

#### **Purchasing Office**

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### October 25, 2023

#### TITLE 38 ADDENDUM NO. 1

PROPOSAL FOR FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TRANSPORTATION, SUPERVISION, PERMITS, ETC. NECESSARY FOR THE GREENHOUSE ADDITION – PHASE 3 - BILLEAUSD HALL, LOCATED ON THE UL LAFAYETTE CAMPUS, LAFAYETTE, LOUISIANA.

#### Due November 21, 2:00 PM Solicitation No. 24207

The following is to be made part of the original specifications as though issued at the same time and shall be incorporated integrally therewith. This addendum shall be acknowledged <u>on the BID FORM</u> when submitted to the Purchasing Department prior to the bid due date/time.

#### Item No. 1 – CLARIFICATION TO SPECIFICATIONS:

See attached specifications inadvertently omitted with Solicitation File Number 24207.

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This is a public works bid. The addendum <u>MUST</u> be acknowledged with your bid <u>on</u> the BID FORM. For questions related to bidding these projects, please contact the UL Lafayette Purchasing Department at <u>bids@louisiana.edu</u> or 337.482.9051.

Marie C. Frank, MPA, CPPB Assistant Vice President for Administration & Finance University of Louisiana at Lafayette Department of Purchasing



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# University of Louisiana, Lafayette (9-18-2023 – Revision) Lafayette at LA 70504 (Structure C)

SECTION 13120 GLAZED STRUCTURES

#### PART 1 **PRODUCT**

Double Glass & Five-Wall Polycarbonate Greenhouse Enclosure of CT 22 x 58-DGFW Multi-Chamber Style Model, with 8.5/12 Roof Slope, 2 each partition walls to divide **Room A** - 22'11" W x 22' 11" L Growing Room, **Room B** - 22'11" W x 22' 11" L Class Room, and Room C -Center Storage Room -22'11" W x 13'10" L. by Gothic Arch Greenhouses, Inc. P. O. Box 1564 Mobile, AL 36633

> Cindy M. Munisteri 1-800-531-4769 Gothic Arch Greenhouses, Inc. gothicarch@comcast.net

#### PART 1 **GENERAL**

#### 1.1 INCLUDED PRODUCTS

Greenhouse Materials

- Α. Structural Framing
- Double Glass and Five-Wall Polycarbonate Glazing Materials В.
- C. 6 ea. Continuous Motorized Ridge Vents
- Doors: 4 set 72" x 84" Double Store-Front Doors w/Double Glass Panic Bars and ADA-Approved Hardware on all doors-locks to receive Figure 8
- E. (4) Exhaust Fans as specified & (8) Motorized Intake Shutters
- (8) HAF 12" Air-Circulation Fans w/Manual Variable Speed Control F.
- G. (4) 2' x 4' Side Vents with Manual Corkscrew Openers
- Η. Shade Panels in all (3) three rooms

#### 1.2SUBMITTALS

- A. Product data: Available manufacturer and supplier data sheets on each product to be used.
- B. Shop drawings: Detailed drawings of the greenhouse prepared specifically for the project by the manufacturer. Includes Plans, elevations, sections, details, and attachments to other work.
- C. Engineered stamped drawings: Detailed shop drawings with structural calculations, stamped or sealed by a licensed professional engineer of the required jurisdiction. Includes Plans, elevations, sections, details, isometric, and attachments to other work.
- D. Specialized drawings: For instruction of non-standard/custom components that are designed into the greenhouse structure.

## 1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with a minimum 20-year experience in fabrication and erection of glazed structures for projects of similar scope.
- B. Installer Qualifications: Experienced in performing work of this type of structure required for this project.

### 1.4 DELIVERY, STORAGE AND HANDLING

- A. General Contractor will coordinate with the shipper to receive, offload, and quality check materials.
- B. Store products in the manufacturer's unopened packaging, covered to protect factory finishes from damage, precipitation, and construction dirt until ready for installation.

