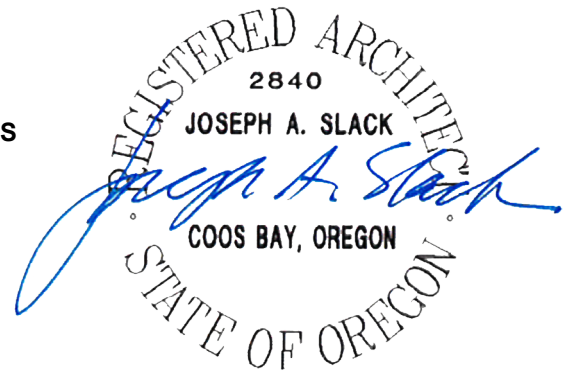


ADDENDUM #2 – OCTOBER 14, 2024

RE: COOS COUNTY BOARD OF COMMISSIONERS
Beaver Hill Pit Roof Structure - REBID
Project #19.48.1

FROM: HGE ARCHITECTS, Inc.
333 South 4th Street
Coos Bay, Oregon 97420
541-269-1166



TO: Prospective Bidders

This Addendum forms a part of the Contract Documents and modifies the original Documents dated September 2024, as noted below. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject Bidder to disqualification.

This Addendum consists of **TWO (2)** page(s) together with the following attachments:

- REVISED Specification Section 13-3412 Metal Building Systems

CHANGES TO PROJECT MANUAL:

- 1. Section 01-1000 Summary: Paragraph 1.04, B:** ADD “County will provide access of the site to the contractor as requested, including those days closed to the public. Note paragraph C.2 regarding access to north or south side; however, the days closed, noted above, the contractor may occupy both sides.
- 2. Section 13-3412 Metal Building Systems:** Make the following changes:
 - a. Paragraph 1.03, B, 4:** CHANGE “2019” to “2022”
 - b. Paragraph 1.03, B, 5:** CHANGE “Exposure B” to “Exposure C”
 - c. Paragraph 1.03, C, 1, a:** CHANGE to read “H/60 to a maximum of 5 inches for wind loads”
 - d. Paragraph 1.03, C, 2, a, 1:** CHANGE to read “L/180 for transient loads, such as wind, seismic, and snow, and L/120 for Dead and Live”
 - e. Paragraph 1.08, D:** DELETE paragraph in entirety (siding panels)
 - f. Paragraph 2.01, C, 6:** DELETE item in entirety (Daylighting system).
 - g. Paragraph 2.02, D:** DELETE the term “Sill supports”
 - h. Paragraph 2.02, E:** DELETE paragraph in entirety (reference to wall panels).
 - i. Paragraph 2.02, G:** REVISE to read “Roof slope: Refer to drawings”
 - j. Paragraph 2.03, A:** CHANGE “2019” to “2022 code”
 - k. Paragraph 2.05, C, 2:** DELETE reference to “G90 galv.”
 - l. Paragraph 2.08:** Clarification – Refer to Drawings regarding galvanized steel pipe downspout and sheet metal downspouts, reference Detail 3/A3.1.
 - m. Paragraph 2.10, A:** CHANGE “ASTM A1” to “ASTM A123”

- n. **Paragraph 3.04, C:** ADD “per Alternate Bid”
- 3. **Section 32-1123 Aggregate Base Courses:** Make the following changes:
 - a. **Paragraph 2.01, A:** REMOVE in entirety and REPLACE with “All base aggregate must comply with ODOT spec 640”.
 - b. **Paragraph 3.03, C:** REVISE to read “Place aggregate in maximum 8 inch depth lifts.”
- 4. **Section 32-1216 Asphalt Paving, Paragraph 3.02:** REMOVE Paragraph in entirety.

CHANGES TO DRAWINGS:

- 1. **Sheet A5.1 Building Details, Details 7 & 8:**
 - a. Epoxy anchors to be Simpson SET-XP or equivalent.
 - b. Detail 8 Clarification – entire steel post and rail can be shop fabricated, including drill and tap for rail attachment. Entire assembly to be hot dipped galvanized, except for minor field work as noted.

SUBSTITUTION APPROVALS: None.

