To: All Plan Holders of Record

Bidders are to acknowledge the receipt of this Addendum by inserting its number and date into their Bid Forms. Failure to do so may subject the Bidder to disqualification. This Addendum forms part of the Contract Documents as if bound therein and modifies them as follows:

I. PRIOR APPROVALS

A. Substitution requests were submitted for the following materials:

1. Standing Seam Metal Roofing
   a. Proposed substitution: ....... Seam-Loc 24 Standing Seam Metal Roofing from Metal Sales Manufacturing Corp.
   b. Status: ......................... Approved As Noted

Note: Remainder of project specifications shall be strictly adhered to. This includes, but is not limited to, requirements for light gage steel substructure, fiberglass blanket insulation, thermal spacer blocks, and all flashings, trims, and accessories. Requirements pertaining to the manufacturer, supplier, installer, system performance, warranty, and weight certification shall also be met.

II. AMENDMENTS TO THE PROJECT MANUAL

A. None

III. AMENDMENTS TO THE DRAWINGS

A. None

IV. GENERAL INFORMATION

A. Parking Permits
   1. MSU parking permits are not required for vehicles parked at the BART Farm.

V. ATTACHMENTS

A. Substitution Request: Standing Seam Metal Roofing
B. Pre-Bid Conference – Meeting Notes
C. Pre-Bid Conference Sign-In Sheet
D. Pre-Bid Conference – Agenda and Information
SUBSTITUTION REQUEST (PRIOR APPROVAL)

Project Title: Miller Pavilion Roof Recover Bid Package #1
Location: 2730 W Garfield St., Bozeman, MT 59715
Owner: MONTANA STATE UNIVERSITY  Bidder (Sub-): Metal Sales Manufacturing Corporation

PPA No: 18-2038

This request is submitted for the approval of the Architect. Bidder / Sub-Bidder shall submit one request in accordance with Bidders’ Instructions and Information for each proposed substitution. All blanks are to be completed.

The material, system, or equipment defined by this Substitution Request is proposed as a replacement for the material, system, or equipment originally specified and defined as follows:

<table>
<thead>
<tr>
<th>SECTION</th>
<th>PARAGRAPH</th>
<th>SPECIFIED MATERIAL, SYSTEM, OR EQUIPMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>07600</td>
<td>2.01</td>
<td>MR-24 Standing Seam Metal Roof System by Butler Manufacturing</td>
</tr>
</tbody>
</table>

PROPOSED SUBSTITUTION: The material, system, or equipment being proposed is defined as follows:
Seam-Loc 24 Standing Seam Metal Roof Panel System by Metal Sales

Attached is the Seam-Loc 24 Condensed Technical Reference guide

- What are the differences between the specified material, system, or equipment and the proposed substitution?
The Seam-Loc 24 Panel offers a 2 11/16" rib height mechanically-seamed side lap and the minimum roof slope is 1/4:12.

- Does the proposed substitution require dimensional changes on the Construction Drawings? (Y ☑ N)

- Does the proposed substitution require changes to the Work of other trades? (Y ☑ N)

- Is the warranty for the proposed substitution comparable with that of the specified product? (Y ☑ N)

By signing and submitting this request, the Bidder / Sub-Bidder represents that the function, appearance, and quality of the proposed substitution are equivalent or superior to the specified material, system, or equipment.

By signing and submitting this request, the Bidder / Sub-Bidder agrees to pay all costs, including architectural and engineering fees, associated with the incorporation of the proposed substitution into the Project.

Michael J. McTamney, A.AIA, CSI

Received: [Signature]

Architect’s Action: ☐ Rejected  ☑ Approved

☑ Approved

REMAINDER OF ROOFING SYSTEMS TO STRICTLY CONFORM TO PROJECT SPECIFICATIONS - REFER TO ADDENDUM NO 1 DATED APRIL 18, 2019

ARCHITECTURE 118  SCOTT STROH
REVIEWED BY (ARCHITECT)  AUTHORIZED AGENT
APRIL 18, 2019  APRIL 18, 2019

MSU Substitution Request Form 099 (Revised 062911)
**SEAM-LOC 24®**

Factory-Applied Sealant

24" Coverage

2 2/16“

18 1/2“

Factory-Applied Sealant

18“ Coverage

2 5/8“

12 1/2“

**PANEL OVERVIEW**

- Finishes: PVDF and Acrylic-Coated Galvalume®
- Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
  AZ50 per ASTM A 792 for painted Galvalume®
  G90 per ASTM A 653 for Galvanized
- Gauges: 24 ga standard; 22 ga optional
- 24" or 18" panel coverage, 2 11/16" rib height
- Panel Length: Minimum: 5' ; Maximum: 45' recommended
- Structural trapezoidal standing seam roof system
- Pittsburgh double flat locking mechanically-seamed side lap
- Factory-applied side lap sealant in panel and clip
- Minimum roof slope: 1/4:12
- Panels can be factory-notched and punched
- Accommodates 1/2“ to 6“ blanket insulation

**TESTING AND APPROVALS**

- UL 2218 Impact Resistance - Class 4
- UL 790 Fire Resistance Rating - Class A, per building code
- UL 263 Fire Resistance Rating - per assembly
- ASTM E 283 Air Leakage - 0.06 cfm/ft² at 6.24 psf
- ASTM E 331 Water Penetration - none at 6.24 psf
- ASTM E 1680 Air Leakage - 0.0011 cfm/ft² at 6.24 psf
- ASTM E 1646 Water Penetration - none at 12 psf
- ASTM E 1592 Structural Performance
- UL 580 Uplift Resistance - Class 90 Constructions: #197 and #197A
- FM 4471 Roof Approval - Class 1-90 and 1-165
- 2017 FBC Approvals - FL10999.8 and FL10999.9
**SEAM-LOC 24®**

**ATTACHMENT DETAILS**

Factory-Applied Sealant
Seam-Loc 24° Panel
Clip
Clip Fastener

**BEFORE SEAMING**

Factory-Applied Sealant
S-5! Mini U Clamp (Optional)
Clip
Clip Fastener

**AFTER SEAMING**

**FASTENING INFORMATION**

- **Clips**
  - Clip spacing is based upon the design loads, the spanning capacity of the panels, the fasteners and the support members.
  - Clip Tabs are 0.037" thick, G90. Clip base is 0.060" thick, G60.
  - Floating Clips can accommodate 1-1/2" of thermal movement each way.

- **Fasteners**
  - Overdriven fasteners will cause panel distortions.
  - Fasteners should extend 1/2" or more past the inside face of the support material.
  - Clip Fasteners:
    - Attaching to Wood: #10-12 Pancake Head Wood Screw
    - Attaching to Steel:
      - <18 ga. 1/4"-14 Deck Screw
      - >=18 ga. <=12 ga. 1/4"-14 Driller, No Washer
      - >12 ga. 1/4"-24 Driller, No Washer
  - Exposed End Fasteners:
    - At Eave Plate or Compression Plate: #12-14 XL Driller
  - Concealed End Fasteners:
    - At Compression Plate: #12-14 Driller, No Washer
  - Trim Fasteners: 1/4"-14 x 7/8" XL Stitch Screw

---

**SECTION PROPERTIES**

<table>
<thead>
<tr>
<th>Ga</th>
<th>Width</th>
<th>Yield ksi</th>
<th>Weight psf</th>
<th>Top In Compression</th>
<th>Bottom In Compression</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in</td>
<td></td>
<td></td>
<td>lxx in/ft</td>
<td>Sxx in/ft</td>
</tr>
<tr>
<td>24</td>
<td>24</td>
<td>50</td>
<td>1.09</td>
<td>0.2055</td>
<td>0.0952</td>
</tr>
<tr>
<td>24</td>
<td>24</td>
<td>50</td>
<td>1.09</td>
<td>0.2055</td>
<td>0.0952</td>
</tr>
<tr>
<td>24</td>
<td>18</td>
<td>50</td>
<td>1.15</td>
<td>0.2480</td>
<td>0.1221</td>
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<tr>
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<td>50</td>
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<tr>
<td>22</td>
<td>24</td>
<td>50</td>
<td>1.43</td>
<td>0.2725</td>
<td>0.1263</td>
</tr>
</tbody>
</table>

**ALLOWABLE UNIFORM LOADS, psf**

For various clip spacings

<table>
<thead>
<tr>
<th>Inward Load</th>
<th>Outward Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>2'</td>
<td>2.5'</td>
</tr>
<tr>
<td>10</td>
<td>64</td>
</tr>
<tr>
<td>455</td>
<td>302</td>
</tr>
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<td>455</td>
<td>302</td>
</tr>
<tr>
<td>455</td>
<td>302</td>
</tr>
</tbody>
</table>

1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. lxx and Sxx are effective section properties for deflection and bending.
2. Allowable loads are calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear, deflection and ASTM E 1592 uplift testing. Allowable loads consider the 3 or more equal spans condition. Allowable loads do not address web crippling, fasteners or support material. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase for wind.
5. Loads determined using a S-5! Mini U clamp at each panel clip location.

