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:** NONE

2. **SPECIFICATIONS:**

   2.1. Section 02920 - SYNTHETIC TURF
   Description: Revise section 1.6, Item A: Synthetic sports turf groomer with a width of at least seven feet.

   2.2. Section 02952 - LANDSCAPE MAINTENANCE
   Description: Revise section 1.2, Item A: Maintenance period shall be 183 calendar days beginning on the day of check review and upon approval of the Owner’s Representative.
3. DRAWINGS:

3.1. Drawing L-1 - SOCCER FIELD IRRIGATION PLAN
Description: Notes added regarding irrigation control and re-certification of booster pump.

3.2. Drawing L-2 - SOCCER FIELD IRRIGATION NOTES & LEGEND
Description: SPECIAL ON-SITE RECYCLED WATER NOTES updated. Ball valve note updated.

3.3. Drawing L-3 - SOCCER FIELD PLANTING PLAN
Description: Tree species changed to Australian Willow.

3.4. Drawing A-011 - DEMO SITE PLAN
Description: Demolition notes numbered 6, 8, 11, and 13 revised.

3.5. Drawing A-202 – ENLARGED PLANS & SECTIONS
Description: Detail 2: CONCRETE TO SYNTHETIC TRACK SECTION updated.

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 # 1

Enclosures:
- Specification section 02920-SYNTHETIC TURF (8.5” x 11”, 9 pages)
- Specification section 02952 LANDSCAPE MAINTENANCE (8.5” x 11”, 5 pages)
- Revised Drawing L-1 IRRIGATION PLAN, dated 12/03/14 (30” x 42”, 1 page)
- Revised Drawing L-2 IRRIGATION NOTES & LEGEND, dated 12/03/14 (30” x 42”, 1 page)
- Revised Drawing L-3 PLANTING PLAN, dated 12/03/14 (30” x 42”, 1 page)
- Revised Drawing A-001 DEMO SITE PLAN, dated 12/03/14 (11” x 17”, 1 page)
- Revised Drawing A-202 ENLARGED PLANS & SECTIONS, dated 12/03/14 (11” x 17”, 1 page)
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 manufacturers 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/mark ing 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. 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-allergic 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:**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Standard</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Average Pile Yarn Weight</td>
<td>ASTM D 5848</td>
<td>52 oz/square yard</td>
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<tr>
<td>Average Total Weight</td>
<td>ASTM D 5848</td>
<td>86 oz/square yard</td>
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<tr>
<td>Secondary Backing Weight</td>
<td>ASTM D 5848</td>
<td>26 oz/square yard</td>
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<tr>
<td>Primary Backing</td>
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<td>8 oz/square yard</td>
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<tr>
<td>Average Tuft Length</td>
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<tr>
<td>Stitches Per Inch</td>
<td>ASTM D 5793</td>
<td>2.3</td>
</tr>
<tr>
<td>Tufting Gauge</td>
<td>ASTM D 5793</td>
<td>3/8” maximum</td>
</tr>
<tr>
<td>Tuft Bind</td>
<td>ASTM D 1335</td>
<td>&gt; 9 lbs</td>
</tr>
<tr>
<td>Yarn Denier (monofilament fiber)</td>
<td>ASTM D 1577</td>
<td>10,800</td>
</tr>
<tr>
<td>Yarn Denier (slit film fiber)</td>
<td>ASTM D 1577</td>
<td>10,000</td>
</tr>
<tr>
<td>Yarn Denier (secondary fiber)</td>
<td>ASTM D 1577</td>
<td>4,200</td>
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<tr>
<td>Surface Flammability</td>
<td>ASTM D 2859</td>
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<tr>
<td>Permeability</td>
<td>ASTM F 1551</td>
<td>&gt;30</td>
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<tr>
<td>Melt Point</td>
<td>ASTM D 789</td>
<td>130 Degrees Celcius</td>
</tr>
<tr>
<td>Gmax (American Football)</td>
<td>ASTM F 355</td>
<td>&lt;125 at installation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&lt; 175 over life of warranty</td>
</tr>
</tbody>
</table>

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. Synthetic sports turf groomer with a width of at least seven feet.

B. Synthetic turf sweeper.

1.1 EXAMINATION
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
PART 1 - GENERAL

1.1 SUMMARY

A. Provide all labor, materials, equipment, tools, services and miscellaneous and incidental work to complete all landscape maintenance as indicated on the Drawings and as specified.

B. Related work specified elsewhere:
   1. Landscape Irrigation - Section 02810
   2. Synthetic Turf – Section 02920
   3. Landscape Planting - Section 02950

1.2 DESCRIPTION OF WORK

A. Maintenance period shall be 183 calendar days beginning on day of check review and upon approval of the Owner’s Representative.

1.3 QUALITY ASSURANCE

A. Arrange for subsequent check review at 30-day intervals with Contractor and Owner’s Representative. Provide seven (7) days advance notice.

