

Contract Documents and Specifications

For

Upstate Construct New Utility Shed

University of South Carolina

Project #50003202

May 23, 2017

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Project Number: 50003202

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SE-311

## INVITATION FOR MINOR CONSTRUCTION QUOTES

PROJECT NAME: USC Upstate- Construct New Utility Shed

PROJECT NUMBER: 50003202

PROJECT LOCATION: 151 State Rd S-42-8387; Spartanburg SC 29303

BID SECURITY REQUIRED? Yes  No PERFORMANCE BOND REQUIRED? Yes  No PAYMENT BOND REQUIRED? Yes  No 

CONSTRUCTION COST RANGE: \$ 18,000-24,000

DESCRIPTION OF PROJECT: Construct New Manufactured Small Utility Shed- Building Size 24 feet x 54 feet. Small and Minority Business participation is encouraged.

BIDDING DOCUMENTS/PLANS MAY BE OBTAINED FROM: purchasing.sc.edu (See Facilities / Construction Solicitations)

PLAN DEPOSIT AMOUNT: \$ 0.00 IS DEPOSIT REFUNDABLE Yes  No  N/A 

Bidders must obtain Bidding Documents/Plans from the above listed source(s) to be listed as an official plan holder. Only those Bidding Documents/Plans obtained from the above listed source(s) are official. Bidders rely on copies of Bidding Documents/Plans obtained from any other source at their own risk.

IN ADDITION TO THE ABOVE OFFICIAL SOURCE(S), BIDDING DOCUMENTS/PLANS ARE ALSO AVAILABLE AT:

It is the contractors responsibility to download all documents from purchasing.sc.edu

All questions &amp; correspondence concerning this Invitation shall be addressed to the A/E.

A/E NAME: DP3 Architects, LTD.

A/E CONTACT: Lorna P Cardenas

A/E ADDRESS: Street/PO Box: 211 East Broad St.

City: Greenville

State: SC

ZIP: 29602-

EMAIL: lcardenas@dp3architects.com

TELEPHONE: (864) 232-8200 Ext. 1019

FAX:

AGENCY: University of South Carolina

AGENCY PROJECT COORDINATOR: Aimee Rish

ADDRESS: Street/PO Box: 743 Greene St.

City: Columbia

State: SC

ZIP: 29208-

EMAIL: ARISH@fmc.sc.edu

TELEPHONE: (803) 777-2261

FAX:

PRE-QUOTE CONFERENCE: Yes  No MANDATORY ATTENDANCE: Yes  No 

PRE-QUOTE DATE: 6/6/2017 TIME: 10:00am

PLACE: 155 American Way, Conf Rm 110 Spartanburg

QUOTE CLOSING DATE: 6/20/2017 TIME: 3:00pm

PLACE: 743 Greene Street, Conf Rm 053 Columbia

QUOTE DELIVERY ADDRESSES:

HAND-DELIVERY:

Attn: Aimee Rish "Bid Enclosed"

743 Greene St

Columbia, SC, 29208

MAIL SERVICE:

Attn: Aimee Rish "Bid Enclosed"

743 Greene St

Columbia, SC, 29208

APPROVED BY:

(Agency Project Coordinator)

DATE:

# SE-331 QUOTE FORM

Quotes shall be submitted only on SE-331.

QUOTE SUBMITTED BY: \_\_\_\_\_  
(Offeror's Name)

QUOTE SUBMITTED TO: University of South Carolina  
(Owner's Name)

FOR: PROJECT NAME: Upstate Construct New Utility Shed  
PROJECT NUMBER: 50003202

### OFFER

- In response to the Invitation for Minor Construction Quotes, and in compliance with the Instructions to Bidders for the above-named Project, the undersigned OFFEROR proposes and agrees, if this Quote is accepted, to enter into a Contract with the Owner in the form included in the Solicitation Documents, and to perform all Work as specified or indicated in the Solicitation Documents, for the prices and within the time frames indicated in the Solicitation and in accordance with the other terms and conditions stated.
- Pursuant to Section 11-35-3030(1) of the SC Code of Laws, as amended, OFFEROR has submitted Bid Security as follows in the amount and form required by the Solicitation Documents:

