



**APPLICATION ACCEPTED:** April 6, 2015  
**PLANNING COMMISSION:** October 21, 2015  
**BOARD OF SUPERVISORS:** Not Yet Scheduled

## County of Fairfax, Virginia

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October 14, 2015

# WS

STAFF REPORT

APPLICATION RZ/FDP 2015-SP-004

SPRINGFIELD DISTRICT



**APPLICANT:** Christopher Land, LLC

**PRESENT ZONING:** R-1: Residential, One Dwelling Unit/Acre  
WSPOD: Water Supply Protection Overlay District

**REQUESTED ZONING:** PDH-2: Planned Development Housing District,  
Two Dwelling Units/Acre  
WSPOD: Water Supply Protection Overlay District

**PARCELS:** 55-4 ((1)) 29, 29A

**LOCATION:** 12727 and 12733 Lee Highway

**SITE AREA:** 6.53 acres

**PROPOSED DENSITY:** 2.0 dwelling units per acre (du/ac)

**PROPOSED OPEN SPACE:** 21.5% (1.40 acres)

**PLAN MAP:** Fairfax Center Area;  
Low Density Residential Area; 1-2 du/ac

**PROPOSAL:** To retain one of the existing dwellings and  
construct 12 single family detached dwellings

### STAFF RECOMMENDATIONS:

Staff recommends approval of RZ 2015-SP-004, subject to the execution of proffers consistent with those contained in Appendix 1.

Nick Rogers, AICP

Staff recommends approval of FDP 2015-SP-004.

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

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

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

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



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

# Final Development Plan

FDP 2015-SP-004

Applicant: CHRISTOPHER LAND, LLC  
Accepted: 04/06/2015  
Proposed: RESIDENTIAL  
Area: 6.53 AC OF LAND; DISTRICT - SPRINGFIELD

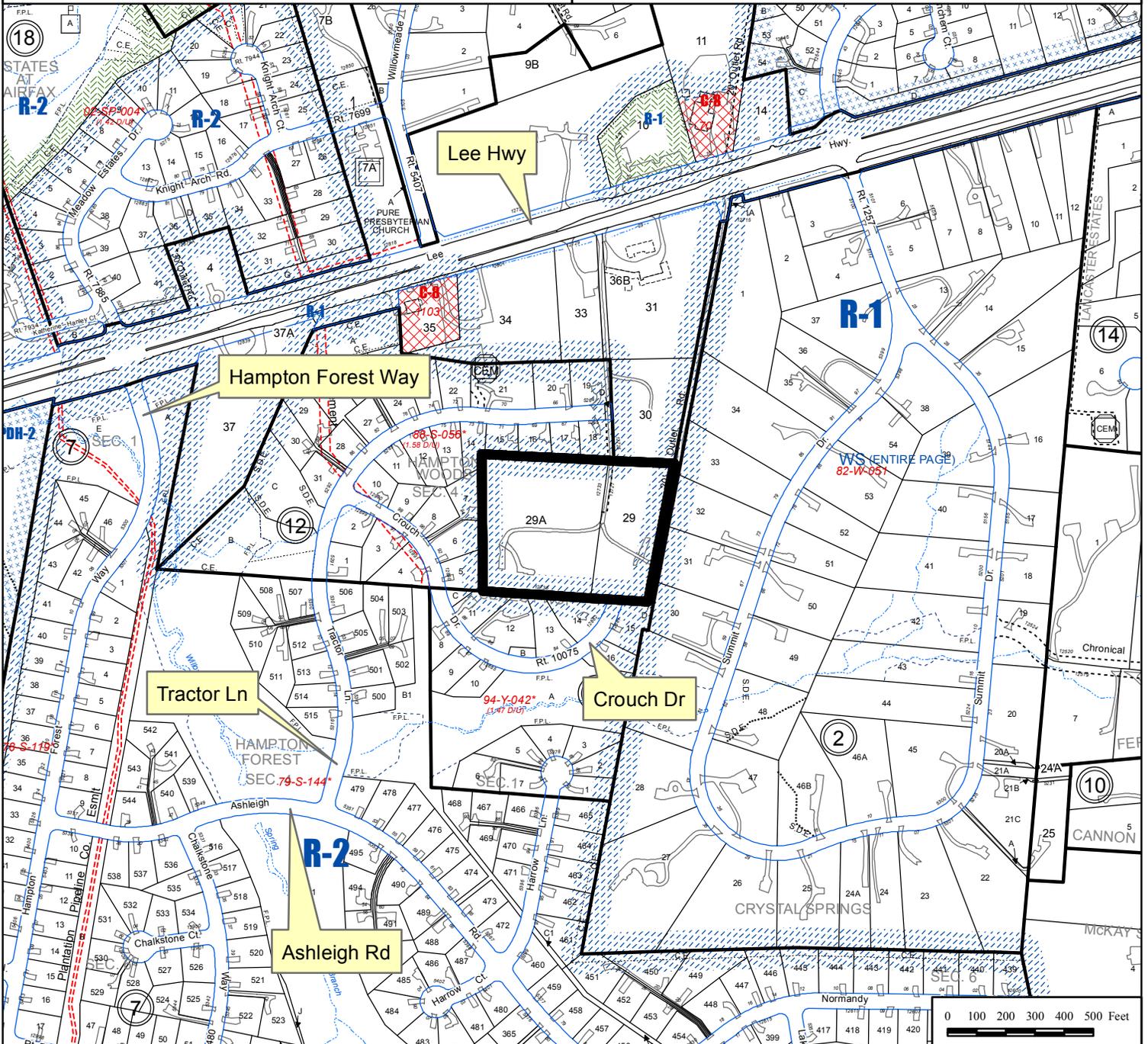
Zoning Dist Sect:  
Located: AT THE TERMINUS OF CROUCH DRIVE  
Zoning: PDH- 2  
Overlay Dist: WS  
Map Ref Num: 055-4- /01/ /0029 /01/ /0029A

# Rezoning Application

RZ 2015-SP-004

Applicant: CHRISTOPHER LAND, LLC  
Accepted: 04/06/2015  
Proposed: RESIDENTIAL  
Area: 6.533 AC OF LAND; DISTRICT - SPRINGFIELD

Zoning Dist Sect:  
Located: AT THE TERMINUS OF CROUCH DRIVE  
Zoning: FROM R- 1 TO PDH- 2  
Overlay Dist: WS  
Map Ref Num: 055-4- /01/ /0029 /01/ /0029A

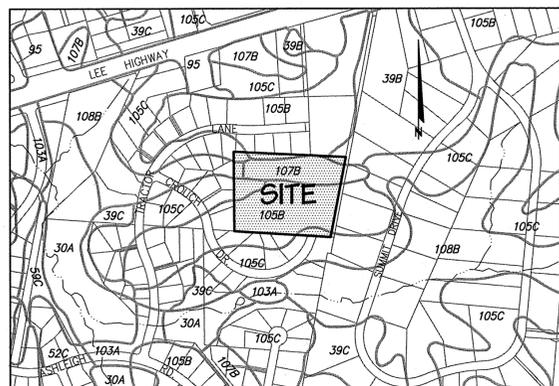


# CONCEPTUAL / FINAL DEVELOPMENT PLAN

# THE RESERVE AT HAMPTON SPRINGS

SPRINGFIELD DISTRICT  
FAIRFAX COUNTY, VIRGINIA

RZ 2015-SP-004



SOIL I.D. #	SERIES NAME	FOUNDATION SUPPORT	SOIL DRAINAGE	EROSION POTENTIAL	PROBLEM CLASS	GEOTECH REPORT REQ'D
39B	GLENELG SILT LOAM	GOOD	GOOD	HIGH	I	NO
105B	WHEATON-GLENELG COMPLEX	GOOD	GOOD	HIGH	IVB	YES
105C	WHEATON-GLENELG COMPLEX	GOOD	GOOD	HIGH	IVB	YES
107B	WHEATON-MEADOWVILLE COMPLEX	FAIR	MARGINAL	MEDIUM	IVB	YES
108B	WHEATON-SUMNERDICK COMPLEX	MARGINAL	POOR	MEDIUM	IVB	YES

**SOILS MAP/DATA**

SCALE : 1" = 500'

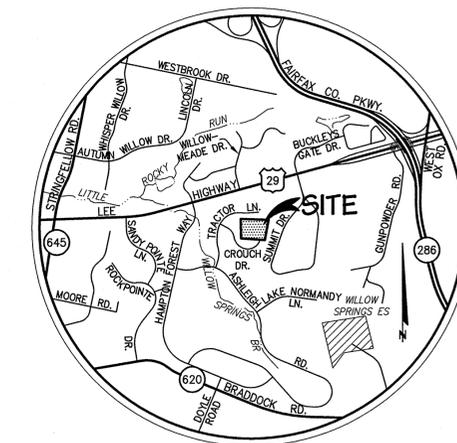
NOTE : THE SOIL TYPES MAPPED FOR THIS PROJECT ARE NOT MARINE CLAYS, AND DO NOT CONTAIN NATURALLY-OCCURRING ASBESTOS.

REVISIONS		
NO.	SHEET NUMBER AND REVISION DESCRIPTION	DATE
1.	(1) REVISED SITE TABS; MOVED TYPICAL LAYOUT & SWM INFO TO OTHER SHEETS. (3) REVISED TREE COVER TYPES. (4) REVISED LAYOUT. (5) REVISED LANDSCAPING & TREE COVER CALCULATIONS. (6&7) NEW SHEET. (7&8) UPDATED TREE PRESERVATION PLAN & INVENTORY. (12) REVISED OUTFALL NARRATIVE & DRAINAGE MAP.	6-25-15
2.	(1) REVISED SITE TABS. (2) ADDED HEIGHTS OF EXISTING SHEDS. (4) REV. LAYOUT, CONNECTED PATHS, REV. TURNAROUND AT LOTS 4/5 (5) REVISED LANDSCAPING & TREE COVER CALCULATIONS; ADDED SIGHT DISTANCE NOTE. (6) REVISED SITTING AREA DETAIL. (7) MOVED TURNAROUND AND ROAD EXTENSION DETAILS TO SHEET 8. (8) NEW SHEET. (9&10) ADDED TREES 8660-8666.	8-24-15

NO CHANGES, OTHER THAN THOSE SPECIFIED ABOVE, HAVE BEEN MADE TO THIS PLAN FROM WHAT WAS PREVIOUSLY SUBMITTED OR APPROVED.

