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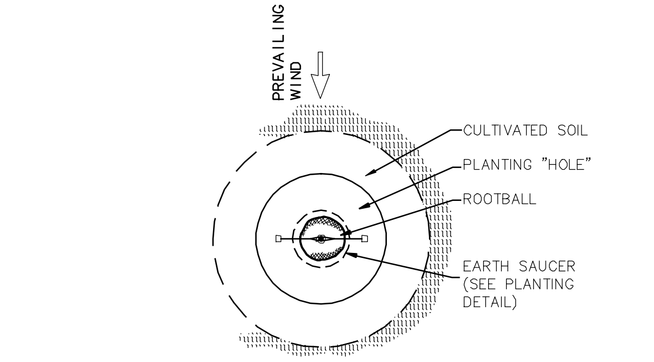
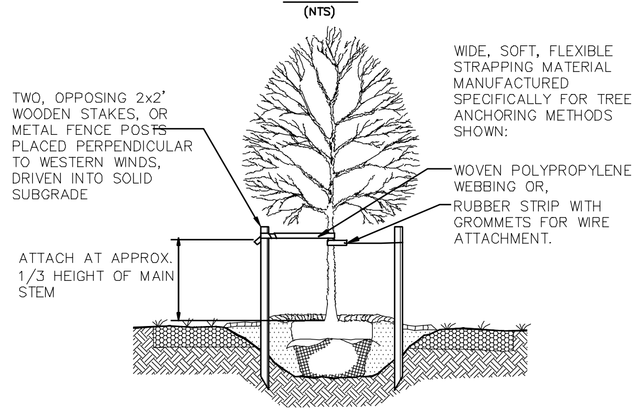


PLAN
(NTS)



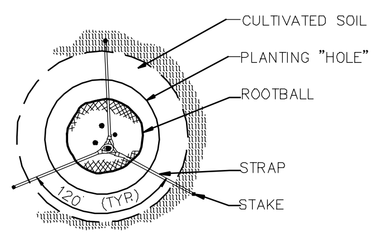
(Note: Trees 1" cal. & less may be supported by a single, 1x2 wooden stake, driven into solid sub-grade on west side of tree. Approved strapping material should be wrapped in figure "8" to keep stake from touching trunk & branches.)

TREE STAKING DETAIL (2" CAL. & LESS)

(NTS)

NOTES:

1. MULTI-TRUNK TREES: ATTACH STRAPS TO THE LARGEST CENTRAL TRUNK. TREES MORE THAN 2" CAL.: ATTACH TRAPS IN BRANCH CROTCH, AT APPROX.1/3 HEIGHT OF MAIN TRUNK, 4 STAKES MAY BE NEEDED FOR TREES MORE THAN 4" CAL.
2. SPACE STAKES EVENLY AROUND TREE, SUCH THAT STRAPS DO NOT COME IN CONTACT WITH OTHER TRUNKS OR BRANCHES.



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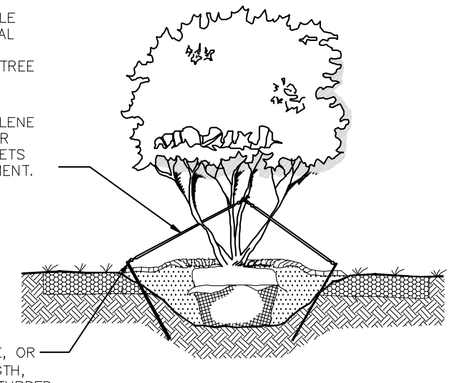
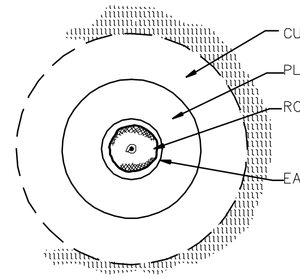


MULTI-TRUNK & LARGE TREE STAKING DETAIL

(NTS)

NOTES:

1. PLANTING "HOLE" TO BE 3 TIMES AS WIDE AS ROOTBALL.
2. CULTIVATED AREA TO BE 5 TIMES AS WIDE AS ROOTBALL.
3. REMOVE BURLAP FROM TOP THIRD OF ROOTBALL AFTER PLACING IN HOLE. REMOVE ALL STRAPPING AND TOP 12" OF WIRE BASKETS.
4. SET TREE PLUMB PRIOR TO BACKFILLING.



