

**SOIL EROSION AND SEDIMENT CONTROL NOTES**

- All Soil Erosion and Sediment Control practices shall be installed prior to any major soil disturbances, or in their proper sequence and maintained until permanent protection is established.
- Any Disturbed areas that will be left exposed more than 30 Days and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of a temporary cover, the disturbed areas will be mulched with straw, or equivalent material, at a rate of two (2) tons per acre, according to NJ State Standards.
- Permanent Vegetation shall be seeded or sodded on all exposed areas within ten (10) days after final grading. Mulch will be used for protection until seeding is established.
- All work shall be done in accordance with the NJ State Standards for Soil Erosion and Sediment Control in New Jersey.
- A sub-base course will be applied immediately following rough grading and installation of improvements in order to stabilize streets, roads, driveways and parking areas. In areas where no utilities are present, the sub-base shall be installed within 15 days or preliminary grading.
- Immediately following initial disturbance or rough grading all critical areas subject to erosion (i.e. steep slopes, roadway embankments) will receive a temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of two (2) tons per acre, according to the NJ State Standards.
- Any steep slopes receiving pipeline installation will be backfilled and stabilized daily, as the installation proceeds (i.e. slopes greater than 3:1).
- Traffic control Standards require the installation of a 50'x30'x6" pad of 1 1/2" or 2" stone, at all construction driveways, immediately after initial site disturbance.
- The Somerset-Union Soil Conservation District shall be notified in writing 48 hours in advance of any land disturbing activity.
- At the time when the site preparation for permanent vegetative stabilization is going to be accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover, shall be removed or treated in such a way that will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be employed.
- In that N.J.A.C. 17:27, requires that no Certificate of Occupancy be issued before the provisions of the Certified Plan for Soil Erosion and Sediment Control have been completed for permanent measures, all site work for site plans and all work around individual lots in subdivisions, will have to be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.
- Consult Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.
- Any changes to the Certified Soil Erosion and Sediment Control Plan will require the submission of revised Soil Erosion and Sediment Control Plans to the District for re-certification. The revised plans must meet all current NJ State Soil Erosion & Sediment Control Standards.
- The Somerset-Union Soil Conservation District shall be notified of any changes in ownership.
- Mulching to the NJ Standards is required for obtaining a Conditional Report of Compliance. Conditions are only issued when the season prohibits seeding.
- Contractor is responsible for keeping all adjacent roads clean during life of construction project.
- The developer shall be responsible for remedying any erosion or sediment problems that arise as a result of ongoing construction at the request of the Somerset-Union Soil Conservation District.
- Hydro seeding is a two-step process. The first step includes seed, fertilizer, lime, etc., along with minimal amounts of mulch to promote consistency, good seed to soil contact, and give a visual indicator of coverage. Upon completion of seeding operation, hydro-mulch shall be applied at a rate of 1500 lbs. per acre in second step. The use of hydro-mulch, as opposed to straw, is limited to optimum seeding dates as listed in the NJ Standards.

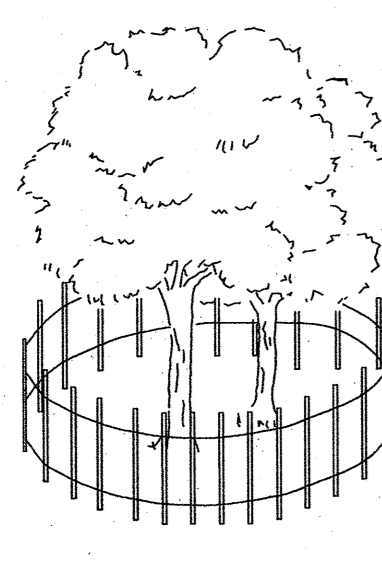
**CONSTRUCTION SCHEDULE**

APPROX. START DATE	APPROX. DURATION
1. CLEAR CENTERLINE OF PROPOSED ENTRANCE AND PLACE CONSTRUCTION ENTRANCE AS NOTED.	1 WEEK
2. PLACE ALL SEDIMENT CONTROL STRUCTURES PRIOR TO MAJOR SOIL DISTURBANCE (I.E. BUILDING CONSTRUCTION AND PARKING LOT CONSTRUCTION)	7 DAYS
3. DEMOLISH EXISTING BUILDING AND DRIVEWAY.	2 DAYS
4. CONSTRUCT BUILDING AND REMAINING UNDERGROUND UTILITIES.	180 DAYS
5. PLACE CURB AND STABILIZED BASE COURSE ON ROADWAYS AND PARKING AREAS.	14 DAYS
6. CONSTRUCT SEWAGE PIT, CONNECT ROOF LEADERS.	3 DAYS
7. STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH APPLICABLE TEMPORARY OR PERMANENT SEEDING SPECIFICATIONS.	3 DAYS

