AA 418-05 Webb, Trevor
VAR 0187

MSA-S-1829-4667

Comments
6/21/05 JV

Robert L. Ehrlich, Jr.
Governor

Michael S. Steele
Lt. Governor

Martin G. Madden
Chairman

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS
1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

June 21, 2005

Rob Konowal
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road
Annapolis, Maryland 21401

Re: Variance 2005-0187-V Trevor and Laura Webb

Dear Mr. Konowal:

Thank you for providing information on the above referenced variance. The applicant is requesting a variance to permit a dwelling with less setbacks and Buffer than required and with disturbance to steep slopes. The property is designated a Limited Development Area (LDA) and a Resource Conservation Area (RCA). The property was previously developed with a single-family dwelling. Based on our records, this property was the subject of a previous variance, Case No. 2004-0514-V. The Administrative Hearing Officer denied a variance to construct a dwelling with less setbacks and Buffer than required and with disturbance to steep slopes.

Providing the lot is properly grandfathered, this office does not oppose the variance; however impacts must be minimized and the variance the minimum necessary. Based on the information provided, we have the following comments regarding the development proposal and variance request.

1) As shown on the site plan, the lot is severely constrained by steep slopes. The front of the lot contains a flat area outside the setback from steep slopes adjacent to Pine Bluff Way.

2) The applicant proposes to construct a dwelling with a garage, a septic system, and a stormwater management device within the setback to steep slopes. The proposed dwelling is not located on steep slopes, and only a small area of steep slopes within the 15-foot limit of disturbance behind the dwelling will be disturbed. Compared with the previous variance request, the current proposal consolidates the development footprint and reduces overall impacts as follows: 1,254 square feet less disturbance, 110 square feet less woodland

clearing, and 1,006 less impervious surface coverage. We understand that no development is proposed within the RCA portion of the site.

3) Mitigation, at a ratio of 3:1 for disturbance within the Buffer and 1:1 for disturbance outside the Buffer, should be required. Plantings should be accommodated on the site to the extent possible, particularly to stabilize areas within the setback from steep slopes and steep slopes that are disturbed during construction.

4) As shown on the site plan, stormwater will be directed to an infiltration trench to provide water quality benefits on the site and prevent erosion on steep slopes.

Thank you for the opportunity to provide comments. Please include this letter in your file and submit it as part of the record for this variance. Also, please notify the Commission in writing of the decision made in this case.

Sincerely,

Julie V. LaBranche

Julie V. LaBranche
Natural Resource Planner

cc Trevor and Laura Webb

AA 418-05 Webb

Maryland State Archives
Preliminary Inventory Worksheet of Series Contents

Circle one: TRANSFER OTHER _____
Initials: DS/JD Number: S1829
Series: Project Evaluation – Project Files Date:
Agency: Department of Natural Resources
Division: Critical Area Commission For the Chesapeake and Atlantic Coastal Bays

Box # 4	Description	Dates 2005
✓	AA 418-05: Webb, Trevor: VAR	Scan
✓	AA 419-05: Silver Sands: VAR	Scan
✓	AA 420-05: Carrick, Bernard: VAR	Scan
✓	AA 421-05: Monaghan, Elliott: VAR	Scan
✓	AA 422-05: Schwartz, Joseph: VAR	Scan
✓	AA 423-05: Redmiles, Stephen: VAR	Scan
✓	AA 424-05: Sutter, Frederick: VAR	Scan
✓	AA 425-05: Hepburn, George: VAR	Scan
✓	AA 426-05: Evangelista, Ruben: VAR	Scan
✓	AA 439-05: Girl Scouts of America: Special Exception	Scan
✓	AA 484-05: Advance Marine Services: Site Plan	Scan
✓	AA 487-05: Youngblood, Daniel: VAR	Scan
✓	AA 488-05: Padella, Arthur: VAR	Scan
✓	AA 489-05: Swatta, Chris: VAR	Scan
✓	AA 490-05: Plus Properties, LLC: VAR	Scan
✓	AA 491-05: Plus Properties, LLC: VAR	Scan
✓	AA 492-05: Zeender, Roland: VAR	Scan
✓	AA 493-05: Ryon, Elizabeth: VAR	Scan
✓	AA 494-05: Hammer, Robert: VAR	Scan
✓	AA 495-05: Advance Auto Parts: Site Plan	Scan
✓	AA 507-05: Herrington Partnership: Other	Scan
✓	AA 508-05: Barnett, Grover: VAR	Scan
✓	AA 509-05: Clagg, Roy: VAR	Scan
✓	AA 510-05: Hankins, William: VAR	Scan
✓	AA 511-05: Leach, Rose: VAR	Scan
✓	AA 512-05: Drury, William: VAR	Scan

Maryland State Archives
Preliminary Inventory Worksheet of Series Contents

Circle one: TRANSFER OTHER _____
Initials: DS/JD Number: S1829
Series: Project Evaluation – Project Files Date:
Agency: Department of Natural Resources
Division: Critical Area Commission For the Chesapeake and Atlantic Coastal Bays

