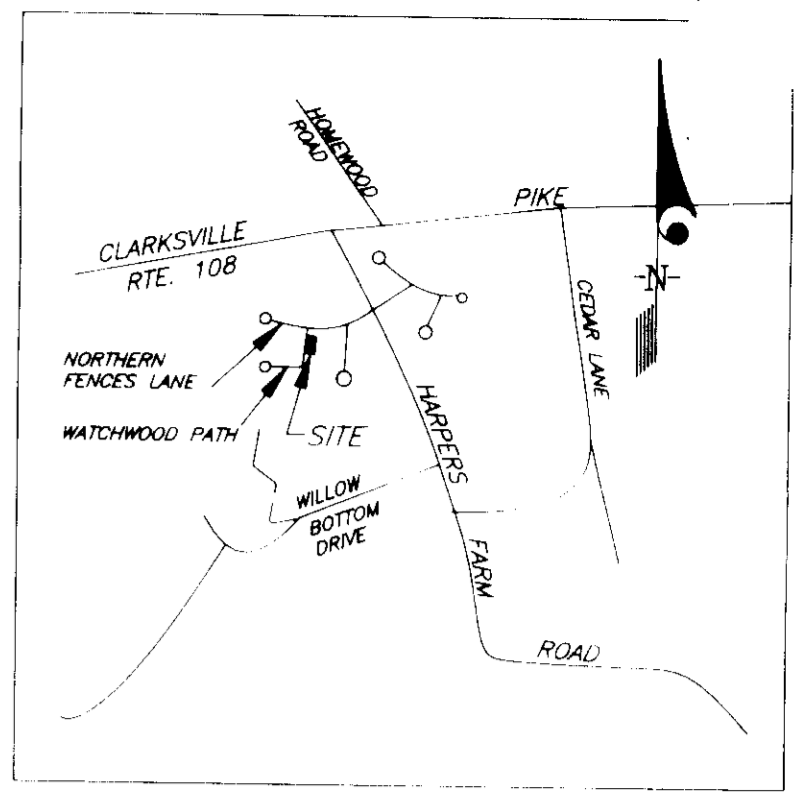
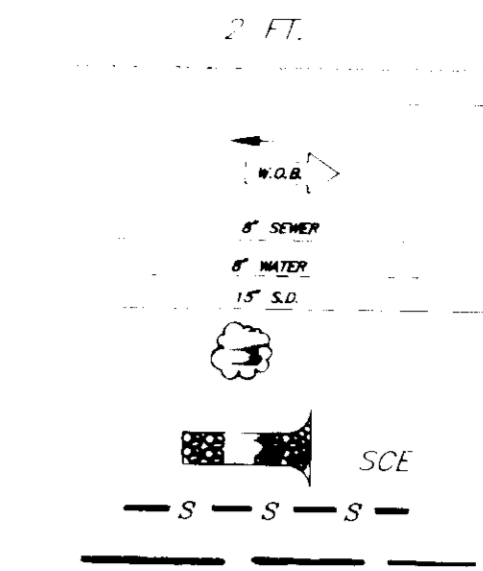


SPECIAL NOTES

Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. See approved Road Construction Plans F-90-06 and/or approved Water and Sewer plans Contract No. 34-3009-D.

