

VICINITY MAP
SCALE: 1" = 200'
HOWARD COUNTY ADC MAP 20, GRID A2

BENCHMARKS
Denotes Benchmark (PK Nail Set in Macadam Driveway)
100-N 1360335.6520 E 546296.3260 (NAD 83/91) Elev. 382.67 (NGVD 88)
101-N 1360030.2150 E 546212.9890 (NAD 83/91) Elev. 381.86 (NGVD 88)

- GENERAL NOTES**
- Site Data: Property Address 7440 Oakland Mills Road, Jessup, MD 20794. Tax Map 42, Grid 16, 6th Election District. Parcel 277; Liber 16269 Folio 246; Area = 2.28 ac.±. Court Order 13-C-16-103473 (Default Judgement Granted for 25' access strip from Oakland Mills Road entered on Aug. 22, 2016.) Area = 0.462 ac.±. Total Area = 2.742 ac.±.
 - The subject property is zoned R-12 per the 10/6/13 Comprehensive Zoning Plan.
 - Public water and sewer will be used within this site.
 - There are no floodplains, wetlands, historic structures or cemeteries on-site.
 - This property is subject to the Amended 5th edition of the Howard County Subdivision and Land Development Regulations.
 - Field run boundary and topographic survey prepared by FSH Associates in October, 2016.
 - Forest stand delineation prepared by Exploration Research Inc. in June, 2017.
 - Minimum lot size and open space requirements are in accordance with Howard County Code sections 109.0 and 16.121.
 - Open Space Required: 2,742 x 0.30 (30% of gross area (min. Lot Size 8,400 s.f.)) = 0.822 ac.±. Open Space Provided: 0.967 ac.±.
 - Per FEMA (FIRM Map) 24027C0165D no FEMA delineated floodplain exists surrounding the subject property.

LEGEND

	Ex. 10' Contour Line		Ex. Fire Hydrant
	Ex. 2' Contour Line		Ex. Water Valve
	Proposed 10' Contour Line		Ex. Sewer Manhole
	Proposed 2' Contour Line		Ex. Sewer Cleanout
	Ex. Wood Fence		Ex. Storm Drain Inlet
	Ex. Chain Link Fence		Limit of Disturbance Line
	Property Line		Super Silt Fence Line
	Ex. Woods Line		Silt Fence Line
	Proposed Woods Line		Diversion Fence
	Soil Line		Stone Construction Entrance (SCE)
	Proposed Fire Hydrant		Stockpile Area
	Proposed Dry Well		
	Specimen Trees TBR		

PLAN
Scale: 1" = 50'

STORMWATER MANAGEMENT SUMMARY

Required ESDv = 4,547 cu.ft.±
Provided ESDv = 3,605 cu.ft.±
ESDv Prov'd through Dry Wells (M-5) = 2,016 cu.ft.±
ESDv Prov'd through Grass Swale (M-8) = 143 cu.ft.±
ESDv Prov'd through Filterra® Retention Inlet = 1,446 cu.ft.±
Total ESDv Prov'd = 3,605 cu.ft.±

DESIGN NARRATIVE:

- The onsite natural resource, woods, were conserved to the maximum extent practicable while maintaining the intent of the proposed project. The existing woods were conserved along the boundary perimeters to create a buffer. Three (3) specimen trees needed to be removed to provide a driveway turn-around and proposed utilities, an alternative compliance request from section 16.116.(b).(1) of the Howard County Subdivision and Land Development Regulations, to allow for removal of specimen trees will be provided.
- All existing flow patterns were maintained.
- Impervious areas were reduced to the maximum extent practical while maintaining the projects intent. Using permeable paving, an alternative surface, for the use-in-common access drive was not an option due to the public utilities beneath this drive. Additionally providing permeable paving for the private driveways was not practical due to the 10 foot setback requirement off the proposed houses.
- Minimal erosion and sediment control measures are required for this project. Erosion and sediment control will be achieved through the use of silt fence and super silt fence.
- Stormwater management has been achieved using environmental site design (ESD) practices to the maximum extent practicable (MEP) through the use of dry wells (M-5) and a grass swale (M-8).

MINIMUM LOT SIZE CHART

LOT NUMBER	GROSS AREA (SF)	PIPESTEM AREA (SF)	MINIMUM LOT SIZE (SF)
1	11,697±	2,788±	8,909±
2	12,383±	3,132±	9,251±
3	12,657±	3,480±	9,177±
4	12,890±	3,420±	9,470±
5	12,298±	2,976±	9,322±
6	11,782±	2,989±	8,793±

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP	K ¹ FACTOR
LoC	Legare silt loam, 8 to 15 percent slopes	C	0.37
LoB	Legare-Montalto-Urban land complex, 0 to 8 percent slopes	C	0.37
RuC	Russell and Beltsville, 5 to 10 percent slopes	C	0.26
UcB	Urban land-Chillum-Beltsville complex, 0 to 5 percent slopes	C	0.43

SITE ANALYSIS DATA

- Total area of site = 2.742 ac.
- No wetlands, wetland buffers or streams exist on site.
- No 100-year floodplain exists on site.
- Existing forest area on site = 2.46 ac.
- No areas of 15-24.9% slopes exist on site.
- No 25% slopes or greater exist on site.
- Limits of disturbance = 1.74 ac.±.
- Proposed impervious area = 0.66 ac.±.
- Erodible soils (K ≥ 0.35) = 0.47 ac.±.
- Proposed site use: Residential

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. #34684, Expiration Date: 7/08/2019.

