

ADDENDUM NO. 1

VILLAGE OF WEST MANSFIELD Water Treatment Plant Shop & Lime Sludge Dewatering Building

February 9, 2015

To: Planholders

From: Mote & Associates, Inc.
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Re: Village of West Mansfield
Water Treatment Plant Shop & Lime Sludge Dewatering Building

This addendum forms a part of the Contract Documents and modifies the original Contract Documents dated January 2015. Acknowledge receipt of all Addenda in the space provided on the Bid Proposal form. Failure to do so may subject the Bidder to disqualification.

CHANGES/CLARIFICATIONS TO THE BIDDING REQUIREMENTS AND DRAWINGS:

1. Sheet #7 of 14, Power & Lighting Plan
 - A. The electrical conduit and conductors feeding the proposed 50 KVA transformer from the proposed 100A breaker installed in the existing water treatment plant main shall be revised to the following sizes: “(3) #2 AWG THHN/THWN Cu and ground in a minimum 2” diameter conduit.”
 - B. The communication port shown at the workbench is to be relocated to the south wall of the lab. The communication port shall be CAT6 line run in the SCADA conduit from the existing water treatment plant. It shall provide a telephone connection and an internet connection.

2. A Standing Seam Sheet Metal Roofing specification is attached. It shall replace the specification for Metal Roofing and Ceiling Panels. The new specification is attached.

End of Addendum

Attachments: Standing Seam Sheet Metal Roofing 07 61 00

STANDING SEAM SHEET METAL ROOFING

07 61 00

PART ONE - GENERAL

1.01 Requirements Included

- A. Prefinished, prefabricated structural standing seam roof system with continuous interlocking field formed seams.
- B. Coordinate with installation of roofing substructure.
- C. Provide color coordinated hip, gable, and valley flashings, ridge and peak caps, eave and shelf drips, and counterflashings.
- D. Provide clips, fasteners, closures, and sealants as necessary to meet design criteria and ensure weathertight installation.

1.02 System Description

- A. Design Requirements:
 - 1. Provide factory preformed panel system that has been pre-tested and certified by manufacturer to comply with specified requirements under installed conditions.
 - 2. Provide one piece, single length roof panel where possible.
 - 3. Provide continuous interlocking standing seam.
- B. Structural Requirements:
 - 1. Engineer panels for structural properties in accordance with latest edition of American Iron and Steel Institute's "Cold Formed Steel Design Manual.
- C. Substrate Criteria
 - 1. Solid 1/2" minimum thickness plywood substrate, roof.
 - 2. Solid 7/16" minimum thickness plywood substrate, exterior walls.
- D. Environmental Requirements
 - 1. Resistance to air infiltration: .004 cfm per linear foot of joint when tested in accordance with ASTM E 1680 at static test pressure differential of 12.00 psf.
 - 2. Resistance to water infiltration: No leakage through panel joints when tested in accordance with ASTM E 1648 at static test pressure differential of 6.24 psf.

1.03 Submittals

- A. Product Data: Submit manufacturer's specifications, standard detail drawings, and installation instructions.
- B. Shop Drawings:

1. Submit shop drawings indicating thickness and dimensions of parts, fastenings and anchoring methods, details and locations of seams, transitions and other provisions necessary for thermal expansion and contraction.
 2. Indicate roof terminations, clearly showing flashings and change of direction caps.
 3. Clearly indicate locations of field and factory applied sealant.
 4. Show locations and types of hold-down clips and fasteners.
 5. Provide plan showing layout of entire roof.
- C. Samples:
1. Submit two samples, 12" long x full width panel showing proposed metal gauge, seam profile, and required finish.
 2. Submit standard color samples on metal for Engineer's selection.
- D. Test Reports:
1. Submit test reports prepared by (UL) Underwriters Laboratories, Inc. indicating wind uplift rating of proposed roof system.
- E. Certification:
1. Submit manufacturer's certification that materials and finishes meet specification requirements.
- F. Applicator's and Manufacturer's Experience Records:
1. Submit list of completed projects and name of Engineer or Architect.

1.04 Quality Assurance

- A. Manufacturer's Qualifications:
1. Five years minimum experience in factory fabrication of standing seam roofs.
 2. All roof panels shall be roll formed at the manufacturer's prime manufacturing location.
 3. Products listed in this specification section are as manufactured by AEP Span, AMS Architectural Metal Systems, Butler or Englert or Approved Equal.
- B. Regulatory Requirements:
1. Comply with requirements of applicable building codes and other agencies having jurisdiction of wind uplift rating of standing seam roofs.

1.05 Delivery, Storage and Handling

- A. Protect products and accessories from damage and discoloration during transit and at project site. Store sheets and components in dry storage area to prevent condensation.
- B. Do not overload roof structure with stored materials. Do not permit material storage or traffic on completed roof surfaces.

1.06 Guarantee and Warranty

- A. Furnish manufacturer's standard 20-year warranty stating architectural fluorocarbon finish will be:
 - 1. Free of fading or color change in excess of 5 NBS units as measured per ASTM D 2244-68;
 - 2. Will not chalk in excess of numerical rating of 7 when measured in accordance with standard procedures specified in ASTM D 659-74;
 - 3. Will not peel, crack, chip, or delaminate.
- B. Furnished written warranty signed by roof installer for two year period from date of substantial completion of building covering repairs required to maintain roof and flashings in watertight conditions.

PART TWO - PRODUCTS

2.01 Products and Manufacture

- A. Panels:
 - 1. Prefinished Galvalume[®] sheet, ASTM AZ50 made up of 55% aluminum, 1.6% silicon and the balance zinc as described in ASTM specification A792.
 - 2. Fabricate panels with minimum 26 guage, Kynar 500 finish.
 - 3. Factory fabricates panel with integral continuous interlocking standing seams.
 - 4. Seam size of 1" or 1 1/2" integral snap-lock panel is acceptable.
 - 5. Provide high grade elastomeric sealant on bottom edge of female seam leg, designed to seal against adjacent male panel leg in accordance with the chosen manufacturer's instructions.
 - 6. Provide factory formed panel width of 18" or 24" width 1 3/4" high x 3/8" wide standing seam.
 - 7. Provide panels in full length from ridge to eave.
 - 8. Engineer panels to use concealed anchors that permit expansion and contraction.
- B. Seams:
 - 1. Panel seams shall interlock entire length of seam.
 - 2. Engineer standing seam to lock up and resist joint disengagement during design wind uplift conditions as calculated according to local building codes.
 - 3. Fabricate female leg with pressure equalized capillary break to prevent water siphoning through joints.
 - 4. Provide factory sealant on leading edge of female seam leg to aid in resistance of

leaks and to provide panel-to-panel seal while allowing expansion and contraction movement.

C. Clips:

1. Provide UL listed clip designed to allow panels to thermally expand and contract.
2. Fabricate clips with embossments that raise underside of panels above substrate to allow underside ventilation.
3. Fabricate clips with structurally embossed outstanding legs to prevent distortion due to wind uplift forces.

D. Finish

1. Fluorocarbon Coating:
 - a. Full strength 70% Kynar 500® coating baked on to a nominal dry-film thickness of 1.0 mil.
 - b. 0.3 mil baked on primer.
 - c. Color: As selected by Owner or Engineer from manufacturer's standard.

2.02 Materials

A. Clip/Fastener Assemblies:

1. Standard Fasteners: Same as UL 90 fasteners specified above.
2. Nailable Substrate Fasteners: #10 - 12 x 1" long A-Point fastener, pancake head Phillips drive screws for plywood; noncorrosive base material.
3. Clip shall be designed to meet positive and negative pressures as calculated per local building code.

B. Accessories:

1. Provide manufacturer's standard accessories and other items essential to completeness of standing seam roof installation.
2. Provide nylon seam end plugs for clean termination of panel.
3. Provide factory fabricated rib covers at roof slope transitions.

- C. Felt Underlayment (solid substrate) 30#, asphalt saturated fiberglass felt, nonperforated.

PART THREE – EXECUTION

3.01 Examination

A. Substrate:

1. Examine substrate to ensure it is properly secured and prepared to receive metal roofing.
2. Ensure substrate is installed flat, free from objectionable warp, wave, and buckle.
3. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 Preparation

- A. Felt Underlayment (solid substrate):
 - 1. Provide one layer of 30# felt with horizontal overlaps and end laps staggered between layers.
 - 2. Lay parallel to ridgeline with 2 1/2" horizontal laps and 6" vertical laps.

3.03 Installation

- A. Comply with manufacturer's instructions for assembly, installation, and erection in order to achieve weathertight installation. Install in accordance with approved shop drawings.
- B. Standing Seam System:
 - 1. Install panels in accordance with manufacturer's instructions and recommendations.
 - 2. Anchor securely in place using clips and fasteners spaced in accordance with manufacturer's recommendations for design wind load criteria.
 - 3. Fully seat adjacent panel to achieve continuous engagement of standing seam joint.
- C. Dissimilar Metals:
 - 1. Where sheet metal is in contact with dissimilar metals, execute juncture to facilitate drainage and minimize possibility of galvanic action.
 - 2. At point of contact with dissimilar metal, coat metal with protective paint or tape which can be placed between metals.
- D. Field apply sealant to penetrations, transitions, and other locations necessary for airtight, waterproof installation.

3.04 Cleaning

- A. Clean exposed surfaces of work promptly after completion of installation.

3.05 Protection

- A. Protect work as required to ensure roofing will be without damage at time of final completion.

End of Section