- Bid Bond with Power of Attorney       Electronic Bid Bond       Cashier's Check  
(Bidder check one)

- OFFEROR acknowledges the receipt of the following Addenda to the Solicitation documents and has incorporated the effects of said Addenda into its Quote (Bidder, check only boxes that apply.):

ADDENDA:       #1       #2       #3       #4       #5

- OFFEROR agrees that this Quote, including all bid alternates, if any, may not be revoked or withdrawn after the opening of quotes, and shall remain open for acceptance for a period of 60 Days following the Quote Date, or for such longer period of time that OFFEROR may agree to in writing upon request of the Owner.
- OFFEROR agrees that from the compensation to be paid, the Owner shall retain as Liquidated Damages the amount of \$ 150.00 for each calendar day the actual construction time required to achieve Substantial Completion exceeds the specified or adjusted Contract Time for Substantial Completion, as provided in the Contract Documents.
- OFFEROR herewith submits its offer to provide all labor, materials, equipment, tools of trades and labor, accessories, appliances, warranties and guarantees, and to pay all royalties, fee, permits, licenses and applicable taxes necessary to complete the following items of construction work:

6.1 BASE QUOTE \$ \_\_\_\_\_  
(enter BASE QUOTE in figures only)

6.1.1 ALTERNATE NO. 1 \$ \_\_\_\_\_ to be ADDED / DEDUCTED from BASE QUOTE.  
(circle one)

6.1.2 ALTERNATE NO. 2 \$ \_\_\_\_\_ to be ADDED / DEDUCTED from BASE QUOTE.  
(circle one)

SC Contractor's License Number: \_\_\_\_\_

Classification(s) & Limits: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Telephone/Fax \_\_\_\_\_

E-mail \_\_\_\_\_

This Quote is hereby submitted on behalf of the Offeror named above.

BY: \_\_\_\_\_  
(Signature of Offeror's Representative)

\_\_\_\_\_  
(Print or Type Name of Offeror's Representative)

TITLE: \_\_\_\_\_

## Instructions to Bidders

1. Bidding Documents include the Bidding Requirements and the proposed Contract Documents. The Bidding Requirements consist of the Advertisement or Invitation to Bid, Instructions to Bidders, Supplementary Instructions to Bidders, the bid form, and other sample bidding and contract forms. The Drawings, Specifications and all Addenda issued prior to execution of the Purchase Order.
2. Addenda are written or graphic instruments issued by the Architect prior to the execution of the Contract which modify or interpret the Bidding Documents by additions, deletions, clarifications or corrections.
3. A Bid is a complete and properly executed proposal to do the Work for the sums stipulated therein, submitted in accordance with the Bidding Documents.
4. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Alternate Bids.
5. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
6. A Bidder is a person or entity who submits a Bid and who meets the requirements set forth in the Bidding Documents.
7. The Bidder by making a Bid represents that the Bidder has read and understands the Bidding Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction.
8. The Bid is made in compliance with the Bidding Documents.
9. The Bidder has visited the site, become familiar with local conditions under which the Work is to be performed and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents.
10. The Bid is based upon the materials, equipment and systems required by the Bidding Documents without exception.
11. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor Architect assumes responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
12. Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.

13. Interpretations, corrections and changes of the Bidding Documents will be made by Addendum. Interpretations, corrections and changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon them.
14. The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
15. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.
16. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
17. No substitutions will be considered after the Contract award unless specifically provided for in the Contract Documents.
18. Addenda will be issued no later than five days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one which includes postponement of the date for receipt of Bids.
19. Each Bidder shall ascertain prior to submitting a Bid that the Bidder has received all Addenda issued, and the Bidder shall acknowledge their receipt in the Bid.
20. Bids shall be submitted on the forms included with the Bidding Documents.
21. All blanks on the bid form shall be legibly executed in a non-erasable medium.
22. Sums shall be expressed in both words and figures. In case of discrepancy, the amount written in words shall govern.
23. Interlineations, alterations and erasures must be initialed by the signer of the Bid.
24. All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change."
25. All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be enclosed in a sealed opaque envelope. The envelope shall be addressed to the party receiving the Bids and shall be identified with the Project name, the Bidder's name and address and, if applicable, the designated portion of the Work for which the Bid is submitted. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope with the notation "SEALED BID ENCLOSED" on the face thereof.

26. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids. Bids received after the time and date for receipt of Bids will be returned unopened.

27. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids.

28. At the discretion of the Owner, if stipulated in the Advertisement or Invitation to Bid, the properly identified Bids received on time will be publicly opened and will be read aloud. An abstract of the Bids may be made available to Bidders.

29. The Owner shall have the right to reject any or all Bids. A Bid not accompanied by a required bid security or by other data required by the Bidding Documents, or a Bid which is in any way incomplete or irregular is subject to rejection.

30. It is the intent of the Owner to award a Contract to the lowest qualified Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive informalities and irregularities in a Bid received and to accept the Bid which, in the Owner's judgment, is in the Owner's own best interests.

31. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in the Bidding Documents, and to determine the low Bidder on the basis of the sum of the Base Bid and Alternates accepted.

USC SUPPLEMENTAL GENERAL CONDITIONS  
FOR CONSTRUCTION PROJECTS

WORK AREAS

1. The Contractor shall maintain the job site in a safe manner at all times. This includes (but is not limited to) the provision and/or maintenance of lighting, fencing, barricades around obstructions, and safety and directional signage.
2. Contractor's employees shall take all reasonable means not to interrupt the flow of student traffic in building corridors, lobbies, stairs and exterior walks. All necessary and reasonable safety precautions shall be taken to prevent injury to building occupants while transporting materials and equipment through the work area. Providing safe, accessible, plywood-shielded pedestrian ways around construction may be required if a suitable alternative route is not available.
3. At the beginning of the project, the USC Project Manager will establish the Contractor's lay-down area. This area will also be used for the Contractor's work vehicles. The lay-down area will be clearly identified to the contractor by the Project Manager, with a sketch or drawing provided to USC Parking Services. In turn, Parking Services will mark off this area with a sign containing the project name, Project Manager's name, Contractor name and contact number, and end date. Where this area is subject to foot traffic, protective barriers will be provided as specified by the Project Manager. The area will be maintained in a neat and orderly fashion.
4. Work vehicles parked in the lay down area (or designated parking areas) will be clearly marked and display a USC-furnished placard for identification. No personal vehicles will be allowed in this area, or in any areas surrounding the construction site. Personal vehicles must be parked in the perimeter parking lots or garages. Temporary parking permits can be obtained at the Contractor's expense at the USC Parking Office located in the Pendleton Street parking garage. Refer to the CAMPUS VEHICLE EXPECTATIONS (below) for additional information.
5. Contractor is responsible for removal of all debris from the site, and is required to provide the necessary dumpsters which will be emptied on a regular basis. Construction waste must not be placed in University dumpsters. The construction site must be thoroughly cleaned with all trash picked up and properly disposed of on a daily basis and the site must be left in a safe and sanitary condition each day. The University will inspect job sites regularly and will fine any contractor found to be in violation of this requirement an amount of up to \$1,000 per violation.
6. The Contractor shall be responsible for erosion and sediment control measures where ground disturbances are made.

PROJECT FENCING

7. All construction projects with exterior impacts shall have construction fencing at the perimeter. Fencing shall be 6' chain link with black or green privacy fabric (80-90% blockage). For fence panels with footed stands, sandbag weights shall be placed on the inside of the fence. Ripped sandbags shall be replaced immediately.
8. For projects with long fencing runs and/or high profile locations, decorative USC banners shall be used on top of privacy fabric; banners should be used at a ratio of one banner for every five fence panels. USC Project Manager will make arrangements for banner delivery for Contractor to hang.
9. The use of plastic safety fencing is discouraged and shall only be used on a temporary basis (less than four weeks) where absolutely necessary. Safety fencing shall be a neon yellow-green, high-



visibility fencing equal to 'Kryptonight' by Tenax. Safety fencing shall be erected and maintained in a neat and orderly fashion throughout the project.

10. Vehicles and all other equipment shall be contained within a fenced area if they are on site for more than 3 consecutive calendar days.

