

LAYOUT 1/31/07 (KW) INSP 4 7/24/07 (KW)
 INSP 2 2/1/07 (KW) INSP 5 _____
 INSP 3 2/2/07 (KW) INSP 6 _____

ISSUE DATE: 1/11/07

APPROVAL DATE: 7/24/07 (KW)

P 526179

A 550225-E

PERMIT
INDEXED
TAX ID #04-365976
ON-SITE SEWAGE DISPOSAL SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
BUREAU OF ENVIRONMENTAL HEALTH

K+K Excavating IS PERMITTED TO INSTALL ALTER
 ADDRESS: 15882 Frederick Rd. PHONE NUMBER: 410-442-1336
 SUBDIVISION: Vineyards @ Cattail Creek LOT NUMBER: 12
 ADDRESS: 15310 Leondina Drive PROPERTY OWNER: Mannarelli
 SEPTIC TANK CAPACITY (GALLONS): 1500 OUTLET BAFFLE FILTER REQUIRED
 PUMP CHAMBER CAPACITY (GALLONS): 1500 COMPARTMENTED TANK REQUIRED
 NUMBER OF BEDROOMS: 5
 SQUARE FEET PER BEDROOM: 180
 LINEAR FEET OF TRENCH REQUIRED: 186 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 3.0 feet below original grade. Bottom maximum depth 7.0 feet below original grade. Effective area begins at 5.0 feet below original grade. 4.0 feet of stone below distribution pipe.
LOCATION:	Install the septic system as shown on the approved building permit plan, <i>unless directed by inspector SP</i>
NOTES:	Basement service by gravity.

PLANS APPROVED: Sara Fegel DATE: 5/19/06

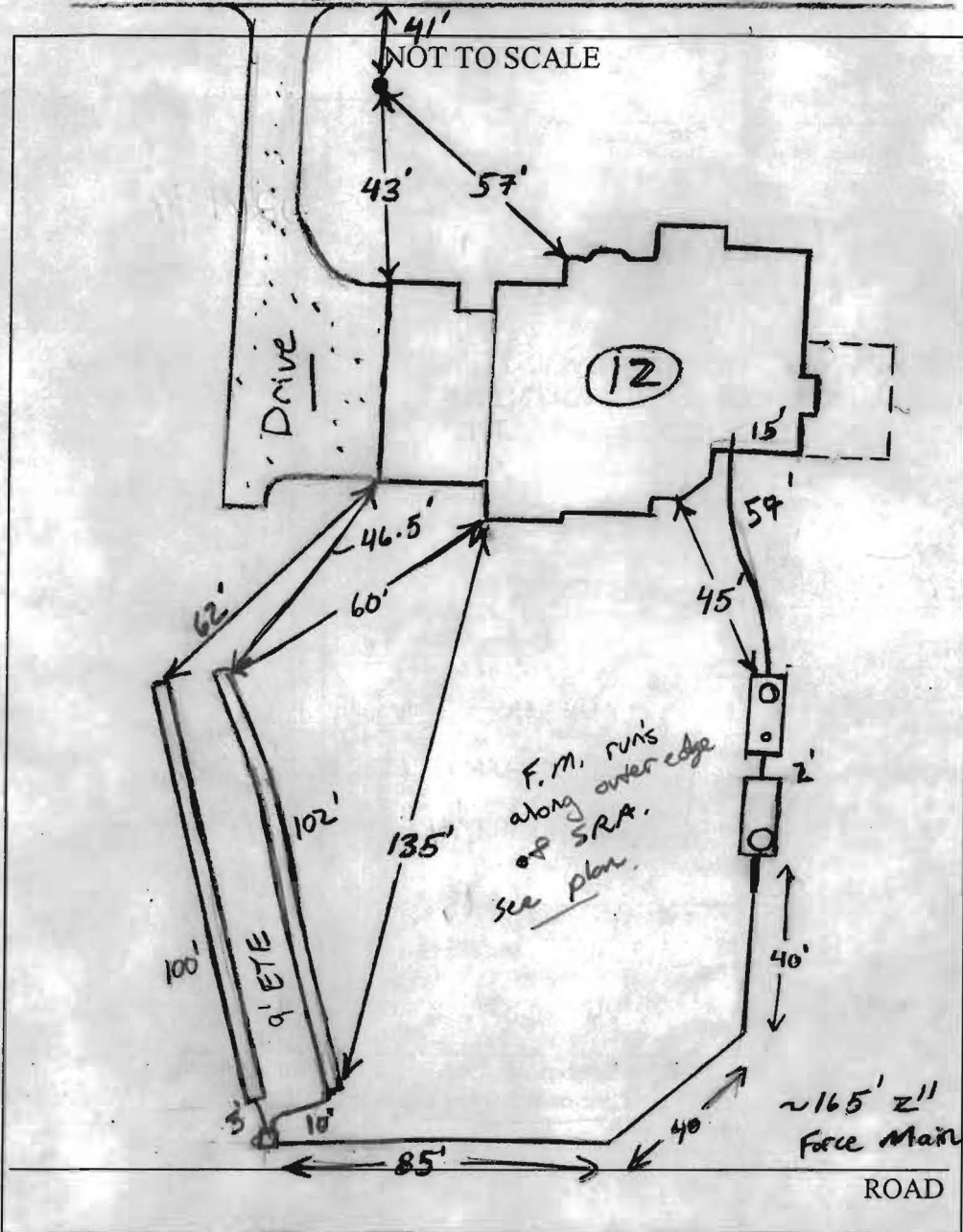
NOTES: PERMIT VOID AFTER 2 YEARS
 CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION INSPECTION FOR ALL INSTALLATIONS
 WATERTIGHT SEPTIC TANKS REQUIRED
 ALL PARTS OF SEPTIC SYSTEM SHALL BE 100 FEET FROM ANY WATER WELL UNLESS SPECIFICALLY AUTHORIZED
 MANHOLE RISERS REQUIRED ON ALL SEPTIC TANKS AND PUMP CHAMBERS UNLESS SPECIFICALLY AUTHORIZED
 CONTRACTOR RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE REGULATIONS, GUIDELINES AND THE TERMS OF THIS PERMIT

