Peoria Park District
Planning, Design and Construction Department
1314 N. Park Road
Peoria, IL 61604
Telephone: (309) 686-3386

ADDENDUM NO. 1

PROJECT TITLE: Noble Center
Chiller Replacement

ISSUANCE DATE: April 17, 2026
LOCATION: Noble Center

The proposed Contract Documents for this Work are modified as follows:

I. GENERAL INFORMATION:

Glycol type shall be propylene.

II. DRAWINGS:

Revised drawings dated 04/16/26 attached. Revisions include:

1) Drawing MD100- LOWER LEVEL – MECHANICAL DEMOLITION
   a) Add keyed note 5 indicating to remove fence in front of cooling tower.

III. PROJECT MANUAL/SPECIFICATIONS.:

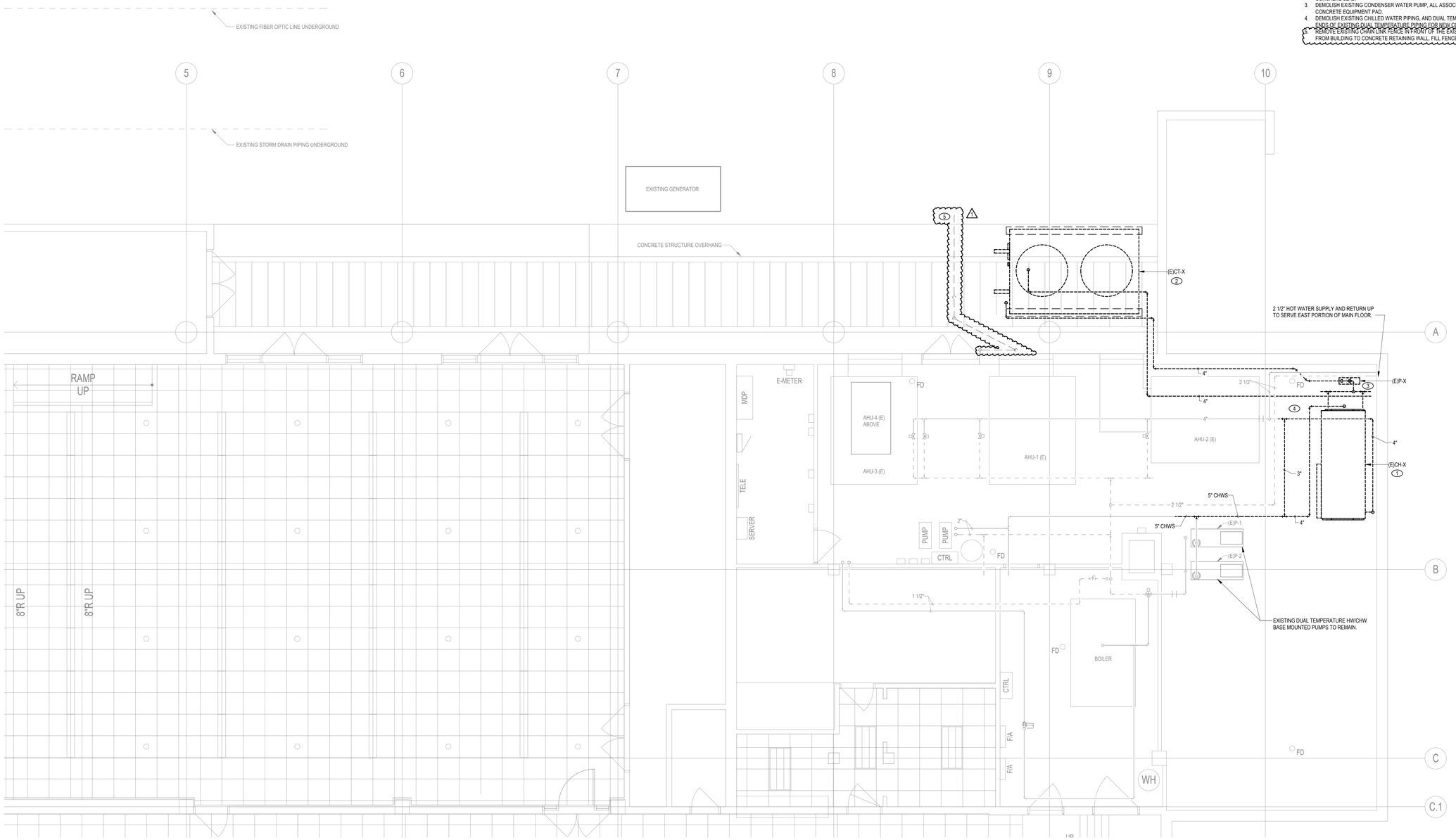
1) Section 26 6423.13-2.1.b
   a) Section shall now read “Chiller shall be rated per standard AHRI 550-590”
2) Section 23 6423.13-2.8.B.1
   a) Omit the following “With precoated epoxy-phenolic fins.”
   b) Epoxy-phenolic fins are not required.
3) Section 23 6423.13-2.8.C.3
   a) Omit the following “With a corrosion-resistant coating.”
   b) Corrosion-resistant coatings are not required.
4) Section 23 6423.13-2.10.O
   a) Provide Field or Factory wired power meter with BACnet MSTP connection.
5) Section 23 6423.13-2.13.B
   a) Omit section B and its sub sections in their entirety.
6) Section 23 0923 2.01
   a) Add approved manufacturer Distech Controls be BASe2.
7) Section 23 2513
   a) Add specification section ‘Water Treatment for Closed-Loop Hydronic Systems’

