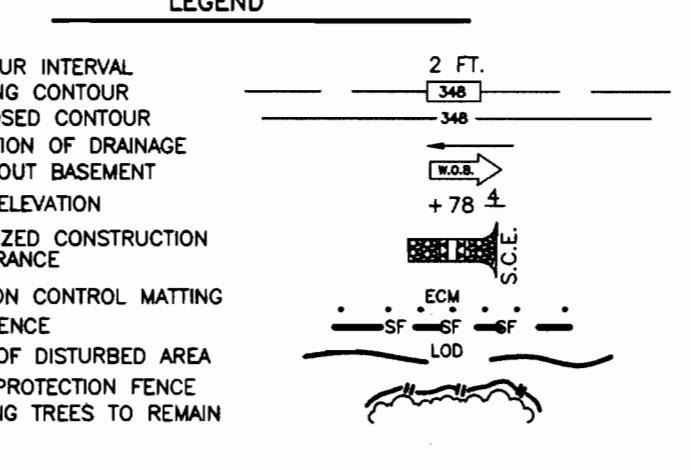
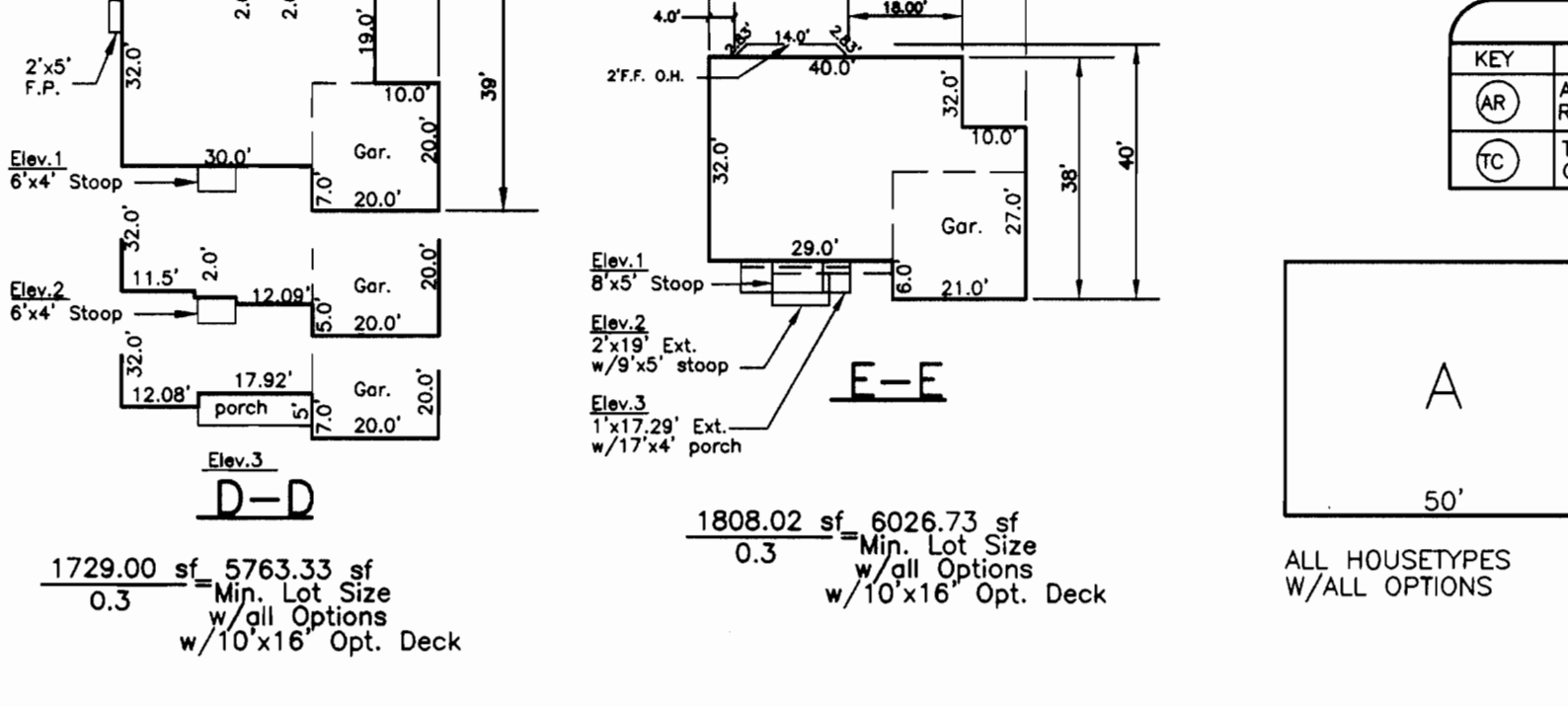
