

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (10-18-93).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the **MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL** and revisions thereto.
- Following initial soil disturbance or disturbance, 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 2:1.
 - 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. I, 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 **MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL** for permanent seedings, sod, temporary seeding and mulching (see G).
- Temporary stabilization with mulch alone can only be done when recommended seeding dates 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 permanent stabilization has been obtained from the Howard County Sediment Control Inspector.
- SITE ANALYSIS**

Total Area of Site:	0.19 Acres
Area Disturbed:	0.18 Acres
Area to be seeded or paved:	0.08 Acres
Area to be vegetatively stabilized:	0.09 Acres
Total Fill:	2.12 CY
Off-site Water/Borrow Area Location:	3.36 CY
- 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 DPW Sediment Control Inspector.
- On all sites with disturbed areas in areas 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.
- Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
 - The total amount of silt fence = 330 LF
 - The total amount of super silt fence = 0
 - The total amount of earth dike = 0
- 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 its 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	60
5. Construct structures, sidewalks and driveways	60
6. Final grade, install erosion control matting and stabilize in accordance with standards and specifications	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

Reviewed for HOWARD S.C.D. by **Cheryl Sumner** 3/29/99
 Signature: *Cheryl Sumner*
 U.S. National Resource Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
 Approved by **John P. Peterson** 3/29/99

APPROVED: DEPARTMENT OF PLANNING & ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 4/1/99
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/5/99
 DIRECTOR
 DATE: 4/5/99

Rev. Hse & Grd. lot 170 to show Ex. conditions. 12-27-99
REVISIONS

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

Purpose: To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, moderate toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies:

- This 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 vegetable growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - 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 standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey, published 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. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate authority. Regardless, topsoil shall not be a mixture of contrasting textures (clay, sand, silt, gravel, cinders, fragments, gravel, sticks, twigs, or other materials larger than 1 and 1/2" in diameter).
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clay, ground limestone shall be spread at the rate of 4-6 lbs/acre (200-600 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over the graded area and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

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 view of soil test recommendations, use one of the following schedules:

- 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 500 lbs per acre 30-0-0 urea-form fertilizer (9 lbs/1000 sq ft.).
- 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 (14 lbs/1000 sq ft.) of 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 15 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" landscape 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 200 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 6 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.

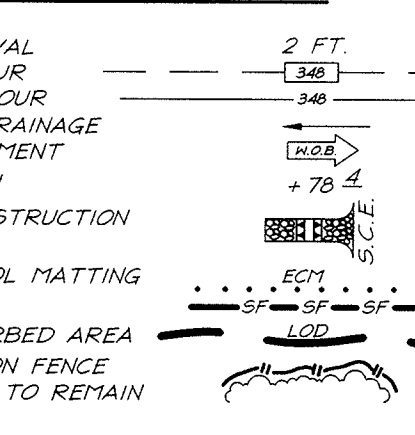
SOIL AMENDMENTS: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft.).

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 ryegrass (3.2 lbs/1000 sq ft.) for the period 15th thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs/1000 sq ft.). For the period November 15 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 200 gallons per acre (5 gal/1000 sq ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft.) for anchoring.