#### BEHAVIOR

11. Fraternalization between Contractor's employees and USC students, faculty or staff is strictly prohibited.
12. USC will not tolerate rude, abusive or degrading behavior on the job site. Heckling and cat-calling directed toward students, faculty or staff or any other person on USC property is strictly prohibited. Any contractor whose employees violate this requirement will be assessed a fine of up to \$500 per violation.
13. Contractor's employees must adhere to the University's policy of maintaining a drug-free and tobacco-free campus.

#### HAZARDOUS MATERIALS & SAFETY COMPLIANCE

14. A USC Permit to Work must be signed prior to any work being performed by the general contractor or sub-contractor(s).
15. The contractor will comply with all regulations set forth by OSHA and SCDHEC. Contractor must also adhere to USC's internal policies and procedures (available by request). Upon request, the contractor will submit all Safety Programs and Certificates of Insurance to the University for review.
16. Contractor must notify the University immediately upon the discovery of suspect material which may contain asbestos or other such hazardous materials. These materials must not be disturbed until approved by the USC Project Manager.
17. In the event of an OSHA inspection, the Contractor shall immediately call the Facilities Call Center, 803-777-4217, and report that an OSHA inspector is on site. An employee from USC's Safety Unit will arrive to assist in the inspection.

#### LANDSCAPE & TREE PROTECTION

18. In conjunction with the construction documents, the USC Arborist shall direct methods to minimize damage to campus trees. Tree protection fencing is required to protect existing trees and other landscape features to be affected by a construction project. The location of this fence will be evaluated for each situation with the USC Arborist, Landscape Architect and Project Manager. Tree protection fencing may be required along access routes as well as within the project area itself. Fence locations may have to be reset throughout the course of the project.
19. The tree protection fence shall be 6' high chain link fence with 80-90% privacy screening unless otherwise approved by USC Arborist and/or Landscape Architect. If the tree protection fence is completely within a screened jobsite fence perimeter, privacy fabric is not required. In-ground fence posts are preferred in most situations for greater protection. If utility or pavement conflicts are present, fence panels in footed stands are acceptable. See attached detail for typical tree protection fencing.
20. No entry, vehicle parking, or materials storage will be allowed inside the tree protection zone. A 4"

layer of mulch shall be placed over the tree protection area to maintain moisture in the root zone.

21. Where it is necessary to cross walks, tree root zones (i.e., under canopy) or lawns the following protective measures shall be taken:
  - a. For single loads up to 9,000 lbs., a 3/4" minimum plywood base shall be placed over 4" of mulch.
  - b. For single loads over 9,000 lbs., two layers of 3/4" plywood shall be placed over 4" of mulch.
  - c. Plywood sheets shall be replaced as they deteriorate or delaminate with exposure.
  - d. For projects requiring heavier loads, a construction entry road consisting of 10' X 16' oak logging mats on 12" coarse, chipped, hardwood base. Mulch and logging mats shall be supplemented throughout the project to keep matting structurally functional.
22. Damage to any trees during construction shall be assessed by the USC Arborist, who will stipulate what action will be taken for remediation of damage. The cost of any and all remediation will be assumed by the contractor at no additional cost to the project. Compensation for damages may be assessed up to \$500 per caliper inch of tree (up to 8") and \$500 per inch of diameter at breast height (for trees over 8").
23. Damage to trunks and limbs, as well as disturbance of the root zone under the dripline of tree, including compaction of soil, cutting or filling, or storage of materials, shall qualify as damage and subject to remediation.
24. Any damage to existing pavements or landscaping (including lawn areas and irrigation) will be remediated before final payment is made.

#### TEMPORARY FACILITIES

25. Contractor will be responsible for providing its own temporary toilet facilities, unless prior arrangements are made with the USC Project Manager.
26. Use of USC communications facilities (telephones, computers, etc.) by the Contractor is prohibited, unless prior arrangements are made with the USC Project Manager.

#### CAMPUS KEYS

27. Contractor must sign a Contractor Key Receipt/Return form before any keys are issued. Keys must be returned immediately upon the completion of the work. The Contractor will bear the cost of any re-keying necessary due to the loss of or failure to return keys.

#### WELDING

28. A welding (hot work) permit must be issued by the University Fire Marshall before any welding can begin inside a building. The USC Project Manager will coordinate.

