Venue: VyStar Ballpark

Address: 301 A. Phillip Randolph Blvd., Jacksonville, FL 32202

Project Name: VyStar Ballpark Playing Field Renovation

RFP Release	Pre-Bid Meeting	Final Questions Due	Answers to All Questions	All Proposals Due	Anticipated Bid Award
Date: 6/27/25	Date: 7/7/25 Time: 10:00a ET*	Date: 7/10/25 Time: 5:00p ET	Date: 7/14/25	Date: 7/17/25 Time: 5:00p ET	Date: 7/22/25

Submit All Responses To

Project Manager: Matthew Goudreau, Assistant General Manager

Contact Information: mattg@jaxshrimp.com, (904) 358-2846 ext. 119

*The Pre-Bid Meeting will not require any potential bidders to be on site. Those that wish to walk the property will have a window of access for one (1) hour after the video call. The URL for the video call is https://us02web.zoom.us/j/89211044263

The anticipated start date of this project is November 3, 2025. This project must be completed by January 26, 2026 to accommodate the coming show/event season. This project will be awarded to best bid. Jacksonville Baseball LLC reserves the right to use any and all contracted trade agreements (if applicable) to offset monetary cost (PO amount) for this project.

PROJECT DESCRIPTION

The Playing surface Improvements project is located at VyStar Ballpark, 301 A. Phillip Randolph Blvd. Jacksonville, FL 32202. The project will be completed in a timely manner that will not disrupt the day-to-day operation of the venue. The baseball park event schedule cannot be interfered with. The job will consist of a complete demolition of the existing playing surface per demolition plan dictates. The job will also include developing an entirely new drainage system, root zone, irrigation system, grassing and all components of a new baseball playing surface. If the job requires an alteration from the drawing a written report and pictures of any items that are making the change required and approved before work can continue. All documents should be on electronic version and paper if requested.

Qualifications from responders and subcontractors shall be submitted with the purpose that their applications demonstrate the best qualifications to provide the required comprehensive services that will serve the Jacksonville Baseball LLC and the city of Jacksonville, to conduct a building assessment. The report may also include potential engineering and infrastructure surveys.

All interested vendors shall submit a document to illustrate the candidate's firm profile and experience. Please list a minimum of three similar projects for consideration that represent your understanding of the project description and scope of work. In addition to the requested document and project examples, please return all completed attachments and pricing worksheets provided in this RFP.

GENERAL REQUIREMENTS:

1. Proposer shall furnish and supply all labor, personnel, service, supervision, skills, permits, licenses, disposal fees, mobilization fees, tools, equipment, lifts, rigging, apparatus, gaskets, bolts, hardware, parts, supplies, material, incidentals, travel time, transportation, fuel surcharge, shipping, and documentation necessary to complete the specified work.

2. Proposer shall maintain a credible work force daily to ensure progress of project. A superintendent or supervisor shall be on the jobsite at all times when work is being performed. At no time shall any non-skilled laborers or helpers be left on the job unsupervised.

3. Proposer employees or personnel shall not under any circumstances fraternize with employees or building clients at the facility.

4. Proposer must be fully equipped and capable of meeting all specifications and requirements of this bid.

5. Prior to submitting a bid, the Proposer shall examine all documents relating to this project and visit the job site to ascertain the nature of the work and the character of the job site. The Proposer shall become familiar with the contractual requirements, project limitations, and various aspects of the work, physical conditions, and surroundings of the job site. The Proposer shall include in their bids a sum sufficient to cover the costs of doing the work under the existing site conditions and project requirements. By submitting a bid for the project, the Proposer declares that he or she has thoroughly investigated the job site, examined all related project documents and is familiar and satisfied with the nature, character and condition of the project site, contractual requirements, project limitations and the various aspects of this project. Jacksonville Baseball LLC will not consider any claims for compensation whatsoever on account of the Proposers' failure to fully investigate and examine the project requirements and job site conditions as required above.

6. Proposer must provide an estimated schedule for this project from date of Purchase Order with bid to competition.

7. Service Hours may vary and are subject to change including nights and weekends. Additional work hours can be coordinated upon award.

8. All material, parts, supplies, and/or product utilized for this project shall be new and unused.

9. Technical and Descriptive Literature: Proposers shall include the complete manufacturer’s technical and descriptive literature regarding the brand and material your firm is proposing to utilize for this project. Literature shall be sufficient in detail in order to allow a full and fair evaluation of the offer submitted.

10. Materials, supplies, services and parts requested by Jacksonville Baseball LLC or part of this project must be of the highest quality and must conform to any related state, municipal or federal standard and be consistent with standard commercial practices.

11. All services provided performed under this project shall be, unless otherwise stated in the contract, shall be in accordance with the methods and procedures of the industry’s highest standards.

12. Proposer shall comply with all applicable State and local laws, ordinances, codes, and regulations.

13. Proposer shall engage JSEB contractors and/or subcontractors to provide services for this project. Jacksonville Baseball LLC, in partnership with the City of Jacksonville, has committed to meeting a 30% participation rate for JSEB qualified businesses for this capital project.

14. Proposer shall complete all work in a neat and workmanlike manner, to the satisfaction of Jacksonville Baseball LLC.

15. Proposer shall secure all equipment, tools and related materials while working in the facility against the occurrence of theft, accidents, injuries or damage to any person or property at all times.

16. Proposer shall maintain sufficient safeguards against the occurrence of accidents, injuries or damage to any person or property around the project or work site. Barricades, caution tape and/or signs shall be placed around all work areas.

17. Any damage to existing utilities, building, finished surfaces, equipment, City or public property or improvements, resulting from the performance of this contract shall be repaired to the satisfaction of Jacksonville Baseball LLC at the Proposer's sole expense. The repair or replacement work shall be of equal or greater quality and in appearance to prior condition. If damage caused by the Proposer must be repaired or replaced by Jacksonville Baseball LLC, the cost of such work shall be deducted from the monies due the Proposer.

18. Excess materials, rubbish, garbage, rags, debris, etc., generated from the inspection work services shall be disposed of off-site by the Proposer daily at the Proposer's own expense. Any material needing removal is to be disposed of off-site in a safe and legal manner. The Proposer shall not stockpile debris, rubbish, garbage, excess materials or other unwanted materials on the sidewalk or on the street. Washing of excess materials into the storm drain is prohibited. Payment for transportation and disposal of excess materials and removed equipment shall be included in the contract and no additional compensation shall be made.

19. The contractor shall be responsible for the field after top-dressing, clean up, and final placement of all materials to proper grade until approved by 4Most Sport Group.

20. Prior to scheduled commencement of the project and associated work this includes shutting of any system down to inspect, a meeting will be conducted at the project site or other designated site by Jacksonville Baseball LLC with the Proposer, 4Most Sport Group, and any other persons directly involved with the performance of the work. No work will commence before consulting with the 4Most Sport Group. 4Most Sport Group must approve the actual work schedule of the Proposer to ensure that no disruption or interferences with the building operation which may result in health hazard or offensive conditions and business continuity.

21. Final acceptance, shall be determined by 4Most Sport Group and will occur with the following:

    1. Contractor must stay on site for at least seven (7) days after sod has been properly installed.

    2. There shall be consistent turf that is void of any dead areas and weeds over the entire sodded area.

3. To achieve a smooth, level-playing surface that is appropriately compacted, a 1-ton roller is to be utilized across the entire playing surface within 1 day of sodding and before top-dressing.

4. Contractor shall apply 50 tons of topdressing sand evenly across all newly sodded areas.

5. All transitions shall be smooth and free from any elevation change from surface to surface.

    a. This includes soil to sod and then the transition of sod back to soil.

22. Warranty Coverage: No warranty for Assessment of Building required

23. Proposer shall provide a minimum of five (5) customer references, for which the Proposer has performed similar-scope services, for professional baseball and specified herein, that will qualify Proposer to perform this project. Jacksonville Baseball LLC reserves the right to contact the references provided. The reference information shall include company names, contact name, telephone numbers, type of services provided and date of services (timeframe).

24. Invoicing Requirements: All invoices shall include, but not be limited to the following information:

    a. Purchase Order Number

    b. Service Description

    c. Total Cost of Services

    d. Invoice shall be sent to the requesting department address stated on Purchase Order.

25. Failure to comply with requirements stated in these specifications will result in the termination of contract due to non-performance.

26. It is intended that the Proposal includes all labor and materials to accomplish a complete installation in every aspect. However, Proposers are cautioned to familiarize themselves with the existing conditions on the premises and to include all incidental work that might occur during the job.

27. Each proposer is required to provide the following information in the amounts requested. Proposers who fail to provide any of the submittals requested will not be given consideration.

    a. Submit one (1) copy of Drawings (if applicable) and Product information sufficient to explain the Proposers proposed system/product and adherence to the bid specifications.

    b. Submit one (1) copy of manufacturer's descriptive literature and manufacturer's fabrication specifications.

c. Submit one (1) copy of manufacturer's warranty if different from the Vendor's Warranty as required in the Terms and Conditions.

d. Submit one (1) copy of manufacturer's operating, service and/or parts manual.

e. Submit one (1) copy of certificate of insurance as described in the RFP.

The Proposer MUST mail a hard copy of the Proposal to the Project Manager no later than time and date specified in the RFP or addendums.

Proposal must be signed and sealed by a corporate officer, general partner, sole proprietor, (as applicable) or other authorized signatory having the authority to commit the Proposer in full. For an added level of assurance, Proposers are encouraged to also send an electronic copy to the Project Manager, but this is not required.