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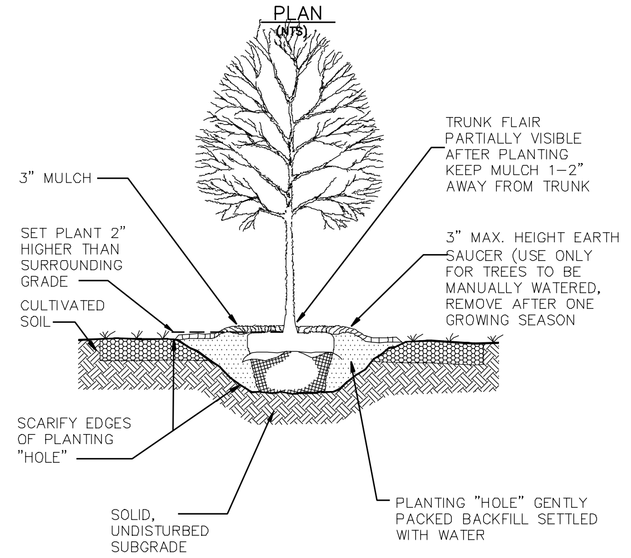


TREE PLANTING DETAIL

GRADING AND SHAPING

Grading and shaping may not be required where hydraulic seeding and fertilizing equipment is to be used. Vertical banks shall be sloped to enable plant establishment. When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seedbed preparation, seeding, mulching and maintenance of the vegetation.

Concentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

LIME AND FERTILIZER RATES AND ANALYSIS

Agricultural lime is required at the rate of one to two tons per acre unless soil tests indicate otherwise. Graded areas require lime application. If lime is applied within six months of planting permanent perennial vegetation, additional lime is not required. Agricultural lime shall be within the specifications of the Georgia Department of Agriculture.

Lime spread by conventional equipment shall be "ground limestone." Ground limestone is calcitic or dolomitic limestone ground so that 90 percent of the material will pass through a 10-mesh sieve, not less than 50 percent will pass through a 50-mesh sieve and not less than 25 percent will pass through a 100-mesh sieve.

Agricultural lime spread by hydraulic seeding equipment shall be "finely ground limestone." Finely ground limestone is calcitic or dolomitic limestone ground so that 98 percent of the material will pass through a 20-mesh sieve and not less than 70 percent will pass through a 100-mesh sieve.

Initial fertilization, nitrogen, topdressing, and maintenance fertilizer requirements for each species or combination of species are listed in the tables that follow this section.

LIME AND FERTILIZER APPLICATION

When "hydraulic seeding" equipment is used, the initial fertilizer shall be mixed with seed, innoculant (if needed), and wood cellulose or wood pulp fiber mulch and applied in a slurry. The innoculant, if needed, shall be mixed with the seed prior to being placed into the hydraulic seeder. The slurry mixture will be agitated during application to keep the ingredients thoroughly mixed. The mixture will be spread uniformly over the area within one hour after being placed in the hydroseeder.

Finely ground limestone will be mixed with water and applied immediately after mulching is completed or in combination with the top dressing. When "conventional planting" is to be done, lime and fertilizer shall be applied uniformly in one of the following ways:

1. Apply before land preparation so that it will be mixed with the soil during seedbed preparation.
2. Mix with the soil used to fill the holes, distribute in furrows.
3. Broadcast after steep surfaces are scarified, pitted or trenched.