END OF ADDENDUM #2

**SECTION 13-3419
METAL BUILDING SYSTEMS**

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Manufacturer-engineered, shop-fabricated structural steel building frame, galvanized.
- B. Metal wall and roof panels including gutters and downspouts.
- C. Refer to Drawings for building shape, roof slope, roof configuration. Metal Building System manufacture/engineer shall follow general configuration of building design. Slab and foundation to be constructed as shown in Drawings.

1.02 REFERENCE STANDARDS

- A. ANSI/AISC 341-16 - AISC Seismic Provisions for Structural Steel Buildings.
- B. AISC 360 - Specification for Structural Steel Buildings; 2016.
- C. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.
- D. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2009.
- E. ASTM A307 - Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60 000 PSI Tensile Strength; 2014.
- F. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength; 2014.
- G. ASTM A325M - Standard Specification for Structural Bolts, Steel, Heat Treated 830 MPa Tensile Strength (Metric); 2014.
- H. ASTM A529/A529M - Standard Specification for High-Strength Carbon-Manganese Steel of Structural Quality; 2014.
- I. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2015.
- J. ASTM A792/A792M - Standard Specification for Steel Sheet, 55% Aluminum-Zinc Alloy-Coated by the Hot-Dip Process; 2010 (Reapproved 2015).
- K. ASTM A992/A992M - Standard Specification for Structural Steel Shapes; 2011 (Reapproved 2015).
- L. ASTM C991 - Standard Specification for Flexible Fibrous Glass Insulation for Metal Buildings; 2016.
- M. ASTM C1107/C1107M - Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink); 2014.
- N. ~~ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2015a.~~
- O. AWS A2.4 - Standard Symbols for Welding, Brazing, and Nondestructive Examination; 2012.
- P. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015.
- Q. MBMA (MBSM) - Metal Building Systems Manual; 2012.
- R. ~~SSPC Paint 20 - Zinc-Rich Primers (Type I, "Inorganic," and Type II, "Organic"); 2002 (Ed. 2004).~~
- S. UL 580 - Standard for Tests for Uplift Resistance of Roof Assemblies; Current Edition, Including All Revisions.

1.03 DESIGN REQUIREMENTS

- A. Design members to withstand dead load, applicable snow load, and design loads due to pressure and suction of wind calculated in accordance with 2022 Oregon Structural Specialty code.

- B. Members to withstand the following building system live and dead loads:
1. Roof snow load of 25 psf
 2. Collateral load (HVAC, Fire Sprinkler System, Lighting, etc.) of 2 psf
 3. Seismic Site Classification (Table 20.3-1 ASCE) = Site Class D. **2022**
 4. All loads shall be proportioned and applied in accordance with the **2019** edition of the Oregon Structural Specialty Code (OSSC) and ASCE Standard 7. **C**
 5. Ultimate Design Wind Speed = 135 mph (3-second gust). Exposure **B**.
 6. Wind Surface Roughness = C.
 7. Wind Importance = 1.00.
 8. Seismic Importance = 1.00.
- C. Deflections shall be limited as follows:
1. Primary Framing:
 - a. ~~H/360 for wind loads.~~ **H/60 to a maximum for 5 inches for wind loads.**
 - b. $0.02 \cdot H$ or H/50 for seismic loads.
 - c. L/240 for roof snow load and dead load.
 - d. L/360 for roof snow load.
 - e. Camber frame rafters for dead load + collateral dead load.
 2. Secondary Framing:
 - a. Roof Framing for Gravity Load:
 - 1) L/240 for dead load + roof snow load; but not less than that required to maintain positive drainage for the greater of dead load + 1/2 roof snow load or dead load + 5 PSF.
 3. Sheeting: L/360 for roof snow load.
 - a. Where L is the span of the element between support points, and H is the eave height of the building.
- D. Assembly to permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to temperature range of 60 degrees F.
- E. Site Conditions: The following site features and adjacent structures must be considered in the design. The top of building is approximately 20 feet above surrounding terrain.
- F. Roof drainage system to withstand rainfall intensity of 2 inches per hour with 5 minute duration.
- G. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Meeting: Convene one week before starting work of this section.