LEGEND

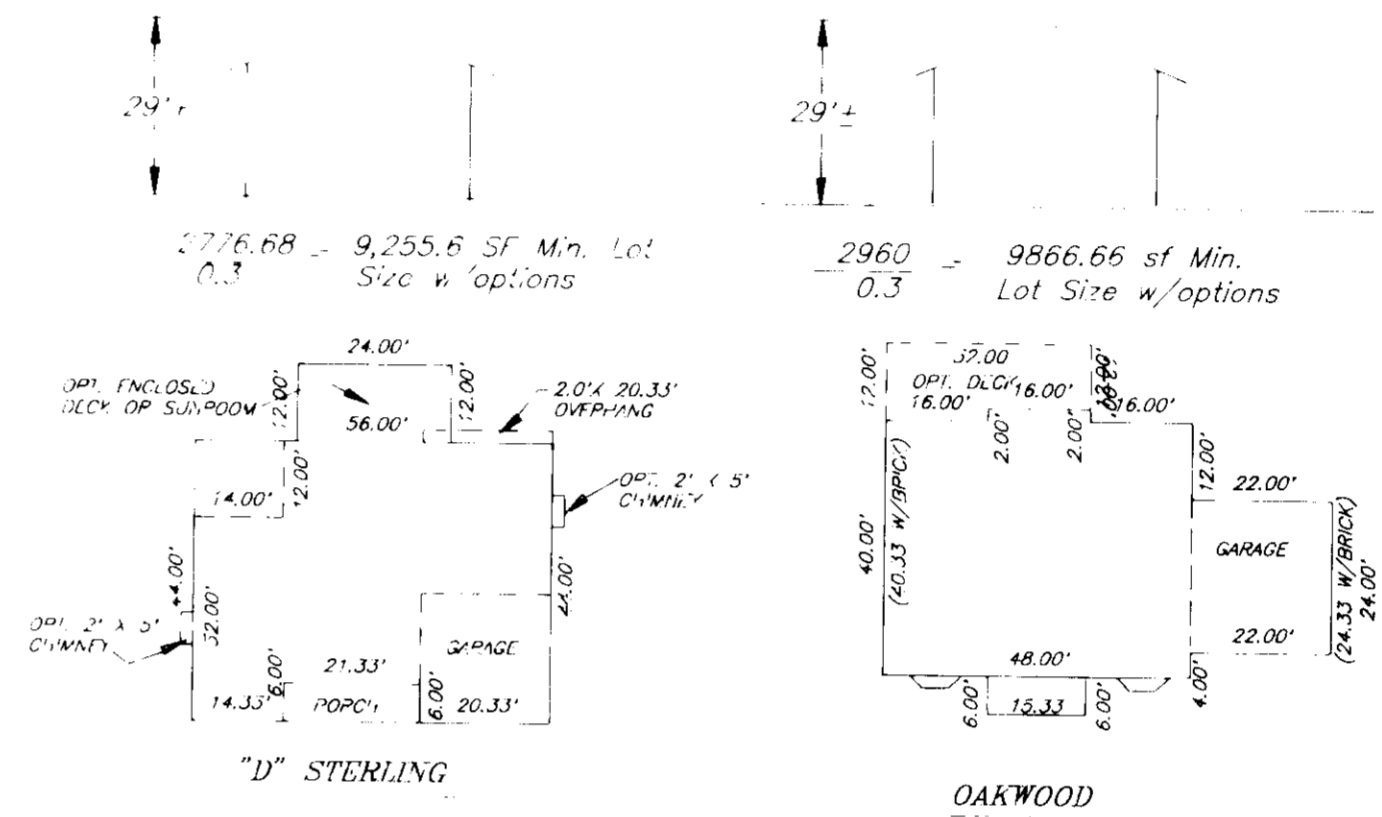
- CONTOUR INTERVAL 2 FT.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM MAIN
- EXISTING TREES TO REMAIN
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- LIMIT OF DISTURBED AREA



