

**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 dolomitic 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 (0.5 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.

**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 (0.7 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.

**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 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 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:
 

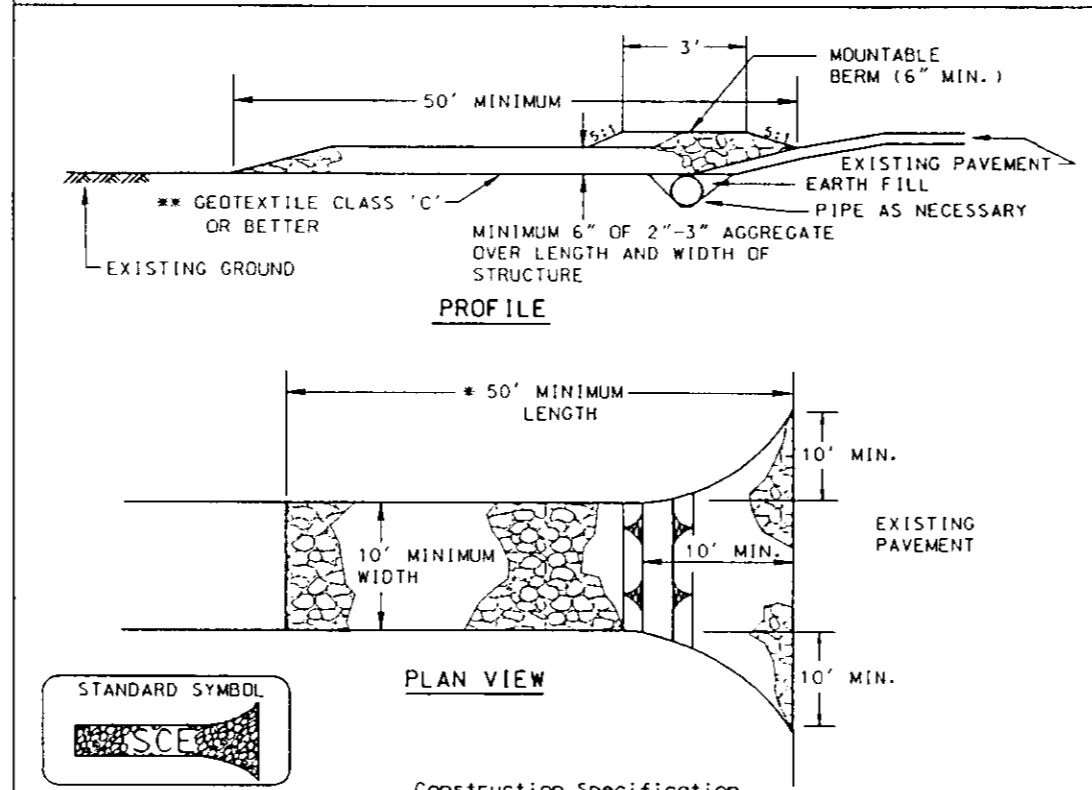
Total Area of Site:	0.18AC
Area Disturbed:	0.19AC
Area to be roofed or paved:	0.06AC
Area to be vegetatively stabilized:	0.13AC
Total Cut:	250CY
Total Fill:	245CY
Offsite Waste/Borrow Area Location:	*
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must 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 = 250 LF

**CONSTRUCTION SEQUENCE:**

	NO. OF DAYS
1. Obtain grading permit.	7
2. Install tree protection fence.	N/A
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

\* Delay construction of houses on lots: N/A  
See single lot sediment control detail, this sheet.

