



UNIVERSITY OF
SOUTH CAROLINA

Project Manual

USC Union Gazebo at Patrons Park

Project #H40-I305

May 3, 2016

USC Facilities Design & Construction
743 Greene Street
Columbia, SC 29208

The **Boudreaux** Group
Interdisciplinary Design Architecture Interiors Planning



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Project Number: H40-I305

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SE-311 INVITATION FOR MINOR CONSTRUCTION QUOTES

PROJECT NAME: USC Union Gazebo at Patron's Park

PROJECT NUMBER: H40-I305

PROJECT LOCATION: University of South Carolina- Union Campus Union, SC

BID SECURITY REQUIRED? Yes No

PERFORMANCE BOND REQUIRED? Yes No

PAYMENT BOND REQUIRED? Yes No

CONSTRUCTION COST RANGE: \$ 10,000-20,000

DESCRIPTION OF PROJECT: Renovation of the existing 24' x 24' gazebo including woodwork repair, replacement and finishing, re-roofing and minor electrical work. Small and minority business participation is encouraged. Bidders are responsible for obtaining all information including all updates from USC's website: www.purchasing.sc.edu. See Facilities/Construction Solicitations and Awards..

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

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:
N/A

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

A/E NAME: The Boudreaux Group, Inc.

A/E CONTACT: Erica Timmons

A/E ADDRESS: Street/PO Box: 1330 Lady Street, Suite 500 (P.O. Box 5695)

City: Columbia State: SC ZIP: 29201-(29250)

EMAIL: etimmons@boudreauxgroup.com

TELEPHONE: 803-799-0247 FAX: 803-771-6844

AGENCY: University of South Carolina

AGENCY PROJECT COORDINATOR: Aimee B. Rish

ADDRESS: Street/PO Box: 743 Greene Street

City: Columbia State: SC ZIP: 29208-

EMAIL: arish@fmc.sc.edu

TELEPHONE: 803-777-2261 FAX: 803-777-7334

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

PRE-QUOTE DATE: 6/13/2016 TIME: 11 am PLACE: Community Rm., 309 East Academy Street, Union

QUOTE CLOSING DATE: 6/23/2016 TIME: 2 pm PLACE: Rm. 53, 743 Greene Street, Columbia

QUOTE DELIVERY ADDRESSES:

HAND-DELIVERY:

Attn: Aimee B. Rish "Bid Enclosed"
743 Greene Street
Columbia, SC 29208

MAIL SERVICE:

Attn: Aimee B. Rish "Bid Enclosed"
743 Greene Street
Columbia, SC 29208

APPROVED BY: _____ DATE: _____
(Agency Project Coordinator)

SE-331 QUOTE FORM

Quotes shall be submitted only on SE-331.

QUOTE SUBMITTED BY: _____
(Offeror's Name)

QUOTE SUBMITTED TO: _____
(Owner's Name)

FOR: PROJECT NAME: USC Union- Gazebo Renovation
PROJECT NUMBER: H40-I305

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 \$ 100.00 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: _____

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.

