

STORMWATER MANAGEMENT PROFILES & DETAILS

PATRIOTS OVERLOOK TOWN OF MANCHESTER 6th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND TAX MAPS: 23,402, BLOCKS: 16, 14, 20, PARCELS: 427,822,3506,3508

NOT FOR CONSTRUCTION

OF MAR

51285

51285

SONAL EMILIAN

3/1/2024



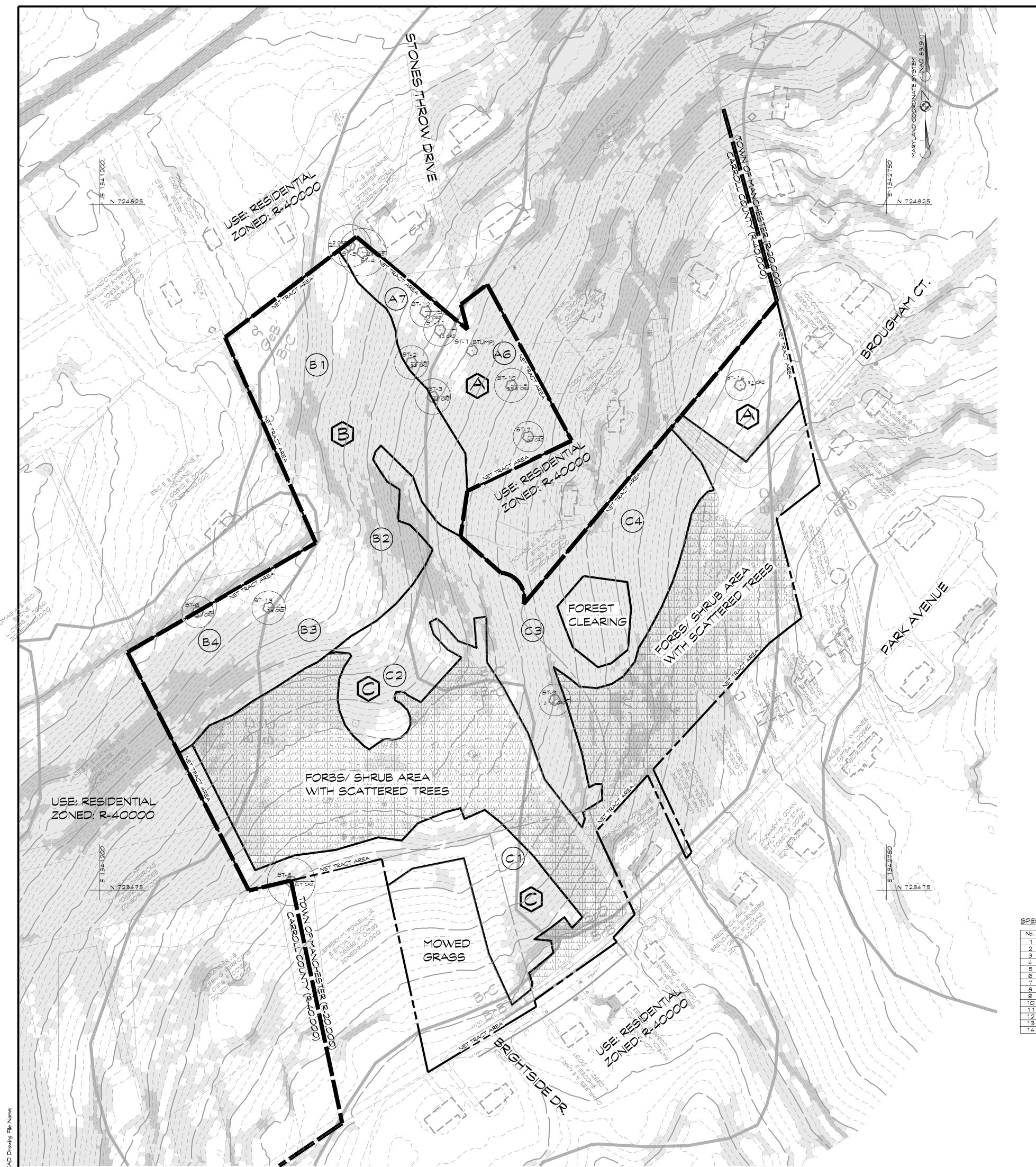
Braton D. Moore, P.E.