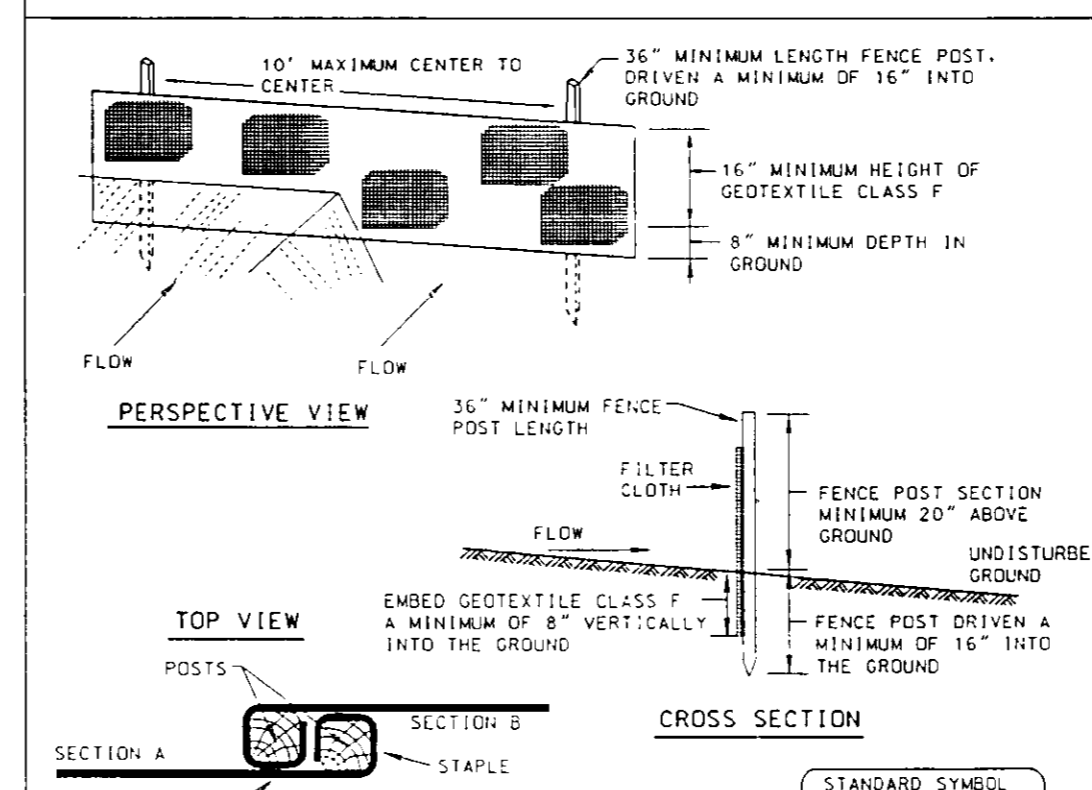
**DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE**



1. Length - minimum of 50' (±30' for single residence lot).
2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The 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**



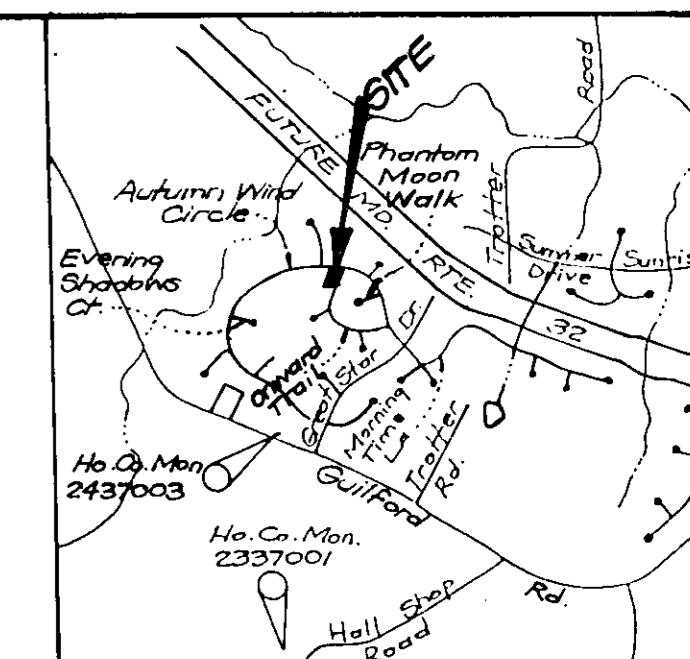
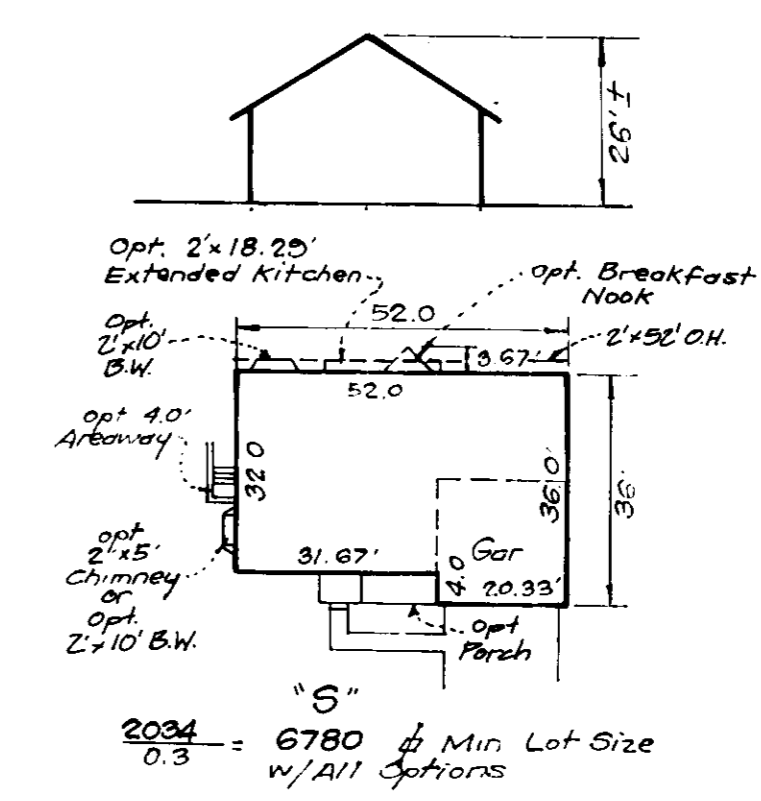
1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square minimum size or 1 1/2" diameter (minimum round) and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear 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./177 minute (max.)	Test: MSMT 322
Filtering 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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**LEGEND**

