

**21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL**

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

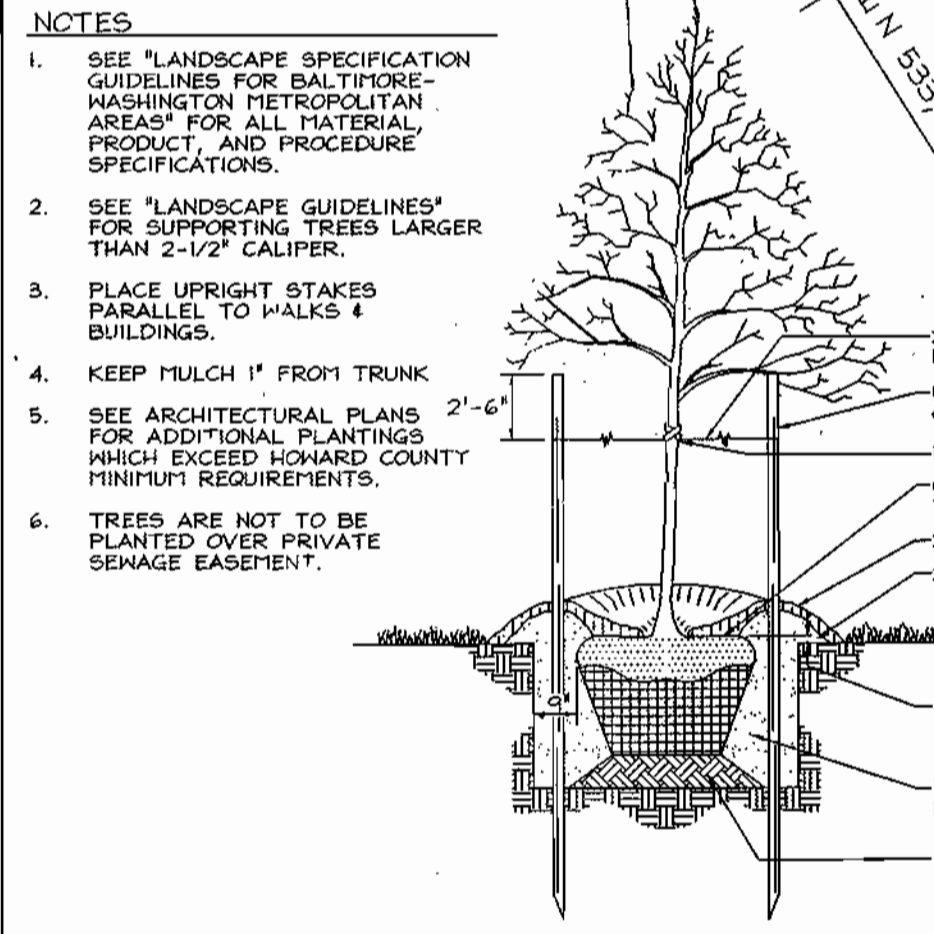
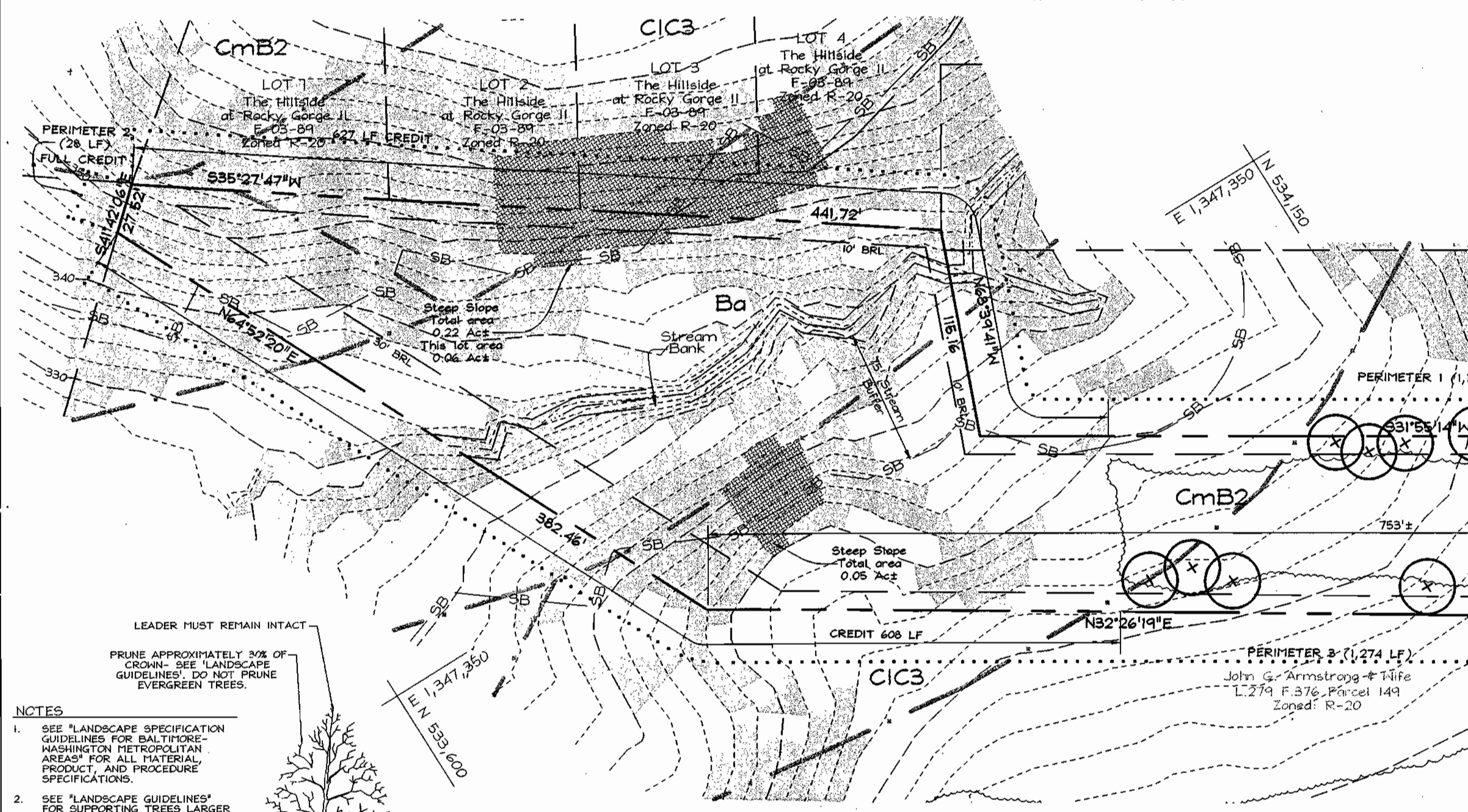
**Purpose**  
To provide a suitable soil medium for vegetation growth, which is not deep enough to support plants or furnish nutrients, but which is suitable for plants, and/or unsuitable soil gradation.

