

INVITATION TO BID

State of Ohio
Department of Administrative Services
General Services Division
Office of Procurement Services

The Original Signed Bid must be submitted to the Office of Procurement Services to receive consideration for award.		BIDDER NAME	
BID NUMBER RS900016	OPENING DATE (1:00 p.m.) November 12, 2014	STREET ADDRESS <input type="checkbox"/> Check if remit address is different and list on separate sheet	
General Services Division Office of Procurement Services 4200 Surface Road Columbus, OH 43228-1395 Attn: Bid Desk		CITY STATE ZIP	
		COUNTY	MBE/EDGE CERTIFICATE NUMBER
		TELEPHONE NO. ()	TOLL FREE NO. 1 - ()
		CONTACT PERSON	FAX NO. ()
REQ./INDEX NO. MAC040	BID NOTICE DATE 10/16/14	CONTRACTOR'S E-MAIL ADDRESS	
SELECT YOUR PREFERRED METHOD OF RECEIVING PURCHASE ORDERS AND ENTER THE E-MAIL OR FAX NUMBER INFORMATION (ONLY SELECT ONE METHOD)			
<input type="checkbox"/> E-Mail <input type="checkbox"/> Fax			
In addition to the standard terms for payment, the payment terms for state agency(ies) will be 2%, 10 Days, Net 30 Days unless otherwise stated in the following space. If no discount is offered, bidder should circle "Net 30 Days". ____%, ____ Days, Net 30 Days			
PARTICIPATING AGENCY(IES): ALL STATE AGENCIES, AND PROPERLY REGISTERED COUNTIES, TOWNSHIPS, MUNICIPAL CORPORATIONS, REGIONAL TRANSIT AUTHORITIES, REGIONAL AIRPORT AUTHORITIES, PORT AUTHORITIES, SCHOOL DISTRICTS, CONSERVANCY DISTRICTS, TOWNSHIP PARK DISTRICTS AND PARK DISTRICTS, PURSUANT TO SECTION 125.04(B) OF THE OHIO REVISED CODE, THE COOPERATIVE PURCHASING ACT. STATE UNIVERSITIES, STATE VOCATIONAL SCHOOLS, STATE COMMUNITY COLLEGES OR OTHER INSTITUTIONS OF HIGHER EDUCATION MAY USE THESE CONTRACTS. SUCH USE, HOWEVER, IS BASED UPON EACH ENTITY'S PROCUREMENT AUTHORITY.			
THE DEPARTMENT OF ADMINISTRATIVE SERVICES, OFFICE OF PROCUREMENT SERVICES, IS SOLICITING BIDS FOR: TENSIONED FABRIC STRUCTURES (TFS) TERM OF CONTRACT: This Invitation to Bid is to establish a requirements contract to procure the described supplies or services on behalf of the above participating agency(ies). The agency(ies) may place orders against the Contract beginning <u>12/01/14</u> or upon the date when DAS signs the Contract, whichever is later in time. The Contract will expire <u>10/31/17</u> unless DAS terminates the Contract based upon reasons set forth in Article I-C of the Standard Contract Terms and Conditions. No agencies may place purchase orders against the Contract beyond the expiration date unless DAS renews the Contract by amendment. The Contractor may begin performance under the Contract only upon receipt of a valid order from a participating state agency. INSTRUCTIONS TO BIDDERS AND CONTRACT TERMS AND CONDITIONS, Revised 10/2013, are a part of this Invitation to Bid. Copies may be downloaded by clicking on this link: Instructions: Terms and Conditions for Bidding, Standard Contract Terms and Conditions, and Supplemental Contract Terms and Conditions . All prior versions of Instructions to Bidders, Contract Terms and Conditions are null and void. By submitting this Invitation to Bid, the Contractor certifies that Contractor has truthfully disclosed the location(s) where all services are to be performed; the location(s) where all applicable State contract data is to be maintained or made available; and the principal location of business for the Contractor and all subcontractors. The Contractor further certifies and acknowledges that Contractor will not change the country of the location(s) where services are performed and will not change the country of the location(s) where data is maintained or made available without prior written consent of the State. Any questions or clarifications regarding this Invitation to Bid should be directed to the Office of Procurement Services through the Internet at www.ohio.gov/procure . All questions should be submitted a minimum of five (5) working days prior to the bid opening date.			
PRINTED/TYPED SIGNATURE	AUTHORIZED SIGNATURE (ORIGINAL SIGNATURE ONLY) (Please sign in blue ink)		DATE

