

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

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

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

Conditions Where Practice Applies:

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subgrade/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing 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 adjoining 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, all loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an approved or a soil scientist and approved by the appropriate approval authority. However, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clinders, stones, slag, coarse fragments, gravel, silt, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, blackberry, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clay, ground limestone shall be applied at the rate of 4-6 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

PERMANENT SEEDING NOTES

APPLY TO GRADES OR CHANNELS ARE SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT SEED-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: Loosen upper three inches of soil by rolling, disking or other suitable means before seeding, if not previously done.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - apply 2 tons per acre dolomitic limestone (92 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 uniform fertilizer (9 lbs./1000 sq.ft.).
- Alternative - 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 periods March 1 thru April 30, and August 1 thru October 15, seed with 80 lbs. per acre (1.4 lbs./1000 sq.ft.) of uncoated small grain straw immediately after seeding. Another match immediately after application using match anchoring tool or 218 gallons per acre (5 lbs./1000 sq.ft.) of emulsified asphalt on full grass. On slopes 3 feet or higher, use 348 gallons per acre (8 lbs./1000 sq.ft.) for anchoring.

SEEDING: For periods March 1 thru April 30, and August 1 thru October 15, seed with 2 1/2 tons per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of seeding legumes (0.7 lbs./1000 sq.ft.). For the period August 15 thru October 15, seed with 3 lbs. per acre of seed anchored straw mulch and seed as soon as possible.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 80 lbs./1000 sq.ft.) of uncoated small grain straw immediately after seeding. Another match immediately after application using match anchoring tool or 218 gallons per acre (5 lbs./1000 sq.ft.) of emulsified asphalt on full grass. On slopes 3 feet or higher, use 348 gallons per acre (8 lbs./1000 sq.ft.) for anchoring.

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

TEMPORARY SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by rolling, disking or other suitable means before seeding, if not previously done.

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 August 1 thru October 15, seed with 2 1/2 tons per acre of annual ryegrass (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of seeding legumes (0.7 lbs./1000 sq.ft.). For the period August 15 thru October 15, seed with 3 lbs. per acre of seed anchored straw mulch and seed as soon as possible.

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

SEEDING AND EROSION CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Planning and Zoning, and the Maryland Department of Transportation, before any construction activity commences.
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within 31 days of the date of disturbance or graded areas on the project.
- All sediment traps/basins shown must be fenced and warning signs placed around them. The traps/basins shall be installed in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for permanent seedings, and temporary seedings and reseedings.
- Temporary stabilization with mulch shall only be done when recommended seeding rates 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:	1.26 Acres
Area to be seeded or planted:	0.24 Acres
Area to be vegetatively stabilized:	0.88 Acres
Total Area:	1.12 Acres
Total Erosion Control:	0.24 Acres
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be provided on the same day.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the Howard County Department of Planning and Zoning, and the Maryland Department of Transportation, is required for the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other grading or stabilization practices may not be authorized until the initial approval by the inspection agency is made.
- Trenches for the construction of utilities shall be backfilled and stabilized within one working day, or is limited to three pipe lengths.
- The total amount of earth site = 0.24 Acres
- The total amount of super site area = 0.88 Acres
- The total amount of silt fence = 221 LF

* It is the responsibility of the contractor to identify the spot/narrow area 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.	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.	14
5. Construct structures, ditches and driveways.	14
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
8. Delay construction of houses on lots.	N/A

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.

Richard J. [Signature] 1-17-01
DATE



CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 BALT. • (301) 621-8100 WASH.

DESIGNED PC	SEDIMENT EROSION CONTROL LOTS 43 THRU 46	SCALE 1" = 30'
DRAWN ZAH	RAUSCH PROPERTY	DRAWING 2 of 2
CHECKED Gme	TAX MAP 37 PARCEL 95 FIRST (1st) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 00-132
DATE 12-7-00	FOR: PATRIOT HOMES P.O. BOX 1018 Columbia, Maryland 21044	FILE NO. 00-1320E

APPROVED: DEPARTMENT OF PLANNING & ZONING

1/31/01 DATE

2/1/01 DATE

2/7/01 DATE

Reviewed for HOWARD S.C.D.