# 1.5 WARRANTY~ Note: Installation by a factory-trained crew is required.

- A. The manufacturer guarantees the PRODUCT(s) for A LIFETIME\* from the date of purchase against defects in workmanship and/or materials. \* A lifetime warranty applies to specific products. The following Schedule defines the terms and lengths of our warranty.
- 1.6 Greenhouse Frame and Frame Components: Lifetime Limited Warranty against defects in workmanship and/or materials. We will process all freight claims if the frame is damaged during shipping, and the greenhouse is shipped 'prepaid' from our plant. Within the first year, all necessary repairs and/or replacements (at GAG 's discretion) will be completed at no expense to the customer. For the duration of the lifetime warranty, any necessary replacement parts will be provided at no cost. However, the customer will be responsible for any shipping and handling costs, as well as installation costs of replacement components.

- a) Five-Wall Polycarbonate Roof Glazing: 10-year limited warranty against defects in workmanship and/or materials, and on light transmission, and against breakage caused by hail. Within the first year, all necessary replacements will be completed at no expense to the customer. For the duration of the 10-year warranty, any necessary replacement parts will be provided at no cost, however, the customer will be responsible for any shipping and handling costs, as well as installation costs of materials.
- b) Double Glass Units (Regular and Safety): Lifetime Limited Warranty against defects in workmanship and/or materials. Due to the nature of glass, we will guarantee that all glass pieces are manufactured to the correct dimensions and are free from material defects. We will not guarantee that glass will not be broken during customer handling, installation, or use. We will process all freight claims if the glass is damaged during shipping, and the greenhouse is shipped 'prepaid' from our plant. Within the first year, all necessary replacements will be completed at no expense to the customer. For the duration of the lifetime warranty any necessary replacement parts will be provided at no cost, however, the customer will be responsible for any shipping and handling costs, as well as installation costs of glass/ glazing materials. Please note that the seal on these units is guaranteed for TEN (10) years from the date of purchase.
- c) Installation(s) Performed by Gothic Arch Greenhouses: Any installation of a greenhouse performed entirely by Gothic Arch Greenhouses is guaranteed for one (1) year from the date of installation. This guarantee ensures the greenhouse is installed properly and completely, and is sealed against leakage under normal weather conditions. However, during periods of extreme Wind-Driven rains, resulting minor water infiltration may occur. Broken glass as a result of a shifting or settling foundation is not guaranteed. Within the one-year warranty, all necessary repairs and/or replacements (at GAG's discretion) will be completed at no expense to the customer. (Except for Greenhouse Accessories see below)
- d) Greenhouse Accessories: All Gothic Arch Greenhouses Accessories are guaranteed for One (1) year from the purchase date. The specific manufacturers of our accessories may offer longer warrantees. We will repair or replace (at our discretion) any defective accessory we sell. It is the customer's responsibility to pay shipping costs on any defective items. Labor for installation of replacement responsibility of others.
- e) This warrantee, for all products, does not apply if the damage occurs because of accident, improper handling or operation, abuse, misuse, Act of God, or unauthorized repairs made or attempted.
- f) Only parts that prove to be defective during the period of warrantee will be repaired or replaced without charge. Not including Install labor by others.

  Warrantee entitlement is only available to the original customer who purchased

our products through Gothic Arch Greenhouses, this warrantee is non-transferable and void once the greenhouse is no longer in the possession of the original purchaser. A copy of this warranty should be retained with a copy of the purchase invoice to ensure warranty coverage. Should repair become necessary, contact our office at 1-800-531-4769.

This warranty, for all products, does not apply if the damage occurs because of the accident, improper handling or operation, abuse, misuse, Act of God, or unauthorized repairs made or attempted. Only parts that prove to be defective during the period of warrantee will be repaired or replaced without charge. Warranty entitlement is only available to the original customer who purchased our products through Gothic Arch Greenhouses. This warranty is non-transferable and void once the greenhouse is no longer in the possession of the original purchaser. A copy of this warranty should be retained with a copy of the purchase invoice to ensure warranty coverage. Should repair become necessary, call Gothic Arch Greenhouses at 1-800-531-4769.