1.05 SUBMITTALS

- A. See Section 01-3000 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on profiles, component dimensions, fasteners.
- C. Shop Drawings: Indicate assembly dimensions, locations of structural members, connections; wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, installation ; framing anchor bolt settings, sizes, and locations from datum, foundation loads; indicate welded connections with AWS A2.4 welding symbols; indicate net weld lengths; provide professional seal and signature.
- D. Samples: Submit two samples of precoated metal panels for each color selected, 12 by 12 inch in size illustrating color and texture of finish.
- E. Submit shop drawings stamped by a professional engineer registered in the state of Oregon showing plan view layout of all members, anchor bolt placement plan, and connection details for all framing members.

- F. Submit structural calculations stamped by a professional engineer registered in the state of Oregon showing design loads and calculations for all components of the building including a summary of column reactions for all load combinations.
- G. Erection Drawings: Indicate members by label, assembly sequence, and temporary erection bracing.
- H. Project Record Documents: Record actual locations of concealed components and utilities.

1.06 QUALITY ASSURANCE

- A. Design structural components, develop shop drawings, and perform shop work under direct supervision of a Professional Structural Engineer experienced in design of this Work.
 - 1. Design Engineer Qualifications: Licensed in the State in which the Project is located.
 - 2. Conform to applicable code for submission of design calculations as required for acquiring permits.
 - 3. Cooperate with regulatory agency or authority and provide data as requested.
- B. Perform work in accordance with AISC 360, MBMA (MBSM), and AISC 341.
- C. Perform welding in accordance with AWS D1.1/D1.1M.
- D. Manufacturer Qualifications: Company specializing in the manufacture of products similar to those required for this project.
 - 1. Not less than 5 years of documented experience.
 - 2. Member of MBMA (Metal Building Manufacturers Association) and ICC (International Code Council). Accredited under the International Accreditation Service, "Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems (AC472)", and testing per FM Global.
- E. All nomenclature shall conform to the MBMA Metal Building Systems Manual.
- F. Coordination and administration of the work shall be in accordance with the MBMA Metal Building Systems Manual - Common Industry Practices. Fabricate structural steel members in accordance with MBMA Low Rise Building Systems Manual, and, for items not covered, AISC - Specification for Structural Steel for Buildings.
- G. Erector Qualifications: Company specializing in performing the work of this section with minimum 5 years experience.

1.07 INSURANCE REQUIREMENTS

- A. Building manufacturer's Professional Structural Engineer shall submit certificate of insurance, or evidence of insurance for errors and omissions insurance with the following coverages:
 - 1. Single occurrences: \$1,000,000.
 - 2. Aggregate: \$2,000,000.
- B. Building manufacturer shall also provide proof of general liability insurance, with Coos County named as additional insured. Refer to Supplemental Conditions - Section 00-7300 for coverage requirements.

1.08 WARRANTY

- A. See Section 01-7800 - Closeout Submittals, for additional warranty requirements.
- B. A manufacturer's representative is required to inspect the installation periodically and prior to substantial completion.
- C. Correct defective Work within a one and two year period after Date of Substantial Completion, general workmanship and weathertightness respectively.
- D. ~~Siding Panels Finish Warranty: Furnish the siding panel manufacturer's written warranty, covering failure of the factory-applied exterior finish on metal wall and roof panels within the warranty period.~~

- E. Provide manufacturer's written no dollar limit (NDL) weather tightness and condensation warranty for a minimum of twenty-five (25) years against leaks in roof panel system and condensation arising out of or caused by ordinary wear and tear under normal weather and atmospheric conditions in Coos County, Oregon.
- F. It is the manufacturers' sole responsibility to warrant against any labor or materials deficiencies.
- G. The warranty shall be signed by both the metal roof system manufacturer and the metal roof system contractor.
- H. Paint System
 - 1. Provide manufacturer's standard written paint film warranty for thirty five (35) years on finish film integrity and color retention.
 - 2. The finish shall not crack, check, peel, flake, or blister, or chalk in excess of ASTM D659, number 8 rating, or fade in excess of 5 units per ASTM D2244, under normal atmospheric conditions in Coos County, Oregon.
 - 3. The warranty shall be signed by the metal roof system manufacturer.
- I. All warranties shall commence after the date of Substantial Completion.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. Metal Buildings:
- B. Approved Manufacturer and Basis of Design: Butler Manufacturing Company[<>]: www.butlermfg.com/speclink.
- C. Other approved manufactures:
 - 1. Metallic Building Company: www.metallic.com.
 - 2. VP Buildings; (Varco Pruden): www.vp.com.
 - 3. Behlen Building Systems.
 - 4. Rigid Global Buildings.
 - 5. Metallion Industries Metal Siding/Roofing Mechanically Seamed Panels, MI200.
 - 6. ~~Butler Sunlite Strip Daylighting System.~~
 - 7. Web Steel Buildings Northwest.
 - 8. Nucor Building Systems.
 - 9. Pacific Building Systems.
 - 10. Substitutions: See Section 01-6000 - Product Requirements.