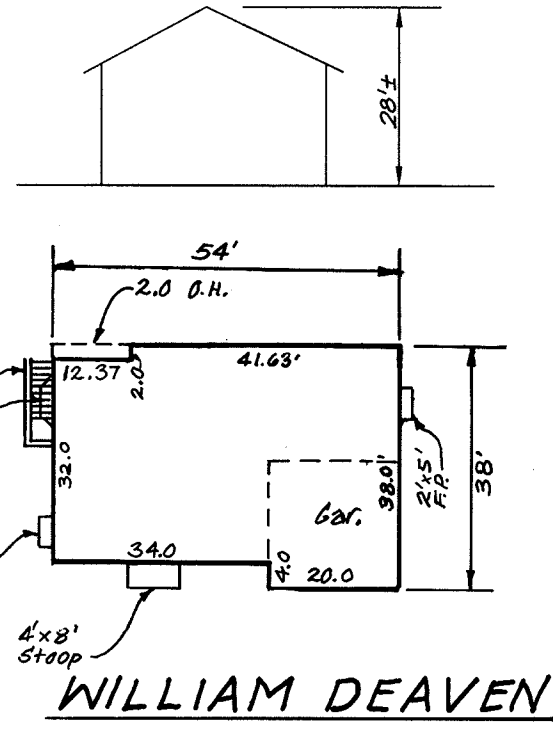
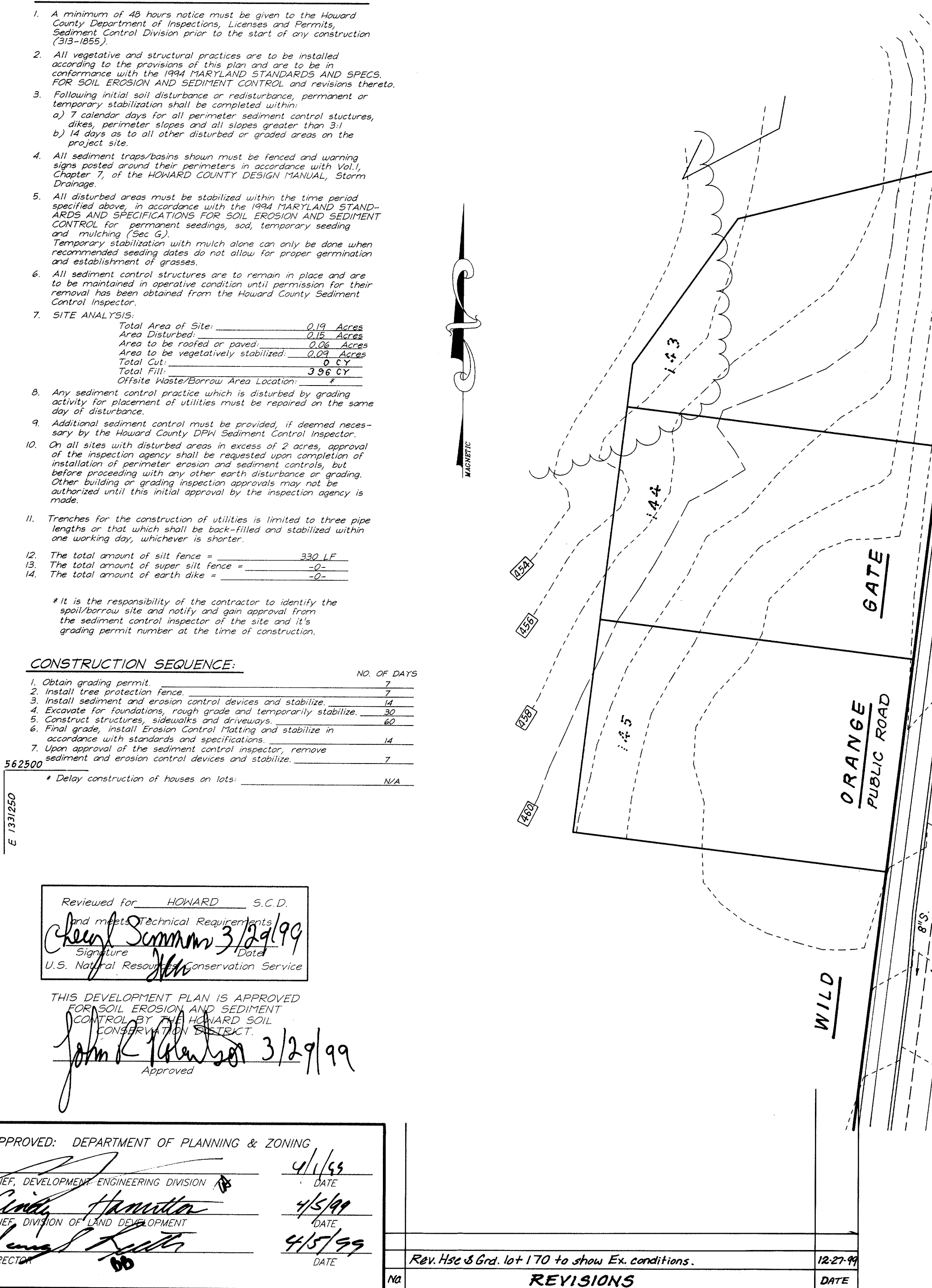
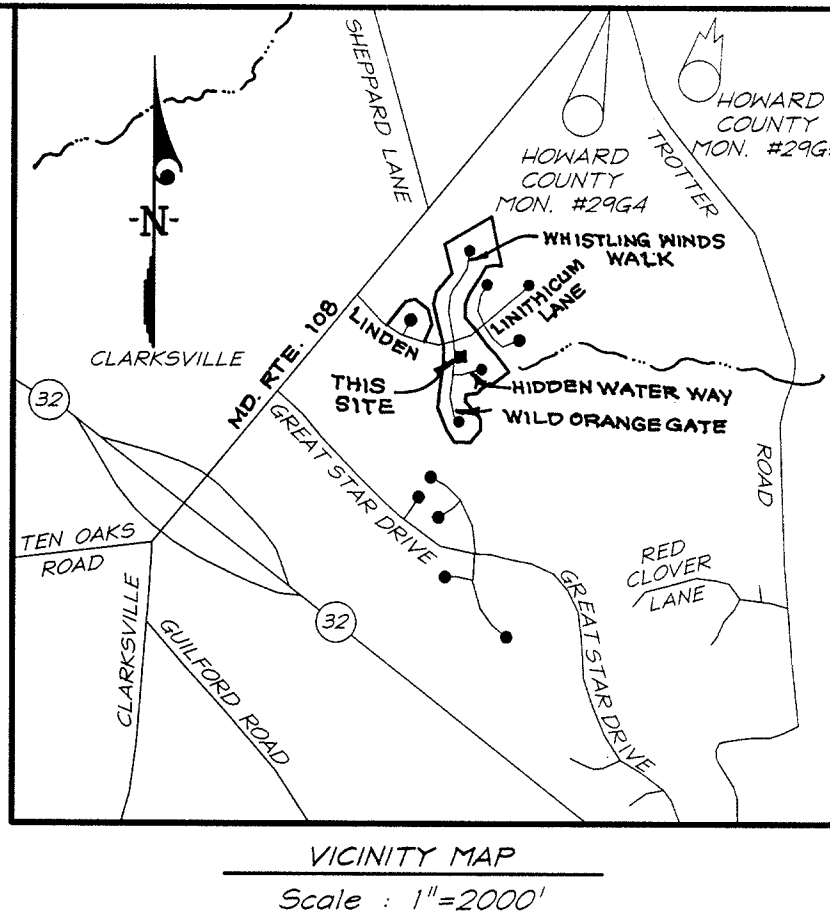
REFER TO THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