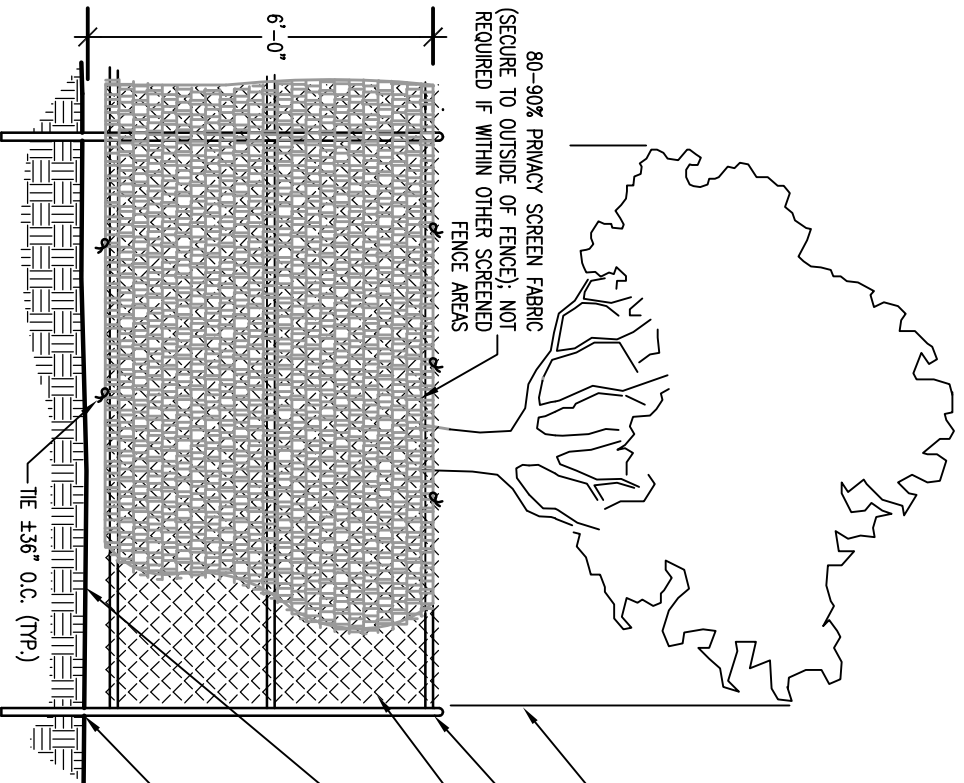
PROJECT EVALUATION & CLOSE-OUT

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.



TREE CANOPY DRIPLINE:
SEE NOTE #2.

2 1/2" O.D. GALV. FENCEPOST

CHAIN LINK FENCE PANEL

80-90% PRIVACY SCREEN FABRIC
(SECURE TO OUTSIDE OF FENCE); NOT
REQUIRED IF WITHIN OTHER SCREENED
FENCE AREAS

6'-0"

PROVIDE 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 DRIPLINE, 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 DRIPLINE 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: USC Union Gazebo Renovation

Project Number: H40-I305

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 _____, 2____ (seal)

_____ State

My commission expires _____

USC Union Gazebo at Patron's Park

Project Name: USC Union Gazebo at Patron's Park

Project No: U-787-14-10



PROJECT OVERVIEW

The University of South Carolina's Union, SC campus features a small park and greenspace in the center of downtown Union, adjacent to several of USC Union's campus buildings. The park features a 24 foot diameter octagonal gazebo that has experienced heavy weathering, and is in need of repair and renovation.

The scope of work included in this project involves the repair and replacement of several areas of damaged wood present on the gazebo, the removal of the old wood shake roof and subsequent installation of a new cedar shingle roofing system. Some minor electrical repair and replacement will be required, along with a thorough cleaning, sanding and staining of the entire structure. The contractor shall have 45 days to achieve Substantial Completion.

This narrative and accompanying images serve as a general outline and guide to the work required to renovate the gazebo to a satisfactory condition. The narrative is organized in four sections as follows:

- Section 1 : Roofing Replacement
- Section 2 : Wood Repair and Replacement
- Section 3 : Electrical Components – Repair and Replacement
- Section 4 : Cleaning, Sanding, and Staining

The existing gazebo is a pre-engineered, modular structure manufactured by Vixen Hill Cedar Products of Elverson, Pennsylvania. A thorough visual inspection of the gazebo was conducted in March of 2016 by the architect; the work outlined in each section of the narrative reflects the recommendations by the architect based on the aforementioned visual inspection of the structure. The following image shows the gazebo structure in its entirety on the date of the visual inspection.

The BASE BID QUOTE, to be provided on the provided SE-331 Quote Form, is to include all work as described below. There are no Alternates or Allowances.



SECTION 1 : ROOFING REPLACEMENT

This section identifies the scope of work involved in the replacement and repair of the gazebo roof system. Through visual inspection, the architect has determined that the cedar shingle roof system is failing, and is in need of complete replacement.

****DO NOT TO INSTALL NEW ROOF UNTIL THE NEW CUPOLA IS INSTALLED****

The extent of wood damage or wood requiring replacement is based solely on visual inspection by the architect, and may not be limited to what is referenced in this narrative; Contractor must use best judgement in determining roof components that require repair or replacement **and is to complete a thorough inspection of the gazebo before submitting a bid.**

****Any visible wood that is replaced must be solid Cedar, as to match the existing wood present on the gazebo.***

1. Shingle Removal

Remove the entire cedar shingle roof system, while preserving the 1" x 4" purlins (strapping) that the shingles are attached to. See Image 1-A for the shingles in question.

2. Purlins (strapping)

- a. Through visual observation by the architect, it was determined that the 1" x 4" wood purlins supporting the shingles were in acceptable condition, and did not require complete replacement. See image 1-B for the purlins in question.
- b. After all shingles are removed, inspect the existing purlins and rafters, and replace any members that are rotting, split, or damaged from shingle removal.