NEITHER THE HOWARD COUNTY COUNCIL NOR THE HEALTH DEPARTMENT IS RESPONSIBLE FOR THE SUCCESSFUL OPERATION OF ANY SYSTEM PERMITTEE RESPONSIBLE FOR OBTAINING FINAL APPROVAL ON THIS PERMIT CALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM

BUILDING PERMIT SIGNED AND RETURNED

A550225-E

LEONARDINA DR.



TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3'	3'	7'
NUMBER OF TRENCHES		2
TOTAL LENGTH		202'
ABSORPTION AREA		606 + SW
DISTRIBUTION BOX LEVEL		
DISTRIBUTION BOX Baffle		Turn Down
DISTRIBUTION BOX PORT		Yes / side of Box

SEPTIC TANK DATA		
SEPTIC TANK 1 LEVEL		Yes
Major Bros 2 cop	CAPACITY	1500 GAL
	SEAM LOC	Top
	TANK LID DEPTH	3'
	BAFFLES	Yes
	BAFFLE FILTER	—
	MANHOLE LOC	Front
	6" PORT LOC	Rear
	WATERTIGHT TEST	—
SEPTIC TANK 2 LEVEL		Yes
	CAPACITY	1500 GAL
	SEAM LOC	Top
	TANK LID DEPTH	3.5'-4'
	BAFFLES	Front
	BAFFLE FILTER	—
	MANHOLE LOC	Rear
	6" PORT LOC	None
	WATERTIGHT TEST	—

PRE-CONSTRUCTION 1/31/07 Contractor to run force main down towards lower left corner of SRA. Set tanks per plan.

INSTALLATION Install 2 x 100' trenches on contour running towards house. May lose some of easement. OK (KW)

2/1/07 2" Force main run to D box. Top 100' trench installed. Starting 2nd 100' trench. (KW) 2/2/07 2nd trench complete. 3' inlet on both trenches. bottoms @ 7'. levelled in D box. Roughly leveled. Contractor ran out of water. OK to Backfill. Need Pump/Alarm test (KW) 7/24/07 P/A test OK. Sys. complete. (KW)

