



PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

November 9, 2016

ADDENDUM # 2

To: Plan Holders

From: Jeffrey E. Alspaugh
Proposal Engineer

RE: **Pre-Bid Meeting Minutes and Replacement of Specification
For Certified Shop Fabricated Structural Wood**

Contract ID: DN00545
County: Cherokee
Letting Date: November 15, 2016

Attached are the pre-bid meeting minutes for this contract proposal.

The above contract has experienced the following revision:

- 1. Replace the existing Certified Shop Fabricated Structural Wood specification with the attached Certified Shop Fabricated Structural Wood specification.**

These revisions do not change bid items or the associated quantities.

Please access ebs addenda files on Bid Express®.

Please insert this letter into the addendum section of the proposal and sign the verification. Thank you for your attention to this matter.



Cherokee Rest Area Renovation Meeting Minutes

November 8, 2016

Project: Cherokee County Rest Area Renovation, US-19/74/129, Andrews, NC

Pre-Bid Conference held at Rest Area

Meeting Minutes

- Welcome and sign-in. Pre-bid sign-in sheet attached.
- Attendance at this pre-bid meeting is Mandatory for Bidding.
- The renovation and addition shall include completely gutting and rebuilding to meet current accessibility requirements. Includes new roof rafters to tie into the existing roof- existing wooden entrance deck ramp to be removed and rebuilt in new location.
- Bid Date: Sealed Single Prime- Bids will be received until 2:00 PM on November 15, 2016. All Bids opened at 2:00 PM on the same day Division 14 Office in Sylva NC.
- Location for Bid Opening: Division 14 Office, at 253 Webster Road, Sylva, NC 28779
- Bonds Required:
 - Bid Bond – 5% - Required with Bid
 - Performance Bond - 100%- only required from low bidder
 - Payment Bond - 100%- only required from low bidder
 - *Must use the bond forms provided in the Project Manual (Proposal) – failure is grounds for disqualification of bid.

Proposal and Contract

- General Contractor licensed in NC- other trades must be licensed
- Provide Unit Prices for contract items in the Contract – bid Form from Proposal
- *Corporations must use a corporate seal where the name of the company occurs on the contracting forms.
- Construction Schedule: Start Date: December 15, 2016, completion date is April 30, 2017. This completion date is not negotiable as the facility must be open for Memorial Day use.
- Liquidated damages \$600.00 per calendar day.
- 0 % Disadvantaged Business Enterprise goal- we encourages use of MBE/WBE contractors
- Contract Proposal -- Wanda Austin, Division 14 Project Manager/Contract Officer.
 - Addendums received must be initialed.
 - Forms can be taken from the (Proposal) or downloaded from NCDOT's web site.
 - Use the bid forms that are appropriate to the Contractor's business legal structure.
 - Performance / Payment Bond forms can be found on the NCDOT Connect web site.
 - The following should be noted and followed (including but not limited to)
 - Contractors must keep their record for 3 years after the date of Final Acceptance.

Please Review Division 1-General Requirements for information about Progress Documentation & Procedures and Submittals. Shop drawings should be complete and checked prior to submittal for review.

- Request for additional Documents
 - Email to Jeffrey Alspaugh, jealspaugh@ncdot.gov
- Requests for Information
 - By email only to Jeffrey Alspaugh, jealspaugh@ncdot.gov
Jeffrey will then route to Paul Stankiewicz and Consultant Architect
 - Please separate questions about the specs or drawings into two sections so that they may be answered more quickly.
 - Provide the spec section number and paragraph references
 - Provide drawing sheet and detail numbers
- Requests for Substitution
 - By email only to Jeffrey Alspaugh, jealspaugh@ncdot.gov
 - Jeffrey will then route to Paul Stankiewicz and Consultant Architect
 - Include manufacturer's product lit.; reason for substitution; evidence of being equal to product specified; architect's judgement is final.
- Entire Rest Area Site will be closed to the public
- NCDOT contact for site visits prior to bid: Keith Blazer, (828) 631-0272
fkblazer@ncdot.gov
- The existing power source on site may be used.
- Contractor must provide a port-a-john for their workers.

Questions and Answers from Pre-Bid Conference:

Q: Are any building permits required?

A: No.

Q: Who is conducting inspections?

A: NCDOT will provide inspections. The electrical work will be inspected by the State Construction Office Electrical Inspector, who must be given a week's notice of the need for inspection. A monthly construction progress meeting will be held, with NCDOT.

- Revised specification section 06170 was distributed that shall replace that section in the DN 00545 proposal. The specification was revised to eliminate the requirement for FSC certification. This revision contains 4 pages and replaces pages 152-155. See attached.
- Plans were reviewed on site with designers available to answer questions.