3. New Shingle Installation

- a. Install a new cedar shingle roof over the existing purlins. Shingles may be purchased by the original manufacturer of the gazebo, Vixen Hill, or an equal product may be purchased by the

contractor. The replacement shingles must be solid Cedar. *Refer to the technical specifications attached.*

- b. Shingles should be fastened to the purlins in the same manner as the original shingles. Consult the gazebo manufacturer, Vixen Hill, for exact fastener type that should be used.

SECTION 2 : WOOD RAIL REMOVAL, REPAIR AND REPLACEMENT

This section identifies the scope of work involved in the replacement and/or repair of several areas of the gazebo that show excessive wear or deterioration. Through visual inspection, the architect has estimated that 10% of the wood present on the gazebo will need to be replaced. **Use this quantity for bidding purposes.**

The extent of wood damage or wood requiring replacement is based solely on visual inspection by the architect, and may not be limited to what is referenced in this narrative; Contractor must use best judgement in determining wood components that require repair or replacement. *Any visible wood that is replaced must be solid Cedar, as to match the existing wood present on the gazebo.*

1. Hand Rails

- a. Removal: **(REFER TO IMAGE 1-AA)** Carefully remove existing handrail module located opposite of existing gazebo entrance and use for repair or patching of damaged gazebo parts as able. **In the future** this opening will be modified to include stairs and connection to the existing parking area but **DO NOT INCLUDE this work in the base bid.**
- b. Replace any missing pieces of decorative wood blocking between rungs of each handrail. Reference Image 2-A.
- c. Secure any loose or detached rungs with rust-resistant deck screws. Countersink all screw heads to be flush with the surface of the wood.
- d. All top hand rails were constructed with a routed channel containing screw heads that attach to each rung; the routed channels have been filled with cedar splines – most of which have deteriorated – reference Image 2-B as an example of the areas in question. Remove all deteriorated splines, and install new rail cap over the

existing hand rails. Reference Image 2-C as a basis of design for the rail cap recommended. Rail cap must be milled to shed water (as shown in Image 2-C); Rail cap must be attached with rust-resistant deck screws, and attached in a method that conceals or countersinks screw heads.

2. Cupola

- a. Replace entire cupola component at the roof ridge of the gazebo. Reference Image 2-D to identify the component in question. The cupola is to be replaced with a replacement cupola module manufactured by Vixen Hill Cedar Products. Replacement cupola shall have a **copper roof**. Attach and secure cupola as directed by the manufacturer. Request pricing as noted here: ***Cupola for a (24') large scale octagonal cupola with copper roof, with light fixture.***
- b. Replacement of the cupola involves the connection of a new light fixture. See 'Section 3 – Electrical Components – Repair and Replacement' for details.

Refer to attached manufacturer's data and product information for purchasing information. Vixen Hill Cedar Products contact information is: 800-423-2766 (ph) or Andrea Beringer at Andrea@vixenhill.com

3. Floor Joists / Floor Boards

- a. At the entrance of the gazebo, (just beyond the concrete entry steps) a spongy area of floor was observed. It was observed that a doveled joint between two of the floor modules had begun to separate (Reference Image 2-E, highlighting the area in question, and Image 2-F for close-up view of separating seam between modules). Re-secure the joint between these modules by reinforcing the doveled joint with rust-resistant deck screws or carriage bolts attaching the floor joists in question underneath the gazebo floor.
- b. Visually inspect remaining joints between floor modules underneath the gazebo floor, and secure any additional joints that appear to be separating.

4. Benches

- a. Visually inspect all bench support members; it was observed that several supports had loosened or detached connections. Secure any loose or detached connections with rust-resistant deck screws – countersink all screw heads to be flush with the wood surface.

Reference Image 2-G for an example of a bench component requiring repair / reattachment.

- b. Replace any missing or heavily damaged bench components. Any visible wood that is replaced must be solid Cedar, as to match the existing wood present.

5. Decorative Column Molding

The decorative molding on each of the 8 columns is deteriorating, and in need of replacement (See Image 2-H for the molding in question). Replace molding around all columns with the same or similar shape of molding in solid cedar. Attach with rust-resistant fasteners.

6. Foundation Skirting (Latticework)

All foundation skirting latticework was observed to be deteriorating and in need of complete replacement (See Image 2-I for latticework in question). Latticework may be purchased in pre-assembled modules from the gazebo manufacturer (Vixen Hill), or may be constructed on-site. If constructed on-site, the latticework must be similar in design and assembly to the existing.

7. Fasteners

It is recommended that either stainless steel or coated (coating to be brown in color to match wood) deck screws and fasteners be used at all attachments. Galvanized fasteners are not to be used, as they cause dark staining to occur on cedar.

