# Invitation to Bid

# 20150415-02 GHS BLEACHERS

Responses to an Invitation to Bid will be received by the Purchasing Supervisor, Sumner County Board of Education, 1500 Airport Road, Gallatin, TN 37066 for 20150415-02 GHS BLEACHERS until 9:30 a.m. CDT April 15, 2015. Bid responses will be opened at that time, taken under advisement and evaluated. Should you have any questions please contact Chris Harrison at chris.harrison@sumnerschools.org. All proposals are subject to the Board of Education's conditions and specifications which are available from Chris Harrison, Purchasing Coordinator (615) 451-6569. All bids can be viewed on line at www.sumnerschools.org.

# NOTICE TO RESPONDENTS

Responses to an Invitation to Bid will be received by the Purchasing Supervisor in the SUPPORT SERVICE FACILITY CONFERENCE ROOM, Sumner County Board of Education, 1500 Airport Road Gallatin, TN 37066. They will be received until **9:30 A.M. Local Time APRIL 15, 2015** for **20150415-02 GHS BLEACHERS**, at which time the responses will be opened, taken under advisement and evaluated. *BIDS WILL BE POSTED ON www.sumnerschools.org* 

# GENERAL REQUIREMENTS AND CONDITIONS

- 1. The Sumner County Board of Education reserves the right to accept or reject any and/or all responses in whole or in part, and to waive informalities therein.
- Any responses received after the scheduled closing time for the receipt for responses will not be considered.
- 3. If a mistake is discovered after the responses are received, only the Sumner County Board of Education may allow the respondent to withdraw the entire response.
- 4. Partial payments will not be approved unless justification for such payment can be shown. Terms will be net 30 days.
- 5. Payment will not be made until the said **20150415-02 GHS BLEACHERS** are inspected and approved as meeting all specifications by persons appointed by the Sumner County Board of Education.
- 6. Responses submitted must be in a sealed envelope and marked on the outside as follows: RESPONSE: 20150415-02 GHS BLEACHERS DEADLINE: 9:30 A.M.; APRIL 15, 2015
- 7. Facsimile responses will not be considered.
- 8. If a successful bidder violates any terms of their bid, the contract, school board policy or any law they may be disqualified from bidding for a period of two years for minor violations or longer for major violations. Bids from disqualified bidders will not be accepted during the period of disqualification.
- Prices quoted on the response (if any) are to be considered firm and binding until the said 20150415-02 GHS BLEACHERS are in the possession of the Sumner County Board of Education.
- 10. No purchase or contract is authorized or valid until the issuance of a Board Purchase Order in accordance with Board Policy. No Board Employee is authorized to purchase equipment, supplies or services prior to the issuance of such a Purchase Order.
- 11. Any deviation from these stated terms, specifications and conditions must be coordinated with and approved in writing by the Purchasing Supervisor, Vicky Currey (615) 451-6560.
- 12. All bids that exceed \$25,000 must have the Company Name, License Number, Expiration Date thereof and License Classification of Contractor listed on outside of sealed envelope. As required by State of Tennessee Code Annotated 62-6-119.
- 13. The awarded bidder will be required to post a performance and payment bond in the amount of 25% of the contract price if it exceeds \$100,000 as stated by State of Tennessee Code Annotated 12-4-201.
- 14. If the project cost in excess of \$25,000 a performance bond must be secured by the requesting party in an amount equal to the market improvement value.

# **20150415-02 GHS BLEACHERS**

The Sumner County Board of Education, herein known as "School System", is soliciting bids for the installation of bleacher at Gallatin High. The bid shall be valid for a period of 90 days from the date of bid opening.

Jobsite: Gallatin High

700 Dan P. Herron Drive Gallatin, TN 37066

#### SCOPE OF WORK

#### 1.1 WORK INCLUDED

A. Manufacture, deliver and install telescopic seating system in accordance with applicable codes, the following specifications, and approved drawings.