End of Meeting Minutes. Participants are requested to provide written responses to the NCDOT for any corrections or additions to these minutes.

Copy: Pre-Bid Participants and Q/A and Addendums; to be Posted on DOT Division 14 web site.

SECTION 06170 – CERTIFIED SHOP FABRICATED STRUCTURAL WOOD

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Manufacture Engineered Wood / Structural Composite Lumber (SCL)
 - a. Glue-Laminated Construction Framing
 - b. Microllam or Laminated Veneer Lumber (LVL).
 - 2. Accessories including but not limited to metal connector plates, structural connectors, fastener, blocking, curbing miscellaneous framing and bracing.

1.02 SUBMITTALS

- A. Product Data: Submit manufacturer's printed descriptions of materials, components metal connector plates, structural connectors, fasteners, blocking, curbing, miscellaneous framing and bracing, preservative treatment systems, performance criteria, adhesives, finishes, use limitation, recommendations and installation information..
- B. Shop Drawings: Submit fabrication and assembly drawings showing structural members and indication materials, member sizes, design values, material and dimensional relationship of components, assembly configuration, erection sequence, piece numbering, metal plate connectors, extent of preservative treatment, bearing and anchorage details and requirements.
 - 1. Drawings for installed products indicated to comply with design loads shall include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
 - a. Provide truss fabricator's design and engineering data for the required trusses including stress diagrams under the signature, seal and registration number of a qualified structural engineer.
 - 2. Field Measurements: Indicate verified field measurements on the Shop Drawings.
 - 3. Shop Drawings shall not be copies or modified copies of the Contract Drawings.
- C. Samples:
 - 1. Initial for Selection: Submit printed color charts or sample chains indicating manufacturer's complete range for each type of material finish exposed to view that is not yet selected by Architect or specified.
 - 2. Final Selection: Submit a minimum 8 inch (200mm) long full sized sample of each different profile (grain and species for clear finishes) and end bearing condition with proposed finishes, and fasteners.
- D. Quality Assurance Submittals: Test and Evaluation Reports for wood treatments; and Qualification Statements.

1.03 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Engineered Wood: APA trademark displayed
 - a. Rim Boards: Per APA EWS Rim Boards and PS 1 or PS 2 or APA Standard PRP-108.
 - i. Glulam Rim Boards shall be resawn grade manufactured per APA EWS Rim Boards and ANSI A190.1.
 - 2. Glulam Standards: Marked with an APA-ES trademark
 - a. Glulam design per:
 - i. APA Glulam Design Specification
 - ii. Form EWS Y117
 - iii. ICC-ES ESR-1940
 - iv. ANSI/AITC Standard A190.1-02
- B. Qualifications:
 - 1. Manufacturer/Fabricator of Shop-Fabricated Structural Wood and Glue-Laminated Construction: A firm experienced a minimum five (5) years in producing products similar to those indicated for this Project and with a record of successful in-service performance, as

well as sufficient production capacity to produce required units.

2. Erector of Shop-Fabricated Structural Wood and Glue-Laminated Construction: Perform installation with skilled, experienced and trained workmen supervised by trained personnel who shall have a minimum three (3) years successful experience in installations of similar size and scope.
 - a. Manufacturer/Fabricator capable of providing field service representation during installation, approving acceptable installer and approving application method.
3. Testing Agency: An independent testing agency with the experience and capability to conduct the testing indicated, meeting requirements of ISO/IEC Standard 17025 or ASTM E699 and ASTM E329.
4. Engineer: Licensed by the AHJ where Project site resides.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, Storage and Handling per TPI, Building Component Safety Information (BCSI), and manufacturer's written recommendations, and DIVISION 01 requirements.

1.5 WARRANTY

- A. Manufacturer Warranty: Contractor shall provide manufacturer's limited lifetime warranty that Wood I-Beam Joists, Laminated Veneer Lumber, Glue Laminated (Glulam) Beams and engineered Rim Boards are manufactured in complete accordance with industry standards and will, as manufactured, be free from defects in materials and workmanship for the expected life of the structure in which they are installed beginning with Date of project acceptance.
- B. Manufacturer Warranty: Contractor shall provide Wood Treatment manufacturer's twenty (20) year limited warranty against structural damage due to termites, carpenter ants and fungal decay.

