To: All Prospective Bidders

THE FOLLOWING REVISIONS AND/OR CLARIFICATIONS SHALL BE MADE TO THE BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS. REVISE AND AMEND THE DOCUMENTS FOR THE ABOVE NAMED PROJECT IN ACCORDANCE WITH THIS ADDENDUM. THE BID SHALL REFLECT THESE ADDENDUM CHANGES AND EACH BIDDER SHALL MAKE REFERENCE IN THEIR BID TO THIS ADDENDUM ALL BIDDING REQUIREMENTS AND CONTRACT DOCUMENTS SHALL APPLY TO THIS ADDENDUM AS ORIGINALLY INDICATED IN THE APPLICABLE PORTIONS OF THE CONTRACT DOCUMENTS, UNLESS OTHERWISE MODIFIED BY THIS ADDENDUM.

Acknowledge receipt of this Addendum in the space provided on Document 00210 – Bid Proposal. Failure to do so may result in the bid being deemed non-responsive.

The Addendum consists of the following changes:

1. ADMINISTRATIVE ITEMS:

   1.1. THE BID OPENING IS POSTPONED TO THURSDAY, December 18, 2014 at 3:30pm

   1.2. REPLACE Section 00210 Bid Proposal with the attached REVISED Section 00210 Bid Proposal

   1.3. ADD Section 01230 Alternates

2. SPECIFICATIONS:

   2.1. REPLACE Section 02920 Synthetic Turf System with the attached REVISED Section 02920 Synthetic Turf System
3. DRAWINGS:

3.1. REPLACE Drawing A-101 with the attached REVISED Drawing A-101

4. BIDDERS QUESTIONS: NONE

RESPONSE TO QUESTIONS FROM BIDDERS

The following questions were received as Bid RFIs. Enclosed are responses to each. The following revisions and clarifications shall become a part of the Contract Documents upon award of Bid. All bidders are required to incorporate all necessary changes, additions, or deductions into their proposals.

END OF ADDENDUM # 3

Enclosures:
- REVISED Section 00210 Bid Proposal (7 pages)
- ADDED Section 01230 Alternates (2 pages)
- REVISED Section 02920 Synthetic Turf System (9 pages)
- REVISED Drawing A-101 (1 page)
SECTION 00210

BID PROPOSAL

TO: RIO HONDO COMMUNITY COLLEGE DISTRICT, a California Community College District, acting by and through its Board of Trustees (“District”), 3600 Workman Mill Road, Whittier, California 90601.

FROM: _________________________________________

(Name of Bidder as listed on License)

_______________________________________

(Address)

_______________________________________

(City, State, Zip Code)

_______________________________________

(Telephone)

_______________________________________

(Fax)

_______________________________________

(Email)

(Name(s) of Bidder's Authorized Representative(s) & Title)
1.01 Bid Proposal.

A. Bid Proposal Amount. Pursuant to and in compliance with the Notice to Contractors Calling for Bids, the Instructions for Bidders and the other documents relating thereto, the undersigned Bidder, having reviewed the Instructions for Bidders and all other Contract Documents and upon compliance with all requirements therein with reference to the submittal of this Bid Proposal, hereby proposes and agrees to perform the Contract including, without limitation, all of its component parts; to perform everything required to be performed; to provide and furnish any and all of the labor, materials, tools, equipment, applicable taxes, and services necessary to perform the Work of the Contract in strict compliance with the Contract Documents and complete in a workmanlike manner all of the Work required for the Project described as:

Bid #2037 – Soccer Field Renovation.

A) Total Bid Amount: $________________________
(Total Bid Amount in Figures)

_______________________________________________________________
(Total Bid Amount in Words)

B) Allowance Amount: $__300,000,000__
(Total Allowance Amount in Figures)

Three Hundred Thousand________
(Total Allowance Amount in Words)

for the sum of:

C) Total Base Bid Amount: $________________________
(Total Base Bid Amount in Figures)

_______________________________________________________________
(Total Base Bid Amount in Words)
B. Acknowledgment of Bid Addenda. In submitting this Bid Proposal, the undersigned Bidder acknowledges receipt of all Bid Addenda issued by or on behalf of the District, as set forth below. The Bidder confirms that this Bid Proposal incorporates and is inclusive of, all items or other matters contained in Bid Addenda.

