

- A minimum of 48 hours notice must be given to the Howard County Department of inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction, (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the most current "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", and revisions thereto.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, of the HOWARD COUNTY
- DESIGN MANUAL, Storm Drainage. All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (Section G) for permanent seeding, sod, temporary seeding, and mulching. Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

and establishment of grasses.

alysis:		
Total Area of Site	0.488	Acres
Area Disturbed	0.41	Acres
Area to be roofed or paved	0.11	Acres
Area to be vegetatively stabilized	0.30	Acres
Total Cut	400	Cu. Yds.
Total Fill	400	Cu. Yds.
Offsite waste area location	N/A	•

- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. Additional sediment control must be provided, if deemed necessary by the Howard
- County Sediment Control Inspector. 10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.
- Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made. Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.

HOWARD SOIL CONSERVATION DISTRICT PERMANENT SEEDING NOTES Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, disking, or other

acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following

1) PREFERRED -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq. ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000sq. ft.)

2) ACCEPTABLE -- Apply 2 tons per acres dolomitic limestone (92 lbs/1000sq. ft.) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft.) before seeding. Harrow or disk into upper three inches of soil.

SEEDING -- For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs per acre (1.4 lbs/1000sq. ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (.05 lbs/1000sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) - 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) - Use sod. Option (3) - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch 2 tons / acre well anchored straw.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring.

MAINTENANCE -- Inspect all seeding areas and make needed repairs, replacements and

HOWARD SOIL CONSERVATION DISTRICT TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-termvegetative cover

SEEDBED PREPARATION: -- Loosen upper three inches of soil by raking, disking, or other

acceptable means before seeding, if not previously loosened. SOIL AMENDMENTS: -- Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000sq. ft.).

SEEDING -- For periods March 1 thru April 30, and from August 15 thru October 15 seed with 2-12 bushels per acre of annual rye (3.2 lbs/1000sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs/1000sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING -- Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000sq. ft.) of unrotted weed free small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000sq. ft.) of emulsified asphalt on flat areas. On sloves 8 feet or higher, use 348 gallons per acre (8 gal/1000sq. ft.) for anchoring. Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION

AND SEDIMENT CONTROL for additional rates and methods not covered.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

i. This practice is limited to areas having 2:1 or flatter slopes where

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation. Conditions Where Practice Applies

a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth. b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish

continuing supplies of moisture and plant nutrients. c. The original soil to be vegetated contains material toxic to plant growth. d. The soil is so acidic that treatment with limestone is not feasible.

have the appropriate stabilization shown on the plans. Construction and Material Specifications l. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2.1 require

special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall

in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station. II. Topsoil Specifications - Soil to be used as topsoil must meet the following: i. Topsoll shall be a loam, sandy loam, clay loam, silt loam, sandy clay Loam, loamy sand. Other solls

may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardlese, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5 % by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1-1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nuteedge, poison ivy, thistle, or others as specified. iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tone/acre (200-400 pounds per 1,000 square feet) prior to the placement of

conjunction with tillage operations as described in the following procedures. III. For sites having disturbed areas under 5 acres: i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization -Section I - Vegetative Stabilization Methods and Materials

topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in

IV. For sites having disturbed areas over 5 acres: I. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:

a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher. b. Organic content of topsoil shall be not less than 1.5 percent by weight.

c. Topsoil having soluble salt content greater than 500 parts per million shall not be used. d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization --Section I - Vegetative Stabilization Methods and Materials. V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins. ii. Grades on the greas to be topsoiled, which have been previously established, shall be maintained albeit 4" - 8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resultina from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or

iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeabed preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

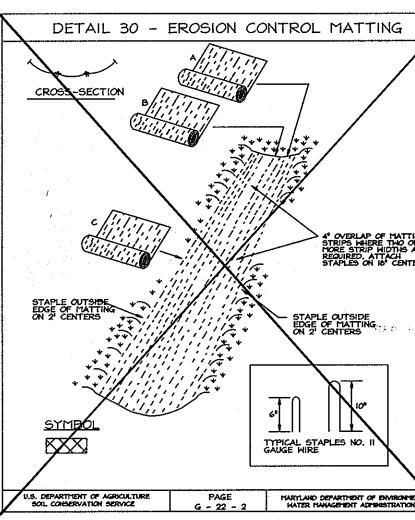
> I. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements: a. Composted sludge shall be supplied by, or originate from, a person or persons that are

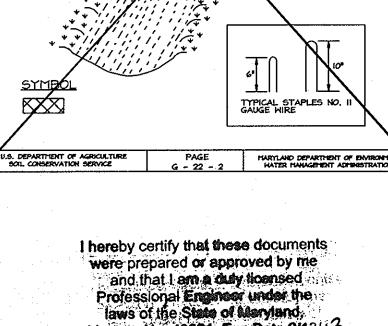
permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06. b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a Ph of 7.0 to 8.0. If compost does not meet these

requirements, the appropriate constituents must be added to meet the requirements c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet, ii. Composted sludge shall be amended with a potassium fertilizer applied at the rate of $4\ \text{lb/1,000}$

square feet, and 1/3 the normal lime application rate. References: Guideline Specifications, Soil Preparation and Sodding. MD-VA, Pub.#1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

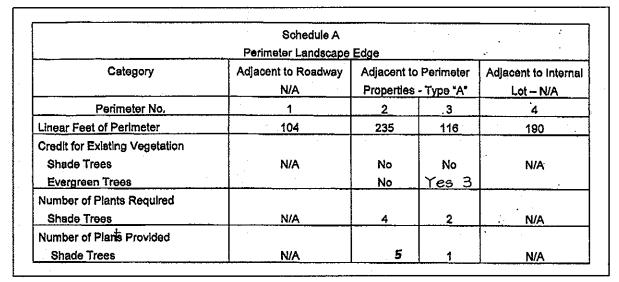
NOTE: See Sheet 4 for sequence of construction.





License No. 40091, Exp Date 2/13/13 A LE CONTROLLERO MANUALTE 是一种原理的ANTERNATION





Comments: The owner/developer will plant 5 shade trees (2 1 - 3 Caliper) and retain 3 evergreens along perimeter 3, to substitute for I shade tree. *Perimeter 4 is exempt since it is on existing interior subdivision line.

LANDSCAPE PLAN GENERAL NOTES

1. Contractor shall contact "miss utility" (800-257-7777) and shall verify the location of all underground utilities within the project area prior to installation of plant material.

Proposed locations of plant material shall be staked in the field by the contractor for approval by owner's representative prior to planting.

Plant material and beds shall receive a minimum 3-inch depth

4. All areas disturbed by planting operations shall be repaired by the contractor to the satisfaction of the owner's representative.

Quantities of trees, evergreens, and shrubs noted on the plant list are based upon the graphic symbols shown on the drawings. Contractor shall provide and install these items based upon araphic symbol quantities. Contact owner's representative if a difference is found between the quantities noted in the plant list and the symbol count of plant materials shown on the drawings.

6. Quantities of groundcovers, perennials, annuals, bulbs, and ornamental grasses shall be as noted in the plant list regardless of the number of graphic symbols shown on the drawinas.

7. All plant materials shall be nursery grown and shall comply with the american standard for nursery stock (ansi z60.1), latest edition, published by the american association of nurserymen.

8. All trees to conform to the american association of nurserymen's standards: section 1.1.2- height of branching. all trees to be matched.

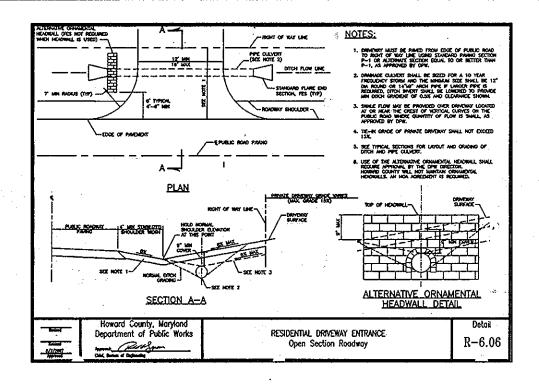
All plant materials to be full heavy specimens.

10. All areas within the limit of disturbance other than pavements, walks, walls and planting beds shall be seeded lawn. Surety for the five (5) required shade trees is \$1,500.00.

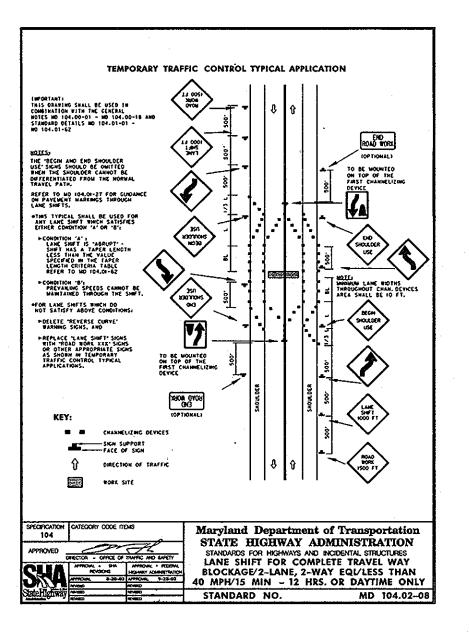
12. The owner, tenent and/or their agents shall be responsible for maintenance of the required landscaping, plant materials, berms, fences and walls. All plant materials shall be maintained in good growing condition and when neccessary, replaced with new materials to ensure continued compliance with applicable regulations. All required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.