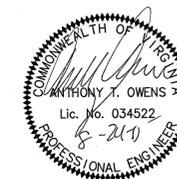
**NOTES**

- THE SUBJECT PROPERTY DELINEATED ON THIS PLAN IS LOCATED ON FAIRFAX COUNTY TAX ASSESSMENT MAP NUMBERS 55-4(11)29 & 29A. THE SITE IS CURRENTLY ZONED R-1 & WSP0D. THE PROPOSED ZONING DISTRICT IS PDH-2 & WSP0D.
- THE PROPERTY HEREON IS CURRENTLY UNDER THE OWNERSHIP OF :
  - PARCEL 29 - NGA K. STROM & KIM-NHUNG N. NGUYEN IN DEED BOOK 16896 AT PAGE 711
  - PARCEL 29A - ROEL D. & ANITA E. CRUZ IN DEED BOOK 14984 AT PAGE 1986
- BOUNDARY AND TOPOGRAPHIC INFORMATION TAKEN FROM A FIELD RUN SURVEY PREPARED BY CHARLES P. JOHNSON & ASSOCIATES, DATED JANUARY 2015. CONTOUR INTERVAL EQUALS TWO FEET NGVD 1929.
- THERE ARE NO 100-YEAR FLOODPLAINS ON-SITE. NO FLOODPLAIN OR DRAINAGE STUDIES ARE REQUIRED FOR THIS PROJECT.
- THERE ARE NO RESOURCE PROTECTION AREAS (RPAs) OR ENVIRONMENTAL QUALITY CORRIDORS (EQCs) IMPACTING THIS SITE. A WATER QUALITY IMPACT ASSESSMENT WILL NOT BE REQUIRED.
- TO THE BEST OF OUR KNOWLEDGE, THE SITE HAS NO SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION AND PRESERVATION.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO KNOWN GRAVES, OBJECTS, OR STRUCTURES MARKING A PLACE OF BURIAL.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITY EASEMENTS HAVING A WIDTH OF 25 FEET OR GREATER, NOR ANY MAJOR UNDERGROUND UTILITY EASEMENTS LOCATED WITHIN THE SITE.
- EXISTING WELLS ON-SITE ARE TO BE CAPPED AND ABANDONED IN ACCORDANCE WITH HEALTH DEPARTMENT REGULATIONS, EXCEPT FOR THE ONE ON PROPOSED LOT 9, WHICH WILL BE RETAINED FOR IRRIGATION PURPOSES.
- SEE SHEET 3 FOR A DESCRIPTION OF THE EXISTING VEGETATION.
- THE EXISTING DWELLING ON PARCEL 29, CONSTRUCTED IN 1946, AND ASSOCIATED STRUCTURES ARE TO BE REMOVED. THE EXISTING DWELLING ON PARCEL 29A, CONSTRUCTED IN 1974 AND 2006, IS TO REMAIN.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH IN TITLE 40, CODE OF FEDERAL REGULATIONS PART 116.4, 302.4, AND 355; ALL HAZARDOUS WASTE AS SET FORTH IN COMMONWEALTH OF VIRGINIA/DEPARTMENT OF WASTE MANAGEMENT VR 672-10-1 - VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATIONS; AND/OR PETROLEUM PRODUCTS AS DEFINED IN TITLE 40, CODE OF FEDERAL REGULATIONS PART 280; TO BE GENERATED, UTILIZED, STORED, TREATED, AND/OR DISPOSED OF ON-SITE AND THE SIZE AND CONTENTS OF ANY EXISTING OR PROPOSED STORAGE TANKS OR CONTAINERS.
- THE SUBJECT PROPERTIES ARE WITHIN THE WATER SUPPLY PROTECTION OVERLAY DISTRICT (WSP0D).
- THERE ARE NO AFFORDABLE DWELLING UNITS (ADUs) REQUIRED FOR THIS PROJECT.
- NO DENSITY REDUCTIONS ARE REQUIRED BY ZONING ORDINANCE SECTION 2-308. DENSITY CREDIT FOR ANY DEDICATION OF LAND FOR PUBLIC USE SHALL BE RESERVED FOR THE SUBJECT PROPERTY IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN PAR. 4 OF §2-308 OF THE ZONING ORDINANCE.
- THE INTERNAL AND EXTERNAL TRAFFIC AND PEDESTRIAN CIRCULATION SYSTEMS SHALL BE PROVIDED AS GENERALLY SHOWN ON THIS PLAN, SUBJECT TO FINAL ENGINEERING.
- ALL PUBLIC STREETS SHALL CONFORM TO FAIRFAX COUNTY AND/OR VDOT STANDARDS AND SPECIFICATIONS, UNLESS OTHERWISE MODIFIED.
- A TRAIL IS NOT REQUIRED FOR THIS PROJECT PER THE FAIRFAX COUNTY TRAILS PLAN.
- THE LANDSCAPE CONCEPTS, SCREENING MEASURES, AND PROPOSED TREE COVER PROVIDED SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 12 OF THE FAIRFAX COUNTY PFM. LANDSCAPING SHOWN ON THIS PLAN IS FOR SCHEMATIC PURPOSES ONLY, AND IS SUBJECT TO CHANGE WITH FINAL ENGINEERING. THE LOCATION OF LANDSCAPING MAY BE ADJUSTED TO ACCOMMODATE UTILITY, SIGNAGE, SIGHT DISTANCE, AND OTHER REQUIREMENTS, FROM THOSE SHOWN ON THIS PLAN.
- THE PROPOSED UTILITY ALIGNMENTS SHOWN ON THE PLAN ARE SCHEMATIC AND SUBJECT TO CHANGE WITH FINAL ENGINEERING DESIGN. UTILITY PLANS AND PROFILES, AS WELL AS ALL NECESSARY EASEMENTS WILL BE PROVIDED WITH THE SITE PLAN(S).
- IN ACCORDANCE WITH THE ADOPTED COMPREHENSIVE PLAN, THE PROPOSED DEVELOPMENT WILL PROVIDE RESIDENTIAL DEVELOPMENT AT 1.99 DWELLING UNITS PER ACRE AND WILL CONFORM TO ALL APPLICABLE ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS, EXCEPT AS NOTED BELOW:
  - A REDUCTION OF THE CUL-DE-SAC RADIUS (PFM PLATE 7-7) FROM 45 FEET TO 30 FEET IS HEREBY REQUESTED.
- PROPOSED PUBLIC IMPROVEMENTS :
  - WATER SERVICE TO BE PROVIDED BY AN EXISTING 8" MAIN LOCATED IN CROUCH DRIVE.
  - SANITARY SERVICE TO BE PROVIDED BY EXISTING 8" MAINS LOCATED IN CROUCH DRIVE AND LOT 7 OF HAMPTON WOODS SECTION FOUR.
- A PAVILION IS PROPOSED AS A RECREATIONAL FACILITY WITH THIS DEVELOPMENT. ADDITIONAL SITE FEATURES INCLUDING, BUT NOT LIMITED TO BENCHES, COVERED WALKWAYS, FLAGPOLES, TRELLISES, WATER FEATURES, SIGNS, WALLS, FENCES, LIGHTING, AND UTILITY MAINTENANCE STRUCTURES NOT REPRESENTED IN THIS PLAN MAY BE PROVIDED AS LONG AS THE FINAL DEVELOPMENT IS IN SUBSTANTIAL CONFORMANCE WITH WHAT IS REPRESENTED IN THIS PLAN.
- SPECIAL AMENITIES PROPOSED WITH THIS PLAN INCLUDE A PAVILION AND AN INFORMAL PLAY/SITTING AREA WITH TRAILS AND BENCHES.
- A DEVELOPMENT SCHEDULE HAS NOT BEEN DETERMINED AT THIS TIME.
- SEE SHEET 7 FOR ARCHITECTURAL ELEVATIONS.
- FIRE LANE LOCATION(S), AND THE STRIPING AND SIGNAGE THEREOF, WILL BE PROVIDED WITH THE SITE PLAN, IF APPLICABLE.
- PARCELS "A" THROUGH "C" SHALL BE CONVEYED TO A HOMEOWNERS ASSOCIATION FOR OWNERSHIP AND MAINTENANCE.
- THE APPLICANT RESERVES THE RIGHT TO LOCATE ONE OR MORE TEMPORARY SALES OFFICES ON THE PROPERTY IN ACCORDANCE WITH ARTICLE 8-808 OF THE ZONING ORDINANCE.
- MINOR MODIFICATIONS TO THE BUILDING FOOTPRINTS, LOT AREAS, DIMENSIONS, UTILITY LAYOUT, AND LIMITS OF CLEARING AND GRADING MAY OCCUR WITH THE FINAL ENGINEERING DESIGN, IN SUBSTANTIAL CONFORMANCE WITH THE CDP/FDP, PROVIDED SUCH ARE IN ACCORDANCE WITH THE MINOR MODIFICATIONS PROVISION IN SECTION 16-403 OF THE ZONING ORDINANCE.



**VICINITY MAP**

SCALE : 1" = 2000'



**SITE TABULATIONS**

SITE AREA :		
LOT AREA	176,938 ±	(4.062 Ac)
PARCELS A-C	69,659 ±	(1.599 Ac)
RIGHT-OF-WAY DEDICATION	37,967 ±	(0.872 Ac)
<b>TOTAL</b>	<b>284,564 ±</b>	<b>(6.533 Ac)</b>

**PDH-2 ZONE**

	REQUIRED	PROVIDED
NUMBER OF UNITS	---	13 SINGLE-FAMILY DETACHED
MAXIMUM DENSITY	2 DU/AC	1.99 DU/AC
MINIMUM LOT AREA	N/A	10,500 ±
AVERAGE LOT AREA	N/A	13,600 ±
MAXIMUM BUILDING HEIGHT	N/A	35'
MINIMUM YARDS	N/A	SEE TYPICAL LOT DETAIL ON SHEET 6
OPEN SPACE	20% (1.31 Ac)	21.5%± (1.40 Ac±)
RECREATIONAL OPEN SPACE	N/A	2%± (0.13 Ac±)
PARKING	2 spaces/unit (26 total)	2 spaces/unit (26 total)

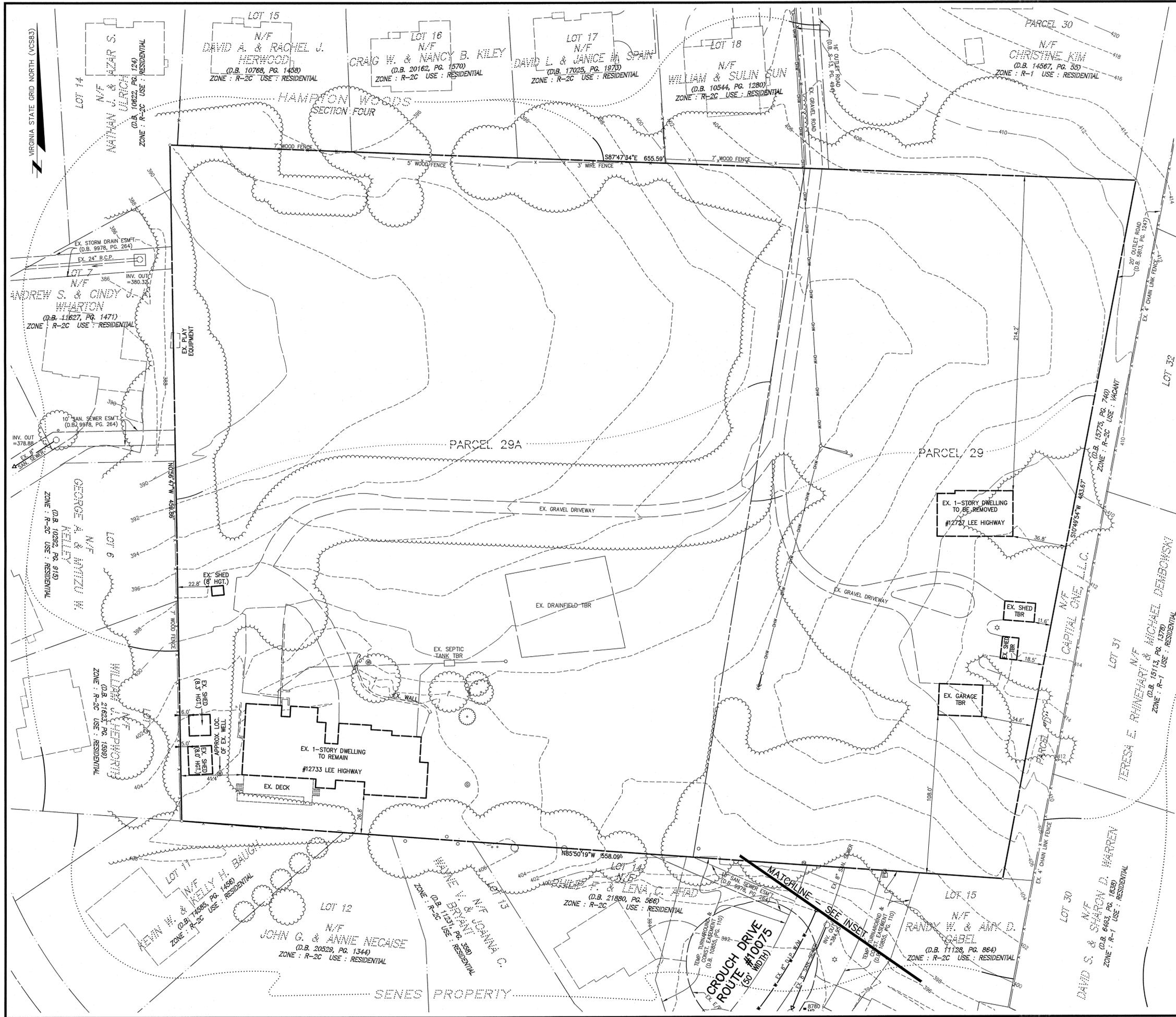
**DEVELOPER**  
THE CHRISTOPHER COMPANIES  
10461 WHITE GRANITE ROAD  
SUITE 103  
OAKTON, VIRGINIA 22124  
(703) 352-5950

