect fire side of boiler and record condition.
- Inspect firebrick and refractory for defects.
- Visually inspect boiler pressure vessel for leaks.
- Disassemble, inspect and clean low-water cutoff.
- Inspect hand valves and automatic feed equipment.
- Inspect, clean and lubricate burner and combustion control equipment.
- Check burner sequence of operation.
- Check combustion air equipment.
- Inspect fuel piping for leaks and proper support.
- Test low-water cutoff and pressure relief valve.
- Check operating and safety controls.

Steam Boilers

- Inspect boiler and burner.
- Test low-water cutoff and pressure relief valve.
- Check operating and safety controls.
- Shut off burner and open electrical disconnect.

Pumps

- Lubricate pump bearings and motor bearings per manufacturer's specifications.
- Tighten all nuts and bolts.
- Inspect motor mounts and vibration pads.
- Visually inspect pump alignment and coupling.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect mechanical seals and packing.
- Inspect and clean strainers.
- Inspect hand valves.
- Verify gauges for accuracy.
- Check suction and discharge pressures.

Dehumidifiers

- Inspect and clean fan assembly.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect motor mounts and vibration pads.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect and lubricate dampers and linkages.
- Check fan operation.
- Inspect drains and drain pans.
- Inspect filters.
- Clean outside air intake screen.
- Inspect heating coils.
- Inspect and clean heating section.
- Check and set gas pressure.
- Check and set temperature rise.
- Inspect optional DX cooling.
- Inspect seals.

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MISCELLANEOUS HVAC EQUIPMENT

Unit Ventilator

- Clean and vacuum grilles, coil fan and unit interior.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect filters.
- Change filters.
- Inspect and lubricate dampers and linkages.
- Check unit operating conditions.

Reheat Coils

- Visually inspect coils.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.

Mini Split Systems

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Check unit operation.
- Clean filters.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect drains and drain pans.
- Inspect condenser.
- Clean condenser.

Fan Coils / Unit Heaters

- Clean and vacuum coil, fan, housing and burners.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Check unit operation.
- Check gas pressure and adjust as necessary.

Boxes - Dual Duct and VAV

- Inspect box for ductwork connection.
- Inspect and lubricate dampers and linkages.

Computer Room Units

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Check unit operation.
- Inspect refrigeration system.
- Inspect filters.
- Change filters.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Secure unit panels.
- Inspect drains and drain pans.
- Check water cooling.
- Inspect condenser.
- Inspect humidifier.
- Clean humidifier.
- Clean condenser.

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Heating Season Task Lists

AUTOMATIC TEMPERATURE CONTROLS

Air Compressor

- Drain tank and check traps.
- Change oil and check oil pressure.
- Inspect belts and sheaves.
- Inspect unloader and check valves.
- Inspect high pressure safety valves.
- Check motor operating conditions and lubricate.
- Inspect PE switch, starter and alternator.

Refrigerated Air Dryer

- Check refrigerant pressure.
- Check refrigerant temperature.
- Clean condenser and cover grilles.
- Clean drain trap and bypass valves.

Filter and Pressure Reducing Station

- Inspect particle filter.
- Inspect oil filter.
- Inspect pressure reducing valve settings.
- Inspect low pressure safety valve.

Boiler, Chiller, Convertor

Pumps and Zone Controls

- Calibrate all controllers.
- Calibrate all transmitter and receiver gauges.
- Inspect all control valves.
- Inspect pilot positioners.
- Inspect all PE switches.
- Inspect all auxiliary control devices.

Fan Systems and HVAC Unit Controls

- Review sequence of operation.
- Inspect and lubricate dampers.
- Inspect pilot positioners.
- Inspect all control valves.
- Inspect all controllers.
- Inspect all transmitter and receiver gauges.
- Inspect all solenoid air valves, PE switches and air valves.
- Inspect all auxiliary control devices.
- Inspect all economizer functions.

Room Terminal Unit Controls

- Inspect all room thermostats.
- Inspect all control valves.
- Check operation of unit coil steam traps.
- Inspect and lubricate dampers.
- Inspect all auxiliary control devices.

DDC Controls / Electronic Controls

- Check for failed components.
- Check and set schedules.
- Inspect electronic operators.
- Review sequence of operation.
- Review current programs.
- Change batteries.
- Check remote communication.