28. Jacksonville Baseball LLC is acting as Agent for the City of Jacksonville. Jacksonville Baseball LLC is the entity that will issue all purchase orders, contracts and receive invoices on behalf of the City of Jacksonville Payments with regards to this Solicitation will be made by the City of Jacksonville, FL directly to vendor.

    City of Jacksonville is tax exempt. This project is/is not tax exempt. This does not affect or exempt any bidders' tax responsibility otherwise.

    Payment terms are Net 30 days from receipt of invoice only after acceptable delivery and receipt of item or project. All items will be checked upon arrival to ensure each is in approved condition prior to any payment.

29. Project Manager: The Project Manager or his designated representative will be responsible for coordinating all aspects of service relating to this contract once the bid is formally approved and awarded by. Proposer will work under the direction of the Project Manager or the designated Jacksonville Baseball LLC representative throughout the duration of the contract.

    The authorized Jacksonville Baseball LLC representative shall decide all questions that may arise as to the quality and acceptability of any work or services performed under this contract in accordance to the specification set forth in the bid requirements. If, in the opinion of the designated Jacksonville Baseball LLC representative, the performance becomes unsatisfactory, Jacksonville Baseball LLC shall notify the Proposer of such, and the Proposer shall make acceptable such performance at no additional cost to Jacksonville Baseball LLC.

    Project Manager:

    Matthew Goudreau, Assistant General Manager

    Office: (904) 358-2846 ext. 119

    Email: mattg@jaxshrimp.com

30. Insurance: The selected proposer shall, at its own expense, secure and deliver to Jacksonville Baseball LLC prior to commencing work and shall always keep evidence of insurance coverage which meets the minimum requirements set forth on Schedule 1, attached hereto.

31. Selection Criteria: The qualified bidder with the lowest responsible bid price, and whose business and financial capabilities, past performance, and reputation meet the required standards will be awarded the contract.

32. Exclusive Service Providers: Jacksonville Baseball LLC have certain exclusive agreements for service providers that may be required to be utilized as part of the scope within this project. The following providers MUST be used (if the project calls for needs within these categories):

    a. Security Staff: SAFE Management

    b. Waste Hauling: Waste Pro

    c. Building Automation Controls: Siemens

    d. Portable Restrooms/Sinks: United Rentals

33. Bonding: The successful bidder, upon award of the contract, will be required to provide a bid bond to ensure they will enter into a contract and provide the necessary performance and payment bonds. The successful bidder will be required to furnish a bond in the amount of 5% of the contract price. This bond shall guarantee the faithful performance of the contract and compliance with all terms and conditions.

-End of Section-

TECHNICAL REQUIREMENTS

Section I: Infield Skin Surface with MoistureRise

Part 1 – General

1.01 – Scope of Work

1. Install 4" of compacted sub-grade
    a. See Infield Plan Detail
2. Install 1" layer of 'Crusher Fines" on compacted subgrade
    a. See Infield Plan Detail
3. Install MoistureRise Sub-Surface Irrigation system as designed.
    a. No substitutions for drip irrigation components.
4. Install 5" of DuraEdge Professional Infield Mix to designated area and bring to Finish Grade.
    a. See Grade Plan for proper slope.

1.02 – Quality Assurance

1. Installer Qualifications: Installers of materials specified shall have, at minimum, five (5) successful installations of similar DuraEdge Products & Materials. Installers shall be in possession of and demonstrate knowledge of the use of laser guided finishing equipment.
2. Material: If quality control samples are specified, they shall be completed at a rate of one per 250 tons of material delivered to the job site. All tests shall be conducted by the lab specified in Section 1.2 (B). All testing will be compared to and be in accordance with the material specifications provided in Section 2.2

1.03 – Project Site Conditions

1. All site work and earthwork shall be performed in accordance with the preceding sections. Sub-base material shall compact to 90 percent. If conditions do not warrant such compaction, then an imported select granular fill shall be installed. Furthermore, the compacted sub-grade shall be installed in accordance with the final slope and shall mirror finish grade to ensure an even depth of material once placement has occurred.
2. Under no circumstances are perforated pipe under drains necessary or recommended for use under any infield skin material. Geotextile fabric is not recommended between the compacted sub-base and the infield skin material.

3. A survey of the sub-grade elevations shall occur and be approved by 4Most Sport Group, prior to placement of the infield skin material.

Part 2 – Materials

2.01 – Manufacturer

1. DuraEdge Professional Infield Mix is produced in various locations throughout the United States of America and is produced by the following manufacturer:

    DuraEdge Products, Inc.

    149 South Broad Street

    Grove City, PA 16127

    Phone: (866) 867-0052

    Fax: (724) 264-4174

    Email: info@duraedge.com

2. DuraEdge Professional Infield Mix is an engineered soil product which is mechanically mixed offsite in a controlled environment using a pugmill-type mixer. This process ensures thorough mixing of the sand and clay components to exact specifications.

3. Infield mix shall be clean, dry clay mixed with washed mason-type sand resulting in a weed-free mixture that reddish brown in color having a yield of 1.35 tons per cubic yard when placed loose or 1.5 tons per cubic yard when compacted 85% - 90% on a Standard Proctor Test (ASTM D 689-07). The material possesses the following particle size analysis:

    a) Total sand content shall be 58-62 percent.

    b) The combined amount of sand retained on the medium, coarse, and very coarse sieves shall be greater than or equal to 40 percent.

    c) The combined amount of silt and clay shall be 38-42 percent.

    d) The ratio of silt divided by clay, otherwise known as the SCR, shall be 0.5–1.0.

    e) No particles greater than 3 millimeters.

    f) Equal to or less than 5 percent of particles shall be retained on the 2 millimeters.

4. Sub-Surface Irrigation System (MoistureRise) requires Hunter 17mm Eco-Wrap Dripline in the linear feet quantity specified on the Infield Irrigation sheet.

2.02 – Submittals

1. Product Data: For the product specified, submit a five-pound sample along with a private lab test result indicating the particle size analysis of the material specified. All tests shall be performed in accordance with ASTM F-1632.

   Approved Testing Lab:

   Turf & Soil Diagnostics

   35 King Street

   Trumansburg, NY 14886

   (607) 387-5694

2. There is no substitute for this testing location.

2.03 – Amendments

1. While there is no substitute for this manufacturer and product, certain amendments are approved for use with DuraEdge Professional Infield Mix. These shall be installed at 4Most Sport Group's discretion in accordance with the manufacturer's recommendations. Contact the manufacturer for further instructions.

2.03 – Excess Materials

1. Provide the owners' authorized representative with a 25-ton stockpile of material for future use.

Part 3 – Execution

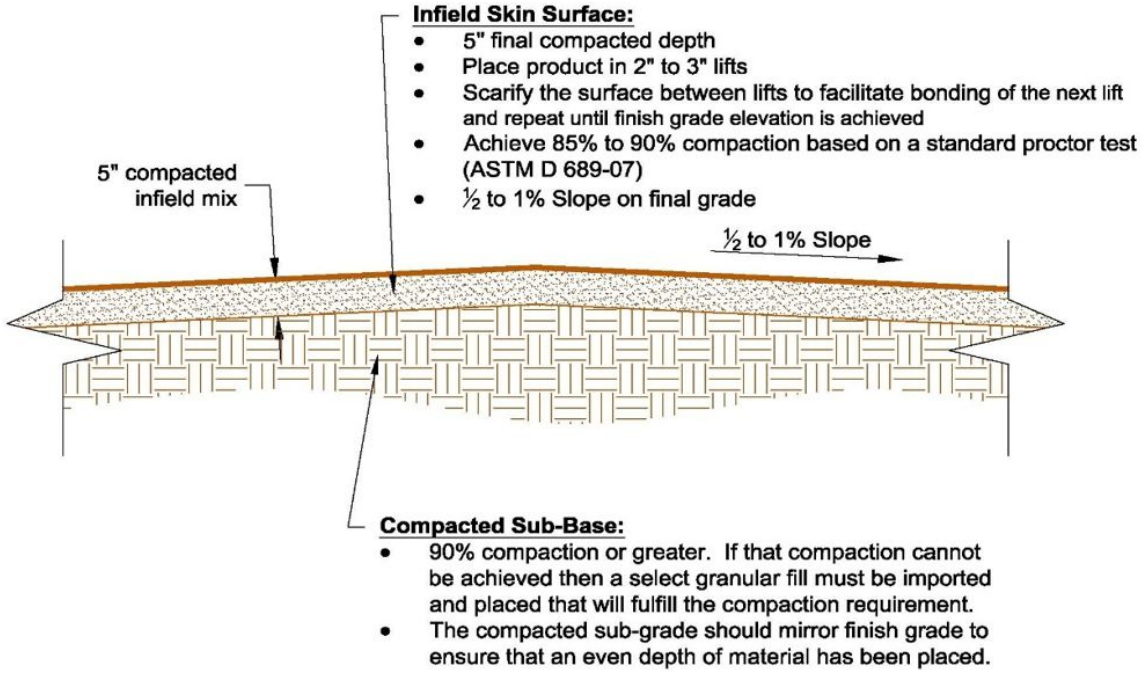
3.01 – Placement

1. Place the material in lifts of two (2) to three (3) inches and lightly compact until an optimum compaction between 85 and 90 percent is achieved on a standard proctor test (ASTM D 689-07). Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved. Completing this process as described will minimize settling and improve the performance of the product. See diagram in 3.1.C.