2.02 METAL BUILDING

- A. Single span rigid frame.
- B. Bay Spacing: varies ft .
- C. Primary Framing: Rigid frame of rafter beams and columns, portal frames, and wind bracing.
- D. Secondary Framing: Purlins, Girts, Eave struts, Flange bracing, Sill supports, and Clips, and other items detailed.
- E. ~~Wall System: -Preformed metal panels of vertical profile, with sub-girt framing/anchorage assembly, and accessory components.~~
- F. Roof System - Base Bid: Preformed metal panels oriented parallel to slope, with sub-girt framing/anchorage assembly, and accessory components.
- G. Roof Slope: ~~-4 inches in 12 inches, typical.~~ **Refer to Drawings.**

2.03 PERFORMANCE REQUIREMENTS

- A. Design structural members to withstand dead load, applicable snow load, and design loads due to pressure and suction of wind calculated in accordance with Oregon State Structural Specialty Code (OSSC) ~~2019~~ **2022** code.
- B. Design structural members to withstand Class 30 wind uplift in accordance with UL 580.

- C. Exterior wall and roof system shall withstand imposed loads with maximum allowable deflection of L/240 of span.
- D. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.

2.04 MATERIALS - FRAMING

- A. Structural Steel Members: ASTM A36/A36M, galvanized.
- B. Plate or Bar Stock: ASTM A529/A529M, Grade 50, galvanized.
- C. Anchor Bolts: ASTM A307, galvanized to ASTM A153/A153M.
- D. Bolts, Nuts, and Washers: ASTM A325 or ASTM A325M Type 1 galvanized to ASTM A153/A153M Class C.
- E. Welding Materials: Type required for materials being welded.
- F. Grout: ASTM C1107/C1107M Non-shrink type, premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents, capable of developing minimum compressive strength of 2400 psi in two days and 7000 psi in 28 days.

2.05 MATERIALS - WALLS AND ROOF

- A. Sheet Steel Stock: Pre-finished, galvanized ASTM A653, structural quality, 1 with a G90 coating.
- B. Steel Sheet: ASTM A792/A792M aluminum-zinc alloy coated to AZ50/AZM150.
- C. Roof System:
 1. Standing Seam; standing seam panels with system of interlocking panels and "screw top" type attachment.
 2. 24 ga., ~~G90 galv.~~, 24" width coverage, with 3" high ribs, and minor corrugations at 6" oc., panel lengths maximum possible to minimize end laps.
 3. See below for Finish requirements. Manufacturers standard primer or "galvalum" finish on interior side of panel.
 4. Roof panel mounting clip; two part assembly, 16 ga. galvanized steel clip base with 24 ga stainless steel sliding clip tab. Base shall be pre-drilled for mounting to roof structural members. Sliding clip tab shall be designed to lock into roof panel lock seam.
 5. Panel Sidelap; Panels shall provide full double lock seam with factory applied mastic in female portion of panel.
 6. Panel Endlap; Endlaps shall be sealed with tape-mastic and non-skinning butyl caulk. Endlaps shall occur over secondary structural members. Seams shall be staggered.
 7. Maximum lengths practical, min single length at 30' and under.
 8. See below for Finish requirements. Manufacturers standard primer or "galvalum" finish on interior side of panel.
- D. Roof Panel Finish: Fluoropolymer Coil Coating System: Polyvinylidene fluoride (PVDF) multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent PVDF resin, and at least 80 percent of coil coated aluminum surfaces having minimum total dry film thickness (DFT) of 0.9 mil, 0.0009 inch; color and gloss as selected by Architect from manufacturer's standard line.
- E. Joint Seal Gaskets: Manufacturer's standard type.
- F. Fasteners: Manufacturer's standard type, galvanized to comply with requirements of ASTM A153/A153M, finish to match adjacent surfaces when exterior exposed.
- G. Trim, Closure Pieces, Caps, Flashings, Gutters, Downspouts, Rain Water Diverter, Fascias, and Infills: Same material, thickness and finish as exterior sheets; brake formed to required profiles.