IV. **INVITATION TO BID**: N/A

END OF ADDENDUM NO. 1

KEYED NOTES:

1. DEMOLISH EXISTING CHILLER, 12" TALL CONCRETE EQUIPMENT PAD, FEET, AND DISCONNECT PNEUMATIC CONTROLS AND PROPERLY CAP. BENDING OR CRIMPING OF PNEUMATIC TUBES IS NOT ACCEPTABLE. VACUUM DOWN AND RECLAIM ALL REFRIGERANT FOR PROPER DISPOSAL.
2. DEMOLISH EXISTING COOLING TOWER, ALL ASSOCIATED CONDENSER WATER PIPING, ALL MAKE UP WATER PIPING, ALL CHEMICAL FEED PIPING, AND EQUIPMENT. DISCONNECT PNEUMATIC CONTROLS AND PROPERLY CAP. BENDING OR CRIMPING OF PNEUMATIC TUBES IS NOT ACCEPTABLE. DEMOLISH EXISTING CONCRETE EQUIPMENT SUPPORT CURBS BENEATH EXISTING COOLING TOWER. FLUSH WITH CONCRETE SLAB.
3. DEMOLISH EXISTING CONDENSER WATER PUMP, ALL ASSOCIATED CONDENSER WATER PIPING, AND CONCRETE EQUIPMENT PAD.
4. DEMOLISH EXISTING CHILLED WATER PIPING, AND DUAL TEMPERATURE PIPING AS SHOWN. PREPARE ENDS OF EXISTING DUAL TEMPERATURE PIPING FOR NEW CONNECTIONS ITVP.
5. REMOVE EXISTING CHAIN LINK FENCE IN FRONT OF THE EXISTING COOLING TOWER. REMOVE FENCING FROM BUILDING TO CONCRETE RETAINING WALL. FILL FENCE HOLES WITH NON-SHRINK GROUT. ⚠1



N

1 LOWER LEVEL - MECHANICAL DEMOLITION PLAN

1/4" = 1'-0"

ADAM E. CARLSON
062-072502
EXPIRES: 30NOV27
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DATE: 04/03/2026

KEDbluestone
707 NE Jefferson Ave.
Peoria, IL 61603
(309) 938-4005
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Noble Center Chiller Replacement

1125 West Lake Avenue, Peoria IL

REVISIONS:

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	04.16.2026

DESIGNED BY: JJO | CHECKED BY: AEC

PROJECT NO: 325-082

ISSUE DATE: 04/03/2026

ISSUANCE: ISSUED FOR BIDDING

SHEET NAME: **LOWER LEVEL - MECHANICAL DEMOLITION**

SHEET (30X42): MD100

SECTION 23 2513
WATER TREATMENT FOR CLOSED-LOOP HYDRONIC SYSTEMS

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section includes the following water treatment for closed-loop hydronic systems:
   1. Side Stream Filter Housing.
   2. Chemicals.
   3. Propylene Glycol

1.03 DEFINITIONS

A. Low Voltage: As defined in NFPA 70 for circuits and equipment operating at less than 50 V or for remote-control, signaling power-limited circuits.

