

ADDENDUM NO. 1

TO: PLANS AND SPECIFICATIONS FOR STATE OF MISSOURI

**Upgrade/Improve Electrical
Swine Pavilion, Missouri State Fairgrounds
Sedalia, Missouri
PROJECT NO.: F1904-01**

Bid Opening Date: 1:30 PM, Thursday, September 5, 2019 (Not Changed)

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

ADDED Unit Prices Form is attached. Bidders must complete and provide the Unit Prices Form to bid this project.

SPECIFICATION CHANGES:

1. Section 001116 – Invitation For Bid

a. REVISE Paragraph 7.0-B as follows:

B. Project Manager: Jared Cook, phone # 573-690-6733, fax # 573-751-7277

2. ADD Section 004322 – Unit Prices Form in its entirety. USE ATTACHED UNIT PRICES FORM.

3. Section 007300 – Supplementary Conditions

a. REVISE Paragraph 2.0 as follows:

Construction Representative: Randy Duncan

Division of Facilities Management, Design and Construction
709 Missouri Boulevard, Jefferson City, MO 65109
Telephone: 573-526-0582; Fax: 573-522-1763
Email: randy.duncan@oa.mo.gov

Project Manager:

Jared Cook
Division of Facilities Management, Design and Construction
301 West High Street, Room 730
Jefferson City, Missouri 65102
Telephone: 573-690-6733; Fax: 573-751-7277
Email: jared.cook2@oa.mo.gov

4. ADD Section 012200 – Unit Prices in its entirety (attached).

5. ADD Section 233723 – HVAC Gravity Ventilators, Louvers, and Vents in its entirety (attached).

6. Section 265100 – Interior Lighting

a. ADD the following approved manufacturers to Paragraph 2.1-B.5:

- e. ILD
 - f. Columbia
- b. ADD the following approved manufacturer to Paragraph 2.1-B.6:
- e. Hi Lite

DRAWING CHANGES:

1. Sheet E-001

- a. ADD the following General Notes:

- 21. The Contractor shall submit for review a drawing that indicates the routing of the panelboard feeders from the new Main Distribution Panel MDP to each of the panelboard locations to ensure that the existing structure is not overloaded as a result of the new conduit and wire.”
- 22. Where new panelboards are indicated mounted on existing steel columns, the Contractor shall furnish and install a unistrut support frame for mounting the panelboard bolted to the concrete floor slab and drilled/screwed to the existing steel column as required to completely support the panelboard”.

2. Sheet ES-101

- a. ELECTRICAL RISER DIAGRAM, ADD the following note: “The Contractor shall furnish and install 3 phase kWh/Demand meter for Main Distribution Panel 'MDP' to monitor power usage. Meter to have LCD display and lockable outdoor enclosure. Provide split-core current sensors and all other components and accessories necessary for a complete installation. Meter to be E-mon D-mon model 2083200 KIT or approved equal by Honeywell, Leviton or Square D. Meters shall be located and mounted directly on the side of the Main Distribution Panel MDP. Furnish and install all necessary wiring, mounting hardware, and associated equipment.”
- b. ELECTRICAL RISER DIAGRAM, ADD the following sentences to Keyed Note 6: “The Contractor shall coordinate any power outages to existing buildings as a result of the replacement and rework of the pole mounted high voltage line and equipment. The Contractor shall temporarily support and protect the existing overhead primary wiring as required during the pole replacement work.”

3. Sheet EP-104

- a. ADD the new louvers indicated for the existing window openings at the southeast corner of the building per attached Supplemental Drawing SD-EP-104.

GENERAL COMMENTS:

- 1. The Pre-Bid Meeting was held August 20, 2019 followed by a walk-through of the facility. The Pre-Bid Meeting sign-in sheet is attached.
- 2. Bidders needing additional site inspection should contact Jason Moore at 660-530-5617 to schedule a time.
- 3. Please contact Mandy Roberson, Contract Specialist, at 573-522-0074 or mandy.roberson@oa.mo.gov for questions about bidding procedures and MBE/WBE/SDVE goals and submittal requirements.