## 1.2 RELATED WORK BY OTHERS

- A. Adequate floor levelness and strength for operation of telescopic seating.
- B. Adequate wall strength for attachment and operation of wall attached telescopic seating.

#### 1.3 SYSTEM DESCRIPTION

- A. Telescopic seating system shall be multiple tiered seating rows comprised of seat and deck components, risers, and supportive understructure.
- B. Telescopic seating shall be operable on the telescopic principle, stacking vertically in minimum floor area when not in use.
- C. The first moving row, on manual sections, shall be secured with release lever. All other rows shall be mechanically locked, operable only upon unlocking and cycling of first row. Power sections shall be secured with mechanical locks as well as the power system, operable upon activating the pendant control.

# 1.4 QUALITY ASSURANCE

- A. Design Load Criteria (Structural)
  - International Building Code Standard: Comply with requirements of IBC / ICC 300, "Standard for Bleachers, Folding and Telescopic Seating and Grandstands Assembly Seating, except where other requirements are indicated by the owner.
  - 2. Seating layout design shall be in compliance with IBC / ICC 300 Code, Chapter 4.
- B. Manufacturer: Company specializing in telescopic seating with a minimum of 25 years' experience in manufacturing telescopic seating.
- C. Quality Standards: Manufacturer to be I.S.O. 9001 certified.
- D. Engineer Qualifications: Manufacturer to employ a registered, licensed Professional Engineer to certify that the equipment to be supplied meets or exceeds the design criteria of this specification.
- E. Installation: Shall be handled directly by the manufacturer or by a factory certified installation subcontractor.
- F. Product Liability: Certification of insurance coverage of not less than \$5,000,000.
- G. Welding Processes: To be performed by certified professional welding operators in accordance with American Welding Society, (AWS), D1, 1 "Structural Welding Code-Steel".

H. Product Improvements: Equipment provided shall incorporate manufacturer's design improvements and materials current at time of shipment, provided that such improvements and materials are consistent with the intent of these specifications.

# 1.5 SUBMITTALS

## A. Bid Submittals

- 1. Manufacturer's descriptive literature and specifications.
- 2. List of deviations from these specifications, if any.
- 3. Certification of Insurance.
- 4. I.S.O. 9000 Certification.

#### B. Job Submittals

- 1. Shop drawings shall all equipment to be furnished with details of accessories to be supplied including necessary electrical service to be provided by others. All electrical submittals must include U.L. listing number.
- 2. Samples of material and color finish as requested by Owner.
- 3. Sample of manufacturer's blow molded plastic seat module.
- 4. Sample of manufacturer's 2-row bleacher sample.
- 5. Sample of manufacturer's center aisle hand rail which complies with the below specification.
- 6. Sample of manufacturer's "U" shaped support bracing which complies with the below specification.
- 7. Sample of manufacturer's 2<sup>nd</sup> row post which complies with the below specification.
- 8. Bidders will be required to submit a copy of their most recent quarterly Tennessee State Unemployment Tax Report to the owner as written proof of having at least 5 experienced, qualified, drug free installers on their State of Tennessee employment list. These installers could be required to help install the project, finish punch-list items, or perform any required maintenance in a timely fashion as requested by the owner.
- 9. Warranty, operation and maintenance instructions to the owner upon completion.
- 10. Successful bidder will be required to submit a Drug-Free Affidavit.
- 11. Successful bidder will be required to be in compliance with Public Chapter No. 587, Finger Printing & Background Check.

#### 1.6 DESIGN CRITERIA

- A. Telescopic seating shall be designed to support, in addition to its own weight, and the weight of added accessories, a uniformly distributed live load of not less than 100 lbs. per square foot (4.8 kN per sq. m.) of gross horizontal projection.
  - 1. Seat boards and footrest shall be designed for a live load of not less than 120 lbs. per linear foot (1.751 kN per linear m).
  - 2. A sway force applied to seats shall be 24 lbs. per linear foot (350 N per linear m.) parallel to the seats and 10 lbs. per linear foot (146 N per linear m.) perpendicular to the seats. Sway forces shall not be considered simultaneously applied.
- B. Railings, posts and sockets designed to withstand the following forces applied separately:
  - 1. Handrails shall be designed and constructed for:
    - a. A concentrated load of 200 lbs. (890 N) applied at any point and in any direction.
    - b. A uniform load of 50 lbs. per foot (730 N/m) applied in any direction. The concentrated and uniform loading conditions shall not be required to be applied simultaneously.

