

SOILS LEGEND				
SYMBOL	NAME / DESCRIPTION	GROUP	K Value	Acres±
BaA	Baite silt loam, 0 to 3 percent slopes	D	0.37	0.236
GFB	Gladstone-Urban land complex, 0 to 8 percent slopes	B	0.24	0.094
GFC	Gladstone-Urban land complex, 8 to 15 percent slopes	B	-	0.680
GnB	Glenville silt loam, 3 to 8 percent slopes, moderately eroded, subject to hydric conditions	C	0.43	0.047

ADDRESS CHART	
LOTS	STREET
P. 321	7938 Harriet Tubman Lane

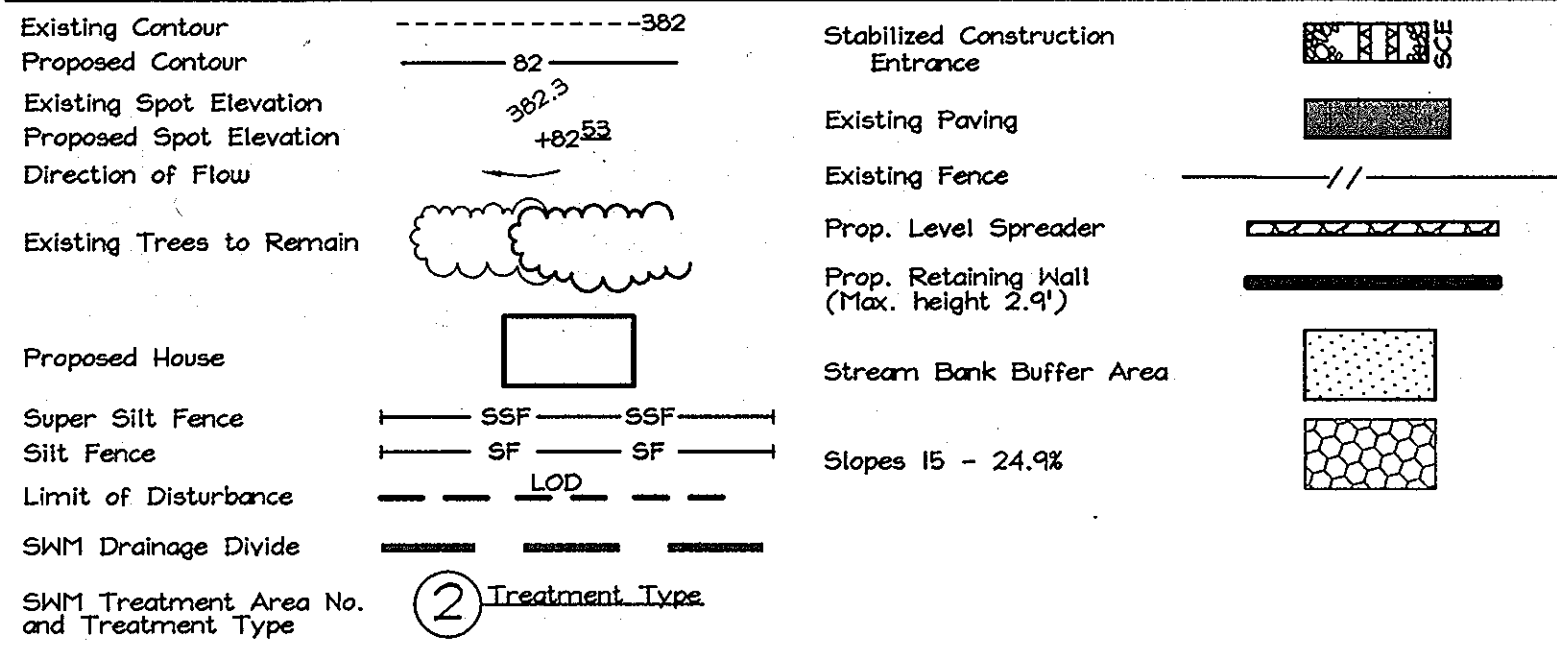
VEGETATIVE ASSESSMENT				
TREE # / DBH	COMMON NAME	SCIENTIFIC NAME	CONDITION	COMMENTS
ST-1 / 41.4"	Tulip Poplar	Liriodendron tulipifera	Good	-
ST-2 / 31.9"	Tulip Poplar	Liriodendron tulipifera	Poor	Large Cavity
ST-3 / 40"	Tulip Poplar	Liriodendron tulipifera	Poor	Decay / Cavity

This one (1) acre ± property is vegetated with meadow grasses and surrounded by mature tulip poplar forest on two sides. Gravel paving was present in a strip along the northern property line and running in line with the shared driveway where it terminated near an abandoned picnic shelter. Single family residential homes with lawn and driveways bound the property on the north and west. The three specimen trees were found along the southern property line.

