

STANDARD FOR TEMPORARY VEGETATIVE COVER FOR SOILS STABILIZATION

SITE PREPARATION:

1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
2. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
3. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

SEEDBED PREPARATION:

1. UNIFORMLY APPLY FERTILIZER IN ACCORDANCE WITH THE FERTILIZER APPLICATION TABLE.
2. SOIL TO BE SEEDED SHOULD BE TESTED FOR LIME REQUIREMENT. WHEN THE SOIL TO BE SEEDED HAS A PH VALUE OF LESS THAN 5.8, SUFFICIENT LIMESTONE SHALL BE APPLIED TO BRING THE SOIL TO A PH OF APPROXIMATELY 6.5 IN ACCORDANCE WITH THE LIME APPLICATION TABLE. THE QUANTITY OF LIME REQUIRED MAY BE REDUCED PROPORTIONALLY, IF THE MAGNESIUM AND CALCIUM OXIDE CONTENT IS GREATER THAN 40%.
2. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.
3. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE (ITEM 3 UNDER SITE PREPARATION).
4. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS WITHIN THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NJ (SSESCNJ).

TEMPORARY SEEDING AND MULCHING:

1. APPLY SEED MIXTURE TYPE B AT A SEEDING RATE OF 25 LBS/ACRE (MINIMUM). SEE THE SEED MIXTURE TABLE FOR SEED SPECIES PERCENTAGES.
2. PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
3. MULCHING IS REQUIRED ON ALL SEEDING. IMMEDIATELY AFTER SEEDING UNROTTED STRAW OR HAY SHALL BE APPLIED AT A RATE OF 70 TO 90 LBS./1,000 SF TO ACHIEVE 95% SOIL SURFACE COVERAGE (MINIMUM DEPTH OF ONE TO TWO INCHES). MULCH SHALL BE ANCHORED BY APPROVED METHODS WITHIN THE NEW JERSEY TURNPIKE AUTHORITY (NJTA) STANDARD SPECIFICATIONS, SECTION 704.03 (I.E. SYNTHETIC PLASTIC EMULSION OR VEGETABLE BASED GELS).

STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

SITE PREPARATION:

1. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.
2. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
3. TOPSOIL SHOULD BE APPLIED IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
4. IMMEDIATELY FOLLOWING TOPSOILING OPERATIONS, FERTILIZING, LIMING AND SEEDING SHALL COMMENCE.
5. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SEEDBED PREPARATION:

1. UNIFORMLY APPLY FERTILIZER IN ACCORDANCE WITH THE FERTILIZER APPLICATION TABLE.
2. SOIL TO BE SEEDED SHOULD BE TESTED FOR LIME REQUIREMENT. WHEN THE SOIL TO BE SEEDED HAS A PH VALUE OF LESS THAN 5.8, SUFFICIENT LIMESTONE SHALL BE APPLIED TO BRING THE SOIL TO A PH OF APPROXIMATELY 6.5 IN ACCORDANCE WITH THE LIME APPLICATION TABLE. THE QUANTITY OF LIME REQUIRED MAY BE REDUCED PROPORTIONALLY, IF THE MAGNESIUM AND CALCIUM OXIDE CONTENT IS GREATER THAN 40%.
3. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR, CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
4. HIGH ACID PRODUCING SOIL - SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS OF SSESCNJ FOR SPECIFIC REQUIREMENTS.

STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (CONT'D)

SEEDING:

1. APPLY SEED MIXTURE TYPE C AT A SEEDING RATE OF 125 LBS./ACRE (MINIMUM). SEE THE SEED MIXTURE TABLE FOR SEED SPECIES PERCENTAGES.
2. PLANT BETWEEN MARCH 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 1.
3. SEEDING CAN BE PERFORMED BY APPLYING SEED UNIFORMLY BY USING A CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKED SEEDER OR HYDROSEEDING. EXCEPT FOR DRILLED, HYDROSEEDER OR CULTIPACKED SEEDING'S, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH 1/4 TO 1/2 INCH. BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
4. IF HYDROSEEDING IS UTILIZED, THE SEEDING RATE SHALL BE INCREASED BY 25%. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED.

MULCHING:

1. MULCHING IS REQUIRED ON ALL SEEDING. IMMEDIATELY AFTER SEEDING UNROTTED STRAW OR HAY SHALL BE AT A RATE OF 70 TO 90 LBS./1,000 SF APPLIED TO ACHIEVE 95% SOIL SURFACE COVERAGE (MINIMUM DEPTH OF ONE TO TWO INCHES). MULCH SHALL BE ANCHORED BY APPROVED METHODS WITHIN THE NEW JERSEY TURNPIKE AUTHORITY (NJTA) STANDARD SPECIFICATIONS, SECTION 704.03 (I.E. SYNTHETIC PLASTIC EMULSION OR VEGETABLE BASED GELS).