The ORIGINAL signed Bid must be submitted to the Office of Procurement Services by 1:00 o'clock p.m., on the above listed opening date to receive consideration for award. It is requested that the Bidder NOT sign their bid in BLACK ink. BIDDER CERTIFIES, by signature affixed to its bid, that the information provided by it in its bid including the certified statements, is accurate and complete. Bidder declares to have read and understood and agrees to be bound by all of the instructions, terms, conditions and specifications of this Invitation to Bid and agrees to fulfill the requirements of any awarded contract at the prices bid.

SPECIAL CONTRACT TERMS AND CONDITIONS

AMENDMENTS TO CONTRACT TERMS AND CONDITIONS: The following Amendments to the Contract Terms and Conditions do hereby become a part hereof. In the event that an amendment conflicts with the Contract Terms and Conditions, the Amendment will prevail.

BID CONFERENCE: A bid conference will be held on 10/28/14 at ODAS, State Procurement, 4200 Surface Rd., Columbus, OH 43228 to discuss the requirements of the bid. The conference will commence promptly at 1:30 P.M. barring an unforeseen circumstance that results in a delay of the conference. Attendance will be taken. The state will not be responsible to a bidder for their failure to obtain information discussed during the bid conference due to their failure to attend and/or arriving after the conference has convened.

Please contact Geraldine Berry by 10/27/14 at 614-644-1790 during regular business hours to make arrangements for authorization to enter the facility.

MULTIPLE AWARD CONTRACT: This bid is issued to establish a Multiple Award Contract (MAC). A MAC is a contract made with more than one supplier of the same or similar types of supplies or services at varying prices for delivery within the same geographic area. The state's obligations under a MAC are subject to the Ohio Controlling Board's continuing authorization to use the MAC program authorizing the use of Multiple Award Contracts.

CONTRACT AWARD: The State will award to one or more responsive and responsible bidder(s) as it deems in the best interest of the State.

COOPERATIVE PURCHASING CONTRACT: This Contract may be relied upon by Ohio institutions of higher education and Ohio political subdivisions. Ohio political subdivisions include any county, township, municipal corporation, school district, conservancy district, township park district, park district created under Chapter 1545 of the Revised Code, regional transit authority, regional airport authority, regional water and sewer district, port authority or any other political subdivision as described in the Ohio Revised Code. To qualify to use this Contract the political subdivision must be currently enrolled in the State's Cooperative Purchasing Program. Purchases made from this Contract by a political subdivision that is not properly registered with the State's Cooperative Purchasing Program will be a violation of law and may be contrary to the political subdivision's competitive bidding requirements. If a political subdivision or institution of higher education relies upon this Contract to issue a purchase order or other ordering document, the political subdivision or institution of higher education "steps into the shoes" of the State under this Contract. The political division's or institution of higher education's order and this Contract are between the Contractor and the political subdivision or institution of higher education. The Contractor must look solely to the political subdivision or institution of higher education for performance, including payment. The Contractor agrees to hold the state of Ohio harmless with regard to political subdivisions and institution of higher education's orders and political subdivision's and institution of higher education's performance. DAS may cancel this Contract and may seek remedies if the Contractor fails to honor its obligations under an order from a political subdivision or institution of higher education.

DELIVERY AND ACCEPTANCE: Services will be performed as set forth in the Contract and in accordance with paragraphs S-8, S-9, and S-10 of the SUPPLEMENTAL CONTRACT TERMS AND CONDITIONS. The location of performance will be noted on the purchase order issued by the participating agency. Payment for services rendered will occur upon the inspection and written confirmation by the ordering agency that the services provided conform to the requirements set forth in the Contract. Unless otherwise provided in the Contract, payment shall be conclusive except as regards to latent defects, fraud, or such gross mistakes as amount to fraud.