**Conditions Where Practice Applies**

- This practice is limited to areas having 2:1 or flatter slopes where:
  - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
  - 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.
  - The original soil to be vegetated contains material toxic to plant growth.
  - The soil is so acidic that treatment with lime is not feasible.
- 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**

- Topsoil salvaged from the existing site may be used provided that it meets the standards 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 Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
  - 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 a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textures and shall contain less than 5% by volume of coarse stones, slag, iron fragments, gravel, sticks, roots, trash, or other materials larger than 1/2" in diameter.
  - Topsoil must be free of roots of plant parts such as Bermuda grass, zoysia, johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
  - In the case of the soil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-6 lbs/acre (200-600 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.



**TYPICAL TREE PLANTING AND STAKING**  
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 6/10/03

CHIEF, DIVISION OF LAND DEVELOPMENT DATE 6/10/03

DIRECTOR DATE 6/10/03

**PERMANENT SEEDING NOTES**

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING 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 schedules:

- Preferred-Apply 2 tons per acre dolomitic limestone (42 lbs/100 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/100 sq ft) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs per acre 30-0-0 urea-form fertilizer (14 lbs/100 sq ft).
- Acceptable-Apply 2 tons per acre dolomitic limestone (42 lbs/100 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/100 sq ft) before seeding. Harrow or disc into upper three inches of soil.

SEEDINGS: For the period March 1 thru April 30, and August 1 thru October 31, seed 60 lbs per acre (14 lbs/100 sq ft) of Kentucky 31 Tall Fescue per acre and 2 lbs per acre 250-0-0 urea-form fertilizer (14 lbs/100 sq ft). For the period November 1 thru February 28, plant site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and match with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using a mulch anchoring tool or 26 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 345 gallons per acre (6 gal/1000 sq ft) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

SEEDING 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/100 sq ft).

SEEDINGS: For periods March 1 thru April 30 and August 1 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of seeping legumes (0.7 lbs/1000 sq ft). For the period November 1 thru February 28, plant site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring or next fall.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using a mulch anchoring tool or 26 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 345 gallons per acre (6 gal/1000 sq ft) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**SEDIMENT CONTROL NOTES**

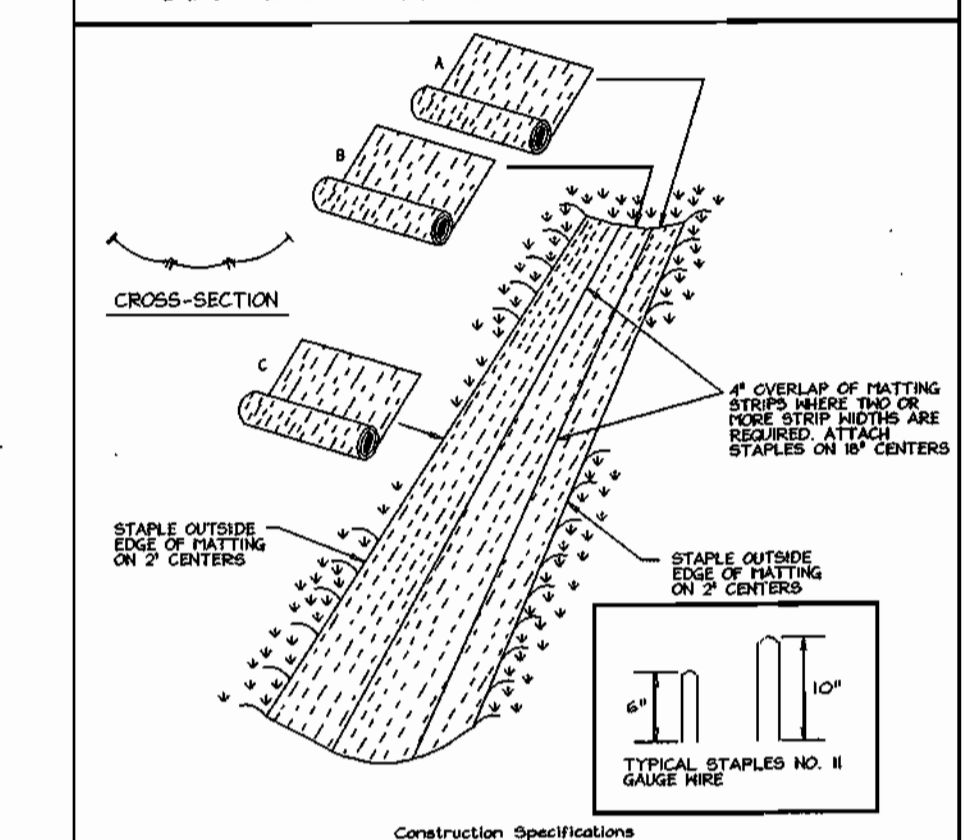
- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (315-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redistribution, 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 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, 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 for permanent seeding, sod, temporary seeding, and mulching (Sec. 6). Temporary stabilization with mulch alone shall 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	3.77 Acres
Area Disturbed	0.25 Acres
Area to be roofed or paved	0.02 Acres
Area to be vegetatively stabilized	0.78 Acres
Total City	4.82 AC
Off-site water/borrow area location	NY
- 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 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 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 are limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, contractor to verify.
- Earthwork quantities are solely for the purpose of calculating fees. Contractor is short all quantities prior to the start of construction.
- To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Ba	Baile silt loam	C
BeB2	Bellefonte silt loam, 1 to 5 percent slopes, moderately eroded	C
CiC3	Chillum gravelly loam, 5 to 10 percent slopes, severely eroded	C
CmB2	Chillum silt loam, 1 to 5 percent slopes, moderately eroded	C

**DETAIL 30 - EROSION CONTROL MATTING**



1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".

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

3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Staples shall be placed 2' apart with 4' rows for each strip, 2' side rows, and 2' alternating rows down the center.

