

**Specifications for Athletic Field Grounds Maintenance Contract
New Castle County Vocational Technical School District
New Castle County, Delaware**

I. GENERAL REQUIREMENTS

This specification covers the requirements for Athletic Field Grounds Maintenance services for a period of one year starting March 2018 through March 2019. The work required includes furnishing of all services, equipment, transportation, materials and labor necessary to provide the required level of service.

1. All services rendered shall comply with all Local, County, State and Federal laws, ordinances, rules and regulations.
2. All services under this contract shall be performed in a professional, safe, workman-like manner consistent with all industry "best practices".
3. Contractor shall provide the following documentation with their bid submittal:
 - a. Valid copy of State of Delaware Business License
 - b. Copy of current Delaware Pesticide Business License
 - c. Copy of Delaware Commercial Nutrient Handler Certification card for each individual employed by the Contractor who will apply nutrients to NCCVTSD property as part of the contract.
 - d. Copy of Delaware Commercial Pesticide Applicator Certification card for each individual employed by the Contractor who will spray chemicals on NCCVTSD property.
 - i. Individuals must hold both a 1A certification as well as a Category 03 (Ornamental & Turf Pest Control) certification
 - e. Copy of valid Liability insurance certificate listing individual coverage amounts covered by the policy (see Item #4 below).
4. Contractor recognizes that they are operating as an independent Contractor and that they are liable for any and all losses, penalties, damages, expenses, attorney's fees, judgments, and/or settlements incurred by reason of injury to or death of any and all persons, or injury to any and all property, of any nature, arising out of the Contractor's negligent performance under the Contract, and particularly without limiting the foregoing, caused by, resulting from, or arising out of any act of omission on the part of the Contractor in its negligent performance under this Contract.

The Contractor shall maintain such insurance as will protect against claims under Worker's Compensation Act and from any other claims for damages for personal injury, including death, which may arise from operations under this Contract. The Contractor is an independent contractor and is not an employee of the District.

During the term of this Contract, the Contractor shall, at its own expense, carry insurance with minimum coverage limits as follows:

- a. Comprehensive General Liability \$1,000,000
- b. Product Liability \$1,000,000/\$3,000,000

- 5. If the contractor changes their insurance policy or the policy expires during the service period, the contractor shall immediately provide the NCCVTSD with an updated copy of their insurance certificate.

II. EQUIPMENT

The successful bidder shall own and utilize, at a minimum, the following specialized pieces of equipment. Please provide a complete listing of your specific equipment you plan to utilize to meet the requirements of this section with your bid. Include photos as necessary to assist the District in ascertaining if your equipment meets these requirements. All equipment must be in good working order and be capable of being properly calibrated on a consistent basis.

- 1. Fertilizer Spreader - A broadcast-type spreader, either:
 - a. Self-contained motorized unit, such as a PermaGreen or Spyker type unit
 - b. Tractor-mounted unit such as a Vicon or Lely
- 2. Topdresser - A broadcast-type unit, such as:
 - a. Dakota Turf Tender
 - b. Turfco
 - c. Ty-Crop
 - d. Toro "Pro Pass" or MH-series units
- 3. Large area turf aerator - Cam drive-type unit capable of core aeration to a depth of 4", such as:
 - a. John Deere 2000, 1500 or 1000
 - b. Toro ProCore Series
- 4. Deep tine aerator - Capable of solid-tine aeration to a depth 8" minimum, such as:
 - a. Soil Reliever
 - b. Toro SR-Series
 - c. Wiedenmann Terra-Spike Series
- 5. Boom-type spray unit - Self-contained or tractor-mounted
 - a. Must have 15' to 20' spray boom
 - b. Utilize XR-TeeJet type nozzles (or approved other)

- c. Be capable of running at a set ground speed
 - d. Maintain proper operating pressure relative to ground speed to insure even product application and distribution
 - e. Have a minimum 100 gallon tank capacity
 - f. "Z Spray" type units at NOT an approved apparatus for meeting the requirements of this section.
6. Slice seeder - Tractor-mounted unit, such as:
- a. Vredo
 - b. Turfco Tri-wave
7. Bulk loading equipment
- a. Contractor shall provide a tractor and/or skid steer loader of adequate size to efficiently move and load topdressing sand during topdressing operations.
8. Other
- a. Contractor is responsible for providing any and all other equipment needed to properly execute this contract, including clean-up operations.