B. TSS: Total suspended solids are solid materials, including organic and inorganic, that are suspended in the water. These solids may include silt, plankton, and industrial wastes.

1.04 ACTION SUBMITTALS

A. Product Data: Include rated capacities, operating characteristics, and furnished specialties and accessories for the following products:
   1. Propylene Glycol
   2. Bypass feeders.
   3. Water meters.
   4. Inhibitor injection timers.
   5. pH controllers.
   6. TSS controllers.
   7. Chemical solution tanks.
   8. Injection pumps.
   9. Chemical test equipment.
   10. Chemical material safety data sheets.

B. Shop Drawings: Pretreatment and chemical treatment equipment showing tanks, maintenance space required, and piping connections to hydronic systems.
   1. Include plans, elevations, sections, and attachment details.
   2. Include diagrams for power, signal, and control wiring.

1.05 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For sensors, injection pumps, and controllers to include in emergency, operation, and maintenance manuals.

1.06 QUALITY ASSURANCE

A. HVAC Water-Treatment Service Provider Qualifications: An experienced HVAC water-treatment service provider capable of analyzing water qualities, installing water-treatment equipment, and applying water treatment as specified in this Section.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   1. Enerco Inc.
   2. Crown Solutions Inc.
   3. Certified Laboratories
   4. H-O-H Water Technology Inc.
   5. Watertech of America
   6. Butler Chemical Company
   7. Betz
   8. America’s Best Water Treaters

2.02 PERFORMANCE REQUIREMENTS

A. Water quality for hydronic systems shall minimize corrosion, scale buildup, and biological growth for optimum efficiency of hydronic equipment without creating a hazard to operating personnel or the environment.

B. Base HVAC water treatment on quality of water available at Project site, hydronic system equipment material characteristics and functional performance characteristics, operating personnel capabilities, and requirements and guidelines of authorities having jurisdiction.

C. Closed hydronic systems, including hot-water heating, chilled water and dual-temperature water, shall have the following water qualities:
   1. pH: Maintain a value within 9.0 to 10.5.
   2. "P" Alkalinity: Maintain a value within 100 to 500 ppm.
   3. Boron: Maintain a value within 100 to 200 ppm.
   4. Chemical Oxygen Demand: Maintain a maximum value of 100 ppm.
   5. Soluble Copper: Maintain a maximum value of 0.20 ppm.
   6. TSS: Maintain a maximum value of 10 ppm.
   7. Ammonia: Maintain a maximum value of 20 ppm.
   8. Free Caustic Alkalinity: Maintain a maximum value of 20 ppm.
   9. Microbiological Limits:
      a. Total Aerobic Plate Count: Maintain a maximum value of 1000 organisms/mL.
      b. Total Anaerobic Plate Count: Maintain a maximum value of 100 organisms/mL.
      c. Nitrate Reducers: Maintain a maximum value of 100 organisms/mL.
      d. Sulfate Reducers: Maintain a maximum value of zero organisms/mL.
      e. Iron Bacteria: Maintain a maximum value of zero organisms/mL.

2.03 SIDE STREAM FILTER HOUSING

A. Housing: 304 Stainless Steel, with corrosion-resistant exterior coating and band clamp closure at top of housing. Standard inlet and top side outlet shall be 2" MNPT. Unit shall be equipped with leg supports for floor installation, factory installed pressure gauges and drain ports.
   1. Capacity: Minimum 10" diameter, filter housing height based on flow rate requirements.
   2. Minimum Working Pressure: 150 psig at 300 deg F.