______ No Addenda Issued
(initial)
______ Addenda Nos. ______________ received, acknowledged and (initial) incorporated into this Bid Proposal.

C. Alternate Bid Items. The Bidder’s price proposal(s) for Alternate Bid Items is/are set forth in the form of Alternate Bid Item Proposal included herewith. The Bidder acknowledges that the award of the Contract, if at all, shall be in accordance with the Instructions for Bidders.

1.02 Rejection of Bid; Holding Open of Bid. It is understood that the District reserves the right to reject this Bid Proposal and that this Bid Proposal shall remain open and not be withdrawn for the period of time specified in the Call for Bids, except as provided by law.

1.03 Documents Comprising Bid Proposal. The undersigned Bidder has submitted as its Bid Proposal the following: Bid Proposal (00210), List of Subcontractors (00215), Non-Collusion Declaration (00220), DIR (00230) and Bid Security (Cash, Cashier’s Check, Certified Check or Bid Bond – 00260), Statement of Bidder’s Qualifications (00240). The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected as non-responsive.

1.04 Award of Contract. It is understood and agreed that if written notice of the acceptance of this Bid Proposal and award of the Contract thereon is mailed or delivered by the District to the undersigned after the opening of Bid Proposals and within the time this Bid Proposal is required to remain open or at any time thereafter before this Bid Proposal is withdrawn, the undersigned will execute and deliver to the District the Agreement in the form attached hereto in accordance with the Bid Proposal as accepted within five (5) working days after notification of acceptance and award. Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (1) the Labor and Material Payment Bond; (2) the Performance Bond; (3) the Drug-Free Workplace Certificate; (4) Certificates of Insurance evidencing all insurance
coverages required to be provided under the Contract Documents; (5) the Certificate of Workers’ Compensation Insurance; and (6) Letter of Assent for Project Labor Agreement. The Work under the Contract Documents shall be commenced by the undersigned Bidder, if awarded the Contract, on the date stated in the District’s Notice to Proceed issued pursuant to the Contract Documents. Completion of the Work and all Interim Milestones shall be achieved within the Contract Time and Interim Milestones specified in the Contract Documents.

1.05 **Notices.** All notices or other correspondence shall be addressed to the District and the Bidder at their respective addresses set forth herein. Notices shall be effective only if in writing and in conformity with the requirements for service of notices set forth in the Contract Documents.

1.06 **Contractor’s License.** The undersigned Bidder is currently and duly licensed in accordance with the California Contractors License Law, California Business & Professions Code §§7000 et seq., under the following:

<table>
<thead>
<tr>
<th>Class</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Expiration Date</td>
</tr>
</tbody>
</table>

By executing this Bid Proposal, the Bidder hereby certifies that: (a) it is duly licensed, in the necessary class(es), for performing the Work of the Contract Documents; (b) that such license shall be in full force and effect throughout the duration of the performance of the Work under the Contract Documents; and (c) that all Subcontractors providing or performing any portion of the Work of the Contract Documents shall be so similarly and appropriately licensed to perform or provide such portion of the Work.

1.07 **Designation of Subcontractors.** In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code §§4100, et seq.) and amendments thereof, each Bidder shall set forth in the Subcontractors List: (a) the name and location of the place of business of each Subcontractor who will perform work or labor or render services to the Bidder in or about the construction of the Work to be performed under the Contract Documents in an amount in excess of one-half of one percent (0.5%) of the Bidder’s Bid Proposal; and (b) the trade and/or portion of the Work which will be performed by each listed Subcontractor. The Bidder shall list only one Subcontractor for each trade and/or portion of the Work as is defined by the Bidder in its Bid Proposal. If a Bidder fails to list a Subcontractor for a portion of the work in excess of one-half of one percent (0.5%) of the Bidder’s Bid Proposal or if the Bidder specifies more than one Subcontractor for the same portion of Work to be performed under the Contract Documents valued in excess of one-half of one percent (0.5%) of the Bidder’s Bid Proposal amount, the Bidder shall be deemed to have agreed that it is fully qualified to perform that portion of the Work itself and that it shall perform that portion of the Work.
1.08 **Confirmation of Figures.** By submitting this Bid Proposal, the Bidder confirms that it has checked all of the above figures and understands that neither the District nor any of its agents, employees or representatives shall be responsible for any errors or omissions on the part of the undersigned Bidder in preparing and submitting this Bid Proposal.