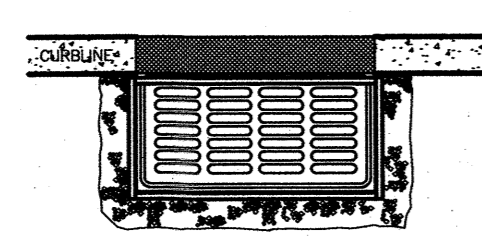
**DUST CONTROL**

ANY OF THE FOLLOWING METHODS SHALL BE USED FOR DUST CONTROL:  
 MULCHES: SEE STABILIZATION SPECIFICATIONS ON THIS PLAN.  
 TILLAGE: TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, AND SPRING TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.  
 SPRINKLING: SITE IS SPRINKLED UNTIL THE SURFACE IS WET.  
 BARRIERS: BALES OF HAY AND/OR SILT FENCES CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

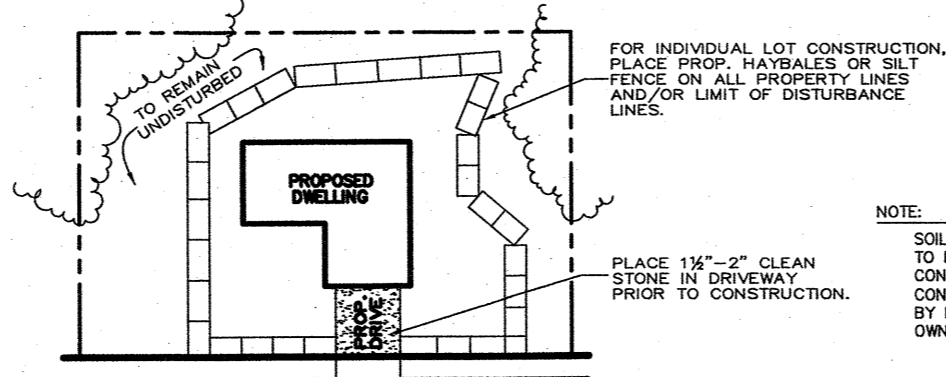
**CONSTRUCT STABILIZED STONE ENTRANCE IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY (27-1)**



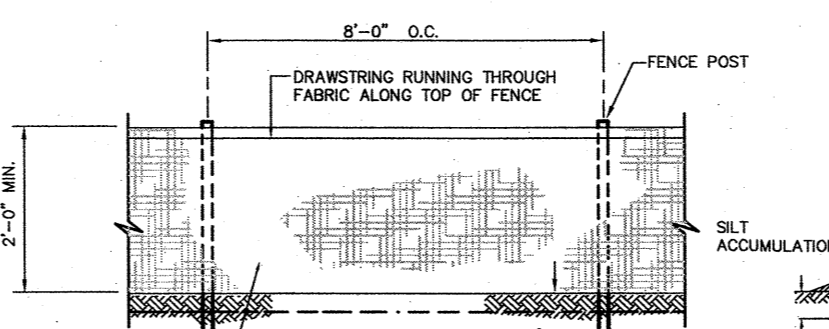
**TREE PROTECTION DETAIL**  
NOT TO SCALE



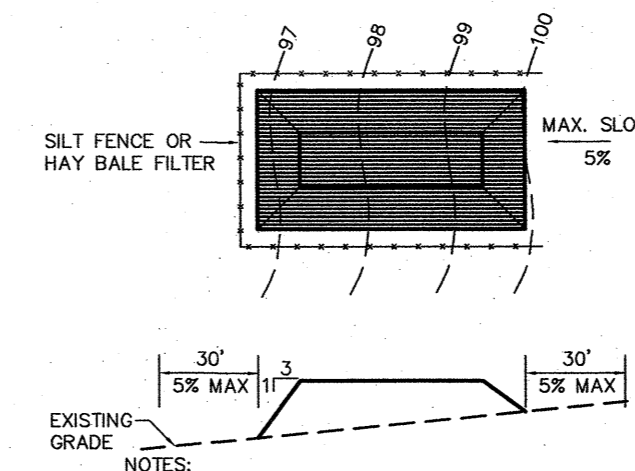
**INLET PROTECTION DETAIL**  
NOT TO SCALE



**TYPICAL DETAIL OF PRACTICE FOR INDIVIDUAL LOT CONSTRUCTION**  
NOT TO SCALE



**TEMPORARY SILTATION CONTROL FENCE**  
NOT TO SCALE



**TOPSOIL STOCKPILE DETAIL**  
NOT TO SCALE

NOTE: SOIL EROSION CONTROL MEASURES SHALL APPLY TO SUBSEQUENT LOT OWNERS IF TITLE IS CONVEYED.