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- ARCHITECTURAL ELEVATIONS
- FUTURE ROAD EXTENSION
- TREE PRESERVATION PLAN
- TREE PRESERVATION INVENTORY
- DRAINAGE MAPS
- BMP COMPUTATIONS
- OUTFALL ANALYSIS

**CPJ Charles P. Johnson & Associates, Inc.**  
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DATE : APRIL 1, 2015  
REVISED : JUNE 25, 2015  
AUGUST 24, 2015



**LEGEND**

- - - - - 402 - EXISTING CONTOUR
- - - - - 400 - EXISTING INDEX CONTOUR
- ~~~~~ EXISTING TREELINE
- ==== EX. STORM DRAIN & EASEMENT
- EX. SAN. SEWER & EASEMENT
- W— EX. WATERMAIN & EASEMENT
- EX. UTILITY LINE & POLE

**EXISTING CONDITIONS PLAN**

NO.	DATE	REVISION	APPROVAL
2	8-24-15	ADDED HEIGHTS OF EXISTING SHEDS (KIV)	

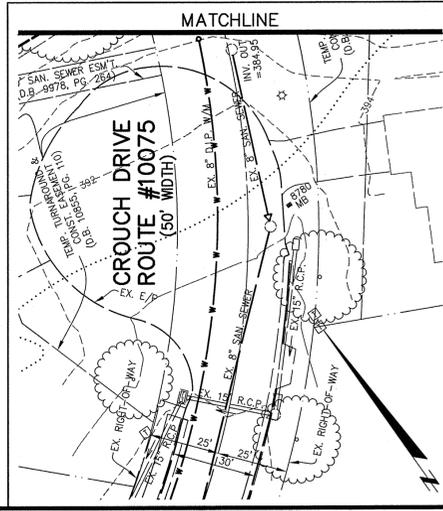
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**EXISTING CONDITIONS PLAN**

# THE RESERVE AT HAMPTON SPRINGS

SPRINGFIELD DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

RZ 2015-SP-004



DESIGN	DRAFT	KIV	KIV	DATE	NO.
APPROVED	HMF	FEB. 2015	30		
SHEET		OF		REVISIONS	
2		13			
PRJ NO: 14-501			TYPE: CDP/FDP		

VIRGINIA STATE GRID NORTH (VCS883)

### COVER TYPE SUMMARY

COVER TYPE	PRIMARY SPECIES	SUCCESSIONAL STAGE	CONDITION	AREA (in SF)
Upland Forest (onsite)	Red Maple, White Oak, Tulip Poplar	sub-climax	good	106,780
Landscaped Tree Canopy	Silver Maple, Paper Birch, White Pine	----	good	29,450
Maintained Grassland	----	----	----	130,730
Developed Area	----	----	----	9,604
Upland Forest (offsite)	Silver Maple, Red Maple, White Oak, Tulip Poplar	sub-climax	good	8,000
<b>TOTAL AREA</b>				<b>284,564</b>



EXISTING VEGETATION MAP

**THE RESERVE AT HAMPTON SPRINGS**

SPRINGFIELD DISTRICT  
FAIRFAX COUNTY, VIRGINIA

RZ 2015-SP-004

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NO.	DATE	REVISION	REVISOR	APPROVAL
1.	6-25-15	REVISED COVER TYPES (KJV)		

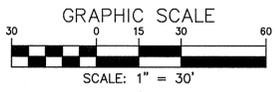
PROFESSIONAL SEAL

ANTHONY T. OWENS  
Lic. No. 034522  
Professional Engineer

NO.	DATE	REVISIONS	REVIEW BY	APPROVAL DATE

DESIGN	DRAFT	APPROVED	DATE	SCALE	VERT.
KJV	KJV	HMF	06/25/2015	AS SHOWN	1" = 30'

SHEET	OF
3	13
PRJ NO: 14-501	
TYPE: CDP/FDP	





# THIS SHEET IS FOR LANDSCAPE PURPOSES ONLY



### RAIN GARDEN LANDSCAPING REQUIREMENTS

(PER PFM 6-1307)

	FOOTPRINT AREA OF RAIN GARDEN	
	REQUIRED	PROVIDED
TOTAL NUMBER OF TREES (10 TREES / 1,000 SF)	60	60
OVERSTORY TREES	-	34
UNDERSTORY TREES (30%-50% OF TOTAL TREES)	18-30	26
SHRUBS (2-3 PER TREE)	120-180	140

### LEGEND

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- 
- 
- 
- 

\* LANDSCAPING IS CONCEPTUAL IN NATURE. FINAL LOCATIONS AND SPECIES ARE TO BE DETERMINED WITH FINAL SITE PLAN. NATIVE AND/OR DESIRABLE SPECIES WILL BE USED WHERE POSSIBLE. TREE LOCATIONS AND SIZES MAY VARY WITH FINAL OVERHEAD & UNDERGROUND UTILITY LOCATIONS.

### NOTE :

TREE PRESERVATION CANOPY AREAS MEETING STANDARDS OF §12-0200 WERE CALCULATED USING THE FOLLOWING THREE GUIDELINES :

- CANOPY CREDIT IS TAKEN ONLY FOR TREES WITH MAIN TRUNKS LOCATED ON THE SITE BEING DEVELOPED WITHIN THE TREE PRESERVATION AREAS
- TREES THAT WERE BISECTED BY THE DEVELOPMENT SITE'S OUTER PROPERTY LINE THAT ARE ASSUMED TO SURVIVE FOR THE MINIMUM 10 YEARS AFTER PLAN APPROVAL. CREDIT WAS TAKEN ONLY FOR THE PART OF THE TREE'S CANOPY THAT DIRECTLY OVERHANGS THE DEVELOPMENT SITE.
- WHERE SHARED PROPERTY LINES BISECT DENSE FOREST STANDS AND IT IS NOT PRACTICAL OR FEASIBLE TO DETERMINE WHICH PROPERTY A CANOPY ORIGINATES FROM, THE EXTENT OF ON-SITE CANOPY AREAS MAY BE DEFINED BY THE SHARED PROPERTY LINE.

PLEASE REFER TO THE TREE PRESERVATION PLAN ON SHEET 7 TO SEE INDIVIDUAL TREES 12" AND GREATER IN DIAMETER THAT CONTRIBUTE TO THE TREE PRESERVATION CANOPY AREA PER THE ABOVE GUIDELINES.

Table 12.10 10-YEAR TREE CANOPY CALCULATION WORKSHEET

A. Tree Preservation Target Calculations and Statement (Table 12.3)		
A	Pre-development area of existing tree canopy	136,230 SF
B	Percentage of gross site area covered by existing tree canopy	47.9 %
C	Percentage of 10-year canopy required for site	30 %
D	Percentage of 10-year canopy requirement that should be met through tree preservation	47.9 %
E	Proposed percentage of canopy requirement that will be met through tree preservation	50.7 %
F	Has the Tree Preservation Target minimum been met?	YES
G	If no, provide sheet number where deviation approval is located	N/A

B. Tree Canopy Requirement		
1	Identify gross site area	284,564 SF
2	Subtract area dedicated to road frontage and parks	0 SF
3	Subtract area of exemptions	0 SF
4	Adjusted gross site area (B1 - B2 - B3)	284,564 SF
5	Identify site's zoning and/or use	PDH-2
6	Percentage of 10-year canopy required	30 %
7	Area of 10-year canopy required (B4 x B6)	85,369 SF
8	Is a modification of canopy requirements being requested?	NO
9	If B8 is yes, provide sheet number where modification request is located	N/A

C. Tree Preservation		
1	Tree Preservation Target Area	40,869 SF
2	Total canopy area meeting standards of §12-0200	34,640 SF
3	x 1.25	43,300 SF
4	Total canopy area of unique or valuable forest or woodland communities	0 SF
5	x 1.50	0 SF
6	Total canopy area of Heritage, Memorial, Specimen or Street Trees	0 SF
7	x 1.5 to 3.0	0 SF
8	Canopy area of trees within Resource Protection Areas and 100-year floodplains	0 SF
9	x 1.0	0 SF
10	Canopy area of Virginia Pines	0 SF
11	x 1.0	0 SF
12	Total of C3, C5, C7, C9, and C11	43,300 SF

D. Tree Planting		
1	Area of canopy to be met through tree planting (B7 - C12)	42,069 SF
2	Area of canopy to be planted	32,600 SF
3	x 1.0	32,600 SF
4	Area of canopy to be planted for energy conservation *	7,250 SF
5	x 1.50	10,875 SF
6	Area of canopy provided through tree seedlings	0 SF
7	x 1.0	0 SF
8	Area of canopy provided through native shrubs or woody seed mix	0 SF
9	x 1.0	0 SF
10	Percentage of line D6 represented by line D8 (must not exceed 33% of D6)	0 %
11	Total of canopy area to be provided through tree planting	43,475 SF
12	Is offsite planting relief requested?	NO
13	Tree Bank or Tree Fund?	N/A
14	Canopy area requested to be provided through offsite banking or tree fund	0 SF
15	Amount to be deposited into the Tree Preservation and Planting Fund	0

E. Total of 10-year Tree Canopy Provided		
1	Total canopy area provided through tree preservation (C12)	43,300 SF
2	Total canopy area provided through tree planting (D11)	43,475 SF
3	Total canopy area provided through offsite mechanism (D14)	N/A SF
4	Total 10-year tree canopy provided	86,775 SF

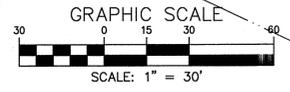
Total 10-year tree canopy provided (% of net site area)	
	30.5 %

**LANDSCAPE PLAN**  
**THE RESERVE AT HAMPTON SPRINGS**  
 SPRINGFIELD DISTRICT  
 FAIRFAX COUNTY, VIRGINIA  
 RZ 2015-SP-004

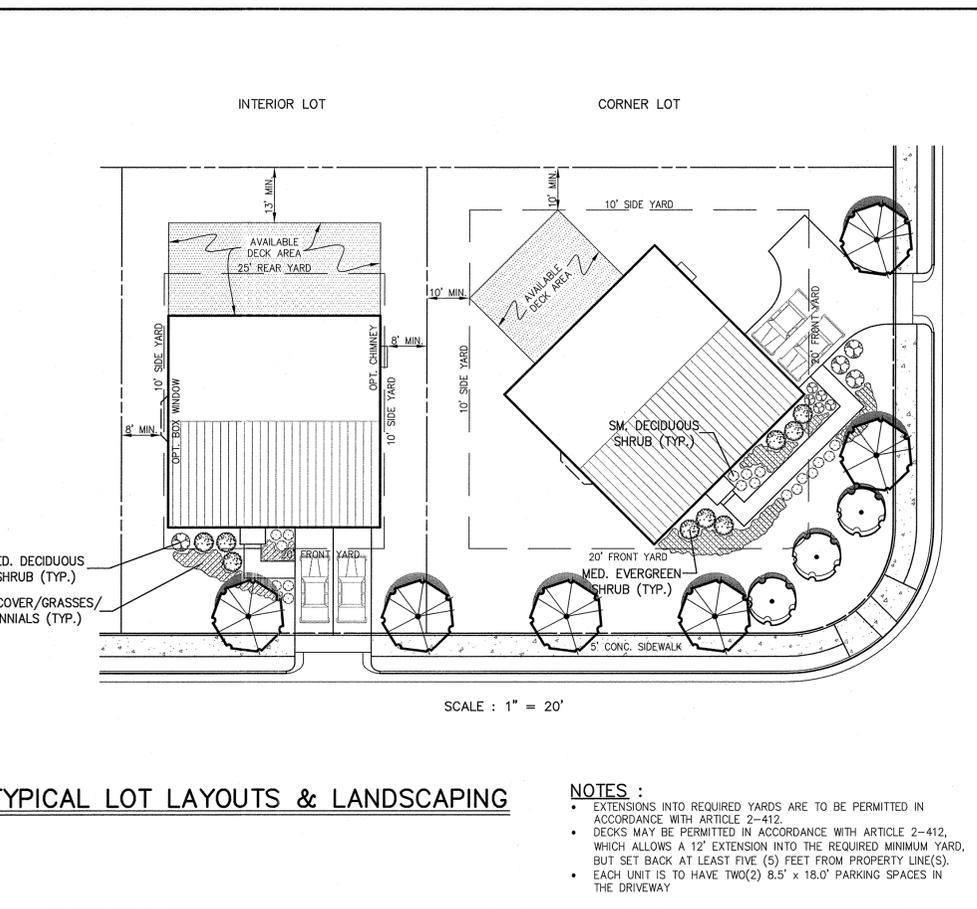
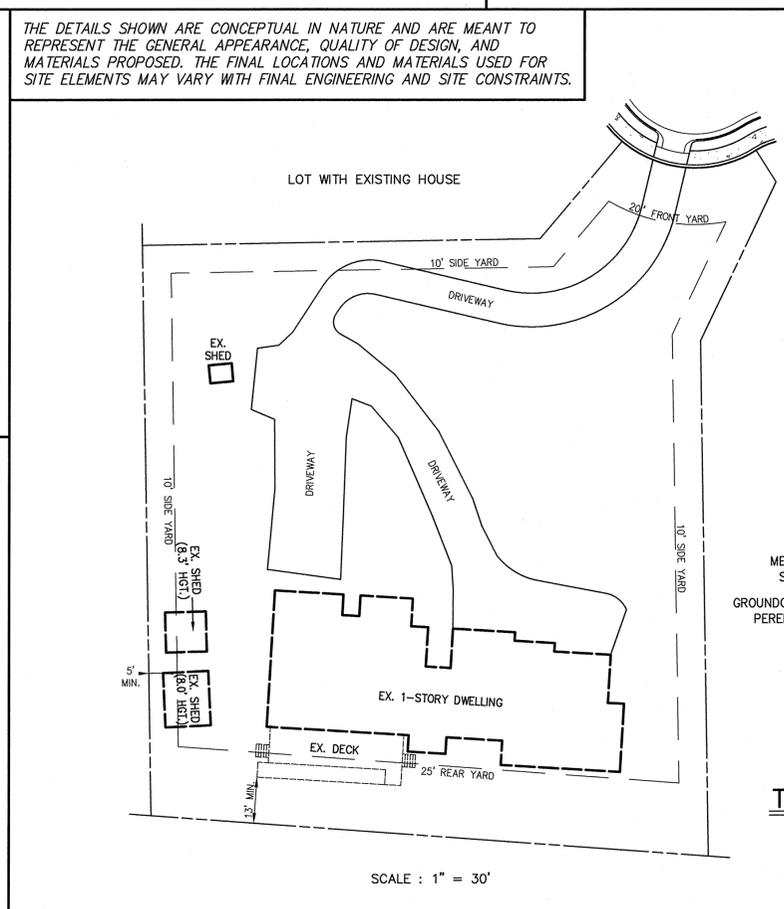
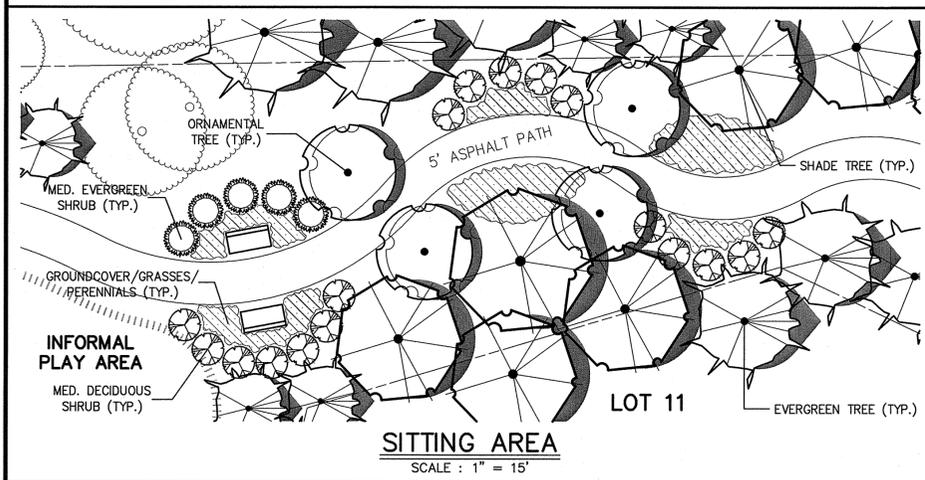
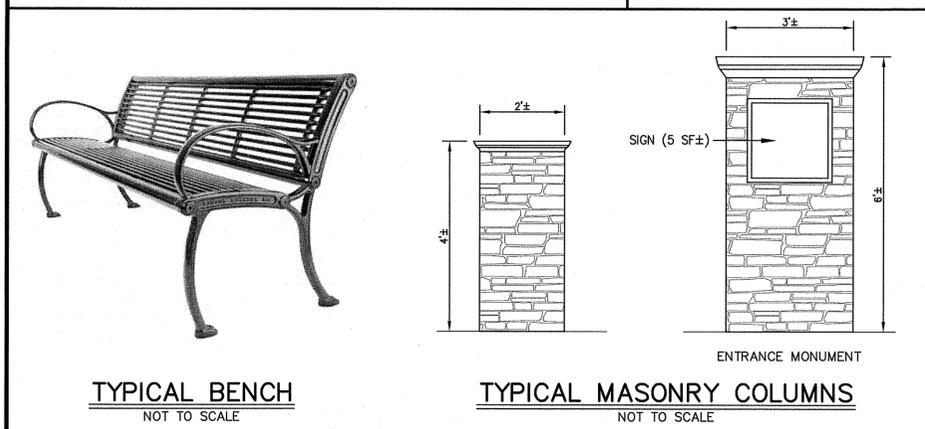
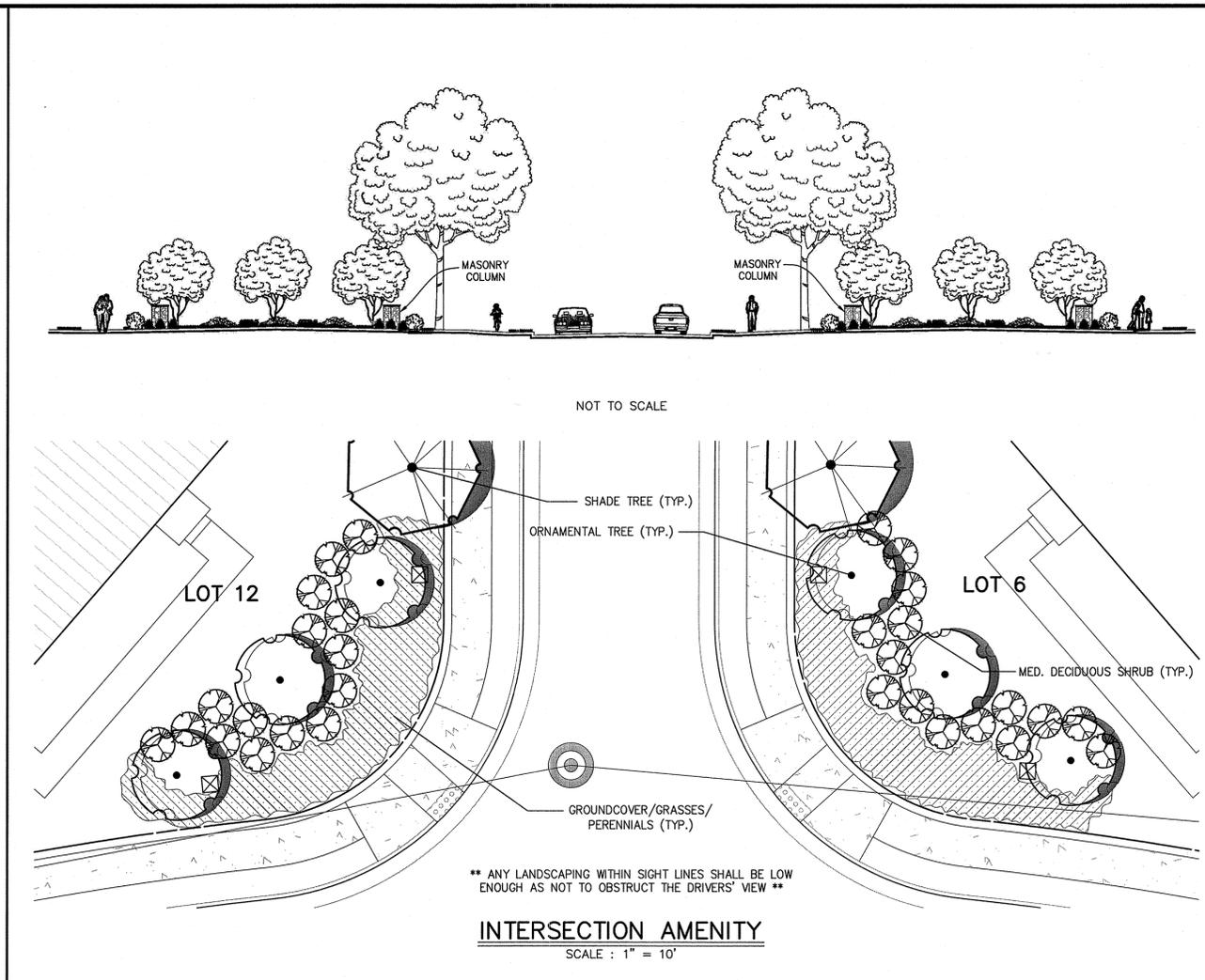
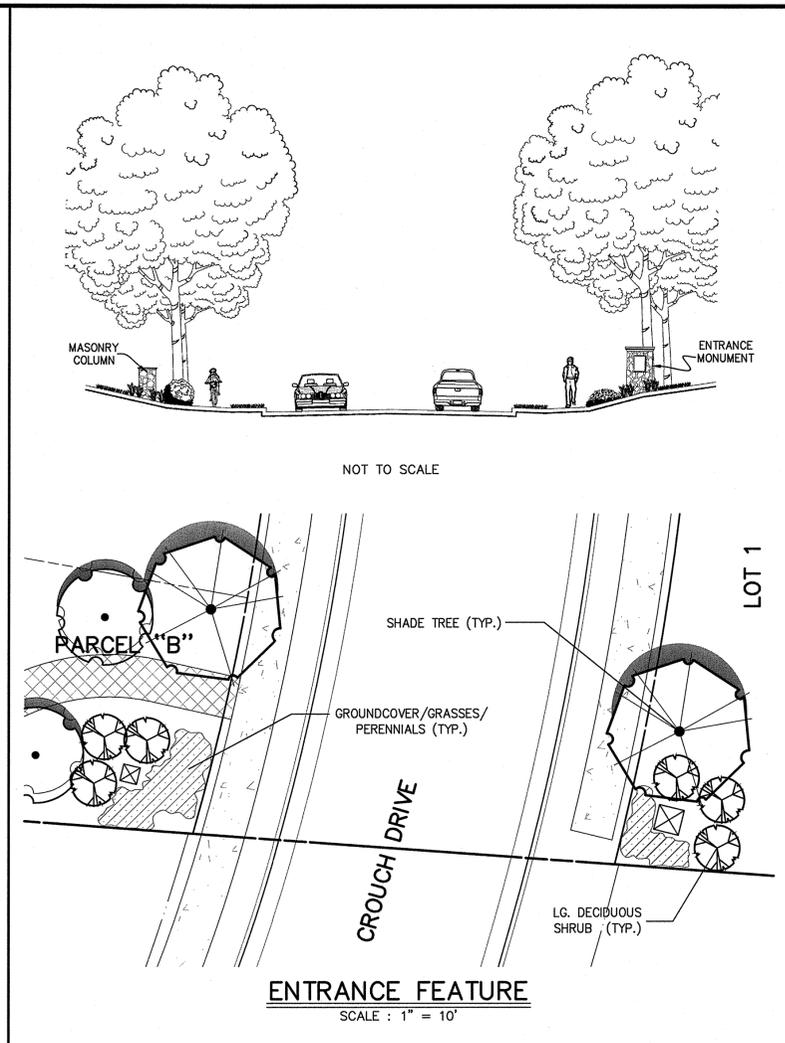
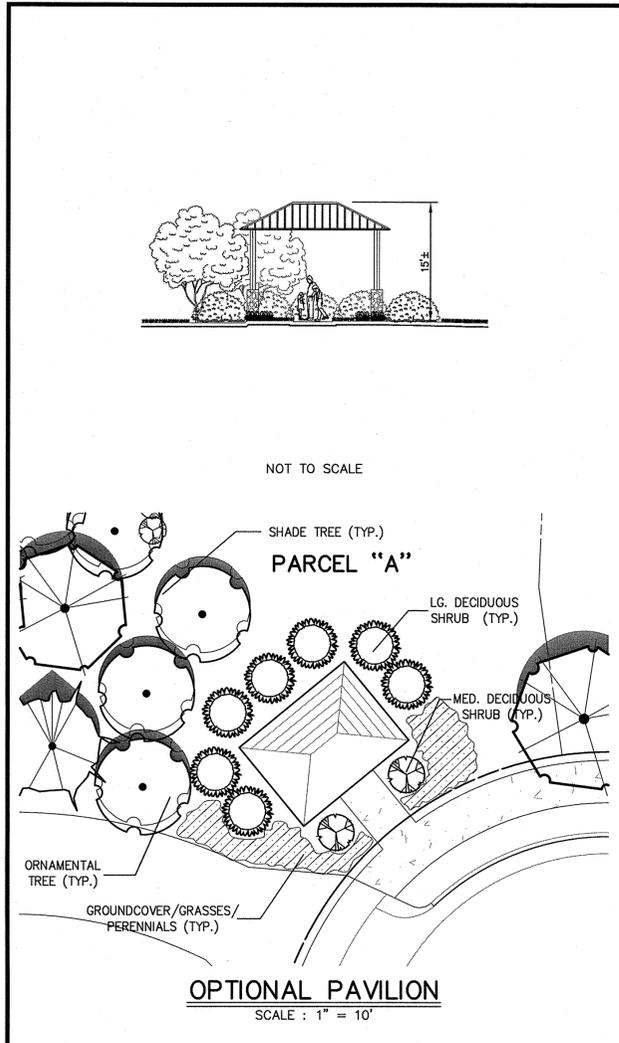


DESIGN	DRAFT	DATE	SCALE	SHEET	OF
KJV	KJV	FEB. 2015	1" = 30'	5	13
APPROVED	HMP				
DATE					
SCALE					
HORIZ.	1" = 30'				
VERT.					
NO.					
DESCRIPTION					
REVISIONS					
NO.					
DATE					
APPROVED					
DATE					

**RAIN GARDEN DETAIL**  
SCALE: 1" = 20'



Plant species and additional credit types (if applicable) are to be specified with the final site/landscape plan. Total 10-year tree canopy provided with the site plan shall be equivalent to that shown on the CDP/FDP. \* The number of trees used for energy conservation credit may vary with final plans due to changes in house locations and site constraints. A lowering of the credit amount taken may require an increase in total trees to be planted to make up the difference.



**NOTES :**

- EXTENSIONS INTO REQUIRED YARDS ARE TO BE PERMITTED IN ACCORDANCE WITH ARTICLE 2-412.
- DECKS MAY BE PERMITTED IN ACCORDANCE WITH ARTICLE 2-412, WHICH ALLOWS A 12' EXTENSION INTO THE REQUIRED MINIMUM YARD, BUT SET BACK AT LEAST FIVE (5) FEET FROM PROPERTY LINE(S).
- EACH UNIT IS TO HAVE TWO(2) 8.5' x 18.0' PARKING SPACES IN THE DRIVEWAY.

**TYPICAL LOT DETAILS & SITE AMENITIES**

# THE RESERVE AT HAMPTON SPRINGS

SPRINGFIELD DISTRICT  
FAIRFAX COUNTY, VIRGINIA

CPJ Charles P. Johnson & Associates, Inc.  
Associates  
Civil and Environmental Engineers • Planners • Landscape Architects • Surveyors  
3999 Peader Dr., Ste. 200 Fairfax, VA 22030 703-585-7555 Fax: 703-272-8595  
www.cpj.com • Silver Spring, MD • Catlettsburg, MD • Annapolis, MD • College Park, MD • Frederick, MD • Fairfax, VA

NO. DATE

2. 8-24-15 REVISED SITING AREA DETAIL (CJV)

1. 8-24-15 NEW SHEET (CUT REVISION - PRIOR TO APPROVAL)

DESIGN DRAWN BY: KJV  
APPROVED: HMF  
DATE: FEB. 2015  
SCALE: HORIZ: VARIES VERT: ---  
SHEET 6 OF 13  
PRJ NO: 14-501  
TYPE: CDP/FDP

Attached Xrefs: 00-F6601/00-F0700/00-F0500/00-R0401/00-0301

Last Saved 8/24/2015 Last Plotted 8/24/2015 2:57 PM Sheet N:\14501\DWG\00-F0301



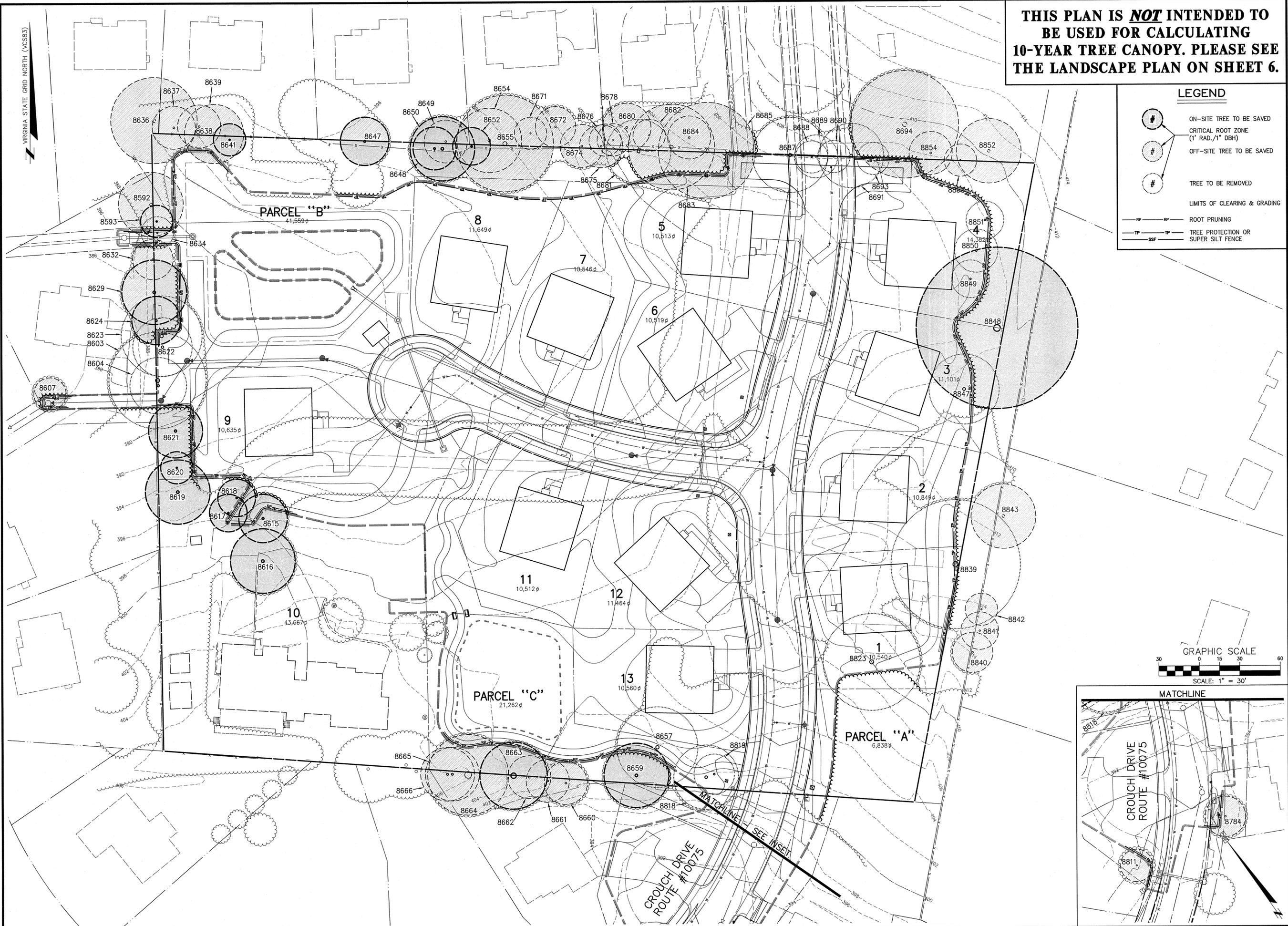


VIRGINIA STATE GRID NORTH (VCS83)

**THIS PLAN IS NOT INTENDED TO BE USED FOR CALCULATING 10-YEAR TREE CANOPY. PLEASE SEE THE LANDSCAPE PLAN ON SHEET 6.**

**LEGEND**

-  ON-SITE TREE TO BE SAVED
-  CRITICAL ROOT ZONE (1' RAD./1" DBH)
-  OFF-SITE TREE TO BE SAVED
-  TREE TO BE REMOVED
-  LIMITS OF CLEARING & GRADING
-  ROOT PRUNING
-  TREE PROTECTION OR SUPER SILT FENCE



TREE PRESERVATION PLAN  
**THE RESERVE AT  
 HAMPTON SPRINGS**

SPRINGFIELD DISTRICT  
 FAIRFAX COUNTY, VIRGINIA



NO.	DATE	REVISION	BY	APPROVAL DATE
1.	6-25-15	REVISED TREE PRESERVATION INVENTORY (LBD)		
2.		ADDED TREES 8660-8666		

DESIGNER	DATE	SCALE	HORIZ.	VERT.
LEAD	FEB. 2015	1" = 30'		
APPROVED				
HMF				
SHEET 9 OF 13				
PRJ NO: 14-501				
TYPE: CDP/FDP				

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RZ 2015-SP-004

**TREE PRESERVATION NARRATIVE:**

Trees as referred to in this document are considered those trees that are protected by limits of clearing and grading and shown for preservation on approved plans.

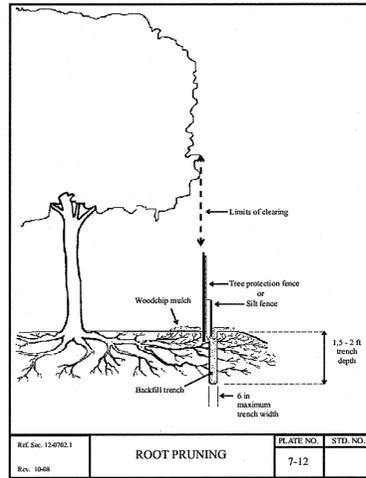
- Flagging/ Site Layout:** Prior to requesting a pre-construction meeting, the contractor is responsible for flagging the limits of clearing and grading. These limits shall not exceed that shown on the approved plans
- Pre-Construction Meeting:** After clearing limits have been staked a meeting shall be requested by the contractor to walk with owner or owner's designated representative, arborist/forester hired by owner, site superintendent, clearing contractor and UFMD, DPWES representative to make minor adjustments as necessary to observe trees listed in tree preservation activity schedule. Additional preservation activities will be coordinated with the Urban Forestry Division at this time.
- Tree Protection Approval:** Selective tree removals, root pruning, and tree protection fence installation should be completed prior to any demolition or land clearing operations. An UFMD, DPWES, representative shall be contacted a minimum of three (3) days prior to any site clearing, grading or demolition activities are to begin, to inspect the site to insure that the tree protection has been installed.
- Protection of Existing Understorey Vegetation and Soil Conditions in Tree Preservation Areas:** All tree preservation-related work occurring in or adjacent to tree preservation areas shall be accomplished in a manner that minimizes damage to vegetation to be preserved in the lower canopy environment, and to the existing top soil and leaf litter layers that provide nourishment and protection to that vegetation. Any removal of any vegetation or soil disturbance in tree preservation areas including the removal of plant species that may be perceived as noxious or invasive, such as poison ivy, greenbrier, multi-floral rose, etc. shall be subject to the review and approval of UFMD, DPWES
- Use of Equipment:** Except as qualified herein, the use of motorized equipment in tree preservation areas will be limited to hand-operated equipment such as chainsaws, wheel barrows, rake and shovels. Any work that requires the use of motorized equipment, such as tree transplanting spades, skid loaders, tractors, trucks, stump-grinders, etc., or any accessory or attachment connected to this type of equipment shall not occur unless pre-approved by UFMD.
- Root Pruning:** Tree preservation Areas shall be root pruned along the limits of clearing adjacent to significant trees 20" dbh and greater or as noted by the project arborist in the Tree Inventory and Activity Schedule. Root pruning shall be a minimum of 18" deep and shall be accomplished using a small walk behind trencher or air spade. The root pruning trench shall be backfilled immediately. Silt fence/super silt fence installation utilizing walk behind trencher can be substituted for root pruning as long as a minimum depth of 18" is achieved.
- Mulching:** Mulch shall be placed in areas as indicated on approved plans and/or extending in a swath fifteen feet wide along the Limit of Disturbance adjacent to indicated trees at minimum. Trees/Areas indicated will be mulched with wood chips generated from on site clearing or tree removal and pruning operations when possible. Shredded hardwood mulch from offsite maybe utilized if approved by project arborist. Mulch shall be spread in a uniform depth of three (3") inches by hand.
