

6.1	Function and Basis of Work		Table C Pounds of Gypsum to Add
6.2a	Nitrogen, Phosphorus, Potassium, and Sulfur Fertilizer	6.5d	Use of Gypsum as Fertilizer
6.2b	Starter Fertilizer Definition	6.6a	Derivation and Definition of Compost
6.2c	Starter Fertilizer Composition	6.6b	Compost Impurities
	Table D Maximum Fertilizer Applications	6.6c	Compost Physical Condition, Water, pH and Salts
6.2d	Micronutrient Fertilizers	6.6d	Compost Testing
6.3a	Limestone Composition & Properties	6.6e.1	Compost As Starter Fertilizer
6.3b	Proprietary Limestone Materials	6.6e.2	Application Rates for Compost as Starter Fertilizer
6.3c.1	Solid Limestone Materials	6.6f	Methods and Timing of Compost Application
6.3c.2	Pulverized Limestone	6.6g	Surface Application of Compost
6.3c.3	Granular Limestone	6.6h	Soil Incorporation of Compost
6.3c.4	Pelletized Limestone	6.6i	Non-Standard Compost
	Table A Pounds of Limestone to Add	6.7	Site Clean Up
6.3d	Limestone Application Rates to Raise Soil pH	6.8a	Materials Acceptance
6.4a	Composition and Use of Elemental Sulfur to Reduce pH	6.8b	Performance Acceptance
6.4b	Application of Elemental Sulfur	6.9	Professional Guarantee
	Table B Pounds of Elemental Sulfur to Add	6.10a	Site Protection
6.4c	Notes About Elemental Sulfur	6.10b	Erosion Protection and Repair
6.5a	Gypsum Composition	6.10c	Repair Limitations
6.5b	Gypsum Grades and Labeling	6.10d	Damages Disclaimer
6.5c.1	Use of Gypsum to Remove Soluble Salts	6.10e	Hazards Disclaimer
6.5c.2	Gypsum Application	6.11	Payment

**6.1 Function and Basis of Work** The specifications of Section 6 shall apply to the composition and application of fertilizer, limestone, sulfur, gypsum and compost for turfgrass and other landscape seeding. All labor, equipment, and materials required for the completion of Section 6 shall be furnished by the seeding contractor, unless specified otherwise.

**6.2a Nitrogen, Phosphorus, Potassium, and Sulfur Fertilizer Materials** Fertilizers which supply nitrogen, phosphorous, potassium, and sulfur for turfgrass and other seeding shall be uniform in composition, free flowing, and suitable for application with mechanized rotary spreaders, drop spreaders, hydraulic seeders, or other equipment capable of uniformly distributing fertilizer over the soil surface. Nitrogen, phosphorus, potassium, and sulfur fertilizers may include a single fertilizer compound and only one nutrient, or may include a combination of compounds which supply nitrogen, phosphorus, potassium, and sulfur. Such fertilizers shall be labeled according to Maryland fertilizer laws and shall include the trade name of the product, the identity of the chemical ingredients of the product, and the guaranteed nutrient analysis of the product. The addition of nitrogen (N), phosphorus (P<sub>2</sub>O<sub>5</sub>), potassium (K<sub>2</sub>O) and Sulfur (S) to soils shall be made as permitted by Maryland Nutrient Management Regulations in accordance with representative soil tests performed by an accredited soil testing laboratory and the recommendations of the soil testing laboratory or the Maryland Cooperative Extension. Refer to Section 14.8 for a list of regional soil testing laboratories that serve Maryland.

**6.2b Starter Fertilizer Definition** Starter fertilizer shall be defined as a general purpose fertilizer which is used at the time of seeding to enhance seedling establishment. Starter fertilizers typically include nitrogen, phosphorus, potassium, and may also include sulfur. The use of starter fertilizer is optional. Starter fertilizer may be used to enhance seedling establishment in all sites, including sites where soil tests show no deficiency of nitrogen, phosphorus, potassium, or sulfur. Starter fertilizer may be applied up to 10 days before seeding, at the time of seeding, or up to 5 days after seeding operations are completed.

