SECTION 009113 – ADDENDUM TWO

PART 1 - ADDENDA

- 1.1 PROJECT INFORMATION
 - A. Project Name: 23100 Forest Municipal School District Forest High School Football Field Bleachers Upgrade.
 - B. Owner: Forest Municipal School District, 325 Cleveland Street, Forest, MS 39074.
 - 1. Owner's Representative: Dr. Melanie R. Nelson, Superintendent.
 - C. Architect: Dale Partners Architects, P.A., One Jackson Place, Suite 250, 188 East Capitol Street, Jackson, MS 39201.
 - D. Architect Project Number: 23100
 - E. Date of Addendum Two: 27 February 2024
- 1.2 NOTICE TO BIDDERS
 - A. This Addendum is issued to all registered plan holders pursuant to the Instructions to Bidders and Conditions of the Contract. This Addendum serves to clarify, revise, and supersede information in the Project Manual, Drawings, and previously issued Addenda. Portions of the Addendum affecting the Contract Documents will be incorporated into the Contract by enumeration of the Addendum in the Owner/Contractor Agreement.
 - B. The Bidder shall acknowledge receipt of this Addendum in the appropriate space on the Bid Form.
 - C. The date for receipt of bids is CHANGED by this Addendum at same time and location.
 1. The new bid date is Thursday, March 21, 2024.
- 1.3 GENERAL
 - A. Attached are the annotated Pre-Bid Meeting Minutes and Meeting Attendees dated 16 February 2024.
 - B. Contractor shall provide pricing for Bids "A" & "B". Bid will not be accepted with only one price on the bid form.
 - C. Bid "B", Contractor shall include in price to remove existing bleachers, foundation and structure and install new bleachers, steps, ramp, handrails, guardrails, fencing and concrete pads for Home and Visitor side. Include VIP seating only on the Home side.
- 1.4 REVISIONS TO DIVISION 00 PROCUREMENT REQUIREMENTS AND CONTRACTING REQUIREMENTS

27 February 2024



- A. DOCUMENT 004113 BID FORM. Delete this form in its entirety and replace it with new. See attached.
- 1.5 REVISIONS TO DIVISION 01 GENERAL REQUIREMENTS
 - A. DOCUMENT 012200 UNIT PRICES (New). See attached.
 - B. DOCUMENT 012300 ALTERNATES (Revised). Delete this form in its entirety and replace it with new. See attached.
- 1.6 REVISIONS TO TECHNICAL SPECIFICATIONS
 - A. DOCUMENT 133416 ALL ALUMINUM BLEACHER SYSTEM (New). See attached.
- 1.7 ATTACHMENTS
 - A. Annotated Pre-Bid Meeting Minutes and Meeting Attendees dated 16 February 2024.
 - B. This Addendum includes the following attached Specifications:
 - 1. Specification 004113 Bid Form dated 27 February 2024.
 - 2. Specification 012200 Unit Prices dated 27 February 2024.
 - 3. Specification 012300 Alternates dated 27 February 2024.
 - 4. Specification 133416 All Aluminum Bleacher System dated 27 February 2024.

END OF ADDENDUM TWO

Agenda MINUTES

16 February 2024

23100 Forest Municipal School District Forest High School Football Field Bleachers Upgrade / **Pre-Bid Meeting**

General 1.

T. Doug Dale, AIA

Jeffrey R. Barnes, AIA, ASID

DALE

PARTNER

Leigh G. Jaunsen, AIA, LEED AP

Russ S. Blount, AIA, LEED AP

Jason M. Agostinelli, AIA Neil Polen, AIA, LEED GA

In memory of Michael A. Barranco, AIA 1962-2011

- Please silence cell phones a.
- b. Sign-in sheet: Minutes will include list of meeting attendees
- Plan holders list: Minutes will include list of plan holders C.
- Description: Project consists of upgrading existing bleachers at the high school football d. field and other Work indicated in the Contract Documents.
- Team e.
- Owner......Forest Municipal School District / Forest, MS / f. Dr. Melanie R. Nelson, Superintendent
- Owner's Business Manager.......Forest Municipal School District / Forest, MS /Jeff Jones g.
- h. Architect......Dale Partners Architects, P. A. / Jackson, MS / Russ Blount
- i. Project Manager Dale Partners Architects, P. A. / Jackson, MS / Luigia Hodge
- 2. Procurement and Contracting Requirements
 - a. Advertisement for Bids
 - i. Advertisement dates: 01/31/24 & 02/07/24
 - ii. Bid Receipt: Bids to be opened at 2:00 PM on Thursday, February 29, 2024
 - iii. Bid Location: Forest Municipal School District, 325 Cleveland Street, Forest, MS
 - Bidder Qualifications h
 - i. Bidders must be properly licensed under the laws governing their respective trades
 - ii. List all applicable state & local license & registration nos. on outside of bid envelope
 - Bonding & Insurance с.
 - i. Bidders must be able to obtain insurance and bonds required for the Work
 - d. Bid Security
 - i. A Bid Security in the amount of 5% of the total maximum bid amount is required
 - ii. Cash, cashier's check, certified check, US money order, or bid bond
 - **Bid Form and Attachments** e.
 - i. Acknowledgement of Addenda
 - ii. Subcontractor identification
 - **Bid Submittal Requirements** f.