FINAL INSPECTOR K. Wall DATE OF APPROVAL 7/24/07

BUILDING PERMIT SIGNED

LOT 9
JEFFREY A. LYONS
TERRY M. LYONS
LIBER 4192 FOLIO 43

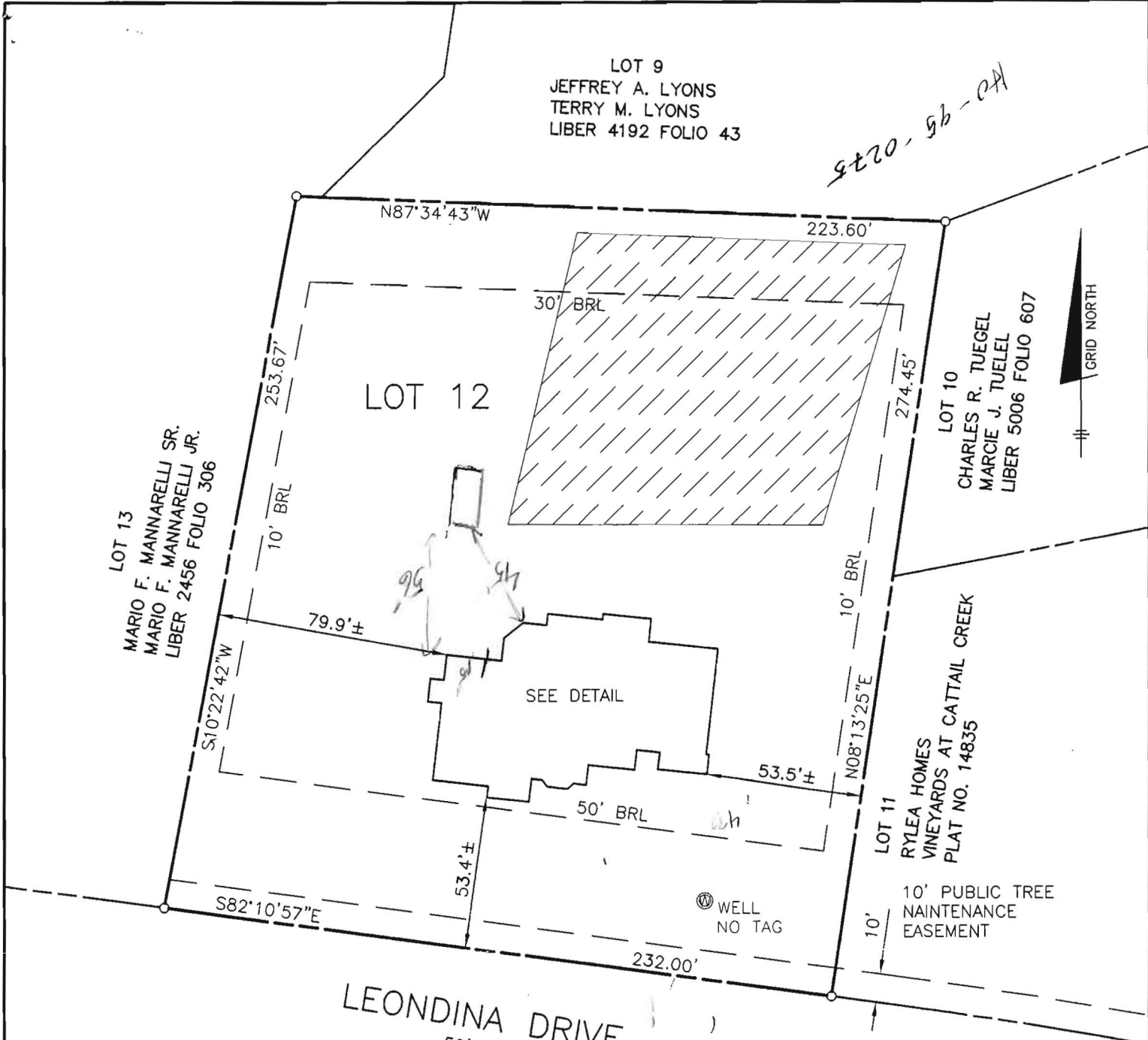
9220-96-04

LOT 13
MARIO F. MANNARELLI SR.
MARIO F. MANNARELLI JR.
LIBER 2456 FOLIO 306

LOT 10
CHARLES R. TUEGEL
MARCIE J. TUEGEL
LIBER 5006 FOLIO 607

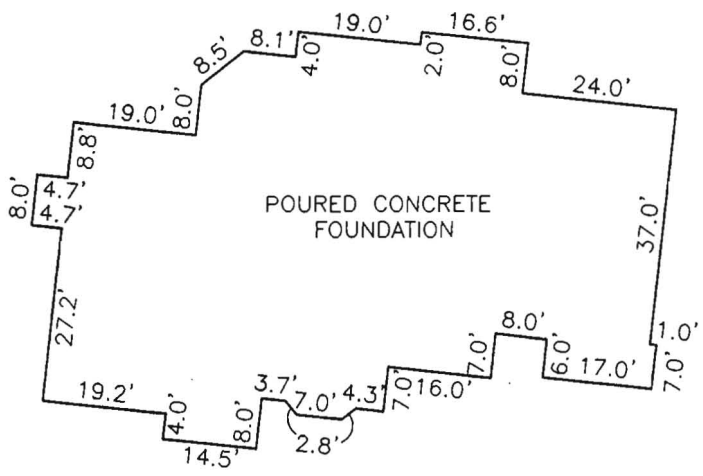
LOT 11
RYLEA HOMES
VINEYARDS AT CATTAIL CREEK
PLAT NO. 14835

10' PUBLIC TREE
MAINTENANCE
EASEMENT



LEONDINA DRIVE
50' RW

*wall check
ok SF
1/11/07*



FOUNDATION DETAIL
SCALE: 1" = 30'

