

## ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

HVAC Repairs, Blade & Paint Shop Building  
AVCRAD Army Aviation Site  
Springfield, Missouri  
PROJECT NO. T2329-01

**Bid Opening Date: 1:30 PM, Tuesday, September 10, 2024 (Not Changed)**

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

### **SPECIFICATION CHANGES:**

1. ADD attached new Specification Section 220553 – Mechanical Identification
2. Section 230713 – Duct Jacketing
  - a. REMOVE and REPLACE with attached revised Specification Section 230713 – Duct Jacketing. Parts 1.4, 2.1, 2.2, and 3.4 have been revised.

### **DRAWING CHANGES:**

1. Sheet M-100
  - a. REMOVE and REPLACE with attached revised Sheet M-100.
2. Sheet M-101
  - a. REMOVE and REPLACE with attached revised Sheet M-101.

### **GENERAL COMMENTS:**

1. The Pre-Bid Meeting was held August 19, 2024 followed by a walk-thru of the project site. The Pre-Bid Meeting Attendance/Meeting Minutes are attached.
2. Please contact Mandy Roberson, Contract Specialist, at 573-522-0074 or [mandy.roberson@oa.mo.gov](mailto:mandy.roberson@oa.mo.gov) for questions regarding bidding procedures and MBE/WBE/SDVE goals and submittal requirements.
3. The deadline for technical questions is 12:00 PM on September 3, 2024.
4. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
5. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
6. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 7A, Columbia MO 65203, (573) 446-7768 to get plans and specifications.
7. The current planholders list can be found online at: [T2329-01 HVAC Repairs, Blade & Paint Shop Bldg - AVCRAD Army Aviation Site :: Plan Holders :: State of Missouri Office of Administration \(oafmdcplanroom.com\)](https://www.oafmdcplanroom.com).
8. **All bids shall be submitted on the bid form without additional terms and conditions, modifications, or stipulations. Each space on the bid form shall be properly filled**

including an amount for each alternate. Failure to do so will result in rejection of the bid.

9. MBE/WBE/SDVE participation requirements can be found in DIVISION 00. The MBE/WBE/SDVE participation goals are 10%/10%/3%, respectively. Only certified firms as of the bid opening date can be used to satisfy the MBE/WBE/SDVE participation goals for this project. If a bidder is unable to meet a participation goal, a Good Faith Effort Determination Form must be completed. Failure to complete this process will result in rejection of the bid.
10. Alternate amounts shall be entered as the amount associated with the listed alternate and should not include the base bid.

**ATTACHMENTS:**

1. Pre-Bid Meeting Attendance/Meeting Minutes
2. Section 220553 – Mechanical Identification
3. Section 230713 – Duct Jacketing
4. Sheet M-100
5. Sheet M-101

**August 28, 2024**

**END ADDENDUM NO. 1**



**BUXTON KUBIK DODD**  
DESIGN COLLECTIVE

Meeting Date: August 19<sup>th</sup>

## **MEETING MINUTES**

### **PREBID MEETING**

**State of Missouri**

**Office of Administration, Division of Facilities Management, Design and Construction**

**Project: HVAC Repairs, Blade & Paint Shop Building 00029, Army Aviation Site (AVCRAD)**

**Project No.: T2329-01**

#### **Meeting Attendees:**

MS Mike Smith, Project Manager, MONG

PM Paul McBride, MONG

VM Vicki Mayo, Allen's Mechanical

TG Thomas Gray, Project Manager, Core Insulation

TM Tim Mooneyham, Estimator, Midwest Materials

DC Dylan Chorce, Principal Engineer, Buxton Kubik Dodd Design Collective

#### **Discussion Notes:**

- 1) The meeting was held in person at the AVCRAD facility.
- 2) MS went through the project manual bid requirements including all submission procedures, safety information, badging requirements, and working timeframe.
- 3) Mandy Roberson will be the Contract specialist on this job
- 4) DC discussed the plans including bid alternates and project designations
- 5) A site walk followed the meeting.
- 6) All questions must be submitted by September 3<sup>rd</sup> to be incorporated into an addendum document.

**End of Meeting Minutes**

## SECTION 220553 - MECHANICAL IDENTIFICATION

### PART 1 GENERAL

#### 1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### 1.02 SUMMARY

- A. This Section includes the following mechanical identification materials and their installation:
  - 1. Stencils.