- 2. Guards shall be designed and constructed for:
  - a. A concentrated load of 200 lbs. (890 N/m) applied at any point and in any direction along the top railing member and; a uniform load of 50 lbs. per foot (730 N/m) applied horizontally at the required guardrail height and simultaneous uniform load of 100 lbs. per foot (1460 N/m) applied vertically downward at the top of the guardrail. The concentrated and uniform loading conditions shall not be required to be applied simultaneously.
  - b. American Institute of Steel Construction (AISC), American Iron and Steel Institute (AISI) and Aluminum Association (AA) design criteria shall be the basis for calculation of member sizes and connections.
  - c. Wood members shall be designed in accordance with National Forest Products Association (NFOPA), and National Design Specification for Wood Construction.

#### 1.7 WARRANTY

- A. The manufacturer shall warrant all work performed under these specifications to be free of defects for a period of one year.
- B. Any materials found to be defective within this period will be replaced at no cost to the Owner. This warranty shall not include replacements required by Acts of God, war, vandalism, flood, fire, calamity or deliberate abuse or misuse of the equipment.

# 2.1 ACCEPTABLE MANUFACTURERS

- A. All seating shall be equal to or exceed the Irwin Model 4500 as manufactured by Irwin Telescopic Seating Company, Altamont, IL 62411.
- B. Prior approved equal, subject to strict compliance with these specifications. All approved products must be approved in writing by the Owner, 10 days prior to the bid and all substitutions are still subject to strict compliance with this specification regardless of what the manufacturer's "standard product" is and regardless of approval of a sample product. Owner has the right to request any samples listed in Section 1.5B prior to bid in order to evaluate substitution requests. Owner has the right to reject any substitution request after 1st sample submittal is reviewed.

# 2.2 MATERIALS

- A. Seating Area: One group of wall attached, electrically operated telescoping bleachers.
  - 1. Group 1: 80' 0" x 9 tiers high
- B. Dimensions: The bidder is to conduct field measurements to determine overall height, open depth, and closed depth. The bidder must take in account any entry doors.
  - 1. Row Spacing: 24" spacing
  - 2. Riser per row: 10"

#### C. Accessories:

- 1. Aisles shall be footrest level in sizes and quantities listed below. Aisles at the footrest level shall have non-slip treads on the top front edge. Aisles are to be 48" wide.
- Intermediate aisle steps shall be provided. Steps are permanently attached closed design. Steps shall be designed to eliminate any possible toe catch between the top of the intermediate step and the bottom of the nose beam per ADA or other applicable codes. Front step shall be hinged for storage on first row deck without the need for removal.

#### 3. Aisle handrails.

a. Smart Rail aisle handrails shall be provided for row spacing between 22" and 26". Aisle railings shall quickly and easily rotate 90 degrees to the locked position and store parallel to the front of the aisle. Railings that require removal from the pocket or the use of tools for storage will not be acceptable. Aisle railings shall also be capable of remaining in the use position during operation, eliminating any rail setup or takedown time. Aisle railings shall be an individual rail design, located on every other row starting at row two (2). Railing to be constructed of 1 ½" 11 ga. round steel tubing, finished in a textured power coated epoxy. For safety, railings designed without a full return of the handrail will not be acceptable.

# 4. Wheel Chair Seating Areas.

- a. Recoverable wheel chair spaces shall be provided at the section joint location or section length as shown on plans. An integral support on row two shall be provided to eliminate structural damage to the understructure during the operation and use of the system. Recoverable seating areas do not require front railings for support. Provide these on main floor ADA spaces.
- b. Permanent wheel chair spaces shall be provided at the section joint location or section length as shown on plans. Permanent notches to have a Panelam closure panel to eliminate any open areas under the system. Closure panels to support row two eliminating damage to the understructure or the need for front railings. Provide (1) on main floor. All remaining ADA spaces are to be recoverable.

