



County of Fairfax, Virginia

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

RECEIVED
Department of Planning & Zoning

JAN 08 2015

Zoning Evaluation Division

December 3, 2014

Blagoj Skandev
5315 Ox Road
Fairfax, VA 22030

RE: Rezoning Application RZ 2014-BR-001

Dear Mr. Skandev:

Enclosed you will find a copy of an Ordinance adopted by the Board of Supervisors at a regular meeting held on December 2, 2014, granting Rezoning Application RZ 2014-BR-001 in the name of Blagoj Skandev/SD Homes LLC. The Board's action rezones certain property in the Braddock District from the R-1 District to the R-3 District to permit residential development with a total density of 2.06 dwelling units per acre (du/ac). The subject property is located on the E. side of Twinbrook Road approximately 900 feet S. of its intersection with Braddock Road, on approximately 42,209 square feet of land, [Tax Map 69-3 ((1)) 31], subject to the proffers dated November 20, 2014.

The Board also:

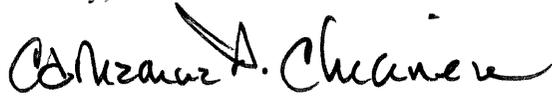
- Waived the location requirements of bio-retention facilities, pursuant to Section 6-1307 of the Public Facilities Manual to allow infiltration trenches to be located on individual lots, provided that a private maintenance agreement, in a form acceptable to the County Attorney's Office is completed for each lot

Office of the Clerk to the Board of Supervisors
12000 Government Center Parkway, Suite 533
Fairfax, Virginia 22035

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Email: clerktothebos@fairfaxcounty.gov
<http://www.fairfaxcounty.gov/bosclerk>

- Approved a deviation of the Tree Preservation Target, pursuant to Section 12-0508 of the Public Facilities Manual, in favor of the alternatives, as shown on the proposed plan and as conditioned

Sincerely,



Catherine A. Chianese
Clerk to the Board of Supervisors

Cc: Chairman Sharon Bulova
Supervisor John Cook, Braddock District
Tim Shirocky, Acting Director, Real Estate Division, Dept. of Tax Administration
Barbara Berlin, Director, Zoning Evaluation Division, DPZ
Diane Johnson-Quinn, Deputy Zoning Administrator, Dept. of Planning and Zoning
Thomas Conry, Dept. Manager – GIS - Mapping/Overlay
Michael Davis, Section Chief, Transportation Planning Division
Donald Stephens, Transportation Planning Division
Department of Highways-VDOT
Sandy Stallman, Park Planning Branch Manager, FCPA
Charlene Fuhrman-Schulz, Development Officer, DHCD/Design Development Division
Jill Cooper, Executive Director, Planning Commission
Ajay Rawat, Coordinator, Facilities Planning, Fairfax County Public Schools
Karyn Moreland, Chief Capital Projects Sections, Dept. of Transportation

At a regular meeting of the Board of Supervisors of Fairfax County, Virginia, held in the Board Auditorium in the Government Center at Fairfax, Virginia, on the 2nd day of December, 2014, the following ordinance was adopted:

**AN ORDINANCE AMENDING THE ZONING ORDINANCE
PROPOSAL NUMBER RZ 2014-BR-001**

WHEREAS, Blagoj Skandev (SD Homes LLC), filed in the proper form an application requesting the zoning of a certain parcel of land herein after described, from the R-1 District to the R-3 District, and

WHEREAS, at a duly called public hearing the Planning Commission considered the application and the propriety of amending the Zoning Ordinance in accordance therewith, and thereafter did submit to this Board its recommendation, and

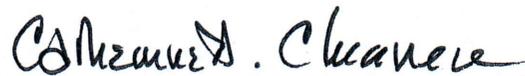
WHEREAS, this Board has today held a duly called public hearing and after due consideration of the reports, recommendation, testimony and facts pertinent to the proposed amendment, the Board is of the opinion that the Ordinance should be amended,

NOW, THEREFORE, BE IT ORDAINED, that that certain parcel of land situated in the Braddock District, and more particularly described as follows (see attached legal description):

Be, and hereby is, zoned to the R-3 District, and said property is subject to the use regulations of said R-3 District, and further restricted by the conditions proffered and accepted pursuant to Va. Code Ann., 15.2-2303(a), which conditions are in addition to the Zoning Ordinance regulations applicable to said parcel, and

BE IT FURTHER ENACTED, that the boundaries of the Zoning Map heretofore adopted as a part of the Zoning Ordinance be, and they hereby are, amended in accordance with this enactment, and that said zoning map shall annotate and incorporate by reference the additional conditions governing said parcel.

GIVEN under my hand this 2nd day of December, 2014.



Catherine A. Chianese
Clerk to the Board of Supervisors

PROFFER STATEMENT

November 20, 2014

RZ 2014-BR-001
Blagoj Skandev/SD Homes, LLC

Pursuant to Section 15.2-2303(A), Code of Virginia, 1950 as amended, the undersigned Owner/Applicant, in this rezoning proffers that the development of the parcel under consideration and shown on the Fairfax County Tax Map as Tax Map Reference 69-3 ((1)) 31 (hereinafter referred to as the "Property") will be in accordance with the following conditions (the "Proffered Conditions"), if and only if, said rezoning request for the R-3 Zoning District is granted. In the event that said rezoning request is denied, these Proffered Conditions shall be null and void. The Owner/Applicant, for themselves, their successors and assigns hereby agree that these Proffered Conditions shall be binding on the future development of the Property unless modified, waived or rescinded in the future by the Board of Supervisors of Fairfax County, Virginia, in accordance with applicable County and State statutory procedures. The Proffered Conditions are:

1. Substantial Conformance. Development of the Property shall be in substantial conformance with the Generalized Development Plan (GDP) titled "Twinbrook Road Subdivision" prepared by GeoEnv Engineers & Consultants, LLC, dated November 20, 2014, consisting of 16 sheets. A maximum of two single family detached dwelling units shall be constructed on the Property.
2. Minor Modifications. Pursuant to Paragraph 5 of Section 18-204 of the Zoning Ordinance, minor modifications from the GDP may be permitted when it is determined by the Zoning Administrator that such modifications are in substantial conformance with the GDP.
3. Architectural Design. The building materials shall be any combination of brick, stone, cementations siding and stucco supplemented with trim and detail features. Dwellings shall incorporate a brick, stone or stucco water table on all facades visible from public streets.
4. Universal Design. At the time of initial purchase, the Applicant shall offer each purchaser the following universal design options at no additional cost:
 - A. Front entrance doors that are a minimum of 36 inches wide;
 - B. Clear knee space under the sink in the kitchen;
 - C. Level door handles instead of knobs;
 - D. Light switches 44-48 inches high;
 - E. Thermostats a maximum of 48 inches high; and
 - F. Electrical outlets a minimum of 18 inches high.

At the time of initial purchase, the Applicant shall offer each purchaser additional universal design options at the purchaser's sole cost. These additional options may include, but not be limited to:

- G. Step-less entry from the garage to the house and/or into the front door;
 - H. A curb-less shower, or a shower with a curb of less than 4.5" high;
 - I. A turning radius of five feet near the first floor bathroom commode;
 - J. Grab bars in the bathrooms that are ADA compliant; and
 - K. A first-floor bathroom console sink in lieu of a cabinet-style vanity.
5. Right-of-Way Dedication. As a part of subdivision approval, the applicant shall dedicate and convey without encumbrances in fee simple, to the Board of Supervisors, right-of-way along Twinbrook Road (Rt. 652), such that the half-section, as measured from the centerline, shall equal 44 feet.
 6. Twinbrook Road Improvements. The Applicant shall provide roadway improvements generally as shown on the GDP, including a one-foot wide asphalt shoulder, a gravel shoulder a minimum of eight feet to eleven feet wide, a ditch for the conveyance of stormwater, and a five-foot wide concrete sidewalk.
 7. Sight Distance. The driveway locations shall provide adequate sight distances as shown on the GDP for entering the public street. Vegetation across the site frontage shall be trimmed or removed to eliminate sight line obstructions.
 8. Sidewalk. A concrete sidewalk a minimum of five feet wide shall be constructed by the applicant within the area to be dedicated as right-of-way along Twinbrook Road. The eastern edge of the sidewalk shall generally be located approximately one (1) foot from and parallel to the proposed eastern limit of the right-of-way, in accordance with Virginia Department of Transportation ("VDOT") roadway design standards, with the final location of the sidewalk to be determined during site plan review, as approved by the Department of Public Works and Environmental Services ("DPWES") and VDOT. The Applicant shall extend the concrete sidewalk to the south to connect with the existing concrete apron along the Twinbrook Road frontage of Tax Map 69-3 ((10)) 38; and the applicant shall cooperate and coordinate with the adjoining property owner of Tax Map 69-3 ((1)) 29A regarding the sidewalk location at the common property line to the north and the clearing and grading necessary to construct the facility. The applicant shall minimize the clearing and grading needed to provide a sidewalk and shall effectuate a grading transition between the properties.
 9. Construction Hours. Construction shall occur only between the hours of 7:00 a.m. until 7:00p.m., Monday through Friday, and 9:00a.m. until 6:00 p.m., Saturday and Sunday. Construction activities shall not occur on the holidays of New Year's Day, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The allowable hours of construction as specified in this proffer shall be listed within any contract with future sub-contractors associated with initial construction on the site.
 10. Stormwater Management.

- A. Best Management Practice ("BMP") measures for the Property shall be provided as shown on the GDP. The SWM and BMP measures shall be developed in accordance with the PFM, unless waived or modified by DPWES. The stormwater management system shall be reviewed for adequacy by DPWES at the time of subdivision plan review; if any inadequacies are identified, appropriate corrective measures in substantial conformance with the GDP shall be employed to the satisfaction of DPWES, prior to final subdivision plan approval.
- B. Maintenance of the SWM facilities shall be the responsibility of the Applicant and the successor owners.
- C. Prior to entering into a contract of sale, prospective purchasers shall be notified in writing by the Applicant of the maintenance responsibility for the storm water management facilities and shall acknowledge receipt of this information in writing.
- D. The Applicant shall provide the owners with written materials describing proper maintenance of the approved BMP facilities.
- E. Should future County policy permit all or part of the SWM facilities on the Property to be eligible for County maintenance, then the Applicant or the successor owners may request County maintenance of eligible facilities.

11. Energy Conservation.

Dwelling units on the Property shall be constructed to achieve one of the following programs, the selection of which shall be determined by the Applicant:

- A. Certification in accordance with the 2012 National Green Building Standard (NGBS) using the ENERGY STAR® (version 3.0) Qualified Homes path for energy performance, as demonstrated through a preliminary report submitted to the Environment and Development Review Branch of the Department of Planning and Zoning (DPZ) prior to the issuance of the Residential Use Permit (RUP) for each dwelling from a home energy rater certified through the Home Innovation Research Labs that demonstrates that each dwelling unit has attained the certification and a final report submitted to DPZ within thirty (30) days after the issuance of the RUP of each dwelling; or
- B. 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 each dwelling.

12. Landscape Plan. As part of the subdivision plan submission, the Applicant shall submit to Urban Forest Management Division ("UFMD"), DPWES for review and approval a detailed landscape and tree cover plan which shall, at a minimum, be generally consistent with the quality and quantity of plantings and materials shown on the GDP. The landscape plan shall be designed to ensure adequate planting space for all trees based on the requirements in the Public Facilities Manual ("PFM"). Plantings shall include only non-invasive species and, to the extent practical, plant species native to Fairfax County. Adjustments to the type and location of vegetation and the design of landscaped areas and streetscape improvements/plantings shall be permitted as approved by UFMD.

13. Tree Preservation: The applicant shall submit a Tree Preservation Plan and Narrative as part of the first and all subsequent site plan submissions. The preservation plan and narrative shall be prepared by a Certified Arborist or a Registered Consulting Arborist, and shall be subject to the review and approval of UFMD. The tree preservation plan shall include a tree inventory that identifies the location, species, critical root zone, size, crown spread and condition analysis percentage rating for all individual trees to be preserved, as well as all on and off-site trees, living or dead with trunks 12 inches in diameter and greater (measured at 4½-feet from the base of the trunk or as otherwise allowed in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture) located within 25 feet to either side of the limits of clearing and grading. 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 GDP and those additional areas in which trees can be preserved as a result of final engineering.

14. Tree Preservation Walk-Through. The Applicant shall retain the services of a certified arborist or Registered Consulting Arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an UFMD representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented.

Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.

15. Limits of Clearing and Grading. The Applicant shall conform strictly to the limits of clearing and grading as shown on the GDP, subject to allowances specified in these proffered 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 in areas protected by the limits of clearing and grading as shown on the GDP, they shall be located in the least disruptive manner necessary as determined by UFMD. A replanting plan shall be developed and implemented, subject to approval by UFMD for any areas protected by the limits of clearing and grading that must be disturbed for such trails or utilities.

16. Tree Preservation Fencing. All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fencing. Tree protection fencing to 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 demolition, and phase I and II erosion and sediment control sheets,

as may be modified by the "Root Pruning" proffer 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 supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved.

17.

Root

Pruning. The Applicant shall root prune, as needed to comply with the tree preservation requirements of these proffers. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the subdivision plan submission. The details for these treatments shall be reviewed and approved by UFMD, 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; and
- An UFMD representative shall be informed when all root pruning and tree protection fence installation is complete.

18. Site Monitoring. During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as proffered and as approved by UFMD. The Applicant shall retain the services of a certified arborist or Registered Consulting Arborist to monitor the tree preservation efforts in order to ensure conformance with all tree preservation development.

19. Mulching. The Applicant shall mulch to a depth of three to four (3-4) inches within the areas to be left undisturbed within 25 feet of the limits of clearing and grading where soil conditions are poor, lacking leaf litter, or prone to soil erosion. Areas to be mulched shall be clearly identified on the Tree Preservation Plan.

All areas to be mulched shall be accessed in a manner that protects adjacent trees and vegetation that are required to be preserved. Access and the application of mulch shall conform to the following Specifications:

- Mulch may be placed within tree protection areas at points designated by the Project Arborist to minimize impacts to existing vegetation;
- Motorized equipment may be used to reach over tree protection fencing to place mulch at designated points;
- Mulch shall be spread by hand within tree preservation areas; and
- Mulch shall consist of wood chips or pine bark mulch. Hay or straw mulch shall not be used within tree preservation areas.