2. Depth of the material shall be five (5) inches for new construction when finished and compacted. See diagram

3. Typical cross-section of infield skin:

Infield Skin Surface:
DuraEdge Infield Mix



3.02 – Watering

1. In most cases, the material is delivered with optimum moisture and adding water is not necessary. If unable to achieve optimum compaction, a light application of water may be needed.

3.03 – Finish Grading

2. Material shall be finish graded with a laser device that allows accuracy to +/- 1/8 inch. A slope of 1/2 percent to 1 percent shall be placed on the infield surface to facilitate surface drainage.

    a) See Grading Plan

3.04 – Inspection

1. The finished surface of the infield shall be smooth and free from any visible dips, humps, bumps, or other blemishes which would hinder the removal of water through positive surface drainage. Where warranted, a finished elevation survey shall be conducted to ensure proper installation.

3.05 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

    a) Infield Mix

    b) Base Material

    c) Drip Pipe

    d) PVC

-End of Section-

Section II: Warning Track Surface

Part 1 – General

1.01 – Scope of Work

1. Install compacted road base material to warning track location and bring to 4” below proposed finish grade.
    a) See Warning Track Diagram

2. Install 4” of Lava Warning Track material to bring to proposed finish grade.
    b) See Grading Plan

1.02 – Project Site Conditions

1. All site work and earthwork shall be performed in accordance with the preceding sections. Furthermore, the compacted sub-grade shall be installed in accordance with the final slope and shall mirror finish grade to ensure an even depth of material once placement has occurred.

2. In certain instances, and where warranted, a survey of the sub-grade elevations shall occur prior to placement of the material.

1.03 – Quality Assurance

1. Installer Qualifications: Installers of materials specified shall have, at minimum, five (5) successful installations of DuraEdge Products & Materials. Installers shall be in possession of and demonstrate knowledge of the use of laser guided finishing equipment.

2. Material: If quality control samples are specified, they shall be completed at a rate of one per 250 tons of material delivered to the job site. All tests shall be conducted by the lab specified in Section 1.2 (B). All testing will be compared to and be in accordance with the material specifications provided in Section 2.2.

Part 2 – Materials

2.01 – Manufacturer

1. DuraTrax Lava Warning Track is produced in various locations throughout the United States of America by and at the direction of the following manufacturer:

    DuraEdge Products, Inc.

    149 South Broad Street

    Grove City, PA 16127

    Phone: (866) 867-0052 Email: info@duraedge.com

2.02 – Materials

1. Stone Base – Use washed stone base meeting AASHTO #67 washed specifications. Stone material shall have the following characteristics:

#67 Washed (3/4” stone)	
Sieve Designation	Range of % Passing
1”	100
3/4”	90-100
3/8”	20-55
No. 4	0-10
No. 5	0-5
No. 8	0-5

2. DuraTrax Lava Warning Track is an engineered product which is mechanically crushed and screened off-site in a controlled environment. Warning Track shall be clean, crushed red lava rock resulting in a mix that is red in color, having a yield of approximately 0.9 tons per cubic yard and possessing the following particle size analysis:

Sieve Designation	Range of % Passing
3/16”	100
No. 4	90-100
No. 8	55-70
No. 16	40-55
No. 30	30-45
No. 50	20-35
No. 100	15-25
No. 200	5-15

2.03 – Submittals

1. Product Data: For the product specified, submit a 5-pound sample along with a private lab test result indicating the particle size analysis of the material specified. All tests shall be performed in accordance with ASTM F-1632.

    Approved Testing Lab:

    Turf & Soil Diagnostics

    35 King Street

    Trumansburg, NY 14886

    (607) 387-5694

    a) There is no substitute for this testing location.

2.04 – Excess Materials

1. Provide the owners' authorized representative with a 25-ton stockpile of material for future use.

Part 3 – Execution

3.01 – Placement

1. Compact the sub-grade until a minimum of 95 percent compaction is achieved. Sub-grade shall follow proposed grading plan to ensure proper drainage to newly installed drainage line.

2. Place the warning track material over the top of compact sub-grade. The depth of the warning track material should be 3" (inches) at completion after compaction. The finish grade of the warning track material will maintain the slope percentage of sub-grade.

3. When placing both the #67 stone and the lava warning track material, use lifts of two (2) inches and compact with a minimum 1-ton vibratory roller until an optimum compaction between 90 percent and 95 percent is achieved. Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved. Completing this process as described will minimize settling and improve the performance of the product.

4. The warning track and sub-base layers beneath it must have a proper proposed slope. See schematic cross-section in plans.

3.02 – Inspection

1. The finished surface of the warning track shall be smooth and free from any visible dips, humps, bumps, or other blemishes which would hinder the removal of water through positive surface drainage. Where warranted, a finished elevation survey shall be conducted to ensure proper installation.

3.03 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

    a) Warning Track Material

    b) Base Material

-End of Section-

Section III: Fusion Root Zone

Part 1 – General

1.01 – Scope of Work

1. Supply and Install pea gravel to a depth of 4” throughout root zone areas
2. Playing surface edges must be formed before pea gravel is installed
3. Supply and Install Fusion Root Zone to a depth of 10” throughout the root zone areas.
4. Supply and Install starter fertilizer to specified quantities.
    a. Nutrient tests will be utilized to provide proper needs.
    b. Use a typical starter package from SiteOne Landscape for new sand base root zones for bidding purposes
5. Bring root zone to proper grades and elevations
    a. See Grading Plan

Part 2 – Products and Materials

2.01 – Fusion Root Zone

1. Fusion Root Zone mix is an engineered soil product which will be mechanically mixed onsite in a specific type of pug mill mixer by qualified personnel. The performance of the blended product relies on the unique mineral and chemical properties and composition of the components, and the precise composition of the mix. The blend must undergo consistent and rigorous testing by the approved testing lab throughout the mixing process and prior to installing the product. This process ensures thorough mixing of the sand and clay components to exact specifications. This material will comprise the 10” root zone layer and must meet the requirements shown in the table below.

2. Table 1. Particle Size Distribution of Fusion Root Zone & Selection Criteria

Particle Size Analysis

% Gravel	0.7%
% Sand	88.3%
% Silt	8%
% Clay	3%

Confidence Intervals – Engineered Root Zones	Based on 88-12
(No. 10) Gravel (> 2.0 mm)	< 2.0%
(No. 18) Very Coarse Sand (2.0 - 1.0 mm)	2.7 - 8.0%
(No. 35) Coarse Sand (1.0 - 0.5 mm)	24.4 - 33.0%
(No. 60) Medium Sand (0.5 - 0.25 mm)	35.9 - 48.6%
(No. 100) Fine Sand (0.25 - 0.15 mm)	9.4 - 12.8%
(No. 270) Very Fine Sand (0.15 - 0.05 mm)	2.4 - 4.5%
Silt + Clay (< 0.05 mm)	6.4 - 10.6
Total Fines	12.0%
Total < 0.25 mm	23.1%

Physical Properties of the Root Zone

(ASTMF-1815-11)

Bulk Density (g/cm3)	Total Porosity	Air-Filled Porosity at 30	Capillary Porosity at 30	Hydraulic Conductivity
Optimal Root Zone: 1.61		cm	cm	(Inches per Hour)
USGA Specifications:	35 – 55%	15 – 30%	15 – 25%	> 6 in/hr
Engineered Root Zone Confidence Intervals	35.4 – 43.2%	17.9 – 24.3%	15.5 – 20.9%	13.7 – 22.9 in/hr
Optimal Root Zone	41.0%	24.7%	16.9%	23 in/hr

(ASTM F-1647-11, Method A)

Particle Density (g/cm3)	Organic Matter % (LOI)
Optimal Root Zone: 2.65	Optimal Root Zone: 0.23%
	Confidence Intervals: 0.08 – 0.38%

Approved Supplier:

Natural Sand Company

149 South Broad Street

Grover City, PA 16127

Part 3 – Execution

3.01 – Delivery of Root Zone Materials

1. The Sports Field Contractor shall schedule delivery of approved lots of the root zone material. Confirm that delivery will be made in washed and covered trucks, and or rail cars, to eliminate contamination during transportation. Stockpiling of the material on site is to be coordinated with the 4Most Sport Group and Jumbo Shrimp grounds personnel. The material shall be placed in an area free from contamination avoiding such areas as low wet areas and or refuse and debris areas.

2. Each load of root zone delivered to the site may be visually inspected by the Owner and/or 4Most Sport Group for any contamination. If samples appear to be contaminated, or visually different from previously delivered material, a sample shall be sent to the Testing Agent. If the sample fails to meet the specifications it will be rejected by 4Most Sport Group. The rejected material shall be removed off the Field Site and off the owner's property by the Sports Field Contractor or root zone supplier immediately. The Owner shall not bare any cost for its removable. Should the test results meet the specifications and are within the initial test results, the Owner shall bear the cost for that lot.

3.02 – Pea Gravel Placement

1. While performing this work, the Sports Field Contractor shall avoid damage to any existing structures or features of the Baseball Diamond area, or features under construction, such as drainage and irrigation systems. The Sports Field Contractor shall, at his own expense, repair any such damage.

2. The Sports Field Contractor shall spread the pea gravel over the completed sub-base and drain tile to the depth and finish grades indicated on the drawings. Extreme care must be exercised so that there is no damage caused to both the baseball field sub-base, and irrigation systems by any of the equipment used during the hauling and spreading operations. The sub-base soil shall be dry before placement and spreading of the gravel can begin.