**6.2c Starter Fertilizer Composition** Nitrogen, phosphorus, potassium and sulfur may be applied separately or in any combination as a starter fertilizer in the absence of soil tests and without regard to any established nutrient requirements so that not more than 1.0 lb. of soluble nitrogen (N) per 1000 ft<sup>2</sup> (45 lbs. N/acre) or 2.0 lbs. of 50% slow-release nitrogen (N) per 1000 ft<sup>2</sup> (90 lbs. N/Acre) and 2.0 lbs. of phosphorus (P<sub>2</sub>O<sub>5</sub>) per 1000 ft<sup>2</sup> (90 lbs. P<sub>2</sub>O<sub>5</sub>/acre) and 2.0 lbs. of potassium (K<sub>2</sub>O) per 1000 ft<sup>2</sup> (90 lbs. K<sub>2</sub>O/acre) and 0.5 pound sulfur (S) per 1000 ft<sup>2</sup> (22 lbs S/acre) are applied to the soil surface as an aid to rapid seedling establishment. However, when compost is applied to the seeding site, the nutrient contribution of the compost shall be subtracted from the nutrient contribution of the starter fertilizer. See Section 6.6e for provisions regarding the application rates of compost with and without soil incorporation. See Section 14.3 thru Section 14.5 for information about selected fertilizer materials.

**Table D Maximum Fertilizer Applications According to Maryland Nutrient Management Guidelines**

Fertilizer Analysis	Maximum Application Lbs.		N Yield Lbs.		P <sub>2</sub> O <sub>5</sub> Yield Lbs.		K <sub>2</sub> O Yield Lbs.	
	Acre	1000 ft <sup>2</sup>	Acre	1000 ft <sup>2</sup>	Acre	1000 ft <sup>2</sup>	Acre	1000 ft <sup>2</sup>
10 - 20 - 20 with 100% Soluble N	436	10.0	43.6	1.0	87.1	2.0	87.1	2.0
10-22- 22 with 50% UF	396	9.1	39.6	0.9	87.1	2.0	87.1	2.0
18 -18 -18 with 100% Sol N	242	5.6	43.6	1.0	43.6	1.0	43.6	1.0
with 50% SCU or UF)	484	11.1	87.1	2.0	87.1	2.0	87.1	2.0
18 -24 -12 with 50% SCU	363	8.3	65.3	1.5	87.1	2.0	43.6	0.5
19 -19 -19 with 100% Soluble N	229	5.3	43.6	1.0	43.6	1.0	43.6	1.0
with 50% SCU	458	10.5	87.1	2.0	87.1	2.0	43.6	2.0

Note: All fertilizer applications shall conform to Maryland Nutrient Management Regulations

**6.2d Micronutrient Fertilizers** Micronutrient fertilizers contain guaranteed quantities of essential micronutrients such as iron, boron, zinc, copper, manganese, molybdenum, or other elements required for the growth of turfgrass and other plants, but which do not contain significant quantities of nitrogen, phosphorus, or potassium. Micronutrient fertilizers shall be uniform in composition, free flowing, and suitable for application with mechanized rotary spreaders, drop spreaders, hydraulic seeders, or other equipment capable of uniformly distributing fertilizer over the soil surface, or shall be formulated for use with sprayer equipment. Such fertilizers shall be specifically designated as appropriate for use in turfgrass or other landscape seedings, and shall be labeled according to Maryland law. Micronutrient fertilizers shall include the trade name of the product, the identity of the chemical ingredients of the product, and the guaranteed nutrient analysis of the product. The addition of micronutrients shall be in accordance with soil test results and the recommendations of an accredited soil testing laboratory of the Maryland Cooperative Extension. Micronutrient fertilizers shall not be applied to soils which will be seeded to turfgrass or other landscape seedings in the absence of soil tests, and shall not be included in routinely applied starter fertilizers (see Section 6.2b-c).

**6.3a Limestone Composition & Properties** Limestone may be used to increase soil pH by decreasing soil acidity, or may be used to supply calcium and sometimes magnesium, an essential plant nutrient. Limestone used for soil pH modification or as a nutrient source of calcium shall be composed of finely ground calcitic or dolomitic limestone (calcium carbonate or calcium carbonate + magnesium carbonate), and shall contain a minimum of 50% total oxide equivalent (calcium oxide + magnesium oxide); neither hydrated or burnt lime shall be used for turfgrass or other landscape seeding. Limestone shall be uniform in composition, free flowing, and suitable for application with mechanized rotary spreaders, drop spreaders, hydraulic seeders, or other equipment capable of uniformly distributing limestone over the soil surface.