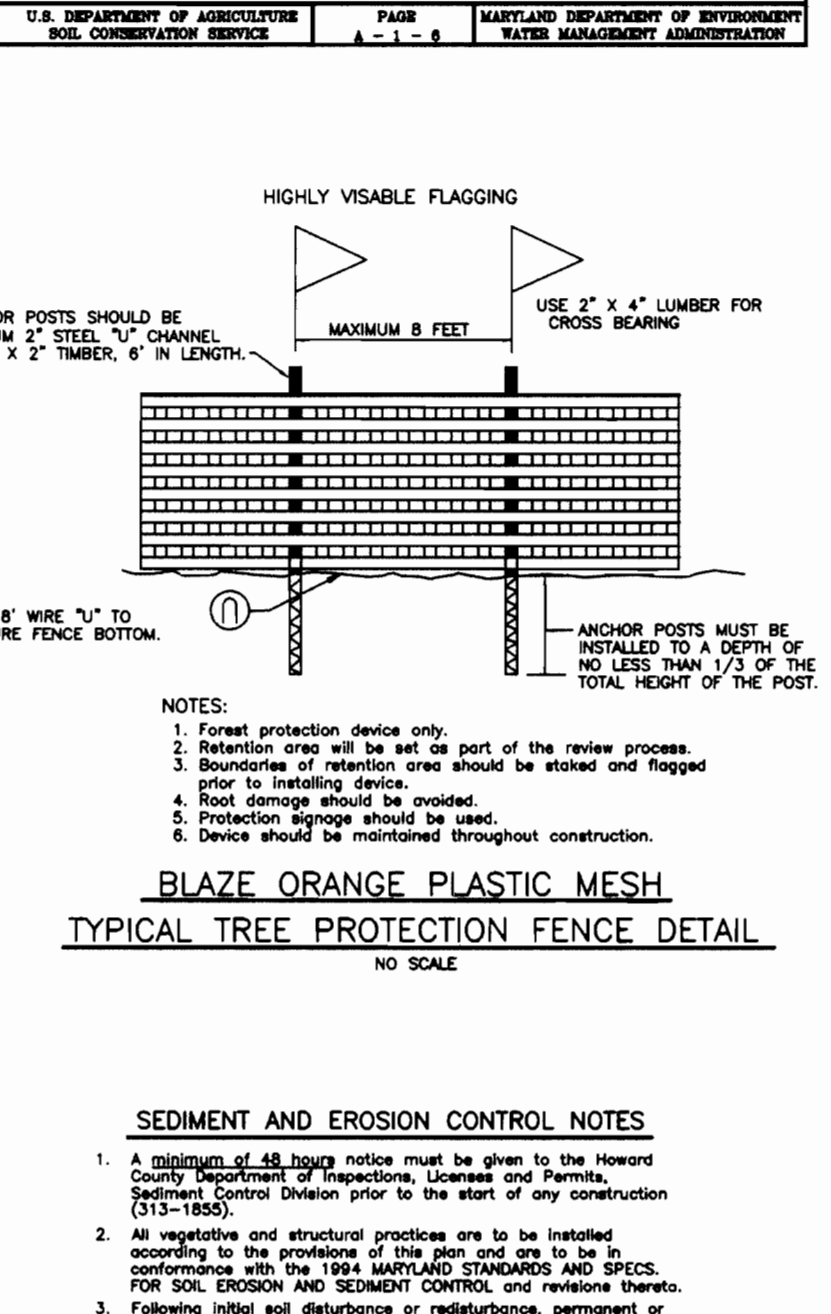