GENERAL NOTES

- The subject property is zoned R-20 per the 02/02/04 Comprehensive Zoning Plan and per the "Comp List" Zoning Amendments effective on 07/26/06.
- Total area of property = 1.003 ac±.
- Public water and sewer will be used within this site via existing Contract #34-3273 & 30-3274.
- In accordance with Section 128 of the Howard County Zoning Regulations, bay windows, chimneys or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks, porches or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback.
- There are no floodplains, historic structures or cemeteries on-site.
- This property is subject to the Amended 5th edition of the Howard County Subdivision and Land Development Regulations.
- All construction shall be in accordance with the latest standards and specifications of Howard County standards and specifications if applicable.
- Forest conservation for this project will be fulfilled by submitting a declaration of intent that will state that the clearing will amount to less than 20,000 square feet.
- Field run boundary and topographic survey prepared by FSH Associates in June, 2012.
- Forest stand delineation prepared by Exploration Research Inc.
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- For flag or pipestem lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and road right-of-way line and not to the pipestem lot driveway.
- Paving and concrete pads designated "TBR" are to be removed and revegetated.
- Wetlands analysis prepared by Exploration Research, Inc. on May 18, 2012. No wetlands exist on site.

LEGEND

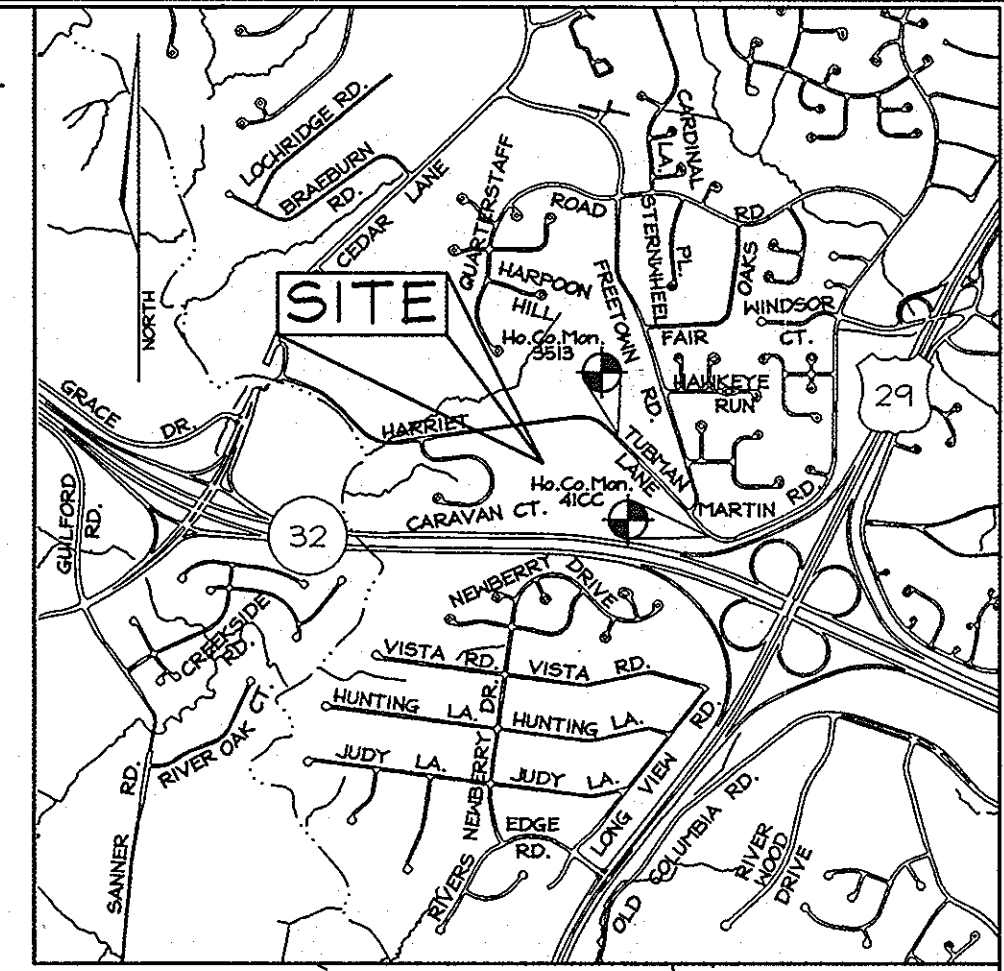


GEODETIC SURVEY CONTROL

Sta. 9513 N 563,573.6927 E 1,346,098.0898 El.: 415.395 (feet)
 Sta. 41CC N 562,494.2612 E 1,347,062.3894 El.: 399.946 (feet)

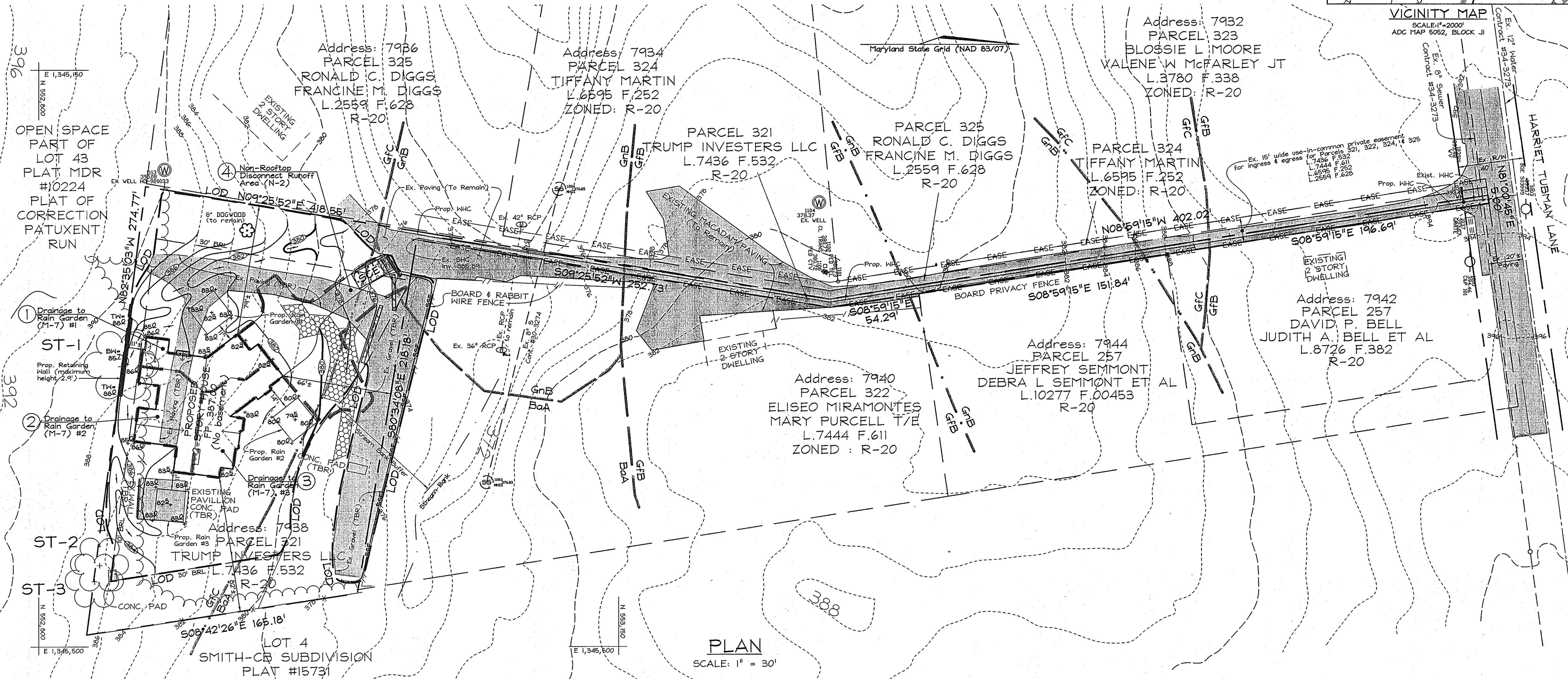
SITE ANALYSIS DATA

- Total area of site = 1.003 ac.
- No wetlands exist on site.
- No 100-year floodplain exists on site.
- No forest exist on site.
- Area of 15-24.9% slopes = 1,416 sq ft.
- No 25% slopes or greater exist on site.
- Limits of disturbance = 0.762 ac±.
- Area of woods to remain = 0.121 ac±.
- Proposed impervious area = 0.162 ac±.
- Existing impervious area converted to grass = 0.171 ac±.
- Exist. impervious area to remain (pipe-stem) = 0.090 ac±.
- Ultimate conditions area of grass = 0.459 ac±.
- Area of erodible soils (K value > 0.35) = 0.283 ac±.