Architecture = Interiors = Planning 161 Lameuse Street, Suite 201 Biloxi, MS 39530

DALE PARTNERS ARCHITECTS, P.A.

P 228.374.1409 = f 228.374.1414

- i. Envelope requirements (re: Bid Submittal Checklist)
- ii. Proper identification
- g. Notice of Award
 - i. Offered within 60 days after receipt of bids
 - ii. Award will be made as soon as possible & successful bidder should be ready to secure bonds & insurance immediately
- 3. Communication during Bidding Period
 - a. Obtaining documents
 - i. Plan holders are required to register and order bid documents at www.dalepartnersplans.com
 - b. Bidder's Requests for Information
 - i. Binding answers to questions must be included in an official written addendum and the Contractor or Subcontractor is encouraged to provide written communications to the Architect for proper response
 - ii. Address e-mailed written correspondence to biddinginfo@dalepartners.com
 - iii. No questions will be accepted after 5:00 PM on Friday, February 23, 2024 in order to allow the Architect adequate time to prepare any necessary addenda
 - c. Addenda

i.	Addendum no 1)2.21.24

- ii. Addendum no 2 (if needed).....02.26.24
- 4. Contracting Requirements
 - a. The Supplementary Conditions
 - i. Refer to this section for specific comments & directives
 - 1. Change order markups
 - 2. Weather delays
 - 3. Retainage
 - 4. Stored material
 - 5. Liquidated damages
 - 6. Insurance
 - b. Other Owner requirements: verify user occupancy during construction
- 5. Construction Documents
 - a. Use of Site
 - i. Complete use of site TBD
 - ii. Parking
 - iii. Lay-down area
 - b. Work Restrictions
 - i. Work days

- ii. Work times
- c. Unit prices, alternates, & allowances
 - i. Unit prices: No unit prices currently included in bid package
 - ii. Alternates:
 - 1. Additive Alternate No. 01: Add ramp and landing as shown on drawings on Visitor Side.
 - 2. Additive Alternate No. 02: Add ramp and landing as shown on drawings on Home Side.
 - 3. Additive Alternate No. 03: Paint existing structure under bleachers for Visitor and Home Seating.
 - iii. Allowances:
 - 1. Allowance No. 01: Include the Sum of Ten Thousand Dollars (\$10,000.00) total for Construction Contingency Allowance.
- d. Substitutions following award
 - i. Substitutions will be considered within 30 days of the contract award
 - ii. Burden of proof of "equal" will be on the Contractor or Vendor
- 6. Schedule
 - a. Project Schedule
 - i. Section 013200 in Project Manual
 - ii. GC to provide CPM type schedule, regularly updated
 - b. Contract Time
 - i. Contract time current defined as Substantial Completion date of August 1, 2024
 - c. Liquidated Damages
 - i. \$250 each calendar day of the delay after Contract Time
- 7. Post-Meeting Addendum
 - a. May be issued, as necessary to document the meeting questions & provide proper responses
- 8. Other Bidder Questions
 - a. Architect will record and distribute meeting minutes to attendees and others known by the Architect's office to have received a complete set of Procurement and Contracting Documents
 - b. Minutes of meeting are issued as Available Information and do not constitute a modification to the Procurement and Contracting Documents
 - c. Modifications to the Procurement and Contracting Documents are issued by written Addendum only
- 9. Site/facility visit or walkthrough
 - a. The Jamboree will not use the football field per Dr. Nelson

- b. Senior Graduation will be held on May 21st at 7PM on the home side; Practice will be held at 5PM
- c. Clarification:
 - i. Handrails are painted in the base bid
 - ii. Extend handrails and guardrails to meet codes; add mid-rail and brace to support
 - iii. Cut necessary panels to align for handrails
 - iv. Add mid-rail and chain link at guardrails
 - v. Include Press Box structure painting in Home Side Alternate
 - vi. Unit price for resecuring planks shall be included in Construction Documents (added section to specifications), in 5% of total square feet of Home and Visitor's bleachers in base bid
 - vii. Add backs on existing bleachers on the Home side for the section indicated as RESERVED.