#### 1.03 QUALITY ASSURANCE

- A. ASME Compliance: Comply with ASME A13.1, "Scheme for the Identification of Piping Systems," for letter size, length of color field, colors, and viewing angles of identification devices for piping.

#### 1.04 COORDINATION

- A. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.
- B. Install identifying devices before installing acoustic ceilings and similar concealment.

### PART 2 PRODUCTS

#### 2.01 STENCILS

- A. Stencils: Prepared with letter sizes according to ASME A13.1 for piping; minimum letter height of 1-1/4 inches for ducts; and minimum letter height of 3/4 inch for access panel and door markers, equipment markers, equipment signs, and similar operational instructions.
  - 1. Contractor to replicate stencil lettering on any and all ducts where jacketing will cover existing lettering.
  - 2. Stencil Material: Metal or fiberboard.
  - 3. Stencil Paint: Exterior, gloss, alkyd enamel black, unless otherwise indicated. Paint may be in pressurized spray-can form.

4. Identification Paint: Exterior, alkyd enamel in colors according to ASME A13.1, unless otherwise indicated.

### PART 3 EXECUTION

#### 3.01 APPLICATIONS, GENERAL

- A. Products specified are for applications referenced in other Division 15 Sections. If more than single-type material, device, or label is specified for listed applications, selection is Installer's option.

**END OF SECTION**

## **SECTION 230713 - DUCT JACKETING**

### **PART 1 - GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

#### **1.2 SUMMARY**

- A. This Section includes semirigid and flexible duct, plenum, insulation; insulating cements; field-applied jackets; accessories and attachments; and sealing compounds.

#### **1.3 SUBMITTALS**

- A. Product Data: Identify thermal conductivity, thickness, and jackets (both factory and field applied, if any), for each type of product indicated.
- B. Material Test Reports: From a qualified testing agency acceptable to authorities having jurisdiction indicating, interpreting, and certifying test results for compliance of insulation materials, sealers, attachments, cements, and jackets with requirements indicated. Include dates of tests.
- C. Installer Certificates: Signed by the Contractor certifying that installers comply with requirements.
- D. Packaging: Ship materials in containers marked by manufacturer with appropriate ASTM specification designation, type and grade, and maximum use temperature.

#### **1.4 COORDINATION**

- A. Coordinate clearance requirements with duct Installer for insulation application.

#### **1.5 SCHEDULING**

- A. Schedule insulation application after testing duct systems. Insulation application may begin on segments of ducts that have satisfactory test results.

### **PART 2 - PRODUCTS**

#### **2.1 MANUFACTURERS**

- A. Manufacturers: Subject to compliance with requirements, provide .020 aluminum (for base bid) or PVC (for bid alternate sections) products by one of the following:

1. Johns Manville
2. Ideal Products
3. RPR Products

## 2.2 ACCESSORIES AND ATTACHMENTS

- A. Bands: For base bid, 3/4 inch wide, in one of the following materials compatible with jacket:
  1. Aluminum: 0.020 Mil thick
  2. Stainless Steel: 0.020 Mil thick
- B. Permaweld Liquid Adhesive: For PVC bid alternates 1&2.
- C. Self-Adhesive Anchor Pins and Speed Washers: Galvanized steel plate, pin, and washer

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates and conditions for compliance with requirements for installation and other conditions affecting performance of insulation application.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Surface Preparation: Clean and dry surfaces to receive insulation. Remove materials that will adversely affect insulation application.

### 3.3 GENERAL APPLICATION REQUIREMENTS

- A. Apply jacketing materials, accessories, and finishes according to the manufacturer's written instructions; with smooth, straight, and even surfaces; and free of voids throughout the length of ducts and fittings.
- B. Use accessories compatible with jacketing materials and suitable for the service. Use accessories that do not corrode, soften, or otherwise attack jacket in either wet or dry state.
- C. Seal joints and seams with banding on jacketing indicated.
- D. Keep jacketing materials dry during application and finishing.

- E. Apply jacketing with tight longitudinal seams and end joints. Bond seams and joints with adhesive recommended by the insulation material manufacturer.
- F. Apply jacketing with the least number of joints practical.
- G. Apply jacketing over fittings and specialties, with continuous thermal and vapor-retarder integrity, unless otherwise indicated.
- H. Floor Penetrations: Terminate jacketing at underside of floor assembly and at floor support at top of floor.

