

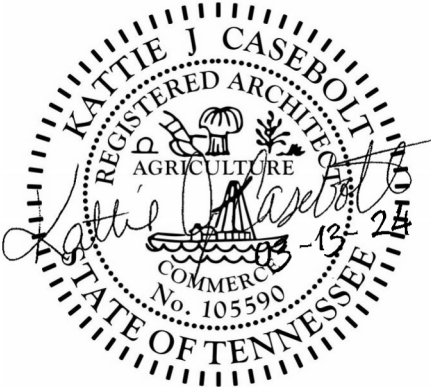
# COLLECTIVE

ARCHITECTURE COMPANY

DATE: Mar 13, 2024

MEMORANDUM TO: All Potential Bidders

FROM: Collective Architecture Company  
Kattie Casebolt  
236 E. Market Street  
Kingsport, TN 37663



SUBJECT: Addendum #2

PROJECT NAME: New Building for  
Sullivan County Recycling  
999 Cross Community Rd  
Blountville, TN 37616

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ITEM # 1 **Specification Section 13121:** Replace existing specification section with revised specification section **Sullivan County Recycling Center – 3/13/2024-R1 Section 13121 Pre-Engineered Buildings**. Changes made are indicated in red. This revised section will answer questions regarding the type of roof & wall panels, the roof/wall insulation, linear membranes. See attachment.

236 EAST MARKET STREET  
KINGSPORT, TENNESSEE 37660  
CELL: 803.389.9494

- ITEM # 2      **Question No 2:** In the documents provided the service voltage is shown as 208/120, but the bailer is shown as 30HP 460V in the specs. The electrical drawings show the bailer as a 250A 208V connection. Please clarify.  
**Response:** The bailer has a converter installed to step down the power. The contractor will coordinate with the owner/bailer contractor for exact electrical connections.
- ITEM # 3      **Question No 3:** There is a specification for Chain link fencing, but none shown on the drawings.  
**Response:** Chain link fencing is not part of this project. The specification is not applicable.
- ITEM #4      **Question No 4:** Is the truck scale & scale building by the owner?  
**Response:** The scale building & scales is not part of this project. The contractor will need to include the underground water & sewage piping along with the empty 2” conduit for future power indicated on the drawings for future.
- ITEM #5      **Question No 5:** Is the pit plates indicated on the Marathon drawings included with the bailer and will there be a Marathon technician on site.  
**Response:** The pit plates are supplied with the bailer and will be installed by the owner’s bailer contractor, Municipal Equipment.
- ITEM #6      **Question No 6:** Who and how will the bailer be delivered and what is the weight?  
**Response:** The bailer will be delivered by the owner’s contractor once the pit is constructed and ready for installation. The bailer will be in 2 sections, 30,000 pounds each.
- ITEM #7      **Question No 7:** Is the county ok with standard roll up doors?  
**Response:** The county is good with the substitution of roll up doors provided the roll up door meets or exceeds the specifications of the sectional doors. The contractor is to provide an additive/deductive or equal cost of the roll up door.

Attachments **Sullivan County Recycling Center – 3/13/2024-R1 Specification Section 13121 Pre-Engineered Buildings**

**END OF ADDENDUM**

**SULLIVAN COUNTY RECYCLING CENTER – 3/13/2024 – R1**

**SECTION 13121**

**PRE-ENGINEERED BUILDINGS**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Pre-engineered, shop fabricated structural steel building frame.
- B. Sloped concealed fastener roof system.
- C. Wall system.
- D. Related trim, coping, flashing and components required for a complete watertight system.
- E. Roof Curbs for roof mounted mechanical equipment.

**1.2 REFERENCES**

- A. AISC - Specification for Structural Steel for Buildings - Allowable Stress Design and Plastic Design.
- B. AISC - Quality Certification Program, Category MB.
- C. ASTM A36/A36M - Structural Steel.
- D. ASTM A123 - Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- E. ASTM A153 - Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- F. ASTM A307 - Carbon Steel Bolts and Studs, 60 000 psi Tensile Strength.
- G. ASTM A325/A325M - High Strength Bolts for Structural Steel Joints.
- H. ASTM A446/A446M - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) Quality.
- I. ASTM A490/A490M - Heat Treated Steel Structural Bolts, Classes 150 ksi (1035 MPa) Tensile Strength.
- J. ASTM A500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.
- K. ASTM A501 - Hot-Formed Welded and Seamless Carbon Steel Structural Tubing.
- L. ASTM A525/A525M - Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

