

STANDARD AND SPECIFICATIONS FOR RECREATION AREA IMPROVEMENT

DEFINITION
ESTABLISHING GRASSES, LEGUMES, NINES, SHRUBS, TREES, OR OTHER PLANTS, OR SELECTIVELY REDUCING STAND DENSITY AND TRIMMING WOODY PLANTS, TO IMPROVE AN AREA FOR RECREATION.

PURPOSE
TO INCREASE THE ATTRACTIVENESS AND USEFULNESS OF RECREATION AREAS AND TO PROTECT THE SOIL AND PLANT RESOURCES.

CONDITIONS WHERE PRACTICE APPLIES
ON ANY AREA THAT IS TO BE USED FOR LAWNS, AND AREAS THAT WILL BE MAINTAINED IN A CLOSELY MOWED CONDITION.

SPECIFICATIONS
ESTABLISHING GRASSES (TURFGRASS), PASSIVE RECREATION AREAS, PARKS, ATHLETIC FIELDS, CAMPING AREAS, PICNIC AREAS, PASSIVE RECREATION AREAS SUCH AS LAWNS, AND SIMILAR AREAS.

1. TIME OF PLANTING
A. FALL PLANTING IS PREFERRED. SEED AFTER AUGUST 15 IN THE SPRING, PLANT UNTIL MAY 15. FERTILIZE AND WATER AS NEEDED. PLANT SEEDS IN THE SPRING, PLANT UNTIL AUGUST 15. IRRIGATION MAY BE NECESSARY TO ENSURE A SUCCESSFUL SEEDING.

2. SITE PREPARATION

A. INSTALL GRADED WATER CONTROL MEASURES AND BRING AREA TO BE SEEDED TO A MINIMUM OF 4 IN. TOPSOIL IS REQUIRED.

B. SEE STANDARD AND SPECIFICATIONS FOR TOPSOIL.

C. PLOW TO A DEPTH OF 6 INCHES.

D. LIME TO A PH OF 6.5.

E. TEST SOIL FOR NITROGEN. IF SOIL MUST BE FERTILIZED, BEFORE RESULTS OF A SOIL TEST CAN BE OBTAINED TO DETERMINE FERTILIZER NEEDS, APPLY COMMERCIAL FERTILIZER AT 850 POUNDS OF 5-10-10 OR EQUIVALENT PER ACRE (20 LBS./1000 SQ. FT.)

F. REMOVE ROCKS, FOREIGN MATTER, AND STONES OVER 1 INCH IN DIAMETER, FROM THE SURFACE, FOR THE SEEDBED.

3. PLANTING

A. USE A CULTIPACKER TYPE SEEDER IF POSSIBLE, SEED TO A DEPTH OF 1/8 TO 1/4 INCH. IF FERTILIZED, USE A CULTIPACKER, OR ROLL AFTER SEEDING. IF HYDROSEED, LIME AND FERTILIZED MAY BE APPLIED THROUGH THE SEEDER, AND ROLLING IS NOT PRACTICAL.

4. MULCHING

A. MULCH ALL SEEDINGS IN ACCORDANCE WITH STANDARD AND SPECIFICATIONS FOR MULCHING.

B. SELECT GRAN STRAW IS THE BEST MATERIAL.

5. SEED

A. SELECT SEED MIXTURE FOR SITE CONDITIONS AND INTENDED USE FROM TABLE 3.2.

6. CONTACT CORNELL COOPERATIVE EXTENSION TURF SPECIALIST FOR SUITABLE VARIETIES

A. WHEN KENTUCKY BLUEGRASS IS USED, IT IS DESIRABLE TO PLANT TWO OR MORE VARIETIES IN THE SAME AREA.

B. TURF-TYPE TALL FESCUE HAVE REPLACED THE OLD KY-3 TALL FESCUE. NEW VARIETIES HAVE FINER, TEXTURED GRASSES SUCH AS BLUEGRASS AND RED FESCUE.

C. COMMON YEREGRASS, WHICH ARE RELATIVELY SHORT LIVES, SPECIALLY BREED FOR USE IN LAWNS, ARE NOT PRACTICAL FOR USE IN RECREATION AREAS. FERTILIZERS PROVIDED EXCELLENT QUALITY TURF, BUT CONTINUE TO LACK WINTER HARDINESS.