ENVIRONMENTAL CONCEPT PLAN
7440 OAKLAND MILLS ROAD

TAX MAP 42 GRID 16
6TH ELECTION DISTRICT

PARCEL 277
HOWARD COUNTY, MARYLAND

OWNER/DEVELOPER
7440 Oakland Mills Road, LLC
c/o Mr. Joe Encarnacao
19901 Belle Chase Drive
Laytonsville, Maryland 20882
Phone No. 301-252-2870

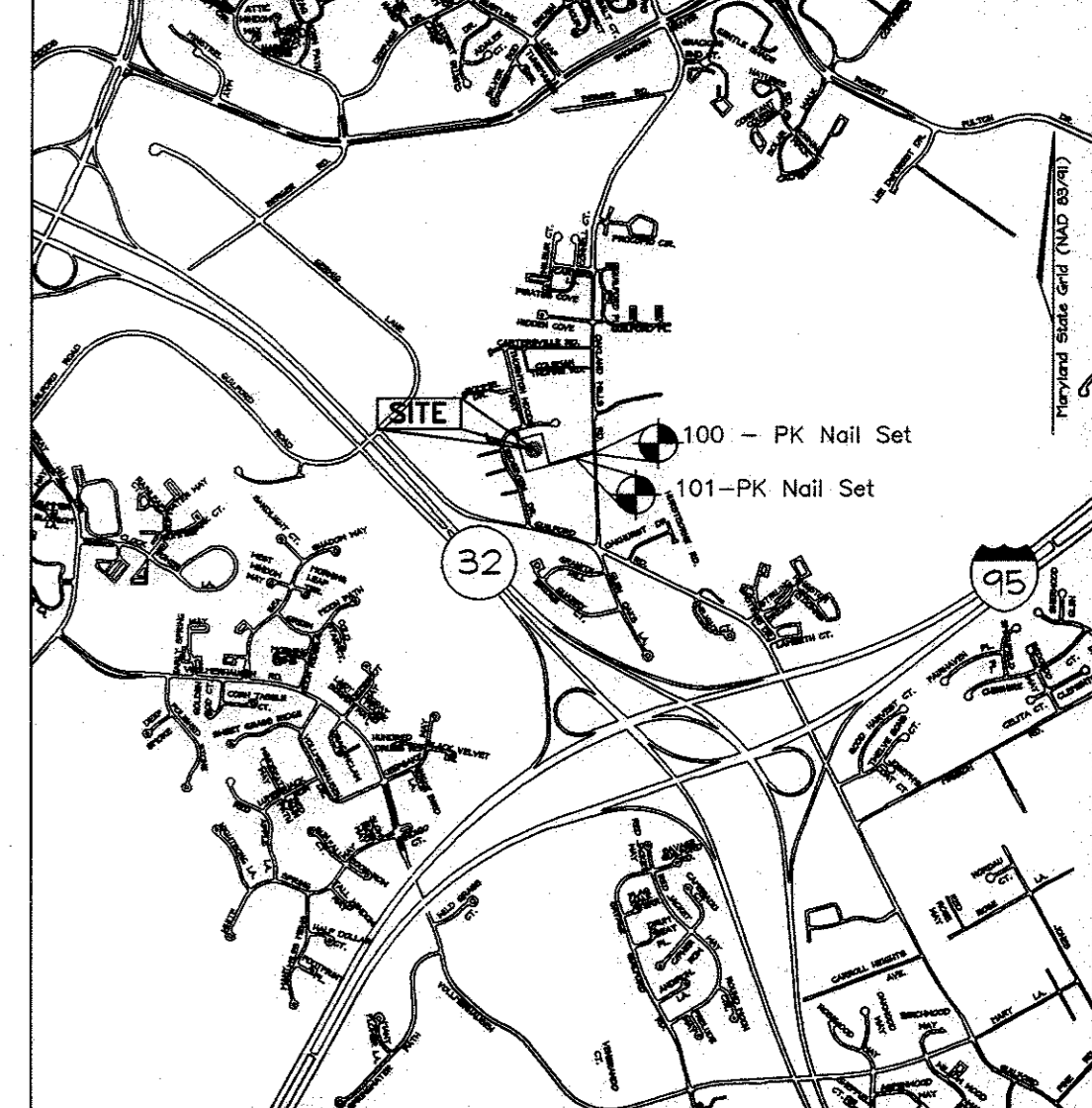
FSH Associates
Engineers Planners Surveyors
86339 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-796-1562
E-mail: info@fsher.com