BOILERS

Boilers - General

- Inspect safety relief.
- Inspect combustion controls.
- Inspect piping and connections.
- Inspect low-water cutoff.
- Inspect water make up system.
- Inspect room air intake system.
- Inspect valves.
- Inspect water level gauge glass and controls.
- Disassemble low-water cutoff.
- Clean low-water cutoff.
- Inspect contacts.
- Inspect wiring.
- Reassemble low-water cutoff.
- Clean internal and external surfaces.
- Clean burner assembly.
- Clean fireside.
- Inspect flues.
- Inspect refractory.
- Blowdown mud legs.
- Blowdown gauge glass.
- Blowdown feeder cutoff switch.
- Prepare machine for winter conditions.

Gas Boilers

- Inspect burner operation.
- Inspect gas booster.
- Inspect gas regulator.
- Inspect linkage.
- Check for gas leaks.
- Inspect gas safety switches.
- Inspect gas valves.

Steam Boilers

- Inspect condensate float valve.
- Inspect condensate return pumps.
- Inspect condensate tank.
- Inspect pumps.
- Inspect gas safety switches.
- Inspect pressure controls.
- Inspect draft fans / switches.

Electric Boilers

- Inspect magnetic contactors.
- Inspect pressure control.
- Inspect high-limit switch.
- Inspect step controller.

Hot Water Boilers

- Inspect circulating pump system.
- Inspect water cutoff.
- Inspect water feeder.
- Inspect cutoff valves.
- Inspect temperature controls.
- Inspect draft system.

Prepared By:

C.A. Hayes Mechanical, Inc.
15311 S. 70th Court
Orland Park, IL 60462

MISCELLANEOUS HVAC EQUIPMENT

Unit Ventilator

- Clean and vacuum grilles, coil fan and unit interior.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect filters.
- Change filters.
- Inspect and lubricate dampers and linkages.
- Check unit operating conditions.

Reheat Coils

- Visually inspect coils.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.

Humidifiers

- Inspect and clean strainers.
- Inspect and hand valves and steam traps.
- Inspect and clean float assembly.
- Inspect drains and drain pans.
- Clean heating element.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Clean plugged spray nozzles.
- Check unit operating conditions.
- Inspect gas heating section.
- Change pads.

Heat Exchanger

- Visually check for leaks and tighten connections.
- Verify pressure gauge and thermometer are accurate.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect operating / safety controls.
- Clean exterior surfaces as needed.
- Inspect PE switches, solenoid air valves and limit controls.

Radiation

- Visually inspect fins / cast iron.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.

Fan Coils / Unit Heaters

- Clean and vacuum coil, fan, housing and burners.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Check unit operation.
- Check gas pressure and adjust as necessary.

Boxes - Dual Duct and VAV

- Inspect box for ductwork connection.
- Inspect and lubricate dampers and linkages.

Mini Split Systems

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Check unit operation.
- Clean filters.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect drains and drain pans.
- Inspect condenser.
- Clean condenser.

Furnaces

- Lubricate bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Change belts.
- Inspect and lubricate dampers and linkages.
- Inspect drains and drain pans.
- Inspect filters.
- Change filters.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Secure unit panels.
- Remove burners, clean and vacuum.
- Check burner sequence of operation.
- Inspect combustion control equipment.
- Check and adjust gas pressure.

Computer Room Units

- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Check unit operation.
- Inspect refrigeration system.
- Inspect filters.
- Change filters.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Secure unit panels.
- Inspect drains and drain pans.
- Check water cooling.
- Inspect condenser.
- Inspect humidifier.
- Clean humidifier.
- Clean condenser.

Induction Units

- Visually inspect coil.
- Inspect drains and drain pans.
- Clean discharge grille.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.

Fans and Central Fan Systems

- Inspect fan assembly.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect motor mounts and vibration pads.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect and lubricate dampers and linkages.
- Check fan operation.
- Clean outside air intake screen.
- Inspect drains and drain pans.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect filter advancing mechanism.
- Inspect filters.
- Change filters.
- Inspect heating coils.

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C.A. Hayes Mechanical, Inc.
15311 S. 70th Court
Orland Park, IL 60462

Dehumidifiers

- Inspect and clean fan assembly.
- Lubricate fan bearings and motor bearings per manufacturer's specifications.
- Inspect belts and sheaves.
- Inspect motor mounts and vibration pads.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect and lubricate dampers and linkages.
- Check fan operation.
- Inspect drains and drain pans.
- Inspect filters.
- Clean outside air intake screen.
- Inspect heating coils.
- Inspect and clean heating section.
- Check and set gas pressure.
- Check and set temperature rise.
- Inspect optional DX cooling.
- Inspect seals.