D. COARSE GRASS SEEDS ARE NOT PRACTICAL FOR USE IN RECREATION AREAS.

E. FERTILIZING—FIRST YEAR

A. APPLY FERTILIZER AS INDICATED BY THE SOIL TEST THREE TO FOUR WEEKS AFTER SEEDING. (IF TEST RESULTS HAVE NOT BEEN OBTAINED, APPLY 1 POUND NITROGEN/1,000 SQ. FT. AS A COMPLETE FERTILIZER WITH A 2-1-1 OR 4-1-3 RATIO.) SUMMER OR EARLY FALL, APPLY AS ABOVE UNLESS AIR TEMPERATURES ARE ABOVE 70° F. FOR AN EXTENDED PERIOD, WAIT FOR COOLER TEMPERATURES TO FERTILIZE LATE FALL.

7. RESTRICT USE

A. ALL SEEDINGS SHOULD BE PROTECTED FROM USE FOR ONE FULL YEAR TO ALLOW DEVELOPMENT OF A DENSE SOY WITH GOOD ROOT STRUCTURE.

Maintaining GRASSES

1. MAINTAIN A PH OF 6.0 TO 7.0.

2. PLOW TO A DEPTH OF 6 INCHES IN EARLY JUNE AS FOLLOWS: APPLY AN LBS. OF FERTILIZER AT THE RATE OF 10 LBS./1,000 SQ. FT. AND REPEAT IN LATE AUGUST IF SOIL DENSITY IS NOT ADOBE.

3. AVOID FERTILIZING WHEN HEAT IS OVER 80° F. AND AVOID FERTILIZING WHEN AIR TEMPERATURES ARE ABOVE 70° F. FOR AN EXTENDED PERIOD, WAIT FOR COOLER TEMPERATURES TO FERTILIZE LATE FALL.

8. RESTRICT USE

A. ALL SEEDINGS SHOULD BE PROTECTED FROM USE FOR ONE FULL YEAR TO ALLOW DEVELOPMENT OF A DENSE SOY WITH GOOD ROOT STRUCTURE.

STANDARD AND SPECIFICATIONS FOR TOPSOILING

DEFINITION
SPREADING A SPECIFIED QUALITY AND QUANTITY OF TOPSOIL MATERIALS ON GRADED OR CONSTRUCTED SUBSOIL AREAS.

PURPOSE
TO PROVIDE ACCEPTABLE PLANT COVER GROWING CONDITIONS, THEREBY REDUCING EROSION, TO REDUCE IRRIGATION WATER NEEDS, AND TO REDUCE THE NEED FOR NITROGEN FERTILIZER APPLICATION.

CONDITIONS WHERE PRACTICE APPLIES

TOPSOIL IS APPLIED TO SUBSOILS THAT ARE DROUGHTY (LOW AVAILABLE MOISTURE FOR PLANTS), STONY, SLOW-DRYING, OR SALTY OR EXTREMELY ACID. IT IS ALSO USED TO BACKFILL AROUND SHRUB AND TREE TRANSPLANTS. THIS STANDARD DOES NOT APPLY TO MELTAN SOILS.

DESIGN CRITERIA

1. PRESERVE EXISTING TOPSOIL IN PLACE, THEREBY REDUCING THE NEED FOR ADDED TOPSOIL.

2. CONSERVE BY STOCKPILE TOPSOIL AND REUSE FINE TEXTURED SUBSOILS THAT MUST BE STRIPPED FROM THE EXCAVATED SITE AND APPLIED AFTER FINAL GRADING WHERE VEGETATION WILL BE ESTABLISHED.

3. REFER TO USDA SOIL CONSERVATION SERVICE (PRESENTLY NATURAL RESOURCE CONSERVATION SERVICE) SURVEYS OR SOIL INTERPRETATION RECORD SHEETS FOR FURTHER SOIL TEXTURE INFORMATION FOR SELECTING APPROPRIATE DESIGN TOPSOIL DEPTHS.

SITE PREPARATION

1. AS NEEDED, INSTALL EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, CHANNELS, SEDIMENT TRAPS, AND SEDIMENTATION MEASURES, OR MAINTAIN P. ALREADY INSTALLED.

2. COMPLETE ROUGH GRADE AND FINAL GRADE, ALLOWING FOR DEPTH OF TOPSOIL TO BE ADDED.

3. SOILS THAT HAVE BEEN OVER-ERODDED, OR ARE OVER-WEATHERED, OR ARE OVER-EXPOSED AT APPROXIMATELY 90° ANGLES TO THE SLOPE, DIRECTION IN SOIL AREAS THAT ARE STEEPER THAN 5 PERCENT, AREAS THAT HAVE BEEN OVER-COMPACTED SHALL BE DECOMPACTED TO A MINIMUM DEPTH OF 12 INCHES.