DESIGN BY: MLT
DRAWN BY: MLT
CHECKED BY: ZTF
SCALE: 1" = 50'
DATE: August 10, 2017
H.O. No.: 3948
SHEET No.: 1 OF 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chiechi 9-12-17
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kentel 9-27-17
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



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SCALE: 1"=2000'
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 - Per FEMA (FIRM Map) 24027C0165D no FEMA delineated floodplain exists surrounding the subject property.
 - Design Narrative:
 - The onsite natural resources (woods) were conserved to the maximum extent practicable.
 - The existing flow patterns were maintained.
 - Impervious areas were reduced through the use of permeable pavement driveways.
 - Minimal erosion and sediment control measures are required for this project. Erosion and sediment control will be achieved through the use of silt fence and super silt fence.
 - Stormwater management has been achieved using permeable pavement and dry well ESD practices.

SPECIMEN TREE LIST

Number	Common name	Species	Condition	DBH
ST-1	Tulip Poplar	Liriodendron tulipifera	Good	42"
ST-2	Tulip Poplar	Liriodendron tulipifera	Good	37.71"
ST-3	Tulip Poplar	Liriodendron tulipifera	Good	36"
ST-4	Tulip Poplar	Liriodendron tulipifera	Good	37"±28.5"
ST-5	Tulip Poplar	Liriodendron tulipifera	Poor	43"
ST-6	Tulip Poplar	Liriodendron tulipifera	Good	36.4"

LEGEND

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	Proposed 2' Contour Line		Ex. Sewer Cleanout
	Ex. Wood Fence		Ex. Storm Drain Inlet
	Ex. Chain Link Fence		Forest Stand Boundary
	Property Line		Forest Stand Label
	Ex. Woods Line		Specimen Tree
	Soil Line		

FOREST STAND ANALYSIS TABLE

KEY	TYPE OF COMMUNITY	AREA Acres	SOIL INFORMATION				EXISTING VEGETATION (Type and approx. %)	STAND CHARACTERISTICS			FOREST AREA IN SENSITIVE ENVIRONMENTS
			SOIL TYPE	TYPICAL FOREST COVER	WOODLAND SUITABILITY INDEX	HABITAT VALUE		SIZE AVG. DIAM.	AGE	GENERAL CONDITIONS	
F-1	Upland Hardwoods	2.04	LoB	Mixed Hardwoods (Oaks)	75-80 oaks 75 pines	Good	poplar 40% ash 30%	20-30	60-140	Good	none
			RUC	Mixed Hardwoods (Oaks)	70-80 oaks 70-90 pines	Good	oak 20% other 5%	24	-	-	-
			UcB	-	65-74 oaks 70 pines	Fair-Good	-	-	-	-	-
F-2	Upland Hardwoods	0.42	LoB	Mixed Hardwoods (Oaks)	75-80 oaks 75 pines	Good	poplar 30% cherry 20%	8-12	24-60	Good	none
			RUC	Mixed Hardwoods (Oaks)	70-80 oaks 70-90 pines	Good	black walnut 20% other 15%	8-12	-	-	-
			-	-	-	-	-	-	-	-	-

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 - Proposed site use: Residential

Forest Stand Delineation Narrative

This Forest Stand Delineation was prepared in accordance with the Howard County Forest Conservation Manual.

F1 This forested area on-site contains approximately 2.04 acres. This area of successional forest contains a canopy layer that is predominately tulip poplar with some white ash. Understory species include cherries, elm, and overstory species saplings. This stand contains 6 trees over 24" DBH as noted in the chart elsewhere on this sheet.

F2 This forested area on-site contains approximately 0.42 acres. This area of mid-successional forest contains a canopy layer that is predominately tulip poplar, black cherry and black walnut. Understory species include sassafras and overstory species saplings. No specimen trees are contained in this section of forest.

L1 Areas of lawn, scattered shrubs and trees, and an existing road.

SOILS LEGEND

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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

W. C. ... 9.12.17
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

W. S. ... 9.7.17
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



Forest Stand Delineation by:
EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
6339 Howard Lane
Baltimore, MARYLAND 21076
Tel: 410-567-5200 Fax: 410-796-1562
E-mail: info@eshri.com

FOREST STAND DELINEATION
7440 OAKLAND MILLS ROAD

TAX MAP 42 GRID 16
6TH ELECTION DISTRICT

PARCEL 277
HOWARD COUNTY, MARYLAND

FSH Associates
Engineers Planners Surveyors
8339 Howard Lane, Elkridge, MD 21075
Tel: 410-567-5200 Fax: 410-796-1562
E-mail: info@fshri.com

DESIGN BY: *SMH*
DRAWN BY: *SMH*
CHECKED BY: *SLH*
SCALE: 1"=40'
DATE: June 09, 2017
P.L.O. No.: 3948
SHEET No.: 1 OF 2