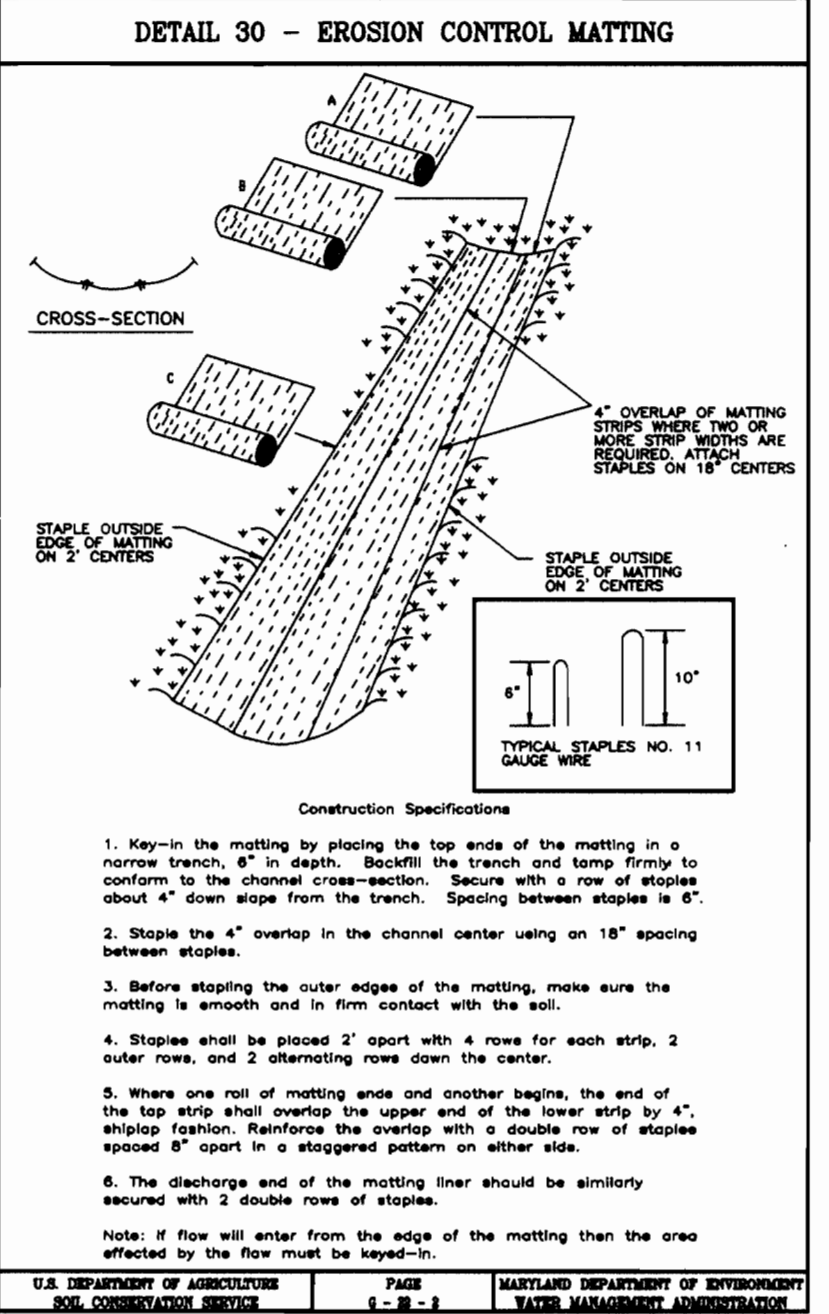
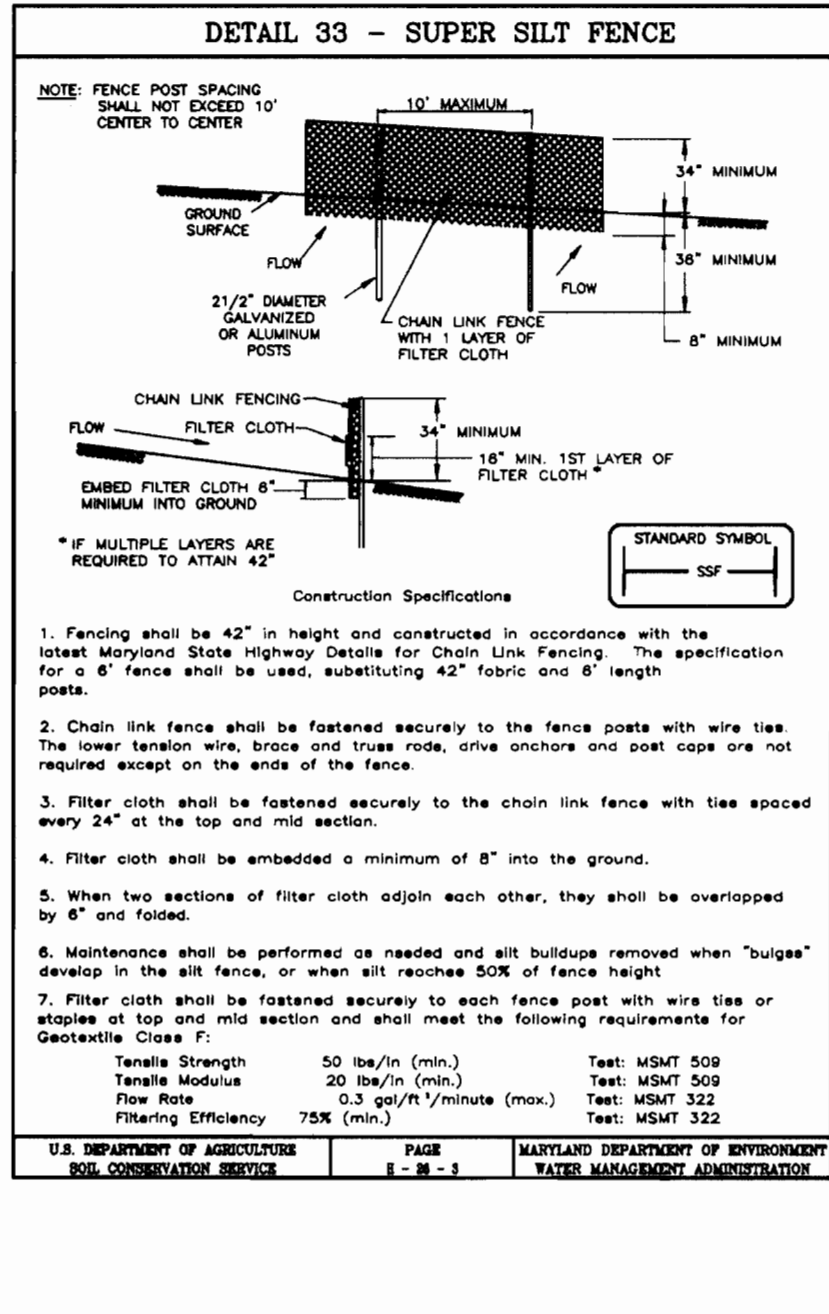