4. REMOVE REFUSE, WOODY PLANT PARTS, STONES OVER 3 INCHES IN DIAMETER, AND OTHER LITTER.

TOPSOIL MATERIALS

1. TOPSOIL SHOULD BE AT LEAST 8 PERCENT THICKNESS OF FINE TEXTURED ORGANIC MATERIAL, AND NO GREATER THAN 20 PERCENT. MUCC SOIL SHOULD NOT BE CONSIDERED TOPSOIL.

2. TOPSOIL SHOULD NOT LESS THAN 20 PERCENT FINE TEXTURED MATERIAL (PASSING THE NO. 200 SOIL TEST).

3. TOPSOIL TREATED WITH SOIL STERILANTS OR HERBICIDES SHALL BE SO IDENTIFIED TO PURCHASER.

4. TOPSOIL SHALL BE RELATIVELY FREE OF STONES OVER 1 INCH IN DIAMETER, AND OTHER LITTER, MULCH, WEEDS, SALT, AND OTHER SUBSTANCES WHICH WILL BE LESS THAN 10 PERCENT GRAVITY.

5. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.

APPLICATION AND GRADING

1. TOPSOIL THAT IS APPLIED TO A UNIFORM DEPTH OVER THE AREA, IT SHALL NOT BE PLACED WHEN IT IS PARTLY FROZEN, MUDDY, OR ON SNOWY SLOPES OR OVER ICE, SNOW, OR STANDING WATER.

2. TOPSOIL SHOULD BE APPLIED AND GRADED ON SLOPES STEEPER THAN 30 PERCENT SHALL BE PROMPTLY SEDEDDED, CHOSHED, AND STABILIZED BY "TRACKING" WITH AVAILABLE EQUIPMENT.

3. DO NOT USE TOPSOIL IN AREAS WHERE THERE IS NO SOIL, OR WHERE THERE IS NO SOIL, THE NEED FOR ADDITIONAL TOPSOIL.

4. CONSERVE BY STOCKPILING TOPSOIL AND REUSING FINE TEXTURED SUBSOILS THAT MUST BE STRIPPED FROM THE EXCAVATED SITE AND APPLIED AFTER FINAL GRADING WHERE VEGETATION WILL BE ESTABLISHED.

5. REFER TO USDA SOIL CONSERVATION SERVICE (PRESENTLY NATURAL RESOURCE CONSERVATION SERVICE) SURVEYS OR SOIL INTERPRETATION RECORD SHEETS FOR FURTHER SOIL TEXTURE INFORMATION FOR SELECTING APPROPRIATE DESIGN TOPSOIL DEPTHS.

APPLY TOPSOIL IN THE FOLLOWING AMOUNTS

SITE CONDITIONS	INTENDED USE	MINIMUM TOPSOIL DEPTH
DEEP SAND OR LOAMY SAND	MOWED LAWN	6 IN.
	TALL LEGUMES, UNKNOWN	2 IN.
	TALL GRASS, UNKNOWN	1 IN.
DEEP SANDY LOAM	MOWED LAWN	5 IN.
	TALL LEGUMES, UNKNOWN	2 IN.
	TALL GRASS, UNKNOWN	NONE
SILT, SILT LOAM, LOAM OR SILT	MOWED LAWN	4 IN.
	TALL LEGUMES, UNKNOWN	1 IN.
	TALL GRASS, UNKNOWN	1 IN.

EROSION CONTROL BLANKETS

USE TO REPLACE MULCH ON SLOPES GREATER THAN 5% AS SHOWN ON THE PLANS. EROSION CONTROL BLANKETS SHALL CONSIST OF LIGHTWEIGHT, PHOTOGRAPABLE POLY-PROPYLENE, 6 MIL THICK, 6 MIL WEIGHT, 0.5 LBS./SQ. YARD, WITH MANUFACTURER'S DOT STAPLE SYSTEM AND 6 INCH BIOSTAKES. DEGRADABLE BLANKET FASTENERS. USE DEGRADABLE DOUBLE NET STRAW BLANKET, PRODUCT NO. S150 BY NORTH AMERICAN GREEN, OR APPROVED EQUIVALENT.

SITE PREPARATION

UNITS OF CLEARING AND DISTURBANCE SHALL BE CLEARLY IDENTIFIED. EROSION AND SEDIMENT CONTROLS SHALL BE IN ACCORDANCE WITH THE PLANS AND/OR WHERE EROSION AND SEDIMENTATION MAY OCCUR. FURTHER EROSION AND SEDIMENT CONTROL SYSTEMS WILL BE PLACED AS DICTATED BY SITE CONDITIONS IN ORDER TO MAINTAIN THE QUALITY OF THE SITES AND TO PROTECT EXISTING EROSION AND SEDIMENT CONTROLMENTS. CLEARING AND GRUBBING AND REMOVAL OF ANY TREES, OTHER VEGETATION AND/OR EXCAVATION FROM AREAS TO BE DISTURBED MAY BEGIN ONLY WHEN EROSION AND SEDIMENT CONTROL SYSTEMS ARE IN PLACE AND FULLY FUNCTIONAL.

