DAVID R. CRAIG
HARFORD COUNTY EXECUTIVE

MARY F. CHANCE
DIRECTOR OF ADMINISTRATION

C. PETE GUTWALD
DIRECTOR OF PLANNING AND ZONING

HARFORD COUNTY GOVERNMENT

Department of Planning and Zoning

FOREST STAND DELINEATION

Probst Property (Eva Mar)

FSD No.: FSD-14-004-1 Submitted: 03/06/2014 Revised:

Map: 41 Parcel: 131

George William Stephens, JR. and Associates, Inc.
c/o Rowan Glidden
2205-C Commerce Road
Forest Hill, Maryland 21050

Dear Mr. Glidden:

The Department of Planning and Zoning has reviewed this Forest Stand Delineation (FSD 14-004-1) for its conformance with the Harford County Forest and Tree Conservation Regulations. The Department has found this Forest Stand Delineation to be complete. Therefore, the Department of Planning and Zoning hereby grants approval of this FSD with the following comments.

The subject site is located on the northeast side of MD Route 543, northwest of Amyclae Drive near Bel Air, Maryland. The property is zoned R1 (Urban Residential). The Forest Stand Delineation for the Probst Property was performed in April and December of 2012. A Concept Plan for Eva Mar (C14-004) has been submitted for this property. Future submittals shall come under the name of Eva Mar.

This site contains a total of 152.60 +/- acres. There are 49.80 +/- acres of forest located on site with five (5) distinct forest stands with two (2) stand variants identified. Numerous tributaries, channels and associated wetlands were delineated at the site and verified in field. A Jurisdictional Determination was performed by the Army Corp of Engineers. Approximately 39.41 +/- acres of the site shall be designated as Natural

Resource District (NRD). There were two additional areas of intermittent streams that have been identified by the Department. They are located at the top of stream systems in Stand F2 that need to be extended one (1) toward the area identified as windthrow and the other an extension of the top channel towards specimen tree UU approximately 75 feet. These areas and their required buffers need to be identified as Natural Resource District (NRD) on all subsequent submittals for this property.

Stand 'F-1' (20.20+/- acres) is located on the northern portion of the property. The stand is a mature mixed oak/poplar/beech forest. The stand is dominated tulip poplar, white oak, scarlet oak and red oak. Larger trees, including sycamores were located along a minor tributary. The understory is established and is dominated by American Beech, red maple, hickory, white oak and tulip poplar. The shrub layer is dominated by spicebush, multiflora rose, barberry and wineberry. Vine cover occurred in patches. Dieback was evident, but not excessive. This stand is surrounded by residential development, but is suitable for woodland bird and mammal species. Stand 'F-1' received a 'good' rating and is considered to be a high priority for retention on the basis of its priority structure. Portions of the stand are located within the Natural Resource District.

Stand 'F-1(v)' (6.60 +/- acres) is located on the northwestern portion of the site. The stand is a variant stand of F-1 and consists of a mature mixed oak/poplar/beech forest. The stand is dominated by tulip poplar and white oak. The shrub layer is sparse and consists of spicebush, multiflora rose and wineberry. There is a presence of American beech in the canopy, and large numbers of black cherry noted within the understory. There is evidence that adjacent property owners have used this area as a dumping spot for land and landscape debris. This stand received a 'good' forest rating, and is considered a high priority for retention. Portions of the stand exist within a Natural Resource District.

Stand 'F-2' (16.40 +/- acres) is located on the north central portion of the site. The stand is a poplar/oak forest which is dominated by tulip poplar. Additional canopy species include white oak, American beech, red maple and white ash. The understory is established and is dominated by American beech, red maple and black cherry. The shrub layer includes spicebush, and American hornbeam. Noted vines include grape and Japanese honeysuckle. This stand received a 'good' forest rating, but portions of the stand appear to have been selectively cut as stump sprouts and sapling regeneration are evident. The stand is a high priority for retention base on its priority structure. The stand provides habitat for common woodland bird and mammal species. Portions of the stand are located in the Natural Resource District.

Stand 'F-3' (2.5 +/- acres) is located on the far southwestern portion of the site. The stand is a maple dominated mixed mesic forest. The understory is dominated by red maple, white ash and black cherry. The shrub layer is dominated by spicebush. The herbaceous layer is dominated by field garlic, garlic mustard, Japanese honeysuckle, woodreed and Indian strawberry. This stand received a 'good' forest rating, and is located in a Natural Resource District.