B. Filter Media:
   1. Filters shall be sized for 10% of design flow rate (GPM) listed in pump schedule based on main system distribution pumps.
   2. Filter Cartridge shall have operating temperature up to 200 degrees F.

2.04 CHEMICALS

A. Chemicals shall be as recommended by water-treatment system manufacturer that are compatible with piping system components and connected equipment and that can attain water quality specified in "Performance Requirements" Article.

PART 3 EXECUTION

3.01 WATER ANALYSIS

A. Perform an analysis of supply water to determine quality of water available at Project site.

3.02 INSTALLATION

A. Install chemical application equipment on concrete bases, level and plumb. Maintain manufacturer's recommended clearances. Arrange units so controls and devices that require servicing are accessible. Anchor chemical tanks and floor-mounting accessories to substrate.

B. Side Stream Filters: Install in closed hydronic systems, including hot-water heating, chilled water, and dual-temperature water, and equipped with the following:
   1. Install bypass feeder in a bypass circuit around circulating pumps unless otherwise indicated on Drawings.
   2. Install water meter in makeup-water supply.
   3. Install test-coupon assembly in bypass circuit around circulating pumps unless otherwise indicated on Drawings.
   4. Install a gate or full-port ball isolation valves on inlet, outlet, and drain below the feeder inlet.
   5. Install a swing check on the inlet after the isolation valve.

C. Fill system with fresh water and add liquid alkaline compound with emulsifying agents and detergents to remove grease and petroleum products from piping. Circulate solution for a minimum of 24 hours, drain, clean strainer screens, and refill with fresh water.

D. Add initial chemical treatment and maintain water quality in ranges noted above for the first year of operation.

3.03 CONNECTIONS

A. Where installing piping adjacent to equipment, allow space for service and maintenance.

B. Make piping connections between HVAC water-treatment equipment and dissimilar-metal piping with dielectric fittings. Comply with requirements in Section 232116 "Hydronic Piping Specialties."

C. Install shutoff valves on HVAC water-treatment equipment inlet and outlet. Metal general-duty valves are specified in Section 230523.11 "Globe Valves for HVAC Piping," Section 230523.12 "Ball Valves for HVAC Piping," Section 230523.13 "Butterfly Valves for HVAC Piping," and Section 230523.15 "Gate Valves for HVAC Piping."

D. Comply with requirements in Section 221119 "Domestic Water Piping Specialties" for backflow preventers required in makeup-water connections to potable-water systems.

E. Confirm applicable electrical requirements in electrical Sections for connecting electrical equipment.

F. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

G. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

3.04 FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:

1. Inspect field-assembled components and equipment installation, including piping and electrical connections.
2. Inspect piping and equipment to determine that systems and equipment have been cleaned, flushed, and filled with water, and are fully operational before introducing chemicals for water-treatment system.
3. Place HVAC water-treatment system into operation and calibrate controls during the preliminary phase of hydronic systems' startup procedures.
4. Do not enclose, cover, or put piping into operation until it is tested and satisfactory test results are achieved.
5. Test for leaks and defects. If testing is performed in segments, submit separate report for each test, complete with diagram of portion of piping tested.
6. Leave uncovered and unconcealed new, altered, extended, and replaced water piping until it has been tested and approved. Expose work that has been covered or concealed before it has been tested and approved.
7. Cap and subject piping to static water pressure of 50 psig above operating pressure, without exceeding pressure rating of piping system materials. Isolate test source and allow test pressure to stand for four hours. Leaks and loss in test pressure constitute defects.
8. Repair leaks and defects with new materials and retest piping until no leaks exist.

C. Equipment will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

E. Comply with ASTM D 3370 and with the following standards:

1. Silica: ASTM D 859.
2. Acidity and Alkalinity: ASTM D 1067.
3. Iron: ASTM D 1068.
4. Water Hardness: ASTM D 1126.

3.05 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain HVAC water-treatment systems and equipment.

B. Training: Provide a "how-to-use" self-contained breathing apparatus video that details exact operating procedures of equipment.

END OF SECTION