

T \_\_\_\_\_ INSP 4 \_\_\_\_\_  
INSP 2 \_\_\_\_\_ INSP 5 \_\_\_\_\_  
INSP 3 \_\_\_\_\_ INSP 6 \_\_\_\_\_

ISSUE DATE: 2/1/2006

APPROVAL DATE: 2/9/06

# PERMIT INDEXED

TAX ID #04-316940

P 524011

A 522417

## ON-SITE SEWAGE DISPOSAL SYSTEM HOWARD COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH

Cumberland & Co., Inc IS PERMITTED TO INSTALL  ALTER

ADDRESS: 16391 A E Mullinix Road PHONE NUMBER: 301-252-1122  
301-854-6838

SUBDIVISION: \_\_\_\_\_ LOT NUMBER: \_\_\_\_\_

ADDRESS: 17201 Hardy Road PROPERTY OWNER: Cumberland Development

SEPTIC TANK CAPACITY (GALLONS): 1500 OUTLET BAFFLE FILTER REQUIRED

PUMP CHAMBER CAPACITY (GALLONS): n/a COMPARTMENTED TANK REQUIRED

NUMBER OF BEDROOMS: 4

SQUARE FEET PER BEDROOM: 210

LINEAR FEET OF TRENCH REQUIRED: 200 HOUSE SERVED BY PUBLIC WATER

TRENCHES:	Trench to be 3.0 feet wide. Inlet 4.0 feet below original grade. Bottom maximum depth 8.0 feet below original grade. Effective area begins at 6.5 feet below original grade. 4.0 feet of stone below distribution pipe.
LOCATION:	Place the distribution box at the elevation where you can get a 40' minimum trench.
NOTES:	Watch well locations.

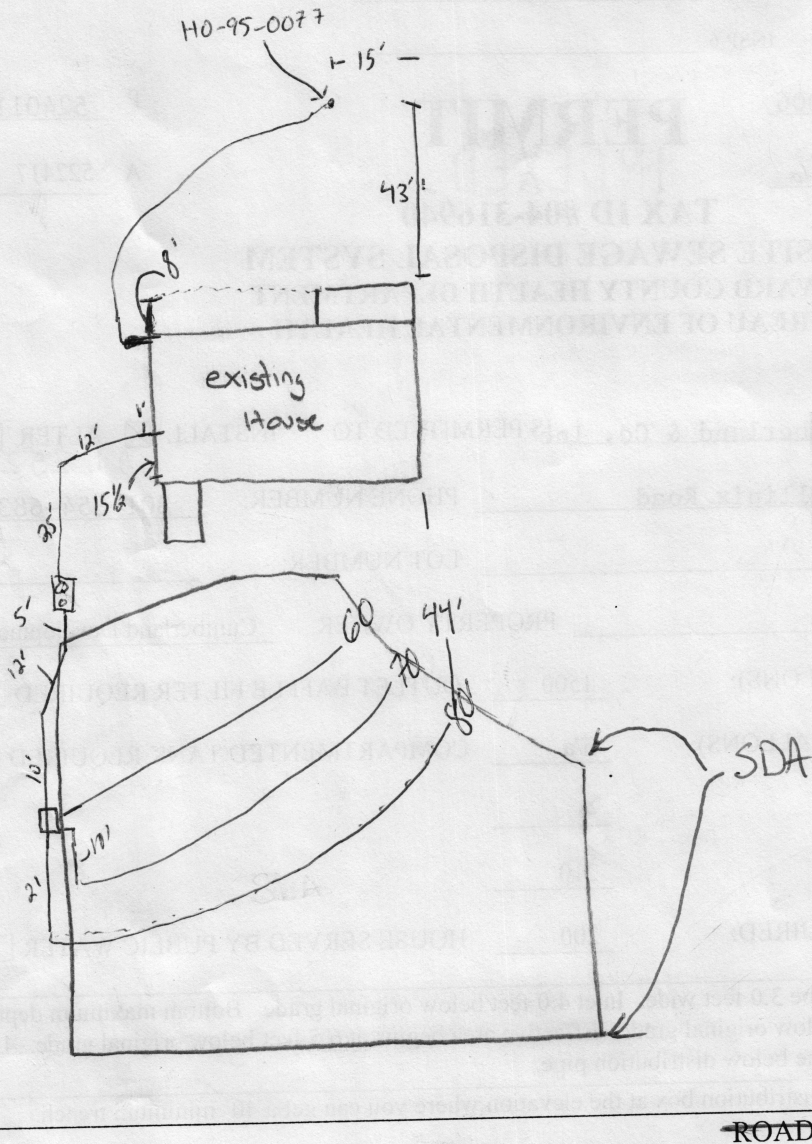
PLANS APPROVED: Kevin J. Bell Reviewed by: \_\_\_\_\_ DATE: 10/25/2005