4. The deadline for technical questions was Wednesday, August 28, 2019.
5. Changes to, or clarification of, the bid documents are only made as issued in the addenda.
6. All correspondence with respect to this project must include the State of Missouri project number as indicated above.
7. Current Planholders list available online at: <https://www.adsplanroom.net/jobs/114/planholders/f1904-01-upgradeimprove-electrical-swine-pavilion-missouri-state-fairgrounds>
8. Prospective Bidders contact American Document Solutions, 1400 Forum Blvd Suite 1C, Columbia MO 65201, 573-446-7768 to order official plans and specifications.

ATTACHMENTS:

1. Section 004322 – Unit Prices Form
2. Section 012200 – Unit Prices
3. Section 233723 – HVAC Gravity Ventilators, Louvers, and Vents
4. Supplemental Drawing SD-EP-104
5. Pre-Bid Meeting Sign-In Sheet

August 30, 2019

END ADDENDUM NO. 1

ADDED AS PER ADDENDUM NO. 1

1.0 Description

- A. For changing specified quantities of work from those indicated by the contract drawings and specifications, upon written instructions of Owner, the following unit prices shall prevail. The unit prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover the finished work of the several kinds of work called for. Only a single unit price shall be given and it shall apply for either MORE or LESS work than that shown on the drawings and called for in the specifications or included in the Base Bid. In the event of more or less units than so indicated or included during construction the total contract price shall be decreased as appropriate or increased by contract change in accordance with General Conditions Article 4.1.

2.0 Unit Prices:

A. Unit Price No. 1 – Additional Brick Masonry Work

- 1. Description: Add additional brick masonry including face brick and backing to the requirements of work specified in Division 4 "Masonry Restoration and Repair".
- 2. Unit of Measurement: Square Foot (for full depth of wall)
- 3. Base Bid Quantity: 36 square feet (each square foot includes both face brick and backing).

\$ _____ per square foot

SECTION 012200 – UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract including General and Supplementary Conditions and other Division 1 Specification Sections apply to this Section.
- B. Quantities of Units to be included in the Base Bid are indicated in Section 004322 – Unit Prices.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Unit Prices.
- B. Related Sections include the following:
 - 1. Division 1 Section 004113 “Bid Form”
 - 2. Division 1 Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Contract Changes.

1.3 DEFINITIONS

- A. Unit Price is an amount proposed by bidders, stated on the Bid Form Attachment 004322 a price per unit of measurement for materials or services added to the Contract Sum by appropriate modification, if estimated quantities of Work required by the Contract Documents are increased.

1.4 PROCEDURES

- A. Unit Prices include all necessary material plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Owner reserves the right to reject Contractor's measurement of Work in-place that involves use of established Unit Prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- C. List of Unit Prices: A list of Unit Prices is included in Part 3. Specification Sections referenced in the schedule contain requirements for materials described under each Unit Price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 LIST OF UNIT PRICES

- A. **Unit Price No. 1 - Additional Brick Masonry Work**
 - 1. Description: Add additional brick masonry including face brick and backing to the requirements of work specified in Division 4 “Masonry Restoration and Repair”.

2. Unit of Measurement: Square Foot (for full depth of wall)
3. Base Bid Quantity: 36 square feet (each square foot includes both face brick and backing).

END OF SECTION 012200

SECTION 233723 - HVAC GRAVITY VENTILATORS, LOUVERS AND VENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. This Section includes fixed extruded aluminum louvers.

1.3 DEFINITIONS

- A. Louver Terminology: Definitions of terms for metal louvers contained in AMCA 501 apply to this Section unless otherwise defined in this Section or in referenced standards.
- B. Horizontal Louver: Louver with horizontal blades; i.e., the axes of the blades are horizontal.
- C. Drainable-Blade Louver: Louver with blades having gutters that collect water and drain it to channels in jambs and mullions, which carry it to bottom of unit and away from opening.