1.09 **Acknowledgment and Confirmation.** The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. The undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible and complete for providing, performing and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned Bidder certifies that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein within the Contract Time and in accordance with the Contract Documents. The undersigned Bidder certifies that its bid amount includes funds sufficient to allow the Bidder to comply with all applicable local, state and federal laws and regulations governing the labor and services to be provided for the performance of the Work of the Contract and shall indemnify, defend and hold District harmless from and against any and all claims, demands, losses, liabilities and damages arising out of or relating to Bidder’s failure to comply with applicable law in this regard.

By: ________________________________

(Signature)

(Corporate Seal)

(Typed or Printed Name of Bidder’s Authorized Representative)

Title: ________________________________
ALTERNATE BID ITEM PROPOSAL

Bidder must provide a proposal for each Deductive Alternate Bid item set forth herein; failure to do so will result in rejection of the Bid Proposal for non-responsiveness. The proposal price for the Alternate Bid Item shall be exclusive of the base bid proposal amounts in Paragraph 1 of the Bid Proposal.

Bidder Name: _________________________________________________________

<table>
<thead>
<tr>
<th>Deductive Alternates</th>
</tr>
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<tbody>
<tr>
<td>Scope of Work: Provide all labor, materials, equipment, supplies and supervision.</td>
</tr>
<tr>
<td>Work is to include but not limited to the scope of work outline in the plans and</td>
</tr>
<tr>
<td>specifications.</td>
</tr>
</tbody>
</table>

Alternate Bid Item No. 1 Deductive

Synthetic Turf - Total Price

_______________________________ ( $ )

Amount in Words

Specified Manufacture

Alternate Bid Item No. 2 Deductive

Synthetic Track - Total Price

_______________________________ ( $ )

Amount in Words

Specified Manufacture

Alternate Bid Item No. 3 Deductive

Grooming Equipment: John Deere SMG CareMax with groomer & sweeper- Total Price

_______________________________ ( $ )

Amount in Words

Specified Manufacture
By: ________________________________  
(Signature)

(Corporate Seal)

(Typed or Printed Name of Bidder’s Authorized Representative)

Title: ________________________________
SECTION 01230
ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS
A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 1 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. 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 alternate into the Work. No other adjustments are made to the Contract Sum.
   3. Include as part of each Alternate, miscellaneous devices, accessory objects and similar items incidental to or required for a complete installation whether or not mentioned as part of the Alternate.

1.4 PROCEDURES
A. Coordination: Modify 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. 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 in schedule 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 (Additive): Modernization of the Kindergarten restrooms in Building A, rooms A102, A103 and the casework at room A107, exterior walkway canopies and associated footings, shown on Drawings as Alternate No. 1. Also included will be the Workroom (casework and sink upgrades) between the restrooms and the Mechanical room in this building.

1. Includes but not limited to the demolition of four (4) water closets, reconfiguration of spaces to provide two (2) accessible toilet rooms and associated architectural, plumbing, mechanical and electrical work as shown on Addendum 2.

2. Includes but limited to limited demolition of casework in the Workroom and installation of an accessible sink cabinet and associated architectural, plumbing, and electrical work as shown on Addendum 2.

3. Includes but not limited to the installation of water isolation valves at each building where work is being done as part of this project. Provide utility locator services to find source for water into each building. Include snaking out drains in each restroom for a minimum distance of 100 feet, running a video camera in those waste lines to document the condition of the pipe and search for blockages such as tree roots or collapsed pipe.

