

Addendum No. 3

Spartanburg High School Batting Cages Project No. 021074.00 July 28, 2021

The following clarifications, amendments, additions, deletions, revisions, and/or modifications are hereby made a part of the Contract Documents, and change the original documents only in the manner and to the extent stated below:

Item No. 1: Project Manual - Section 00 00 06 Proposal:

Delete the previously issued section 00 00 06 in its entirety and replace it with the attached section 00 00 06.

Item No. 2: Project Manual - Section 01 23 00 Alternates:

Delete the previously issued section 01 23 00 Alternates in its entirety and replace it with the attached section 01 23 00.

Item No. 3: Project Manual - Section 09 62 53 Synthetic Turf Flooring:

Delete the previously issued section 09 62 53 Synthetic Turf Flooring its entirety and replace it with the attached section 09 62 53.

Item No. 4: Project Manual – Section 11 68 33 Athletic Field Equipment:

Delete the previously issued section 11 68 33 Athletic Field Equipment in its entirety and replace it with the attached section 11 68 33.

Item No. 5: <u>Civil Drawings – General Note:</u>

Primary construction access will be from the northeastern corner of the parking lot, travelling between the baseball field and softball field, around the softball outfield, to the construction site. The route is approximately 665 LF in length. The path is approximately 13 ft +/- wide at its narrowest point between the softball scoreboard and the adjacent top of bank. Any and all damage to pavement, curb & gutter, sidewalk, and grass shall be repaired as part of base bid. Grass shall match existing (Bermuda 419). See attached sketch for primary route.

Item No. 6: <u>Civil Drawings – General Note:</u>

The Contractor shall install a 4 ft. tall, black vinyl coated chain link fence behind the steel landscape edging. The fence shall start where the curb begins to taper down (full 6" curb), and continue to other the other curb taper (full 6" curb). The fence is approximately 189 LF in length. The wire mesh fabric shall be 9 gauge, with a top bar between posts. Posts shall be installed a maximum of 10 ft. on center. This additional scope is part of Alternate One.

Item No. 7:	<u> Civil Drawings – General Note:</u>		
	The Contractor shall install fourteen (14) concrete wheel stops, anchored to the stone and subgrade at 3.5 ft. from the new fence. This additional scope is part of		
	Alternate One.		

This addendum contains

2 Summary Pages
4 Specification Sections
1 8.5x11 Sketch

End of Addendum No. 3

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		PROPOSAL BY	
	Nar	me of General Contractor Submitting Proposal	-
	stees School District Sev South Carolina	ven	
Reference:	Batting Cages for Spartanburg Hig Spartanburg Sc Spartanburg, Sc	gh School chool District Seven	
ADDENDA The following	addenda have bee	en received by this contractor:	
Adde	endum #1	Dated:	
		Dated:	
		Dated:	
		Dated:	
Adde	endum #5	Dated:	_
and with the one hereby proportion Cages for Spaccordance v	drawings and speci se to furnish all lab artanburg High Sch vith the above docu	arized themselves with the local conditions affecting the offications, including all addenda prepared by McMillan Paper, material, equipment and services necessary to consthool in Spartanburg School District Seven, Spartanburg, uments for the lump sum of:	azdan Smith truct the Batting South Carolina in
		Dollars (\$.)
ALTERNATE	:S:		
Alternate No. 1: Parking Lot		Dollars (Add \$)
Alternate No. 2: Batting Cage Turf		urfDollars (Add/Deduct) \$)
SUBCONTRA	ACTORS		
	are the names of th	he subcontractors this contractor will employ on this proj	ect to install the
Electrical:			_

In submitting this bid, it is understood that:

The Owner reserves the right to reject any or all bids, and/or award the contract in accordance with their best interest.

This bid proposal may not be withdrawn for a period of thirty (30) days from the date of bid opening.

The bidder agrees to the conditions set forth in the paragraph titled "Time of Completion and Liquidated Damages" in the Supplementary General Conditions of the specifications.

Security, in the sum of 5% of the base bid, is submitted in accordance with the Supplementary Instructions to Bidders.