- Contour Interval 2 Ff
- Proposed Contour
- Existing Contour
- Spot Elevation + 483
- Direction of Drainage
- Silt Fence - SF
- Stabilized Construction Entrance w/ Mountable Berm
- Limit of Disturbance



**HOWARD COUNTY MONUMENTS**

N# 2337001 - Elev 496.095, 3/4 Reinforcing Rod, 0.6' Below Surface	N 491612.385 E 819527.789
N# 2437003 - Elev 477.122, Concrete Mon., 0.25' Below Surface	N 494285.231 E 820385.343

**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: 0.18AC.
3. The total number of lots included in this submission is: 1. The total number of buildable lots is: 153.
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: 3-21-03, P-24-01, F-24-10B, FDP Phase 200 Part IV.
7. Utilities shown as existing are taken from approved Water and Sewer plans Contract # 34-3356-D, approved Road Construction plans F-24-10B, 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 taken from Road Construction plans F-24-10B prepared by Riemer Muegge & Assoc. Inc.
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.: 2337001 & 2437003.
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 details, R.C.03.
15. In accordance with FDP Phase 200 Part IV 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 is provided per: F-24-10B.
17. Sewer House Connections shown are Taken to 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-24-10B and/or approved Water and Sewer Plans Contract # 34-3356-D.

**OWNER/DEVELOPER**  
HOWARD RESEARCH AND DEVELOPMENT CORP  
10275 Little Retirement Parkway  
Columbia, Maryland 21044

**STREET ADDRESS: 6449 Onward Trail**

SUBDIVISION NAME	COLUMBIA VILLAGE OF RIVER HILL	SECTION/AREA	2/4	LOTS/PARCELS	53
PLAT NO.	11-46-06 thru 11-47-23	ZONE	NT-SFLD	TAX MAP NO.	35
WATER CODE	I-11	ELECTION DIST.	5TH	CENSUS TRACT	6055
		SEWER CODE			6650000



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

DESIGNED MJP 2-AL	<b>SITE DEVELOPMENT PLAN/SEDIMENT AND EROSION CONTROL PLAN - LOT 53</b> COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: PATRIOT HOMES, INC. P.O. Box 1018 Columbia, MD 21044	SCALE 1" = 30'
DRAWN SAL MCR		DRAWING 1 OF 1
CHECKED jme		JOB NO. 95-163
DATE 9-26-95		FILE NO. 95-163X

**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.

*R. W. Junkle*  
R. W. Junkle  
9-26-95  
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.

*G. Nelson Clark*  
G. NELSON CLARK  
9-26-95  
DATE

Reviewed for: HOWARD S.C.D.  
and meets Technical Requirements  
*John P. Blanton*  
John P. Blanton  
10/25/95  
Date  
Natural Resources Conservation Service

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

*John P. Blanton*  
John P. Blanton  
10/25/95  
Date  
Approved

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John P. Blanton*  
John P. Blanton  
10/20/95  
Date  
Chief, Development Engineering Division

*John P. Blanton*  
John P. Blanton  
10/31/95  
Date  
Chief, Division of Land Development and Research

*John P. Blanton*  
John P. Blanton  
11/1/95  
Date  
Director