END OF SECTION 01 23 00
SECTION 02920 – SYNTHETIC TURF SYSTEM

PART I – GENERAL

1.1 SUMMARY

A. Provisions of Division 01 apply to this section.

B. Related Sections:
   1. Section 02300: Earthwork.
   2. Section 02621: Synthetic Turf Dynamic Base System.
   3. Section 02630: Storm Drainage.
   5. Section 03100: Concrete Forms and Accessories.
   6. Section 03200: Concrete Reinforcement.
   7. Section 03300: Cast-in-Place Concrete.

1.2 The work under this section shall consist of furnishing all labor, materials, and equipment necessary to install, in place, all synthetic turf and other materials as indicated on the plans and as specified herein. The installation of all new materials shall be performed in strict accordance with these specifications, the manufacturer’s instructions and in accordance with all details and shop drawings.

1.3 SUBMITTALS

A. Substitutions: Conform to General Conditions Article 4 for approval of Or Equal, Substitutions or Alternatives.

B. Provide the following:
   1. Complete list of products and materials with installation instructions, product data sheets, material safety data sheets (MSDS), specifications, preparation and installation instructions
   3. Submit three (3) 12” by 12” manufacturer’s product samples showing each field color, one linear foot of game striping colors, and colors for other field logos and markings.
   4. Submit (3) three 12”x12” assembled turf samples with backing and infill.
   5. Submit proof that installer is authorized/approved by the manufacturer to install their products.
   6. Submit proof that turf manufacturer has produced and installed a minimum of five (5) monofilament fiber fields that have been used for football, soccer and baseball in the last five (5) years. And that the manufacturer has been in business at least ten (10) years.
7. Provide three (3) sets of the manufacturer's maintenance manuals, for the proper care of synthetic turf system.

C. Test Results: The following test results, certified by a licensed independent testing laboratory, shall be submitted as outlined below
   1. Mandatory and minimum specifications as shown in Part 2. Products not meeting the minimum specifications will be rejected.

D. Shop Drawings: Show fabrication and installation details for synthetic turf including, but not limited to:
   1. Drawings shall show recommended details of construction noting any deviation from contract documents. Include any miscellaneous details for posts, inserts, covers, edge termination, utility vaults etc. required for a complete installation.
   2. Proposed locations of all seams in fabric surfacing. Show installation methods and construction.
   3. Field lining and marking - Submit a complete scale and dimensional drawing of inlaid or tufted-in field lines and marking boundaries. Include graphics for center logo artwork for approval as well.
   4. All submittals will conform to the contract requirements as stated in General Conditions Article 4.

E. Manufacturer Certificates: Certified list of five (5) existing installations of the synthetic turf and infill system that is specified for this project within the last five (5) years, including Owner Representative and telephone number, attesting compliance with quality assurance information. These fields must comply with the materials section of this specification. All must be located within the continental United States. List both turf contractor and manufacturer per project.

F. Sample Warranty: Provide a sample pre-paid third party insured warranty. Policy must be in force at the time of the bid.

   1. The Contractor shall provide a warranty to the Owner that covers defects in materials and installation workmanship of the turf for a period of eight (8) years from the date of substantial completion. The turf manufacturer must verify that their representative has inspected the installation and that the work conforms to the manufacturer's requirements and any written directives. The manufacturer's warranty shall include general wear and damage caused from UV degradation. Other items that must be addressed include the following:
      a. Acceptable uses for the field
      b. Fading
      c. Color match within specifications
      d. Excessive fiber wear
      e. Wrinkling and panel movement
      f. Shock absorbency
      g. Seam integrity
h. Drainage (through the turf only)

2. Exclusions shall include the following:
   a. Vandalism
   b. Acts of God beyond the control of the Owner or the Manufacturer

G. Maintenance and Operations Data: At the completion of the project submit 3 complete sets, in manual form, of all the manufacturer's recommended procedures and materials for, but not limited to general maintenance, line/marking installation, small repair procedures, cleaning, etc.

H. Project Record Documents: Record actual locations of seams, drains, and other pertinent information in accordance with the General Requirements

1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications
   1. Shall be experienced in the manufacture and installation of the specified type of synthetic infill grass for a minimum of ten (10) years.
   2. Shall provide third party certification confirming compliance with referenced standards.