- Tree Protection Fencing:** Tree Preservation Areas shall be protected by per the attached Tree Protection Detail. Super-Silt fencing may be used for tree protection fencing as approved by UFMD. Fencing shall be erected at the limits of clearing and grading as shown on the demolition, and erosion and sediment control sheets. The installation of all tree protection fence types should 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. Tree protection fencing shall be made clearly visible to all construction personnel. Bilingual signs stating "TREE PRESERVATION AREA - KEEP OUT" shall be affixed to the tree preservation fence at least every 30 feet, and three (3) working days prior to the commencement of any clearing, grading, or demolition activities, but subsequent to the installation of the tree protection devices including fencing. UFMD and the district supervisor staff shall be notified and given the opportunity to inspect the site to assure 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 UFMD.
- Tree Protection Maintenance:** Fencing shall be maintained in an upright position for the duration of the project. Tree protection fencing that is damaged as a result of land clearing operations shall be repaired prior to the end of the workday that the damage occurred.
- Pruning:** All pruning shall conform to current ANSI A300-2001 pruning standards. Trees designated for pruning shall be crown cleaned of deadwood 2" and greater unless otherwise specified by the project arborist. The interior of trees shall not be stripped of live tissue, suckers, or epicormic branches. Damaged, crossing, and rubbing branches may be removed at the arborist's discretion. Debris from pruning operations may be chipped and deposited into the Tree Preservation Areas and spread by hand to a uniform depth or be removed from the site.
- Site Monitoring:** During any clearing or tree/vegetation structure removal or transplantation of vegetation on the subject site, a representative of the applicant shall be present to monitor the process and ensure that the activities are conducted as approved by UFMD. The applicant should retain the services of a certified arborist to monitor all construction work and tree preservation efforts in order to ensure conformance with all tree preservation conditions, and UFMD approvals. Monitoring inspections to ensure compliance with tree preservation plans and other jurisdictional requirements shall be conducted daily during initial site clearing operations, weekly through the erosion and sediment control phase, weekly for four weeks thereafter and monthly for 12 months. The district supervisor shall be notified of the name and contact information of the Applicant's representative responsible for site monitoring at the tree preservation walk-through meeting.

NOTE: AS STATED BY SECTION 12-0507.1B IN THE PUBLIC FACILITIES MANUAL, DEAD TREES AND TREES THAT REPRESENT A POTENTIAL HAZARD TO HUMAN HEALTH AND PROPERTY WHICH ARE 12 INCHES IN DIAMETER OR GREATER THAT RESIDE IN ONE OF THE TWO FOLLOWING AREAS WILL BE IDENTIFIED IN THE TREE INVENTORY.

AREA 1. 100 FEET FROM THE PROPOSED LIMITS OF CLEARING AND GRADING WITHIN THE UNDISTURBED AREA.

AREA 2. 10 FEET FROM THE PROPOSED LIMITS OF CLEARING AND GRADING WITHIN THE DISTURBED AREA.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

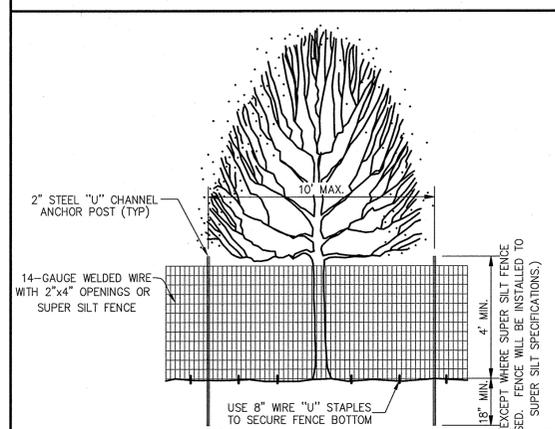


ROOT PRUNING  
PLATE NO. 7-12  
STD. NO.



- NOTES: 1. TREE PROTECTION SIGNS SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.  
2. BILINGUAL SIGNS WILL BE POSTED ON THE TREE PROTECTION FENCE AT LEAST EVERY 30 FEET.  
3. SIGN SHOWN IS FOR INFORMATIONAL PURPOSES ONLY AND ACTUAL SIGNS MAY DIFFER IN APPEARANCE AND WORDING. CONTENT SHALL BE EQUAL.

TREE PROTECTION SIGN DETAIL  
NOT TO SCALE



NOTE: TREE PROTECTION FENCING SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION

TREE PROTECTION FENCE DETAIL  
NOT TO SCALE

NOTE: TREES TO BE PRESERVED WITH IVY OR VINES GROWING ON THEM SHALL HAVE ALL VINES CUT AT THE BASE OF THE VINE. VINES SHALL BE LEFT TO DIE ON THE TREE. NO VINES OR IVY SHALL BE PULLED FROM THE TRUNK OR LIMBS OF THE TREE AS THIS CAN CAUSE INJURY TO THE TRUNK OR LIMBS.

**THIS PLAN IS NOT INTENDED TO BE USED FOR CALCULATING 10-YEAR TREE CANOPY. PLEASE SEE THE LANDSCAPE PLAN ON SHEET 6.**

**TREE INVENTORY AND ACTIVITIES SPREADSHEET**

Tree #	Tree # (Survey)	COMMON NAME	SCIENTIFIC BINOMIAL	DBH(in)	CONDITION	LOCATION	COMMENTS	STATUS	ACTIVITIES								
									ROOT PRUNE	MULCH	REMOVE FENCE	REPLACE FENCE	FERTILIZE	CABLE	CANES/STAKES	TREAT PESTS	
8629	100	black gum	Nyssa sylvatica	24	72	co-owned	Multiple curves in trunk, dual leaders, limb dieback, crowding, poor form, uneven canopy	preserve	X	X	X	X					
8624	101	Eastern red cedar	Juniperus virginiana	18	74	onsite	Buried root collar, playground structure at base, dual leaders, crowding	preserve	X	X	X	X					
8623	102	silver maple	Acer saccharinum	30	70	onsite	Buttressing roots, debris at base, epicormic sprouting, dual leaders, crowding, multiple curves in trunk, leaning canopy, limb dieback	remove									
8622	103	silver maple	Acer saccharinum	22	70	onsite	Multiple leaders, epicormic sprouting, leaning canopy	remove									
8603	104	tulip poplar	Liriodendron tulipifera	36	72	onsite	Buttressing roots, large tree at root collar, leaning trunk, dual leaders, limb dieback, uneven form, crowding.	remove									
8604	105	Eastern red cedar	Juniperus virginiana	21	70	onsite	Root collar impacted from large adjacent tree, leaning trunk, crowding, epicormic sprouting, multiple leaders	remove									
8847	106	black oak	Quercus velutina	26	65	onsite	Dual trunks, debris at base, epicormic sprouting, one trunk broken & missing a large portion, leaning canopy, limb dieback, multiple leaders, poor canopy form	remove									
8592	8592	tulip poplar	Liriodendron tulipifera	24	75	offsite	Dual trunks, crowding, uneven canopy, buttressing roots, multiple leaders	preserve	X	X	X						
8593	8593	Eastern red cedar	Juniperus virginiana	12	67	onsite	Multiple trunks, included bark, multiple leaders, extensive shoot development at base, poor form	preserve	X	X	X						
8607	8607	red maple	Acer rubrum	12	78	offsite	good condition	preserve	X	X	X						
8615	8615	silver maple	Acer saccharinum	18	72	onsite	Bark damage at base, epicormic sprouting, multiple leaders, light mounted in trunk	preserve	X	X	X						
8616	8616	white birch	Betula papyrifera	24	72	onsite	Multiple trunks, included bark, leaning trunk, multiple leaders, buried root collar	preserve	X	X	X						