3. A four (4) inch layer of the above-specified USGA pea gravel material shall be placed and installed over the entire sub-grade and the Baseball Diamond Sub-Drainage System. The Sports Field Contractor shall begin delivery; placement and grading of the 4" gravel blanket only after all other field systems have been inspected and approved by Owner. After testing for each five hundred (500) ton lot of additional gravel, and with Owner's approval, shall installation proceed. Installation shall follow procedures that protect the sub-grade, trenches, and all the field systems components within and below that layer.

4. Only low-earth-pressure, track-type sand dozers equipped with a laser-guided hydraulic system may be used during distribution. Dozers shall only traffic gravel they are spreading and should push out the gravel from behind the pile onto and toward the field center.

3.03 – Spreading of Root Zone

1. The Sports Field Contractor shall begin delivery, placement, and grading of the root zone; only after all other field systems have been inspected and approved as well as all grade points have been verified by survey team. Only after testing for each five hundred (500) ton lot of additional root zone, and with Owner's approval, shall installation proceed. Installation shall follow procedures that protect the sub-base and all other field systems.

2. The Sports Field Contractor shall place the root zone over the field after all previous removal of sod and organic layer has taken place as referred to in section 3.03. Extreme care must be exercised so there is no damage to irrigation systems; by any of the equipment used during the root zone hauling, placement, blending, and spreading operations.

3. Move the root zone from the stockpile in such a manner that contaminated materials are not tracked onto the field from the equipment tracks or tires. If it is determined by the 4Most Sport Group that contamination is occurring, on-site samples will be taken and tested by the Root Zone Testing Agent at the expense of The Sports Field Contractor. Any contamination or over-compacted conditions will require immediate action by The Sports Field Contractor, to satisfy the intent of these specifications, and with no additional cost to the Owner.

4. Delivery trucks shall enter the field area from the designed entrance point. Unless otherwise approved by 4Most Sport Group, the root zone shall be dumped closest to the entrance first and then pushed from behind towards the further most point of the field. Extreme caution must be used throughout the entire process to ensure no damage is done to any of the existing system components.

5. ONLY low earth pressure, track-type sand dozers equipped with a laser-guided hydraulic system may be used during distribution. Dozers shall only traffic root zone they are spreading, Dozers should push out the root zone from behind the pile onto sub-base, and toward the field center.

6. Care shall be taken not to disturb or contact the sub-base with the dozer blades or tracks. All equipment trafficking over the sub-base shall insure there is a minimum of 3" depth of root zone between the root zone and the contact point of the dozer tracks. The root zone may be "pushed" out and onto the surface at the three (3) inch depth in one operation.

7. After placement and distribution, grading should occur in a 4" lifts to remove possibility of settling throughout the field.

8. After thorough placement of the root zone, a final fine/finish grading of the surface shall occur. For the fine grading, use of a turf-type tractor with high flotation tires and a laser-guided hydraulic system.

9. Areas where the root zone material is consistently hauled into the field repeatedly, and that cause any compacted root zone, may require roto-tilling to a depth of five (5) inches minimum.

10. The Sports Field Contractor shall operate the irrigation system until water is shown to be draining through the subdrain collectors. Fill all low spots to finish grade with root zone and water in. This process shall be repeated as required to bring the root zone to finish grade specifications and tolerance forming a smooth firm surface. Finish grades and material depths shall be verified utilizing the laser operated survey instruments at a grid of 25 feet field compaction shall not exceed bulk density as performed in laboratory testing.

3.04 – Finish Grading

1. The required finish grading work shall be performed by The Sports Field Contractor which will produce the grading requirements shown on the grading plan. Also, there shall be no damage to either the sub-base, sub drainage or irrigation systems during the fine grading operations.

2. Ensure that irrigation heads are left with the proper depth of minus 1/4 of an inch to flush with surface after sodding.

3. The Sports Field Contractor shall be responsible for removing minor residual debris from the site prior to the beginning of shaping a finished grade that provides positive drainage and is in conformance with the finish grades shown on grading plan.

4. The Sports Field Contractor shall provide all staking and layout for grade control so that the finished design plan grades will meet specifications.

5. Sand shall be spread to an even rough grade, using an approved machine with tracks to ensure a consistent distribution of sand. Use of a drag mat, after spreading of sand, is acceptable for ensuring a smooth surface prior to tilling. Use of front-end loaders, motor-graders, skid steers, etc. will not be allowed.

6. The final grade shall be established using a fully-automated hydraulically actuated laser guided equipment. Acceptable grading tolerances shall not be exceeded. Laser Equipment shall consist of a sports field specific unit equipped with flotation type tire and/or tracks pulling and/or pushing a minimum of a six (6) foot laser guided scraper that is fully automated, hydraulically actuated and capable of grading to the desired elevations and tolerances.

7. The Sports Field Contractor shall have 3rd party verify grades established during the final finish grade preparation prior to the beginning of sod installation as being true finish contours shown and maintain such areas until the effective date to begin sodding operations. It shall be the responsibility of The Sports Field Contractor to maintain a suitable grade for sod, after 4Most Sport Group has inspected and approved the final finish grade. This will include acceptance based on the conformance survey.

8. The field shall be graded to match the plans of 4Most Sport Group that was approved by the Owner. Laser grade to leave a smooth, consistent surface with a level transition, after installation of sod, from the newly sodded area to all established turf outside of the renovated areas. Laser grading should be within +/- 1/4 of an inch within any 20’ grid with no variances greater than 1/4 of an inch throughout the entire renovated area.

9. After completion of laser grading, irrigate surface with coordination and approval from the Stadium Sports Field Manager, to prepare for sodding.

10. Contractor will supply and apply pre-plant material (fertilizers, etc.) along with the finish grading operations.

11. The acceptability of finish grade areas shall be solely determined by 4Most Sport Group and prior to the installation of sod.

3.02 – Inspection

1. The finished surface of root zone shall be smooth and free from any visible dips, humps, bumps, or other blemishes which would hinder the removal of water through positive surface drainage. Where warranted, a finished elevation survey shall be conducted to ensure proper installation.

3.03 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

    a) Test Reports

    b) Sand analysis

-End of Section-

Section IV: Sod

Part 1 – General

1.01 – Scope of Work

1. Supply 92,000 SF of Platinum Paspalum sod and install ~89,500 SF.

2. Remove any overlaid edges to properly conform to proposed field layout for widths of warning track, infield cutouts, base paths, mound/homeplate circumference.

3. Roll surface upon completion of sod installation

4. Install sand in seams to ensure proper grow in and top-dress new sod with a minimum of 50 Tons of approved topdressing sand.

Part 2 – Products and Materials

2.01 – Sod

1. The owner's preference is Platinum Paspalum from Pike Creek Sod Farm.

2. The sod shall be a nursery-grown, sand-based Paspalum sod, purchased by the contractor and delivered to the field for unloading by the installer.

3. It must be a machine-cut sod, at a uniform thickness to achieve finish grade of Infield skin, Warning Track and all irrigation heads.

4. The sod farms sand growing medium must be a soil that is compatible with the installed root zone of and should be a free draining material that is tested by the contractor's testing lab in particle and soil characteristics. Confirmation of compatibility for both the sod growing medium and the existing root zone, will be required. Additionally, all test results are to be made available to the owner for review and acceptance prior to securing the sod. ASTM-2396(19) criteria for Sod-Soil to root zone compatibility will be followed.

5. Sod must be machine-cut and taken up in commercial size rolls and being a minimum of 42 inches wide by 100 ft. long. The sod is to be a standard cut 1/2" thick or otherwise specified by 4Most Sport Group. Due to the timing of installation, thicker cut may be necessary. This will be confirmed by 4Most Sport Group and communicated to the contractor prior to finish grade of the root zone.

6. The sod shall be sufficiently thick to secure a dense stand of live grass that will maintain suitable conditions for installation. Sod must be live, fresh, and uninjured at the time of planting, and should consist of a sufficient and consistent thickness to withstand all necessary handling. If netting is used at harvest, it must be removed during the installation process.

7. All sod rolls are to be free of noxious weeds and other objectionable plant material.

8. Harvesting procedures, and the equipment used for harvesting the sod, must produce a uniform cut. The sod should have a consistent thickness of soil across the entire width and length of each section. Edges must be cut at 90° angles requiring the use of sharp blades for the entire harvesting process. Sod should be protected against drying and any damage while staged prior to sod installation.

9. Sod may be transported by open truck, only if harvesting begins after 7:00 P.M. local time at the sod farm and delivered to job site before 9:00 A.M. local time the following day. Sod must be adequately covered using burlap or permeable fabric.

10. If delivery of the sod cannot meet the requirements as stated in #3 above, the sod shall be delivered in refrigerated trucks. The temperature range should be between 50-55 degrees at the start of loading process at the sod farm and maintained until sod is unloaded at site. Installer shall have a pallet jack and forklift available on site for unloading.

11. Sod must be installed within 24 hours from harvest, or it will be rejected and must be removed from site. Any of the delivered sod, which is damaged through any action or inaction of the contractor or subcontract, must be replaced at the contractor's expense.

12. Contractor/Installer will be responsible for the coordination and scheduling of the harvesting and delivery of the big roll sod.

13. Acceptance of the delivered sod will be at the sole discretion of 4Most Sport Group.

Part 3 – Execution

3.01 – Sod Installation

1. The entire root zone surface shall be approved by 4Most Sport Group prior to installation of the sod. The areas to receive sod shall be firm, and the irrigation system operational. Lay sod within 24 hours from time of harvest. Sod not placed within 24 hours, will be rejected by the owner with no exceptions. The cost of replacing the rejected sod will be paid for by the contractor/installer.