Unitary Equipment - RTUs

- Lubricate fan bearings and motor bearings for manufacturer's specifications.
- Inspect belts and sheaves.
- Change belts.
- Inspect belts.
- Clean coils.
- Inspect and lubricate dampers and linkages.
- Inspect drains and drain pans.
- Inspect filters.
- Change filters.
- Check motor operating conditions.
- Inspect electrical connections, contactors, relays and operating / safety controls.
- Inspect and clean strainers.
- Inspect hand valves and steam traps.
- Inspect, clean and lubricate burner.
- Inspect, clean and lubricate combustion controls.
- Secure unit panels.
- Check and adjust gas pressure.

Prepared By:

C.A. Hayes Mechanical, Inc.
15311 S. 70th Court
Orland Park, IL 60462

Covered Equipment List

Kaptur Administrative Center

Unit #	Type	Make	Model #	Serial #	Location	Comments	Notes	Year
AHU-01	AHU	Trane	MCC Size 12	Multiple	1st Floor West Mechanical Room	Serves Village Side	-	-
AHU-02	AHU	Trane	MCC Size 08	Multiple	Basement Mechanical Room	Serves Council Chambers	-	-
AHU-03	AHU	Trane	MCC Size 06	Multiple	1st Floor East Mechanical Room	Serves Police Side	-	-
HWB-01	BLRW	Lochinvar	CHN501	C013846	Basement Mechanical Room	-	-	-
HWB-02	BLRW	Lochinvar	CHN501	C013845	Basement Mechanical Room	-	-	-
CON-01	CON	Trane	TTA240B300DL	Z271PLVAD	Outside	Serves Village Side	-	-
CON-02	CON	Trane	TTA240B300DL	Z271PL6AD	Outside	Serves Council Chambers	-	-
CON-03	CON	Trane	TTA120B200CA	Z2752YSAH	Outside	Serves Police Side	-	-
CUH-01	CUH	Trane	C/Size 4	-	Entry Vestibule	Hall Heat	-	-
CUH-02	CUH	Trane	J/Size 4	-	Basement Stairwell	Stairwell Heat	-	-
CUH-03	CUH	Trane	E/Size 3	-	Administration 104	-	-	-
CBP-01	HWP	Taco	1600C3N1 4.5	-	Basement Mechanical Room	In-Line Booster Pump AHU-02	-	-
EF-01	EXH	Cook	90SQJB	-	Attic	Serves Locker Rooms	-	-
EF-02	EXH	Cook	12CVB	-	Attic	Serves Bathrooms	-	-
EF-03	EXH	Greenheck	BSQ-120-5	-	Attic	Serves Attic Space	-	-
EF-04	EXH	Greenheck	BSQ-120-5	-	Attic	Serves Attic Space	-	-
EF-05	EXH	Cook	GN-140	-	Attic	Serves Conference Room	-	-
EF-06	EXH	Cook	GN-140	-	Attic	Serves Break Room	-	-
RAD-01	RAD	Reznor	TR50	BAD66W7N14093X	Police Garage	-	-	-
PP-01	HWP	Taco	1610C3N1 4.75	-	Basement Mechanical Room	In-Line Boiler #1 Pump	-	-
PP-02	HWP	Taco	1610C3N1 4.75	-	Basement Mechanical Room	In-Line Boiler #2 Pump	-	-
SP-01	HWP	Wilo	-	-	Basement Mechanical Room	In-Line Main Loop Pump #1	-	2010
SP-02	HWP	Wilo	-	-	Basement Mechanical Room	In-Line Main Loop Pump #2	-	2010
TCS-01	TCS	Johnson Controls	Metasys	-	Basement Mechanical Room	-	-	-
UHE-01	UHE	Vulcan	-	-	Basement Mechanical Room	-	-	-
UHE-02	UHE	Vulcan	-	-	1st Floor West Mechanical Room	-	-	-
UHE-03	UHE	Vulcan	-	-	Upstairs Storage Area	-	-	-
UHE-04	UHE	Vulcan	-	-	Police Locker Room	-	-	-
UHE-05	UHE	Vulcan	-	-	Police Storage	-	-	-
UHE-06	UHE	Vulcan	-	-	1st Floor East Mechanical Room	-	-	-
UHE-07	UHE	Vulcan	-	-	Police Property	-	-	-
UHE-08	UHE	Vulcan	-	-	Police Evidence	-	-	-
UHE-09	UHE	Vulcan	-	-	Attic	-	-	-
UHE-10	UHE	Vulcan	-	-	Attic	-	-	-
UHE-11	UHE	Vulcan	-	-	Attic	-	-	-
UHE-12	UHE	Vulcan	-	-	Attic	-	-	-
UHE-13	UHE	Vulcan	-	-	Attic	-	-	-
UHE-14	UHE	Vulcan	-	-	Attic	-	-	-
UHE-15	UHE	Vulcan	-	-	Attic	-	-	-
VAV-01	VAV	Price	SDU5000	-	-	-	-	-
VAV-02	VAV	Price	SDU5000	-	-	-	-	-
VAV-03	VAV	Price	SDU5000	-	-	-	-	-
VAV-04	VAV	Price	SDU5000	-	-	-	-	-
VAV-05	VAV	Price	SDU5000	-	-	-	-	-
VAV-06	VAV	Price	SDU5000	-	-	-	-	-
VAV-07	VAV	Price	SDU5000	-	-	-	-	-
VAV-08	VAV	Price	SDU5000	-	-	-	-	-
VAV-09	VAV	Price	SDU5000	-	-	-	-	-
VAV-10	VAV	Price	SDU5000	-	-	-	-	-
VAV-11	VAV	Price	SDU5000	-	-	-	-	-
VAV-12	VAV	Price	SDU5000	-	-	-	-	-
VAV-13	VAV	Price	SDU5000	-	-	-	-	-
VAV-14	VAV	Price	SDU5000	-	-	-	-	-
VAV-15	VAV	Price	SDU5000	-	-	-	-	-
VAV-16	VAV	Price	SDU5000	-	-	-	-	-
VAV-17	VAV	Price	SDU5000	-	-	-	-	-
VAV-18	VAV	Price	SDU5000	-	-	-	-	-