8617	8617	silver maple	Acer saccharinum	14	67	onsite	Buttressing roots, one trunk dead & completely rotted, light mounted in trunk, multiple leaders, canopy dieback	preserve	X	X	X						
8618	8618	red maple	Acer rubrum	14	72	onsite	Buttressing roots, dual leaders, epicormic sprouting, uneven canopy	preserve	X	X	X						
8619	8619	European chestnut	Castanea sativa	24	69	onsite	Debris at base/leaning on tree, epicormic sprouting, tree growing through tire which should be removed soon to prevent more distress, multiple leaders, limb dieback, uneven canopy	preserve	X	X	X						
8620	8620	green ash	Fraxinus pennsylvanica	12	70	onsite	Alternate plant growth at root collar, leaning trunk, crowding, multiple leaders, poor canopy form, uneven canopy	preserve	X	X	X						
8621	8621	European chestnut	Castanea sativa	20	68	onsite	Dual trunks leaning, extensive limb & canopy dieback	preserve	X	X	X						
8632	8632	black cherry	Prunus serotina	15	71	offsite	Extensive buttressing roots, multiple leaders, poor trunk & canopy form, crowding, limb dieback	preserve	X	X	X						
8634	8634	Eastern red cedar	Juniperus virginiana	12	70	onsite	Multiple trunks, included bark, epicormic sprouting, rubbing branches, uneven canopy	remove									
8636	8636	tulip poplar	Liriodendron tulipifera	32	72	offsite	Buttressing roots, dual trunks, multiple curves in trunk, uneven canopy	preserve	X	X	X						
8637	8637	silver maple	Acer saccharinum	16	72	offsite	Multiple leaders, poor canopy form	preserve									
8638	8638	tulip poplar	Liriodendron tulipifera	16	72	offsite	Forest grown form, epicormic sprouting, multiple leaders	preserve	X								
8639	8639	sweetgum	Liquidambar styraciflua	22	72	offsite	Dual trunks, limb dieback, multiple curves in trunk	preserve	X	X	X						
8641	8641	Eastern red cedar	Juniperus virginiana	12	67	onsite	Hole in trunk, extensive shoot development along trunk	preserve	X	X	X						
8647	8647	sweetgum	Liquidambar styraciflua	18	74	co-owned	Limb dieback, multiple leaders	preserve	X	X	X						
8648	8648	Eastern red cedar	Juniperus virginiana	16	72	onsite	Dual leaders, uneven canopy, hole in trunk, epicormic sprouting, poor canopy form	preserve	X	X	X						
8649	8649	scarlet oak	Quercus coccinea	16	72	offsite	Leaning, uneven canopy, poor form, multiple leaders	preserve									
8650	8650	black locust	Robinia pseudoacacia	24	63	onsite	Multiple leaders, dying, broken branches, sparse canopy	preserve	X	X	X						
8652	8652	black cherry	Prunus serotina	14	75	onsite	Dual leaders, crowding	preserve									
8654	8654	tulip poplar	Liriodendron tulipifera	24	75	offsite	Leaning canopy, crowding	preserve	X	X	X						
8655	8655	tulip poplar	Liriodendron tulipifera	36	72	offsite	Buttressing root pushing up mesh fence, multiple leaders, crowding, uneven canopy	preserve	X	X	X						
8657	8657	silver maple	Acer saccharinum	30	50	onsite	Buttressing roots, significant signs of decay, dying, extensive epicormic sprouting, poor form, trunk broken & rotted	remove									
8659	8659	scarlet oak	Quercus coccinea	24	75	onsite	Crowding	preserve	X	X	X						
8660	8660	pin oak	Quercus palustris	16	75	offsite	Crowding, uneven canopy	preserve									
8661	8661	pin oak	Quercus palustris	16	75	offsite	Crowding, multiple curves in trunk	preserve									
8662	8662	pin oak	Quercus palustris	16	75	offsite	Crowding	preserve									
8663	8663	tulip poplar	Liriodendron tulipifera	48	75	co-owned	Dual trunks, crowding, included bark	preserve	X	X	X						
8664	8664	tulip poplar	Liriodendron tulipifera	60	74	offsite	Multiple trunks, epicormic sprouting	preserve	X	X	X						
8665	8665	white oak	Quercus alba	20	70	offsite	Dual trunks, crowding, epicormic sprouting, leaning canopy	preserve	X								
8666	8666	white oak	Quercus alba	20	72	offsite	Dual trunks, crowding, epicormic sprouting	preserve	X								
8671	8671	tulip poplar	Liriodendron tulipifera	12	75	offsite	Leaning canopy	preserve	X								
8672	8672	red maple	Acer rubrum	15	73	offsite	Buttressing roots, dual leaders, leaning trunk	preserve	X								
8674	8674	Virginia pine	Pinus virginiana	16	72	offsite	Limb dieback, uneven canopy, multiple leaders	preserve	X								
8675	8675	Virginia pine	Pinus virginiana	16	72	offsite	Leaning trunk, crowding, multiple curves in trunk, limb dieback	preserve	X								
8676	8676	silver maple	Acer saccharinum	12	74	offsite	Dual trunk, poor form, multiple leaders	preserve	X								
8678	8678	Virginia pine	Pinus virginiana	12	74	offsite	Crowding, uneven canopy, multiple curves in trunk	preserve	X								
8680	8680	tulip poplar	Liriodendron tulipifera	18	74	offsite	Poor canopy form, multiple leaders, uneven canopy	preserve	X								
8681	8681	black locust	Robinia pseudoacacia	24	0	onsite	Dead	remove									
8682	8682	tulip poplar	Liriodendron tulipifera	12	74	offsite	Multiple curves in trunk, leaning, uneven canopy	preserve	X								
8683	8683	silver maple	Acer saccharinum	32	73	offsite	Buttressing roots, stump sprout, dual trunks on either side of fence, vine coverage	preserve	X	X	X						
8684	8684	tulip poplar	Liriodendron tulipifera	16	75	offsite	Dual trunk, uneven canopy	preserve	X								
8685	8685	sweetgum	Liquidambar styraciflua	36	68	offsite	Multiple trunks, buttressing roots, debris at base, extensive limb & canopy dieback, multiple curves in trunk	preserve	X	X	X						
8687	8687	black gum	Nyssa sylvatica	28	70	co-owned	Multiple trunks in trunk, uneven canopy, multiple leaders, vine coverage, multiple trunks, poor form. Obtain letter of permission from neighbor before start of construction.	remove									
8688	8688	tulip poplar	Liriodendron tulipifera	12	70	onsite	Debris at base, leaning trunk, multiple curves in trunk, poor form, multiple leaders, crowding, uneven canopy	remove									
8689	8689	tulip poplar	Liriodendron tulipifera	16	70	onsite	Buttressing & girdling roots, tree at root collar, jog in trunk, uneven canopy, crowding, epicormic sprouting	remove									
8690	8690	scarlet oak	Quercus coccinea	12	67	co-owned	Buttressing & girdling roots, extensive epicormic sprouting, sparse canopy, forest grown form, extensive limb & canopy dieback. Obtain letter of permission from neighbor before start of construction.	remove									
8691	8691	tulip poplar	Liriodendron tulipifera	24	70	offsite	Buttressing roots, multiple trunks, adjacent trees, crowding, uneven canopy, poor form. Obtain letter of permission from neighbor before start of construction.	remove									
8693	8693	tulip poplar	Liriodendron tulipifera	12	74	onsite	Multiple curves in trunk, multiple leaders, uneven canopy	remove									