2. Sod shall be delivered and laid with a tolerance at no less than 3/8" soil and no more than 5/8" soil.

3. During the installation of the sod, the contractor/installer shall maintain the finish grade by floating, hand ranking, dragging, or whatever approved operations are necessary and required.

4. Absolutely no forklift or heavy equipment will be allowed on finish graded root zone. Machines, properly sized in weight and equipped with high flotation turf tread tires, or rubber tracks, shall be used to install sod. Equipment shall be operated at speeds so as not to disturb the previously established finished grade. All areas disturbed by the contractor/installer shall be hand raked back to the project finish grade, prior to installation of the sod on that area or areas.

5. 4Most Sport Group will be on site to observe the installation of the sod. All defects, deemed by owner, shall be repaired, or replaced by the contractor/installer immediately. 4Most Sport Group has sole judgment and shall determine any rejection, replacement, and repair of the daily installed sod.

6. Working with Owner/Owner's rep, and using the existing irrigation system, the sod shall be laid on a moist planting bed to ensure the new roots have exposure to adequate water for optimum growth. The rolls shall be fitted together as tightly as possible and all cracks between the sod roll seams must be filled, by hand, with the approved sand. Tamp or roll the sod to remove air pockets and ensure close contact between the sod and root zone material.

7. 4Most Sport Group will discuss and coordinate with the contractor/installer the starting point and installation layout prior to the beginning of the sodding process. Consideration will be given to the zoning of the irrigation system. However, the process shall include the first roll laid in a straight line with subsequent rolls placed parallel to and tightly against each other. The roll end lateral joints shall be staggered to promote more uniform growth and strength.

8. Care should be exercised to ensure that the sod is not stretched or overlapped, and all seams are tight to prevent holes. All netting shall be removed from the sod roll as it is being installed. Absolutely no netting shall remain under and between the root zone and the sod soil mat.

9. Any patches used for repair shall be no less than 36" in length and the full roll/strip width. They shall be cleanly cut in straight edges and installed tight. The installation personnel shall hand tamp or roll the sod to ensure contact with the root zone material.

10. Fine tune all edges from turf to dirt on all skin surfaces to achieve smooth transition

11. No equipment, or vehicles, will be allowed to travel over any sodded area after installation, unless approved by 4Most Sport Group.

12. The Owner, and/or 4Most Sport Group, shall have the right, at any stage of the sod installation, to reject all work and materials, which in their opinion, does not meet the requirements of the plans and specifications. Rejected materials must be immediately removed from the site and replaced with acceptable new sod material. The replacement of the rejected sod, and all associated costs, shall be at no expense to the owner and/or 4Most Sport Group.

13. Irrigation of the sod will begin immediately after installation of each section and coordinated by the 4Most Sport Group using the existing irrigation system. Manual watering, using a handheld hose may be required and will be communicated by 4Most Sport Group.

14. Rolling shall happen within two (2) days of the sod being laid in the infield and foul territory. A 1-1.5-ton roller should be used without vibration. Care should be taken when turning and travel through transition areas. 4Most Sport Group will provide direction and clarity for optimum time and conditions to begin rolling.

15. Within 2 days of rolling the field, apply 50 tons of topdressing sand evenly across all newly sodded areas.

16. Contractor shall have a representative on site for up to 7 days post sod installation to ensure proper watering and root development

3.11 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for Sod variety

-End of Section-

Section V: Irrigation

Part 1 – General

1.01 – Scope of Work

1. Install new Irrigation system as design

Part 2 – Products and Materials

2.01 – Products

1. Irrigation fittings on Mainline will be SCH 80 Slip x Slip and/or Threaded fittings where needed required to be SCH 80. For Slip applications, Type P PVC Glue is required.

2. Quick Coupler Valve enclosures are to be a 10” round box with Synthetic Turf installed and adhered to lid.

3. Quick Couplers are to be 1” & 1.5”, where noted, in size and Hunter by brand.

4. Irrigation heads are to be Hunter by brand and sized properly as noted on the irrigation design plan.

Part 3 – Execution

3.01 – Installation

1. Irrigation heads shall be installed when the root zone is 95% complete. If dry conditions persist the irrigation heads may be installed at an early stage of the project to hydrate the root zone during the grading process. The irrigation heads shall be installed no more than 0.5” above finish grade of root zone and no less than 0.25” below finish grade.

2. Lateral lines shall be at a minimum depth of twelve (12) inches below Finish Grade and backfilled with sand. Trench must be free and clear of any rocks larger than 0.75” and there shall be a minimum of 2” of bedding sand that pipe rests on. Depth and bedding sand shall be verified before backfilling trench is complete.

3. All lateral lines shall be inspected by Owner or Representative and free of cracks and defects before backfilling of trenches.

4. All head spacing will be visually inspected and approved by Owner or Representative, before backfilling of trenches.

5. Location and Arrangement: Drawings indicate location and arrangement of piping systems. Install piping as indicated unless deviations are approved on coordination drawings.

6. Install piping at minimum uniform slope of 0.5 percent down toward drain valves. Install piping free of sags and bends. Install fittings for changes in direction and branch connections.

7. Install flanges adjacent to valves and to final connections to other components with NPS 2-1/2 (DN 65) or larger pipe connection.

8. Install underground thermoplastic piping according to ASTM F 690.

9. Install expansion loops in control valve boxes for plastic piping.

10. Lay piping on solid sub-base, uniformly sloped without humps or depressions.

11. Only install sprinklers after hydrostatic test is completed.

3.02 – Field Quality Assurance

1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.

2. Operational Test: After electrical circuitry has been energized, operate controllers and automatic control valves to confirm proper system operation.

3. Test and adjust controls and safety mechanisms. Replace damaged and malfunctioning controls and equipment.

4. Any irrigation product will be considered defective if it does not pass tests and inspections.

3.03 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

    a. Pipe

    b. Heads

    c. Fittings

    d. Glue

    e. Wire

-End of Section-

Section VI: Mound & Boxes (Catcher's and Batters')

Part 1 – General

1.01 – Scope of Work

1. Supply and Install up to 18 Pallets of BlackStick Mound Clay for the construction of game mound, batter's boxes and bullpens as indicated on the drawings.
2. Utilizing DuraEdge Professional Infield Mix, construct bullpen mounds to shape. Install BlackStick Mound Clay to typical landing a push-off areas on the front slope of mound continuing up to 6' in front of rubber.

Part 2 – Materials

2.01 – Mound and Batter's Box Surface

1. DuraPitch BlackStick Mound Clay is produced by the following manufacturer:

   DuraEdge Products, Inc.

   149 South Broad Street, Grove City, PA 16127

   Phone: (866) 867-0052 Fax: (724) 530-6696

   Email: info@duraedge.com

   Website: www.duraedge.com

2. DuraPitch BlackStick Mound Clay is an engineered soil product which is mechanically mixed offsite in a controlled environment using a pugmill-type mixer. This process ensures thorough mixing of the sand and clay components to exact specifications.

3. Product Specification:

   a. Pitching mound and batter's box clay is clean, dry clay mixed with washed mason- type sand resulting in a weed-free mix that is reddish brown in color having a yield of 1.75 tons per cubic yard and possessing the following particle size analysis:

   b. Total sand content shall be 15 percent.

   c. The overall clay content shall be greater than 75 percent.

   d. The ratio of silt divided by clay, otherwise known as the SCR, shall be 0.75 – 1.25.

2.03 – Excess Materials

1. Provide the owners' authorized representative with a 1-ton pallet of material for future use.

Part 3 – Execution

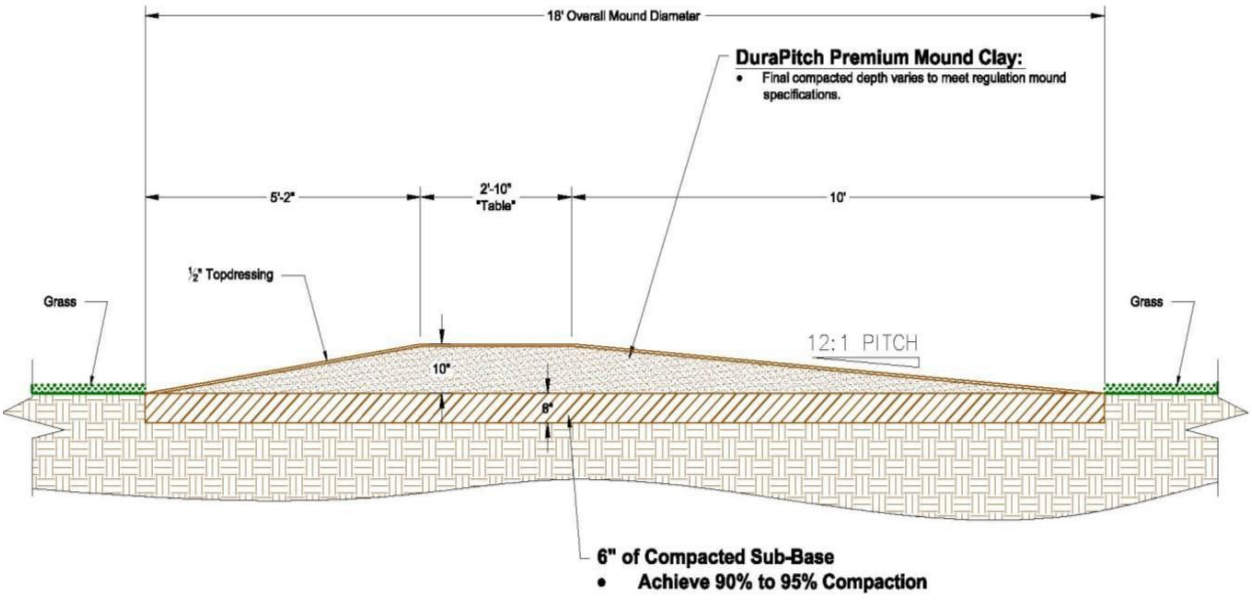
3.01 – Placement

1. Place the material in lifts of 2 inches and compact with 1-ton vibratory roller until an optimum compaction between 90 percent and 95 percent is achieved. Scarify the surface to facilitate bonding of the next lift and repeat until finish grade elevation is achieved. Completing this process as described will minimize settling and improve the performance of the product. See diagram in 3.1.C.