Stand 'F-4' (2.10 +/- acres) is located on the western portion of the site. The stand is a mixed mesic forest, but does not fit into a specific forest association. It contains several species. The stand is dominated by white ash and tulip poplar, with large specimen trees located along the western edge of the stand. The understory is dominated by white ash and black cherry; however, the area exhibits evidence jof vine cover, Asiatic tearthumb, Japanese honeysuckle and bittersweet. The shrub layer includes spicebush, multiflora rose, wineberry and blackberry. Vine cover is extensive in this layer as well. The overall condition of this stand is fair due to extensive vine cover. Canopy breaks have been noted in the stand. The stand is located in a Natural Resource District and is a high priority for retention.

Stand 'F-4 (v)' (0.50 +/- acres) is located on the southeast portion of the site. The stand consists of a small woodland area and is similar to Forest Stand F-4; however, black cherry and red maple are more common. Tulip poplar is present. The variant stand displays evidence of invasive species, including vines.

Stand 'F-5' (1.5 +/- acres) is located on the eastern portion of the site. The mixed mesic stand is dominated by American sycamore red maple, persimmon and black cherry. The shrub layer is dominated by wineberry, multiflora rose rose and blackberry. The herbaceous layer is dominated by Japanese honeysuckle, garlic mustard and Nepal microstegium. This stand received a 'fair to poor' forest rating as extensive vine cover has impacted a number of trees and shrubs causing multiple canopy breaks. The stand is noted to be narrow, but provides cover for edge species such as mockingbirds, cardinals and sparrows. A portion of the stand (0.60+/- acres) is located within the Natural Resource District and is a high priority for retention.

The Harford County Forest Conservation manual defines specimen trees as having a DBH of thirty inches (30") or more; trees having seventy-five percent (75%) of more of the diameter of the current state champion tree of that species, or trees designated as national, state or county champions. One-hundred twenty nine (129) specimen trees were identified within the study area. Specimen trees are delineated on the Forest Stand Delineation map. A request for a waiver shall be required if any specimen tree

that is identified and proposed to be removed for the construction of this subdivision. Particular attention should be given to specimen tree 4J (58" Black Cherry). Given its size and location it appears to be a good candidate for retension. We request that additional evaluation of its health be made in the Forest Conservation Plan (FCP).

Appropriate buffers are required for all streams and channels, and from the edge of the non-tidal wetlands. All required buffers (including flood plain) must be shown on the Forest Conservation Plan (FCP) and all future submissions.

If you have any questions regarding this matter you may contact this office at (410) 638-3103.

Sincerely,

M. D. Davenport 5/9/14

Milton D. Davenport, Chief Date
Development Review

MDD:EV/dm
Cc: MRA, Eva Mar File

SITE DATA:

1A. CONTRACT PURCHASER: TBD
1B. OWNER: ESTATE OF EUGENE R. PROBST (ADDRESS SAME AS PREMISES)

PREMISES ADDRESS: 301 FOUNTAIN GREEN ROAD, BEL AIR, MARYLAND 21015

2. PLAN PREPARED BY: G.W. STEPHENS JR. AND ASSOCIATES, INC., 2205 C COMMERCE ROAD, FOREST HILL, MD 21050, ATTN: ROWAN GLIDDEN, R.L.A.

3. PARCEL INFO: TAX MAP NO. 41, PARCEL 131
DEED REF: 426/452, 2004/143

TOTAL AREA: 152.6 AC±
ZONED R-1
EXISTING USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL SINGLE FAMILY DETACHED

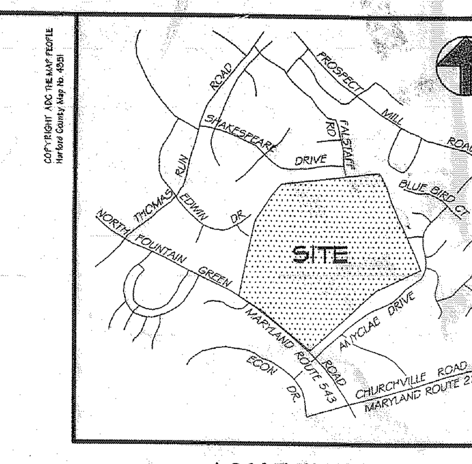
4. BULK REGULATIONS:
R1 - CONVENTIONAL WITH OPEN SPACE
MIN. LOT AREA: 15,000 SF
MIN. USE SETBACK FROM ADJ. RESIDENTIAL LOT: N/A
MIN. LOT WIDTH: 75'
FYSTBK: 25'
SYSTBK: 6' MIN (TOTAL OF 20')
RYSTBK: 40' (MAY BE REDUCED TO 20' ADJOINING N.R.D.)
MAX. BLDG. HEIGHT: 3 STY.
DENSITY:
MAX PERMITTED - 2.0 DU/AC WITH PUBLIC SERVICE
MAX. IMPERVIOUS AREA: NOT SPECIFIED IN CODE
EX. IMPERVIOUS - 0.7 AC±
OPEN SPACE:
REQUIRED - 10% X 152.6 AC = 15.26 AC±
ACTIVE OPEN SPACE:
REQUIRED - 50% OF REQ. OPEN SPACE X 15.26 AC = 7.63 AC±