End

DALE PARTNERS

PRE-BID MEETING ATTENDEES

23100 Forest Municipal School District Forest High School Football Field Bleachers Upgrade / Pre-Bid Meeting

regarding Pre-Bid Meeting mtg. date 16 February 2024, 10:00 AM

location

project

Forest Municipal School District, 325 Cleveland Street, Forest, MS

T. Doug Dale, AIA Jeffrey R. Barnes, AIA, ASID Leigh G. Jaunsen, AIA, LEED AP Russ S. Blount, AIA, LEED AP Jason M. Agostinelli, AIA Neil Polen, AIA, LEED GA

> In memory of Michael A. Barranco, AIA 1962-2011

Initial	Name	Business	Phone	Email
NRI	Dr. Melanie R Nelson	FMSD	(601) 469-3250	mnelson@forest.k12.ms.us
	Marcus Holbert	FMSD	(601) 469-3250	mholbert@forest.k12.ms.us
79	Jeff Jones	FMSD	(601) 469-3250	jjones@forest.k12.ms.us
Δ	Russ Blount	Dale Partners Architects	(601) 352-5411	russblount@daleparnters.com
y	Luigia Hodge	Dale Partners Architects	(601) 613-9413	luigiahodge@dalepartners.com

Initial Name Phone Email 601-382-2571 joey & shillivanent, net Shillium Enterprises, Line lodge

DALE PARTNERS ARCHITECTS, P.A.

Architecture - Interiors - Planning

161 Lameuse Street, Suite 201 Biloxi, MS 39530

P 228.374.1409 • f 228.374.1414

DOCUMENT 004113 - BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

- 1.1 BID INFORMATION
 - A. Bidder:
 - B. Project Identification: 23100 Forest Municipal School District, Forest High School Football Field Bleachers Upgrade.
 - 1. Project Location:
 - a. Site A: Forest High School 511 Cleveland Street Forest, Mississippi 39074 (601) 469-3255 Fax: (601) 469-8250
 - A. Owner: Forest Municipal School District, 325 Cleveland Street, Forest, MS 39074.
 - C. Owner's Representative: Dr. Melanie R. Nelson, Superintendent.
 - D. Architect: Dale Partners Architects, P.A., One Jackson Place, Suite 250, 188 East Capitol Street, Jackson, MS 39201.
 - E. Architect Project Number: 23100.
- 1.2 CERTIFICATIONS AND BASE BID(S) Both "A" & "B" must be completed. The Owner has the rights to accept either Base Bid.
 - A. Base Bid "A", Single-Prime (All Trades) Contract: (Existing Bleachers on Home and Visitor side refurbished). The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Dale Partners Architects and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:
 - 1. _____ Dollars
 - (\$_____).
 2. The above amount may be modified by amounts indicated by the Bidder on the attached Document 004322 "Unit Prices Form" and Document 004323 "Alternates Form."
 - B. Base Bid "B", Single-Prime (All Trades) Contract: (New Bleacher system for Home and Visitor side). The undersigned Bidder, having carefully examined the Procurement and Contracting Requirements, Conditions of the Contract, Drawings, Specifications, and all subsequent Addenda, as prepared by Dale Partners Architects and Architect's consultants, having visited the site, and being familiar with all conditions and requirements of the Work, hereby agrees to

100% Construction Documents

BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT) 004113 Page 1 of 4

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "Forest Municipal School District Forest High School Football Field Bleachers Upgrades". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24673)

furnish all material, labor, equipment and services, including all scheduled allowances, necessary to complete the construction of the above-named project, according to the requirements of the Procurement and Contracting Documents, for the stipulated sum of:

1.		Dollars	
	(\$).	

- 1.3 ALLOWANCES. Include the allowances below in the base bid "A" & "B". Refer to section 012100-ALLOWANCES.
 - A. Allowance No. 01: Lump Sum Contingency Allowance of Ten Thousand Dollars (\$10,000.00)
- 1.4 UNIT PRICE. Refer to Section012200 UNIT PRICES for description of Unit Prices.
 - \$_____/Per Lineal Foot.
- 1.5 ALTERNATES. Refer to Section 012300 Alternates for description of Alternates.
 - A. Additive Alternate No. 01: Add Ramp and Landing and ADA Wheelchair area as shown on drawings on Visitor's Side. Include in Bid "A".
 - (\$).
 - B. Additive Alternate No. 02: Add Ramp and Landing and ADA Wheelchair area as shown on drawings on Home's Side. Include in Bid "A".

(\$_____).

C. Additive Alternate No. 03: Paint existing structure under bleachers for Visitor and Home Seating. Include in Bid "A".

- (\$_____).
- D. Additive Alternate No. 04: Paint existing structure under Press Box. Include in Bids "A" & "B"

__Dollars

Dollars

Dollars

Dollars

(\$_____).

