STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 1 TO PROJECT NO. 44530

CONSTRUCTION WORK, HVAC WORK AND ELECTRICAL WORK
UPGRADE/REPLACE REFRIGERATION EQUPMENT
DOWNSTATE CORRECTIONAL FACILITY
122 RED SCHOOLHOUSE ROAD
FISHKILL, NY

March 11, 2013

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

COMMON DIVISION 1 SECTIONS

1. Page 015000-4, Subparagraph 1.07 B.1.: Add the following Subparagraph:

   "a) Provide 32 lineal feet of 8'-0" high movable type Temporary Partitions as directed by the Director's Representative. After work in the area has been completed, patch all holes made by fasteners with materials and finishes to match existing materials."

2. Page 015000-4, Subparagraph 1.07 B.2.: Add the following Subparagraph:

   "a) Provide 32 lineal feet of 8'-0" high movable type Temporary Dust Barriers as directed by the Director's Representative. After work in the area has been completed, patch all holes made by fasteners with materials and finishes to match existing materials."

CONSTRUCTION WORK SPECIFICATIONS

3. Page 114102-2, Subparagraph 2.01 A.1: Change "0.042" stucco embossed aluminum" to read "20 Gauge Type 304 Stainless Steel Stucco Embossed".

4. Page 114102-2, Subparagraph 2.01 A.2: Change "aluminum face panel" to read "stainless steel face Panel".

5. Page 114102-2, Subparagraph 2.01 A.3: Change "polystyrene and aluminum compatible" to read"polystyrene and stainless steel compatible".

HVAC WORK SPECIFICATIONS

6. SECTION 230533 ELECTRIC HEATING CABLE SYSTEM FOR WATER PIPES: Add the attached Section (pages 230533 – 1 thru 230533-4) to the Project Manual.

ELECTRIC WORK DRAWINGS

7. Drawing No. E-101, E-102, and E-103: Add the following Note:

"FOR ELECTRIC HEATING CABLE, PROVIDE 2 - #12 AWG, 1 - #12 AWG EGC IN 3/4" CONDUIT AND CONNECT TO EXISTING RECEPTACLE CIRCUIT. REFER TO DRAWINGS E-101, E-102 and E-103 FOR THE EXISTING TO REMAIN (EXR) RECEPTACLES. HEAT TRACE CABLE APPROXIMATELY 25 FEET LONG IN EACH BOX. HEAT TRACE DETAIL ON DRAWING M-502."

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

SECTION 230533

ELECTRIC HEATING CABLE SYSTEM FOR WATER PIPES

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

A. HVAC Piping: Section 232000.

B. Piping Insulation: Section 230700.

1.02 REFERENCES

A. FM, IEEE.

1.03 SYSTEM DESCRIPTION

A. Provide a low temperature, all electric, self-regulating type heating cable trace system for plastic and metallic pipes that will maintain the pipeline water temperature at approximately 50 degrees F when the ambient temperature drops to a low of -40, -20, 0 degrees F.

1.04 SUBMITTALS

A. Waiver of Submittals: The "Waiver of Certain Submittal Requirements" in Section 013300 does not apply to this Section.

B. Product Data:
   1. Catalog sheets, specifications and installation instructions.
   2. Bill of materials.

C. Samples: One of each product if different from Company or catalog number specified.

D. Quality Control Submittals:
   1. Company Field Advisor Data: Include:
      a. Name, business address and telephone number of Company Field Advisor secured for the required services.
      b. Certified statement from the Company listing the qualifications of the Company Field Advisor.
      c. Services and each product for which authorization is given by the Company, listed specifically for this project.
   2. Installation Training: Certificate of training from the heating cable manufacturer for each person performing the Work.
   3. List of Completed Installations: If brand names other than those specified are proposed for use, furnish the name, address and telephone number of at least 3 comparable installations which can prove the proposed products have operated satisfactorily for one year.

E. Contract Closeout Submittals:
   1. System acceptance test report.
   2. Certificates:
      a. Affidavit, signed by the Company Field Advisor and notarized, certifying that the system meets the contract requirements and is operating properly.
   3. Operation and Maintenance Data:
      a. Deliver 2 copies, covering the installed products, to the Director's Representative. Include:
         1) Operation and maintenance data for each product.