#### 5. End Rails

- a. End rails of the self-storing type, finished with textured epoxy powder-coated black enamel, shall be provided at the open ends of the group. End rails shall start at row three and meet all national building codes. Railings with flexible uprights that can be expanded beyond the 4" sphere are not acceptable.
- 6. Scorer's table shall be 8' x 15" wide of wood grain high pressure laminate. Scorer's table shall be relocatable to any row of any section without the use of mounting sockets.
- 7. Seat numbers and row letters shall be supplied in a silver matte finish with black identification. Layout of numbering to be coordinated with Owner.

# 2.3 FABRICATION

## A. Understructure System:

- Steel supports and rolling frames shall be constructed of formed steel shapes of the size
  and shape necessary to support the design loads. All support bracing shall begin at row
  and be of diagonal or "knee" type for rigidity. Diagonal bracing to be a "U" shaped
  formed steel channel. Angle iron or "X" type bracing is unacceptable.
- 2. Wheels shall not be less than 4" diameter x 1" non-marring soft rubber face to protect wood or synthetic floor surfaces. Each operating row shall have a minimum of 8 wheels.
- 3. Each fully shirted wheel channel shall be continuously in contact with adjacent channels by nylon guides, to eliminate metal-to-metal contact, and non-binding Quadra-Link guide rods to provide alignment when opening and closing. Wheel channels do not require either at time of installation or periodically.
- 4. Each cantilever arm shall be triple-formed 10 gauge steel, securely welded to the post assembly and contain non-binding Quadra-Link interlocks with each row post assembly. Each post assembly shall include a 1 3/16" wide x 3/4" nylon roller to enhance the overall

- operation and provide proper load support. Roller to be connected using a 3/8" diameter pin. Cantilevers not properly supported with a roller design will not be acceptable. Cantilevers do not require lubrication at time of installation or periodically.
- 5. Vertical columns shall be high tensile steel structural tube to meet design criteria. Minimum column size to be  $1 \frac{1}{2}$ " x 3" 11-gauge structural tube.
- 6. Deck supports shall be bolted to the rear beam, nose and decking with locking hardware.

# B. Seat Systems:

- Blow Molded Seat: Supply plastic modular 18" individual seats in 10" deep models.
   Seating to be scuff resistant blow molded high density polyethylene plastic.
   10" Blow Molded Seat to be supplied
  - a. Seats shall be blow molded, double walled, high density, impact resistant, UV stabilized, linear polyethylene available in 15 bright standard colors. Injection molded seats will not be accepted for this project.
  - b. Each module to be bracket supported with concealed mounting hardware attachment for rigidity.
  - c. Modules shall allow a full  $26\,\%$ " unobstructed are for foot room comfort and cleaning. Modules with external ribs or multiple piece modules are not acceptable.
  - d. Each module has two recessed areas for seat number locations. Number plates are optional.

## C. Deck System:

- 1. Decking: Panelarm decking shall have a 0.030 (30 thousandths) high density polyethylene overlay, permanently bonded over 5-ply structural western fir plywood in strict compliance with U.S. Product Standard PS 195. Finish thickness to be 5/8". Polyethylene finish to be textured grey or beige. Plywood shall be support along the front and back edge for maximum rigidity and designed in a manner that allows 3 plies to run front to pack for increased deck strength. Each plywood panel shall be connected using a tongue and groove splice leaving the deck clean and free of any tipping or cleaning obstructions. Plywood with clear or painted finish is unacceptable. Decking shall be through bolted to steel supports with locking hardware. Decking attached by the use of self-tapping fasteners or retained by friction only is unacceptable.
- 2. Nosing: Nosing with Panelam decks shall be one piece, formed, 14 gauge steel with a minimum G-60 pre-galvanized finish.
- 3. Rear Risers: Rear riser shall be a minimum 14 gauge formed steel with a minimum G-60 pre-galvanized finish.
- 4. Formed Steel Deck Support Members: Support members shall be double formed 10 gauge steel and connect the front nosing and rear riser members. Each deck support shall include a 1 ½" wide x ¾" nylon roller to enhance the overall operation and provide proper load support. Roller to be connected using a 3/8" diameter pin. Cantilevered rollers supported on 1 side only which can bend under occupant load will not be acceptable. Deck supports shall provide support for the decking, throughout its length, and at intermediate locations to limit deflection. Deck supports to have a maximum space of 60" up to 26" row spacing, and 40" up to 33" row spacing.