Box # 4	Description	Dates 2005
✓	AA 513-05: Schoonover, Patricia: VAR	
✓	AA 514-05: Boss/Hanson: VAR	
✓	AA 515-05: Reeder, Lou: VAR	
✓	AA 531-05: Allanson, Gary: VAR	
✓	AA 532-05: Schryer, Brenda: VAR	
✓	AA 533-05: Schepleng, William: VAR	
✓	AA 534-05: Rabbitt, Robert: VAR	
✓	AA 536-05: Bishara, Cox and Mill Creek, LLC: SUB	
✓	AA 569-05: Seznec, Thackray: SUB	
✓	AA 588-05: Cianbro Corp. Wharf Renovation: Site Plan	
✓	AA 591-05: Johnson, Robert: VAR	
✓	AA 597-05: Gallimore, Charles: VAR	
✓	AA 610-05: Pusateri, Michael: VAR	
✓	AA 611-05: Young, Erik: VAR	
✓	AA 612-05: Tessitore, Marguerite: VAR	
✓	AA 613-05: Curland, Marcy: VAR	
✓	AA 614-05: Wilby, Trevor: VAR	
✓	AA 633-05: Etzel, Eric: VAR	
✓	AA 634-05: Summit Pt. Trading Co.: VAR	
✓	AA 639-05: Old Stein Inn: Site Plan	
✓	AA 643-05: Bassford, Bryan: VAR	

018 / V

DIVERSIFIED PERMITS, INC.

P.O. Box 242 Millersville, MD. 21108
Office: (410) 859-5583 Fax: (410) 859-5584
Email: robertbaxter27@aol.com

April 25, 2005

Ms. Lori Rhodes
Office of Planning and Zoning
Heritage Office Complex

Re: Pines on the Severn Lot 1
Variance Application process
1512 Pine Bluff Way

Dear Ms. Rhodes,

This is a formal request for a variance to disturb 15%, 25%+ steep slopes and the buffer within the critical area. In addition, a variance of 2-feet to the "platted" 25-foot building restriction line from the right of way will be necessary for the house development.

A previous variance was applied for and denied under case #2004-514-V. The purpose of this new variance package is to address all previous County and Critical Area Commission concerns in order to receive approval to develop the legal lot. A different house type and layout have been provided.

The site is a legal building lot in the Pines on the Severn subdivision located at 1512 Pine Bluff Way in Arnold. The lot is 0.513 acres, is zoned R-2 and will require a private septic system. Public water is existing. The site is located in both the Resource Conservation and Limited Development Area of the critical area. A home had been built on this site years ago and was recently removed. The location of the old foundation is shown on the plan.

Based on the County concerns, the new plan is proposing a smaller home, smaller deck and is located 7-feet closer to the right of way than the previous variance plan. The limit of disturbance has been decreased by 1,254 square feet. The impervious coverage has been reduced by 1,006 square feet. The woodland clearing has been reduced by 110 square feet. Most importantly, the home is not located in any 25%+ steep slopes as before.

Storm water management has now been addressed by providing a 50% Pretreatment trench with a storm water management infiltration trench

designed to manage the 10 Year Storm for all impervious coverage. In essence, there will be no runoff leaving the site. The Conservation Easement will remain unchanged and assist in protecting the steep slopes.

As previously stated, the hardship on this site is a lack of flatter area to build a home and provide a private septic system. 60% of the site is covered in 25%+ steep slopes. Development of this property, based on the proposed plan, will not be detrimental to the integrity of the neighborhood.

Attached are all applicable documents necessary to process this package. If there is any additional information that would assist in your review and approval, please contact this office directly.

Sincerely,
Diversified Permits, Inc.

Robert E. Baxter, Jr.
President

0418 05

RECEIVED

AUG 09 2005

CRITICAL AREA COMMISSION

IN THE OFFICE OF ADMINISTRATIVE HEARINGS

CASE NUMBER 2005-0187-V

IN RE: **TREVOR AND LAURA WEBB**

THIRD ASSESSMENT DISTRICT

DATE HEARD: AUGUST 2, 2005

ORDERED BY: **STEPHEN M. LeGENDRE**, ADMINISTRATIVE HEARING OFFICER

PLANNER: **ROBERT KONOWAL**

DATE FILED: **AUGUST** 4, **2005**

PLEADINGS

Trevor and Laura Webb, the applicants, seek a variance (2005-0187-V) to permit a dwelling with less setbacks and buffer than required and with disturbance to steep slopes on property located along the east side of Pine Bluff Way, north of Severn Way, Arnold.

PUBLIC NOTIFICATION

The hearing notice was posted on the County's web site in accordance with the County Code. The file contains the certification of mailing to community associations and interested persons. Each person designated in the application as owning land that is located within 175 feet of the property was notified by mail, sent to the address furnished with the application. Mr. Webb testified that the property was posted on July 16, 2005. I find and conclude that the requirements of public notice have been satisfied.

FINDINGS AND CONCLUSIONS

This case concerns the same property the subject of a decision by this office in Case No. 2004-0514-V (March 17, 2005). The prior Order denied a variance to permit a dwelling with less buffer than required and with disturbance to steep slopes. There was no appeal. The present request is to construct a dwelling in the Chesapeake Bay Critical Area buffer as expanded for steep slopes, with disturbance to the slopes and with a front setback of 23 feet.

Anne Arundel County Code, Article 27, Section 27-13-104(a) establishes a 100-foot buffer from tidal waters, tributary streams and tidal wetlands. Section 27-4-601 requires lots in the R-2 district to maintain a front setback in the amount of 30 feet. Finally, Article 26, Section 26-8-201 prohibits disturbances on slopes of 15 percent or greater in a Limited Development Area (LDA) of the Chesapeake Bay Critical Area. Accordingly, the applicants request a buffer variance, a variance to disturb steep slopes and a variance of seven feet to the front setback.

Robert Konowal, a planner with the Office of Planning and Zoning, testified that the property is irregular in shape and encumbered by the expanded buffer and steep slopes. As compared to the prior application, the dwelling has been reduced in size and relocated closer to the road to minimize the impacts to the buffer and slopes. There were no adverse agency comments.[1] By way of conclusion, Mr. Konowal anticipated little adverse impact and offered support for the application.

Bob Baxter, the applicants' engineering consultant, testified that the dwelling would be in the same location as the original home that was destroyed by fire. More particularly, as compared to the prior application, the dwelling has been pulled off the 25 percent slopes; the proposal includes a stormwater infiltration trench and a pretreatment trench to capture all runoff and impervious surfaces; and the limits of disturbance have been slightly reduced.

[1] The Chesapeake Bay Critical Area Commission requested mitigation and control of stormwater.

Mr. Webb testified that the present proposal was developed in conjunction with the environmental agencies. He submitted a letter of no objection from the property owner to the east. There was no other testimony in the matter.

Upon review of the facts and circumstances, I find and conclude that the applicants are entitled to relief from the code. For this Critical Area property, due to the extent of the expanded buffer and steep slopes, a strict implementation of the program would result in an unwarranted hardship. To literally interpret the program would deny the applicants the right to develop the property with a single-family dwelling, a right commonly enjoyed by other properties in similar areas in the Critical Area. Conversely, the granting of the variances will not confer any special privilege that the program typically denies. There is no indication that the request results from the actions of the applicants or from land use on neighboring property. Finally, with mitigation, the variances will not adversely impact Critical Area resources and will harmonize with the general sprit and intent of the program.

With respect to the zoning variance, this property satisfies the test of unique physical conditions, consisting of the extent of the expanded buffer and steep slopes, such that there is no reasonable possibility of development in strict conformance with the code.

I further find that the present application represents the minimum relief. In this regard, the applicants have eliminated the disturbance to the 25 percent slopes, added stormwater management and reduced the limits of disturbance. I further

find that the granting of the variances will not alter the essential character of the neighborhood, substantially impair the appropriate use or development of adjacent property or cause a detriment to the public welfare. The approval is subject to the conditions in the Order.

ORDER

PURSUANT to the application of Trevor and Laura Webb, petitioning for a variance to permit a dwelling with less setbacks and buffer than required and with disturbance to steep slopes; and

PURSUANT to the advertising, posting of the property, and public hearing and in accordance with the provisions of law, it is this 4th day of August, 2005,

ORDERED, by the Administrative Hearing Officer of Anne Arundel County, that the applicants are hereby **granted** variances to disturb the expanded buffer and steep slopes and a variance of seven feet to the front setback to permit a dwelling in accordance with the site plan.

The foregoing variances are subject to the following conditions:

1. The applicants shall provide mitigation at a 3:1 ratio for disturbance in the buffer and 1:1 for disturbance outside the buffer, with plantings onsite to the extent practicable to stabilize steep slopes disturbed by construction.
2. The applicants shall provide stormwater management to provide water quality benefits and to prevent erosion on steep slopes.

3. No further expansion of the dwelling is allowed and accessory structures are not allowed.

Stephen M. LeGendre
Administrative Hearing Officer

NOTICE TO APPLICANT

Within thirty days from the date of this Decision, any person, firm, corporation, or governmental agency having an interest therein and aggrieved thereby may file a Notice of Appeal with the County Board of Appeals.

Further Section 27-16-405(a) provides that a variance expires by operation of law unless the applicant obtains a building permit within one year. Thereafter, the variance shall not expire so long as construction proceeds in accordance with the permit.

If this case is not appealed, exhibits must be claimed within 60 days of the date of this Order, otherwise that will be discarded.

DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT

Following initial soil disturbances or redisturbance, permanent or temporary stabilization shall be completed within seven calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site.

1. Permanent Seeding

A. Soil Tests: Lime and fertilizer will be applied per soil tests results for sites greater than 5 acres. Soil tests will be done at completion of initial rough grading or as recommended by the sediment control inspector. Rates and analysis will be provided to the grading inspector as well as the contractor.

1. Occurrence of acid sulfate soils (grayish black color) will require covering with a minimum of 12 inches of clean soil with 6 inches minimum capping of top soil. No stockpiling of material is allowed. If needed, soil tests should be done before and after a 6 week incubation period to allow oxidation of sulfates.

The minimum soil conditions required for permanent vegetative establishment are:

a. Soil pH shall be between 6.0 and 7.0.

b. Soluble salts shall be less than 500 parts per million (ppm).

c. The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or sericea lespedeza is to be planted, then a sandy soil (< 30% silt plus clay) would be acceptable.

d. Soil shall contain 1.5% minimum organic matter by weight.

e. Soil must contain sufficient pore space to permit adequate root penetration.

f. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil or amendments made as recommended by a certified agronomist.

B. Seedbed Preparation: Area to be seeded shall be loose and friable to a depth of at least 3 inches. The top layer shall be loosened by raking, disking or other acceptable means before seeding occurs. For sites less than 5 acres, apply 100 pounds of dolomitic limestone and 21 pounds of 10-10-10 fertilizer per 1,000 square feet. Harrow or disk lime and fertilizer into the soil to a depth of at least 3 inches on slopes flatter than 3:1.