General Contractor:	
Ву:	
Address:	
Phone Number:	
Fax Number:	
Contractor's License Number:	

SECTION 01 23 00 - ALTERNATES

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. This Section includes administrative and procedural requirements for alternates.

1.3 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 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. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work 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. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

A. Alternate No. 1 – Parking Lot
Provide a price to supply and install all work associated with the parking area located adjacent to the student drive as shown on Civil drawings CV2.1 and CV2.2

B. Alternate No. 2 – Batting Cage Turf
Provide a price to supply and install from specified manufacturer Engineered Turf ET-BCM Batting Cage Material in lieu of the specified product.

END OF SECTION 01 23 00

SECTION 09 62 53 - SYNTHETIC TURF FLOORING

PART 1 - GENERAL

1.1 SUMMARY

- A. Furnish all labor, materials, tools and equipment necessary to install monofilament artificial grass as indicated on the plans and as specified herein; including components and accessories required for a complete installation including but not limited to:
 - 1. Acceptance of prepared concrete slab.

1.2 REFERENCE STANDARDS

- A. FM Factory Mutual
 - 1. P7825 Approval Guide; Factory Mutual Research Corporation; current edition
- B. ASTM American Society for Testing and Materials.
 - 1. D1577 Standard Test Method for Linear Density of Textile Fiber
 - 2. D5848 Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Covering
 - 3. D1338 Standard Test Method for Tuft Bind of Pile Yarn Floor Covering
 - 4. D1682 Standard Method of Test for Breaking Load and Elongation of Textile Fabrics
 - 5. D5034 Standard Test Method of Breaking Strength and Elongation of Textile Fabrics (Grab Test)
 - 6. F1015 Standard Test Method for Relative Abrasiveness of Synthetic Turf Playing Surfaces
 - 7. D4491 Standard Test Methods for Water Permeability of Geotextiles by Permittivity
 - 8. D2859 Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials
 - 9. F355 Standard Test Method for Shock-Absorbing Properties of Playing Surfaces.
 - 10. F2117 Standard Test Method for Vertical Rebound Characteristics of Sports Surface Systems: Acoustical Measurements (Soccer)
 - 11. BS7044, Section 2.2 Methods for Determination of Person/Surface Interaction Method 1: Determination of Traction (Rotational Resistance)
 - 12. F1551-03 Suffix: DIN 18-035, Part 6: Water Permeability of Synthetic Turf Systems

1.3 SUBMITTALS

- A. Comply with Section 013300, Submittal Procedures.
- B. Shop Drawings:
 - 1. Indicate flooring layout; field marking plan and details for the specified sports; roll/seaming layout; methods of attachment, field openings and perimeter conditions.
 - 2. Show installation methods and construction indicating field verified conditions, clearances, measurements, terminations, drainage.
 - 3. Provide joint submission with related trades when requested by Architect.

C. Product Data:

- 1. Submit manufacturer's catalog cuts, material safety data sheets (MSDS), brochures, specifications; preparation and installation instructions and recommendations; storage, handling requirements and recommendations.
- 2. Submit fiber manufacturer's name, type of fiber and composition of fiber.
- 3. Submit data in sufficient detail to indicate compliance with the contract documents.

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- 4. Submit manufacturer's instructions for installation.
- 5. Submit manufacturer's instructions for maintenance for the proper care and preventative maintenance of the synthetic turf system, including painting and markings.
- D. Samples: Submit samples, 9 x 12 inches, illustrating details of finished product, as requested by Architect.

E. Product Certification:

- 1. Submit manufacturer's certification that products and materials comply with requirements of the specifications.
- 2. Submit test results indicating compliance with Reference Standards.
- F. Project Record Documents: Record actual locations of seams, drains and other pertinent information in accordance with Specifications, General Requirements.
- G. List of existing installations: Submit list including respective Owner's representative and telephone number.
- H. Warranties: Submit warranty and ensure that forms have been completed in Owner's name and registered with approved manufacturer.
- I. Testing Certification: Submit certified copies of independent (third-party) laboratory reports on ASTM testing:
 - 1. Pile Height, Face Weight & Total Fabric Weight, ASTM D5848.
 - 2. Primary & Secondary Backing Weights, ASTM D5848.
 - 3. Tuft Bind, ASTM D1335.
 - 4. Grab Tear Strength, ASTM D1682 or D5034.
 - 5. Water Permeability, ASTM D4491