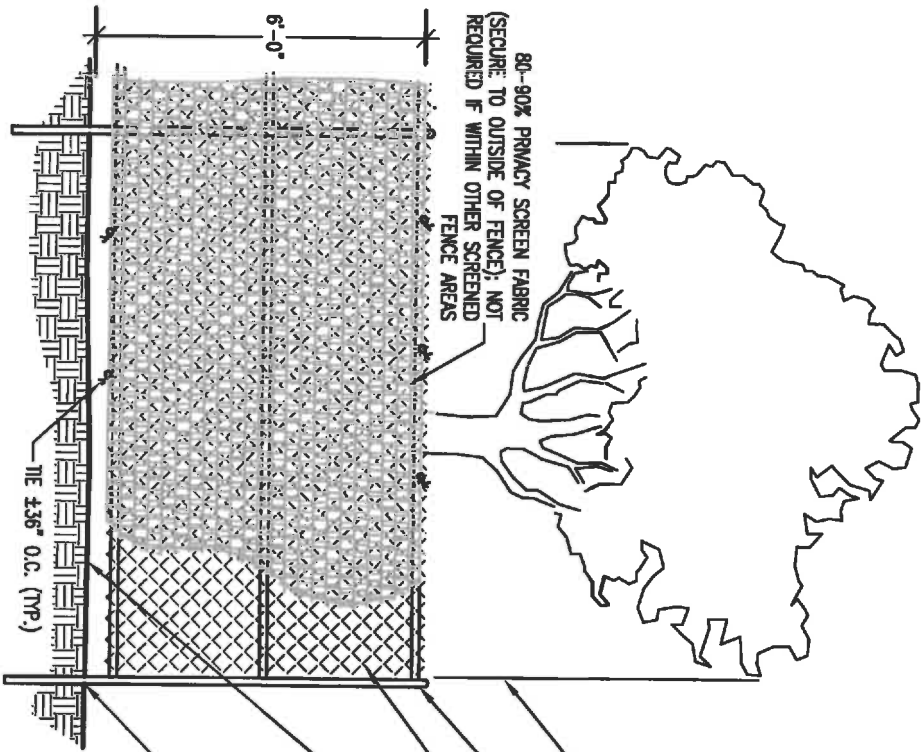
#### PROJECT EVALUATION & CLOSE-OUT

29. For all projects over \$100,000, including IDCs, a Contractor Performance Evaluation (SE 397) will be reviewed with the GC at the beginning of the project and a copy given to the GC. At the end of the project the form will be completed by the USC Project Manager and a Construction Performance rating will be established.
30. Contractor must provide all O&M manuals, as-built drawings, and training of USC personnel on new equipment, controls, etc. prior to Substantial Completion. Final payment will not be made until

this is completed.

#### CAMPUS VEHICLE EXPECTATIONS

31. Personal vehicles must be parked in the perimeter parking lots or garages. Temporary parking permits can be obtained at the Contractor's expense at the USC Parking Office located in the Pendleton Street parking garage.
32. All motorized vehicle traffic on USC walkways and landscape areas must be approved by the USC Project Manager and Parking Division, have a USC parking placard, and be parked within the approved laydown area. Violators may be subject to ticketing, towing and fines.
33. All motorized vehicles that leak or drip liquids are prohibited from traveling or parking on walks or landscaped areas.
34. Drivers of equipment or motor vehicles that damage university hardscape or landscape will be held responsible for damages and restoration expense.
35. All vehicles parked on landscape, hardscape, or in the process of service delivery, must display adequate safety devices, i.e. flashing lights, cones, signage, etc.
36. All drivers of equipment and vehicles shall be respectful of University landscape, equipment, structures, fixtures and signage.
37. All incidents of property damage shall be reported to Parking Services or the Work Management Center.



- 80-90% PRIVACY SCREEN FABRIC (SECURE TO OUTSIDE OF FENCE; NOT REQUIRED IF WITHIN OTHER SCREENED FENCE AREAS)
- TREE CANOPY DRIFLINE: SEE NOTE #2
- 3/2" O.D. GALV. FENCEPOST
- CHAIN LINK FENCE PANEL
- PROMOTE 4" HARDWOOD MULCH AT TREE PROTECTION AREA UPON RECOMMENDATION OF USC ARBORIST
- FENCE POSTS TO BE SET INTO GROUND; MARK POST LOCATIONS FOR REVIEW AND APPROVAL BY USC ARBORIST PRIOR TO INSTALLATION. SEE NOTE #4.