#### 3.4 FINISHES

- A. Aluminum – Base Bid
- B. PVC – Alternate Number 1, and Alternate Number 2

**END OF SECTION 230713**





OFFICE OF  
ADMINISTRATION  
DIVISION OF FACILITIES  
MANAGEMENT,  
DESIGN AND  
CONSTRUCTION

HVAC REPAIRS, BLADE AND  
PAINT SHOP BUILDING

MO - AVCRAD FACILITY  
1107TH AVIATION  
CLASSIFICATION AND  
REPAIR ACTIVITY DEPOT  
SPRINGFIELD, MO

PROJECT # T2329-01  
SITE # 6270  
FACILITY # 815627000

REVISION: 1  
DATE: 08/26/2024  
REVISION: 2  
DATE: 08/26/2024  
REVISION: 3  
DATE: 08/26/2024  
REVISION: 4  
DATE: 08/26/2024  
ISSUE DATE: 07/12/2024

CAD DWG FILE:  
REVISED BY: JFC  
CHECKED BY: JFC  
DESIGNED BY: JFC  
SHEET TITLE:

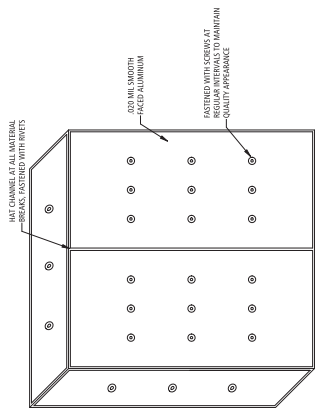
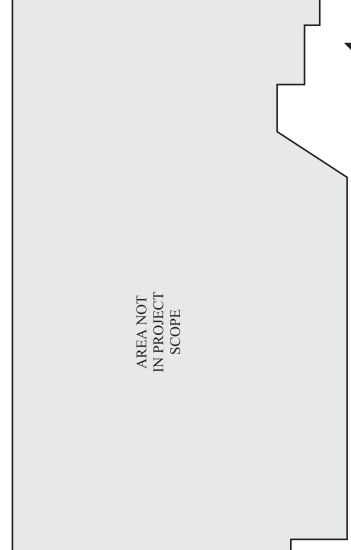
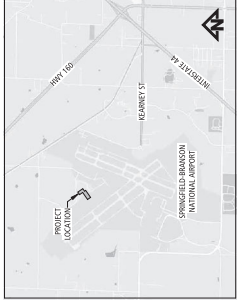
OVERALL  
PROJECT PLAN

SHEET NUMBER:

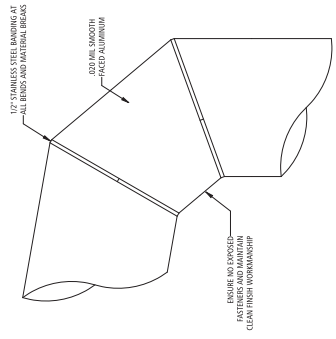
**M-100**  
2 OF 4 SHEETS  
07/12/2024

**BID ALTERNATES**  
THE PROJECT WILL PROCEED WITH ALTERNATES UNLESS OTHERWISE STATED. AREAS THAT ARE EASILY VISIBLE FROM THE PRODUCTION FLOOR OR AREAS THAT MAY INTERFERE WITH SITE MAINTENANCE WILL BE FIRST PRIORITY.  
SEE COLOR CODING BELOW FOR BID ALTERNATES.

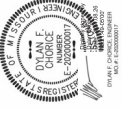
BASE BID:  
ALTERNATE NO. 1:  
ALTERNATE NO. 2:



**RECTANGULAR JACKING DETAIL 2**  
SCALE: 1/8" = 1'-0"  
12/100



**ROUND JACKING DETAIL 1**  
SCALE: NOT TO SCALE  
12/100



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CAD DWG FILE:  
CHECKED BY: JDC  
DESIGNED BY: DFC

SHEET TITLE:

MECHANICAL  
JACKETING PLAN

SHEET NUMBER:

M-101

3 OF 4 SHEETS  
07/12/2024

**MECHANICAL GENERAL NOTES:**

- ALL NOTES ON THIS SHEET SHALL APPLY TO ALL OTHER SHEETS.
- ALL INSTALLATIONS SHALL CONFORM TO THE 2018 INTERNATIONAL MECHANICAL CODE AND THE CURRENTLY ADOPTIVE ORDINANCES IN EFFECT FOR SPRINGFIELD, MO.
- ANY ADDITIONAL IMPACT COST, DESIGN MODIFICATIONS, ADDITIONAL CHANGES, SCHEDULE CHANGES AND/OR OTHER UNANTICIPATED CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTRACTOR, SUBCONTRACTOR, AND/OR ENGINEER OR OWNER FOR THESE CHANGES.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH ALL OTHER TRADES.
- ALL MATERIALS IN SECTION 49.10 SHALL BE SETTED AND LABELED AS SHOWN. ALL PLATE SPACING SHALL BE NOT MORE THAN 12" AND A SANGRE DETOURED INDEX OF MORE THAN 50. PER SECTION 606 OF 16C2016.

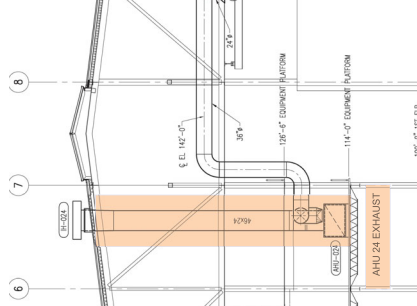
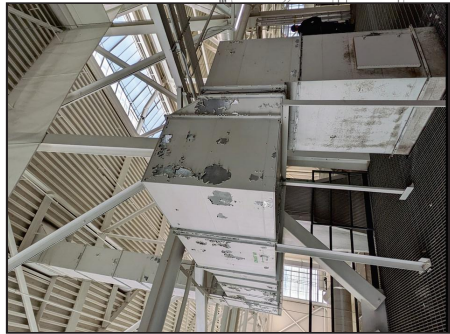
**JACKETING GENERAL REQUIREMENTS**

CONTRACTOR SHALL VERIFY THAT ALL MECHANICAL SYSTEMS ARE PROTECTED FROM MECHANICAL DAMAGE AND MECHANICAL DAMAGE SHALL NOT BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL MECHANICAL SYSTEMS SHALL BE PROTECTED FROM MECHANICAL DAMAGE BY THE CONTRACTOR. ALL MECHANICAL SYSTEMS SHALL BE PROTECTED FROM MECHANICAL DAMAGE BY THE CONTRACTOR.

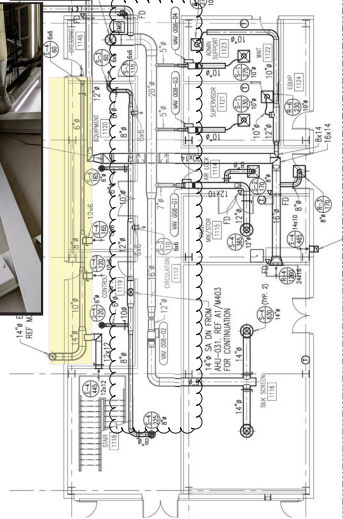
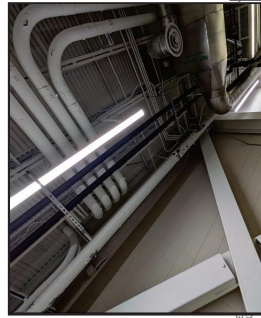
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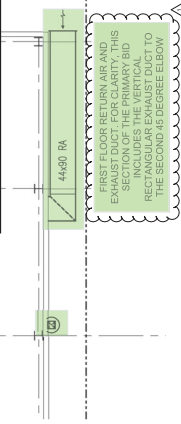
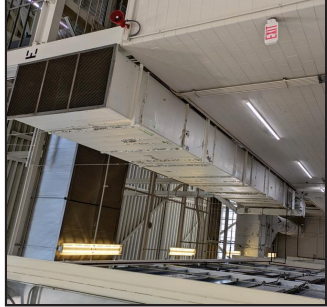
ALTERNATE NO. 1:  
ALTERNATE NO. 2:



EXHAUST AS COLLUMS EXHAUST AIR COLLUMS ONLY NEED BE JACKETED ABOVE EQUIPMENT PLANT ONLY NOT BELOW



FIRST FLOOR SOUTH OFFICES AND STORAGE



FIRST FLOOR RETURN AIR AND EXHAUST SECTION OF THE PRIMARY BID INCLUDES THE VERTICAL RISERS AND EXHAUST TO THE SECOND AS DEGREE BELOW