1.4 QUALITY ASSURANCE

- A. Comply with Section 014000, Quality Assurance.
- B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section. The turf contractor and/or the turf manufacturer:
 - Shall be experienced in the manufacture and installation of specified type of spined and/or ridged monofilament grass system for a minimum of three years. This includes use of a spined and/or ridged monofilament fiber, backing, the backing coating, and the installation method.
 - 2. The manufacturer shall own and operate its own manufacturing plant. Manufacturing the fiber, tufting of the field fibers into the backing materials and coating of the turf system must be done in-house by the turf manufacturer.
 - 3. The manufacturer must have ISO 9001, ISO 14001 and OHSAS 18001 certifications demonstrating its manufacturing efficiency with regards to quality, environment and safety management systems.
 - Shall have 100 applications in use for at least two years with a spined and/or ridged monofilament fiber.
 - 5. Shall have a minimum of 100 applications that are at least 8 years old, which is equal to the respective warranty period, with the same system.
- C. Installer: Company shall specialize in performing the work of this section. The Contractor shall provide competent workmen skilled in this specific type of synthetic grass installation.
 - 1. The designated Supervisory Personnel on the project shall be certified, in writing by the turf

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- manufacturer, as competent in the installation of specified monofilament material, including sewing seams.
- 2. Installer shall be certified by the manufacturer and licensed.
- 3. The installer supervisor shall have a minimum of 5 years' experience as either a construction manager or a supervisor of synthetic turf installations
- D. Pre-Installation Conference: Conduct conference at project site at time to be determined by Architect. Review methods and procedures related to installation including, but not limited to, the following:
 - Inspect and discuss existing conditions and preparatory work performed under other contracts.
 - 2. In addition to the Contractor and the installer, arrange for the attendance of installers affected by the Work, The Owner's representative, and the Architect.
- E. The Contractor shall verify special conditions required for the installation of the system.
- F. The Contractor shall notify the Architect of any discrepancies.
- 1.5 DELIVERY, STORAGE, AND HANDLING
 - A. Comply with Section 016000, Product Requirements.
 - B. Prevent contact with incompatible materials.
 - C. Deliver and store components with labels intact and legible.
 - D. Store materials/components in a safe place, under cover, and elevated above grade.
 - E. Protect from damage during delivery, storage, handling and installation. Protect from damage by other trades.
 - F. Inspect all delivered materials and products to ensure they are undamaged and in good condition.
 - G. Comply with manufacturer's recommendations.
- 1.6 SEQUENCING AND SCHEDULING
 - A. Coordinate the Work with installation of work of related trades as the Work proceeds.
 - B. Sequence the Work in order to prevent deterioration of installed system.
- 1.7 WARRANTY AND GUARANTEE
 - A. See Section 017700 Closeout Submittals, For Additional Warranty Requirements.
 - B. The Contractor shall provide a warranty to the Owner that covers defects in materials and workmanship of the turf for a period of eight (8) years from the date of substantial completion. The warranty must have the following characteristics:
 - 1. Provide full coverage for a minimum of eight (8) years from the date of Substantial Completion.
 - 2. Warrant materials and workmanship.
 - 3. Warrant that the materials installed meet or exceed the system specifications
 - 4. Repair or replace such portions of the installed materials that are no longer serviceable to maintain a serviceable and playable surface.
 - 5. Be from a single source covering workmanship and all materials.
 - 6. Assure the availability of exact or substantially the same replacement materials for the artificial turf system installed for the full warranty period.

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- Include general wear and damage caused from UV degradation. The warranty shall specifically exclude vandalism and acts of God beyond the control of the Turf Manufacturer or Field Builder.
- 8. Cover defects in the installation and workmanship. Assure the installation was done in accordance with both the Installer's recommendations and any written directives of the Installer's on-site representative.
- 9. Shall be limited to repair or replacement of the affected areas, and shall include all necessary materials, labor, transportation costs, etc. to complete said repairs.
- 10. All designs, game markings and layouts shall conform to all currently applicable National Federation State High School Association or NCAA rules and regulations, or league specific requirements, depending on what applies.
- 11. The adhesive bonded or sewn seams of all system components shall provide a permanent, tight, secure and hazard-free athletic playing surface. All inlaid markings (game lines, logos, etc.) shall remain in place throughout the duration of the warranty period.