5. ENVIRONMENTAL DATA:
EXISTING NRD AREA: 39.41 AC± (39.41 AC± / 152.6 TOTAL AC± = 25.8% NRD AREA)
EXISTING FOREST: 45.9 AC±

6. PER REVIEW OF DATA AVAILABLE ON DEPT. OF NATURAL RESOURCES WEBSITE VIA MERLIN SYSTEM ONLINE, THE NEAREST SENSITIVE SPECIES PROJECT REVIEW AREA IS AT A DISTANCE OF 2,200 L.F. ±.

7. SOILS INFORMATION TAKEN FROM HARFORD COUNTY SOILS SURVEY (1973).

8. THIS DEVELOPMENT WILL BE SERVED BY PUBLIC WATER AND SEWER (HARFORD COUNTY)



COPYRIGHT ADC THE MAP PEOPLE Harford County Map No. 4851

LOCATION MAP
SCALE: 1" = 2000'

Specimen Trees

Key	Species Name	Size	Cond.
A	Scarlet oak	32"	F. good
B	White oak	34"	Fair
C	Red oak	36"	F. good
D	Scarlet oak	30"	F. good
E	Tulip poplar	30"	Fair
F	Scarlet oak	32"	Fair
G	Scarlet oak	30"	Good
H	Scarlet oak	31"	Fair
I	Scarlet oak	31"	Fair
J	Tulip poplar	31"	F. good
K	Scarlet oak	34"	F. good
L	Am. beech	35"	F. good
M	White ash	37"	Fair
N	White ash	41"	Poor
O	White ash	31"	F. good
P	Am. beech	30"	Good
Q	Am. beech	31"	Fair
R	White ash	30"	F. good
S	Tulip poplar	37"	Fair
T	Am. beech	30"	Good
U	Red oak	37"	F. good
V	Tulip poplar	30"	F. good
W	Tulip poplar	35"	Good
X	Scarlet oak	30"	F. good
Y	Tulip poplar	32"	F. good
Z	Am. beech	31"	Poor

Key	Species Name	Size	Cond.
3A	Tulip poplar	31"	F. good
3B	Tulip poplar	33"	F. good
3C	Red oak	40"	F. good
3D	Red oak	32"	F. good
3E	Tulip poplar	35"	V. poor
3F	Tulip poplar	30"	Good
3G	Red maple	30"	F. good
3H	Red oak	33"	F. good
3I	White oak	39"	F. good
3J	White ash	34"	Fair
3K	Tulip poplar	36"	Good
3L	White oak	33"	Good
3M	Red oak	33"	F. good
3N	Tulip poplar	35"	Fair
3O	Tulip poplar	34"	F. good
3P	Tulip poplar	47"	V. poor
3Q	Am. beech	33"	Good
3R	Am. beech	31"	Good
3S	White oak	32"	Good
3T	Red maple	49"	F. good
3U	White ash	51"	Fair
3V	Scarlet oak	45"	Fair
3W	Am. sycamore	50"	Good
3X	S. red oak	46"	V. poor
3Y	White ash	31"	Good
3Z	Tulip poplar	44"	F. good

Key	Species Name	Size	Cond.
5A	Black cherry	31"	Good
5B	Pawlonia	31"	F. good
5C	Am. sycamore	33"	F. good
5D	Pin oak	35"	Good
5E	Red maple	40"	Good
5F	Scarlet oak	33"	Good
5G	Scarlet oak	37"	Good
5H	Am. sycamore	35"	Good
5I	Am. sycamore	35"	F. good
5J	Am. sycamore	32"	Fair
5K	White ash	30"	Fair
5L	Am. sycamore	40"	F. good
5M	Am. sycamore	42"	F. good
5N	Am. sycamore	34"	F. good
5O	Am. sycamore	31"	F. good
5P	Am. sycamore	33"	F. good
5Q	Am. sycamore	32"	Good
5R	Am. sycamore	50"	Good
5S	Black walnut	45"	F. good
5T	Am. sycamore	38"	Good
5U	Black walnut	39"	Poor
5V	Tulip poplar	30"	Good
5W	White ash	35"	Fair
5X	Tulip poplar	32"	F. good
5Y	Tulip poplar	31"	V. poor