III. PRODUCTS

The successful bidder shall supply specified products per the maintenance schedule (see attached program) and apply said products according to the maintenance plan. The plan dates represent the WEEK each application is due unless specifically noted otherwise.

1. Provide a label for each product listed on the plan that you intend to utilize.
 - a. Upon award of the contract, all product labels will be treated as a submittal. ALL submittals MUST receive a written approval/stamp prior to use.
2. Substitutions for specific brand-name products can only be made if approved IN WRITING by the District or their appointed representative.
3. Contractor agrees to provide all used product containers (i.e. jugs, bottles and bags) for all products used at each school location.
 - a. Upon completion of the application, empty containers shall be rinsed (when necessary/required by law), gathered, bagged and given to the Building Maintenance Superintendent prior to leaving the premises that day.

- b. A copy of the product load slip for sprayable products shall be provided to the Building Superintendent prior to leaving the school on the day of the application. Slip shall include product Trade Name, Chemical Name and total product used, as well as listing of all treated fields by field name.
4. Topdressing Sand
- a. Use Pioneer Materials "Damp USGA Fairway Topdressing Sand" from Pioneer Materials pit in Dover, DE.
 - b. Upon award of the contract, Contractor will be required to submit a one (1) gallon sample to NCCVTSD for testing. Sample must meet standards for USGA golf green construction sand.
 - c. District reserves the right to spot check/test any sand that is delivered onto NCCVTSD property for compliance with USGA specifications and for uniformity with the initial sand submittal.

5. District-Provided Products

The District has new old stock of the following products at the following locations and shall provide these products to the successful bidder for use this year per the maintenance schedule:

- a. Hodgson High School

4th Millenium Fescue seed	22 bags
Rhambler SRP Turf Type Tall Fescue seed	4 bags
Barenbrug RTF Fescue seed	5 bags

IV. APPLICATIONS

- 1. All products shall be applied in an even and consistent manner.
- 2. Utilize a tracker dye product OR a foam marker unit to insure even application of sprayable products.
- 3. DO NOT apply any sprayable products to any hard surfaces such as concrete, asphalt, dugouts walls & floors, bleachers, etc.
- 4. Any granular products that overthrow and land on any hard surface (i.e. dugouts, walkways, etc.) shall be removed via sweeping or blowing immediately following the application.
- 5. DO NOT turn or drive equipment on wet infield surfaces, home plate areas, mounds, etc. on the baseball and softball fields. Do not drive equipment over pitching mounds at any time.

6. It is the responsibility of the Contractor to coordinate operation of irrigation systems with District personnel after applying granular or sprayable products.
7. Follow all POSTING & NOTIFICATION requirements following any application on any NCCVTSD field.

V. EXEMPT APPLICATIONS

Certain applications are the responsibility of NCCVTSD. These include:

1. "Aerovator" aeration applications
2. "Broadcast Overseeding" applications, generally used between the hash marks on district football fields.
 - a. All "Slice Seed" applications shall be INCLUDED as part of this contract.
 - b. If maintenance schedule does not specifically state "Broadcast Seed", assume the seeding to take place is a slice seeding and should be INCLUDED as part of this contract.

VI. STORAGE & DISPOSAL

1. Contractor shall store all bagged products necessary to execute the contract at their own facility and transport product to the job site on the day of each application.
2. The District will provide areas at each school to unload bulk deliveries of topdressing sand. Sand shall be kept in tight, clean piles and used within five (5) work days of delivery.
 - a. Contractor is responsible for cleanup and disposal of any leftover bulk material.