1.4 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Intake and relief ventilators shall be capable of withstanding the effects of gravity loads, wind loads, and thermal movements without permanent deformation of components, noise or metal fatigue, or permanent damage to fasteners and anchors.
- B. Water Entrainment: Limit water penetration through unit to comply with ASHRAE 62.1-2004.
- C. Structural Performance: Louvers shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated without permanent deformation of louver components, noise or metal fatigue caused by louver blade rattle or flutter, or permanent damage to fasteners and anchors. Wind pressures shall be considered to act normal to the face of the building.
 - 1. Wind Loads: Determine loads based on a uniform pressure of 20 lbf/sq. ft., acting inward or outward.
- D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes, without buckling, opening of joints, overstressing of components, failure of connections, or other detrimental effects.
 - 1. Temperature Change (Range): 120 deg F ambient; 180 deg F material surfaces.

- E. Louver Performance Ratings: Provide louvers complying with requirements specified, as demonstrated by testing manufacturer's stock units identical to those provided, except for length and width according to AMCA 500-L.

1.5 SUBMITTALS

- A. Product Data: For each type of product indicated. For louvers specified to bear AMCA seal, include printed catalog pages showing specified models with appropriate AMCA Certified Ratings Seals.
- B. Shop Drawings: For louvers and accessories. Include plans, elevations, sections, details, and attachments to other work. Show frame profiles and blade profiles, angles, and spacing.

1.6 QUALITY ASSURANCE

- A. Product Options: Information on Drawings and in Specifications establishes requirements for system's aesthetic effects and performance characteristics. Aesthetic effects are indicated by dimensions, arrangements, alignment, and profiles of components and assemblies as they relate to sightlines, to one another, and to adjoining construction. Performance characteristics are indicated by criteria subject to verification by one or more methods including preconstruction testing, field testing, and in-service performance.
- B. Product Options: Drawings indicate size, profiles, and dimensional requirements of intake and relief ventilators, louvers, vents and are based on the specific equipment indicated. Refer to Division 01 Section "Product Requirements".
- C. Welding: Qualify procedures and personnel according to the following:
 - 1. AWS D1.2, "Structural Welding Code--Aluminum".
 - 2. AWS D1.3, "Structural Welding Code--Sheet Steel".
 - 3. AWS D1.6, "Structural Welding Code--Stainless Steel".
- D. SMACNA Standard: Comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" for fabrication, construction details, and installation procedures.

1.7 COORDINATION

- A. Field Measurements: Verify louver openings by field measurements before fabrication and indicate measurements on Shop Drawings.
 - 1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish opening dimensions and proceed with fabricating louvers without field measurements. Coordinate construction to ensure that actual opening dimensions correspond to established dimensions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. Acceptable Manufacturers: Subject to compliance with requirements, provide products by one of the manufacturers specified.

2.2 MATERIALS

- A. Aluminum Extrusions: ASTM B 221, Alloy 6063-T5 or T-52.
- B. Aluminum Sheet: ASTM B 209, Alloy 3003 or 5005 with temper as required for forming or as otherwise recommended by metal producer for required finish.
- C. Fasteners: Same basic metal and alloy as fastened metal or 300 Series stainless steel, unless otherwise indicated. Do not use metals that are incompatible with joined materials.
 - 1. Use types and sizes to suit unit installation conditions.
 - 2. Use Phillips flat-head screws for exposed fasteners, unless otherwise indicated.
 - 3. For fastening galvanized steel, use hot-dip-galvanized steel or 300 series stainless-steel fasteners.
 - 4. For fastening stainless steel, use 300 series stainless-steel fasteners.
 - 5. For color-finished louvers, use fasteners with heads that match color of louvers.
- D. Post-Installed Fasteners for Concrete and Masonry: Torque-controlled expansion anchors, made from stainless-steel components, with capability to sustain, without failure, a load equal to 4 times the loads imposed, for concrete, or 6 times the load imposed, for masonry, as determined by testing per ASTM E 488, conducted by a qualified independent testing agency.
- E. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