FIXED-PRICE WITH COST ADJUSTMENT: During the life of the contract, there may be a new catalog published and/or price list thereto. In this event, it will be necessary for the Contractor to supply the Office of Procurement Services with one (1) copy of each as applicable. Pricing contained in the new catalog and/or price list will become effective thirty (30) days after receipt of notice by the Office of Procurement Services. Thereafter, state agencies may obtain the new catalog and/or price list from the Contractor.

The contract prices(s) will remain firm for the first twelve (12) months duration of the contract. Thereafter, the Contractor may submit a request to increase their price(s) to be effective thirty (30) calendar days after acceptance by DAS. No price adjustment will be permitted prior to the effective date of the increase received by the Contractor from his suppliers, or on purchase orders that are already being processed, or on purchase orders that have been filled and are awaiting shipment. If the Contractor receives orders requiring quarterly delivery, the increase will apply to all deliveries made after the effective date of the price increase.

The price increase must be supported by a general price increase in the cost of the finished supplies, due to increases in the cost of raw materials, labor, freight, Workers' Compensation and/or Unemployment Insurance, etc. Detailed documentation, to include a comparison list of the contract items and proposed price increases, must be submitted to support the requested increase. Supportive documentation should include, but is not limited to: copies of the old and the current price lists or similar documents which indicate the original base cost of the product to the Contractor and the corresponding increase, and/or

copies of correspondence sent by the Contractor's supplier on the supplier's letterhead, which contain the above price information and explains the source of the increase in such areas as raw materials, freight, fuel or labor, etc.

CONTRACTOR QUARTERLY SALES REPORT: The Contractor must report the quarterly dollar value (in U.S. dollars and rounded to the nearest whole dollar) of the sales, to include both state agencies and political subdivisions, under this Contract by calendar quarter (e.g. January-March, April-June, July-September and October-December). The dollar value of the sale is the price paid by the Contract user for the products and/or services listed on the purchase order or other encumbering document, as recorded by the Contractor.

The Contractor will receive an email with a User ID and password and must report the quarterly dollar value of sales to the Department of Administrative Services (DAS) via the Internet using the web form at the Ohio DAS Contract Management Contractor Portal, <https://cm.ohio.gov/>. If no sales occur, the Contractor must show zero. The report must be submitted thirty (30) days following the completion of the reporting period. The Contractor is responsible for emailing the Analyst listed on page one of the contract with any company contact changes.

The Contractor shall also submit a close-out report within one hundred and twenty (120) days after the expiration of this Contract. The Contract expires upon the physical completion of the last outstanding task or delivery order of the Contract. The close-out report must cover all sales not shown in the final quarterly report and reconcile all errors and credits. If the Contractor reported all contract sales and reconciled all errors and credits on the final quarterly report, then the Contractor should show zero "0" sales in the close-out report.

The Contractor must forward the Quarterly Sales Report to the following address:

Department of Administrative Services
Office of Finance
30 E. Broad Street, 40th Floor
Columbus, OH 43215

If the Contractor fails to submit sales reports, falsifies reports or fails to submit sales reports in a timely manner, DAS may suspend, terminate or cancel this Contract.

CONTRACTOR REVENUE SHARE: The Contractor must pay the Department of Administrative Services (DAS) a revenue share of the sales transacted under this contract. The Contractor must remit the revenue share in U.S. dollars within thirty (30) days after the end of the quarterly sales reporting period. The revenue share equals 0.75% of the total quarterly sales reported. Contractors must include the revenue share in their prices. The revenue share is included in the award price(s) and reflected in the total amount charged to ordering agencies which includes both state agencies and political subdivisions using this Contract.