SEED QUALITY

The term "pure live seed" is used to express the quality of seed and is not shown on the label. Pure live seed, PLS, is expressed as a percentage of the seeds that are pure and will germinate. Information on percent germination and purity can be found on seed tags. PLS is determined by multiplying the percent of pure seed with the percent of germination; i.e.

(PLS= % GERMINATION X % PURITY)
EXAMPLE:
Common bermuda seed 70% germination, 80% purity
PLS= 70% germination x 80% purity
PLS= 56%
The percent of PLS helps you determine the amount of seed you need. If the rate is:
10 lbs. PLS/acre
56% PLS = 17.9 lbs/acre
You would need to plant 17.9 lbs/acre to provide 10 lbs/acre of pure live seed.

SEEDBED PREPARATION

Seedbed preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seedbed preparation will be done as follows:

Broadcast plantings

1. Tillage at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches; alleviate compaction; incorporate lime and fertilizer; smooth and firm the soil; allow for the proper placement of seed, sprigs, or plants; and allow for the anchoring of straw or hay mulch if a disk is to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.

PLANTING

Hydraulic Seeding

Mix the seed (inoculated if needed), fertilizer, and wood cellulose or wood pulp fiber mulch with water and apply in a slurry uniformly over the area to be treated. Apply within on hour after the mixture is made.

Conventional Seeding

Seeding will be done on a freshly prepared and firmed seedbed. For broadcast planting, use a cultipacker-seeder, drill, rotary seeder, other mechanical seeder, or hand seeding to distribute the seed uniformly over the area to be treated. Cover the seed lightly with 1/8 to 1/4 inch of soil for small seed and 1/2 to 1 inch for large seed when using a cultipacker or other suitable equipment.

MULCHING

MULCH IS REQUIRED FOR ALL PERMANENT GRASSING. Mulch applied to seeded areas shall achieve 75% soil cover. Select the mulching material from the following and apply as indicated:

1. DRY STRAW or DRY HAY of good quality and free of weed seeds can be used. Dry straw shall be applied at the rate of 2 tons per acre. Dry hay shall be applied at the rate of 2 1/2 tons per acre.
2. WOOD CELLULOSE MULCH or WOOD PULP FIBER shall be used with hydraulic seeding. It shall be applied at the rate of 500 pounds per acre. Dry straw or dry hay shall be applied (at the rate indicated above) after hydraulic seeding.
3. One thousand pounds of WOOD CELLULOSE or WOOD PULP FIBER, which includes a tackifier, shall be used with hydraulic seeding on slopes 3/4:1 or steeper.

Wood cellulose and wood pulp fibers shall no contain germination or growth inhibiting factors. They shall be evenly dispersed when agitated in water. The fibers shall contain a dye to allow visual metering and aid in uniform application during seeding.

APPLYING MULCH

STRAW or HAY MULCH will be spread uniformly within 24 hours after seeding and/or planting. The mulch may be spread by blower-type spreading equipment, other spreading equipment or by hand. Mulch shall be applied to cover 75% or the soil surface. WOOD CELLULOSE or WOOD FIBER MULCH shall be applied uniformly with hydraulic seeding equipment.

ANCHORING MULCH

Anchor straw or hay mulch immediately after application by one of the following methods:

1. EMULSIFIED ASPHALT can be (a) sprayed uniformly onto the mulch as it is ejected from the blower machine or (b) sprayed on the mulch immediately following mulch application when straw or hay is spread by methods other than special blower equipment The combination of asphalt emulsion and water shall consist of a homogeneous mixture satisfactory for spraying. The mixture shall consist of 100 gallons of grade SS-1h or CSS-1h emulsified asphalt and 100 gallons of water per ton of mulch.

Care shall be taken at all times to protect state waters, the public, adjacent property, pavements, curbs, sidewalks, and all other structures from asphalt discoloration.