C. Seeding: Apply 5-6 pounds per 1,000 square feet of tall fescue between February 1 and April 30 or between August 15 and October 31. Apply seed uniformly on a moist firm seedbed with a cyclone seeder, cultipacker seeder or hydroseeder (slurry includes seeds and fertilizer, recommended on steep slopes only). Maximum seed depth should be 1/4 inch in clayey soils and 1/2 inch in sandy soils when using other than the hydroseeder method. Irrigate where necessary to support adequate growth until vegetation is firmly established. If other seed mixes are to be used, select from Table 25, entitled "Permanent Seeding For Low Maintenance Areas" from the current Standards and Specifications for Soil Erosion and Sediment Control. Mixes suitable for this area are 1, 3 and 5-7. Mixes 5-7 are suitable in recreational situations.

D. Mulching: Mulch shall be applied to all seeded areas immediately after seeding. During the time periods when seeding is not permitted, mulch shall be applied immediately after grading. Mulch shall be unrotted, unchopped, small grain straw applied at a rate of 2 tons per acre or 90 pounds per 1,000 square feet (2 bales). If a crimper anchoring tool is used, apply 2.5 tons per acre. Mulch materials shall be relatively free of all kinds of weeds and shall be completely free of prohibited noxious weeds. Spread mulch uniformly, mechanically or by hand, to a depth of 1-2 inches.

E. Securing Straw Mulch: Straw mulch shall be secured immediately following mulch application to minimize movement by wind or water. The following methods are permitted:

(i) Use a mulch anchoring tool which is designed to punch and anchor mulch into the soil surface to a minimum depth of 2 inches. This is the most effective method for securing mulch, however, it is limited to relatively flat areas where equipment can operate safely.

(ii) Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. If mixed with water, use 50 pounds of wood cellulose fiber per 100 gallons of water.

(iii) Liquid binders may be used. Apply at higher rates at the edges where wind catches mulch, such as in valleys and on crests of slopes. The remainder of the area should appear uniform after binder application. Enders listed in the 1994 Standards and Specifications for Soil Erosion and Sediment Control or approved equal shall be applied at rates recommended by the manufacturers.

(iv) Lightweight plastic netting may be used to secure mulch. The netting will be stapled to the ground according to manufacturers recommendations.

2. Temporary Seeding:

Lime: 100 pounds of dolomitic limestone per 1,000 square feet.

Fertilizer: 15 pounds of 10-10-10 per 1,000 square feet.

Seed: Perennial rye - 0.92 pounds per 1,000 square feet (February 1, through April 30 or August 15 through November 1).

Millet - 0.92 pounds per 1,000 square feet (May 1 through August 15).

Mulch: Same as 1 D and E Above.

3. No fills may be placed on frozen ground. All fill to be placed in approximately horizontal layers, each layer having a loose thickness of not more than 8 inches. All fill in roadways and parking areas is to be classified Type 2 as per Anne Arundel County Code - Article 21, Section 2-308, and compacted to 90% density; compaction to be determined by ASTM D-1557-661 (Modified Proctor). Any fill within the building area is to be compacted to a minimum of 95% density as determined by methods previously mentioned. Fills for pond embankments shall be compacted as per MD-378 Construction Specifications. All other fills shall be compacted sufficiently so as to be stable and prevent erosion and slippage.

4. Permanent Sod:
Installation of sod should follow permanent seeding dates. Seedbed preparation for sod shall be as stated in section (B) above. Permanent sod is to be tall fescue, state approved sod; lime and fertilizer per permanent seeding specifications and lightly irrigate soil prior to laying sod. Sod is to be laid on the contour with all ends tightly abutting. Joints are to be staggered between rows. Water and roll or tamp sod to insure positive root contact with the soil. All slopes steeper than 3:1, as shown, are to be permanently sodded or protected with an approved erosion control netting. Additional watering for establishment may be required. Sod is not to be installed on frozen ground. Sod shall not be transplanted when moisture content (dry or wet) and/or extreme temperature may adversely affect its survival. In the absence of adequate rainfall, irrigation should be performed to ensure establishment of sod.

5. Mining Operations:
Sediment control plans for mining operations must include the following seeding dates and mixtures: For seeding dates of: February 1 through April 30 and August 15 through October 31, use seed mixture of tall fescue at the rate of 2 pounds per 1,000 square feet and sericeia lespedeza at the minimum rate of 0.5 pounds per 1,000 square feet.

6. Topsoil shall be applied as per the Standard and Specifications for Topsoil from the current Maryland Standards and Specifications for Soil Erosion and Sediment Control.

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G.21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

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

a. 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.

b. The original soil to be vegetated contains material toxic to plant growth.

c. The soil is so acidic that treatment with limestone is not feasible.

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 have the appropriate stabilization shown on the plans.

Construction and Material Specifications
I. 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 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. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, 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 1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, 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 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in 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 G.20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

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 guidelines:

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 G.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 areas 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 resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

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 seedbed 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 prior to use.

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 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.

STANDARD RESPONSIBILITY NOTES

I(We) certify that:

1. a. All development and construction will be done in accordance with this sediment and erosion control plan, and further, authorize the right of entry for periodic on-site evaluation by the Anne Arundel Soil Conservation District Board of Supervisors or their authorized agents.

b. Any responsible personnel involved in the construction project will have a certificate of attendance from the Maryland Department of the Environment's approved training program for the control of sediment and erosion before beginning the project.