SECTION 3 – ELECTRICAL COMPONENTS - REPAIR AND REPLACEMENT

This section identifies the scope of work involved in the repair and replacement of several electrical components present on the gazebo.

Through a visual inspection completed by the architect, it was observed that the gazebo contained a main electrical breaker box mounted on the outside of the gazebo on the north side.

It appeared that this breaker box provided electricity to several electrical receptacles mounted on the gazebo posts, as well as a light fixture mounted within the cupola, controlled by a switch inside the gazebo (mounted on the eastern side).

The extent of the electrical repair needed is based solely on visual inspection by the architect; the scope of work may not be limited to the electrical components referenced in this narrative; Contractor must use best judgement in determining electrical components that require repair or replacement, and all work must comply with current electrical codes. *At the time of visual inspection by the architect, the electrical system was not live, and the operation of the system could not be fully verified.*

1. Breaker Panel and Conduit

- a. The breaker panel itself must be inspected for correct operation. All components of the panel, including the metal enclosure itself, must be suitable for wet / outdoor use. Replace any components of the panel that are damaged and/or not operating correctly. Reference Image 3-A for breaker panel in question.
- b. All damaged or broken plastic electrical conduit must be repaired or replaced. It was observed that a portion of Romex wiring exiting the breaker panel was not properly enclosed in conduit (Reference Image 3-B for area in question). All wiring exposed to the weather must be contained within conduit and assembled to be moisture resistant.

2. Receptacles

Replace any damaged or exposed electrical receptacles and

junction boxes on the gazebo. Receptacles must be installed within exterior-rated, weatherproof boxes with closing covers. Receptacles must be installed with a ground fault circuit interrupter (GFCI). Reference Image 3-C for receptacles in question.

3. Light Fixture

The new, pre-fabricated cupola to be installed (as described in Section 2 – Wood Repair and Replacement) contains a light fixture installed within it by the manufacturer. This fixture must be connected to the existing electrical line feeding it. The connection must be made within a sealed, weather-resistant junction box using water-resistant wire nuts. See location of existing cupola light fixture in Image 3-D. Provide an LED bulb of appropriate wattage / brightness be installed in the fixture to reduce power usage and frequency of bulb replacement.

4. LED – Cool White Rope Lights

Currently there are existing strands of outdoor lights that have been stapled to the Gazebo. **Refer to Image 1-A.** Contractor shall remove these lights and replace with ½” LED Cool White, 2-wire, 120v clear tubing Rope Lights 120v as provided by the manufacturer below or similar. **Provide Product Data submittal to the architect prior to purchase or installation.** Provide the proper Channel Raceways for straight line installation of said lights using best practices for installation.

Include the price of 1, 150 foot spools in Base Bid. Basis of Design product is: <https://www.1000bulbs.com/product/95671/FT2-L120CW12150.html>

SECTION 4 – CLEANING, SANDING, AND STAINING

This section identifies the scope of work involved in the cleaning, sanding, and staining / waterproofing of the wood components of the gazebo structure.

Through a visual inspection completed by the architect, it was observed that the gazebo required a thorough cleaning, partial sanding of several components, and a complete re-staining / waterproofing of the entire structure.

The extent of the cleaning, sanding, and staining needed is based solely on

visual inspection by the architect; the extent of work may not be limited to the tasks referenced in this narrative; Contractor must use best judgement in determining the best methods of cleaning, sanding, and staining in order to achieve even and consistent wood texture and color across the entire structure upon completion of work.

4. Cleaning / Pressure Washing

- a. The entire gazebo structure requires a thorough initial cleaning and pressure washing to remove stains and mildew from the wood. It is recommended that an appropriate wood cleaner / mildew remover be used in conjunction with pressure washing to achieve best results.
- b. Contractor must use appropriate methods of pressure washing as to clean the wood as thoroughly as possible without damaging the existing wood or leaving pits and/or marks in the wood surface.

5. Sanding

- a. Any wood surfaces that may come in contact with users (including, but not limited to handrails and benches) must be sanded, and edges eased in order to reduce the possibility of splinters or rough edges injuring users of the structure.
- b. Any other wood components showing excessive splintering, uneven surfaces, surface stains, etc. should be sanded. The contractor must use best judgement in determining the extent of wood that may require sanding.

6. Staining

- a. Depending on the schedule in which work is completed, the gazebo may need a second light pressure washing before staining. *It is recommended that the gazebo not be left exposed longer than*

three to four days between final pressure washing and staining to avoid any excess dirt or stains from forming on the wood before final staining.