20. Vegetation Management Plan. An invasive and undesirable vegetation management plan shall be developed that provides for the management and treatment of invasive and undesirable plants, growing in all areas shown to be preserved, that are likely to endanger the long-term ecological functionality, health, and regenerative capacity of the early successional forest communities, for review and approval by UFMD. The management plan shall incorporate the following information:

- Targeted invasive plant species to be suppressed and managed;
- Targeted areas of invasive plant management, which shall be clearly identified on the landscape or tree preservation plan;
- Recommended government and industry method(s) of management, i.e. hand removal, mechanical equipment, chemical control, and/or other; potential impacts of recommended method(s) on surrounding trees and vegetation not targeted for suppression/management and methods to protect these trees and vegetation. For example, if mechanical equipment is proposed in a save area, information shall be provided regarding potential impacts to trees identified for preservation and methods to reduce these impacts. If chemical control is recommended, treatments shall be performed by or under direct supervision of a Virginia Certified Pesticide Applicator or Registered Technician and under the general supervision of Project Arborist);
- Disposal methods for the targeted species;
- Information regarding the timing of treatments (including hand removal, removal by mechanical equipment, or chemical treatments), to include the beginning and end of treatments during a season, and the proposed frequency of treatments per season;
- Potential areas of reforestation, if applicable, and recommendations; and
- Monthly monitoring reports, which shall be provided to UFMD and SDID staff.

The invasive management program shall be continued until Bond release or release of the Conservation Deposit, or prior to release if targeted plant(s) appear to be eliminated based on documentation provided by the Project Arborist and an inspection by UFMD staff.

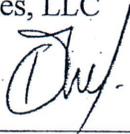
21. Recreation Contribution. The Applicant shall contribute \$2,679 to the Park Authority prior to subdivision plan approval to offset this development's impacts on County Park and Recreation facilities by development of off-site recreational facilities intended to serve the future residents.

22. Public School Contribution. Prior to the issuance of the first building permit, a contribution of \$10,825 shall be made to the Fairfax County School Board to be utilized for capital improvements or capacity enhancements to schools that students generated by the Property will attend. Such contribution shall be made at the time of the first building permit approval for the Property. Following approval of this Application and prior to the Applicant's payment of the contribution, if Fairfax County should increase the ratio of students per unit or the amount of contribution per student, the Applicant shall increase the amount of the contribution for that phase of development to reflect the then-current ratio and/or contribution. If the County should decrease the ratio or contribution amount, the Applicant shall provide the greater of the two amounts.

23. Proffer Notification. The Applicant shall notify the Office of Facilities Planning Services of Fairfax County Public Schools within 30 days of filing a subdivision plan with the County to allow the school system adequate time to plan for anticipated student growth and to ensure classroom availability.
24. Housing Trust Fund. Prior to the issuance of the first RUP, the Applicant shall contribute to the Fairfax County Housing Trust Fund ("HTF") the sum equal to one half percent (1/2%) of the value of one of the units approved at the time of site plan on the Property. The percentage shall be based on the assessed value of the unit subject to the contribution, the sales price of the unit, or an estimate derived from comparable sales of similar type units. The value shall be proposed by the Applicant in consultation with the Fairfax County Department of Housing and Community Development ("HCD") and shall be approved by HCD.
25. Adjustments in Contribution Amounts. For all proffers specifying contribution amounts, with the exception of Proffer 23 related to the public school contribution, the contribution shall adjust on a yearly basis from the base year of 2015 and change effective each January 1 thereafter, based on changes in the Consumer Price Index for all urban consumers ("CPI-U"), (not seasonally adjusted), as reported by the United States Department of Labor, Bureau of Labor Statistics occurring subsequent to the date of final site plan approval and up to the date of payment. In no event shall an adjustment increase exceed the annual rate of inflation as calculated by the CPI-U.
26. Sanitary Sewer Easement. Trees within or immediately adjacent to the off-site sanitary sewer easement located on Tax Map 69-3 ((10)) 41, shall be removed by the applicant, as annotated on the GDP, and the stumps ground, prior to the installation of the sanitary sewer extension. The existing fence on Tax Map 69-3 ((10)) 42 shall be removed prior to the removal of the trees. The area shall be restored, as nearly as possible, to its original condition, such restoration including the backfilling of trenches, the replacement of fences, the resodding of lawns, the mulching of planting areas, and the replacement of shrubbery.
27. Successors and Assigns. These proffers shall bind and inure to the benefit of the Applicant and his/her successors and assigns.

APPLICANT/OWNER OF TAX MAP 069-3 ((1)) 31

SD Homes, LLC



By: Blagoj Skandev
Member/Manager

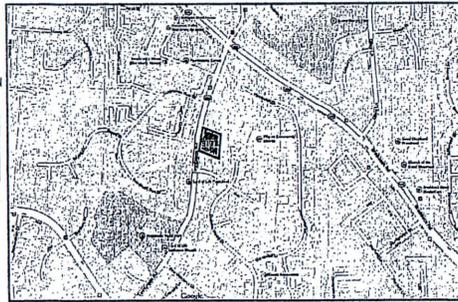
GENERALIZED DEVELOPMENT PLAN (GDP)

FOR

TWINBROOK ROAD SUBDIVISION

Braddock District
Fairfax County, Virginia

PREPARED FOR: SD HOMES, LLC PROPERTY



VICINITY MAP
SCALE: 1" = 500'

SHEET INDEX

1. COVER SHEET
2. NOTES & DETAILS
3. EXISTING VEGETATION MAP & TREE INVENTORY
4. GENERALIZED DEVELOPMENT PLAN (GDP)
5. LANDSCAPE PLAN
6. RECOMMENDED PROFFERS FOR TREE PRESERVATIONS AND DEVIATION LETTER
7. TREE CONSERVATION, PLANTING NOTES AND DETAILS
8. BMP COMPUTATIONS AND SUB-DRAINAGE MAP
9. RUNOFF REDUCTION COMPUTATIONS (LOT 31A)
10. RUNOFF REDUCTION COMPUTATIONS (LOT 31B)
11. BMP NOTES AND DESIGNS, SOIL PROFILE AND INFILTRATION TEST REPORTS (LOT 31A)
12. BMP NOTES AND DESIGNS, SOIL PROFILE AND INFILTRATION TEST REPORTS (LOT 31B)
13. STORMWATER COMPUTATIONS
14. DRAINAGE MAP AND OUTFALL ANALYSIS
15. SIGHT DISTANCE PROFILE
16. PROPOSED DITCH SECTIONS

APPLICANT:

MR. BLAGOJ SKANDEV
SD HOMES, LLC
5315 OX ROAD
FAIRFAX, VA 22032
Tel: 571-201-2330

CIVIL ENGINEER:



GeoEnv Engineers
& Consultants, LLC.

Civil, Environmental & Geotechnical Engineering
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Fax: 703.591.7074
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Fax: 703.591.7074
Web Site: www.geoenv1.com

NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE



COVER SHEET
PROPOSED LOTS 31A & 31B
SUBDIVISION OF LOT 31
5015 TWINBROOK ROAD, BURKE
BRADDOCK DISTRICT
FAIRFAX COUNTY, VA 22015

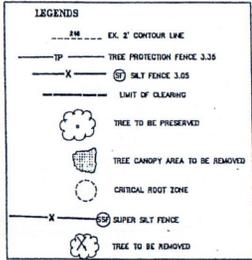
TAX MAP:	69-3-((01))-31
DATE:	NOV. 20, 2014
PREP. BY:	BISHESH
CHECKED BY:	ABE
PROJECT #	2013-5634
SCALE:	N/A
SHEET:	1 OF 16

EXISTING VEGETATION SUMMARY						
KEY	COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGE	CONDITION	AREA (SF)	COVER TYPE DESCRIPTION
A	Open Field	N/A	N/A	FAIR	18,340	THIS COVER TYPE CONTAINS LOW SHRUBS AND GRASS ON THE PROPERTY. THE CONDITION OF THE LAWN IS IN FAIR TO POOR CONDITIONS.
B	Upland Forest	Oak (Quercus), Hickory (Coryca), Yellow-Poplar (Liriodendron tulipifera), Virginia Pine (Pinus virginiana)	Post-Climax	Fair-Good	23,869	The lot contains majority of Low shrubs and grass on the property. Most of these trees are located on the front western side of the property and majority of these trees will be removed.
TOTAL					42,209 SF	

EXISTING CANOPY AREA TABULATIONS:
 SITE AREA: 0.989 ACRES OR 42,209 SQ FT
 ZONE: R-1
 TOTAL CANOPY AREA COMPUTATIONS:
 EXISTING ON-SITE CANOPY AREA:
 =TCSA1+TCSA2+TCSA3=(374+22,719+779)SQ FT=23,869 SQ FT
 TREE TO BE REMOVED-TCSA1+TCSA2=23,492 SQ FT
 TREE TO REMAIN-TCSA3=374 SQ FT
 (OFF-SITE TREE CANOPY AREA IS NOT CREDITED)
 CANOPY AREA MEETING 12-400.0 STANDARDS=374 SQ FT

EXISTING SITE CONDITION:
 THE LOT CONTAINS ABOUT 42,209 SQ FT OF TOTAL LAND AREA AND IS ZONED R-1. THE SIZE AND CONDITION OF ALL THE TREES WITHIN THE LOT AND OFFSITE AREA (WITHIN 25 FEET FROM THE OUTSIDE PERIMETER OF THE LOT) AND THEIR CANOPY LIMIT ARE SHOWN AND PROVIDED ON THE TABULAR FORM ON THIS SHEET.

ACCORDING TO THE CANOPY AREA DELINEATION, THE LOT CONTAINS ABOUT 23,869 SQ FT OF TOTAL LAND AREA THAT IS COVERED WITH EXISTING ON-SITE TREE CANOPY AND THE REMAINING PART OF THE LOT IS COVERED WITH THE MAINTAINED GRASS AREA. TOTAL OF 374 SF OF ON-SITE TREE CANOPY AREA SHALL BE PRESERVED AND WILL BE CREDITED FOR TREE CANOPY CALCULATION. FOR PROPOSED TREE COVER COMPUTATIONS AND NEW PLANTINGS, PLEASE REFER TO TREE LANDSCAPE PLAN. BEFORE START OF CONSTRUCTION OR DEMOLITION WORK, TREE PROTECTION FENCE AS SHOWN ON THE PLANS SHALL BE INSTALLED AS APPROVED BY COUNTY INSPECTOR. MALCHING PAD OR ROOT PRUNING WILL BE PROVIDED IF REQUIRED, TO PROTECT ROOT ZONES OF THE TREES TO BE SAVED.

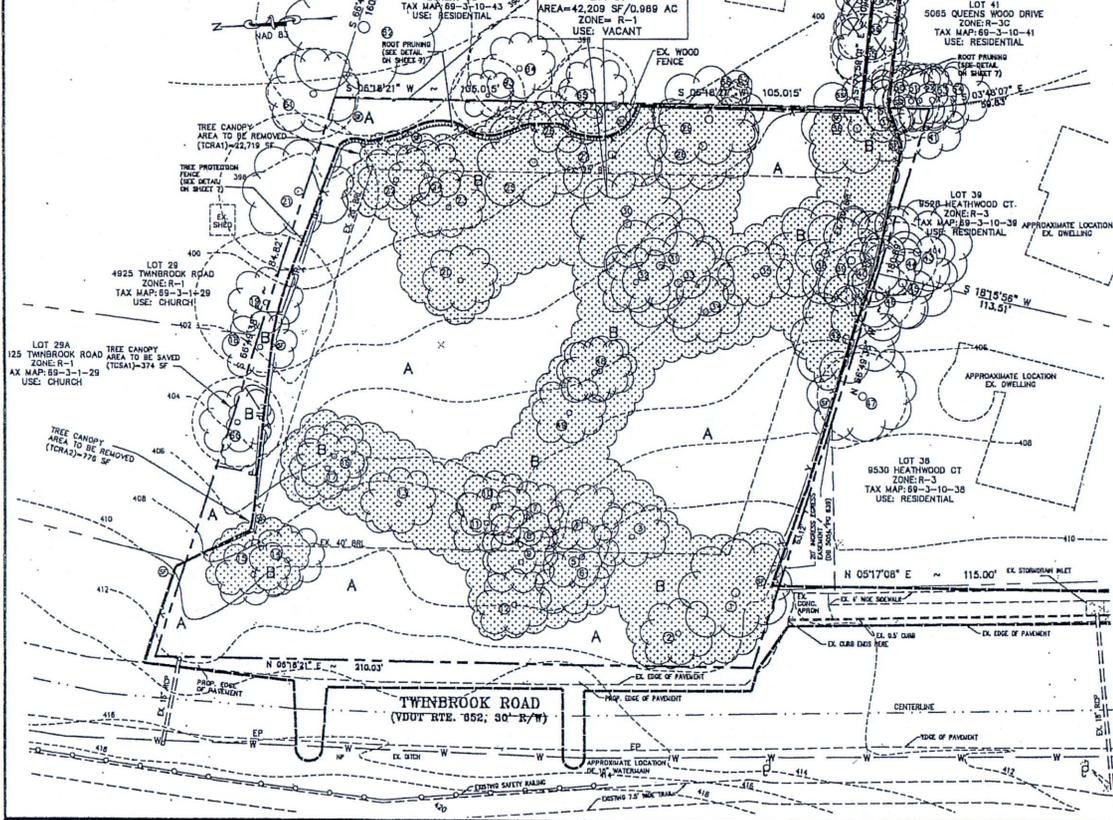


EXISTING TREE INVENTORY:

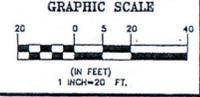
Tree ID	DBH (Diameter at 4.5 feet above ground)	Common Name	Condition Rating	Critical Zone (Radius in Feet)	Remove	Preserve	Malch	Root Prune	Remarks
1	34"	Red Maple	Fair	30"	X				Remove. Cannot survive the construction (Many Broken Branches)
2	24"	Red Maple	Fair	24"	X				Remove. Cannot survive the construction
3	48"	Red Maple	Fair/Good	40"	X				Remove. Cannot survive the construction (Dead Gray/Space of One leaf of multilined tree)
4	13"	Tulip Poplar	Fair	12"	X				Remove. Cannot survive the construction
5	15"	Tulip Poplar	Fair	15"	X				Remove. Cannot survive the construction
6	11"	Tulip Poplar	Fair	11"	X				Remove. Cannot survive the construction
7	14"	Tulip Poplar	Fair	14"	X				Remove. Cannot survive the construction
8	11"	Tulip Poplar	Fair	11"	X				Remove. Cannot survive the construction
9	16"	Tulip Poplar	Fair	16"	X				Remove. Cannot survive the construction
10	15"	Black Locust	Fair/Good	15"	X				Remove. Cannot survive the construction
11	24"	Tulip Poplar	Fair/Good	24"	X				Remove. Cannot survive the construction
12	15"	Tulip Poplar	Fair	15"	X				Remove. Cannot survive the construction (Messy Decay & structural issues)
13	15"	Tulip Poplar	Fair/Good	15"	X	X	X	X	Run all measures as mentioned in Phase I
14	38"	Tulip Poplar	Fair/Good	30"	X	X	X	X	Run all measures as mentioned in Phase I (Thin Trunk)
15	15"	Tulip Poplar	Fair	15"	X				Remove. Cannot survive the construction
16	21"	Black Locust	Fair	21"	X				Remove. Cannot survive the construction
17	15"	Tulip Poplar	Fair	15"	X				Remove. Cannot survive the construction
18	20"	Red Maple	Fair	20"	X				Remove. Decay at Base. Remove Thin Trunk
19	22"	Black Cherry	Fair	20"	X	X	X	X	Aggrading Tree. Run all measures as mentioned in Phase I
20	22"	Tulip Poplar	Fair/Good	22"	X				Remove. Cannot survive the construction
21	24"	Tulip Poplar	Fair/Good	24"	X	X	X	X	Offsite Tree. Run all measures as mentioned in Phase I
22	14"	Tulip Poplar	Fair	14"	X				Remove. Cannot survive the construction
23	28"	Tulip Poplar	Fair/Good	20"	X				Remove. Cannot survive the construction
24	18"	Tulip Poplar	Fair/Good	18"	X				Remove. Cannot survive the construction
25	14"	Tulip Poplar	Fair/Good	14"	X				Remove. Cannot survive the construction
26	22"	Tulip Poplar	Fair/Good	22"	X				Remove. Cannot survive the construction
27	46"	Black Cherry	Fair	40"	X				Remove. does not survive construction, Broken Storm Damage Lead, lost a lot of canopy
28	22"	Tulip Poplar	Fair/Good	22"	X				Remove. Cannot survive the construction
29	17"	Tulip Poplar	Fair/Good	17"	X				Remove. Cannot survive the construction
30	25"	Tulip Poplar	Fair/Good	25"	X				Remove. Cannot survive the construction
31	15"	White Pine	Fair	25"	X				Remove. Cannot survive the construction
32	14"	Walnut	Fair	14"	X				Remove. Cannot survive the construction
33	12"	Norway Spruce	Fair/Good	12"	X				Remove. Cannot survive the construction
34	13"	Walnut	Fair	12"	X				Remove. Cannot survive the construction
35	23"	Red Maple	Fair	23"	X				Remove. Does not survive construction. Thin Trunk/Decay/Recommend Removal
36	23"	Tulip Poplar	Fair/Good	23"	X				Remove. Cannot survive the construction
37	15"	Walnut	Fair	17"	X				Remove. Cannot survive the construction, storm damage
38	27"	Tulip Poplar	Fair/Good	23"	X				Remove. Cannot survive the construction
39	24"	Tulip Poplar	Fair	24"	X				Remove. Cannot survive the construction, storm damage, top half missing
40	11"	Norway Spruce	Fair/Good	11"	X				Remove. Cannot survive the construction
41	-	Frederickson	Fair	-	X				Offsite Tree. Run all measures as mentioned in Phase I
42	13"	Walnut	Fair	12"	X				Remove. Cannot survive the construction
43	16"	Norway Spruce	Fair/Good	15"	X				Offsite Tree. Run all measures as mentioned in Phase I
44	11"	Black Cherry	Fair	10"	X				Offsite Tree. Run all measures as mentioned in Phase I
45	8"	Norway Spruce	Fair/Good	8"	X				Offsite Tree. Run all measures as mentioned in Phase I
46	25"	Red Maple	Fair	25"	X				Offsite Tree. Run all measures as mentioned in Phase I. Multi Lead/Dead leaf dead branches
47	21"	Walnut	Fair	22"	X				Offsite Tree. Run all measures as mentioned in Phase I
48	17"	Tulip Poplar	Fair/Good	17"	X				Remove. Cannot survive the construction
49	14"	Red Maple	Fair	20"	X				Remove. Cannot survive the construction, large broken lead and branches
50	13"	White Pine	Fair/Good	12"	X	X	X	X	Offsite Tree. Run all measures as mentioned in Phase I
51	8"	White Pine	Good	8"	X	X	X	X	Offsite Tree. Run all measures as mentioned in Phase I
52	14"	White Pine	Fair	10"	X				Offsite Tree. Run all measures as mentioned in Phase I
53	7"	White Pine	Poor	7"	X				Offsite Tree. Run all measures as mentioned in Phase I
54	21"	White Pine	Fair/Good	21"	X				Offsite Tree. Run all measures as mentioned in Phase I
55	10"	White Pine	Fair	10"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
56	11"	White Pine	Fair	11"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
57	14"	White Pine	Fair	14"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
58	18"	White Pine	Fair	18"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
59	25"	White Pine	Fair	15"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
60	15"	White Pine	Fair	15"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction
61	18"	Tulip Poplar	Fair	15"	X				Run all measures as mentioned in Phase I
62	16"	Tulip Poplar	Fair/Good	16"	X				Offsite Tree. No Impact of Construction
63	34"	Tulip Poplar	Fair	34"	X				Run all measures as mentioned in Phase I
64	15"	Maple	Fair/Good	13"	X				Offsite Tree. Run all measures as mentioned in Phase I
65	18"	Tulip Poplar	Good	18"	X				Offsite Tree. Run all measures as mentioned in Phase I
66	15"	Maple	Fair/Good	15"	X				Offsite Tree. Run all measures as mentioned in Phase I
67	3"	Decayed	Good	3"	X				Offsite Tree. No Impact of Construction
68	3"	Decayed	Good	3"	X				Offsite Tree. No Impact of Construction
69	15"	Maple	Fair/Good	15"	X				Tree with sanitary sewer asset. Remove. Cannot survive the construction

EVM STATEMENT:
 THE ENTIRE SITE IN ITS EXISTING CONDITION CONSISTS OF ONE COVER TYPE: UPLAND FOREST COMMUNITY TYPE, WHERE POPLARS, MAPLE AND OAKS ARE THE DOMINANT TREE SPECIES. THE EXISTING VEGETATION IS IN GENERALLY FAIR TO GOOD HEALTH CONDITION.

THE SUCCESSIONAL STAGE OF VEGETATION INDICATES A STABLE DECIDUOUS FOREST COMMUNITY.



THIS PLAN IS PREPARED OR APPROVED BY:
 RON RUBIN, ISA CERTIFIED ARBORIST
 #MA-0057A



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 Web: Site: geoenr.com

EXISTING VEGETATION MAP AND TREE INVENTORY
 5015 TWINBROOK ROAD, BURKE
 BRADDOCK DISTRICT
 FAIRFAX COUNTY, VA 22015

TAX MAP: 69-3-(011)-31
 DATE: NOV. 20, 2014
 PREP. BY: BISHESH
 CHECKED BY: ABE
 PROJECT #: 2013-2634
 SCALE: 1"=20'
 SHEET: 3 OF 16

LOT SHAPE FACTOR TABLE

LOT	LOT PERIMETER (L _T)	LOT AREA, A (SF)	SHAPE FACTOR (S _T)
PARENT LOT	840.06	42,209	16.72<35
LOT 31A	571.76	18,319	17.84<35
LOT 31B	574.39	18,278	18.04<35

STREET DEDICATION=5,612 SQ FT

PARKING TABULATIONS-OVERALL

TOTAL NUMBER OF LOTS = 2 LOTS

TOTAL PARKING SPACES REQUIRED = 4 SPACES MIN. (2 SPACES PER UNIT FOR LOTS WITH FRONTAGE ON A PUBLIC STREET)

TOTAL PARKING SPACES PROVIDED

GARAGE	= 4 SPACES (1 CAB GARAGE X 2)
DRIVEWAY	= 4 SPACES (2 SPACES ON DRIVEWAY X 2)

- NOTES:**
- RUNOFF FROM THE EXISTING 15" RCP CURRENTLY DRAINS THROUGH THE NORTHWEST CORNER OF THE LOT. A 10 FOOT WIDE STORM SEWER EASEMENT HAS BEEN CREATED ALONG THE FLOW PATH ALL THE WAY TO THE REAR PROPERTY LINE OF PROPOSED LOT 31A. NO CHANGE TO THE DRAINAGE AREA OR DRAINAGE PATH WILL RESULT FROM THIS PROJECT.
 - PROPOSED UTILITY LINE AND LOT LINE LOCATIONS ARE CONCEPTUAL AND SUBJECT TO ADJUSTMENT WITH FINAL ENGINEERING, PROVIDED THEY ARE IN SUBSTANTIAL CONFORMANCE WITH GDP.
 - THE SIZE AND SHAPE OF THE HOUSE FOOTPRINTS ARE ILLUSTRATIVE AND SUBJECT TO ADJUSTMENT AT TIME OF FINAL ENGINEERING.
 - CLEARING LIMITS MAY BE ADJUSTED IN CERTAIN AREAS TO FACILITATE POSITIVE DRAINAGE, EXCEPT EAST AND NORTH SIDE.

EXISTING TREES TO BE SAVED AND PROPOSED TREES TO BE PLANTED NOT SHOWN ON THIS SHEET FOR CLARITY PURPOSES. REFER SHEETS 3 AND 5.

NOTE: THE RUNOFF FROM THE PROPOSED 5' SIDEWALK TO DRAIN TO THE PROP. DITCH ALONG THE RIGHT OF WAY TWINBROOK ROAD.

TEMPORARY CONSTRUCTION EASEMENT WILL BE OBTAINED FROM THE ADJOINING LOT OWNERS FOR ANY OFFSITE GRADING.

PROP. 15" RCP PROP. INV. OUT/460.0 (WITH ROPAS) SEE NOTE #1

PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

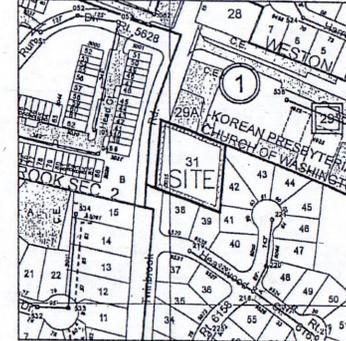
PROP. 15" RCP TO BE EXTENDED FROM EX. 15" RCP PROP. INV. 410.3

QUEENS WOOD DRIVE
(VA RTE. 615B, 50' R/W)

BM @ RIM OF 514 #221
RIM ELEV.=397.85'
INV. ELEV.=388.55'

PROP. SEWER LINE
INVERT(IN) = 388.65'

APPROXIMATE LOCATION
EX. DWELLING



FAIRFAX COUNTY SEWER MAP
SCALE: 1" = 150'

12-0508.3A(3) TREE PRESERVATION TARGET DEVIATION REQUEST

THE EXISTING TREES WILL NOT SURVIVE IN A HEALTHY AND STRUCTURALLY SOUND MANNER FOR A MINIMUM OF 10 YEARS DUE TO CONSTRUCTION ACTIVITIES. THIS A TREE PRESERVATION TARGET DEVIATION IS REQUESTED AS PER PFM 12-0508.3A(3). REFER SHEET #6 FOR DEVIATION REQUEST LETTER.

SEWER LATERAL INSTALLATION NOTES:

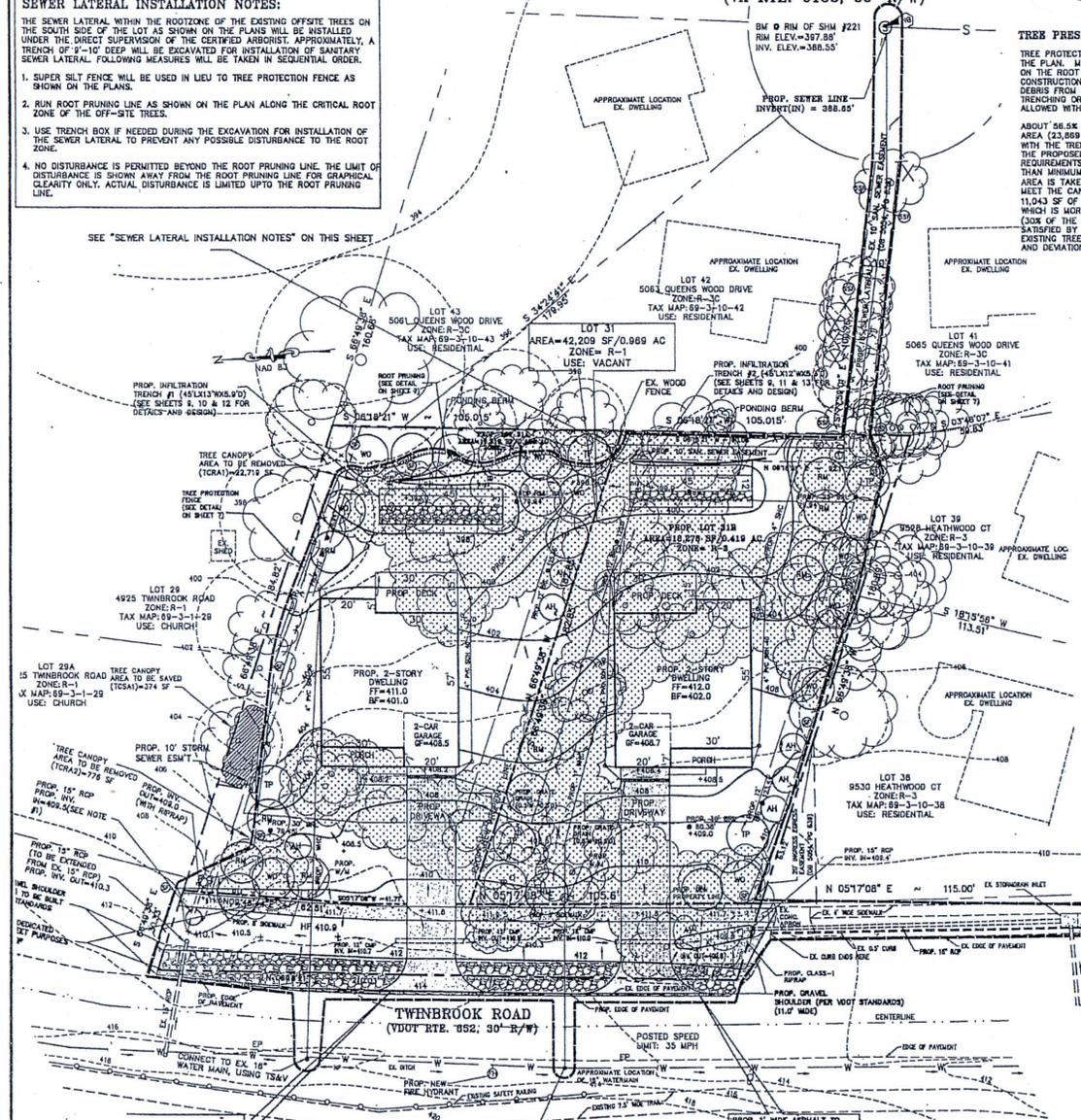
- THE SEWER LATERAL WITHIN THE ROOTZONE OF THE EXISTING OFFSITE TREES ON THE SOUTH SIDE OF THE LOT AS SHOWN ON THE PLANS WILL BE INSTALLED UNDER THE DIRECT SUPERVISION OF THE CERTIFIED ARBORIST. APPROXIMATELY, A TRENCH OF 1'-10" DEEP WILL BE EXCAVATED FOR INSTALLATION OF SANITARY SEWER LATERAL. FOLLOWING MEASURES WILL BE TAKEN IN SEQUENTIAL ORDER.
1. SUPER SILT FENCE WILL BE USED IN LIEU TO TREE PROTECTION FENCE AS SHOWN ON THE PLANS.
 2. RUN ROOT PRUNING LINE AS SHOWN ON THE PLAN ALONG THE CRITICAL ROOT ZONE OF THE OFF-SITE TREES.
 3. USE TRENCH BOX IF NEEDED DURING THE EXCAVATION FOR INSTALLATION OF THE SEWER LATERAL TO PREVENT ANY POSSIBLE DISTURBANCE TO THE ROOT ZONE.
 4. NO DISTURBANCE IS PERMITTED BEYOND THE ROOT PRUNING LINE. THE LIMIT OF DISTURBANCE IS SHOWN AROUND THE ROOT PRUNING LINE FOR GRAPHICAL CLARITY ONLY. ACTUAL DISTURBANCE IS LIMITED TO THE ROOT PRUNING LINE.

SEE "SEWER LATERAL INSTALLATION NOTES" ON THIS SHEET

SUPER SILT FENCE CAN BE INSTALLED IN LIEU TO SILT FENCE AND TREE PROTECTION FENCE.

THIS PLAN IS PREPARED OR APPROVED BY:
RON RUBIN, ISA CERTIFIED ARBORIST
#MA-0057A

QUEENSBROOK DRIVE
(VA RTE. 6158, 50' R/W)

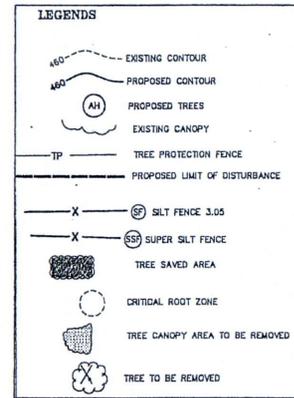


TREE PRESERVATION NARRATIVE

TREE PROTECTION FENCE AND ROOT PRUNING WILL BE INSTALLED AS SHOWN ON THE PLAN. MULCHING PAD WILL BE USED, IF REQUIRED, TO MINIMIZE THE IMPACTS ON THE ROOT ZONE OF THOSE TREES TO BE PRESERVED BY THIS PLAN. THE CONSTRUCTION VEHICLE SHALL NOT ENCROACH BEYOND THE LOT AND ALL THE DEBRIS FROM THE DEMOLITION WORK SHALL BE PILED WITHIN THE LOT. NO TREENING OR STOCKING OF THE CONSTRUCTION MATERIAL OR EQUIPMENT IS ALLOWED WITHIN THE ROOT ZONE OF THE TREES TO BE PRESERVED.

ABOUT 58.5% OF THE LOT AREA IS COVERED WITH THE EXISTING TREE CANOPY AREA (23,889 SQ. FT.). THE SITE REQUIRES 30% OF THE LOT AREA TO BE COVERED WITH THE TREE COVER CANOPY PER PFM REQUIREMENT (PER TABLE 15.4 OF PFM). THE PROPOSED PRESERVATION FROM THE EXISTING TREES IS 0.8% OF THE CANOPY REQUIREMENTS THAT WILL BE MET THROUGH TREE PRESERVATION WHICH IS LESS THAN MINIMUM REQUIRED 16.95%. NO CREDITS FROM THE OFFSITE TREE CANOPY AREA IS TAKEN. THIRTY NINE (39) WILDLIFE TREE SPECIES SHALL BE PLANTED TO MEET THE CANOPY AREA REQUIREMENTS. THE SITE WILL RETAIN A TOTAL OF 11,043 SF OF CANOPY AREA (AFTER THE MULTIPLICATION FACTOR ADJUSTMENT), WHICH IS MORE THAN THE MINIMUM REQUIRED CANOPY AREA OF 11,026 SQ. FT. (30% OF THE GROSS SITE AREA). THE TREE CANOPY COVER REQUIREMENT IS SATISFIED BY THE STUDY SITE BY PLANTING NEW TREES AND PRESERVING THE EXISTING TREES. REFER SHEETS 6 AND 7 FOR TREE PRESERVATION GUIDELINES AND DEVIATION REQUESTS.

- TREE PRESERVATION NOTES:**
1. PRIOR TO ANY CONSTRUCTION ACTIVITY ALL INDIVIDUAL TREES AND GROUPS OF TREES SHALL BE PRESERVED ON THE TREE PRESERVATION PLAN SHALL BE PROTECTED BY FENCING WITH TREE PROTECTION FENCE (A MINIMUM OF FOUR FEET IN HEIGHT) PLACED AT THE CANOPY REQUIREMENT MEETING. TREE PROTECTION FENCING SHOULD BE 14 GAUGE STEEL WOVEN WIRE "FARM FENCE" ON 6 FOOT STEEL POSTS DRIVEN IN TO GROUND 18 INCHES AND PLACED MORE THAN 10 FEET APART; OR SUPER SILT FENCE OR CHAIN LINK FENCE. THE TREE PROTECTION FENCING SHALL BE MADE CLEARLY VISIBLE TO ALL CONSTRUCTION PERSONNEL WITH SIGNS POSTED ON IT STATING IN SPANISH AND ENGLISH THAT IT IS A TREE PRESERVATION AREA AND NO ENTRY IS PERMITTED. THE FENCING SHALL BE INSTALLED PRIOR TO ANY WORK BEING CONDUCTED ON THE SITE INCLUDING REMOVAL OF THE EXISTING TREES FOR SITE CLEARANCE. UNLESS AUTHORIZED BY FAIRFAX COUNTY URBAN FORESTER.
 2. CONSTRUCTION ACTIVITY IS NOT PERMITTED BEYOND THE LIMITS OF CLEARING AND GRADING.
 3. THE ENGINEER, ARCHITECT OR SITE SUPERINTENDENT SHALL FLAG THE LIMITS OF CLEARING AND GRADING PRIOR TO THE PRE-CONSTRUCTION MEETING.
 4. SUPER SILT FENCE AND ROOT PRUNING SHALL BE INSTALLED AS TREE PROTECTION MEASURES TO PROTECT TREES LABELED AS "SAVE" AND TO PROTECT THE SPECIAL TREES.
 5. OFF-SITE AND CO-OWNED TREES SHOULD RECEIVE SPECIAL ATTENTION; DISCUSS THE PROJECT WITH ADJOINING OWNERS ABOUT SUCH TREES, BEFORE START OF THE WORK. WITHOUT NEIGHBOR'S WRITTEN CONSENT, REMOVAL OF THE CO-OWNED TREES ARE PROHIBITED.
 6. AT BOND RELEASE, THE SITE SHALL BE RETURNED TO DETERMINE THE NEED FOR FURTHER TREE CARE OR REMOVAL. SAVE TREES TO BE SAVED AND TO MINIMIZE IMPACT OF THE ROOT ZONES OF THE OFFSITE TREES.
 7. ALL TREE PRESERVATION MEASURES SHALL BE TAKEN TO SAVE TREES TO BE SAVED AND TO MINIMIZE IMPACT OF THE ROOT ZONES OF THE OFFSITE TREES.



KEY	BOTANICAL NAME	COMMON NAME	QTY	STOCK SIZE (HT/CALIPER)	STOCK TYPE	15-YR TREE CANOPY (SF)	SUB-TOTAL	REMARKS
RM	ACER RUBRUM	RED MAPLE	12	2" CALIPER	BB	200	2400	1.5 WILDLIFE CREDIT
TP	LIRIODENDRON TULIPIFERA	TULIP POPLAR	10	2" CALIPER	BB	200	2000	1.5 WILDLIFE CREDIT
WD	QUERCUS PHELLODES	WILLOW OAK	11	2" CALIPER	BB	200	2200	1.5 WILDLIFE CREDIT
AH	ILEX OPACA	AMERICAN HOLLY	8	6 FT HT	CONT.	78	480	1.5 WILDLIFE CREDIT
						SUB-TOTAL	7030 SF	

TABLE 12.10 10-YEAR TREE CANOPY CALCULATION WORKSHEET

A. TREE PRESERVATION TARGET AND STATEMENT		
A1	PREDEVELOPMENT AREA OF EXISTING TREE CANOPY FROM EXISTING VEGETATION MAP	23889 SF
A2	PERCENTAGE OF GROSS SITE AREA COVERED BY EXISTING TREE CANOPY	58.5%
A3	PERCENTAGE OF 10-YEAR TREE CANOPY REQUIRED FOR THE SITE (TABLE 15.4)	30%
A4	PERCENTAGE OF THE 10-YEAR TREE CANOPY REQUIREMENT THAT SHOULD BE MET THROUGH TREE PRESERVATION	16.95%
A5	PROPOSED PERCENTAGE OF CANOPY REQUIREMENT THAT WILL BE MET THROUGH TREE PRESERVATION	0.8%
A6	WAS THE TREE PRESERVATION TARGET MET (AREA MET)?	NO
A7	IF NO FOR A6, THEN SHEET NUMBER WHERE DEVIATION REQUEST IS LOCATED	SHEET 7
A8	IF STEP 6 REQUIRES A NARRATIVE, IT SHALL BE PREPARED IN ACCORDANCE WITH 12-0508.3	SHEET 7
B. TREE CANOPY REQUIREMENT		TOTAL
B1	GROSS SITE AREA	4078 SF
B2	SUBTRACT TO PARKS, ROAD FRONTAGE AND OTHERS	3544 SF
B3	SUBTRACT AREA OF EXEMPTIONS	252 SF
B4	ADJUSTED GROSS SITE AREA (B1-B2-B3)	3613 SF
B5	PERCENT OF 10-YEAR TREE CANOPY REQUIREMENT	30%
B6	AREA OF 10-YEAR TREE CANOPY REQUIRED (B4*B5)	1082 SF
B7	MODIFICATION OF 10-YEAR TREE CANOPY REQUIREMENT (REQUESTED)	1022 SF
B8	IF B7 IS A YES, THEN LIST PLAN SHEET NUMBER WHERE DEVIATION REQUEST IS LOCATED	SHEET 7
C. TREE PRESERVATION		
C1	TREE PRESERVATION TARGET AREA	7341 SF
C2	TOTAL CANOPY AREA MEETING STANDARDS OF 12-0508.3	11043 SF
C3	TOTAL CANOPY AREA PROVIDED BY UNIQUE IN-LOT CANOPY FROM OFFSITE ADJACENT COMMUNDAS	124 SF
C4	TOTAL OF CANOPY PROVIDED BY "REINSTATE" INDIVIDUAL "SPECIES" OR "SERIES" TREES	0 SF
C5	CANOPY OF TREES WITHIN THE RESOURCE PROTECTION AREA AND 10-YEAR FLOODPLAIN	0 SF
C6	TOTAL OF CL, CL, CL AND CH	444 SF
D. TREE PLANTING		
D1	AREA OF CANOPY TO BE MET THROUGH TREE PLANTING (B6-C1)	1608 SF
D2	AREA OF CANOPY PLANTED FOR AIR QUALITY BENEFIT	270 SF
D3	AREA OF TREE PLANTED FOR OPEN SPACE BENEFIT	0 SF
D4	AREA OF TREE PLANTED FOR WATER QUALITY BENEFIT	0 SF
D5	AREA OF CANOPY PLANTED FOR WILDLIFE BENEFIT	2706 SF
D6	AREA OF CANOPY PROVIDED BY NATIVE TREES	0 SF
D7	AREA OF CANOPY PROVIDED BY APPROVED CULTIVARS AND VARIETALS	0 SF
D8	AREA OF CANOPY PROVIDED THROUGH TREE REPLACEMENT	0 SF
D9	PERCENTAGE OF D11 REPRESENTED BY D16 (D16/D11)	0.00%
D10	TOTAL OF CANOPY AREA PROVIDED THROUGH TREE PLANTING (D1-D9)	3076 SF
D11	IS AN OFFSITE PLANNING RELIEF REQUESTED (TREE BANK OR TREE FUND)?	NO
D12	CANOPY AREA REQUESTED TO BE PROVIDED THROUGH OFFSITE BANKING OR TREE FUND	0 SF
D13	AMOUNT TO BE DEPOSITED INTO THE TREE PRESERVATION PLANNING FUND	0 SF
E. TOTAL OF 10-YEAR TREE CANOPY PROVIDED		
E1	TOTAL OF CANOPY AREA PROVIDED THROUGH TREE PRESERVATION	11043 SF
E2	TOTAL OF CANOPY AREA PROVIDED THROUGH TREE PLANTING	3076 SF
E3	TOTAL OF CANOPY AREA PROVIDED THROUGH OFFSITE BANKING (D12)	0 SF
E4	TOTAL OF 10-YEAR TREE CANOPY PROVIDED	14119 SF

TREE CANOPY PROVIDED > TREE CANOPY REQUIRED
11,043 SF > 11,026 SF

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LANDSCAPE PLAN
5015 TWINBROOK ROAD, BURKE
FAIRFAX COUNTY, VA 22015
BRANDROCK DISTRICT

TAX MAP: 89-3-((11))-31
DATE: NOV. 20, 2014
PREP. BY: BISHESH
CHECKED BY: ABE
PROJECT # 2013-2634
SCALE: 1"=20'
SHEET: 5 OF 16

RECOMMENDED PROFFERS FOR TREE PRESERVATION

Tree Preservation: "The applicant shall submit a Tree Preservation Plan and Narrative as part of the first and all subsequent site plan submissions. The preservation plan and narrative shall be prepared by a Certified Arborist or a Registered Consulting Arborist, and shall be subject to the review and approval of the Urban Forest Management Division, DPWES."

The tree preservation plan shall include a tree inventory that identifies the location, species, critical root zone, size, crown spread and condition analysis percentage rating for all individual trees to be preserved, as well as all on and off-site trees, living or dead with trunks 12 inches in diameter and greater (measured at 4 1/2-feet from the base of the trunk or as otherwise allowed in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture) located within 25 feet to either side of the limits of clearing and grading. 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 GDP and those additional areas in which trees can be preserved as a result of final engineering. The tree preservation plan and narrative shall include all items specified in PFM 12-0507 and 12-0509. Specific tree preservation activities that will maximize the survivability of any trees identified to be preserved, such as crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan."

Tree Appraisal: "The Applicant shall retain a professional arborist with experience in plant appraisal, to determine the replacement value of all trees 12 inches in diameter or greater located on the Application Property that are shown to be saved on the Tree Preservation Plan. These trees and their value shall be identified on the Tree Preservation Plan at the time of the first submission of the respective site plan(s). The replacement value shall take into consideration the age, size and condition of these trees and shall be determined by the so-called "Trunk Formula Method" contained in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture, subject to review and approval by UFMD."

At the time of the respective site plan approvals, the Applicant shall post a cash bond or a letter of credit payable to the County of Fairfax to ensure preservation and/or replacement of the trees for which a tree value has been determined in accordance with the paragraph above (the "Bonded Trees") that die or are dying due to unauthorized construction activities. The letter of credit or cash deposit shall be equal to 50% of the replacement value of the Bonded Trees. At any time prior to final bond release for the improvements on the Application Property constructed adjacent to the respective tree save areas, should any Bonded Trees die, be removed, or are determined to be dying by UFMD due to unauthorized construction activities, the Applicant shall replace such trees at its expense. The replacement trees shall be of equivalent size, species and/or canopy cover as approved by UFMD. In addition to this replacement obligation, the Applicant shall also make a payment equal to the value of any Bonded Tree that is dead or dying or improperly removed due to unauthorized construction activity. This payment shall be determined based on the Trunk Formula Method and paid to a fund established by the County for furberance of tree preservation objectives. Upon release of the bond for the improvements on the Application Property constructed adjacent to the respective tree save areas, any amount remaining in the tree bonds required by this proffer shall be returned/released to the Applicant."

Tree Preservation Walk-Through: "The Applicant shall retain the services of a certified arborist or Registered Consulting Arborist, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree-preservation walk-through meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an UFMD, DPWES representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understorey vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understorey vegetation and soil conditions."

Limits of Clearing and Grading: "The Applicant shall conform strictly to the limits of clearing and grading as shown on the GDP, subject to allowances specified in these proffered 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 GDP, 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."

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 (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super

all fence to the extent that required trenching for super all 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 demolition, and phase I & II erosion and sediment control sheets, as may be modified by the "Root Pruning" proffer 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 supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) 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."

Root Pruning: "The Applicant shall root prune, as needed to comply with the tree preservation requirements of these proffers. All treatments shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the subdivision plan submission. 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 broad 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."

Site Monitoring: "During any clearing or tree/vegetation/structure removal on the Applicant Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as proffered and as approved by the UFMD. The Applicant shall retain the services of a certified arborist or Registered Consulting Arborist to monitor all construction and demolition work and tree preservation efforts in order to ensure conformance with all tree preservation development conditions, and UFMD approvals. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES."

DEVIATION LETTER

DATE: MAY 13, 2014

To,
Keith W. Cline, Director
Department of Public Works and Environmental Services
Forest Conservation Branch
Urban Forest Management Division
12055 Government Center Parkway
Fairfax, Virginia 22035

Subject: Request for Deviation from the Tree Preservation Target

Re: Project Name: RZ 2014-BR-001
LOT 31, BURKE
5015 TWINBROOK ROAD
BRADDOCK DISTRICT, FAIRFAX COUNTY, VA 22015

Dear Mr. Knapp,

On behalf of our client, I would like to request for deviation from the tree preservation target requirement for above referenced property. The property is located at 5015 Twinbrook Road, Burke, Fairfax County, VA 22015. The site is zoned R-1 and contains 42,209 sf of land area. The site is currently vacant and wooded. Approximately 23,869 sf (56.5%) of the lot area is covered by the existing tree canopy area. The tree preservation target area required for this lot is 7,161 sf. Please refer to sheet #5 of 12. However, the new development that includes construction of new houses with a new driveway entrance and utilities connections will allow to preserve only 374 sf of the existing tree canopy area, which is less than tree preservation target area requirements. A super sill fence (will work as a tree protection fence) will be installed along the limits of clearing and grading to protect the off-site trees. Also root pruning shall be done to protect the off-site trees. Special attention will be given to protect the off-site trees. Owner or contractor shall strictly follow the approved Tree Conservation Plan and Tree preservation narrative. A tree preservation target deviation is requested as per PFM 12-0508.3A (3).

12-0508.3A(3): Construction activities could be reasonably expected to impact existing trees or forested areas used to meet the tree preservation target to the extent these would not likely survive in a healthy and structurally sound manner for a minimum of 10-years in accordance with post-development standards for trees and forested areas provided in 12-0403 and 12-0404.

The 10-yr Tree canopy requirements will be met by planting new trees. A total of 30.01% of the tree canopy area will be provided, which is more than minimum required 30% of the total lot area. Please refer to attached tree preservation plan.

If you have any questions, please feel free to call me at 703-591-7170. Thank you very much for your quick response and approval of the request in advance.

Thank you,
Regards,
Barthol A. Chehab, P.E.
Principal Engineer
703-591-7170,
GeoEnv Engineers

GeoEnv Engineers
Civil, Environmental & Geotechnical Engineering
10275 Mich. Street, Suite 213
Fairfax, VA 22030
Tel: 703.591.7170
Fax: 703.591.7074
Web Site: geoenv.com

REVISION BLOCK	DESCRIPTION	REV. BY	APPROVED BY	DATE

RECOMMENDED PROFFERS FOR TREE PRESERVATION AND DEVIATION LETTER

5015 TWINBROOK ROAD, BURKE
BRADDOCK DISTRICT
FAIRFAX COUNTY, VA 22015

TAX MAP:	89-3-(01)-31
DATE:	NOV. 20, 2014
PREP. BY:	BISHES-1
CHECKED BY:	ABE
PROJECT #	2013-2634
SCALE:	N.T.S
SHEET:	6 OF 18

SUB-DRAINAGE AREA LEGENDS

DESCRIPTIONS	SYMBOL
Building area (Controlled)	A1
Grass area (Controlled)	A5
Driveway area (Controlled)	A2
Front Porch (Controlled)	A3
Walkway (Un-Controlled for lot 31A)	A4
Walkway (Controlled for lot 31B)	A4
Grass area (Un-Controlled)	A6

MAINTENANCE NOTE:

THE BMP FACILITY AND THEIR APPURTENANT STRUCTURES MUST BE PRIVATELY MAINTAINED AND A PRIVATE MAINTENANCE AGREEMENT WILL BE EXECUTED PRIOR TO THE ISSUANCE OF THE PERMIT.

NOTE

1. THE DOWNSPOUTS AS SHOWN ON THE PLANS TO BE DIRECTED TO THE ON-SITE INFILTRATION TRENCH THROUGH 4" PVC SCH 40.
2. THE INFILTRATION TRENCH WILL BE CONSTRUCTED AFTER ALL THE SITE WORK HAS BEEN COMPLETED AND FINAL STABILIZATION MEASURES HAVE BEEN IMPLEMENTED.

OVERLAND RELIEF STATEMENT

THE TOTAL DRAINAGE AREA THAT DRAINS TO THE INFILTRATION TRENCH #1 WILL BE 0.341 ACRES. RUNOFF FROM SOME OFF-SITE AREA FROM PROPOSED LOT 31B ENTERS INTO THE TRENCH #1 AS WELL. IT WILL CONTRIBUTE ABOUT 1.63 CFS OF RUNOFF FROM THE 100-YEAR STORM. THE EXCESS RUNOFF EXIST FROM THE TRENCH AND FLOWS TOWARDS THE PROPOSED 10" STORM SEWER EASEMENT AND TO THE CHURCH PROPERTY. A STUDY SECTION 1-1 AND 2-2 IS TAKEN TO CHECK IF THE OVERLAND RELIEF EXISTS FOR THE SITE. THE RUNOFF FLOWS WITH NON-EROSIVE VELOCITY AND INFALLS TO THE SHALLOW SWALE LOCATED AT THE CHURCH PROPERTY WITHIN THE STORM DRAIN EASEMENT PREVENTING THE NEARBY STRUCTURES FROM FLOODING. THEREFORE, AN OVERLAND RELIEF EXIST FOR THE SITE.

SPILLWAY DESIGN (100 YEAR OVERLAND RELIEF) LOT 31A

ON-SITE AREA TO BMP= 0.237 AC
 OFFSITE AREA= 0.104 AC
 TOTAL = 0.341 AC

L₁₀₀= 9.8 IN/H
 Q₁₀₀ = (1.25 x 0.39 x 9.8 x 0.340719008264463) = 1.63 CFS
 Q₁₀₀ = 1.25xCxLxH_{provided}^(3/2)
 H_{provided} = 0.17 FT
 C = 3.3 (PFM 8-1302.11)
 L_{min} = Q₁₀₀ / (C x H_{provided}^(3/2))
 L_{min} = 12.35 / (3.3 x (0.17)^(3/2))
 = 5.6 FT
 L_{provided} = 7.7 FT > 5.6 FT, THUS OK.

VELOCITY, V₁₀₀= DISCHARGE/FLOW AREA
 = 1.09 FPS < SCOURING VELOCITY FOR NORMAL SOIL.

SPILLWAY DESIGN (100 YEAR OVERLAND RELIEF) LOT 31B

ON-SITE AREA TO BMP= 0.251 AC
 OFFSITE AREA= 0.000 AC
 TOTAL = 0.251 AC

L₁₀₀= 9.8 IN/H
 Q₁₀₀ = (1.25 x 0.39 x 9.8 x 0.251) = 1.2 CFS
 Q₁₀₀ = 1.25xCxLxH_{provided}^(3/2)
 H_{provided} = 0.17 FT
 C = 3.3 (PFM 8-1302.11)
 L_{min} = Q₁₀₀ / (C x H_{provided}^(3/2))
 L_{min} = 12.35 / (3.3 x (0.17)^(3/2))
 = 4.2 FT
 L_{provided} = 5.1 FT > 4.2 FT, THUS OK.

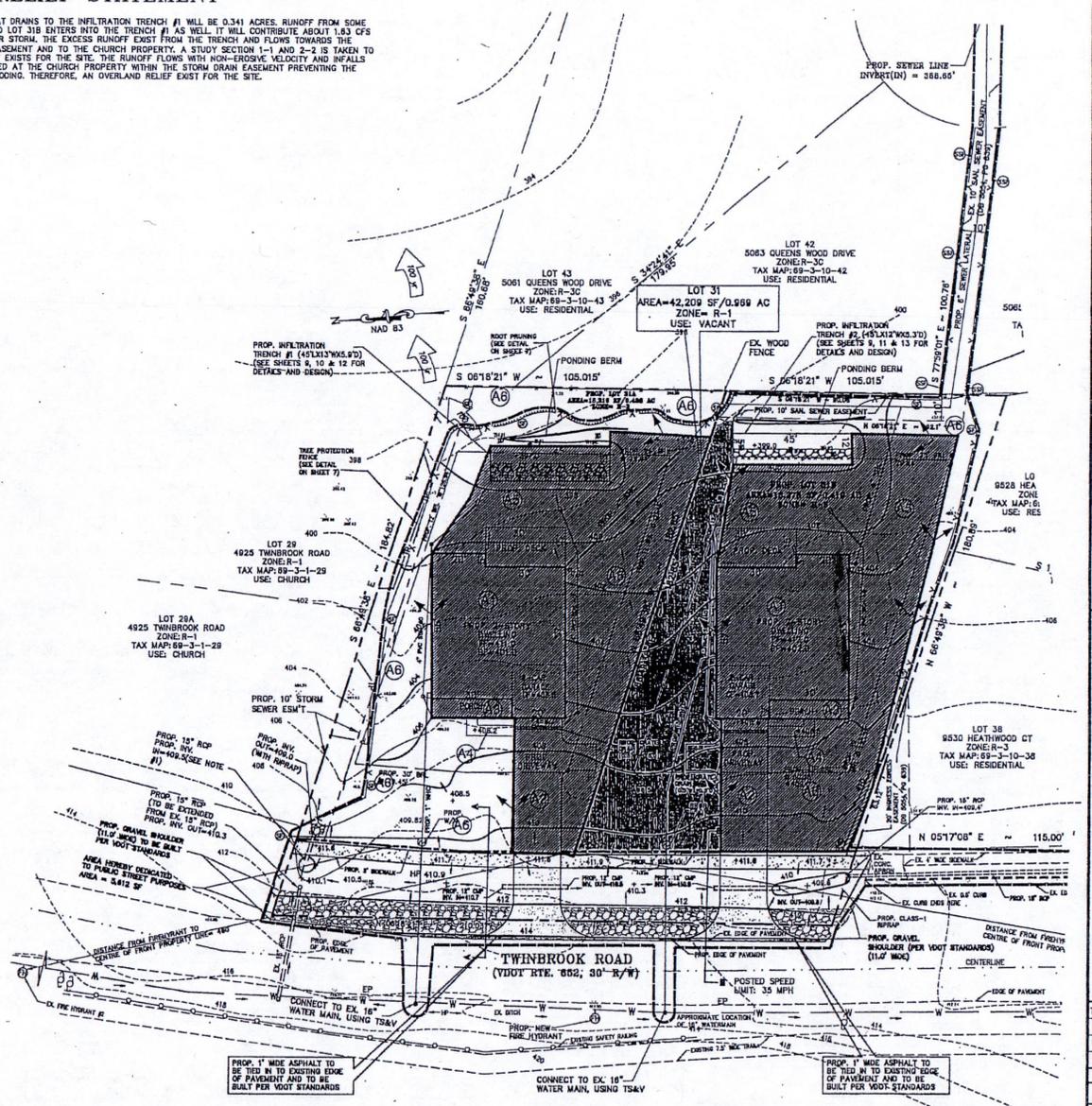
VELOCITY, V₁₀₀= DISCHARGE/FLOW AREA
 = 1.13 FPS < SCOURING VELOCITY FOR NORMAL SOIL.

WATER QUALITY NARRATIVE

INFILTRATION TRENCH HAS BEEN PROPOSED IN NEW LOTS 31A AND 31B. 10-YEAR 2-HOURS RAINFALL (3" OF RUNOFF) HAS BEEN ACCOUNTED FOR DESIGNING THE TRENCH. REFER TO RUNOFF REDUCTION AND PHOSPHOROUS REMOVAL CALCULATION ON SHEETS # 10 AND 11.

LEGEND (SUB-AREA LEGEND)

	DRAINAGE AREA CONTROLLED
	ON-SITE AREA UNCONTROLLED
	OFF-SITE AREA CONTROLLED BY TRENCH #1
	DRAINAGE AREA



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 Fairfax, VA 22030
 Tel. 703.591.7770
 Fax 703.591.7074
 Web Site: geoenr.com

NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE

BMP COMPUTATION AND SUB-DRAINAGE MAP
 5015 TWINBROOK ROAD, BUILDING
 FAIRFAX COUNTY, VA 22015
 BRADDOCK DISTRICT

TAX MAP: 69-3-(01)-31
DATE: NOV. 20, 2014
PREP. BY: BISHESH
CHECKED BY: ABE
PROJECT #: 2013-2634
SCALE: 1"=20'
SHEET: 8 OF 16

1. Post-Development Project & Land Cover Information

Constants					
Annual Rainfall (inches)	1.00				
Target Rainfall Event (inches)	1.00				
Phosphorus EMC (mg/L)	0.26		Nitrogen EMC (mg/L)		1.86
Target Phosphorus Target Load (lb/acre/yr)	0.41				
R _v	0.90				
Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) – undisturbed, protected forest/open space or reforested land	0.0000	0.0000	0.0000	0.0000	0.0000
Managed Turf (acres) – disturbed, graded for yards or other turf to be mowed/managed	0.0000	0.0000	0.0000	0.0000	0.0000
Impervious Cover (acres)	0.0000	0.0000	0.0000	0.0000	0.0000
	Total				0.0000
R _v Coefficients					
	A Soils	B Soils	C Soils	D Soils	
Forest/Open Space	0.02	0.03	0.04	0.05	
Managed Turf	0.15	0.20	0.22	0.25	
Impervious Cover	0.95	0.95	0.95	0.95	
Land Cover Summary					
Forest/Open Space Cover (acres)	0.0000				
Weighted R _v (forest)	0.0000				
% Forest	0.00%				
Managed Turf Cover (acres)	0.0000				
Weighted R _v (turf)	0.0000				
% Managed Turf	0.00%				
Impervious Cover (acres)	0.0000				
R _v (impervious)	0.90				
% Impervious	100%				
Total Site Area (acres)	0.0000				
Site R _v	0.90				
Post-Development Treatment Volume (acre-ft)					
Post-Development Treatment Volume (cubic feet)	0.0000				
Post-Development Load (TP) (lb/yr)	0.0000				
Post-Development Load (TN) (lb/yr)	0.0000				

Drainage Area A					
Drainage Area A Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres)	0.0000	0.0000	0.0000	0.0000	0.0000
Managed Turf (acres)	0.0000	0.0000	0.0000	0.0000	0.0000
Impervious Cover (acres)	0.0000	0.0000	0.0000	0.0000	0.0000
	Total				0.0000
	Post-Development Treatment Volume (cf)				0.0000

Apply Runoff Reduction Practices to Reduce Treatment Volume & Post-Development Load in Drainage Area A													
Practice	Unit	Description of Credit	Credit	Credit Area (acres)	Volume from Upstream RR Practice (cf)	Runoff Reduction (cf)	Remaining Runoff Volume (cf)	Phosphorus Efficiency (%)	Phosphorus Load from Upstream RR Practice (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed by Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Treatment to be Employed
7.a. Infiltration #1 (Spec 8c)	Impervious areas draining to infiltration	50% runoff volume reduction	0.50	0.0000	0.0000	0.0000	0.0000	25	0.0000	0.0000	0.0000	0.0000	
	turf areas draining to infiltration	50% runoff volume reduction	0.50	0.0000	0.0000	0.0000	0.0000	25	0.0000	0.0000	0.0000	0.0000	
7.b. Infiltration #2 (Spec 8c)	Impervious areas draining to infiltration	50% runoff volume reduction	0.50	0.0000	0.0000	0.0000	0.0000	25	0.0000	0.0000	0.0000	0.0000	
	turf areas draining to infiltration	50% runoff volume reduction	0.50	0.0000	0.0000	0.0000	0.0000	25	0.0000	0.0000	0.0000	0.0000	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.0000
TOTAL TURF AREA TREATED (ac)	0.0000
AREA CHECK OK	
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.0000
TOTAL RUNOFF REDUCTION IN D.A. A (cf)	0.0000
PHOSPHORUS REMOVAL FROM RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.0000

Nitrogen Efficiency (%)	Nitrogen Load from Upstream RR Practices (lb)	Untreated Nitrogen Load to Practice (lb)	Nitrogen Removed by Practice (lb)	Remaining Nitrogen Load (lb)
7. Infiltration #1	0.0000	0.0000	0.0000	0.0000
7. Infiltration #2	0.0000	0.0000	0.0000	0.0000
TOTAL RUNOFF REDUCTION IN D.A. A (cf)				0.0000
NITROGEN REMOVAL FROM RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)				0.0000

TOTAL IMPERVIOUS COVER TREATED (ac)	0.0000
TOTAL TURF AREA TREATED (ac)	0.0000
AREA CHECK OK	
PHOSPHORUS REMOVAL BY PRACTICES THAT DO NOT REDUCE RUNOFF VOLUME IN D.A. A (lb/yr)	0.0000
TOTAL PHOSPHORUS REMOVAL IN D.A. A (lb/yr)	0.0000
NITROGEN REMOVAL BY PRACTICES THAT DO NOT REDUCE RUNOFF VOLUME IN D.A. A (lb/yr)	0.0000
TOTAL NITROGEN REMOVAL IN D.A. A (lb/yr)	0.0000

Site Results						
	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
IMPERVIOUS COVER TREATED	0.0000	0.0000	0.0000	0.0000	0.0000	OK
TURF AREA TREATED	0.0000	0.0000	0.0000	0.0000	0.0000	OK
AREA CHECK	OK	OK	OK	OK	OK	OK
Phosphorus						
TOTAL TREATMENT VOLUME (cf)	0.0000					
TOTAL PHOSPHORUS LOAD REDUCTION REQUIRED (LB/YEAR)	0.0000					
RUNOFF REDUCTION (cf)	0.0000					
PHOSPHORUS LOAD REDUCTION ACHIEVED (LB/YR)	0.0000					
ADJUSTED POST-DEVELOPMENT PHOSPHORUS LOAD (TP) (lb/yr)	0.0000					
REMAINING PHOSPHORUS LOAD REDUCTION (LB/YR) NEEDED	CONGRATULATIONS!! YOU EXCEEDED THE TARGET REDUCTION BY 0 LB/YEAR!!					
Nitrogen (for information purposes)						
TOTAL TREATMENT VOLUME (cf)	0.0000					
RUNOFF REDUCTION (cf)	0.0000					
NITROGEN LOAD REDUCTION ACHIEVED (LB/YR)	0.0000					
ADJUSTED POST-DEVELOPMENT NITROGEN LOAD (TN) (lb/yr)	0.0000					

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PROFESSIONAL SEAL
 STATE OF VIRGINIA
 BOARD OF PROFESSIONAL ENGINEERS
 Lic. No. 10080

REVISION BLOCK

NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE

RUNOFF REDUCTION COMPUTATIONS (LOT 31B)
 5015 TWINDROCK ROAD, BURKE
 FAIRFAX COUNTY, VA 22015
 TWINDROCK DISTRICT

TAX MAP: 69-3-((01))-31
 DATE: NOV. 20, 2014
 PREP. BY: BISHESH
 CHECKED BY: ASE
 PROJECT #: 2013-2634
 SCALE: N/A
 SHEET: 1 OF 16

LOT 31A

IMPERVIOUS AREA COMPUTATION (SQ FT)

DESCRIPTION	PRE-DEV	POST-DEV
BUILDING	-	2,740
DRIVEWAY	-	891
FRONT PORCH	-	210
WALK	-	83

TOTAL IMPERVIOUS AREA (SQ FT) 3824 3824
 PERVIOUS AREA/GRASS-AREA (SQ FT) 18,319 14,395
 TOTAL SITE AREA (SQ FT) 18,319 18,319
 INCREASE IN IMPERVIOUSNESS = 3824 SQ FT OR OF THE EXISTING IMP. AREA
 TOTAL % OF IMPERVIOUS AREA = $\frac{3824 \times 100\%}{18319} = 21.42\%$ >18% (MAX ALLOWABLE BY CBPO)
 THE BMP IS REQUIRED.

"C" FACTORS CALCULATION

A. PRE-DEVELOPMENT
 $= (0.9 \times 0.9 + 18319 \times 0.25) = 0.25$
 18319

B. POST-DEVELOPMENT
 $= (3824 \times 0.9 + 14395 \times 0.25) = 0.29$
 18319

RUNOFF COMPUTATION (Q=CIA)

A. PRE-DEVELOPMENT
 (5 MIN To) C2 = $(0.25 \times 6.45 \times 0.421) = 0.57$ CFS
 Q10 = $(0.25 \times 7.27 \times 0.421) = 0.77$ CFS
 B. POST-DEVELOPMENT
 (5 MIN To) C2 = $(0.29 \times 6.45 \times 0.421) = 0.89$ CFS
 Q10 = $(0.29 \times 7.27 \times 0.421) = 1.19$ CFS
 C. CHANGE IN RUNOFF Q100 = $(1.25 \times 0.39 \times 9.84 \times 0.421) = 2.03$ CFS
 Q10 = $1.19 - 0.77 = 0.42$ CFS
 C2 = $0.89 - 0.57 = 0.32$ CFS
 Q100 = $2.03 - 1.30 = 0.73$ CFS

D. CHANGE IN RUNOFF (100YRS) WITH BMP
 $= 2.03 - 1.30 = (1.25 \times 3841 \times 0.8 / 43560 \times 9.84 + 1.25 \times 11,020 / 43560 \times 0.25 \times 9.84)$
 $= -1.026$ CFS DECREASE

MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under the following Zoning Ordinance paragraphs:

Special Permits (9-011.21 & 21.1) Special Exceptions (9-011.21 & 21.1)
 Cluster Subdivision (9-013.10 & 10) Commercial Revitalization Districts (9-022.2A (1216(14))
 Development Plans PRC Districts (9-302.2 & 41) PRC Plan (16-303.10 & 10)
 PDP - P Districts (except PDC) (9-302.1F & 1G) Amendments (18-022.10F & 10G)

- 1. PVI is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100).
- 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading to accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site utilities, energy dissipation devices, and stream rehabilitation measures as shown on Sheet N/A.
- 3. Provide:

Facility Name/Type & No.	On-Site area served (acres)	Off-Site area served (acres)	Drainage area (acres)	Footprint area (sq ft)	Storage Volume (cfs)	If pond, dam height (ft)
1. INFILTRATION TRENCH #1	0.257	0.104	0.341	585	3,451	N/A
2. INFILTRATION TRENCH #2	0	0	0.261	540	2,862	N/A
Totals						
- 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 4.
 Pond site and outlet pipe systems are shown on Sheet N/A.
- 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet N/A.
 Type of maintenance access road surface noted on the plan is N/A (asphalt, geotextile, gravel, etc.)
- 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 5.
- 7. A "stormwater management narrative" which contains a description of how detention and best management practices requirements will be met is provided on Sheet 3.
- 8. A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet 14.
- 9. A description of how the outfall requirements, including known changes to contributing drainage areas (i.e. drainage diversions), of the Public Facilities Manual will be satisfied is provided on Sheet 14.
- 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheet 3, 4.
- 11. A submission waiver is requested for WAIVER WILL BE REQUESTED.
- 12. Stormwater management is not required because INFILTRATION TRENCHES WITH STORAGE CAPACITY ARE PROVIDED.

LOT 31B

IMPERVIOUS AREA COMPUTATION (SQ FT)

DESCRIPTION	PRE-DEV	POST-DEV
BUILDING	-	2,740
DRIVEWAY	-	891
FRONT PORCH	-	210
WALK	-	83

TOTAL IMPERVIOUS AREA (SQ FT) 3824 3824
 PERVIOUS AREA/GRASS-AREA (SQ FT) 18,278 14,354
 TOTAL SITE AREA (SQ FT) 18,278 18,278
 INCREASE IN IMPERVIOUSNESS = 3824 SQ FT OR OF THE EXISTING IMP. AREA
 TOTAL % OF IMPERVIOUS AREA = $\frac{3824 \times 100\%}{18278} = 21.47\%$ >18% (MAX ALLOWABLE BY CBPO)
 THE BMP IS REQUIRED.

"C" FACTORS CALCULATION

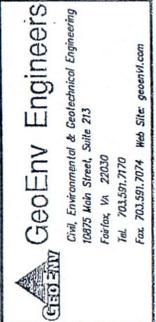
A. PRE-DEVELOPMENT
 $= (0.9 \times 0.9 + 18278 \times 0.25) = 0.25$
 18278

B. POST-DEVELOPMENT
 $= (3824 \times 0.9 + 14354 \times 0.25) = 0.29$
 18278

RUNOFF COMPUTATION (Q=CIA)

A. PRE-DEVELOPMENT
 (5 MIN To) C2 = $(0.25 \times 6.45 \times 0.42) = 0.57$ CFS
 Q10 = $(0.25 \times 7.27 \times 0.42) = 0.76$ CFS
 B. POST-DEVELOPMENT
 (5 MIN To) C2 = $(0.29 \times 6.45 \times 0.42) = 0.89$ CFS
 Q10 = $(0.29 \times 7.27 \times 0.42) = 1.19$ CFS
 C. CHANGE IN RUNOFF Q100 = $(1.25 \times 0.39 \times 9.84 \times 0.42) = 2.01$ CFS
 Q10 = $1.19 - 0.76 = 0.43$ CFS
 C2 = $0.89 - 0.57 = 0.32$ CFS
 Q100 = $2.01 - 1.29 = 0.72$ CFS

D. CHANGE IN RUNOFF (100YRS) WITH BMP
 $= 2.01 - 1.29 = (1.25 \times 3788 \times 0.8 / 43560 \times 9.84 + 1.25 \times 7,180 / 43560 \times 0.25 \times 9.84)$
 $= -0.75$ CFS DECREASE



NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE



STORMWATER COMPUTATIONS
 5015 TWINBROOK ROAD, BURKE
 FAIRFAX COUNTY, VA 22015
 BRADBROCK DISTRICT

TAX MAP: 69-3-((01))-31
 DATE: NOV. 20, 2014
 PREP. BY: BISHESH
 CHECKED BY: ABE
 PROJECT #: 2013-2634
 SCALE: AS NOTED
 SHEET: 13 OF 16



DRAINAGE AREA MAP
SCALE: 1"=200'

OUTFALL NARRATIVE

THIS PLAN PROPOSES THE REZONING OF ONE LOT ZONED R-1 TO TWO LOTS ZONED R-3. THE STUDY LOT FALLS WITHIN POKICK CREEK WATERSHED. THE SITE CONSISTS OF MAINLY ONE DRAINAGE AREA AND ONE OUTFALL LOCATION. THE RUNOFF FROM THE ENTIRE LOT SHEET FLOWS TOWARDS THE NATURAL DRAINAGE WAY TO NORTHEAST DIRECTION TOWARDS LOT 29. THERE IS 15" RCP RUNNING ACROSS THE TWINBROOK ROAD AND OUTFALLS AT THE NORTHWEST CORNER OF THE SUBJECT PROPERTY. THE RUNOFF FROM THIS DRAINAGE PIPE FLOWS TO THE SAME NATURAL DRAINAGE WAY TOWARDS LOT 29. THE RUNOFF FROM THE SITE SHEET FLOWS TOWARDS NORTHEAST DIRECTION AT THE CHURCH PROPERTY WHICH IS THE NATURAL DRAINAGE WAY AND PASSES THROUGH EXISTING SWALES AND CULVERTS LOCATED WITHIN THE STORMDRAIN EASEMENTS AT THE CHURCH PROPERTY, BEFORE IT OUTFALLS AT THE STORMWATER POND, WHICH IS LOCATED ABOUT 350 FT NORTHEAST FROM THE PROPERTY. THEN THE POND DISCHARGES THE RUNOFF TO THE UNDERGROUND STORMWATER SYSTEM.

A STUDY SECTION 1-1 IS TAKEN AT THE SHALLOW GRASS SWALE. ABOUT 2.02 ACRES OF DRAINAGE AREA, DA1 OUTFALLS AT THE SECTION 1-1. THE DRAINAGE AREA CONTRIBUTES ABOUT 9.93 CFS OF RUNOFF FROM THE 100-YEAR STORM, AND IT CREATES ABOUT 0.50 FEET OF WATER DEPTH, AND IT FLOWS WITH NON-EROSIVE VELOCITY OF 4.59 FPS. PLEASE REFER TO SECTION 1-1 ON THIS SHEET. THE RUNOFF CONTINUES TO FLOW DOWNSTREAM WITHIN SHALLOW GRASS SWALE AND INFALLS TO THE SHALLOW DITCH LOCATED WITHIN THE EXISTING 10' STORM DRAIN EASEMENT AT THE CHURCH PROPERTY. PLEASE REFER TO THE DRAINAGE MAP ON THIS SHEET. SIMILARLY STUDY SECTIONS 2-2, 3-3 AND 4-4 ARE TAKEN ALONG THE DRAINAGE WAY. ALL THE SECTIONS REVEAL THE EXISTING DRAINAGE WAY IS ADEQUATE TO HANDLE THE RUNOFF FROM THE STUDY SITE. THE DITCH THEN CONVEYS THE RUNOFF FURTHER NORTHEAST DIRECTION AND PASSES THROUGH THE 10" RCP, WHICH THEN TAKES THE RUNOFF ACROSS THE DRIVEWAY AND OUTFALLS INTO THE GRASS DITCH LOCATED WITHIN THE STORM DRAIN EASEMENT. REFER TO DRAINAGE MAP ON THIS SHEET. THE DITCH FINALLY CONVEYS THE RUNOFF TO THE STORMWATER MANAGEMENT POND.

THE RUNOFF CONTINUES TO FLOW DOWNSTREAM WITHIN THE BEDS AND BANKS OF THE SHALLOW SWALE, WHICH IS ALL GRASS. HENCE, THERE WILL NOT BE ANY NEGATIVE IMPACT ON DOWNSTREAM PROPERTIES. THERE WILL NOT BE ANY DRAINAGE PROBLEM ON SITE AND OFFSITE. IT WILL NOT HAVE ADVERSE IMPACT SUCH AS DOWNSTREAM EROSION, PONDRING, SEDIMENTATION OR INADEQUATE OVERLAND RELIEF AS PER 8-202.8B.1. ALSO THE INCREASED IN RUNOFF RATE WILL NOT AGGRAVATE ANY EXISTING DRAINAGE PROBLEM OR CAUSE NEW PROBLEM IN THE DOWNSTREAM PROPERTY AS MENTIONED IN PFM SECTION 8-202.8B.2.

BATHOMETRIC SURVEY IS REQUIRED PURSUANT TO SW-10, AND LETTER TO INDUSTRY 03-05 (BATHOMETRIC SURVEY) FOR THE IMPONDMENT LOCATED ON THE DOWNSTREAM OF OUTFALL WILL BE SUBMITTED DURING THE FINAL SITE PLAN SUBMISSIONS. THE DISTURBED AREA ASSOCIATED WITH THE OUTFALL IS MORE THAN AN ACRE.

POST-DEVELOPMENT CONDITIONS WITHIN DRAINAGE AREA

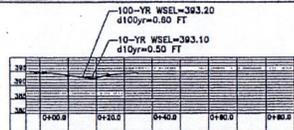
TWO NEW INFILTRATION TRENCHES WILL BE BUILT AT THE LOW LAYING AREA, AND EACH OF THEM HAS BEEN DESIGNED TO CAPTURE 3 INCHES OF RUNOFF FROM STUDY DRAINAGE AREA. BOTH THE TRENCHES HAVE BEEN DESIGNED TO WORK AS A DETENTION SYSTEM WITH ADEQUATE STONE DEPTH. THE INFILTRATION TRENCH WILL CAPTURE ALL THE RUNOFF FROM THE PROPOSED BUILDINGS, PORCHES AND SOME PERVIOUS AREAS. REFER TO SHEETS 8, 9 AND 10 FOR DETAILS AND DESIGN OF INFILTRATION TRENCHES. THERE WILL BE A NET DECREASE OF RUNOFF FROM THE 100-YEAR STORM IN LOTS 31A AND 31B RESPECTIVELY BY PROVIDING THE INFILTRATION TRENCHES. REFER TO CALCULATIONS ON SHEET #11.

THE RUNOFF FROM ALMOST ALL THE IMPERVIOUS AREA FROM BOTH THE LOTS WILL BE DIRECTED TO THE RESPECTIVE TRENCHES VIA 4" PVC PIPE. NO CONCENTRATED FLOW WILL BE GENERATED DURING AND AFTER THE CONSTRUCTION IS COMPLETED.

DURING THE CONSTRUCTION PERIOD

THE TOTAL DISTURBED AREA DUE TO PROPOSED DEVELOPMENT IS 1.008 ACRES, WHICH WILL RESULT (0.617,27X1,008 = 4.4 CFS) AND (6.85X451,009=3.3 CFS) FROM 10-YR AND 2-YR STORM EVENT RESPECTIVELY. ALMOST ALL THE RUNOFF FROM THE IMPERVIOUS AREA WILL BE DIRECTED TOWARDS THE INFILTRATION TRENCHES. THE SILT FENCE AND SUPER SILT FENCE WILL TRAP THE SEDIMENTS FROM FLOWING INTO THE NON DISTURBED AREA AND ADJACENT DOWNSTREAM PROPERTIES. THE SEDIMENT WILL REMAIN WITHIN THE DISTURBED AREA ONSITE AND CLEAR WATER FREE FROM SEDIMENT WILL FLOW TO THE NON DISTURBED AREA AS SHEET FLOW. ALL SEDIMENT AND EROSION CONTROL DEVICES WILL BE KEPT FUNCTIONAL IN ACCORDANCE WITH THE APPROVED SITE PLAN AND IN ACCORDANCE WITH THE COUNTY STANDARDS AND SPECIFICATIONS. NO DEBRIS OR DIRT FROM THE CONSTRUCTION SITE SHALL BE PERMITTED TO THE STREET. THE STREET AND ENTRANCE SHALL BE KEPT NEAT AND CLEAN DAILY AND NO VEHICULAR TRAFFIC SHALL BE OBSTRUCTED DURING CONSTRUCTION PERIOD. THE CONSTRUCTION VEHICLES SHALL BE CLEANED PRIOR TO ENTERING INTO STREET. CONTRACTOR SHALL MANAGE WATER FOR CLEANING CONSTRUCTION VEHICLES.

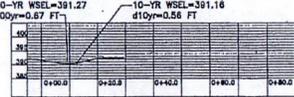
THE PROPOSED TRENCH AREA AT THE NORTHEAST AND NORTH SIDE OF THE PROPERTY WILL NOT ONLY IMPROVE WATER QUALITY OF THE SURFACE RUNOFF, BUT ALSO CONTROL FLOWS OF SEDIMENTS FROM THE PROJECT SITE TO THE DOWNSTREAM PROPERTIES. THE PROPOSED GRADING WILL HONOR THE NATURAL DRAINAGE PATTERN (8-0202.2A). THIS IS OUR OPINION THAT AN ADEQUATE OUTFALL EXISTS FOR THE SITE AND NO EROSION FLOW OCCUR DURING CONSTRUCTION ACTIVITIES.



SECTION 1-1
SCALE: HOR: 1"=20' VER: 1"=20'

Q=CIA
DRAINAGE AREA=DA1=2.02 ACRES
"C" FACTOR= 0.40 (PFM TABLE 6.5)
TIME OF CONCENTRATION, Tc=5 MIN (AVERAGE)
RAINFALL INTENSITY, I2=5.45 IN/HR (PLATE 3-8)
RAINFALL INTENSITY, I10=7.27 IN/HR (PLATE 3-8)
Q2=0.40 X5.45 X 2.02=4.44 CFS
Q10=0.40 X7.27 X 2.02=5.97 CFS
Q100=1.25X0.40X9.84X2.02=9.93 CFS

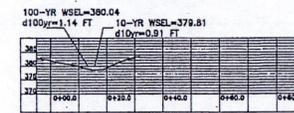
HYDRAULIC COMPUTATIONS (OUTPUT FROM FLOW MASTER)
SHAPESHALLOW SWALE (IRREGULAR CHANNEL)
SLOPE 0.052 FT/FT
C=0.035 (ROUGH EARTH)
FLOW DEPTH, d10=0.50 FT<1.1 FT [OK]
VELOCITY, V=4.59 FPS
10Y W.S.EL.=393.10
100Y W.S.EL.=393.20



SECTION 2-2
SCALE: HOR: 1"=20' VER: 1"=20'

Q=CIA
DRAINAGE AREA=DA1+DA2=2.59 ACRES
"C" FACTOR= 0.40 (PFM TABLE 6.5)
TIME OF CONCENTRATION, Tc=5 MIN (AVERAGE)
RAINFALL INTENSITY, I2=5.45 IN/HR (PLATE 3-8)
RAINFALL INTENSITY, I10=7.27 IN/HR (PLATE 3-8)
Q2=0.40 X5.45 X 2.59=5.65 CFS
Q10=0.40 X7.27 X 2.59=7.5 CFS
Q100=1.25X0.40X9.84X2.59=12.7 CFS

HYDRAULIC COMPUTATIONS (OUTPUT FROM FLOW MASTER)
SHAPESHALLOW SWALE
SLOPE 0.045 FT/FT
C=0.055 (ROUGH EARTH)
FLOW DEPTH, d10=0.56 FT<1.2 FT [OK]
VELOCITY, V=4.55 FPS
10Y W.S.EL.=391.16
100Y W.S.EL.=391.27



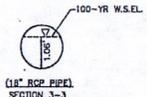
SECTION 4-4
SCALE: HOR: 1"=20' VER: 1"=20'

Q=CIA
DRAINAGE AREA=DA1+DA2+DA3+DA4+DA5=8.88 ACRES
"C" FACTOR= 0.40 (PFM TABLE 6.5)
TIME OF CONCENTRATION, Tc=5 MIN (AVERAGE)
RAINFALL INTENSITY, I2=5.45 IN/HR (PLATE 3-8)
RAINFALL INTENSITY, I10=7.27 IN/HR (PLATE 3-8)
Q2=0.40 X5.45 X 8.88=15.0 CFS
Q10=0.40 X7.27 X 8.88=29.0 CFS
Q100=1.25X0.40X9.84X8.88=33.94 CFS

HYDRAULIC COMPUTATIONS (OUTPUT FROM FLOW MASTER)
SHAPESWALE (IRREGULAR CHANNEL)
SLOPE 0.055 FT/FT
C=0.04 (NATURAL WEEDY SWALE)
FLOW DEPTH, d10=0.91 FT<2.5 FT
VELOCITY, V=4.97 FPS
10Y W.S.EL.=379.81
100Y W.S.EL.=390.04

EX. TWIN 18" RCP PIPE @ SECTION 3-3

SHAPE CIRCULAR
SLOPE (AVERAGE)..... 0.021 FT/FT
MANNING'S N 0.013 (PFM 6-TABLE 6-9)
SIZE 1.5 FT OR 18"
C = 0.35 (PFM TABLE 6.8)
DRAINAGE AREA, DA1+DA2+DA3+DA4=5.28 ACRES
Tc = 5 MIN
I = 7.27 IN/HR, I2 = 5.45 IN/HR
Q10 (FOR TWIN 18" RCP)=0.40 X 7.27 X 5.28= 15.35 CFS
Q10 (FOR SINGLE PIPE)=7.68 CFS
Q2 = 0.40 X 5.45 X 5.28= 11.5 CFS
Q100= 1.25X0.40X9.84X5.28=25.97 CFS (FOR TWIN 18" RCP)
Q100 (FOR SINGLE PIPE)=12.98 CFS



COMPUTATION RESULTS (OUTPUT FROM FLOW MASTER)

Roughness Coefficient: 0.013
Channel Slope: 0.021 ft/ft
Normal Depth: 1.05 ft (100 YR)
Normal Depth: 0.75 (10 YR)
Diameter: 1.5 ft
Velocity: 8.64 ft/s (10 YR)
Velocity: 9.67 (100 YR)

OVERLAND RELIEF STATEMENT

THE TOTAL DRAINAGE AREA THAT DRAINS TO THE INFILTRATION TRENCH #1 WILL BE 0.341 ACRES. RUNOFF FROM SOME OFF-SITE AREA FROM PROPOSED LOT 31B ENTERS INTO THE TRENCH #1 AS WELL. IT WILL CONTRIBUTE ABOUT 1.63 CFS OF RUNOFF FROM THE 100-YEAR STORM. THE EXCESS RUNOFF EXIST FROM THE TRENCH AND FLOWS TOWARDS THE PROPOSED 10' STORM SEWER EASEMENT AND TO THE CHURCH PROPERTY. A STUDY SECTION 1-1 AND 2-2 IS TAKEN TO CHECK IF THE OVERLAND RELIEF EXISTS FOR THE SITE. THE RUNOFF FLOWS WITH NON-EROSIVE VELOCITY AND INFALLS TO THE SHALLOW SWALE LOCATED AT THE CHURCH PROPERTY WITHIN THE STORM DRAIN EASEMENT PREVENTING THE NEARBY STRUCTURES FROM FLOODING. THEREFORE, AN OVERLAND RELIEF EXIST FOR THE SITE.

GeoEnv Engineers
Civil, Environmental & Geotechnical Engineering
10875 Mohr Street, Suite 213
Falls Church, VA 22030
Tel: 703.591.7170
Fax: 703.591.7074
Web Site: geoenf.com

REVISION BLOCK

NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE

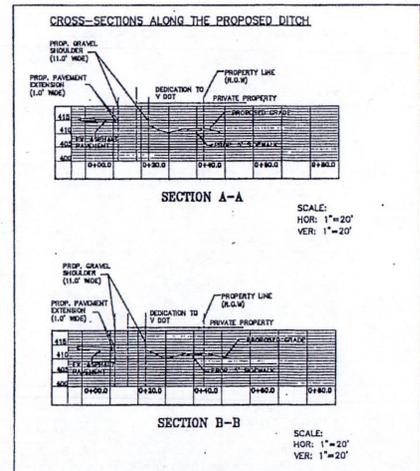
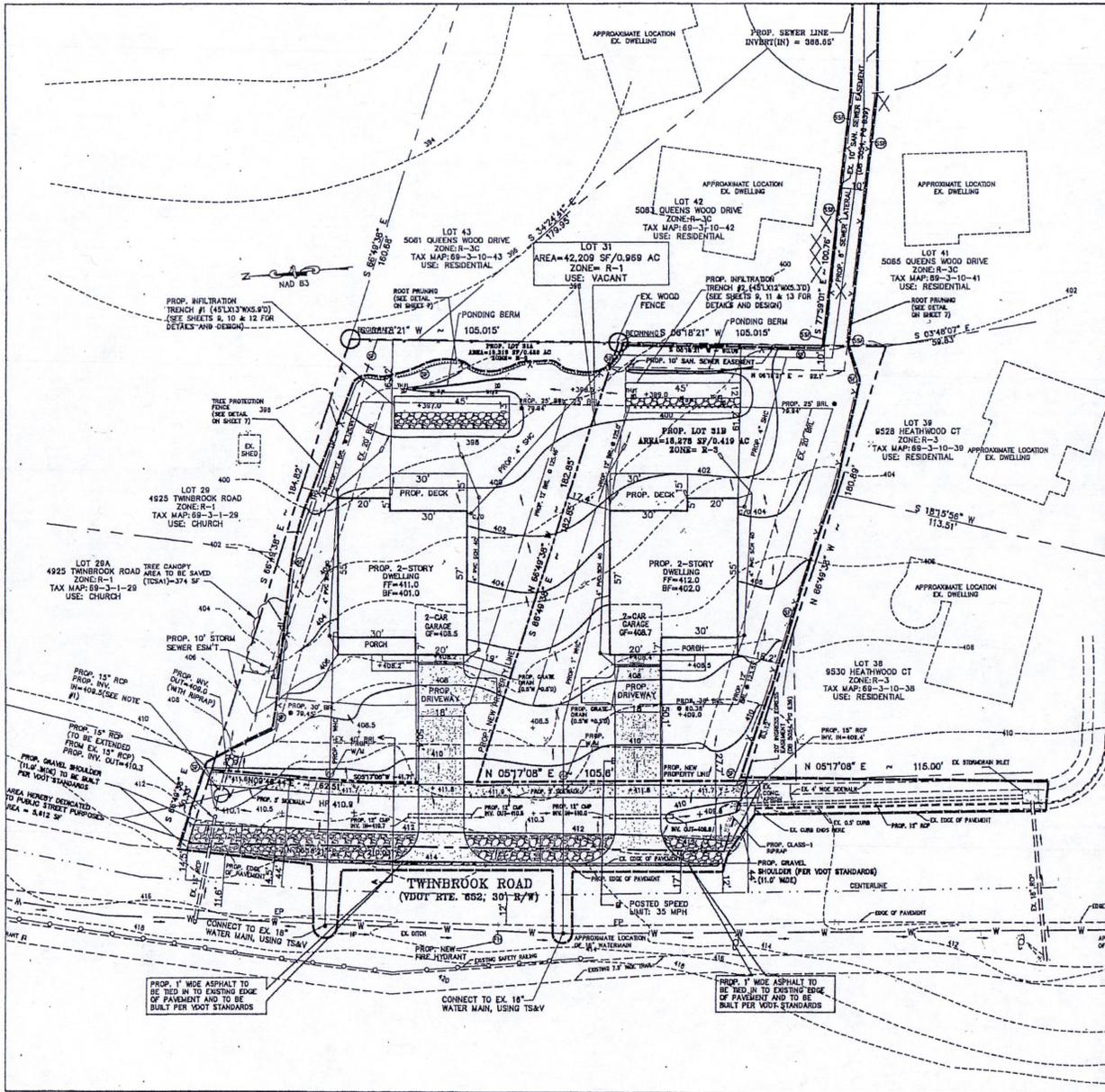
PROFESSIONAL SEAL

STATE OF VIRGINIA
Professional Engineer
No. 0000000000
Name: [Blank]
Exp. Date: [Blank]

DRAINAGE MAP AND OUTFALL ANALYSIS

5015 TWINBROOK ROAD, BURKE
FAIRFAX COUNTY, VA 22015
HEADQUARTERS DISTRICT

TAX MAP: 69-3--(01)-31
DATE: NOV. 20, 2014
PREP. BY: BISHESH
CHECKED BY: ABE
PROJECT #: 2013-2634
SCALE: 1"=20'
SHEET: 14 OF 18



GeoEnv Engineers
 Civil, Environmental & Geotechnical Engineering
 10925 Main Street, Suite 213
 Fairfax, VA 22030
 Tel: 703.591.7770
 Fax: 703.591.0704
 Web Site: geoenv.com

NO.	DESCRIPTION	REV. BY	APPROVED BY	DATE

PROPOSED DITCH SECTIONS

5015 TWINBROOK ROAD, BURKE
 FAIRFAX COUNTY, VA 22015

BRADDOCK DISTRICT

TAX MAP:	89-3-((01))-31
DATE:	NOV. 20, 2014
PREP. BY:	BISHESH
CHECKED BY:	ASE
PROJECT #	2013-2634
SCALE:	1"=20'
SHEET:	18 OF 18



COUNTY OF FAIRFAX
Department of Planning and Zoning
Zoning Evaluation Division
 12055 Government Center Parkway, Suite 801
 Fairfax, VA 22035 (703) 324-1290, TTY 711
www.fairfaxcounty.gov/dpz/zoning/applications

APPLICATION No: RZ 2014-BR-001
 (Assigned by staff)

RECEIVED
 Department of Planning & Zoning

NOV 22 2013

Zoning Evaluation Division

APPLICATION FOR A REZONING
 (PLEASE TYPE or PRINT IN BLACK INK)

PETITION

TO: THE BOARD OF SUPERVISORS OF FAIRFAX COUNTY, VIRGINIA

I (We), BLAGOJ SKANDEV (SD Homes LLC) the applicant (s) petition you to adopt an ordinance amending the Zoning Map of Fairfax County, Virginia, by reclassifying from the R-1 District to the R-3 District the property described below and outlined in red on the Zoning Section Sheet(s) accompanying and made part of this application.

LEGAL DESCRIPTION:

<u>LOT 31</u>	<u>69-3</u>		<u>19720</u>	<u>0036</u>
Lot(s)	Block(s)	Subdivision	Deed Book	Page No.

TAX MAP DESCRIPTION:

<u>69-3</u>		<u>1</u>	<u>31</u>	<u>0.969 ac</u> <u>42,209 sq ft</u>
Map No.	Double Circle No.	Single Circle No.	Parcel(s)/Lot(s) No.	Total Acreage

POSTAL ADDRESS OF PROPERTY:

5015 TWINBROOK RD, BURKE, VA, 22105

ADVERTISING DISCRIPTION: (Example - North side of Lee Highway approx. 1000 feet west of its intersection with Newgate Blvd.)

EAST SIDE OF TWINBROOK ROAD, APPROXIMATELY 900 FEET SOUTH OF THE INTERSECTION OF
PRESENT USE: R-1 VACANT LOT **PROPOSED USE:** R-3 SINGLE FAMILY #
MAGISTERIAL DISTRICT: BRADDOCK **OVERLAY DISTRICT (S):**

The name(s) and address(s) of owner(s) of record shall provided on the affidavit form attached and made part of this application. The undersigned has the power to authorize and does hereby authorize Fairfax County staff representative on official business to enter on the subject property as necessary to process the application.

BLAGOJ SKANDEV

Type or Print Name

Signature of Applicant or Agent

5315 OX ROAD, FAIRFAX, VA, 22030

Address

(Work)

(Mobile)

Telephone Number

571-201-2330

Please provide name and telephone number of contact if different from above:

RZ 2013-0274

DO NOT WRITE BELOW THIS SPACE

Date application accepted: January 9, 2014

Virginia Ruffner Fee Paid \$ 27,850.00

RZ 2014-BR-001

Zoning Application Closeout Summary Report

Printed: 1/6/2015

General Information

APPLICANT: BLAGOJ SKANDEV (SD HOMES LLC)
DECISION DATE: 12/02/2014
CRD: NO
HEARING BODY: BOS
SUPERVISOR DISTRICT:
ACTION: APPROVE
STAFF COORD: JOE GORNEY
DECISION SUMMARY:

ON DECEMBER 2, 2014, THE BOARD OF SUPERVISORS UNANIMOUSLY APPROVED RZ 2014-BR-001 ON A MOTION BY SUPERVISOR COOK SUBJECT TO PROFFERS DATED NOVEMBER 20, 2014.

Zoning Information

Existing Zoning		Proposed Zoning		Approved Zoning	
<u>DISTRICT</u>	<u>AREA</u>	<u>DISTRICT</u>	<u>AREA</u>	<u>DISTRICT</u>	<u>AREA</u>
R- 1	42,209.00 SQ	R- 3	42,209.00 SQ	R- 3	42,209.00 SQ FE

Tax Map Numbers

069-3- /01/ /0031-

Approved Land Uses

Zoning District: R- 3

<u>LAND USE</u>	APPROVED RESIDENTIAL DEVELOPMENT		APPROVED NON-RESIDENTIAL DEVELOPMENT			
	<u>DWELLING</u> UNITS	<u>LAND AREA</u>	<u>NO. OF</u> ADU'S	<u>GFA</u>	<u>LAND AREA</u>	<u>FAR</u>
SFD	2	42,209.00 SQ FEET				
TOTAL						

Approved Waivers/Modifications

SEE FILE FOR ALL WAIVERS AND MODIFICATIONS
 DEVIATION FROM TREE PRESERVATION TARGET PERCENTAGE

Approved Proffers

PROFFER STATEMENT DATE: 11-20-2014

<u>PROFFER</u>	<u>DUE</u>	<u>TRIG #</u>	<u>TRIG EVENT</u>	<u>CONTRIB AMT</u>	<u>EXPIR. DTE</u>
ARCHITECTURE / BUILDING MATERIALS / COLORS	01-01-0001	0	N/A	\$0	01-01-0001
TREE PRESERVATION / SURVEY	01-01-0001	0	AT REDEVELPMNT	\$0	01-01-0001
ARCHITECTURE / GREEN BUILDING / LEEDS	01-01-0001	0	N/A	\$0	01-01-0001
RIGHT OF WAY - DEDICATION	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
FRONTAGE IMPROVEMENTS	01-01-0001	0	N/A	\$0	01-01-0001
CONSTRUCTION - HOURS / NOISE	01-01-0001	0	N/A	\$0	01-01-0001
HOUSING TRUST FUND	01-01-0001	0	RUP	\$0	01-01-0001
PROFFERED PLANS	01-01-0001	0	N/A	\$0	01-01-0001
BEST MANAGEMENT PRACTICES (BMP)	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
TREE PRESERVATION / SURVEY	01-01-0001	0	SITE PLAN	\$0	01-01-0001
OTHER - GENERAL	01-01-0001	0	N/A	\$0	01-01-0001
OTHER - ENVIRONMENT	01-01-0001	0	N/A	\$0	01-01-0001
CONTRIBUTION - FCPA / RECREATION	01-01-0001	0	SUBDIV PLAN	\$2,679	01-01-0001
MINOR MODIFICATION	01-01-0001	0	N/A	\$0	01-01-0001
OTHER - ENVIRONMENT	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
LIMITS OF CLEARING AND GRADING	01-01-0001	0	N/A	\$0	01-01-0001
CONTRIBUTION - SCHOOLS	01-01-0001	0	BLDG PRMT APRV	\$10,825	01-01-0001
LANDSCAPING - ENVIRONMENT	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
LANDSCAPE PLAN REQUIRED	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
ARCHITECTURE / GREEN BUILDING / LEEDS	01-01-0001	0	RUP	\$0	01-01-0001
TREE SAVE FENCING	01-01-0001	0	AT REDEVELPMNT	\$0	01-01-0001
EROSION AND SEDIMENT CONTROL	01-01-0001	0	N/A	\$0	01-01-0001
NOTIFICATION - GENERAL	01-01-0001	0	SUBDIV PLAN	\$0	01-01-0001
SIGHT DISTANCE	01-01-0001	0	N/A	\$0	01-01-0001
SIDEWALK / TRAIL	01-01-0001	0	N/A	\$0	01-01-0001

METES & BOUNDS
FOR
REMAINING OF LOT 31 BURKE
AFTER STREET DEDICATIONS
TWINBROOK ROAD
BURKE, BRADDOCK DISTRICT, FAIRFAX COUNTY, VIRGINIA

BEGINNING at point located 25.18 feet southeast of the northwestern corner of lot 31 Burke and its intersection with Twinbrook Road (VA Route 652) and running S $66^{\circ} 49' 38''$ E, a distance of 184.82 feet; thence turning and running S $06^{\circ} 18' 21''$ W, a distance of 210.03 feet; thence turning and running N $66^{\circ} 49' 38''$ W, a distance of 180.89 feet; thence turning and running N $05^{\circ} 17' 08''$ E, a distance of 211.2 feet to the point of beginning, containing 36,753 square feet of land, more or less.

The Lot is subject to the benefit of a 10-ft wide sanitary sewer easement, as shown on a plat prepared by GeoEnv Engineers of Subdivision of Lot 31, Burke and dated September 28, 2013.

All being particularly described on a plat attached hereto and made a part hereof.