80,500 Sq. Ft		Delcastle Soccer Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
Start of season	Set cutting height to 1.25"				
March 12	21-0-0 Ammonium Sulfate	0.5 lb.	3.75 lbs.	6 bags	
	0-0-22 K-Mag		5 lbs.	8 bags	
April 16	17-0-3 (40% XCU, 2% Fe - 0.067 Acelepryn)	1 lb.	5.75 lbs.	9.25 bags	
	<i>Insecticide application</i>				
<i>*Time to have rainfall within 3 days of application if possible.</i>					
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.	13.5 bags	
	Drop cutting height to 1"				
May 28	RENOVATION				
	Spray (Tank Mix)				
	Katana herbicide				
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.3 bag	
	Seed (middle section of field only - 27,000 sq. ft)				
	Riviera Bermuda Grass		3 lbs.	3 bags	
	Topdress w/ damp fairway topdress sand			25 tons	
<i>*Seed w/ Vredo seeder unit to 1/8" depth</i>					
June 11	12-2-6 NatureSafe	1 lb.	8.33 lbs.	13.5 bags	
June 25	21-0-0 Ammonium Sulfate	0.75 lb.	3.5 lbs.	2 bags	
	<i>*Seeded area only</i>				
July 2	12-2-6 NatureSafe	1 lb.	8.33 lbs.	13.5 bags	
July 16	21-0-0 Ammonium Sulfate	0.75 lb.	3.5 lbs.	2 bags	
	<i>*Seeded area only</i>				

80,500 Sq. Ft		Delcastle Soccer Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
July 30	12-2-6 NatureSafe	1 lb.	8.33 lbs.	13.5	bags
August 27	12-2-6 NatureSafe	1 lb.	8.33 lbs.	13.5	bags
September 10	Overseed with Perennial Ryegrass		20 lbs.	32	bags
	Topdress w/ damp fairway topdress sand			25	tons
September 17	10-20-10 Starter	0.5 lb.	5 lbs.	8	bags
October 1	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	9.66	bags

65,000 Sq. Ft		Delcastle Practice Football Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	<i>If poor germination, Slice Seed bad areas with:</i> Barenbrug RTF (Rhizomatous Tall Fescue) <i>Approx. 10,000 sq. ft</i>		7 lbs.		1.5 bags
	27-0-5 (64% MethEx/36% AS)	1.5 lbs.	5.5 lbs.		7 bags
	0-0-22 K-Mag		5 lbs.		6.5 bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i> *Have rainfall or irrigate within 3 days of application - Make sure seed has germinated	0.86 lb.	3.44 lbs.		4.5 bags
May 7	12-2-6 NatureSafe	1.5 lbs.	12.5 lbs.		16.25 bags
June 11	Spray (Tank Mix) - If Needed Q4 Plus Herbicide UMAXX (46-0-0 stabilized urea) <i>*Spray only if needed for weeds & crabgrass</i>		3 oz. 0.2 lb.		1.5 gallons 0.25 bag
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		7 bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		7 bags
August 14	Spray (Tank Mix) - If Needed Q4 Plus Herbicide UMAXX (46-0-0 stabilized urea) <i>*Spray only if needed for weeds & crabgrass</i>		3 oz. 0.2 lb.		1.5 gallons 0.25 bag
September 3	25-0-8 (50% Duration) 0-0-22 K-Mag	1.5 lbs.	6 lbs. 5 lbs.		7.75 bags 6.5 bags

65,000 Sq. Ft		Delcastle Practice Football Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
September 22	Aerovate aerate & seed field (do when field is a bit on dry side, then water)				
	Broadcast Rhambler SRP Fescue between hash marks & worn areas				1 bag
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	5.25	bags
October 13	Broadcast Rhambler SRP Fescue between hash marks & worn areas (apply BEFORE Concord game)				1 bag
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Rhambler SRP Fescue		6 lbs.		8 bags
	10-20-10 Starter	0.5 lb.	5 lbs.		6.5 bags