RECREATION CENTER

Unit #	Type	Make	Model #	Serial #	Location	Comments	Notes	Year
AHU-01	AHU	Comfortmaker	BYMB024-030GA	R901800181	-	-	-	-
AHU-02	AHU	Comfortmaker	DBYHA018G	H904307444	-	-	-	-
AHU-03	AHU	Carrier	-	-	-	-	-	-
AHU-04	AHU	York	N2AHD10A06A	MESS188985	-	-	-	-
AHU-05	AHU	York	N2AHD10A06A	-	-	-	-	-
AHU-06	AHU	Carrier	-	-	-	-	-	-
CON-01	CON	Trane	TTR025C100AA	R2753J4YF	-	-	-	-
CON-02	CON	-	-	-	-	-	-	-
CON-03	CON	Carrier	38TG018300	3089E74923	-	-	-	-
CON-04	CON	York	-	-	-	-	-	-
CON-05	CON	York	-	-	-	-	-	-
CON-06	CON	Carrier	38TG018300	3089E74932	-	-	-	-
HWB-01	BLRW	A.O. Smith	HW428072	-	Basement Boiler Room	Boiler A - Serves Offices	-	-
HWB-02	BLRW	A.O. Smith	HW428072	8728892831	Basement Boiler Room	Boiler B	-	-
HWB-03	BLRW	A.O. Smith	HW428072	872D908528	Basement Boiler Room	Boiler C	-	-
HWP-01	HWP	-	-	-	-	-	-	-
HWP-02	HWP	-	-	-	-	-	-	-
HWP-03	HWP	-	-	-	-	-	-	-
HWP-04	HWP	-	-	-	-	-	-	-
HWP-05	HWP	-	-	-	-	-	-	-
HWP-06	HWP	-	-	-	-	-	-	-
HWP-07	HWP	-	-	-	-	-	-	-
RTU-01	RTU	Trane	-	-	Ground SW of Building	A/C Only - Gym	-	-

METRA STATION

Unit #	Type	Make	Model #	Serial #	Location	Comments	Notes	Year
CON-01	CON	-	-	-	-	-	-	-
EF-01	EXH	-	-	-	-	-	-	-
EF-02	EXH	-	-	-	-	-	-	-
FUR-01	EXH	-	-	-	-	-	-	-
HWH-01	HWH	-	-	-	-	-	-	-