B. Installer Qualifications:
   1. Installation team shall be an established, insured installation firm experienced as a premium turf installer with suitable equipment and supervisory personnel, with a minimum of ten (10) years experience.
   2. Installation team shall be trained and certified, in writing, by the turf manufacturer, as competent in the installation of the specified material, including seaming and proper installation of the infill mixture.
   3. Site superintendent shall have successfully completed at least five (5) installations similar to this type within the last five (5) years.

C. Source Limitations: Obtain synthetic turf through one source from a single manufacturer.

D. All components and their installation method shall be designed and manufactured for use on outdoor athletic fields. The materials as hereinafter specified, should be able to withstand full climatic exposure, be resistant to insect infestation, rot, fungus and mildew; to ultra-violet light and heat degradation, and shall have the basic characteristic of flow-through drainage allowing free movement of surface run-off through the turf and directly into prepared granular base and into the field drainage system.

E. The synthetic turf and components shall be of national reputation with previous use at all levels of competition, including professional and collegiate levels of football and soccer and shall have been in use for a period of not less than three years. The turf fabric shall be
produced by the manufacturer and installed by factory-authorized distributors directly employing the installation crew.

1.5 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit synthetic turf work to be performed according to Contractor or Manufacturer’s written instructions and warranty requirements.

B. Field Measurements: Indicate measurements on Shop Drawings.

1.6 MAINTENANCE SERVICE – Turf Installation Contractor shall train maintenance staff and/or contracted maintenance staff in the use of the recommended maintenance equipment and provide maintenance guidelines to the facility maintenance staff.

PART TWO – PRODUCTS

1.1 ACCEPTABLE MANUFACTURERS

A. AstroTurf
B. FieldTurf
C. Shaw Sportsturf
D. Sprinturf
E. Approved equal

1.2 MATERIALS

A. Synthetic Turf System 1: Reference Landscape Plan L-3

a. Basis of Design: AstroTurf®, LLC – AstroTurf® GameDay Grass™3DXtreme – 52. A complete synthetic turf system consisting of a combination of horseshoe shaped monofilament polyethylene and parallel slit film fibers along with an extruded monofilament (polylon) RootZone™. Pile height shall be nominal 2.00". Fibers shall be tufted to a tri-composite primary backing and a mechanically applied adhesive secondary backing.

1. The tufted fiber shall no weigh less than 52 ounces per square yard. The tufted rows of fiber are to be spaced no more than 3/8" apart. ASTM tests proving the fiber meets these qualifications must be provided with the bid. Turf systems that do not meet this specification will be disqualified.

2. The carpets’ primary backing shall be comprised of two layers (18pic and 13pic) of woven polypropylene with a binding layer of polypropylene which is needled in between the two layers of woven primary to create a single composite structure. This tri-composite backing is to have a minimum weight of 8.0 oz per square yard. The carpet shall then be coated with a secondary backing of Biocel™ Polyurethane synthetic coating material with a minimum application rate of 26
ounces per square yard and then perforated for adequate drainage. Carpets that are not perforated for adequate drainage shall not be acceptable.

3. The carpet shall be delivered in 15’ wide rolls. The rolls shall be of sufficient length to go from sideline to sideline. Head seams, other than at sidelines, will not be acceptable.

B. The pile surface shall provide good traction in all types of weather with the use of conventional sneaker type shoes, composition mold sole athletic shoes, baseball spikes and screw-on football spikes.

C. The pile surface shall be suitable for both temporary and permanent line markings using acrylic paint, as per the manufacturer’s recommendations.

D. All adhesives used in bonding the seams shall be resistant to moisture, freeze/thaw, bacteria and fungus attacks, and resistant to ultraviolet radiation. The adhesive shall be made especially for the adhesion of synthetic turf seams.

E. The adhesive system shall consist of a factory-made adhesive bed applied to a non-woven fabric seaming tape. The adhesive bed shall be a metered amount suitable for the application. It shall be heat and pressure activated. A special heat application machine and pressure application using weighted rollers is mandatory.

F. As Alternate #1, the entire turf system may include a factory-applied heat reduction technology.

G. Perimeter edge details required for the system shall be as detailed and recommended by the manufacturer, and as approved by the manufacturer.