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**Metal Sales**

metal.sales.us.com

Anchorage, AK 866.540.7663
Bay City, MI 888.777.7640
Deer Lake, PA 800.544.2577
Denver, CO 800.289.7663
Jacksonville, FL 800.394.4419
Jefferson, OH 800.321.5833
Mocksville, NC 800.228.6119
Nashville, TN 800.251.8508
Rock Island, IL 800.747.1206
Rogers, MN 800.328.9316
Seattle, WA 800.431.3470
Sellersburg, IN 800.999.7777
Sioux Falls, SD 888.902.8320
Spokane, WA 800.572.6565
Temple, TX 800.543.4415
Woodland, CA 800.759.6019
The following is a summary of the above referenced meeting:

I. PURPOSE OF MEETING

A. Pre-Bid Conference for above referenced project. Introductions were made and Contractor information was collected.

II. ITEMS OF DISCUSSION

A. Proposed Roofing Assembly

1. Metal-over-metal overlay system utilizing standing seam roofing panels.
2. Up to 9-inches nominal fiber blanket insulation.
3. Existing metal roofing panels to remain in place.
4. Total weight of new materials added to roof must be certified to not exceed 2.0 pounds per square foot.
5. Rigid insulation is not intended in the roofing assembly.

B. Bidding Requirements

1. Project bidding requirements are included in the Project Manual.
2. State of Montana public bidding requirements apply (bonding, insurance, prevailing wages, gross receipts tax, etc.)

C. Miscellaneous

1. This is a summertime project (mid-May to mid-August).
2. Contractor staging requirements will be addressed at Pre-Construction meeting.
3. Public safety is critical.
4. No smoking on site.
5. No parking permits are required at the project site.

III. FUTURE ACTION ITEMS

A. Addendum No. 1

This information is forwarded to all those who attended the meeting. If any information summarized above is not correct, complete, or is inaccurate in any way, please notify the Authorized Agent listed above.
**PRE-BID CONFERENCE SIGN-IN SHEET**

Project Name: Miller Pavilion Roof Recover, Bid Package #1  
PPA No.: 18-2038 (A118 18-043)  
Location: Montana State University  
Meeting Date: April 9, 2019  
Owner: State of Montana  
Montana State University  
Bozeman, Montana

Please provide the following information:

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mike McDonald</td>
<td>CentiMark</td>
<td>(208) 258-3364</td>
<td><a href="mailto:Michael.McDonald@CentiMark.com">Michael.McDonald@CentiMark.com</a></td>
</tr>
<tr>
<td>Katie Wilson</td>
<td>CentiMark</td>
<td>(208) 258-3365</td>
<td><a href="mailto:Katie.Wilson@CentiMark.com">Katie.Wilson@CentiMark.com</a></td>
</tr>
<tr>
<td>Josh Kendall</td>
<td>TruNorth Contractors, Inc.</td>
<td>(406) 600-3019</td>
<td><a href="mailto:jkendall@trunorthcontractors.com">jkendall@trunorthcontractors.com</a></td>
</tr>
<tr>
<td>Grant Petersen</td>
<td>MSU CPDC</td>
<td>(406) 994-5451</td>
<td><a href="mailto:grant.petersen@montana.edu">grant.petersen@montana.edu</a></td>
</tr>
<tr>
<td>Leslie Schroeder</td>
<td>MSU CPDC</td>
<td>(406) 994-5265</td>
<td><a href="mailto:leslie.schroeder1@montana.edu">leslie.schroeder1@montana.edu</a></td>
</tr>
<tr>
<td>Scott Stroh</td>
<td>Architecture 118</td>
<td>(406) 404-1777</td>
<td><a href="mailto:scott.s@arch118.com">scott.s@arch118.com</a></td>
</tr>
</tbody>
</table>
I. SIGN-IN, COLLECT BUSINESS CARDS

II. INTRODUCTIONS
   A. Owner: Grant Petersen; MSU – Project Manager; (406) 994-5451; grant.petersen@montana.edu
   B. Architect: Scott Stroh; Architecture 118, Bozeman, Montana; (406) 404-1777; scott.s@arch118.com

III. SUMMARY OF PROJECT
   A. The Project will recover the existing roofing assembly on the building.
   B. There are no bid alternate represented in the bidding documents.

IV. BIDDING PROCESS AND CONTRACT REQUIREMENTS
   A. Refer to Invitation to Bid for bid date and location.
   B. Refer to Instructions to Bidders for general bidding requirements and procedures, bonding requirements, permits and fees, substantial completion date, liquidated damages, etc.

V. QUESTIONS PERTAINING TO BIDDING DOCUMENTS

VI. MISCELLANEOUS

VII. TOUR THE PROJECT SITE

VIII. FUTURE ACTION ITEMS