**6.3b Proprietary Limestone Materials** Proprietary liquid or solid limestone products e.g., Neutracal™, NutraLime Dry™, NutraLime Liquid™ etc.) applied at rates recommended by their manufacturers may be used to as a supplement to reduce soil acidity in the seedbed at the time of hydraulic seeding. Unless guaranteed by their manufacturers to reduce soil acidity to a depth of 4.0 inches, according to Table A, such products shall not be used in lieu of limestone applications specified in Section 6.3a,c-d.

**6.3c.1 Solid Limestone Materials** Solid limestone materials shall conform to one of the following grades: pulverized (fine powder), granulated (coarse powder), or pelletized (small aggregates of fine powder). Limestone shall be labeled according to Maryland law, and include the trade name of the product, the identity of the chemical ingredients of the product, and the guaranteed analysis of the product. Bagged limestone shall carry the required label information on its bags. Label information pertaining to bulk limestone shall accompany and be delivered to the seeding site by the distributor at the time of delivery.

**6.3c.2 Pulverized Limestone** Pulverized limestone, the most finely ground limestone material, shall be of such fineness that a minimum of 50% of the ground limestone shall be able to pass through a 100 mesh sieve, and a minimum of 98% shall be able to pass through a 20 mesh sieve. Pulverized limestone applications over 50 pounds per 1000 ft<sup>2</sup> shall be uniformly incorporated into the upper 4.0 to 6.0 inches of the soil surface; pulverized limestone applications of 50 pounds per 1000 ft<sup>2</sup> or less may be incorporated or left on the soil surface. Pulverized limestone shall be distributed with drop spreaders at times when high winds will not interfere with uniform distribution or cause nuisance dust. Pulverized limestone shall not be distributed with rotary spreaders or other spreaders. Pulverized limestone may be included in the hydraulic seeding slurry.

**6.3c.3 Granular Limestone** Granular limestone, a medium grade of ground limestone material, shall be of such fineness that a minimum of 30% of the ground limestone shall be able to pass through a 100 mesh sieve, a minimum of 50% shall pass through a 60 mesh sieve, and a minimum of 98% shall be able to pass through a 20 mesh screen. Limestone applications over 50 pounds per 1000 ft<sup>2</sup> shall be uniformly incorporated into the upper 4.0 to 6.0 inches of the soil surface; granulated limestone applications of 50 pounds per 1000 ft<sup>2</sup> or less may be incorporated or left on the soil surface.. Granular limestone may be distributed with drop or rotary spreaders, but shall not be included in the hydraulic seeding slurry.

**6.3c.4 Pelletized Limestone** Pelletized limestone, a product composed of pellets made of pulverized limestone, shall be of a pellet type and size which is recommended by the manufacturer for use with turfgrass. The limestone used in the manufacture of a pelletized limestone product shall be of such fineness that a minimum of 50% of the ground limestone shall be able to pass through a 100 mesh sieve, and a minimum of 98% shall be able to pass through a 20 mesh sieve. Pelletized limestone applications over 50 pounds per 1000 ft<sup>2</sup> shall be uniformly incorporated into the upper 4.0 to 6.0 inches of the soil surface; pelletized limestone applications of 50 pounds per 1000 ft<sup>2</sup> or less may be incorporated or left on the soil surface. Pelletized limestone may be distributed with rotary or drop spreaders, or in hydraulic seeding slurries.

**Table A Pounds of Limestone to Add per 1000 ft<sup>2</sup> to Raise Soil pH to 6.5**

Original pH	Soil Texture Class		
	Sand	Loam	Clay
4.8	85	140	200
5.0	75	125	175
5.2	65	110	150
5.4	55	95	125
5.6	45	80	100
5.8	35	65	80
6.0	25	50	60
6.2	15	35	40
6.4	5	15	20

Note: Table A shall be used for limestone applied according to the specifications of Section 6.3

**6.3d Limestone Application Rates to Raise Soil pH** Limestone application rates to raise soil pH shall be based upon soil tests and standardized recommendations. Soil pH shall be determined by an accredited soil testing laboratory. Limestone applications shall be based on the recommendations of the soil testing laboratory, or the Maryland Cooperative Extension, or Table A, above. Where applications of limestone are required, the limestone shall be uniformly distributed over the soil surface with appropriate spreader equipment.