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  
ALL 410-313-1771 FOR INSPECTION OF SEPTIC SYSTEM**

Hardy Pac

NOT TO SCALE

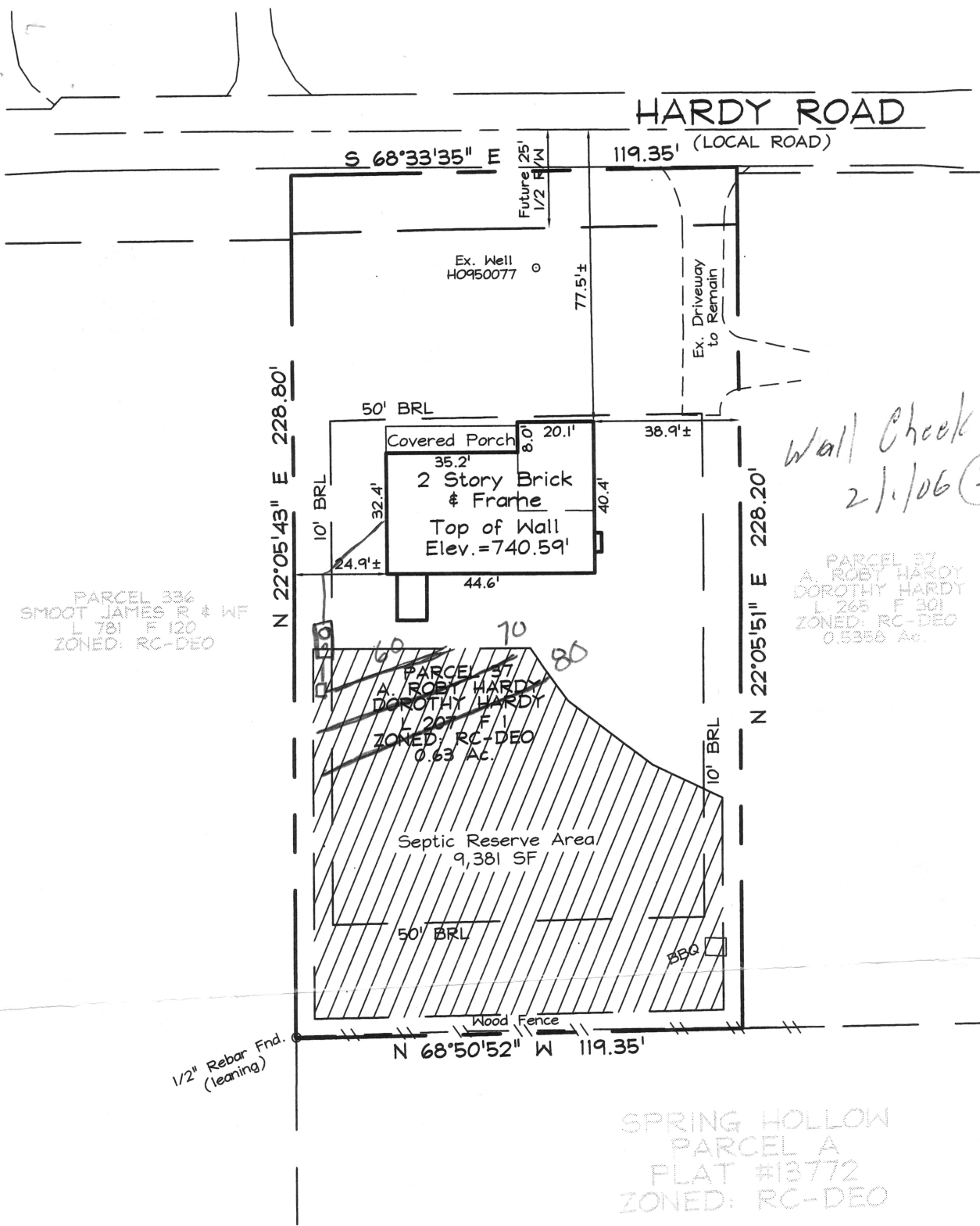


TRENCH/DRAINFIELD DATA		
WIDTH	INLET	BOTTOM
3	4	8
NUMBER OF TRENCHES	3	
TOTAL LENGTH	210	
ABSORPTION AREA	630 + side area	
DISTRIBUTION BOX LEVEL	Yes	
DISTRIBUTION BOX BAFFLE	Yes	
DISTRIBUTION BOX PORT	No	

SEPTIC TANK DATA		
SEPTIC TANK 1 LEVEL	✓	
CAPACITY	1500	GAL
SEAM LOC	TOP	
TANK LID DEPTH	1'	
BAFFLES	✓	
BAFFLE FILTER	✓	
MANHOLE LOC	front	
6" PORT LOC	Back	
WATERTIGHT TEST	N/A	
SEPTIC TANK 2 LEVEL	/	
CAPACITY	/	
SEAM LOC	/	
TANK LID DEPTH	/	
BAFFLES	/	
BAFFLE FILTER	/	
MANHOLE LOC	/	
6" PORT LOC	/	
WATERTIGHT TEST	/	

PRE-CONSTRUCTION 2/3/06 L2yout Fill over septic area  
needs to be scraped and moved. Install system more or  
 INSTALLATION less as drawn on wall check. OK for trenches  
to be installed slightly off contour to preserve room for  
3rd system. ends of trenches close to well on 2d<sup>(radius)</sup> property  
must stay > 100'. GAC 1x60', 1x70' & 1x80' to permit specs.  