### PART 2 PRODUCTS

### 2.1 PERFORMANCE/DESIGN CRITERIA

- A. Structural Design: Engage a qualified professional engineer, licensed in the State of LA. to design Greenhouse Structure and glazing.
- B. Structural Performance: Glazing shall withstand the following design loads within limits and under conditions indicated determined according to the Building Code of the City of Lafayette, Louisiana as of 10/16/2020 Structure C, these are specified as Design Wind Pressures of 140 MPH and Snow Loads of 32 PSF.
- C. Strength of greenhouse unit is to withstand a positive and negative wind loading of 25.5 pounds per square foot and a snow loading of 32 pounds per square foot. Maximum deflection is not to exceed 1/120 of the total unit span per 2018 International Building Code Table 1604.3 for Greenhouses.
- D. Design framing system and glazing material to support design loads as prescribed by the governing building code.
- E. Glazing bars to be vertical and horizontal extrusions with internal and external weep/condensation channels to direct moisture, which could collect on the interior of the glazing, to the exterior of the greenhouse. The sill member shall be sloped and weep channeled to the exterior to force moisture, which may be collected, to exit to the exterior. No uncontrolled water leakage in system under normal circumstances. The options of framing system are as follows:
  - a) GAG-CCG Proprietary aluminum extrusions with screw on glazing cap.

#### 2.1 STANDARD MATERIALS

A. **Framing Members**: Unless otherwise noted, to be all aluminum alloy and temper of all framework members shall be of 6063-T52. Structural members such as trusses, purlins, bracing, ridge and gutters shall be of 6063-T6. Structural support members shall be as

recommended for strength, corrosion resistance and application of required finish; ASTM B 221 for extrusions; ASTM B 209 for sheet/plate. All frameworks to be pre-cut, pre-punched and pre-drilled unless otherwise noted.

- B. **Vertical glazing bars**: to be specified as CC. Standard 24 ½" o/c spacing unless noted otherwise.
  - a) Horizontal bracing: Unless otherwise noted, to be standard 1" x 2" x 1/8" channel.
  - b) **Roof purlins**: Unless otherwise noted, to be standard 1 ½" x 3" x 3/16" channel.
  - c) Internal truss: Unless otherwise noted, to be standard 1 ½" x 3" x 3/16" channel.
  - d) Gusset plates: As noted on drawings.
  - e) **Perimeter base**: Unless otherwise noted, to be standard 1" x 2" x 3/16" angle.
- C. **Fasteners**: shall be non-magnetic stainless steel; or other materials warranted by the manufacturer to be non-corrosive and compatible with aluminum components.
- D. Glass: All glass shall be tempered and comply with the Insulated Glass Certification Council with ASTM E 773-83 and E 774-84a class CBA requirements (IGCC No. IGCC-514CBA). Double glass unless otherwise noted, shall be hermetically sealed, factory insulated, 1/8" tempered-over-1/8" tempered, dual sealed, 5/8" O.A. thick at all flat glass and curved glass applications, made with a molecular sieve desiccant, primary seal of polyisobutylene and a secondary seal of polyurethane.
  - a) Clear Double Glass unit with overall 5/8" (16mm):
    - 1) Air space: 3/8"
    - 2) Interior lite: 1/8" clear
    - 3) Visible light transmittance: 82%
    - 4) SHGC 0.79
    - 5) Winter R-value: 2.0
    - 6) Shading coefficient: 0.9
    - 7) UV transmittance: 58%
- E. **Polycarbonate**: shall incorporate a co-extruded UV inhibitor with included non-prorated 10-year warranty against diminishing light transmission and damage due to hail.
  - a) **Clear five-wall** polycarbonate, 16mm thick. R Value to be no less than 3.0 and visible light transmittance no less than 62%.
- F. Gasket Material:
  - a) Gaska Tape V1520 Series medium density closed-cell polyvinyl chloride foam coated both sides with an aggressive, pressure-sensitive adhesive, A3, and 84# polycoated two side, brown kraft liner.
- G. **Structural Sealant**: Tremco Proglaze Silicone, clear.
- H. **Perimeter Sealant**: Tremco 830 Thermoplastic, Elastomeric Sealant; color to match framing finish if available; otherwise color as selected from manufacturer