Equipment Maintenance Schedule

KAPTUR ADMINISTRATION CENTER

Unit #	Type	# Heating Inspections	# Cooling Inspections	# Filter Changes	# Belt Changes	# Coil Cleanings
AHU-01	AHU	1	1	0	1	0
AHU-02	AHU	1	1	0	1	0
AHU-03	AHU	1	1	0	1	0
HWB-01	BLRW	1	0	0	0	0
HWB-02	BLRW	1	0	0	0	0
CON-01	CON	0	1	0	0	1
CON-02	CON	0	1	0	0	1
CON-03	CON	0	1	0	0	1
CUH-01	CUH	1	0	0	0	0
CUH-02	CUH	1	0	0	0	0
CUH-03	CUH	1	0	0	0	0
CBP-01	HWP	1	0	0	0	0
EF-01	EXH	1	0	0	1	0
EF-02	EXH	1	0	0	1	0
EF-03	EXH	1	0	0	1	0
EF-04	EXH	1	0	0	1	0
EF-05	EXH	1	0	0	1	0
EF-06	EXH	1	0	0	1	0
RAD-01	RAD	1	0	0	0	0
PP-01	HWP	1	0	0	0	0
PP-02	HWP	1	0	0	0	0
SP-01	HWP	1	0	0	0	0
SP-02	HWP	1	0	0	0	0
TCS-01	TCS	1	1	0	0	0
UHE-01	UHE	1	0	0	0	0
UHE-02	UHE	1	0	0	0	0
UHE-03	UHE	1	0	0	0	0
UHE-04	UHE	1	0	0	0	0
UHE-05	UHE	1	0	0	0	0
UHE-06	UHE	1	0	0	0	0
UHE-07	UHE	1	0	0	0	0
UHE-08	UHE	1	0	0	0	0
UHE-09	UHE	1	0	0	0	0
UHE-10	UHE	1	0	0	0	0
UHE-11	UHE	1	0	0	0	0
UHE-12	UHE	1	0	0	0	0
UHE-13	UHE	1	0	0	0	0
UHE-14	UHE	1	0	0	0	0
UHE-15	UHE	1	0	0	0	0
VAV-01	VAV	0	0	0	0	0
VAV-02	VAV	0	0	0	0	0
VAV-03	VAV	0	0	0	0	0
VAV-04	VAV	0	0	0	0	0
VAV-05	VAV	0	0	0	0	0
VAV-06	VAV	0	0	0	0	0
VAV-07	VAV	0	0	0	0	0
VAV-08	VAV	0	0	0	0	0
VAV-09	VAV	0	0	0	0	0
VAV-10	VAV	0	0	0	0	0
VAV-11	VAV	0	0	0	0	0
VAV-12	VAV	0	0	0	0	0
VAV-13	VAV	0	0	0	0	0
VAV-14	VAV	0	0	0	0	0
VAV-15	VAV	0	0	0	0	0
VAV-16	VAV	0	0	0	0	0
VAV-17	VAV	0	0	0	0	0
VAV-18	VAV	0	0	0	0	0

Prepared By:
 C.A. Hayes Mechanical, Inc.
 15311 S. 70th Court
 Orland Park, IL 60462

RECREATION CENTER

Unit #	Type	# Heating Inspections	# Cooling Inspections	# Filter Changes	# Belt Changes	# Coil Cleanings
AHU-01	AHU	0	1	0	1	0
AHU-02	AHU	0	1	0	1	0
AHU-03	AHU	0	1	0	1	0
AHU-04	AHU	0	1	0	1	0
AHU-05	AHU	0	1	0	1	0
AHU-06	AHU	0	1	0	1	0
CON-01	CON	0	1	0	0	1
CON-02	CON	0	1	0	0	1
CON-03	CON	0	1	0	0	1
CON-04	CON	0	1	0	0	1
CON-05	CON	0	1	0	0	1
CON-06	CON	1	0	0	0	1
HWB-01	BLRW	1	0	0	0	0
HWB-02	BLRW	1	0	0	0	0
HWB-03	BLRW	1	0	0	0	0
HWP-01	HWP	1	0	0	0	0
HWP-02	HWP	1	0	0	0	0
HWP-03	HWP	1	0	0	0	0
HWP-04	HWP	1	0	0	0	0
HWP-05	HWP	1	0	0	0	0
HWP-06	HWP	1	0	0	0	0
HWP-07	HWP	1	0	0	0	0
RTU-01	RTU	1	1	0	0	1

METRA STATION

Unit #	Type	# Heating Inspections	# Cooling Inspections	# Filter Changes	# Belt Changes	# Coil Cleanings
CON-01	CON	0	2	0	0	1
EF-01	EXH	1	0	0	0	0
EF-02	EXH	1	0	0	0	0
FUR-01	EXH	2	2	0	1	0
HWH-01	HWH	1	0	0	0	0