- b. Ensure the wood has had adequate time to dry, and that all wood surfaces are free of any dirt, sawdust, pollen, etc. before applying stain; follow all stain manufacturer's surface preparation requirements.
- c. Provide *a mildew resistant, semi-transparent, oil-based deck stain be used* in order to achieve optimum water proofing and stain resistance. SUBMIT PRODUCT INFORMATION (data) for Architect's review prior to purchase or proceeding with work. The stain color must be approved by the owner before application.
- d. The application of the stain must be done in accordance with all application methods required by the exact stain product / manufacturer chosen. It is recommended that stain be applied manually via brushes, however, should the stain be applied via airless sprayer, the stain must be immediately back-brushed after spray application to achieve an even appearance.

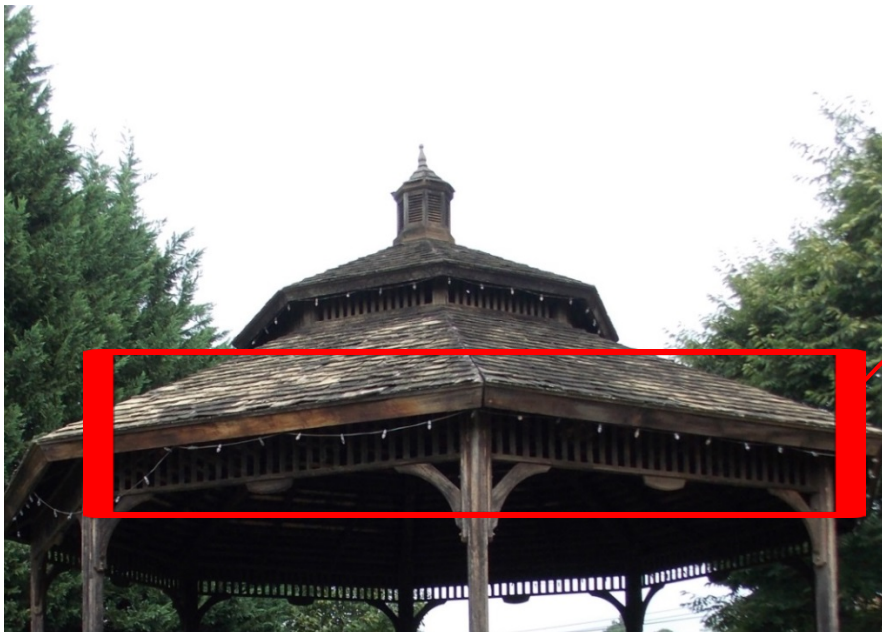
END OF NARRATIVE

ATTACH: Photos

IMAGE 1-AA : Remove existing handrail module opposite existing Gazebo entrance and save for use as replacement parts as needed.



IMAGE 1-A : The existing shingle roof requiring replacement



**Remove and replace
existing string
lights**

IMAGE 1-B : Purlins (strapping) to be preserved



IMAGE 2-A : An area in need of repair on hand rails

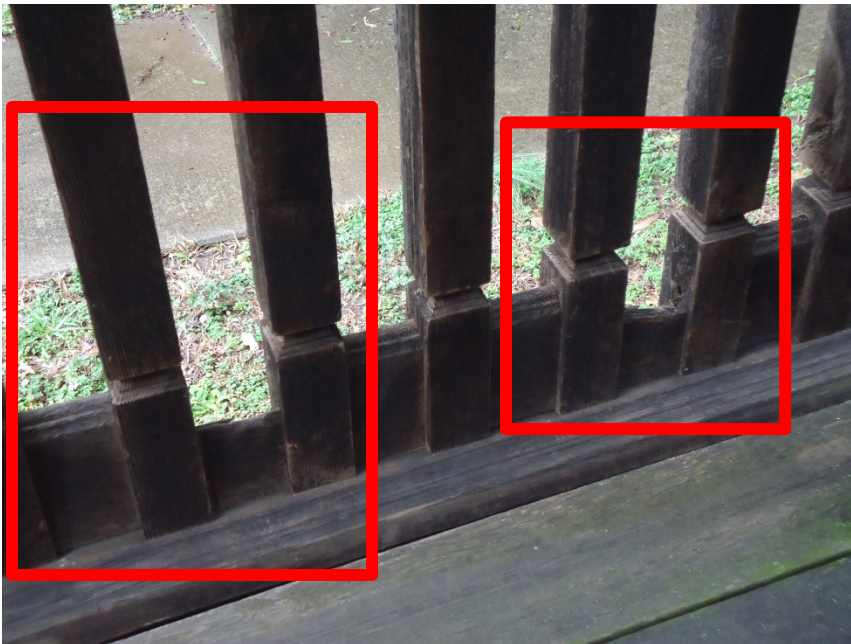


IMAGE 2-B : Top rail of hand rail to be covered by rail cap. Existing deteriorating cedar spline outlined in red.