77,000 Sq. Ft		Delcastle Football Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	Broadcast seed wear areas with: Rhambler SRP Turf Type Tall Fescue		7 lbs.		1.5 bags
	27-0-5 (64% MethEx/36% AS)	1.5 lbs.	5.5 lbs.		8.5 bags
	0-0-22 K-Mag		5 lbs.		7.75 bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i> *Have rainfall or irrigate within 3 days of application	0.86 lb.	3.44 lbs.		5.25 bags
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.		8.5 bags
June 11	Spray (Tank Mix) Dismiss Herbicide UMAXX (46-0-0 stabilized urea)		0.16 oz. 0.2 lb.		12 oz. 0.3 bag
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		8.5 bags
July 15	Spray (Tank Mix) Dismiss Herbicide UMAXX (46-0-0 stabilized urea)		0.16 oz. 0.2 lb.		12 oz. 0.3 bag
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		8.5 bags
August 14	Spray (Tank Mix) - If Needed Q4 Plus Herbicide UMAXX (46-0-0 stabilized urea) *Spray only if needed for weeds & crabgrass		3 oz. 0.2 lb.		1.8 gallons 0.3 bag
September 3	25-0-8 (50% Duration) 0-0-22 K-Mag	1.5 lbs.	6 lbs. 5 lbs.		9.25 bags 7.75 bags

77,000 Sq. Ft		Delcastle Football Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
September 20	Broadcast Rhambler SRP Fescue between hash marks & bench sideline areas (apply BEFORE Middletown game)				1 bag
September 22	Aerovate aerate field (do when field is a bit on dry side, then water)				
October 13	Broadcast Rhambler SRP Fescue between hash marks & bench sideline areas (apply BEFORE Concord game)				1 bag
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.		6 bags
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Rhambler SRP Fescue		7 lbs.		11 bags
	Topdress w/ damp fairway topdress sand				25 tons
	10-20-10 Starter	0.5 lb.	5 lbs.		7.75 bags

155,000 Sq. Ft		Delcastle Baseball Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 5	Spray (Tank Mix)				
	SpeedZone Herbicide		1.65 oz.		2 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.66 bags
March 12	<i>Aerate/seed bare areas in outfield with:</i>				
	Barenbrug RPR Perennial Ryegrass		5 lbs.		2.5 bag
	Barenbrug RTF (Rhizomatous Tall Fescue)		7 lbs.		3.5 bag
	<i>Approx 25,000 sq. ft</i>				
	11-52-0 (bare areas in outfield only)	0.5 lb.	2 lbs.		1 bag
	27-0-5 (67% MethEx/36% AS)	1 lb.	3.7 lbs.		11.5 bags
	0-0-22 K-Mag		5 lbs.		15.5 bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.		10.66 bags
	<i>Pre-emergent & insecticide application</i>				
	*Have rainfall within 3 days of application - MAKE SURE SEEDLINGS ARE AT 3 LEAF STAGE				
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.		26 bags
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.		3.6 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.66 bags
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		17 bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		17 bags
August 14	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.		3.6 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.66 bag
	*Spray only if needed for weeds & crabgrass				

155,000 Sq. Ft		Delcastle Baseball Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	18.5	bags
	0-0-22 K-Mag		5 lbs.	15.5	bags
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	12.5	bags
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed SOCCER AREAS w/ Rhambler SRP Fescue (20,000 sq. ft.)		7 lbs.	3	bags
	10-20-10 Starter (Seeded areas only)	0.5 lb.	5 lbs.	2	bags

44,000 Sq. Ft		Delcastle Softball Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	3.25	bags
	0-0-22 K-Mag		5 lbs.	4.5	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.	3	bags
	<i>Pre-emergent & insecticide application</i>				
*Have rainfall within 3 days of application - MAKE SURE SEEDLINGS ARE AT 3 LEAF STAGE					
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.	7.33	bag
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1	gallon
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.2	bag
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	5	bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	5	bags
August 14	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1	gallon
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.2	bag
*Spray only if needed for weeds & crabgrass					
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	5.25	bags
	0-0-22 K-Mag		5 lbs.	4.5	bags
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	3.5	bags
End of Season	<i>Core Aerate w/ 5/8" Tines</i>				
	<i>Overseed SOCCER AREAS w/ Rhambler SRP Fescue (5,000 sq. ft.)</i>		7 lbs.	1	bags
	10-20-10 Starter (Seeded areas only)	0.5 lb.	5 lbs.	4.5	bags