The contractor must remit any monies due as the result of the close-out report at the time the close-out report is submitted to DAS. The Contractor must pay the revenue share amount due by check. To ensure the payment is credited properly, the Contractor must identify the check as a "Revenue Share" and include the Ohio Contract Management Remittance Report

The Contractor should make the check payable to: Treasurer, State of Ohio and forward the check to the following address:

Department of Administrative Services
Office of Finance
30 E. Broad Street, 40th Floor
Columbus, OH 43215

If the full amount of the revenue share is not paid within thirty (30) calendar days after the end of the applicable reporting period, the non-payment constitutes a contract debt to the State. The State may either initiate withholding or setting off payments or employ the remedies available under Ohio law for the non-payment of the revenue share.

If the Contractor fails to pay the revenue share in a timely manner, DAS may suspend, terminate or cancel this Contract.

SPECIFICATIONS

I. SCOPE OF WORK

The state of Ohio is seeking contractors to provide Tensioned Fabric Structures (TFS). The State has a need for portable structures (different sizes and styles) that can be used by various agencies and other entities when there is a demand for additional space, cold storage, salt barns and other uses. The State will work with the Contractor so that the structures may be moved and set up in new locations. Services provided by the manufacturer/dealer must include the design, engineering, fabrication, products, shipment and installation of the structures and/or foundations for structures as needed by the State and/or the registered cooperative members.

II. GENERAL SPECIFICATIONS

- A. The Contractor shall be responsible for the design, engineering, fabrication, products, foundation at site specific locations, shipment and, installation of the structures of the work specified herein. The intent of this specification is to have single source responsibility for the above functions.
- B. Performance Requirements: The Contractor shall be responsible for the configuration, fabrication and erection of the tensioned membrane structure. All materials provided shall be new and unused.
- C. Erection of the complete system shall be the responsibility of the awarded contractor.
- D. The fabric structure shall be a frame-supported tensioned membrane structure. The fabric shall have low elongation characteristics under tension and shall assume an anticlastic configuration. Structures that have designs incorporating fabric in a flat or mono-axially curved configuration at any location in the roof will not be acceptable.
- E. Provide a structure as shown in the drawings and described in this specification. Foundations and anchoring for the structure shall be the responsibility of general contractor.
- F. The structural design shall comply with applicable codes and regulations.
- G. Design engineering documentation of complete tensioned membrane structure will meet all applicable codes.
- H. The structure shall be designed in accordance with the International Building Code (IBC) with the design wind speed to be 90 MPH minimum.

III. SUBMITTALS

Upon receipt of a Purchase Order the Contractor(s) will submit the following documents to the agency or registered cooperative members.

- A. Manufacturer product data, including specifications and installation instructions for each component of the TFS. Include laboratory test reports and other data, where applicable.
- B. Engineering drawings: 11" x 17", dimensioned drawings for the TFS signed and sealed by a license civil or structural engineer. Include plan view, elevations, details, sections, connections, and anchorage/footings.
- C. Samples: Fabric, 8 ½" x 11" minimum
- D. Structural calculations: Signed and sealed by a registered structural or civil engineer specializing in TFS design and engineering.

IV. LAWS/REGULATIONS

All contractors are expected to follow all federal, state and local laws pertaining to the manufacturing and installation of these products. Some common regulations can be found at the following sites:

- A. American Welding Society Structural Welding Code - AWS D1.1
- B. American Welding Society Structural Welding Code, Aluminum – AWS D1.2

SPECIFICATIONS

- C. National Fire Protection Association Fire Test for Flame Propagation of Textiles and Films – NFPA 701
- D. American Society of Civil Engineers, Minimum Design Loads for Buildings and other structures – ASCE 7
- E. Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes – ASTM A 500

V. MANUFACTURERS

Acceptable Manufacturers: Britespan, Norseman, US Cover, Clear Span, Rushmore, Hanson, or equivalent.