2. HAY and STRAW mulch shall be pressed into the soil immediately after the mulch is spread. A special "packer disk" or disk harrow with the disks set straight may be used. The disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disks shall be dull enough to press the mulch into the ground without cutting it, leaving much of it in an erect position. Mulch shall not be plowed into the soil.
3. PLASTIC MESH or NETTING with mesh no larger than one inch by one inch may be needed to anchor straw or hay mulch on unstable soils and concentrated flow areas. These materials shall be installed and anchored according to manufacturer's specifications.

IRRIGATION

Irrigation shall be applied at a rate that will not cause runoff.

TOPDRESSING

Topdressing shall be applied on all permanent grassing.
Recommended rates of application are listed in the tables below.

SEEDING RATES AND PLANTING DATES FOR PERMANENT GRASSING

Species	Broadcast Rates 1/ - PLS 2/ Per Acre	Broadcast Rates 1/ - PLS 2/ Per 1000 sq.ft.	Resource Area 3/	Planting Dates by Resource Areas — Planting Dates (Solid lines indicate optimum dates, dotted lines indicate permissible but marginal dates.) J F M A M J J A S O N D	Remarks
BERMUDA, COMMON (Cynodon dactylon) Hulled seed			P		1,787,000 seed per pound Quick cover. Low growing and sod forming. Full sun. Good for athletic fields.
alone	10 lbs.	0.2 lb.	C		
with other perennials	6 lbs.	0.1 lb.			
BERMUDA, COMMON (Cynodon dactylon) Unhulled seed with temporary cover	10 lbs.	0.2 lb.	P C		Plant with winter annuals.
with other perennials	6 lbs.	0.1 lb.			Plant with Tall fescue.

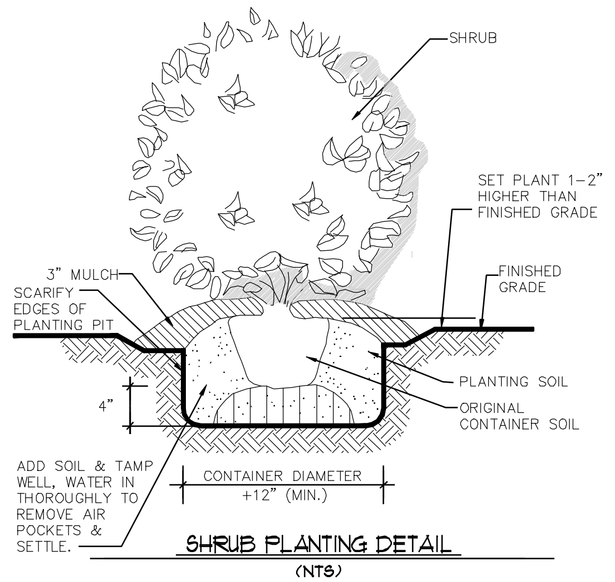
FERTILIZER REQUIREMENTS FOR PERMANENT GRASSING

TYPE OF SPECIES	YEAR	ANALYSIS OR EQUIVALENT N-P-K	RATE	N TOP DRESSING RATE
1. Cool season grasses	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 1000 lbs./ac. 400 lbs./ac.	50-100 lbs./ac. 1/ 2/ — 30
2. Warm season grasse	First Second Maintenance	6-12-12 6-12-12 10-10-10	1500 lbs./ac. 800 lbs./ac. 400 lbs./ac.	50 -100 bs./ac. 2/ 6/ 50 -100 bs./ac. 2/ 6/ 30 lbs./ac. 5/

1/ Apply in spring flollowing seeding.
2/ Apply in split applications when high rates are used.
3/ Apply in 3 split applications.
4/ Apply when plants are pruned.
5/ Apply to grass species only.
6/ Apply when plants grow to a height of 2 to 4 in.

PERMANENT GRASSING REQUIREMENTS

(NTS)



SHRUB PLANTING DETAIL

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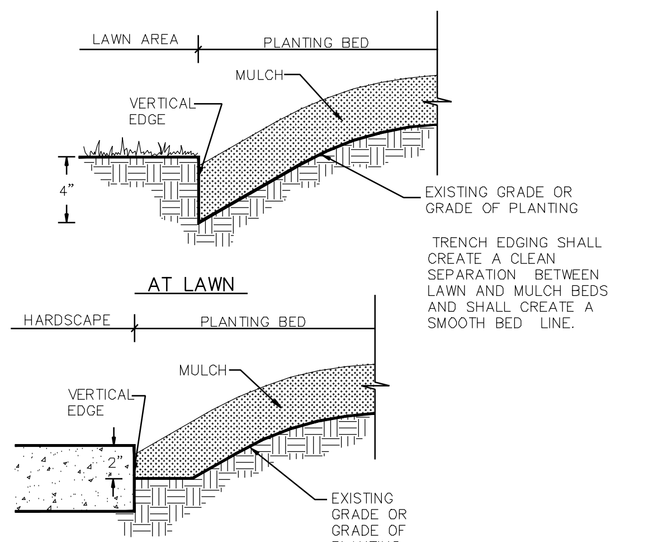
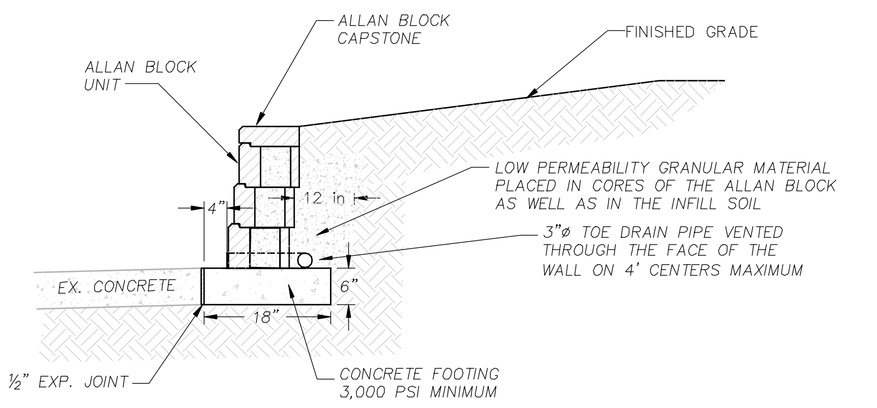


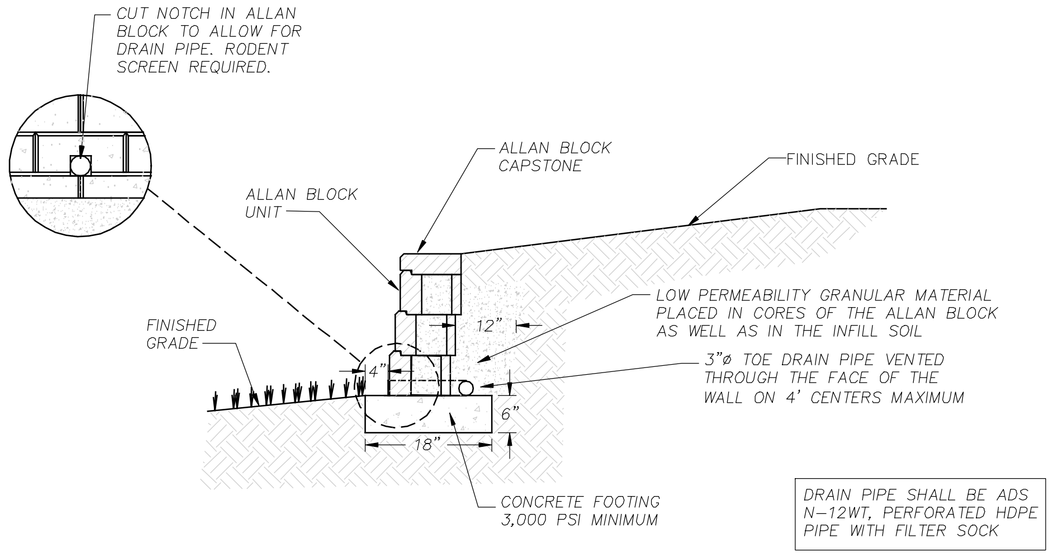
TRENCH EDGING SHALL CREATE A CLEAN SEPARATION BETWEEN LAWN AND MULCH BEDS AND SHALL CREATE A SMOOTH BED LINE.