2-9-06 All done per plan ok to cover all work. Sleeve for well has cut of hole only 4' ~~SD~~  
2/10/06 sleeve for well extended. OK (GAC)

FINAL INSPECTOR Gabriel King DATE OF APPROVAL 2/9/06



**LEGEND**

- F/P = FIREPLACE
- B/W = BAY WINDOW
- D/W = DRIVEWAY
- CONC = CONCRETE
- O/H = OVERHANG
- H/P = HEAT PUMP/AIR COND.
- G/M = GAS METER
- E/M = ELECTRIC METER

DIMENSIONS FROM FOUNDATION WALL TO PROPERTY LINE ARE ±0.1'

ADDRESS No.: 17197 HARDY ROAD  
TOP OF WALL ELEV. = 740.59'  
THE LOCATION DRAWING IS OF BENEFIT TO THE CONSUMER ONLY INsofar AS IT IS REQUIRED BY A LENDER OR A TITLE INSURANCE COMPANY OR ITS AGENT IN CONNECTION WITH CONTEMPLATED TRANSFER, FINANCING OR REFINANCING;

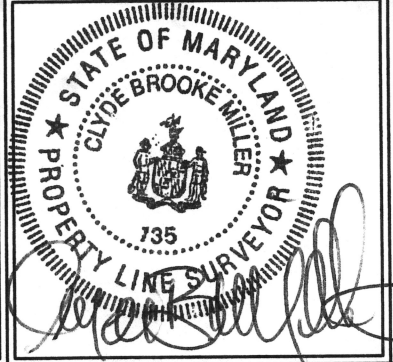
THE LOCATION DRAWING IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OR LOCATION OF FENCES, GARAGES, BUILDINGS, OR OTHER EXISTING OR FUTURE IMPROVEMENTS;

AND THE LOCATION DRAWING DOES NOT PROVIDE FOR THE ACCURATE IDENTIFICATION OF PROPERTY BOUNDARY LINES, BUT SUCH IDENTIFICATION MAY NOT BE REQUIRED FOR THE TRANSFER OF TITLE OR SECURING FINANCING OR REFINANCING.