100% Construction Documents

BID FORM - STIPULATED SUM (SINGLE-PRIME CONTRACT)

004113 Page 2 of 4

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "Forest Municipal School District Forest High School Football Field Bleachers Upgrades". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24673)

1.6 **BID GUARANTEE**

(\$

- Α. The undersigned Bidder agrees to execute a contract for this Work in the above amount and to furnish surety as specified within 10 days after a written Notice of Award, if offered within 90 days after receipt of bids, and on failure to do so agrees to forfeit to Owner the attached cash, cashier's check, certified check, U.S. money order, or bid bond, as liquidated damages for such failure, in the following amount constituting five percent (5%) of the Base Bid amount above:
 - 1. Dollars
 - _). The above amount may be modified by amounts indicated by the Bidder on the attached 2. Document 004322 "Unit Prices Form" and Document 004323 "Alternates Form."
- В. In the event Owner does not offer Notice of Award within the time limits stated above, Owner will return to the undersigned the cash, cashier's check, certified check, U.S. money order, or bid bond.

1.7 SUBCONTRACTORS AND SUPPLIERS

- Α. The following companies if needed shall execute subcontracts for the portions of the Work indicated:
 - 1. Concrete Work: _____
 - 2. Electrical Work: _____

1.8 TIME OF COMPLETION

The undersigned Bidder proposes and agrees hereby to commence the Work of the Contract Α. Documents on a date specified in a written Notice to Proceed to be issued by Architect and shall fully complete the Work by Substantial Completion date of 1 August 2024.

1.9 ACKNOWLEDGMENT OF ADDENDA

- Α. The undersigned Bidder acknowledges receipt of and use of the following Addenda in the preparation of this Bid:
 - 1. Addendum No. 1, dated .
 - 2. Addendum No. 2, dated ______.
 - 3. Addendum No. 3, dated ______.
 - 4. Addendum No. 4, dated ______.

- 1.10 **BID SUPPLEMENTS**
 - Α. The following supplements are a part of this Bid Form and are attached hereto.
 - 1. Bid Form Supplement - Bid Bond Form (AIA Document A310-2010).

1.11 CONTRACTOR'S LICENSE

Α. The undersigned further states that it is a duly licensed contractor for the type of work proposed in Mississippi, and that all fees, permits, etc., pursuant to submitting this proposal have been paid in full.

1.12

	•	
12	SUBMISSION OF BID	
Α.	Respectfully submitted this	day of, 2024.
В.	Submitted By:	(Name of bidding firm or corporation).
C.	Authorized Signature:	(Handwritten signature).
D.	Signed By:	(Type or print name).
E.	Title:	(Owner/Partner/President/Vice President).
F.	Witnessed By:	(Handwritten signature).
G.	Attest:	(Handwritten signature).
Н.	Ву:	(Type or print name).
I.	Title:	(Corporate Secretary or Assistant Secretary).
J.	Street Address:	·
K.	City, State, Zip:	·
L.	Phone:	
M.	Email:	
N.	License No.:	
О.	Federal ID No.:	(Affix Corporate Seal Here).

END OF DOCUMENT 004113

SECTION 012200 - UNIT PRICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for unit prices.
- B. Related Requirements:
 - 1. Section 012100 "Allowances" for procedures for using unit prices to adjust quantity allowances.
 - 2. Section 012600 "Contract Modification Procedures" for procedures for submitting and handling Change Orders.
 - 3. Section 014000 "Quality Requirements" for field testing by an independent testing agency.

1.3 DEFINITIONS

A. Unit price is an amount incorporated into the Agreement, applicable during the duration of the Work as a price per unit of measurement for materials, equipment, or services, or a portion of the Work, added to or deducted from the Contract Sum by appropriate modification, if the scope of Work or estimated quantities of Work required by the Contract Documents are increased or decreased.

1.4 PROCEDURES

- A. Unit prices include all necessary material, plus cost for delivery, installation, insurance, applicable taxes, overhead, and profit.
- B. Measurement and Payment: See individual Specification Sections for work that requires establishment of unit prices. Methods of measurement and payment for unit prices are specified in those Sections.
- C. Owner reserves the right to reject Contractor's measurement of work-in-place that involves use of established unit prices and to have this work measured, at Owner's expense, by an independent surveyor acceptable to Contractor.
- D. List of Unit Prices: A schedule of unit prices is included in Part 3. Specification Sections referenced in the Part 3 "Schedule of Unit Prices" Article contain requirements for materials described under each unit price.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF UNIT PRICES

- A. Unit Price No 1: Resecure existing Bleachers planks on Home and Visitor sides.
 - 1. Description: Provide 5% of material and labor to re-secure planks to structure. Provide a unit price per linear foot to furnish and install additional material and labor.
 - 2. Unit of Measurement: Lineal Feet for removal of unsatisfactory existing material to resecure planks to existing structure.
 - 3. Quantity Allowance: Coordinate unit price with allowance adjustment requirements in Section 012100 "Allowances."

END OF SECTION 012200

Construction Documents

UNIT PRICES

012200 Page 2 of 2

Copyright © 2022 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "22013 Laurel High School Field House Renovation". A valid, current MasterSpec license is required for editing and use of this document for any other project.(19250)

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for alternates.