VI. CONTRACTOR REQUIREMENTS

Bidder/Contractor must provide proof of the following:

- A. Have been in continuous operation as a professional fabric Tension Structure contractor for a minimum of ten (10) years.
- B. Hold general contractor's license in the state of Ohio for a minimum of five (5) years.
- C. The metal awning frames must be completed by certified welders.
- D. Provide written welding procedure specifications.
- E. A professional engineer who is legally authorized to practice in the jurisdiction where project is located and who is experienced in providing engineering services for installing Tensioned Fabric Structures similar to those indicated for this project and with a record of successful in service performance.
- F. OSHA 10 Hour Construction Industry Certified Training.
- G. OSHA Fall Protection Training.
- H. Job site installation crew must include one CPR trained member on the job site at all times of the installation.
- I. The installation crew must have a copy of the awning company's Code of Safety Practices at the job site during times of installation.
- J. When forklifts are used at the job site, the operator must be Fork Lift Operation trained.
- K. The contractor must provide proof that the manufacturer has an ongoing written Quality Assurance program for five years or more.
- L. The contractor must provide proof that the manufacturer has a full-time Quality Assurance manager.
- M. The TFS Manufacturer must be a current member of a professional trade association, i.e., Lightweight Structures Association.

VII. WARRANTY

- A. Warrant frame materials and workmanship against defects for a period of 5 to 15 years year from date of purchase order or installation, whichever is later.
- B. Warrant fabric materials and workmanship against defects for a period of 5 to 15 years (depending on selected and approved fabric), on a prorated basis, from the date of purchase order or installation, whichever is later, and/or offer the same warranty offered by the fabric mill that manufactured or supplied the fabric.
- C. Warrant their work and their sub contractor's work (foundation, erection of the TFS, site work, etc.) for a period of one (1) year from completion of the project.

SPECIFICATIONS

VIII. ENGINEERING

- A. Based on the structural calculations as defined in this section, prepare structural design drawings defining the complete structure, precise interface geometry determination, reaction loads imposed on foundations, anchoring loads, connection details, interfaces and seam layouts.
- B. Structural calculations for the fabric structure shall include:
 - 1. Large deflection numerical shape generation that will insure a stable, uniformly stressed, three-dimensionally curved shape that is in static equilibrium with the internal pre-stress forces and is suitable to resist all applied loads.
 - 2. Large deflection finite element method structural analysis of the membrane system under all applicable wind, seismic and snow loads.
 - 3. Finite element method structural analysis of the support from system.
 - 4. Member sizing calculations of all primary structural members.
 - 5. Connection design including bolt, weld and ancillary member sizing.
 - 6. Biaxial Fabric test specification, interpretation and fabric compensation determination.
 - 7. Accurate generation of the two dimensional compensated fabric templates required to generate the three dimensional equilibrium shapes.
 - 8. Minimum design requirements for the foundation of each project will be provided by the agency.

IX. REGULATORY REQUIREMENTS

- A. Conform to applicable code for fire resistance ratings for Tensioned Fabric Structure covering.
- B. All fabric structures shall be designed so no life safety issue is created in the event of a loss of the fabric. The structural support members shall not rely on the fabric for structural stability.

X. DELIVERY, STORAGE AND HANDLING

- A. Delivery and Storage: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. Store materials in accordance with manufacturer's instructions, in a clean, dry, well-ventilated area, above ground on blocking, and do not allow materials to become wet, stained, or dirty.
- B. Handling: Handle materials so as to prevent materials, coatings, and finishes during transportation and installation to prevent damage or staining. Handle fabric in accordance with manufacturer's instructions. Use care in handling of fabric to avoid damage to fabric material and coating. Do not damage, crush, or kink cables where occurs.

XI. MATERIALS

- A. Approved Architectural Fabric Membrane Materials
 - 1. Polyvinyl Chlorine (PVC)
 - a. Raw Material: Polyester
 - b. Construction: PVC/PVDF Coated Polyester
 - c. Tensile Strength: to meet requirements of engineer
 - d. Light Transmission: 8% - 14%, depending on required strength
 - e. Color: White or other color selections
 - f. Expected service life: 7 – 10 years
 - g. Flame retardant: NFPA 701
 - h. Composure: Solid and water repellent
 - i. Seams: RF Sealed with sufficient strength to develop 90 percent of full strength of fabric 10) Recyclable material construction