439 East Main Street Westminster, MD 21157-5539
(410) 848-1790 FAX (410) 848-1791

PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THIS DOCUMENT WAS PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 5 1 285, EXPIRATION DATE: DECEMBER 7, 2025

ELOPER ER LLC TER RD MD 21136 171	Date	Kevisions	Drawn By: BH
			Designed By: BH
			Reviewed By: BDM
			Date: JANUARY, 2024
			Scale: AS SHOWN
			Job No.: 2014024
			Sheet: 7 OF 8

OWNER/ DEVELOPER
PV MANCHESTER LLC
113 WESTMINSTER RD
REISTERSTOWN, MD 2113
410-977-3171



Forest Stand Delineation Narrative

This Forest Stand Delineation has been prepared for the forested tract within the boundary of Patriot's Overlook subdivision, located on the north side of Old Fort Schoolhouse Road in Manchester, MD as shown on Carroll County Tax Map 23, Parcel 427 and Map 402, Parcels 822, 3506 and 3508. This property had a previously approved Forest Stand Delineation, completed in July of 2002. Approximately 15.14 of the site are forested. This forest is divided into three stands or homogeneous units and are shown on the Forest Stand Delineation as Stands A, B, and C. DRS Engineering performed a site visit on November 3, 2008, to verify that the data included in the previously approved Forest Stand Delineation remained accurate. CLSI performed an additional site visit April 3, 2015, to re-verify the data reported in the previous reports. On February 1, 2024, CLSI performed another site visit to again re-verify the data shown in previous Forest Stand Delineation reports. During this field Investigation, several specimen trees were noted that previously had not been Identified. These trees have been flagged and located and are included on this plan.

Stand A: Prior approved FSD 8.71 Acres (2.76 acres remaining on site)

Due to the subdivision of the site since the initially approved FSD, approximately 5.76 acres of this stand are now located on adjacent properties. One portion of the stand has been isolated by the new road, and the area that was divided has evolved and been enveloped into Stand C as poplars have become more prevalent in that particular area. While new property lines and construction of the road have divided this stand, the stand itself remains physically intact. It should, however, be noted that large portions of Stand A have also sustained wind shear damage as a result of recent storms, resulting in high counts of dead fallen trees as well as injuries to a number of trees.

Stand A is a mature hardwood stand which is dominated by a mixture of Oak species, with significant areas of emergent Tulip Poplar due to previous clearing. Associated tree species include Cherry, Red and Norway Maples. Codominant species include Red and White Oak, Black Gum, Black Cherry, Black Locust and Tulip Poplar. The understory layer consists of mixed Oaks, Hickory, Maple and Locust. The herbaceous layer contains Laurel, High and Low Bush Blueberry, Multiflora Rose and Bush Honeysuckle. The stand has a basal area of 112 square feet with an average of 260 trees per acre 60 trees per acre* (see note above). The canopy closure is 71% with 37% of the ground covered by herbaceous plant material. The stand is classified as a Priority Area I.

Stand B: Prior approved FSD 6.34 Acres (6.20 acres remaining on site)

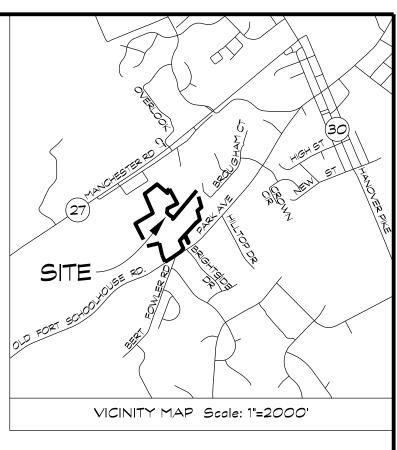
A small portion of this stand (approximately 0.21 acres) was removed in association with the installation of several wells on the property since the previously approved FSDs were completed.

Stand B is dominated by Yellow Poplar. The understory layer consists of Black Cherry, Locust, Sassafras and Red Maple. The herbaceous layer contains Virginia Creeper, Poison Ivy and Honeysuckle. The stand has a basal area of 115 square feet with an average of 320 trees per acre and 20 dead trees per acre. The canopy closure is 75% with 60% of the ground covered by herbaceous plant. The stand is classified as a Priority Area II.

Stand C: Prior approved FSD 5.5 Acres (6.18 acres now on site)

A small portion of this stand was removed with the installation of several wells on the property since the previously approved FSDs were completed, however the stand has also expanded slightly since the FSD now includes another tract (Parcel 3508) that was not on the initially approved FSD.

Stand C is dominated by Mixed Oak and Hickories. Associated species include Black Locust, Red, Norway and Silver Maples as well as Walnut, Ash and Yellow Poplar. The understory layer contains Cherry, Box Elder and mixed Maple species. The herbaceous layer contains Virginia Creeper, Multiflora Rose, Poison Ivy and Honeysuckle. The basal area is 110 square feet with an average of 240 trees per acre and 32 dead trees per acre. The canopy closure is 76% with 44% of the ground covered by herbaceous plants. The stand is classified as Priority Area II.



ENVIRONMENTAL SITE NOTES

- 1. ZONING DISTRICT: R-20,000 AND R-40,000
- LAND USE: RESIDENTIAL 2. TOTAL AREA OF SITE (NET TRACT): 26.03 ACRES
- TOTAL FORESTED AREA ON SITE: 15. 14 ACRES 3. WATERSHED DRAINAGE BASIN: DOUBLE PIPE CREEK
- WATERSHED NO. 02130304 STREAM CLASSIFICATION: IV-P
- 4. SOILS SHOWN ARE FROM USDA NRCS WEB SOIL SURVEY. 5. NO RARE, THREATENED OR ENDANGERED PLANT, ANIMAL SPECIES OR HABITAT WERE OBSERVED DURING THE SITE VISIT. A LETTER OF INQUIRY HAS BEEN SENT

TO THE MDNR NATURAL HERITAGE PROGRAM DATED

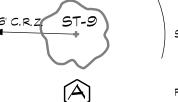
- APRIL 7, 2015 (UPDATED INQUIRY SENT 02/02/2024). 6. NO FEMA FLOODPLAIN IS ON SITE.
- 7. THIS SITE IS WITHIN SHIST-SAPROLITE AQUIFER AREA.

LEGEND



SCATTERED TREES/ FORBS/SHRUB AREA

FOREST STAND DIVIDE LINE



SPECIMEN TREE

FOREST STAND IDENTIFIER FOREST STAND PLOT IDENTIFIER

ZONING LINE

FOREST STAND PRIORITY LEVEL SOILS CHART (CARROLL COUNTY FC TECHNICAL MANUAL)

SOIL SERIES ERODIBILITY "K" HYDRIC

SPECIMEN TREE CHART

No.	DBH	Common Name	Botanical Name	CRZ	Condition	Comment
1	NA	Black Oak Stump	Quercus velutina	NA	NA	Tree no longer standing
2	33	Black Oak	Quercus velutina	33	FAIR	
3	35	Black Oak	Quercus velutina	35	POOR	Multistem (2 of the specimen, 3 total), Limb dieback
4	48	Tulip Poplar	Liriodendron tulipifera	48	FAIR	Multistem (2)
5	42	Black Oak	Quercus velutina	42	FAIR	Multistem (2)
6	31	Sweet Birch	Betula lenta	31	FAIR	Limb dieback
7	30	Northern Red Oak	Quercus rubra	30	POOR	
8	47	White Oak	Quercus alba	47	FAIR	Offsite
9	31.5	Tulip Poplar	Liriodendron tulipifera	31.5	FAIR	
10	33.5	Red Oak	Quercus rubra	33.5	FAIR	Dead limbs, crown damage
1 1	32	Black Oak	Quercus velutina	32	POOR	
12	31	Red Oak	Quercus rubra	31	FAIR	
13	33	Tulip Poplar	Liriodendron tulipifera	33	FAIR	
14	31	Red Oak	Quercus rubra	31	POOR	

FLOODPLAIN ON-SITE

FOREST STAND DELINEATION

THERE S NO FEMA

PATRIOTS OVERLOOK

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6th ELECTION DISTRICT * CARROLL COUNTY, MARYLAND
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