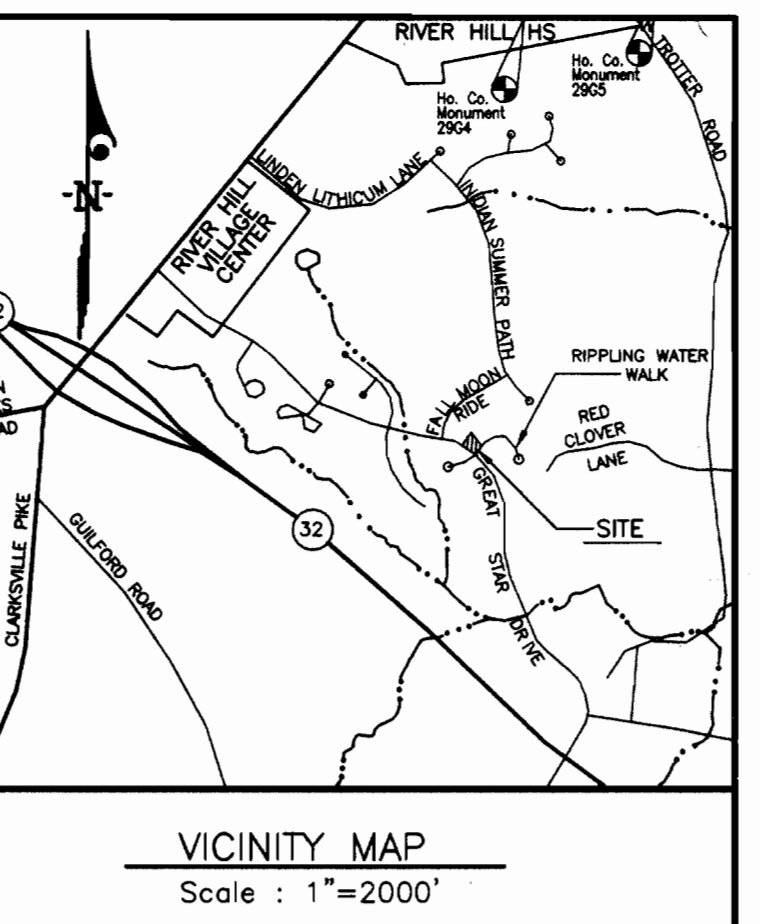