65,000 Sq. Ft		Hodgson Soccer Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
ASAP	Slice Seed w/ 4th Millenium Fescue		8.5 lbs.		11 bags
	<i>*This field is very beat up and needs seeding immediately!</i>				
March 12	27-0-5 (64% MethEx/36% AS)	1.5 lbs.	5.5 lbs.		7 bags
	0-0-50		4 lbs.		5.25 bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.		4.5 bags
	<i>Pre-emergent & insecticide application</i>				
	<i>*Have rainfall or irrigate within 3 days of application</i>				
May 7	12-2-6 NatureSafe	1.5 lbs.	12.5 lbs.		16 bags
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.		1.5 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.25 bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		7.25 bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		7.25 bags
August 13	Spray (Tank Mix)				
	Q4 Plus Herbicide		3 oz.		1.5 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.25 bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
September 3	25-0-8 (50% Duration)	1 lb.	4 lbs.		5.25 bags
	0-0-22 K-Mag		5 lbs.		6.5 bags
September 14	<i>Aerovate aerate field (do when field is a bit on dry side, then water)</i>				

65,000 Sq. Ft		Hodgson Soccer Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	5.25	bags
End of Season	Core Aerate w/ 5/8" Tines				
	Slice Seed w/ 4th Millenium Fescue		8.5 lbs.		11 bags
	Topdress w/ damp fairway topdress sand				25 tons
	10-20-10 Starter	0.5 lb.,	5 lbs.		6.5 bags

110,000 Sq. Ft		Hodgson Baseball Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	8 bags	
	0-0-50		4 lbs.	9 bags	
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.	7.5 bags	
	<i>Pre-emergent & insecticide application</i>				
*Have rainfall or irrigate within 3 days of application					
May 7	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	12 bags	
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	2.6 gallons	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.5 bag	
*Spray only if needed for weeds & crabgrass					
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	12 bags	
July 30	18-0-4 NatureSafe (33% MESA)	1	5.5 lbs.	12 bags	
August 13	Spray (Tank Mix)				
	Q4 Plus Herbicide		3 oz.	2.6 gallons	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.5 bag	
*Spray only if needed for weeds & crabgrass					
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	13 bags	
	<i>Core Aerate w/ 5/8" Tines</i>				
	<i>Overseed Infield & Skirts w/ Rhambler SRP Fescue (10,000 sq. ft.)</i>		5 lbs.	1 bag	
	0-0-50		3 lbs.	6.6 bag	
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	9 bags	

60,500 Sq. Ft		Hodgson LAX/Field Hockey Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	4.5	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i>	0.86 lb.	3.44 lbs.	4.2	bags
	*Have rainfall or irrigate within 3 days of application				
May 7	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	6.66	bags
End of Spring Season	<i>Sod Goal & Center of Field with thick-cut fescue sod. Slice seed areas around goals & other week spots w/ Barenbrug RTF Rhizomatous Tall Fescue.</i>		6 lbs.		1 bag
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.4	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.25	bag
	*Spray only if needed for weeds & crabgrass				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	6.66	bags
July 31	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	6.66	bags
August 13	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.4	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.25	bag
	*Spray only if needed for weeds & crabgrass				
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	7.25	bags
	0-0-22 K-Mag		5 lbs.	6	bags
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	5	bags
End of Season	<i>Core Aerate w/ 5/8" Tines</i>				

60,500 Sq. Ft		Hodgson LAX/Field Hockey Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
	Overseed w/ Barenbrug RTF Rhizomatous Tall Fescue		4 lbs.		5 bags
	Topdress w/ damp fairway topdress sand				25 tons
	10-20-10 Starter	0.5 lb.	5 lbs.		6 bags

75,000 Sq. Ft		Hodgson Football Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	5.5	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i>	0.86 lb.	3.44 lbs.	5.25	bags
	*Have rainfall or irrigate within 3 days of application				
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.	12.5	bags
End of Spring Season	Slice Seed weak areas with: Rhambler SRP Turf Type Tall Fescue <i>Approx. 10,000 sq. ft.</i>		7.5 lbs.	1.5	bags
June 11	Spray (Tank Mix) Dismiss Herbicide UMAXX (46-0-0 stabilized urea)		0.16 oz. 0.1 lb.	12 oz. 0.3 bag	
	*Spray for nutsedge either pre or post-emergent				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	8.25	bags
July 14	Spray (Tank Mix) Dismiss Herbicide UMAXX (46-0-0 stabilized urea)		0.16 oz. 0.1 lb.	12 oz. 0.3 bag	
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	8.25	bags
August 13	Spray (Tank Mix) - If Needed Q4 Plus Herbicide UMAXX (46-0-0 stabilized urea)		3 oz. 0.1 lb.	1.8 gallons 0.3 bag	
	*Spray only if needed for weeds & crabgrass				
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	9	bags
	0-0-50		3 lbs.	4.5	bags