2.06 ACCESSORY COMPONENTS

- A. Concrete: Specified in Section 03-3000.
- B. Division 31 - Earthwork, Excavation and Fill for building slab and foundation.

2.07 FABRICATION - FRAMING

- A. Fabricate members in accordance with AISC 360 for plate, bar, tube, or rolled structural shapes.
- B. Anchor Bolts: Formed with bent shank, assembled with template for casting into concrete.

2.08 FABRICATION - GUTTERS AND DOWNSPOUTS

- A. Fabricate of same material and finish as roofing metal.
- B. Form gutters and downspouts of standard profile and size indicated to collect and remove water. Fabricate with connection pieces.
- C. Form sections in maximum possible lengths. Hem exposed edges. Allow for expansion at joints.
- D. Fabricate support straps of same material and finish as roofing metal, color as selected.

2.09 MISCELLANEOUS MATERIALS

- A. Trim, Closure Pieces, Caps, Flashings, Rain Water Diverter: Same material, thickness and finish as exterior sheets; brake formed to required profiles, finish to match panel.

2.10 FINISHES

- A. Framing Members: Clean, prepare, and galvanize to ASTM A1. **A123**
- B. Secondary Framing Members: Clean, prepare, and galvanize to ASTM G90. Do not prime surfaces to be field welded.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position

3.02 ERECTION - FRAMING

- A. Erect framing in accordance with AISC 360 - Specification for Structural Steel Buildings. Erect framing also in accordance with MBMA Low Rise Building Systems Manual, Common Industry Practices.
- B. Provide for erection and wind loads. Provide temporary bracing to maintain structure plumb and in alignment until completion of erection and installation of permanent bracing. Locate braced bays as indicated.
- C. The erector shall furnish temporary guys and bracing where needed for squaring, plumbing, and securing the structural framing against loads, such as wind loads acting on the exposed framing and seismic forces, as well as loads due to erection equipment and erection operation, but not including loads resulting from the performance of work by others. Bracing furnished by the manufacturer for the metal building system cannot be assumed to be adequate during erection. The temporary guys, braces, falseworks and cribbing are the property of the erector, and the erector shall remove them immediately upon completion of erection.
- D. Set column base plates with non-shrink grout to achieve full plate bearing.
- E. Do not field cut or alter structural members without approval of the metal building manufacturer.
- F. After erection, prime welds, abrasions, and surfaces not shop primed.

3.03 ERECTION - WALL AND ROOF PANELS

- A. Install in accordance with manufacturer's instructions.
- B. Exercise care when cutting prefinished material to ensure cuttings do not remain on finish surface.
- C. Fasten cladding system to structural supports, aligned level and plumb.
- D. Locate end laps over supports. End laps minimum 2 inches. Place side laps over bearing.
- E. Provide expansion joints where indicated.

- F. Use concealed fasteners.
- G. Install sealant and gaskets, providing weather tight installation.

3.04 ERECTION - GUTTERS AND DOWNSPOUTS

- A. Rigidly support and secure components. Join lengths with formed seams sealed watertight. Flash and seal gutters to downspouts.
- B. Slope gutters minimum 1/16 inch/ft.
- C. Connect downspouts to storm sewer system. **per Alternate Bid.**

3.05 TOLERANCES

- A. Framing Members: 1/4 inch from level; 1/8 inch from plumb.
- B. Roofing: 1/8 inch from true position.
- C. All work shall be performed in a workmanlike manner.
- D. Install Framing in accordance with MBMA Low Rise Building Systems Manual, Common Industry Practices.

END OF SECTION