Signature: [Signature] 1/29/01

Signature: [Signature] 1/29/01

Signature: [Signature] 1/29/01

DEVELOPER'S/BUILDER'S CERTIFICATE

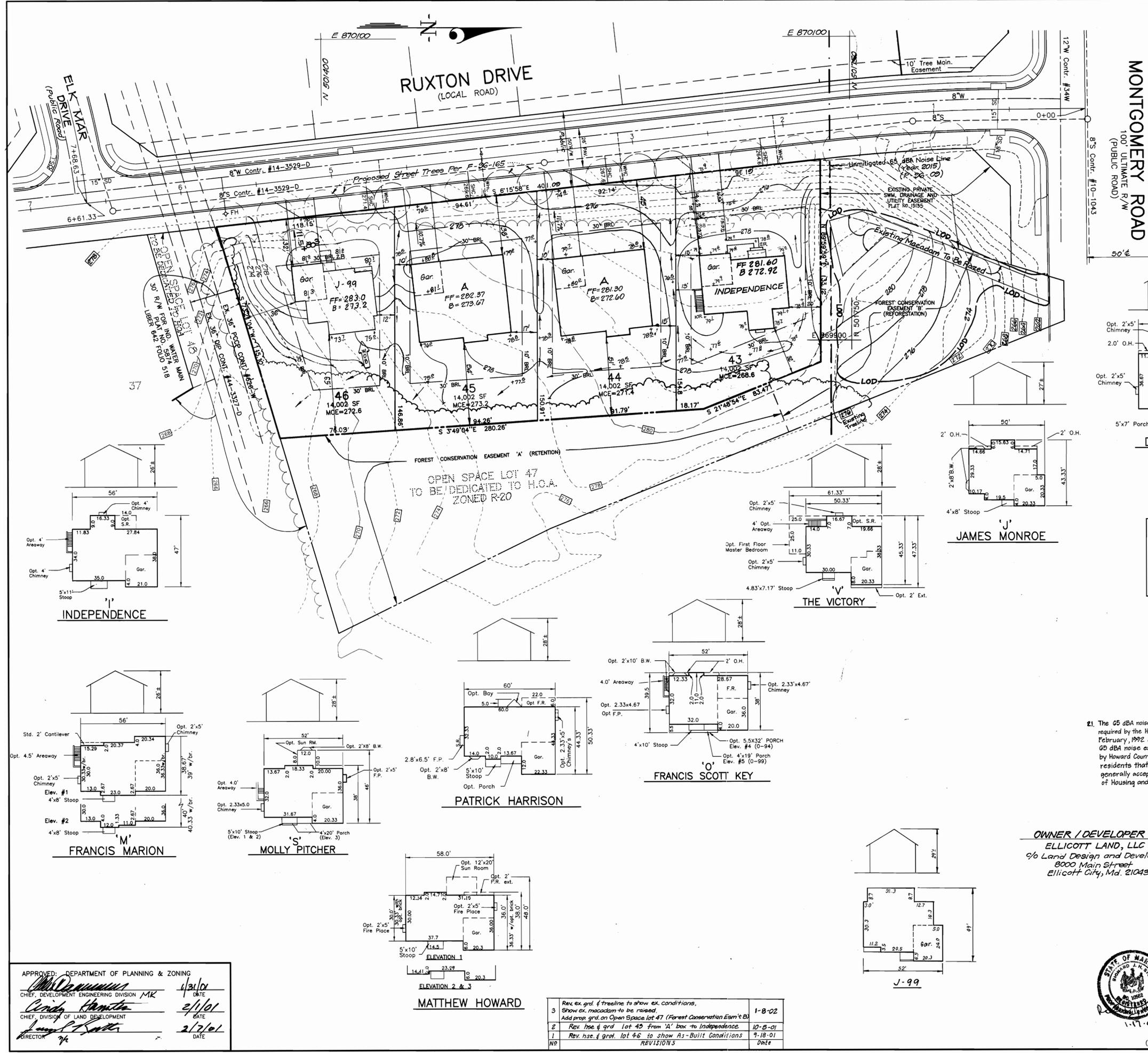
"I/we certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment approved Training 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: [Signature] 12/7/00