IMAGE 2-C : Basis of design for hand rail cap



IMAGE 2-D : Overall image of gazebo roof with cupola component outlined in red



IMAGE 2-E : Area of floor in which sponginess was observed (outlined in red)



IMAGE 2-F : Close-up image of separating joint in floor modules (outlined in red)



IMAGE 2-G : Example of bench component in need of repair

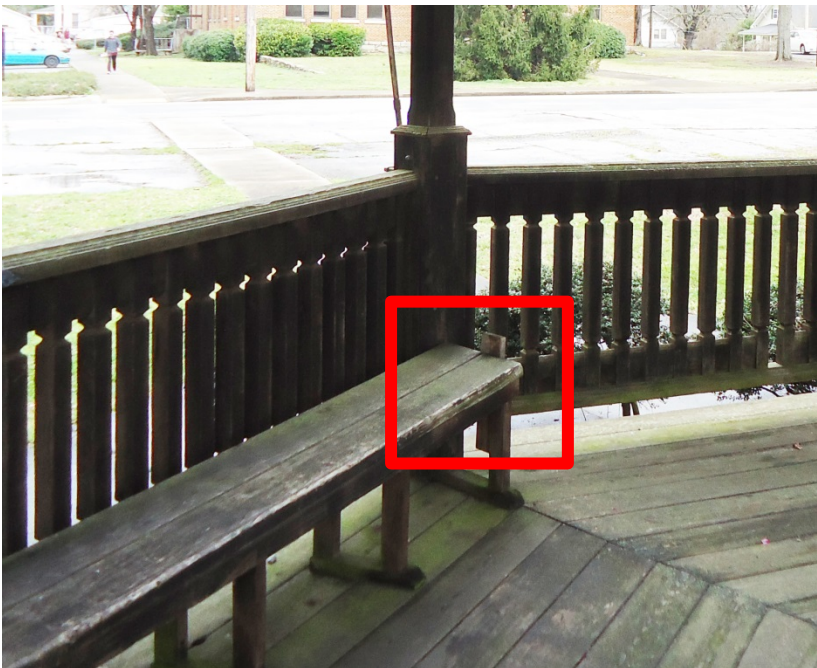


IMAGE 2-H : Example of column molding in need of replacement

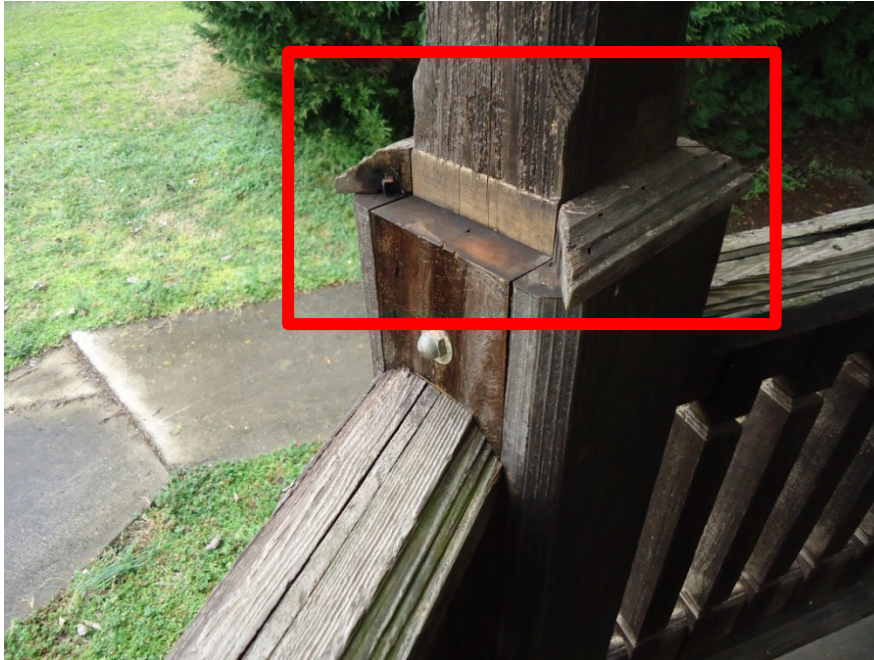


IMAGE 2-I : Example of foundation skirting lattice in need of replacement



IMAGE 3-A : Electrical breaker panel



IMAGE 3-B : Area of exposed Romex wire and damaged conduit



IMAGE 3-C : Example of a damaged receptacle



IMAGE 3-D : Existing flood light fixture inside cupola module



The Boudreaux Group

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END OF DOCUMENT

Attachments:

Specification Section 073129 Wood Shingles and Shakes
Vixen Hill Manufacturers Parts Description

SECTION 073129 - WOOD SHINGLES AND SHAKES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Wood roof shingles.