2.3 FABRICATION, GENERAL

- A. Factory or shop fabricate intake and relief ventilators to minimize field splicing and assembly. Disassemble units to the minimum extent as necessary for shipping and handling. Clearly mark units for reassembly and coordinated installation.
- B. Fabricate frames, including integral bases and sills, to fit in openings of sizes indicated, with allowances made for fabrication and installation tolerances, adjoining material tolerances, and perimeter sealant joints.
- C. Fabricate units with closely fitted joints and exposed connections accurately located and secured.
- D. Fabricate supports, anchorages, and accessories required for complete assembly.

- E. Perform shop welding by AWS-certified procedures and personnel.
- F. Assemble louvers in factory to minimize field splicing and assembly. Disassemble units as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation.
- G. Vertical Assemblies: Where height of louver units exceeds fabrication and handling limitations, fabricate units to permit field-bolts assembly with close-fitting joints in jambs and mullions, reinforced with splice plates.
 - 1. Continuous Vertical Assemblies: Fabricate units without interrupting blade-spacing pattern unless horizontal mullions are indicated.
 - 2. Horizontal Mullions: Provide horizontal mullions at joints unless continuous vertical assemblies are indicated.
- H. Maintain equal louver blade spacing, including separation between blades and frames at head and sill, to produce uniform appearance.
- I. Include supports, anchorages, and accessories required for complete assembly.
- J. Provide vertical mullions of type and at spacings indicated, but not more than recommended by manufacturer, or 72 inches o.c., whichever is less.
 - 1. Full Recessed Mullions: Where indicated, provide mullions fully recessed behind louver blades. Where length of louver exceeds fabrication and handling limitations, fabricate with close-fitting blade splices designed to permit expansion and contraction.
 - 2. Semirecessed Mullions: Where indicated, provide mullions partly recessed behind louver blades so louver blades appear continuous. Where length of louver exceeds fabrication and handling limitations, fabricate with interlocking split mullions and close-fitting blade splices designed to permit expansion and contraction.
 - 3. Exposed Mullions: Where indicated, provide units with exposed mullions of same width and depth as louver frame. Where length of louver exceeds fabrication and handling limitations, provide interlocking split mullions designed to permit expansion and contraction.
 - 4. Exterior Corners: Prefabricated corner units with mitered and welded blades and with fully recessed mullions at corners.
- K. Provide subsills made of same material as louvers or extended sills for recessed louvers.
- L. Join frame members to each other and to fixed louver blades with fillet welds concealed from view unless otherwise indicated or size of louver assembly makes bolted connections between frame members necessary

2.4 FIXED, EXTRUDED-ALUMINUM LOUVERS

- A. Acceptable Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. American Warming and Ventilating, Inc.
 - 2. Greenheck Fan Corporation.
 - 3. Ruskin Company

B. Horizontal, Drainable-Blade Louver:

1. Louver Depth: 4 inches.
2. Frame and Blade Nominal Thickness: Not less than 0.080 inch for blades and 0.080 inch for frames.
3. Mullion Type: Exposed.
4. Louver Performance Ratings:
 - a. Free Area: Not less than 8.5 sq. ft. for 48-inch- wide by 48-inch-high louver.
 - b. Point of Beginning Water Penetration: Not less than 1000 fpm free-area velocity.
5. AMCA Seal: Mark units with AMCA Certified Ratings Seal.

2.5 BLANK-OFF PANELS

A. Uninsulated, Blank-Off Panels: Metal sheet attached to back of louver.

1. Aluminum sheet for aluminum louvers, not less than 0.050-inch nominal thickness.
2. Galvanized-steel sheet for galvanized-steel louvers, not less than 0.040-inch nominal thickness.
3. Panel Finish: Same type of finish applied to louvers, but black color.
4. Attach blank-off panels with sheet metal screws.
5. Seal perimeter joints between panel faces and louver frames with gaskets or sealant.
6. Panel Finish: Same type of finish applied to louvers, but black color.
7. Attach blank-off panels with sheet metal screws.