Signature: [Signature] 12/7/00

OWNER / DEVELOPER

ELLCOTT LAND, LLC
c/o Land Design and Development, Inc.
8000 Main Street
Ellicott City, Md. 21043



LEGEND

- CONTOUR INTERVAL: 2 FT.
- EXISTING CONTOUR: Dashed line
- PROPOSED CONTOUR: Solid line
- DIRECTION OF DRAINAGE: Arrow
- WALK OUT BASEMENT: Symbol
- SPOT ELEVATION: Number
- STABILIZED CONSTRUCTION ENTRANCE: Symbol
- EROSION CONTROL MATING: Symbol
- SILT FENCE: Symbol
- LIMIT OF DISTURBED AREA: Dashed line
- TREE PROTECTION FENCE: Symbol
- EXISTING TREES TO REMAIN: Symbol

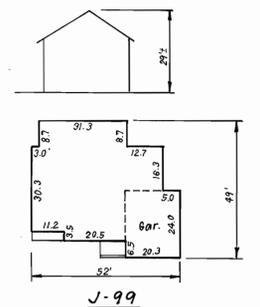
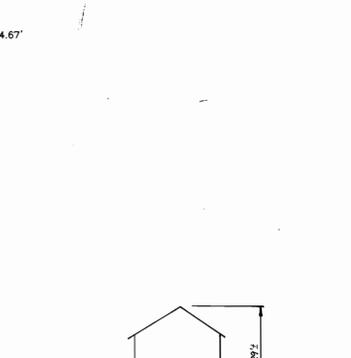
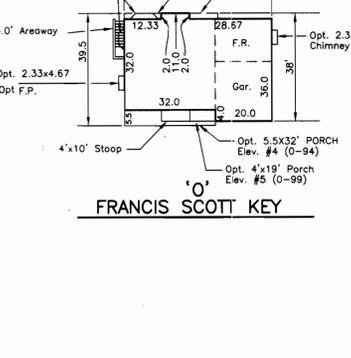
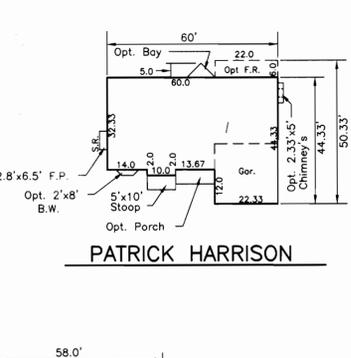
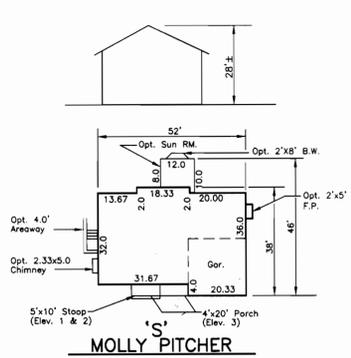
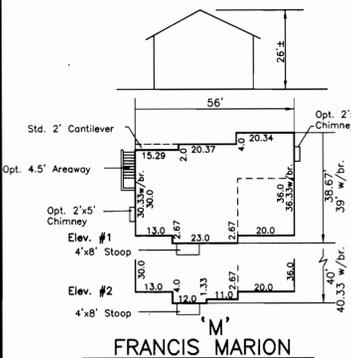
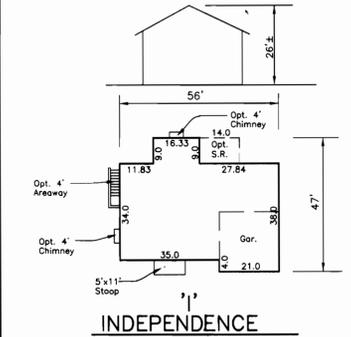
BENCHMARKS:

- #1 Elevation 291.93 N 501,966.231 E 868,453.612
- #2 Elevation N/A N 501,884.354 E 869,482.835

VICINITY MAP
Scale: 1"=2000'

The vicinity map shows the project location relative to Montgomery Road, Ruxton Drive, and other local roads. It also shows the zoning boundary and the location of the site.

- VICINITY MAP**
- Subject property is zoned: R-20 per 10-18-93 Comprehensive Zoning Plan.
 - The total area included in this submission is: 1.26 Acres.
 - The total number of lots included in this submission is: 4.
 - Improvement to property: Single Family Detached.
 - SHC Elevation's shown are at the Property Line.
 - Department of Planning and Zoning reference file numbers are: S-94-347-84-160; F-94-54; F-96-08; F-96-165; SDP-98-49; F98-174; F-00-02.
 - Utilities shown as existing are taken from approved Water and Sewer plans Contract # 4-3529-D, approved Road Construction Plans F-96-165.
 - 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 F-96-165 prepared by Mildenberg, Boender & Assoc., Inc in May 1997.
 - 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.: 2645005-R and 2645006-R.
 - 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-6.05.
 - Stormwater Management is provided by Extended Detention and Bio Retention. Facilities are Privately owned and maintained, per F-96-165.
 - The landscaping requirements have been met by preserving existing vegetation.
 - In accordance with section 128.a.1.b.&c. of zoning regulations, bay windows or chimneys not more than 16 feet in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 10 feet into the front or rear setbacks.
 - No clearing, grading or construction is permitted within Wetland and Stream Buffers or Forest Conservation Easements.
 - Stormwater management is provided per F-96-165.
 - This plan complies with the requirements of Section 16.1200 of the Ho. Co. Code for Forest Conservation By-Use Site Forest Retention and Reforestation, and the payment of a Fee-In-Lieu.
Area of Ex. Forest Conservation from Lot 40 = 0.30 Ac. ± (To Be Relocated) Area of Reforestation = 0.30 Ac. ±
Fee-In-Lieu For 0.07 Ac. ± Reforestation = \$ 914.76 Paid to Ho. Co. Forest Conservation Fund

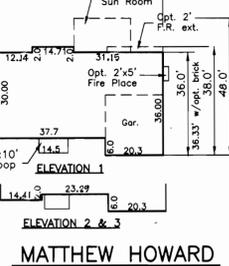


APPROVED: DEPARTMENT OF PLANNING & ZONING

Chief, Development Engineering Division MK 1/31/01 DATE

Chief, Division of Land Development 2/1/01 DATE

Director 2/2/01 DATE



REVISIONS

3	Rev. ex. grad. if treeline to show ex. conditions. Show ex. macadam to be raised. Add prop. grad. on Open Space lot 47 (Forest Conservation Eas't B)	1-8-02
2	Rev. hse. & grad. lot 45 from 'A' box to Independence	10-5-01
1	Rev. hse. & grad. lot 46 to show As-Built Conditions	9-18-01

OWNER / DEVELOPER
ELLICOTT LAND, LLC
% Land Design and Development, Inc.
8000 Main Street
Ellicott City, Md. 21043

21. The 65 dBA noise contour line drawn on this subdivision plan is required by the Howard County Design Manual, chapter 5, revised February, 1992 and cannot be considered to exactly locate the 65 dBA noise exposure. The 65 dBA noise line was established by Howard County to alert developers, builders and future residents that areas beyond this threshold may exceed generally accepted noise levels established by U.S. Dept. of Housing and urban development.

SHEET INDEX

DESCRIPTION	SHEET NO.
SITE DEVELOPMENT PLAN	1 OF 2
SEDIMENT & EROSION CONTROL PLAN	2 OF 2

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
RAUSCH PROPERTY	# 37	43-46
PLAT NO. 14473	BLOCK NO. 6	ZONE R-20
TAX MAP NO. 37	ELECTION DIST. FIRST	Census Tract # 0011.01
WATER CODE D04	SEWER CODE 2152700 AND 2150562	

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