B. Make final review at completion of maintenance period to determine acceptability of work.

C. Prior to date of final review, acquire from Owner’s Representative approved reproducible prints and record from job record set all changes made during construction, label said prints “Project Record”, and deliver to Owner’s Representative. Prior to date of final review deliver to Owner’s Representative “Landscape and Irrigation Guarantee” as required.

D. Deliver all turnover items noted in other specification sections prior to a final review.

1.4 GUARANTEE

A. Guarantee all plant material installed under contract against any and all poor, inadequate or inferior materials and/or workmanship, per Section 02950, Planting. Replace any plant found to be dead, missing, or in poor condition due to faulty materials or workmanship, as determined by Owner’s Representative, at no cost to the Owner.

B. Replace all material found to be dead, missing, or in poor condition during maintenance period immediately. The Owner’s Representative shall be sole judge as to condition of material. Replace material within 15 days of written notification by Owner’s Representative.

PART 2 - PRODUCTS
2.1 MATERIALS

A. All material to conform to planting specifications in other sections or otherwise be acceptable to the Owner’s Representative. Provide monthly record of all herbicides, fertilizers, insecticides and disease control chemicals used to the Owner’s Representative.

PART 3 - EXECUTION

3.1 GENERAL

A. Continuously maintain all areas involved in this contract during progress of work and during maintenance period until final acceptance of work by the Owner’s Representative.

B. Unacceptable condition of any planting at termination of schedule maintenance period may cause postponement of final completion date of contract. Maintenance to be continued by Contractor until all work is acceptable.

C. In order to carry out maintenance work, furnish sufficient men and adequate equipment to perform work in timely fashion during plant maintenance period.

D. Start of Maintenance criteria: Maintenance period shall not start until all elements of construction, planting and irrigation for entire project are complete. Project will not be segmented into maintenance phases, unless specifically authorized in writing by the Owner’s Representative.

E. Request inspection to begin plant maintenance period after all planting and related work has been completed in accordance with contract documents.

F. Watering schedules shall be given to the Owner’s Representative on a weekly basis.

3.2 MAINTENANCE

A. Keep all areas free of debris and weeds. Keep planted areas weed-free. Pick up all litter in planted and hardscape areas. Clean up run-off onto paved areas caused by erosion of soil in planted areas. All pick-up and cleaning operations including hardscape shall be done weekly.

B. Provide adequate protection of all areas. Repair damaged areas at Contractor's expense. All hazardous conditions shall be remedied immediately.

C. Between 15th and 20th day of maintenance period, re-sod all spots or areas within lawn where normal turf growth is not evident as determined by Owner’s Representative. Re-sod as often as necessary to provide assured complete coverage of turf.

D. Do not remove by hand or by mechanical means any noxious weeds (to include but not limited to Bermuda Grass, Kikuya Grass, Nut Sedge, Oxalis and Morning Glory.)

3.3 TREE AND SHRUB CARE

A. Watering: Maintain an adequate water basin around plants so that enough water can be applied to establish moisture through major root zone. When hand-watering, use a water wand to break water force. Use mulches to reduce evaporation and frequency of watering.
B. Pruning:

1. Trees:
   a. Prune trees to select and develop permanent scaffold branches, and radial orientation so as not to overlay one another; to eliminate diseased or damaged growth; to eliminate narrow V-shaped branch forks that lack strength; to reduce toppling and wind damage by thinning out crowns; to maintain growth within space limitations; to maintain a natural appearance; to balance crown with roots.
   b. Under no circumstances will stripping of lower branches (raising up) of young trees be permitted. Retain lower branches in a “tipped back” or pinched condition with as much foliage as possible to promote caliper trunk growth (tapered trunk). Lower branches can be cut flush with trunk only after tree is able to stand erect without staking or other support. Remove sucker growth if deemed appropriate by Owner’s Representative.
   c. Thin out evergreen trees and shape when necessary to prevent wind and storm damage. Primary pruning of deciduous trees shall be done during dormant season. Prune damaged trees or those that constitute health of safety hazards at any time of year as required to eliminate these conditions.

2. Shrubs:
   a. Objective of shrub pruning is same as for trees. Do not clip shrubs into balled or boxed forms unless such is required by design and directed by Owner’s Representative.
   b. Make all pruning cuts to lateral branches or buds to trunk with 1/4" to 1/2" shoulder. “Stubbing” not permitted.

C. Staking and Guying: Remove stakes and guys as soon as they are no longer needed. Stakes and guys are to be inspected to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds. Replace all broken stakes and ties with specified materials.

D. Weed Control: Keep basins and areas between plants free of weeds. Use recommended legally approved herbicides. Avoid frequent soil cultivation that destroys shallow roots. Use mulches to help prevent weed seed germination.

E. Insect and Disease Control: Maintain control with approved materials. Work will not be accepted if any plants show infestation by disease or insects.

3.4 GROUNDCOVER CARE

A. Weed Control: Control weeds with chemical spray or by mechanical means so as to cause minimal damage to planted material.

B. Do not remove by hand or by mechanical means any noxious weeds (to include but not limited to Bermuda Grass, Kikuya Grass, Nut Sedge, Oxalis and Morning Glory.)