8694	8694	white oak	Quercus alba	40	72	offsite	Multiple leaders, limb & canopy dieback	preserve	X	X	X						
8784	8784	red maple	Acer rubrum	15	75	offsite	Multiple leaders, buried root collar	preserve	X								
8811	8811	red maple	Acer rubrum	12	75	offsite	Multiple leaders, buried root collar	preserve	X	X	X						
8818	8818	tulip poplar	Liriodendron tulipifera	24	71	onsite	Dual trunk, poor form, vine coverage, multiple leaders, epicormic sprouting	remove									
8819	8819	tulip poplar	Liriodendron tulipifera	15	74	onsite	Vine coverage, jog in trunk, multiple leaders, canopy dieback	remove									
8823	8823	white oak	Quercus alba	36	73	onsite	Buttressing & exposed roots, limb dieback, uneven canopy, multiple leaders	remove									
8839	8839	white oak	Quercus alba	48	65	onsite	Buttressing roots, bark damage, multiple leaders, extensive limb & canopy dieback	remove									
8840	8840	pignut hickory	Carya glabra	15	72	offsite	Buttressing roots, hole in										



Virginia Runoff Reduction Method New Development Worksheet - v2.8 - June 2014

Update Summary Sheet

Print

### Site Data Summary

Total Rainfall = 43 inches

### Site Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Turf (acres)	0.00	0.00	4.83	0.00	4.83	73.85
Impervious (acres)	0.00	0.00	1.71	0.00	1.71	26.15
<b>Total</b>					<b>6.54</b>	<b>100.00</b>

### Site Rv

Site Rv	0.41
Post Development Treatment Volume (ft3)	9754
Post Development TP Load (lb/yr)	6.13
Post Development TN Load (lb/yr)	43.84
Total TP Load Reduction Required (lb/yr)	3.45

### Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Turf (acres)	4.83	0.00	0.00	0.00	0.00	4.83
Impervious (acres)	1.71	0.00	0.00	0.00	0.00	1.71
<b>Total</b>						<b>6.54</b>

### Drainage Area Compliance Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Red. (lb/yr)	3.98	0.00	0.00	0.00	0.00	3.98
TN Load Red. (lb/yr)	31.66	0.00	0.00	0.00	0.00	31.66

### Drainage Area A Summary

### Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Turf (acres)	0.00	0.00	4.83	0.00	4.83	73.85
Impervious (acres)	0.00	0.00	1.71	0.00	1.71	26.15
<b>Total</b>					<b>6.54</b>	

### BMP Selections

Practice	Credit Area (acres)	Downstream Practice
6.b. Bioretention #2 (Spec #9)	Impervious: 1.32 Turf (Pervious): 3.13	

Total Impervious Cover Treated (acres)	1.32
Total Turf Area Treated (acres)	3.13
Total TP Load Reduction Achieved in D.A. A (lb/yr)	3.98
Total TN Load Reduction Achieved in D.A. A (lb/yr)	31.66

### Drainage Area A

#### Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres)	0.00	0.00	4.83	0.00	4.83	0.22
Impervious Cover (acres)	0.00	0.00	1.71	0.00	1.71	0.95
<b>Total</b>					<b>6.54</b>	

Post Development Treatment Volume (cf) = 9754

### 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 Practices (lbs)	Untreated Phosphorus Load to Practice (lbs.)	Phosphorus Removed By Practice (lbs.)	Remaining Phosphorus Load (lbs.)	Downstream Treatment to be Employed	Nitrogen Efficiency (%)	Nitrogen Load from Upstream RR Practices (lbs)	Untreated Nitrogen Load to Practice (lbs.)	Nitrogen Removed By Practice (lbs.)	Remaining Nitrogen Load (lbs.)
<b>6. Bioretention</b>																		
6.a. Bioretention #1 or Urban Bioretention (Spec #9)	Impervious acres draining to bioretention	40% runoff volume reduction	0.40	0.00	0	0	0	25	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
	turf acres draining to bioretention	40% runoff volume reduction	0.40	0.00	0	0	0	25	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
6.b. Bioretention #2 (Spec #9)	Impervious acres draining to bioretention	80% runoff volume reduction	0.80	1.32	0	3642	910	50	0.00	2.86	2.57	0.29		60	0.00	20.44	18.80	1.63
	turf acres draining to bioretention	80% runoff volume reduction	0.80	3.13	0	2000	500	50	0.00	1.57	1.41	0.16		60	0.00	11.22	10.32	0.90
<b>TOTAL IMPERVIOUS COVER TREATED (ac)</b>					<b>1.32</b>													
<b>TOTAL TURF AREA TREATED (ac)</b>					<b>3.13</b>													
AREA CHECK OK																		
<b>TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)</b>														<b>3.45</b>				
<b>TOTAL RUNOFF REDUCTION IN D.A. A (cf)</b>														<b>5.641</b>				
<b>PHOSPHORUS REMOVAL FROM RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)</b>														<b>3.98</b>				
<b>TOTAL RUNOFF REDUCTION IN D.A. A (cf)</b>														<b>5.641</b>				
<b>NITROGEN REMOVAL FROM RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)</b>														<b>31.66</b>				
SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS																		
<b>TOTAL IMPERVIOUS COVER TREATED (ac)</b>					<b>1.32</b>													
<b>TOTAL TURF AREA TREATED (ac)</b>					<b>3.13</b>													
AREA CHECK OK																		
<b>PHOSPHORUS REMOVAL BY PRACTICES THAT DO NOT REDUCE RUNOFF VOLUME IN D.A. A</b>														<b>0.00</b>				
<b>TOTAL PHOSPHORUS REMOVAL IN D.A. A (lb/yr)</b>														<b>3.98</b>				
SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS																		
<b>NITROGEN REMOVAL BY PRACTICES THAT DO NOT REDUCE RUNOFF VOLUME IN D.A. A</b>														<b>0.00</b>				
<b>TOTAL NITROGEN REMOVAL IN D.A. A (lb/yr)</b>														<b>31.66</b>				

### Channel and Flood Protection

	Weighted CN	1-year storm Adjusted CN	2-year storm Adjusted CN	10-year storm Adjusted CN
Target Rainfall Event (in)		2.70	3.20	5.20
D.A. A CN	80	75	76	77

### RAIN GARDEN #1 & #2 (SPLIT FLOW TO RAIN GARDENS)

#### Numbers per Rain Garden

Total Site Area A = 6.54 ac

Drainage Area to Rain Garden from Surface A<sub>rg</sub> = 2.25 ac

Total Impervious Area to Rain Garden from Surface A<sub>i</sub> = 0.67 ac

Q<sub>10</sub> = 10.58 cfs (From SCS)

Treatment Volume (From Runoff Reduction Spreadsheet) T<sub>v</sub> = 4.873 cf (From RRM)

Bioretion Soil Media Depth d = 3 ft

Gravel Depth d = 1 ft

Surface Storage Depth d = 0.5 ft

#### Filter Bed Design

Equivalent Storage Depth h<sub>v</sub> = 1.65 ft

Required Surface Area of Filter A<sub>req</sub> = WQ<sub>v</sub> / h<sub>v</sub> = 2953 sf

Provided Surface Area of Filter A<sub>f</sub> = 3,000 sf at elevation 388.00

Provided surface area is larger then the required area.

Depth of Filter d<sub>f</sub> = 3 ft at elevation 385.00

Coefficient of Permeability of Filter Bed k<sub>f</sub> = 1.5 in/hr

Drain time through the filter t<sub>d</sub> = (WQ<sub>v</sub>) \* (d<sub>f</sub>) / [(k<sub>f</sub> / 12) \* (0.5h<sub>v</sub> + d<sub>f</sub>) \* A<sub>f</sub>] = 10.19 hrs < 24 hrs OK

	1-year storm	2-year storm	10-year storm
Target Rainfall Event (in)	2.70	3.20	5.20
Drainage Area A			
Drainage Area (acres)	6.54		
Runoff Reduction Volume (cf)	5,641		
Drainage Area B			
Drainage Area (acres)	0.00		
Runoff Reduction Volume (cf)	0		
Drainage Area C			