TOP OF FOUNDATION WALL ELEVATION = 476.7'
OFFSET DIMENSIONS TO PROPERTY LINES ARE ± 0.1'
THE ORIGINAL SIGNATURE AND STAMP ARE NOT BLACK

SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DIMENSIONS OF THE BUILDING WALLS SHOWN HEREON ARE CORRECT; THAT THEY ARE BASED ON A FIELD RUN SURVEY PERFORMED BY BENCHMARK ENGINEERING, INC. ON

Stephan Jalon 9/22/06

STEPHAN JALON
PROFESSIONAL LAND SURVEYOR
MD REG. No. 10726
FOR BENCHMARK ENGINEERING, INC.
MD REG. No. 351
FEMA FIRM No. 240044 0020 B
ZONE: C
DATED: 12/04/86



BENCHMARK
ENGINEERS • LAND SURVEYORS • PLANNERS
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE • SUITE 418
ELLICOTT CITY, MARYLAND 21043
phone: 410-465-6105 • fax: 410-465-6644
www.bei-civilengineering.com

WALL CHECK
VINEYARDS AT CATTAIL CREEK
LOTS 11 THRU 28
PLAT No. 14835
LOT No. 12

15310 LEONDINA DRIVE

4TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

FIELD OBS. BY KD
COMP. BY EWF
DRAWN BY EWF SCALE: 1" = 50' DATE: 09/21/06

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

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

Purpose
To provide a suitable medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials 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 vegetative 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. If, 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 as 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 soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, 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, quack grass, Johnson grass, nutsedge, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 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.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
- Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices such as diversion, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
 - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
 - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
 - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. C-21-2
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribed amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal time application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institute, Revised 1973.



PERMANENT SEEDING NOTES

Apply to graded or cleared area 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 on the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sf).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through February 28, protect site by Option 1) 2 tons per acre of 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

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

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be re-disturbed where a short-term 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: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual ryegrass (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

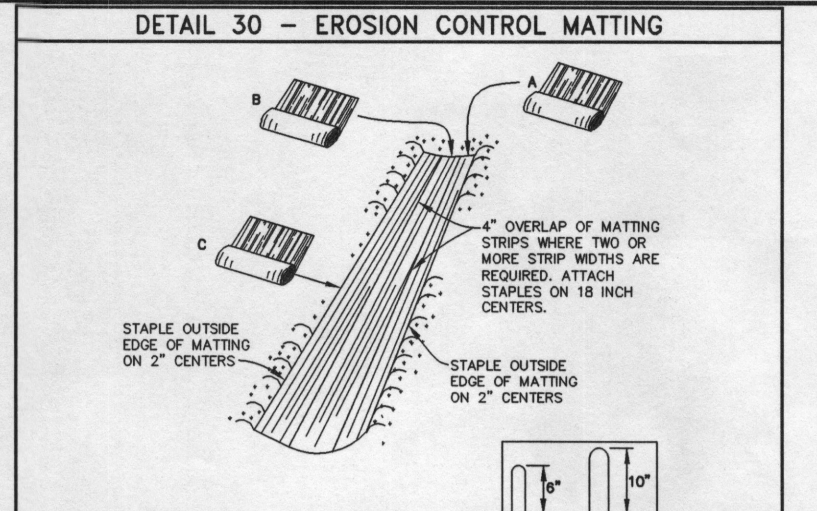
Refer to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

PLAN VIEW
SCALE: 1" = 50'

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections and Permits, Sediment Control Division 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 most current "Maryland Standards and Specifications for Soil Erosion and Sediment Control", and revisions thereto.
3. Following initial soil disturbances or re-disturbance, 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 calendar 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 perimeter 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 "1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control" for Permanent Seeding (Sec. 51) Sod (Sec. 54), Temporary Seeding (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: 1.38 Ac.±
Area to be Disturbed: 0.9 Ac.±
Area to be roofed or paved: 0.3 Ac.±
Area to be vegetatively stabilized: 0.6 Ac.±
Total Cut: 491 C.Y. SEE NOTE 12
Total Fill: 307 C.Y. SEE NOTE 12
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 controls 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. Trenches for the construction of utilities is limited to three pipe lengths or that which can be back filled and stabilized within one working day, whichever is shorter.
12. Quantities and estimates shown are for sediment control purposes only. Contractor shall prepare his/her own quantity estimates to his/her satisfaction.