**6.4a Composition and Use of Elemental Sulfur to Reduce Soil pH** Elemental sulfur (S) may be used to reduce soil pH by increasing soil acidity. Elemental sulfur shall be composed of coarsely ground or granular sulfur (S) with minimum purity of 95%. Elemental sulfur shall be the only material used for reducing soil pH; neither aluminum sulfate, nor iron sulfate, nor any other chemical may be used to reduce soil pH at sites intended for turfgrass or other landscape seeding. Although sulfur is an essential plant nutrient, elemental sulfur (S) shall not be used as a fertilizer material. When soil tests show that sulfur is deficient in the soil of a seeding site, then either gypsum, ammonium sulfate, sulfur coated urea, or potassium sulfate shall be used to correct the sulfur deficiency. The use of sulfur fertilizer is discussed in section 6.2a and 6.2b; information about the nutrient content of fertilizer materials is included in Section 14.3 thru Section 14.5.

**6.4b Application of Elemental Sulfur** Elemental sulfur application rates shall be based upon soil tests and standardized recommendations. Soil pH shall be determined by an accredited soil testing laboratory. The use of elemental sulfur to reduce soil pH shall be based on the recommendations of the soil testing laboratory or the Maryland Cooperative Extension, or Table B, below. Where applications of elemental sulfur are recommended, the elemental sulfur shall be uniformly spread and incorporated into the upper 4.0 to 6.0 inches of the soil surface. Elemental sulfur shall not be broadcast and left on the soil surface, or included in hydraulic seeding mixtures.

**Table B Pounds of Elemental Sulfur to Add per 1000 ft<sup>2</sup> to Reduce Soil pH to 6.5**

Original pH	Soil Texture	
	Sandy Soil	Clay Soil
7.5	10-15	20-25
8.0	25-35	35-50
8.5	35-50	40-50

Note: Table B shall be used for elemental sulfur applied according to the specifications of Section 6.4

**6.4c Notes About Elemental Sulfur** Elemental sulfur is flammable, and the combination of elemental sulfur and certain fertilizers can be explosive. Elemental sulfur is slowly decomposed (oxidized) in the soil, and may require several months before its effects are completely realized. Cold and/or dry weather may significantly reduce the oxidation rate of elemental sulfur. During decomposition, the sulfur granules are changed into sulfuric acid, and the soil near the granules becomes very acidic, which may kill seedlings, mature plants, earthworms, and soil microflora.

**6.5a Gypsum Composition** Gypsum may be used as a fertilizer to supply calcium and/or sulfur for turfgrass and other landscape seeding, or as an aid to reduce excessive soluble salts concentrations in soil, or to improve soil physical properties. Gypsum shall be composed of finely ground gypsum (calcium sulfate, CaSO<sub>4</sub>) with a minimum purity of 90%. Gypsum shall be uniform in composition, free flowing, and suitable for application with mechanized rotary spreaders, drop spreaders, or other equipment capable of uniformly distributing gypsum over the soil surface.

**6.5b Gypsum Grades and Labeling** Gypsum shall conform to one of the following grades: pulverized (fine powder), granulated (coarse powder), or pelletized (small, rounded aggregates of fine powder). Gypsum shall be labeled according to Maryland law, and shall include the trade name of the product, the identity of the chemical ingredients of the product, and the guaranteed analysis of the product. Bagged gypsum shall carry the required label information on its bags; label information pertaining to bulk gypsum shall accompany and be delivered to the seeding site by the distributor at the time of delivery.

**6.5c.1 Use of Gypsum to Remove Soluble Salts** Gypsum is used as an aid to hasten the removal of sodium and certain other soluble salts from soils. It is important to keep in mind that while the addition of gypsum makes it easier for soluble salts to be removed from soil, only water that leaches through the soil profile can remove the soluble salts from soils with high salts concentrations. The leaching process is often very slow, and may require several years assuming adequate rainfall and drainage.

**6.5c.2 Gypsum Application** Gypsum shall be incorporated into the upper 4.0 to 6.0 inches of the soil surface. Gypsum used to reduce soil soluble salts shall not be left on the soil surface, and shall not be included in hydraulic seeding mixtures with seed. Gypsum application rates shall be based upon soil tests and standardized recommendations. Modifications to reduce excess soil soluble salts by incorporating gypsum into the soil shall be made according to the recommendations of an accredited soil testing laboratory, or the Maryland Cooperative Extension, or Table A, below. Gypsum shall be uniformly distributed over the soil surface with appropriate spreader equipment calibrated for use with gypsum.