SPECIFICATIONS

2. Polytetrafluoroethylene (PTFE) coated Fiberglass
 - a. Base Fabric: Woven "EC6" glass.
 - b. Coating: PTFE.
 - c. Tensile Strength: as required by engineer
 - d. Combustibility: Non-combustible substrate when tested in accordance with ASTM E 136.
 - e. Intermittent Flaming: Class A, when tested in accordance with ASTM E 108.
 - f. Flame Spread: Class A, when tested in accordance with ASTM E 84.
 - g. Flame Retardancy: Passing NFPA 701.
 - h. Solar Transmission: 19 percent, minimum.
 - i. Seams: Welded, with sufficient strength to develop 90 percent of full strength of fabric
 - j. Expected Service Life: 20 to 25 years.
 - k. Color After Exposure to Sunlight: Retention of color (white or other color selection)
 - l. Neoprene gaskets will be used to protect PTFE against contact with metal components.
3. High Density Polyethylene (HDPE)
 - a. Mesh fabric made from UV stabilized HDPE
 - b. Fire Retardancy: NFPA 701
 - c. Sewn with PTFE thread in a zig-zag stitch to prevent failure under tension
 - d. Color: As approved by architect/agency from available selection
4. Expanded Polytetrafluoroethylene (ePTFE)
 - a. Tear strength: as required by engineer
 - b. Light Transmission: 30% - 40% with respect to associated required strength
 - c. Color: White or other color selection
 - d. Flame retardant: NFPA 701
 - e. Flame spread: Class A (ASTM E84)
 - f. Composure: Solid and water repellent
 - g. Seams: RF Sealed with sufficient strength to develop 90 percent of full strength of fabric
 - h. Five (5) year expected life – Fifteen (15) year full warranty
 - i. Recyclable material construction

B. Structural Steel Framing

1. Structural frame shall be fabricated from structural steel using standard shapes. The steel shall be minimum ASTM A36 for standard profiles and A500 Grade B for structural tubes.
2. The fabrication of the steel shall be in accordance with guidelines set forth in the AISC steel design manual and the AWS code of structural welding. All welds shall be in accordance with manufacturers design and performed prior to shipping. No welding shall be performed in the field unless authorized in writing by the Agency or Agency's representative.
3. The structural members shall be fabricated in as large segments as possible to minimize field joints.
4. All segments of the assembly will be welded or stamped with the appropriate part number in a manner that will still be visible after powder coating is applied.
5. Grind all corners and sharp edges.
6. Base pricing for steel finishing shall be polyester power painted to a minimum of 3 mils.
7. Steel will require abrasive blasting and primer before application of the polyester power paint finish.
8. Alternate pricing for steel finishing shall be Post Fabrication, Hot Dipped Galvanized to the following requirements:
 - a. Structural Steel Plates: done in-line, Hot Dipped Galvanized to a nominal coating zinc weight of 2.0 OZ./SF.
 - b. Tubes: done in-line, Hot Dipped Galvanized to a nominal coating zinc weight of 0.6 OZ/SF.

C. Aluminum Membrane Plates and Clamps

1. Aluminum shall conform to alloy 6061-T6.
2. All components will be welded or stamped with the appropriate part number in a manner that will still be visible after powder coating is applied.
3. The aluminum shall be polyester powder painted to a minimum of three (3) mils.

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D. Cables and End Fittings

1. Galvanized Cables and Fittings

- a. All structural wire rope shall be made from Wire Rope conforming to AISI Steel Cable Manual requirements with a Class A galvanized coating or approved substitute. The cable should be IWRC improved plow steel.
- b. All cable terminations and connectors shall be hot-dipped galvanized for corrosion protection. Cables should be designed with a minimum safety factor of 2 on breaking strength.
- c. Cables which are designated to be pre-stretched shall be pre-stretched per ASTM A603 for wire rope. Cables of the same type shall have the same modulus of elasticity.
- d. All cables and end fittings shall be delivered clean and dry.
- e. All swaged and splattered fittings shall be designed and attached to develop the full breaking strength of the cable. Thimble end fittings shall develop a minimum of 110% of the cable breaking strength.
- f. Swaged end fittings, pins, nuts and washers shall be electro-galvanized.
- g. Splattered end fittings shall be hot dipped galvanized.
- h. Attach a tag indicating cable length and mark number to each cable assembly.
- i. The design load is the load in the cable under pre-stressed load condition per the recommendation of the engineer on record.
- j. Cables shall be tensioned to double the design load before length is cut.
- k. Cables shall be tensioned to the design load when measuring the cut length that is indicated on the shop drawings.