1.3 FABRIC SURFACE

A. The pile surface shall resemble freshly mown natural grass in appearance, texture and color.

B. The pile surface shall be nominally uniform in length.

C. The pile fiber angle shall be 90 degrees ± 15 degrees, measured from the horizontal after installation of the infill material.

D. The entire system shall be resistant to weather, insects, rot, mildew and fungus growth and will be non-allergenic and non-toxic.

E. The Synthetic Turf System 1 shall have a nominal fiber length of 2.00”. The Synthetic Turf System 2 shall have a nominal fiber length of 1 5/8”.

F. Each roll shall be minimum 15’ wide

G. The entire system shall be constructed for porous standards as specified. Synthetic turf system shall be perforated at 4 – 6” on center. Systems that are not perforated for maximum drainage shall not be acceptable.

H. All markings shall be tufted in-place, inlaid or glued. It is recommended that the maximum amount of markings be factory-prefabricated into the turf system prior to shipment to site.

1.4 PRODUCT SPECIFICATIONS

A. Synthetic Turf System 1: Face yarns shall be a combination of:

1. A proven athletic quality, outdoor stabilized blend of non-texturized monofilament yarn with a horseshoe shaped cross-section and parallel slit film polyethylene fibers and;
2. A texturized monofilament blended (polylon) RootZone™ designed specifically for outdoor use, made with carbon black, to best resist the effects of ultraviolet degradation, heat, foot traffic, water and airborne pollutants.

B. The fabric shall possess the following minimum physical characteristics. ASTM testing shall be provided with the bid and any products not meeting the minimum physical characteristics will be rejected:

**Synthetic Turf System 1:**

- Average Pile Yarn Weight: ASTM D 5848, 52 oz/square yard
- Average Total Weight: ASTM D 5848, 86 oz/square yard
- Secondary Backing Weight: ASTM D 5848, 26 oz/square yard
- Primary Backing: ASTM D 5848, 8 oz/square yard
- Average Tuft Length: ASTM D 5823, 2.00"
- Stitches Per Inch: ASTM D 5793, 2.3
- Tufting Gauge: ASTM D 5793, 3/8" maximum
- Tuft Bind: ASTM D 1335, > 9 lbs
- Yarn Denier (monofilament fiber): ASTM D 1577, 10,800
- Yarn Denier (slit film fiber): ASTM D 1577, 10,000
- Yarn Denier (secondary fiber): ASTM D 1577, 4,200
- Surface Flammability: ASTM D 2859, 8 of 8 PASS
- Permeability: ASTM F 1551, >30
- Melt Point: ASTM D 789, 130 Degrees Celcius
- Gmax (American Football): ASTM F 355, <125 at installation<br>  < 175 over life of warranty

1.5 Infill Material

A. Infill particles shall be recycled granulated SBR rubber, free of belting fabric and/or wire; and silica sand with a minimum fill height necessary to achieve the required shock absorbing properties and bio-mechanical properties.

1.6 Provide Synthetic Sports Turf Equipment

A. Grooming equipment: John Deere SMG CareMax with groomer and sweeper
B. Or equal

1.1 EXAMINATION

SYNTHETIC TURF SYSTEM

02920 - 6

Addendum No.3 12/15/14
A. Examine substrates and conditions, with Installer present, for compliance with requirements for visual installation tolerances. Proceed with installation only after satisfactory conditions have been corrected.

B. Certification of prior work: The synthetic turf manufacturer and/or installation contractor shall perform a visual inspection of the field base onto which the synthetic turf system is to be installed and to examine the finished surface for required compaction, and grade tolerances (through string line testing). After any discrepancies between the required materials, application and tolerance requirements noted have been corrected, the synthetic turf installer should submit a written certification of VISUAL acceptance of the base for installation of the synthetic turf system. Any tests other than VISUAL tests (string line, water hose, etc...) shall be the responsibility of the General Contractor or Landscape Architect.

C. Installation of all materials shall be performed in full compliance with approved project shop drawings. Only factory trained technicians skilled in the installation of athletic caliber synthetic turf systems, working under the direct supervision of the manufacturer’s supervisors, shall undertake the placement of the turf system. The designated Supervisory personnel on the project must be certified, in writing by the turf manufacturer as competent in the installation of these materials, including proper seaming and proper installation of the infill mixture. The manufacturer shall certify the installation and warranty compliance.

