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.

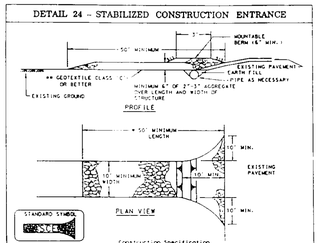
1) *Preferred–Apply 2 tons per acre dolomitic limestone (92 lbs./ 100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./ 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq.ft.).*
2) *Acceptable–Apply 2 tons per acre dolomatic limestone (92 lbs./ 1000 sq.ft.) and apply 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 60 lbs. 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 (8 gal/1000 sq.ft.) for anchoring.

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

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length – minimum of 50' (*30' for a single residence lot).
2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile (Filter cloth) shall be placed over the existing ground prior to placing stone. *While plan approval authority may not require single family residences to use geotextile.
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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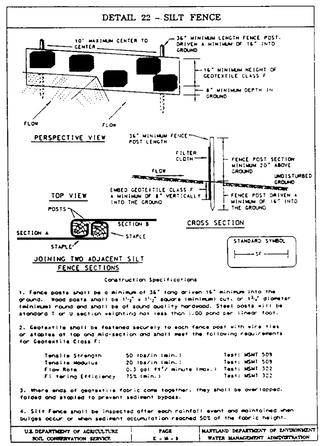
DETAIL 22 – SILT FENCE



JOINING TWO ADJACENT SILT FENCE SECTIONS

Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.
2. 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: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal. ft²/ minute (max.)	Test: MSMT 322
Ft Turing Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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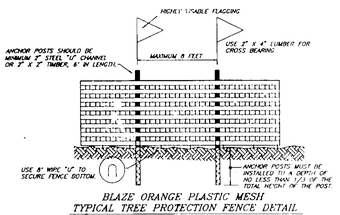


BLAZE ORANGE PLASTIC MESH
TYPICAL TREE PROTECTION FENCE DETAIL

NO SCALE

NOTES:
1. Forest protection device only.
2. Retention area will be set as part of the review process.
3. Boundaries of retention area should be staked and flagged prior to installing device.
4. Root damage should be avoided.
5. Protection signage may also be used.
6. Device should be maintained throughout construction.

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).

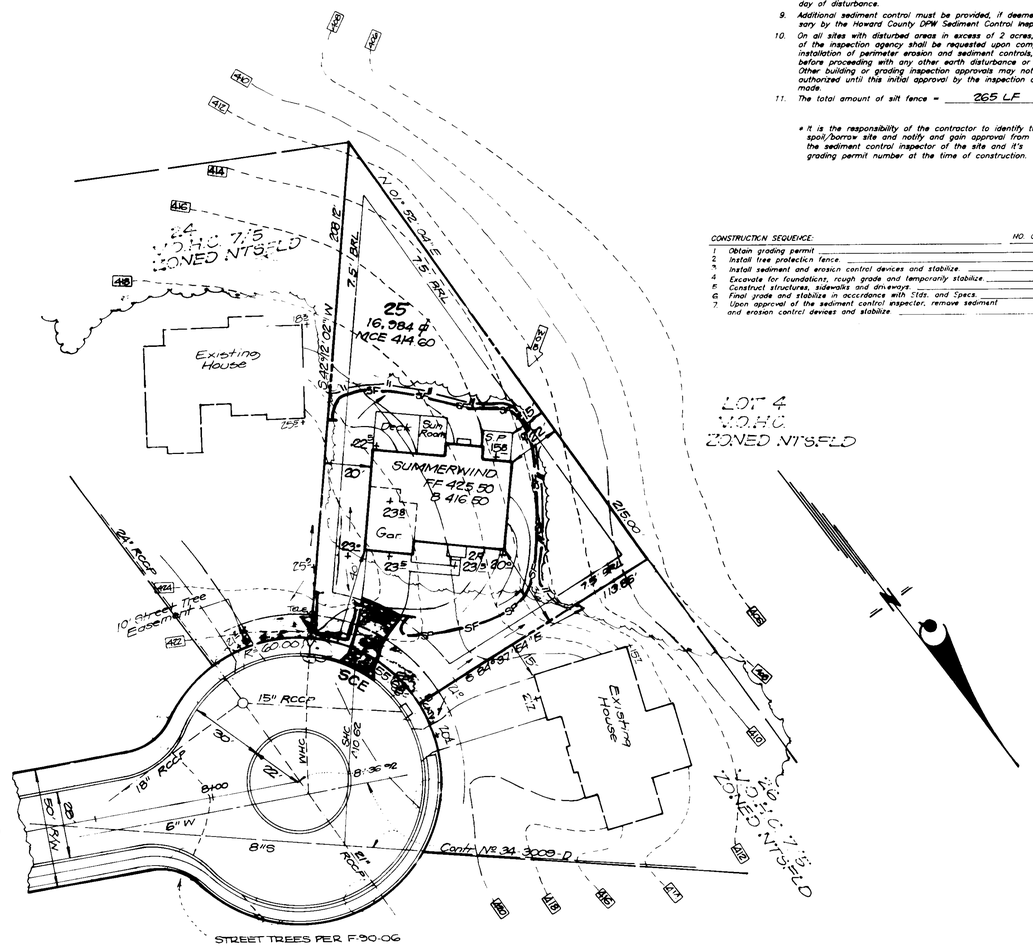
SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.) For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