PART 2 – PRODUCTS

2.01 MANUFACTURERS / FABRICATORS

- A. Shop-Fabricated Engineered Wood Products
 1. Gaylon Timber, Nashville, TN
 2. EnWood Structures, Raleigh, NC
 3. Apache Forest Products, Midlothian, VA
 4. Structural Wood Systems, Greenville, AL
- B. Product Options
 1. Glulam beams
 - a. Layup: Balanced or unbalanced
 - b. Tapered
 - c. Pitched and tapered and curved
 - d. Appearance Classification
 - e. Finish: Stained or painted

2.02 DESCRIPTION

- A. Regulatory Requirements
 1. CPA [EPP Certified](#) MDF, Particleboard and Hardboard; < 0.20 ppm formaldehyde emissions per ASTM E1333.
 1. No Added Urea-Formaldehyde (NAF) MDF, Particleboard and Hardboard
 2. Ultra-Low Emitting (ULEF) MDF, Particleboard and Hardboard

2.03 MATERIALS

- A. Hardwood or Softwood, as indicated: Provide solid wood lumber and veneers per performance requirements. Do not provide finger-jointed wood unless clearly indicated in the Contract Documents.
- B. Structural and Framing Lumber:
 1. S4S surfaced dry lumber per [US DoC PS20](#) and applicable [grading rules](#) per NeLMA or NHLA.
 2. Factory mark each piece of lumber with grade stamp of inspection agency indicating grade,

species, moisture content at time of surfacing, and mill.

- a. For exposed lumber, mark grade stamp on end or back of each piece, or omit grade stamp and provide certificates of grade compliance issued by inspection agency.
- C. Fasteners and Anchorage: Of size type, material and finish suited to application shown.
 1. Fasteners: Of appropriate type, length and durability for wood product used to securely fasten to the substrate for the intended life and use of the unit.
 2. Metal Connector Plates: Steel type and thickness as indicated.
 3. Framing Anchors Manufacturer: Simpson, or an A/E approved equivalent.
- D. Multipurpose Construction Adhesive: Non-HAP formulation complying with ASTM D3498 that is recommended for indicated use by adhesive manufacturer.
- E. Glue: Non-HAP aliphatic-resin, polyurethane, or phenol-resorcinol wood glue recommended by manufacturer for general carpentry use.

2.04 MANUFACTURED UNITS

- A. Engineered Wood Products: Provide products acceptable to AHJ, with allowable design stresses as published by manufacturer that meet or exceed those indicated.
 1. Wood Truss Construction Elements - Rafters & Joists: Per Truss Plate Institute (TPI)
 2. Structural Glued Laminated Timber: Per APA and ICC-ES
 - a. Laminated-Veneer Lumber: Per ASTM D5456 using exterior-type adhesive per ASTM D2559.
 - b. Parallel-Strand Lumber: Per ASTM D5456 using exterior-type adhesive per ASTM D2559.
 - c. Glulam: Per ANSI / AITC 117 (softwood) or AITC 119 (hardwood).
 3. Rim Boards: Per APA PRR-401

PART 3 - EXECUTION

3.01 EXAMINATION, PREPARATION, & INSTALLATION

- A. Examination, preparation and installation per industry standards, fabricator's or manufacturer's written instructions, and DIVISION 01 requirements.
 1. Proceed with installation only after unsatisfactory conditions have been corrected and installation area properly prepared.
 2. Layout installation by marking extents of each item, and anchoring / fastening locations coordinated with blocking or other structural support.
 3. Product Preparation: Handle products in accordance with manufacturer's instructions and warranty requirement.
 4. WOOD TRUSSES: Per TPI, and fabricator's written instructions.
 - a. Connect wood trusses to wood framing or blocking with framing anchors.
 - b. Provide temporary supports and bracing. Provide permanent cross bracing.
 - c. Suspend conduits, piping & mechanical equipment from framing spanning between top or bottom chord truss panel points with joist hangers at each end. Exercise caution so as not to damage or overload trusses.
 - d. DO NOT CUT OR REMOVE TRUSS MEMBERS.
 - e. Remove metal plate connected wood trusses that are damaged or do not meet requirements and replace with trusses that do meet requirements.
 5. ENGINEERED WOOD: Per ANSI / AF&PA [NDS-2005](#), and manufacturer's written instructions.
 - a. Place rough carpentry to indicated levels and lines, with members plumb, aligned, cut and fitted
 - b. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty item and trim.

3.02 FIELD QUALITY CONTROL

- A. Field inspection: Each connection, bracing and bearing condition.

3.03 CLEANING, MAINTENANCE AND PROTECTION

- A. Provide progress cleaning, waste management and provide final cleaning per Division 1 requirements.
- B. Provide Initial maintenance per manufacturer's recommendations.

3.04 CLOSEOUT ACTIVITIES

- A. Substantial completion requirements per Division 1 requirements.

END OF SECTION 06170