**Table C Pounds of Gypsum to Add per 1000 ft<sup>2</sup>  
to Reduce Soluble Salts to Recommended Levels**

Original Salts Level millisiemens	parts per million (ppm)	Pounds Gypsum per 1000 ft <sup>2</sup>
8	2500	320
7	1800	230
6	1250	160
5	700	80
4.5	550	40

Note: Table C shall be used for gypsum applied according to the specifications of Section 6.5

**6.5d Use of Gypsum as Fertilizer** Where additions of gypsum are recommended to correct soil deficiencies of calcium or sulfur, based on soil tests conducted by an accredited soil testing laboratory or the Maryland Cooperative Extension, the recommended amount of gypsum may be applied to the soil surface without soil incorporation, and may be included in hydraulic seeding mixtures. Gypsum shall be uniformly spread over the soil surface with properly calibrated equipment. Pelletized gypsum and granulated gypsum shall be spread with rotary or drop spreaders. Pulverized gypsum shall be spread only with drop spreaders. Hydraulic seeders shall use pelletized or pulverized gypsum. Not more than 50 pounds per 1000 ft<sup>2</sup> of pelletized, pulverized, or granulated gypsum shall be applied in a single application to the soil surface of areas which will be seeded to turfgrass or other landscape seeding.

**6.6a Derivation and Definition of Compost** Compost shall be derived from any combination of the following fully decomposed materials: grass clippings, leaves, wood chips, animal byproducts or residuals, sewage sludge, or other organic materials or adjuvants which are commonly utilized in the production of compost. Compost shall be fully matured, and shall be cured for a minimum of 30 days; minimal biological activity, as evidenced by noticeable heat or odor, shall be present at the time of delivery to the seeding site or at the time of soil application. Compost shall be dark brown to black in color and shall be capable of supporting the germination and development of seedlings.

**6.6b Compost Impurities** Compost shall be free of plant pathogens, human pathogens, and weed seeds; proof of conformity to EPA minimum heating requirements (i.e., compost developed a minimum temperature of 55° C or 131° F for 5 days during production) shall be sufficient to establish the compost as free of pathogens and weed seeds. Compost shall not contain concentrations of any heavy metal or other material which exceed EPA 503. Compost shall contain a minimum of 50% organic matter by weight, and shall not contain more than 1.0% by weight of pebbles or small stones which are greater than 0.25 inches in diameter. Compost shall not contain noticeable quantities of wood, metal, bone, plastic, rubber or similar refuse, or any solid objects, stones, or wood chips, larger than 1.0 inches in diameter.

**6.6c Compost Physical Condition, Water Content, pH and Soluble Salts** Compost shall be loose and friable, with a water content less than or equal to 30% by weight, and shall be of such fineness that 98% is able to pass a 1.0 inch screen. The pH of compost shall not be less than pH 5.5 nor greater than pH 8.0. The soluble salts concentration of compost shall be less than 5.0 millisiemens.

**6.6d Compost Testing** Compost shall be tested by its producer and guaranteed to meet the specifications of Section 6.6a-c and thereby establish the suitability of the compost for turfgrass or other landscape seeding. Applications of compost shall be based on soil nutrient and organic matter requirements as demonstrated or recommended by soil tests performed by an accredited soil testing lab or the Md. Cooperative Extension. However, if the carbon to nitrogen ration (C:N ratio) of compost exceeds 25:1, supplemental nitrogen fertilizer may be required to avoid induced nitrogen deficiency. In the absence of such tests, and regardless of any demonstrated soil nutrient deficiencies, compost may be used as a routine starter fertilizer and soil amendment for turf or other landscape seeding establishment when applied to the soil surface or incorporated

**6.6e.1 Compost As Starter Fertilizer** When compost is used alone or in combination with other fertilizer materials to comprise a starter fertilizer for seeding, as specified in Section 6.2b, the nutrient contribution of the compost shall be subtracted from the nutrient contribution of any starter fertilizer used. Compost may replace some or all of the nutrients which might otherwise be applied as a starter fertilizer.

**6.6e.2 Application Rates for Compost as Starter Fertilizer** In the absence of soil tests to establish a greater need for nitrogen, phosphorus, potassium or sulfur, the maximum allowable contribution of these nutrients by compost used as a routine starter fertilizer shall be the same as that allowed by an ordinary inorganic starter fertilizer according to Maryland Nutrient Management Guidelines i.e., 1.0 pound nitrogen (N) per 1000 ft<sup>2</sup>, and 2.0 pounds phosphorus (P<sub>2</sub>O<sub>5</sub>) per 1000 ft<sup>2</sup>, and 2.0 pounds potassium (K<sub>2</sub>O) per 1000 ft<sup>2</sup>, and 0.5 pound sulfur (S) per 1000 ft<sup>2</sup> when compost is spread and left on the soil surface. When compost is incorporated into the upper 4.0 to 6.0 inches of the soil surface as a starter fertilizer in the absence of soil tests or any demonstrated soil nutrient deficiencies, up to 2.0 lbs nitrogen (N) per 1000 ft<sup>2</sup>, and 2.0 lbs phosphorus (P<sub>2</sub>O<sub>5</sub>) per 1000 ft<sup>2</sup>, and 2.0 lbs potassium (K<sub>2</sub>O) per 1000 ft<sup>2</sup>, and 1.0 lb sulfur (S) per 1000 ft<sup>2</sup> may be applied.

**6.6f Methods and Timing of Compost Application** Compost shall be uniformly spread with suitably calibrated equipment over the soil surface, or uniformly spread and incorporated into the upper 4.0 to 6.0 inches of the soil surface by rototilling, disking, or other approved method. Compost applications shall be timed so that seeding will be completed within 15 days after the application of compost, or at the time of seeding, or up to 5 days after seeding operations are completed. Compost shall not be applied to newly seeded turfgrass or other landscape seeding later than 5 days after seeding, but may be applied after the seeding is established.

**6.6g Surface Application of Compost** Not more than 0.5 inch of compost shall be applied and left on the soil surface, regardless of purpose or nutrient content. Compost depths over 0.5 inch may adversely affect seed establishment. Compost which is spread on the soil surface and left without subsequent soil incorporation shall not deliver more nutrients than allowed by Maryland Nutrient Management Guidelines. Compost shall not be left on the soil surface at any site where rain or runoff may dislodge and erode the compost into nearby streams or water systems. The application of straw or other mulch designed to protect soil and compost from erosion is recommended at all sites where up to 0.5 inches of compost is spread and left on the soil surface.

**6.6h Soil Incorporation of Compost** Where more than 0.5 inch of compost is spread on the soil surface, or when the nutrient delivery of compost exceeds 2.0 pounds of nitrogen (N) per 1000 ft<sup>2</sup>, or 2.0 pounds of phosphorus (P<sub>2</sub>O<sub>5</sub>), or 2.0 pounds of potassium (K<sub>2</sub>O) per 1000 ft<sup>2</sup> the compost shall be incorporated into the upper 4.0 to 6.0 inches of the soil surface within 2 days after the application of the compost, or before the first significant rainfall. Compost applications shall not cause soil organic matter concentrations to exceed 25% by volume when sampled over the top 4.0 inches of the soil surface. In sites where compost must be incorporated into the soil according to the specifications of Section 6.6h, the soil shall be protected from erosion by rain or water runoff with the use of straw or other soil mulch materials. Erosion control mulches shall be applied within 2 days after the soil incorporation of compost, or before the first significant rain.

**6.6i Non-Standard Compost** Compost which does not meet the specifications of Section 6.6a-d may be used for turfgrass or other landscape seeding when all parties are informed by the seeding contractor or compost supplier of the possible adverse consequences of such compost upon seedling germination and establishment. All parties must approve the use of non-standard compost before it is delivered to the seeding site. Non-standard compost application rates and methods shall conform to Maryland Nutrient Management Guidelines and Section 6.6e-h unless other specifications are approved.

**6.7 Site Clean Up** Grading stakes, stones, trash, and other debris which may hinder seedbed preparation shall be removed from the site when subsoil preparation operations are completed. Soil, fertilizer, compost, limestone, etc. shall be removed from paved areas as soon as possible after topsoil spreading and tilling operations are completed. Clean up shall be completed by the seeding contractor before acceptance is given.

