SECTION 02920
SCREENED TOPSOIL AND TOPSOIL BORROW

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and other Division 1 Specifications Sections, apply to this Section.

1.2 SUMMARY

A. Work Included: Under this Section, the Contractor shall furnish all labor, materials, equipment and transportation required to furnish and place ½” Screened Topsoil and Topsoil Borrow as shown on the drawings and as specified. Where proposed tree or shrub planting mix and seeding is noted on the drawings, it shall be composed of onsite screened topsoil to be reused in compliance with these specifications or Topsoil Borrow, as required, to meet this specification.

B. Sufficient quantities of topsoil are present at the site and available for reuse as topsoil if compatible with the requirements of this specification. The Contractor shall be responsible for amending topsoil, as required to comply with this specification.

C. Spread all stockpiled topsoil to produce a uniform depth throughout proposed general lawn areas.

D. Use soil amendments such as lime and fertilizer in accordance with testing laboratory recommendations.

1.3 SUBMITTALS

A. Topsoil test results shall be submitted to a Certified Laboratory for review to determine acceptability.

1.4 QUALITY ASSURANCE

A. The Contractor shall furnish a Certified Laboratory Report showing the soils classified and nutrient analysis of representative samples of the topsoil that is proposed to be used, including the extent of lime and fertilizer required. Samples submitted for approval must be representative of the total volume to be furnished, taken in the presence of the Owner’s Representative, and delivered to a certified laboratory by the Contractor; all costs for such shall be borne by the Contractor.

B. If additional topsoil is required, the Contractor shall submit to the Owner, at least five (5) days prior to shipment/delivery of topsoil borrow materials, a one (1) cubic foot representative sample of the topsoil borrow, certifications, certified test results for each material location. The Contractor shall provide a listing of addresses (locations) identifying the origin of the topsoil to be delivered. The Owner shall reserve the right to reject, on or after delivery, any material that does not meet these Specifications.
1.5 PRODUCT HANDLING

A. Delivery of borrow topsoil to the site shall be coordinated such that it is placed as delivered and no stockpiling required.

PART 2 PRODUCTS

2.1 BORROW TOPSOIL

A. In accordance with the specific requirements of this project, existing topsoil may be reused within the limits of areas to receive new grass and vegetation. The Contractor shall furnish all required Topsoil Borrow, from off site sources, as necessary, to complete the project.

B. Screened Topsoil materials harmful to plant life, to be clean, fertile, friable, well draining, natural sandy loam. All topsoil to be free of any subsoil earth clods, sods, stones over 1/2” in any dimension, sticks, roots, weeds, litter and other deleterious material. Screened Topsoil shall be uniform in quality and texture and contain organic matter and mineral elements necessary for sustaining healthy plant growth.

C. Screened Topsoil shall have the following optimum ranges unless otherwise approved by the Engineer/Owner.

<table>
<thead>
<tr>
<th>Organic Content</th>
<th>6.0 - 20%</th>
</tr>
</thead>
<tbody>
<tr>
<td>(by loss of ignition at 375 C method of testing)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PH</th>
<th>6.0 - 8.0</th>
</tr>
</thead>
</table>

D. Nutrient levels shall be achieved by the Contractor's addition of amendments to the topsoil to meet the optimum nutrient levels specified in the testing laboratory report for each of crop/plant to be installed.

E. Proposed screened topsoil shall be “fine sandy loam” or “sandy loam” determined by mechanical analysis (ASTM D-422) and based on the “USDA” Classification System. And meeting the following mechanical analysis:

<table>
<thead>
<tr>
<th>Classification</th>
<th>% of Total Weight</th>
<th>Average %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand (0.05 – 2 (mm))</td>
<td>45 – 75</td>
<td>60</td>
</tr>
<tr>
<td>Silt (0.002 – 0.05mm)</td>
<td>15 – 35</td>
<td>25</td>
</tr>
<tr>
<td>Clay (Less than 0.002mm)</td>
<td>5 – 20</td>
<td>15</td>
</tr>
</tbody>
</table>

F. Screened Topsoil shall be completely free of any toxic chemical, hazardous waste and any material or condition that would prevent the establishment of a suitable lawn.

Screened Topsoil shall be a natural product consisting of primarily of natural topsoil, free from subsoil, and obtained from an area that has never been stripped. Screened Topsoil shall not contain less than five percent (5%) nor more than ten percent (10%) organic matter as determined by the loss on ignition of oven-dried samples, at 100 °C ± 5°C. To
adjust organic matter content, the soil may be amended, prior to site delivery, by the
addition of composted leaf mold or peat moss. Use of organic amendments is accepted
only if random soil sampling indicates a through incorporation of these materials.

2.2 STOCKPILED TOPSOIL (IF APPLICABLE)

A. Proposed for reuse shall conform to all requirements of paragraph 2.1 of this Section and
shall be screened unless otherwise approved by the Engineer/Owner.

2.3 EXISTING TOPSOIL

A. Amend existing topsoil as required by topsoil tests. Supplement with imported topsoil
when required.

2.4 REUSE OF EXISTING TOPSOIL

A. The reuse of topsoil shall not be permitted except as a general fill material to subgrade
elevations at the limits of proposed baseball fields, grass and planting areas.

PART 3 EXECUTION

3.1 SHAPING AND GRADING OF SUBSOIL AT ALL LAWN AREAS

A. After shaping of lawn subgrades, remove all sticks, stones, or foreign material one and
one half (1-1/2) inches or greater in dimension. Harrow or otherwise loosen the subgrade
soil to a depth of four (4) inches if required to correct overcompaction. Remove debris
and stone off-site.

B. Do not apply Screened Topsoil to the scarified subgrade without approval by the
Engineer/Owner. Screened Topsoil will not be permitted to be spread until topsoil test
reports have been submitted and approved. Topsoil shall not be delivered or worked in a
frozen or muddy condition.

C. Uniformly distribute and spread stockpiled and borrow topsoil from over all graded lawn
areas to conform smoothly to the lines, grades, and elevations shown or otherwise
required. All baseball field areas to have a minimum of six (6) inches of topsoil after
compaction or as indicated on the Contract Drawings.

Manually supply topsoil around all trees and shrubs to remain. Avoid damage to root
systems.

D. Resupply and place topsoil to eroded, settled or damaged areas until all lawn areas are
stabilized. Care shall be taken not to damage grass or pavement areas in the
replacement to topsoil.

3.2 PROTECTION

A. Remove: weeds prior to lawn development operations. No weeds shall be allowed to go
to seed.

B. Keep: heavy equipment, trucks, etc. off topsoiled areas. At no time will equipment other
than light tractors be allowed on any topsoiled areas.

C. If compaction occurs, scarify to a depth of 6” and regrade grade.
3.3 ADDITIVES
A. The Contractor shall apply all necessary fertilizer and lime to the soil in accordance with the manufacturer's and laboratory recommendations and as required by the seeding and/or planting specifications.

3.4 EXCESS STOCKPILED TOPSOIL
A. Remains property of Owner and is to be deposited by the Contractor in an approved location unless otherwise directed by the Owners Representative.

END OF SECTION 02920