75,000 Sq. Ft		Hodgson Football Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
September 14	Aerovate aerate field (do when field is a bit on dry side, then water)				
September 21	Broadcast Rhambler SRP Fescue between hash marks & bench sideline areas (apply BEFORE Newark Game)				1 bag
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.		6 bags
October 26	Broadcast Rhambler SRP Fescue between hash marks & bench sideline areas (apply BEFORE St. George's game)				1 bag
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Rhambler SRP Fescue		6 lbs.		9 bags
	Topdress w/ damp fairway topdress sand				25 tons
	10-20-10 Starter	0.5 lb.	5 lbs.		7.5 bags

72,000 Sq. Ft		Hodgson Practice Football Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
	Set cutting height to 1.25" - Reduce to 1" within 2 1/2 weeks.				
ASAP	Slice Seed w/ HGT Renovator Bluegrass on damaged yard line areas				1 bag
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	5.33	bags
	0-0-22 K-Mag		5 lbs.	7	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.	5	bags
	21-0-0 Ammonium Sulfate	1/2 lb.	2.4 lbs	3.5	bags
	<i>Pre-emergent & insecticide application</i>				
	*Irrigate within 3 days of application				
May 7	12-2-6 NatureSafe	1 1/4 lb.	10.4 lbs.	15.66	bags
End of Spring Season	Deep Tine Aerate 10" w/ solid 1/2" tines				
	Slice Seed w/ HGT Bluegrass between hash marks		3 lbs.		1 bag
	Topdress field w/ USGA spec sand				
June 18	18-0-4 NatureSafe (33% MESA)	1 1/2 lbs.	8.33 lbs.	12	bags
July 14	Spray (Tank Mix)				
	Q4 Plus Herbicide		3 oz.	1.7	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.33	bag
	*Make spray application only when air temp is below 85 (i.e. in the early AM)				
July 30	12-2-6 NatureSafe	1 lbs.	8.33 lbs.	12	bags
August 13	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.7	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.33	bag
	*Spray only if needed for weeds & crabgrass				

72,000 Sq. Ft		Hodgson Practice Football Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
August 16	Broadcast Barenbrug HGT Bluegrass between hash marks & other high-use areas (3 days post spray)				1 bags
September 3	25-0-8 (50% Duration)	1.5 lb.	6 lbs.		8.66 bags
	0-0-50		3 lbs.		4.33 bags
	Aerovate aerate field				
	Broadcast Barenbrug HGT Renovator Bluegrass between hash marks & other high-use areas				1 bag
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.		5.75 bags
	Aerovate aerate field				
October 22	21-0-0 Ammonium Sulfate (Between Hash Marks ONLY)	0.5 lb.	2.3 lbs.		0.5 bag
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Barenbrug HGT Renovator Bluegrass		2 lbs.		3 bags
	Topdress w/ damp fairway topdress sand				25 tons
	10-20-10 Starter	0.5 lb.	5 lbs.		6.5 bags

39,000 Sq. Ft		Hodgson Softball Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	3 bags	
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i>	0.86 lb.	3.44 lbs.	2.66 bags	
	<i>*Have rainfall or irrigate within 3 days of application</i>				
May 7	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	4.25 bags	
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1 gallon	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.15 bag	
	<i>*Spray only if needed for weeds & crabgrass</i>				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	4.25 bags	
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	4.25 bags	
August 13	Spray (Tank Mix)				
	Q4 Plus Herbicide		3 oz.	1 gallon	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.15 bag	
	<i>*Spray only if needed for weeds & crabgrass</i>				
September 1	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	4.66 bags	
	<i>Core Aerate w/ 5/8" Tines</i>				
	<i>Overseed Infield & Skirts w/ Rhambler SRP Fescue (10,000 sq. ft.)</i>		5 lbs.	4 bags	
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	3 bags	