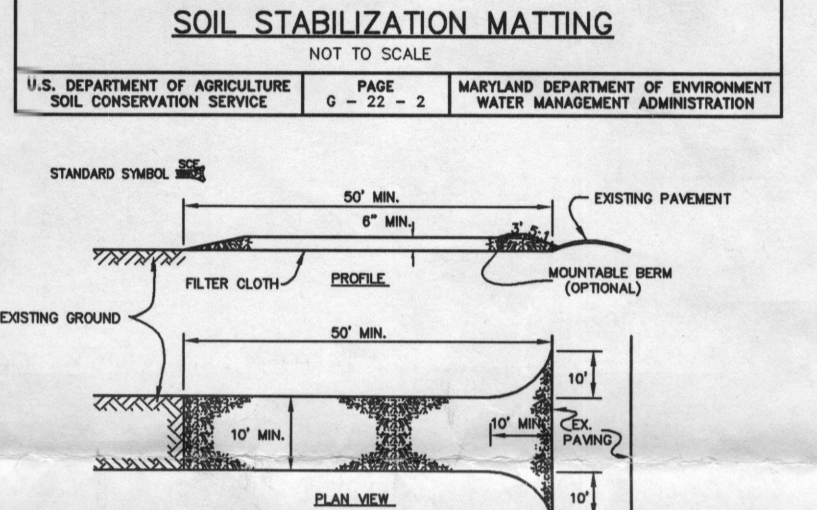
* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.



CONSTRUCTION SPECIFICATIONS

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 4" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO COMPRESS TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH SPACING BETWEEN STAPLES 6".
2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
3. BEFORE STAPLING OVER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
4. STAPLES SHALL BE PLACED 2' APART WITH 4' ROWS FOR EACH STRIP, 2' OUTER ROWS, AND 2' ALTERNATING ROWS DOWN THE CENTER.
5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SIMILAR FASHION REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
6. THE DISCHARGE END OF THE MATTING LINDER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

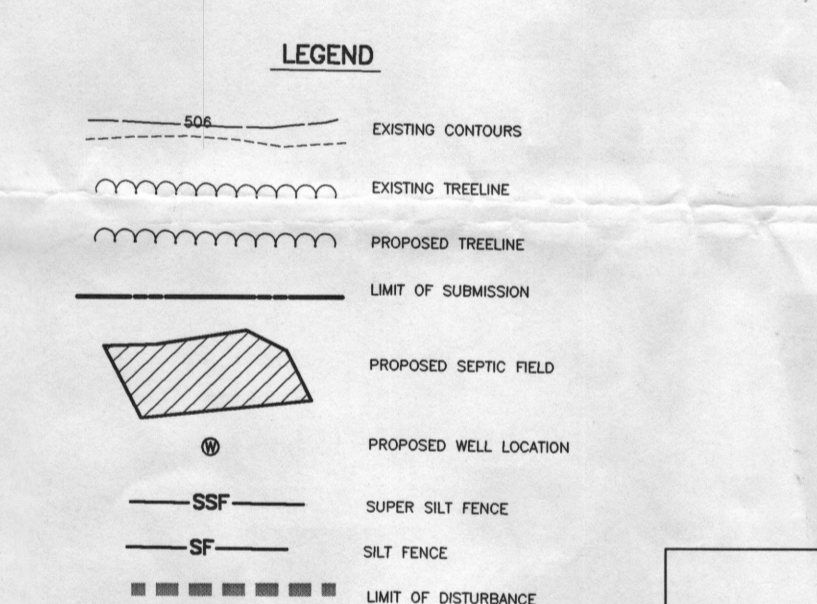
NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEY-IN.



CONSTRUCTION SPECIFICATIONS

1. Stone size - Use #2 stone or equivalent or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum is required).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a maintenance berm with 3:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and/or cleanup of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an approved sediment trapping device. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