2.6 FINISHES, GENERAL

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- B. Finish louvers after assembly.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates and openings, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Coordinate setting drawings, diagrams, templates, instructions, and directions for installation of anchorages that are to be embedded in concrete or masonry construction. Coordinate delivery of such items to Project site.

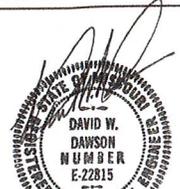
3.3 INSTALLATION

- A. Install, louvers level, plumb, and at indicated alignment with adjacent work.
- B. Install perimeter reveals and openings of uniform width for sealants and joint fillers, as indicated.
- C. Install concealed gaskets, flashings, joint fillers, and insulation as installation progresses. Comply with Division 07 Section "Joint Sealants" for sealants applied during installation.
- D. Protect galvanized and nonferrous-metal surfaces from corrosion or galvanic action by applying a heavy coating of bituminous paint on surfaces that will be in contact with concrete, masonry, or dissimilar metals.
- E. Repair finishes damaged by cutting, welding, soldering, and grinding. Restore finishes so no evidence remains of corrective work. Return items that cannot be refinished in the field to the factory, make required alterations, and refinish entire unit or provide new units.
- F. Use concealed anchorages where possible. Provide brass or lead washers fitted to screws where required to protect metal surfaces and to make a weathertight connection.
- G. Form closely fitted joints with exposed connections accurately located and secured.
- H. Install concealed gaskets, flashings, joint fillers, and insulation as louver installation progresses, where weathertight louver joints are required. Comply with Division 07 Section "Joint Sealants" for sealants applied during louver installation.

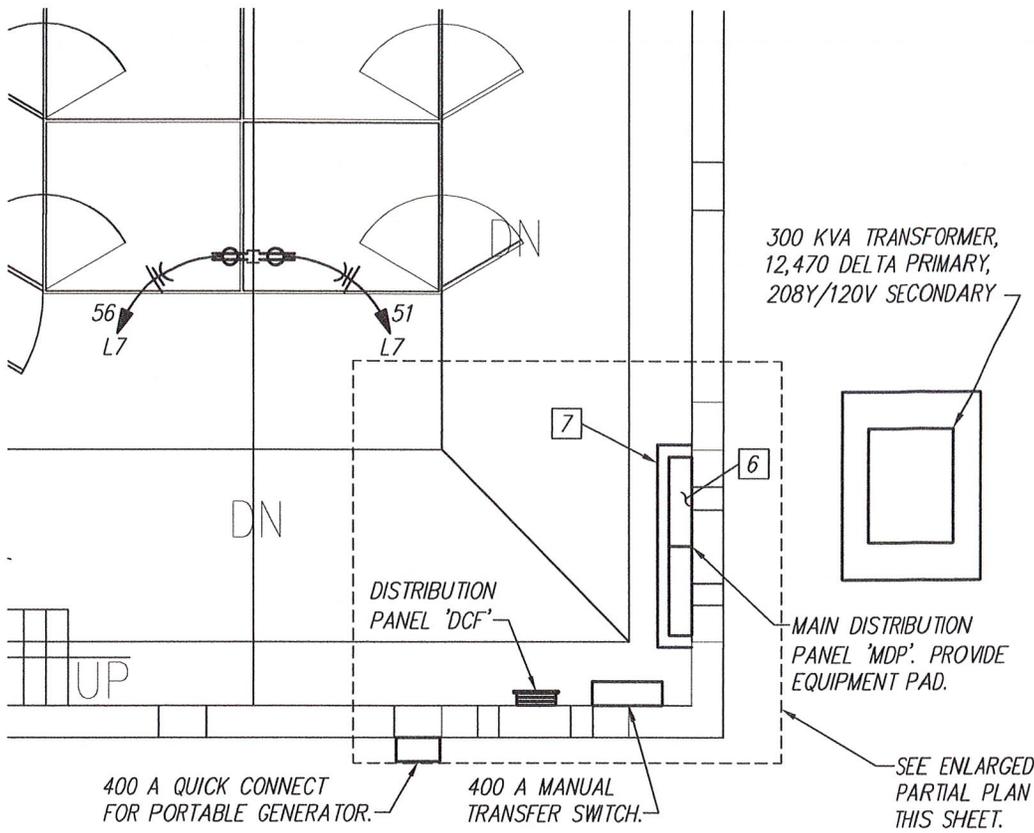
3.4 ADJUSTING AND CLEANING

- A. Clean exposed surfaces of ventilators, louvers and vents that are not protected by temporary covering, to remove fingerprints and soil during construction period. Do not let soil accumulate until final cleaning.
- B. Before final inspection, clean exposed surfaces with water and a mild soap or detergent not harmful to finishes. Thoroughly rinse surfaces and dry.
- C. Restore ventilators and louvers damaged during installation and construction so no evidence remains of corrective work. If results of restoration are unsuccessful, as determined by Architect, remove damaged units and replace with new units.
 - 1. Touch up minor abrasions in finishes with air-dried coating that matches color and gloss of, and is compatible with factory-applied finish coating.

END OF SECTION 233723

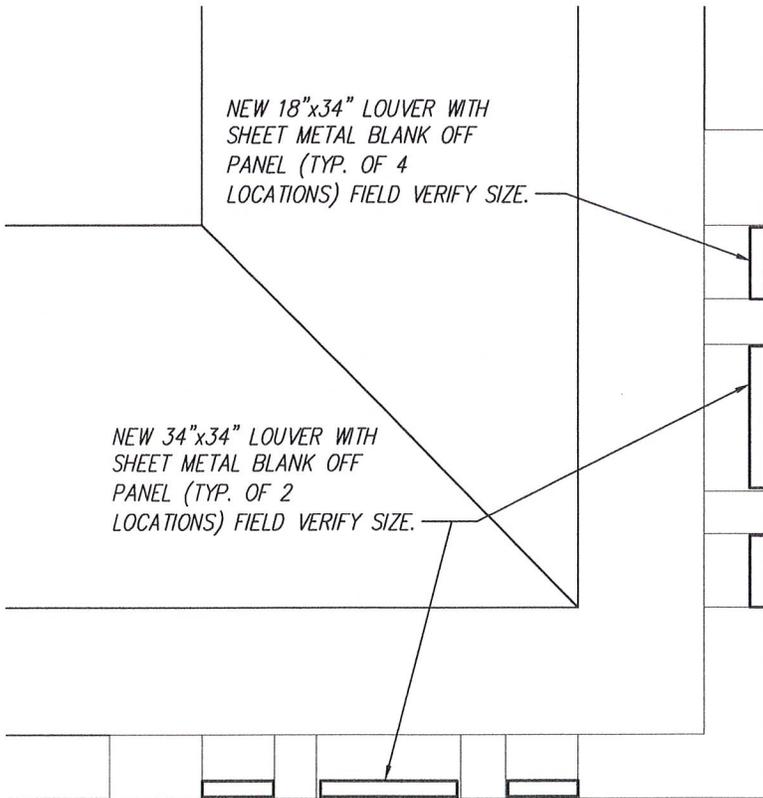


David W. Dawson
Missouri # E-22815 06/21/2019



1. POWER PLAN AREA 4

SCALE: 1/8" = 1'-0"



2. ENLARGED PARTIAL PLAN

SCALE: 1/4" = 1'-0"

1600 Baltimore, Suite 300
Kansas City, Missouri, 64108
Phone: 816.942.8437
Fax: 816.942.8441

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Mechanical and Electrical Engineers • Since 1933

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OFFICE OF ADMINISTRATION
DIVISION OF FACILITIES
MANAGEMENT,
DESIGN AND CONSTRUCTION