110,000 Sq. Ft		St. George's Baseball Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lbs.	3.70 lbs.		8 bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i>	0.86 lb.	3.44 lbs.		7.5 bags
	<i>*Have rainfall or irrigate within 3 days of application</i>				
May 7	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		12 bags
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.		2.6 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.5 bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		12 bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		12 bags
August 13	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.		2.6 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.5 bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
September 3	25-0-8 (50% Duration)	1.5 lb.	6 lbs.		13 bags
September 11	Core Aerate w/ 5/8" Tines				
	Overseed Infield, Skirts & down Foul Lines w/ Rhambler SRP Fescue (20,000 sq. ft.)		5 lbs.		2 bag
	10-20-10 Starter (seeded areas only)	0.5 lb.	5 lbs.		2 bags
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.		9 bags

48,000 Sq. Ft		St. George's Softball Field		2018	
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 lbs.	3.70 lbs.	3.5	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i>	0.86 lb.	3.44 lbs.	3.33	bags
	<i>*Have rainfall or irrigate within 3 days of application</i>				
May 7	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	5.33	bags
June 11	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.125	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.2	bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	5.33	bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.	5.33	bags
August 13	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.125	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.2	bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
September 3	25-0-8 (50% Duration)	1.5 lb.	6 lbs.	5.75	bags
September 11	Core Aerate w/ 5/8" Tines				
	Overseed Infield, Skirts & down Foul Lines w/ Rhambler SRP Fescue (10,000 sq. ft.)		5 lbs.	1	bag
	10-20-10 Starter (seeded areas only)	0.5 lb.	5 lbs.	1	bags
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	4	bags

70,000 Sq. Ft		St. George's LAX/Field Hockey Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 1/2 lbs.	5.5 lbs.	7.75	bags
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.	4.75	bags
	21-0-0 Ammonium Sulfate	1/2 lb.	2.4 lbs.	3.33	bags
	<i>Pre-emergent & insecticide application</i>				
	*Irrigate immediately				
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.	11.66	bags
End of Spring Season	Deep Tine Aerate 10" w/ solid 1/2" tines Slice Seed w/ HGT Renovator Bluegrass Topdress field w/ USGA spec sand				
June 18	18-0-4 NatureSafe (33% MESA)	1 1/2 lbs.	8.33 lbs.	11.66	bags
July 14	Spray (Tank Mix)				
	Q4 Plus Herbicide		3 oz.	1.66	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.3	bag
	<i>*Make spray application only when air temp is below 85 (i.e. in the early AM)</i>				
July 30	12-2-6 NatureSafe	1 lbs.	8.33 lbs.	11.66	bags
August 13	Spray (Tank Mix) - If Needed				
	Q4 Plus Herbicide		3 oz.	1.66	gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.3	bag
	<i>*Spray only if needed for weeds & crabgrass</i>				
September 3	25-0-8 (50% Duration)	1.5 lb.	6 lbs.	8.5	bags
	0-0-50		3 lbs.	4	bags
	<i>Aerovate aerate field</i>				
	<i>Broadcast Barenbrug HGT Renovator Bluegrass in high-use areas</i>		4 lbs.	1	bag

70,000 Sq. Ft		St. George's LAX/Field Hockey Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	5.66	bags
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Barenbrug HGT Renovator Bluegrass		3 lbs.	4.25	bags
	Topdress w/ damp fairway topdress sand				
	10-20-10 Starter	0.5 lb.	5 lbs.	7	bags

60,000 Sq. Ft		St. George's Practice Field		2017		
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units	
March 12	27-0-5 (64% MethEx/36% AS)	1 lb.	3.7 lbs.	4.5	bags	
	0-0-22 K-Mag		5 lbs.	6	bags	
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension)	0.86 lb.	3.44 lbs.	4.25	bags	
	21-0-0 Ammonium Sulfate	1/2 lb.	2.4 lbs	3	bags	
	<i>Pre-emergent & insecticide application</i>					
	*Have rainfall or irrigate within 3 days of application					
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.	10	bags	
End of Spring Season	Slice Seed thin areas with:					
	Barenbrug RPR Ryegrass		5 lbs.	1	bag	
	Barenbrug HGT Renovator Bluegrass		3 lbs.	1	bag	
	<i>Approx. 10,000 sq. ft.</i>					
June 11	Spray (Tank Mix) - If Needed					
	Q4 Plus Herbicide		3 oz.	1.4	gallons	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.25	bag	
	*Spray only if needed for weeds & crabgrass					
June 18	18-0-4 NatureSafe (33% MESA)	1 1/2 lbs.	8.33 lbs.	10	bags	
July 30	12-2-6 NatureSafe	1 lb.	8.33 lbs.	10	bags	
	0-0-50		3 lbs.	4	bags	
August 13	Spray (Tank Mix) - If Needed					
	Q4 Plus Herbicide		3 oz.	1.4	gallons	
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.	0.25	bag	
	*Spray only if needed for weeds & crabgrass					
August 16	Broadcast Barenbrug HGT Renovator Bluegrass between hash marks & other high-use areas (3 days post spray)				1	bags

60,000 Sq. Ft		St. George's Practice Field			2017
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
September 3	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.	7.25	bags
	Aerovate aerate field				
	Broadcast Barenbrug HGT Renovator Bluegrass between hash marks & other high-use areas			1	bag
October 1	25-0-8 (50% Duration)	1 lb.	4 lbs.	5	bags
	Aerovate aerate field				
October 22	21-0-0 Ammonium Sulfate (Between Hash Marks ONLY - Irrigate immediately!)	0.5 lb.	2.3 lbs.	2.75	bags
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Barenbrug HGT Renovator Bluegrass		2 lbs.	2.5	bags
	Topdress w/ damp fairway topdress sand			25	tons
	10-20-10 Starter	0.5 lb.	5 lbs.	6	bags

66,000 Sq. Ft		Howard Practice Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
March 12	27-0-5 (64% MethEx/36% AS)	1 1/2 lbs.	5.5 lbs.		8 bags
March 26	Spray (Tank Mix) SpeedZone Herbicide		1.8 oz.		0.93 gallons
	UMAXX (47-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.25 bag
April 16	25-0-5 (51% MESA/100% EXPO/0.067 Acelepryn/0.167 Dimension) <i>Pre-emergent & insecticide application</i> *Have rainfall or irrigate within 3 days of application	0.86 lb.	3.44 lbs.		4.5 bags
May 7	12-2-6 NatureSafe	1 lb.	8.33 lbs.		11 bags
June 11	Spray (Tank Mix) Q4 Plus Herbicide		3 oz.		1.5 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lbs.		0.25 bag
	*Spray only if needed for weeds & crabgrass				
June 18	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		5.25 bags
July 30	18-0-4 NatureSafe (33% MESA)	1 lb.	5.5 lbs.		7.25 bags
August 13	Spray (Tank Mix) Q4 Plus Herbicide		3 oz.		1.5 gallons
	UMAXX (46-0-0 stabilized urea)	0.1 lb.	0.2 lb.		0.25 bag
	*Spray only if needed for weeds & crabgrass				
August 16	Broadcast Barenbrug RPR Ryegrass in high-use areas (3 days post spray)				1 bags
September 1	25-0-8 (50% Duration)	1.5 lbs.	6 lbs.		8 bags
	<i>Aerovate aerate field</i>				

66,000 Sq. Ft		Howard Practice Field			2018
Week Of	Product	#N/1000	Product/1000	Total Product Required	Units
	Broadcast Barenbrug RPR Ryegrass in high-use areas				1 bag
September 24	Broadcast Barenbrug RPR Ryegrass in high-use areas				1 bag
October 1	25-0-8 (50% Duration) Aerovate aerate field	1 lb.	4 lbs.		5.25 bags
End of Season	Core Aerate w/ 5/8" Tines				
	Overseed w/ Barenbrug RTF Rhizomatous Tall Fescue		6 lbs.		8 bags
	10-20-10 Starter	0.5 lb.	5 lbs.		6.66 bags