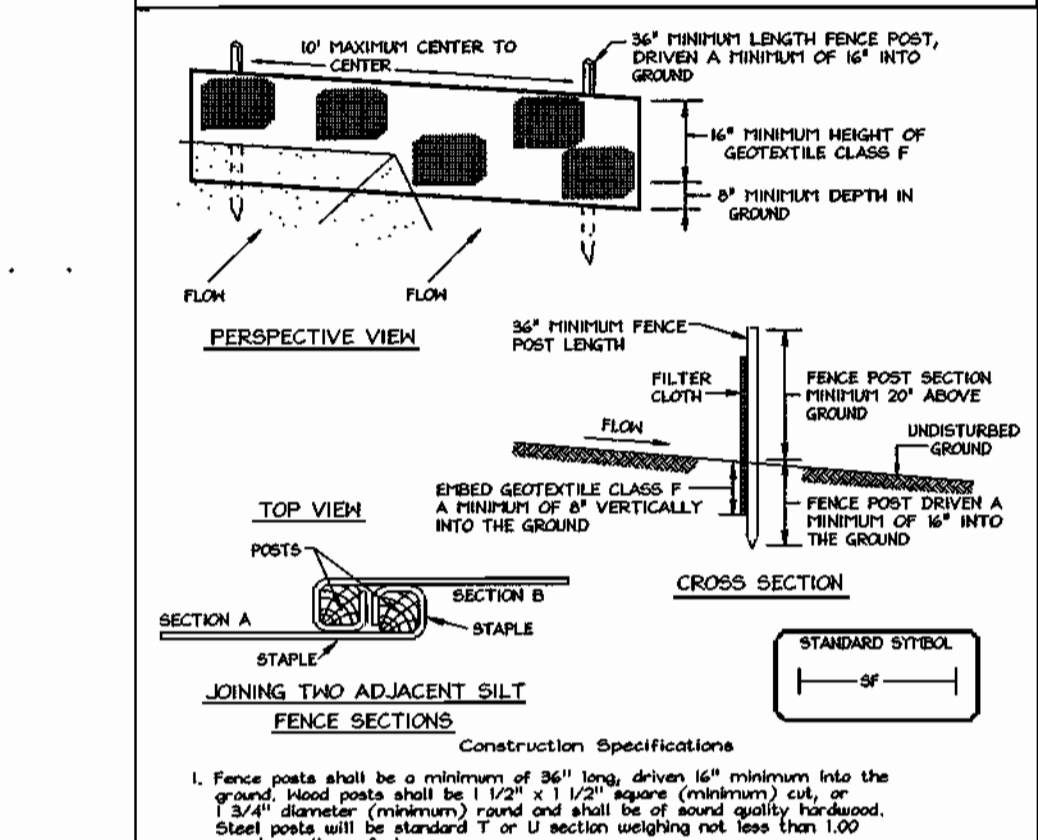
5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4', staple further back than the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.

6. The discharge end of the matting shall be securely secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area affected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 6-22-2 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**DETAIL 22 - SILT FENCE**

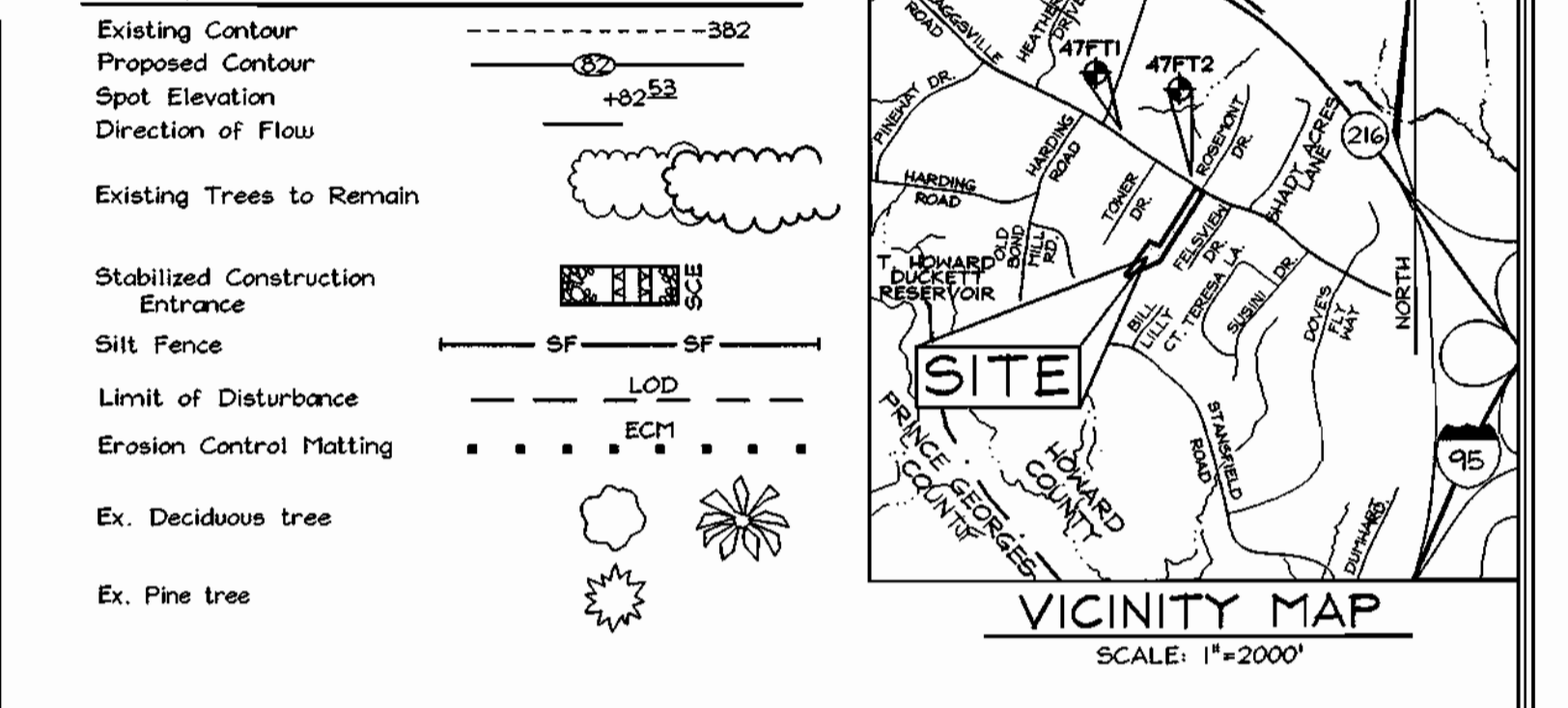


Construction Specifications

- Fence posts shall be a minimum of 1/2" x 1/2" square (minimum) cpi, or 3/4" x 3/4" square (minimum) round and shall be of good quality hard-wood. Stake posts shall be standard 7/8" or U section weighing not less than 100 pounds per linear foot.
- 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: FHST 509
Tensile Elongation	20 % (min.)	Test: FHST 509
Flow Rate	0.5 gal ft <sup>2</sup> /minute (max.)	Test: FHST 522
Filtration Efficiency	75% (min.)	Test: FHST 522
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bridge silt or when sediment accumulation restricts flow of the fabric.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 6-8-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



**BENCHMARKS**

Sta. 4771	N 535143.322 (ft)	E 1,346,960.276 (ft)	Elev. 404.040 (ft)
Sta. 4772	N 163,112.0109 (m)	E 410,554.3181 (m)	Elev. 123.1516 (m)
Sta. 4772	N 534,509.424 (ft)	E 1,347,851.0391 (ft)	Elev. 401.100 (ft)
	N 162,918.7983 (m)	E 410,825.8184 (m)	Elev. 122.2555 (m)

**GENERAL NOTES**

- Property is within the Metropolitan District.
- Public water and sewer will be used within this site. Ex. WHC and SHC to be utilized.
- The Contractor shall notify the following utility companies or agencies at least five (5) working days before starting work shown on these plans:
 

Verizon	1.800.749.0033/410.224.9210
ATT	1.800.252.1133
State Highway Administration	410.531.5533
BGE(Contractor Services)	410.550.4620
BGE(Underground Damage Control)	410.787.9369
Pfiss Utility	1.800.257.7777
Colonial Pipeline Company	410.795.1390
Howard County, Dept of Public Works, Bureau of Utilities	410.315.4900
Howard County Health Department	410.315.2640
- The contractor shall notify Pfiss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 315-1830 at least five (5) working days prior the start of work.
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Topography based on a Field Run Topographic Survey prepared by C.B. Miller & Associates in December 2001 with two inch contours.
- Contractor to confirm all dimensions, utilities and topography in the field. If any conflicts arise, contact Engineer before beginning any work.
- Howard County Soil Map #33.
- There are no floodplains on site, see F-03-79 for additional info.
- The project is in conformance with the latest Howard County Standards unless waivers have been approved.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate system. Howard County monument numbers 4771 and 4772 were used for this project.
- In accordance with section 12B of the Howard County Zoning Regulations, 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 or enclosed may project not more than 10 feet into the front or rear yard setback. BRLL's shown taken from Howard County Zoning Regulation for the Zoning District.
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit for any new dwelling to insure safe access for fire and emergency vehicles per the following (minimum) requirements:
  - Width-12 feet (14' serving more than one residence).
  - Surface-6 inches of compacted crusher run base with 1 1/2" Min. tar and chip coating.
  - Geometry-max. 15% grade, max. 10% grade change, and 45 foot turning radius.
  - Structures (bridges/culverts)-capable of supporting 25 gross tons (H25-loading).
  - Drainage elements-capable of safely passing 100 year flood with no more than one foot depth over driveway surface.
  - Structure clearance-minimum 12 feet.
  - Maintenance-sufficient to insure all weather use.
- All Sewer House Connections to be a minimum of 2% and a maximum of 5%. If no slope is shown, 2.0% may be assumed.
- There are no wetlands on site. Wetlands evaluation prepared by Exploration Research, Inc. in November, 2001.
- No clearing, grading or construction is permitted within wetland or stream system buffers unless approved by the Department of Planning and Zoning.
- This project is subject to the Fifth Edition of the Subdivision and Land Development Regulations.
- This project is exempt from providing stormwater management. Total proposed impervious area on site is less than 5,000 SF.

**SITE ANALYSIS DATA CHART**

- Total project area: 3.26 Acres
- Area of plan submission: 3.26 Acres
- Limit of disturbed area: 0.25 Acres
- Subject property zoned R-20 per 10/18/93 Comprehensive Zoning Plan.
- Proposed uses for site # structures: single family detached
- Floor space on each level of building(s) per use: See house templates this sheet
- Total number of units proposed: 1
- Total number of units proposed: 1
- Proposed building coverage of site: 0.05 acre; 1.5% of gross lot area
- Howard County file references: Contr. #142-14; Contr. #529-5; F-03-79

**ADDRESS CHART**

Parcel	Street
92	10461 Old Scaggsville Road

**OWNER/DEVELOPER**  
Cornerstone Homes c/o Brian D. Boy  
9691 Norfolk Avenue  
Laurel, Maryland 20723  
Tel.: (410)792-2565 Fax: (410)792-2567

**SITE DEVELOPMENT PLAN CORNERSTONE**

TAX MAP 46 GRID 18 PARCEL 92  
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**PERMIT INFORMATION CHART**

Subdivision Name:	Section/Area:	Parcel No.:
N/A	N/A	92
Dead Ref.:	Grid:	Zoning:
L.6573 F.1	18	R-20
Water Code:	Sewer Code:	Elect. District:
E-19		6th
		Census Tract:
		6068.02

DESIGN BY: PS  
DRAWN BY: AT  
CHECKED BY: ZTF  
SCALE: 1"=50'  
DATE: May 27, 2003  
W.O. No.: 3050  
SHEET No.: 1 OF 1

**FSH Associates**  
Engineers Planners Surveyors  
8316 Forest Street, Elkton City, MD 21943  
Tel: 410-750-2251 Fax: 410-750-7350  
E-mail: FSHAssociates@gs.com

21.0 STANDARDS 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 vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, moderate toxic to phytotoxic, and/or unacceptable soil gradation.

**Conditions Where Practice Applies:**  
1. This practice is limited to areas having 21 or flatter slopes where:  
a. The texture of the exposed subsoil 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.

II. For sites having disturbed areas under 5 acres:  
1. Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization and Erosion Control - Vegetative Stabilization Methods and Materials.

III. For sites having disturbed areas over 5 acres:  
1. On soils meeting topsoil specifications, stream test results indicating fertilizer and lime requirements 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 4%. Soils having less than 4% organic content shall be amended with organic matter. The amendment shall be applied at a rate of 200 parts per million shall not be used.  
c. For areas having high soil salinity or sodium content, the soil shall be treated with salt-tolerant or chemical tolerant plants. For the purpose of this practice, a soil having a salinity of 14 dsm/m or higher shall be treated with salt-tolerant plants.  
d. The soil shall be so acidic that treatment with limestone is not feasible.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 21% require special consideration and design for adequate stabilization. Areas having slopes steeper than 21% shall have the appropriate stabilization shown on the plans.

**Construction and Material Specifications:**  
1. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given site can be determined from the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:  
1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand, loam, or soil approved by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall be a mixture of material selected from the following: topsoil, subsoil, or other materials that shall contain less than 5% by volume of coarse sand, gravel, silt, clay, stones, trash, or other materials larger than 1/2" in diameter.  
2. Topsoil must be free of debris and plant parts such as Bermuda grass, dogwood, hollyhock, nightshade, poison ivy, thistle, or others as specified.

III. Where the subsoil is either highly acidic or composed of heavy clay, ground limestone shall be spread at the rate of 4 lbs./square foot (200-400 parts per 100,000 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.

**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, slicing or other acceptable means before seeding, if not previously loosened.

**SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:  
1) Overseed-Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 500 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) for the period March 1 thru April 30 and from August 15 thru October 15. Seed with 40 lbs. per acre Kentucky 31 Tall Fescue, for the period May 1 thru July 31, seed with 40 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.25 lbs./1000 sq.ft.) of sweeping lespedeza. During the period of October 15 thru February 30, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 40 lbs. Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.  
2) Acceptable-Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq.ft.) and 500 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) for the period March 1 thru April 30 and from August 15 thru October 15. Seed with 40 lbs. per acre Kentucky 31 Tall Fescue, for the period May 1 thru July 31, seed with 40 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.25 lbs./1000 sq.ft.) of sweeping lespedeza. During the period of October 15 thru February 30, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 40 lbs. Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

**SEEDING:** For the period March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (14 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs. per acre (14 lbs./1000 sq.ft.) of Kentucky 31 Tall Fescue and 2 lbs. per acre (.25 lbs./1000 sq.ft.) of sweeping lespedeza. During the period of October 15 thru February 30, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 40 lbs. Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

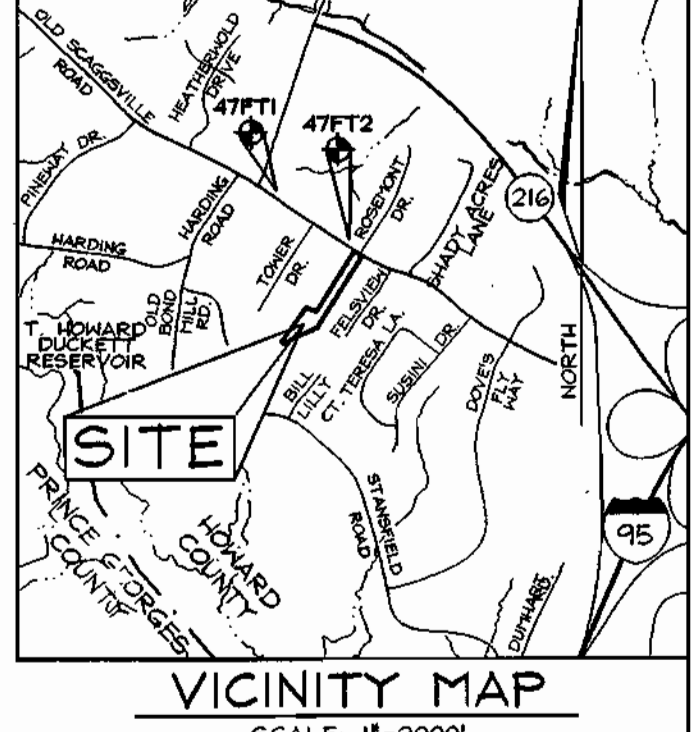
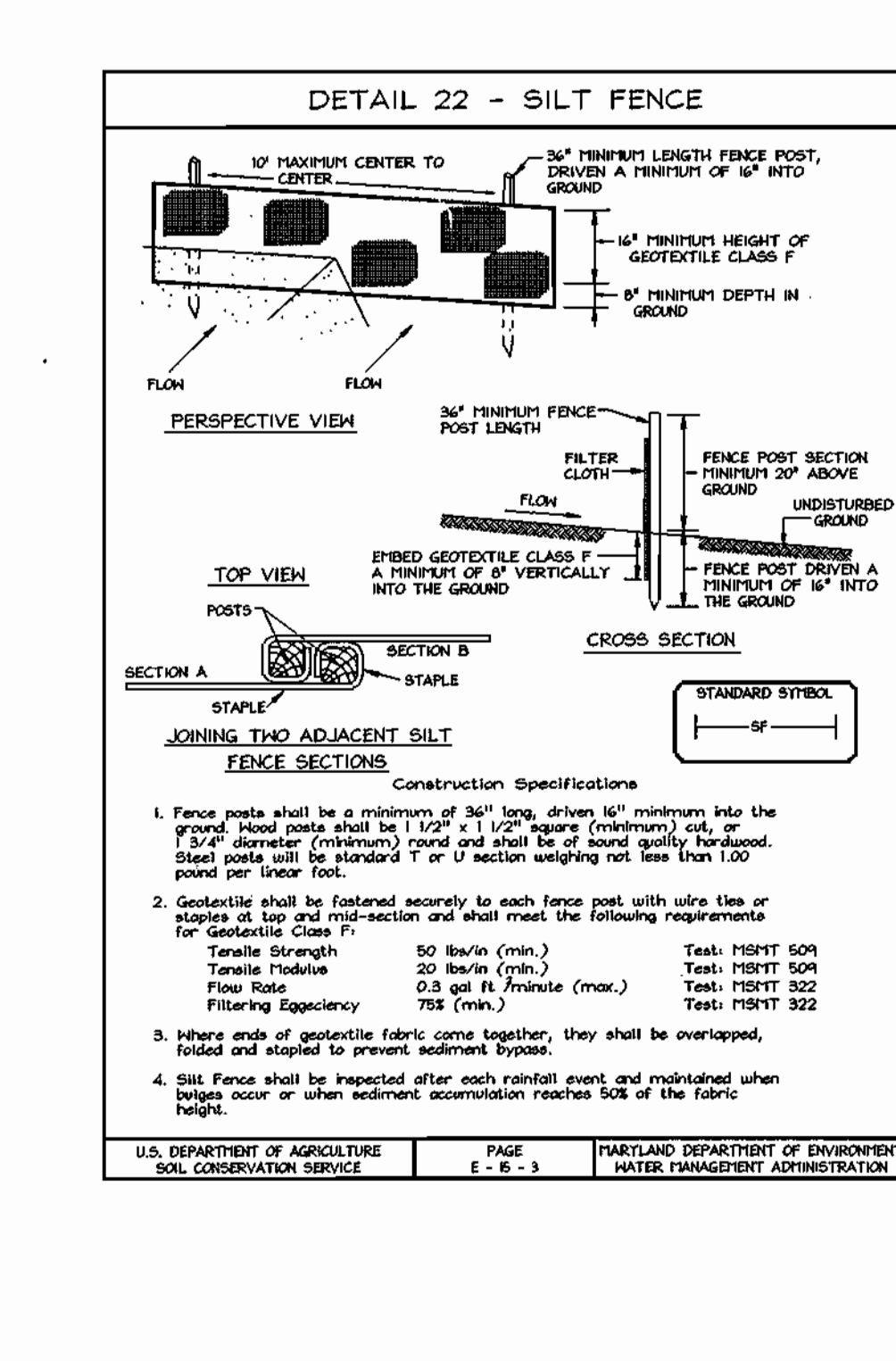
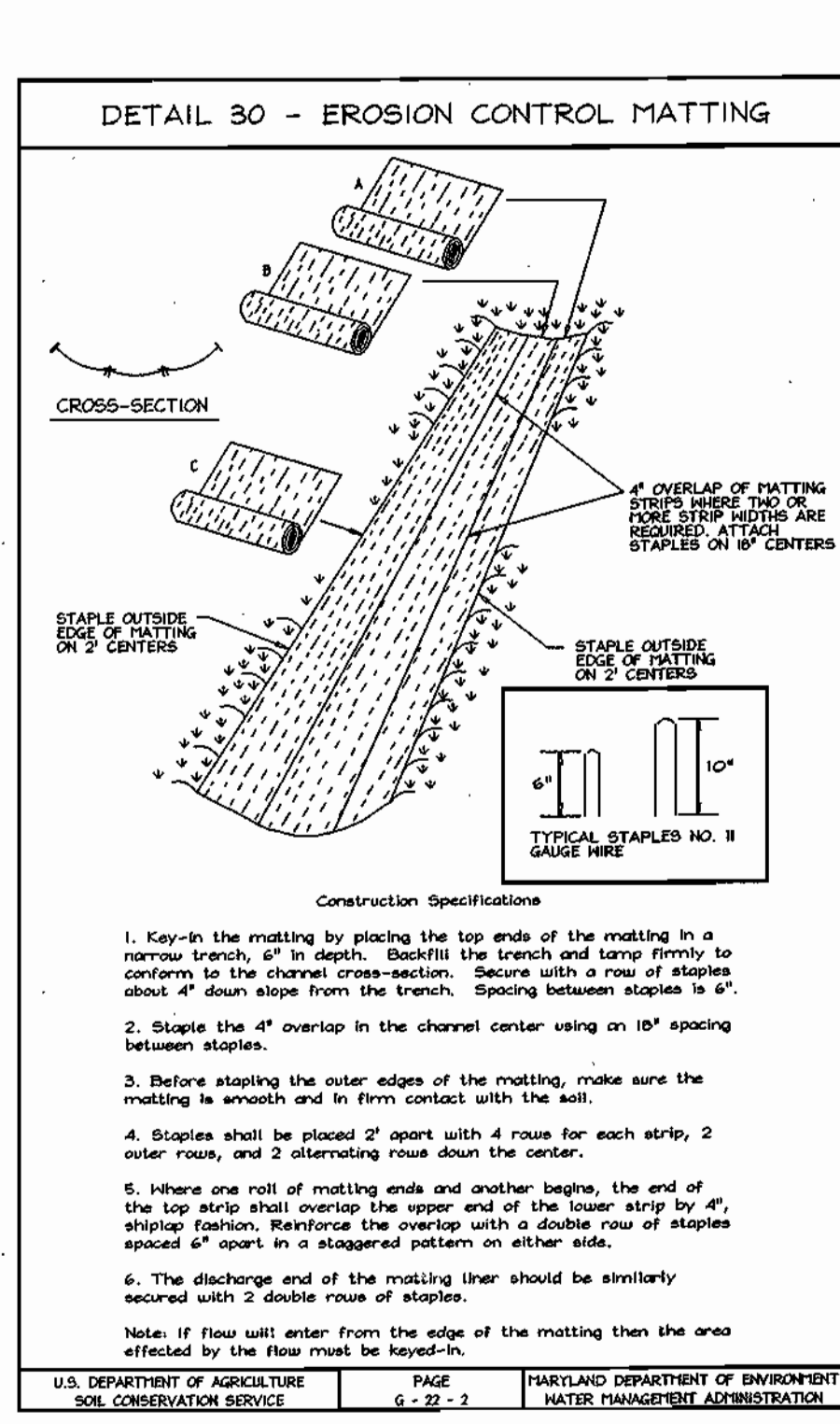
**MULCHING:** Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2/8 gallopers per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 3/8 gallopers per acre (5 gal/1000 sq.ft.) for anchoring.

**PLANTING:** Apply 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2/8 gallopers per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 3/8 gallopers per acre (5 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**SEEDING CONTROL NOTES**  
1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (315-1055).  
2. All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.  
3. Following initial soil disturbance or redistribution, 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 5%, (b) 14 days on all other disturbed or graded areas on the project site.  
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. I, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.  
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, soil, temporary seeding, and mulching (Sec. G). Temporary stabilization with straw alone shall be done when recommended seeding dates do not allow for proper germination and establishment of grasses.  
6. 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.  
7. Site Analysis:  
Total Area: 3.27 Acres  
Area Disturbed: 0.26 Acres  
Area to be roofed or paved: 0.02 Acres  
Area to be vegetatively stabilized: 0.23 Acres  
Total Fill: 1112 CY  
Offsite waste/borrow area location: #1

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.  
9. Additional sediment controls 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.  
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.  
12. Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.  
13. To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.



**LEGEND**

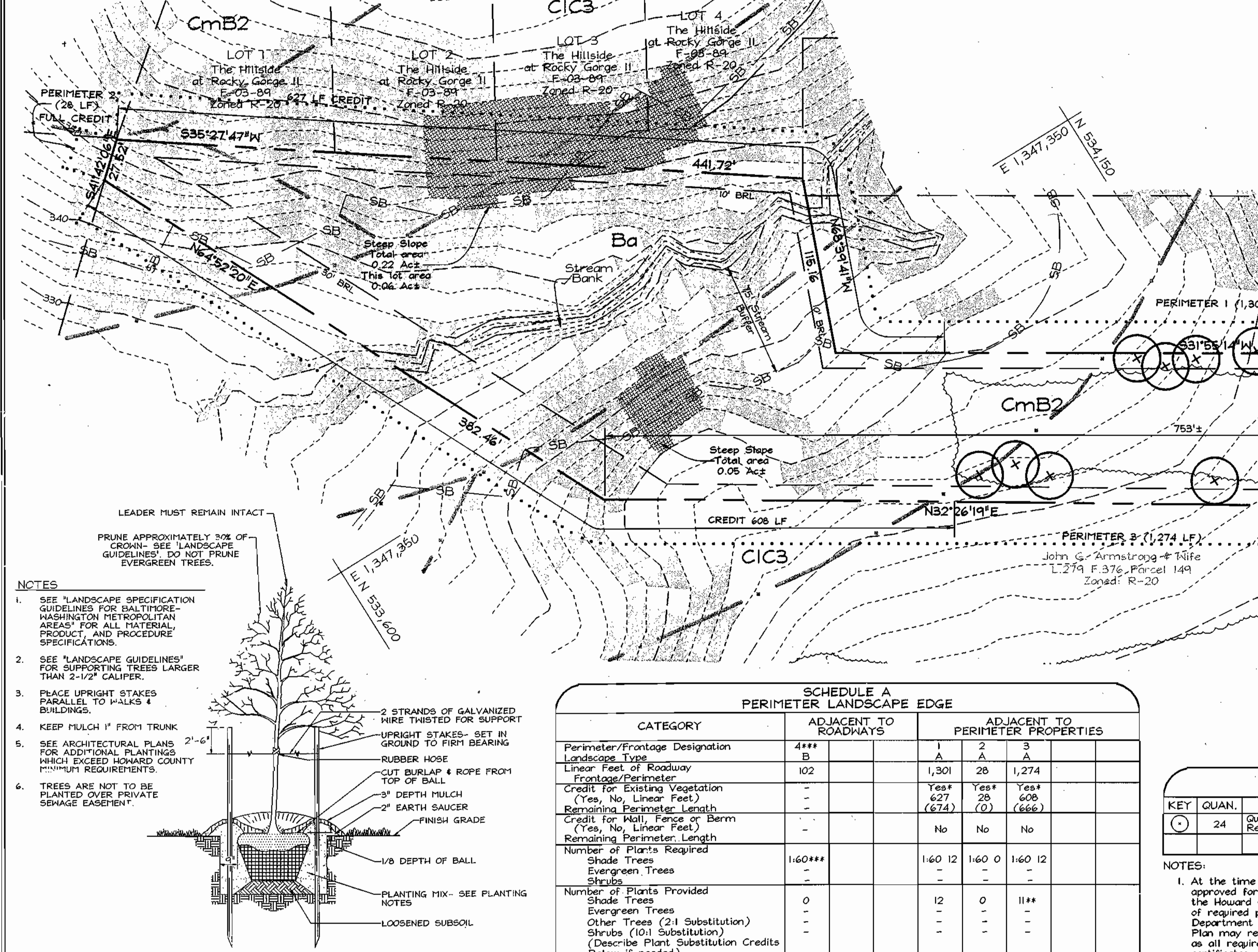
- Existing Contour: Dashed line with elevation
- Proposed Contour: Solid line with elevation
- Spot Elevation: Circle with elevation
- Direction of Flow: Arrow
- Existing Trees to Remain: Cloud-like symbol
- Stabilized Construction Entrance: Box with 'S' and 'H' and arrow
- Silt Fence: 'SF' symbol
- Limit of Disturbance: Dashed line
- Erosion Control Matting: Dotted pattern
- Ex. Deciduous tree: Tree symbol
- Ex. Pine tree: Tree symbol

**BENCHMARKS**

Sta.	N	E	Elev.
47FT1	535443.322 (ft)	1,346,960.276 (ft)	404.040 (ft)
163,112.019 (m)	410,554.3131 (m)	Elev. 123.1516 (m)	
47FT2	534,504.424 (ft)	1,347,851.039 (ft)	401.100 (ft)
162,918.7983 (m)	410,825.8184 (m)	Elev. 122.2595 (m)	

**GENERAL NOTES**

- Property is within the Metropolitan District.
- Public water and sewer will be used within this site. Ex. WNC and SHC to be utilized.
- The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:  
Verizon: 1.800.743.0033/410.224.9210  
AT&T: 1.800.252.1133  
State Highway Administration: 410.531.3532  
BGE(Contractor Services): 410.850.4620  
BGE(Underground Damage Control): 410.787.9068  
MHI: 1.800.257.7777  
Howard County, Dept. of Public Works, Bureau of Utilities: 410.795.1930  
Howard County Health Department: 410.313.4400  
Howard County Planning Department: 410.313.2640
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Topography based on a Field Run Topographic Survey prepared by C.B. Miller & Associates in December 2001 with two foot contours.
- Contractor to confirm all dimension, utilities or topography in the field. If any conflicts arise, contact Engineer before beginning any work.
- Howard County Soil Map #33
- There are no floodplains on site, see F-03-79 for additional info.
- The project is in conformance with the latest Howard County Standards unless waivers have been approved.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate system. Howard County monument numbers 47FT1 and 47FT2 were used for this project.
- In accordance with section 128 of the Howard County Zoning Regulations, 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 deck: open or enclosed may project not more than 10 feet into the front or rear yard setback. BRL's shown taken from Howard County Zoning Regulation for the Zoning District.
- Driveway(s) shall be provided prior to issuance of a use and occupancy permit for any new dwelling to insure safe access for fire and emergency vehicles per the following (minimum) requirements:  
a) Width-12 feet (14' serving more than one residence).  
b) Surface-6 inches of compacted base with 1 1/2" Min. tar and chip coating.  
c) Geometry-max. 15% grade, max. 10% grade change, and 45 foot turning radius.  
d) Structures (bridges/culverts)-capable of supporting 25 gross tons (H25-loading).  
e) Drainage elements-capable of safely passing 100 year flood with no more than one foot depth over driveway surface.  
f) Structure clearance-minimum 12 feet.  
g) Maintenance-sufficient to insure all weather use.
- All Sewer House Connections to be a minimum of 2% and a maximum of 5%. If no slope is shown, 2.0% may be assumed.
- There are no wetlands on site. Wetlands evaluation prepared by Exploration Research, Inc. in November, 2001.
- No clearing, grading or construction is permitted within wetland or stream system buffers unless approved by the Department of Planning and Zoning.
- This project is subject to the Fifth Edition of the Subdivision and Land Development Regulations.
- This project is exempt from providing stormwater management. Total proposed impervious area on site is less than 5,000 SF.



**SCHEDULE A PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES		
		1	2	3
Perimeter/Frontage Designation	4*** B	1	2	3
Landscape Type	-	A	A	-
Linear Feet of Roadway Frontage/Perimeter	102	1,301	28	1,274
Credit for Existing Vegetation (Yes, No, Linear Feet)	-	Yes* 627 (674)	Yes* 28 (0)	Yes* 608 (666)
Remaining Perimeter Length	-	No	No	No
Credit for Wall, Fence or Berm (Yes, No, Linear Feet)	-	-	-	-
Remaining Perimeter Length	-	-	-	-
Number of Plants Required	1:60***	1:60 12	1:60 0	1:60 12
Shade Trees	-	-	-	-
Evergreen Trees	-	-	-	-
Shrubs	-	-	-	-
Number of Plants Provided	0	12	0	11**
Shade Trees	-	-	-	-
Evergreen Trees	-	-	-	-
Other Trees (2:1 Substitution)	-	-	-	-
Shrubs (10:1 Substitution)	-	-	-	-
(Describe Plant Substitution Credits Below if needed)	-	-	-	-
** Existing woods to remain	-	-	-	-
*** Credit taken for existing 20' deciduous tree	-	-	-	-
*** No landscaping required since House fronts road	-	-	-	-

**SOILS LEGEND**

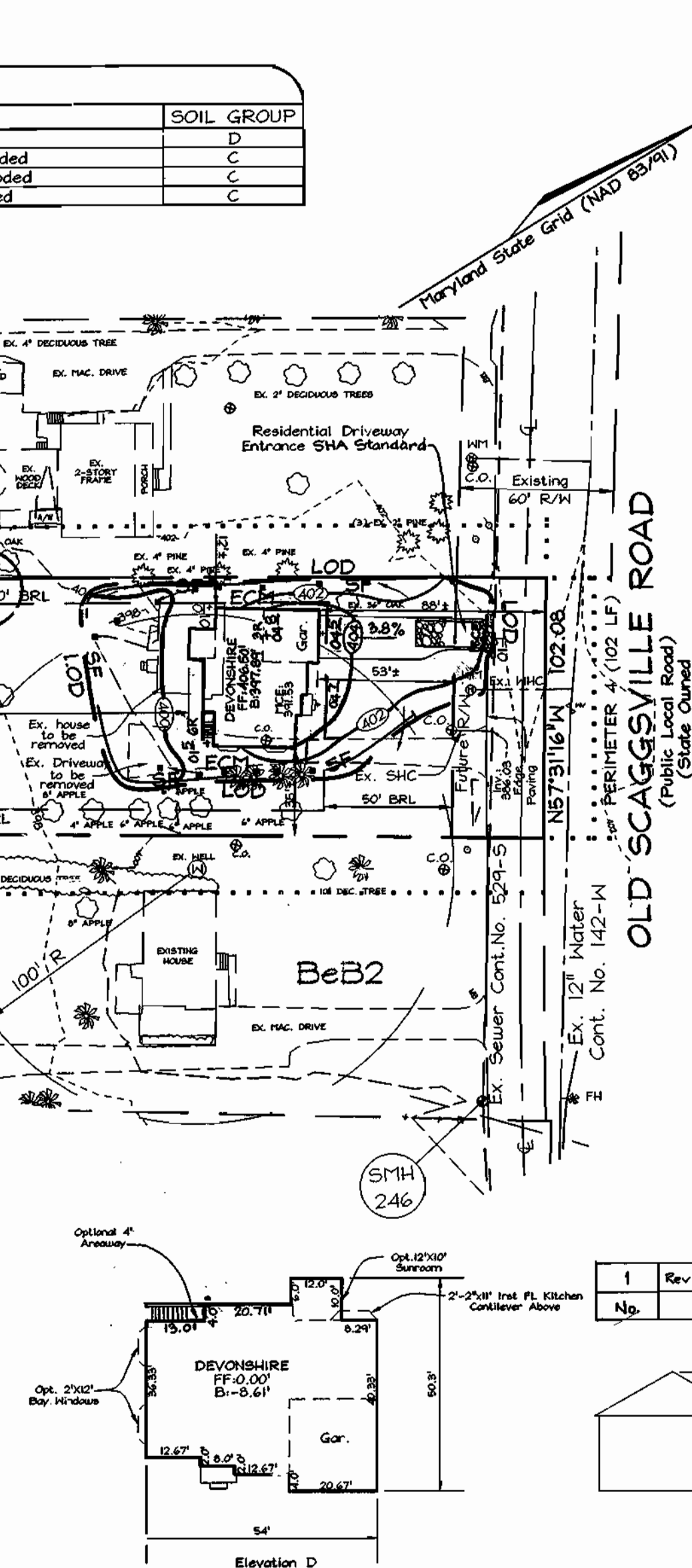
SYMBOL	NAME / DESCRIPTION	SOIL GROUP
Ba	Baile silt loam	D
BeB2	Bellville silty loam, 1 to 5 percent slopes, moderately eroded	C
CmB2	Chillum silty loam, 5 to 10 percent slopes, severely eroded	C
CmB2	Chillum silt loam, 1 to 5 percent slopes, moderately eroded	C

**LANDSCAPE SCHEDULE**

KEY QUAN.	BOTANICAL NAME	SIZE	NOTE
○ 24	Quercus rubra (Shade Trees) Red Oak	2 1/2"-3" Cal.	B & B

**NOTES:**

- 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 Landscaping 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 Landscaping Plan may result in denial or delay in the release of landscape survey until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
- Financial surety for the required landscaping must be posted as part of the Grading Permit in the amount of \$7,200.00 (24 shade trees @ \$300.00 each)
- Coordinate landscaping with F-03-79



**SITE ANALYSIS DATA CHART**

a. Total project area:	3.28 Acres
b. Area of plan submission:	3.32 Acres
c. Limit of disturbed area:	0.25 Acres
d. Subject property zoned:	R-20 per 10/16/93 Comprehensive Zoning Plan.
e. Proposed uses for site:	structures: single family detached
f. Floor space on each level of building(s):	per use: See house templates this sheet
g. Total number of units allowed:	1
h. Total number of units proposed:	1
i. Proposed building coverage of site:	0.05 acres; 15% of gross lot area
j. Howard County file references:	Contr. #142-14; Contr. #529-S; F-03-79

**ADDRESS CHART**

Parcel	Street
42	10461 Old Scaggsville Road

**OWNER/DEVELOPER**  
Cornerstone Holdings LLC  
c/o Brian D. Boy  
9691 Norfolk Avenue  
Lansdale, Maryland 20723  
Tel.: (410) 792-2565 Fax: (410) 792-2567

**SITE DEVELOPMENT PLAN**  
**CORNERSTONE**

TAX MAP 46 GRID 18  
6TH ELECTION DISTRICT

PARCEL 42  
HOWARD COUNTY, MARYLAND

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 6/14/03

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 6/16/03

DIRECTOR: *[Signature]* DATE: 6/16/03

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

*[Signature]* DATE: 6/16/03

USA-NATURAL RESOURCE CONSERVATION SERVICE

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

*[Signature]* DATE: 6/16/03

HOWARD SCD

**ENGINEERS 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]* DATE: 5/19/03

SIGNATURE OF ENGINEER: ZACHARIA Y. FISCH DATE: 5/19/03

**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]* DATE: 5/27/03

SIGNATURE OF DEVELOPER DATE: 5/27/03

**PERMIT INFORMATION CHART**

Subdivision Name	Section/Area	Parcel No.
N/A	N/A	92

Deed Ref.	Grid	Zoning	Tax Map No.	Elect. District	Census Tract
L.6573 F.1	18	R-20	46	6th	6068.02

Water Code	Sewer Code	Elevation
F-19	7450000	



**FSH Associates**  
Engineers Planners Surveyors  
8318 Forest Street Ellicott City, MD 21043  
Tel: 410-750-2251 Fax: 410-750-7390  
E-mail: FSHAssociates@cs.com

DESIGN BY: PS  
DRAWN BY: AY  
CHECKED BY: ZYF  
SCALE: 1"=50'  
DATE: May 27, 2003  
H.O. No.: 3050  
SHEET No.: 1 OF 1