C. Watering: Water enough that moisture penetrates throughout root zone and only as frequently as necessary to maintain healthy growth.
D. Trash Removal: Remove trash weekly.

E. Edging: Edge groundcover to keep in bounds and trim top growth as necessary to achieve an overall even appearance.

3.5 LAWN AND TURF CARE

A. Mowing and Edging:

1. Lawns shall be mowed at 2” height.

2. Commence mowing of turf when grass has reached recommended mowing height for specified species. Mow at least weekly after first cut. Turf must be well-established and free of bare spots and weeds to satisfaction of Owner's Representative prior to final acceptance.

3. Pick up excess grass clippings as determined by Owner’s Representative and remove from site and premises.

4. Trim edges at least twice monthly or as needed for neat appearance. Clippings to either be vacuumed or blown off walks.

B. Watering: Water lawns at such frequency as weather conditions require as to replenish soil moisture below root zone and maintain healthy growth.

C. Weed Control: If needed, control broad leaf weeds with selective herbicide.

3.6 FERTILIZING

A. Fertilize all planting areas with following:

1. At end of first 30 days and at 30 day intervals, apply 7 lbs per 1,000 square feet of 16-7-12 (+ iron) fertilizer.

2. At end of maintenance period and at 30-day intervals should maintenance period be extended, apply 10 lbs per 1,000 square feet of 16-7-12 (+ iron) fertilizer.

3.7 SYNTHETIC TURF CARE

A. Field Maintenance

1. Perform regularly scheduled periodic maintenance twice per year. The maintenance will include but not be limited to a complete inspection and repair including all materials and cleaners of all areas of the field including: Fiber fibrillation analysis, Seam analysis, Perimeter anchoring, Excessive wear analysis, UV fade inspection, Infill – consistency in depth, Infill – migration analysis, Glued inlay analysis, Base stability analysis, Painted marking inspection, Debris removal, Brushing, Aerating, Grooming, Removal of weeds and moss, Removal of stains, Keeping the infill level.

2. The inspection and maintenance will be performed by an Authorized Maintainer, if the person is not the same as the previous visit, then credentials will be submitted for approval before the visit.

3. Approximate number of times is 2 times per year for 8 years through the warranty period.
4. The maintenance activities will include and not be limited to the most current Maintenance Guidelines at the time the maintenance is being undertaken.

B. Adjustment and Cleaning
   1. Do not permit traffic over unprotected surface.
   2. Contractor shall provide the labor, supplies, and equipment as necessary for final cleaning of surfaces and installed items.
   3. All usable remnants of new material shall become the property of the Owner.
   4. The Contractor shall keep the area clean throughout the project and clear of debris.
   5. Surfaces, recesses, enclosures, and related spaces shall be cleaned as necessary to leave the work area in a clean, immaculate condition ready for immediate occupancy and use by the Owner.

C. Protection
   1. Protect installation throughout construction process until date of final completion.

3.8 IRRIGATION SYSTEM

A. Checking System: Check entire system weekly for proper operation. Flush out lateral lines after removing last sprinkler head or two at each end of lateral. All heads are to be adjusted as necessary for unimpeded coverage.

B. Programming: Provide to Owner’s Representative written weekly irrigation schedules for each remote control valve for scheduling input for the Campus Irrigation Controller Computer. Provide Owner’s Representative two (2) keys to controller enclosure.

C. Repairs: Repair all damages to irrigation system at Contractor’s expense. Repairs to be made within one watering period.

END OF SECTION 02952
DEMOLITION NOTES

1. REMOVE PORTION OF (E) CHAIN LINK FENCE
2. REMOVE (E) CONCRETE PAVING
3. REMOVE (E) CONCRETE CURB
4. REMOVE (E) DRINKING FOUNTAIN
5. REMOVE (E) SCOREBOARD AND SUPPORTS
6. REMOVE (E) BLEACHERS
7. REMOVE (E) TREE
8. REMOVE (E) EXERCISE POLES AND EQUIPMENT, INCLUDING FOOTINGS. RESTORE SOIL AS NECESSARY.
9. REMOVE (E) ASPHALT PAVING
10. REMOVE (E) DOUBLE CHAIN LINK GATE
11. REMOVE (E) IRRIGATION SYSTEM AND SALVAGE SPRINKLER HEADS TO THE DISTRICT.
12. REMOVE & REPLACE (E) ASPHALT PAVING
13. SAWCUT, REMOVE & REPLACE (E) CONCRETE PAVING
14. (E) CHAIN LINK FENCE TO REMAIN
15. (E) CONCRETE PAVING TO REMAIN
16. (E) ASPHALT PAVING TO REMAIN
17. (E) RETAINING WALL TO REMAIN
18. (E) ELECTRICAL BOX TO REMAIN
19. (E) TREE TO REMAIN, PROTECT IN PLACE
20. (E) STORAGE SHED TO REMAIN
21. (E) STORM DRAIN TO REMAIN
CONCRETE TO SYNTHETIC TRACK
SECTION

1 1/2" = 1'-0"