#### 2.2 Greenhouse

#### A. WALL GLAZING

Glazing shall be: Hermetically sealed, factory insulated, 1/8" Guardian Climate Guard 7036 tempered-over- 1/8" clear tempered, dual sealed, 5/8" O.A. thick, made with a molecular sieve desiccant, primary seal of polyisobutylene and a secondary seal of polyurethane. All glass to comply with the Insulated Glass Certification Council with ASTM E 773-83 and #E774-84a class CBA requirements (IGCC No. IGCC-514CBA)

#### **B. ROOF GLAZING**

Glazing shall be: shall incorporate a co-extruded UV inhibitor with included non-prorated 10-year warranty against diminishing light transmission and damage due to hail.

Five Wall Clear: FWG02A6C- 16 mm thick Relative (R-Value) Heat Gain 3.03. Approximately 62% of light transmission

- C. Glazing Bars are to be Gothic Arch Greenhouse proprietary solid extrusions. The vertical and horizontal extrusions shall have internal and external weep/condensation channels to direct moisture, which could collect on the interior of the glazing, to the exterior of the greenhouse. The sill member shall be sloped and weep channeled to the exterior to force moisture, which may be collected, to exit to the exterior. The moisture shall weep/exit through small weep holes located periodically along the length of the sill member at the center of each bay. The Gothic Arch Greenhouse shall incorporate a screw-on, continuous glazing cap assembly system to secure glazing to the glazing bars.
- 2.2 **ACCESSORIES**: Provide accessories as scheduled to achieve design intent and environmental control.
  - A. **Roof Vents**: 6 ea. Continuous Motorized Ridge Vents

Continuous ridge vents, as indicated on drawings, using appropriate size and glazing, Operated with a VC-100A motorized rack and pinion gear system supplied by Wadsworth Control Systems

#### B. **Doors**

- a) 4 ea. 72" x 84" -Double Heavy-Duty Storefront Door Unit w/ (Dbl. Glass)

  Commercial Storefront shall be Aluminex 100 Series, sealed insulated glass units, as manufactured by Aluminex. Sufficient strength and size fasteners shall be made of corrosion resistant and compatible material. The door hardware shall be supplied and/or installed by Aluminex and shall include: pivots/hinges, lock with cylinder & thumb -turn, standard 150mm/6" extruded aluminum threshold, tubular 12" off-set "D" push/pull back to back mount, optional hardware available upon request.
- b) Panic Bar & ADA Approved Hardware, door locks shall receive Figure 8 cores
- C. Ventilation Package GAVP-183-2 (Room A-Grow Room) and (Room B- Class Room)

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- a) GAG18 Exhaust Fans, (Metal Shutter Fans painted to match the Greenhouse)
- b) Motorized intake shutters painted to match the frame
- c) Insect screen for Air-Intake Shutters
- D. Bartlett Climate Boss Touch Screen Control with Weather Station
  - a) **Controller Dimensions:** 7.17x7.09x3.54"/ea
  - b) Room A 22'11" W x 22' 11" L Growing Room,
  - c) Room B 22'11" W x 22' 11" L Class Room
  - d) Room C 22'11" W x 13'10" L Center Storage Room
  - e) Climate Boss Add-on: RH Sensor, Automatic Dehumidification Cycle
  - f) 1 ea Weather Boss w/ Rain Sensor & Wind Speed (wind & rain alarm)
  - g) 1 ea. Weather Boss w/ Rain Sensor & Wind Speed (wind & rain alarm)
- E. 8 ea. HAF 12" Air-Circulation Fans w/Manual Variable Speed Control
- F. 4 ea. 2' x 4' Side Vents with Manual Corkscrew Openers (Room A-Grow Room) and (Room B-Class Room)
- G. 7 ea 12'W x 28' L 70 % Decorative Brown Panels Plain only included Eye bolts.