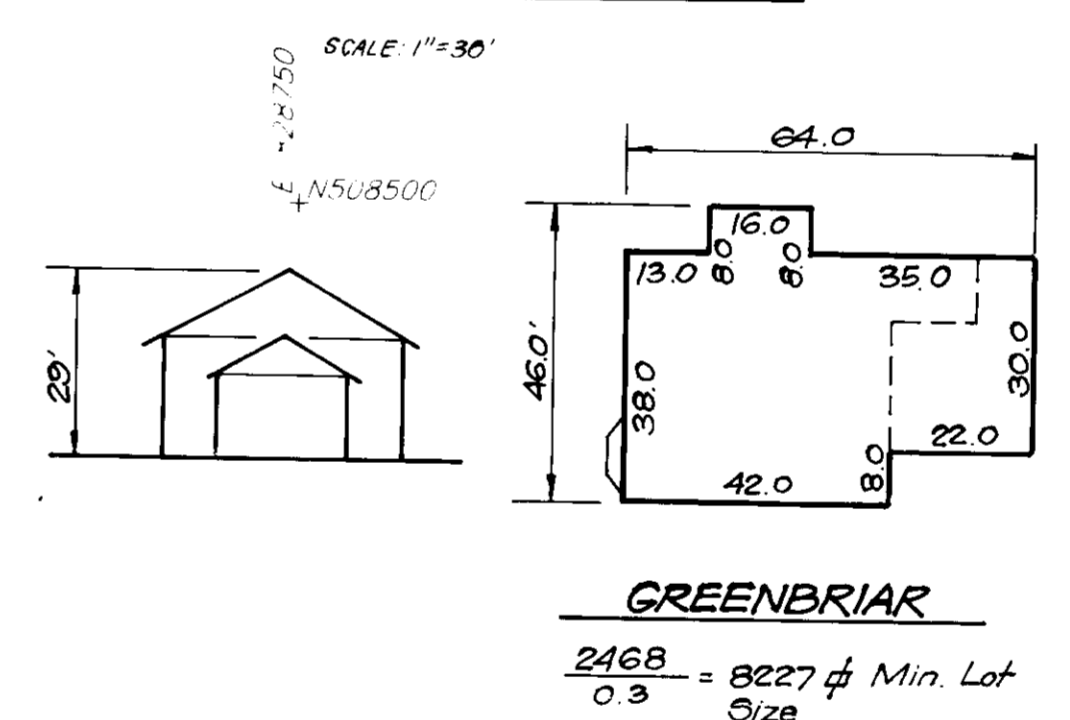
VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

1. HORIZONTAL AND VERTICAL CONTROL SHOWN HEREON IS BASED UPON HOWARD COUNTY GEODETIC CONTROL STATIONS 2739002 AND 2739003.
2. SUBJECT PROPERTY IS ZONED NEW TOWN SINGLE FAMILY LOW DENSITY PER 8-2-85 COMPREHENSIVE ZONING PLAN.
3. THE STORM WATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY HAVE BEEN WAIVED AS PER D.P.W. ACTION DATED SEPT. 6, 1988.
4. DEPT. OF PLANNING AND ZONING FILE NUMBERS APPROVED ARE: F-90-06, S-88-101, P-89-45, AND WP89-14, F-90-06.
5. TOTAL NUMBER OF LOTS: 3
6. TOTAL AREA OF LOTS: 1.12 ACRES
7. TOPOGRAPHY IS ACTUAL FIELD SURVEY.
8. ANY DAMAGE DONE TO COUNTY OWNED RIGHTS-OF-WAY TO BE CORRECTED AT THE DEVELOPER'S EXPENSE.
9. THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION DIVISION 24 HRS. IN ADVANCE OF CONSTRUCTION; PHONE: 792-2630.
10. THE MINIMUM SETBACK RESTRICTIONS FROM THE PROPERTY LINES AND THE RIGHTS-OF-WAY OF ANY PUBLIC ROAD IS TO BE IN ACCORDANCE WITH THE RECORDED F.D.P. CRITERIA PHASE 204-A RECORDED AS PLAT 3054A, 1143 THRU 1148.
11. FOR DRIVEWAY ABUTTING DETAIL SEE HO. CO. STD. DETAIL R-605



TYPICAL HOUSES

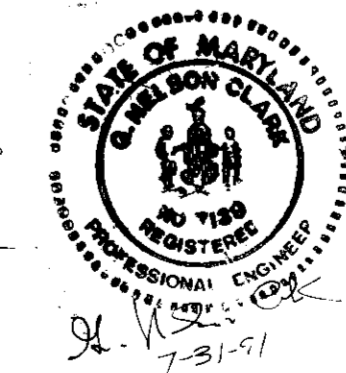


GREENBRIAR
2468 = 8227 sq. ft. Min. Lot Size

ADDRESS CHART		
LOT NUMBER	STREET ADDRESS	STREET ADDRESS
16	5109	WATCHWOOD PATH
17	5113	WATCHWOOD PATH
18	5117	WATCHWOOD PATH