SCHEDULE A PERIMETER LANDSCAPE EDGE		LOT 1
Category	Adjacent to Roadways	
Landscape Type		B
Frontage/Perimeter		164'
Number of Plants Required		
Shade Trees	(1/50)	3
Evergreen Trees	(1/40)	4
Shrubs		
Number of Plants Provided		
Shade Trees		3
Evergreen Trees		4
Surety Amounts		\$1500



BENCHMARKS:
 Howard County Monument 2964
 Intersection of MD. Route 108 and Trotter Road
 Howard County Monument 2965
 an additional 2,544' ± Northeastly along MD. Route 108 away from Site



PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QUAN.	REMARK
AR	ACER RUBRUM 'OCTOBER GLORY'	2 1/2"-3" CAL.	3	B&B
AR	RED MAPLE			
TC	TSUGA CANADENSIS			
TC	CANADIAN HEMLOCK	6'-8" HT.	4	B&B

- NOTES:**
- All plant materials shall be full and heavy, be well formed and symmetrical, conform to the most current AAN specifications and be installed in accordance with HRD planting specifications.
 - Contractor shall verify location of all underground utilities prior to digging.
 - Final location of plant material may need to vary to meet field conditions. Trees shall not be planted in the bottom of drainage swales.

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
1	6101 RIBBLING WATER WALK

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

Conditions Where Practice Applies:

- The 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 of the tree species to be planted will not be reached.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone 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 requirements set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given site can be found in the representative soil profile section in the Soil Survey, conducted 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, or other soil as recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Topsoil shall not be a mixture of contrasting textured materials and shall contain less than 2% by volume of cinders, stones, coals, clumps of organic matter, roots, rocks, trash, or other material longer than 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, cowpeas, johnsongrass, nutcracker, or other species as specified.
 - If the subsoil is either highly acidic or composed of heavy clay, ground limestone shall be spread at the rate of 4-8 tons/core (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.