Shade for both Room A - 22'11" W x 22' 11" L Growing Room & Room B - 22'11" W x 22' 11" L Class Room and (1) for center room

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### 2.4 FINISHES

- A. Finish for all aluminum framing members and trim shall be manufacturer's standard semi-gloss baked-on Duracron enamel finish. Prepared, pre-treated, and applied coating to exposed metal surfaces to comply with AAMA Duracron 2603 specifications and with coating and resin manufacturers' written instructions. Available finishes:
  - a) Arctic White (Standard)
  - b) Hartford Green (Standard)
  - c) Rideau Brown (Standard)
  - d) Black (available for additional cost)

### 2.5 FABRICATION

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- A. Fabricate components in accordance with approved shop drawings. Remove burrs and rough edges. Shop fabricates, to greatest extent practicable, to minimize field cutting, splicing, and assembly. Disassembled only to extent necessary for shipping and handling limitations.
- B. Fabricate components true to detail, and free from defects impairing appearance, strength or durability.
- C. Fabricate components to allow for accurate and rigid fit of joints and corners. Match components carefully ensuring continuity of line and design.
- D. Reinforce components at anchorage and support points, at joints, and at attachment points for interfacing work.

### 2.6 OPTIONAL ACCESSORIES

A. As noted on the quotation, will be supported with available documentation in the form of drawings, product sheets, or supplier-produced technical specifications.

### **PART 3 EXECUTION**

#### 3.1 EXAMINATION

- A. The installer must examine the substratum and the conditions under which the work is to be installed and notify the contractor, in writing, of any conditions detrimental to the proper and timely completion of the work. Work is not to proceed until unsatisfactory conditions have been corrected in a manner acceptable to the installer.
- B. If the installers cannot proceed with the installation of the greenhouse structure due to the substratum and foundation not being properly prepared to handle the greenhouse weight, the customer will be responsible for any and all additional costs for the installers' time wasted and travel home and back to the job site when the site is corrected.
- C. If substrate preparation is the responsibility of another installer, notify the Architect of unsatisfactory preparation before proceeding.

## 3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer to achieve the best result for the substrate under the project conditions.

### 3.3 INSTALLATION

- A. Set all items in their correct location as instructed, level, square, and plumb, at proper elevations, and in alignment with other work in accordance with the manufacturer's installation instructions and approved shop drawings.
- B. All counter-flashing shall be furnished and placed by Gothic Arch Greenhouses to match

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- the greenhouse structure.
- C. Anchor structure securely in place, allowing for required movement, including expansion and contraction.
- D. Install glazing and sealants in accordance with the manufacturer's instructions without exception, including surface preparations.
- E. Set sill members in the bed of sealant. Set other members with internal sealants to provide weather-resistant construction.
- Install flashings, bent metal closures, corners, gutters, and other accessories as required F. or detailed.
- G. Clean surfaces and install sealant in accordance with sealant manufacturer's instructions and structure manufacturer's guidelines.
- Upon completion of the installation, it shall be the contractor's responsibility to make all Η. necessary final adjustments to attain normal operation of each door, vent, accessory, and mechanical hardware.
- It is **not** the greenhouse contractor's responsibility for the following: masonry, plumbing, ١. electrical power, or control wiring for components.

### 3.5 SCHEDULE

Installation shall be staged as determined by the Resident Engineer and the General Α. Contractor to ensure that the work of all trades is properly coordinated.

#### 3.6 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

#### **END OF SECTION**