DEVELOPER'S/BUILDER'S 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 inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary."
 Paul T. Sleep 6-21-91
 signature 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] 7-31-91
 signature Date



SUBMISSION NAME	SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF HARPER'S CH.	7/5	16, 17, & 18
PLAT NO. 9317	BLOCK NO. 16	ZONE SFLD N.Z.
WATER CODE 1-03	TAX MAP NO. 29	ELECTION DIST. 5TH
	SEWER CODE 6740000	CENSUS TRACT 6055

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 735 MINISTREL WAY • COLUMBIA, MD 21045 • (301) 991-7500 • BALTO. • (410) 421-0000 • GASH

DESIGNED VHL	SITE DEVELOPMENT AND SEDIMENT AND EROSION CONTROL PLAN LOTS 16, 17 AND 18 COLUMBIA VILLAGE OF HARPER'S CHOICE SECTION 7, AREA 5 5TH ELECTION DISTRICT HOWARD COUNTY MARYLAND	SCALE 1"=30'
DRAWN KJWM		DRAWING 1 OF 2
CHECKED VHL		JOB NO. 91-092
DATE JUNE 1991		FILE NO. 91-092

FOR: DOUGLAS HOMES
 P.O. BOX 828
 ELICOTT CITY, MD 21043

Reviewed for HOWARD S.C.D. Name
 and meets Technical Requirements
 Signature: [Signature] Date: 8/6/91
 US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 John R. Robertson 8/6/91
 Approved

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT
 James M. Donald 8/22/91
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Planning Director: [Signature] 8/27/91
 Chief of Community Planning and Land Development DATE

APP'D: D. FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: [Signature] 8/15/91
 Chief Bureau of Engineering DATE

NO.	REVISIONS	Date
2	Rev. hse. f. qrd. lot 18, Add hse. typical	1-31-95
1	Rev. hse. f. qrd. lot 16	3-4-92
1/2		

SEDIMENT AND EROSION CONTROL NOTES

- 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. (992-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, 14 days 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 perimeters in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS 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 grasses 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:	1.12 Ac
Area to be roofed or paved:	0.22 Ac
Area to be vegetatively stabilized:	0.46 Ac
Total Cut:	0.70 CY
Total Fill:	3.10 CY
- Offsite Waste/Borrow Area Location:
- 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 control must be provided, if deemed necessary by the Howard County DFW Sediment Control Inspector. 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.
- If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
- All pipes to be blocked at the end of each day (see detail this sheet).
- The total amount of silt fence = 540 LF

* It is the responsibility of the contractor to identify the spoil/borrow site and notify HCSGD of the site and its grading permit number at the time of construction.

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 (92 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 ureaform fertilizer (9 lbs./1000 sq ft.)
 2) Acceptable— Apply 2 tons per acre dolomitic limestone (92 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 60lbs per acre (1.4 lbs./1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs./1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, 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 sod. Option (3) Seed with 60 lbs/acre 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 90 lbs./1000 sq ft) of unrotted 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 8 feet or higher, use 348 gallons per acre (9 gal/1000 sq ft) for anchoring.

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

TEMPORARY SEEDING NOTES

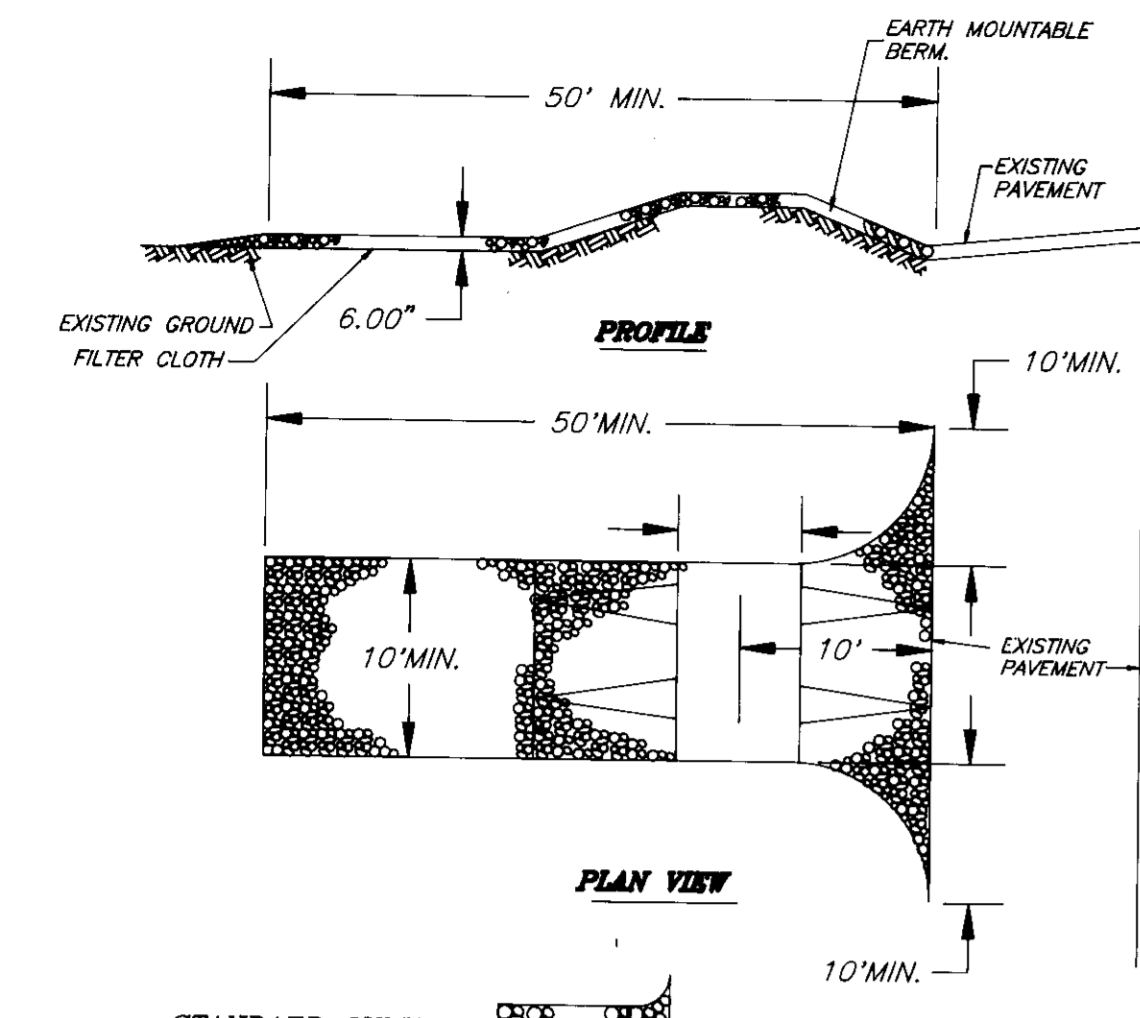
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 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 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 weeping lovegrass (.07 lbs./1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq ft) of unrotted 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 8 feet or higher, use 348 gallons per acre (9 gal/1000 sq ft) for anchoring.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

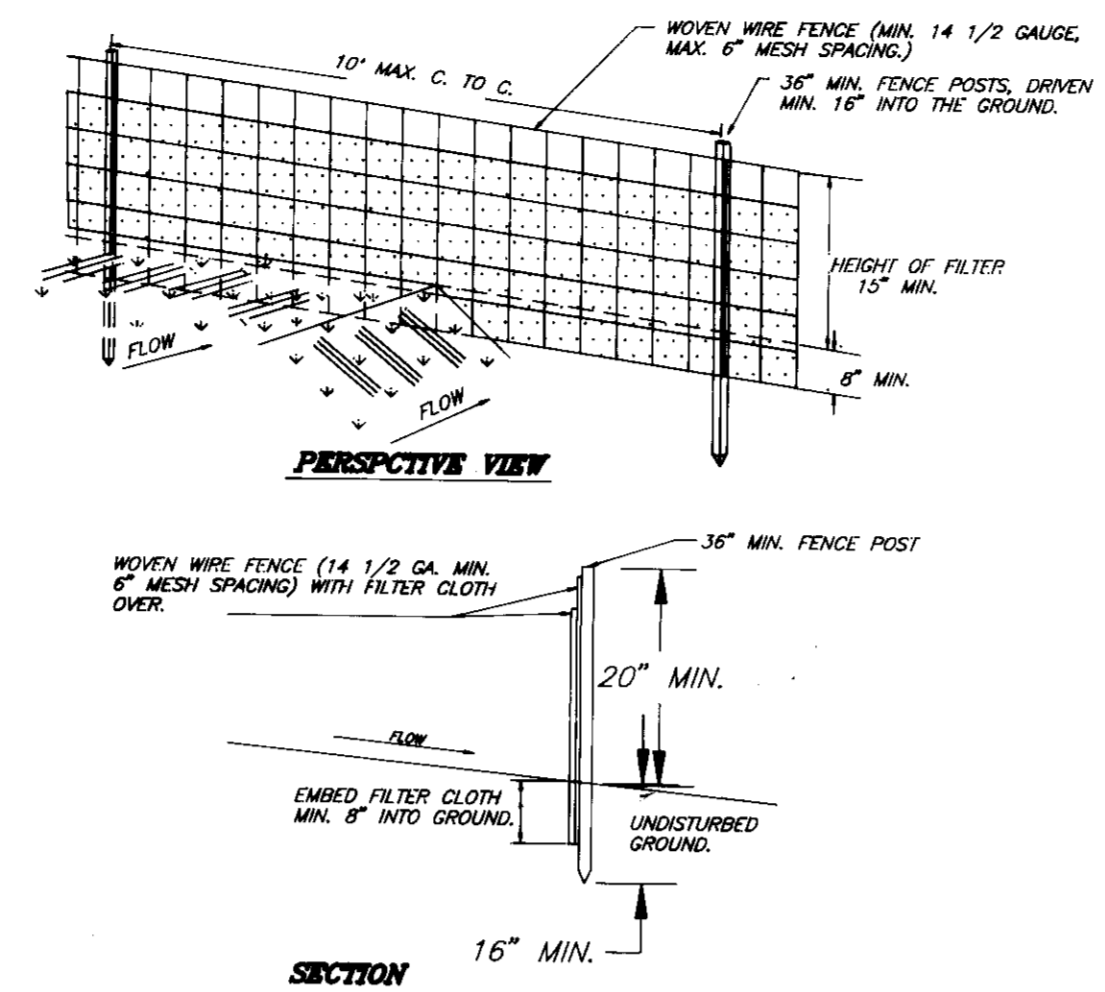


CONSTRUCTION SPECIFICATIONS

- STONE SIZE: USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT. LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A RESIDENTIAL LOT WHERE A 30' FOOT MINIMUM LENGTH WOULD APPLY.)
- THICKNESS: NOT LESS THAN SIX (6) INCHES.
- WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH: WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE.
- SURFACE WATER: ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 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 CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WASHING: WHEELS 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 STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE (SCE)

NO SCALE



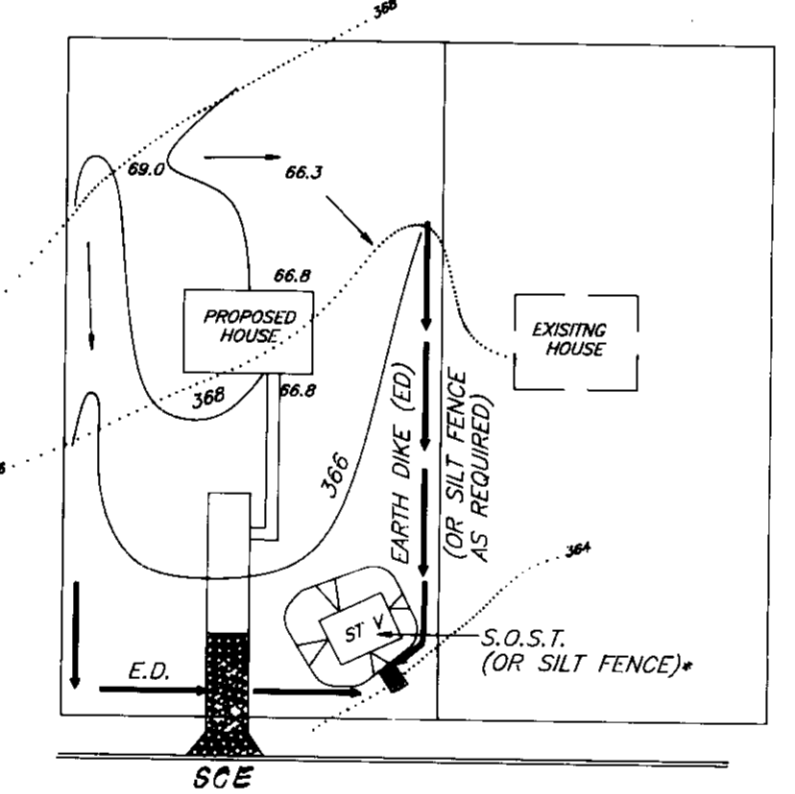
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- 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 X, MIRA-100X, STABILINKA T140N, OR APPROVED EQUAL.
 PREFABRICATED UNIT: GORAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE (S)

NO SCALE



NOTE: Single lot detail cannot be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing an existing sediment trap.

LOT SIZE	1/4 ACRE	1/2 ACRE	1 ACRE
DEPTH	2'	3'	6'
BOT LENGTH	11'	26'	26'
BOT WIDTH	11'	11'	26'
BOT AREA	121SF	286SF	676SF

* Can be adjusted in the field, but the bottom area must be as given or greater.

SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 [Signature] 8/22/91
 COUNTY HEALTH OFFICE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
 [Signature] 8/27/91
 PLANNING DIRECTOR
 [Signature] 8/27/91
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 8/15/91
 DIRECTOR
 [Signature] 8-15-91
 CHIEF BUREAU OF ENGINEERING

Reviewed for HOWARD S.C.D. Name
 [Signature] 8/16/91
 Signature Date
 US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 8/16/91
 Approved

DEVELOPER'S/BUILDER'S 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] 6-21-91
 signature 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] 6-25-91
 Signature Date



CONSTRUCTION SEQUENCE:

	NO. OF DAYS
A. Obtain grading permit and install sediment and erosion control devices and stabilize.	7
B. Excavate for foundations, rough grade and temporarily stabilize.	14
C. Construct structures, sidewalks and driveways.	60
D. Final grade and stabilize in accordance with Stds. and Specs.	12
E. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

DESIGNED	SITE DEVELOPMENT AND SEDIMENT AND EROSION CONTROL PLAN LOTS 16, 17 AND 18	SCALE	As Shown
DRAWN		DRAWING	2 of 2
CHECKED	COLUMBIA VILLAGE OF HARPER'S CHOICE SECTION 7 AREA 5 5TH ELECTION DISTRICT HOWARD COUNTY MARYLAND	JOB NO.	91-092
DATE	JUNE 1991	FILE NO.	91092-X

FOR: DOUGLAS HOMES
 P.O. BOX 629
 ELLICOTT CITY, MD 21043