**FSH Associates**

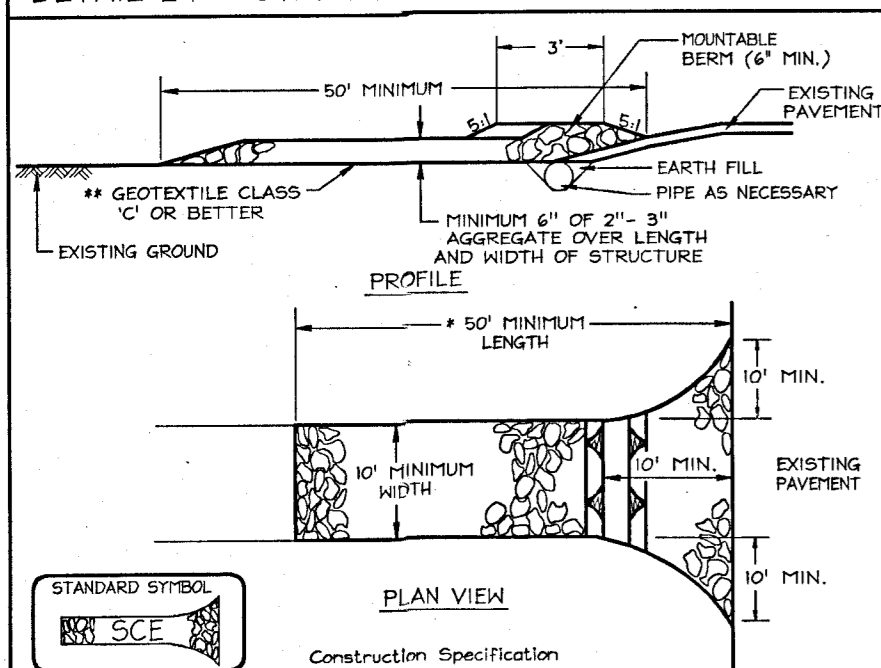
Engineers Planners Surveyors  
8318 Forrest Street Ellicott City, MD 21043  
Tel: 410-750-2251 Fax: 410-750-7350  
E-mail: info@fsha.biz

<b>WALL CHECK</b>	
FOUNDATION Update:	1/19/06
FINAL Date:	
DRAWN BY:	MD
SCALE:	1" = 40'
W.O. No.:	3378



**PARCEL 37**  
**#17197 HARDY ROAD**  
**HARDY PROPERTY**  
 TAX MAP 7 GRID 8 PARCEL 37  
 4TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

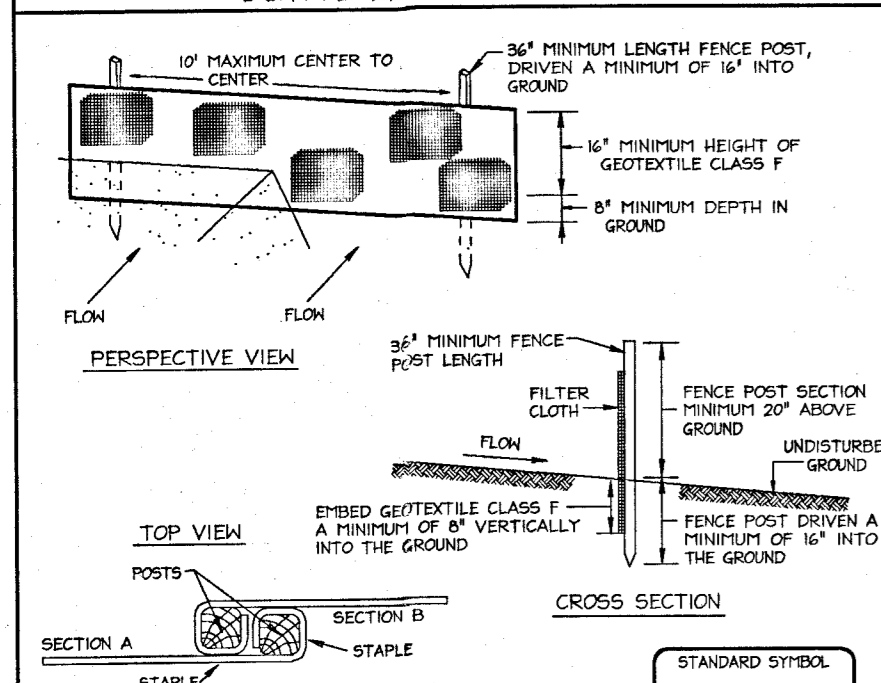
**DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE**