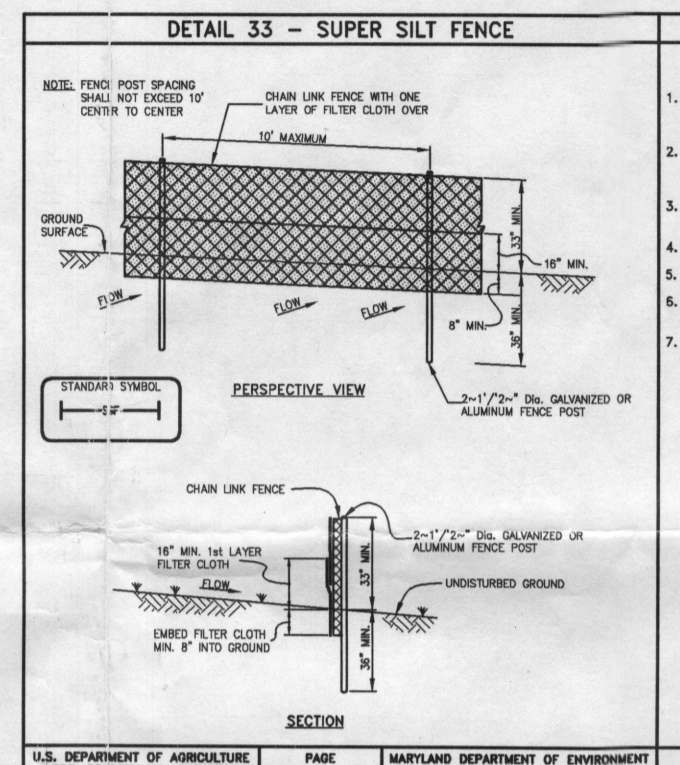
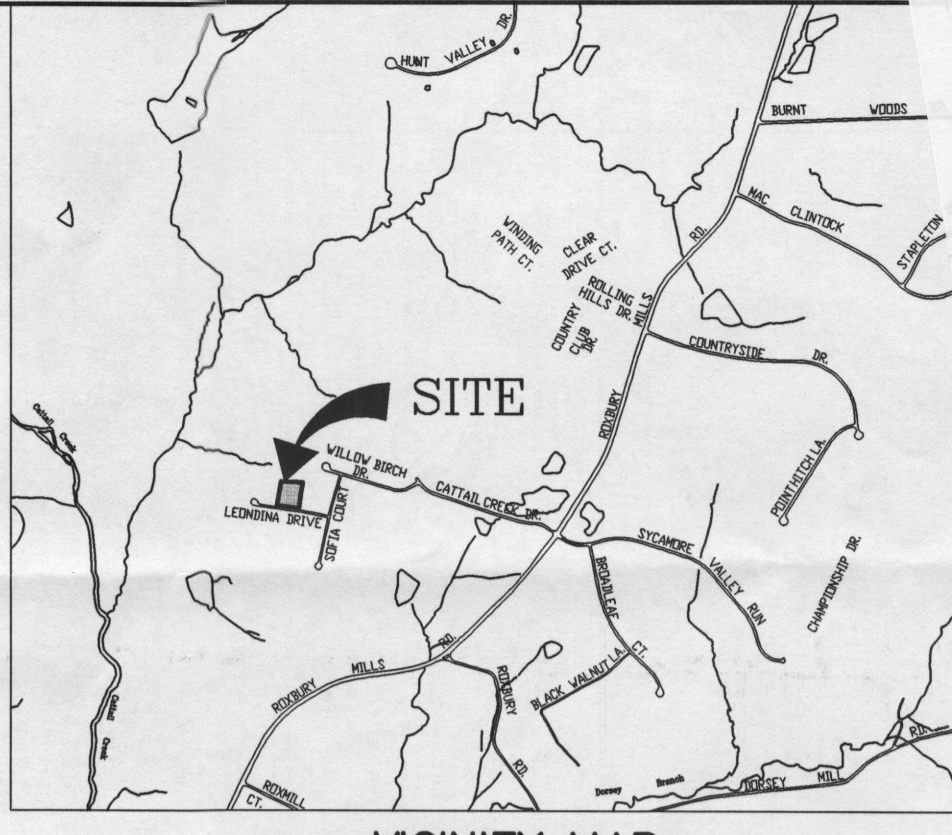


NOTES:

1. THE LOT SHOWN HEREON COMPLIES WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
2. THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWERAGE DISPOSAL IMPROVEMENTS OF AND NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWER IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS FOR ENCROACHMENT INTO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED SEWERAGE EASEMENT PLAT SHALL NOT BE NECESSARY.
3. UNLESS OTHERWISE SHOWN, NO WELLS OR SEWERAGE EASEMENTS ARE LOCATED WITHIN 100 FEET OF THE PROPERTY.
4. TOPOGRAPHY SHOWN HEREON IS FROM THE SIGNED PERCOLATION CERTIFICATION PLAN PREPARED BY FISHER, COLLINS AND CARTER, INC. DATED MARCH 10, 1993.
5. FIELD TOPOGRAPHY WAS PREPARED BY BENCHMARK ENGINEERING, INC. DATED JULY 2003.
6. EXACT LENGTH OF SEPTIC TRENCHES ARE BE DETERMINED BY THE HEALTH DEPARTMENT AT THE TIME OF PERMIT ISSUANCE.
7. SPOIL FROM THE TRENCHING OF THE SEPTIC AREA IS TO BE PLACED ON THE UPHILL SIDE OF THE EXCAVATION.
8. SELECTIVE CLEARING OF TREES MAY TAKE PLACE IN THE SEPTIC RESERVE AREA AND AROUND THE SEPTIC PIPE AND TANK.
9. THE BOUNDARY INFORMATION, SEPTIC LOCATION AND WELL LOCATION ARE BASED ON INFORMATION OBTAINED FROM PLAT NUMBER 14835, VINEYARDS AT CATTAL CREEK.
10. SEPTIC TANK FOR THIS LOT TO BE 1,250 GALLONS.
11. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-0275, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC. AND IS ACCURATELY SHOWN.