1.3 DEFINITIONS

- A. Roofing Terminology: See ASTM D 1079 and glossary in NRCA's "NRCA Roofing and Waterproofing Manual" for definitions of terms related to roofing work in this Section.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product in sizes indicated.
 - 1. Wood Shingles: Full size unit.
- C. Samples for Initial Selection: For each type of wood product indicated.
 - 1. Include Samples of accessories involving color selection.
- D. Samples for Verification: For the following products:
 - 1. Wood Shingles: Full size.

1.5 INFORMATIONAL SUBMITTALS

- A. Sample Warranty: For special warranties.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For wood products to include in maintenance manuals.

1.7 MAINTENANCE MATERIAL SUBMITTALS

- A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Wood Shingles: [**100 sq. ft. (9.3 sq. m)**] of each type, in unbroken bundles.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store roofing materials in a dry, well-ventilated location protected from weather and moisture according to manufacturer's written instructions.
- B. Protect unused roofing materials from weather and moisture when left overnight or when work is not in progress.
- C. Handle, store, and place roofing materials in a manner to prevent damage to roof deck or structural supporting members.

1.9 PROJECT CONDITIONS

- A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit product installation and related work to be performed according to manufacturer's written instructions and warranty requirements.

1.10 WARRANTY

- A. Special Materials Warranty: Manufacturer's warranty administered by CSSB and on CSSB's standard form in which the Manufacturer agrees to repair or replace CSSB-labeled products that fail in materials within specified warranty period. Material failures include manufacturing defects that result in leaks.
 - 1. Materials Warranty Period: Limited lifetime from date of Substantial Completion.
- B. Installer's Warranty: On warranty form at end of this Section, signed by Installer, in which Installer agrees to repair or replace installed products that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: **Five** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Decay Resistance: Provide wood products treated according to AWPA U1, chromated copper arsenate (CCA) pressure treatment; with a minimum of 0.40 lb/cu. ft. (6.4 kg/cu. m) retention.

1. Identification: Attach a label to each bundle of wood products; identify manufacturer, chemical treatment, method of application, purpose of treatment, and warranties available.

- B. Grading Rules: Provide wood products that comply with **Cedar Shake & Shingle Bureau's (CSSB)** grading rules for products indicated.

1. Identification: Attach a label to each bundle of wood products that identifies manufacturer, type of product, grade, dimensions, and identification mark of grading agency acceptable to authorities having jurisdiction.

2.2 ROOF SHINGLES

- A. Cedar Shingles: Smooth-sawn western red cedar shingles.

1. Grade: No. 1, with starter courses of **No. 1**
2. Size: **16 inches (406 mm) long; 0.40 inch (10 mm) thick**

2.3 ACCESSORIES

- A. Roofing Staples: **Type 304 Or Type 316**, stainless-steel staples, 0.05-inch (1.3-mm) thick, with a minimum of 7/16-inch (11-mm) crown width, of sufficient length to penetrate a minimum of 3/4 inch (19 mm) into sheathing.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
1. Examine roof sheathing to verify that sheathing joints are supported by framing and blocking or metal clips and that installation is within flatness tolerances.
 2. Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and completely anchored and that provisions have been made for flashings and penetrations through wood roofing.
- B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ROOF-SHINGLE INSTALLATION

- A. General: Install wood-shingle roofing according to manufacturer's written instructions and to recommendations in CSSB's "New Roof Construction Manual" and NRCA's "NRCA Roofing Manual: Steep-Slope Roofing Systems."
- B. Install drainage mat perpendicular to roof slope in parallel courses, butting edges and ends to form a continuous layer, and fasten to roof deck.
- C. Install wood-shingle starter course along lowest roof edge.
 - 1. Install in **single layer**
 - 2. Extend **1 inch (25 mm)** over fascia.
 - 3. Extend **1 inch (25 mm)** over rake edge.
- D. Install first course of wood shingles directly over starter course and in continuous straight-line courses across roof deck. Install second and succeeding courses of wood shingles in continuous straight-line courses across roof deck.
 - 1. Extend **1 inch (25 mm)** over rake edge.
 - 2. Offset joints between shingles in succeeding courses a minimum of 1-1/2 inches (38 mm). Do not allow alignment of vertical joints in alternate courses.
 - 3. Space shingles a minimum of 1/4 inch (6 mm) and a maximum of 3/8 inch (10 mm) apart.
 - 4. Fasten each shingle with two **staples** spaced 3/4 to 1 inch (19 to 25 mm) from edge of shingle and 1-1/2 to 2 inches (38 to 51 mm) above butt line of succeeding course. Drive fasteners flush with top surface of shingles without crushing wood.
 - 5. Maintain weather exposure of **5 inches (127 mm) for 16-inch- (406-mm-) long shingles.**