1.2 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if the Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternates into the Work. No other adjustments are made to the Contract Sum.

1.3 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Execute accepted alternates under the same conditions as other work of the Contract.
- C. Schedule: A schedule of alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "Forest Municipal School District Forest High School Football Field Bleachers Upgrades". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24673)

SECTION 13 34 16

ALL ALUMINUM FRAME BLEACHER

PART 1 - GENERAL

1.1 GENERAL

- A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.
- B. Home Side Bleachers shall be 258 feet wide and 12 rows in depth, along with 40 feet wide and 12 rows in depth, VIP section with seats and backs. VIP section to be located centered on the 50 yard line. Include handrails, guardrails, chain-link fencing, ADA seating area, ramps, steps, concrete pad and structure.
- C. Visitor Side Bleachers shall be 135 feet wide and 10 rows in depth. Include handrails, guardrails, chain-link fencing, ADA seating area, ramps, steps, concrete pad and structure.

1.2 SCOPE

- A. These Specifications cover the requirements for the design, fabrication, delivery and installation of the permanent all aluminum grandstand system, including the following:
 - 1. Concrete foundations
 - 2. **40**" Elevated Grandstand with Front Walkway
 - 3. Aluminum treads and risers
 - 4. Aluminum Aisle steps
 - 5. Guardrails and handrails
 - 6. Seating
 - 7. Ramps, stairs, and landings
 - 8. Grandstand finishes.

1.3 RELATED SECTIONS AND DOCUMENTS

A. Concrete – Division 3

1.4 CODES AND STANDARDS

- A. Perform all work in accordance with the latest editions and revisions of the following standards, which hereby become part of this section.
 - 1. ICC 300 Standard for Bleachers, Folding and Telescopic Seating and Grandstands
 - 2. International Building Code, Edition 2018 [2015, 2012]
 - 3. Local Building Code Amendments [LIST STATE]
 - 4. AWS D1.2 Structural Welding Code Aluminum
 - 5. Aluminum Design Manual (ADM), 2015
 - 6. ACI 318 Building Code Requirements for Structural Concrete
 - 7. The Society for Protective Coatings (SSPC)

1.5 GRANDSTAND CONTRACTOR QUALIFICATIONS

- Α. Manufacturer/Fabricator Qualifications:
 - 1. Experience: Manufacturer/fabricator with not less than 10 years' experience with successful production of products and systems to the specified scope of Work, with a record of successful in-service performance and completion of similar projects for a period of not less than 10 years, and with sufficient production capability, facilities, and personnel to produce required Work.
 - 2. Approved manufacturer or approved equal:
 - a) Dant Clayton Corporation - Louisville, KY
- Β. Installer Qualifications:
 - 1. Experience: Installer with not less than 5 years' experience in performing specified scope of Work, with a record of successful in-service performance and completion of projects for a period of not less than 2 years, and with sufficient production capability, facilities, and personnel to produce required Work.
 - 2. Manufacturer/Fabricator Acceptance: Installer shall be certified, approved, licensed, or acceptable to manufacturer/fabricator to install products.
- Delegated Engineering Responsibility: Contractor shall employ a qualified professional C. engineer licensed in the state where the project is located to provide engineering for products and systems as required.

1.6 PERFORMANCE REQUIREMENTS

4.

- Α. Design Loads: Engineer to withstand design loads including but not limited to gravity, wind, seismic, and erection design loads and shrinkage/thermal movements as established by authorities having jurisdiction, applicable local building codes, and as indicated.
 - 1. Superimposed Dead Load 6 psf
 - 2. Live Load 100 psf 3.
 - Sway Load 24 plf per row parallel to row
 - Sway Load 10 plf per row perpendicular to row
 - 5. Wind Load Design per local building code
 - 6. Seismic Load Design per local building code
 - 7. Design per local code Guardrail Loads
- Β. Grandstand System Self Weight: Self-weight of the grandstand system shall be incorporated into the project calculations for both foundations and framing.
- C. Structural Deflections: Limit live load deflections of aluminum footboards, aluminum seatboards and structural steel framing and any other flexural members to L/200 of the span.
- D. Structural Drift: Limit the horizontal frame drift of the grandstand system to H/200 of the frame height under sway, wind and seismic loads.

E. Dimensional Tolerances: Engineer and detail products, systems and connections back to primary structural elements to accommodate fabrication tolerances and dimensional tolerances of framing members and adjacent construction.