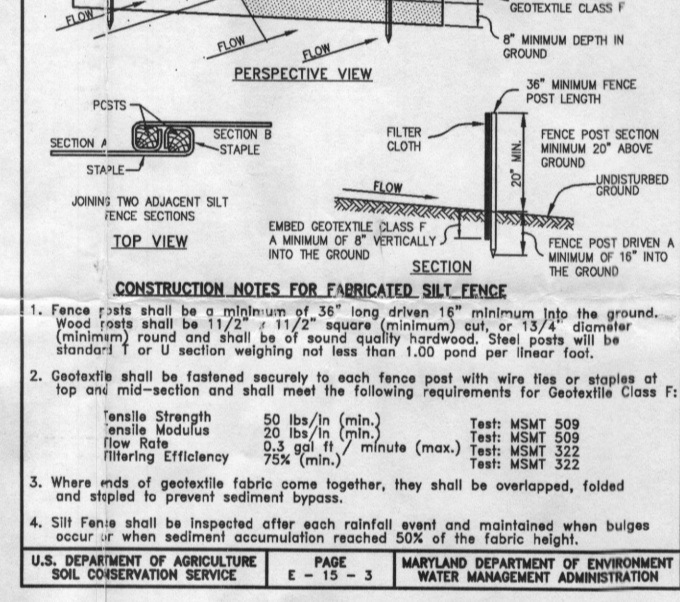
SEQUENCE OF CONSTRUCTION - INDIVIDUAL HOUSE

- DAY 1 OBTAIN GRADING PERMIT.
- DAY 2 THE CONTRACTOR(S) IS TO IDENTIFY AND MARK ANY HAZARDOUS CONDITIONS THAT MAY EXIST ON SITE, SUCH AS OVERHEAD POWERLINES, OLD WELLS, GAS LINES, ETC.
- DAY 3-4 INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, SUPER SILT FENCE, AND DRAINAGE CULVERT.
- DAY 4-10 GRADE SITE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.
- DAY 11 INSTALL EROSION CONTROL MATTING IN THE DITCHES AND SWALES.
- DAY 12-60 CONSTRUCT HOUSE, INSTALL DRIVEWAY AND UTILITIES. SPOIL FROM THE TRENCHING OF THE SEPTIC AREA IS TO BE PLACED ON THE UPHILL SIDE OF THE EXCAVATION.
- DAY 61-63 STABILIZE ANY REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDBED NOTES.
- DAY 64-65 UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES, PERMANENTLY STABILIZE AS REQUESTED.



CONSTRUCTION SPECIFICATIONS

1. Fencing shall be 42" in height and constructed in accordance with the general Manufacturer's instructions for Chain Link Fencing. The specification for 4" Chain Link Fencing shall be used.
2. Chain Link Fencing shall be fastened securely to the fence posts with wire ties. The fence posts shall be driven into the ground and shall be spaced 20' apart.
3. Filter cloth shall be fastened securely to the chain link fence with the spaced every 24" at the top and bottom.
4. Filter cloth shall be embedded a minimum of 6" into the ground.
5. When the sections of filter cloth meet each other, they shall be overlapped by 2" and folded.
6. Maintenance shall be performed or needed and all failures repaired when "top" develops in the silt fence, or when silt reaches 50% of fence height.
7. Filter cloth shall be fastened securely to each fence post with wire ties or staples of the size and spacing that meet the following requirements for Chain Link Fencing:
Fence Length 50 ft./in. (min.)
Fence Width 75 ft./in. (min.)
Filtering Efficiency 75% (min.)
Fence Post Spacing 20 ft. (min.)
Fence Post Diameter 1 1/2" (min.)



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Fence posts shall be a minimum of 16" long when 16" intervals into the ground. Posts shall be spaced 20' apart. Posts shall be driven into the ground and shall be spaced 20' apart.
2. Fabricate shall be fastened securely to each fence post with wire ties or staples of the size and spacing that meet the following requirements for Chain Link Fencing:
Fence Length 50 ft./in. (min.)
Fence Width 75 ft./in. (min.)
Filtering Efficiency 75% (min.)
Fence Post Spacing 20 ft. (min.)
Fence Post Diameter 1 1/2" (min.)
3. Where wire connections are used, 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 in chain sediment material 50% of fence height.

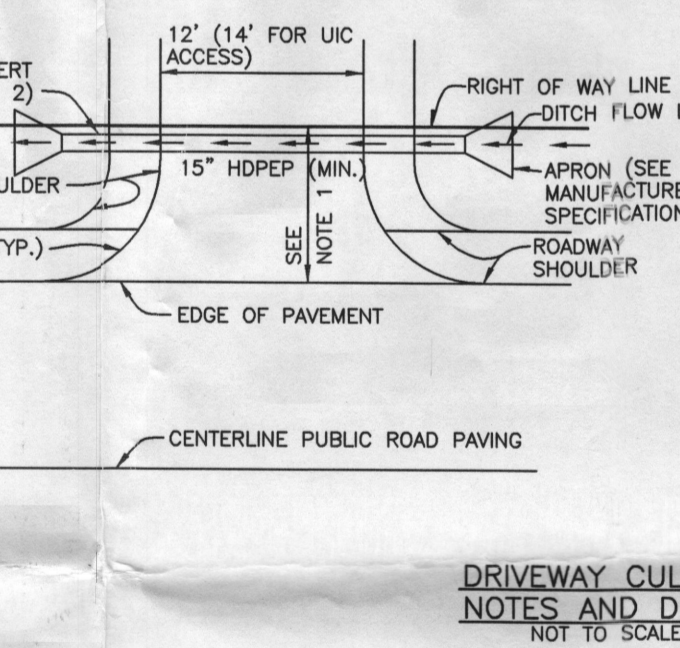
SILT FENCE DESIGN CRITERIA

Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Minimum)
0 - 10%	0 - 100'	unlimited
10 - 20%	101 - 511'	1,000 feet
20 - 33%	512 - 311'	1,000 feet
33 - 50%	312 - 101'	500 feet
50% +	21 +	250 feet

SILT FENCE DESIGN CRITERIA

Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Minimum)
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of a 1:1 or 2:1 slope and sandy soils (USDA general classification system, and Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.



NOTES:

1. DRIVEWAY MUST BE PAVED FROM EDGE OF PUBLIC ROAD TO RIGHT OF WAY LINE USING STANDARD PAVING SECTION P-1-45 SHOWN ON STD. NO. R-201 OR ALTERNATE SECTION EQUAL TO OR BETTER THAN P-1-45 APPROVED D.P.W.
2. DRAINAGE CULVERT SHALL BE SIZED FOR A 10 YEAR FREQUENCY STORM.
3. DRIVEWAY CULVERT PIPES TO BE 15" HDPE OR GREATER TO PREVENT BLOCKING. HDPE APRONS TO BE INSTALLED AT EACH END OF THE DRIVEWAY CULVERT AND SIZED PER MANUFACTURER'S SPECIFICATIONS. IF A LARGER PIPE IS REQUIRED, DITCH INVERT CAN BE LOWERED TO PROVIDE MIN. DITCH GRADIENT OF 0.5% AND CLEARANCE SHOWN.
4. SWALE FLOW MAY BE PROVIDED OVER DRIVEWAY IF LOCATED AT OR NEAR THE CREST OF A VERTICAL CURVE ON THE PUBLIC ROAD WHERE QUANTITY OF FLOW IS SMALL, AS APPROVED BY D.P.W.
5. THE IN GRADE OF PRIVATE DRIVEWAY SHALL NOT EXCEED 14%.
6. SEE HOWARD COUNTY STANDARD DETAIL R-6.06 FOR ADDITIONAL INFORMATION.

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
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BUILDER: JAMES H. SELFRIDGE BUILDERS
4781 TEN OAKS ROAD
DAYTON, MARYLAND 21036
410-531-8930

PROJECT: VINEYARDS AT CATTAL CREEK LOT 12
LOCATION: LEONDINA DRIVE GLENWOOD, MD 21738
TAX MAP NO. 21, GRID NO. 8, PARCEL # 225
4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: GRADING PERMIT, SEDIMENT AND EROSION CONTROL PLAN

HOUSE TYPE: HENRY RESIANCE

DATE: MAY, 2006 PROJECT NO. 1936

SCALE: 1" = 50' DRAWING 1 OF 1

DESIGN: DAM DRAFT: EDD