LEGEND



BENCHMARKS:

Howard County Monument 29G4
 Intersection of MD. Route 108 and Trotter Road
 Howard County Monument 29G5
 an additional 2,544'± Northeastly along MD. Route 108 away from Site



GENERAL NOTES:

- Subject property is zoned: NTSFLD per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is: 0.1894 Acres.
- The total number of lots included in this submission is: 1
- Improvement to property: Single Family Detached
- The maximum lot coverage by structure including decks is 30%.
- Department of Planning and Zoning reference file numbers: 5-93-21; P-95-12; F-96-102; W/P-95-70; F-98-122
- Utilities shown as existing are taken from approved Water and Sewer plans Contract #34-3586-D, approved Road Construction plans F-96-102, 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 Morris & Ritchie Associates in January 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: 29G4 & 29G5
- 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-A, Part V, 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.
- SHC Elevations shown are at the Property lines.
- Quantity Stormwater Management for section 4, area 5 is provided by three facilities; The Refurbished SWM pond #1 South of Linden Linthicum Lane (F-96-89), the Culvert at Great Star Dr. (F-96-10) and SWM pond #4 in section 4, area 4 (F-96-130) Quality Management for this section will be provided by three facilities: a Forbay North of SWM pond #1 (F-96-89), a shallow Marsh facility at the end of Wild Orange Gate and an extended Detention facility within pond #4 (F-96-130). The subdivision is located in the Patuxent River area sub-basin and is a Class 1 Watershed.

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
170	5809 Wild Orange Gate

OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044

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-96-102 and/or approved Water and Sewer Plans Contract #34-3586-D.

SUBMISSION NAME	SECTION/AREA	LOTS/PARCELS
VILLAGE OF RIVER HILL	4/5	170
PLAT NO.	BLOCK NO.	ZONE
13274	1	NTSFLD
TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
35	5th	6055
WATER CODE	SEWER CODE	
1-10	6653000	
CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS		
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.		
DESIGNED	SITE DEVELOPMENT, SEDIMENT AND EROSION CONTROL PLAN LOT 170	SCALE
JE		1" = 30'
DRAWN	COLUMBIA VILLAGE OF RIVER HILL	DRAWING
BH	SECTION 4 AREA 5	1 of 1
CHECKED	FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO.
TD		99-001
DATE	FOR: WILLIAMSBURG BUILDERS 5485 HARPERS FARM ROAD Columbia, Maryland 21044	FILE NO.
1/27/99		99-001-X



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
 2-2-99

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 so deemed necessary.
 Bob Corbett
 2-3-99