LIME APPLICATION TABLE

SOIL (PH)	SOIL TEXTURAL CLASS			
	LOAMY SAND (LBS)	SANDY LOAM (LBS)	LOAM (LBS)	SILTY LOAM (LBS)
5.7	750	1,500	2,250	3,000
5.3 - 5.6	1,500	2,600	3,750	4,500
4.9 - 5.2	2,250	3,750	5,250	6,000
4.5 - 4.8	3,000	4,500	6,750	7,500
4.1 - 4.4	3,750	5,250	8,250	9,000

FERTILIZER APPLICATION TABLE

FERTILIZER ANALYSIS (N-P-K)	WEIGHT OF BAG (LBS)	BAGS PER ACRE
5-10-10	50	18
5-10-10	80	11
5-10-10	100	9
10-20-20	50	9
10-20-20	80	5.5
10-20-20	100	4.5

SEED MIXTURE TABLE

SEED MIXTURE	TYPE OF SEED	MINIMUM PURITY PERCENT	MINIMUM GERMINATION PERCENT	PERCENT OF TOTAL WEIGHT OF MIXTURE
TYPE B	TALL TURF-TYPE FESCUE (HOUNDG, MUSTANG, K-31)	95	90	75
	PERENNIAL RYE GRASS (LINN)	95	90	25
TYPE C	KENTUCKY BLUE GRASS (BANIFF, AMERICAN)	98	85	30
	KENTUCKY BLUE GRASS (MERIT, TOUCHDOWN)	98	85	30
	FINE TEXTURED PERENNIAL RYE GRASS (PREMIER)	95	90	40

STANDARD FOR TOPSOILING

MATERIALS:

1. TOPSOIL SHALL MEET THE MATERIAL REQUIREMENTS OF THE NJTA STANDARD SPECIFICATIONS, SECTION 703 - TOPSOILING.

STRIPPING AND STOCKPILING:

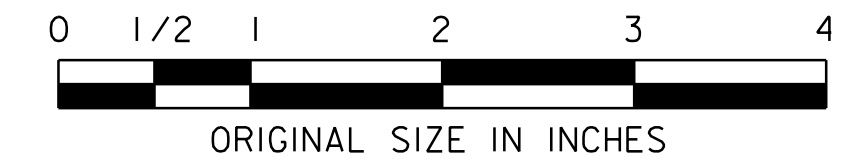
1. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
2. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
3. STOCKPILE OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
4. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH THE STANDARDS FOR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION.

SITE PREPARATION:

1. GRADE AT THE ONSET OF OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE.
2. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER OF UNDERGROUND UTILITIES.
3. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

APPLYING TOPSOIL:

1. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY.
2. TOPSOIL SHALL BE SPREAD IN A UNIFORM LAYER THAT WILL PRODUCE A COMPACTED THICKNESS OF FOUR (4) INCHES. ALL SURFACES SHALL THEN BE RAKED AND COMPACTED TO A SMOOTH EVEN SURFACE, FREE FROM ANY DEPRESSIONS THAT WOULD COLLECT WATER, CONFORMING TO THE PRESCRIBED LINES AND GRADES. AFTER SHAPING AND GRADING, ALL TRUCKS AND OTHER EQUIPMENT SHALL BE EXCLUDED FROM THE TOPSOILED AREAS.



SE-2
SE-3

NEW JERSEY TURNPIKE AUTHORITY
GARDEN STATE PARKWAY
CONTRACT NO. P500.360 - FACILITIES IMPROVEMENT PROGRAM
PMD5 (TELEGRAPH HILL) MP 116, PMD6 (CLARK) MP 136.7,
PMD7 (CLIFTON) MP 156.1 AND PMD8 (PARAMUS) MP 164.2

PMD5 (TELEGRAPH HILL)
SOIL EROSION AND SEDIMENT CONTROL NOTES -1

T.Y. LIN INTERNATIONAL
3379 QUAKERBRIDGE ROAD, SUITE 200
HAMILTON, NJ 08619
CERTIFICATE OF AUTHORIZATION NO. 24GA27976000
SCALE: NOT TO SCALE
DATE: MAY 2015

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REV.	DESCRIPTION	DATE	BY	CHK.

CHURCHILL CONSULTING ENGINEERS
344 NORTH ROUTE 73, SUITE A, BERLIN, NJ 08009
Joseph E. Keil
JOSEPH E. KEIL, P.E.
NEW JERSEY PROFESSIONAL ENGINEER NO. 24GE0360500

FILE NAME: \\Chil-Sys-Print-TYU\COM\TYU\PM\A\Documents\Projects\361163.00_NJ\TIF\Drawings\Sheets\Vegetation_Hilly\P500_360_FD_0022.sht
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USER: JESSE R. MAZUR

	BY	DATE
DESIGNED BY:	TJB	10/2014
DRAWN BY:	TJB	10/2014
CHECKED BY:	JJM	10/2014
SUPERVISOR:	J KEIL	