PERMANENT SEEDING NOTES

APPLY TO GRADES OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE. A PERMANENT LONG-LIVED VEGETATIVE COVER IS REQUIRED.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, discing, 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) Preferred - Apply 2 tons per acre dolomitic limestone (92 lb./1000 sq.ft.) and 800 lbs. per acre 10-10-10 fertilizer (14 lb./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 20-20-20 urethane fertilizer (8 lb./1000 sq.ft.).
- 2) Alternative - Apply 2 tons per acre dolomitic limestone (92 lb./1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (14 lb./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 80 lbs. per acre (1.4 lb./1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 80 lbs. per acre (1.4 lb./1000 sq.ft.) of Kentucky 31 Tall Fescue and 100 lbs. per acre (1.8 lb./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, seed with 100 lbs. per acre (1.8 lb./1000 sq.ft.) of weeping lovegrass and 80 lbs. per acre (1.4 lb./1000 sq.ft.) of Kentucky 31 Tall Fescue and mulch with 2 tons/core (4000 lbs./1000 sq.ft.) of mulch. Seed and mulch as soon as possible after the spring, or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unbleached small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 348 gallons per acre (6 gal/1000 sq.ft.) for anchoring.

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

SEEDING PREPARATION: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 800 lbs. per acre 10-10-10 fertilizer (14 lb./1000 sq.ft.) before seeding.

SEEDING: For the period March 1 thru April 30, and August 1 thru November 15, seed with 2 1/2 bushel per acre of ground rice (3.5 lb./7000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 2 1/2 bushel per acre of ground rice (3.5 lb./7000 sq.ft.) of Kentucky 31 Tall Fescue and 100 lbs. per acre (1.8 lb./1000 sq.ft.) of weeping lovegrass (0.7 lb./1000 sq.ft.). For the period of October 16 thru February 28, seed with 100 lbs. per acre (1.8 lb./1000 sq.ft.) of weeping lovegrass and 80 lbs. per acre (1.4 lb./1000 sq.ft.) of Kentucky 31 Tall Fescue and mulch with 2 tons/core (4000 lbs./1000 sq.ft.) of mulch. Seed and mulch as soon as possible after the spring, or use seed.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unbleached small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 5 feet or higher, use 348 gallons per acre (6 gal/1000 sq.ft.) for anchoring.