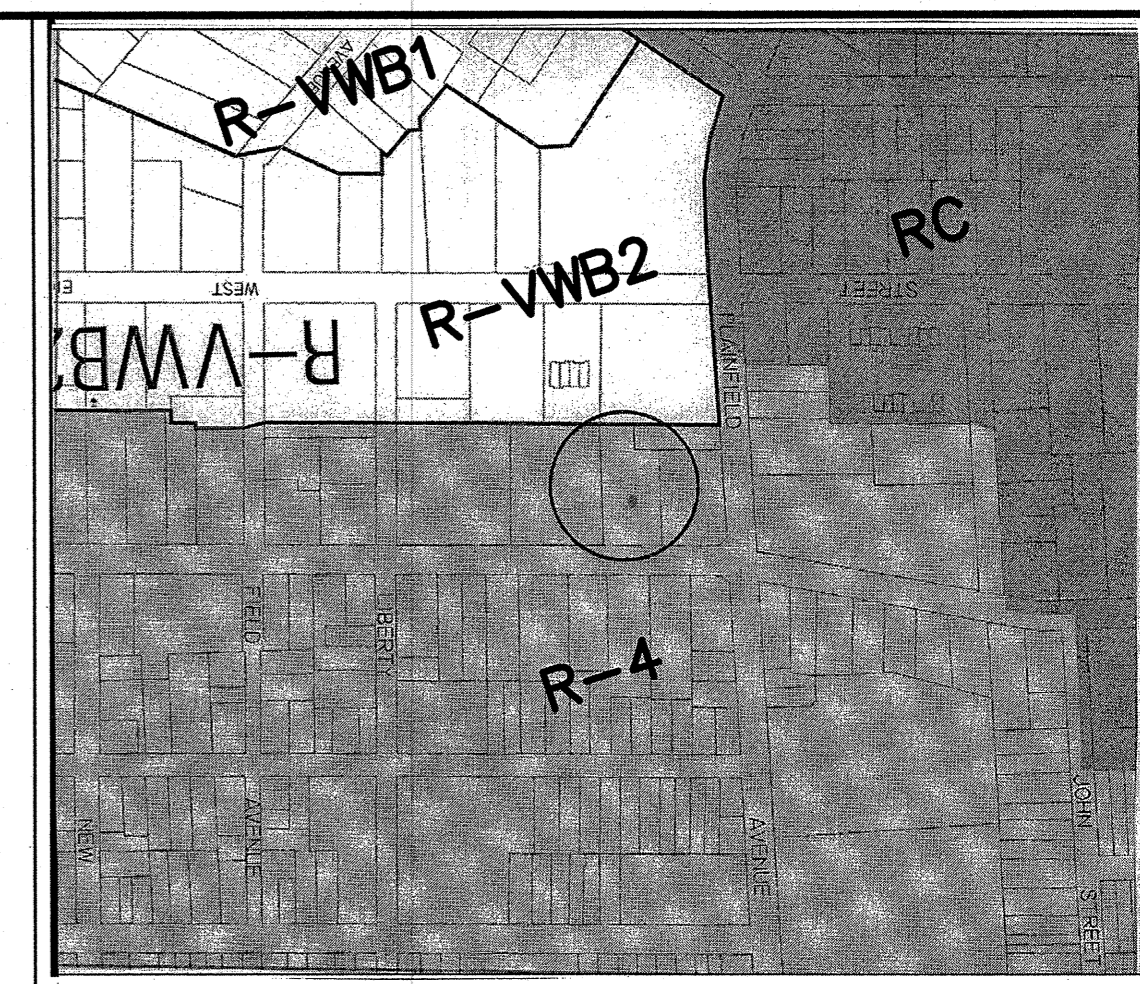
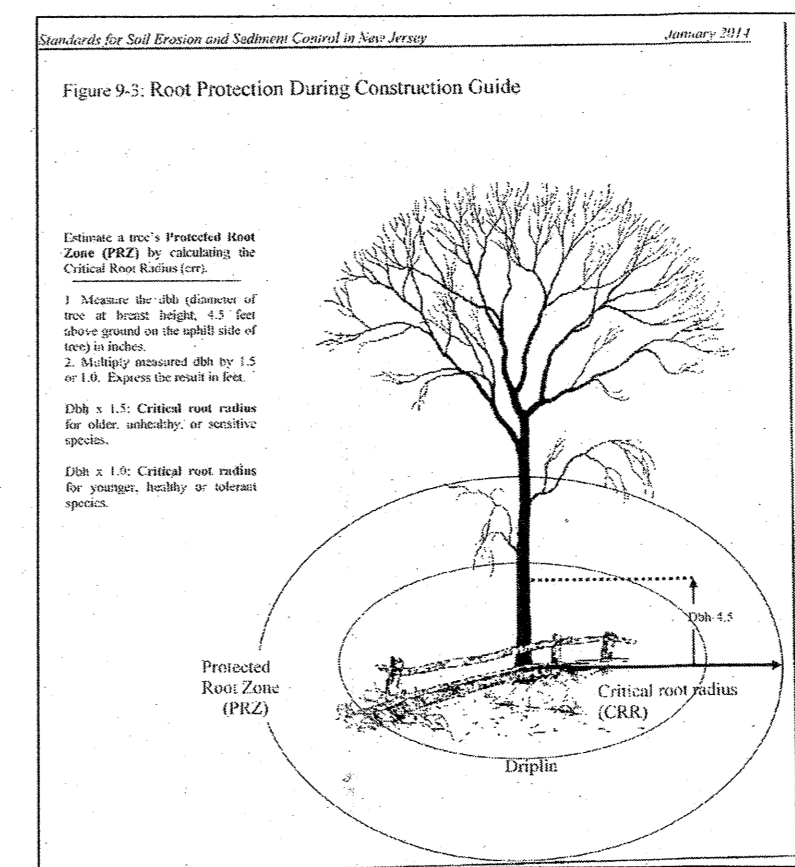