DEPARTMENT OF
AGRICULTURE

UPGRADE/IMPROVE
ELECTRICAL

SWINE PAVILION
MISSOURI STATE
FAIRGROUNDS
SEDALIA, MO

PROJECT # F1904-01
SITE # 1501
ASSET # 3511501037

REVISION: _____
DATE: _____
REVISION: _____
DATE: _____
REVISION: _____
DATE: _____

ISSUE DATE: 06/21/2019

CAD DWG FILE: _____
DRAWN BY: _____
CHECKED BY: _____
DESIGNED BY: _____

SHEET TITLE:

SUPP. DRAWING

SHEET NUMBER:

SD-EP-104

Pre-Bid Meeting Attendance Sheet
Upgrade/Improve Electrical
Swine Pavilion, Missouri State Fairgrounds
Sedalia, Missouri

Project No. F1904-01
 August 20, 2019, 10:00 AM

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
Bryan Chinn	OA-FMDC		573-751-2440	bryan.chinn@oa.mo.gov
Jared Cook	OA-FMDC		573-690-6733	jared.cook2@oa.mo.gov
Jason Mecke	MSF		660-530-5617 (cell - 660-281-6333)	Jason.Mecke@mda.mo.gov
Hans Stutz	DB2 Services Inc (Metal Roofing)		(913) 371-7100 ② 916 926 6715	hstutz@db2services.com
Eric Friga	Friga Construction Co.		417-887-7134	eric@frigainc.com
STEVE DUTROW IPM	PRO-POST JV		573-645-5812	stephen@PROSTBUILDERS.com

**Pre-Bid Meeting Attendance Sheet
Upgrade/Improve Electrical
Swine Pavilion, Missouri State Fairgrounds
Sedalia, Missouri**

**Project No. F1904-01
August 20, 2019, 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
PAUL JEFFRIES President	Jeffries Electrical Services	NO	573-680-1571	P.Jeffries@KTIS.NET
JIM MARSHALL Architect	JPNA Architects Inc.	NO	816-505-3700	jmarshall@jmaonline.com
DAVID DAWSON	W.L. CASSELL & ASSOC.	NO	816-842-8437	ddawson@wlc-ka.net
Jim Withrow	W.L. Cassell & Assoc	NO	816-842-8437	jwithrow@wlc-ka.net
Shad Sparks	MC POWER	NO	660-887-4458	Ssparks@mcpower.com
TODD HOLMAN	SMC	NO	660-827-5377	THolman@SMCElectric.com

**Pre-Bid Meeting Attendance Sheet
Upgrade/Improve Electrical
Swine Pavilion, Missouri State Fairgrounds
Sedalia, Missouri**

**Project No. F1904-01
August 20, 2019, 10:00 AM**

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
ROBERT REASBECK	All - PRO - SUB	—	816.258.2359	breasbeck@rcicon.com
Dillon Kliever	All-Pro - Sub	—	816-392-1256	dkliever@rcicon.com
JIM STUCK	All - PRO -	—	660-580-0019	jstuck@allproelectrical.com
Zack Kaltefleiter	All-PRO	—	660-747-0090	zkaltefleiter@allproelectrical.com
Dan Grose	All-PRO	-	660-221-3601	dgrose@allproelectrical.com
Randy Duncan	OA/FMDC	-	573-619-4395	randy.duncan@OA.Mo.gov

Pre-Bid Meeting Attendance Sheet
 Upgrade/Improve Electrical
 Swine Pavilion, Missouri State Fairgrounds
 Sedalia, Missouri

Project No. F1904-01
 August 20, 2019, 10:00 AM

Name & Title	Company Name Type of Contracting	MBE/WBE/ SDVE Status	Phone	E-Mail Address
LEROY ROBERTSON PM	REIN Hold Electric Electrical	—	573 537-9354	LEROY@REIN Hold Electric.com
Aron Martin	Martin General Contractors		573-485- 2107	amartin@martin-gc.com
CLINT BROWN	SML		060-221 0276	CBROWN@SMLELECTRICAL.COM