1.8 MAINTENANCE SERVICE

- A. Contractor shall train the Owner's facility maintenance staff in the use of the turf manufacturer's recommended maintenance equipment.
- B. Manufacturer must provide maintenance guidelines and a maintenance video to the facility maintenance staff.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- A. Manufacturers: Subject to compliance with requirements, provide synthetic field sport surfacing by one of the following: Basis of Design: Engineered Turf ET 70 Crossfit, color to be selected by owner.
 - 1. Engineered Turf
 - a. Batting Cage ET 70 Crossfit with no infill
 - 2. A-Turf.
 - 3. Shaw Sports Turf.

2.2 MATERIALS AND PRODUCTS

- A. Artificial grass system materials shall consist of the following:
 - 1. Carpet made of "spined and/or ridged" monofilament polyethylene fibers tufted into a fibrous, non-perforated, porous backing; ½-inch overall thickness.
 - 2. Glue, thread, paint, seaming fabric and other materials used to install and mark the artificial grass.
- B. The installed artificial grass shall have the following properties:

Style Specifications

Style Name: ET 70 special Yarn #1 Type: monofilament Color Name: By Owner

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Total Denier: 10,800(1800/6)

Thickness/Form: Approx. 350 micron diamond shape

Description: Proprietary PR formulation for superior wear resistance.

Yarn #2Type: Texturized thatch

Color Name: By Owner Total Denier: 5000(625/8)

Description: Texturized monofilament PE thatch.

Total Yarn Face Wt: 70 oz. / sq. yd.

Primary Backing #1: 13 pic polybac Primary Backing #2: 13 pic polybac Primary Backing Wt: 7 oz. / sq. yd.

Secondary Coating: 26 oz. Urethane / sq. yd.

Total Product Wt: 103 ox. / sq. yd.

Tufting Information

Pile Height: 1 3/8" tufted, approx., 1 1/8" finished

Stitch Rate: As Required

Tufting Gauge: 3/8" Roll Widths: 15'

Drainage Perforations: Non-perforated

Specifications are standard and may vary slightly due to manufacturing tolerances or consumer specifications.

- C. Carpet shall consist of spined and/or ridged monofilament fibers tufted into a primary backing with a secondary backing.
- D. Width of Carpet Rolls: Manufacturer's standard.
 - 1. Rolls shall be long enough to go from field sideline to sideline.
 - Where the playing field is for football, the perimeter white line shall be tufted into the individual sideline rolls.
- E. Fiber shall be 10,800 denier, low friction, and UV-resistant fiber measuring not less than 2.25 inches high.
- F. Non-tufted or inlaid lines and markings shall be painted with paint approved by the synthetic turf manufacturer.
- G. Thread for sewing seams of turf shall be as recommended by the synthetic turf manufacturer.
- H. Glue and seaming fabric for inlaying lines and markings shall be as recommended by the synthetic turf manufacturer.

2.3 QUALITY CONTROL IN MANUFACTURING

A. The manufacturer shall own and operate its own manufacturing plant. Manufacturing the fiber, tufting of the field fibers into the backing materials and coating of the turf system must be done in-house by the turf manufacturer. Outsourcing of any of these major processes is unacceptable.

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- B. The manufacturer shall have full-time certified in-house inspectors at their manufacturing plant that are experts with industry standards.
- C. Primary backing shall be inspected by the manufacturer's full-time certified in-house inspectors before tufting begins.
- D. The manufacturer's full-time in-house certified inspectors shall verify "pick count", yarn density in relation to the backing, to ensure the accurate amount of face yarn per square inch.
- E. The manufacturer's full-time, in-house, certified inspectors shall perform turf inspections at all levels of production including during the tufting process and at the final stages before the turf is loaded onto the truck for delivery.
- F. The manufacturer shall have its own, in-house laboratory where samples of turf are retained and analyzed, based on standard industry tests, performed by full-time, in-house, certified inspectors.
- G. The manufacturer must have ISO 9001, ISO 14001 and OHSAS 18001 certifications demonstrating its manufacturing efficiency with regards to quality, environment and safety management systems.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Installer shall examine the surface to receive the synthetic turf and accept the substrate in writing prior to the beginning of installation.
 - The surface shall be accepted by Installer as "clean" as installation commences and shall be maintained in that condition throughout the process.
- B. Correct conditions detrimental to timely and proper completion of Work.
- C. Do not proceed until unsatisfactory conditions are corrected.
- D. Beginning of installation means acceptance of existing conditions.

3.2 PREPARATION

- A. Prior to the beginning of installation, inspect the substrate for tolerance to grade.
- B. When requested by Architect, installed substrate shall be tested for alkalinity and moisture prior to the installation of the monofilament turf. A sub base that drains poorly is an unacceptable substrate

3.3 INSTALLATION - GENERAL

A. The installation shall be performed in full compliance with approved Shop Drawings.

- B. Only trained technicians, skilled in the installation of athletic caliber synthetic turf systems working under the direct supervision of the approved installer supervisors, shall undertake any cutting, sewing, gluing, shearing, topdressing or brushing operations.
- C. The designated Supervisory personnel on the project must be certified, in writing by the turf manufacturer, as competent in the installation of this material, including sewing seams and proper preparation of substrate.

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D. Designs, markings, layouts, and materials shall conform to all currently applicable National Collegiate Athletic Association rules, NFHS rules, and/or other rules or standards that may apply to this type of synthetic grass installation. Designs, markings and layouts shall first be approved by the Architect or Owner in the form of final shop drawings. All markings will be in full compliance with final shop drawings.

3.4 INSTALLATION

- A. Install at location(s) indicated, to comply with final shop drawings, manufacturers'/installer's instructions.
- B. The Contractor shall strictly adhere to specified procedures. Any variance from these requirements shall be provided in writing, by the manufacturer's on-site representative, and submitted to the Architect and/or Owner, verifying that the changes do not in any way affect the Warranty.
- C. Carpet rolls shall be installed directly over the properly prepared substrate.
- D. Full width rolls shall be laid out across the field.
 - 1. Turf shall be of sufficient length to permit full cross-field installation from sideline to sideline.
 - 2. No cross seams will be allowed in the main playing area between the sidelines.
 - 3. Each roll shall be attached to the next roll utilizing standard state-of-the- art sewing procedures.
 - 4. When all of the rolls of the playing surface have been installed, the sideline areas shall be installed at right angles to the playing surface.
- E. Artificial turf panel seams shall be sewn along the selvedge edging flap of the turf roll. Seams secured by other means including gluing are unacceptable. Installation shall be 99% sewn.
 - 1. Minimum gluing will only be permitted to repair problem areas, corner completions, and to cut in any logos or inlaid lines as required by the specifications.
 - 2. Seams shall be flat, tight, and permanent with no separation or fraying.
 - 3. In the case of all lines and logos, turf carpet/field fibers must be sheared to the backing (do not cut the backing) and adhered using hot melt adhesives.
- F. Non-tufted or inlaid lines and markings shall be painted in accordance with turf and paint manufacturers' recommendations. Number of applications will be dependent upon installation and field conditions.
- G. Synthetic turf shall be attached to the perimeter edge detail in accordance with the manufacturer's standard procedures.
- H. Upon completion of installation, the finished field shall be inspected by the installation crew and an installation supervisor.

3.5 FIELD MARKINGS

- A. Field markings shall be installed in accordance with approved shop drawings. If football is designated as the primary sport, all five-yard lines will be tufted-in.
- B. Balance of sports markings will be inlaid or painted in accordance with the Drawings.

3.6 ADJUSTMENT AND CLEANING

- A. Do not permit traffic over unprotected surface.
- B. Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.