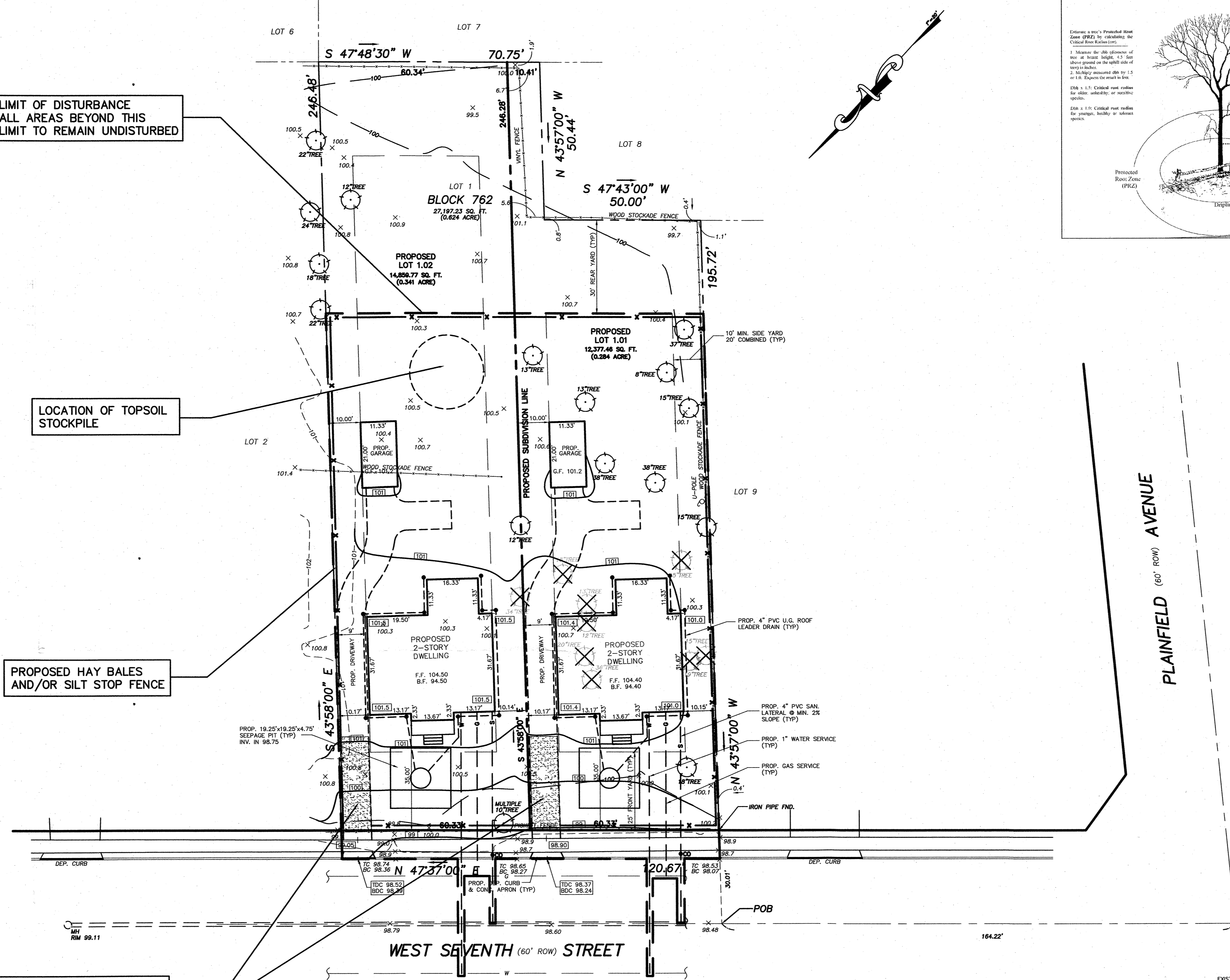
**THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY.**

THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN PLANNING AREA (PA1) AS PER THE STATE PLAN POLICY MAP (SPPM). THEREFORE SOIL DECOMPACTION MEASURES ARE NOT REQUIRED.

LIMIT OF DISTURBANCE ALL AREAS BEYOND THIS LIMIT TO REMAIN UNDISTURBED

LOCATION OF TOPSOIL STOCKPILE

PROPOSED HAY BALES AND/OR SILT STOP FENCE



**KEY MAP**  
SCALE: N.T.S.

**STABILIZATION SPECIFICATION**

A. 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.

B. WORK LINE AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE STANDARD FOR LAND GRADING ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED. NOTE: TOPSOIL SHALL HAVE AN AVERAGE DEPTH OF 5" (4" MIN.) FIRMED IN PLACE.

1. TEMPORARY SEEDING AND MULCHING

LIMESTONE APPLICATION RATE AS REQUIRED IN ACCORDANCE WITH THE RESULTS OF SOIL TESTING.

FERTILIZER: 500 LBS PER ACRE OR 11 LBS PER 1,000 SF USING 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4".

SEED MIXTURE	PLANTING RATE LBS/ACRE	PLANTING DATES
COOL SEASON GRASSES:	LBS/1,000 SF (PLANT HARDINESS ZONE 6-b)	
PERENNIAL RYEGRASS	100 2.3	OPTIMAL PLANTING PERIODS 3/1-5/15, 8/15-10/1
WARM SEASON GRASSES:		
PEARL MILLET	20 0.5	OPTIMAL PLANTING PERIOD 5/15-8/15

MULCHING - USE SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 70 TO 90 LBS PER 1,000 SQUARE FEET.

LIQUID MULCHING BINDER - SYNTHETIC OR ORGANIC BINDERS SUCH AS CURASOL, DCA-70, PETRO-SET, AND TERRA-TACK MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS.

2. PERMANENT SEEDING (LAWN AREA)

LIMESTONE APPLICATION RATE AS REQUIRED IN ACCORDANCE WITH THE RESULTS OF SOIL TESTING.

FERTILIZER: 500 LBS PER ACRE OR 11 LBS PER 1,000 SF USING 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4".

SEEDING: (RESIDENTIAL/ COMMERCIAL LOTS, WELL TO MODERATELY WELL DRAINED)

SEED MIXTURE(S)	PLANTING RATE LBS/ACRE	PLANTING DATES
FINE FESCUE (BLEND)	130 3.0	OPTIMAL PLANTING PERIODS 8/15-10/15
KENTUCKY BLUEGRASS (BLEND)	45 1.0	ACCEPTABLE PLANTING PERIOD 3/1-4/30, 5/1-8/14*
PERENNIAL RYEGRASS	20 0.5	*WITH IRRIGATION

MULCHING - USE THE SAME SPECIFICATIONS LISTED IN "TEMPORARY SEEDING AND MULCHING" INSTALL AS REQUIRED.