NOTES:

1. PROVIDE PROTECTION FENCING FOR ALL TREES WITHIN AREA OF DISTURBANCE AND CONSTRUCTION ACCESS.
2. PROTECTION FENCING SHALL BE IN PLACE PRIOR TO BEGINNING CONSTRUCTION.
3. PROTECTION FENCING TO BE PLACED AT THE OUTSIDE OF THE CANOPY DRIFLINE, OR AT A DISTANCE OF ONE FOOT PER ONE INCH OF TREE DIAMETER, MEASURED AT BREAST HEIGHT, WHICHEVER IS LARGER, UNLESS OTHERWISE INDICATED ON LANDSCAPE PLAN OR APPROVED BY UNIVERSITY ARBORIST.
4. IN-GROUND POSTS ARE STANDARD. IF EXISTING ROOTS, UTILITIES OR PAVEMENT PRECLUDE USE OF IN-GROUND POSTS, FOOTED STANDS ARE ACCEPTABLE. SAND BAGS SHALL BE PLACED ON THE INSIDE OF FENCE.
5. DAMAGE TO ANY TREES DURING CONSTRUCTION SHALL BE ASSESSED BY UNIVERSITY ARBORIST AND THE UNIVERSITY ARBORIST SHALL STIPULATE WHAT ACTION WILL BE TAKEN FOR REMEDIATION OF DAMAGE. THE COST OF ANY AND ALL REMEDIATION WILL BE ASSUMED BY CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
6. DISTURBANCE OF ROOT ZONE UNDER DRIFLINE OF TREE, INCLUDING COMPACTION OF SOIL, CUTTING OR FILLING OR STORAGE OF MATERIALS SHALL QUALIFY AS DAMAGE AND SUBJECT TO REMEDIATION.

TREE PROTECTION FENCING (IN-GROUND) WITH SCREENING

NO SCALE REVISED 8.28.14

Project Name: Upstate Construct New Utility Shed  
Project Number: 50003202

University of South Carolina

**CONTRACTOR'S ONE YEAR GUARANTEE**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

WE \_\_\_\_\_  
as Contractor on the above-named project, do hereby guarantee that all work executed under the requirements of the Contract Documents shall be free from defects due to faulty materials and /or workmanship for a period of one (1) year from date of acceptance of the work by the Owner and/or Architect/Engineer; and hereby agree to remedy defects due to faulty materials and/or workmanship, and pay for any damage resulting wherefrom, at no cost to the Owner, provided; however, that the following are excluded from this guarantee;

Defects or failures resulting from abuse by Owner.

Damage caused by fire, tornado, hail, hurricane, acts of God, wars, riots, or civil commotion.

\_\_\_\_\_  
[Name of Contracting Firm]

\*By \_\_\_\_\_

Title \_\_\_\_\_

\*Must be executed by an office of the Contracting Firm.

SWORN TO before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ (seal)

\_\_\_\_\_ State

My commission expires \_\_\_\_\_

**SECTION 133420  
POST FRAME BUILDING**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Post frame storage building structure.
- B. Site work.

**1.02 ADMINISTRATIVE REQUIREMENTS**

- A. Preinstallation Meeting: Convene one week before starting work of this section. Attendance by all affected installers is mandatory.

**1.03 SUBMITTALS**

- A. Bid Package: Include Post Frame Building Performance Specification requirements, site plan showing building location, and size and drainage pattern around building to tie into existing surface drainage system. Provide positive drainage away from the building on all sides.
- B. Shop Drawings: Engineer stamped to indicate compliance with system description, design requirements, IBC 2015, and The Office of the State Engineer's Manual.
- C. Samples: Submit two samples of precoated metal siding panels, 12 x 12 inch in size illustrating color, gauge, and texture of finish.
- D. Manufacturer's qualifications statement.
- E. Certificate: Certify all products meet or exceed the specified requirements.
- F. Manufacturer's Instructions: Include general building specifications.
- G. Warranty: Submit manufacturer's warranty and ensure that all forms have been completed in Owner's name, and registered with the manufacturer.
- H. Quality Assurance
  - 1. Designer Qualifications: Perform design under direct supervision of a professional engineer experienced in the design of this type of work and licensed in the State in which the project is located.
  - 2. Manufacturer Qualifications: Company specializing in the manufacture of products similar to those required for this project.