3.3 ROOFING INSTALLER'S WARRANTY

- A. WHEREAS **<Insert name>** of **<Insert address>**, herein called the "Roofing Installer," has performed roofing and associated work ("the work") on the following project:
 - 1. Owner: **<Insert name of Owner>**.
 - 2. Address: **<Insert address>**.
 - 3. Building Name/Type: **<Insert information>**.
 - 4. Address: **<Insert address>**.
 - 5. Area of the Work: **<Insert information>**.
 - 6. Acceptance Date: **<Insert date>**.
 - 7. Warranty Period: **<Insert time>**.
 - 8. Expiration Date: **<Insert date>**.
- B. AND WHEREAS Roofing Installer has contracted (either directly with Owner or indirectly as a subcontractor) to warrant the work against leaks and faulty or defective materials and workmanship for designated Warranty Period,

- C. NOW THEREFORE Roofing Installer hereby warrants, subject to terms and conditions herein set forth, that during Warranty Period he will, at his own cost and expense, make or cause to be made such repairs to or replacements of the work as are necessary to correct faulty and defective work and as are necessary to maintain the work in a watertight condition.
- D. This Warranty is made subject to the following terms and conditions:
1. Specifically excluded from this Warranty are damages to the work and other parts of the building, and to building contents, caused by:
 - a. Lightning;
 - b. Peak gust wind speed exceeding <Insert wind speed> mph (m/s);
 - c. Fire;
 - d. Failure of roofing system substrate, including cracking, settlement, excessive deflection, deterioration, and decomposition;
 - e. Faulty construction of parapet walls, copings, chimneys, skylights, vents, equipment supports, and other edge conditions and penetrations of the work;
 - f. Vapor condensation on bottom of roofing; and
 - g. Activity on roofing by others, including construction contractors, maintenance personnel, other persons, and animals, whether authorized or unauthorized by Owner.
 2. When the work has been damaged by any of foregoing causes, Warranty shall be null and void until such damage has been repaired by Roofing Installer and until cost and expense thereof have been paid by Owner or by another responsible party so designated.
 3. Roofing Installer is responsible for damage to the work covered by this Warranty but is not liable for consequential damages to building or building contents resulting from leaks or faults or defects of the work.
 4. During Warranty Period, if Owner allows alteration of the work by anyone other than Roofing Installer, including cutting, patching, and maintenance in connection with penetrations, attachment of other work, and positioning of anything on roof, this Warranty shall become null and void on date of the alterations, but only to the extent the alterations affect the work covered by this Warranty. If Owner engages Roofing Installer to perform the alterations, Warranty shall not become null and void unless Roofing Installer, before starting the alterations, notified Owner in writing, showing reasonable cause for claim, that the alterations would likely damage or deteriorate the work, thereby reasonably justifying a limitation or termination of this Warranty.
 5. During Warranty Period, if original use of roof is changed and it becomes used for, but was not originally specified for, a use or service more severe than originally specified, this Warranty shall become null and void on date of the change, but only to the extent the change affects the work covered by this Warranty.
 6. Owner shall promptly notify Roofing Installer of observed, known, or suspected leaks, defects, or deterioration and shall afford reasonable opportunity for Roofing Installer to inspect the work and to examine evidence of such leaks, defects, or deterioration.
 7. This Warranty is recognized to be the only warranty of Roofing Installer on the work and shall not operate to restrict or cut off Owner from other remedies and resources lawfully available to Owner in cases of roofing failure. Specifically, this Warranty shall not operate to relieve Roofing Installer of responsibility for performance of the work according to requirements of the Contract Documents, regardless of whether Contract was a contract directly with Owner or a subcontract with Owner's General Contractor.

E. IN WITNESS THEREOF, this instrument has been duly executed this **<Insert day>** day of **<Insert month>**, **<Insert year>**.

1. Authorized Signature: **<Insert signature>**.
2. Name: **<Insert name>**.
3. Title: **<Insert title>**.

END OF SECTION 073129

Please note:
To determine the size of the unit, please measure the interior diameter from post to opposite post.