- Length - minimum of 50' (+30' for a single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- 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.
- Stone - crushed aggregate (20 to 30) or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. If the stabilized construction entrance shall be provided with a mounded berm with 5:1 slopes and a minimum of 6" of stone over the pipe. The pipe has to be placed according to the drainage when SCE is located at a high spot and has no drainage to convey, a pipe will not be necessary. Pipe shall be sized and placed to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters an active construction site. Whenever possible, the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE 1 OF 3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

**DETAIL 22 - SILT FENCE**



- Fence posts shall be a minimum of 3/4" dia. driven 16" minimum into the ground. Wood posts shall be 1 1/2" dia. (minimum) and shall be of sound quality hardwood. Steel posts will be standard 1" or 1 1/4" section weighing not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples. It shall meet the following requirements:  
Tensile Strength: 50 lbs/in. (min.) Test: NHTST 509  
Tensile Modulus: 20 lbs/in. (min.) Test: NHTST 509  
Flow Rate: 0.5 gal ft<sup>2</sup>/minute (max.) Test: NHTST 322  
Filtering Efficiency: (min.) Test: NHTST 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt fence shall be inspected after each rainfall event and maintained when damage occurs or when sediment accumulation reaches 50% of the fabric height.

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**2.10 STANDARDS AND SPECIFICATIONS FOR TOPSOIL**

- Definition**  
Placement of topsoil over a 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 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.
  - 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-NRCS 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 approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 15% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, twigs, or other materials larger than 1 and 1/2" in diameter.
    - Topsoil must be free of plants or plant parts such as ferns, grass, weeds, dandelions, johnsongrass, nutcracker, 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 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Limestone 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 2.0.0 Vegetation Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

**SEDIMENT CONTROL NOTES**

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (310-1055).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- 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 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 perimeter in accordance with Vol. I, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 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, soil, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall 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 permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 

Total Area	0.63 Acres
Area Disturbed	0.21 Acres
Area to be roofed or paved	0.09 Acres
Area to be vegetatively stabilized	0.21 Acres
Total Cut	744 CY
Total Fill	237 CY

 Offsite waste/borrow area location:
  - 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 controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
  - 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.
  - 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.
  - Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
  - To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