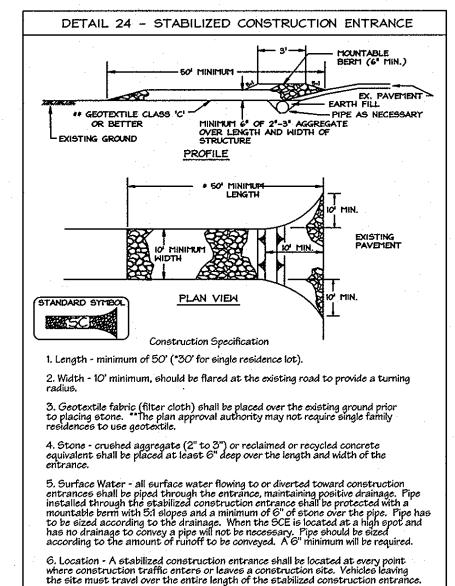
13. At the time of installment, all shrubs and other plantings herewith listed and approved for this site shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all require materials are planted and/or revisions are made to applicable plans and certificates.

		PLANT LIST CH	ART			
SYMB.	COMMON NAME	BOTANICAL NAME	QTY	SIZE	REMARKS	
•	Red Sunset Red Maple	acer rubrum	5	2"-2 1/2" Cal	B&B	
,	<u> </u>					

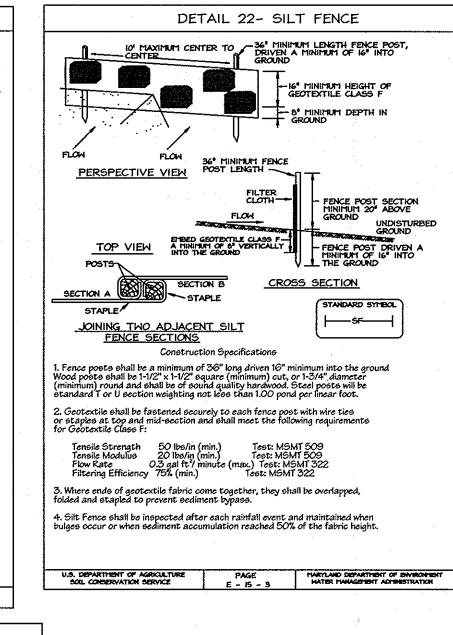


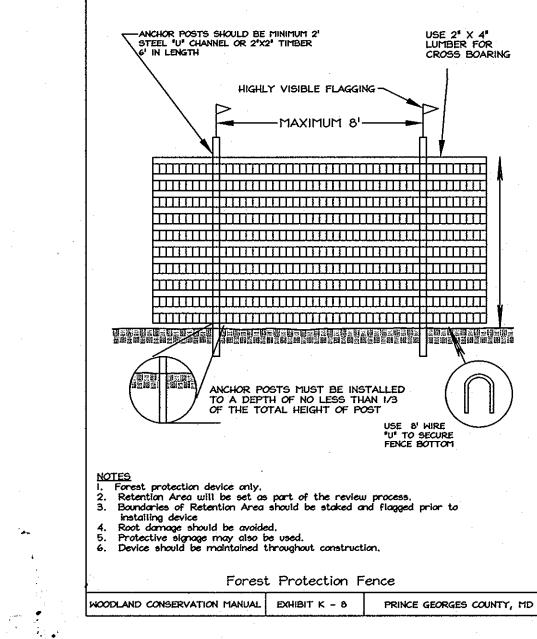
SECTION ROAD AND STREET	* CALIFORNIA BEARING RATIO (CBR)	3 10 05	5 YO <7	≥7	3 TO 45	5 10 <7	≥7	
HUMBER	CLASSIFICATION	PANEMONT MATERIAL (MONES)	MAN HEAR WITH GAR			HALA WETH CONSTANT GA		
PARKING BATS: RESDOCTIVE, AND NON-RESIDENTIVE.	HUA SUPERPANE FINAL SURFACE 9.5 IAN PO 64-22, LENEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5	
D_1	P-1 PHOND DOWN ASSISTANCE THAN 2 HEAT TRUDES PER DAY	HOMA SUPERPAYE INTERDMEDIATE SURFACE (HA)	NA.	, MA	ж	, m	- MA	NA.
r-1		HAM SUPERPARE BASE 19.0 MM, PO 64-22, LEMEL 1 (ESAL)	20	20	20	3.5	3.0	2.3
	GRADED ACCRECATE BASE (GAB)	8.5	7.0	5.0	4.0	4.0	4.0	
LE MAI SUR GRADED A THE SHTER BOR TO SU IN LIEU O JUNTY RIGH	DEFINE LIVERS SHALL BE FLACED BY APPROPRIATE COMPACTED LIVE PROCECULATE HAS COMPACT, AND SE BUT SEPARCE (16" BIM TO CORRENTE BASE (CAB) TO BE FLACED AND COMPACTED IN 6" BMX. SEMEMATE SUPPLIES COMPACT LIVER MIST BE FLACED WITH 2" BECO- INSTAINLY, COMPLICION RESPECTION AND BRIDD REDUCTION COMPACT COMPACT AND AND THE BASE SHAPPING COMPACT FLACED THE ADDISTRY LIVES AND FOR THE PROPRIET LATTER FRACED THE ADDISTRY LIVES AND FOR THE PROPRIET LATTER THEOCOMPACT AND AND THE BASE SHAPPING LIVES AND COLORS.	2.00° MAX) COMPACTED THROUGHESS LAYERS. S OF PLACEMENT OF BASE COURSE, MAD AS RECURRED NCAL/INDUSTRIAL EXTRANCE APRONS TECHNO THE MESS OF THE INTERNEDIATE PRAYMENT LAYER CAN BE				ORPORE BAS		:)
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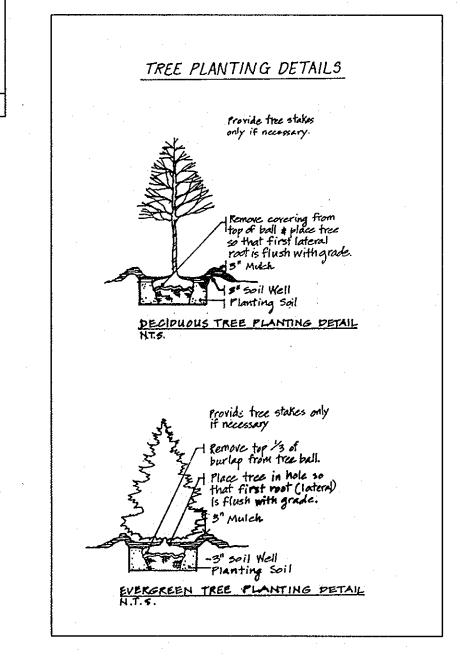


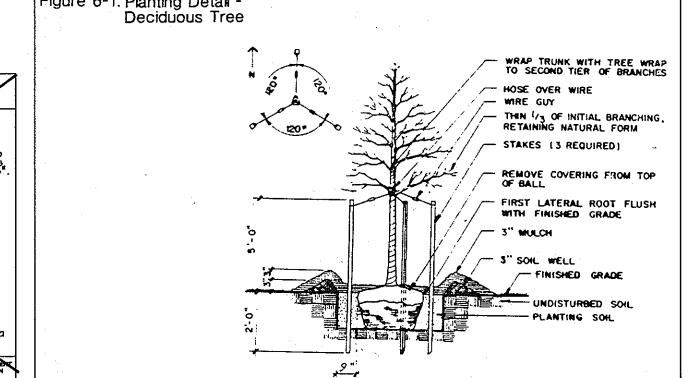
BLAZE ORANGE PLASTIC MESH





U.S. DEPARTMENT OF AGRICULTURE





DEVELOPER'S / BUILDER'S CERTIFICATION I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Subdivision and Land Development Regulations and the Landscape Manual. I/We further certify that upon completion, a letter notice, of accompanied by an executed One Year Guarantee of Plant Materials will be submitted to the Department of Planning and Zoning.

Figure 6-3. Planting Details ·

Description

DRAWN OWNER/DEVELOPER:

T3" MULCH

- CUT EDGE OF BED VERTICALLY - FINISHED GRADE

> Engineers, Surveyors, Planners 9250 Rumsey Road, Suite 106 Columbia, Maryland - 21045 (410)715-1070 - (301)596-3424 - FAX(410)715-9540 SEDIMENT CONTROL, LANDSCAPING AND CONSTRUCTION NOTES & DETAILS CLAY SUBDIVISION, LOT

LDE Inc.

AS SHOWN SINGLE FAMILY DETACHED DWELLING 2 OF 3 TAX MAP 50, PARCEL 496 PLAT NO. 4599 JOB NO. 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND 06-016.2 revious Submittals: VP-80-52, F-80-088 HARMONY BUILDERS INC. 4228 COLUMBIA ROAD ELLICOTT CITY, MD 21042 (410) 4G1-0833 FILE NO. SDP-07-106

ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE

THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT SURVEYOR DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNE

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EROSION CONTROL MATTING

Construction Specifications

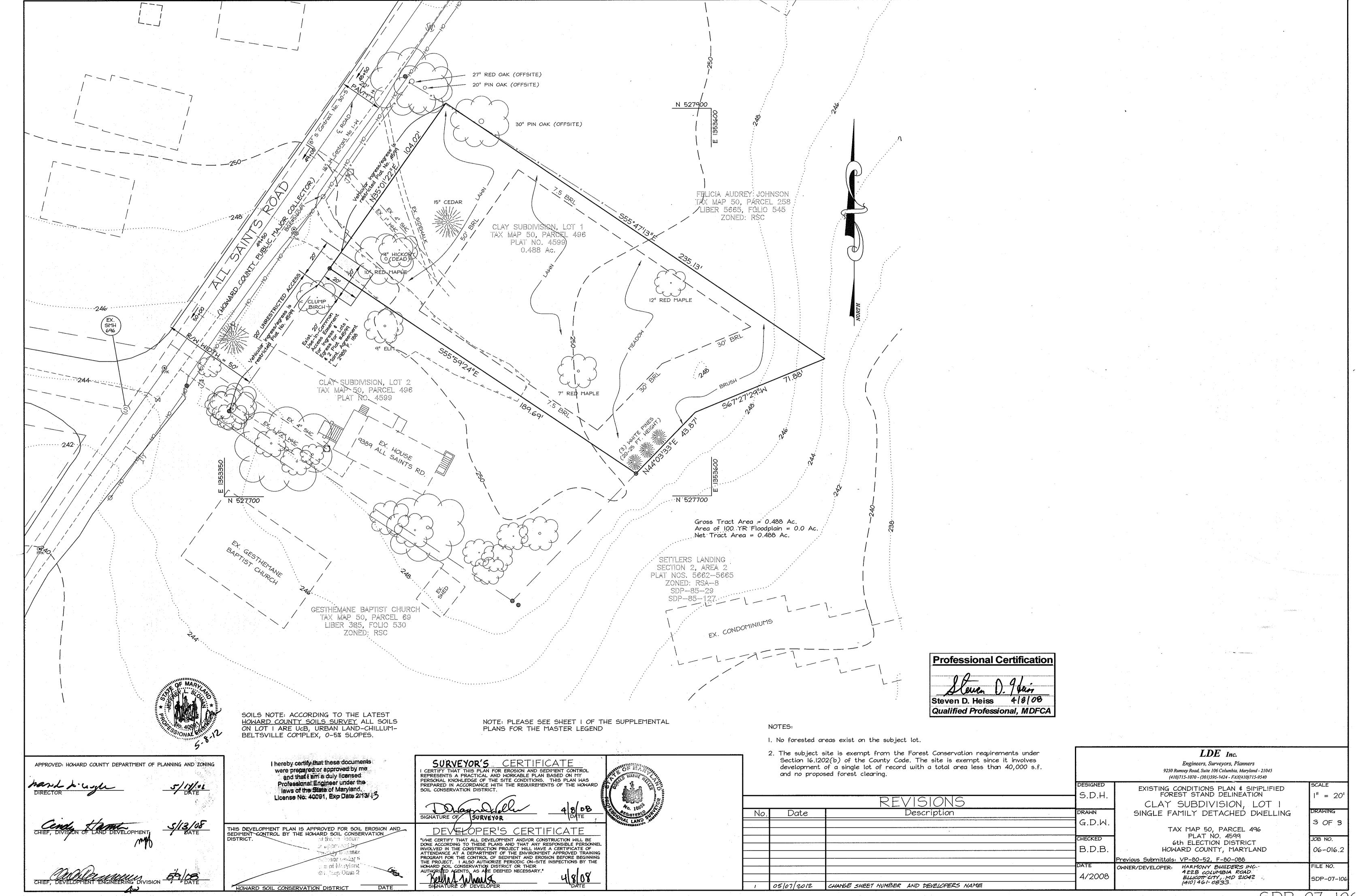
2. Staple the 4" overlap in the channel center using an 18" spacing between staples.

s are deemed necessary."

05/07/2012

Date

ELIMINATE ECM DETAIL, CHANGE SHEET NUMBER AND DEVELOPERS NAME



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SDP 07-106