Responsible personnel on site:
- TREVOR WEBB

c. If applicable, the appropriate enclosure will be constructed and maintained on sediment basin(s) included in this plan. Such structure(s) will be in compliance with the Anne Arundel County Code.

2. The developer is responsible for the acquisition of all easements, right, and/or rights-of-way that may be required for the sediment and erosion control practices, stormwater management practices and the discharge of stormwater onto or across adjacent or downstream properties included in the plan.

3. Initial soil disturbance or re-disturbance, permanent stabilization shall be completed within seven calendar days for the surface of all controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site. Temporary stabilization of the surface of perimeter controls, dikes, swales, ditches, and perimeter slopes may be allowed at the discretion of the sediment control inspector.

4. The sediment control approvals on this plan extend only to areas and practices identified as proposed work.

5. The approval of this plan for sediment and erosion control does not relieve the developer/consultant from complying with Federal, State, or County requirements appertaining to environmental issues.

6. The developer must request that the Sediment Control Inspector approve work completed in accordance with the approved erosion and sediment control plan, the grading or building permit, and the Ordinance.

7. All material shall be taken to a site with an approved sediment and erosion control plan.

8. On all sites with disturbed areas in excess of two acres, approval of the sediment and erosion control inspector shall be required on completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. This will require first phase inspections, whether building or grading inspection approvals may not be authorized until the initial approval by the sediment control inspector has been given.

9. Approval shall be requested on final stabilization of all sites with disturbed areas in excess of two acres before removal of controls.

10. Existing topography must be field verified by responsible personnel to the satisfaction of the sediment control inspector prior to commencing work.

Signature of Developer/Owner — Date 12/15/2004

Name: TREVOR WEBB — Title: OWNER

Affiliation:

Address: 2201 FURNACE TERRACE, ANNAPOLIS, MD. 21401

Telephone: (410) 573-0255

SEQUENCE OF CONSTRUCTION:

1. Contractor/Developer shall contact the Anne Arundel County Department of Inspections and Permits at 410-222-7780 at least 48 hrs. prior to the start of construction. Work may begin upon approval by Dept. of Inspections and Permits. — 2 Days
2. Install S.C.E. and Silt Fence as indicated. — 2 Days
3. Begin clearing and rough grading of site. Excavate for basement, footers, and foundation. Begin house construction. — 2 Weeks
11. Install all utilities*, including SEPTIC SYSTEM, SWM TRENCHES and driveway. Finish construction of house. — 3 Months
5. Fine grade site. — 2 Days
6. Stabilize all disturbed areas with seed and mulch as indicated. Upon inspector's approval remove any remaining sediment control devices. — 2 Days
7. Final cleanup and maintenance. — 2 Days

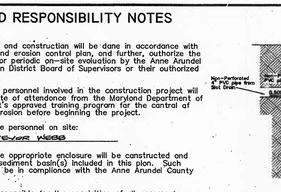
*Utilities Note: Disturb only that area which can be backfilled and stabilized in one working day.

* DRIVEWAY NOTES:

1. Driveway shall be 10' minimum width.
2. Material shall be minimum 6" thick, CR-6 gravel w/ 2" Bituminous Concrete surface course.
3. A paved apron, constructed in accordance with Anne Arundel County Design Manual Standard Detail [illegible], shall be provided within and to the ultimate right-of-way line of the intersecting public road, as part of this grading permit.

CRITICAL AREA CALCULATIONS
Article 28

1. Total area of site: 22,381 sq. ft.
2. Impervious area allowed on site: 5,445 sq. ft. (1/2 acre lot or greater, less than 1 acre)
3. Proposed impervious area: 2,370 sq. ft. (-1,06[illegible]SF)
4. Existing woodlands on site: 14,351 sq. ft.
5. Woodlands allowed to be cleared: 30% or 4,306 sq. ft.
6. Proposed woodland clearing for development: 1,640 sq. ft. or (-1105F)
12% of total woodlands.



NOTES:
1. Infiltration trench to be to be constructed in accordance with the latest Standard Specifications and as shown on these plans.
2. Filter cloth shall be placed on the sides and top of the trench. Overlap filter cloth: Top - 6 inches, Side - 3 feet.
3. Load-bearing Surface: Parking lots, sidewalks, driveways use SCH. 40 PVC pipe.
4. Non-Load-bearing Surface Use: SCH-35 or SCH. 40 PVC Pipe stamped with 3000 lbs. crush.
5. 4" or 6" PVC pipe used as per approved plans.
6. Trench shall be the size noted on the plans.

TYPICAL INFILTRATION TRENCH
NOT TO SCALE

B.2.A Infiltration Trench General Notes and Specifications

An infiltration trench may not receive run-off unit the entire contributing drainage area to the infiltration trench has received final stabilization.

1. Heavy equipment and traffic shall be restricted from traveling over the proposed location of the infiltration trench to minimize compaction of the soil.
2. Excavate the infiltration trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance trench wall stability. Large rocks must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing of the filter fabric during subsequent installation procedures. The sides and walls of the trench shall be roughened where sheared and sealed by heavy equipment.
3. A Class "C" geotextile or better (see Section 24.0, Material Specifications, 1994 Standards and Specifications for Soil Erosion and Sediment Control, MDE, 1994) shall interface between the trench side walls and between the stone reservoir and gravel filter layers. A partial list of perimeter filter fabrics that meet the Class "C" criteria follows. Any alternative filter fabric must be approved by the plan approval authority.