1.7 SUBMITTALS

- A. Approval Drawings: Submit for review detailed approval drawings as follows:
 - 1. Drawings shall include at a minimum:
 - a) All dead, live and other applicable loads used in the design.
 - b) Detailed and dimensioned foundation, framing, layout, and seating plans.
 - c) Foundation sizes, locations and elevations shall be shown in compliance with surrounding Work and relationships to finish grade.
 - d) Seating plan indicating all aisles, walkways, seating sections and exits.
 - e) Sections and details showing complete methods of assembly and anchorage:
 - i. Show riser heights and platform widths.
 - ii. Show stair and ramp sections including railings.
 - iii. Show overall sections showing railings systems, sightlines (when required by scope)
 - f) Connection details showing size, type, and grade of all plates, bearings, inserts and anchors.
 - g) Finishes.
 - h) Joint covers.
 - 2. All approval drawings submitted shall be sealed by a professional engineer who is licensed in the state where the project is located.
 - 3. Equipment Hung From Seating Units: No pipe, ducts or other equipment shall be hung from the seating units without written approval of the Delegated Design Engineer. Coordinate all attachment methods and fastener types with the Delegated Design Engineer to ensure they are suitable for the selected system.
- B. Delegated Design Engineering Calculations: Calculations submittal for products indicated to demonstrate conformance with specified design loads, element stiffness and performance requirements including structural analysis data signed and sealed by the professional engineer responsible for their preparation licensed in the state where the project is located.
- C. Qualification Data: For firms and persons specified in "Quality Assurance" to demonstrate their capabilities, experience and qualifications. Submit for record lists of completed projects with project names and addresses, names and addresses of Architects and Owners, and other information specified.
 - 1. Manufacturer qualifications
 - 2. Professional Engineer qualifications
- D. Samples for Verification: For each type of exposed material, color, finish and texture.

E. Warranty: Sample of standard warranty.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver grandstand components in such quantities and at such times to sufficient for construction activities to occur without delay.
- B. Storage: Store components with adequate dunnage.
- C. Handling: Handle and transport components in a position consistent with their shape and design to avoid excessive stresses which would cause damage.

1.9 QUALITY CONTROL BY CONTRACTOR

- A. For grandstand members furnished under this Section, quality control inspection and testing shall occur during the manufacture of the components, and the components are subject to the approval of the engineered seating bowl supplier's Quality Control Manager.
- B. Plant Quality Control: Provide copies of plant quality control program describing procedures for the following:
 - 1. Overall quality control measures
 - 2. Verifying sizes and critical dimensions of members.
 - 3. Verifying position of plates, inserts, and other embedded items.
 - 4. Final inspecting of products prior to shipment.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard 1-year warranty is required in which manufacturer agrees to repair finish or replace components that fail in materials or workmanship within specified warranty period.

PART 2 - PRODUCTS

2.1 PERMANENT ALL ALUMIMINUM GRANDSTAND SYSTEM COMPONENTS

- A. Single Source Responsibility: Furnish each type of product from a single manufacturer/fabricator. Provide secondary materials only as recommended by manufacturer/fabricator of primary materials.
- B. Basis of Design: The design for permanent all aluminum grandstand is based on a system designed and engineered by Dant Clayton.
- C. Concrete Foundations and Slabs: Design of concrete foundations shall be based on an assumed 1,000 psf minimum bearing capacity and validated by the project geotechnical engineer.
 - 1. All design, detailing, fabrication and installation shall be in accordance with ACI 318.
 - 2. Cast-in-place concrete shall have a minimum compressive strength of 4,500 psi with air entrainment of 6% +/- 1%.

- 3. All reinforcing steel shall be in accordance with ASTM A615 with a minimum yield strength of 60,000 psi.
- 4. Provide a minimum 6" thick layer of free draining compacted granular fill beneath the concrete slab.
- D. Aluminum: Provide aluminum components as recommended by manufacturer, and in compliance with the following:
 - 1. All detailing, fabrication, and erection shall be in accordance with the code required edition of the Aluminum Design Manual.
- E. Understructure
 - 1. Understructure shall be fabricated from 6061-T6 alloy aluminum extrusions.
 - 2. Vertical members shall be 2 7/8" O.D. tubing.
 - 3. Horizontal braces and footrest supports shall be 3" x 2 7/8" channel.
 - 4. Cross braces and diagonals shall be $2\frac{1}{4}$ x 7/8" channel.
 - 5. Handrail support shall be 2 5/8" O.D. tubing.
 - 6. The understructure shall be assembled from the above items in an interlocking design using 7/16" x 3 $\frac{1}{2}$ " hot-dipped galvanized bolts.
 - 7. The structure shall be a bolted design so that in the event of accidental damage the sub-component parts may be replaced using common hand tools. Field welding for repair purposes shall not be considered.
 - 8. Aluminum angle understructure is an acceptable substitution provided 3" x 3" x ¼" aluminum angles are used for vertical and horizontal members. Smaller sizes are specifically prohibited. Understructure will be a bolted assembly.
 - 9. Primary structural members shall be bolted together, or calculations must be submitted verifying that the structure has taken into account the weakening of aluminum associated with welding per AA ADMI.
- F. Decking System
 - 1. Footboards
 - a) The deck planking shall be maintenance free, corrosion resistant all aluminum decking.
 - b) Decking shall be 6063-T6 extruded aluminum with fluted surface. Extrusions shall have a minimum actual vertical support rib height of 1.75" and a nominal wall thickness of 0.080."
 - c) There will be no gaps between the longitudinal joints of the planking.
 - d) All aluminum extrusions shall be directly attached to the aluminum support structure without the use of hardware. Attachment shall be positive snap and interlock design. The use of bolt clips, bolt runners, or other friction type fastening devices are not acceptable.
- G. Risers
 - 1. The decking riser system shall be extruded aluminum; alloy 6063-T6 with a fluted surface and a wall thickness of 0.78".
 - 2. Fluted opening in the decking and risers system for attachment of seats, seat brackets and railing systems are not acceptable due to their tendency to collect debris and require excessive owner maintenance.

- H. Seating
 - 1. Aluminum Bench Seats:
 - a) Seats shall be 6063-T6 extruded aluminum with a fluted surface and a wall thickness of 0.078". Seatboards shall be a minimum of 9 1/2" wide actual, with outside legs of 1 3/4" actual vertical height and shall have two internal legs with a vertical height of 2 5/8".
 - b) Seatboards shall attach with one 3/8" diameter bolt and shall be designed for positive physical fastening. Bolt clips, bolt runners or other friction type fastening devices are not acceptable.

2. [Colosseum 1 Seats for VIP/Booster sections:

a) Seat construction shall be one piece with an integral armrest, double wall construction, rotationally molded, linear medium density polyethylene resin with an average wall thickness of 3/16" and meeting the following criteria:

Melt Index	ASTM D-1238	3.3 g/10 min.			
Density	ASTM D-4883	0.938 g/cm3			
Melting Point	126.5 deg C	-			
The com	The completed and molded properties shall be:				
Yield tensile str	rength ASTM D-638	2,600 psi			
Elongation @ B	Break ASTM D-638	765 %			
Flexural modul	us ASTM D-790	97,000 psi			
Impact Strengtl	n ARM	175 ft-lbs			
	(Max force @ -40o C ¼" thicl	kness)			
Environmental Stress Crack ASTM D-1693 > 500 hrs.					
Resistance F50 Condition B					
Heat distortion Temperature ASTM D-648					
66 psi	52.5 deg C				
264 psi	40 deg C				

- 3. Handicap Seating as required by ADA or by shown on drawings. Deviations from handicap seating design are not allowed.
- I. Aisle Steps
 - 1. Aisle step units are to be provided at all intermediate aisle locations as shown on the architectural drawings and be made from 1.75" aluminum extrusions and plate material.
 - 2. Aisle step units shall be mounted to the stadia system with pop rivets or galvanized hardware.
 - 3. Aisle steps will be designed to satisfy row depth with vertical closure panels at the ends of the intermediate steps. No cavity or recessed closure is allowed in area of foot travel.
 - 4. Provide a finish and texture matching that of the stadia tread and riser system to which they are installed. See Finishes.
 - 5. Provide stair nosing at steps and treads.
 - 6. Shall be designed to resist loads imposed from any step mounted rails.
- J. Guardrail & Handrail System

- 1. Chain Link Fence Guardrail System:
 - a) Guardrails shall be anodized aluminum extruded channel, 3" x 2 7/8", 6061-T6 alloy, anodized to clear 204R1.
 - b) The guardrail system shall be of interlocking design with positive throughbolt fastening. The top rail shall be designed to fully cover the rail support posts for a totally snag-free area and eliminate the potential of sharp edge contact with spectators.
 - c) Chain link Fence shall be 2" mesh, 6 gauge [black vinyl] coated fabric
- 2. Handrail System
 - a) Aluminum handrails shall be provided in all areas required by building code and as indicated on the architectural drawings at all locations of new aluminum stadia treads and risers.
 - b) Handrails shall be 1 15/16" O.D. extruded aluminum pipe. Straight pipe shall be 6061-T6 aluminum alloy with minimum yield strength of 35 ksi. Bent pipe shall be 6061-T4 aluminum alloy with minimum yield strength of 21 ksi.
 - c) Aisle handrails shall be two-line and feature internal fittings for both lines of rail. External fittings are not permitted.
 - d) Aisle handrails shall be mounted to the aisle steps with connecting bracket or floor flange.
 - e) Handrails on all ramps and stairs shall provide 1-1/2" clearance from the guardrail material and shall extend 12" past the last riser with a return. Newel posts will not interrupt handrails. Handrails will not project more than 4.5" into the width of a stair or ramp.
- K. Stairs
 - 1. Shall conform to all above pertinent criteria consistent with the component design of the grandstand.
 - 2. Shall be self-supporting and shall not attach to or be suspended from any footboard or decking member.
 - 3. Stairs shall be fully closed deck tread and riser.
 - 4. Handrail will be inset from guardrail $1\frac{1}{2}$ to 3".
- L. Ramps
 - 1. Frames shall be 9" x 1.40 extruded aluminum mill finish channel with 3" x 1.4" extruded aluminum mill finish vertical channel columns.
 - 2. Treads shall be 6063-T6 extruded aluminum with a fluted surface and a minimum wall thickness of .078". Minimum vertical height of treads shall be 1.75" actual.
 - 3. Handrail will be inset from guardrail $1\frac{1}{2}$ " to 3". Guardrail will not be used for handrail.
 - 4. Guardrailing to match grandstand design unless otherwise noted.
 - 5. Decking aluminum extrusions will run perpendicular to the direction of traffic. Deck aluminum extrusions shall interlock for additional rigidity.
 - 6. Anti-skid tape is not allowable to correct for deviations to paragraph 4 above.
- M. End Caps

