

Construction Specifications

- Fencing shall be 42" in height and constructed in accordance with the most current Maryland State Highway Design Manual. The specification for a 6' fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The tension wire, brace and truss rods, eye anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 6" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildup removed when "bumps" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened secure to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for **Standard Class F**:

Tensile Strength	50 lbs/in (min)	Test: HMT 509
Tensile Modulus	20 lbs/in (min)	Test: HMT 509
Flow Rate	0.3 gal/ft (min/ft) (max)	Test: HMT 322
Filtration Efficiency	75% (min)	Test: HMT 322

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

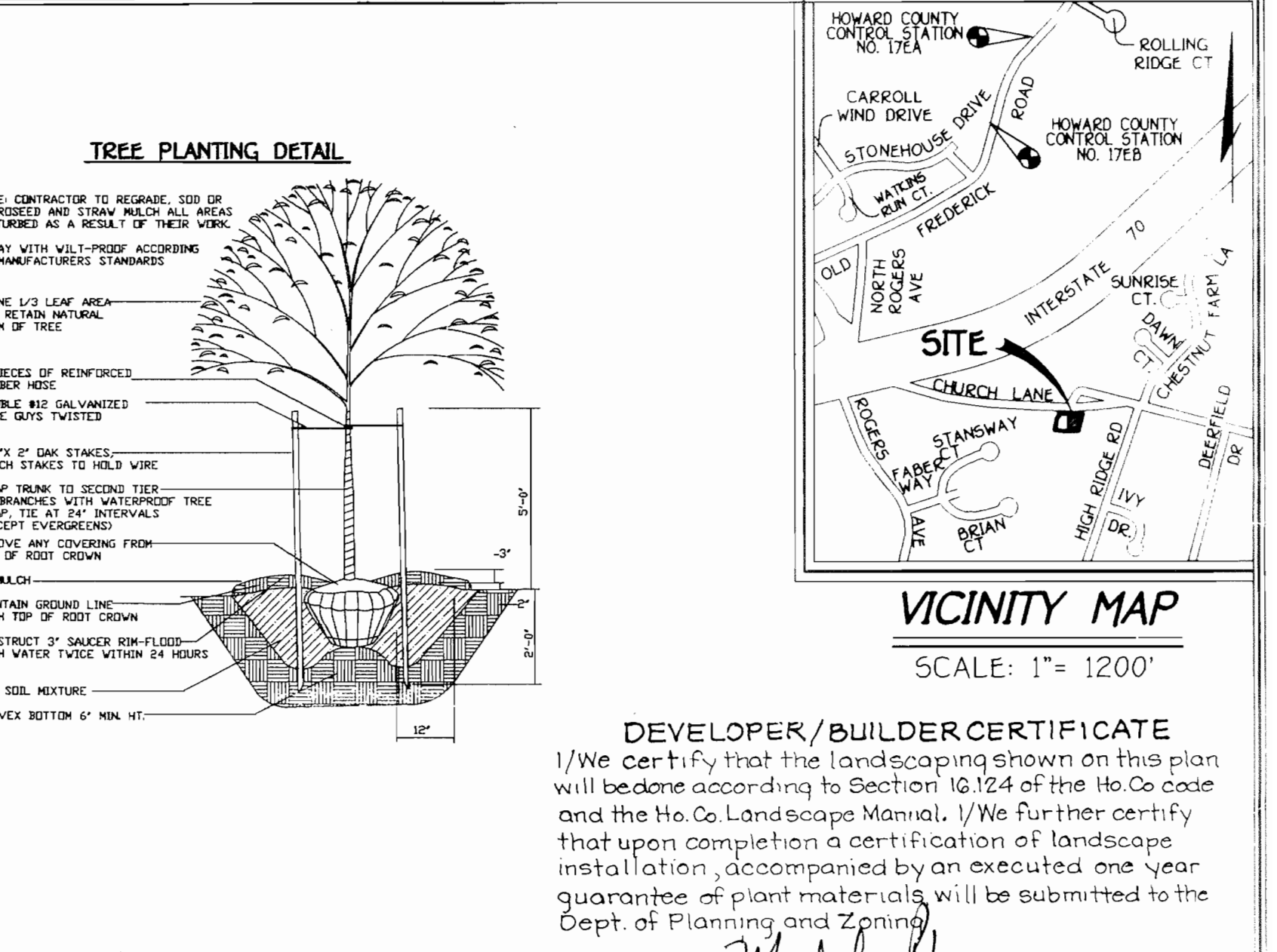
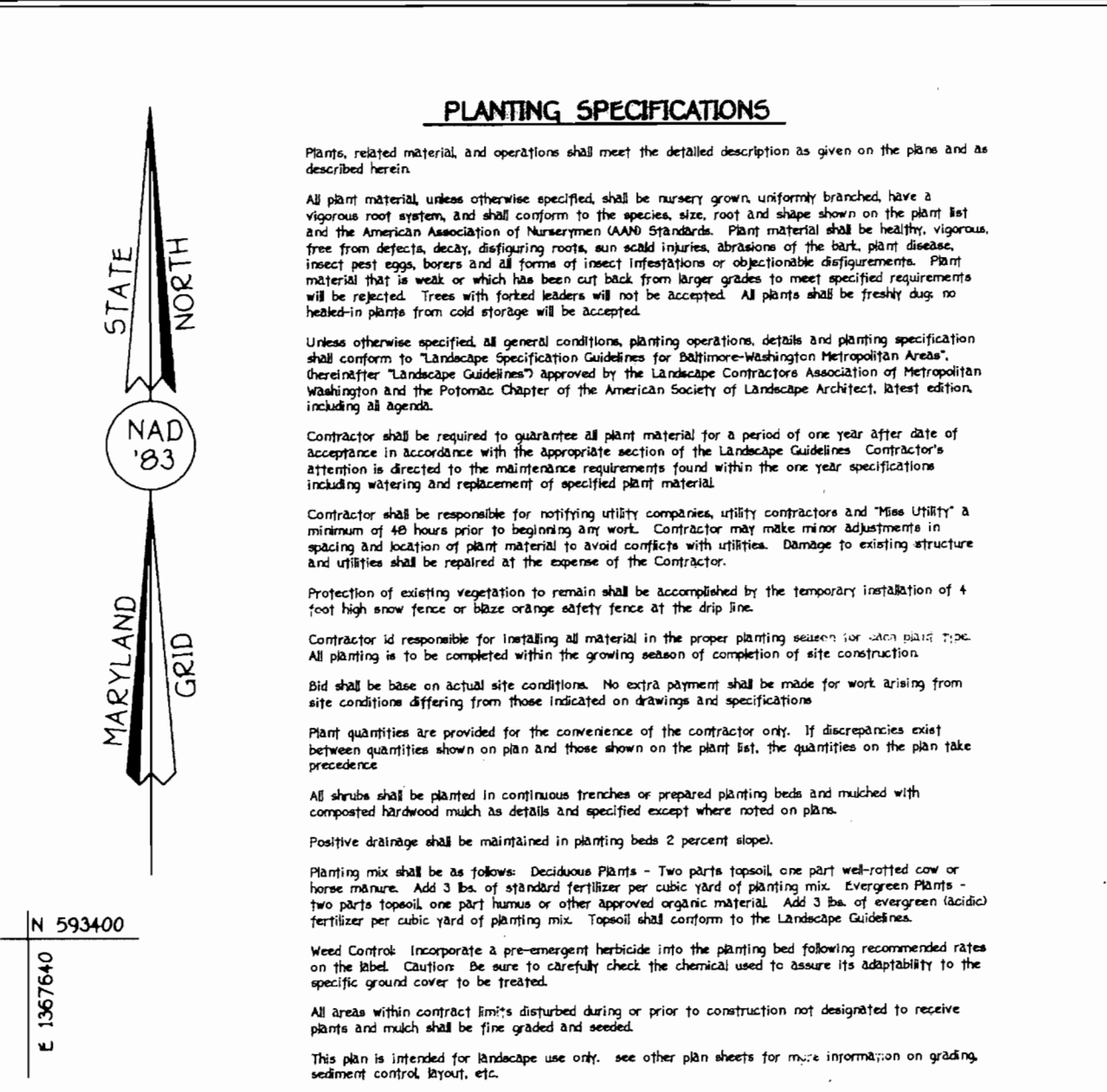
DEFINITION
Vegetative stabilization is the use of vegetation to stabilize exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to absorb runoff, thereby reducing sediment loads and runoff to downstream areas, and improving wildlife habitat and visual resources.

GENERAL PRACTICE APPLIES
This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into temporary seeding to quickly establish vegetative cover for short duration (up to one year) and Permanent Seeding for long term vegetative cover. Temporary Seeding areas for Temporary Seeding are Temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth fills, etc. and for Permanent Seeding are berms, dune, cut and fill slopes and other areas at final grade, erosion control and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY
Planting vegetation in disturbed areas will have an effect on the water budget, especially on volume and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by absorbing those substances present within the root zone. Sediment control devices must remain in place during grading, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation**
 - Final erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendments (Fertilizer and Lime Specifications)**
 - Soil tests must be performed to determine the exact ratio and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analysis.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer shall be substituted for lime with prior approval of the appropriate state fertilizer law and shall bear the name, trade name or trademark and warranty of the manufacturer.
 - Lime materials shall be ground limestone (hydrated or burnt lime) but shall be substituted which contains at least 90% total solids (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98-100% will pass through a #20 sieve.
 - Incorporate lime and fertilizer into the top 3-5" of soil by discing or other suitable means.
- Seeded Preparation**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable approved construction equipment such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or compacted but left in the roughened condition. Seeded areas greater than 300 sq ft should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer as prescribed on the plans.
 - Apply lime and fertilizer into the top 3-5" of soil by discing or other suitable means.
- Minimum soil conditions required for permanent vegetative establishment**
 - Soil pH shall be between 6.0 and 7.5.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soil on site, seeding is prohibited and a required in accordance with Section 21 Standards and Specifications for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade. When acidified or otherwise loosened to a depth of 3" to 5" to permit blowing the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as indicated on the plans.
 - Soil shall be amended into the top 3-5" of soil by discing or other suitable means. Lawn areas shall be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Seeded areas shall be tracked with a roller to roughen the surface. Steep slopes (greater than 3:1) shall be tracked by a roller leaving a rough irregular condition with ridges running parallel to the contour of the slope. The top 1-3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.



SEDIMENT CONTROL NOTES

- A Minimum of 48 hours Notice Must be Given to the Howard County Department of Inspection, Licenses and Permits, Sediment Control Division Prior to the Start of Any Construction (133-1055).
- All Vegetative and Structural Practices Are to be Installed According to the Provisions of This Plan and Are to be in Accordance with the Provisions of the 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 Re-Disturbance, Permanent or Temporary Stabilization Shall be Completed Within A 7 Calendar Days for All Perimeter Sediment Control Structures, Dikes, Perimeter Slopes and All Slopes Steeper Than 3:1, 6:1 or 14 Days As to All Other Disturbed or Graded Areas On the Project Site. 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 12, Of the Howard County Design Manual, Storm Drainage, Chapter 12, Of the Howard County Design Manual, Storm Drainage.
- 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 for Permanent Seeding (Sec. 50), Soil (Sec. 54), Temporary Seeding (Sec. 50), Permanent Seeding (Sec. 50), Soil (Sec. 54), Temporary Seeding (Sec. 50), and Mulching (Sec. 52). Temporary Stabilization with Much Alone Can Only be Done When Recommended Seeding Dates Do Not Allow for Proper Germination and Establishment of Grasses.
- 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.
- Site Analysis:

Total Area of Site	0.3214 Acres
Area Disturbed	0.1871 Acres
Area to be Rooted or Paved	0.0747 Acres
Area to be Vegetatively Stabilized	0.1124 Acres
Total Cut	5245 Cu.Yds.
Total Fill	150 Cu.Yds.
Off-Site Water/Borrow Area Location	N/A/Cu.Yds.
- Any Sediment Control Practice which is Disturbed by Grading Activity for Placement of Utilities Must be Replaced on the Same Day of Disturbance.
- Additional Sediment Controls Must be Provided, if Deemed Necessary by the Howard County Sediment Control Inspector.
- All Sites with Disturbed Areas in Excess of 2 Acres, Approval of the Inspector. Agency shall be Requested Upon Completion of Installation of Perimeter Erosion and Sediment Control, But Before Proceeding with Any Other Earth Approval May Not be Authorized Until This Initial Approval by the Inspector Agency is Made.
- Trenches for the Construction of Utilities is Limited to Three Pipe Lengths Or That which Shall be Backfilled and Stabilized Within One Working Day, Whichever is Shorter.

STABILIZED CONSTRUCTION ENTRANCE - 2

NOT TO SCALE

PERMANENT SEEDING NOTES

- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:**
- SEEDING PREPARATION**
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
 - SOIL AMENDMENTS**
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 80 LBS. PER ACRE (2.3 LBS./1000 SQ.FT.) OF CERTIFIED 3 TALL FESCUE FOR THE PERIOD MARCH 1 THROUGH APRIL 30, SEED WITH 80 LBS. PER ACRE (2.3 LBS./1000 SQ.FT.) OF CERTIFIED 3 TALL FESCUE AND 2 LBS. PER ACRE (0.6 LBS./1000 SQ.FT.) OF WHEATGRASS THROUGH FEBRUARY 28, PRODUCT SITE OR OPTION C - TWO TONS PER ACRE (200 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (20 GALLONS PER 1000 SQ.FT.) OF PULVERIZED APHALT ON FLAT AREAS OR 500 GALLONS PER ACRE (50 GALLONS PER 1000 SQ.FT.) OF PULVERIZED APHALT ON SLOPES 8 FEET OR HIGHER. USE 340 GALLONS PER ACRE (34 GALLONS PER 1000 SQ.FT.) FOR ANCHORING.
 - MATERIALS**
FOR ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.
• FOR PUBLIC ROADS SUBSTITUTE CHEQUONUKET GRASSHATCH AT 15 LBS./ACRE AND CERTIFIED 3 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING DATE. SEEDING DATE FOR THE MIXTURE IS MARCH 1 TO APRIL 30.
- TEMPORARY SEEDING NOTES**
- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
 - SEEDING PREPARATION**
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
 - SOIL AMENDMENTS**
APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER OR 1 LBS./1000 SQ.FT.
 - SEEDING**
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 1 BUREL PER ACRE OF ANNUAL RYE (1.2 LBS./ACRE) OF WHEATGRASS (0.7 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PRODUCT SITE BY APPLYING 2 TONS PER ACRE OF WHEATGRASS STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE 500.
 - MULCHING**
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 250 GALLONS PER ACRE (25 GALLONS/1000 SQ.FT.) OF PULVERIZED APHALT ON FLAT AREAS OR 500 GALLONS PER ACRE (50 GALLONS PER 1000 SQ.FT.) OF PULVERIZED APHALT ON SLOPES 8 FEET OR HIGHER. USE 340 GALLONS PER ACRE (34 GALLONS PER 1000 SQ.FT.) FOR ANCHORING.
 - SEEDING TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

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- SEEDING TO THE 1986 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.**

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT. 1 week
- INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN. 2 days
- CLEAR AND GRAB TO LIMITS OF DISTURBANCE AND MAKE GRADE TO SUB-BASE. 4 days
- CONSTRUCT BUILDING. 60 days
- FINI GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE. 2 days
- REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND RESEEDING IS GRANTED BY EPA CONTROL INSPECTOR. 2 days

ENGINEER'S CERTIFICATE

I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer EARL D COLLINS 4-5-01 Date

DEVELOPER'S CERTIFICATE

I/we certify that all development and construction will be done according to this plan for sediment and erosion control and that all responsible personnel 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 inspection by the Howard Soil Conservation District.

Signature of Developer MICHAEL PFAU 4-5-01 Date

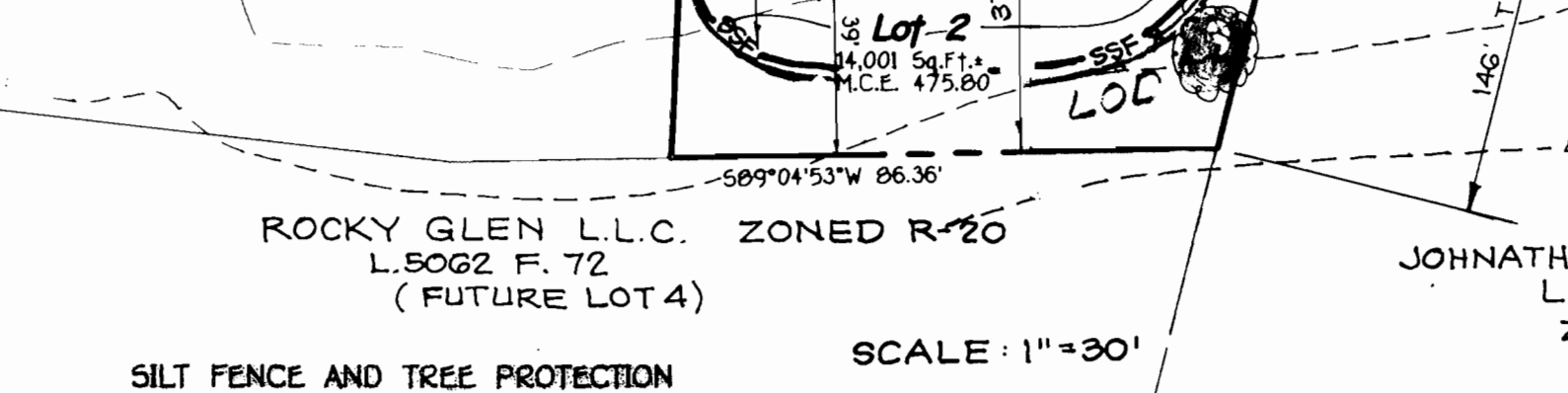
LANDSCAPING PLANT LIST

QTY	KEY	NAME	SIZE
2	(Symbol)	ACER SACCHARUM	2'-2 1/2\"/>
		GRN.MT./SUGAR MAPLE	CAL FULL CROWN D&B

SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER	CATEGORY	LANDSCAPE TYPE	LINEAR FEET OF PERIMETER	NUMBER OF PLANTS REQ.	SHADE TREES
P-1	ADJ. TO PERIMETER	A	146'	2	

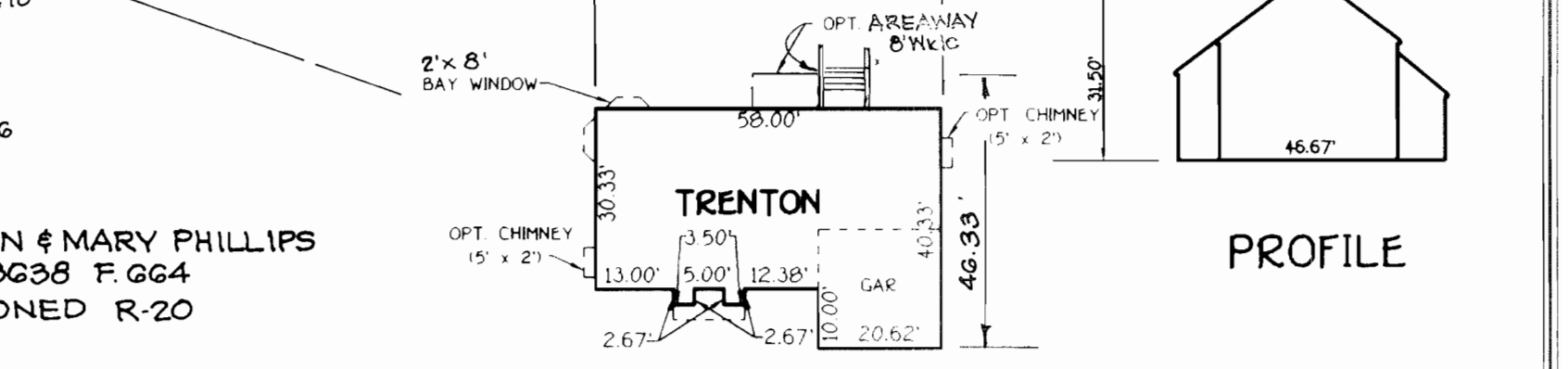
FINANCIAL SURETY FOR THE INTERNAL LANDSCAPING IN THE AMOUNT OF \$600.00 FOR THE REQUIRED 2 TREES WILL BE PAID FOR AT THE TIME OF GRADING PERMIT APPLICATION BY THE BUILDER.



GENERAL NOTES:

- SUBJECT PROPERTY ZONED R-20 PER 10/18/93 COMPREHENSIVE ZONING.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1080 AT LEAST 5 FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- BOUNDARY PERFORMED BY FISHER COLLINS AND CARTER INC. ON OR ABOUT JANUARY 1992.
- TOPOGRAPHIC SURVEY PERFORMED BY: Fisher Collins & Carter, Inc.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON HOWARD COUNTY GEODETIC CONTROL STATIONS:
 - 518.172A: N 10160.5724 (meters) E 41372.7247 (meters)
 - 518.172B: N 100994.8448 (meters) E 41322.8979 (meters)
- HOWARD COUNTY FILE NO. 5-99-19, 1-00-171 SEWER CONTROL 14-3092-D, 230-5 WATER CONT. 70W AND P.B. CASE# 340.
- ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITTING AND LOT GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHT-OF-WAYS OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- TOTAL PROJECT AREA: 0.3214+C
- PRESENT ZONING: R-20
- PROPOSED USE FOR SITE AND STRUCTURES: SINGLE FAMILY DETACHED
- The Reestablishment of Future Lot 4 (F-00-172), Landscaping Will Not Be Required Along The Southern Boundary Of Lot 2.
- Obligations Of The Forest Conservation Program For Lots 1 And 2 Are Met With A Fee-In-Lieu Payment In The Amount Of \$1,307.00 Under F-00-171.
- A Fee-In-Lieu Of Open Space In The Amount Of \$1500.00 Is Provided For Lot 1 Is Exempt From Open Space Obligation.
- Ho. Co. 51d apron detail: R-G-06

NOTE: In accordance with Section 128 of the Ho. Co. Zoning Reg., bay windows, chimneys or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks, porches or decks open enclosed, may project not more than 10 feet into the front or rear yard setback.



ADDRESS CHART

LOT 2	8415 CHURCH LANE
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FISHER, COLLINS & CARTER, INC.
ENGINEERS, CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21043
(410) 661-2299
CALIBRARY/SOP/SINGLE LOT/50P BASE

DATE	DESCRIPTION	REVISION BLOCK
1-18-02	Rev. grad. to show As-Built Conditions	
T-27-01	Rev. hse 4 grnd.	

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer EARL D COLLINS 4-5-01 Date

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Signature of Developer MICHAEL PFAU 4-5-01 Date

Approved for HOWARD SCD and meets Technical Requirements.

Signature: *John M. Ryan* 4/16/01 Date
S.D.A.-Natural Resources Conservation Service

Signature: *John M. Ryan* 4/16/01 Date
Howard SCD

APPROVED DEPARTMENT OF PLANNING AND ZONING

Signature: *Michael Pfaue* 4/15/01 Date
Director, Department of Planning and Zoning

Signature: *Michael Pfaue* 4/15/01 Date
Chief, Division of Land Development

Signature: *Michael Pfaue* 4/17/01 Date
Chief, Development Engineering Division

DEVELOPER/OWNER
Rocky Glen, LLC
c/o Land Design And Development, L.L.C.
8000 Main Street
Ellicott City, Maryland 21043

BUILDER
Trinity Homes
7320 Grace Drive
Columbia, Md 21044

SUBDIVISION	SECTION/AREA	LOT NO.
ROCKY GLEN L.L.C.	N/A	2

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
14555	13	R-20	1B	7320	602G

WATER CODE	SEWER CODE
H 02	1451500

SITE DEVELOPMENT SEDIMENT EROSION PLAN

ROCKY GLEN L.L.C.

LOT 2

TAX MAP No: 1B PARCEL No: 282

2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: FEBRUARY 28, 2001

SHEET 1 OF 1

SOP 01-104