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

SEDIMENT AND EROSION CONTROL NOTES

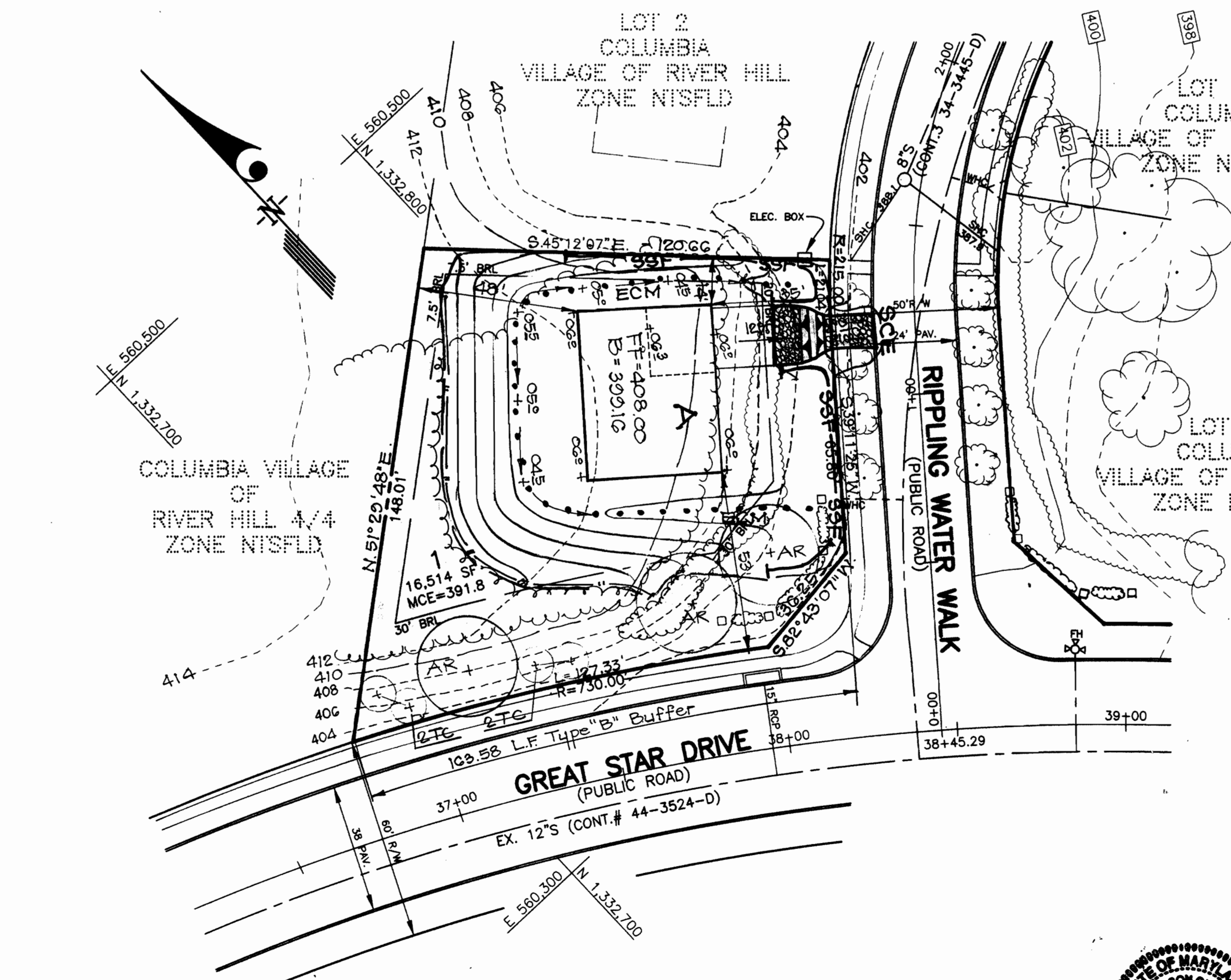
- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, for the installation of sediment control structures.
- All negative and structural practices are to be installed according to the provisions of this plan and are to be installed in accordance with the MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following listed soil disturbances or redevelopments, permanent or temporary stabilization shall be completed within:
 - a) 7 calendar days for all permanent sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1.
 - b) 14 days for all other disturbed or graded areas on the project.
- All sediment traps/basins must be fenced and warning signs posted around their perimeter in accordance with Vol. II, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above. In accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seeding, and temporary seeding and mulching (See G).
- All sediment control structures with multiple slopes can only be done when temporary stabilization with mulch alone can only be done when permanent seeding does not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in a operative condition until permission for their removal has been obtained from the Howard County Department of Inspections, Licenses and Permits.
- SITE ANALYSIS:**

Total Area of Site	0.38 Acres
Area Disturbed	0.28 Acres
Area to be vegetatively stabilized	0.28 Acres
Total Area of Site	0.38 Acres
Total Area of Site	0.38 Acres
- Any sediment control practice which is disturbed by grading or other activities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPE Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of installation of perimeter erosion and sediment control, but before final grading, shall be required. Other building or grading inspection approvals may not be authorized until the final approval by the Inspector is made.
- Trenches for the construction of utilities shall be backfilled and stabilized within one working day, or is limited to three pipe lengths.
- The total amount of silt fence = 182 LF.
- The total amount of super diversion fence = 182 LF.

CONSTRUCTION SEQUENCE:

1. Initial site preparation.
2. Install sediment control ditches and dikes.
3. Excavate for foundations, rough grade and temporary stabilizes.
4. Excavate for foundations, rough grade and temporary stabilizes.
5. Final grade, install Erosion Control Matting and stabilize in accordance with standards and specifications.
6. Final grade, install Erosion Control Matting and stabilize in accordance with standards and specifications.
7. Upon approval of the Sediment Control Inspector, remove sediment control ditches and stabilize.

Set and construct control devices on site:



GENERAL NOTES:

- Subject property is zoned: NTSFLD per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is : 0.3791 Acres.
- The total number of lots included in this submission is : 1.
- Improvement to property : Single Family Detached.
- The maximum lot coverage permitted is : 30%.
- Department of Planning and Zoning reference file numbers : F-96-89, F-96-110, F-96-124, S-93-21, P-95-11, W&S Cont. #34-3445-D, WP-95-32, WP-95-78, and WP-95-114.
- Utilities shown as existing are taken from approved Water and Sewer plans Contract #34-3445-D and #44-3445-D, approved Road Construction plans F-96-124, and actual field survey.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- All roadways are public and existing.
- The existing topography was taken from Road Construction Plans prepared by Gutschick, Little & Weber in March 1996.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monuments Numbers : 2964 & 2965.
- The contractor shall notify the Department of Public Works/ Division of Construction Inspection at (410) 313-1880 at least twenty-four (24) hours 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.
- For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details R.6.03.
- In accordance with FDP-Phase 222, Part III by windows or chimneys not more than 10 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into the front or rear setbacks. Exterior stairway/areaways may not project into any setbacks.
- This plan has been prepared in accordance with the provisions of section 16.124 of the Howard County Code and Landscape Manual. Financial Surety for the trees in schedule A in the amount of \$1,500.00 shall be part of the builders grading permit applications.
- 5HC elevations shown are at the property line.
- This property is exempt from the forest conservation requirements per section 16.1202 (b)(1)(iv) of the Ho. Co. Code because it is part of a planned unit development with preliminary plan approval prior to 12/31/02.

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-95-141 and/or approved Water and Sewer Plans Contract #34-3445-D.

OWNER / DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.
 10725 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
VILLAGE OF RIVER HILL	4/3	1
PLAT NO. 12757	BLOCK NO. 1	ZONE NTSFLD
TAX MAP NO. 35	ELECTION DIST. 5th	CENSUS TRACT 6055
WATER CODE I-10	SEWER CODE 6653000	

CLARK · FINEFROCK & SACKETT, INC.
 ENGINEERS · PLANNERS · SURVEYORS
 7135 MINSTREL WAY · COLUMBIA, MD 21046 · (410) 381-7500 BALT. · (301) 621-8100 WASH.

DESIGNED	SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN LOT 1	SCALE
JME/P.C.		1" = 30'
DRAWN	COLUMBIA VILLAGE OF RIVER HILL SECTION 4 AREA 3 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	DRAWING
KQL/SH		1 of 1
CHECKED	JME/P.C.	JOB NO.
		00-158
DATE	FOR: COLUMBIA BUILDERS, INC. P.O. BOX 999 COLUMBIA, MARYLAND 21044	FILE NO.
12-8-00		00-158-X

APPROVED: DEPARTMENT OF PLANNING & ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

2/6/01
 2/6/01
 2/7/01

Reviewed for HOWARD S.C.D. and meets Technical Requirements
 Signature: Jim McNeil
 U.S. Natural Resource Conservation Service

2/6/01
 2/12/01

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
 Signature: Jim McNeil
 Approved

DEVELOPER'S/BUILDERS CERTIFICATE

I/We certify that the landscaping shown on this plan will be done according to plan, section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a Certificate of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Signature: B. James Greenfield
 B. JAMES GREENFIELD
 12-8-00
 Date

ENGINEER'S CERTIFICATE

I hereby 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: G. Nelson Clark
 G. Nelson Clark
 1-25-01
 Date

DEVELOPER'S/BUILDERS CERTIFICATE

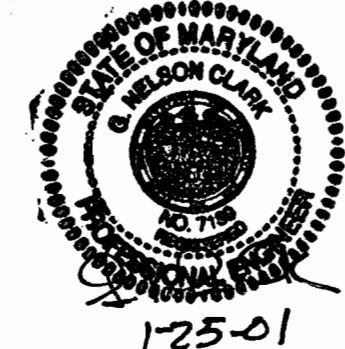
I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training 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 or their authorized agents, as are deemed necessary.

Signature: B. James Greenfield
 B. JAMES GREENFIELD
 12-8-00
 Date

DEVELOPER'S/BUILDERS CERTIFICATE

I/We certify that all development and construction will be done according to this plan of development and 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 or their authorized agents, as are deemed necessary.

Signature: G. Nelson Clark
 G. Nelson Clark
 1-25-01
 Date



SDP-01-78