- 1. All end caps shall be one-piece cast aluminum and shall be friction fit to the plank without the use of mechanical fasteners.
- N. Hardware
 - 1. Bolts used for field installation shall be galvanized.
 - 2. Primary connections, i.e. seat, cross-brace, handrail (rail and posts) shall be made with minimum of 3/8" diameter hardware.
 - 3. Stainless steel expansion anchors
- O. Vertical Closure System
 - 1. [Flat Stackable Riser]
 - a) Riser closure shall consist of a stackable snap-in 1" x 6" 6063-T6 aluminum extrusion with 0.100" wall thickness. Stacked risers to provide a flat finish front
 - b) Riser closure to span between rail post spaced at 6'-0" c/c.
 - c) Aluminum top cap to be provided where gaps are created between top of closure and decking walking surface.
 - d) Closure to be attached to rail post with stainless steel mechanical screws.
- P. Finishes
 - 1. Aluminum:
 - a) Aluminum Finish Descriptions:
 - i. Mill Finish: natural appearance of the aluminum as it comes from the rolling mill with no further surface treatment.
 - Slip Resistant Deck SRD: Mill finish aluminum that has a sandblasted walking surface to meet the textured finish noted below
 - b) Footboards and Walkways
 - i. Mill
 - ii. SRD
 - iii. SSRD
 - iv. SRD/Anodized
 - v. Slip Resistance of Walking Surfaces:
 - (1) All stadia system walking surfaces will provide an equivalent or greater Static Coefficient of Friction (SCOF) of 0.6 in all directions of travel, using ANSI/NFSI B101.1-2009 testing method by the National Floor Safety Institute.
 - c) Risers
 - i. Anodized

- d) Seat boards
 - i. Anodized
- e) Colosseum 1 Chairs
 - i. Color chosen from standard palette.
- f) Seat backs
 - i. Anodized
- g) Vertical Closure
 - i. Anodized

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
- B. Before installation proceeds, installer shall prepare written report, endorsed by installer, listing conditions detrimental to performance of the work. This includes survey of elevations and locations of concrete foundations or pads and anchor bolts to verify compliance with the requirements of the grandstand manufacturers' specified tolerances.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Install grandstand and all components according to manufacturer's written instruction and the approved shop drawings.
- B. Do no field cut, drill or alter structural members without written approval from grandstand system manufacturers' engineer.

3.3 CLEANING

- A. Clean all surfaces according to manufacturer's recommendations.
- B. Use cleaning solutions and methods that do not damage finishes or the adjacent surfaces.
- C. Mill finish aluminum surfaces are unprotected from oxidation. All mill finished aluminum will oxidize at various rates during the manufacturing, shipping, installation and usage of the grandstand as it is exposed to various weather conditions. Oxidation is natural and expected, and in no way impacts the life cycle or structural performance of the grandstand. Grandstand manufacturer is not responsible for repair, replacement or cleaning of oxidized aluminum.

- D. Remove all metal burrs, sharp edges or other cutting, unsafe, conditions.
- E. Touch up finishes as recommended by manufacture.

END OF SECTION

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Additive Alternate No. 01 : Add Ramp and Landing and ADA Wheelchair area as shown on drawings on Visitor's Side. Include in Bid "A".
- B. Additive Alternate No. 02: Add Ramp and Landing and ADA Wheelchair area as shown on drawings on Home's Side. Include in Bid "A".
- C. Additive Alternate No. 03: Paint existing structure under bleachers for Visitor and Home Seating. Include in Bid "A".
- D. Additive Alternate No. 04: Paint existing structure under Press Box. Include in Bids "A" & "B"

END OF SECTION 012300

Copyright © 2024 by the American Institute of Architects. Warning: This AIA MasterSpec-based document is protected by U.S. Copyright Law and International Treaties. It was created by "Dale Partners Architects" for "Forest Municipal School District Forest High School Football Field Bleachers Upgrades". A valid, current MasterSpec license is required for editing and use of this document for any other project.(24673)