

ADDENDUM NO. 3

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

**Replace Roofs – Laundry & Print Shop
Moberly Correctional Center
Moberly, Missouri
PROJECT NO.: C1913-02**

Bid Opening Date: 1:30 PM, June 25, 2020

Bidders are hereby informed that the construction Plans and/or Specifications are modified as follows:

SPECIFICATION CHANGES:

1. SECTION 220719 – PLUMBING PIPING INSULATION
 - a. REPLACE with REVISED Section 220719 – PLUMBING PIPING INSULATION (attached).
2. SECTION 221005 – PLUMBING PIPING
 - a. REPLACE with REVISED Section 221005 – PLUMBING PIPING (attached).
3. SECTION 221006 – PLUMBING PIPING SPECIALITIES
 - a. REPLACE with REVISED Section 221006 – PLUMBING PIPING SPECIALITIES (attached).

ATTACHMENTS:

1. Section 220719 – Plumbing Piping Insulation
2. Section 221005 – Plumbing Piping
3. Section 221006 – Plumbing Piping Specialties

June 18, 2020

END ADDENDUM NO. 3

SECTION 220719 - PLUMBING PIPING INSULATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Piping insulation.
- B. Jackets and accessories.

1.02 RELATED REQUIREMENTS

- A. Section 221005 - Plumbing Piping: Placement of hangers and hanger inserts.

1.03 REFERENCE STANDARDS

- A. ASTM C534/C534M - Standard Specification for Preformed Flexible Elastomeric Cellular Thermal Insulation in Sheet and Tubular Form 2016.
- B. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2020.
- C. UL 723 - Standard for Test for Surface Burning Characteristics of Building Materials Current Edition, Including All Revisions.

PART 2 PRODUCTS

2.01 REGULATORY REQUIREMENTS

- A. Surface Burning Characteristics: Flame spread index/Smoke developed index of 25/50, maximum, when tested in accordance with ASTM E84 or UL 723.

2.02 FLEXIBLE ELASTOMERIC CELLULAR INSULATION

- A. Manufacturers:
 - 1. Aeroflex USA, Inc; Aerocel Stay-Seal with Protape (SSPT): www.aeroflexusa.com/#sle.
 - 2. Armacell LLC; AP Armaflex: www.armacell.us/#sle.
 - 3. K-Flex USA LLC; Insul-Tube: www.kflexusa.com/#sle.
- B. Insulation: Preformed flexible elastomeric cellular rubber insulation complying with ASTM C534/C534M Grade 1; use molded tubular material wherever possible.
 - 1. Minimum Service Temperature: Minus 40 degrees F (Minus 40 degrees C).
 - 2. Maximum Service Temperature: 220 degrees F (104 degrees C).
 - 3. Connection: Waterproof vapor barrier adhesive.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install insulation a minimum of ten (10) linear feet measured from the roof drain outlet in the horizontal downstream direction of piping.

END OF SECTION 220719

SECTION 221005 - PLUMBING PIPING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Pipe, pipe fittings, specialties, and connections for piping systems.
 - 1. Storm water.
 - 2. Pipe hangers and supports.

1.02 RELATED REQUIREMENTS

- A. Section 220719 - Plumbing Piping Insulation.

1.03 REFERENCE STANDARDS

- A. ASTM D1785 - Standard Specification for Poly Vinyl Chloride (PVC) Plastic Pipe, Schedules 40, 80, and 120 2015, with Editorial Revision (2018).
- B. ASTM D2466 - Standard Specification for Poly Vinyl Chloride (PVC) Plastic Pipe Fittings, Schedule 40 2017.
- C. ASTM D2564 - Standard Specification for Solvent Cements for Poly Vinyl Chloride (PVC) Plastic Piping Systems 2012 (Reapproved 2018).
- D. ASTM D2665 - Standard Specification for Poly Vinyl Chloride (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings 2014.
- E. ASTM D2855 - Standard Practice for the Two-Step (Primer & Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly Vinyl Chloride (CPVC) Pipe and Piping Components with Tapered Sockets 2015.
- F. ASTM D3034 - Standard Specification for Type PSM Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings 2016.
- G. NSF 61 - Drinking Water System Components - Health Effects 2019.
- H. NSF 372 - Drinking Water System Components - Lead Content 2016.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with applicable codes.

PART 2 PRODUCTS

2.01 GENERAL REQUIREMENTS

- A. Potable Water Supply Systems: Provide piping, pipe fittings, and solder and flux (if used), that comply with NSF 61 and NSF 372 for maximum lead content; label pipe and fittings.

2.02 STORM WATER PIPING, BURIED WITHIN 5 FEET (1500 MM) OF BUILDING

- A. PVC Pipe: ASTM D2665 or ASTM D3034.
 - 1. Fittings: PVC.
 - 2. Joints: Solvent welded, with ASTM D2564 solvent cement.

2.03 STORM WATER PIPING, ABOVE GRADE

- A. PVC Pipe: ASTM D2665 or ASTM D3034.
 - 1. Fittings: PVC.
 - 2. Joints: Solvent welded, with ASTM D2564 solvent cement.

PART 3 EXECUTION

3.01 PREPARATION

- A. Ream pipe and tube ends. Remove burrs.
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

3.02 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Provide clearance in hangers and from structure and other equipment for installation of insulation and access to valves and fittings.
- C. PVC Pipe: Make solvent-welded joints in accordance with ASTM D2855.

3.03 SCHEDULES

- A. Pipe Hanger Spacing:
 - 1. Plastic Piping:
 - a. All Sizes:
 - 1) Maximum Hanger Spacing: 6 ft (1.8 m).
 - 2) Hanger Rod Diameter: 3/8 inch (9 mm).

END OF SECTION 221005

SECTION 221006 - PLUMBING PIPING SPECIALTIES

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Drains.

1.02 RELATED REQUIREMENTS

- A. Section 220000 – Plumbing
- B. Section 220719 – Plumbing Piping Insulation
- C. Section 221005 - Plumbing Piping.

1.03 REFERENCE STANDARDS

- A. ASME A112.6.4 - Roof, Deck, and Balcony Drains 2008 (Reaffirmed 2012).

PART 2 - PRODUCTS

2.01 DRAINS

- A. Manufacturers:
 - 1. Jay R. Smith Manufacturing Company: www.jayrsmith.com
 - 2. Zurn Industries, LLC: www.zurn.com
 - 3. Watts: www.watts.com
- B. Roof Drains:
 - 1. Assembly: ASME A112.6.4.
 - 2. Body: Cast iron with sump.
 - 3. Strainer: Removable aluminum or cast iron dome.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

END OF SECTION