TRENCH EDGING DETAIL

(NTS)

GRANULAR MATERIAL FOR BLOCK FILL AND DRAINAGE COURSE BEHIND WALL SHALL BE WELL-GRADED GRANULAR WALL ROCK 0.25 in TO 1.5 in LESS THAN 10% FINES

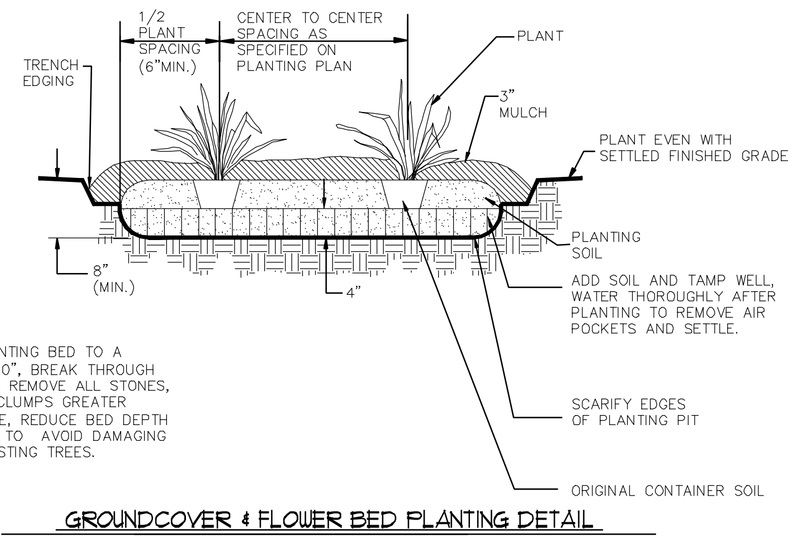




DRAIN PIPE SHALL BE ADS N-12WT, PERFORATED HDPE PIPE WITH FILTER SOCK

SEGMENTAL BLOCK WALL TYPICAL DETAIL

(NTS)



ROTO-TILL PLANTING BED TO A DEPTH OF 8"-10", BREAK THROUGH HARD PAN AND REMOVE ALL STONES, ROOTS AND CLUMPS GREATER THAN 1" IN SIZE, REDUCE BED DEPTH AS NECESSARY TO AVOID DAMAGING ROOTS OF EXISTING TREES.

GROUNDCOVER & FLOWER BED PLANTING DETAIL

(NTS)

NO.	DATE	DESCRIPTION	BY
6			
5			
4			
3			
2			
1			
D	01-16-12	ISSUED FOR BIDS	PFM

REVISIONS

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Travis Pruitt & Associates, Inc.
SURVEYORS · ENGINEERS · ENVIRONMENTAL SCIENTISTS · LANDSCAPE ARCHITECTS

DETAIL SHEET

ATHENS HOUSING AUTHORITY LANDSCAPE PLANTING PLANS

ATHENS- CLARKE COUNTY, GEORGIA

GEORGIA REGISTERED No. 1029 LANDSCAPE ARCHITECT CYNTHIA M. SLOAN

For The Firm
Travis Pruitt & Associates, Inc.

DATE: 01-16-2012
SCALE: AS SHOWN
DN:11-0327DT
LBY: LB-11
JN: NUMBER
FN: N/A

Sheet No. LS-7