**PERMANENT SEEDING NOTES**

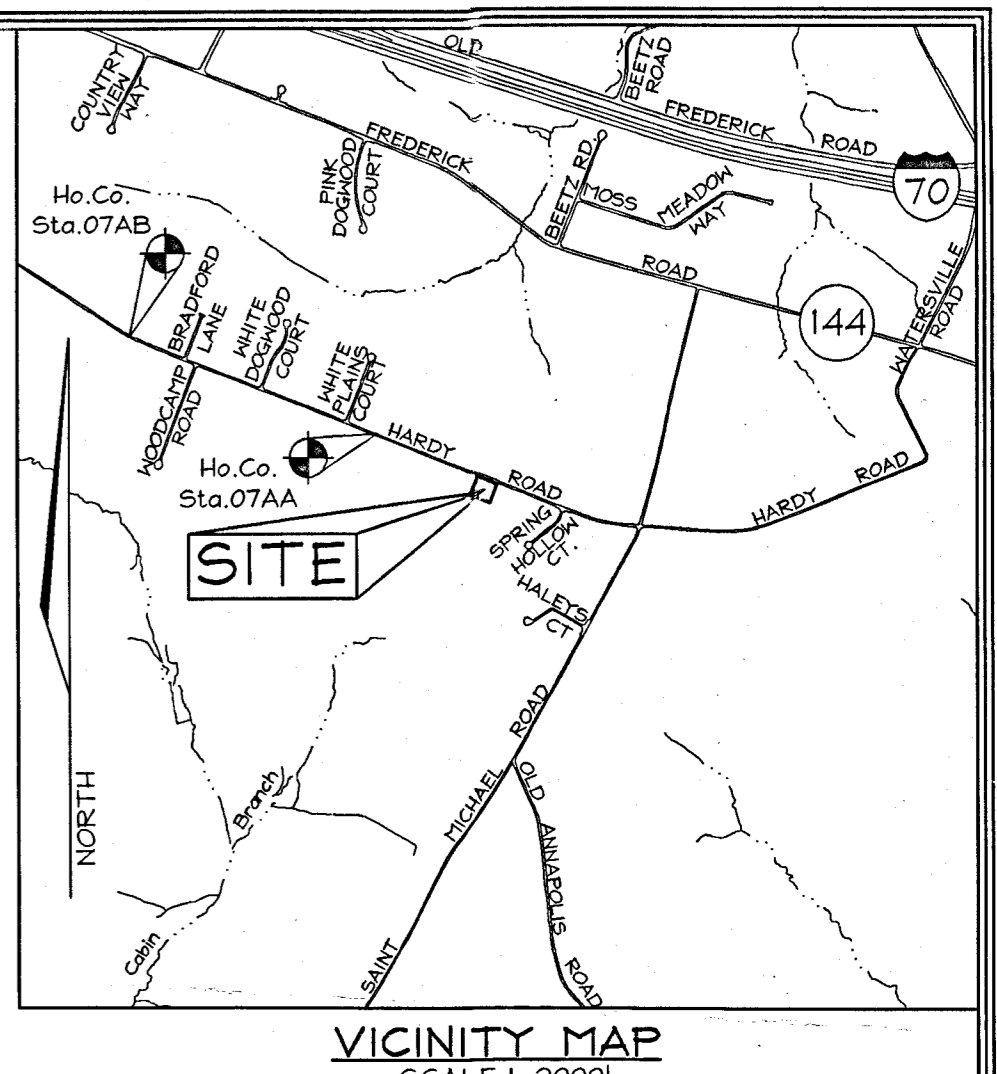
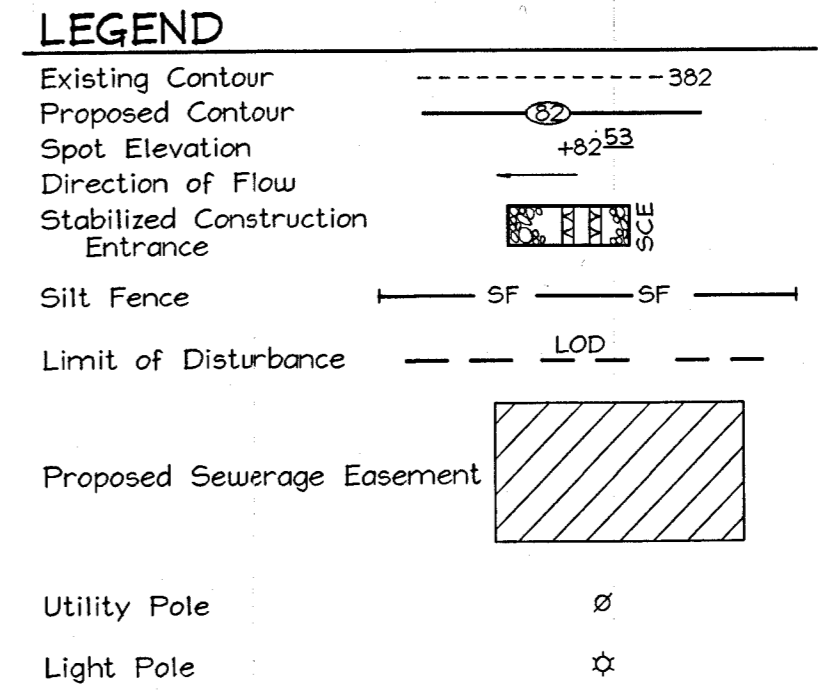
- APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS REQUIRED.
- SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.
- SOIL AMENDMENTS:** In lieu of soil test recommendations, use one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (42 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 (4 lbs/1000 sq.ft.)
  - Acceptable - Apply 2 tons per acre dolomitic limestone (42 lbs/1000 sq.ft.) and 1000 lbs per acre 10-10-10 fertilizer (22 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.
- SEEDING:** For the period 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 wintering clover. During the period October 16 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. Option (2) Use soil. 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 at 200 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 340 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, disking 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 the period 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 wintering clover (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 soil.
- 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 at 200 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 3 feet or higher, use 340 gallons per acre (8 gal/1000 sq.ft.) for anchoring.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
ChB2	Chester silt loam, 3 to 6 percent slopes, moderately eroded	B