3.2 PREPARATION

A. Inspect delivered field surface fabric and components immediately prior to installation. Any damaged or defective items shall be rejected. Installed artificial system shall be inspected for, but not limited to, the following:
   1. Uniformity of product and color
   2. Surface bubbles
   3. Field markings
   4. Field Edge installation
   5. Pile height of each roll shall be measured. Any material(s) that does not meet minimum height and thickness specifications shall be rejected. Pile height shall be measured in its finished positions.

C. Environmental Conditions: Weather conditions are important for the successful installation of the systems. No work under this section will proceed when:
   1. Ambient temperatures are below 45 degrees F.
   2. Material temperatures are below 45 degrees F.
   3. Surfaces are wet or damp
   4. Rain is imminent or falling.
   5. Conditions exist or are imminent, which will be unsuitable to installation requirements of the systems specified herein. Humidity levels will be inside the limits recommended by the adhesive manufacturer to obtain optimum bonding characteristics of the surfaces.
1.3 INSTALLATION OF THE SYNTHETIC TURF

A. The carpet rolls are to be installed directly over the properly prepared base stone. Extreme care should be taken to avoid disturbing the base stone both in regard to compaction and planarity. A 2-5 ton static roller shall be on site and available to repair and properly compact any disturbed areas of the base stone.

B. The full width rolls shall be laid out across the field. When all of the rolls of the playing surface have been installed, the sideline areas will be installed at right angles to the playing field turf. All work shall be such that the seams shall remain as required for the duration of the warranty period at a minimum. All seam widths are to be held to a minimum and shall be traverse to the field direction. Seams shall be flat, tight and permanent with no separation or fraying.

C. The perimeter of the field shall be firmly secured to the edge anchors for the life of the warranty and in accordance to project details.

D. Resilient Infill
   1. The rubber infill material shall be spot inspected and tested for conformance to sieve specifications. Any metal found in the rubber shall be cause for rejection of the rubber sack and immediate inspection of all materials.
   2. Infill must be placed in such a way as to minimize fiber entrapment.
   3. The infill must be uniformly applied so as to ensure uniform, predictable surface. The turf foreman must take numerous on site measurements to confirm the uniformity of the infill.

1.4 Field Lining and Markings

   1. General: A complete field “Lining, Marking and Field Boundary” system will be provided with the installation of the surfacing system specified herein. All markings shall be installed in accordance with prior approved project Shop Drawings.
   2. Inlays shall conform to the manufacturers' specifications, directions and recommendations for the best results.
   3. Striping layouts shall be accurately surveyed by the Contractor before installation of inlaid field markings
   4. Install inlays only when the surface is completely dry. Adhere all inlays securely into place. Never loose-lay and sew an inlay into place.

1.5 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.
B. Testing Services: Testing and inspecting of completed applications of synthetic turf system shall take place in suggestive states, in areas of extent and using methods that are industry standard. Do not proceed with application of next stages until test results for previously completed applications show compliance.

C. Remove and replace items where test results indicate that it does not comply with specified requirements.

1.6 FINAL ACCEPTANCE

A. Prior to final acceptance, the Contractor shall submit to the Owner three (3) copies of Maintenance Manuals, which will include all necessary instructions for the proper care and preventative maintenance of the synthetic turf system, including painting and striping.

B. The Contractor shall provide evidence that the turf can be plowed with conventional rubber bladed snow removal equipment.

C. The finished playing surface shall appear as mowed grass with no irregularities and shall afford excellent traction for conventional athletic shoes of all types. The finished surface shall resist abrasion and cutting from normal use.

1.7 CLEANING

A. Contractor shall provide the labor, supplies and equipment as necessary for final cleaning of surfaces and installed items. All usable remnants of new material shall become the property of the Owner. The Contractor shall keep the area clean throughout the project and clear of debris. Surfaces, recesses, enclosures, etc… shall be cleaned, as necessary, to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

END OF SECTION 02920