**PART 2 PRODUCTS**

**2.01 POST FRAME SYSTEM**

- A. Acceptable Manufacturers:
  - 1. Hoover Buildings
  - 2. Walter Buildings
  - 3. National Barn Company
  - 4. Morton Buildings

**2.02 DESCRIPTION**

- A. System: Laminated, pressure treated posts set in concrete footings; pre-engineered, clear-span roof truss system. Metal roof and siding, enclosed on three sides and open on front facade (no siding or doors). Front facade to consist of four even bays with 10 feet wide x 10 feet high framed openings.
- B. Building size: 24 feet x 54 feet (Refer to site plan for building footprint and location).
- C. Minimum eave height: 12 feet.

**2.03 MATERIALS**

- A. Material A: Laminated Columns.
  - 1. Lumber: No. 2 or better Southern Yellow Pine, three member
  - 2. Treated: Pressure treated below grade, retention 0.8 pounds per cubic foot with CCS.

3. Footings: Concrete; size, type, and rebar per engineered building size; minimum four feet depth below grade.
- B. Material B: Framing.
  1. Side girts: 2x6x10 No. 1 or better Southern Yellow Pine spaced 30" O.C. with all joints staggered at attachments to columns.
  2. Roof purlins: 2x6x10 No. 1 or better Southern Yellow Pine; spaced 30" O.C. on edge between trusses, connections per engineered details designed with current standards per size and loading.
- C. Material C: Roof Trusses.
  1. Assembly: Factory assembled.
  2. Plates: Galvanized steel, 16- or 20-gauge as required per truss size and loading.
  3. Lumber: Kiln dried, graded as engineered per truss size and loading.
  4. Connections: Mechanically attached to posts per engineered details designed with current standards per size and loading.
  5. Roof Pitch: 4/12 pitch.
- D. Finish Material A: Metal Roof and Siding Panels.
  1. Product: 28-gauge structural steel grade E - 92,000 PSI average (80,000 minimum); galvanized underneath, primer, and polyester topcoat.
  2. Color: To be selected by Architect from full range of colors to match existing pole barn.
  3. Trim: Die formed, prepainted 28-gauge structural steel; all untreated lumber covered with trim (to include gables, ridges, corners, bases, overhangs, intersections of roof and walls).
  4. Ridge vent: Low-profile design with sidewall overhangs.
  5. Gutters and downspouts:
    - a. Color: To be selected by Architect.
    - b. Type: 5 inch box type.
    - c. System: Gutter on both sides of building; include 4 inch x 3 inch downspouts and elbows as required.
- E. Finish Material B: Floor.
  1. Design: Six inch compacted crusher run fill inside building, extending 10 feet in front of building on front facade.
- F. Finish Material C: Wainscot.
  1. Design: Four feet x eight feet Oriented Strand Board; installed horizontally six inches above finish floor level. Provide cap at top to cover void between OSB and exterior siding.
  2. Location: Three interior enclosed sides.
- G. Accessories.
  1. Sky Lights.
    - a. Quantity: Eight, with two centered over each bay on either side of ridge line.
    - b. Type: Compatible with metal roofing system. Submit to Architect for approval.

### **PART 3 EXECUTION**

#### **3.01 GRADING**

- A. Grade site to provide level building pad and prep for installation of six inches of compacted crusher run inside building perimeter. Extend crusher run 10 feet outside building along the entire length of the front face and adjacent work yard. Rework existing yard edge to blend into new yard edge. Provide storm drainage swales as required to direct water away from building on all sides.

#### **3.02 INSTALLATION**

- A. Install in accordance with manufacturer's instructions.

#### **3.03 FIELD QUALITY CONTROL**

- A. Coordinate Architect's site visit for final inspection.

- B. Install sealant and gaskets, providing weather tight installation.

**3.04 CLEANING**

- A. Clean all excess construction material, equipment, and debris from site.

**3.05 PROTECTION**

- A. Protect installed building from subsequent construction and grading operations.

**END OF SECTION**