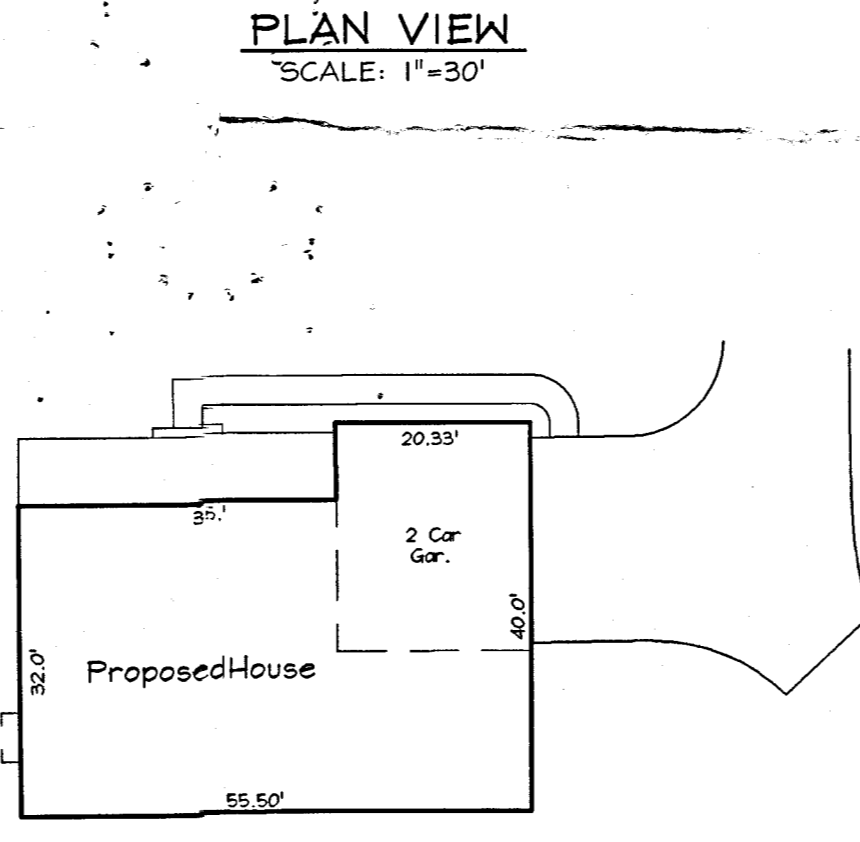
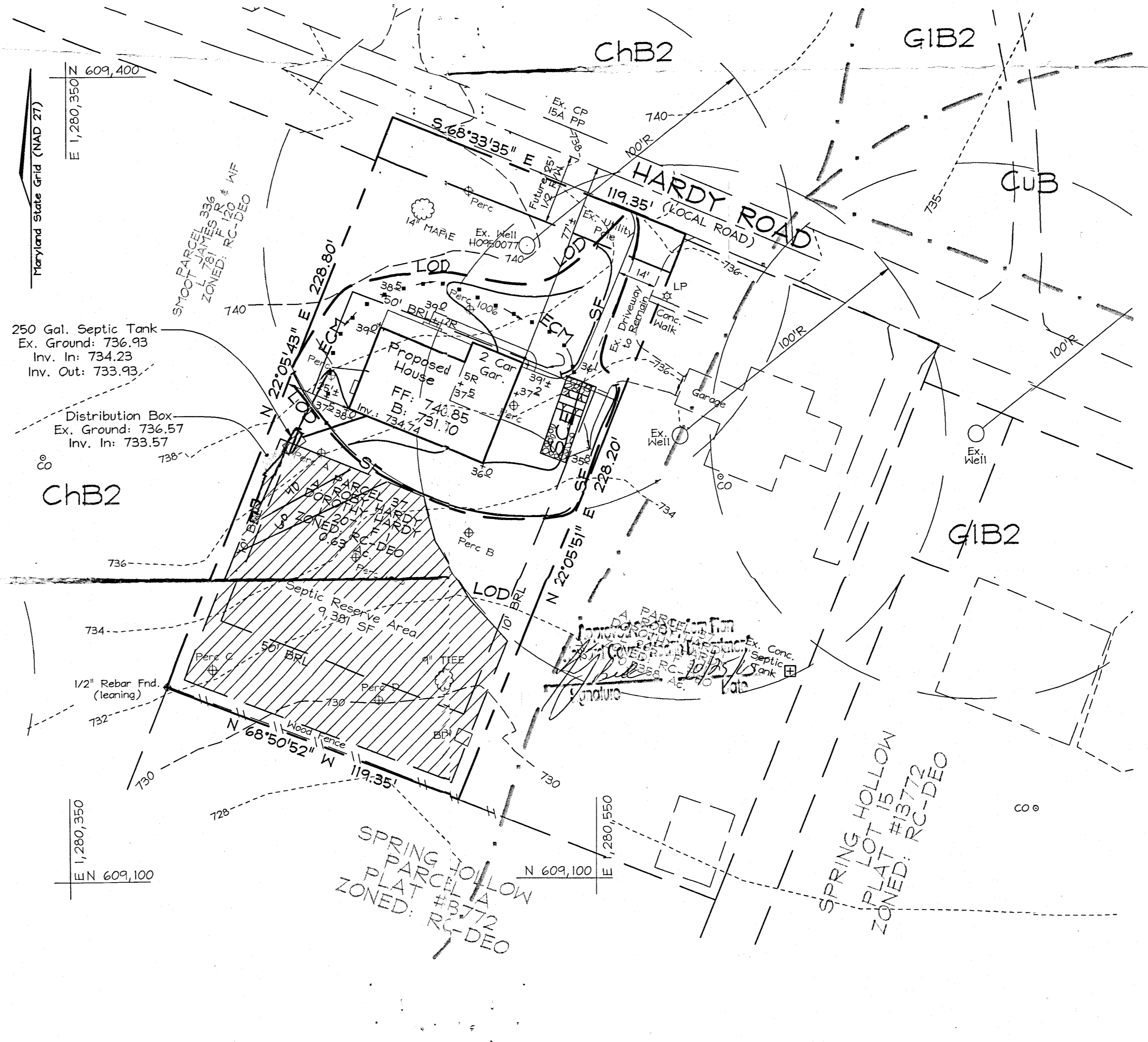


