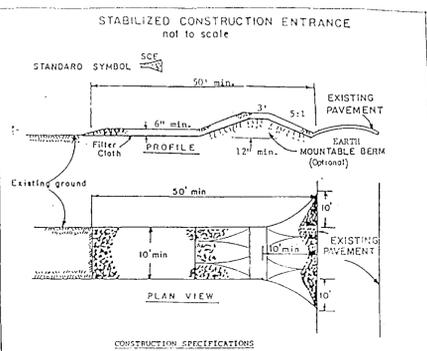


CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES OR STAPLES EVERY 24" AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
- FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING
- FILTER CLOTH: FILTER Y, MIRAFL 100, STABILINKA 100N OR APPROVED EQUAL
- PREFABRICATED UNIT: GEOPAB, ENVIRONMENTAL, OR APPROVED EQUAL



- CONSTRUCTION SPECIFICATIONS
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 feet except on a single east-west line where a 30 foot minimum length would apply.
 3. Thickness - Not less than six (6) inches.
 4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress of water occurs.
 5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 6. Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a portable pump with 5:1 slopes will be permitted.
 7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanup of any measures used to track sediment. All sediment applied, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 8. Washing - Vehicles shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area established with stone and which drains into an approved sediment trapping device.
 9. Inspect - Inspection and record maintenance shall be provided after each rain.

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, 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 (82 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 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 ureamform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable: Apply 2 tons per acre dolomitic limestone (82 lbs/1000 sq ft) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

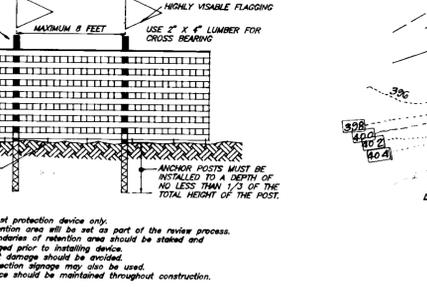
SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 600 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru August 15, seed with 600 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre. For the period May 1 thru August 15, seed with 600 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre. For the period May 1 thru August 15, seed with 600 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre. For the period May 1 thru August 15, seed with 600 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue per acre.

TEMPORARY SEEDING NOTES

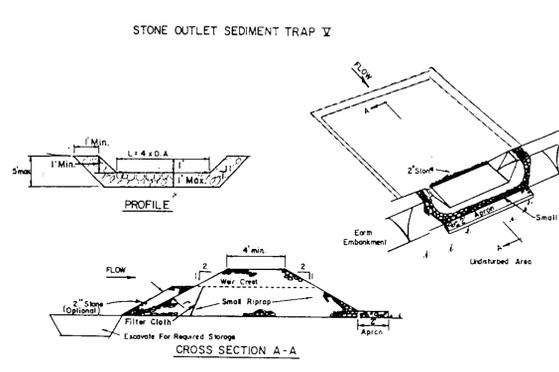
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

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

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (1.2 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 2 1/2 bushels per acre of annual ryegrass (1.2 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 2 1/2 bushels per acre of annual ryegrass (1.2 lbs/1000 sq ft). For the period May 1 thru August 15, seed with 2 1/2 bushels per acre of annual ryegrass (1.2 lbs/1000 sq ft).