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- C. All usable remnants of new material shall become the property of the Owner.
- D. The Contractor shall keep the area clean throughout the project and clear of debris.
- E. Surfaces, recesses, enclosures, and related spaces shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

3.7 PROTECTION

A. Protect installation throughout construction process until date of final completion.

END OF SECTION 09 62 53

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SECTION 11 68 33 - ATHLETIC FIELD EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes athletic field equipment including:
 - 1. Tension cable netting system.
 - 2. Baseball Equipment

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product and accessory indicated.
- B. Shop Drawings: For athletic field equipment. Include the following:
 - 1. Location of athletic field equipment.
 - 2. Anchorage details.
- C. Delegated-Design Submittal: For installed products indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 INFORMATIONAL SUBMITTALS

A. Maintenance Data: For athletic field equipment to include in maintenance manuals.

PART 2 - PRODUCTS

2.1 TENSION CABLE NETTING SYSTEM

A. Tension Cable Netting:

- Batting Cage and Perimeter Netting Basis of Design: Jaypro Sports BBC-SPDKT (Cable Suspended Tunnel Kit) Waterford, CT 06385 (800) 243-0533 www.jaypro.com
- 2. Comparable Products: Submit for Architect approval prior to bidding.
- 3. Delegated Design: Engage a qualified professional engineer, as defined in Section 01 40 00 "Quality Requirements," to design cable netting system, including attachment to building construction.
- 4. Provide a complete system of nets, cables, rollers, connections etc. as described in the contract documents.

2.2 FABRICATION

A. General: Fabricate work in shop to greatest extent possible, before application of finishes. Remove sharp and rough edges and corners from cut metal and grind welds smooth. Design components, joints, and connections to withstand most severe possible loading condition, with normal safety factor.

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PART 3 - EXECUTION

3.1 GENERAL

A. EXAMINATION

- Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for play court layout, alignment of mounting substrates, installation tolerances, operational clearances, accurate locations of connections to electrical system, and other conditions affecting performance.
 - a. Verify critical dimensions.
 - b. Examine supporting structure and below finished surfaces for subgrades, subfloors and footings.
 - c. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements have been clearly marked for installers. Locate reinforcements and mark locations if not already done.
- 2. Proceed with installation only after unsatisfactory conditions have been corrected.

B. INSTALLATION, GENERAL

- General: Comply with manufacturer's written installation instructions and competition rules indicated for each type of athletic equipment. Complete equipment field assembly, where required.
- Permanently Placed Athletic Equipment and Components: Rigid, level, plumb, square, and true; anchored securely to supporting structure; positioned at locations and elevations indicated on Shop Drawings; in proper relation to adjacent construction; and aligned with court layout.
 - a. Insert Location: Coordinate location with application of game lines and markers.
 - b. Insert Elevation: Coordinate installed heights of inserts with installation and field finishing of finish floor or grade and type of floor plate.

3.2 NETTING

- A. General: Install netting in strict accordance with manufacturer's recommendations.
- B. Remove all sharp edges and surfaces that may cause injury or tear clothing if contacted. If removing sharp surfaces exposes bare metal, apply cold galvanizing to bare metal.
- C. Netting: Fasten netting to framing securely according to manufacturer's recommendations at recommended height, width, and spacing. Leave recommended slack.
- D. Test netting to ensure proper operation.
- E. Suspend netting from cables and provide rollers for smooth operation.
- F. Basis of Design: Jugs Sports #96 Twisted Knotted Black Polyester
- G. Tunnel Dimensions Custom 18'-0" wide X 12'-0" high X 70'-0" long.

3.3 ADJUSTING

- A. Adjust units after installation to ensure that units are level and that moving parts operate freely and in manner intended. Clean exposed surfaces and touch-up or replace damaged marred finishes.
- B. Adjust movable components of athletic equipment to operate safely, smoothly, easily, and quietly, free from binding, warp, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Lubricate hardware and moving parts.

3.4 CLEANING AND PROTECTION

- A. After completing athletic equipment installation, inspect components. Remove spots, dirt, and debris and touch up damaged shop-applied finishes according to manufacturer's written instructions.
- B. Provide final protection and maintain conditions acceptable to manufacturer and Installer that ensure athletic equipment is without damage or deterioration at time of Substantial Completion.
- C. Replace athletic equipment and finishes that cannot be cleaned and repaired, in a manner approved by Architect, before time of Substantial Completion.

3.5 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain athletic equipment. Refer to Division 1 Section.

END OF SECTION 11 66 00