TEMPORARY CRITICAL AREA PLANTING SPECIFICATIONS

1. WATER MANAGEMENT PRACTICES MUST BE APPLIED AS APPROPRIATE FOR SITE CONDITIONS. THE AREA MUST BE ROUGH GRADED AND SHOWN AS PHYSICALLY STABLE. LARGE DEEKS AND ROCKS ARE TO BE REMOVED. SEEDS ARE TO BE PLANTED ON THE SOIL SURFACE. SCARIFICATION OR SCRAPPING OF THE SOIL SURFACE IS NOT NECESSARY PRIOR TO SEEDING.

2. FERTILIZER AND LIME ARE NOT TYPICALLY USED FOR TEMPORARY SEEDINGS.

3. PLANTING IN SPRING OR SUMMER, EARLY FALL THEN SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 LBS. PER ACRE (APPROXIMATELY 0.7 LB. /1000 SQ. FT. OR USE 1 LB. /1000 SQ. FT. FOR WINTER SEEDINGS).

4. PLANTING IN LATE FALL OR EARLY WINTER, THEN SEED CERTIFIED 'AROSTOOK' WINTER RYE (CEREAL RYE) AT 100 LBS. PER ACRE (2.5 LBS./1000 SQ. FT.).

5. ANY SEEDING METHOD MAY BE USED THAT WILL PROVIDE UNIFORM APPLICATION OF SEED TO THE AREA AND RESULT IN RELATIVELY GOOD SOIL TO THE SEED.

6. MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE (APPROX. 90 LBS. /1000 SQ. FT. OR 2 BALES). BALED HAY OR STRAW MULCH ALLOWABLES SHALL BE DETERMINED BASED ON LONG TERM USE. THE SOIL AND HAY OR STRAW MULCH SHALL BE REPLICATED AS SHOWN ON THE PLANS. CONCENTRATORS, QUALITY OF HAY OR STRAW, CONCERN, WOOD FIBER, HORNMLICH OR OTHER SPRAYABLE PRODUCTS APPROVED BY THE STATE OF NEW YORK FOR CONSTRUCTION USE, MAY BE APPLIED ACCORDING TO MANUFACTURERS' SPECIFICATION. CONCERN IS ADVISED TO USE NYLON OR OTHER SYNTHETIC PRODUCTS. THEY MAY BE DIFFICULT TO REMOVE PRIOR TO FINAL SEEDING.

7. EROSION—FIRST YEAR

A. APPLY FERTILIZER AS INDICATED BY THE SOIL TEST THREE TO FOUR WEEKS AFTER SEEDING. (IF TEST RESULTS HAVE NOT BEEN OBTAINED, APPLY 1 POUND NITROGEN/1,000 SQ. FT. AS A COMPLETE FERTILIZER WITH A 2-1-1 OR 4-1-3 RATIO.) SUMMER OR EARLY FALL, APPLY AS ABOVE UNLESS AIR TEMPERATURES ARE ABOVE 70° F. FOR AN EXTENDED PERIOD, WAIT FOR COOLER TEMPERATURES TO FERTILIZE LATE FALL.

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LAND GRADING CONSTRUCTION NOTES

1. ALL GRADED OR DISTURBED AREAS, INCLUDING SLOPES, SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE GRADED OR DISTURBED.

2. ALL EROSION AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE SEDIMENT CONTROL PLAN AND THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL."

3. THE EROSION AND SEDIMENT LEVELS SHALL BE STOCKPILED IN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.

4. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL.

5. AREAS THAT ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF FOUR INCHES PRIOR TO PLACEMENT.

6. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SURFACE SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

7. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 9 INCHES IN THICKNESS.

8. EXCEPT FOR APPROVED LANDFILLS OR NONSTRUCTURAL FILL, MATERIAL SHALL BE FREE OF DEGRADABLE OR OTHER SUBSTANCES THAT ARE CONSIDERED AS HAZARDOUS OR OBTRUSIVE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF Satisfactory Fills.

9. FROZEN MATERIAL, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SOILS OR STRUCTURAL FILLS.

10. ALL FILLS SHALL BE PLACED ON SATURATED OR FROZEN SURFACES.

11. ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.

12. SEEDS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN ON PAGE 5B-44 OF THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL."

13. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

14. STOCKPILES, BORROW AREAS, AND SPOIL AREAS SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS.