APPLICATION ACCEPTED: July 2, 2013
PLANNING COMMISSION: January 9, 2014
BOARD OF SUPERVISORS: Not yet scheduled

County of Fairfax, Virginia

December 26, 2013

STAFF REPORT

APPLICATION SE 2013-MV-011

MOUNT VERNON DISTRICT

APPLICANTS:	Kimberly B. & Kelly P. Campbell
ZONING:	R-E: Residential Estate District (0.5 Dwellings Units/Acre)
PARCEL:	122-2 ((2)) 7
LOCATION:	11727 River Drive
SITE ACREAGE:	1.56 acres
PLAN MAP:	Residential, 0.1 – 0.2 dwelling units/acre (du/ac)
SPECIAL EXCEPTION CATEGORY:	Category 6 – Uses in a Floodplain
PROPOSAL:	To retroactively permit the placement of fill in a floodplain and to permit additional fill

STAFF RECOMMENDATIONS:

Staff recommends denial of SE 2013-MV-011. However, if it is the intent of the Board of Supervisors to approve SE 2013-MV-011, staff recommends that the approval be subject to the Development Conditions contained in Appendix 1.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions proffered by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

It should be noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

Megan Duca

Department of Planning and Zoning
Zoning Evaluation Division
12055 Government Center Parkway, Suite 801
Fairfax, Virginia 22035-5509
Phone 703-324-1290 FAX 703-324-3924
www.fairfaxcounty.gov/dpz

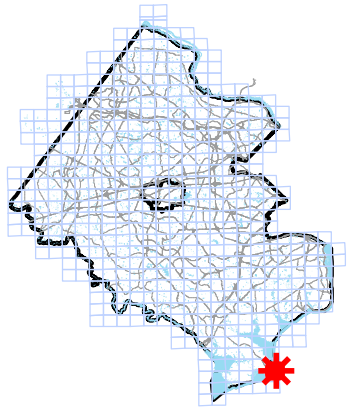
The approval of this special exception does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290.

Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 48 hours advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

Special Exception

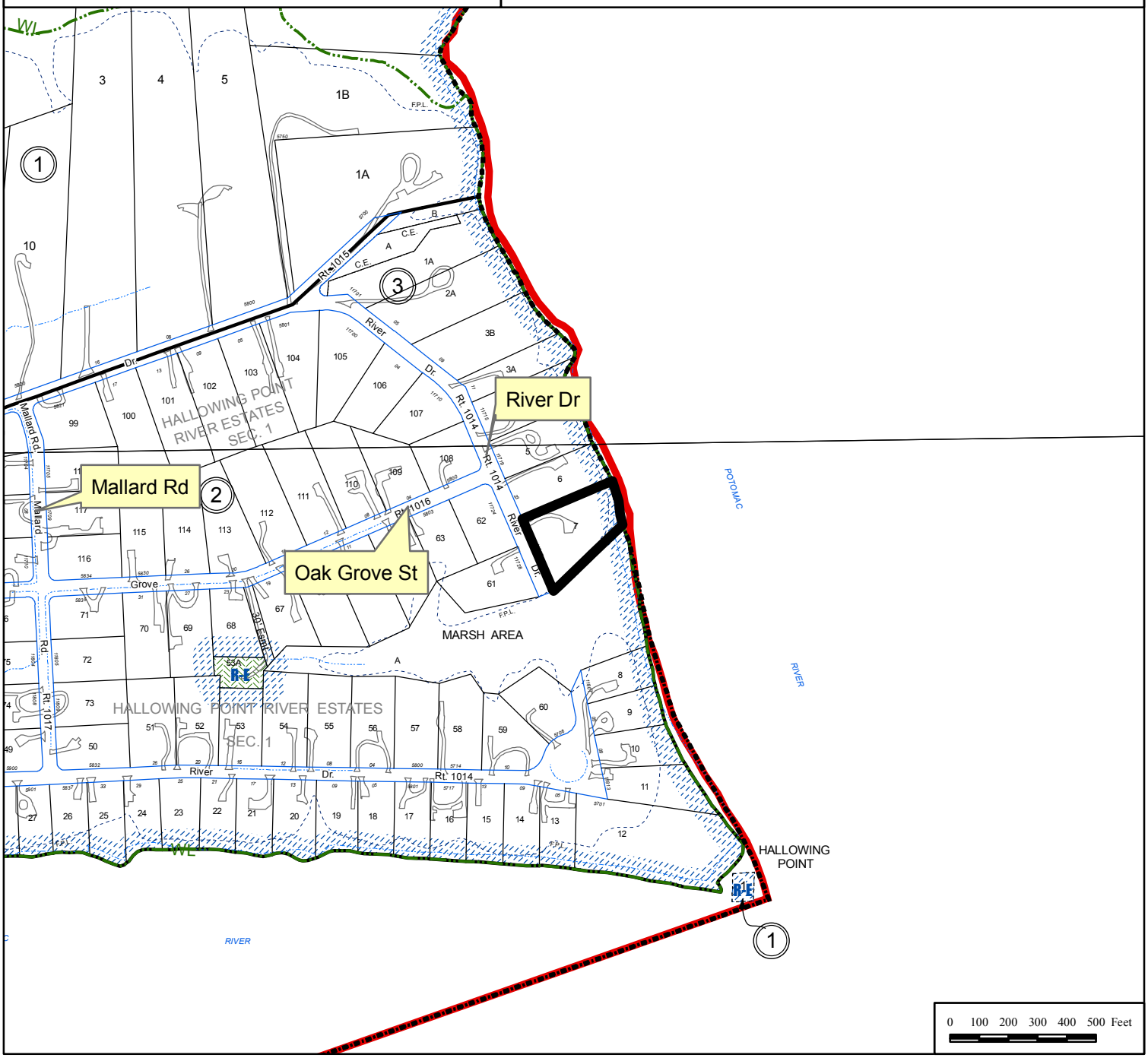
SE 2013-MV-011



Applicant: KIMBERLY B. & KELLY P. CAMPBELL
Accepted: 07/02/2013
Proposed: USES IN A FLOODPLAIN
Area: 1.56 AC OF LAND; DISTRICT - MOUNT VERNON

Zoning Dist Sect: 02-0904
Art 9 Group and Use: 6-2
Located: 11727 RIVER DRIVE, MASON NECK, VA 22079

Zoning: R- E
Plan Area: 4,
Overlay Dist:
Map Ref Num: 122-2- /02/ /0007



LEGALITY OF LOT CERTIFICATION (LTI 02-10)

I HEREBY CERTIFY THAT ALL APPROPRIATE COUNTY APPROVALS WERE OBTAINED IN ACCORDANCE WITH THE PROCESS REQUIRED BY THE SUBDIVISION ORDINANCE IN EFFECT AT THE TIME OF THE CREATION OF LOT 7. THE LOT WAS CREATED AS PART OF THE HALLOWING POINT RIVER ESTATES SUBDIVISION - SECTION ONE, APPROVED BY FAIRFAX COUNTY ON 07-07-1948 AND RECORDED IN DEED BOOK 646, AT PAGE 224 IN FAIRFAX COUNTY LAND RECORDS.

WETLANDS PERMITS CERTIFICATION

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

SIGNATURE _____

OWNER/DEVELOPER HAROLD A. LOGAN, AGENT FOR OWNER(S)
NAME TITLE

INFORMATION REGARDING ACTIVITIES IN THE RESOURCE PROTECTION AREA

ACTIVITY	YES/NO
CONSTRUCTION ACTIVITIES IN A RESOURCE PROTECTION AREA (IF YES, INDICATE TYPE BELOW)	YES
REDEVELOPMENT PRINCIPAL STRUCTURE	NO
REDEVELOPMENT ACCESSORY STRUCTURE	NO
PUBLIC ROADS	NO
PRIVATE ROADS	NO
DRIVEWAYS	NO
STORMWATER OUTFALL	NO
OTHER (INDICATE TYPE):	PATIO, WALLS, WALK

SHEET INDEX

1. COVER SHEET
2. PRE SPECIAL EXCEPTION CONDITIONS PLAN
3. APPROVED SPECIAL EXCEPTION PLAN
4. EXISTING CONDITIONS
5. SPECIAL EXCEPTION PLAN
6. NOTES & DETAILS
7. TREE PRESERVATION PLAN
8. REVETMENT INFORMATION

GENERAL NOTES

1. NO TITLE REPORT FURNISHED.
2. TOTAL DISTURBED AREA : 0.20 ACRES.
   TOTAL AMOUNT OF EXISTING FILL IN FLOOD PLAIN IS 2309 CUBIC YARDS.
   TOTAL AMOUNT OF PROPOSED FILL TO BE PLACED IN FLOODPLAIN IS 75 CUBIC YARDS.
3. SURFACED AREA OF FRONT YARD: N/A
4. BOUNDARY & TOPOGRAPHIC SURVEY BY BOWMAN CONSULTING.
5. ALL EXISTING ABOVE GROUND UTILITIES ARE TO ADJUSTED, RELOCATED OR REMOVED AS NECESSARY. LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. INTERFERENCE OR DISRUPTION OF SAME WILL NOT BE THE RESPONSIBILITY OF HAROLD A. LOGAN ASSOC., P.C.
6. THERE ARE NO KNOWN GRAVE OBJECTS OR BURIAL SITES ON THIS PROPERTY.
7. THERE ARE NO KNOWN MAJOR UTILITY EASEMENTS ON THIS PROPERTY.

REQUIRED INFORMATION

DESCRIPTION OF PROPOSED WORK	DETACHED GARAGE ADDITION, PATIO, WALLS , WALKS, ECT
TAX MAP NUMBER	122-2 ((2)) 7
ZONING DISTRICT	RE
MINIMUM YARD REQUIREMENTS (SETBACKS)	FY:50', SY:20', RY: 25'
TOTAL LOT AREA (SQUARE FEET)	68,133 SF.
SERVED BY (INDICATE PUBLIC WATER OR INDIVIDUAL WELL)	PUBLIC WATER
SERVED BY (INDICATE PUBLIC SEWER OR INDIVIDUAL WASTEWATER MANAGEMENT SYSTEM)	INDIVIDUAL WASTE WATER MANAGEMENT SYSTEM
WATER QUALITY WAIVER INFO, IF APPLICABLE	PROVIDED ON SHEET NO.: 3
TREE CONSERVATION PLAN	PROVIDED ON SHEET NO.: 7

SPECIAL EXCEPTION PLAN
HALLOWING POINT RIVER ESTATES
LOT 7 - SECTION ONE
SE 2013 - MV - 011

MOUNT VERNON DISTRICT
FAIRFAX COUNTY, VIRGINIA

PROFESSIONAL SEAL

COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES
1111 & 191
CERTIFIED LAND SURVEYOR

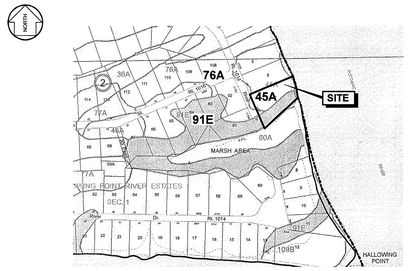
DATE : 12-31-2012
REV. 12-13-2013
REV. 12-18-2013

OWNER INFORMATION

KIMBERLY B CAMPBELL & KELLY P CAMPBELL
11727 RIVER DRIVE
MASONNECK, VA. 22079

SOILS MAP DATA

SCALE : 1" = 500'

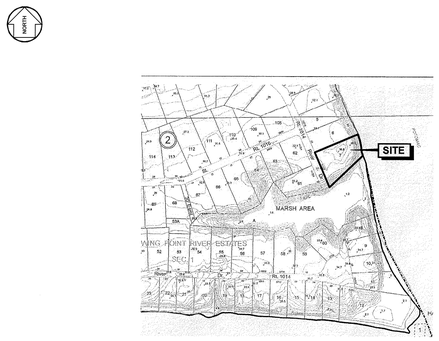


IS THE SITE LOCATED WITHIN NATURALLY OCCURRING ASBESTOS SOILS?
YES ☐ NO ■

AREAS THAT MAY CONTAIN NATURALLY OCCURRING ASBESTOS SOILS ARE LOCATED ON THE COUNTY ORANGE SOILS TAX MAP GRIDS ON THE COUNTY WEBSITE. SPECIAL PRECAUTIONS REGARDING THESE SOILS OR FILL ORIGINATING FROM THESE SOILS ARE REQUIRED BY THE OCCUPATIONAL SAFETY AND HEALTH REGULATIONS ENFORCED BY THE VIRGINIA DEPARTMENT OF LABOR AND INDUSTRY AND SPECIAL GUIDANCE HAS BEEN ISSUED BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY.

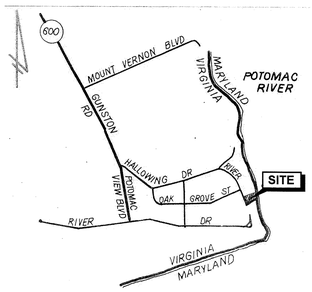
TOPOGRAPHIC MAP

SCALE : 1" = 500'



VICINITY MAP

SCALE : 1" = 2,000'



COUNTY NUMBER

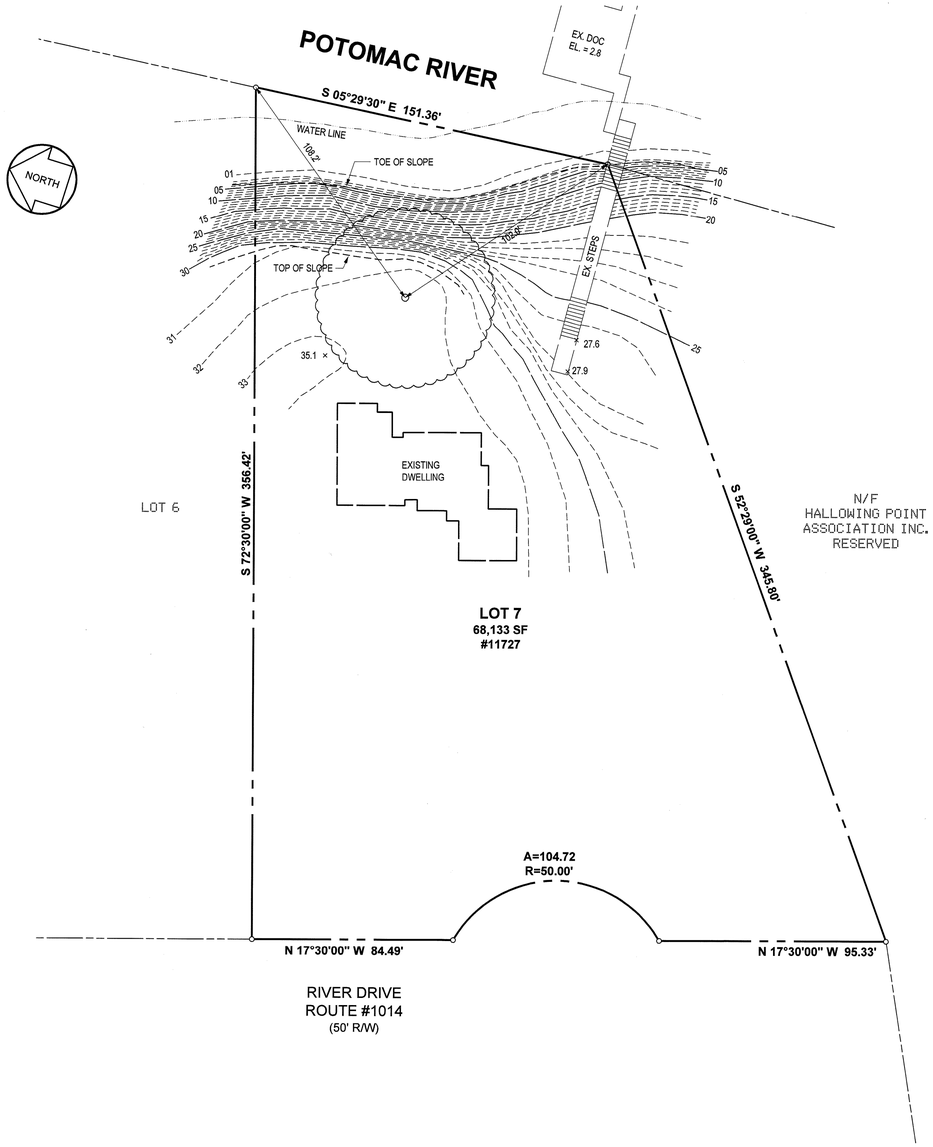
PLAN REVIEWER _____

SELECTED PROPERTIES AND RATINGS OF NRCS MAPPED SOILS IN FAIRFAX COUNTY

SOIL NUMBER	SOIL NAME[1]	EQUIVALENT OLD SOIL PROBLEM CLASS[2]	NEW SOIL PROBLEM CLASS[3]	SOIL HYDROLOGIC GROUP	SOIL EROSION FACTORS[4]			SUBSOIL PERMEABILITY RATE[5] (INCH / HOUR)	HIGH WATER TABLE[6]	HARD BEDROCK[7]	SOIL DRAINAGE[8]	SUITABILITY FOR SEPTIC DRAINFIELDS[9]	SUITABILITY FOR INFILTRATION TRENCHES[10]	EROSION POTENTIAL[11]	FOUNDATION SUPPORT[12]	OTHER NOTES[13]
					SURFACE K	CRITICAL K	T (TON / ACRE.YEAR)		AVERAGE DEPTH (FT)							
45	GRIST MILL MATAPEAKE COMPLEX	C	IVB	D	0.49	0.49	4	0.06 TO 2.0	2.0 TO > 6	> 20	GOOD	GOOD	GOOD	LOW	GOOD	
76	MATAPEAKE SILT LOAM	C	I	B	0.49	0.49	4	0.2 TO 2.0	> 6	> 200	GOOD	GOOD	GOOD	MEDIUM	GOOD	
91	SASSAFRAS MARUMSCO COMPLEX*	A	III	C	0.32	0.32	5	0.06 TO 2.0	1 TO > 6	> 50	POOR - P,C,S	POOR - P,U,C,S	POOR - P,C,U	HIGH	POOR - U,P,C,B	US

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

C:\DOCUME~1\HAROLD~1.LOG\LOCALS~1\Temp\AcPublish_5028\[RP] 1820 Special Exception Plan.dwg December 18, 2013 - 11:27am



COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES
1111 & 191
CERTIFIED LAND SURVEYOR

SCALE : 1" = 30'
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/NA
REVISIONS: 12-13-13
12-18-2013

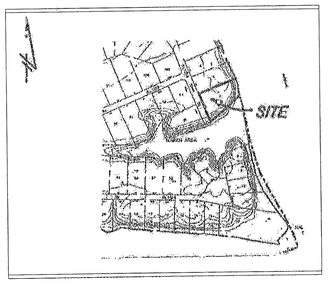
HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE

MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA

PRE - SPECIAL EXCEPTION CONDITION PLAN

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

RP 1820



TOPO MAP
1"=500'

TREE COVER TABULATION

GROSS SITE AREA = 68,133 SF

PERCENTAGE OF TREE COVER REQUIRED = 20%

TREE COVER REQUIRED = 13,626 SF

CREDIT FOR TREES PRESERVED = 1.25x 7400 SF = 9,250 SF
1.00x 15,000 SF = 15,000 SF (RPA)

TREE COVER PROVIDED = 24,250 SF

VEGETATION TABLE

AREA DESCRIPTION	VEG. TYPE	AREA (AC.)
EX. YARD	TURF AND SCATTERED TREES	1.17 ACRES
EX. BANK	SCRUB SHRUBS	0.31 ACRES
EX. SHORELINE	UNVEGETATED	0.08 ACRES

GENERAL NOTES

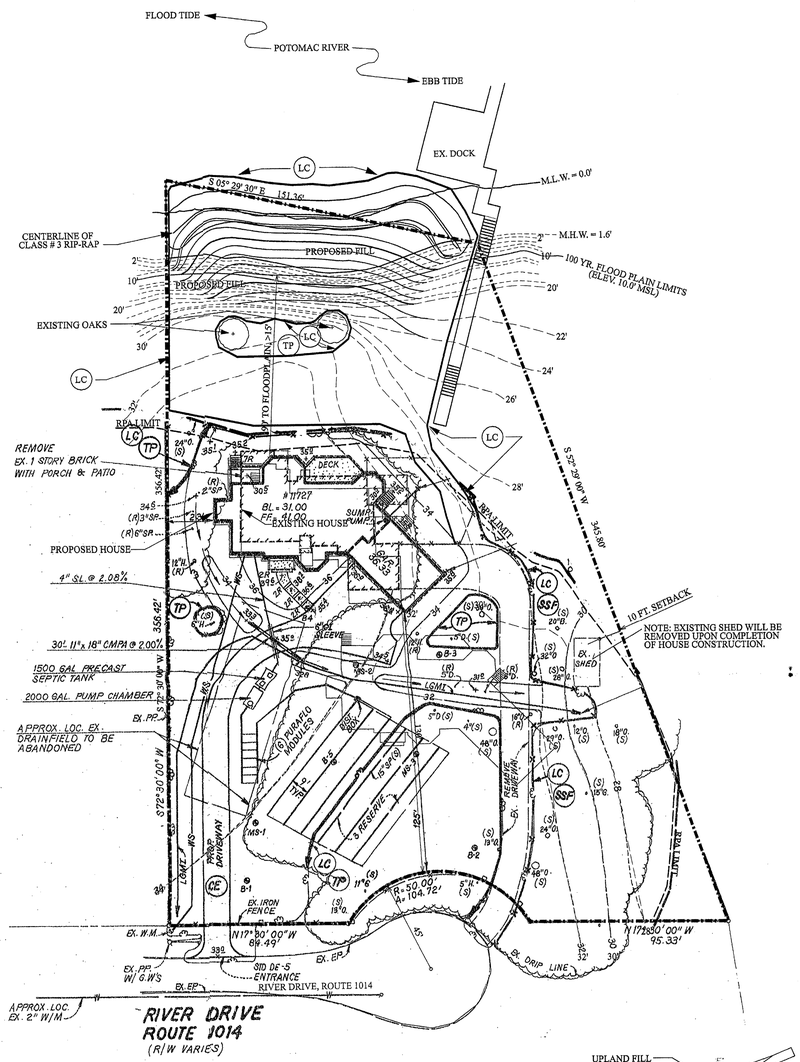
1) TAX MAP REFERENCE: 122-2-((2)) 7
2) NO TITLE REPORT FURNISHED.
3) PROPERTY IS SERVED BY PUBLIC WATER AND PRIVATE SEPTIC FIELD.
4) TOTAL DISTURBED AREA FOR SHORELINE PROJECT = 0.17AC.
5) WATERSHED : HIGH POINT.
6) SURFACED AREA OF FRONT YARD: N/A.
7) BOUNDARY AND TOPOGRAPHIC SURVEY BY OTHERS.
8) PLANIMETRICS AND OTHER BASE MAP AND NOTES TAKEN FROM APPROVED GRADING PLAN (# 005203-INF-06-1) BY HAROLD A. LOGAN ASSOCIATES, P.C.
9) MAXIMUM BUILDING HEIGHT <35'
10) 100-YR FLOODPLAIN DETERMINED FROM FEMA FIRM FOR TIDAL POTOMAC RIVER.
11) RPA LIMITS AS PER FAIRFAX COUNTY AND DELINEATED ON BASE MAP INFORMATION BY HAROLD A. LOGAN ASSOC., P.C.
12) NO TRAILS ARE REQUIRED, AS PER FAIRFAX CO. COMPREHENSIVE PLAN.
13) NO KNOWN GRAVE SITES ARE LOCATED ON THE PROPERTY.
14) PROPOSED FILL NOT TO EXCEED SLOPE OF TO 2:1.
15) NO UTILITY EASEMENTS WITHIN THE PROPOSED WORK AREA.
16) PROPOSED FILL IN DESIGNATED 100-YR FLOODPLAIN (ELEVATION 10.0' MSL) = 1100 CY.
17) SHORELINE STABILIZATION INFORMATION PROVIDED BY MJCI, INC, AS PER APPROVAL WETLAND PERMIT FIGURES AND PLAN.
18) FAIRFAX COUTNTY HEALTH DEPARTMENT APPROVAL DATED 3-24-04 FOR APPROVAL GRADING PLAN (005203-INF-06-1).

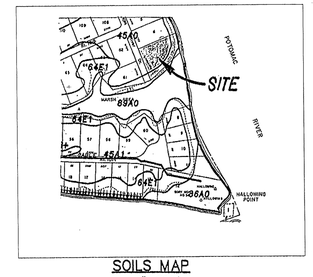
I hereby certify that, to the best of my knowledge and belief, all County approvals were in accordance to the Subdivision Ordinance in effect at the time of the creation of this lot. The lot was created as a part of the HALLOWING POINT RIVER ESTATES Subdivision approved on JULY 1948 and recorded in Deed Book 646 at Page 224 in the Fairfax County Land Records.

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

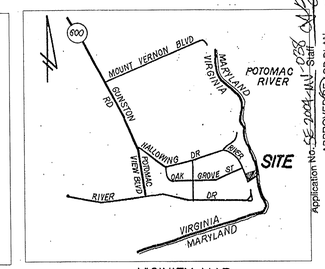
SIGNATURE

OWNER/DEVELOPER HAROLD A. LOGAN, JR. / Manager for Owner
NAME / TITLE





SOILS MAP
1"=500'



VICINITY MAP
1"=2000'

Application No. SE 2004-MV-038 Staff
APPROVED (SE) SP PLAN 105
SEE DEV CONDS DATED
Date of (BOS) (BZA) approval
Sheet 1 of 1

SOIL MAP/DATA

SOIL ID NUMBERS	SERIES NAME	FOUNDATION SUPPORT	SUBSURFACE DRAINAGE	SLOPE STABILITY	ERODABILITY	GEOTECHNICAL REPORT REQ'D	PROBLEM CLASS
45AO	MATAPEAKE	GOOD	FAIR-P	GOOD	MODERATE	NO	C
64E1	SILTY AND CLAYEY SED	MARGINAL U,B,C,P	MARGINAL C,P	POOR-U,C,P	SEVERE	YES	A
89AO	MARSH, (TIDAL)	POOR-P,B,W	POOR-P,W	GOOD	SLIGHT	YES	A

NOTE: ALL PROPOSED CONSTRUCTION IS WITHIN SOIL TYPE 45AO

LEGEND

EP = EDGE OF PAVEMENT
SL = SANITARY LATERAL
W.M. = WATER METER
W.S. = WATER SERVICE
EXISTING TREE (B = BEECH, D = DOGWOOD, H = HICKORY, G = SP = SPRUCE, O = OAK, P = POPLAR
(R) = TO BE REMOVED
(S) = TO BE SAVED
CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
LC LIMITS OF CLEARING, GRADING AND/OR CONSTRUCTION
SF TEMPORARY SILT FENCE
TP TEMPORARY TREE PROTECTION

OWNER

KIMBERLY B. CAMPBELL
KELLY B. CAMPBELL
11727 RIVER DRIVE
LORTON VA 22079

ZONING: RE

MINIMUM SETBACKS
FRONT = 30'
SIDE = 20'
REAR = 25'

DEVELOPER

MONTICELLO HOMES
7829 MANOR HOUSE DRIVE
FAIRFAX STATION, VA 22039
TEL. 703-425-0001
FAX. 703-425-6476

FLOODPLAIN STATEMENTS:

1) PROPOSED SHORELINE STABILIZATION PROJECT ADDRESSES EROSION PROBLEM ALONG EASTERN PROPERTY BOUNDARY, AS PER PLAN FAIRFAX COUNTY: LOCAL WETLAND BOARD PERMIT # WB-01-W-007.
2) CORPS, VMRC AND DEQ PERMITS OBTAINED FOR SHORELINE PROJECT.
3) NO HABITABLE STRUCTURES WITHIN FLOODPLAIN AND VERTICAL SEPARATION OF OVER 20 FEET EXISTS BETWEEN HOUSE FF. ELEVATION AND 100- YEAR FLOODPLAIN.

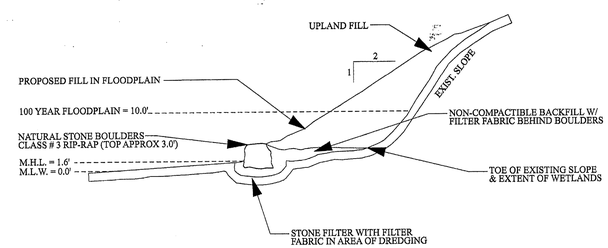
STORMWATER MANAGEMENT STATEMENT:

THIS PROJECT DOES NOT REQUIRE A SITE PLAN PURSUANT TO SECTION 17 OF THE FAIRFAX COUNTY ZONING ORDINANCE, DOES NOT REQUIRE SUBDIVISION APPROVAL PURSUANT TO SECTION 101 OF THE FAIRFAX COUNTY CODE, AND DOES NOT RESULT IN A IMPERVIOUS AREA OF MORE THAN 18% (6987 SF >18%); THEREFORE PER SECTION 118-3-2(1) OF THE FAIRFAX COUNTY CODE, NO BMP IS REQUIRED.

IMPERVIOUS ACREAGE ANALYSIS
(ENGINEER'S USE)

	DEVELOPMENT LEVEL		IMPERVIOUS ACREAGE COMPUTATIONS	
	PRE	POST	PRE	POST
SITE AREA IN ACRES	A	A	1.56	1.56
COMPOSITE RATIONAL C FACTOR	C1	C2	0.35	0.36
FRACTIONAL IMPERVIOUSNESS	I1	I2	0.150	0.162
TOTAL IMPERVIOUSNESS ACRES	AxI1	AxI2	0.23	0.2527

INCREASE IN IMPERVIOUS ACRES (AxI2)- (AxI1) 0.0227 ACRES= 1.5 % INCREASE



STONE BOULDER AND BACKFILL* (TYP)
*AS PER APPROVED WETLAND PERMIT
N.T.S.

CONTOUR INTERVAL = 2'
GRAPHIC SCALE: 1" = 30'
NORTH 30' 0' 30' 60'

RECEIVED
Department of Planning & Zoning
MAR 0 9 2005
Zoning Evaluation Division

ANGLER Environmental
Aquatic Resource Specialists
12801 Randolph Ridge Ln. Manassas, Va. 20109 ph: (703) 393-4844 fax: (703) 393-2934
106 North Thompson St. Richmond, Va. 23221 ph: (804) 353-6017 fax: (804) 353-6018

APPLICANT: KELLY AND KIM CAMPBELL

PROJECT: CAMPBELL -
HALLOWING POINT RIVER ESTATES -
LOT 7 - SECTION ONE - SHORELINE PROTECTION

SPECIAL EXCEPTION PLAT SE2004-MV-038

FAIRFAX COUNTY, VIRGINIA

PROJECT MANAGER:	LG
DESIGNED:	LG
DRAWN:	KG, DM
JOB NUMBER:	1450
DESIGN FILE:	1450-SPEX.DGN
DATE:	11/12/04
REVISIONS:	DM, 02/22/05

SHEET 1

COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES 1111 & 191
CERTIFIED LAND SURVEYOR

SCALE : 1" = 30'
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE
MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA
APPROVED SPECIAL EXCEPTION PLAN

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

SHEET 3 OF 8
RP 1820

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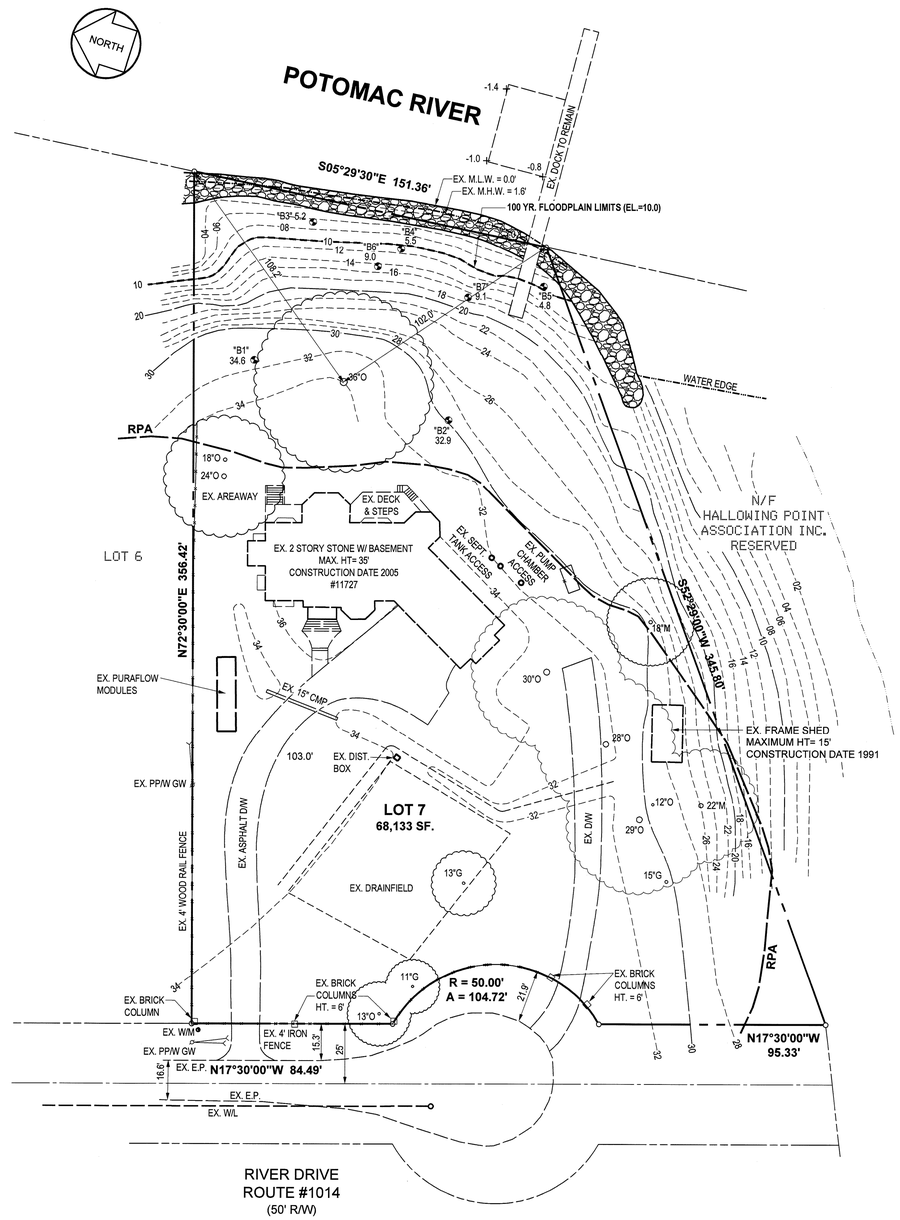
LEGEND

C & G = CURB & GUTTER
CLF = CHAIN LINK FENCE
D/W = DRIVEWAY
DS = DOWNSPOUT
EP = EDGE OF PAVEMENT
FH = FIRE HYDRANT
IPF = IRON PIPE FOUND
PP = POWER POLE
PP W/ GW = POWER POLE WITH GUY WIRE
(R) = TO BE REMOVED
(S) = TO BE SAVED
SL = SANITARY LATERAL
WF = WOOD FENCE
WM = WATER METER
WS = WATER SERVICE

EXISTING TREE
G = GUM
M = MAPLE
O = OAK



COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES
1111 & 191
LAND SURVEYOR

SCALE : 1" = 30'
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE

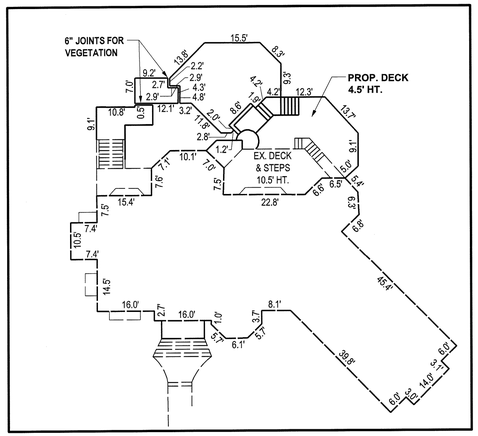
MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA

EXISTING CONDITIONS

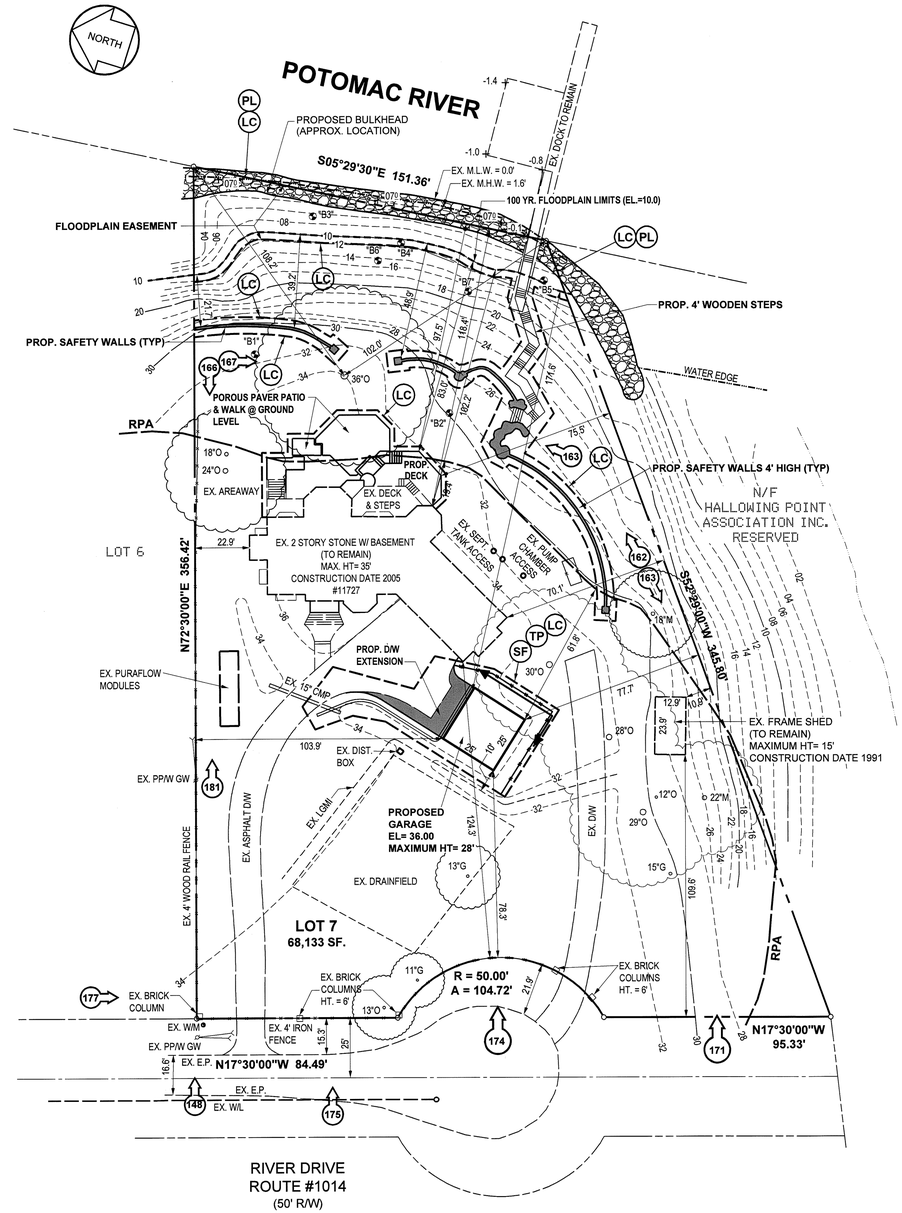
HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

SHEET 4 OF 8

RP 1820



HOUSE DIMENSION DETAIL
SCALE : 1" = 20'



LEGEND

- (CE) TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- (SF) TEMPORARY SILT FENCE
- (LC) LIMITS OF CLEARING, GRADING AND / OR DISTURBANCE
- (TP) TEMPORARY TREE PROTECTION

C & G = CURB & GUTTER
CLF = CHAIN LINK FENCE
D/W = DRIVEWAY
DS = DOWNSPOUT
EP = EDGE OF PAVEMENT
FH = FIRE HYDRANT
IPF = IRON PIPE FOUND
PP = POWER POLE
PP W/ GW = POWER POLE WITH GUY WIRE
(R) = TO BE REMOVED
(S) = TO BE SAVED
SL = SANITARY LATERAL
WF = WOOD FENCE
WM = WATER METER
WS = WATER SERVICE

EXISTING TREE
G = GUM
M = MAPLE
O = OAK

(000) DENOTES LOCATION OF PHOTOGRAPHER AND DIRECTION PHOTO WAS TAKEN

IMPERVIOUS SURFACE CALCULATIONS:

PRE-DEVELOPMENT:

DWELLING	3611 SF
DRIVEWAY	3430 SF
SHED	299 SF
LANDSCAPE	60483 SF
TOTAL	68133 SF

[(0.1756)(0.9) + (1.3885)(0.3)]/1.56 = C-FACTOR = 0.37
Q10 = (0.37)(1.56)(7.27) = 4.20 CFS

POST DEVELOPMENT

DWELLING	3611 SF
DRIVEWAY	3983 SF
GARAGE	600 SF
TERRACE	1132 SF
WALKS	350 SF
WALLS	450 SF
LANDSCAPE	58007 SF
TOTAL	68133 SF

[(0.2325)(0.9) + (1.3317)(0.3)]/1.56 = C-FACTOR = 0.39
Q10 = (0.39)(1.56)(7.27) = 4.42 CFS

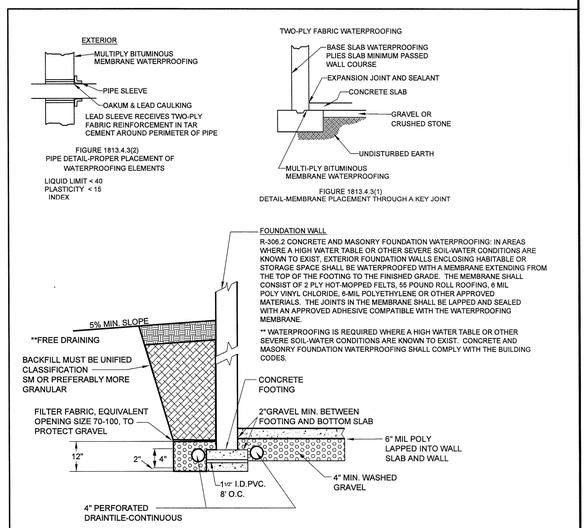
RUNOFF CALCULATIONS:
POST-DEVELOPMENT RUNOFF INCREASE:
4.42- 4.20 = 0.22 CFS

DURING CONSTRUCTION RUNOFF
(0.6)(0.2)(7.27) = 0.87 CFS (ALL REQUIRED SILT CONTROLS INSTALLED)

IMPERVIOUS SURFACE = 10126/68133 = 14.9%

THERE ARE RPA'S AS INDICATED ON THIS SITE.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS PLAN AND THE DEVELOPMENT PROPOSED HEREON CONFORMS TO ALL REQUIREMENTS OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE (FAIRFAX COUNTY CODE SECTION 118) ADOPTED BY THE FAIRFAX COUNTY BOARD OF SUPERVISORS ON JULY 7, 2003 AND EFFECTIVE NOVEMBER 18, 2003.



** FOUNDATION WALL BACKFILL MATERIAL SHALL BE CLEAN SAND OR GRAVEL OR A MIXTURE OF THESE GRANULAR SOILS. THE BACKFILL SHALL BE FREE DRAINING, GENERALLY FROST FREE, FREE FROM ORGANIC MATTER, CONSTRUCTION DEBRIS, LARGE ROCKS OR OTHER UNSUITABLE MATERIALS.

PLACEMENT OF WALL BACKFILL SHALL BE IN APPROVED LAYERS AND COMPACTED IN ACCORDANCE WITH THE BUILDING CODES.

NOTE: SPECIFIC INDIVIDUAL DESIGN REQUIRED IN SOIL WITH SEVERE GROUND WATER CONDITIONS AND CRETACEOUS AGE DELTAIC SILTS AND CLAYS (MARINE CLAY).

OBJECTIVE: TO REDUCE THE RISK OF WET BASEMENTS AND RELIEVE PRESSURE FROM SUBSURFACE WATER ON THE FOUNDATION.

METHOD OF DISCHARGE: DISCHARGE FOR FOUNDATION DRAINS WILL BE TO DAYLIGHT BY GRAVITY. WHERE THE FOUNDATION DRAIN IS CONNECTED TO A STORM SEWER STRUCTURE THE HYDRAULIC GRADIENT FOR THE 10 YR. STORM MUST BE BELOW THE LOWEST FLOOR ELEVATION AT THE POINT OF CONNECTION TO PRECLUDE BASEMENT FLOODING FROM THE STORM SEWER SYSTEM. DISCHARGE BY MECHANICAL MEANS IS ACCEPTABLE ONLY WHEN GRAVITY DISCHARGE IS NOT POSSIBLE.
HOUSE GRADING PLANS SHALL SHOW THE FOUNDATION DRAINS AND THE LOCATION OF THE FOUNDATION DRAIN DISCHARGE.
ROOF DRAINS MUST DISCHARGE BEYOND LIMITS OF EXCAVATION FOR FOUNDATION WALLS.

TYPICAL FOUNDATION DRAIN

RPA Boundary Location Certification

(The following certification statement is to be placed on the plan, signed, and sealed by the licensed professional submitting the plan.)

RPA Boundary Location Certification

The lot depicted on this infill lot grading plan includes an RPA. The locations of all RPA features have been verified in the field.

Checklist of RPA features which are present:

YES	NO	
☐	☑	(1) A tidal wetland;
☑	☐	(2) A tidal shore;
☑	☐	(3) A water body with perennial flow;
☐	☑	(4) A nontidal wetland connected by surface flow and contiguous to a tidal wetland or water body with perennial flow;
		(5) A buffer area as follows:
☑	☐	(i) Any land within a major floodplain;
☑	☐	(ii) Any land within 100 feet of a feature listed in (1) through (4).

Supporting Documents:

☐ Jurisdictional determination or verification letter from the U.S. Army Corps of Engineers for all Waters of the U.S.

I hereby certify that:

Each of the individual features listed above, which together comprise the RPA, have been reviewed and the locations of the features and final RPA boundary shown on the plan are in conformance with the requirements of the Chesapeake Bay Preservation Ordinance.

Signature — Date: 9/26/2011

Name: HAROLD A. LOGAN — Virginia license number: CERTIFIED LAND SURVEYOR #1111

NOTE :
ALL EXISTING STRUCTURES TO REMAIN UNLESS OTHERWISE NOTED

THE HORIZONTAL AND VERTICAL LOCATION OF UNDERGROUND ELECTRICAL, GAS, CABLE TV, AND TELEPHONE UTILITIES SHOWN ON THESE PLANS ARE TAKEN FROM AVAILABLE INFORMATION. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF SAID UTILITIES PRIOR TO BEGINNING EXCAVATION IN THE VICINITY THEREOF.

4-0402 INSPECTION

ALL CONSTRUCTION INVOLVING PROBLEM SOILS MUST BE PERFORMED UNDER THE FULL-TIME INSPECTION OF THE GEOTECHNICAL ENGINEER. AND THE GEOTECHNICAL ENGINEER SHALL FURNISH A WRITTEN OPINION TO THE COUNTY AS TO WHETHER OR NOT WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS, AND HIS RECOMMENDATIONS FOR WORK IN THE ISSUANCE OF RESIDENTIAL OR NONRESIDENTIAL USE PERMITS.

THIS PLAN AND THE DEVELOPMENT PROPOSED HEREON COMPLIES WITH THE AMENDED CHESAPEAKE BAY PRESERVATION ACT DUE TO THE FOLLOWING:

LAND DISTURBING ACTIVITIES HAVE BEEN LIMITED TO THE EXTENT POSSIBLE, AND ALL EROSION AND SEDIMENT CONTROLS WILL BE INSTALLED AS REQUIRED.

COMMONWEALTH OF VIRGINIA — HAROLD A. LOGAN — CERTIFICATES 1111 & 191 — CERTIFIED LAND SURVEYOR

SCALE : 1" = 30'
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE

MOUNT VERNON DISTRICT — FAIRFAX COUNTY, VIRGINIA

SPECIAL EXCEPTION PLAN

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

SHEET 5 OF 8

RP 1820

EROSION AND SEDIMENT CONTROL NARRATIVE (CONSTRUCTION SEQUENCE)

1. INSTALL CONSTRUCTION ENTRANCE
2. INSTALL SILT FENCES IN THEIR LOCATIONS AS SHOWN ON PLAN.
3. CLEAR SITE.
4. CONSTRUCT GARAGE.
5. PERMANENTLY STABILIZE DISTURBED AREAS PER VIRGINIA EROSION AND SEDIMENT CONTROL STANDARD AND SPEC. 3.32.
6. REMOVE E&S CONTROLS WITH THE SITE INSPECTORS PERMISSION.

LAND CONSERVATION NOTES

1. NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 14 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS AGENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER BACKFILL.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
6. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
7. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, IS TO BE MULCHED WITH HAY OR STRAW MULCH AT THE RATE OF TWO TONS PER ACRE AND OVER-SEEDED NO LATER THAN MARCH 15TH.
8. AT THE COMPLETION OF CONSTRUCTION PROJECTS AND PRIOR TO THE RELEASE OF THE BOND, ALL TEMPORARY SEDIMENT AND EROSION CONTROLS SHALL BE REMOVED AND ALL DISTURBED AREAS SHALL BE STABILIZED.

MAINTENANCE PROGRAM:

1. THE SITE SUPERINTENDENT, OR HIS/HER REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (i.e. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS; SPECIALLY AFTER A HEAVY RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.
2. ALL SEDIMENT TRAPPING DEVICES SHALL BE CLEANED OUT AT 50% TRAP CAPACITY AND THE SEDIMENT SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR HAULING AWAY IF NOT SUITABLE FOR FILL.

THE EROSION AND SEDIMENT CONTROLS SHOWN ON THIS PLAN HAVE BEEN DESIGNED IN ACCORDANCE WITH FAIRFAX COUNTY PUBLIC FACILITIES MANUAL CHAPTER 11, AND THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK 1992, THIRD ADDITION.

FAIRFAX COUNTY PRIORITY RATING FORM FOR EROSION & SEDIMENT CONTROL

PROJECT NAME: HALLOWING POINT RIVER ESTATES LOT 7- SECTION ONE PROJECT NUMBER: _____

TAX MAP: 122-2 ((2))7 EVALUATOR: MARK CRAIN DATE: 12-28-2012

A. Percentage of Denuded Area to Total Site Area

		Rating
• >60%	[ ]	5
• 31 to 60%	[ ]	3
• 10 to 30%	[X]	1

If the denuded area is greater than 10 acres, the project is initially rated a high priority.

B. Watercourse Crossing

		Rating
Yes	[ ]	*
No	[X]	0

*If yes, project is initially rated a high priority.

C. Distance of Denuded Area to Downstream Adjacent Property

		Rating
• < 50-feet	[X]	5
• 50 to 150-feet	[ ]	3
• > 150-feet	[ ]	0

D. Distance of Any Portion of the Denuded Area to a Natural Watercourse

		Rating
• < 50-feet	[X]	5
• 50 to 150-feet	[ ]	3
• > 150- feet	[ ]	0

E. *Minimum Vegetative Buffer (Trees, Shrubs, Grasses and other Plants)

		Rating
• < 50-feet	[X]	0
• 50 to 150-feet	[ ]	-3
• > 150-feet	[ ]	-5

* Vegetation in Resource Protection Areas are not to be included as vegetative buffers for this application.

F. Distance Between the Site Outfall and any Downstream, Wet Pond, Wetland, Parkland or other Land Deemed Environmentally Sensitive by the Director.

		Rating
• < 2,500-feet	[X]	5
• 2,500 to 5,000-feet	[ ]	3
• > 5,000-feet	[ ]	0

G. Critical Slopes Within 50-feet of Adjacent Property

- Are there any slopes of 0 to 7%; greater than or equal to 300-feet in length; or,
- Are there any slopes of 7 to 15%; greater than or equal to 1 50-feet in length; or,
- Are there any slopes greater than 15% and greater than or equal to 75-feet in length

		Rating
If Yes to any of the above	[X]	5
Not Applicable if critical slope is > 50-feet from adjacent property	[ ]	0

H. Soil Erodibility (Based on Physiographic Setting)

Physiographic Province		Rating
• Triassic Basin	[X]	5
• Piedmont Upland	[ ]	3
• Coastal Plain	[ ]	1

TOTAL / OVERALL RATING : 26

OVERALL RATING	PRIORITY	(Mark with an "X")
If > 22	High	[X]
If > 14 and < or = to 22	Medium	[ ]
If < or = to 14	Low	[ ]

PROJECT PRIORITY LEVEL: HIGH

Reserved for Fairfax County use

APPROVED BY _____ DATE _____
Plan Reviewer

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

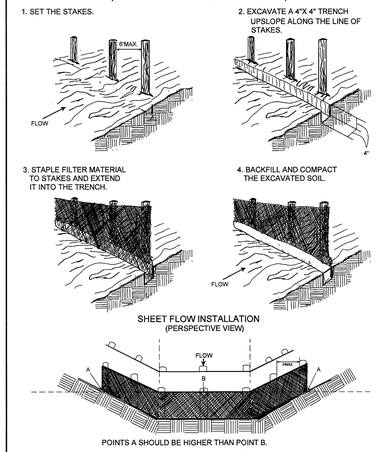


PLATE. 3.05-2

SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, VA. DSWC Sherwood and Wyant

STONE CONSTRUCTION ENTRANCE

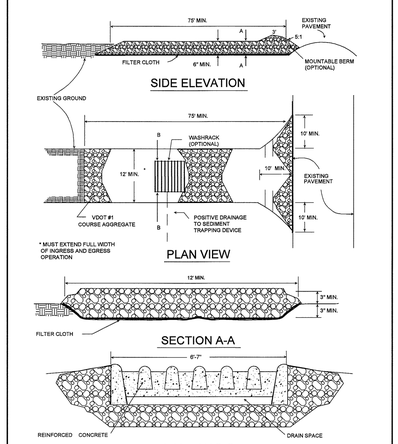


Plate 3.02-1

SOURCE: ADAPTED from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

TREE PROTECTION FENCE INSTALLATION

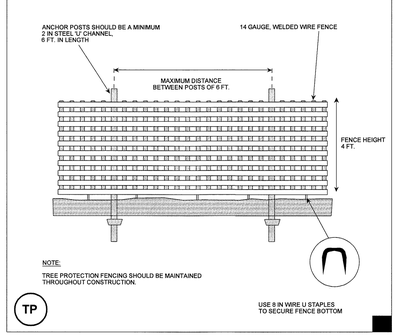


TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA

	Total Lbs. Per Acre
Minimum Care Lawn	
- Commercial or Residential	175-200 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	95-100%
- Improved Perennial Ryegrass	0-5%
- Kentucky Bluegrass	0-5%
High-Maintenance Lawn	200-250 lbs.
- Kentucky 31 or Turf-Type Tall Fescue	100%
General Slope (3:1 or less)	
- Kentucky 31 Fescue	128 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
	150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	
- Kentucky 31 Fescue	108 lbs.
- Red Top Grass	2 lbs.
- Seasonal Nurse Crop *	20 lbs.
- Crownvetch **	20 lbs.
	150 lbs.

* Use seasonal nurse crop in accordance with seeding dates as stated below :
February 16th through April ..... Annual Rye
May 1st through August 15th ..... Foxtail Millet
August 16th through October ..... Annual Rye
November through February 15th ..... Winter Rye

** Substitute Sericea lespedeza for Crownvetch east of Farmville, Va. (May through September use hulled Sericea, all other periods, use unhulled Sericea). If Flatpea is used in lieu of Crownvetch, Increase rate to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.

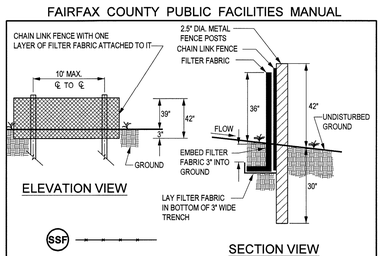
TABLE 3.35-A

ORGANIC MULCH MATERIALS AND APPLICATION RATES

MULCHES:	RATES: Per Acre	RATES: Per 1000 sq. ft.	NOTES:
Straw or Hay	1½ - 2 tons (Minimum 2 tons for winter cover)	70 - 90 lbs.	Free from weeds and coarse matter. Must be anchored. Spread with mulch blower or by hand.
Fiber Mulch	Minimum 1500 lbs.	35 lbs.	Do not use as mulch for winter cover or during hot, dry periods.* Apply as slurry.
Corn Stalks	4 - 6 tons	185 - 275 lbs.	Cut or shredded in 4-6" lengths. Air-dried. Do not use in fine turf areas. Apply with mulch blower or by hand.
Wood Chips	4 - 6 tons	185 - 275 lbs.	Free of coarse matter. Air-dried. Treat with 12 lbs nitrogen per ton. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.
Bark Chips or Shredded Bark	50 - 70 cu. yds.	1-2 cu. yds.	Free of coarse matter. Air-dried. Do not use in fine turf areas. Apply with mulch blower, chip handler, or by hand.

* When fiber mulch is the only available mulch during periods when straw should be used, apply at a minimum rate of 2000 lbs./ac. or 45 lbs./1000 sq. ft.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



SUPER SILT FENCE
NO SCALE

FENCING
CHAIN LINK FENCE SHALL BE 39" ABOVE GRADE WITH 3" EMBEDDED FOR A TOTAL FABRIC WIDTH OF 42". THE POST SHALL BE 42" ABOVE GRADE WITH 30" PLACED BELOW GRADE (WITHOUT CONCRETE) FOR A TOTAL LENGTH OF 72".

NOTES
1. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES.
2. FILTER FABRIC SHALL BE FASTENED SECURELY TO CHAIN LINK FENCE WITH TIES SPACED HORIZONTALLY 24" AT THE TOP AND MIDSECTION.
3. PHYSICAL PROPERTIES OF THE FILTER FABRIC SHALL CONFORM TO THE LATEST EDITION OF THE **VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.**
4. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6".
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN SEDIMENT BUILD-UP REACHES 50% OF THE HEIGHT OF THE SUPER SILT FENCE.

REF. SEC. 11-0110.3J	SUPER SILT FENCE NO SCALE	PLATE NO.	STD. NO.
REV. 1-00		11-11	

OUTFALL NARRATIVE

GENERAL
THERE ARE NO ONSITE STORMWATER MANAGEMENT FACILITIES PLANNED FOR THIS SITE. THERE ARE NO CONCENTRATED FLOWS LEAVING THIS SITE. ALL OVERLAND FLOW IS IN THE FORM OF SHEET FLOW BY THE TIME DITCH SECTION ALONG RIVER DRIVE OR THE POTOMAC RIVER IS REACHED.

DRAINAGE AREA
THE TOTAL DRAINAGE FOR THIS SITE IS 1.5 ACRES.

OUTFALL DISCHARGE AMOUNT
PEAK 10-YEAR RELEASES FROM THESE AREAS TOTALS 4.42 CFS AT THE 10-YEAR STORM. PRE-DEVELOPMENT RUNOFF IS 4.20 CFS (10-YEAR). POST-DEVELOPMENT RUNOFF INCREASES THIS FIGURE BY 0.22 CFS.

CHANNEL CROSS SECTION
THERE ARE NO CHANNEL CROSS SECTIONS TO INVESTIGATE ON THE PROPOSED SITE. ALL FLOW IS SHEET FLOW.

LIMITS OF STUDY
THE LIMITS OF STUDY ARE DEPICTED ON THE TOPO/DRAINAGE DIVIDE MAP.

CHANNEL PERMISSIBLE VELOCITY
THE MAXIMUM ALLOWABLE VELOCITY FOR A GRASS-LINED DITCH IS 4.0 FPS, HOWEVER THERE ARE NO CHANNELS TO CONCENTRATE FLOWS.

CHANNEL CAPACITY
THERE ARE NO CHANNELS. ALL RUNOFF FLOW IS OVERLAND IN NON-CONCENTRATED FORM.

CHANNEL VELOCITY
NA.

EASEMENT REQUIREMENTS
NO EASEMENTS ARE REQUIRED SINCE THE DOWNSTREAM REACHES ARE ADEQUATE AND NO CHANNEL IMPROVEMENTS ARE PROPOSED.

DOWNSTREAM IMPACTS
NO CULVERTS OR BRIDGES ARE PRESENT THROUGH THE ENTIRE LIMITS OF STUDY.

FINAL OPINION
POST-DEVELOPMENT RUNOFF IS ONLY MARGINALLY INCREASED OVER EXISTING FLOW. THE EXISTING SYSTEM HAS SUFFICIENT CAPACITY TO HANDLE THE PROPOSED DEVELOPMENT. THE RUNOFF VELOCITIES ARE NOT EROSIVE. NO DELETERIOUS DOWNSTREAM EFFECTS WILL BE REALIZED. IN MY PROFESSIONAL OPINION THE OUTFALL IS ADEQUATE AND NO ADVERSE DOWNSTREAM EFFECTS DUE TO PROPOSED DEVELOPMENT WILL OCCUR.

PRE-DEVELOPMENT SITE CONDITIONS NARRATIVE

PROJECT DESCRIPTION
THIS PROJECT PROPOSED HEREON INVOLVES A PATIO ADDITION AND THE NEW CONSTRUCTION OF A DETACHED GARAGE TO A SINGLE-FAMILY DWELLING AND ASSOCIATED IMPROVEMENTS ON 1.56 ACRES IN THE MT VERNON DISTRICT. A TOTAL OF 0.20 ACRES WILL BE DISTURBED OVER THE COURSE OF THIS PROJECT. THE PROJECT IS LOCATED IN THE HIGH POINT WATERSHED.

EXISTING SITE CONDITIONS
THE SITE CURRENTLY FLOWS FROM THE WEST TO THE EAST AND INTO THE POTOMAC RIVER. THERE IS A NATURAL HIGH POINT ON THE SITE ALONG RIVER DRIVE. TO THE EXTENT POSSIBLE THE EXISTING MAN MADE AND NATURAL DRAINAGE PATTERNS HAVE BEEN HONORED ACROSS THE PROPERTY. THE HIGH POINT IS ALONG RIVER DRIVE AT AN ELEVATION OF APPROXIMATELY 34.0 SLOPING TOWARDS THE REAR OF THE PROPERTY LEAVING THE SITE AT THE POTOMAC RIVER. THE SITE FEATURES SHEET FLOW.

ADJACENT AREAS
THERE IS AN RPA LOCATED ONSITE AS SHOWN. SUPER SILT FENCE AND TREE PROTECTION WILL BE UTILIZED ONSITE IN ORDER TO MINIMIZE IMPACTS TO THE RPA. THE RPA WILL BE ENCROACHED UPON BY THE PROPOSED DEVELOPMENT. A WQIA WILL BE PROVIDED IN ORDER TO DETAIL THE MITIGATION OF THE DISTURBANCE IN THE RPA.

OFF-SITE AREAS
OFF-SITE AREAS ARE TO BE DISTURBED DUE TO THIS PROJECT AS SHOWN. NO BORROW SITES ARE TO BE UTILIZED AND ANY WASTE OF SURPLUS IS TO BE DISPOSED OF VIA PROPER PROCEDURES.

CRITICAL AREAS
THERE ARE RPA'S ON AND SURROUNDING THIS SITE.

SOILS
THIS SITE FEATURES GRIST MILL MATAPEAKE (45A), HONGA PEAT (60A), MATAPEAKE SILT LOAM (76A) AND SASSAFRAS/MARUMSCO COMPLEX (91E) TYPE SOILS. PLEASE SEE GEOTEHCNICAL REPORT HEREON FOR FURTHER INFORMATION.

EROSION AND SEDIMENT CONTROLS
SUPER SILT FENCE IS BEING EMPLOYED ON THE DOWNSTREAM SIDE OF THE SITE AND ONLY AS MUCH LAND WILL BE CLEARED AS NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS.

PERMANENT SITE STABILIZATION:
ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING SHALL BE DONE WITH AN APPROPRIATE GROUND COVER ACCORDING TO SPEC. 3.32D VESC THAT DICTATES 175-200 LBS/ACRE OF SEED FOR THE PIEDMONT AREA. THE SEED SHALL INCLUDE 95-100% TURF-TYPE TALL FESCUE, 0-5% IMPROVED PERENNIAL RYEGRASS AND 0-5% KENTUCKY BLUEGRASS. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES THAT HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS AND WILL BE APPLIED AS A SECOND STEP IN THE SEEDING OPERATION. IN ALL SEEDING OPERATION, SEED, FERTILIZER AND LIME WILL BE APPLIED PRIOR TO MULCHING.

MAINTENANCE:
IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. THE SILT FENCE BARRIER WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF THE SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
2. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RE-SEEDED AS NEEDED.
3. TREE PROTECTION WILL BE INSPECTED AND REPLACED IF REMOVED FOR ANY REASON.
4. CONSTRUCTION ENTRANCE AND WASH RACK WILL BE INSPECTED TO ENSURE PROPER OPERATION AND ANY MAINTENANCE REQUIRED WILL BE PERFORMED IMMEDIATELY.

STOCKPILE AREA (IF REQUIRED)
SURPLUS SOIL FROM THE CONSTRUCTION PROPOSED HEREON SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO SEDIMENT DAMAGE SHALL RESULT. STOCKPILES SHALL BE STABILIZED IN ACCORDANCE WITH MS#2. THE SIDE SLOPES OF THE STOCKPILES SHALL NOT EXCEED 2:1. PERIMETER CONTROLS MUST BE PLACED AROUND THE STOCKPILE IMMEDIATELY; SEEDING OF STOCKPILES SHALL BE COMPLETED WITH 7 DAYS OF THE FORMATION OF THE STOCKPILE IN ACCORDANCE WITH ST. & SPEC 3.31, TEMPORARY SEEDING IF IT IS TO REMAIN DORMANT FOR LONGER THAN 30 DAYS.

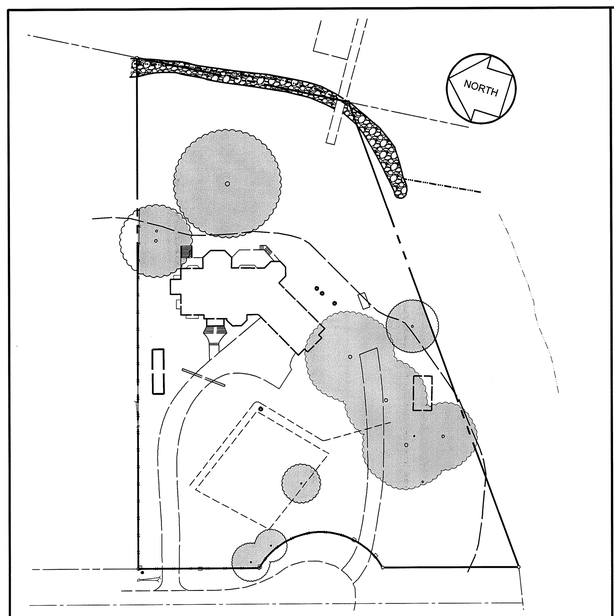
COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES 1111 & 191
LICENSED LAND SURVEYOR

SCALE : N/A
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/ NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE
MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA
NOTES & DETAILS

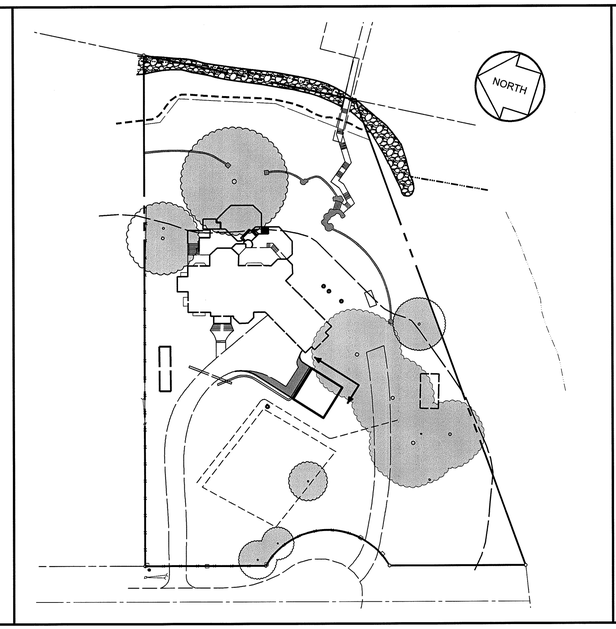
HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

SHEET 6 OF 8
RP 1820



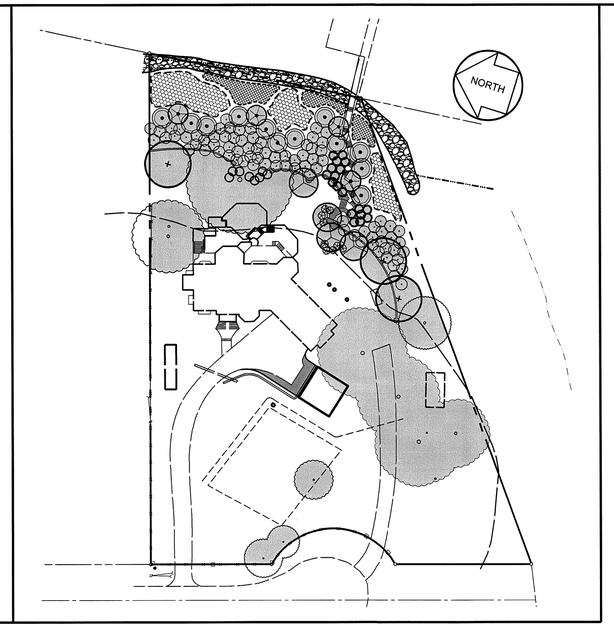
EXISTING VEGETATION MAP

SCALE : 1" = 50'



TREE PRESERVATION PLAN

SCALE : 1" = 50'



POST DEVELOPMENT PLAN / TREE CANOPY COVER

SCALE : 1" = 50'

Table 12.3 Tree Preservation Target Calculations and Statement

A	Pre-development area of existing tree canopy (from Existing Vegetation Map) =	14,064 SF
B	Percentage of gross site area covered by existing tree canopy =	20.6%
C	Percentage of 10-year tree canopy required for site (see Table 12.4) =	30%
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	6.2%
E	Proposed percentage of canopy requirement that will be met through tree preservation =	100%
F	Has the Tree Preservation Target minimum been met?	Provide Yes or No
G	If No for line F, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications listed in § 12-0508.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	
H	If step G requires a narrative, it shall be prepared in accordance with § 12-0508.4	
I	Place this information prior to the 10-year tree Canopy Calculations as per instructions in Table 12.10.	

Table 12.10 10-year Tree Canopy Calculation Worksheet

Step		Totals	Reference
A. Tree Preservation Target and Statement			
A 1	Place the Tree Preservation Target calculations and statement here preceeding the 10-year tree canopy calculations		see § 12-0508.2 for list of required elements and worksheet
B. Tree Canopy Requirement			
B1	Identify gross site area =	68,133 SF	§ 12-0511.1A
B2	Subtract area dedicated to parks, road frontage, and		§ 12-0511.1B
B3	Subtract area of exemptions =	4,200 SF	§ 12-0511.1C(1) through § 12-0511.1C(6).
B4	Adjusted gross site area (B1 - B2) =	63,933 SF	
B5	Identify site's zoning and/or use	RE	
B6	Percentage of 10-year tree canopy required =	30%	§ 12-0510.1 and Table 12.4
B7	Area of 10-year tree canopy required (B4 x B6) =	19,180 SF	
B8	Modification of 10-year Tree Canopy Requirements requested?	NO	Yes or No
B9	If B8 is yes, then list plan sheet where modification request is located		Sheet number
C. Tree Preservation			
C1	Tree Preservation Target Area =	4,224 SF	
C2	Total canopy area meeting standards of § 12-0400 =	9,995 SF	
C3	C2 x 1.25 =	12,494 SF	§ 12-0510.3B
C4	Total canopy area provided by unique or valuable forest or woodland communities		
C5	C4 x 1.5 =		§ 12-0510.3B(1)
C6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =		
C7	C6 x 1.5 to 3.0 =		§ 12-0510.3B(2)
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	4,069	
C9	C8 x 1.0 =	4,069	§ 12-0510.3C(1)
C10	Total of C3, C5, C7 and C9 =	16,563 SF	If area of C10 is less than B7 then remainder of requirement must be met through tree planting - go to D
D. Tree Planting			
D1	Area of canopy to be met through tree planting (B7-C10) =	2,125	
D2	Area of canopy planted for air quality benefits =		
D3	x 1.5 =		§ 12-0510.4B(1)
D4	Area of canopy planted for energy conservation =		
D5	x 1.5 =		§ 12-0510.4B(2)
D6	Area of canopy planted for water quality benefits =		
D7	x 1.25 =		§ 12-0510.4B(3)
D8	Area of canopy planted for wildlife benefits =		
D9	x 1.5 =		§ 12-0510.4B(4)
D10	Area of canopy provided by native trees =		
D11	x 1.5 =		§ 12-0510.4B(5)
D12	Area of canopy provided by improved cultivars and varieties =		
D13	x 1.25 =		§ 12-0510.4B(6)
D14	Area of canopy provided through tree seedlings =		
	x 1.0 =		§ 12-0510.4D(1)
D15	Area of canopy provided through native shrubs		
	x 1.0 =		§ 12-0510.4D(1)
D16	Percentage of D14 represented by D15 =		Must not exceed 33% of D14
D17	Total of canopy area provided through tree planting =	0	
D18	Is an off-site planting relief requested?	NO	Yes or No
D19	Tree Bank or Tree Fund?	NO	§ 12-0512
D20	Canopy area requested to be provided through off-site banking or tree fund.	N/A	
D21	Amount to be deposited into the Tree Preservation and Planting Fund	N/A	
E. Total of 10-year Tree Canopy Provided			
E1	Total of canopy area provided through tree preservation (C10) =	16,563 SF	
E2	Total of canopy area provided through tree planting (D17) =	2,125 SF	
E3	Total of canopy area provided through off-site mechanism (D19) =		
E4	Total of 10-year Tree Canopy Provided = (E1+E2+E3)	18,688 SF	Total of E1 through E3. Area should meet or exceed area required by B7

11727 RIVER DRIVE TREE PRESERVATION/CONSERVATION NARRATIVE

1. ALL WORK PERFORMED SHALL MEET OR EXCEED INDUSTRY STANDARDS. IN THE EVENT CULTURAL TREATMENTS PRESCRIBED ARE NOT COVERED BY AN EXISTING STANDARD, ALL WORK SHALL MEET OR EXCEED STANDARDS APPROVED BY THE FAIRFAX COUNTY URBAN FORESTER. INDUSTRY STANDARDS SHALL MEAN THOSE MOST RECENTLY PUBLISHED BY INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), AND/OR TREE CARE INDUSTRY ASSOCIATION (TCIA).
2. PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL INDIVIDUAL TREES AND GROUPS OF TREES SHOWN TO BE PRESERVED ON THE TREE PRESERVATION PLAN SHALL BE PROTECTED BY FENCING A MINIMUM OF FOUR FEET IN HEIGHT, PLACED AT THE LIMITS OF CLEARING AND GRADING, OR AS DETERMINED DURING THE PRE-CONSTRUCTION MEETING. TREE PROTECTION FENCING SHOULD BE 14 GAUGE STEEL WOVEN WIRE "FARM FENCE", ON 6 FOOT STEEL POSTS DRIVEN INTO THE GROUND 18 INCHES AND PLACED NOT MORE THAN 10 FEET APART; OR SUPER SILT FENCE; OR CHAINLINK FENCE. THE TREE PROTECTION FENCING SHALL BE MADE CLEARLY VISIBLE TO ALL CONSTRUCTION PERSONNEL WITH SIGNS POSTED ON IT STATING IN SPANISH AND ENGLISH THAT IT IS A TREE PRESERVATION AREA AND NO ENTRY IS PERMITTED. THE FENCING SHALL BE INSTALLED PRIOR TO ANY WORK BEING CONDUCTED ON THE SITE, INCLUDING THE DEMOLITION OF ANY EXISTING STRUCTURES OR FENCES, UNLESS AUTHORIZED BY THE FAIRFAX COUNTY URBAN FORESTER.
3. ALL CONSTRUCTION ACTIVITY BEYOND THE LIMITS OF CLEARING AND GRADING SHOWN ON THE SITE PLAN AND THE TREE PRESERVATION PLAN SHALL BE PROHIBITED UNLESS PREVIOUSLY APPROVED BY THE FAIRFAX COUNTY URBAN FORESTER.
4. THE ENGINEER, ARCHITECT, OR SITE SUPERINTENDENT SHALL FLAG THE LIMITS OF CLEARING AND GRADING PRIOR TO THE PRECONSTRUCTION MEETING.
5. THE SITE SUPERINTENDENT, FAIRFAX COUNTY URBAN FORESTER, AND PROJECT ARBORIST SHALL WALK THE LIMITS OF CLEARING AND GRADING TO DISCUSS TREE ISSUES AND THE IMPORTANCE OF NOT VIOLATING THE LIMITS OF CLEARING AND GRADING. TREES TO BE REMOVED FROM WITHIN TREE SAVE AREAS AND PORTIONS OF THE LIMITS OF CLEARING AND GRADING TO BE ROOT PRUNED SHALL BE CONFIRMED AT THIS TIME. ANY TREE PRESERVATION ACTIVITIES SUCH AS CROWN PRUNING, VERTICAL MULCHING SHALL BE DISCUSSED AT THIS TIME AS WELL.
6. CLEARING OPERATIONS: TREES TO BE REMOVED SHALL BE FELLED IN SUCH A MANNER AS TO PRESERVE THE TREES THAT ARE TO REMAIN. TREES DIRECTLY ADJACENT TO BUT WITHIN THE LIMITS OF CLEARING AND GRADING SHALL BE FELLED BY HAND, WITH A CHAIN SAW, AND THE STUMPS SHALL REMAIN IN PLACE. IF, DUE TO SITE CONSTRAINTS, THE STUMPS MUST BE REMOVED, THIS SHALL BE DONE ONLY AFTER ROOT PRUNING ALONG THE LIMITS OF CLEARING AND GRADING HAS OCCURRED, AND SHALL BE DONE IN A MANNER THAT DOES NOT INJURE TREES TO BE PRESERVED.
7. OFF-SITE AND JOINTLY OWNED TREES SHOULD RECEIVE SPECIAL ATTENTION; DISCUSS THE PROJECT WITH OWNERS OF SUCH TREES BEFORE STARTING WORK.
8. THE TREE CARE CONTRACTOR SHALL PERFORM TREE REMOVALS AS SPECIFIED. TREES WITHIN THE TREE PRESERVATION AREAS, WHICH ARE INDIVIDUALLY IDENTIFIED BY THE PROJECT ARBORIST AND/OR THE FAIRFAX COUNTY URBAN FORESTER TO BE REMOVED, SHALL BE FELLED BY HAND WITH A CHAIN SAW AND THE STUMPS SHALL REMAIN IN PLACE. SUCH TREES SHALL BE FELLED IN A MANNER THAT DOES NOT INJURE TREES TO BE PRESERVED. TREES TO BE REMOVED FROM THE TREE PRESERVATION AREA SHALL BE DROPPED INTO THE AREA TO BE CLEARED, OR PIECED DOWN. THESE TREES SHALL BE MOVED INTO THE AREA TO BE CLEARED WITHOUT INJURING REMAINING VEGETATION. DEAD TREES SHALL BE REMOVED FROM TREE PRESERVATION AREAS ONLY IF THEY POSE A HAZARD. TRUNKS OF DEAD TREES SHALL REMAIN IN TREE PRESERVATION AREAS UNLESS THEY POSE A HAZARD. STUMPS SHALL REMAIN IN THE TREE PRESERVATION AREAS UNLESS OTHERWISE STATED IN THE TREE PRESERVATION PLAN.
9. AFTER TREES ARE REMOVED FROM THE TREE PRESERVATION AREAS, EROSION CONTROL SYSTEM AND TREE PRESERVATION FENCING SHALL BE PUT IN PLACE BEFORE BEGINNING THE ACTUAL CLEARING/GRADING PROCESS.
10. SILT FENCE OR SUPER SILT FENCE, IF REQUIRED, MAY BE INSTALLED IN THE ROOT PRUNING TRENCH. IF SUPER SILT FENCE IS USED, IT MAY SERVE AS TREE PRESERVATION FENCING. OTHER TYPES OF TREE PRESERVATION FENCING SHALL BE PLACED BETWEEN THE AREA TO BE CLEARED AND THE ROOT PRUNING TRENCH.
11. THE TREE CARE CONTRACTOR SHALL PRUNE TREES AS SPECIFIED IN THE TREE PRESERVATION PLAN. ALL WORK SHALL MEET OR EXCEED INDUSTRY STANDARDS, AND AN INTERNATIONAL SOCIETY OF ARBORICULTURE CERTIFIED ARBORIST SHALL BE ON SITE WHILE TREE CARE OPERATIONS ARE TAKING PLACE.
12. SHOULD ENTRY INTO A TREE SAVE AREA BE NECESSARY, THE SITE SUPERINTENDENT SHALL CONTACT THE PROJECT ARBORIST AND/OR THE FAIRFAX COUNTY URBAN FORESTER *FIRST*. MEASURES PRESCRIBED BY THE PROJECT ARBORIST AND/OR THE FAIRFAX COUNTY URBAN FORESTER TO MINIMIZE OR MITIGATE DAMAGE RESULTING FROM ENTRY SHALL BE TAKEN.
13. AT BOND RELEASE, THE SITE SHALL BE REVIEWED TO DETERMINE THE NEED FOR FURTHER TREE CARE OR REMOVAL.

TYPICAL SIGNAGE FOR TREE PRESERVATION AREA

N.T.S.

EVM ONLY - NOT FOR TREE PRESERVATION PURPOSES

COVER TYPE	PRIMARY SPECIES	UNDERSTORY SPECIES	COMMENTS	SUCCESSIONAL STAGE	CONDITION	AREA
2: UPLAND FOREST	Oak/Poplar	NA	NA	Sub-climax	Good	0.38 ACRES
5: DEVELOPED	NA	Dwelling and Hardscape	N/A	N/A	N/A	0.18 ACRES
6: MAINTAINED GRASSLAND	Domestic Grasses	NA	NA	NA	Good	1.00 ACRES

BMP BUFFER PLANTING SCHEDULE

	BOTANICAL NAME	COMMON NAME	QUANTITY	CALIPER	HEIGHT	TREE COVER CREDIT (SF)	REMARKS
	QUERCUS PALUSTRIS	PIN OAK	3	2"	N/A	525 SF TOTAL (10 YEAR)	B & B
	BETULA NIGRA	RIVER BIRCH	4		8'-10' MULTI STEMMED	700 SF TOTAL (10 YEAR)	B & B
	CERCIS CANADENSIS	EASTERN REDBUD	12	1"	5' - 6'	900 SF TOTAL (10 YEAR)	B & B
	VIBURNUM DENTATUM	SHASTA VIBURNUM	82		18" - 24"		B & B
	AZALEA POUKHANESIS	POUKHANENSIS AZALEA	18		18"		
	AZALEA DELWARE VALLEY WHITE	DELWARE VALLEY WHITE AZALEA	9		18"		
	CORNUS STOLOIFERA	RED TWIG DOGWOOD	18		18" - 24"		
	AMELANCHIER CANADENSIS	SERVICEBERRY	4		4' - 5'		
	MISCANTHUS SINENSIS MORNING LIGHT	MORNING LIGHT SILVER GRASS	85				1 GAL.
NOT INCLUDED IN CALCULATIONS	PENNISETUM ALOPECUROIDES	FOUNTAIN GRASS	600				1 GAL.

NOTE : ALL PLANTING TO OCCUR IN THE RPA

COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES
11101 & 191
LAND SURVEYOR

SCALE : N/A
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/ NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE

MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA

TREE PRESERVATION PLAN

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
9114 INDUSTRY DRIVE
MANASSAS PARK, VA. 20111 (703) 330-1988 FAX 690-8132

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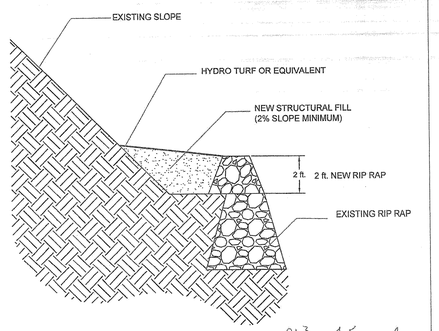


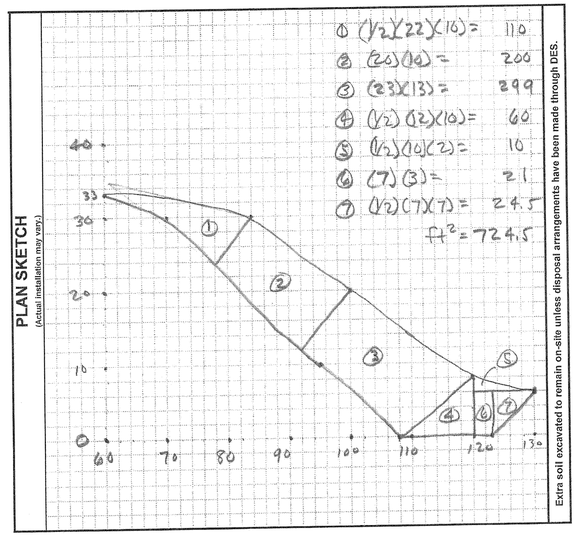
NOT TO SCALE

New Rip Rap Volume = 2'x3' x 200' = 1200 ft³ = 45 yards
New Structural Fill Volume = 2'x5' x 200' = 2000 ft³ = 75 yards

SHORELINE REVETMENT DRAWING

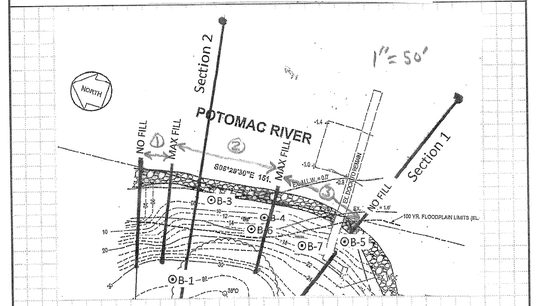
11727 RIVER DRIVE, LORTON, VA 22079

11727 River Drive – Fill Volume Analysis



Drainage & Erosion SOLUTIONS LLC
CONSULTING & CONTRACTING SERVICES
2339 Archdale Road
Reston, VA 20191
(703) 391-0040 (703) 991-0421 fax
www.DrainageAndErosion.com
info@DrainageAndErosion.com
VA Class 'B' Lic. No.: 2705 092015
MHIC Lic. No. 123227
Fed. Tax ID No.: 57-1147748
Date Prepared:
Proposal Submitted To:
Street Address:
City, State and Zip Code:
Phone/Fax:
E-mail:
Location:

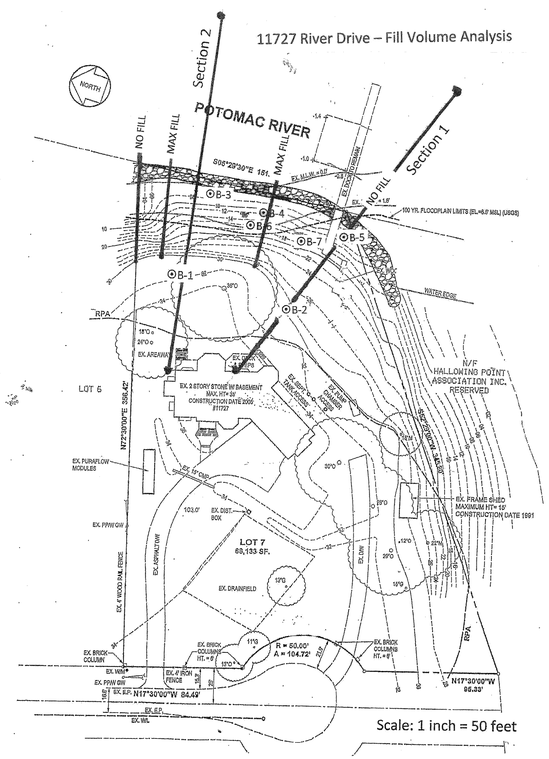
11727 River Drive – Fill Volume Analysis



① (22')(724.5')(1/2) = 7,969.5
② (74')(724.5') = 53,613
③ (58')(724.5')(1/2) = 21,010.5
82,593 ft³/27 = 3059 yd³

Extra soil excavated to remain on-site unless disposal arrangements have been made through DES.

11727 River Drive – Fill Volume Analysis



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info@DrainageAndErosion.com
VA Class 'B' Lic. No.: 2705 092015
MHIC Lic. No. 123227
Fed. Tax ID No.: 57-1147748
Date Prepared:
Proposal Submitted To:
Street Address:
City, State and Zip Code:
Phone/Fax:
E-mail:
Location: 11727 River Drive

11727 River Drive – Fill Volume Analysis

Rip-Rap Volumes

Campbell Property

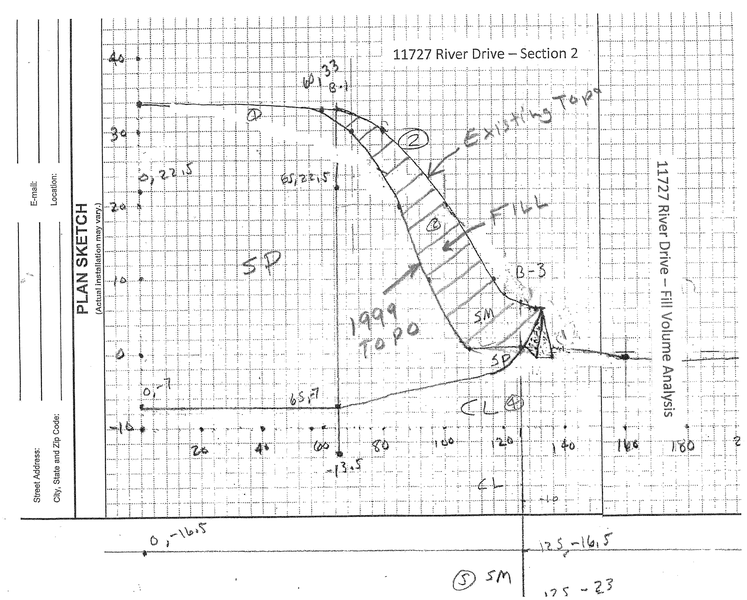
(154' long)(63ft²) = 9702 ft³ ≈ 360 yd³

① (1/2)(7x7) = 24.5
② (3)(7) = 21
③ (1/2)(7)(7) = 24.5
63 ft³

HOA Property - tapers to 0 to south

(70' long)(63ft²)(1/2) = 2205 ft³ = 82 yd³

Extra soil excavated to remain on-site unless disposal arrangements have been made through DES.



COMMONWEALTH OF VIRGINIA
HAROLD A. LOGAN
CERTIFICATES 1111 & 191
LICENSED LAND SURVEYOR

SCALE : N/A
DATE : 12-31-2012
DESIGNED : HAL
DRAFTED : MB/ NA
REVISIONS: 12-13-13
12-18-2013

HALLOWING POINT RIVER ESTATES LOT 7 SECTION ONE
MOUNT VERNON DISTRICT FAIRFAX COUNTY, VIRGINIA
REVETMENT INFORMATION

HAROLD A. LOGAN ASSOCIATES P.C.
LAND SURVEYING - SITE PLANNING - SUBDIVISION DESIGN
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SHEET 8 OF 8

RP 1820

DESCRIPTION OF THE APPLICATION

The applicants request the approval of a Special Exception (SE) to allow the deposition of fill material in a floodplain to remain and to allow for additional fill to be placed in the floodplain. Par. 9 of Sect. 2-903 in the Zoning Ordinance allows site grading to properties which do not require major fill as a permitted use in a floodplain. The Ordinance defines major fill as any fill, regardless of amount, in an area greater than 5,000 square feet or any fill in excess of 278 cubic yards in an area of 5,000 square feet or less. To exceed this maximum, the applicants must obtain a Special Exception from the Board of Supervisors. The applicants have placed approximately 2,309 cubic yards of fill within the floodplain and intend to add an additional 75 cubic yards of fill for a total of 2,384 cubic yards of fill within the floodplain. This amount requires Special Exception approval.

The applicants constructed a shoreline revetment on the subject property involving the placement of fill soils and 154 linear feet of rip rap adjacent to the Potomac River in an attempt to stabilize the shoreline and adjacent slope. An additional 70 linear feet of rip rap was also placed on the adjacent property. The placement of fill soils and rip rap was completed without proper approval of a grading plan or valid Special Exception. In addition to the rip rap and fill that was already placed on the property, the applicants intend to add an additional 45 cubic yards of rip rap and 75 cubic yards of fill behind the rip rap. The applicants also intend to add safety walls, steps, a ground-level porous paver patio and walk, and a deck in areas located within the Resource Protection Area (RPA) but outside of the floodplain, and to construct a detached garage with an extended driveway in front of the existing dwelling. The majority of the deck is located outside of the RPA; however, a portion of the deck is shown within the RPA. The features within the RPA will require approval of an RPA Encroachment Exception (WRPA) and Water Quality Impact Assessment (WQIA) by the Board of Supervisors.

A reduced copy of the submitted Special Exception Plat is included at the beginning of this staff report. Copies of the proposed development conditions, applicants' statement of justification, and the affidavit are included in Appendices 1, 2 and 3, respectively.

LOCATION AND CHARACTER

The 1.56 acre subject property is located at 11727 River Drive in the Mount Vernon District along the Potomac River. The property is zoned R-E and is surrounded by other properties zoned R-E to the north, south, and west and bounded by the Potomac River to the east. The property to the south of the application property, which is owned by the Hallowing Point HOA, is designated on the zoning map as "Marsh Area" and is largely located within the floodplain. A driveway off of River Drive provides access to the 5,545 square foot house that was constructed in 2005 according to records from the Department of Tax Administration. An existing frame shed that is 15-feet in height and constructed in 1991 is located on the southern end of the property.

The property contains both RPA and floodplain. The limit of the RPA extends from the Potomac River up to almost the rear of the existing dwelling, while the floodplain limit extends approximately 25 – 40 feet from the Potomac River onto the property. The property slopes steeply downward toward the river starting approximately 70 feet behind the existing house. According to the SE Plat, the grade drops from approximately 30 feet above sea level at the edge of the backyard to approximately six feet above sea level in front of the revetment across a horizontal distance of approximately 45 feet. The contours on the SE Plat indicate that that the northeastern portion of this area contains the steepest slopes.

The new revetment and a wooden dock were constructed along the site's frontage on the Potomac River. Staff was unable to locate a record of building permit or Joint Permit Application approval for the existing dock. The photographs below show the rip rap rocks that form the revetment that was constructed in violation.

View from the bottom of the slope looking north
Source: DPZ Site Visit, August 2013

View from the top of the slope looking east
Source: DPZ Site Visit, August 2013

BACKGROUND

The bulleted list below provides a brief summary of the background on the subject property. The paragraphs that follow provide a more detailed summary.

- March 2001: Virginia Department of Environmental Quality determined that the Join Permit Application submitted for the stabilization of the eroded stream bank would qualify for a U.S. Army Corps of Engineers Nationwide Permit for Bank Stabilization;
- August 2001: Wetlands Permit issued for shoreline revetment;
- August 22, 2003: Wetlands Permit extended for two years;
- June 23, 2004: Grading plan approved for new dwelling;
- August 2004: WQIA was not able to be approved as submitted because it was

determined that an RPA encroachment exception and an SE were required;

- September 2004: Building permit issued to construct dwelling;
- May 2005: SE 2004-MV-038 approved for fill in the floodplain;
- June 2005: Revised grading plan approved for dwelling to relocate the septic tanks and the drain field from previous approval. The approved plan did not show the improvements approved with the SE;
- July 2005: Applicants received a right-of-entry from the adjacent HOA to allow construction project;
- November 2005: Revised grading plan disapproved by DPWES to permit a temporary access road to the shoreline on the adjacent HOA property;
- January 2006: Applicants' agent requested an interpretation as to whether the proposed grading plan that was disapproved was in substantial conformance with the approved SE. This request was ultimately dismissed by staff for the applicants' failure to respond to requests for additional information;
- September 2007: Department of Planning and Zoning issued a letter to the applicants to notify them that there was no evidence of grading plan approval to construct the rip rap revetment and fill pursuant to SE 2004-MV-038 and, therefore, the SE was set to expire November 2007 unless additional time was requested;
- October 2007: Applicants submitted a request for additional time on the SE;
- March 2008: Applicants received a notice of violation because the development of the property was not in conformance with the approved SE;
- September 2008: Applicants submitted a WQIA, which could not be approved as submitted;
- November 2008: Applicants submitted a soils report, which DPWES disapproved;
- November 2009: Applicants submitted a WQIA, which could not be approved as submitted;
- October 2009: The applicants' request for additional time was closed out when it was determined that the work that was completed was not in substantial conformance with the approved SE;
- October 2011: Applicants submitted a new soils report, which DPWES disapproved;
- March 2012: RPA encroachment exception submitted for proposed safety walls, walkways, and patio could not be approved as submitted;
- April 2012: Meeting held with the applicants and various members of staff to discuss the progress of the application and next steps needed;
- August 2012: Applicants resubmitted a soils report, which DPWES disapproved;
- December 2012: An Agreed Final Order was signed regarding the complaint filed by the Zoning Administrator against the applicants;
- January 2013: New SE application was received and new WRPA and WQIA submitted;
- May 2013: Applicants submitted a soils report, which DPWES disapproved; and,
- October 2013: Applicants resubmitted a soils report, which DPWES disapproved.

In a letter dated March 29, 2001, the Virginia Department of Environmental Quality (DEQ) determined that the Join Permit Application (JPA[1]) submitted for the subject property (No. 01-0298) for the stabilization of approximately 140 linear feet of eroded stream bank along the Potomac River would qualify for a U.S. Army Corps of Engineers (Corps) Nationwide Permit (NWP) No. 13 for Bank Stabilization. The letter further stated that through an agreement made with the Corps, a Virginia Water Protection (VWP) permit would not be required from DEQ for this project. The letter noted that the project would still be expected to comply with the State's Water Quality Standards (9 VAC 25-260).

In August of 2001, a Wetlands Permit was issued on the subject property (WB 01-W-007) to install a rip rap revetment measuring approximately 177 linear feet along the shoreline of the property.

On August 22, 2003, the Wetlands Board voted to extend the Wetlands Permit for an additional two years, through July 25, 2005, since the rip rap had not been installed.

On June 23, 2004, a grading plan (5203-INF-006-1) was approved on the subject property for the construction of a new single family detached dwelling.

On August 27, 2004, DPWES issued a letter indicating that the Water Quality Impact Assessment (WQIA 5203-WQ-003-1) would not be able to be approved as submitted. This WQIA was submitted as a general RPA encroachment for shoreline stabilization and 177 linear feet of rip rap revetment. When certain structures, such as stream bank stabilization structures, are proposed to be located within the RPA, approval of a WQIA is required pursuant to Chesapeake Bay Preservation Ordinance (CBPO) 118-2-1(a) and 118-3-3(a). According to the DPWES website, "The purpose of the WQIA is to demonstrate that the proposed RPA encroachment is necessary and that impacts are identified, minimized, and mitigated to the maximum extent practicable." The approved details included with the WQIA must subsequently be incorporated into the final approved construction plan. The description contained in the applicants' WQIA request states, "The proposed shoreline stabilization project includes installing erosion and sediment control measures, stockpiling fill dirt on the site for backfilling behind the riprap bulkhead, and stabilizing the disturbed areas with vegetation." The WQIA request also stated that approximately 1,200 square feet of tidal wetlands would be impacted by the placement of the rip rap and that the proposed work reflects the design recommendations provided for in the wetlands permit. It was determined that a Resource Protection Area Encroachment Exception (WRPA), WQIA, and an SE were required.

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1 The Joint Permit Application is a multi-jurisdictional permit to allow construction and land disturbance within subaqueous areas or bottomlands, tidal wetlands, and coastal primary sand dunes. Property owners file one application that is concurrently reviewed by the Army Corps of Engineers (federal), Virginia Marine Resources Commission (state), and the Fairfax County Wetlands Board (local). The VMRC, acts as the clearinghouse for these applications and handles distribution to federal and local authorities for review.

On September 21, 2004, a building permit was issued to construct a new custom single family detached dwelling pursuant to Infill Lot Grading Plan 5203-INF-006-1.

On May 9, 2005, the Board of Supervisors approved SE 2004-MV-038 to allow uses in a floodplain for construction of a rip rap revetment and location of fill for shoreline stabilization on the subject property. The approved development conditions, which are included in Appendix 4 of this report, specified that the applicants must demonstrate to DPWES all necessary federal, state, and county approvals prior to commencing any land disturbing activity. In addition, the conditions stated that trees and other indigenous vegetation shall be preserved on the site during the construction process to the maximum extent feasible, especially the two existing Oak trees along the crest of the slope, as determined by DPWES. Further, the conditions required that a soils report and grading plan be submitted and approved by DPWES prior to any land disturbing activity. The conditions also stipulated that a WQIA be resubmitted and approved prior to the approval of the grading plan. This previous SE is no longer valid and the applicants must obtain new special exception approval. As discussed below, it was determined that the completed site was not in substantial conformance with the SE Plat and development conditions and that approval of a new SE would be required to address the non-compliance and zoning violations.

On June 29, 2005, a revised Infill Lot Grading Plan (5203-INF-006-2) was approved by DPWES for the single family detached dwelling. No reference to the approved SE was contained on the plan and the plan did not show the improvements approved with the SE. According to Zoning Administration records, it appears that the only change to the plan from the previous approval was the relocation of septic tanks and the drain field and no effort was made to submit a soils report.

On July 11, 2005, the applicants received a non-notarized temporary right-of-entry from Hallowing Point Association, Inc to allow for construction vehicles, other equipment and personnel traversing from the southeast corner of the property to the waterfront for the duration of the “current construction project.” This letter further stated that upon completion of the work, the reserved area was to be restored to equal or better condition than the original.

On November 16, 2005, a revised Infill Lot Grading Plan (5203-INF-006-03) was disapproved by DPWES. This plan was submitted to permit a temporary access road to the shoreline, which included a portion of the adjacent property owned by the Hallowing Point Association. This plan was disapproved by DPWES because the proposed work was not in accordance with the approved SE. In addition, the required WQIA had not been approved.

Around this same time, the Department of Planning and Zoning received the final house location plat for the dwelling marked as approved on November 28, 2005.

On January 17, 2006, the homeowners’ agent (Angler Environmental) sent a letter to the Department of Planning and Zoning, Zoning Evaluation Division requesting an

interpretation as to whether the proposed grading plan 5203-INF-006-03 that was disapproved by DPWES was in substantial conformance with the approved SE. According to Zoning Administration Division's correspondence contained in the property's files, it appears that there may have been some verbal discussion between staff and the requestor noting that the proposal would not be in substantial conformance with the approved SE. However, no formal written response was provided and the request was ultimately dismissed by staff for failure of the homeowner's agent to respond to requests for additional information. Based on a review of aerial photography at that time, it appears that the fill was added and that the revetment was already constructed at this point without submitting the required plans and obtaining proper approvals. The images below show the aerial imagery in 2004 and the aerial imagery in 2007. As shown in these images, the revetment and fill work was done some time during this timeframe. It also appears that rip rap was added on the adjacent HOA property.

Source: Fairfax County GIS, 2004 Aerial

Source: Fairfax County GIS, 2007 Aerial

On September 25, 2007, the Department of Planning and Zoning issued a letter to the applicants to notify them that there is no evidence of an approved grading plan to construct the rip rap revetment and location of fill for shoreline stabilization as part of SE 2004-MV-038. Therefore, the SE was set to expire on November 9, 2007 unless additional time was requested.

On October 30, 2007, the applicants submitted a request for additional time and asked for guidance on the next steps for completing the project. According to Zoning Administration's records, a meeting was held in December of 2007 with the applicants and representatives from DPWES and Zoning Enforcement to discuss this issue. It was determined that at a minimum, the applicants would need to submit a grading plan and WQIA for the work that has been done, and that a determination would need to be made as to whether the work that was done was completed in substantial conformance with the SE Plat. According to the Zoning Evaluation Division records, this request for additional time was eventually closed out on October 2, 2009, when it was determined

that the completed site was not in substantial conformance with the SE Plat and development conditions and that approval of a new SE would be required to address the non-compliance and zoning violations.

On March 14, 2008, the Department of Planning and Zoning issued a Notice of Violation to the property owners subsequent to a zoning inspection of the property on February 2, 2008. This zoning inspection revealed that the rip rap revetment and shoreline stabilization project were completed without proper grading plan approval. Therefore, the Notice of Violation stated that the development of the above referenced property without an approved grading plan was not in conformance with the approved development conditions of SE 2004-MV-038 and was in violation of Sect. 18-901 of the Zoning Ordinance. This section states that any building erected or improvements constructed contrary to any of the provisions of this Ordinance and any use of any building or land which is conducted, operated, or maintained contrary to any of the provisions of this Ordinance or contrary to any detailed statement or plan approved under the provisions of the Ordinance is unlawful. The Notice of Violation directed the property owners to clear the violation within 30 days of receipt of this notice by submitting and gaining approval of a grading plan that was in compliance with SE 2004-MV-038.

On April 3, 2008, the Department of Planning and Zoning sent a new Notice of Violation to the property owners and rescinded the previous Notice of Violation. This Notice of Violation clarified that the Board of Zoning Appeals (BZA) will not hear any appeal regarding a development condition violation, since the adoption of the development conditions is by the Board of Supervisors. As such, any such appeal of the violation would be heard by the Board of Supervisors.

On September 15, 2008, the applicants submitted a WQIA (5203-WQ-014-1) for the installation of the rip rap bulkhead along the shoreline within the RPA. DPWES determined that this application could not be approved as submitted, as outlined in a letter dated October 20, 2008, because additional information was necessary and because the project must be in substantial conformance with the approved SE. However, the approved SE expired and it was determined that the completed site was not in substantial conformance with the SE Plat and development conditions.

On November 3, 2008, the applicants submitted a new WQIA (5203-WQ-014-2) to install the rip rap bulkhead along the shoreline within the RPA. DPWES issued a letter on March 18, 2009, to inform the applicants that this could not be approved as submitted because the total encroachment within the RPA was not shown to include the areas of the construction access and entire slope stabilization, as well as the proposed rip rap, among other issues. It was also noted that the project must be in substantial conformance with the approved SE or an SEA may be necessary. The letter from DPWES also stated that the temporary construction access road appeared to be the permanent access to the dock and that the stairs and boardwalk shown on the current plan have been removed. In addition, matting was placed on the access road. DPWES requested that the applicants revise the plan as necessary to include and adequately

address all changes to the site.

On November 12, 2008, DPWES disapproved a soils report (5203-SR-009-1) that was submitted on the subject property.

On August 5, 2009, the applicants submitted a comment response letter for the previously submitted WQIA. On November 23, 2009, DPWES issued a letter on this WQIA (5203-WQ-014-3). It was determined that the request requires conformance with the SE and would also require an RPA Encroachment Exception to be heard by the Board of Supervisors.

On October 21, 2011, the applicants resubmitted a soils report (5203-SR-009-2) to DPWES. On January 13, 2012, DPWES issued a letter in response, which stated that the soils report could not be approved as submitted. Specifically, additional technical information was required.

On March 7, 2012, DPWES issued a letter to the applicants indicating that the RPA Encroachment Exception (5203-WRPA-009-1) requested for the safety walls, walkways, and patio on the subject site could not be approved as submitted. This letter stated that the existing construction was not done in compliance with the existing SE and the safety walls and patio in the RPA could not be approved administratively, as they are not considered to be site amenities for passive recreation.

On April 4, 2012, a meeting was held to discuss the current progress of the application with the applicants, County Attorney's Office, engineers, and staff. According to notes from DPWES, it was determined that the following applications would be required: a new SE, RPA Encroachment Exception, WQIA, Soils Report, and Grading Plan. It was noted that permits from the Wetlands Board, Virginia Marine Resources Commissioner (VMRC), and the United States Army Corps of Engineers may also need to be approved.

On August 9, 2012, the applicants resubmitted a Soils Report (5203-SR-009-3) for the subject property. On November 5, 2012, DPWES issued a letter stating that the soils report could not be approved as submitted. The report was determined to rely on the previous report and was not considered a complete or self-supporting report. In addition, comments from the letter issued on January 13, 2012, had not been addressed in this report. The letter requested that a revised report be submitted that addresses all comments.

On December 5, 2012, an Agreed Final Order was signed regarding the Complaint filed by the Zoning Administrator against the applicants. This Agreed Final Order established the required steps necessary for the applicants to resolve the violation on the subject property. This included the following: submission of the SE by January 2, 2013; submission to DPWES for the RPA Encroachment Exception by January 31, 2013; submission of a soils report to DPWES as required by the SE by April 30, 2013; approval of the SE gained by July 15, 2013; submission of a grading plan subsequent to

the review of the soils report by the Geotechnical Review Board (GRB) and within ten days of obtaining SE approval; applying for and obtaining all required permits and posting all required escrows within 30 days of approval of such plans, studies, and/or assessments by DPWES; completion of any and all required grading, construction, installation and/or repair work to the revetment within 60 days after the issuance of permits for such work; and, completion of all other proposed work that is identified and/or subject to the SE on or before December 15, 2013.

On January 3, 2013, the Zoning Evaluation Division received the current SE application. The applicants' initial submission did not meet the minimum application submission requirements outlined in the Zoning Ordinance. The application could not be accepted for review until these requirements were met. The applicants subsequently resubmitted application materials several times to address deficiencies with the submitted application. The application was eventually accepted for review on July 2, 2013, when the application was determined to meet the Zoning Ordinance's submission requirements.

On January 31, 2013, the applicants submitted a new RPA Encroachment Exception (5203-WRPA -010-1) and WQIA (5203-WQ-019-1) to DPWES. There are still outstanding issues with these requests and, therefore, DPWES has not been able to process the applications.

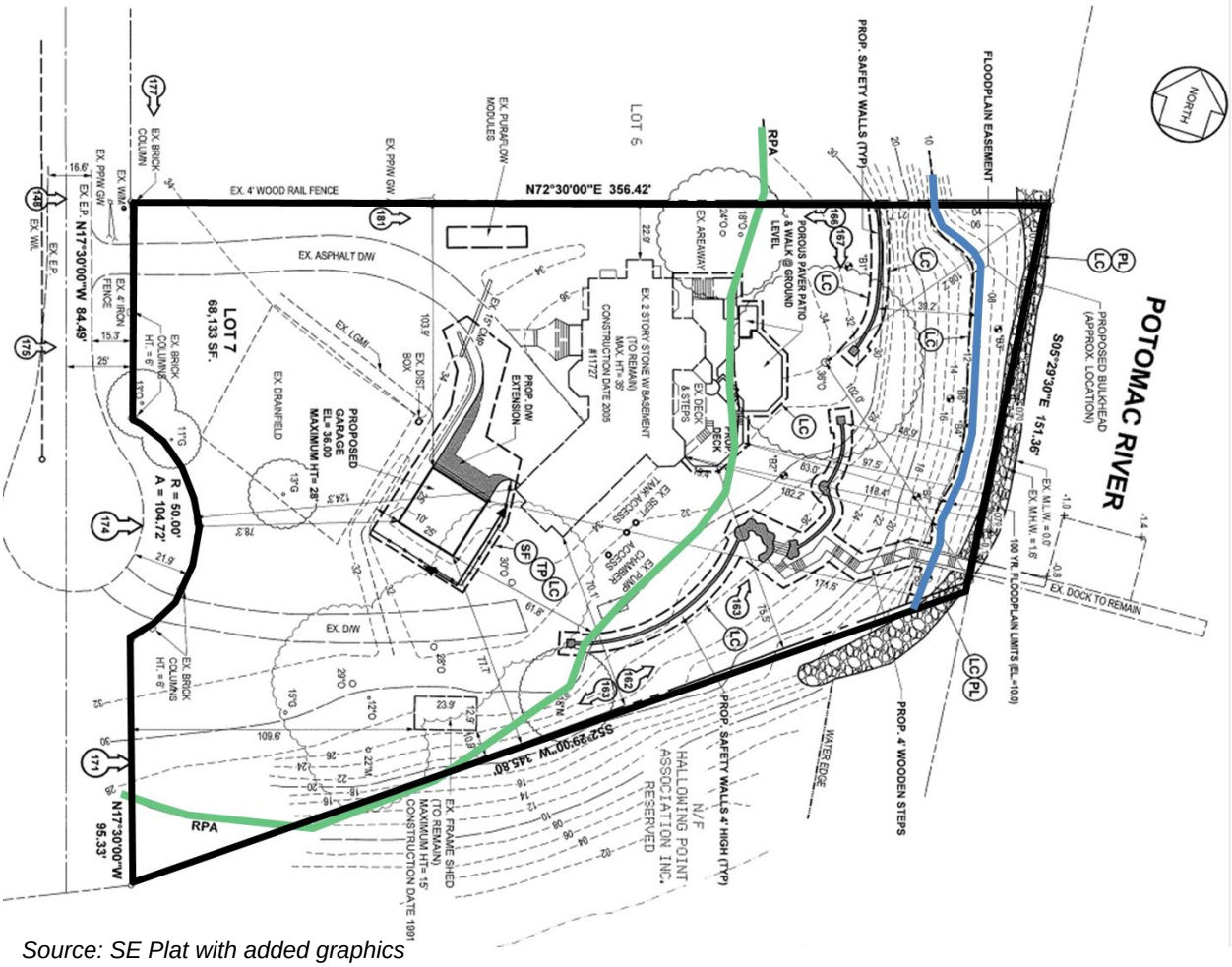
On May 7, 2013, the applicants resubmitted a Soils Report (5203-SR-009-4) to DPWES. On May 21, 2013, DPWES issued a letter that stated that the Soils Report was disapproved. The letter stated that the previous review comments had not been addressed. In addition, review comments were provided from three members of the GRB. These comments generally all indicated that the report was incomplete and could not be completely reviewed in its current state.

On October 16, 2013, the applicants resubmitted a Soils Report (5203-SR-009-5) to DPWES. This was forwarded to the GRB on October 23, 2013. On November 19, 2013, DPWES issued a letter to the applicants stating that the report was disapproved because the minimum Factor of Safety (FS) required for the long-term stability of slopes had not been achieved. The report indicates an FS of 1.1 on a portion of the site, while an FS of 1.25 is necessary when supported with sufficient field and laboratory characterization of the slope's soils, according to DPWES and the GRB. This comment remains outstanding and, therefore, the Soils Report has not yet been approved. This is further discussed in the Analysis section of this report.

DESCRIPTION OF THE SPECIAL EXCEPTION PLAT

The applicants' Special Exception (SE) Plat contains eight sheets. The first sheet provides general notes and information. The second sheet shows the conditions that existed prior to the approval of the first special exception, while the third sheet shows the previously approved SE Plat. Sheet four contains the current existing conditions and

sheet five shows the property contours, existing dwelling, revetment, and proposed improvements. The sixth sheet displays various sediment control information and an outfall narrative and sheet seven contains an existing vegetation map, tree preservation plan, and tree canopy cover exhibit. Finally, sheet eight contains more detailed information about the revetment that was included in the geotechnical report submitted to DPWES.



Source: SE Plat with added graphics

The boundaries of the subject property are outlined with the thick black line in the image above. As shown on the Plat, the property contains both RPA and floodplain. The RPA and floodplain boundaries are also depicted on the above image. The Plat depicts the location of the existing driveway and house, as well as the rip rap revetment that was installed. Although the SE Plat states that this is a “proposed bulkhead,” the revetment has already been constructed. The revetment as shown on the Plat is approximately 154 feet in length across the subject property. In addition, the SE Plat clearly shows that rip rap has been installed on the adjacent HOA property and the geotechnical analysis confirms that approximately 70 linear feet of rip rap has been placed on the adjacent HOA property. This adjacent property is not included with the current SE request. According to the SE Plat, the

grade drops from approximately 30 feet above sea level at the edge of the backyard to approximately six feet above sea level in front of the revetment across a horizontal distance of approximately 45 feet. The contours on the SE Plat indicate that the northeastern portion of this area contains the steepest slopes.

The SE Plat depicts various additional features that the applicants would like to construct in the future. The applicants intend to add safety walls, steps, a ground-level porous paver patio and walk, and a deck in areas located within the Resource Protection Area (RPA) but outside of the floodplain. The majority of the deck is located outside of the RPA; however, a portion of the deck is shown within the RPA. The features within the RPA will require approval of a WRPA and WQIA from DPWES. In addition, the applicants plan to construct a detached garage with an extended driveway in front of the existing dwelling outside of the floodplain and RPA.

Overall, the SE Plat states a total disturbed area of 0.20 acres. The geotechnical report submitted to DPWES states that approximately 3,059 cubic yards of fill and 360 cubic yards of rip rap have been placed on the property. Approximately 2,309 cubic yards of this fill has been placed within the floodplain. In addition, the geotechnical report recommends the installation of 75 cubic yards of additional fill and 45 cubic yards of additional rip rap for a total of 2,384 cubic yards of fill within the floodplain. The previously approved SE, which was approved prior to the installation of the revetment, stated that there was 1,100 cubic yards of proposed fill in the floodplain.

Sheet 7 of the SE Plat depicts an existing vegetation map, tree preservation plan, and tree canopy cover. The tree preservation plan shows the preservation of all of the existing trees and the tree canopy cover plan shows additional plantings located to the rear of the property along the slope. The final review of the proposed landscaping will be subject to DPWES approval at the time of the review of the WQIA to ensure compliance with the Chesapeake Bay Preservation Ordinance (CBPO).

COMPREHENSIVE PLAN PROVISIONS

The Environment chapter of the Comprehensive Plan's Policy Plan cites a number of objectives pertaining to the protection, preservation, and restoration of environmental resources (Appendix 5). Specifically, the Plan calls for the prevention and reduction of pollution to surface and groundwater resources, and to protect and restore the ecological integrity of Fairfax County. New development must avoid problem soil areas or employ engineering measures to protect existing and new structures from unstable soils.

The Comprehensive Plan also specifically states that the Potomac Estuary and the Chesapeake Bay should be protected from avoidable impacts of land use activities. One of the policies associated with this objective is to ensure that new development and redevelopment comply with the County's Chesapeake Bay Preservation Ordinance (CBPO). Several additional objectives also recommend the identification, protection,

and enhancement of an integrated network of ecologically valuable land and surface waters for existing and future County residents and the conservation and restoration of tree cover on developed and developing sites.

As further described below, the applicants will need to demonstrate compliance with the CBPO, as determined by DPWES. To address the issue of soil stability, staff requested that the applicants undertake a geotechnical analysis to determine the integrity of the revetment and the adjacent slope that was created. A recent review of this geotechnical analysis by the GRB and DPWES staff indicates that the existing slope is not stable in all areas. This is discussed further in the Analysis section of this report.

ANALYSIS

Use Limitations for Uses in a Floodplain (Sect. 2-905)

All permitted uses and all special exception uses in a floodplain shall be subject to the following Zoning Ordinance provisions:

1. *Except as may be permitted by Par. 6 and 7 of Sect. 903 above, any new construction, substantial improvements, or other development, including fill, when combined with all other existing, anticipated and planned development, shall not increase the water surface elevation above the 100-year flood level upstream and downstream, calculated in accordance with the provisions of the Public Facilities Manual.*

   Staff from DPWES reviewed the application and commented that the fill that has occurred within the limits of the 100-year floodplain is not likely to have a significant impact on the 100-year water surface elevation in the Potomac River (Appendix 6). However, the limits of the 100-year floodplain must be delineated and dedicated within a floodplain easement. Any change in floodplain limits must be documented and coordinated with FEMA. Staff has proposed development conditions that would require the applicants to delineate the 100-year floodplain easement and submit the plan to the Fairfax County FEMA Floodplain Administrator to determine whether the base flood elevation or limits of the floodplain in any Special Flood Hazard Area (SFHA) depicted on the County's Flood Insurance Rate Map (FIRM) would be altered as a result of any new construction, substantial improvements, or other development shown on the plan, including fill. If the County FEMA Administrator determines that the projected increase in the base flood elevation is greater than one foot, the applicants would be required to submit technical or scientific data to FEMA for a Letter of Map Revision. With the implementation of these as development conditions, staff believes that the application can satisfy this standard.

2. *Except as may be permitted by Par. 8 of Sect. 903 above, the lowest elevation of the lowest floor of any proposed dwelling shall be eighteen inches or greater*

above the water-surface elevation of the 100-year flood level calculated in accordance with the provisions of the Public Facilities Manual.

The dwelling already exists on the subject property and is located outside of the floodplain and is more than 18 inches above the floodplain elevation. Therefore, the application satisfies this standard.

3. *All uses shall be subject to the provisions of Par. 1 of Sect. 602 above.*

Part 1 of Sect. 2-602 states that no building shall be erected on any land and no change shall be made in the existing contours of any land, including any change in the course, width or elevation of any natural or other drainage channel, in any manner that will obstruct, interfere with, or change the drainage of such land, taking into account land development that may take place in the vicinity under the provisions of this Ordinance, without providing adequate drainage in connection therewith as determined by the Director in accordance with the provisions of the Public Facilities Manual (PFM).

In this case, the applicants have made changes to the existing contours of the property. However, staff from DPWES commented that the change is unlikely to alter the floodplain elevation.

4. *No structure or substantial improvement to any existing structure shall be allowed unless adequate floodproofing as defined in the Public Facilities Manual is provided.*

This standard applies to dwelling units and accessory structures and is not applicable to the revetment. The applicants' proposed safety walls, steps, ground-level flagstone patio, and portions of the deck are located within the RPA but not within the floodplain; therefore, this standard is not applicable.

5. *To the extent possible, stable vegetation shall be protected and maintained in the floodplain.*

Sheet 4 of the SE Plat provides a tree canopy cover exhibit and the 10-year tree canopy calculation worksheet. The worksheet states that the proposed development would provide for approximately 16,563 square feet of tree preservation. Much of the vegetation proposed for preservation is located to the south of the dwelling. Staff from the Urban Forest Management Division (UFMD) commented that there are numerous errors on the SE Plat, such as omitted trees (Appendix 7). In addition, the SE Plat indicates that a total of 18,688 square feet of 10-year tree canopy will be provided but states that 19,180 square feet of tree canopy is required to meet the 10-year tree canopy requirement. The applicants have not requested a modification of the 10-year tree canopy requirement. Staff also noted that the previously submitted SE Plat provided for inadequate limits of clearing and grading to sufficiently protect the root zone of the 36-inch diameter

southern red oak located at the rear of the house. The applicants revised the SE Plat to reduce the limits of clearing and grading in the vicinity of this tree; however, there is still some grading proposed for the installation of the safety walls near the tree. In order to attempt to preserve this large tree, staff has proposed a development condition that would require the applicants to use construction techniques for wall construction that provide for minimal disturbance to the root zone of this tree.

Through the submission of a Water Quality Impact Assessment (WQIA) and Resource Protection Area Encroachment Exception (WRPA), staff reviews the vegetation to ensure compliance with requirements of the CBPO and PFM. This should typically be done in conjunction with the SE application and heard by the Board of Supervisors concurrently. However, the applicants have only recently responded to the outstanding comments associated with the WQIA and WRPA and, therefore, staff is not yet able to process the applications. Staff from DPWES noted during the review of the submitted applications that the aerial map indicates that the grading that was completed removed some existing vegetation, including several large trees. In addition to the plantings required by the CBPO and PFM, trees illegally removed from the RPA must be replaced by other trees of the same or comparable species and/or be replaced two for one with 2-inch caliper trees. The WQIA must include a detailed account of all trees removed and propose replacement vegetation of sufficient quantity, size, and species. The WQIA must include an acceptable restoration plan for the restoration of the removal of vegetation that did not comply with the provisions of the CBPO. The plant materials and planting techniques must be specified on the plan and meet the requirements specified in the PFM. Staff has proposed a development condition that requires the applicants to re-submit the WQIA and WRPA within 30 days of the Special Exception approval to ensure that the applicants will meet this standard.

6. *There shall be no storage of herbicides, pesticides, or toxic or hazardous substances as set forth in Title 40, Code of Federal Regulations, Parts 116.4 and 261.30 et seq., in a floodplain.*

The applicants have given no indication to staff that these substances would be stored on the property.

7. *For uses other than those enumerated in Par. 2 and 3 of Sect. 903 above, the applicant shall demonstrate to the satisfaction of the approving authority the extent to which:*

   A. *There are no other feasible options available to achieve the proposed use; and,*
   B. *The proposal is the least disruptive option to the floodplain; and,*
   C. *The proposal meets the environmental goals and objectives of the adopted comprehensive plan for the subject property.*

Early in the review process, staff noted a concern with the existing slope at the rear of the property and requested that the applicants submit a geotechnical report to DPWES to determine whether the fill used to construct the revetment was of a satisfactory standard and if the slope is stable. The applicants submitted the geotechnical report to DPWES in October. DPWES reviewed the report and solicited feedback from the Geotechnical Review Board (GRB).

As described in the Background section of this report, on November 19, 2013, DPWES issued a letter to the applicants stating that the report was disapproved because the applicants have not met the minimum recommended Factor of Safety (FS) across the site (Appendix 8). The Factor of Safety can be described as the ratio of the forces stabilizing the slope over the forces that destabilize the slope. It is calculated by geometrically modeling the slope's soils, groundwater conditions, surface loads, and various other criteria and calculating the forces in a slope stability analysis. A Factor of Safety less than 1.0 indicates that the slope is unsafe and failing. Due to the many variables and unknowns involved in a slope stability analysis, a Factor of Safety of at least 1.25 is commonly required for long-term slope stability analysis. The applicants' geotechnical report shows that a section taken during the geotechnical analysis in the area of the slope generally between the dock and the existing deck to the rear of the dwelling has an FS of 1.1, which is not considered sufficiently stable. Although the applicants indicate that the area that does not meet the Factor of Safety of 1.25 is a natural slope, DPWES maintains that the applicants are expected to meet the standard throughout the site given that disturbance has occurred on the site. According to DPWES, the standard of 1.25 has been enforced in the County since the 1990s by both the GRB and County reviewers. Although it is not currently contained within the PFM, it is considered sound engineering practice and a PFM Amendment is currently being considered to formalize this standard within the PFM.

This comment remains outstanding and, therefore, the Soils Report has not yet been approved. The applicants must either demonstrate that the slope is currently stable to the satisfaction of DPWES and the GRB or perform measures to stabilize the slope. Although the applicants appear to have explored how the slope could be stabilized through certain engineering practices, the applicants have rejected this solution due to the cost of the project. The applicants have also stated that this issue was not raised with the previously approved SE. Staff notes that the approved development conditions from the previous SE required the applicants to submit a soils report for approval by DPWES prior to the approval of a grading plan. It appears, therefore, that the slope stability issue would not have been known at the time of the review of the previous SE if a soils report had not yet been submitted. In addition, the applicants' Agreed Final Order states that the applicants shall submit a full and complete soils report to DPWES as required by the previously approved Special Exception.

Given that the applicants have not demonstrated that the entire area would contain a stable slope to the satisfaction of DPWES and the GRB, staff does not believe that the application fully satisfies this standard. In staff's opinion, it is critically important that the Factor of Safety of 1.25 for the slope be provided and that the applicants update the SE Plat to demonstrate how they meet this requirement.

8. *Nothing herein shall be deemed to prohibit the refurbishing, refinishing, repair, reconstruction or other such improvements of the structure for an existing use provided such improvements are done in conformance with the Virginia Uniform Statewide Building Code and Article 15 of this Ordinance.*

   The applicants' request would conform to this standard.

9. *Nothing herein shall be deemed to preclude public uses and public improvements performed by or at the direction of the County.*

   No public uses have been proposed for the subject property.

10. *Notwithstanding the minimum yard requirements specified by Sect. 415 above, dwellings and additions thereto proposed for location in a floodplain may be permitted subject to the provisions of this Part and Chapter 118 of The Code.*

    This standard is not applicable because the existing dwelling and proposed detached garage are not located within the floodplain.

11. *All uses and activities shall be subject to the provisions of Chapter 118 of The Code.*

    Chapter 118 of the Fairfax County Code is the County's Chesapeake Bay Preservation Ordinance (CBPO). This ordinance defines how Resource Protection Areas are delineated, governs the land use activity that is permitted within them, and provides remedial requirements for unauthorized disturbance of RPAs. The CBPO requires a WQIA and WRPA to be submitted for land disturbance within an RPA and is used to ensure that this disturbance meets the goals, objectives, and requirements of Chapter 118.

    In order to obtain retroactive approval for the existing revetment and fill and approval of the proposed features within the RPA, the applicants need to obtain an approved WQIA and WRPA. The disturbed area in the RPA must be restored in accordance with the CBPO. The applicants have only recently responded to the outstanding comments associated with the WQIA and WRPA and, therefore, staff is not yet able to make a determination on the WQIA or WRPA. Once DPWES staff determines that the applicants have submitted all of the necessary information, the application can be accepted for review. Staff has proposed a development condition that would require the applicants to re-submit a WQIA and

RPA Encroachment Exception to DPWES within 30 days of approval of the Special Exception.

12. *When as-built floor elevations are required by federal regulations or the Virginia Uniform Statewide Building Code for any structure, such elevations shall be submitted to the County on a standard Federal Emergency Management Agency (FEMA) Elevation Certificate upon placement of the lowest floor, including basement and prior to further vertical construction. If a non-residential building is being floodproofed, then a FEMA Floodproofing Certificate shall be completed in addition to the Elevation Certificate. In the case of special exception uses, the Elevation Certificate shall show compliance with the approved special exception elevations.*

    The applicants are not proposing any new structures within the floodplain with this Special Exception request.

13. *The construction of all buildings and structures shall be subject to the requirements of the Virginia Uniform Statewide Building Code.*

    The proposed detached garage would be subject to these requirements.

14. *All recreational vehicles shall:*
    - *A. Be on site for fewer than 180 consecutive days;*
    - *B. Be fully licensed and ready for highway use; or,*
    - *C. Meet the requirements of this Part and the Virginia Uniform Statewide Building Code for anchoring and elevation of manufactured homes.*

    If the applicants decide to store recreational vehicles on site, this standard would apply.

15. *All necessary permits shall be received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, as amended, 33 U.S.C. § 1334.*

    The applicants' Agreed Final Order clearly outlines the process that the applicants must take to receive retroactive approval for the work that has been completed in the floodplain without receiving proper approvals. Pursuant to this Order, the applicants must obtain a special exception for the fill in the floodplain. The Order states that special exception approval shall be obtained by July 15, 2013. The applicants must also apply for an RPA Encroachment Exception and WQIA. A soils report must also be submitted to DPWES and forwarded to the Geotechnical Review Board (GRB) for review and comment. Following the review of the soils report by the GRB, the applicants must apply for a grading plan and any other plans required by DPWES. Finally, the Order states that within 30 days after approval of these plans, the applicants shall apply for

and obtain all required permits and post any necessary escrows. Given that additional rip rap and fill is being proposed beyond what was already installed, the applicants will likely need to apply for an amended Join Permit Application and possibly an amended permit from the Wetlands Board. The Order requires the applicants to complete any and all required grading, construction, installation and/or repair work to the revetment on the property within 60 days after the issuance of the permits for such work. All other proposed work identified and/or subject to the SE must be completed on or before December 15, 2013.

16. *If any new construction, substantial improvements, or other development, including fill, when combined with all other existing, anticipated and planned development, results in change in the base flood elevation in any Special Flood Hazard Area (SFHA) depicted on the County's Flood Insurance Rate Map (FIRM), the applicant shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data to FEMA for a Letter of Map Revision, as soon as practicable but, not later than six (6) months after the date such information becomes available or the placement of fill, whichever comes first. If the projected increase in the base flood elevation is greater than one (1) foot, the applicant shall also obtain approval of a Conditional Letter of Map Revision from the Federal Insurance Administrator prior to the approval of construction.*

    To ensure that the applicants comply with this standard, staff has proposed a development condition that would require the applicants to notify the Federal Insurance Administrator of the grading changes resulting from the installation of the revetment.

17. *In riverine situations, adjacent communities and the Virginia Department of Conservation and Recreation shall be notified prior to any alteration or relocation of a watercourse depicted on the FIRM and copies of such notifications shall be submitted to the Federal Insurance Administrator. The flood carrying capacity within the altered or relocated portion of any watercourse shall be maintained.*

    In a case such as this where the work has already been completed, any changes in the floodplain limits must be reviewed by the Federal Insurance Administrator. The development condition described above addresses this standard.

In summary, in staff's opinion the applicants' request fails to satisfy all of the Use Limitations for Uses in a Floodplain because the applicants have not demonstrated that the existing slope on the property will be stable. Because of the outstanding violation and the Agreed Final Order, staff did not recommend that the application be deferred any longer.

General Special Exception Standards (Sect. 9-006)

All special exception uses shall satisfy the following general standards:

1. *The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.*

   The Comprehensive Plan notes that new development and redevelopment must comply with the County's Chesapeake Bay Preservation Ordinance (CBPO). The applicants would need to obtain approval of this Special Exception as well as secure the approval of a WQIA and WRPA for full compliance with CBPO. The applicants would also need to demonstrate that they meet the Factor of Safety for the slope. Since the applicants do not appear willing to address the outstanding issues, the request would not be in conformance with the Comprehensive Plan.

2. *The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.*

   A revetment can be an effective strategy for floodplain protection on properties located along rivers that are subject to tidal activity. Staff believes that the application is in harmony with the purpose and intent of the R-E District, which was established to promote agricultural uses and low density residential uses. The purpose and intent of the Zoning Ordinance's Floodplain Regulations are to provide for safety from flood and other dangers; to protect against loss of life, health, or property from flood or other dangers; and, to preserve and protect floodplains in as natural a state as possible for the preservation of wildlife habitats, for the maintenance of the natural integrity and function of the streams, for the protection of water quality, and for the promotion of a zone for ground water recharge. Therefore, the applicants' request would be harmonious with the applicable zoning district regulations subject to conformance with the proposed development conditions.

3. *The proposed use shall be such that it will be harmonious with and will not adversely affect the use or development of neighboring properties in accordance with the applicable zoning district regulations and the adopted comprehensive plan. The location, size and height of buildings, structures, walls and fences, and the nature and extent of screening, buffering and landscaping shall be such that the use will not hinder or discourage the appropriate development and use of adjacent or nearby land and/or buildings or impair the value thereof.*

   As previously discussed, the applicants have not demonstrated to the satisfaction of DPWES and the GRB that the slope will be stable. As a result, staff remains concerned about the stability of the slope, which could potentially impact neighboring properties in the event that a slope failure occurs. Staff believes that the applicants cannot meet this standard unless and until they demonstrate that the slope will be stable.

4. *The proposed use shall be such that pedestrian and vehicular traffic associated with such use will not be hazardous or conflict with the existing and anticipated traffic in the neighborhood.*

   The applicants' request would not affect pedestrian or vehicular traffic. Therefore, this standard is not applicable.

5. *In addition to the standards which may be set forth in this Article for a particular category or use, the Board shall require landscaping and screening in accordance with the provisions of Article 13.*

   Article 13 of the Zoning Ordinance requires any addition or removal of vegetation within the RPA to be subject to the provisions of Chapter 118 of the County Code, which is the Chesapeake Bay Preservation Ordinance. The applicants would need to comply with these regulations. However, the applicants have only recently responded to the outstanding comments associated with the WQIA and WRPA and, therefore, staff is not yet able to process these applications. Staff's proposed development condition would require the re-submission of the WQIA and WRPA within 30 days of approval of the SE. In order to gain approval, the applicants must provide the appropriate plantings to meet the CBPO, as determined by DPWES. In addition, staff has proposed a development condition that states that prior to grading plan approval, the applicants shall demonstrate to UFMD that all landscaping shall be planted within a sufficiently stable slope.

6. *Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.*

   The Zoning Ordinance does not specify a minimum open space requirement for a parcel that is zoned R-E.

7. *Adequate utility, drainage, parking, loading and other necessary facilities to serve the proposed use shall be provided. Parking and loading requirements shall be in accordance with the provisions of Article 11.*

   The Health Department commented that the proposed detached garage shown on the SE Plat may interfere with an installed Lateral Groundwater Movement Interceptor (LGMI) that was installed in conjunction with the existing septic system (Appendix 9). The LGMI is an important portion of the overall design function of the existing septic system and until a proposed location is submitted that is at least ten feet from the proposed garage and ten feet from the existing drainfield the Health Department cannot approve the proposed location of the garage. Although the detached garage is not located within the floodplain, it is a feature shown on the SE Plat. Therefore, staff has proposed a development condition that would require that the final location of the garage be subject to review and approval by the Health Department.

8. *Signs shall be regulated by the provisions of Article 12; however, the Board may impose more strict requirements for a given use than those set forth in this Ordinance.*

   The applicants have not incorporated any requests related to signs. All signs related to the proposed use shall be in accordance with the provisions of Article 12 of the Zoning Ordinance.

In staff's opinion, the application fails to satisfy all of the General Special Exception Standards. Staff remains concerned that the applicants have not demonstrated to the satisfaction of DPWES and the GRB that the slope on the property will be stable. Staff believes that the applicants must demonstrate that the slope is stable to the satisfaction of DPWES and the GRB to fully comply with the General Special Exception Standards.

CONCLUSIONS AND RECOMMENDATIONS

Staff Conclusions

The approval of a Special Exception is a necessary step in clearing the existing violation on the property and adhering to the applicants' Agreed Final Order. However, staff does not believe that the current application satisfies all applicable Zoning Ordinance provisions, including the General Special Exception Standards and the Use Limitations for Uses in a Floodplain, given that the applicants have not demonstrated to the satisfaction of DPWES and the GRB that the slope will be stable. Although the applicants could resolve this issue by providing for slope stabilization measures, the applicants are currently not proposing any such measures to address this comment. As a result, staff is unable to support the applicants' current request.

Recommendation

Staff recommends denial of SE 2013-MV-011. However, if it is the intent of the Board of Supervisors to approve SE 2013-MV-011, staff recommends that the approval be subject to the Development Conditions contained in Appendix 1.

It should be noted that it is not the intent of staff to recommend that the Board, in adopting any conditions proffered by the owner, relieve the applicants/owners from compliance with the provisions of any applicable ordinances, regulations, or adopted standards.

It should be further noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

The approval of this application does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

APPENDICES

1. Proposed Development Conditions
2. Applicants' Statement of Justification
3. Affidavit
4. SE 2004-MV-038 Clerk's Letter and SE Plat
5. Environmental Analysis
6. Stormwater Management Analysis
7. Urban Forest Management Analysis
8. Geotechnical Analysis
9. Health Department Analysis
10. Glossary of Terms

PROPOSED DEVELOPMENT CONDITIONS

SE 2013-MV-011

December 26, 2013

If it is the intent of the Board of Supervisors to approve SE 2013-MV-011, located at 11727 River Drive, Tax Map 122-2 ((2)) 7, for uses in a floodplain pursuant to Sect. 2-904 and 9-606 of the Fairfax County Zoning Ordinance, staff recommends that the Board condition the approval by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.

2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the Special Exception Plat approved with the application, as qualified by these development conditions. Notwithstanding the structures and uses indicated on the Special Exception Plat, the applicants may disturb land, demolish existing structures, and/or construct improvements outside of the 100-year floodplain and Resource Protection Area (RPA) without submitting a Special Exception (SE) application as long as the applicants comply with all applicable local, state and federal ordinances. However, the applicants may not allow any new structures or impervious areas to extend into the RPA without submitting and obtaining the approval of a Special Exception Amendment and an RPA Exception.

3. This Special Exception is subject to the provisions of Article 17, Site Plans as may be determined by the Department of Public Works and Environmental Services (DPWES). Any plan submitted pursuant to this Special Exception shall be in substantial conformance with the approved Special Exception Plat entitled “Special Exception Plan Hallowing Point River Estates Lot 7 – Section One” prepared by Harold A. Logan Associates P.C., which is dated December 31, 2012, as revised through December 18, 2013, and these conditions. Minor modifications to the approved Special Exception Amendment may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance. Irrespective of the features shown on the SE Plat, there shall be no encroachment into the RPA for the proposed deck and patio.

4. Prior to the approval of a grading plan, site plan, or minor site plan, a Hold Harmless agreement shall be executed with Fairfax County for any adverse effects resulting from the location of the site within a floodplain area.

5. Within 30 days of this Special Exception’s approval, the applicants shall re-submit a Water Quality Impact Assessment (WQIA) and RPA Encroachment

Exception (WRPA) request to DPWES. The applicants shall obtain WQIA and WRPA approval within 180 days of this Special Exception's approval and prior to grading plan, site plan, or minor site plan approval. Notwithstanding the landscaping shown on the Special Exception Plat, the location and species of the proposed plantings shall be subject to the review and approval of the Urban Forest Management Division (UFMD). Landscaping in the RPA shall be installed within 90 days of the WQIA approval unless the UFMD determines a later planting date is necessary to ensure the health of the landscaping.

6. Within 30 days of this Special Exception's approval, the applicants shall re-submit a Soils Report to DPWES. The applicants shall incorporate appropriate engineering practices to address slope stabilization issues as recommended by the Geotechnical Review Board (GRB) and DPWES prior to grading plan approval. The applicants shall achieve a factor of safety of 1.25 for the entire area of the slope, as determined by DPWES in consultation with the GRB.

7. Within 60 days of approval of the SE, the applicants shall submit a grading plan to DPWES. The applicants shall obtain grading plan approval within 180 days of approval of the SE.

8. Within 60 days of approval of the SE, the applicants shall obtain all required permits for the existing dock.

9. Prior to grading plan, site plan, or minor site plan approval, the applicants shall demonstrate to UFMD that all landscaping shall be planted within a sufficiently stable slope. The applicants shall incorporate stabilization measures to support the long-term maturity of any new landscaping, subject to the review and approval of UFMD.

10. The applicants must demonstrate to DPWES that all necessary federal, state, and county approvals have been obtained prior to any additional land disturbing activity.

11. Prior to grading plan approval, the applicants shall delineate the limits of the 100-year floodplain and record a floodplain easement, subject to review and approval by DPWES.

12. Concurrent with the first submission of any grading plan, site plan, or minor site plan, the applicants shall submit an additional copy of the plan to the Fairfax County FEMA Floodplain Administrator (Stormwater Planning Division) to determine whether the base flood elevation or limits of the floodplain in any Special Flood Hazard Area (SFHA) depicted on the County's Flood Insurance Rate Map (FIRM) would be altered as a result of any new construction, substantial improvements, or other development shown on the plan, including fill. If the County FEMA Floodplain Administrator determines that the base flood elevation or limits of the floodplain would be altered, the applicants shall

submit technical or scientific data to FEMA for a Letter of Map Revision. If the projected increase in the base flood elevation is greater than one foot, the applicants shall also obtain approval of a Conditional Letter of Map Revision from the Federal Insurance Administrator prior to the approval of any construction. If the applicants are required to submit either a Letter of Map Revision and/or Conditional Letter of Map Revision as outlined above, the applicants shall submit a copy of the approval letter from FEMA to the Department of Planning and Zoning (DPZ).

13. The applicants shall use construction techniques during the construction of the wall in the vicinity of the 36" southern red oak at the rear of the dwelling that provide for the least amount of disturbance to the root zone of this tree, as determined by UFMD at the time of grading plan review.

14. The final location of the detached garage shall be subject to review and approval by the Fairfax County Health Department at the time of grading plan review.

15. Within 60 days of approval of the Special Exception the applicants shall provide all necessary information to DPWES in order to determine if the disturbance to the adjacent Hallowing Point Association property requires the approval of a WRPA, WQIA, SE, grading plan or other plans or permits. If it is determined that additional permits are needed for the grading on the HOA property, then the applicants shall work with the HOA to submit the proper applications within 90 days of such determination.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicants from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicants shall be themselves responsible for obtaining the required Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, twelve (12) months after the date of approval unless, at a minimum, the use has been established or construction has commenced and been diligently prosecuted as evidenced by the issuance of an approval for a grading plan, site plan, or minor site plan concurrent with a water quality impact assessment. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the special exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

HAROLD A. LOGAN ASSOCIATES. P.C.
Land Surveying • Subdivision Design • Site Planning
9114 Industry Drive • Manassas Park, Virginia 20111

President
Harold A. Logan
Registered Land Surveyor
Virginia • Maryland (Retired) • West Virginia (Inactive)

Phone: (703) 330-1988
Fax: (703) 690-8132

RECEIVED
Department of Planning & Zoning
JAN 02 2013
Zoning Evaluation Division

December 28, 2012

Department of Planning & Zoning
12055 Government Center Parkway
Suite 801
Fairfax, Virginia 22035

Re: Special Exception, Allow use and fill in the floodplain/RPA, Tax Map 122-2((02)) 0007, Mt. Vernon District

The following is submitted as a Statement of Justification for the above reference Special Exception application. The property consists of 1.56 acres and has public street frontage on River Road. The owners, Kimberly B. & Kelly P. Campbell desire to repair a shoreline revetment including fill in the floodplain. They also desire to add certain improvements (walks, walls, patio....) in the floodplain/RPA as shown on the attached plan.

1. Type of Operation

This application is seeking a Special Exceptions under Section 2-904 of the Zoning Ordinance to allow development in the floodplain. The applicant is seeking to repair a shoreline revetment including fill in the floodplain. They also desire to add certain improvements (walks, walls, patio....) in the floodplain/RPA as shown on the attached plan. Strict application of the ordinance would completely deny the applicant of full use and enjoyment of their Property. The authorization of the Special Exception would not be any detriment to the adjacent property owners. Further, the character of the zoning district would not be changed by the granting of this Special Exception would be in harmony with the intended spirit and purposes of the zoning ordinance and would not be contrary to pubic interest.

2. Hours of Operation

The Special Exception is required to repair a shoreline revetment including fill in the floodplain. No commercial uses are proposed, therefore the "hours of operation" is not applicable.

3. Estimated Number of Patrons/Clients/Patients/Pupils/Etc.

RECEIVED
Department of Planning & Zoning
JAN 02 2013
Zoning Evaluation Division

The Special Exception is required to repair a shoreline revetment including fill in the floodplain. No commercial uses are proposed, this section is not applicable.

4. Proposed Number of Employees/Attendants/Teachers/Etc.

The Special Exception is required to repair a shoreline revetment including fill in the floodplain. No commercial uses are proposed, this section is not applicable.

5. Estimation of Traffic Impact of the Proposed Use, Including the Maximum Expected Trip Generation and the Distribution of Such Trips by Mode and Time of Day

The subject property currently contains one single-family detached house. There is no proposed increase in vehicle traffic.

6. Vicinity of General Area to be Served by the Use

The Special Exception is required to repair a shoreline revetment including fill in the floodplain. No commercial uses are proposed, this section is not applicable.

7. Description of Building Façade and Architecture of Proposed New Building Additions.

The proposed addition on the subject property will be consistent with the surrounding architecture.

8. A listing of All Hazardous or Toxic Substances

To the best of our knowledge, the subject property does not contain any hazardous of toxic substances. There is an existing residential style oil tank onsite that will be removed according to all Federal, State and local requirements and regulations.

9. A statement of How the Proposed use Conforms to the Provision of All Applicable Ordinances, Regulations, Adopted Standards and Any Applicable Conditions

The subject property and proposed use will conform to the provision of all applicable ordinances, regulations, adopted standards and any applicable conditions, except for those Special Exception conditions requested as part of this application.

In addition to the items listed above, the application proposes to meet the following general standards:

All applicable ordinance and requirements will be met with this application.

If you have any questions, please feel free to contact me.

Sincerely,

Mark D. Crain

SPECIAL EXCEPTION AFFIDAVIT

DATE: 11/27/2013
(enter date affidavit is notarized)

I, Mark D. Crain, do hereby state that I am an
(enter name of applicant or authorized agent)

121736

(check one) [ ] applicant
[✓] applicant's authorized agent listed in Par. 1(a) below

in Application No.(s): SE 2013-MV-011
(enter County-assigned application number(s), e.g. SE 88-V-001)

and that, to the best of my knowledge and belief, the following information is true:

1(a). The following constitutes a listing of the names and addresses of all **APPLICANTS, TITLE OWNERS, CONTRACT PURCHASERS,** and **LESSEES** of the land described in the application,* and, if any of the foregoing is a **TRUSTEE,**** each **BENEFICIARY** of such trust, and all **ATTORNEYS** and **REAL ESTATE BROKERS,** and all **AGENTS** who have acted on behalf of any of the foregoing with respect to the application:

(**NOTE:** All relationships to the application listed above in **BOLD** print are to be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel(s) for each owner(s) in the Relationship column.)

NAME (enter first name, middle initial, and last name)	ADDRESS (enter number, street, city, state, and zip code)	RELATIONSHIP(S) (enter applicable relationships listed in **BOLD** above)
Kimberly B. Campbell	11727 River Drive Lorton, VA 22079	Applicant/Title Owner
Kelly P. Campbell	11727 River Drive Lorton, VA 22079	Applicant/Title Owner
Harold A. Logan Associates, PC	9114 Industry Drive Manassas Park, VA 20111	Agent and Attorney-in-Fact for Kimberly B. Campbell and Kelly P. Campbell
Harold A. Logan	9114 Industry Drive Manassas Park, VA 20111	Agent and Attorney-in-Fact for Kimberly B. Campbell and Kelly P. Campbell
Mark D. Crain	9114 Industry Drive Manassas Park, VA 20111	Agent and Attorney-in-Fact for Kimberly B. Campbell and Kelly P. Campbell
Compton & Duling, LC	12701 Marblestone Drive #350 Prince William, VA 22192	Agent and Attorney-in-Fact for Kimberly B. Campbell and Kelly P. Campbell
Jason E. Hickman, Esq.	12701 Marblestone Drive #350 Prince William, VA 22192	Agent and Attorney-in-Fact for Kimberly B. Campbell and Kelly P. Campbell
MJCI, Inc.	10381 Main Street, 3rd Floor Fairfax, VA 22030	Agent
Mark J. Cross	10381 Main Street, 3rd Floor Fairfax, VA 22030	Agent

(check if applicable) [ ] There are more relationships to be listed and Par. 1(a) is continued on a "Special Exception Attachment to Par. 1(a)" form.

* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.

** List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

SPECIAL EXCEPTION AFFIDAVIT

DATE: 11/27/2013
(enter date affidavit is notarized)

for Application No. (s): SE 2013-MV-011
(enter County-assigned application number(s))

121736

1(b). The following constitutes a listing*** of the **SHAREHOLDERS** of all corporations disclosed in this affidavit who own 10% or more of any class of stock issued by said corporation, and where such corporation has 10 or less shareholders, a listing of all of the shareholders:

(**NOTE**: Include **SOLE PROPRIETORSHIPS, LIMITED LIABILITY COMPANIES,** and **REAL ESTATE INVESTMENT TRUSTS** herein.)

CORPORATION INFORMATION

NAME & ADDRESS OF CORPORATION: (enter complete name and number, street, city, state, and zip code) Harold A. Logan Associates, PC 9114 Industry Drive Manassas Park, VA 20111

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.

[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.

[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF SHAREHOLDERS: (enter first name, middle initial and last name)
Harold A. Logan

(check if applicable) [✓] There is more corporation information and Par. 1(b) is continued on a "Special Exception Affidavit Attachment 1(b)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

Special Exception Attachment to Par. 1(b)

DATE: 11/27/2013
(enter date affidavit is notarized)

121736

for Application No. (s): SE 2013-MV-011
(enter County-assigned application number (s))

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
Compton & Duling, LC 12701 Marblestone Drive #350 Prince William, VA 22192

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
Jason E. Hickman
Geary H. Rogers
Thomas D. Duling
Maryse C. Allen

NAME & ADDRESS OF CORPORATION: (enter complete name, number, street, city, state, and zip code)
MJCI, Inc. 10381 Main Street, 3rd Floor Fairfax, VA 22030

DESCRIPTION OF CORPORATION: (check one statement)

[✓] There are 10 or less shareholders, and all of the shareholders are listed below.
[ ] There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
[ ] There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

NAMES OF THE SHAREHOLDERS: (enter first name, middle initial, and last name)
Mark J. Cross
Kimberly F. Cross

(check if applicable) [ ] There is more corporation information and Par. 1(b) is continued further on a "Special Exception Attachment to Par. 1(b)" form.

SPECIAL EXCEPTION AFFIDAVIT

DATE: 11/27/2013
(enter date affidavit is notarized)

121736

for Application No. (s): SE 2013-011
(enter County-assigned application number(s))

1(c). The following constitutes a listing*** of all of the **PARTNERS**, both **GENERAL** and **LIMITED**, in any partnership disclosed in this affidavit:

PARTNERSHIP INFORMATION

PARTNERSHIP NAME & ADDRESS: (enter complete name, and number, street, city, state, and zip code)

(check if applicable) [ ] The above-listed partnership has no limited partners.

NAMES AND TITLE OF THE PARTNERS (enter first name, middle initial, last name, and title, e.g. **General Partner, Limited Partner, or General and Limited Partner**)

(check if applicable) [ ] There is more partnership information and Par. 1(c) is continued on a "Special Exception Affidavit Attachment to Par. 1(c)" form.

*** All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

SPECIAL EXCEPTION AFFIDAVIT

DATE: 11/27/2013
(enter date affidavit is notarized)

121736

for Application No. (s): SE 2013-011
(enter County-assigned application number(s))

1(d). One of the following boxes **must** be checked:

[ ] In addition to the names listed in Paragraphs 1(a), 1(b), and 1(c) above, the following is a listing of any and all other individuals who own in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land:

[✓] Other than the names listed in Paragraphs 1(a), 1(b), and 1(c) above, no individual owns in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER,** or **LESSEE*** of the land.

2. That no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household owns or has any financial interest in the subject land either individually, by ownership of stock in a corporation owning such land, or through an interest in a partnership owning such land.

EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on the line below.)
None

(check if applicable) [ ] There are more interests to be listed and Par. 2 is continued on a "Special Exception Attachment to Par. 2" form.

Application No.(s): _____
(county-assigned application number(s), to be entered by County Staff)

SPECIAL EXCEPTION AFFIDAVIT

DATE: 11/27/2013
(enter date affidavit is notarized)

121736

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney or holds 10% or more of the outstanding bonds or shares of stock of a particular class, has, or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of more than $100, singularly or in the aggregate, with any of those listed in Par. 1 above.
EXCEPT AS FOLLOWS: (**NOTE**: If answer is none, enter "**NONE**" on line below.)
None

NOTE: Business or financial relationships of the type described in this paragraph that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings. See Par. 4 below.)

(check if applicable) [ ] There are more disclosures to be listed and Par. 3 is continued on a "Special Exception Attachment to Par. 3" form.

4. **That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, I will reexamine this affidavit and provide any changed or supplemental information, including business or financial relationships of the type described in Paragraph 3 above, that arise on or after the date of this application.**

WITNESS the following signature: Mark D. Crain

(check one) [ ] Applicant [✓] Applicant's Authorized Agent

Mark D. Crain (Agent and Attorney-in-Fact)
(type or print first name, middle initial, last name, and & title of signee)

Subscribed and sworn to before me this 27th day of November 20 13, in the State/Comm. of Virginia, County/City of Manassas.

Melody J. Hess
Notary Public

My commission expires: October 31, 2016

MELODY J HESS NOTARY PUBLIC MY COMMISSION NUMBER 180035 COMMONWEALTH OF VIRGINIA

APPENDIX 4

FAIRFAX COUNTY

VIRGINIA

OFFICE OF THE CLERK
BOARD OF SUPERVISORS
12000 Government Center Parkway, Suite 533
Fairfax, Virginia 22035-0072

Tel: 703-324-3151 • Fax: 703-324-3926 • TTY: 703-324-3903

www.fairfaxcounty.gov/gov/bos/clerkhomepage.htm
Email: clerktothebos@fairfax county.gov

May 26, 2005

Lee Goodwin
Angler Environmental
12801 Randolph Ridge Lane
Manassas, Virginia 20109

Re: Special Exception Application Number SE 2004-MV-038

Dear Mr. Goodwin:

At a regular meeting of the Board of Supervisors held on May 9, 2005, the Board approved Special Exception Application Number SE 2004-MV-038 in the name of Kelly and Kim Campbell located at 11727 River Drive (Tax Map 122-2 ((2)) 7) to allow uses in a floodplain for construction of a riprap revetment and location of fill for shoreline stabilization on a residential lot pursuant to Section 2-904 of the Fairfax County Zoning Ordinance, by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.

2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the Special Exception Plat approved with the application, as qualified by these development conditions.

3. Any plan submitted pursuant to this Special Exception shall be in substantial conformance with the approved Special Exception Plat entitled Special Exception Plat SE 2004-MV-038 and prepared by Angler Environmental, which is dated 11/12/04 as revised through 2/22/05 and these conditions. Location of the dwelling and puraflo system is illustrative only, and may be changed or relocated outside of the floodplain and Resource Protection Area (RPA) provided the required setbacks from the floodplain and for the R-E District are satisfied.

4. A Hold Harmless agreement shall be executed with the County for all adverse effects which may arise as a result of the location of the site within a floodplain area, prior to approval of a grading plan.

5. The applicant must demonstrate to the Department of Public Works and Environmental Services (DPWES) all necessary federal, state, and county approvals prior to commencing any land disturbing activity.

6. Trees and other indigenous vegetation shall be preserved on the site during the construction process to the maximum extent feasible, especially the two existing oak trees along the crest of the slope, as determined by DPWES, and all preserved vegetation shall be maintained.

7. No more land shall be disturbed than is necessary to provide for the construction of the shoreline stabilization measures, as determined by DPWES.

8. Irrespective of that shown on the Special Exception Plat, a soils report shall be submitted to and approved by DPWES, unless waived by DPWES, for construction in problem Class A soils, prior to the approval of a grading plan.

9. The US Army Corps of Engineers shall be consulted in writing prior to the submission of a grading plan, to determine whether or not any action is required to ensure compliance with § 404 of the Clean Water Act. Any required actions shall be completed prior to grading the site, as determined by DPWES. If any necessary permissions are not granted or the required actions are not completed, this Special Exception shall be null and void.

10. Stormwater drainage shall be directed to ditches through the use of pipes, swales, or other devices, as determined by DPWES. All fill areas shall be stabilized, graded, or have drains installed such that normal rainfall will not flow over the filled area onto adjacent properties, as determined by DPWES.

11. Prior to approval of a grading plan, it must be demonstrated to DPWES that the proposed shoreline stabilization construction, including fill, when combined with all other existing, anticipated, and planned development, shall not increase the water surface elevation above the 100-year flood level upstream and downstream.

12. A grading plan must be submitted and approved by DPWES prior to any land disturbing activity.

13. A grading plan shall be submitted to and approved by DPWES prior to commencing land disturbing activity for the shoreline stabilization measure in accordance with the Chapter 104 of *The Code of the County of Fairfax*, the Erosion and Sediment Control Ordinance. Appropriate erosion and sediment controls, including, but not limited to, super-silt fence, shall be employed during construction within and adjacent to the RPA, and shall remain in place, and be

properly maintained, for the duration of the land disturbing activity within the RPA until such time that the disturbed area is completely stabilized as determined by the Environmental and Facilities Inspections Division site inspector.

14. The limits of clearing and grading must be clearly shown on the grading plan and include adequate access and areas for stockpiles, and will be subject to approval by the DPWES. The limits of clearing and grading shown on the Plat must be strictly observed and enforced. Any encroachment into, and/or disturbance of, the RPA not shown on the approved Plat will be considered a violation of the Chesapeake Bay Preservation Ordinance (CBPO) and is subject to the penalties of the CBPO Article 9.

15. The fact that there are potential flood hazards due to the location of the site within the 100-year floodplain shall be made part of the land records and included in the chain of title, provided in writing to any potential home buyers prior to establishment of a sales contract.

16. There shall be no storage of herbicides, pesticides, or toxic or hazardous substances as set forth in Title 40, Code of Federal Regulations, Parts 116.4 and 261.30 et seq., below the flood level.

17. A Water Quality Impact Assessment shall be resubmitted to, and approved by DPWES prior to approval of the grading plan in accordance with CBPO 118-4-3. In order that the project is in harmony with the purpose and intent of the CBPO, vegetated buffer area(s) shall be established in the disturbed areas within the RPA on the lot and shall be of a combined area of at least 0.17 acres. The size, species, density and locations shall be consistent with the planting requirements of CBPO 118-3-3(f), or a vegetation plan that is equally effective in retarding runoff, preventing erosion, and filtering non-point source pollution from runoff, as determined by the Department of Public Works and Environmental Services (DPWES). The vegetation shall be randomly placed to achieve a relatively even spacing throughout the buffer. Notwithstanding any statements on the Plat and in the Water Quality Impact Assessment, the size, species, density and locations of the trees, shrubs and groundcover will be subject to approval of the Director of the DPWES.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be responsible for obtaining the required Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this Special Exception shall automatically expire, without notice, thirty (30) months after the date of approval unless the use has been established or construction has commenced and been diligently prosecuted. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the Special Exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

If you have questions regarding the expiration of this Special Exception or filing a request for additional time, they should be directed to the Zoning Evaluation Division in the Department of Planning and Zoning at 703-324-1290. The mailing address for the Zoning Evaluation Division is Suite 801, 12055 Government Center Parkway, Fairfax, Virginia 22035.

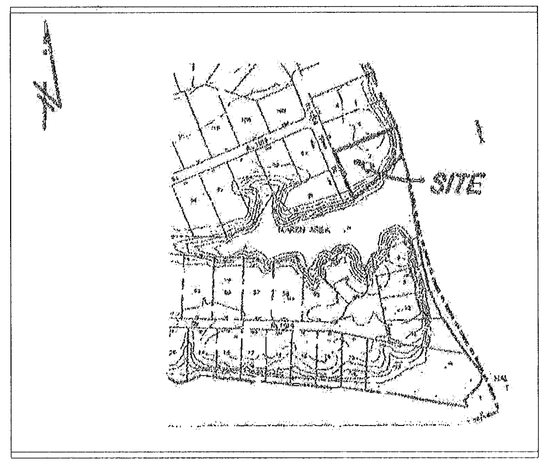
Sincerely,

Patti M. Hicks
Deputy Clerk to the Board of Supervisors

PMH/ns

cc: Chairman Gerald E. Connolly
Supervisor Gerald W. Hyland, Mount Vernon District
Janet Coldsmith, Director, Real Estate Div., Dept. of Tax Administration
Barbara A. Byron, Director, Zoning Evaluation Div., DPZ
Leslie B. Johnson, Deputy Zoning Administrator for Zoning Permit Review Branch
Audrey Clark, Director, BPRD, DPWES
Angela K. Rodeheaver, Section Chief, Trnsprt'n. Planning Div.,
Charles Strunk, Project Planning Section, Department of Transportation
Michelle A. Brickner, Director, Site Development Services, DPWES
Marie Langhorne, Plans & Document Control, OSDS, DPWES
Deloris Harris, DPWES - Environment & Facilities Review Division
Department of Highways, VDOT
Kirk Holley, Park Planning Branch Mgr., FCPA
District Planning Commissioner
Gary Chevalier, Office of Capital Facilities, Fairfax County Public Schools

RECEIVED
Department of Planning & Zoning
JUN 03 2005
Zoning Evaluation Division



TOPO MAP
1"=500'

TREE COVER TABULATION

GROSS SITE AREA = 68,133 SF

PERCENTAGE OF TREE COVER REQUIRED = 20%

TREE COVER REQUIRED = 13,626 SF

CREDIT FOR TREES PRESERVED = 1.25x 7400 SF = 9,250 SF
1.00x 15,000 SF = 15,000 SF (RPA)

TREE COVER PROVIDED = 24,250 SF

VEGETATION TABLE

AREA DESCRIPTION	VEG. TYPE	AREA (AC.)
EX. YARD	TURF AND SCATTERED TREES	1.17 ACRES
EX. BANK	SCRUB SHRUBS	0.31 ACRES
EX. SHORELINE	UNVEGETATED	0.08 ACRES

GENERAL NOTES

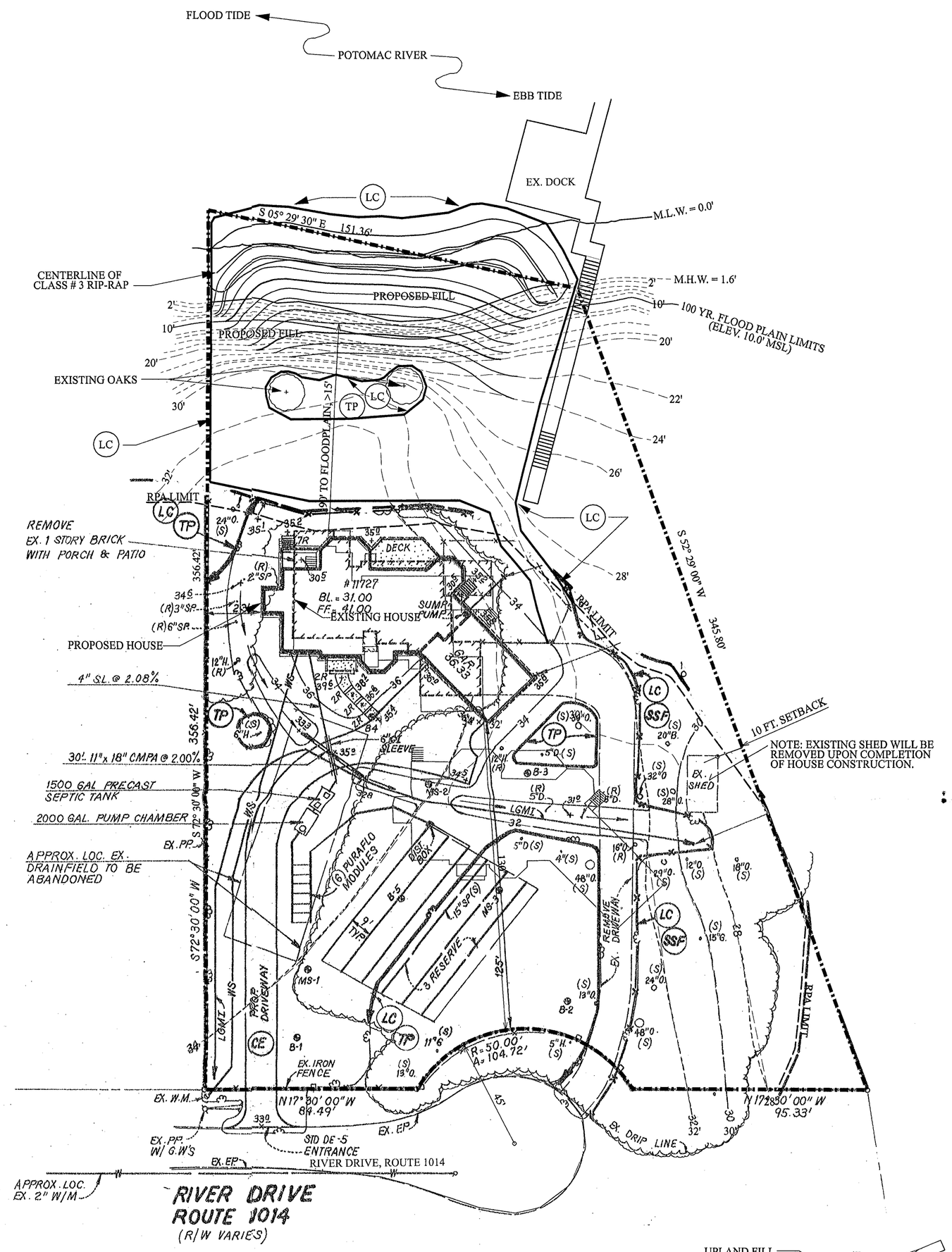
1) TAX MAP REFERENCE: 122-2-((2)) 7
2) NO TITLE REPORT FURNISHED.
3) PROPERTY IS SERVED BY PUBLIC WATER AND PRIVATE SEPTIC FIELD.
4) TOTAL DISTURBED AREA FOR SHORELINE PROJECT = 0.17AC.
5) WATERSHED : HIGH POINT.
6) SURFACED AREA OF FRONT YARD: N/A.
7) BOUNDARY AND TOPOGRAPHIC SURVEY BY OTHERS.
8) PLANIMETRICS AND OTHER BASE MAP AND NOTES TAKEN FROM APPROVED GRADING PLAN (# 005203-INF-06-1) BY HAROLD A. LOGAN ASSOCIATES, P.C.
9) MAXIMUM BUILDING HEIGHT <35'
10) 100-YR FLOODPLAIN DETERMINED FROM FEMA FIRM FOR TIDAL POTOMAC RIVER.
11) RPA LIMITS AS PER FAIRFAX COUNTY AND DELINEATED ON BASE MAP INFORMATION BY HAROLD A. LOGAN ASSOC., P.C.
12) NO TRAILS ARE REQUIRED, AS PER FAIRFAX CO. COMPREHENSIVE PLAN.
13) NO KNOWN GRAVE SITES ARE LOCATED ON THE PROPERTY.
14) PROPOSED FILL NOT TO EXCEED SLOPE OF TO 2:1.
15) NO UTILITY EASEMENTS WITHIN THE PROPOSED WORK AREA.
16) PROPOSED FILL IN DESIGNATED 100-YR FLOODPLAIN (ELEVATION 10.0' MSL) = 1100 CY.
17) SHORELINE STABILIZATION INFORMATION PROVIDED BY MJCI, INC, AS PER APPROVAL WETLAND PERMIT FIGURES AND PLAN.
18) FAIRFAX COUTNTY HEALTH DEPARTMENT APPROVAL DATED 3-24-04 FOR APPROVAL GRADING PLAN (005203-INF-06-1).

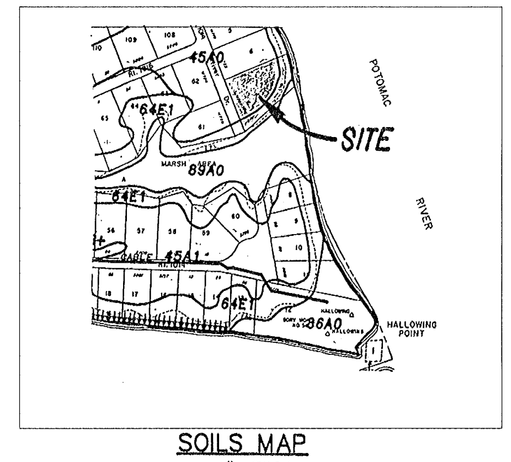
I hereby certify that, to the best of my knowledge and belief, all County approvals were in accordance to the Subdivision Ordinance in effect at the time of the creation of this lot. The lot was created as a part of the HALLOWING POINT RIVER ESTATES Subdivision approved on JULY 1998 and recorded in Deed Book 646 at Page 224 in the Fairfax County Land Records.

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

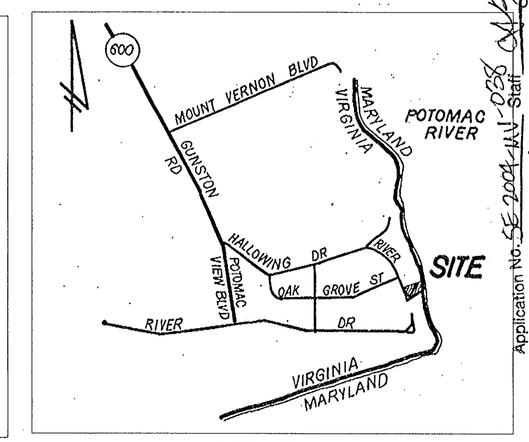
SIGNATURE

OWNER/DEVELOPER HAROLD A. LOGAN Agent for Owner
NAME TITLE





SOILS MAP
1"= 500'



VICINITY MAP
1"=2000'

Application No. SE 2004-MV-038 Staff
APPROVED (SE) SP PLAN
SEE DEV CONDS DATED
Date of (BOS) (BZA) approval 5/17/05
Sheet ___ of ___

SOIL MAP/DATA

SOIL ID NUMBERS	SERIES NAME	FOUNDATION SUPPORT	SUBSURFACE DRAINAGE	SLOPE STABILITY	ERODABILITY	GEOTECHNICAL REPORT REQ'D	PROBLEM CLASS
45A0	MATAPEAKE	GOOD	FAIR-P	GOOD	MODERATE	NO	C
64E1	SILTY AND CLAYEY SED	MARGINAL U,B,C,P	MARGINAL C,P	POOR-U,C,P	SEVERE	YES	A
89A0	MARSH (TIDAL)	POOR-F,B,W	POOR-F,W	GOOD	SLIGHT	YES	A

NOTE: ALL PROPOSED CONSTRUCTION IS WITHIN SOIL TYPE 45A0

LEGEND

EP = EDGE OF PAVEMENT
SL = SANITARY LATERAL
W.M. = WATER METER
W.S. = WATER SERVICE
EXISTING TREE (B = BEECH, D = DOGWOOD, H = HICKORY, G = SP = SPRUCE, O = OAK, PO = POPLAR
(R) = TO BE REMOVED
(S) = TO BE SAVED
CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
LC LIMITS OF CLEARING, GRADING AND/OR CONSTRUCTION
SF TEMPORARY SILT FENCE
TP TEMPORARY TREE PROTECTION

OWNER

KIMBERLY B. CAMPBELL
KELLY B. CAMPBELL
11727 RIVER DRIVE
LORTON VA 22079

ZONING: RE

MINIMUM SETBACKS
FRONT = 50'
SIDE= 20'
REAR= 25'

DEVELOPER

MONTICELLO HOMES
7829 MANOR HOUSE DRIVE
FAIRFAX STATION, VA 22039
TEL. 703-425-0001
FAX. 703-425-6476

FLOODPLAIN STATEMENTS:

1) PROPOSED SHORELINE STABILIZATION PROJECT ADDRESSES EROSION PROBLEM ALONG EASTERN PROPERTY BOUNDARY, AS PER PLAN FAIRFAX COUNTY. LOCAL WETLAND BOARD PERMIT # WB-01-W-007.
2) CORPS, VMRC AND DEQ PERMITS OBTAINED FOR SHORELINE PROJECT.
3) NO HABITABLE STRUCTURES WITHIN FLOODPLAIN AND VERIICAL SEPARATION OF OVER 20 FEET EXISTS BETWEEN HOUSE FF. ELEVATION AND 100- YEAR FLOODPLAIN.

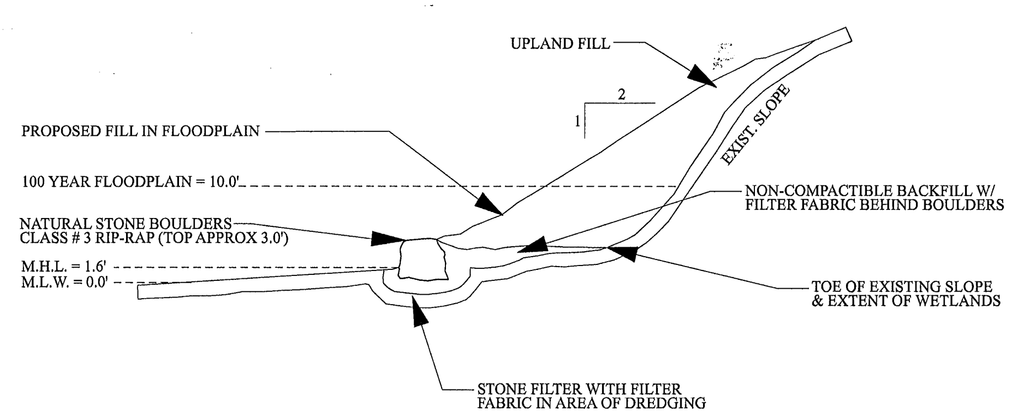
STORMWATER MANAGEMENT STATEMENT:

THIS PROJECT DOES NOT REQUIRE A SITE PLAN PURSUANT TO SECTION 17 OF THE FAIRFAX COUNTY ZONING ORDINANCE, DOES NOT REQUIRE SUBDIVISION APPROVAL PURSUANT TO SECTION 101 OF THE FAIRFAX COUNTY CODE, AND DOES NOT RESULT IN A IMPERVIOUS AREA OF MORE THAN 18% (6967 SF >18%); THEREFORE PER SECTION 118-3-2(1) OF THE FAIRFAX COUNTY CODE, NO BMP IS REQUIRED.

IMPERVIOUS ACREAGE ANALYSIS
(ENGINEER'S USE)

	DEVELOPMENT LEVEL		IMPERVIOUS ACREAGE COMPUTATIONS	
	PRE	POST	PRE	POST
SITE AREA IN ACRES	A	A	1.56	1.56
COMPOSITE RATIONAL C FACTOR	C1	C2	0.35	0.36
FRACTIONAL IMPERVIOUSNESS	I1	I2	0.150	0.162
TOTAL IMPERVIOUSNESS ACRES	AxI1	AxI2	0.23	0.2527

INCREASE IN IMPERVIOUS ACRES (AxI2)- (AxI1) 0.0227 ACRES= 1.5 % INCREASE



STONE BOULDER AND BACKFILL* (TYP)
*AS PER APPROVED WETLAND PERMIT
N.T.S.

CONTOUR INTERVAL = 2'
GRAPHIC SCALE: 1" = 30'
NORTH 30' 0' 30' 60'

RECEIVED
Department of Planning & Zoning
MAR 02 2005
Zoning Evaluation Division

ANGLER Environmental
Aquatic Resource Specialists
12801 Randolph Ridge Ln. Manassas, Va. 20109 ph: (703) 393-4844 fax: (703) 393-2934
106 North Thompson St. Richmond, Va. 23221 ph: (804) 353-6017 fax: (804) 353-6018

APPLICANT: KELLY AND KIM CAMPBELL
PROJECT: CAMPBELL - HALLOWING POINT RIVER ESTATES - LOT 7 - SECTION ONE - SHORELINE PROTECTION

SPECIAL EXCEPTION PLAT SE2004-MV-038

FAIRFAX COUNTY, VIRGINIA

PROJECT MANAGER:	LG
DESIGNED:	LG
DRAWN:	KG, DM
JOB NUMBER:	1450
DESIGN FILE:	1450-SPEX.DGN
DATE:	11/12/04
REVISIONS:	DM, 02/22/05

SHEET 1

County of Fairfax, Virginia

MEMORANDUM

DATE: December 18, 2013

TO: Barbara Berlin, Director
Zoning Evaluation Division, DPZ

FROM: Pamela G. Nee, Chief
Environment and Development Review Branch

SUBJECT: **ENVIRONMENTAL ASSESSMENT** for: **SE 2013-MV-011**
Campbell

This memorandum, prepared by Mary Ann Welton, includes citations from the Comprehensive Plan that list and explain environmental policies for this property. Plan citations are followed by a discussion of concerns including a description of potential impacts that may result from the proposed development as depicted on the revised special exception plan dated December 13, 2013 and a Geotechnical Analysis, performed by Soil and Structure dated October 4, 2013. Possible solutions to remedy identified issues are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are in harmony with Plan policies.

COMPREHENSIVE PLAN CITATIONS:

The Comprehensive Plan is the basis for the evaluation of this application. The assessment of the proposal for conformity with the environmental recommendations of the Comprehensive Plan is guided by the following citations from the Plan:

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on pages 7 and 8 states:

"Objective 2: **Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.**

Policy a. Maintain a best management practices (BMP) program for Fairfax County and ensure that new development and redevelopment complies with the County's best management practice (BMP) requirements. . . .

Department of Planning and Zoning
Planning Division
12055 Government Center Parkway, Suite730
Fairfax, Virginia 22035-5509
Phone 703-324-1380
Fax 703-324-3056
www.fairfaxcounty.gov/dpz/

Policy k. For new development and redevelopment, apply better site design and low impact development (LID) techniques such as those described below, and pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas. In order to minimize the impacts that new development and redevelopment projects may have on the County's streams, some or all of the following practices should be considered where not in conflict with land use compatibility objectives:

- Minimize the amount of impervious surface created.
- Site buildings to minimize impervious cover associated with driveways and parking areas and to encourage tree preservation. . . .
- Encourage cluster development when designed to maximize protection of ecologically valuable land. . . .
- Encourage fulfillment of tree cover requirements through tree preservation instead of replanting where existing tree cover permits. Commit to tree preservation thresholds that exceed the minimum Zoning Ordinance requirements.
- Where appropriate, use protective easements in areas outside of private residential lots as a mechanism to protect wooded areas and steep slopes. . . .
- Encourage the use of innovative BMPs and infiltration techniques of stormwater management where site conditions are appropriate, if consistent with County requirements.
- Apply nonstructural best management practices and bioengineering practices where site conditions are appropriate, if consistent with County requirements. "

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on page 10 states:

"Objective 3: **Protect the Potomac Estuary and the Chesapeake Bay from the avoidable impacts of land use activities in Fairfax County.**

Policy a. Ensure that new development and redevelopment complies with the County's Chesapeake Bay Preservation Ordinance. . . ."

The Fairfax County Comprehensive Plan Policy Plan, 2013 Edition, Environment section as amended through February 12, 2013, on page 12, states:

"Objective 6: **Ensure that new development either avoids problem soil areas, or implements appropriate engineering measures to protect existing and new structures from unstable soils.**

Policy a: Limit densities on slippage soils, and cluster development away from slopes and potential problem areas..."

Policy b: Require new development on problem soils to provide appropriate engineering measures to ensure against geotechnical hazards."

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, on page 18 states:

"Objective 10: **Conserve and restore tree cover on developed and developing sites. Provide tree cover on sites where it is absent prior to development.**

Policy a: Protect or restore the maximum amount of tree cover on developed and developing sites consistent with planned land use and good silvicultural practices. . . ."

ENVIRONMENTAL ANALYSIS

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed development. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions. Particular emphasis is given to opportunities provided by this application to conserve the county's remaining natural amenities.

This application seeks approval for impacts in the floodplain for an amount and area of disturbance in excess of that which was originally approved by the Board of Supervisors on May 9, 2005. The original special exception request was associated with a proposed 177 linear foot riprap revetment which was approved by the Wetlands Board in July, 2001. The 68,133 square foot subject property is situated directly on the Potomac River and Gunston Cove in in the High Point watershed. The shoreline of the subject property is identified as Environmental Quality Corridor (EQC), Resource Protection Area (RPA) under the County's Chesapeake Bay Preservation Ordinance (CBPO) and 100 year floodplain under the County's Zoning Ordinance.

Shoreline Stabilization

The original special exception for fill in the floodplain partially fulfilled the first condition of a 2001 Wetlands Permit which was granted by the Wetlands Board for a 177 linear foot riprap revetment on the shoreline of the subject property on July 25, 2001 and extended by the Wetlands Board for an additional period of two years in August, 2003.

Shoreline stabilization projects are complex endeavors which require that applicants exercise diligence in the planning, permitting and executing of such projects. Shoreline stabilizations require multiple approvals through the joint permit application process which encompasses federal, state and local tidal wetlands approvals, as well as the many local permitting requirements and approvals associated with fill in the floodplain, and land disturbance incurred to implement the proposed shoreline stabilization. This particular case was further complicated by the fact that the property owners decided to replace the home that existed on the subject property after they received the original wetlands permit in 2001, but before the shoreline stabilization was constructed. Applicant vigilance and methodical oversight are critical to the successful achievement of such a multi-faceted project involving numerous permitting requirements.

This current 2013 application for after the fact approval for fill in the floodplain now involves a site where a new home was constructed, fill was placed in the 100 year floodplain and shoreline stabilization was installed, all of which significantly affected the stability of the subject site which is steeply sloping adjacent to the Potomac River. Because of the property's position in relationship to the tidal shoreline, the site is subject to significant wind and wave action from the fetch which characterizes the site.

Due to the failure of the oversight process by the applicant, this application for fill in the floodplain in excess of that which was originally approved by the Board of Supervisors in 2005 is now governed by a court order, dated December 5, 2012 in the Circuit Court of the County of Fairfax.

The applicants are strongly encouraged to meet the court's directives in a timely manner in order to achieve a full resolution for this case. The order directs the property owners to meet all the permitting requirements which were not originally addressed when land disturbing work commenced without the necessary approvals from the Department of Public Works and Environmental Services (DPWES) including, but not limited to the following approvals:

- A grading plan for construction of the riprap revetment;
- A Chesapeake Bay Preservation Ordinance (CBPO) exception for work in the Resource Protection Area (RPA);
- A full and complete soils report/geotechnical analysis to be reviewed and approved by the Geotechnical Review Board and DPWES staff;
    - In the event that the soils report identifies deficiencies or remedies for work accomplished, such remedies shall be incorporated into the this current special exception plan to ameliorate any such deficiencies, as well as into all other necessary plans associated with this application.

Staff met with the applicant and his agents on September 4, 2013 to discuss additional information needed under this current submission to fully evaluate the application. At that meeting, staff requested that a soils report be provided, reviewed and approved by the geotechnical review board (GRB) and DPWES staff to inform the direction of this application.

The geotechnical analysis dated October 4, 2013 and subsequently reviewed by DPWES staff determined that the factor of safety for a portion of the slope is not sufficiently stable. For that reason the geotechnical report was not approved. To achieve approval, the geotechnical report

must be revised to encompass appropriate measures to remedy the deficient factor of safety finding for the relevant portion of the slope. After the report is revised and approved by DPWES, such measures should be included in the special exception plan submission. The December 13, 2013 revised special exception plan does not address the slope stability issue which is crucial to completing and incorporating all necessary information into this special exception plan.

Harmony with the Comprehensive Plan

To ensure that this application is in harmony with Comprehensive Plan policy,

- The applicant should continue to exercise a good faith effort to seek approval for the geotechnical analysis, as recommend by the DPWES in conjunction with the GRB;
- The applicant is strongly encouraged to avoid any new impervious surface in the EQC/RPA and 100 year floodplain, and the applicant should revise the statement of justification to reflect this recommendation;
- The applicant is strongly encouraged to restore the slope with necessary plant material as may be required by DPWES in order to ensure conformance with a future approved Water Quality Impact Assessment (WQIA) for impacts in the RPA;
- The applicant should provide all the necessary data and information necessary for a thorough evaluation of this current special exception plan;
- At such time that this application is properly permitted by the Board of Supervisors, the applicant should submit a new Joint Permit Application (JPA) to the Virginia Marine Resources Commission (VMRC) and the Fairfax County Wetlands Board which reflects the current plan and footprint of this project in its current state, and reflecting only measures proposed and approved to remedy slope stability and RPA/ EQC restoration measures, as required by DPWES;
- The applicant must exercise vigilance and positive oversight or hire a qualified individual to fulfill the role of ensuring that all the permitting requirements and deadlines are adhered to in a timely manner.

PGN/MAW

County of Fairfax, Virginia

MEMORANDUM

DATE: October 28, 2013

TO: Megan Duca, Staff Coordinator
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Thakur Dhakal, P.E., Senior Engineer III
Site Development and Inspections Division
Department of Public Works and Environmental Services

SUBJECT: Special Exception Plat #SE 2013-MV-011; 11727 River Drive; SE Plat dated June 18, 2013; Little High Point Watershed; LDS Project # 5203-ZONA-002-1; Tax Map #122-2-02-0007; Mount Vernon District

We have reviewed the subject plan and offer the following stormwater management comments.

Chesapeake Bay Preservation Ordinance (CBPO)
Part of the site is within a County mapped 1993 Resource Protection Area. The application indicates that there was an unauthorized disturbance within the limits of RPA. RPA delineation is required to accurately delineate the limits of RPA (LTI 08-12).

The disturbed area within the RPA shall be restored in accordance with CBPO 9-1.d and Water Quality Impact Assessment for the disturbance in RPA must be submitted in conjunction with special exception application and heard by the Board concurrently.

Special Exception Plan indicates that several retaining walls, a flagstone patio, and walks more than 4 feet wide have been proposed within the limits of RPA, which may not be minimum necessary to afford relief. A detailed evaluation will be made and separate comments will be provided when water quality impact assessment is be submitted.

Floodplain
There are regulated floodplains on the site. A fill has been occurred within the limits of floodplain. However, the fill will not likely to have a significant impact on 100 year water surface elevation in Potomac River. But, the limits of 100 year floodplain shall be delineated and dedicated within a floodplain easement. Any change in floodplain limits shall be documented and coordinated with FEMA.

Department of Public Works and Environmental Services
Land Development Services
12055 Government Center Parkway, Suite 444
Fairfax, Virginia 22035-5503
Phone 703-324-1720 • TTY 703-324-1877 • FAX 703-324-8359
www.fairfaxcounty.gov/dpwes

A geotechnical investigation shall be conducted to determine the type, nature and amount of fill. The geotechnical report shall be submitted separately and approved by DPWES. The geotechnical recommendations shall be incorporated into future grading plans.

Downstream Drainage Complaints
There are no recent downstream flooding complaints on file.

Stormwater Detention
No Stormwater detention is applicable to this site.

Water Quality Control
Applicant indicates that the total impervious area in the parcel will be less than 18%, and no BMP are required for this project. However, the disturbance in RPA must be mitigated by establishing a buffer. No details of the buffer have been provided on the plan.

Onsite Major Storm Drainage System and Overland Relief
Applicant needs show that no buildings will be flooded with a 100-year design flow. Grading around the house shall be provided such that the ground slopes away from the building.

Downstream Drainage System
Adequate outfall narrative has been provided.

Dam Breach
None of this property is within the dam breach inundation zone.

Stormwater Management Proffers

Comments on the draft proffers will be provided separately once we receive the draft proffers.

These comments are based on the 2011 version of the Public Facilities Manual (PFM). A new Stormwater ordinance and updates to the PFM's Stormwater requirements are being developed as a result of changes to state code (see 4VAC50-60 adopted May 24, 2011). The site plan for this application may be required to conform to the updated PFM and the new ordinance.

Please contact me at 703-324-1720 if you require additional information.

TD/

cc: Fred Rose, Chief, Watershed Planning & Assessment Branch, Stormwater Planning Division, DPWES
Don Demetrius, Chief, Watershed Evaluation Branch, SPD, DPWES
Clinton Abernathy, Acting Chief, South Branch, SDID, DPWES
Zoning Application File

County of Fairfax, Virginia

MEMORANDUM

DATE: August 5, 2013

TO: Nicholas Rogers, Staff Coordinator
Zoning Evaluation Division, DPZ

FROM: Jay Banks, Urban Forester II
Forest Conservation Branch, UFMD

SUBJECT: Hallowing Point River Estates, Section 1, Lot 7.SE 2013-MV-011

RE: Request to review Special Exception Plan

At the request of the Department of Planning and Zoning, staff from the Urban Forest Management Division (UFMD) has completed a review of the Special Exception Plan 2013-MV-011 stamped "Received, Department of Planning and Zoning, Jun 18, 2013." A site visit was conducted on July 26, 2013.

Specific Comments:

1. **Comment:** Two existing trees are not shown on sheet 2 of 4 of the SE. A tulip poplar (*Liriodendron tulipifera*) on the southern boundary and a red oak (*Quercus rubra*) on the east side of the house. Both trees are within the Resource Protection Area (RPA) and could potentially be impacted by proposed development activities.

   Recommendation: Correctly show all of the existing tree canopy on the plan.

2. **Comment:** The trunk diameters are not accurately indicated for each of the existing trees that are shown on sheet 2 of 4. In addition, the existing tree line is not accurately shown on the plan.

   Recommendation: Show the correct trunk diameters and an accurate tree line for the existing trees shown on the plan.

3. **Comment:** It appears that the 36-in. diameter southern red oak (*Quercus falcate*) located at the rear of the house is to remain. Limits of clearing and grading are not shown to sufficiently protect the root zone to ensure survivability of the tree.

   Recommendation: Require limits of clearing and grading to protect a sufficient root zone of the 36-in. diameter oak tree. Show wall construction outside of the protected area.

Department of Public Works and Environmental Services
Urban Forest Management Division
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035-5503
Phone 703-324-1770, TTY: 703-324-1877, Fax: 703-803-7769
www.fairfaxcounty.gov/dpwes

4. **Comment:** There are two trunk diameters provided for the red oak (*Quercus rubra*) on the northern property boundary.

   Recommendation: The incorrect trunk diameter should be deleted.

5. **Comment:** Proposed grading is shown to take place outside of the limits of clearing and grading at the rear of the house. The 32 and 34 grade lines extent outside of the proposed LCG. A correct limits of clearing and grading should be shown so the true construction impact to existing trees can be evaluated.

   Recommendation: Require the correct limits of clearing and grading on the SE plan.

6. **Comment:** A tree preservation area sign detail is not provided as part of the tree preservation plan.

   Recommendation: Require a detail specifying tree preservation area signage and installation.

JSB/

UFMDID #: 183360

cc: DPZ File

Department of Public Works and Environmental Services
Land Development Services, Environmental and Site Review Division
12055 Government Center Parkway, Suite 535
Fairfax, Virginia 22035-5503
Phone 703-324-1720, TTY: 703-324-1877, Fax: 703-324-8359
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County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

NOV 19 2013

John Vergeres, P.E.
Soil & Structure Consulting, Inc.
1889 Preston White Drive, Suite 104
Reston, Virginia 20191

Reference: Geotechnical Report for Hallowing Point River Estates Lot 7 (aka 11727 River Drive), Project #5203-SR-009-5 with 5203-SRI-009-1-1, Tax Map #112-2 ((2)) 0007, Mount Vernon District, Type: Residential

Dear Mr. Vergeres:

The referenced geotechnical report dated October 4, 2013 prepared on behalf of Kelly & Kimberly Campbell with your previous Project Number 101.000-13 has been reviewed. We have also reviewed your response dated November 15, 2013 to interim review comments formally issued on 11/14/2012. The report was re-submitted to satisfy development condition #8 of Special Exception Application number SE 2004-MV-038 and to partially support the site construction plan prepared by Harold A. Logan Associates, P.C. (submission number 5203-INF-006-3).

The report, with the November 15, 2013 response, is not approved and shall be revised to address the following item/s. In addition, to help us expedite the review process, please prepare a cover letter summarizing the responses to the comments and the associated pages of the revised report.

1. A minimum Factor of Safety (FS) of 1.25 is required for the long-term stability of slopes. An FS of 1.1 is not considered sufficiently stable as mentioned in the 11/14/2012 interim comments. Also see attached excerpts of feedback from members of the Geotechnical Review Board (GRB) based on a review of the response of November 15, 2013.

The revised report and/or response to the above comments shall be submitted through the Customer and Technical Support Center (CTSC, tel. 703-222-0801) for review. CTSC is located on the 2nd Floor of the Herrity Building (12055 Government Center Parkway, Fairfax, Va.).

If you have any questions, please contact me at 703-324-1720.

Sincerely,

Kanthan Siva

Umakanthan Sivapalarasah, P.E.
Chief Geotechnical Engineer
Site Development and Inspections Division (SDID)

Department of Public Works and Environmental Services
Land Development Services, Site Development and Inspections Division
12055 Government Center Parkway, Suite 535
Fairfax, Virginia 22035-5503
Phone 703-324-1720 • TTY 703-324-1877 • FAX 703-324-8359

Attachments: Excerpt of direct review comments from GRB Member 1, 2 and 3

cc: Mark Crain, L.S., Harold A. Logan Associates, P.C.
Kelly & Kim Campbell
Paul Emerick, County Attorney
Bijan Sistani, P.E. - SDID South Branch Chief, Land Development Services, DPWES
Geotechnical File

Sivapalarasah, Kanthan

GRB #1

From: [redacted]
Sent: Monday, November 18, 2013 12:12 PM
To: Sivapalarasah, Kanthan
Subject: RE: Campbell Residence (5203-SR-009-3)

Kanthan:
I concur with GRB3 [redacted] and GRB2 [redacted] that a FOS of 1.25 should maintained over the site.
Thank you.
[redacted]

Sivapalarasah, Kanthan

GRB #2

From: [redacted]
Sent: Monday, November 18, 2013 7:48 AM
To: Sivapalarasah, Kanthan
Cc: [redacted]
Subject: Re: Campbell Residence (5203-SR-009-3)

Kanthan:
I agree with GRB#3 [redacted] that the calculated safety factor should be at least 1.25. ~~This could be accomplished by~~ [redacted] ~~or by a more detailed consideration of the shear strength values used~~. Otherwise, the response is satisfactory.

[redacted]

Sivapalarasah, Kanthan

GRB #3

From: [redacted]
Sent: Sunday, November 17, 2013 8:52 PM
To: Sivapalarasah, Kanthan; [redacted]
Subject: Re: Campbell Residence (5203-SR-009-3)

Kanthan,
I still think that the factor of safety of section 1 should be above 1.25. [redacted] But I will leave the final decision to you. Otherwise I am satisfied with their response.
Regards,

County of Fairfax, Virginia

DATE: August 19, 2013

TO: Nick Rodgers, Staff Coordinator
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Kevin R. Wastler, EH Supervisor KRW
Technical Review and Information Resources Section
Fairfax County Health Department

SUBJECT: Special Exception Plat Analysis

REFERENCE: Application No. SE 2013-MV-011 (Kimberly B. and Kelly P. Campbell)

After reviewing the application, the Health Department **cannot** approve the proposed Special Exception Plat Analysis at this time. The plat submitted with the application shows a detached garage structure as part of the site plan improvements. The location shown for the detached garage may potentially interfere with an installed Lateral Groundwater Movement Interceptor (LGMI) trench that was installed in conjunction with the existing septic system. It appears that the proposed detached garage may be located on a portion of the installed trench.

The LGMI is an important portion of the overall design function of the existing septic system and until a proposal is submitted to change it's location that is at least 10' from the proposed detached garage and 10' from the existing drainfield the Health Department cannot approve the application as submitted.

Please have the owners or there agents contact the Health Department for additional information concerning this matter.

Fairfax County Health Department
Division of Environmental Health
Technical Review and Information Resources
10777 Main Street, Suite 102, Fairfax, VA 22030
Phone: 703-246-2510 TTY: 711 Fax: 703-278-8156
www.fairfaxcounty.gov/hd

GLOSSARY

This Glossary is provided to assist the public in understanding
the staff evaluation and analysis of development proposals.
It should not be construed as representing legal definitions.
Refer to the Fairfax County Zoning Ordinance, Comprehensive Plan
or Public Facilities Manual for additional information.

ABANDONMENT: Refers to road or street abandonment, an action taken by the Board of Supervisors, usually through the public hearing process, to abolish the public's right-of-passage over a road or road right-of way. Upon abandonment, the right-of-way automatically reverts to the underlying fee owners. If the fee to the owner is unknown, Virginia law presumes that fee to the roadbed rests with the adjacent property owners if there is no evidence to the contrary.

ACCESSORY DWELLING UNIT (OR APARTMENT): A secondary dwelling unit established in conjunction with and clearly subordinate to a single family detached dwelling unit. An accessory dwelling unit may be allowed if a special permit is granted by the Board of Zoning Appeals (BZA). Refer to Sect. 8-918 of the Zoning Ordinance.

AFFORDABLE DWELLING UNIT (ADU) DEVELOPMENT: Residential development to assist in the provision of affordable housing for persons of low and moderate income in accordance with the affordable dwelling unit program and in accordance with Zoning Ordinance regulations. Residential development which provides affordable dwelling units may result in a density bonus (see below) permitting the construction of additional housing units. See Part 8 of Article 2 of the Zoning Ordinance.

AGRICULTURAL AND FORESTAL DISTRICTS: A land use classification created under Chapter 114 or 115 of the Fairfax County Code for the purpose of qualifying landowners who wish to retain their property for agricultural or forestal use for use/value taxation pursuant to Chapter 58 of the Fairfax County Code.

BARRIER: A wall, fence, earthen berm, or plant materials which may be used to provide a physical separation between land uses. Refer to Article 13 of the Zoning Ordinance for specific barrier requirements.

BEST MANAGEMENT PRACTICES (BMPs): Stormwater management techniques or land use practices that are determined to be the most effective, practicable means of preventing and/or reducing the amount of pollution generated by nonpoint sources in order to improve water quality.

BUFFER: Graduated mix of land uses, building heights or intensities designed to mitigate potential conflicts between different types or intensities of land uses; may also provide for a transition between uses. A landscaped buffer may be an area of open, undeveloped land and may include a combination of fences, walls, berms, open space and/or landscape plantings. A buffer is not necessarily coincident with transitional screening.

CHESAPEAKE BAY PRESERVATION ORDINANCE: Regulations which the State has mandated must be adopted to protect the Chesapeake Bay and its tributaries. These regulations must be incorporated into the comprehensive plans, zoning ordinances and subdivision ordinances of the affected localities. Refer to Chesapeake Bay Preservation Act, Va. Code Section 10.1-2100 et seq and VR 173-02-01, Chesapeake Bay Preservation Area Designation and Management Regulations.

CLUSTER DEVELOPMENT: Residential development in which the lots are clustered on a portion of a site so that significant environmental/historical/cultural resources may be preserved or recreational amenities provided. While smaller lot sizes are permitted in a cluster subdivision to preserve open space, the overall density cannot exceed that permitted by the applicable zoning district. See Sect. 2-421 and Sect. 9-615 of the Zoning Ordinance.

COUNTY 2232 REVIEW PROCESS: A public hearing process pursuant to Sect. 15.2-2232 (Formerly Sect. 15.1-456) of the Virginia Code which is used to determine if a proposed public facility not shown on the adopted Comprehensive Plan is in substantial accord with the plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Plan.

dBA: The momentary magnitude of sound weighted to approximate the sensitivity of the human ear to certain frequencies; the dBA value describes a sound at a given instant, a maximum sound level or a steady state value. See also Ldn.

DENSITY: Number of dwelling units (du) divided by the gross acreage (ac) of a site being developed in residential use; or, the number of dwelling units per acre (du/ac) except in the PRC District when density refers to the number of persons per acre.

DENSITY BONUS: An increase in the density otherwise allowed in a given zoning district which may be granted under specific provisions of the Zoning Ordinance when a developer provides excess open space, recreation facilities, or affordable dwelling units (ADUs), etc.

DEVELOPMENT CONDITIONS: Terms or conditions imposed on a development by the Board of Supervisors (BOS) or the Board of Zoning Appeals (BZA) in connection with approval of a special exception, special permit or variance application or rezoning application in a "P" district. Conditions may be imposed to mitigate adverse impacts associated with a development as well as secure compliance with the Zoning Ordinance and/or conformance with the Comprehensive Plan. For example, development conditions may regulate hours of operation, number of employees, height of buildings, and intensity of development.

DEVELOPMENT PLAN: A graphic representation which depicts the nature and character of the development proposed for a specific land area: information such as topography, location and size of proposed structures, location of streets trails, utilities, and storm drainage are generally included on a development plan. A development plan is s submission requirement for rezoning to the PRC District. A GENERALIZED DEVELOPMENT PLAN (GDP) is a submission requirement for a rezoning application for all conventional zoning districts other than a P District. A development plan submitted in connection with a special exception (SE) or special permit (SP) is generally referred to as an SE or SP plat. A CONCEPTUAL DEVELOPMENT PLAN (CDP) is a submission requirement when filing a rezoning application for a P District other than the PRC District; a CDP characterizes in a general way the planned development of the site. A FINAL DEVELOPMENT PLAN (FDP) is a submission requirement following the approval of a conceptual development plan and rezoning application for a P District other than the PRC District; an FDP further details the planned development of the site. See Article 16 of the Zoning Ordinance.

EASEMENT: A right to or interest in property owned by another for a specific and limited purpose. Examples: access easement, utility easement, construction easement, etc. Easements may be for public or private purposes.

ENVIRONMENTAL QUALITY CORRIDORS (EQCs): An open space system designed to link and preserve natural resource areas, provide passive recreation and protect wildlife habitat. The system includes stream valleys, steep slopes and wetlands. For a complete definition of EQCs, refer to the Environmental section of the Policy Plan for Fairfax County contained in Vol. 1 of the Comprehensive Plan.

ERODIBLE SOILS: Soils that wash away easily, especially under conditions where stormwater runoff is inadequately controlled. Silt and sediment are washed into nearby streams, thereby degrading water quality.

FLOODPLAIN: Those land areas in and adjacent to streams and watercourses subject to periodic flooding; usually associated with environmental quality corridors. The 100 year floodplain drains 70 acres or more of land and has a one percent chance of flood occurrence in any given year.

FLOOR AREA RATIO (FAR): An expression of the amount of development intensity (typically, non-residential uses) on a specific parcel of land. FAR is determined by dividing the total square footage of gross floor area of buildings on a site by the total square footage of the site itself.

FUNCTIONAL CLASSIFICATION: A system for classifying roads in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways which are limited access highways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Principal arterials are designed to accommodate travel; access to adjacent properties is discouraged. Minor arterials are designed to serve both through traffic and local trips. Collector roads and streets link local streets and properties with the arterial network. Local streets provide access to adjacent properties.

GEOTECHNICAL REVIEW: An engineering study of the geology and soils of a site which is submitted to determine the suitability of a site for development and recommends construction techniques designed to overcome development on problem soils, e.g., marine clay soils.

HYDROCARBON RUNOFF: Petroleum products, such as motor oil, gasoline or transmission fluid deposited by motor vehicles which are carried into the local storm sewer system with the stormwater runoff, and ultimately, into receiving streams; a major source of non-point source pollution. An oil-grit separator is a common hydrocarbon runoff reduction method.

IMPERVIOUS SURFACE: Any land area covered by buildings or paved with a hard surface such that water cannot seep through the surface into the ground.

INFILL: Development on vacant or underutilized sites within an area which is already mostly developed in an established development pattern or neighborhood.

INTENSITY: The magnitude of development usually measured in such terms as density, floor area ratio, building height, percentage of impervious surface, traffic generation, etc. Intensity is also based on a comparison of the development proposal against environmental constraints or other conditions which determine the carrying capacity of a specific land area to accommodate development without adverse impacts.

Ldn: Day night average sound level. It is the twenty-four hour average sound level expressed in A-weighted decibels; the measurement assigns a "penalty" to night time noise to account for night time sensitivity. Ldn represents the total noise environment which varies over time and correlates with the effects of noise on the public health, safety and welfare.

LEVEL OF SERVICE (LOS): An estimate of the effectiveness of a roadway to carry traffic, usually under anticipated peak traffic conditions. Level of Service efficiency is generally characterized by the letters A through F, with LOS-A describing free flow traffic conditions and LOS-F describing jammed or grid-lock conditions.

MARINE CLAY SOILS: Soils that occur in widespread areas of the County generally east of Interstate 95. Because of the abundance of shrink-swell clays in these soils, they tend to be highly unstable. Many areas of slope failure are evident on natural slopes. Construction on these soils may initiate or accelerate slope movement or slope failure. The shrink-swell soils can cause movement in structures, even in areas of flat topography, from dry to wet seasons resulting in cracked foundations, etc. Also known as slippage soils.

OPEN SPACE: That portion of a site which generally is not covered by buildings, streets, or parking areas. Open space is intended to provide light and air; open space may be function as a buffer between land uses or for scenic, environmental, or recreational purposes.

OPEN SPACE EASEMENT: An easement usually granted to the Board of Supervisors which preserves a tract of land in open space for some public benefit in perpetuity or for a specified period of time. Open space easements may be accepted by the Board of Supervisors, upon request of the land owner, after evaluation under criteria established by the Board. See Open Space Land Act, Code of Virginia, Sections 10.1-1700, et seq.

P DISTRICT: A "P" district refers to land that is planned and/or developed as a Planned Development Housing (PDH) District, a Planned Development Commercial (PDC) District or a Planned Residential Community (PRC) District. The PDH, PDC and PRC Zoning Districts are established to encourage innovative and creative design for land development; to provide ample and efficient use of open space; to promote a balance in the mix of land uses, housing types, and intensity of development; and to allow maximum flexibility in order to achieve excellence in physical, social and economic planning and development of a site. Refer to Articles 6 and 16 of the Zoning Ordinance.

PROFFER: A written condition, which, when offered voluntarily by a property owner and accepted by the Board of Supervisors in a rezoning action, becomes a legally binding condition which is in addition to the zoning district regulations applicable to a specific property. Proffers are submitted and signed by an owner prior to the Board of Supervisors public hearing on a rezoning application and run with the land. Once accepted by the Board, proffers may be modified only by a proffered condition amendment (PCA) application or other zoning action of the Board and the hearing process required for a rezoning application applies. See Sect. 15.2-2303 (formerly 15.1-491) of the Code of Virginia.

PUBLIC FACILITIES MANUAL (PFM): A technical text approved by the Board of Supervisors containing guidelines and standards which govern the design and construction of site improvements incorporating applicable Federal, State and County Codes, specific standards of the Virginia Department of Transportation and the County's Department of Public Works and Environmental Services.

RESOURCE MANAGEMENT AREA (RMA): That component of the Chesapeake Bay Preservation Area comprised of lands that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

RESOURCE PROTECTION AREA (RPA): That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments from runoff entering the Bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources. New development is generally discouraged in an RPA. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

SITE PLAN: A detailed engineering plan, to scale, depicting the development of a parcel of land and containing all information required by Article 17 of the Zoning Ordinance. Generally, submission of a site plan to DPWES for review and approval is required for all residential, commercial and industrial development except for development of single family detached dwellings. The site plan is required to assure that development complies with the Zoning Ordinance.

SPECIAL EXCEPTION (SE) / SPECIAL PERMIT (SP): Uses, which by their nature, can have an undue impact upon or can be incompatible with other land uses and therefore need a site specific review. After review, such uses may be allowed to locate within given designated zoning districts if appropriate and only under special controls, limitations, and regulations. A special exception is subject to public hearings by the Planning Commission and Board of Supervisors with approval by the Board of Supervisors; a special permit requires a public hearing and approval by the Board of Zoning Appeals. Unlike proffers which are voluntary, the Board of Supervisors or BZA may impose reasonable conditions to assure, for example, compatibility and safety. See Article 8, Special Permits and Article 9, Special Exceptions, of the Zoning Ordinance.

STORMWATER MANAGEMENT: Engineering practices that are incorporated into the design of a development in order to mitigate or abate adverse water quantity and water quality impacts resulting from development. Stormwater management systems are designed to slow down or retain runoff to re-create, as nearly as possible, the pre-development flow conditions.

SUBDIVISION PLAT: The engineering plan for a subdivision of land submitted to DPWES for review and approved pursuant to Chapter 101 of the County Code.

TRANSPORTATION DEMAND MANAGEMENT (TDM): Actions taken to reduce single occupant vehicle automobile trips or actions taken to manage or reduce overall transportation demand in a particular area.

TRANSPORTATION SYSTEM MANAGEMENT (TSM) PROGRAMS: This term is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network. TSM programs usually consist of low-cost alternatives to major capital expenditures, and may include parking management measures, ridesharing programs, flexible or staggared work hours, transit promotion or operational improvements to the existing roadway system. TSM includes Transportation Demand Management (TDM) measures as well as H.O.V. use and other strategies associated with the operation of the street and transit systems.

URBAN DESIGN: An aspect of urban or suburban planning that focuses on creating a desirable environment in which to live, work and play. A well-designed urban or suburban environment demonstrates the four generally accepted principles of design: clearly identifiable function for the area; easily understood order; distinctive identity; and visual appeal.

VACATION: Refers to vacation of street or road as an action taken by the Board of Supervisors in order to abolish the public's right-of-passage over a road or road right-of-way dedicated by a plat of subdivision. Upon vacation, title to the road right-of-way transfers by operation of law to the owner(s) of the adjacent properties within the subdivision from whence the road/road right-of-way originated.

VARIANCE: An application to the Board of Zoning Appeals which seeks relief from a specific zoning regulation such as lot width, building height, or minimum yard requirements, among others. A variance may only be granted by the Board of Zoning Appeals through the public hearing process and upon a finding by the BZA that the variance application meets the required Standards for a Variance set forth in Sect. 18-404 of the Zoning Ordinance.

WETLANDS: Land characterized by wetness for a portion of the growing season. Wetlands are generally delineated on the basis of physical characteristics such as soil properties indicative of wetness, the presence of vegetation with an affinity for water, and the presence or evidence of surface wetness or soil saturation. Wetland environments provide water quality improvement benefits and are ecologically valuable. Development activity in wetlands is subject to permitting processes administered by the U.S. Army Corps of Engineers

TIDAL WETLANDS: Vegetated and nonvegetated wetlands as defined in Chapter 116 Wetlands Ordinance of the Fairfax County Code: includes tidal shores and tidally influenced embayments, creeks, and tributaries to the Occoquan and Potomac Rivers. Development activity in tidal wetlands may require approval from the Fairfax County Wetlands Board.

Abbreviations Commonly Used in Staff Reports

A&F	Agricultural & Forestal District
ADU	Affordable Dwelling Unit
ARB	Architectural Review Board
BMP	Best Management Practices
BOS	Board of Supervisors
BZA	Board of Zoning Appeals
COG	Council of Governments
CBC	Community Business Center
CDP	Conceptual Development Plan
CRD	Commercial Revitalization District
DOT	Department of Transportation
DP	Development Plan
DPWES	Department of Public Works and Environmental Services
DPZ	Department of Planning and Zoning
DU/AC	Dwelling Units Per Acre
EQC	Environmental Quality Corridor
FAR	Floor Area Ratio
FDP	Final Development Plan
GDP	Generalized Development Plan
GFA	Gross Floor Area
HC	Highway Corridor Overlay District
HCD	Housing and Community Development
LOS	Level of Service
Non-RUP	Non-Residential Use Permit
OSDS	Office of Site Development Services, DPWES
PCA	Proffered Condition Amendment
PD	Planning Division
PDC	Planned Development Commercial
PDH	Planned Development Housing
PFM	Public Facilities Manual
PRC	Planned Residential Community
RC	Residential-Conservation
RE	Residential Estate
RMA	Resource Management Area
RPA	Resource Protection Area
RUP	Residential Use Permit
RZ	Rezoning
SE	Special Exception
SEA	Special Exception Amendment
SP	Special Permit
TDM	Transportation Demand Management
TMA	Transportation Management Association
TSA	Transit Station Area
TSM	Transportation System Management
UP & DD	Utilities Planning and Design Division, DPWES
VC	Variance
VDOT	Virginia Dept. of Transportation
VPD	Vehicles Per Day
VPH	Vehicles per Hour
WMATA	Washington Metropolitan Area Transit Authority
WS	Water Supply Protection Overlay District
ZAD	Zoning Administration Division, DPZ
ZED	Zoning Evaluation Division, DPZ
ZPRB	Zoning Permit Review Branch