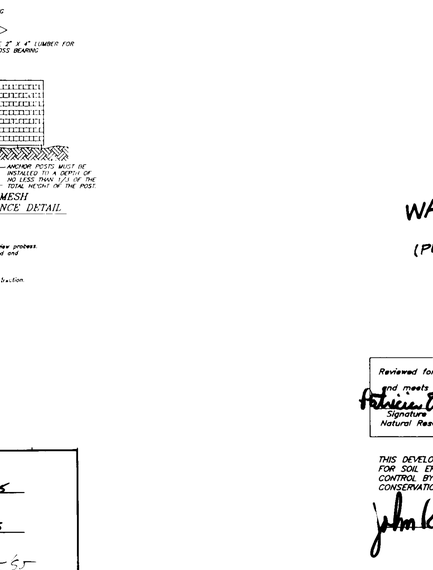
MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 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.

LEGEND

Contour Interval 2 FT
Existing Contour ----(414)----
Proposed Contour ——410——
Spot Elevation +10.2
Direction of Drainage →
Walk Out Basement (W.O.B.)
Trees to be Saved
Tree Protection Fence —//—//—
Minimum Cellar Elevation MCE
Silt Fence —SF—SF—
Stabilized Construction Entrance (SCE)





SUMMERWIND

3132 54 / 03 = 10,441 ± sf Min. Lot Size

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. (313-1855).*
2. *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.*
3. *Following initial soil disturbance or radistarbance, permanent or temporary stabilization shall be completed within:*
   a) *7 calendar days for all perimeter sediment control stuctures, 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 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seedings (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:*

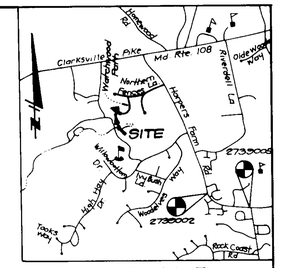
Total Area of Site:	16,984 SF
Area Disturbed:	9350 SF
Area to be roofed or paved:	5008 SF
Area to be vegetatively stabilized:	2442 SF
Total Cut:	170 CY
Total Fill	165 CY
Offsite Waste/Borrow Area Location	*

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. *The total amount of silt fence =* 265 LF

* *It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.*

CONSTRUCTION SEQUENCE:

	NO. OF DAYS
1. Obtain grading permit	7
2. Install tree protection fence.	7
3. Install sediment and erosion control devices and stabilize.	14
4. Excavate for foundations, rough grade and temporarily stabilize.	30
5. Construct structures, sidewalks and driveways.	60
6. Final grade and stabilize in accordance with Stds. and Specs.	14
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7



VICINITY MAP

Scale: 1" = 2000'

GENERAL NOTES:

1. *Subject property is zoned: NT SFLD per 10-18-93 Comprehensive Zoning Plan.*
2. *The total area included in this submission is : 16,984 SF The total area of buildable lots: 20.5051 Acres*
3. *The total number of lots included in this submission is: 1 The total number of buildable lots in this project is: 48*
4. *Improvement to property : Single Family Residential Unit*
5. *The maximum lot coverage permitted is: 30%*
6. *Department of Planning and Zoning reference file numbers are: S-88-01, P.89-45, F-90-06, WP 89-14*
7. *Utilities shown as existing are taken from approved Water and Sewer plans Contract # 34-3009-D , approved Road Construction plans F-90-06 , and actual field survey.*
8. *Any damage to county owned rights-of-way shall be corrected at the developer's expense.*
9. *All roadways are public and existing.*
10. *The existing topography was field-run by Clark, Finefrock and Sackett, Inc. on 11-25-95.*
11. *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.: 2739002 and 2739005*
12. *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.*
13. *The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.*
14. *For driveway entrance details, refer to Ho. Co. Design manual Volume IV Std. Detail R-6.05*
15. *In accordance with FDP Phase 204-A bay 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.*
16. *Stormwater Management requirements have been waived per Department of Public Works Action Dated Sept 6, 1988.*
17. *Sewer House Connection elevation shown is located at the property line.*

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-90-06 and/or approved Water and Sewer Plans Contract # 34-3009-D.

OWNER / DEVELOPER

HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

STREET ADDRESS

LOT № 25 5128 WATCHWOOD PATH

SUBDIVISION NAME		SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF HARPERS CHOICE		7/5	25
PLAT NO.	BLOCK NO. / ZONE	TAX MAP NO.	ELECTION DIST. / CENSUS TRACT
9317	16 / NT	29	5TH / 6055
WATER CODE		SEWER CODE	
W-03		6740000	

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Signature Patricia Engler 12/12/95
Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 12/12/95
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."

Phillip A. Dorsey 11-30-95
NAME 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.

Jeffrey J. Schwab 12-1-95
JEFFREY J. SCHWAB DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — 12/14/95 Date
VJC
Chief, Division of Land Development and Research — 12/15/95 Date
Director — 12/18/95 Date

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

DESIGNED JME	SITE DEVELOPMENT PLAN, SEDIMENT & EROSION CONTROL PLAN LOT 25 COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 5 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DRAWN BAL	SCALE 1" = 30'
CHECKED JJS	DRAWING 1 OF 1
DATE 12-1-95	JOB NO. 95-174
	For: DORSEY BUILDERS, INC. 10390 Old Frederick Rd. Sykesville, Md 21784
	FILE NO. 95-174X

S.D.P. 96-62