1.05 QUALITY ASSURANCE

A. Heating cables shall be Factory Mutual (FM) approved, in compliance with IEEE 515.

PART 2 PRODUCTS

2.01 HEATING CABLES FOR FREEZE PROTECTION

A. Type SR-3: Self-regulating; Nelson Electric's Hevi-Duty Limitrace LT3/LT23, Raychem Corp.'s Chemelex Auto-Trace 3BTV1/3BTV2, or Thermon Mfg. Co.'s 3-FLX-1/3-FLX-2:
   1. Thermal output of 3 watts/ft (120V cable operated at 120V.

2.02 SYSTEM ACCESSORIES

A. Furnish the heating cable manufacturer's accessories to suit the system requirements:
   1. Splice, Tee & Power Connection Kits: Nelson Electric's Hevi-Duty PLT Series Kits, Raychem Corp.'s PMKG Series Kits, or Thermon Mfg. Corp.'s PCA Series Kits.
   2. Thermostat Control Kits: Remote bulb/capillary type; Nelson Electric's Hevi-Duty TH4X325 (22 amp @ 480 volts, SPDT), Raychem Corp.'s AMC-1B (22 amp @ 480 volts, SPDT), or Thermon Mfg. Corp.'s E4-35235 (25 amp @ 277 volts, SPST).
   3. Aluminum Foil Tape: Nelson Electric's Hevi-Duty AT-50, Raychem Corp.'s AT-180, or Thermon Mfg. Corp.'s AL-20P.
   4. Stainless Steel Banding: Nelson Electric's Hevi-Duty PS-6, Raychem Corp.'s NA, or Thermon Mfg. Corp.'s PCB.
   5. Fiberglass Tape: Nelson Electric's Hevi-Duty GT-6, Raychem Corp.'s GT-66, or Thermon Mfg. Corp.'s PF-1.
   6. Electric Traced Warning Labels: Nelson Electric's Hevi-Duty WS-100, Raychem Corp.'s ETL, or Thermon Mfg. Corp.'s CL.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions:
   1. Examine areas and conditions under which electric heating cables are to be installed.
   2. Notify Director's Representative in writing of conditions detrimental to proper completion of the work.
   3. Ensure that surfaces, and pipes to which electric heating cables are to be installed are free of burrs and other sharp protrusions and that pipes have been pressure tested for leakage.
   4. Do not proceed with the Work until unsatisfactory conditions have been corrected in an acceptable manner.

3.02 INSTALLATION

A. Install the Work of this Section in accordance with manufacturer's printed instructions.

B. After attaching heating cables to pipe, test cables for insulation resistance of 20 megaohms or greater, measured to ground. Where leakage is detected replace cable and retest.

C. Install electric traced warning labels every 10 feet on the exterior of the pipe insulation.

D. Set thermostats so that heating cables will be de-energized when the pipeline temperature rises above 55 degrees F.

3.03 FIELD QUALITY CONTROL

A. System Test:
   1. Preparation: Notify the Director's Representative at least 3 working days prior to the test so arrangements can be made to have a Facility Representative witness the test.
   2. Make the following tests:
      a. Verify that each heating cable is operating properly by noting and recording its current draw. Note surface temperature of pipe to which cable is attached and ambient air temperature. Use manufacturers approved shop drawing data for expected current draw for each tape at given surface/ambient temperature. Compare actual current draw with expected draw. Any cable with a $\pm$ 15 percent variance from the manufacturer's expected draw will be rejected.
   3. Supply all equipment necessary for system adjustment and testing.
   4. Submit written report of test results signed by Company Field Advisor and the Director's Representative.

3.04 HEATING CABLE SCHEDULE

A. Unless otherwise indicated on the drawings, apply the following types of heating cables to suit pipe size and minimum ambient temperature, maintaining the pipeline water temperature at approximately 50 degrees F.

PIPE SIZE	MINIMUM AMBIENT TEMPERATURE
	0 degree F
Up to 2”	SR-3

END OF SECTION