2. Stainless Steel Cables and Fittings

- a. Cables shall be 1x19 Stainless Steel Open Strands, Grade 316
- b. Cables and fittings will be fabricated per the standard operating procedure of the following approved manufacturers:
 - 1) Frontier Technologies
 - 2) Ronstan International
- c. Attach a tag indicating the cable length and mark number to each cable assembly.
- d. The design load is the load in the cable under pre-stressed load condition per the recommendation of the engineer on record
- e. Cables shall be tensioned to double the design load before length is cut
- f. Cables shall be tensioned to the design load when measuring the cut length that is indicated on the shop drawings.

3. Bolts and Related Fasteners

- a. Fasteners and hardware accessories shall be of types and sizes best suited for the purpose as recommended by the engineer on record.
- b. Fasteners used on main structural members shall be hot-dipped galvanized high-strength bolts including nuts and washers, and conforming to ASTM A325 or A490 as applicable. All other fasteners shall be adequately sized and treated for corrosion protection.
- c. Concrete anchor bolts shall conform to ASTM F1554 and be stainless steel.

E. Foundation

The Contractor may be responsible for the design, building and installation of the foundation, if requested by the agency.

1. Strip Foundations – assumed allowable soil bearing 2.0 KSF.
2. Spread Foundation – assumed allowable soil bearing 2.0 KSF
3. Allowable soil bearing to be verified by a licensed geotechnical engineer after the foundation has been excavated, prior to placement of concrete.
4. Notify the architect/engineer as soon as possible of any unusual soil conditions or soil conditions in variance with test boring, or soil of questionable bearing.
5. The Contractor shall be responsible for the design, installation and final clearance of any required needling, underpinning, shoring, or bracing of existing structures.
6. Structural fill shall be placed in 8" lifts compacted 95% of modified optimum density.
7. No backfilling of foundation wall shall be undertaken until suitable wall bracing, temporary or permanent, has been provided.

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8. Do not place fill on frozen ground. All soil surrounding and under foundations shall be protected from freezing and frost action during the course of construction. Soil which has been allowed to freeze shall be removed.
9. Bottom of exterior footings shall be at least 4'-0" below finished grade.
10. The agency may have specific design requirements that will be provided to the Contractor when needed. These requirements could be minimum concrete strength requirements, etc., that may change pricing on the foundation component.

XII. EXECUTION

A. Examination

1. Examine the conditions under which this work is to be performed and correct unsatisfactory conditions.
2. Correct unsatisfactory conditions before proceeding with installation.

B. Installation

1. TFS Manufacturer will prepare a full and comprehensive assembly procedure guide prior to installation.
2. Comply with the TFS manufacturer recommendations, the approved shop drawings and the applicable Code requirements.
3. Weather Conditions: Proceed with installation of the fabric and associated work only when existing and forecasted weather conditions will permit work to be performed in accordance with manufacturers recommendations. The Tension Fabric Structure shall not be installed when wind conditions are deemed in excess of manufacturer's determination of safe wind speed erection conditions. It shall be the manufacturer's sole discretion to determine the acceptable and safe wind condition for installation.
4. Framing and structural members: Anchor bolts shall be accurately set. Uniform bearing under base plates shall be provided using non shrink grouting compound where applicable. Members shall be accurately set to assure proper fitting and covering. As erection progresses, the work shall be securely fastened to resist the dead load and wind and erection stresses. Erected structural frame work shall be adequately guyed and secured to resist all possible loads due to wind and the installation process.
5. Fabric: Prior to start of installation; check all surfaces of framing members and other rigid construction elements to be in contact with fabric to ensure that all edges are smooth and well rounded. Remove any potential causes for snagging or tearing of the fabric. Properly install all connections and provide all materials and equipment required for the erection and stressing of the fabric. Unroll the fabric in such a manner as to avoid snagging or dragging the fabric over sharp objects during installation. Adequate fabric pre-stress shall be confirmed by the fabric structure manufacturer and the appearance of the fabric membrane roof shall be smooth and wrinkle free. Creasing or folding the fabric around sharp corners shall be avoided at all times.
6. Fabric tensioning system: Cables shall be free of all kinks and bends. Care shall be taken not to damage cables during installation. Bolt holes shall be 1/16" larger than the bolt, unless otherwise indicated.
7. After installation, restore marred or abraded surfaces to original condition using same paint or coating as factory-applied finishes, when the results are acceptable to the Architect, otherwise replace damaged equipment.