**PRE-ENGINEERED BUILDINGS**

**13121-1**

- M. ASTM A529/A529M - Structural Steel with 42 ksi (290 MPa) Minimum Yield Point ( $\frac{1}{2}$  in (12.7 mm) Maximum Thickness).
- N. ASTM A572/A572M - High-Strength Low-Alloy Columbium-Vanadium Steels of Structural Quality.
- O. ASTM A792/A792M - Steel Sheet, Aluminum-Zinc Alloy Coated by the Hot-Dip Process.
- P. ASTM C665 - Mineral Fiber Blanket Thermal Insulation for Light Frame Construction and Manufactured Housing.
- Q. ASTM C991 - Flexible Glass Fiber Insulation for Pre-Engineered Metal Buildings.
- R. ASTM C1107 - Packaged, Dry, Hydraulic-Cement Grout (Non-shrink).
- S. AWS A2.0 - Standard Welding Symbols.
- T. AWS D1.1 - Structural Welding Code - Steel.
- U. MBMA (Metal Building Manufacturers Association) - Metal Building Systems Manual.
- V. SSPC (Steel Structures Painting Council) - Steel Structures Painting Manual.
- W. SSPC - Paint 20 Zinc Rich Coating.
- X. UL - Building Materials Directory - Roof Deck Construction.

### **1.3 DESIGN REQUIREMENTS**

- A. Design structure to withstand loads indicated on structural drawings.
- B. Design members to withstand UL 580 - Uplift Resistance, Uplift Class 90.
- C. Exterior wall and roof system shall withstand imposed loads with maximum allowable deflection of span:  $1/180$ .
- D. Provide drainage to exterior for water entering or condensation occurring within wall or roof system.
- E. Permit movement of components without buckling, failure of joint seals, undue stress on fasteners or other detrimental effects, when subject to temperature range of 90 degrees F.
- F. Size and fabricate wall and roof systems free of distortion or defects detrimental to appearance or performance.
- G. Roof system shall be a exposed fastener system.

#### **1.4 SUBMITTALS FOR REVIEW**

- A. Section 01300 - Submittals: Procedures for submittals.
- B. Product Data: Provide data on profiles, component dimensions and fasteners.
- C. Shop Drawings: Indicate assembly dimensions, locations of structural members, connections, attachments, openings, cambers, and loads; wall and roof system dimensions, panel layout, general construction details, anchorages and method of anchorage, and method of installation; framing anchor bolt settings, sizes, and locations from datum, and foundation loads; indicate welded connections with AWS A2.0 welding symbols; indicate net weld lengths; provide professional seal and signature of qualified Professional Engineer registered in the State of Tennessee.
- D. Samples: Submit two samples of metal panels for each finish selected, 12 x 12 inch in size illustrating color and texture of finish.

#### **1.5 QUALITY ASSURANCE**

- A. Perform Work in accordance with AISC - Quality Certification Program Category MB. MBMA - Metal Building Systems Manual and MBMA - Low Rise Building Systems Manual.
- B. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with a minimum of three years documented experience.
- C. Erector Qualifications: Company specializing in performing the work of this section with a minimum of three years documented experience.
- D. Design structural components, develop shop drawings, and perform shop and site work under direct supervision of a Professional Structural Engineer experienced in design of this Work and licensed in the State of Tennessee.

#### **1.6 REGULATORY REQUIREMENTS**

- A. Conform to applicable code for submission of design calculations, reviewed shop and erection drawings, as required for acquiring permits.
- B. Cooperate with regulatory agency or authority and provide data as requested.
- C. Provide systems approved by the State Fire Marshal.

#### **1.7 WARRANTY**

- A. Provide a 20 year manufacturer's standard warranty to include coverage for exterior surfaces, galvanized or galvalume finishes and pre-finished color coat against chipping, cracking or crazing, blistering, peeling, chalking, or fading. Include coverage for weather tightness of building enclosure elements after installation.

### **PART 2 PRODUCTS**

## 2.1 MANUFACTURERS - BUILDING SYSTEM

- A. Manufacturers:
  - 1. Butler Building Systems:
    - a. **Roof System: Butlerib II Roof System (PBR Like Panel)**
    - b. **Wall Panel: Butlerib II Wall System (PBR Like Panel)**
  - 2. Other acceptable manufacturers offering similar products include, but are not limited to Kirby, Nucor, Star and American Buildings. Other acceptable manufacturers offering equivalent products will be considered by Architect during bidding procedures subject to prior approval.
  - 3. Substitutions: Refer to Section 01600.

## 2.3 MANUFACTURER'S - EQUIPMENT CURBS

- A. LM Curbs or pre-engineered building manufacturer: Full welded joint, standing seam curbs, internally insulated, to fit mechanical equipment and standing seam roof, 80 high minimum above finished roof, with horizontal top. Curbs that are not specifically designed and manufactured to fit the specific metal roof are not acceptable.

## 2.4 MATERIALS - FRAMING

- A. Structural Steel Members: ASTM A36/A36M, A529/A529M, A572/A527M, Grade 50 as required.
- B. Structural Tubing: ASTM A500, Grade B, A501 as required.
- C. Plate or Bar Stock: ASTM A529/A529M.
- D. Anchor Bolts: ASTM A307, galvanized to ASTM A153.
- E. Bolts, Nuts, and Washers: ASTM A325, galvanized to ASTM A153.
- F. Welding Materials: AWS D1.1; type required for materials being welded.
- G. Primer: SSPC 20, Red Oxide.
- H. Grout: ASTM C1107, 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.