VICINITY MAP

SCALE: 1" = 2000'
 ADC MAP 5052, BLOCK JI



STORMWATER MANAGEMENT CALCULATIONS

- Based on LOD area of 32,708 sf and proposed impervious area of 7,044 sf (house and driveway), the PE value for "B" soils and 1% = 21.5% is 1.2"
- The proposed house was treated using 3 rain gardens, see table this sheet. The proposed driveway has been treated using the non-rooftop disconnect credit.

No.	Size	Drainage Area	Impervious Area	% Imp.(1)	Rv	Pe	ESDv Req'd	ESDv Prov'd
1	19'x19'	1,805 sf±	1,805 sf±	100%	0.95	1.2"	171 cf±	180.5 cf±
2	19'x19'	1,665 sf±	1,665 sf±	100%	0.95	1.2"	158 cf±	180.5 cf±
3	19'x19'	1,682 sf±	1,682 sf±	100%	0.95	1.2"	160 cf±	180.5 cf±

RAIN GARDEN NOTES: 1. All rain gardens will be installed with a boxed frame 6" above ground surface.
 2. Rooftop will drain to rain gardens via down-spouts directed into the rain garden.

STORMWATER MANAGEMENT NARRATIVE

Stormwater Management for the proposed house is treated using three (3) rain gardens. SWM for the proposed driveway is treated using the non-rooftop disconnect practice. Therefore SWM has been treated using Environmental Site Design (ESD) practices to the Maximum Extent Possible (MEP). All existing flow patterns on-site have been maintained. All existing gravel driveways except a portion along the pipestem are to be removed and replaced with grass. A portion of this driveway is located in the 75' stream bank buffer, however this is a temporary disturbance and the buffer will be enhanced with this gravel removal. No other disturbances occur within any natural resources. Sediment control for all site construction is achieved through super silt fence along the northern property line. This sediment control practice has been approved by Howard Soil Conservation District in an approval letter dated August 13, 2012.

DEVELOPER

Mark E. Armstrong
 Patricia M. Rinaldi
 924B Hourglass Place
 Columbia, MD 21045
 (410) 757-4716

PERMIT INFORMATION CHART

Subdivision Name:	Section/Area	Lot/Parcel No.			
Parcel 321	N/A	P. 321			
Deed / Plat	Grid	Zoning	Tax Map No.	Elect. District	Census Tract
7436 / 532	23	R-20	35	4th	6056.02

PROFESSIONAL CERTIFICATION

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. #22418, Expiration Date: 07/24/2013.

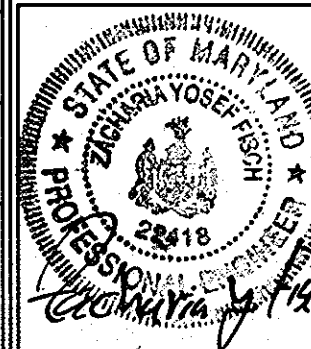
ENVIRONMENTAL CONCEPT PLAN

PARCEL 321

7938 HARRIET TUBMAN LANE

TAX MAP 35 GRID 23
 5TH ELECTION DISTRICT

PARCEL 321
 HOWARD COUNTY, MARYLAND



FSH Associates

Engineers Planners Surveyors
 6339 Howard Lane, Elkridge, MD 21075
 Tel: 410-567-5200 Fax: 410-798-1562
 E-mail: info@fsh.net

DESIGN BY: FSH
 DRAWN BY: CRH2
 CHECKED BY: ZYF
 SCALE: 1" = 30'
 DATE: Sep. 19, 2012
 N.O. No.: 3800
 SHEET No.: 1 OF 1

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Mark E. Armstrong 10/10/12
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Patricia M. Rinaldi 10/09/12
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE