



APPLICATION ACCEPTED: June 20, 2014
APPLICATION AMENDED: September 16, 2014, December 19, 2014, January 19, 2015,
March 19, 2016
PLANNING COMMISSION: April 15, 2015
BOARD OF SUPERVISORS: Not yet scheduled

County of Fairfax, Virginia

April 1, 2015

STAFF REPORT

APPLICATION SE 2014-DR-033

Concurrent with:
Resource Protection Area Encroachment Exception #6100-WRPA-005-2 &
Water Quality Impact Assessment #6100-WQ-003-2

DRANESVILLE DISTRICT

APPLICANT: Krishna R. Murthy

ZONING: R-1 (Residential, 1 du/ac)

PARCEL: 29-1 ((1)) 25

SITE AREA: 25,564 square feet

PLAN MAP: Residential, 1-2 dwelling units per acre (du/ac)
Private Open Space

SPECIAL EXCEPTION PROPOSAL: To allow fill within the 100-year floodplain for the construction of a new single family detached dwelling.

STAFF RECOMMENDATIONS:

Staff recommends approval of SE 2014-DR-033, subject to the proposed development conditions contained in Appendix 1.

Staff recommends approval of RPA Encroachment Exception #6100-WRPA-005-2 and WQIA #6100-WQ-003-2, subject to the proposed development conditions contained in Attachment A of Appendix 4.

Bob Katai

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/



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.

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. 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.

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.

O:\bkatai\Murthy\Staff Report and Conditions\00 – Consolidated Staff Report.doc



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).

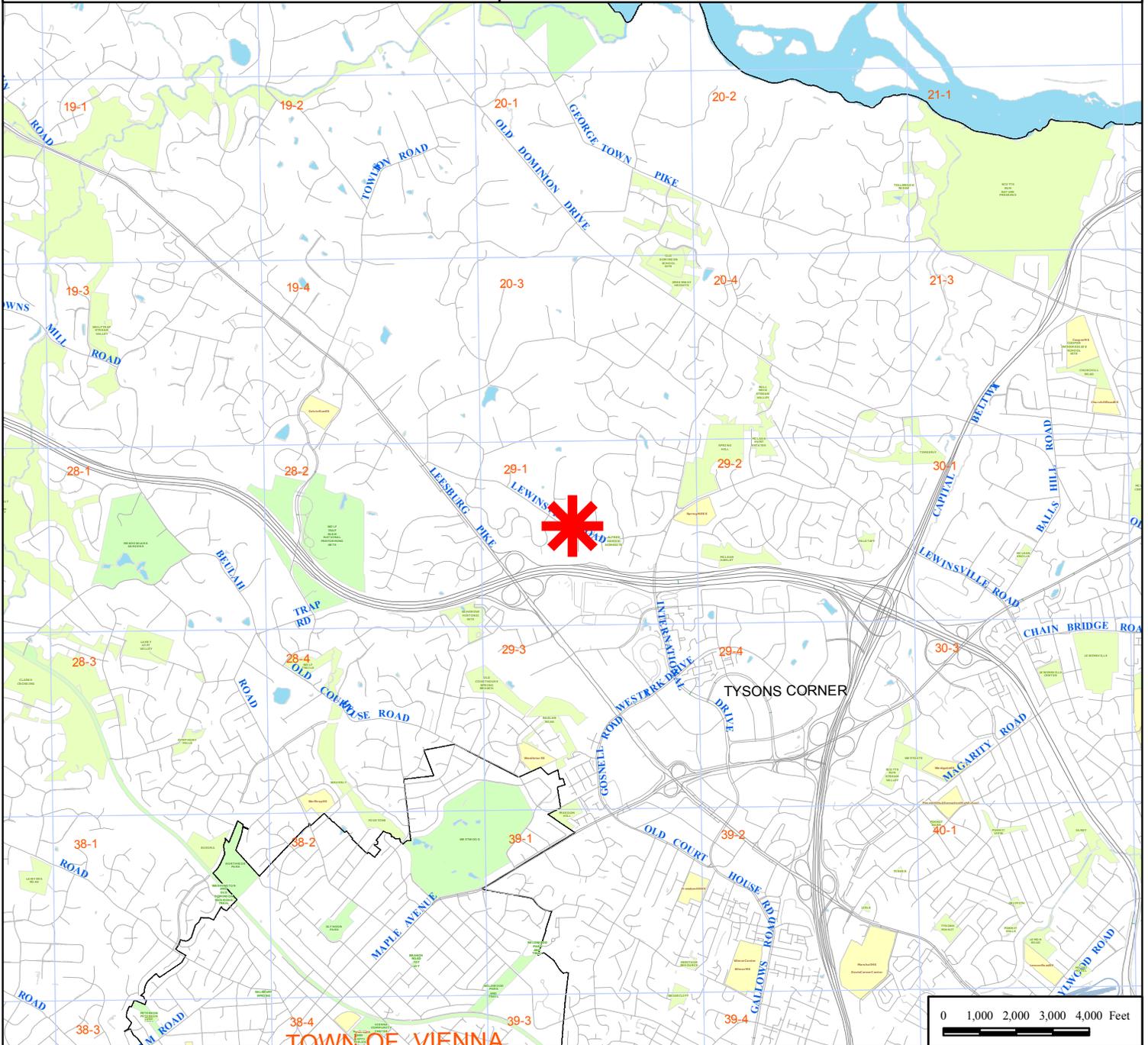
Special Exception

SE 2014-DR-033

Applicant: KRISHNA R. MURTHY
Accepted: 06/20/2014
Proposed: USES IN FLOODPLAIN
Area: 24559 SF OF LAND; DISTRICT - DRANESVILLE

Zoning Dist Sect: 02-0904
Located: 8512 LEWINSVILLE ROAD, MCLEAN, VA 22102

Zoning: R- 1
Plan Area: 2
Overlay Dist:
Map Ref Num: 029-1- /01/ /0025



Special Exception

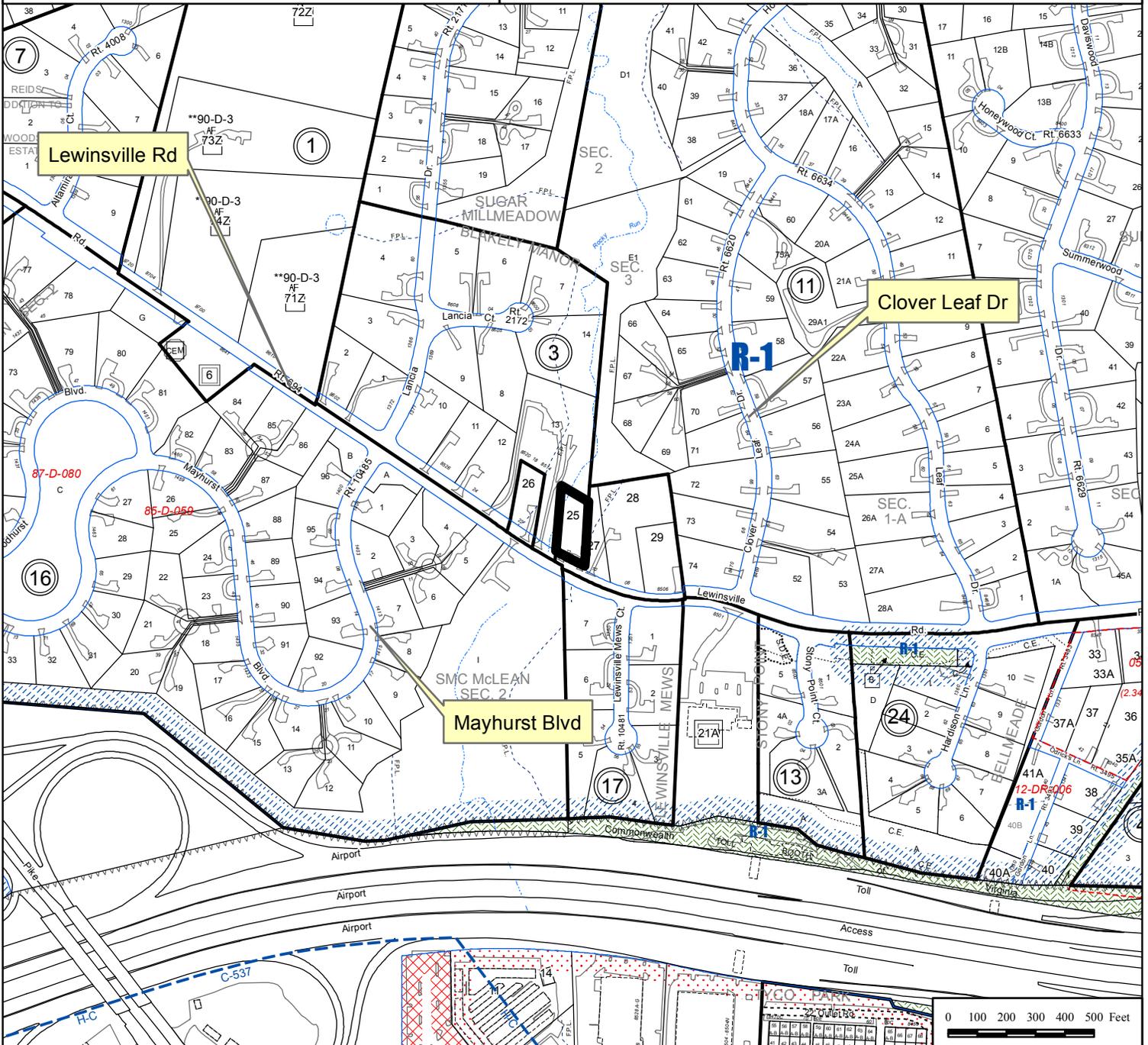
SE 2014-DR-033



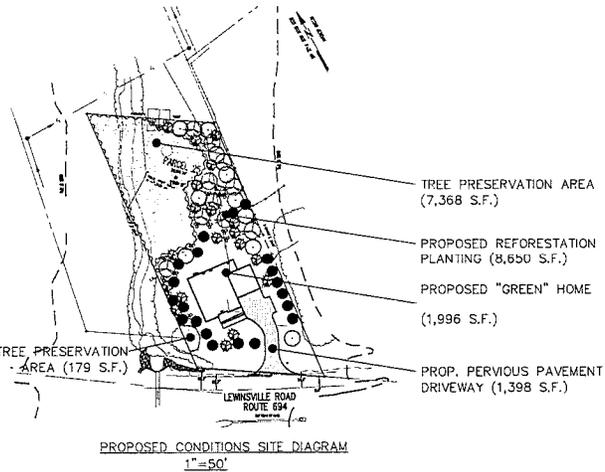
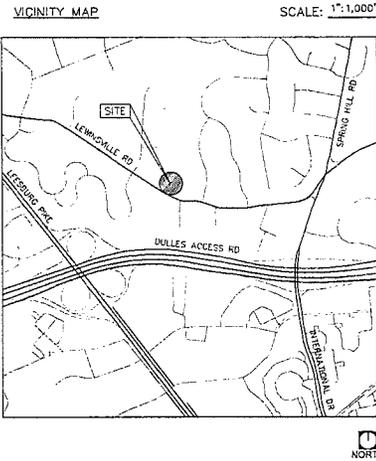
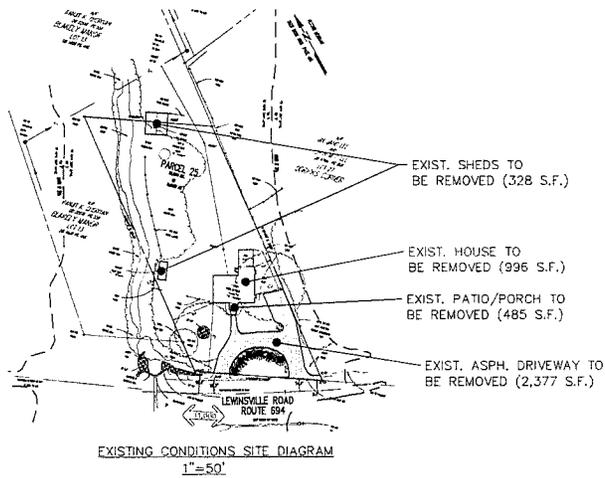
Applicant: KRISHNA R. MURTHY
Accepted: 06/20/2014
Proposed: USES IN FLOODPLAIN
Area: 24559 SF OF LAND; DISTRICT - DRANESVILLE

Zoning Dist Sect: 02-0904
Located: 8512 LEWINSVILLE ROAD, MCLEAN, VA 22102

Zoning: R-1
Plan Area: 2
Overlay Dist:
Map Ref Num: 029-1- /01/ /0025

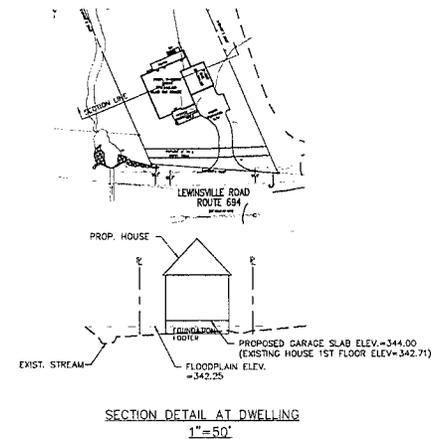


SPECIAL EXCEPTION PLAT
 ODRICKS CORNER LOT 25
 (8512 LEWINSVILLE ROAD)
 29-1-((1))-0025
 PROPERTY OF KRISHNA RAMACHANDRA MURTHY
 DRANESVILLE DISTRICT
 FAIRFAX COUNTY, VIRGINIA



PROJECT FEATURES

- REMOVE EXISTING HOME FROM WITHIN THE FLOODPLAIN.
 PROPOSED NEW DWELLING ABOVE FLOODPLAIN ELEVATION.
- REPLACE EXISTING DWELLING FROM 1955 WITH A NEW LEED CERTIFIED "GREEN" HOME.
 (The proposed house will be designed and constructed to LEED-Homes, EarthCraft, or National Green Building Standards)
- REPLACE EXISTING ASPHALT DRIVEWAY WITH PERVIOUS PAVEMENT DRIVEWAY.
- REDUCE TOTAL IMPERVIOUS AREA BY 343 SQ. FT.
- 7,300 SQ. FT. OF TREE PRESERVATION.
- 8,650 SQ. FT. OF NEW REFORESTATION PLANTING.



General Notes

1. CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION, FOR THE MARKING OF UNDERGROUND UTILITIES.
2. NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM, THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.C.
4. THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. DESTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
6. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
7. ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
8. CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.

No.	Revision/Issue	Date

RECEIVED
 Department of Planning & Zoning
 MAR 20 2015
 Zoning Evaluation Division

SHEET INDEX

SEP.1 - COVER SHEET	
SEP.2 - SPECIAL EXCEPTION PLAT	
SEP.3 - DRAINAGE INFORMATION	
SEP.4 - FLOODPLAIN SECTIONS	
SEP.5 - CONCEPTUAL BUILDING PLANS	
SEP.6 - TREE CONSERVATION PLAN	
SEP.7 - EXISTING CONDITIONS PLAN	

From Name and Address
LAND | Engineering, plc
 11350 Random Hills Road
 Suite 800 - PHB #27
 Fairfax, Virginia 22030
 T (703) 375 9599
 F (703) 591 3049
 www.landengineeringplc.com

Project Name and Address
 ODRICKS CORNER LOT 25
 SPECIAL EXCEPTION PLAT
 8512 LEWINSVILLE ROAD
 MCLEAN, VA 22102
 FAIRFAX COUNTY, VA
 DRANESVILLE DISTRICT

Plan	Cover Sheet	Sheet	1 OF 7
Date	MARCH 2015		
Scale	1"=20'		



DEMOLITION NARRATIVE

- BUILDINGS, PAVEMENT, VEGETATION, AND STRUCTURES WITHIN LIMITS OF DISTURBANCE TO BE REMOVED.
- EXISTING FENCES, PATIOS, STEPS, STOOP, YARD DEBRIS, AND WALKS WITHIN LIMITS OF DISTURBANCE TO BE REMOVED.
- ELECTRIC SERVICE TO BE RELOCATED UNDERGROUND, OVERHEAD LINES AND POLES IN THE VICINITY OF THE SITE SHALL BE COORDINATED WITH VIRGINIA POWER, AND ANY OTHER APPLICABLE UTILITIES.
- CONTRACTOR SHALL EXERCISE CARE WHEN WORKING NEAR GAS, WATER, TELECOM, AND O/N & U/O ELECTRIC LINES.
- EXISTING DRIVEWAY TO BE REMOVED.
- ALL DEMOLITION OCCURRING OUTSIDE THE LIMITS OF DISTURBANCE WILL NEED TO BE HAND REMOVED, NO MECHANIZED EQUIPMENT SHALL BE USED OUTSIDE THE LIMITS OF DISTURBANCE.

"TBR" = TO BE REMOVED
 "TBS" = TO BE SAVED

EROSION & SEDIMENT CONTROL LEGEND

CS	3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	(Symbol)
IP	3.07	INLET PROTECTION	(Symbol)
PS	3.32	PERMANENT SEEDING	(Symbol)
TP	3.38	TEMP. TREE PROTECTION	(Symbol)
SP	3.05	SILT FENCE	(Symbol)
SS		SUPER SILT FENCE	(Symbol)
LD		LIMITS OF DISTURBANCE	(Symbol)
		DRAINAGE DIVIDES	(Symbol)

NOTE: REFER TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK FOR ADDITIONAL INFORMATION.

RPA NOTE:
 THE LIMITS OF DISTURBANCE SHOWN NEAR THE LIMITS OF THE RPA MUST BE STRICTLY OBSERVED AND ENFORCED. ANY ENCROACHMENT INTO, AND/OR DISTURBANCE OF THE RPA NOT SHOWN ON THIS PLAN IS CONSIDERED A VIOLATION OF THE CSPO AND IS SUBJECT TO THE PENALTIES OF CSPO ARTICLE 8.

PROJECT SUMMARY

THIS PROJECT PROPOSES THE RE-DEVELOPMENT OF A RESIDENCE WITHIN A MINOR FLOODPLAIN AND RESOURCE PROTECTION AREA. SPECIFICALLY, THE DEMOLITION AND REMOVAL OF AN EXISTING SINGLE-FAMILY DWELING, DRIVES, AND DRIVEWAY (ORIGINALLY CONSTRUCTED IN 1950) - TO BE REPLACED BY A NEW SINGLE-FAMILY DWELING WITH DRIVEWAY. THE PROPOSED HOME AND DRIVEWAY WILL REDUCE THE TOTAL SITE IMPERVIOUS AREA FROM THE EXISTING CONDITION. THE TOTAL AMOUNT OF POST-DEVELOPMENT IMPERVIOUS AREA ON THE SUBJECT SITE IS PROPOSED AT 3,943 SQUARE FEET (51%). SEE EXISTING CONDITIONS PLAN SHEET 4.

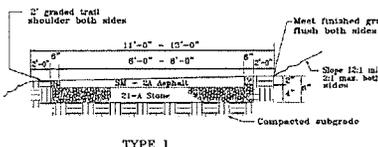
SITE TABULATIONS

8512 LEWINSVILLE ROAD
 MAP # 29-1-(11)-0025
 LAND AREA (ACREAGE) 0.5638 AC
 LAND AREA (SQFT) 25,564 S.F.
 ZONING R-1 (RESIDENTIAL 1 DU/AC)
 DISTURBED AREA = 10,200 (0.234 AC)
 TREE PRESERVATION PROVIDED:
 7,628 SQ.FT. OR 0.177 ACRES (23%)
 GROSS FLOOR AREA = 2,935 S.F.
 LEWINSVILLE ROAD: 2-LANE MINOR ARTERIAL (35 MPH POSTED)

SITE ISSUES

EXISTING TOPOGRAPHY FROM A DECEMBER 2013 FIELD RUN SURVEY BY REWY TO DUCOTE.

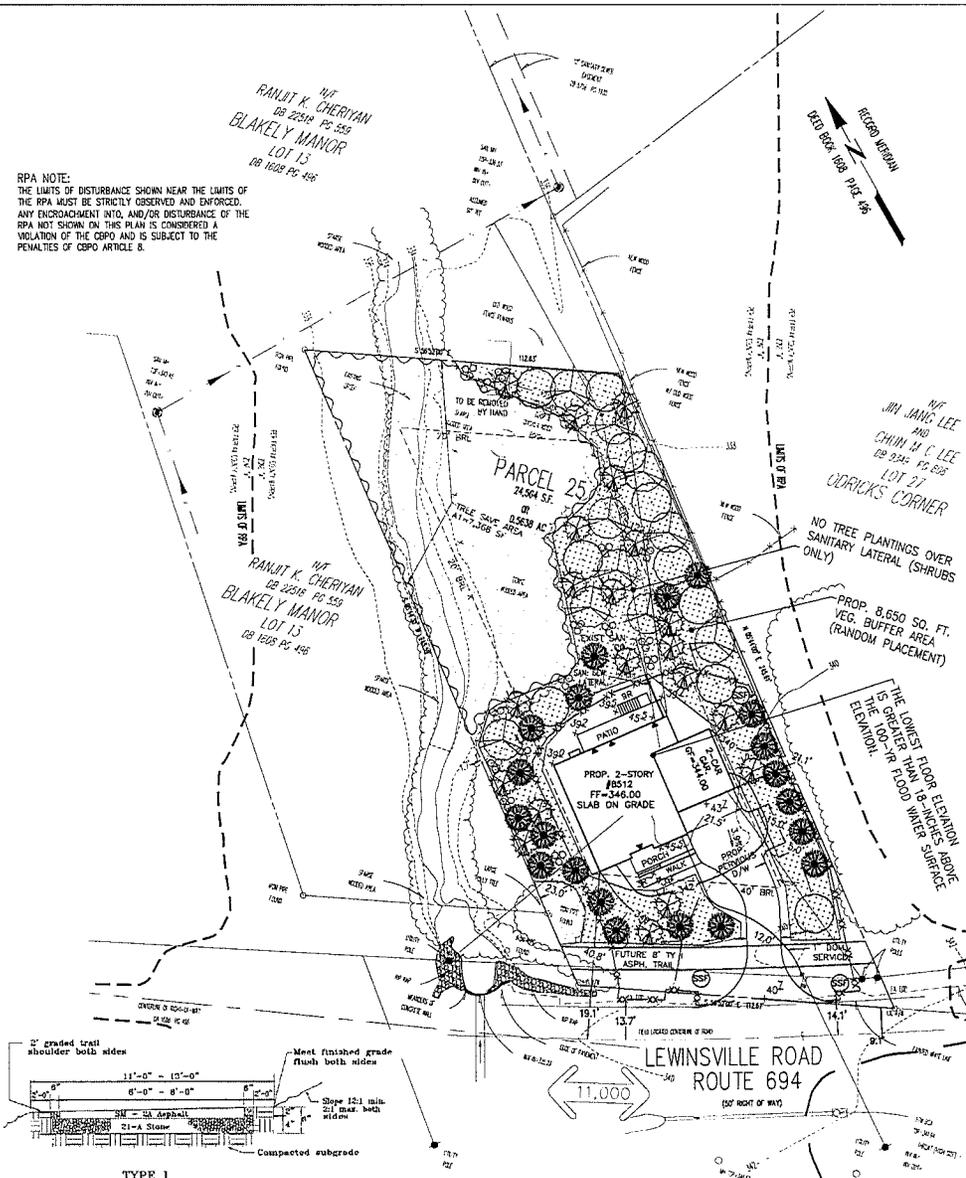
- THE PROPOSED USE OF THIS PROPERTY IS IN HARMONY WITH THE ADOPTED COMPREHENSIVE PLAN.
- THE PROPOSED USE IS IN HARMONY WITH THE GENERAL PURPOSE AND INTENT OF THE APPLICABLE ZONING DISTRICT REGULATIONS.
- THE PROPOSED USE IS HARMONIOUS WITH & WILL NOT ADVERSELY AFFECT THE USE OF DEVELOPMENT OF THE NEIGHBORING PROPERTIES IN ACCORDANCE WITH THE APPLICABLE ZONING DISTRICT REGULATIONS AND THE ADOPTED COMPREHENSIVE PLAN. THE LOCATION, SIZE, AND HEIGHT OF BUILDING STRUCTURES, WALLS, AND FENCES AND THE NATURE/EXTENT OF SCREENING, BUFFERING AND LANDSCAPING WILL NOT BE SUCH AS TO DISCOURAGE THE APPROPRIATE DEVELOPMENT AND USE OF ADJACENT OR NEARBY LAND AND/OR BUILDINGS OR IMPAIR THE VALUE THEREOF.
- THE PROPOSED DEVELOPMENT WILL NOT ADVERSELY AFFECT EXISTING PEDESTRIAN AND VEHICULAR TRAFFIC IN THE NEIGHBORING AREAS.
- THE LANDSCAPING AND SCREENING SHALL BE IN CONFORMANCE TO PROVISIONS OF ARTICLE 13 OF THE ZONING ORDINANCE AND SHALL BE ACCURATELY DEPICTED WITH THE SITE PLAN.
- THE OVERALL PLAN IS IN CONFORMANCE TO ALL PERTINENT ZONING REGULATIONS, INCLUDING ARTICLE 2.
- THERE ARE NO KNOWN BURIAL SITES ON THIS PROPERTY.
- THERE ARE NO EXISTING SEPTIC FIELDS, AND NO EXISTING WELLS ON THE SUBJECT PROPERTY. (SERVED BY PUBLIC WATER & PUBLIC SEWER)
- THE PROPOSED DWELLING WILL HAVE A HIP ROOF AND WALLS WILL BE CONSTRUCTED WITH SIDING OR BRICK VENEER.
- VEHICLES PER DAY FOR LEWINSVILLE ROAD FROM 2012 VDOT DATA.
- THE SUBJECT SITE LIES ENTIRELY WITHIN A CHESAPEAKE BAY RESOURCE PROTECTION AREA.
- THE LOT SHOWN HEREON APPEARS TO PLOT IN FLOOD ZONE "A" AN AREA DETERMINED TO BE WITHIN THE 1% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON F.E.W.A. MAP # 5105900155E EFFECTIVE DATE: SEPTEMBER 17, 2010.
- THE 100-YEAR FLOOD ELEVATION IS 342.25'. THE LOWEST FLOOR ELEVATION IS 344.00' - A DIFFERENCE OF 1.75'.
- THE PROPOSED GRADING CREATES APPROXIMATELY 123 CUBIC YARDS (3,321 CUBIC FEET) OF NET FILL.
- THERE ARE NO EXISTING UTILITY EASEMENTS OF 25' WIDTH OR MORE, NOR ANY MAJOR UNDERGROUND UTILITIES IN THE VICINITY OF THIS LOT.
- A 6" TYPE I ASPHALT TRAIL IS PLANNED FOR THE FUTURE TO MEET COMPREHENSIVE PLAN REQUIREMENTS.



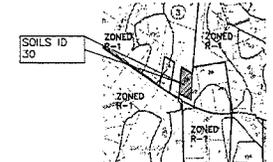
TYPE I

Suitable for bicycle and general pedestrian use, 6" is the required minimum width for sidewalks and 8" the required minimum for walkways. Wider sections may be required in heavily traveled areas.

Where soil is well drained and compactable, the slope base may be eliminated and this section replaced by a 3 1/2" full-depth asphalt section. Construction of this substitute section is subject to the approval of the Director.



SOILS MAP
 NORTH SCALE: 1"=500'



SOILS MAP SOURCE: COUNTY MAP; PRIVATE SOIL SCIENTIST (FOR UNMAPPED SITES)

SOIL #	SOIL SERIES	FOUNDATION SUPPORT	SOIL DRAINAGE	EROSION POTENTIAL	PROBLEM CLASS
30	COOROUS & HARBOR	POOR	POOR	LOW	II

PLANT SCHEDULE

KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE
OVERSTORY TREES				
OA	10	WHITE OAK	QUERCUS ALBA	2" CAL
AR	10	RED MAPLE	ACER RUBRUM	2" CAL
UNDERSTORY TREES				
ID	20	AMERICAN HOLLY	ILEX OPACA	2" CAL
CC	20	EASTERN REDBUD	CERIS CANADENSIS	2" CAL
SHRUBS				
IG	73	INKBERRY HOLLY	ILEX GLABRA	12"-18" HT.
OR	73	RHODODENDRON	RHODODENDRON	12"-18" HT.
IV	74	VIRGINIA SWEETSPIRE	ITEA VIRGINICA	12"-18" HT.

NOTE: FINAL SELECTION OF TREES MAY VARY, WITH APPROVAL OF COUNTY URBAN FORESTER.
 NOT ALL SHRUBS SHOWN OR PLAN CLARITY.

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 information on the utility loc 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: (1) A tidal wetland;
 (2) A tidal shore;
 (3) A water body with perennial flow;
 (4) A non-tidal 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 the RPA boundary shown on the plan are in conformance with the requirements of the Chesapeake Bay Preservation Ordinance.

SPECIALIST: LLOYD A. NTUK, PE Date: 8/25/14
 License No: 044168
 State: Virginia license number

General Notes

- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION, FOR THE MARKING OF UNDERGROUND UTILITIES.
- NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.O.T.
- THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
- ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
- CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.

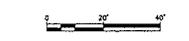


No.	Revision/Issue	Date

Firm Name and Address:
 LAND [Engineering,] plc
 11350 Random Hills Road
 Suite 800 - PMB #27
 Fairfax, Virginia 22030
 T (703) 375-9586
 F (703) 591-3049
 www.landengineerinc.com

Project Name and Address:
 ODDRICKS CORNER LOT 25
 SPECIAL EXCEPTION PLAT
 8512 LEWINSVILLE ROAD
 MCLEAN, VA 22102
 FAIRFAX COUNTY, VA
 DRANKSVILLE DISTRICT

PLAT INFORMATION:
 SPECIAL EXCEPTION PLAT
 Date: MARCH 2015
 Sheet: 2 OF 7
 Scale: 1"=20'



8512 Lewinsville Road

TOTAL LOT AREA: 24,564 S.F. 0.564 AC.

IMPERVIOUS COVER SUMMARY

	PRE-DEV	POST-DEV
BUILDINGS:	995	1,995
SHEDS:	328	0
DRIVEWAY:	2,377	1,398 (Previous)
PATIO/S/STOOP/WALK:	449	103
PORCH:	36	346
TOTAL:	4,186	3,843
(ACRES):	0.096	0.088
% IMPERVIOUS:	17.0%	15.6%

RUNOFF COEFF.

C =	0.90	0.90
A =	0.096	0.088
C =	0.30	0.30
A =	0.468	0.476
SITE C =	0.40	0.39

WATER QUALITY (BMP)

TOTAL IMPERVIOUS AREA = 15.6% < 18.0%
CBA/PO objectives have been met by limiting on-site impervious area.

WATER QUANTITY (GWC)

Rational Method (10-minute T.C.) Q (Flow) = C x I x A	2-YR	10-YR	100-YR
Intensity (in/hr)	5.45	7.27	9.84
Peak Flow (cfs)	2.24	1.65	2.23
Peak Flow (cfs)	1.21	1.61	2.19
Q Increase	-0.03	-0.03	-0.05

DRAINAGE AND OUTFALL NARRATIVE

RUNOFF FROM THE SITE FLOWS WEST-WARD AS NON-CONCENTRATED SHEET FLOW INTO THE FLOOD PLAIN OF THE ON-SITE ROCKY RUN. (PFM 6-0202.681)

THE PROPOSED DEVELOPMENT REDUCES THE AMOUNT OF TOTAL IMPERVIOUS AREA, AND REDUCES THE RUNOFF PEAK FLOWS.

THE PRE-DEVELOPMENT FLOW PATTERNS REMAIN UNCHANGED IN THE POST-DEVELOPED STATE, AND THE DECREASED IMPERVIOUS AREA RESULTS IN A NEGLIGIBLE DECREASE OF SHEET FLOW RUNOFF FOR THE 2-YR (-0.01 CFS) AND 10-YR (-0.01 CFS) STORMS.

THE MINOR FLOW DECREASE AS A RESULT OF THIS SHEET FLOW, AND RESULTS IN A NEGLIGIBLE DECREASE IN FLOW DEPTH WITHIN THE DOWN STREAM CHANNEL. THE FLOW REMAINS WELL WITHIN THE CAPACITIES AND WELL BELOW EROSION VELOCITIES FOR THE DOWNSTREAM DRAINAGE SYSTEM. (PFM 6-0202.682)

THEFORE, IT IS THE OPINION OF THE ENGINEER THAT REQUIREMENTS FOR THE ADEQUACY OF THE DOWNSTREAM DRAINAGE SYSTEM HAVE BEEN MET, AND IT IS OUR PROFESSIONAL OPINION THAT NO ADJACENT OR DOWNSTREAM PROPERTIES WILL SUFFER ADVERSE IMPACTS DUE TO THIS PROPOSED DEVELOPMENT ACTIVITY.

FLOODPLAIN ANALYSIS NARRATIVE

IN ACCORDANCE WITH FAIRFAX COUNTY REQUIREMENTS, A FLOODPLAIN ANALYSIS HAS BEEN CONDUCTED IN SUPPORT OF THIS SPECIAL EXCEPTION APPLICATION WHICH PROPOSES MORE THAN 18-INCHES OF FILL WITHIN A FLOODPLAIN.

THE ANALYSIS IS BASED ON THE APPROVED FLOODPLAIN STUDY ON ROCKY RUN FOR THE PULTE/MCLEAN 100 DEVELOPMENT PREPARED BY DEWBERRY IN NOVEMBER OF 1995, AND APPROVED BY FAIRFAX COUNTY ON 8/13/1996 (8052-FP-02-2).

LIMITS OF ANALYSIS

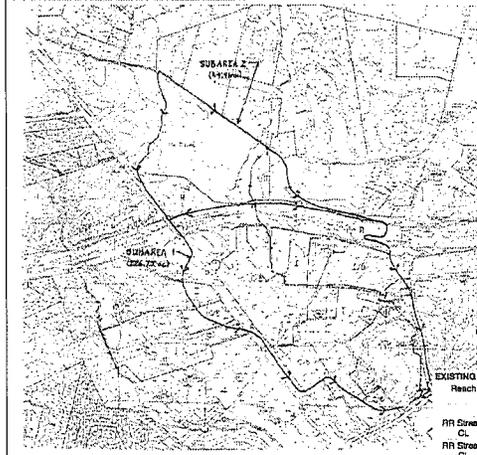
THE FLOODPLAIN HAS BEEN ANALYZED FROM APPROXIMATELY 500- FEET DOWNSTREAM OF THE SUBJECT PROPERTY, UP TO LEWINSVILLE ROAD. HYDROLOGIC AND HYDRAULIC ANALYSES WERE PERFORMED TO DETERMINE THE 100-YEAR FLOODPLAIN BOUNDARIES FOR THIS PORTION OF ROCKY RUN.

ENGINEERING ANALYSIS
A COMBINATION OF FIELD RUN SURVEY AND 2009 AERIAL SPOT ELEVATION DATA (QS INFORMATION) HAS BEEN COMPILED AND CALIBRATED TO COMPARE MAPS WITH A TWO-FOOT CONTOUR INTERVAL, PROFILE, AND CROSS-SECTIONS. THE CROSS-SECTIONS RE SHOW LEFT-TO-RIGHT LOOKING UPSTREAM (SOUTHERLY DIRECTION). BOTH EXISTING & PROPOSED CONDITIONS HAVE BEEN ANALYZED. EXISTING CONDITIONS ARE BASED ON THE RECORD FLOODPLAIN STUDY AND REGIONAL POND D-67 AS-BUILT INFORMATION. PROPOSED CONDITIONS REFER TO THE TEAR-DOWN/REBUILD ON LOT 25 WITH ASSOCIATED FILL DISCHARGES ARE TAKEN FROM THE RECORD STUDY WHICH ARE BASED ON ULTIMATE LAND USE CONDITIONS. THE FOLLOWING WATERSHED CHARACTERISTICS FOR ULTIMATE LAND USE CONDITIONS WERE USED:

AREA (ACRES):	311.7
CURVE NUMBER:	85
TIME OF CONCENTRATION:	0.352 HOURS (21.12 MINUTES)
100-YEAR PEAK DISCHARGE:	1,810 CFS (CONSERVATIVE RATE FROM TR-55)
MANNING'S 'N'-VALUE:	0.10 (BOTH STREAM CHANNEL & FLOODPLAIN OVERBANK)

THE U.S. ARMY CORPS OF ENGINEERS (USACE) HEC-RAS 4.1 RIVER ANALYSIS SYSTEM WAS USED TO COMPUTE WATER SURFACE ELEVATIONS AND DEVELOP CROSS-SECTIONS. PEAK DISCHARGES ARE RELATIVELY MEASURABLE AS THE UPSTREAM AREAS ARE CONTROLLED BY A REGIONAL STORMWATER MANAGEMENT POND IMMEDIATELY UPSTREAM OF LEWINSVILLE ROAD. DUE TO SIZE & RESTRICTIVENESS, THE LEWINSVILLE ROAD CULVERTS WERE NOT INCLUDED IN THE RECORD STUDY NOR IN THIS ANALYSIS.

CALCULATED FLOODPLAIN
THE PROPOSED LOT 25 DWELLING HAS A LOWEST FLOOR ELEVATION THAT IS GREATER THAN 18-INCHES ABOVE THE 100-YEAR FLOOD ELEVATION. THE PROPOSED LOT 25 DEVELOPMENT WILL NOT INCREASE 100-YEAR FLOOD ELEVATIONS UPSTREAM, NOR DOWNSTREAM OF THE SUBJECT SITE. THE PROPOSED FLOODPLAIN ALTERATIONS WILL RESULT IN NO CHANGE TO THE 100-YEAR FLOOD ELEVATION AT ANY OF THE STUDY SECTIONS NEAR THE WORK AREA, AND ON THE DOWNSTREAM LOTS WITHIN THE EXTENT OF THE ANALYSIS AREA. (SEE CROSS-SECTION DATA, NEXT SHEET.) THEREFORE IT IS THE OPINION OF THE ENGINEER THAT THERE IS NO ADVERSE AFFECT OR INCREASE OF FLOOD RISK TO ANY OF THE SURROUNDING PROPERTIES.



PRELIMINARY STORMWATER MANAGEMENT NARRATIVE

THE EXISTING SITE CONDITION IS A MIX OF MATURE GRASSES AND TREES OF VARYING EVERGREEN AND DECIDUOUS SPECIES. PREVIOUS SITE DEVELOPMENT ACTIVITIES INCLUDE ONE RESIDENTIAL SINGLE-FAMILY DWELLING WITH DRIVEWAY AND ACCESSORY SHED ON THE LOT.

THE PROPOSED DEVELOPMENT ACTIVITY RESULTS IN A NET DECREASE BY 2% OF ONSITE IMPERVIOUS AREA. THE TOTAL SITE IMPERVIOUS AREA REMAINS BELOW THAT WHICH WOULD BE SELECTED TO BE MAINTAINED BY LIMITING POST-DEVELOPMENT IMPERVIOUS COVER. THERE IS NO PROPOSED STORMWATER MANAGEMENT FACILITY.

THE PROPOSED 90 SQUARE FEET DECREASE IN IMPERVIOUS AREA RESULTS IN PEAK FLOW REDUCTION OF 0.01 CFS FOR THE RANGE OF DESIGN STORMS. THEREFORE IT IS OUR OPINION THAT THE EXISTING CHANNEL SYSTEM IS ADEQUATE TO PROPERLY HANDLE AND TREAT RUNOFF FLOWS FROM THE PROPOSED DEVELOPMENT.

PRELIMINARY OUTFALL NARRATIVE

RUNOFF FROM THE PROJECT SHEET FLOWS 50' WEST, DIRECTLY INTO THE EXISTING CHANNEL BED-AND-BANKS. A DETAILED FLOOD ANALYSIS INCLD WITH THIS PLAN, INDICATES THAT THE EXISTING NATURAL CHANNEL IS CAPABLE OF CONVEYING FLOWS FROM THE TOTAL DRAINAGE SHEET, AT SUITABLE VELOCITIES. THE DEVELOPMENT ACTIVITY REDUCES PEAK FLOW, AND POST-DEVELOPMENT RUNOFF VOLUME TO THE OUTFALL CHANNEL. REQUIRED WAS SUBMITTED TO FAIRFAX COUNTY STORMWATER MAINTENANCE FOR A RECORD OF DOWNSTREAM DRAINAGE COMPLAINTS, AND NONE WERE REPORTED.

BASED ON OUR INVESTIGATION, IT IS OUR PROFESSIONAL OPINION THAT THIS DEVELOPMENT WILL NOT ADVERSELY IMPACT DOWNSTREAM PROPERTIES, AND THE OUTFALL IS ADEQUATE TO CONVEY RUNOFF FLOWS ASSOCIATED WITH THE PROPOSED ADDITION.

OVERLAND RELIEF NARRATIVE

OVERLAND RELIEF IS PROVIDED BY MEANS OF PROPOSED SPLASH BLOCKS AT THE ROOF DRAIN DOWNSPOUT DISCHARGE POINTS. THESE DISCHARGES TRAVEL OVERLAND WESTWARD AS SHEET FLOW TO THE EXISTING CHANNEL BANKS. THERE ARE NO DOWNSTREAM STRUCTURES WHICH COULD BE IMPACTED AS A RESULT OF DRAINAGE FROM THIS PROJECT. THE REDUCTION OF IMPERVIOUS AREA, ALONG WITH THE USE OF SPLASH BLOCKS TO ENHANCE RUNOFF LEAVES THE SITE AS NON-CONCENTRATED SHEET FLOW WILL ENSURE THAT THE DEVELOPMENT WILL NOT EXAGGERATE ANY EXISTING DRAINAGE PROBLEMS, NOR IMPACT FUTURE WATERSHED MANAGEMENT PROJECTS.

HEC-RAS CROSS-SECTION SUMMARY TABLE

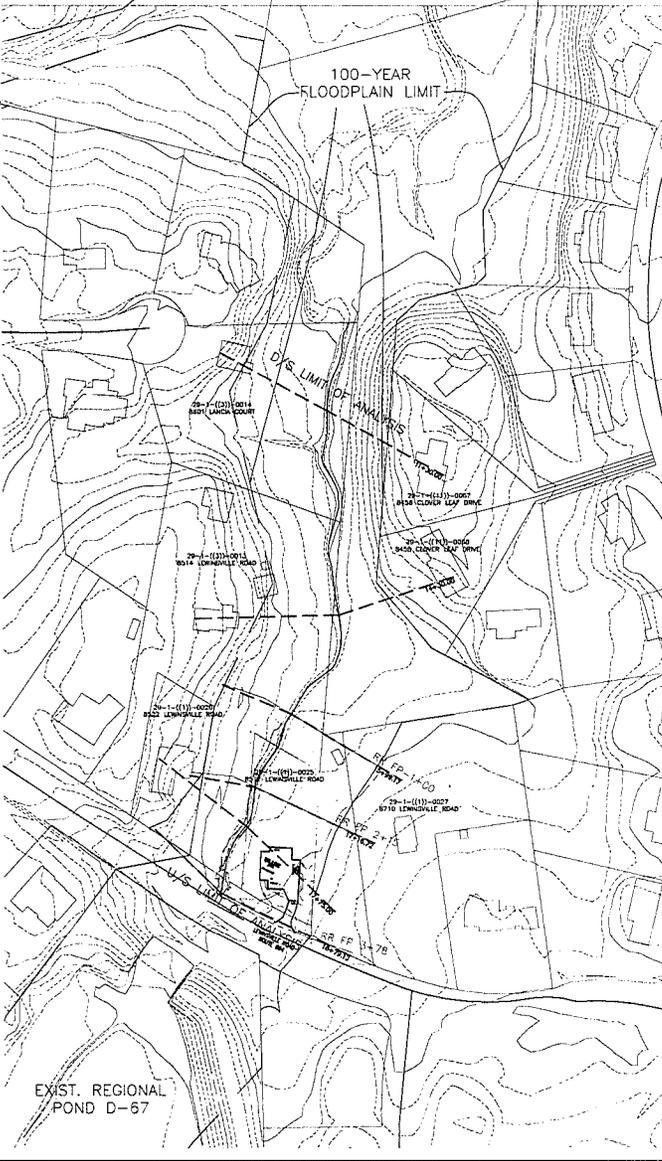
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude #	Chl
RR Stream CL	1879.12	PF 1	1813.08	333.98	342.25	342.41	0.011820	3.13	678.02	166.90	0.27	0.27	
RR Stream CL	1716.72	PF 1	1814.58	333.91	341.03	341.76	0.010184	2.98	609.52	215.08	0.21	0.21	
RR Stream CL	1599.17	PF 1	1817.87	333.74	340.50	340.62	0.009351	2.78	654.20	242.07	0.30	0.30	
RR Stream CL	1430	PF 1	1829.25	331.70	336.93	339.09	0.008700	3.17	576.74	165.71	0.30	0.30	
RR Stream CL	1130	PF 1	1851.58	327.85	337.72	333.73	0.002526	2.13	688.70	176.38	0.17	0.17	

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude #	Chl
RR Stream CL	1879.12	PF 1	1810.00	338.70	342.98	343.08	0.008003	2.5	723.02	280.09	0.27	0.27	
RR Stream CL	1775	PF 1	1813.08	333.98	342.25	342.51	0.014890	4.00	442.81	125.00	0.38	0.38	
RR Stream CL	1716.72	PF 1	1814.98	333.91	341.03	341.76	0.010184	2.98	609.52	215.08	0.21	0.21	
RR Stream CL	1599.17	PF 1	1817.87	333.74	340.50	340.62	0.009351	2.78	654.20	242.07	0.30	0.30	
RR Stream CL	1430	PF 1	1829.25	331.70	336.93	339.09	0.008700	3.17	576.74	165.71	0.30	0.30	
RR Stream CL	1130	PF 1	1851.58	327.85	337.72	333.73	0.002526	2.13	688.70	176.38	0.17	0.17	

OVERALL DRAINAGE MAP
SCALE: 1"=1,000' NORTH

PERMITS STATEMENT
THERE ARE NO FEDERAL AND/OR STATE PERMITS REQUIRED AS A RESULT OF THIS DEVELOPMENT ACTIVITY.

FLOODPLAIN ANALYSIS MAP
SCALE: 1"=80' NORTH



General Notes

- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION. FOR THE MARKING OF UNDERGROUND UTILITIES.
- NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND VADOT.
- THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. OBSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON OR ADJACENT TO THE PROPOSED LIMITS OF DISTURBANCE.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
- ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
- CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.



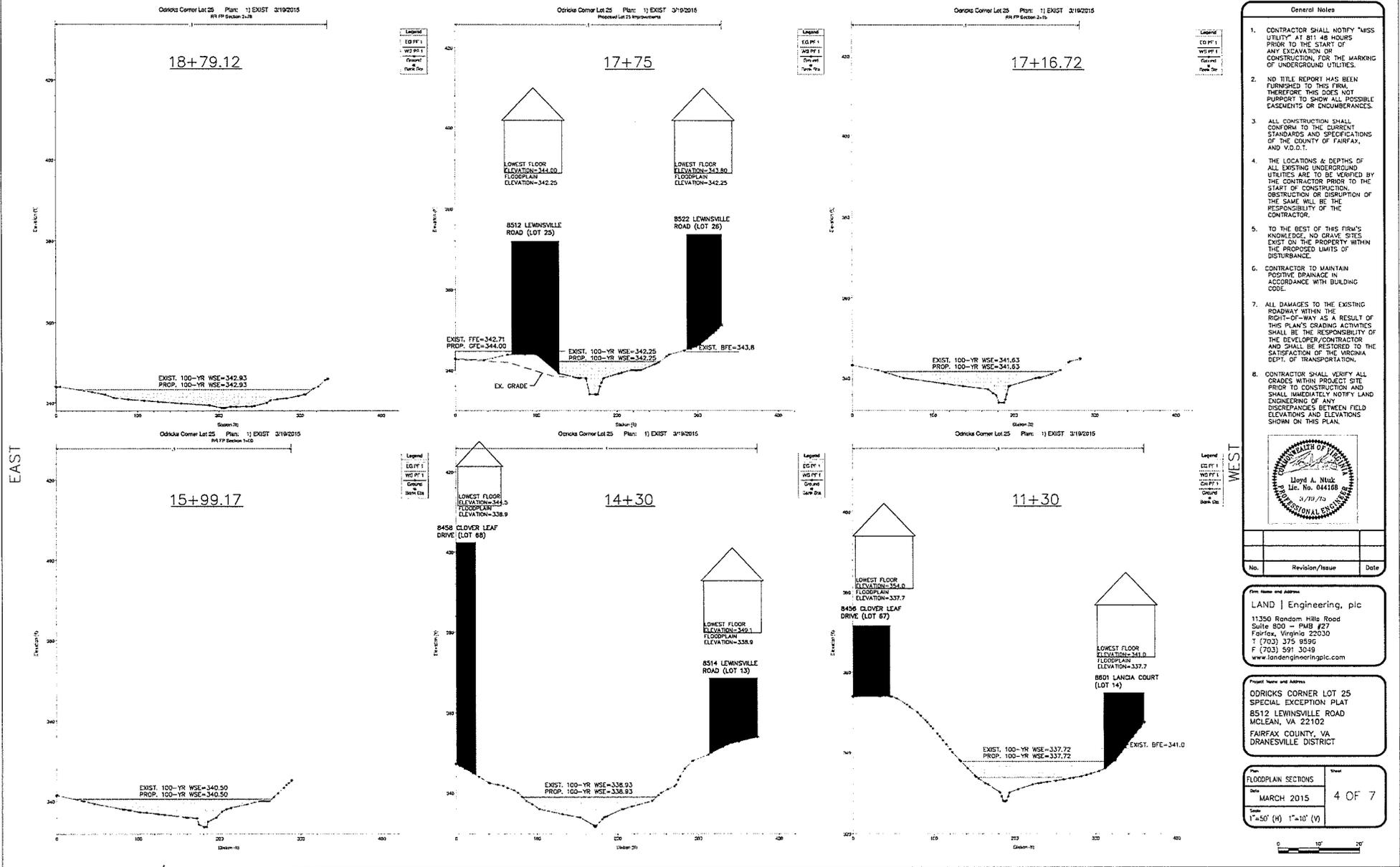
No.	Revision/Issue	Date

Firm Name and Address
LAND | Engineering, plc
11350 Random Hills Road
Suite 800 - PMB #27
Fairfax, Virginia 22030
T (703) 375 0599
F (703) 591 3049
www.landengineerplc.com

Project Name and Address
**ODRICKS CORNER LOT 25
SPECIAL EXCEPTION PLAT
8512 LEWINSVILLE ROAD
MCLEAN, VA 22102
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT**

Plan
DRAINAGE INFORMATION
Date: MARCH 2015
Scale: 1"=80'
Sheet: 3 OF 7

ALL SECTIONS ARE VIEWING UPSTREAM (FROM NORTH TO SOUTH) SEE SHEET 2 FOR SECTION LOCATIONS



General Notes

1. CONTRACTOR SHALL NOTIFY MISS UTILITY AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION FOR THE MARKING OF UNDERGROUND UTILITIES.
2. NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
3. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.O.T.
4. THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. OBSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
5. TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
6. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
7. ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
8. CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.

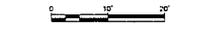
Professional Engineer Seal for Lloyd A. Nink, License No. 044108, dated 3/19/15.

No.	Revision/Issue	Date

Firm Name and Address
LAND | Engineering, pc
 11350 Random Hills Road
 Suite 800 - PMB #27
 Fairfax, Virginia 22030
 T (703) 375 0596
 F (703) 591 3048
 www.landengineeringpc.com

Project Name and Address
ODRICKS CORNER LOT 25
 SPECIAL EXCEPTION ROAD
 MCLLAN, VA 22102
 FAIRFAX COUNTY, VA
 DRANESVILLE DISTRICT

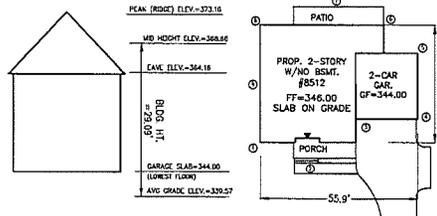
Plan: **FLOODPLAN SECTIONS**
 Date: **MARCH 2015**
 Title: **4 OF 7**
 Scale: 1"=50' (H) 1"=10' (V)





AVERAGE GRADE DEMONSTRATION		
SPOT	EX. GRADE	PROP. GRADE
1	338.00	340.00
2	309.30	342.00
3	342.50	342.50
4	340.40	342.00
5	341.30	340.00
6	339.10	339.10
7	338.00	338.00
8	338.10	338.60
SUB-TOTAL		3,083.70
AVG. GRADE		338.57
ELEV. OF HIGHEST RIDGE =		373.16
AVG. EYE HEIGHT		
ASSOC. WITH RIDGE =		384.18
MID-HEIGHT ROOF ELEV. =		368.66
BUILDING HEIGHT =		28.09

BUILDING HEIGHT CERTIFICATION



FLOODPROOFING STATEMENT

THE PROPOSED DWELLING WILL INCORPORATE ALL FLOODPROOFING MEASURES FOR STRUCTURAL, ELECTRICAL, MECHANICAL, PLUMBING, WATER, AND SANITARY CONSTRUCTION IN COMPLIANCE WITH COUNTY, STATE, AND FEDERAL REQUIREMENTS.

FLOOD INSURANCE ACKNOWLEDGEMENT

THE APPLICANT IS AWARE THAT FLOOD INSURANCE MAY BE REQUIRED BY THE APPLICANT'S LENDING INSTITUTION AND THE FLOOD INSURANCE RATES MAY INCREASE BECAUSE OF INCREASES IN RISKS TO LIFE AND PROPERTY.

KRISHNA R. MURTAI 3/1/2015
Subha R. Parvathy DATE
 APPLICANT

General Notes

- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION FOR THE MARKING OF UNDERGROUND UTILITIES.
- NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.D.T.
- THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. OBSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
- ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
- CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.

Professional Engineer Seal: Lloyd A. Ntsek, Lic. No. 044106, State of Virginia, Professional Engineer.

No.	Revision/Issue	Date

Firm Name and Address:
 LAND | Engineering, pc
 11350 Random Hills Road
 Suite 800 - PMB #27
 Fairfax, Virginia 22030
 T (703) 375 9596
 F (703) 591 3049
 www.landengineeringpc.com

Project Name and Address:
 ODRICKS CORNER LOT 25
 SPECIAL EXCEPTION PLAT
 8512 LEWINSVILLE ROAD
 MOLEAN, VA 22102
 FAIRFAX COUNTY, VA
 DRANESVILLE DISTRICT

Plan: CONCEPTUAL BUILDING PLANS
 Date: MARCH 2015
 Sheet: 5 OF 7
 Scale: 1" = 20'

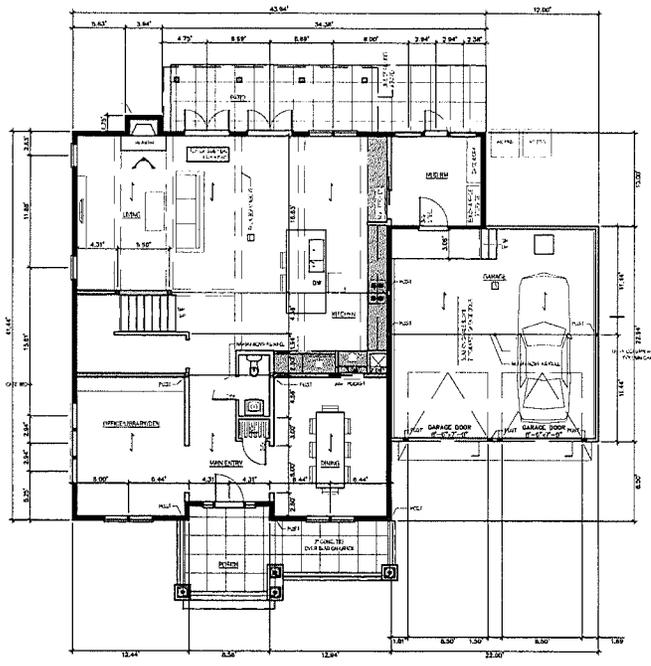
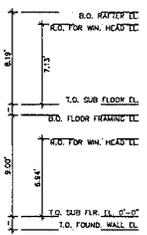
The proposed house will be designed and constructed to LEED-Homes, EarthCraft, or National Green Building Standards



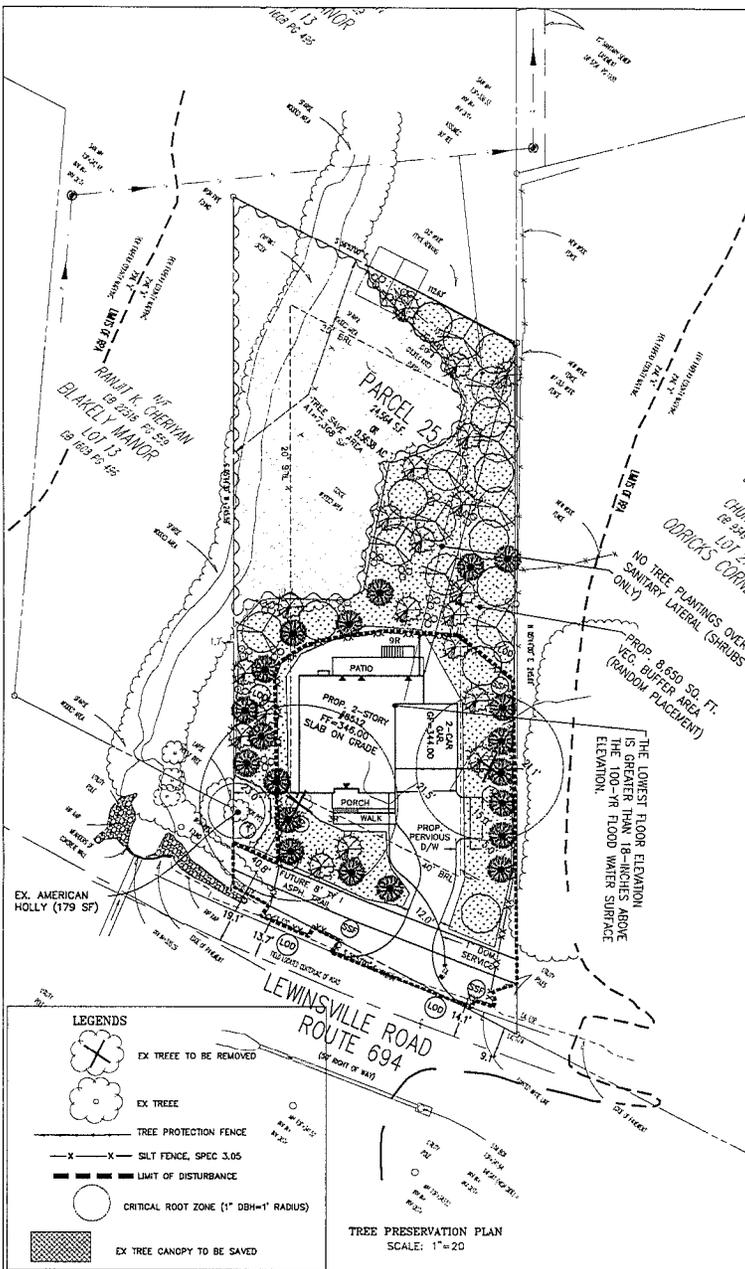
FRONT ELEVATION
 SCALE 1/4" = 1'-0"



REAR ELEVATION
 SCALE 1/4" = 1'-0"



ENTRY LEVEL FLOOR PLAN
 SCALE 1/4" = 1'-0"



EXISTING VEGETATION INVENTORY

Tree #	DBH (Diameter at 4.5 feet above grade)	Common Name	Condition Rating	CRZ (Critical Zone Radius in Feet)	Removal	Preservation	Commented Preservation Method	Remarks
1	11	American Holly	2	14'	10			Not to be removed, as mentioned in previous sheet
2	20	Silver maple	2	24'	20	X		Does not survive within LCD
3	2209	Silver maple	0.5	24'	24'	X		Does not survive within LCD

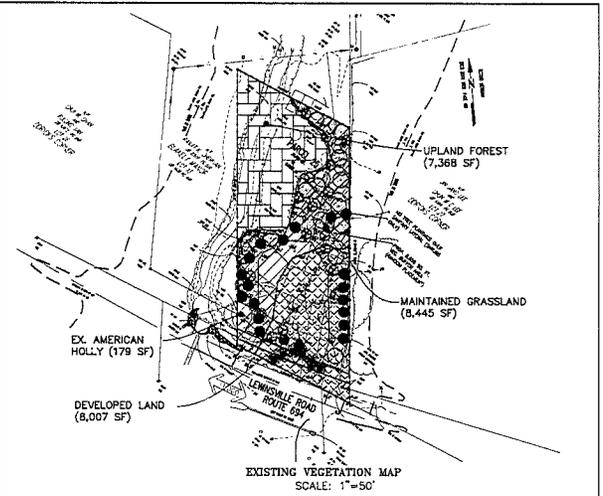
TREE PRESERVATION NARRATIVE

THE SITE PLAN CONSISTS OF THE DEVELOPMENT OF A SINGLE FAMILY DWELLING ON LOT 25 WHICH IS CURRENTLY OCCUPIED. THE 24,559 SQ FT LOT IS ZONED R-1.

THE LOT IS COVERED WITH A DWELLING, SOME HARDSCAPE, EXISTING TREES, AND GRASS AREA. THERE ARE TWO (2) ON-SITE TREES TO BE REMOVED FOR THE PROPOSED CONSTRUCTION. THE LOCATION AND LIMIT OF THE ON-SITE CANOPY AREA IS SHOWN ON THE PLAN. THE SIZE OF TREES (DBH), AND THEIR CONDITIONS ARE SHOWN ON THE TABULAR FORM ON THIS SHEET. THE CRITICAL ROOT ZONE OF THE TREES WITHIN THE 25 FEET AREA OF LIMIT OF CLEARING AND GRADING (10 FT WITHIN DISTURBED AREA AND 25 WITHIN UNDISTURBED AREA) IS ALSO PROVIDED ON THE PLAN. THE OFF-SITE TREES WILL REMAIN UNDISTURBED BY THIS DEVELOPMENT.

THE TREE COVER REQUIREMENTS FOR THE SITE IS MET BY CONSERVATION OF 7,368 SQ FT OF EXISTING TREE CANOPY AREA WHICH WILL BE PRESERVED BY THIS PLAN. ABOUT 9,210 SQ FT (AFTER THE 1.25 FACTOR FOR NATIVE TREE CREDIT) OF 10-YEAR TREE CANOPY WILL BE PROVIDED BY THIS TREE CONSERVATION PLAN, WHICH WILL MEET THE MINIMUM REQUIREMENTS OF 7,368 SQ FT FOR THE STUDY LOT. PLEASE REFER TO THE COMPUTATIONS ON THIS SHEET. THE LOT REQUIRES TO COVER AT LEAST 30% OF THE LOT AREA BY THE TOTAL TREE CANOPY AREA PER R-1 ZONING REQUIREMENTS OF FAIRFAX COUNTY. AS MENTIONED ABOVE, THE TOTAL TREE CANOPY AREA OF THE SITE IS 9,210 SQ FT OR 37.50% OF THE LOT AREA, AND IT WILL BE PRESERVED. SUPER SILT FENCE WILL BE INSTALLED AS NECESSARY TO PROTECT THE PRESERVED TREES.

I CERTIFY THIS PLAN MEETS BOTH THE TREE PRESERVATION TARGET (PFM 12-0501) AND THE TREE CONSERVATION PLAN (PFM 12-0502) SUBMITTAL REQUIREMENTS; NO DEVIATION OR MODIFICATIONS TO THE TREE CONSERVATION PLAN REQUIREMENTS ARE BEING REQUESTED.



EXISTING VEGETATION SUMMARY

COVER TYPE	AREA	PRIMARY TREE SPECIES	CONDITION	SUCC. STAGE
DEVELOPED LAND	0.184 AC.	SILVER MAPLE	GOOD	SECONDARY
MAINTAINED GRASSLAND	0.193 AC.	SILVER MAPLE	GOOD	SECONDARY
UPLAND FOREST	0.209 AC.	WHITE OAK	FAIR/GOOD	CLIMAX

THE EXISTING PROPERTY CONTAINS AN UPLAND FOREST COMMUNITY CONSISTING PRIMARILY OF WHITE OAK, SILVER MAPLE, AND AMERICAN BEECH. THERE ARE NO HERITAGE, SPECIMEN, OR MEMORIAL TREES NOTED. THE EXISTING COMMUNITY OF TREES ARE IN THE MID-STAGE/STEADY SUCCESSION.

ALL TREES IN THE RESPECTIVE COVER TYPES ARE GENERALLY IN FAIR-TO-GOOD CONDITION.

Table 12.12 10-year Tree Canopy Calculation Worksheet

Slip	Table 12.3	Total
A1	Pre-development area of existing tree canopy (from Existing Vegetation Map) =	12,800 SF
A2	Percentage of gross site area covered by existing tree canopy =	51.3%
A3	Percentage of 10-year tree canopy required for site (see Table 12.1) =	30%
A4	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	51.3%
A5	Proposed percentage of canopy requirement that will be met through tree preservation =	39%
A6	Has the Tree Preservation Target minimum been met? =	YES
A7	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 § 12-0507.2 along with a narrative that provides site-specific explanation of why the Tree P =	
A8	If slip G requires a narrative, it shall be prepared in accordance with § 12-0507.4 =	

B. Tree Canopy Requirement

B1	Identify gross site area =	24,559 SF
B2	Substituted area dedicated to parks, road heritage, and =	0
B3	Substituted area of exemptions =	0
B4	Adjusted gross site area (B1 - B2) =	24,559 SF
B5	Identify site zoning and/or use =	R-1
B6	Percentage of 10-year tree canopy required =	30%
B7	Area of 10-year tree canopy required (B4 x B5) =	7,368 SF
B8	Modification of 10-year Tree Canopy Requirement requested? =	NO
B9	If B8 is yes, then list plan sheet where modification request is located =	N/A

C. Tree Preservation

C1	Tree Preservation Target Area =	7,780 SF
C2	Total canopy area meeting standards of § 12-0200 =	0 SF
C3	§ 12-1.25 =	0 SF
C4	Total canopy area provided by unique or valuable forest or wetland communities =	0 SF
C5	§ 12-1.5 =	0 SF
C6	Total of canopy area provided by "heritage," "Memorial," "Specimen," or "Street" trees =	0 SF
C7	§ 12-1.5 =	0 SF
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	7,547 SF
C9	§ 12-1.5 =	7,547 SF
C10	Total of C2, C3, C4 and C9 =	7,547 SF

D. Tree Planting

D1	Area of canopy to be met through tree planting (B7-C10) =	-170 SF
D2	Area of canopy planted for air quality benefits =	0 SF
D3	x 1.5 =	0 SF
D4	Area of canopy planted for energy conservation =	0 SF
D5	x 1.5 =	0 SF
D6	Area of canopy planted for water quality benefits =	7,000 SF
D7	x 1.25 =	8,750 SF
D8	Area of canopy planted for wildlife benefits =	2,100 SF
D9	x 1.5 =	3,150 SF
D10	Area of canopy provided by cotton trees =	0 SF
D11	x 1.5 =	0 SF
D12	Area of canopy provided by improved cultivars and varieties =	0 SF
D13	x 1.25 =	0 SF
D14	Area of canopy provided through tree seedlings =	0 SF
D15	§ 12-1.5 =	0 SF
D16	Area of canopy provided through native shrubs or woody seed mix =	0 SF
D17	Percentage of D14 represented by D15 =	0 SF
D18	Total of canopy area provided through tree planting =	11,900 SF
D19	Is an offset planting relief requested? =	NO
D20	Tree Shrub or Tree Fund? =	NO
D21	Canopy area requested to be provided through offset banking or tree fund =	N/A
D22	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) =	7,547 SF
E2	Total of canopy area provided through tree planting (D17) =	11,900 SF
E3	Total of canopy area provided through offset banking or tree fund (D21) =	0 SF
E4	Total of 10-year Tree Canopy Provided =	19,447 SF

THIS PLAN AND COMPUTATIONS HAVE BEEN PREPARED/REVIEWED BY ISA CERTIFIED ARBORIST.

Yusuf A. Bluh-Thorn
YUSUF A. BLUH-THORN DATE: 3-13-2015 CERTIFICATE NUMBER:

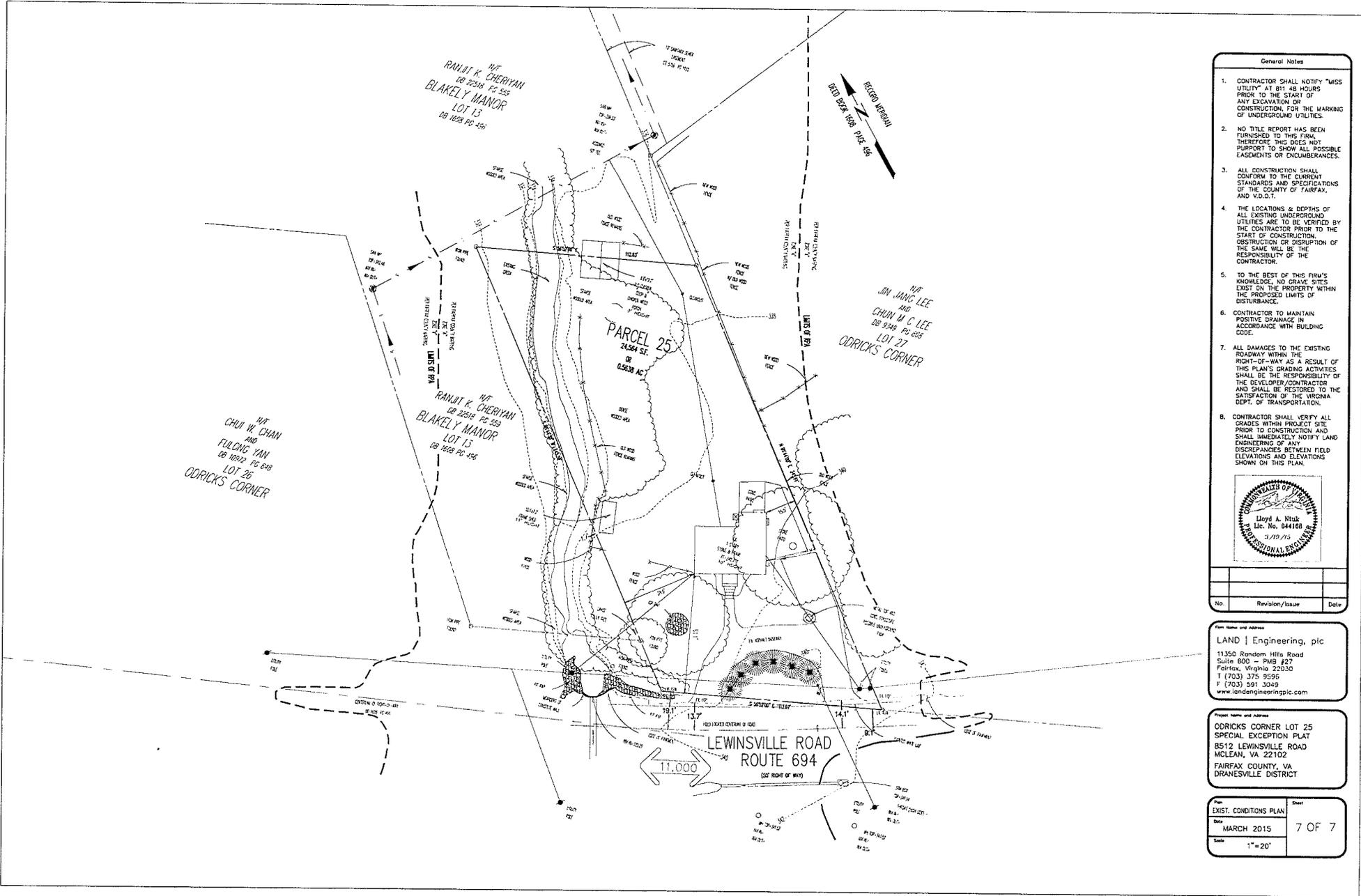
- General Notes**
- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 815 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION FOR THE MARKING OF UNDERGROUND UTILITIES.
 - NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
 - ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.C.T.
 - THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. OBSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 - TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
 - CONTRACTOR TO MAINTAIN PROPER DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
 - ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
 - CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.

Lloyd A. Nix
Lic. No. 044188
3/10/15
PROFESSIONAL ENGINEER

No.	Revision/Issue	Date

Firm Name and Address
LAND Engineering, Inc
11350 Mountain Hills Road
Suite 800 - PWB #27
Fairfax, Virginia 22030
T (703) 375 0591
F (703) 591 3049
www.landengineering.com

Project Name and Address
ODRICKS CORNER LOT 25 SPECIAL EXCEPTION ROAD
8512 LEWINSVILLE ROAD
MCLAN, VA 22102
FAIRFAX COUNTY, VA
DRANESVILLE DISTRICT



General Notes

- CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 811 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION FOR THE MARKING OF UNDERGROUND UTILITIES.
- NO TITLE REPORT HAS BEEN FURNISHED TO THIS FIRM. THEREFORE THIS DOES NOT PURPORT TO SHOW ALL POSSIBLE EASEMENTS OR ENCUMBRANCES.
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE COUNTY OF FAIRFAX, AND V.D.O.T.
- THE LOCATIONS & DEPTHS OF ALL EXISTING UNDERGROUND UTILITIES ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONSTRUCTION OR DISRUPTION OF THE SAME WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TO THE BEST OF THIS FIRM'S KNOWLEDGE, NO GRAVE SITES EXIST ON THE PROPERTY WITHIN THE PROPOSED LIMITS OF DISTURBANCE.
- CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE IN ACCORDANCE WITH BUILDING CODE.
- ALL DAMAGES TO THE EXISTING ROADWAY WITHIN THE RIGHT-OF-WAY AS A RESULT OF THIS PLAN'S GRADING ACTIVITIES SHALL BE THE RESPONSIBILITY OF THE DEVELOPER/CONTRACTOR AND SHALL BE RESTORED TO THE SATISFACTION OF THE VIRGINIA DEPT. OF TRANSPORTATION.
- CONTRACTOR SHALL VERIFY ALL GRADES WITHIN PROJECT SITE PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY LAND ENGINEERING OF ANY DISCREPANCIES BETWEEN FIELD ELEVATIONS AND ELEVATIONS SHOWN ON THIS PLAN.



No.	Revision/Issue	Date

Firm Name and Address
LAND | Engineering, plc
 11350 Randon Hills Road
 Suite 600 - PMB #27
 Fairfax, Virginia 22030
 T (703) 375-9506
 F (703) 591-3049
 www.landengineeringplc.com

Project Name and Address
ODRICKS CORNER LOT 25
 SPECIAL EXCEPTION ROAD
 8512 LEWINSVILLE ROAD
 MCLEAN, VA 22102
 FAIRFAX COUNTY, VA
 DRANESVILLE DISTRICT

Plan	Sheet
EXIST. CONDITIONS PLAN	7 OF 7
Date	MARCH 2015
Scale	1" = 20'

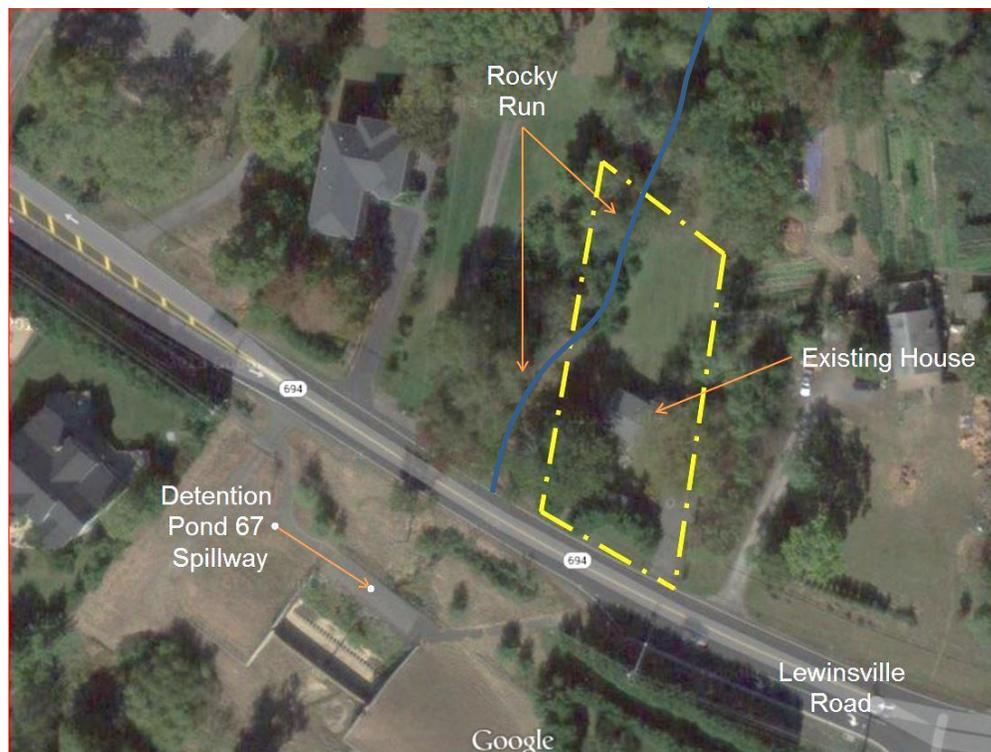
DESCRIPTION OF THE APPLICATION

The applicant requests the approval of a Special Exception (SE) for fill in the floodplain to allow construction of a new single family detached dwelling within the 100-year floodplain along Rocky Run. The proposed dwelling would replace the site's existing dwelling and accessory structures. The subject property consists of a 24,564 square foot (0.56 acres) lot zoned R-1 and located within the Odricks Corner subdivision, along Lewinsville Road in the Dranesville District.

The subject property is located entirely within a major floodplain and associated Resource Protection Area (RPA). Par. 1 of Sect. 2-904 of the Ordinance permits construction of a single family dwelling in a major floodplain upon the approval of a special exception approved by the Board of Supervisors. Construction of the new dwelling would require the placement of 123 cubic yards of fill under the footprint of the proposed residence and attached garage to raise the structures above the flood elevation and the removal of the existing driveway, structures, and vegetation that would result in disturbance of approximately 10,200 square feet. In addition, because the entire site is located within the RPA, the applicant is also requesting the approval of an associated RPA Encroachment Exception (WRPA) and Water Quality Impact Assessment (WQIA), which are scheduled to be heard by the Board of Supervisors concurrent with the SE application.

A reduced copy of the submitted SE Plat is included at the beginning of this staff report. Copies of the proposed development conditions, applicant's statement of justification, and the affidavit are included in Appendices 1, 2 and 3, respectively. The DPWES staff report for the associated RPA Encroachment Exception and Water Quality Impact Assessment is included in Appendix 4.

LOCATION AND CHARACTER



The subject property is located at 8612 Lewinsville Road in the Odricks Corner subdivision. The property is located entirely within the floodplain and RPA associated with Rocky Run. The site is developed with a 996 square foot single family detached dwelling that was constructed in 1955, along with a paved two-car parking pad, accessed off of Lewinsville Road via a semi-circular driveway. The site also contains two accessory structures, including a storage shed in close proximity to the western property line and a chicken coop straddling the northern property line. A large portion of the rear yard is landscaped as turf.

The property is zoned R-1 and is surrounded by other properties zoned R-1. Properties to the north, east, and west contain single family detached dwellings. To the immediate west is the channel for Rocky Run, which meanders onto the northwestern portion of the property. To the south, across Lewinsville Road, is the spillway for Regional Detention Pond 67.

The property is served by community water and sewer. The site is relatively flat, except adjoining the stream in the northwestern portion of the parcel, where the land drops to the shallow channel.

BACKGROUND

The subject property, containing 24,564 square feet and measuring approximately 113 feet wide, does not meet the current R-1 Zoning Ordinance requirements for minimum lot area, 36,000 square feet, and minimum lot width, 150 feet. In addition, the subject lot and residence were established prior to effectuation of the current RPA and floodplain controls.

The property is not subject to any proffers, special exceptions, special permits, or variances. No other special exception applications for fill in the floodplain to construct new or replace existing single family dwellings have been approved in the vicinity of the property.

COMPREHENSIVE PLAN PROVISIONS

Plan Area:	Area II
Planning District:	McLean Planning District
Planning Sector	M-6 Spring Hill Community Planning Sector
Plan Map:	Residential, 1 – 2 units, Private Open Space

There is no specific plan text that applies to this property.

DESCRIPTION OF THE SPECIAL EXCEPTION PLAT

The SE Plat titled “Odricks Corner Lot 25 (8512 Lewinsville Road),” prepared by Land Engineering, PLC, consisting of seven sheets dated March 19, 2015, is reviewed below.

Site Layout

The SE Plat depicts the existing conditions, the location of the proposed dwelling and driveway, site revegetation details, and pre- and post-development floodplain conditions. The proposed dwelling will contain 1,996 square feet within two stories, with a height of 29.09 feet as measured in accordance with the Zoning Ordinance, from the current existing grade to the mid-point of the roof. The dwelling features a 40.8-foot front yard setback, 117.8-foot rear yard setback (122.8-foot rear yard setback without elevated deck), and 23 and 21.1-foot side yard setbacks. The proposed dwelling and its attached two-car garage will be situated 45 and 21 inches, respectively, above the floodplain elevation of 342.25 feet. The SE Plat contains a note that the new house will be designed and constructed to LEED-Homes, EarthCraft, or National Green Building Standards.

Approximately 123 cubic yards of fill will be placed on the property to accommodate the proposed development. The fill would be placed below the proposed dwelling site and modify the site’s existing elevation by a maximum of four feet. Clearing and grading is limited to the front third of the property as shown on Sheet 6 of the SE Plat. The two accessory structures, both located outside of the limits of disturbance, will be removed by hand. With removal of the existing development (dwelling, porch, the crescent-shaped driveway, parking pad, patio, two accessory structures) and replacement with the new development (dwelling, front porch, rear patio, pervious driveway, walkways, attached two-car garage), the amount of impervious area on the site will be reduced by 343 square feet. Additionally, as detailed on Sheets 2 and 6 of the SE Plat, 8,650 square feet of new reforestation area will be added to the 7,300 square feet of tree preservation area.

Vehicular Access and Parking

Vehicular access will be provided to the dwelling through the construction of a new driveway from Lewinsville Road. The driveway will be constructed of pervious materials and will accommodate parking for two vehicles. The 45-foot driveway will provide access to the proposed attached two-car garage.

The SE Plat shows a future eight-foot wide asphalt bicycle and pedestrian trail along the north side of Lewinsville Road. (As discussed under the Analysis portion of this report, in lieu of this trail, staff is recommending dedication of additional right-of-way along Lewinsville Road that can facilitate future construction of an on-road bike lane.)

Landscaping

The Existing Vegetation Map on Sheet 6 of the SE Plat indicates that the site contains a number of trees, most in good or fair condition. While many of these trees will be preserved, the site’s largest trees, two silver maples in close proximity to the proposed

dwelling, are slated for removal. To offset the request for development within the RPA, the applicant is proposing designation of a 7,368 square foot tree save area adjoining the stream in the northwest portion of the lot and revegetation and enhancement of existing vegetation on the remaining undeveloped portions of the lot. The SE Plat includes a plant schedule requiring the planting of 10 overstory trees (10 white oaks, 10 red maples), 40 understory trees (20 American hollies, 20 eastern redbuds), and 220 shrubs (73 inkberry hollies, 73 rhododendrons, and 74 Virginia sweetspires).

ANALYSIS

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

All permitted uses and all special exception uses in a floodplain are 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.*

As indicated by the data presented in the Summary Table on Sheet 3 of the SE Plat, the proposed activity will not increase the water surface elevation above the 100-year flood level upstream and downstream.

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.*

As depicted on the SE Plat, the 100-year flood level is 342.25 feet above sea level on the subject property. The Plat depicts a finished floor elevation of 346 feet for the dwelling and a garage floor elevation of 344 feet. Both proposed elevations meet the 18-inch requirement stated in 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). Staff has proposed a development condition requiring submittal of a floodplain study during grading plan review to ensure that

the proposed grading and construction will not increase the water surface elevation above the 100-year flood level either upstream or downstream. With the proposed development conditions, staff believes this standard will be met.

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.*

The applicant proposes to replace an existing dwelling with a new one, built to comply with current floodproofing standards. Staff has proposed a development condition that would require the applicant to demonstrate to DPWES that all necessary federal, state, and county approvals have been obtained prior to any additional land disturbing activity. With the proposed development conditions, staff believes the application satisfies this standard.

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

Sheet 6 of the SE Plat provides an existing vegetation map and the 10-year tree canopy calculation worksheet. As shown on the existing vegetation map, there are a number of trees on the property, mostly in fair and good condition. The applicant intends retain the majority of the site's existing trees. To comply with the water quality provisions of the Chesapeake Bay Preservation Ordinance (CBPO, the applicant proposes installation of a vegetative buffer equal to the area of encroachment into the RPA as shown on Sheet 2 of the SE Plat to filter the runoff generated on the subject property for increased water quality. Staff has proposed a development condition to attempt to ensure that this vegetation will be protected and maintained. The proposed condition requires that the vegetated buffer areas be established following construction of the dwelling and remain undisturbed once established.

The Forest Conservation memo noted several corrections related to the tree preservation and tree canopy calculations. The memo also recommended that trees proposed for preservation be more clearly identified on the SE Plat and the super silt fence referenced in the tree preservation narrative be delineated on the Plat. The SE Plat dated March 19, 2015 that is attached at the front of this report includes those corrections.

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 applicant has given no indication to staff that these substances would be stored on the property and the SE Plat states that there are no known hazardous or toxic substances to be generated, utilized, stored, treated, and/or disposed of on-site. To ensure that the application meets this standard, staff has proposed a development condition that prohibits the storage of herbicides, pesticides, or

toxic or hazardous substances within the floodplain.

7. *For uses other than those enumerated in Par. 2 [agricultural uses] and 3 [accessory residential uses] 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.*

As previously discussed, the establishment of the subject property as a buildable lot predates a number of regulatory requirements and Policy Plan recommendations, including guidance on the RPA and floodplain. Given these circumstances, staff believes that the replacement of the existing single family detached dwelling on the property may be deemed appropriate. As described above, staff from DPWES reviewed the associated WQIA and WRPA applications for conformance with the CBPO. As summarized in the staff report for these applications contained in Appendix 4, staff finds that the proposal is the minimum necessary to provide an adequate finished floor elevation and garage floor elevation that is at least 18 inches above the 100-year floodplain elevation. Staff also finds that the proposed development is in harmony with the purpose and intent of the CBPO and is not of substantial detriment to water quality. To address water quality, the development will include the installation of a vegetative buffer equal to the area of encroachment into the RPA as shown on Sheet 2 of the SE Plat to filter the runoff generated on the subject property for increased water quality.

The Environment Section of the Policy Plan encourages the use of energy conservation, water conservation, and other green building practices in the design and construction of new development projects, which includes the encouragement of commitments to certification under established green building rating systems. As a result, staff encouraged the applicant to commit to green building certification through Leadership in Energy and Environmental Design (LEED) for Homes, Earthcraft, or the National Green Building Standard (NGBS) using the ENERGY STAR® Qualified Homes path for energy performance. The SE Plat now contains a note committing to one of these certifications and staff has reiterated the provision in a proposed a development condition.

Overall, staff believes the application satisfies this provision for the reasons described above.

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 applicant's 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.*

The proposed dwelling conforms to all of the applicable bulk regulations of the R-1 Zoning District, including minimum setbacks of 40 feet in the front, 25 feet in the rear, and 20 feet on the sides. The applicant has submitted a WQIA and WRPA in accordance with Chapter 118 of The Code and staff recommends approval of these applications (Appendix 4). Therefore, staff finds this standard has been met.

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. The applicant has submitted a WQIA and WRPA to be heard by the Board of Supervisors concurrently with the Special Exception request. Staff from DPWES reviewed these applications and recommends approval of the requested WQIA and WRPA. With the approval of a WQIA and WRPA, the application will satisfy this standard.

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.*

Staff has proposed a development condition that would require the applicant to submit to DPWES certified as-built floor elevations prior to approval of the framing inspection on a FEMA Certificate in accordance with minimum federal

requirements and the Virginia Uniform Statewide Building Code. With the adoption of the proposed condition, this standard is satisfied.

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

The proposed dwelling 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 applicant decides 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.*

Staff has proposed a development condition that will require the applicant to demonstrate to DPWES that all necessary federal, state, and county approvals have been obtained prior to any additional land disturbing activity. In addition, staff has proposed a development condition that will require the applicant to obtain a written determination from the US Army Corps of Engineers prior to the submission of a grading plan as to whether any action is required by the applicant to ensure compliance with § 404 of the Clean Water Act.

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 applicant complies with this standard, staff has proposed a development condition that would require the applicant to notify the Federal Insurance Administrator of the grading changes resulting from the development.

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.*

Staff has determined that the nearby watercourses will not be altered or relocated as a result of the proposed fill. As such, staff believes the application satisfies this standard.

In staff's opinion, the applicant's request satisfies all of the Use Limitations for Uses in a Floodplain with the proposed development conditions.

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 subject parcel is designated for residential use and private open space in the Comprehensive Plan. Staff believes this project, as conditioned, is in harmony with the recommendations of the Comprehensive Plan.

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

Staff finds that the application is in harmony with the purpose and intent of the R-1 District, which was established to provide for single family detached dwellings. The purpose and intent of the Zoning Ordinance's Floodplain Regulations is: 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, staff believes the applicant's 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.*

The property is zoned R-1 and is surrounded by other properties zoned R-1 on all four sides. In general, the surrounding properties are developed with single family detached dwellings, the exception being the County's stormwater detention facility across Lewinsville Road. The proposed dwelling will conform to the bulk standards of the R-1 zoning district.

The proposed dwelling will replace an existing, smaller one. However, the proposed replacement dwelling reduces the amount of impervious area within the RPA by: 1) replacing the asphalt semi-circle driveway with a shorter, pervious driveway; 2) removing an asphalt parking pad, a concrete patio, and a stone patio; 3) removing the two accessory structures; 4) locating the new dwelling as close to the street as possible; and 5) selecting a modest-sized footprint (1,500 square feet, not including garage) for the new dwelling.

The proposed dwelling will be set back a minimum of 20 feet from the east property line, allowing sufficient area for grading improvements to direct stormwater to the rear of the property, away from the adjoining residential lot. Staff has proposed a development condition to further address the drainage issue, which states that stormwater drainage shall be directed to the stream through the use of grades, swales, or other devices. The proposed condition further states that all fill areas shall be stabilized, graded, or have drains installed such that rainfall during the 2-year and 10-year storm events will not flow over the filled area onto adjacent properties, as determined by DPWES. In addition, the applicant will be required to demonstrate at the time of grading plan that adequate outfall will be provided in accordance with the PFM. Staff believes that with the implementation of the proposed development conditions, the proposed dwelling and associated fill will not adversely affect the use or development of neighboring properties.

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.*

In staff's opinion, the construction of one replacement single family detached dwelling will not significantly affect pedestrian and vehicular traffic in the neighborhood. The proposed dwelling's driveway would have a single entrance onto Lewinsville Road, replacing the two entrances currently utilized by the site's semi-circular driveway. Because the single entrance will be in a slightly different location, the applicant will need to demonstrate that the new access meets sight distance requirements when obtaining the necessary access permits from VDOT. With the implementation of the proposed development condition, this standard is addressed.

As the Bicycle Master Plan recommends a five-foot bike lane on Lewinsville Road along the property's frontage, the applicant depicted a bike/ pedestrian trail on the SE Plat. However, on the Comprehensive Plan's sector transportation

map, Lewinsville Road is shown as a two-lane arterial to be widened or improved. Therefore, in lieu of the trail, staff is requesting right-of-way dedication of five-feet along the property frontage which can accommodate the construction of the bike lane as part of the future road improvements.

Staff believes that with the proposed development conditions, this standard has been met.

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.*

There are no transitional screening or barrier requirements for the proposed single family detached dwelling. 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. Sheet 2 of the SE Plat depicts proposed buffer plantings throughout the site in accordance with Chapter 118 of the County Code. To comply with the water quality provisions of the Chesapeake Bay Preservation Ordinance (CBPO), the applicant proposes installation of a vegetative buffer equal to the area of encroachment into the RPA to filter the runoff generated on the subject property for increased water quality. Staff has proposed a development condition that will require the vegetated buffer areas to be established following construction of the single family detached dwelling. Once established, the condition will require that the vegetated buffers shall remain undisturbed. The condition further states there shall be no fences, structures, or other land disturbing activities permitted except for the removal of dead, dying, or diseased trees. Finally, the proposed development conditions state that the final location and species of the proposed plantings shall be subject to the review and approval of UFMD at the time of grading plan review. With the implementation of the proposed development conditions, staff believes the applicant meets this standard.

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 within the R-1 conventional district.

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.*

Prior to the approval of a grading plan, site plan, or minor site plan, the Health Department shall be contacted and the site's existing well shall be properly authorized for irrigation purposes or shall be properly abandoned under a permit issued from the Health Department.

Staff believes the applicant will be providing for adequate utilities and parking for the proposed dwelling with the connection of water and sewer and the proposed two-car garage. As previously discussed, staff believes that with the proposed development conditions, adequate drainage will be provided. In staff's opinion the application meets this standard.

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 applicant has not incorporated any requests related to signs with this application. Any signs for the proposed use shall be in accordance with the provisions of Article 12 of the Zoning Ordinance.

In staff's opinion, the applicant's request satisfies all of the General Special Exception Standards with the adoption of the proposed development conditions.

CONCLUSIONS AND RECOMMENDATIONS

Staff Conclusions

The applicant requests the approval of a Special Exception for fill in a floodplain right-of-way dedication of 5 feet along the property frontage for the construction of the bike lane in the future to allow construction of a single family detached residential dwelling within the 100-year floodplain. The applicant also requests approval of an associated WRPA and WQIA to permit disturbance within the RPA. Staff believes that with the implementation of the proposed development conditions and the WRPA/WQIA conditions, the proposal is in conformance with the Comprehensive Plan guidelines and the applicable Zoning Ordinance provisions.

Recommendation

Staff recommends approval of SE 2014-DR-033, subject to the Development Conditions contained in Appendix 1.

Staff recommends approval of RPA Encroachment Exception #6100-WRPA-005-2 and WQIA #6100-WQ-003-2, subject to the proposed development conditions contained in Attachment A of Appendix 4.

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. Applicant's Statement of Justification
3. Affidavit
4. Staff Report for #6100-WRPA-005-2 and 6100-WQ-003-2
5. Environmental Analysis
6. Stormwater Management Analysis
7. Urban Forest Management Analysis
8. Transportation Analysis
9. Health Analysis
10. Zoning Ordinance Excerpts
11. Glossary of Terms

PROPOSED DEVELOPMENT CONDITIONS**SE 2014-DR-033****April 1, 2015**

If it is the intent of the Board of Supervisors to approve SE 2014-DR-033, located at 8612 Lewinsville Road, Tax Map 29-1 ((1)) 25, for fill 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.
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 "Odricks Corner Lot 25, 29-1-((1))-0025, Property of Krishna Ramachandra Murthy, Dranesville District, Fairfax County, Virginia", prepared by Land Engineering, PLC, dated March 19, 2015, and these conditions. Minor modifications to the approved Special Exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.
4. Disclosure of potential flood hazards due to the location of the site within the 100-year floodplain shall be made in writing to any potential home buyers prior to the execution of a sales contract.
5. The amount of fill permitted on the subject site shall not exceed 123 cubic yards.
6. Prior to the submission of a grading plan, the applicant shall obtain a written determination from the US Army Corps of Engineers as to whether any action is required by the applicant to ensure compliance with § 404 of the Clean Water act. Any required actions shall be completed prior to grading the site. If any necessary permissions are not granted or the required actions are not completed, this Special Exception shall be null and void.
7. Concurrent with the first submission of any grading plan, site plan, or minor site plan, the applicant shall submit an additional copy of the plan to the Fairfax County Federal Emergency Management Agency (FEMA) Floodplain Administrator (Stormwater Planning Division) to determine whether the base

flood elevation in any Special Flood Hazard Area (SFHA) depicted on the County's Flood Insurance Rate Map (FIRM) would be altered as a result of the new construction shown on the plan, including fill. If the County FEMA Floodplain Administrator determines that the base flood elevation would be altered, the applicant 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 applicant 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 applicant is required to submit either a Letter of Map Revision and/or Conditional Letter of Map Revision as outlined above, the applicant shall submit a copy of the approval letter from FEMA to the Department of Planning and Zoning (DPZ).

8. 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.
9. If requested by DPWES, a geotechnical report shall be submitted to DPWES prior to grading plan approval. Plans shall be implemented as required by DPWES.
10. Prior to approval of a grading plan, it shall be demonstrated to DPWES that the proposed disturbance, 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.
11. Prior to any additional land disturbing activity, it shall be demonstrated to DPWES that all necessary federal, state, and county approvals have been obtained.
12. Erosion and sediment control measures shall be installed at all stages of construction, as determined by DPWES. A "super silt fence" shall be installed along the lower clearing and grading limits for the site. If deemed necessary by DPWES, controls shall be designed to achieve greater erosion and sediment control than that achieved by the minimum design standards set forth in the Public Facilities Manual and the Virginia Erosion and Sediment Control Handbook.
13. Prior to approval of the framing inspection, a certified as-built floor elevation shall be submitted on a FEMA Certificate to be filed with the Residential Inspections Division, DPWES, in accordance with minimum federal requirements and the Virginia Uniform Statewide Building Code in effect at the time the building permit is issued. In addition, at the time of the framing inspection, it shall be demonstrated to DPWES that the elevation of the lowest part of the lowest floor of the dwelling proposed on the property shall be at least 18 inches above the base flood elevation, in accordance with Par. 2 of Sect. 2-

905 of the Zoning Ordinance, and the inspection record shall include a signed or initialed statement of concurrence by the inspector.

14. All mechanical, electrical, and utility equipment shall be located at or above the flood level.
15. The crawl space shall not be converted to a finished basement or any living space.
16. The dwelling shall be limited to a height of 35 feet as measured from the existing grade, as defined by the Zoning Ordinance.
17. 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 rainfall during 2-year and 10-year storm events will not flow over the filled area onto adjacent properties, as determined by DPWES. The following landscaping procedures shall be followed to assure adequate tree preservation.
18. The following landscaping procedures shall be followed to assure adequate tree preservation.
 - A. Tree Preservation. The applicant shall submit a Tree Preservation plan as part of the first and all subsequent site plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a Certified Arborist or Registered Consulting Arborist, and shall be subject to the review and approval of the Urban Forest Management Division (UFMD), DPWES.

The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 12 inches in diameter and greater within 25 feet within the undisturbed area and 10 feet of the limits of clearing and grading in the disturbed area shown on the SE Plat. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the SE Plat, and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.

- B. Limits of Clearing and Grading. The Applicant shall conform strictly to the limits of clearing and grading as shown on the Special Exception Plat, subject to allowances specified in these development conditions and for the

installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the Special Exception Plat, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES. A replanting plan shall be developed and implemented, subject to approval by the UFMD, DPWES, for any areas protected by the limits of clearing and grading that must be disturbed for such trails or utilities.

- C. Tree Preservation Fencing. All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four foot high, 14 gauge welded wire attached to six foot steel posts driven 18 inches into the ground and placed no further than 10 feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the SE Plat, as may be modified by the Root Pruning condition below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the UFMD, DPWES, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by the UFMD, DPWES.

- D. Root Pruning. The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the submitted plan. The details for these treatments shall be reviewed and approved by the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:
- Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
 - Root pruning shall take place prior to any clearing and grading, or demolition of structures.
 - Root pruning shall be conducted with the supervision of a certified arborist.

- An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.”
- E. Site Monitoring. During any clearing or tree/vegetation/structure removal on the subject property, a representative of the applicant shall be present to monitor the process and ensure that the activities are conducted per these conditions. The applicant shall retain the services of a Certified Arborist or Registered Consulting Arborist to monitor all construction and demolition work adjacent to any vegetation to be preserved and tree preservation efforts in order to ensure conformance with all tree preservation conditions. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan and reviewed and approved by the UFMD, DPWES.
- F. Landscaping Plans. Site plans submitted for the development shall include a landscape plan as generally shown on the SE Plat. Tree species and planting sites are set forth on the SE Plat, subject to revision as may be approved by the UFMD, DPWES.

Prior to installation of plants to meet requirements of the approved landscape plan, the contractor/developer shall coordinate a pre-installation meeting on site with the landscape contractor and a representative of the UMFD. Any proposed changes to the location of planting, size of trees/shrubs, and any proposed plant substitutions for species specified on the approved plan shall be reviewed at this time and must be approved prior to planting. The installation of plants not specified on the approved plan, and not previously approved by UFMD may require submission of a revision to the landscape plan or removal and replacement with approved material, prior to bond release. UFMD shall be contacted (703-324-1770) a minimum of three days prior to the meeting on site.

19. The limits of clearing and grading shown on the SE Plat shall be strictly observed and enforced. Any encroachment into, and/or disturbance of, the Resource Protection Area (RPA) not shown on the approved SE Plat will be considered a violation of the Chesapeake Bay Preservation Ordinance (CBPO) and is subject to the penalties of the CBPO Article 9.
20. Any replanting or maintenance of landscaping shown on the approved grading plan shall be in accordance with the Chesapeake Bay Preservation Ordinance (Chapter 118 of the Fairfax County Code).
21. Prior to site plan review, five feet along the property's Lewinsville Road frontage shall be dedicated for the construction of a future bike lane.
22. Prior to site plan review, it shall be demonstrated that the new driveway access onto Lewinsville Road meets VDOT sight distance requirements.

23. The dwelling unit shall be constructed to achieve one of the following:
- a) Qualification in accordance with ENERGY STAR® (VERSION 3.0) Qualified Homes path for energy performance, as demonstrated through documentation submitted to the Environment and Development review Branch of the Department of Planning and Zoning ("DPZ") and from a home energy rater certified through the Home Innovation Research Labs that demonstrates that the dwelling unit has attained the certification prior to the issuance of the Residential Use Permit for the dwelling; or
 - b) Certification in accordance with the National Green Building Standard (NGCS) using the ENERGY STAR® (version 3.0) Qualified Homes path for energy performance, as demonstrated through documentation submitted to the Environment and Development review Branch of the DPZ and from a home energy rater certified through the Home Innovation Research Labs that demonstrates that the dwelling unit has attained the certification prior to the issuance of the RUP for the dwelling; or
 - c) Certification in accordance with the Earth Craft House Program, as demonstrated through documentation provided to DPWES and DPZ prior to the issuance of the RUP for the dwelling.
24. Prior to the approval of a grading plan, site plan, or minor site plan, the Health Department shall be contacted and the site's existing well shall be properly authorized for irrigation purposes or shall be properly abandoned under a permit issued from the Health Department.
25. 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., within the floodplain.

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 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, thirty (30) 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. 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.

SPECIAL EXCEPTION AFFIDAVIT

DATE: Sept 9, 2014
(enter date affidavit is notarized)

I, KRISHNA R. MURTHY, do hereby state that I am an
(enter name of applicant or authorized agent)

(check one) applicant
 applicant's authorized agent listed in Par. 1(a) below 125968

in Application No.(s): SE 2014 - OR - 033
(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)
1) KRISHNA R. MURTHY	7715 LEAR ROAD MCLEAN, VA 22102	APPLICANT/owner
2) LAND ENGINEERING, PLC AGENT:- LLOYD A. NTUK	11350 RANDOM HILLS ROAD FAIRFAX, VA, 22030	AGENT/ENGINEER

(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: Sept 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE-2014-OR-033
(enter County-assigned application number(s))

125965

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)

LAND ENGINEERING, PLC, 11350 RANDOM HILL ROAD Suite-800
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 SHAREHOLDERS: (enter first name, middle initial and last name)

LLOYD A. NTUK 11350 RANDOM HILL ROAD AGENT/ENGINEER.
Suite - 800
FAIRFAX, VA 22030

(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 AFFIDAVIT

DATE: Sept 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE-2014-DR-033
(enter County-assigned application number(s))

125968

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)

NONE

(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: Sept 9, 2014
(enter date affidavit is notarized)

for Application No. (s): SE - 2014 - OR - 033
(enter County-assigned application number(s))

125968

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): SE-2014-DR-033
(county-assigned application number(s), to be entered by County Staff)

SPECIAL EXCEPTION AFFIDAVIT

DATE: Sept 9, 2014
(enter date affidavit is notarized)

125968

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.

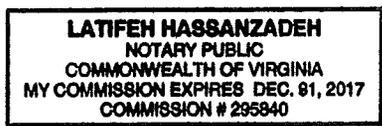
4. That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, 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:
(check one) Applicant Applicant's Authorized Agent
KRISHNA R. MARTHY
(type or print first name, middle initial, last name, and & title of signee)

Subscribed and sworn to before me this 9 day of Sept, 2014, in the State/Comm. of VA, County/City of FAIRFAX.

[Signature]
Notary Public

My commission expires: 12/31/17



SPECIAL EXCEPTION STATEMENT OF JUSTIFICATION

This is a written statement from the applicant describing the proposed use, and other pertinent data, including specifically:

- A. Type of operation: *used in a FLOOD PLAIN for a Single Family detached Dwelling*
- B. Hours of Operation: **Residence.**
- C. Estimated number of patrons//clients/patients/pupils/etc. **Single home family members.**
- D. Proposed number of employees/attendants/teachers/etc.: **Single home family members.**
- E. Estimate 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: **One trip by single home family member's by two axil vehicles during morning and evening.(Two trips)**
- F. Vicinity or general area to be served by the use: **Mclean VA 22102 area**
- G. Description of building façade and architecture of proposed new building or additions:
A typical single family Dwelling is proposed which will have a Hip Roof and Walls will be constructed with Siding or Brick Veneer.
- H. A listing, if known of all hazardous or toxic substances as set forth in title 40, code of Federal Regulations Parts 116.4, 302.4 and 355; all hazardous waste as set forth in Virginia Department of Environmental Quality Hazardous waste Management Regulations; and/or petroleum products as defined in Title 40, Code of Federal Regulations part 280; to be generated, utilized, stored, treated, and /or disposed of onsite and the size and contents of any existing or proposed storage tanks or containers:
No known Toxic or hazardous substances are found.
- I. A statement of how the proposed use conforms to the provisions of all applicable ordinances, regulations, adopted standards and any applicable conditions, or, if any waiver, exception or variance is sought by the applicant from such ordinances, regulations, standards and conditions, such shall be specifically noted with the justification for any such modification: **The proposed use is Harmonious with & will not Adversely Affect the use or Development of the Neighboring properties in Accordance with the Applicable Zoning District Regulations and The Adopted Comprehensive Plans. The Location, Size, and Height of Building Structures Walls, and Fences and the Nature/Extent of Screening, Buffering and Landscaping will not Hinder or Discourage The Appropriate Development and use of Adjacent or Nearby land and / or Buildings or Impair the value Thereof.**

KRISHNA R. MURTHY
TYPE/PRINT NAME OF THE APPLICANT/AGENT

Krishna R. Murthy
SIGNATURE OF APPLICANT/AGENT

RECEIVED
Department of Planning & Zoning
MAR 10 2014
Zoning Evaluation Division

KM
5/21/14



APPLICATION FILED: March 10, 2014
PLANNING COMMISSION: March 12, 2015
BOARD OF SUPERVISORS: To be Scheduled

County of Fairfax, Virginia

January 23, 2014

STAFF REPORT

**RESOURCE PROTECTION AREA (RPA) ENCROACHMENT EXCEPTION
6100-WRPA-005-2
and
WATER QUALITY IMPACT ASSESSMENT
6100-WQ-003-2**

In conjunction with Special Exception Application SE 2014-DR-033

DRANESVILLE DISTRICT

APPLICANT: Krishna Ramachandra Murthy

PROJECT LOCATION: 8512 Lewinsville Road

TAX MAP REFERENCE: 29-1 ((01)) 0025

APPLICATION SUBMITTED: October 15, 2014

APPLICATION ACCEPTED: October 15, 2014

APPLICATION AMENDED: January 16, 2015

WATERSHED: Difficult Run

RPA EXCEPTION REQUEST: General RPA Encroachment Request under Chesapeake Bay Preservation Ordinance (CBPO) § 118-6-9

PROPOSAL: Approval of an Exception to allow encroachment into the 1993 RPA for the construction of a new single-family detached residential dwelling.

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



RPA Exception #6100-WRPA-005-2 and
WQIA #6100-WQ-003-2

- LOT SIZE:** 24,564 square feet (0.5638 acres)
- AREA OF REQUESTED RPA ENCROACHMENT:** Approximately 10,200 square feet (0.234 acres) disturbed area of which 3,840 square feet (0.088 acres) is proposed to be impervious area
- PUBLIC HEARING:** General RPA Encroachment Request under CBPO § 118-6-9 to be held in conjunction with the Special Exception application pursuant to CBPO § 118-6-1.
- DESCRIPTION:** The applicant proposes to demolish the existing structure, driveway and accessory structures on the parcel and build a new single family detached dwelling and driveway, with fill and establish additional vegetation buffer within the RPA.
- BACKGROUND:** The subject site, Lot 25, Ordick's Corner, is a 0.5638 acre parcel located at 8512 Lewinsville Road in McLean. According to Fairfax County tax records, the parcel is developed with a 996 square foot single family detached dwelling, built in 1955. Also existing on the site are a paved driveway and detached accessory structures. The existing conditions total 3,701 square feet of impervious surfaces on the site.
- The RPA was designated with the initial adoption of the CBPO in 1993, and encumbers 100% of the parcel.
- The property was owned by current owner since 2014.
- DOCUMENTS AND CORRESPONDENCE:** The following information is part of this application:
- RPA Encroachment Exception request dated October 15, 2014 (Attachment B)
 - Water Quality Impact Assessment (6100-WQ-003-2) prepared by Land Engineering PLC, dated December 19, 2015 (Attachment C)
 - Wetland Jurisdictional Determination from the U.S. Army Corps of Engineers dated August 18, 2014 (Attachment D).
- ANALYSIS:** The applicant has submitted the request pursuant to CBPO § 118-6-9 (General RPA Exception).

The entire property is located within the limits of 1993 RPA. When the RPA was adopted on this property, there was about 3,373 square feet of impervious area. At present time there is 4,186 square feet of impervious surface; the additional area was constructed without an RPA exception.

The current owner intends to remove two sheds manually, both of which are located within 50 feet of the stream bank.

The applicant is proposing to demolish the existing dwelling and driveway and construct a new dwelling, with attached garage, and driveway. The total proposed impervious surface on this property will be 3,843 square feet, approximately 15.3% of the lot area. The proposed impervious area will be 343 square feet less than the existing impervious surface.

The proposed construction of the dwelling, driveway and associated fill will disturb 10,200 square feet within the RPA. The proposed limits of clearing and grading do not include the area of the accessory structures. The applicant has proposed that the structures will be removed by hand, without the use of any mechanical equipment. The applicant has proposed to preserve 7,300 square feet of existing vegetative cover, and establish an additional 8,650 square feet of vegetated buffer within existing managed turf (i.e., lawn) areas of the site.

Since the proposed construction will result in an impervious area of less than 18%, the CBPO does not require the stormwater runoff to be controlled by the use of best management practices (§118-3-2(e), 124-1-7(3)(ii).a).

To rebuild or raise the dwelling, disturbance of the RPA within the 50 seaward feet will be necessary. Since the disturbance will be within 50 feet of the stream, this proposal does not qualify for an administrative encroachment exception for Loss of Buildable Area under CBPO 118-5-4(a). A public hearing is required. In addition, the proposed land disturbance exceeds 10,000 square feet; the exception does not qualify under loss of buildable area in a resource protection area (118-6-7). Since

the Board of Supervisors (Board) will be acting on a Special Exception for a Use in a Floodplain for this proposal, the Board will hear this encroachment exception request under the General Resource Protection Area Encroachment Request under CBPO 118-6-9 in conjunction with the Special Exception (SE).

REQUIRED FINDINGS:

General RPA Encroachment Exceptions under CBPO § 118-6-9 may be granted based upon the findings listed in CBPO § 118-6-6(a) though (f), and the additional finding of CBPO § 118-6-9. that the water quality benefits of the application exceed the detriments. It is the opinion of county staff that the required findings, as discussed below, have been satisfied in this application.

(a) *The requested exception to the criteria is the minimum necessary to afford relief:*

This is the opinion of staff that the proposed encroachment into the RPA for the construction of the single family dwelling is the minimum necessary to afford relief. The entire property is located within the limits of County Mapped 1993 RPA. The lot was recorded in 1956 which was 37 years before the RPA was established. The applicant has proposed a 1,996 sq.ft. dwelling to be located as close the street as allowed by the minimum required front yard, minimizing the length of driveway and disturbed area in the RPA.

(b) *Granting the exception will not confer upon the applicant any privileges that are denied by this part to other property owners who are subject to its provisions and who are similarly situated:*

The Board has previously considered a several houses in floodplain and RPA. It is the opinion of staff that the requested exception is not beyond that afforded to other property owners who are similarly situated.

(c) *The exception is in harmony with the purpose and intent of this Chapter and is not of substantial detriment to water quality.*

It is the opinion of staff that, the exception is in harmony with the purpose and intent of the CBPO and is not a substantial detriment to water quality. The proposed and preserved vegetated buffer is more than the total impervious area on the site, and the proposed development will be a net reduction in impervious area.

(d) The exception request is not based upon conditions or circumstances that are self-created or self-imposed:

It is the opinion of staff that the exception is not based on conditions that were self-created and self-imposed.

(e) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality:

It is the opinion of staff that the proposed development conditions are reasonable and appropriate, and will prevent a degradation of water quality. Both the proposed vegetated buffer and the reduction of impervious surfaces will have a positive impact on water quality. The area of the vegetated buffer is more than the total impervious area on the site.

The vegetated buffer will be placed in a recorded easement which will allow the county to enforce the undisturbed nature of the buffer. If it the intent of the Board to approve the RPA Encroachment exception, staff recommends that the approval be conditioned upon the proposed development conditions contained in Attachment A.

(f) Other findings, as required. Exceptions pursuant to CBPO § 118-6-9 are subject to the additional finding that the water quality benefits resulting from the improvement exceed the associated water quality detriments. Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment and is equal to the area of the encroachment into the buffer area shall be established elsewhere on the lot.

RPA Exception #6100-WRPA-005-2 and
WQIA #6100-WQ-003-2

It is the opinion of staff that the applicant has demonstrated there will be a water quality benefit to allowing the improvements. The applicant has proposed a net reduction of impervious surfaces on the site, which will decrease the runoff and phosphorus load, and has proposed to establish additional vegetative buffer within the RPA.

STAFF RECOMMENDATION: Staff recommends approval of RPA Encroachment Exception 6100-WRPA-005-2 and Water Quality Impact Assessment 6100-WQ-003-2, subject to the proposed RPA Exception Conditions, dated January 23, 2014, contained in Attachment A.

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

It should be further noted that the content of this report reflects the analysis and recommendations of staff; it does not reflect the position of the Board. For further information, contact the Environmental and Site Review Division, Land Development Services, Department of Public Works and Environmental Services, 12055 Government Center Parkway, Suite 535, Fairfax, Virginia 22035-5503, 703-324-1720.

Attachment A

PROPOSED EXCEPTION CONDITIONS

#6100-WRPA-005-2 and #6100-WQ-003-2

January 23, 2015

If it is the intent of the Board of Supervisors to approve RPA Encroachment Exception #6100-WRPA-005-2 and WQIA #6100-WQ-003-2, for the property located at 8512 Lewinsville Road, Lot 25 Odricks Corner, Tax Map #29-1-01-0025, to allow encroachment in the Resource Protection Area (RPA) in accordance with Section 118-6-9 of the Chesapeake Bay Preservation Ordinance (CBPO), staff recommends the Board condition the approval by requiring conformance with the following conditions:

1. This RPA Exception is granted for, runs with the land indicated in this application, and is not transferable to other land.
2. This RPA Exception is granted only for the purposes, structures, or uses indicated on the Special Exception Plat approved with this application, as qualified by these exception conditions.
3. Any plan submitted pursuant to this RPA Exception shall be in substantial conformance with the Special Exception Plat titled *Odricks Corner Lot 25 (8512 Lewinsville Road)* prepared by Land Engineering Plc, dated January 2015, and these conditions.
4. A vegetated buffer equal to the area of encroachment into the RPA buffer shall be planted to the density of CBPO 118-3-3(f) as depicted on Sheet 2 of the Special Exception Plat. The vegetated buffer shall be a minimum of 8,650 square feet (0.198 acres). The vegetation shall be randomly placed within the vegetated buffer to achieve a relatively even spacing throughout. Groundcovers shall be provided throughout the buffer. Any modifications to the size, species, density, or locations of the trees and shrubs shall be subject to approval of the Director of the Department of Public Works and Environmental Services.
5. The removal of invasive species on the property shall be in accordance with the CBPO 118-3-3(d) as determined by the Urban Forest Management Division, Department of Public Works and Environmental Services.
6. An erosion and sediment control plan that includes, but is not limited to, a super-silt fence placed at the limits of clearing and grading. The super-silt fence shall remain in place and be properly maintained for the duration of the land disturbing activity until such time that the disturbed areas are re-vegetated and completely stabilized as determined by the Site Development and Inspections Division, Department of Public Works and Environmental Services.

7. All necessary permits shall be received from those governmental agencies from which approval is required by Federal and/or State law.
8. This RPA Exception shall automatically expire without notice 24 months after the date of approval by the Board of Supervisors unless the necessary plans and permits have been approved and construction of the improvements as depicted on the Plat have commenced and are being diligently pursued, as determined by the Director of the Department of Public Works and Environmental Services.

This approval, contingent on the above noted conditions, does not relieve the applicant from compliance with the provisions of any other applicable federal, state, or county ordinances, regulations, or adopted standards. The applicant shall be responsible for obtaining the approval of any required plans and permits through established procedures.



County of Fairfax, Virginia

MEMORANDUM

DATE: March 9, 2015

TO: Barbara Berlin, Director
Zoning Evaluation Division, DPZ

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

SUBJECT: ENVIRONMENTAL ASSESSMENT for: SE 2014-DR-033
Murthy

This memorandum, prepared by John R. Bell, includes citations from the Comprehensive Plan that provide guidance for the evaluation of the above referenced special exception plat as revised through December 19, 2014. Possible solutions to remedy identified environmental impacts are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are also compatible 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:

In the Fairfax County Comprehensive Plan, Policy Plan, 2013 Edition, Environment section as amended through July 1, 2014, on page 7 through 9, the Plan states:

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

Policy k. For new development and redevelopment, apply better site design and low impact development 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:

Department of Planning and Zoning
Planning Division
12055 Government Center Parkway, Suite 730
Fairfax, Virginia 22035-5509
Phone 703-324-1380
Fax 703-653-9447
www.fairfaxcounty.gov/dpz/



- Minimize the amount of impervious surface created. . . .
- Maximize the use of infiltration landscaping within streetscapes consistent with County and State requirements. . . .

Development proposals should implement best management practices to reduce runoff pollution and other impacts. Preferred practices include: those which recharge groundwater when such recharge will not degrade groundwater quality; those which preserve as much undisturbed open space as possible; and, those which contribute to ecological diversity by the creation of wetlands or other habitat enhancing BMPs, consistent with State guidelines and regulations. . . .”

Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through July 1, 2014, pages 19, 20 and 21:

“Objective 13: Design and construct buildings and associated landscapes to use energy and water resources efficiently and to minimize short- and long-term negative impacts on the environment and building occupants.

Policy a. In consideration of other Policy Plan objectives, encourage the application of energy conservation, water conservation and other green building practices in the design and construction of new development and redevelopment projects. These practices may include, but are not limited to:

- Environmentally-sensitive siting and construction of development;
- Application of low impact development practices, including minimization of impervious cover (See Policy k under Objective 2 of this section of the *Policy Plan*);
- Optimization of energy performance of structures/energy-efficient design;
- Use of renewable energy resources;
- Use of energy efficient appliances, heating/cooling systems, lighting and/or other products;
- Application of best practices for water conservation, such as water efficient landscaping and innovative wastewater technologies, that can serve to reduce the use of potable water and/or reduce stormwater runoff volumes;
- Reuse of existing building materials for redevelopment projects;
- Recycling/salvage of non-hazardous construction, demolition, and land clearing debris;
- Use of recycled and rapidly renewable building materials;

- Use of building materials and products that originate from nearby sources;
- Reduction of potential indoor air quality problems through measures such as increased ventilation, indoor air testing and use of low-emitting adhesives, sealants, paints/coatings, carpeting and other building materials;
- Reuse, preservation and conservation of existing buildings, including historic structures;
- Retrofitting of other green building practices within existing structures to be preserved, conserved and reused;
- Energy and water usage data collection and performance monitoring;
- Solid waste and recycling management practices; and
- Natural lighting for occupants.

Encourage commitments to implementation of green building practices through certification under established green building rating systems for individual buildings (e.g., the U.S. Green Building Council's Leadership in Energy and Environmental Design for New Construction [LEED-NC[®]] or the U.S. Green Building Council's Leadership in Energy and Environmental Design for Core and Shell [LEED-CS[®]] program or other equivalent programs with third party certification). An equivalent program is one that is independent, third-party verified, and has regional or national recognition or one that otherwise includes multiple green building concepts and overall levels of green building performance that are at least similar in scope to the applicable LEED rating system. Encourage commitments to the attainment of the ENERGY STAR[®] rating where available. Encourage certification of new homes through an established residential green building rating system that incorporates multiple green building concepts and has a level of energy performance that is comparable to or exceeds ENERGY STAR qualification for homes. Encourage the inclusion of professionals with green building accreditation on development teams. Encourage commitments to the provision of information to owners of buildings with green building/energy efficiency measures that identifies both the benefits of these measures and their associated maintenance needs.

Policy c. Ensure that zoning proposals for residential development that are not otherwise addressed in Policy b above will incorporate green building practices sufficient to attain certification under an established residential green building rating system that incorporates multiple green building concepts and that includes an ENERGY STAR Qualified Homes designation or a comparable level of energy performance. Where such zoning proposals seek development at or above the mid-point of the Plan density range, ensure that county expectations regarding the incorporation of green building practices

are exceeded in two or more of the following measurable categories: energy efficiency; water conservation; reusable and recycled building materials; pedestrian orientation and alternative transportation strategies; healthier indoor air quality; open space and habitat conservation and restoration; and greenhouse gas emission reduction. As intensity or density increases, the expectations for achievement in the area of green building practices would commensurately increase.”

ENVIRONMENTAL ANALYSIS:

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed land use. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions.

Green Building

The Comprehensive Plan recommends green building certification involving residential zoning proposals. The zoning application involves one single-family dwelling on a very small lot in an R-3 zoned area. The applicant has been advised that staff is recommending a commitment that the home be designed and constructed to LEED-Homes, EarthCraft or National Green Building Standard (NGBS) with the Energy Star path for energy performance. Based on the most recent discussions with the applicant, it is staff's understanding that they are willing to pursue green building certification under one of the accepted practices, as noted above. Staff feels that this issue is resolved at this time.

Floodplain

The subject property is located almost entirely within a Resource Protection Area. The proposed structure is depicted as elevated on a substantial amount of fill dirt in order to elevate the livable areas above the 100-year floodplain elevation by no less than eighteen inches as required by Zoning Ordinance standards. The applicant is proposing the removal of the existing dwelling and other accessory structures from the 100-year floodplain. The proposed dwelling will be constructed on fill located closer to the roadway. As a result, the overall impervious surface area of the proposed dwelling will be less than the existing dwelling and accessory structures. Runoff will be reduced as a result. The Department of Public Works and Environmental Services (DPWES) has determined that no onsite detention of water quality control measures will be required. Any final determination regarding standards for runoff and onsite grading will be made by DPWES.

PGN:JRB



County of Fairfax, Virginia

MEMORANDUM

DATE: March 17, 2015

TO: Bobby Katai, Staff Coordinator
Zoning Evaluation Division
Department of Planning and Zoning

FROM: Mohan Bastakoti, P.E., Senior Engineer III 
South Branch
Site Development and Inspections Division
Department of Public Works and Environmental Services

SUBJECT: SE 2014-DR-033: 6100-ZONA-001-1; Dranesville District

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

Chesapeake Bay Preservation Ordinance (CBPO)

There are Resource Protection Areas on the site. If the encroachment extends into the seaward 50 feet of RPA, an exception for loss of buildable area is required. Chapter 118-6-7

As the encroachment extends seaward 50 feet of the RPA, an exception for loss of buildable area in a resource protection area will be required per section 118-6-7.

Floodplain

The proposed single family dwelling is located in a FEMA flood hazard zone A. The proposed work may be permitted upon the approval of a special exception by the Board. ZO 2-904.

The proposed activity 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. (ZO 2-905-1). A flood plain study shall be separately submitted to SDID for review during grading plan review.

Since the property is located FEMA zone A; If it results 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.

Acknowledgment, signed by the applicant, that the applicant is aware that flood insurance may be required by the applicant's lending institution and that the flood insurance rates may increase because of increases in risks to life and property is required.

Both normal and emergency ingress and egress from the street shall be shown on the plan.

A statement certifying all floodproofing proposed, and indicating its compliance with all County, State and Federal requirements is required. This certification must be signed, sealed, and indicate the address of the certifying professional and it must cover all structural, electrical, mechanical, plumbing, water and sanitary facilities connected with the use.

Downstream Drainage Complaints

There are no current downstream drainage complaints on file.

Stormwater Detention

Proposed activity is exempt from detention requirements per Chapter 124-1-7.

Water Quality Control

Proposed activity is exempt from water quality requirements per Chapter 124-1-7.

Downstream Drainage System

The applicant has provided adequate outfall analysis and meets PFM requirements.

cc: Shahab Baig, Chief, North Branch, SDID, DPWES
Greg McLaughlin, Senior Engineer III, North Branch, SDID, DPWES
Zoning Application File





County of Fairfax, Virginia

MEMORANDUM

DATE: February 19, 2015

TO: Bobby Katai, Staff Coordinator
Zoning Evaluation Division, DPZ

FROM: Craig Herwig, Urban Forester III
Forest Conservation Branch, DPWES

SUBJECT: Odricks Corner-8512 Lewinsville Road, lot 25; SE 2014-DR-033

This review is based on the Special Exception application SE 2014-DR-033 and Special Exception Plat stamped "Received Department of Planning and Zoning, January 23, 2015. The following comments and recommendations are based on this review and site visit conducted on July 11, 2014.

General Comment: Urban Forest Management Division (UFMD) comments and recommendations on the previously submitted SE Plat were provided to DPZ in my memo dated July 11, 2014. The following comments and recommendations contained in the previous memo were not adequately addressed and are submitted in their entirety, in this memo.

- 1. Comment:** The tree preservation target on line C1 of Table 12.10 is incorrect.

Recommendation: The tree preservation target shall be calculated as follows: The area of 10-year tree canopy for this site is 7,368 square feet. The percentage of gross site area covered by existing canopy is identified as 51.3%. $7,368 \times .513 = 3,780$, (tree preservation target). Provide the correct tree preservation target with the changes identified below in comment 4. Adjust the calculations provided in the Tree Preservation Narrative.

- 2. Comment:** Table 12.10, 10-year tree canopy calculations, applies the 1.25 multiplier to the existing tree canopy area for meeting the standards set out in the PFM 12-0400. This is incorrect. The entire site is located within a Resource Protection Area (RPA).

Recommendation: Areas within an RPA are not eligible for additional credit. The figure for upland forest to be preserved should be in row C8 and shall be calculated using no canopy credit multiplier. Adjust the calculations on Table 12.10. (PFM 12-0510.3C(1))



Odricks Corner-8512 Lewinsville Road, lot 25
SE 2014-DR-033
February 19, 2015
Page 2 of 2

- 3. Comment:** The Existing Vegetation Map (EVM) has included the figure for existing upland forest with the applied 1.25 multiplier. This is incorrect.

Recommendation: The EVM shall accurately depict the location of the outer edge of forested areas at the time of plan submission and not for any future increase in canopy. Include the figure for existing upland forest in the EVM without taking a 1.25 multiplier. (PFM 12-0506.1A)

- 4. Comment:** The canopy for the existing American holly tree does not appear to have been included in the 10-year canopy calculations. It is unclear if this tree is proposed for preservation. Shade and label all trees proposed for preservation.

Recommendation: Shade and label all canopy proposed for preservation on the Special Exception plat and include the canopy proposed for preservation on Table 12.10. (PFM 12-0510.3A)

- 5. Comment:** Tree protection in the form of super silt fence has been mentioned in the tree preservation narrative but it is not mentioned in the legend or shown on the special exception plat on sheet 1.

Recommendation: The information in the Tree Conservation Plan shall match and be consistent with the information on all grading plan and E&S control sheets. Show super silt fence in the legend on the tree preservation plan and locate all E&S controls on all future grading, and/or E&S control sheets. (PFM 12-0509.2F)

Please feel free to contact me with any further questions or concerns.

CSH/

UFMDID #: 193243

cc: DPZ File





County of Fairfax, Virginia

MEMORANDUM

DATE: February 12, 2015

TO: Barbara Berlin, Director
Zoning Evaluation Division, DPZ

FROM: Michael A. Davis, Acting Chief
Site Analysis Section, DOT *JRH For MAD*

FILE: 3-5 (SE 2014-DR-033)

SUBJECT: Transportation Impact

REFERENCE: SE 2014-DR-033; Krishna R. Murthy
Tax Map: 029-1 ((01)) 0025

This department has reviewed the SE application. The Bicycle Master Plan recommends a 5-ft bike lane on Lewinsville Road, the applicant's frontage. In lieu of the trail, staff requests right-of-way dedication of 5 feet along the property frontage for the construction of the bike lane in the future. The new access to Lewinsville Road should meet sight distance requirement.

MAD/AY
cc. Bob Katai



County of Fairfax, Virginia

DATE: July 14, 2014

TO: Bobby Katai, 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 Application Analysis

REFERENCE: Application No. SE 2014-DR-033 (Krishna R. Murthy)

After reviewing the application, we have only one comment to be considered. Health Department records indicate that there is an existing well located on the property at 8512 Lewinsville Rd, McLean, Va 22102. According to records the dwelling is connected to the public water supply.

The owner needs to contact the Health Department concerning the existing well and either request the well be used for irrigation purposes or the well must properly be abandoned under a permit issued from the Health Department.

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



9-006 General Standards

In addition to the specific standards set forth hereinafter with regard to particular special exception uses, all such uses shall satisfy the following general standards: SPECIAL EXCEPTIONS 9-9

1. The proposed use at the specified location shall be in harmony with the adopted comprehensive plan.
2. The proposed use shall be in harmony with the general purpose and intent of the applicable zoning district regulations.
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.
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.
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.
6. Open space shall be provided in an amount equivalent to that specified for the zoning district in which the proposed use is located.
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.
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.

PART 6 9-600 CATEGORY 6 MISCELLANEOUS PROVISIONS REQUIRING BOARD OF SUPERVISORS' APPROVAL

9-607 Provisions for Uses in a Floodplain

The Board may approve a special exception for the establishment of a use in a floodplain in accordance with the provisions of Part 9 of Article 2.

PART 9 2-900 FLOODPLAIN REGULATIONS

2-901 Purpose and Intent

In furtherance of the zoning powers, purposes and jurisdictions provided for by Sections 15.2-2280, 15.2-2283 and 15.2-2284, Code of Virginia, 1950, as amended, and in furtherance of the County's participation in the National Flood Insurance Program authorized under the National Flood Insurance Act of 1968, as amended (42 U.S.C. § 4001 et seq.), these regulations are created 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.

2-902 Administration

1. The provisions of this Part shall apply to all land within a floodplain. The floodplain limits shown on the Zoning Map shall be used as a guide; provided, however, that only those land areas which meet the definition of floodplain shall be subject to the provisions of this Part.
2. The Director shall be responsible for the administration of this Part. He shall review all proposed uses and development to determine whether the land on which the proposed use or development is located is in a floodplain. The Director may, in appropriate cases, require information from the applicant, including, but not limited to, an engineering study of the floodplain. Upon a determination that the land on which the proposed use or development is located is in a floodplain, he shall determine whether such use or development may be permitted in accordance with the provisions of Sect. 903 below or requires the approval of a special exception as set forth in Sect. 904 below.
3. Any decision of the Director or Board regarding a use in a floodplain shall be based on consideration of at least all of the following factors:
 - A. Type and location of proposed structure and/or use
 - B. Access to site

- C. Frequency and nature of flooding
 - D. Nature and extent of any proposed grading or fill
 - E. Impact of proposal on the floodplain on properties upstream and downstream
 - F. Potential of proposal to cause or increase flooding or to jeopardize human life
 - G. Impact of the proposed use on the natural environment and on water quality
4. The Director shall collect and maintain all records necessary for the County's participation in the National Flood Insurance Program. Base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six (6) months after the date such information becomes available, the Director or designee shall notify the Federal Insurance Administrator or require the applicant to notify the Federal Insurance Administrator of any change in base flood elevation in any Special Flood Hazard Area (SFHA) depicted on the County's Flood Insurance Rate Map (FIRM) by submitting technical and scientific data to the Federal Emergency Management Agency (FEMA) for a Letter of Map Revision.
 5. The degree of flood protection required by these regulations, the Virginia Uniform Statewide Building Code, and the Public Facilities Manual is considered reasonable for regulatory purposes. Larger floods may occur on rare occasions or flood heights may be increased by man-made or natural causes, such as bridge openings restricted by debris. Therefore, these regulations do not imply that areas outside the floodplain areas, or land uses permitted within such areas, will be free from flooding and flood damages under all conditions. Additionally, the granting of a permit or approval of a site, subdivision, or land development plan in an identified floodplain area shall not constitute a representation, guarantee, or warranty of any kind by any official or employee of the County of the practicability or safety of the proposed use, and shall create no liability upon the County, its officials or employees.

2-903 Permitted Uses

Except as provided in Par. 10 below for cluster subdivisions, the following uses and topographic improvements, as qualified, may be permitted in a floodplain upon a determination by the Director that such use is permitted in the zoning district in which located, and that the use is in accordance with the provisions of this Part and the standards and criteria set forth in the Public Facilities Manual. Any such approval by the Director shall be in writing and shall specify such conditions deemed necessary to ensure that the proposed construction and resultant use conform to the provisions of this Part.

Any use, including associated fill, permitted in the zoning district in which located, which does not meet the qualifications set forth below as determined by the Director, may be permitted upon the approval of a special exception by the Board.

1. Any use within a minor floodplain. As set forth in the definition of floodplain, a minor floodplain is a floodplain which has a drainage area greater than 70 acres but less than 360 acres.
2. Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, viticulture, truck farming, forestry, sod farming, and wild crop harvesting; provided, however, that such use does not require the approval of a Building Permit or require major fill. All uses permitted by this paragraph shall be operated in accordance with a conservation plan prepared in accordance with the standards of the Northern Virginia Soil and Water Conservation District.
3. Residential uses accessory to single family detached and attached dwellings such as play areas, lawns, paved tennis or play courts, trails, gardens, patios, decks and docks, which do not require major fill and accessory structures such as children's playhouses, doghouses, storage structures and other similar structures which do not require approval of a Building Permit or require major fill. All structures shall be anchored to prevent flotation.
4. Community, commercial and public recreational uses such as golf courses, driving ranges, archery ranges, picnic grounds, boat launching ramps, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, and hiking, bicycle and equestrian trails. This paragraph shall not be deemed to permit any paved tennis or play court exceeding 5000 square feet in area, swimming pool, or any use requiring the approval of a Building Permit or requiring major fill.
5. Off-street parking and loading areas including aisles and driveways which do not exceed 5000 square feet in area, which will have one (1) foot or less depth of flooding and which will not require major fill.
6. Metrorail, railroad track and roadway floodplain crossings meeting WMATA, VDOT and/or Fairfax County design requirements and where any additional rise in water surface will not have an adverse effect upon the floodplain and/or will be set aside in an easement. A stream channel relocation proposed in conjunction with a crossing shall be subject to the provisions of the Public Facilities Manual.
7. Public and private utility lines, and all public uses and public improvements performed by or at the direction of the County, or as may be required by County ordinances, to include but not to be limited to channel improvements and erosion control, reservoirs, storm water management and best management practice facilities and similar uses provided the installation of such facilities is accomplished with appropriate easements or agreements and with the minimum disruption necessary to the floodplain.
Notwithstanding the above, ponds, reservoirs, storm water management and best management practice (BMP) facilities in floodplains which have a drainage area of 360 acres or greater and which are designed to serve a specific private development

may be permitted only upon the approval of a special exception by the Board in accordance with the provisions of this Part.

8. Permitted accessory structures, other than those specified in Par. 3 above, and additions to single family detached and attached dwellings constructed prior to August 14, 1978, subject to the following conditions:
 - A. The estimated cost of the addition or accessory structure is less than fifty (50) percent of the market value as determined by the Department of Tax Administration of the existing structure.
 - B. The lowest part (i.e., the bottom of the floor joists or top of a concrete slab on grade) of the lowest floor including basement of any such structure may be constructed less than eighteen (18) inches above the 100-year flood level provided it is determined that there is less than one (1) percent chance of flooding the structure in any given year, i.e., the structure is higher than the 100-year flood level.
 - C. The lowest part of the lowest floor of any accessory structure not meeting the requirements of Par. 8B above may be constructed below the base flood elevation provided the following standards are met:
 - (1) The size of the accessory structure shall not exceed 1000 square feet of gross floor area.
 - (2) The accessory structure shall only be used for parking and/or storage purposes.
 - (3) The accessory structure shall be constructed using flood damage resistant materials and all interior walls and floors shall be constructed using unfinished material.
 - (4) The accessory structure shall be anchored and floodproofed in accordance with the Virginia Uniform Statewide Building Code.
 - (5) Any mechanical, electrical and utility equipment in the accessory structure must be elevated to or above the base flood elevation.
 - D. As may be required by the Director, the applicant and owners shall sign a "hold harmless" agreement holding Fairfax County harmless from all adverse effects which may arise as a result of the construction and establishment of the proposed use within the floodplain. Such an agreement shall be recorded among the land records of Fairfax County.
9. Topographic improvements which do not require major fill.
10. For cluster subdivisions in the R-2 District and cluster subdivisions in the R-3 and R-4 Districts which have a minimum district size of three and one-half (3.5) acres or greater, only the following uses and improvements may be permitted by the Director, provided that the encroachments for such uses and improvements are the minimum necessary and are provided in a manner that minimizes disturbance to the floodplain to the greatest practical extent:
 - A. Driveways that do not exceed 5000 square feet in area and will not require major fill.
 - B. Extension of or connection to existing public and private utilities.

- C. Trails depicted on the comprehensive plan trails map and/or trails connecting to trails depicted on the comprehensive plan trails map.
- D. Channel improvements and erosion control measures performed by or at the direction of the County or as may be required by County ordinances.
- E. Regional stormwater management facilities included in the regional stormwater management plan.
- F. Roadway floodplain crossings, as qualified by Par. 6A above.

For the purpose of this Section, major fill shall be deemed to be any fill, regardless of amount, in an area greater than 5000 square feet or any fill in excess of 278 cubic yards in an area of 5000 square feet or less. The combined and cumulative area of any fill and pavement permitted under Paragraphs 2, 3, 4, 5 and 9 of this Section shall not exceed an area of 5000 square feet for all uses on a lot.

In addition, the provisions set forth above which exclude uses requiring a Building Permit shall not apply when such Building Permit is required for structures such as retaining walls, fences, ramps or trail bridges.

2-904 Special Exception Uses

1. All uses permitted by right, special permit or special exception in the zoning district in which located that are not approved by the Director under the provisions of Sect. 903 above may be permitted upon the approval of a special exception by the Board. Such special exception may be permitted subject to conformance with the provisions of this Part, the applicable special permit or special exception standards, the Purpose and Intent of the Zoning Ordinance, and the standards and criteria set forth in the Public Facilities Manual. Uses permitted by special permit or special exception shall be subject to their respective fees in addition to the fee for a Category 6 special exception use.
2. In addition to the submission requirements for all special exception uses set forth in Sect. 9-011, the following information shall be submitted for all Category 6 special exception applications for uses in a floodplain:
 - A. The following shall be shown and certified on the plat provided with the application:
 - (1) The delineation of the floodplain and the source of floodplain information, such as Federal Emergency Management Agency, USGS, Fairfax County, or other.
 - (2) Existing and proposed topography with a maximum contour interval of two (2) feet.
 - (3) Both normal and emergency ingress and egress from highway or street.
 - (4) Nature and extent of any proposed fill and any proposed compensatory cut areas with quantities.
 - (5) The location and dimensions of any structure or part thereof that is proposed for location in the floodplain.

- (6) Elevation of the nearest 100-year floodplain, and the exact distance from the structure to the floodplain line at the nearest point.
- (7) Lowest floor elevation, including basement, of all buildings, existing and proposed, and information relative to compliance with Federal and State floodproofing requirements.
- B. A written statement providing, in detail, the following information:
 - (1) Any existing or anticipated problems of flooding or erosion in the area of the application and upstream and downstream from the application property.
 - (2) Whether additional Federal and/or State permits are required.
- C. When structures are proposed to be erected, the following information shall be submitted:
 - (1) The proposed use of the structure.
 - (2) A statement certifying all floodproofing proposed, and indicating its compliance with all County, State and Federal requirements. This certification must be signed, sealed, and indicate the address of the certifying professional and it must cover all structural, electrical, mechanical, plumbing, water and sanitary facilities connected with the use.
 - (3) Acknowledgment, signed by the applicant, that the applicant is aware that flood insurance may be required by the applicant's lending institution and that the flood insurance rates may increase because of increases in risks to life and property.
- D. Any additional information as may be deemed necessary by the Director, to include but not be limited to an engineering study or detailed calculation on any proposed drainage improvement.

2-905 Use Limitations

All permitted uses and all special exception uses in a floodplain shall be subject to the following 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.
2. The lowest part (i.e., the bottom of the floor joists or top of a concrete slab on grade) of the lowest floor including basement of any new or substantially improved dwelling including manufactured homes and, except as may be permitted by Par. 8 of Sect. 903 above, any proposed addition to an existing dwelling shall be eighteen (18) 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
3. All uses shall be subject to the provisions of Par. 1 of Sect. 602 above.

4. No structure or substantial improvement to any existing structure shall be allowed unless adequate floodproofing as required herein or under the Virginia Uniform Statewide Building Code is provided.
5. To the extent possible, stable vegetation shall be protected and maintained in the floodplain.
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.
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.
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, Article 15 of this Ordinance and the requirements of Par. 2 above.
9. Nothing herein shall be deemed to preclude public uses and public improvements performed by or at the direction of the County.
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.
11. All uses and activities shall be subject to the provisions of Chapter 118 of The Code.
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.
13. The construction of all buildings and structures shall be subject to the requirements of the Virginia Uniform Statewide Building Code.
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.

A recreational vehicle shall be deemed ready for highway use if it is on wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

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.
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.
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.

2-906 Definitions

The definitions listed below shall only be used in the interpretation and administration of this Part.

BASE FLOOD: A flood having a one (1) percent chance of being equaled or exceeded in any given year.

BASE FLOOD ELEVATION: The Federal Emergency Management Agency designated water surface elevation of a flood having a one (1) percent chance of being equaled or exceeded in any given year shown on the FLOOD INSURANCE RATE MAP.

BASEMENT: Any area of the building having its floor below grade (below ground level) on all sides.

DEVELOPMENT: Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

FLOOD OR FLOODING:

1. A general or temporary condition of partial or complete inundation of normally dry land areas from:
 - A. The overflow of inland or tidal waters; or
 - B. The unusual and rapid accumulation or runoff of surface waters from any source.
 - C. Mudflows which are proximately caused by flooding as defined in Par. 1B above and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in Par. 1A above.

FLOOD INSURANCE RATE MAP (FIRM): An official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been produced and made available digitally is also commonly called a Digital Flood Insurance Rate Map (DFIRM). The official FIRM for Fairfax County shall be the FIRM/DFIRM prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated September 17, 2010, as amended.

FLOOD INSURANCE STUDY (FIS): An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood-related erosion hazards. The official FIS for Fairfax County shall be the FIS prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated September 17, 2010, as amended.

FLOOD PROOFING: Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

HISTORIC STRUCTURE: Any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the

Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or,
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - A. By an approved state program as determined by the Secretary of the Interior; or,
 - B. Directly by the Secretary of the Interior in states without approved programs.

LOWEST FLOOR: The lowest floor of the lowest enclosed area (including BASEMENT). An unfinished or flood-resistant enclosure, usable solely for building access in an area other than a basement area is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of 44 CFR §60.3.

MANUFACTURED HOME: A structure, transportable in one or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes a MANUFACTURED HOME shall also include park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. A MANUFACTURED HOME shall not be deemed to include a RECREATIONAL VEHICLE.

NEW CONSTRUCTION: For the purposes of determining insurance rates, structures for which the START OF CONSTRUCTION commenced on or after the effective date of an initial FLOOD INSURANCE RATE MAP or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, NEW CONSTRUCTION shall include structures for which the START OF CONSTRUCTION commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

RECREATIONAL VEHICLE: A vehicle that:

1. Is built on a single chassis;
2. Contains 400 square feet or less when measured at the largest horizontal projection;
3. Is designed to be self-propelled or permanently towable by a light duty truck; and,
4. Is designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel, or seasonal use.

SPECIAL FLOOD HAZARD AREA: The land in the floodplain subject to a one (1) percent or greater chance of being flooded in any given year as designated on the official FLOOD INSURANCE RATE MAP for Fairfax County.

START OF CONSTRUCTION For other than NEW CONSTRUCTION and SUBSTANTIAL IMPROVEMENT, under the Coastal Barriers Resource Act (P.L. – 97-348), START OF CONSTRUCTION shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of the construction shall mean the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

STRUCTURE: For flood plain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home or other structure as defined in Article 20. STRUCTURE for insurance coverage purposes, shall mean:

1. A building with two (2) or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;
2. A MANUFACTURED HOME; or
3. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws.

For insurance coverage purposes, STRUCTURE shall include a RECREATIONAL VEHICLE, a park trailer or other similar vehicle, except as described in Par. 3 of this definition, or a gas or liquid storage tank.

SUBSTANTIAL DAMAGE: Damage of any origin sustained by a STRUCTURE whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty (50) percent of the market value of the structure before the damage occurred.

SUBSTANTIAL IMPROVEMENT: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the START OF CONSTRUCTION of the improvement. SUBSTANTIAL IMPROVEMENT shall include structures that have

incurred SUBSTANTIAL DAMAGE regardless of the actual repair work performed. SUBSTANTIAL IMPROVEMENT shall not, however, include either:

1. Any project for improvement of a STRUCTURE to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
2. Any alteration of a HISTORIC STRUCTURE, provided that the alteration will not preclude the structure's continued designation as an HISTORIC STRUCTURE.

VIOLATION: See Par. 1 of Sect. 18-901. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR § 60.3(b)(5), (c)(4), or (c)(10) shall be presumed to be in violation until such time as that documentation is provided.

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