Key	Species Name	Size	Cond.
AA	Tulip poplar	31"	Good
BB	Tulip poplar	30"	Fair
CC	Am. beech	31"	F. good
DD	Red oak	40"	Fair
EE	White ash	31"	Poor
FF	Red oak	30"	F. good
GG	White ash	30"	Fair
HH	Red maple	34"	F. good
II	Am. sycamore	45"	Fair
JJ	Tulip poplar	32"	Good
KK	Am. sycamore	30"	Good
LL	Scarlet oak	30"	Poor
MM	Tulip poplar	34"	Good
NN	White oak	31"	F. good
OO	White ash	38"	Fair
PP	Tulip poplar	31"	F. good
QQ	Tulip poplar	33"	F. good
RR	Tulip poplar	34"	F. good
SS	Red maple	35"	Good
TT	Am. beech	42"	Fair
UU	White oak	32"	Fair
VV	Red maple	34"	F. good
WW	Scarlet oak	32"	Poor
XX	White oak	30"	Fair
YY	Am. beech	32"	Good
ZZ	Scarlet oak	32"	Fair

Key	Species Name	Size	Cond.
4A	White ash	38"	Good
4B	White ash	32"	F. good
4C	White ash	37"	Good
4D	White ash	60"	Fair
4E	White ash	34"	Fair
4F	White ash	37"	F. good
4G	White ash	48"	Poor
4H	White ash	36"	F. good
4I	White ash	58"	Poor
4J	Black cherry	56"	F. good
4K	Norway maple	36"	V. poor
4L	Norway maple	31"	Fair
4M	Norway maple	41"	Fair
4N	White pine	30"	Good
4O	White pine	31"	Good
4P	White ash	50"	Poor
4Q	White ash	47"	Poor
4R	Black cherry	34"	Fair
4S	White ash	42"	Fair
4T	White ash	30"	V. poor
4U	Walnut	42"	F. good
4V	White ash	32"	F. good
4W	Norway maple	42"	Fair
4X	Black cherry	30"	F. good
4Y	Mulberry	33"	F. good
4Z	Norway maple	33"	V. poor

Forest Stand Descriptions

Key	Community Type	Acreage	Dominant Vegetation	General Condition	Priority 1 Acreage
F1	Oak/poplar/beech	20.2 ac	Liriodendron tulipifera, Quercus alba, Quercus rubra, Quercus coccinea, Acer rubrum, Fagus grandifolia, Lindera benzoin, Viburnum dentatum	F.good/ Good	20.2 ac Structure (some in NRD)
F1v	Oak/poplar/beech	6.6 ac	Liriodendron tulipifera, Quercus alba, Fagus grandifolia, Acer rubrum, Prunus serotina, Lindera benzoin, Lonicera japonica	F.good	6.6 ac Structure (some in NRD)
F2	Poplar/oak	16.4 ac	Liriodendron tulipifera, Quercus alba, Fagus grandifolia, Acer rubrum, Fraxinus americana, Lindera benzoin, Carpinus caroliniana	Good	16.4 ac Structure (some in NRD)
F3	Red maple	2.5 ac	Acer rubrum, Fraxinus americana, Lindera benzoin, Lonicera japonica, Allium vineale	F. Good	2.5 ac NRD
F4	Mixed mesic	2.1 ac	Fraxinus americana, Liriodendron tulipifera, Acer rubrum, Prunus serotina, Lindera benzoin, Rosa multiflora, Vitis sp., Lonicera japonica, Polygonum perfoliatum	Fair/poor	2.1 ac Structure, NRD
F4v	Mixed mesic	0.5 ac	Fraxinus americana, Acer rubrum, Prunus serotina, Lonicera japonica	Fair/poor	0.5 ac NRD
F5	Mixed mesic	1.5 ac	Platanus occidentalis, Acer rubrum, Prunus serotina, Diospyros virginiana, Morus rubra, Rosa multiflora, Rubus phoenicolasius, Lonicera japonica, Vitis sp.	Fair/poor	0.6 ac NRD

See forest stand delineation report for complete stand description

NOTES:

1. No rare, threatened or endangered species were observed on the property.
2. Surrounding land uses consists of high density residential development.
3. Field investigation was performed by Eco-Science Professionals, Inc. on March 18, March 19, April 3, April 4, and December 12, 2012.