Amoco 4552	Carthage EX-605
CROLON 1070	Mirafi 140-N
WEBTEC 1017	

The width of the geotextile must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. The filter fabric shall be tucked under the top layer on the bottom of the infiltration trench for a distance of 6 to 12 inches. Sandbags or other anchoring objects should be placed on the fabric at the edge of the trench to keep the material open during windy periods. Where overlaps are required between rolls, the uphill roll shall lap a minimum of 2 feet over the downhill roll in order to provide a shingled effect.

4. If a 6 inch sand filter layer is placed on the bottom of the infiltration trench, the sand for the infiltration trench shall be washed and meet AASHTO-M-43, Size No. 9 or No. 10. Any alternative sand gradation must be approved by the plan approval authority.
5. The stone aggregate should be placed in a maximum loose lift thickness of 12 inches. The gravel (rounded "duck rock" gravel is preferred) for the infiltration trench shall be washed and meet one of the following AASHTO-M-43, Size No. 2 or No. 3.
6. Following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6-inch minimum longitudinal lap. The detailed fill soil or stone aggregate shall be placed over the lap at sufficient intervals to maintain the lap during subsequent backfilling.
7. Care shall be exercised to prevent natural or fill soils from intermixing with the stone aggregate. All contaminated stone aggregate shall be removed and replaced with uncontaminated stone aggregate.
8. Voids may occur between the fabric and the excavation sides shall be avoided. Removing boulders or other obstacles from the trench walls to ease source of rock voids. Therefore, natural soils should be placed in these voids to the more convenient time during construction to ensure fabric continuity to the excavation sides.
9. Vertically excavated walls may be difficult to maintain in areas where soil moisture is high or where soft cohesive or cohesionless soils are dominant. These conditions may require laying back of the side slopes to maintain stability.
10. PVC distribution pipes shall be Schedule 40 and meet ASTM-D-1785. All fittings shall meet ASTM-D-2729. Perforations shall be 3/8 inch in diameter. A perforated pipe shall be provided only within the infiltration trench and shall terminate 1 foot short of the infiltration trench wall. The end of the PVC pipe shall be capped. Note: PVC pipe with a wall thickness classification of SDR-35 meeting ASTM-D-3034 is an acceptable substitute for the Schedule 40 pipe.
11. The observation well is to consist of 6-inch diameter perforated PVC Schedule 40 pipe (M 278 OR P208, Type PS 20) with a cap on it inches above ground level and is to be placed near the longitudinal center of the infiltration trench. The pipe shall have a plastic collar with cline to prevent rotation when removing the cap. The screw cap lid shall be a cleanout with a locking mechanism or special bolt to discourage vandalism. The depth to the invert shall be marked on the lid. The pipe shall be placed vertically within the gravel portion of the infiltration trench and a cap provided at the bottom of the pipe. The bottom of the cap shall rest on the infiltration trench bottom.

Infiltration Trench Computations
Pines on the Severn
(Rooftop runoff and Driveway)

P = Rainfall Depth (Feet)
Ac = Contributing Area to Trench (Square Feet)
Qc = Depth of Runoff from Contributing Area (Feet)
Aw = Surface Area of Trench (Square Feet)
Q = Runoff Depth from Overlying Area Aw (Feet)
Cw = Water Capacity of Overlying Soil (Inches/Inches)
Do = Depth of Soil Overlying Trench (Feet)
Dw = Depth of Trench Storage (Feet)
Vr = Void Ratio in Trench
f = Final Infiltration Rate Below Trench (Feet/Hour)
Qa = Runoff in Inches Before Development
Qa = Runoff in Inches After Development
Qc = Qa - Qa / 12
Ts = Storage Time Hours
T = Effective Filling Time Hours (1 Hour Maximum)

f = 0.20 Ts = 48 Vr = 0.40
Dw max = 24.00 Qb = 0.00 Qa = 4.96 (10 Year Storm)
Qc = 0.41 DA (Ac.) = 0.05 DA (sq ft) = 2,370
P = 0.43 Q = 0.12 Do = 2
(Qp) Dw = 10.00 Cw = 0.31 T = 1
Aw = 217
(Qp)= 2,172 Cubic feet required

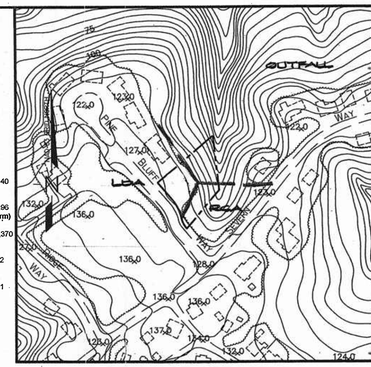
22' * 10' * 10' Deep Trench w/ 2-feet of cover
(For 82 Stone)

****Minimum Water Quality requirement:
0.20/12 x 0.91 ac. = .009 ac. Ft. or 371 Cu. Ft.
371 Cu. Ft. / 40 (void ratio) = 928 Cu. Ft. required

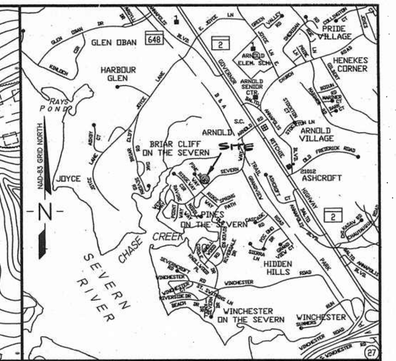
Infiltration Trench Computations
Pines on the Severn
(50% Pretreatment)

f = 0.20 Ts = 48 Vr = 0.40
Dw max = 24.00 Qb = 0.00 Qa = 4.96 (10 Year Storm)
Qc = 0.41 DA (Ac.) = 0.03 DA (sq ft) = 1,185
P = 0.43 Q = 0.12 Do = 3
(Qp) Dw = 10.00 Cw = 0.31 T = 1
Aw = 102
(Qp)= 1,016 Cubic feet required (Pretreatment trench)

11' * 10' * 10' Deep Trench w/ 3-feet of cover
(For 82 Stone)



DRAINAGE AREA MAP
SCALE: 1" = 200'
A. A. CO. TOPO MAP: 517
D.A. = 0.51 AC.
C = 0.44 (R72, SAND)
I 10 = 6.1
Q 10 = 1.87 CFS



VICINITY MAP
SCALE: 1" = 2,000'

GENERAL NOTES

1. Total area of site is: 22,381 sq. ft. 0.51 Ac.+/-
2. Existing Zoning is: R2
   Setbacks: Front: 30' Rear: 25' Side: 7' (20')
3. Existing Use of the site is: VACANT
4. Proposed Use of the site is: (1) SINGLE FAMILY DWELLING
5. Site is known as: LOT 1, 1512 PINE BLUFF WAY
6. Water/[redacted] and [redacted]/Septic to be installed and utilized.
7. FEMA-FIRM Map # 2400088-00B4 Zone C Elev. N/A
8. Site is [redacted] within the Critical Area Zone. Zone: LDA/RCA
9. No property line survey made at this time.
10. This site is [redacted] located within the Severn River Watershed.
11. The contractor shall be responsible for repairing and replacing any existing fences, driveways, etc. damaged or removed during construction.
12. The contractor shall notify "MISS UTILITY" (1-800-257-7777), five (5) working days before starting work shown on these drawings.
13. This plan is intended to provide sediment and erosion control during the grading of the road(s) and lot(s) and the construction of the house(s). Measures have been taken to prevent sediment from leaving the site.
14. D.P., Inc. has not field-verified existing utility information. It is the responsibility of the contractor to contact and obtain all records, information, and locations prior to commencement of grading operations. Any discrepancies shall be brought to D.P., Inc.'s attention immediately.
15. Contours shown on this plan are taken from AERIAL TOPOGRAPHY (for on-site areas). For off-site areas they are taken from A. A. Co. Topo and Utility Operations maps. The contractor shall verify the elevations to his own satisfaction prior to starting work. Any discrepancies shall be brought to D.P., Inc.'s attention immediately.
16. Any pertinent information within 100' of the property line is shown.
17. All roof areas shall drain through downspouts onto splash blocks and ultimately discharge to a vegetatively stabilized area; or drain to a Stormwater Management device as shown on these plans.

EROSION CONTROL GENERAL NOTES:

A. AGENCY NOTIFICATION
The Contractor shall notify Anne Arundel County Department of Inspection and Permits (410-222-7780) at least 48 hours before starting work.

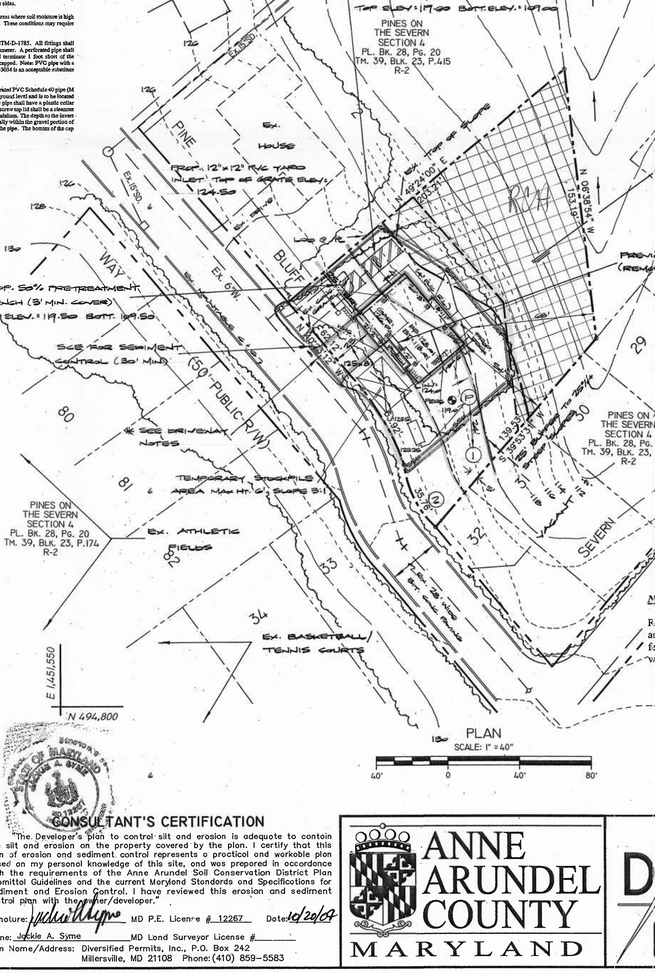
B. MAINTENANCE OF SOIL EROSION CONTROL PROCEDURES
1. All damage to the soil and erosion methods shown on this plan shall be repaired at the end of each day's work.
2. The contractor is to maintain these Sediment and Erosion Control Structures as specified on each detail.

C. GENERAL EROSION CONTROL PROCEDURES
1. Sod is to be placed on all areas shown and on graded areas with slopes greater than 3 to 1.
2. All downspouts are to be carried to the toe of fill slopes.
3. Splash blocks are to be provided at all downspouts not discharging onto a paved surface.
4. All excess material (if any) shall be removed to a site approved by the Anne Arundel Soil Conservation District (410-222-7822)
5. Cut and Fill quantities provided under Earthwork Analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unsuitable material. The contractor shall familiarize himself with site conditions which may affect the work.

EARTHWORK ANALYSIS

1. CUT: 165 CU. YDS. +/-
2. FILL: 125 CU. YDS. +/-
3. SPOIL / BORROW: 350 CU. YDS. +/-
4a. TOTAL AREA STRUCTURALLY STABILIZED: 2,370 SQ. FT. or .054 Ac.+/-
4b. TOTAL AREA VEGETATIVELY STABILIZED: 7,988 SQ. FT. or .183 Ac.+/-
4c. TOTAL AREA DISTURBED: 9,438 SQ. FT. or .216 Ac.+/-
5. PREDOMINANT SOIL TYPE: SEDIMENTARY PINE BLUFF LAND (SPB)

(-1,254)



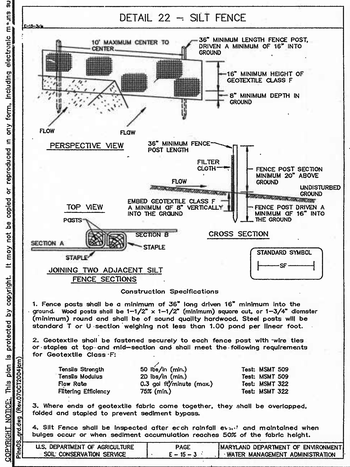
Nature of Variance:

Requesting variances to disturb 15%, 25%+ steep slopes and the buffer to steep slopes. In addition, a variance of 2-feet to the "platted" 25-foot front setback from the right of way.

SEPTIC REQUIREMENTS

(1) 1500 Gallon Septic Tank.
(1) 8-foot diameter drywell, 36-feet deep separated by 24-feet edge to edge.
(2) Replacement drywells
***House no larger than 3,500 square feet
***Public Water (existing meter)

PERC # T02053013



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1-1/2" x 1-1/2" (minimum) square cut, or 1-3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pond per linear foot.

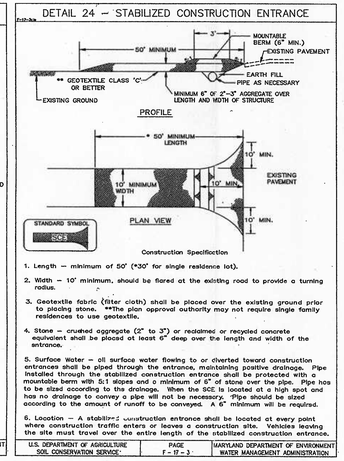
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE E - 15 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

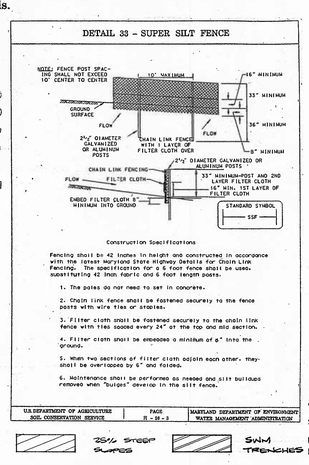
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE F - 17 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

LEGEND

1. Primary System (P)
2. 1st Replacement (1)
3. 2nd Replacement (2)
4. Perc. Location
5. Distribution Box
6. Septic Tank

LEGEND

- 122 — Existing Grade
- 124 — Proposed Grade
- 123x45 / 123x45 — Spot Elevation (Ex., Prop.)
- Ex. Woods Line
- Flow Arrow
- LOD — Limit of Disturbance
- SF — Silt Fence
- SSF — Super Silt Fence
- SCE — Stabilized Construction Entrance
- Temporary Stockpile Area
- Conservation Easement
- Priv. SWM
- 25% Steep Slopes
- SWM Trenches



Construction Specifications

Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6 foot fence shall be used, substituting 42 inch fabric and 8 foot length posts.

1. The posts do not need to set in concrete.
2. Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
3. Filter cloth shall be fastened securely to the chain link fence wire ties spaced every 24" at the top and mid section.
4. Filter cloth shall be embedded a minimum of 8" into the ground.
5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE H - 38 - 3 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

CONSULTANT'S CERTIFICATION

"The Developer's plan to control silt and erosion is adequate to contain the silt and erosion on the property covered by the plan. I certify that this plan of erosion and sediment control represents a practical and workable plan based on my personal knowledge of this site, and was prepared in accordance with the requirements of the Anne Arundel Soil Conservation District Plan Submittal Guidelines and the current Maryland Standards and Specifications for Sediment and Erosion Control. I have reviewed this erosion and sediment control plan with the owner/developer."

Signature: [signature] MD P.E. License # 12267 Date 12/20/04