## 2.5 MATERIALS - WALL AND ROOF SYSTEM

- A. Sheet Steel Stock: Steel with 0.55 oz/sq ft hot dip galvalume coating.
- B. **Insulation: Roll glass fiber type, faced with reinforced white vinyl, UL flame spread classification of 25 or less where exposed. In roof, provide metal strap system attached to purlins to provide R-19 between purlins to meet 2006 International Energy Conservation**

Code. In walls, provide R-13 between purlins and R-13 in metal stud walls, to meet 2006 International Energy Conservation Code and as indicated in the construction drawings.

- C. Joint Seal Gaskets: Manufacturer's standard type.
- D. Fasteners: Manufacturer's standard type, galvanized to ASTM A153 2.0 oz/sq ft high performance organic coating, finish to match adjacent surfaces when exterior exposed.
- E. Bituminous Paint: Asphaltic type.
- F. Sealant: Manufacturer's standard type, non-staining, elastomeric, skinning.
- G. Trim, Closure Pieces, Caps, Flashings, Facias and Infills: Same material, thickness and finish as exterior sheets; brake formed to required profiles.
- H. Thermal Blocks: As required to meet requirements of the 2006 International Energy Conservation Code.
- I. Roof Curbs: Curbs to be manufactured by manufacturer indicated or pre-engineered building manufacturer of same material and finish as roof panels with factory welded seams. Profile to match roof panels; internally insulated; thickness and configuration to structurally support curb-mounted equipment. Curbs shall be designed to direct water around curb and provide a watertight installation.

## **2.6 FABRICATION - FRAMING**

- A. Fabricate members in accordance with AISC Specification for plate, bar, tube, or rolled structural shapes.
- B. Anchor Bolts: Formed with straight shank, assembled with template for casting into concrete.
- C. Columns: Tapered.
- D. Wall girts: face of girt approximately 8" outside the face of the face of the columns.

## **2.7 FABRICATION - WALL AND ROOF SYSTEMS**

- A. Wall Panel: Minimum 26 gage metal thickness, exposed fastener panel, profile as specified product.
- B. Roofing: Minimum 24 gage metal thickness, exposed fastener panel, profile as specified product.
- C. Girts/Purlins: Rolled formed structural shape to receive siding, roofing and liner sheet.
- D. Internal and External Corners: Same material thickness and finish as adjacent material, profile to required angles. Back brace mitered internal corners.

- E. Flashings, Closure Pieces, Fascia, Infills, and Caps: Same material and finish as adjacent material, profile to suit system.
- F. Fasteners: To maintain load requirements and weather tight installation, same finish as cladding, non-corrosive type.

## **2.8 FINISHES**

- A. Framing Members: Clean, prepare, and shop prime. Do not prime surfaces to be field welded.
- B. Exterior Surfaces of Wall, Gutters, Downspouts Trim, Components and Accessories: Precoated Kynar 500 paint finish on steel, color as selected from manufacturer's standard range to match Owner's adjacent building or additional field painting over Kynar Finish as indicated..
- C. Surfaces of Roof Panels: Manufacturer's standard galvanized or galvalume finish.
- C. Interior Surfaces of Wall Components and Accessories: Precoated Kynar 500 paint finish on steel, color as selected from manufacturer's standard range.
- D. Vapor Retarder at Interior Face of Insulation: Sheet vinyl, white.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Section 01039 - Coordination and Meetings: Verification of existing conditions before starting work.
- B. Verify that foundation, floor slab, mechanical and electrical utilities, and placed anchors are in correct position.

### **3.2 ERECTION - FRAMING**

- A. Erect framing in accordance with AISC Specification.
- 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. Set column base plates with non-shrink grout to achieve full plate bearing.
- D. Do not field cut or alter structural members without approval.
- E. After erection, prime welds, abrasions, and surfaces not shop primed.



### **3.3 ERECTION - WALL AND ROOFING SYSTEMS**

- A. Install in accordance with manufacturer's instructions.
- B. Exercise care when cutting prefinished material to ensure cuttings do not remain on the finish surface.
- C. Fasten cladding system to structural supports, aligned level and plumb.
- D. Provide expansion joints where indicated.
- E. Use concealed fasteners.
- F. Install insulation and vapor retarder utilizing for attachment.
- G. Install sealant and gaskets to prevent weather penetration.

### **3.4 INSTALLATION - ACCESSORIES**

- A. Install in accordance with manufacturer's instructions.
- B. Seal wall and roof accessories watertight and weather tight with sealant in accordance with Section 07900.

### **3.5 TOLERANCES**

- A. Framing Members: 1/4 inch from level; 1/8 inch from plumb.
- B. Siding and Roofing: 1/8 inch from true position.

**END OF SECTION 13121**