## D. Finish:

1. For rust resistance in standard or high humidity conditions all painted surfaces shall be finished in textured Epoxy Powder Coated Semi-Gloss Black.

#### 1.4 PROPULSION SYSTEM

- A. Friction Power: Furnish each seating group with an integral friction drive system to open and close the telescopic units. Each individual section shall include 2 friction drive systems integrated into the first row of understructure to achieve smooth and efficient operation. Operation of the seating shall be accomplished with the use of a walk along pendant control.
  - 1. Each power system shall include two large 6 ½" diameter by 4" long friction rollers, for a total of 4 rollers per section. Each roller to include non-marring ½" thick rubber covering.
  - 2. Electrical motors for each section shall be heavy duty and high efficiency gear reduction motors. The shaft diameter for the gear motor and rollers shall be a minimum of 1" and be connected by a 1" schedule 40 drive shaft.
  - All roller chain and sprockets used throughout the drive system shall be a minimum of #50 in size. Each drive unit shall be designed to include a safety shroud around the chain and sprocket for overall safety, and to protect the floor surface should a chain failure occur.
  - 4. The power units shall develop tractive forces adequate to operate the seating units under normal conditions but inadequate to operate should significant obstacles be encountered.
  - 5. Motion monitors and limit switches should be provided on all bleacher banks which telescope at 20 fpm or greater in order to provide an audio-visual warning for each integrally powered unit complete with a flashing light with self-contained warning horn, rated at 85 dB, that activates when the bleacher is in motion. Limit switches are required for these same units to ensure the motors stop once the bleacher bank is completely open or closed.
  - 6. For increased strength, bolts used to attach the wheels to the inside of the gear box on each sign of the motors should be 3/8" bolts or greater, ¼" bolts are not acceptable (no exceptions).
- B. Manufacturer shall provide all wiring from power source within bleacher seating including pendant control. Removable pendant control shall be hand held with forward and reverse button, plugging into a single receptacle. Power source shall be a 60 HZ power source (as specified below) behind each group of seating. Amperage to be as specified by seating manufacturer depending on the number of power units required. For wall-attached installations, power source to terminate in a surface mounted junction box above floor. For reverse units; power source to terminate in a junction box, flush mounted under first seating row in center of group. All connections including to junction boxes are to be made by bleacher installers. All electrical parts and wiring shall be installed in complete accord with the National Electric Code. All systems shall be designed to comply with U.L. (U.L. Listing #E168517).
  - 1. Supply power system with 208/230v, 5 wire 3-phase system.

# 3.1 REVIEWS AND APPROVALS

A. Shop drawings shall be approved and job site field measurements taken prior to installation and telescopic gym seating shall be installed in conformance therewith.

#### 3.2 INSTALLATION

A. The installation of the telescopic gym seating will be handled directly by the manufacturer or by a factory authorized installation subcontractor qualified to perform the installation function.

# **SUMNER COUNTY BOARD OF EDUCATION**

Purchasing Department 1500 Airport Road Gallatin, TN 37066

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20150415-02 GHS BLEACHERS	
9:30 A.M.; APRIL 15, 2015	
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	_Brand
	_Model No.
	_Seating Capacity
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	20150415-02 GHS BLEACHERS 9:30 A.M.; APRIL 15, 2015