
SPORTS MIX

PART 1 GENERAL**1.1 Related Work**

- .1 All Division 1 Specification Sections
- .2 Section [02911](#) Topsoil & Finish Grading
- .3 Section [02938](#) Sodding

1.2 Description of Work

- .1 Provision of all labour, equipment, materials, machines, tools, services and incidentals to add concrete sand and sphagnum peat moss to existing site topsoil to create soccer field and cricket pitch root zone mix, fine grade and maintain prepared surface until Substantial Performance of the works.
- .2 Unless specified otherwise, commencement of this Section will constitute acceptance of the existing site conditions.
- .3 Tolerance:

For finish grade, surface shall be smooth, true to line and level, and free from depressions exceeding 6 mm as measured with 3 m straight edge in any direction.

1.3 Source Quality Control

- .1 All topsoil used on the sports fields will be from the existing site.
- .2 The Contractor shall arrange for and assume all costs for the testing of the new sports root zone topsoil mixed on site for the soccer fields and cricket pitch.
- .3 Test in-situ root zone topsoil mix for :
 - .1 Particle size analysis (percentage of sand, silt and clay by Hydrometer Method).
 - .2 Organic matter (determined at 360 C), phosphorus (sodium bicarb), ammonium acetate extractable potassium, magnesium, calcium, sulphur soil pH, determined at 1:1 water/soil percent base saturation and calculated CEC. (Cation Exchange Capacity).
 - .3 Test for DTPA extractable Zinc, Manganese, Iron, Copper, Mehlich III extractable Boron, soluble salts content, and Atrazine.

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.4 The following soil specifications (from Section '6.5 Root Zone Material & Fine Grading' of the Athletic Field Construction Manual, Second Edition by the Sports Turf Association Inc.) will be used as a guideline to evaluate the blended root zone mix:

.1 Size Envelope: The root zone mix shall be comprised of in-situ topsoil with added concrete sand having particle size distribution which fits within the envelope of the particle size distribution table below:

Sieve Designation (mm)	% Passing
9.5	100-100
4.75	95-100
2.36	80-100
1.18	50-85
0.6	25-60
0.3	10-30
0.15	0-10
0.075	0-3

.2 Soil Amendments: The existing in-situ sandy loam topsoil, containing 3 to 5% organic matter, shall be blended with the approved sand to achieve a final mix containing between 25 – 35% total silt and clay. The root zone mix is to contain less than 5% carbonates.

PART 2 PRODUCTS

2.1 Materials

.1 The composition of the new sports mix topsoil for the soccer field shall approximate the USG recommended Category 3 Field mix noted in Figure 2.3.2 per the Athletic Field Construction Manual, Second Edition by the Sports Field Turf Association Inc. having an approximate composition of between 25 – 35% total silt plus clay and a combined total for fine plus very fine sand less than 20%.

.2 The sand component of the new sport mix topsoil shall be calcareous sand.

.3 Fertilizer: Bulk blend 0-39-9. The bulk blend fertilizer shall be a mix of 850kg of 0-46-0 and 150kg of 0-0-60 per tonne. Fertilizer blend may require adjustment based on pre-plant fertilizer recommendations developed based upon soil analysis of the imported growing medium. Contractor to pay for pre-plant fertilizer

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soil analysis testing.

PART 3 EXECUTION**3.1 Submittals & Review of Material**

- .1 It is expected that sports mix comprised of in-situ topsoil, concrete sand and fertilizer will be manufactured and mixed on site.
- .2 Following mixing on site, provide sample and test results of sports mix material from testing laboratory to the Consultant and receive approval of sports mix material prior to placement on-site. The Consultant may request further mixing and retesting of the sports mix material if deemed suspect.

3.2 Installation

- .1 Spread sports mix material evenly in a manner that will not cause segregation, to depths to make up proposed grading as specified on the Contract drawings and details. Every effort should be made to minimize compaction of the sport mix material while it is being put into place.
- .2 Ensure sports mix material is dry and applied. Installation shall occur only in dry weather.
- .3 The approved sports mix shall be dumped at the side lines and moved into place with due regard for the drainage system. The soil shall be pushed into place and graded using a track type blade. Flotation tires shall be used on all other machines used on the site.
- .4 After settling, top up sports mix material to achieve the proposed grading as specified on the Contract drawings, and as directed in the field by the Consultant. Continue to top up until the required elevations are achieved.

3.3 Protection

- .1 The Contractor is to assume full responsibility for protection of sports field areas until Substantial Performance of Work;
- .2 Erect protective barriers and post signs where necessary and maintain same until Substantial Performance of Work. Remove same after final review.
- .3 Remedy damages, washouts and eroded areas resulting from weather, improper protection or other causes.

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- .4 Remedy any damages to existing drainage weeping tile system due to placement of sports mix at no extra cost to Owner;
- .5 Report, in writing, to the Consultant, all damages resulting from vandalism or any other causes beyond Contractor's control not provided for by the Contract Documents.

END OF SECTION - 02512