XIII. BID REQUIREMENTS

- A. Bidders must submit their electronic building structures catalog, including but not limited to salt/sand storage, equipment, and agricultures buildings with pricing and discount structure with bid. See page 4 for additional information related to changes to catalog pricing.

Failure to submit a complete electronic catalog with your bid may deem the bid as not responsive and no further consideration given.

- B. Bidders will submit the Cost Schedule page which will be used for evaluation purpose in determining responsive and responsible bidders.
- C. Bidder should understand that the Cost Schedule is not an actual bid for product and services, but is a hypothetical structure that is only being used for evaluation purposes.

XIV. CONTRACT AWARD

Contract may be awarded to one or more responsive and responsible bidders meeting the bid specifications.

COST SCHEDULE

For evaluation purposes only - the State is asking that you provide a response to a hypothetical structure it will need – your response will be compared to pricing in the catalog that we are asking you to submit with this bid. Any catalogs received deemed to be excessive in comparison to most others may be deemed as not responsive. Cost Schedule pricing will be used for evaluation purposes only to determine if the bidder is responsive. The State will award to one or more responsive/responsible bidder(s) as it deems is in the best interest of the State.

The Ohio Department of Transportation has a **hypothetical** need as follows:

- A. A tensioned fabric structure it will use for Salt and/or Sand Storage,
- B. Approximately 40 feet Wide
- C. Approximately 50 feet Long
- D. Approximate Height (to be supplied by bidder)
- E. Hypothetical location for the building is at ODOT, Columbus, Franklin County, Ohio.

Lump sum cost should include all costs including, but not limited to the following: design & engineering, fabric, frame, foundation, incidentals – cables, etc., installation, transportation cost, upgrade to galvanized steel finishing

Description	Style (e.g.-round, gabled, etc.)	Dimensions W X L	Height	Total Sq. Ft	Cost
Structures -Salt and Sand Storage - 40"W x 50"L					
Below is a table to breakdown the cost of this type of structure. Please include all items needed. It is assumed that the sum of all these totals is the final cost of the purchase and installation of this type structure.					
Design and Engineering					\$ PER/
Fabric					\$ PER/
Frame					\$ PER/
Foundation					\$ PER/
Incidentals – cables, bolts, etc.					\$ PER/
Installation					\$ PER/
Shipping/Transportation					\$ PER/
Upgrade to galvanized steel finishing					\$ PER/
Other: (Describe)					\$ PER/
Other: (Describe)					\$ PER/
TOTAL LUMP SUM COST					
ESTIMATED DAYS TO COMPLETE AFTER RECEIPT OF PURCHASE ORDER					/days
LENGTH OF WARRANTY					

Contractor will indicate, by checking the appropriate box(es) below, which mode of transportation will apply to this contract.

- Bidder/Broker ("The Contractor") or their subcontractor will make delivery or be performing services using a vehicle that is owned, leased or rented. Provide Certificate of Insurance documenting automobile liability with a Combined Single Limit of \$500,000.00.
- Goods/Services will be delivered via common carrier.
- No employee or representative of the Contractor will have cause to be on state property to make deliveries or to perform services.