APPROVED
M. D. [signature] 5/9/14
Department of Planning & Zoning Date

WETLAND/STREAM NOTES

1. The limits of wetlands and streams were delineated by Ecotone, Inc. in November 2011.
2. The limits of the Natural Resources District were established by G. W. Stephens, Jr. & Associates, Inc.
2. The streams onsite are tributaries to Bynum Run and are classified as Use III - Natural Trout Waters - by the Maryland Department of the Environment.

LEGEND

- PROJECT BOUNDARY
- ADJACENT PARCEL
- 2' CONTOUR
- 10' CONTOUR
- SOILS DEMARCATION
- ZONING LIMITS
- EXISTING VEGETATION (ESTIMATED)
- EXISTING GROUND FEATURES
- EXISTING NONTIDAL WETLANDS
- 25' STATE WETLANDS BUFFER
- NATURAL RESOURCE DISTRICT (NRD)
- EXISTING STREAM
- 100 YEAR FLOODPLAIN (ESTIMATED)
- EXISTING STRUCTURES
- PROPOSED SWM FACILITIES
- 5Y SPECIMEN TREE LOCATION
- 15% - 25% SLOPES
- >25% SLOPES
- EX. FOREST
- FSD FOREST STAND BOUNDARY

SOILS TABLE

TYPE	SOIL SERIES	WET SEASON TESTING	HYDRIC	HIGHLY ERODIBLE	BUILDING CONSTRAINTS
AdB	ALDINO	FEB 1 - APR 30	N	SLIGHT	SEVERE
CcB2	CHESTER	ANYTIME	N	SLIGHT	SLIGHT
CcC2	CHESTER	ANYTIME	N	MODERATE	MODERATE
LeC2	LEGORE	ANYTIME	N	MODERATE	MODERATE
MsB2	MONALTO	FEB 1 - APR 30	N	SLIGHT	SEVERE
NeB2	NESHAMINY	FEB 1 - APR 30	N	SLIGHT	MODERATE
NeC2	NESHAMINY	FEB 1 - APR 30	N	MODERATE	MODERATE
WaB	WATCHUNG	FEB 1 - APR 30	Y	SLIGHT	SEVERE

MD DNR Qualified Professional
USACOE Wetland Delineator
Certification # WDCP93MD0310006A
[signature]
Henry A. Leskinen

Eco-Science Professionals, Inc.
Consulting Ecologists
P.O. Box 5006 Glen Arm, Maryland 21057 Telephone (410) 832-2480 Fax (410) 832-2488

PLAN SCALE: 1" = 100'
0 100' 200' 300'

DATA REFERENCES:

BOUNDARY - HIGHLAND SURVEY ASSOC, INC. SEPT. 20, 2011
TOPO/WETLANDS - ECOTONE, INC.REV. NOV. 11, 2011
100 YEAR FLOODPLAIN - FEMA MAP NO. 24025C0162D PROPERTY LOCATED IN ZONE X (UNMAPPED)
SURROUNDING PLANIMETRIC DATA - HARFORD COUNTY GIS

Receipt 14066 0011
Date 3/6/14 Fee $1,626
Mcd ____ Sign ____
Total $1,626

PLAN TYPE FSD
PLAN NO. 14-004
SERIES NO. 1
DATE 3/6/14
DAC/DUE 4/2/14

FOREST STAND DELINEATION
PROBST PROPERTY

TAX MAP 41 - PARCEL 131
HARFORD COUNTY, MARYLAND
3RD ELECTION DISTRICT
GWS JOB NO. 20-11315.01
DATE OF SUBMITTAL: 12/ /2012

RECEIVED MAR 6 2014 Harford County, Dept. of Planning

GEORGE WILLIAM STEPHENS, JR. and ASSOCIATES, INC.
ENGINEERS ♦ PLANNERS ♦ SURVEYORS ♦ TRANSPORTATION
2205 C COMMERCE ROAD
FOREST HILL, MARYLAND 21050
http://www.gwstephens.com
Ph: (410) 297-2340 Fax: (410) 297-2345

DATE:	REVISION:	DRAWN:	TGH/RGG
DECEMBER 17, 2012	ADDED EX. W&S IN FALSTAFF ROAD	DESIGNED:	
		CHECKED:	
		PAGE:	1 OF 1