**BENCHMARKS**

Sta.	North	East	Elevation
07AA	N 186,177.3451 E	389,177.8383	El.: 228.0794 (meters)
07AB	N 610,816.839 E	1,276,827.624	El.: 748.290 (feet)
	N 185,879.2027 E	389,968.0218	El.: 218.4218 (meters)
	N 609,818.999 E	1,279,420.084	El.: 716.606 (feet)

**GENERAL NOTES**

- Subject property zoned RC-DEO per 2/2/04 Comprehensive Zoning Plan.
- Total area of property = 0.6237 ac.±
- Private water and sewer will be used within this site.
- This area designates a private sewerage easement, of at least 6,700 SF as required by the Maryland State Department of the Environment for individual sewerage disposal (COMAR 26.04.03). Improvements of any nature in this area are restricted until public sewerage 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 to the private sewerage easement.
- All wells and septic fields within 100' of property's boundary have been shown.
- Existing 2 foot Topography on site based on Field Run Survey provided by FSH Associates on or about June 2005. Existing 5 foot Topography of site based on Howard County Aerial Topography flown in 1993.
- The existing well shown on this plan (identified with the attached well tag number: HO-95-0077) has been field located by FSH Associates professional surveyor and are accurately shown.
- The Lot shown hereon comply with the minimum ownership width and lot area as required by the Maryland State Department of the Environment.
- Howard County Soil Map #1 and 2.
- Reference: Liber 207 Folio 01
- Septic fields are located on soil type ChB2, as per the soil survey of Howard County.



**PLOT PLAN**  
**HARDY PROPERTY**

TAX MAP 7 GRID 8  
4TH ELECTION DISTRICT

PARCEL 37  
HOWARD COUNTY, MARYLAND

DESIGN BY: PS  
DRAWN BY: AY  
CHECKED BY: ZYF  
SCALE: As shown  
DATE: Oct. 24, 2005  
W.O. No.: 3333  
SHEET No.: 1 OF 1

**FSH Associates**  
Engineers Planners Surveyors  
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Tel: 410-750-2251 Fax: 410-750-7350  
E-mail: FSHAssociates@cs.com