

LAWN RESTORATION

SITE PREPARATION

1. IF REQUIRED, STRIP TOPSOIL TO A 6-INCH DEPTH. DEPTH MAY VARY DEPENDING ON SOIL STRUCTURE AND PREEXISTING USE.
2. STOCKPILES SHOULD BE LOCATED IN THE IMMEDIATE CONSTRUCTION AREA, BUT SHALL NOT OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE. STOCKPILES SHALL NOT BE PLACED IN THE STREET OR ON SIDEWALKS.
3. INSTALL EROSION CONTROL MEASURE AND FACILITIES SUCH AS SILT FENCE, DIVERSIONS, SEDIMENT BASINS AND CHANNEL STABILIZATION
5. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. FINAL GRADING SHALL BE SMOOTH OF RUTS AND FREE OF OBJECTIONABLE STONES, DEPRESSIONS AND ROUGH EDGES.

TOPSOIL

1. TOPSOIL SHALL COMPLY WITH THE FOLLOWING CRITERIA:
 - MINIMUM DEPTH 5-INCHES (UNSETTLED)
 - pH: 6.0 TO 8.0
 - ORGANIC MATTER CONTENT: 2.75% MINIMUM
 - NITRATE N2: 50LBS/ACRE (50% WATER INSOLUBLE)
 - PHOSPHORUS: 100 LBS/ACRE
 - POTASSIUM: 50 LBS/ACRE
 - TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH.
 - TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE.
 - IF TOPSOIL BECOMES COMPACTED, THE SURFACE MUST BE SCARIFIED 6" TO 12" TO PROVIDE GOOD SEED-TO-SOIL BOND.
 - REMOVE FROM SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSIONS AND OTHER OBJECTIONABLE STONES OR DEBRIS SUCH AS WIRE, TREE ROOTS, PIECES OF CONCRETE, CLOUDS, LUMPS OR OTHER UNSUITABLE MATERIAL.
 - EXISTING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE.

SEEDING

1. USE SEED MIXTURE BELOW FROM TABLE BELOW OR USE MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT.
2. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDER OR CULTIPACKED SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
3. AFTER SEEDING, FIRING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE.
4. ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDED AREA AND MOWED ONCE.

MULCHING

1. MULCHING IS REQUIRED ON ALL SEEDING. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED IN COMPLIANCE WITH THIS MULCHING REQUIREMENT.
2. MULCH SHALL COMPLY WITH THE FOLLOWING CRITERIA:
 - STRAW OR HAY: UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY
2. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70-90 POUNDS PER 1,000 SQUARE FEET) SO THAT APPROXIMATELY 85% OF THE SOIL SURFACE WILL BE COVERED.
3. ANCHOR MULCH IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY PEG AND TWINE, MULCH NETTING, CRIMPER, LIQUID MULCH BINDERS.

IRRIGATION (WHERE FEASIBLE)

1. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDING ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHT STRICKEN SITES.

SEED MIXTURES			
OPTIMUM SEEDING TIME BASED ON HARDNESS ZONE 6B	RESTORATION TYPE PERMITTED BASED ON PLANTING TIME	MIX DESIGN	PLANTING RATE
MARCH 1 - MAY 15 AUGUST 15 - OCTOBER 15	PERMANENT	70% TURF TYPE TALL FESCUE 20% PERENNIAL RYE GRASS 10% KENTUCKY BLUE GRASS	200 LBS/ACRE
LATE FALL (AFTER OCTOBER 15)	TEMPORARY	100% CEREAL RYE	112 LBS/ACRE
MID-SUMMER (MAY 15 - AUGUST 15)	TEMPORARY	40% PEARL MILLET 40% MILLET 20% WEEPING LOVEGRASS	100 LBS/ACRE



PRINCETON, NEW JERSEY ENGINEERING DEPARTMENT

TYPICAL CONSTRUCTION DETAIL

LAWN RESTORATION - TOPSOIL, SEED, MULCH

SCALE: N.T.S.

DATE: SEPT. 2018

STD. DWG. NO.: PEX-08