2. Depth of the material shall vary when finished and compacted. Please see Diagram in 3.1.C.

3. Typical cross-section of pitching mound:

Typical Professional Pitching Mound Cross-Section
(looking at the side of the mound)



3.02 – Watering

1. In most cases, the material is delivered with optimum moisture and adding water is not necessary. If unable to achieve optimum compaction, a light application of water may be needed.

3.03 – Inspection

1. The finished surface of the infield shall be smooth and free from any visible dips, humps, bumps, or other blemishes which would hinder the removal of water through positive surface drainage. In some instances, and where warranted, a finished elevation survey shall be conducted to ensure proper installation.

3.04 – Topdressing and Conditioner

1. Following successful inspection, topdressing shall be applied to the surface for optimum product performance. This topdressing is either expanded shale or calcined clay product and shall be added at a rate of 0.5 pounds per square foot for maintenance, or one (1) pound per square foot for new construction.

2. Product is either ProSlide Expanded Shale Topdressing, a ProSlide Calcined Clay Conditioner, or a combination of both. Both are available through DuraEdge Products, Inc., Grove City, PA, (866) 867-0052.

3.05 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

    a. All Topdressing materials

    b. All Clay product materials

-End of Section-

Section VII: Sub-Surface Mechanical Ventilation System

Part 1 – General

1.01 – Scope of Work

1. Furnish all labor, material, supervision, and equipment necessary to install Sub-Surface Mechanical Ventilation System indicated on the drawings and as specified herein. Also, any incidental work not shown or specified that can reasonably be determined to be part of the work and necessary to provide a complete and functional Sub-Surface Mechanical Ventilation System.

Part 2 – Materials

2.01 – Sub-Drainage Materials

1. All collector pipes will be corrugated pipe sized according to plans and specifications.
2. No deviation from plans and specifications will be permitted.
3. All specialized pipes/drains will be provided and/or approved by manufacturer
4. No deviation from plans and specifications will be permitted
5. Collectors drain fittings are to be NyoPLast fittings with proper sizing

2.02 – Mechanical System

1. Vacuum and Ventilation components will be provided and/or approved by manufacturer.
2. No deviation from the mechanical system will be permitted.
3. The mechanical system will have the ability to warm the sub surface utilizing Thermal Dynamics.
4. All power and installation specifications will be provided by Sub-Surface Mechanical Ventilation System Manufacturer and no deviation from set plans will be permitted.

Part 3 – Execution

3.01 – Placement

1. All installation and placement of Sub-Surface Mechanical Ventilation System, will be under the direction of the manufacturer and no deviation of installation from the approved system will be permitted.

3.02 – Quality Assurance

1. Upon final completion of the system, the work will be inspected and approved by the manufacturer.
2. Within each step of the installation manufacturer will sign off and approve the installation of each category, i.e. collector drains, connections, drains and connection points.
3. No further work will be approved until the manufacturer approves of previous tasks performed.
4. All task evaluations will be scheduled directly with manufacturer 7 days prior to the evaluation(s).

3.03 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:
    a. All drainage pipe material
    b. 1 – gallon proposed Drainage Fill for bedding pipe and pipe cover up
    c. Geotextile filter fabric (12” x 12”)

-End of Section-

Section VIII: Sub-Drainage System (Bid Alternate)

Part 1 – General

1.01 – Scope of Work

1. Furnish all labor, material, supervision, and equipment necessary to install sub drainage as indicated on the drawings and as specified herein. Also, any incidental work not shown or specified that can reasonably be determined to be part of the work and necessary to provide a complete and functional drainage system.

2. Sub Drainage internal drains include but are not limited to:

    a. Installing flat panel pipe of sub drainage system.

    b. Installing collector drain pipes.

    c. Geotextile filter fabric trench lining and separation between stone/gravel and soil.

    d. All piping, fittings, collectors, connections etc.

    e. Drainage stone aggregate up to top of drainage trench.

    f. USGA Pea Gravel (blanket) over sub-grade and drainage stone filled trenches.

    g. Installation of metallic utility marking tape on top of USGA pea gravel Blanket layer over all pipe locations.

3. Connection to Storm Water Outlet/Manhole.

4. The work covered by this specification also includes all applicable federal, state, and local taxes at the time of construction.

5. No deviation from these specifications, the accompanying drawings or the contract agreement is authorized or shall be made without prior written authorization signed by the Owner or his duly appointed representative.

Part 2 – Products/Materials

2.01 – General

1. All products shall be as specified on the plans and herein these specifications.

2. Provide only new materials without flaws or defects and of the highest quality of their specified class and kind.

3. Delivery, Storage and Handling: Store pipe neatly and orderly, stacked and blocked to prevent damage. Cracked, checked, spalled, or otherwise damaged pipe shall be removed from site.

4. Use of chain slings shall not be permitted for pipe handling.

5. All piping, fittings and related materials shall always be carefully handled.

6. All pipelines, fittings and drainage structures shall be kept clean and closed during construction.

2.02 – Materials

1. USGA Pea Gravel: USGA approved pea gravel, washed, rounded material per the following:

   a. Gravel drainage material shall consist of washed crushed stone. Gravel components shall not exceed 12% loss of materials as determined b/a Sulfate Soundness Test (ASTM C38) and the loss shall not exceed 40 as determined by the L.A. Abrasion Test (ASTM Cl31). The stone material shall be used for the trench fill around and above the lateral drainpipes.

2. The Owner's Testing Laboratory shall perform a Sieve Analysis Test on the gravel drainage material.

3. Gravel drainage material will be evaluated using the 1993 USGA Testing Protocol as a guideline.

4. Upon testing of the gravel drainage materials, the test results will establish the specifications for approval or rejection of all subsequent submittals during construction of the Playing Field Sub-Drainage System.

5. A one (1) gallon sample of each 400-ton lot of gravel shall be tested. Upon approval of each lot of materials, the gravel shall be released for placement on the Playing Field site and allowed to be incorporated into the sub-drainage system construction.

6. The Owner shall bear costs for the testing of the gravel drainage material. All costs for subsequent testing required to gain approval of the rejected materials shall be borne by The Sports Field Contractor.

7. This material must physically bridge with the root zone material used for the project and meet permeability requirements to allow movement of water through the fill. See at bottom of chart below.

Aggregate Size U.S. Standard Sieve Mesh (mm)	Allowable Ranges % Passing Individual Sieve
1/2 inch (12.5 mm)	100%
10 mesh (2.0 mm)	<10%
18 mesh (1.0 mm)	<5%

Gravel aggregate shall be clean and dust free. The Parent material shall be stable chemically and physically. Aggregate stability testing shall be determined with sulfate soundness test, ASTM C-88, and/or an LA Abrasion Test ASTM C-131. Acceptance based on the following criteria:	
Test Method	Criteria
Sulfate Soundness	<12% Loss
LA Abrasion	<40%
Gravel size criteria shall meet the following criteria for bridging and permeability with the root zone and/or sand submittal: A. Bridging - D15 Drainage Gravel < 8 x D85 Root Zone. B. Permeability - D15 Drainage Gravel > 5 x D15 Sand Root Zone. C. Uniformity Coefficient - D90 (gravel) / D15 (gravel) is less than or equal to 3.0.	

Drainage Stone: Crushed limestone meeting the below guidelines for crushed stone gradation, washed to remove all dust and fines. Course gravel shown below may be used in collector trenches with round openings and in lateral drain trenches to bed pipe. Material must bridge with USGA pea gravel used for the 4” drainage layer that will rest on top of this course gravel.

Note: The course gravel may be used in collector trenches with round openings and in lateral drain trenches to bed pipe. Material must bridge with USGA pea gravel used for the 4” drainage layer that will rest on top of the course gravel. The following criteria shall be used for the interface between the coarse gravel and the gravel layer on top of laterals or large trenches and pipe.	
Size mm (US Sieve)	Allowable Cumulative % Passing
19.0 mm (3/4 inch)	90 - 100
12.5 mm (1/2 inch)	40 - 60
9.5 mm (3/8 inch)	< 30
6.3 mm (1/4 inch)	< 10
4.0 mm (No. 5)	< 5

Gravel aggregate shall be clean and dust free. The parent material shall be stable, chemically and physically. Aggregate stability testing shall be determined with sulfate soundness test, ASTM C-88 and/or an LA Abrasion Test ASTM C-131. Acceptance based on the following criteria:

Test Method	Criteria
Sulfate Soundness	< 12% loss
LA Abrasion	< 40%
Bridging	D15 Coarse Gravel < 8 x D85 Gravel Blanket
Permeability	D15 Coarse Gravel > 5 x D15 Gravel Blanket

2.03 – Lateral Drain Lines, Collector Lines

1. Lateral drain lines and collector lines will be both perforated and non-perforated (as shown on the Storm Drainage Plans and Details) corrugated polyethylene pipe ASTM F405. The Contractor will also provide the drainage pipe complete with bends, reducers, adapters, couplings collars and joint materials.

2. Sub-Drainage System will comply with pipe sizes indicated on the site sub-drainage Plan. No substitutions or smaller pipes will be used. Damaged and defective pipes shall be removed from the site immediately.

3. Acceptable Material: Subject to compliance with requirements, provide products from one of the following or approved equal:

    a. Advanced Drainage System N-12 Pipe (614) 457-3051 (www.ads-pipe.com)

    c. Substitutions: As submitted for review and approval by 4Most Sport Group by addendum during the bidding process.

4. Pipe shall comply with the following requirements:

    a. Lateral Corrugated Flat Pipe will be a high-density polyethylene pipe, dual wall with an integrally formed smooth waterway. Nominal sizes shall have a full circular cross-section, with an outer corrugated pipe wall and an essentially smooth inner wall (waterway).

2.04 – Accessories

1. Geotextile filter fabric will be a non-woven filter fabric consisting of long- chain synthetic polymers composed of at least 85% by weight polyolefin, polyesters, or polyamides and exhibiting the following physical properties:

    a. Grab Test: 90 lbs. minimum ASTM D4632

    b. Puncture Test: 50 lbs. minimum ASTM D4833

c. Burst Test: 215 PSI minimum ASTM 53786

d. Trapezoid Tear Strength: 40 lbs. maximum ASTM D4533

e. Permeability: 0.1 CM/SCC minimum ASTM D4491

f. Apparent Opening Size: # 50 Sieve Size ASTM D4751

g. Utility Marking Tape: Magnetic detectable conduction, clear plastic covering, imprinted with “Storm Sewer Service” in large letters.

Part 3 – Execution

3.01 – Examination

1. The sub-base preparation shall be complete, and approved by Owner, before commencement of work under this section.

2. The Sports Field Contractor shall verify the locations of other utilities that fall within the work area.

3.02 – Delivery of Gravel

1. The Sports Field Contractor shall schedule delivery of approved lots of both the Fill and USGA pea gravel. Confirm that delivery will be made in washed and covered trucks to eliminate contamination during transportation. Stockpiling of the material on site is to be coordinated with Owner and Construction Manager.

2. Fill and USGA pea gravel: Each load of gravel delivered to the site shall be visually inspected by the Owner for any contamination. If any of the gravel appears to be contaminated or visually different from previously delivered material, a sample shall be sent to the testing agent. If the sample fails to meet the specification requirement, the Owner will reject the balance of that load. The rejected material shall be removed off the project site and by the Sports Field Contractor/Gravel Supplier immediately and disposed of at no cost to the Owner. Owner will pay for any tests that come back as approved, with the Sports Field Contractor paying the cost for any failed test.

3.03 – Excavation

1. The Sports Field Contractor will excavate the trench to the required elevations as noted in the plans for the Drainage System Pipe and provide a clear horizontal distance between the drainpipe and the trench wall on both sides. The Sports Field Contractor will use Spectra-Physics Laser Instruments (or equal) to set and maintain the flow slope and drainage pipe inverts.

2. All activities and work shall be conducted on a dry sub-base. Use great care so no tracks, dents, ruts, or other damage occurs to the sub-base. Any damage to the sub-base that is determined by the Owner to be detrimental to the overall success of the sub-base and its components, will have to be corrected immediately and to the satisfaction of the Owner and at the expense of the Sports Field Contractor.

3. Only perform trenching, drainage pipe installation, and backfilling operations that can be completed in one day. Any exposed trenches that collapse due to rain or other occurrences shall be widened and filled as specified or refilled with sub-grade materials, compacted, and retrenched.

4. Trench width shall not exceed dimensions shown on the plans. Sports Field Contractor shall use great care so as not to disturb the finish grades of the field. Sports Field Contractor shall make provisions to avoid rutting of the field surface and equipment used to install sub-drainage system shall have large flotation tires. Under no circumstances will loaded rubber-tire vehicles, or equipment with a loading rate more than 5-lbs/in to be allowed on the sub-grade prior to, or during excavation, placement of pipelines, or gravel placement. Do not leave any wheel ruts.

5. Compact the bottoms of all trenches to the density described in Backfilling and Compaction included below. Owner has the option of observing the general trenching and compaction operation.

6. Two (2) inches of drainage stone will be laid on top of Geotextile Fabric in the bottom of the trench prior to install of drainpipe. See plans for details.

7. The Sports Field Contractor shall line the Excavated Drainage Trenches with the Geotextile Fabric as shown on the Site Details “Field Cross Section” prior to installing the polyethylene drainpipe and drainage stone.

8. Full bearing will be provided for each pipe section throughout its length with the drainage stone to true grades, alignment and a continuous (minimum 1.00%) slope in the direction of the flow. Lay pipe to slope gradients as noted on drawings, with the maximum variation from true slope of 1/8 inch in 25 feet with ¼ inch maximum variation along full pipe run.

9. Provide recesses in excavation bottom to receive bells for drainpipe having bell and spigot ends. Lay pipe with bells facing up slope, with spigot end entered fully into the adjacent bell. Seal joints in accordance with codes.

10. All lateral pipes shall be joined by snap coupling with soil tight gaskets on both ends. All joints to be sealed with black vinyl tape for minimized air leakage from joints. End caps to be secured with two (2) stainless steel screws and sealed with black vinyl tape for minimized air leakage.

11. The Sports Field Contractor will comply with pipe sizes indicated on the Proposed Storm Drain Plan. Substitution of smaller pipes will not be permitted (larger sizes may be used subject to acceptance of the Owner’s Representative). The Sports Field Contractor will remove damaged and/or defective pipe from the Project site immediately.

12. The perforated pipe shall be laid in accordance with the pipe manufacturer’s recommendations and as per the slope gradients and invert elevations as shown on the Drainage Plan. The pipe collars and couplings will be installed as required.

13. The sub-drainage pipes must be tested and checked before placing the drainage stone to assure free flow. Any obstructions will be removed, and damaged components will be replaced and re-tested.

14. The filter fabric is to be temporarily wrapped around the drainage stone and any open pipe ends to protect the gravel drainage material and pipe from sediment whenever a rain event is expected, or the trench is completed but not yet covered with the USGA pea gravel. The fabric is to be opened back up for the installation of the sub-grade filter fabric cover and placement of the USGA pea gravel to have direct contact between the USGA pea gravel and the drainage stone.

15. The drainage stone will be placed after testing the drainage lines. The Sports Field Contractor will place the gravel around the drainage pipe located in the trench areas until the drainage stone is level with the surrounding sub-grade. After filling the trenches, USGA pea gravel material will be placed thus installing the "Drainage Blanket" described below.

3.04 – Backfilling and Compaction

1. Backfilling Lateral Trenches: Fill lateral trenches with drainage stone in a maximum of a 4-inch lift, consolidating each lift. Do not displace or damage drainage pipe with compacting. The intent is to have a compacted and consolidated trench that will not subside prior to the installation of the root zone mix. Exercise care to prevent disturbance to the sub-grade elevations our compaction.

2. Backfilling Collector Trenches: Fill collector trenches with drainage stone material in a maximum of 6-inch lifts, consolidating each lift. Do not displace or damage drainage pipe when compacting. The intent is to have a compacted, and consolidated, trench that will not subside prior to installation of the root zone mix.

3. Material shall be tamped, vibrated or any other approved process necessary to provide a stable compacted installation.

4. After all collectors and drain lines are installed and completed, the Sports Field Contractor shall repair any ruts, tracks, and undulations on sub-base prior to placement and spreading of root zone.

3.05 – USGA Pea Gravel Layer (Drainage Blanket)

1. While performing this work, the Sports Field Contractor shall avoid damage to any existing structures or features of the project site, or features under construction, such as drainage and irrigation systems. The Sports Field Contractor Shall, at his own expense, repair any such damage.

2. Any filter fabric previously folded over internal drain trenches, should be unfolded, and allowed to rest on the sub-grade as per the construction details. The fabric shall extend twelve (12) inches beyond each edge of the trench. Pin as necessary to hold fabric in place during spreading operations.

3. The Sports Field Contractor will be responsible for removing minor residual debris from the site prior to the beginning of the placement of the Drainage Gravel Layer.

4. A four (4) inch layer of the above-specified USGA pea gravel material shall be placed and installed over the entire sub-grade. The Sports Field Contractor shall begin delivery; placement and grading of the 4-inch gravel blanket only after all other field systems have been inspected and approved by Owner. After testing, and with

Owner's approval for each 400-ton lot of additional gravel, installation shall follow procedures that protect the sub-grade, trenches, and all the field systems components within and below that layer.

5. Drainage fill and pea gravel shall be placed at the edge of the field (or another pre-approved location by Owner) and pushed from behind to the center of the field with a low ground pressure Sand Dozer. Under no circumstances will rubber-tired loaded vehicles, or equipment with a loading rate more than 5-lbs/in, be allowed on the sub-grade during the placement and spreading of the USGA pea gravel.

6. The Sports Field Contractor shall spread the pea gravel over the completed sub-base and drain tile to the depth and finish grades indicated on the drawings. Extreme care must be exercised so that there is no damage caused to both the drainage, sub-base, and irrigation systems by any of the equipment used during the hauling and spreading operations. The sub-base soil shall be dry before placement and spreading of the gravel can begin.

7. Delivery trucks shall enter the field area from the designed entrance point. Unless otherwise approved by Owner, the gravel shall be dumped closest to the entrance first and then pushed from behind towards the further most point of the field. Extreme caution must be used throughout the entire process to ensure no damage is done to any of the existing system components.

8. Move the gravel from the stockpile in such a manner that contaminated materials are not tracked onto the field from the equipment tracks or tires. If it is determined by the Owner that contamination is occurring, on-site samples will be taken and tested by the Testing Agent at the expense of The Sports Field Contractor. Any contamination or over-compacted conditions will require immediate action by The Sports Field Contractor, to satisfy the intent of these specifications, and with no additional cost to the Owner.

9. Only low earth pressure, track-type sand dozers equipped with a laser-guided hydraulic system may be used during distribution. Dozers shall only traffic gravel they are spreading and should push out the gravel from behind the pile onto and toward the field center.

10. Care shall be taken not to disturb or contact the sub-base or trenches with the dozer blades or tracks. All equipment trafficking over the drainage blanket shall ensure there is a minimum of a four (4) inch depth between the sub-base and the contact point of the dozer tracks.

11. After spreading of the gravel is complete, firm the surface with a 5-ton roller. Static vibration shall not be a part of the process.

12. The gravel shall be left firm, but not over-compacted as to protect the porosity and drainage capabilities of the pea gravel profile.

13. The pea gravel must be installed to a consistent depth of four (4) inches throughout the entire site.

14. The USGA pea gravel Layer, after being spread uniformly throughout the surface, shall receive a final laser finished grade. This process may be accomplished by using laser equipment consisting of an agricultural-type tractor, equipped with flotation type tires, and pulling a five to seven-foot laser guided scraper that is fully automated, hydraulically actuated and capable of grading to within 1/4" of desired elevations.

15. The sub-grade must remain smooth and firm during all construction activities. Prevent contamination or mixing of drainage fill and drainage stone and any adjacent sub-grade soil.

16. 4Most Sport Group shall approve the completed installation of the USGA pea gravel Layer before the Sports Field Contractor may proceed with the installation of the root zone Mix.

3.06 – Field Quality Control

1. Perform testing and observation of trench bottoms to confirm solid substrate prior to installation of filter fabric. Trench bottoms are to be probed every 150 feet to verify stiffness. If adequate stiffness is not achieved, observed, and verified, the Contractor must perform remedial work to remove and replace soft material or compact the installed material into compliance.

2. Observe installation and verify overlap of filter fabric for trenches and sub-grade cover.

3. Observe installation of sub drainage pipe and verify joint connections and consistent slope prior to the piping being covered.

4. Observe and verify adequate densification work has been done to achieve the required density of the drainage stone backfill and the USGA pea gravel layer. Also verify that these materials have not been contaminated with other soil materials.

5. Verify these materials have not been contaminated with other soil materials.

3.07 – Cleaning

1. Remove from the project site and legally dispose of unused materials, waste materials, including unsuitable excavated materials, trash and debris generated during the sub-drainage system installation. Maintain disposal route clear, clean, and free of debris.

3.08 – Acceptance

1. Test and demonstrate to the Owner the satisfactory operation of the Drainage System and that it is free of any defects.

2. Complete Drainage System record drawings. The record drawings shall be delivered to the Owner before final acceptance of the work.

3. Completion of the work shall mean full and exact compliance and conformity with the provisions expressed in the drawings and specifications.

4. Sub-Drainage System must be approved by the Owner prior to the commencement of the installation of the root zone.

3.09 – Quality Assurance

1. General: Unless otherwise specified herein, requirements for supervision, inspection, samples, testing, and other similar requirements shall be at the responsibility of The Sports Field Contractor. Approvals, except for field tests, shall be obtained before delivery of any material or any equipment to the project site.

2. Contractor Qualifications: The "Sports Field Contractor" shall complete all work associated with this section and be the entity submitted by the Construction Manager with their initial bid package meeting the following requirements:

3. The Sports Field Contractor must have been actively engaged in the construction of sand-based fields and renovations for a minimum of five (5) consecutive years, and under the current company name.

4. The Sports Field Contractor must submit proof of five (5) or more regulation NCAA Division I, NFL, MLS, MLB, or MiLB sports field installations of sand-based construction that have been in use for a minimum of three (3) years.

5. The Sports Field Contractor must be a member of the American Sports Builder Association and have a Certified Field Builder from the American Sports Builder Association on staff and have proper designation for natural and artificial.

6. The Sports Field Contractor shall have the Certified Sports Field Builder on-site during each step as provided in this section of work.

7. All grades must be established and laser graded by laser equipment consisting of an agricultural-type tractor, equipped with flotation type tires, and pulling a five to seven-foot laser guided scraper that is fully automated, hydraulically actuated and capable of grading to within 1/4" of desired elevations.

8. Inspection of the Site: The Sports Field Contractor shall acquaint itself with all site conditions, including existing underground utilities before construction is to begin. The Sports Field Contractor shall coordinate placement of the sub-drainage system with previously installed underground materials in the vicinity and is responsible for minor adjustments in the layout of the work to accommodate existing underground facilities.

9. The Sports Field Contractor shall install the under drains with a laser operated trencher.

10. The Sports Field Contractor shall keep on site, beginning with and until its completion, the certified field builder, and any necessary assistants, all of which are satisfactory to the Owner.

11. The Superintendent shall represent The Sports Field Contractor and all directions given to him/her shall be as binding as if given to The Sports Field Contractors project manager.

12. The Owner shall have full authority to approve or reject work performed by The Sports Field Contractor. Additionally, the Owner shall have full authority to make minor field changes that are deemed necessary if the changes do not incur additional costs to The Sports Field Contractor.

13. In all cases where inspection of the Playing Field Sub Drainage System is required, and/or where the portions of the work specified is to be performed under the direction of the Owner; The Sports Field Contractor shall notify the Owner at least 48 hours prior to the time such observation or direction is required.

14. Any necessary re-excavation or changes to the system needed because of failure of The Sports Field Contractor to have the required inspections shall be performed at The Sports Field Contractor's expense.

15. All work under this section shall be performed on a dry sub-base.

16. Material Testing During Construction: To ensure that the quality of drainage fill materials remains consistent, from point of supply to job site, the following protocol shall be used:

    a. Sports Field Contractor shall submit to Owners Testing Agent, a one (1) gallon sample of Drainage Fill and USGA pea gravel Fill. These samples shall be taken from the material stockpile allocated for this work by the supplier. 4Most Sport Group will evaluate this material using the appropriate protocol. This pre-construction sample shall be used for comparison with all subsequent quality assurance samples submitted for approval during the construction process. Prior to shipment from the supplier, the Sports Field Contractor will provide a one (1) gallon composite sample representing every 400 tons to be shipped to the site for comparison with the pre-construction sample. The results of each subsequent test will be provided to the owner, and upon approval, the representative amount of material may be shipped to the site.

17. The testing agent will conduct the appropriate test (ASTM F1647 Method A Standards) and submit results to the Owner. The Owner will review the results and either accept or deny as the initial lot for delivery. Approval for all additional lots will be based on this initial test results.

18. No work by the Sports Field Contractor shall commence before written approval of the Natural Grass Fields sub drainage material list, descriptive material and samples have been delivered to the Owner by The Sports Field Contractor.

19. The initial test of each sample is the responsibility of the Owner. The cost for testing that must be repeated, due to a failing sample or a shortage of supply, shall be the responsibility of the Sports Field Contractor.

20. If a visual analysis of shipped material suggests a change in the material quality, an additional test may be required. If this on-site sample passes, the Owner shall bear the cost of the test, with the Sports Fields Contractor making payments for any failed test.

21. All components that make up the sub-drainage system, including the gravel for bedding pipe, USGA gravel blanket and the root zone, must be confirmed as bridging where any two of them meet.

3.10 – Submittals

1. The Sports Field Contractor will provide as a minimum, catalog cuts, product data, and samples along with supporting literature for the following:

a. All drainage pipe material

b. 1-gallon proposed USGA gravel drainage material for the four (4) inch horizontal drainage layer

c. 1-gallon proposed Drainage Fill for bedding pipe and pipe cover up to bottom of 4-inch drainage layer.

d. Geotextile filter fabric (12” x 12”)

-End of Section-

Attachments

Designer’s drawing attached

PRICING WORKSHEET

VyStar Ballpark - Full Building Assessment

Proposer proposes to provide all labor, material, equipment, appurtenances, overhead, profit, bonds and insurance necessary to accomplish the work described in the Request for Proposal documents and any subsequent addenda or responses to questions issued prior to the proposal date for a total cost of:

A.	Base Bid Materials	$_____
B.	Base Bid Labor	$_____
C.	All-In Sub-Surface Mechanical Ventilation System *(Third-Party Material & Installation Price)*	$_____
D.	Bid Alternate Materials *(Traditional Drainage & Additional Grading Necessary)*	$_____
E.	Bid Alternate Labor	$_____
	BASE BID GRAND TOTAL (A+B+C)	**$_____**

ALL BIDS DUE BACK VIA EMAIL TO THE PROJECT MANAGER AND ALL PRODUCT SAMPLES SHALL BE SENT TO:

Jacksonville Baseball LLC, 301 A Phillip Randolph Blvd., Jacksonville, FL 32202 to the attention of Matthew Goudreau. Bids must be sent and received by Jacksonville Baseball LLC on **Thursday, July 17, 2025** by **5:00 PM EDT**.

Submitted by (print):_____

Company Name (print):_____

Signature:_____

Date:_____

(Attach Business Card Here)