**6.8a Materials Acceptance** The seeding contractor shall inform all affected parties of the composition of the fertilizer, compost, limestone, etc. that are intended for application at the site before any of these materials are applied; acknowledgment of acceptance of these materials shall be given by the owner, general contractor, landscape architect, or other person(s) authorized to make such a decision before spreading operations are begun. Labels and other material identification pertaining to the materials that are applied shall be retained by the seeding contractor for a minimum of 90 days after the completion of spreading operations.

**6.8b Performance Acceptance** The site shall be inspected within 24 hours of the completion of each subsection of Section 6, as indicated by the seeding contractor. Acknowledgment of acceptable performance shall be given by the owner, general contractor, landscape architect, or other person authorized to inspect the site. The seeding contractor shall give notification when all subsections of Section 6 have been completed; final acceptance and payment shall be made within 24 hours of such notification, or within the time period specified in the contract.

**6.9 Professional Guarantee** The seeding contractor shall guarantee that the materials and methods selected and used shall be appropriate for the site and its intended use, according to the specifications of Section 6, unless specified otherwise. The seeding contractor shall utilize, distribute, and incorporate such materials according to the specifications of Section 6 with due care and in a timely manner in order to maximize their agronomic effectiveness, and minimize their loss and potential for environmental damage.

**6.10a Site Protection** It shall be the responsibility of the owner, general contractor, or other authorized party to install signs, flagging, etc. at the perimeter of the fertilizer and/or limestone application site which shall serve to notify foot and vehicular traffic that a sensitive area may be damaged by their entry. Under no circumstances shall the seeding contractor be held liable to repair a fertilizer and/or limestone application site that is damaged by the entry of such traffic.

**6.10b Erosion Protection and Repair** It shall be the responsibility of the seeding contractor to ensure that materials applied according to the specifications of Section 6 are not blown or washed from the site, and that nearby areas and streams are protected from fertilizer, gypsum, compost, limestone, and elemental sulfur. In the event of heavy rain or wind that causes damage to the site which may have been anticipated and prevented by the seeding contractor, then the seeding contractor shall repair the damaged areas so they are restored to a condition acceptable under the specifications of Section 6; when soil or other material is moved from the site and deposited on nearby areas the seeding contractor shall restore those areas to a condition substantially similar to that which prevailed before the damaging event.

**6.10c Repair Limitations** The seeding contractor shall not be obliged to repair the site or nearby areas when damage to them was substantially caused by water, soil, or other materials which passed into the site from an area not stabilized or under the control or supervision of the seeding contractor. Examples of situations which shall void the responsibility of the seeding contractor to repair the site and nearby areas shall include the failure of responsible parties to provide effective groundcover, spillways, drainage diversions, water settlements, silt fence, etc., which would have prevented the damage.

**6.10d Damages Disclaimer** The seeding contractor shall not be held liable to repair damages incurred to the site as a result of materials not applied under the supervision of the seeding contractor, nor by vandalism, nor by acts of God. The seeding contractor shall not be held liable to repair or otherwise amend the site as a result of the use of fertilizer, compost, or other materials which are labeled in error or which are otherwise not in accordance with the label or description provided with them by the manufacturer or distributor of the products, when they are applied by the seeding contractor in good faith, in accordance with their label or description.

**6.10e Hazards Disclaimer** Because the fertilizer and/or limestone application site is a construction zone not under the ownership or legal control of the seeding contractor and may present hazards to persons or property which enter the site, the seeding contractor specifically disclaims any and all responsibility for the safety and security of persons or property which may enter the site before the seeding contractor has begun work or when work is underway or at any time after work has been completed, and without regard to whether such entry is legal or otherwise. The seeding contractor shall assume no responsibility for personal injury or property damage, nor be subject to any claims of negligence, when the seeding contractor has performed work according to the specifications of MSA-GS-05.0, as mutually agreed, or has applied products or materials according to the recommendations of their manufacturer or distributor.

**6.11 Payment** The seeding contractor shall give notification upon the completion of Section 6; the site shall be inspected within 24 hours of such notification, and payment shall be made at that time, or as specified in the contract. When payment is not received within the specified time period, the seeding contractor may void any guarantees related to Section 6, and may seek appropriate legal remedies.