3. PERMANENT SEEDING (STEEP SLOPES AND BANKS, BORROW AREAS)

NOTE: THESE AREAS ARE TO BE SEEDDED AND MULCHED IMMEDIATELY AFTER GRADING.

SEED MIXTURE(S)	PLANTING RATE LBS/ACRE	PLANTING DATES
HARD FESCUE	130 3.0	OPTIMAL PLANTING PERIODS 8/15-10/15
CHEWINGS FESCUE	45 1.0	ACCEPTABLE PLANTING PERIOD 3/1-4/30, 5/1-8/14*
STRONG CREEPING RED FESCUE	45 1.0	*WITH IRRIGATION
PERENNIAL RYEGRASS	10 0.25	

4. PERMANENT STABILIZATION WITH SOD

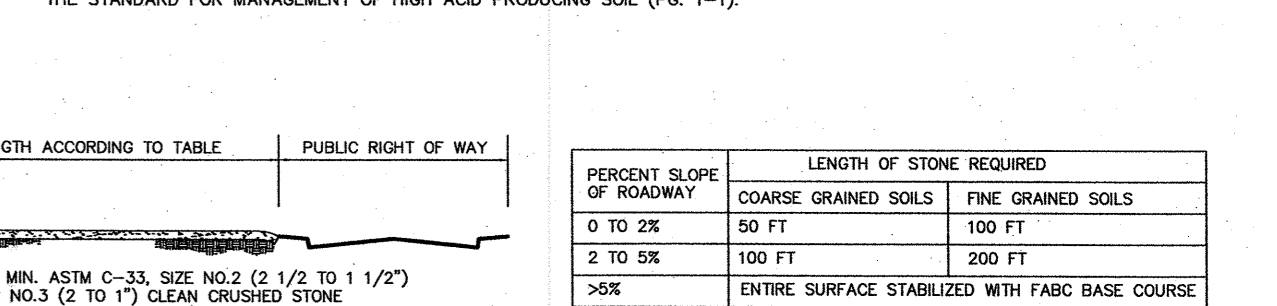
LIMESTONE APPLICATION RATE AS REQUIRED IN ACCORDANCE WITH THE RESULTS OF SOIL TESTING.

FERTILIZER: 500 LBS PER ACRE OR 11 LBS PER 1,000 SF USING 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4".

SOD - USE GOOD QUALITY OF NEW JERSEY CERTIFIED, KENTUCKY BLUEGRASS AND/OR RED FESCUE.

5. PROTECTIVE MATERIALS, NON-GROWING SEASON:

UNROTTED SMALL-GRAIN STRAW, OR SALT HAY AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SF AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING THE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.



TOPSOIL STANDARD MATERIAL

TOPSOIL SHOULD BE FRABLE, 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. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMOHS PER CENTIMETER. MORE THAN 0.5 MILLIMOHS MAY DESICcate SEEDLINGS AND ADVERSELY IMPACT GROWTH). IMPORTED TOPSOIL SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC CONTENT MAY BE RAISED BY ADDITIVES.

APPLYING TOPSOIL

A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN PLACE IS REQUIRED. ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS FIELDS, LANDFILL CAPPING, ETC. 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, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).

NOTES:

- AFTER INTERIOR ROADS ARE PAVED, INDIVIDUAL LOT INGRESS/EGRESS POINTS MAY REQUIRE A STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH STANDARD FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY (27-1). WIDTH OF THE STONE INGRESS/EGRESS POINT SHALL BE EQUAL TO THE ENTRANCE WIDTH AND A MINIMUM OF 10 FT IN LENGTH.
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO ROADWAYS.
- ALL SEDIMENT TRACKED ONTO ROADWAYS (PUBLIC OR PRIVATE) OR OTHER IMPERVIOUS SURFACES SHALL BE REMOVED IMMEDIATELY.

**SOIL EROSION AND SEDIMENT CONTROL PLAN**  
 PREPARED FOR  
**529-539 W. SEVENTH STREET**  
**LOT 1 IN BLOCK 762**  
 CITY OF PLAINFIELD, UNION COUNTY, NEW JERSEY

**FLETCHER ENGINEERING, INC.** ENGINEERS • SURVEYORS • PLANNERS  
 P.O. Box 329 • Fords, NJ 08863 • Phone 732-738-8809 • Fax 732-738-6727

SCALE: 1"=20'  
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