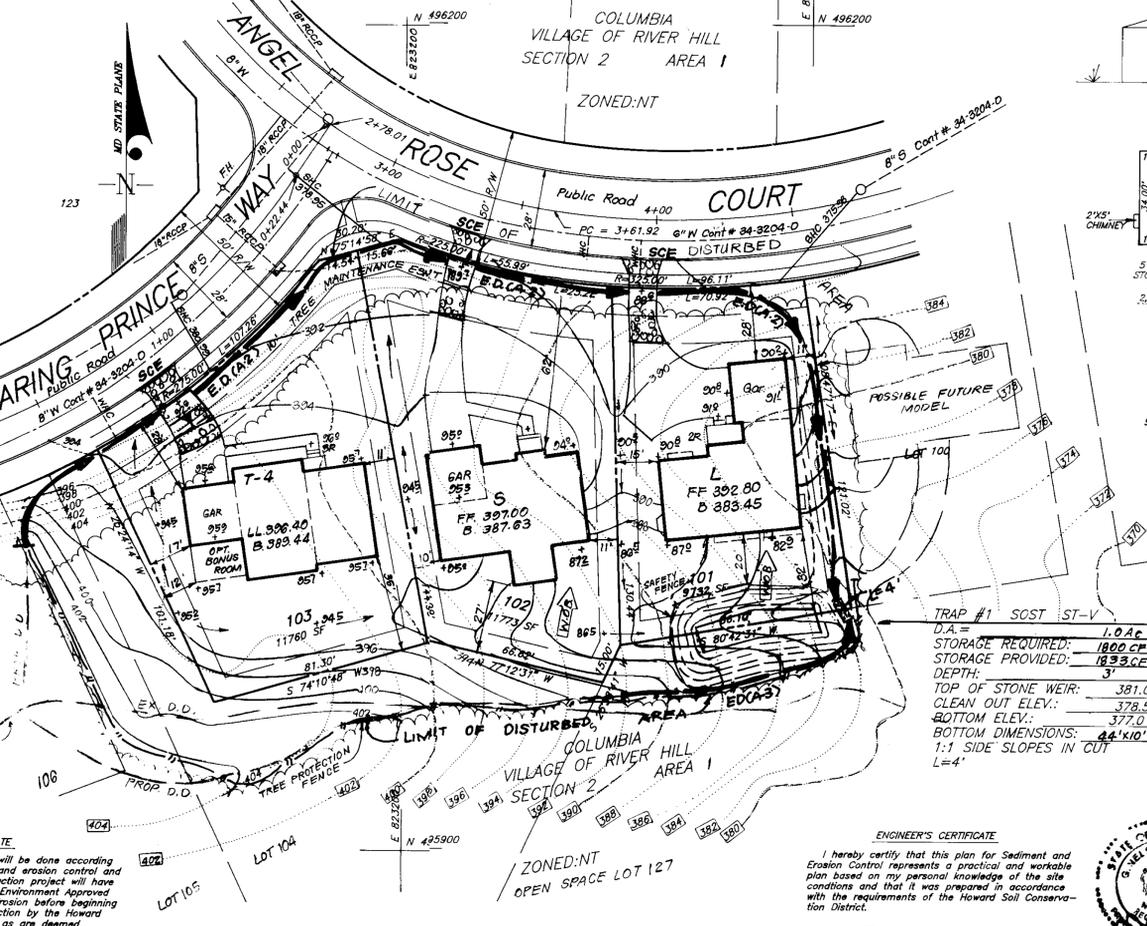
BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL



- OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in the embossed filter cloth.
- CONSTRUCTION SPECIFICATIONS FOR ST-V
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
 2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
 3. All cut and fill slopes shall be 2:1 or flatter.
 4. The stone used in the outlet shall be small riprap 4"-8" along with a 1" thickness of 2" aggregate placed on the upgrade side on the small riprap and embedded filter cloth in the riprap.
 5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
 6. The structure shall be inspected after each rain and repairs made as needed.
 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

CONSTRUCTION SEQUENCE

NO.	DESCRIPTION	NO. OF DAYS
A.	Obtain grading permit	7
B.	Install tree protection fence	7
C.	Install sediment and erosion control devices and stabilize	14
D.	Excavate for foundations, rough grade and temporarily stabilize	30
E.	Construct structures, sidewalks and driveways	60
F.	Final grade and stabilize in accordance with Stds. and Specs.	14
G.	Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize	7

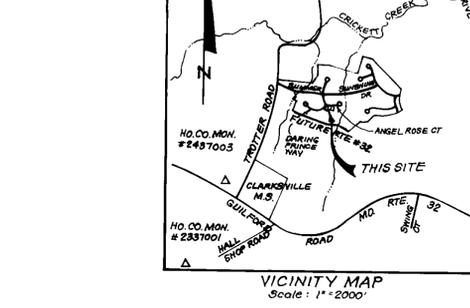
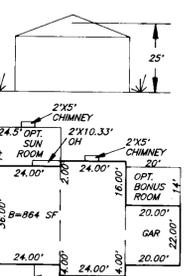


SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (3/3-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
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 3:1, b) 14 days as to 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 perimeters in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec.51) sod (Sec.54), temporary seeding (Sec.50) and mulching (Sec.52). Temporary stabilization with mulch alone can only 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 of Site: 0.765 Ac
 - Area Disturbed: 0.765 Ac
 - Area to be roofed or paved: 0.3 Ac
 - Area to be vegetatively stabilized: 0.7 Ac
 - Total Cut: 102,654 cu yd
 - Total Fill: 16,424 cu yd
 - Off-site Waste/Borrow Area Location: None
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 control must be provided, if deemed necessary by the Howard County DPW 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. If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
12. The total amount of silt fence = None

TYPICAL HOUSES

SCALE: 1"=30'



- LEGEND
- CONTOUR INTERVAL
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - DIRECTION OF DRAINAGE
 - WALK OUT BASEMENT
 - EXISTING SEWER MAIN
 - EXISTING WATER MAIN
 - EXISTING STORM DRAIN
 - EXISTING TREES TO REMAIN
 - STABILIZED CONSTRUCTION ENTRANCE
 - SILT FENCE
 - LIMIT OF DISTURBED AREA
 - TEMPORARY GRADING FOR SEDIMENT CONTROLS
 - DRAINAGE DIKE
 - D.D.

GENERAL NOTES:

1. Subject property is zoned: NT SFLD per 6-2-85 Comprehensive Zoning Plan.
2. The total area included in this submission is: 0.765 Acres
3. The total number of lots included in this submission are: 3
4. Improvement to property: Single family detached
5. The maximum lot coverage permitted is: 30%
6. Department of Planning and Zoning reference file numbers are: 3-91-03, P-92-13, WP-92-13, F-93-18 FOP Phase 203
7. Utilities shown as existing are taken from approved water and sewer plan Contract # 34-3204-D, approved road construction plans F-93-18, and actual field survey.
8. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
9. Storm water management is provided per: F-93-18.
10. All roadways are public and existing.
11. The existing topography shown was taken from plans prepared by Riemer Muggs and Associates, Inc. F-93-18.
12. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos.: 2337001, 2337002, and 2437003.
13. The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 313-1810 at least five (5) working days prior to the start of work.
14. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
15. Decks and Fences may only extend 5' into the front and rear setback as stated in FOP Ph. 203 Item # 6. For driveway entrance details refer to Howard County Design Manual Volume II Std. details R-6.03.

SPECIAL NOTES:

This plan is for house siting and lot grading only. Improvements shown within the rights-of-way are not to be used for construction. For construction, see approved Road Construction Plans F-93-18 and/or approved Water and Sewer Plans Contract #C-34-3204-D.

SHEET INDEX:

SHEET 1 SITE DEVELOPMENT PLAN & SEDIMENT & EROSION CONTROL PLAN

LOT NUMBER	STREET ADDRESS
101	63/6 ANGEL ROSE COURT
102	63/2 ANGEL ROSE COURT
103	63/1 DARING PRINCE WAY

SUBDIVISION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF RIVER HILL	2/1	101-103

OWNER:	DEVELOPER:
HOWARD RESEARCH AND DEVELOPMENT CORPORATION	10276 Little Patuxent Parkway, Columbia, Maryland 21044

DESIGNED	SCALE
W.H.T.	1"=30'
DRAWN	DRAWING
J.M.E.	101/1
CHECKED	JOB NO.
J.M.E.	03-047
DATE	FILE NO.
3-10-93	03-047X

FOR: COLUMBIA BUILDERS, INC. P.O. Box 399, Columbia, Md. 21044

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

DATE: 6-16-93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DATE: 7-2-93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: 6-10-93

DEVELOPER'S/BUILDER'S CERTIFICATE

"We certify that all development and construction will be done according to this plan 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."

DATE: 3-10-93

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.

DATE: 3-10-93