Drainage Area (acres)	0.00		
Runoff Reduction Volume (cf)	0		
Drainage Area D			
Drainage Area (acres)	0.00		
Runoff Reduction Volume (cf)	0		
Drainage Area E			
Drainage Area (acres)	0.00		
Runoff Reduction Volume (cf)	0		

Based on the use of Runoff Reduction practices in the selected drainage areas, the spreadsheet calculates an adjusted Rv<sub>Developed</sub> and adjusted Curve Number.

Drainage Area A	A Soils	B Soils	C Soils	D Soils
Forest/Open Space - undisturbed, protected forest/open space or reforested land	Area (acres) 0.00 CN 30	Area (acres) 0.00 CN 55	Area (acres) 0.00 CN 70	Area (acres) 0.00 CN 77
Managed Turf - disturbed, graded for yards or other turf to be mowed/managed	Area (acres) 0.00 CN 39	Area (acres) 0.00 CN 61	Area (acres) 4.83 CN 74	Area (acres) 0.00 CN 80
Impervious Cover	Area (acres) 0.00 CN 98	Area (acres) 0.00 CN 98	Area (acres) 1.71 CN 98	Area (acres) 0.00 CN 98
<b>Weighted CN</b>	<b>80</b>			<b>77</b>

Virginia Runoff Reduction Method New Development Worksheet - v2.8 - June 2014

To be used w/ 2011 BMP Standards and Specifications

### Site Data

Project Name: The Townes at Burke Lake Crossing

Date: 1/21/2015

data input cells  
calculation cells  
constant values

### 1. Post-Development Project & Land Cover Information

#### Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Phosphorus EMC (mg/L)	0.26
Target Phosphorus Target Load (lb/acre/yr)	0.41
Pj	0.90
Nitrogen EMC (mg/L)	1.86

#### Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) - undisturbed, protected forest/open space or reforested land	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) - disturbed, graded for yards or other turf to be mowed/managed	0.00	0.00	4.83	0.00	4.83
Impervious Cover (acres)	0.00	0.00	1.71	0.00	1.71
<b>Total</b>					<b>6.54</b>

#### Rv 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)	0.00
Weighted Rv(orest)	0.00
% Forest	0%
Managed Turf Cover (acres)	4.83
Weighted Rv(turf)	0.22
% Managed Turf	74%
Impervious Cover (acres)	1.71
Rv(imperious)	0.95
% Impervious	26%
<b>Total Site Area (acres)</b>	<b>6.54</b>
<b>Site Rv</b>	<b>0.41</b>
Post-Development Treatment Volume (acre-ft)	0.22
Post-Development Treatment Volume (cubic feet)	9,754
Post-Development Load (TP) (lb/yr)	6.13
Post-Development Load (TN) (lb/yr)	43.84
Total Load (TP) Reduction Required (lb/yr)	3.45

### Site Results

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
IMPERVIOUS COVER	1.71	0.00	0.00	0.00	0.00	OK
IMPERVIOUS COVER TREATED	1.32	0.00	0.00	0.00	0.00	OK
TURF AREA	4.83	0.00	0.00	0.00	0.00	OK
TURF AREA TREATED	3.13	0.00	0.00	0.00	0.00	OK
AREA CHECK	OK	OK	OK	OK	OK	

### Phosphorus

TOTAL TREATMENT VOLUME (cf)	9,754
TOTAL PHOSPHORUS LOAD REDUCTION REQUIRED (LB/YEAR)	3.45
RUNOFF REDUCTION (cf)	5,641
PHOSPHORUS LOAD REDUCTION ACHIEVED (LB/YR)	3.98
ADJUSTED POST-DEVELOPMENT PHOSPHORUS LOAD (TP) (lb/yr)	2.15
REMAINING PHOSPHORUS LOAD REDUCTION (LB/YR) NEEDED	CONGRATULATIONS!! YOU EXCEEDED THE TARGET REDUCTION BY 0.5 LB/YEAR!!

BMP COMPUTATIONS

# THE RESERVE AT HAMPTON SPRINGS

SPRINGFIELD DISTRICT  
FAIRFAX COUNTY, VIRGINIA

REVISED PRIOR TO APPROVAL

NO. DATE

DESIGN: KJV  
APPROVED: HMF  
DATE: FEB. 2015  
SCALE: HORIZ. 1" = 30'  
VERT: ---

PRJ NO: 14-501  
TYPE: CDP/FDP

Attached Xrefs: 00-F0500/00-R0401/00-R0301/00-F0700/55-4

REVISIONS

DESCRIPTION

REVIEW BY

APPROVAL DATE

CPJ Charles P. Johnson & Associates, Inc.  
Civil and Environmental Engineers • Planners • Landscape • Architects • Surveyors  
3959 Pender Dr., Ste. 210 Fairfax, VA 22030 703-585-7585 Fax: 703-573-8895  
www.cpj.com • Silver Spring, MD • Catonsville, MD • Annapolis, MD • College Park, MD • Frederick, MD • Fairfax, VA

RZ 2015-SP-004

Sheet 12 of 13

**OUTFALL, SWM, AND BMP NARRATIVE**

THE SITE CONSISTS OF 6.53 ACRES, ON WHICH 13 SINGLE-FAMILY DETACHED UNITS ARE PROPOSED TO BE CONSTRUCTED. THE SITE IS HALF WOODED, WITH SLOPES AVERAGING ABOUT 3%. THE EXISTING HOUSE AND DRIVEWAY ON PARCEL 29 ARE TO BE REMOVED. THE HOUSE ON EX. PARCEL 29A (PROP. LOT 10) IS TO REMAIN. AN EXISTING SWALE RUNS THROUGH THE SITE WHICH RECEIVES STORMWATER FROM UPSTREAM OFFSITE PROPERTIES. RUNOFF FROM THE SITE DRAINS TOWARD RESIDENTIAL PROPERTIES TO THE WEST AND THEN INTO AN EXISTING CLOSED STORM SEWER SYSTEM PROVIDED IN HAMPTON WOODS SECTION 4 (FAIRFAX COUNTY PLANS 9001-S0-001). THIS EXISTING CLOSED STORM SEWER SYSTEM DISCHARGES INTO A MAJOR 100-YR FLOODPLAIN ALONG WILLOW SPRINGS BROOK LOCATED WITHIN THE LITTLE ROCKY RUN WATERSHED TO THE WEST OF THE SITE.

**POST-DEVELOPMENT CONDITIONS**

TWO RAIN GARDENS WITH UNDERGROUND STORAGE WILL BE PROVIDED WITH THIS DEVELOPMENT. A CLOSED STORM SEWER SYSTEM WILL BE INSTALLED TO COLLECT MOST OF THE SITE'S RUNOFF INTO THE PROPOSED RAIN GARDEN. THIS RAIN GARDEN WILL PROVIDE STORMWATER MANAGEMENT AND STORMWATER QUALITY CONTROL FOR THIS SITE. THE POST DEVELOPMENT PEAK FLOWS WILL BE BELOW THE PRE DEVELOPMENT PEAK FLOWS. THE OVERALL DRAINAGE AREA MAP SHOW ON THIS SHEET DEPICTS THE DRAINAGE AREA WHERE THE SITE OUTFALLS INTO THE EXISTING FLOODPLAIN VIA A CLOSED CONDUIT SYSTEM. THE TOTAL SITE AREA (6.53 ACRES) DRAINING INTO THE EXISTING FLOODPLAIN AT POINT "A" IS LESS THAN 1% OF THE OVERALL DRAINAGE AREA (656 ACRES) OF THE LITTLE ROCKY RUN WATERSHED. THE EXISTING STEAM CHANNEL IS WELL DEFINED WITH BED AND BANKS. THEREFORE, PER PFM 6-0203.2A, THE EXTENT OF THE DOWNSTREAM DRAINAGE IS COMPLETE AT POINT "A". THE OUTFALL CHANNEL IS A COMBINATION OF STONY BOTTOM AND WEEDY SIDES WITH NO VISIBLE SIGNS OF EROSION.

SINCE THE FLOWS FROM THE SITE WILL BE REDUCED BELOW PRE DEVELOPMENT LEVELS, IT IS THE ENGINEER'S OPINION THAT AN ADEQUATE OUTFALL FOR THIS PROJECT HAS BEEN MET. STORMWATER QUALITY (BMPs) WILL BE PROVIDED VIA TWO RAIN GARDENS. PRELIMINARY CALCULATIONS SHOW THAT THE TOTAL PHOSPHORUS REMOVAL IS IN COMPLIANCE WITH THE VIRGINIA RUNOFF REDUCTION METHOD. THEREFORE, WATER QUALITY REQUIREMENTS HAVE BEEN MET FOR THIS DEVELOPMENT.

**Pond Data**

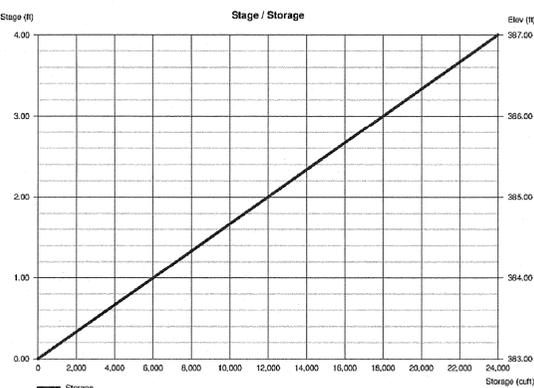
Contours - User-defined contour areas. Conic method used for volume calculation. Beginning Elevation = 385.00 ft. Voids = 40.00%

**Stage / Storage Table**

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	383.00	15,000	0	0
4.00	387.00	15,000	23,998	23,998

**Culvert / Orifice Structures**

[A]	[B]	[C]	[PrtRsr]	[A]	[B]	[C]	[D]
Rise (ft)	= 24.00	0.00	0.00	0.00	0.00	0.00	0.00
Span (ft)	= 24.00	0.00	0.00	0.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0	0	0	0
Invert Ht. (ft)	= 383.00	0.00	0.00	0.00	0.00	0.00	0.00
Length (ft)	= 67.85	0.00	0.00	0.00	0.00	0.00	0.00
Slope (%)	= 3.76	0.00	0.00	n/a	n/a	n/a	n/a
H-Value	= .013	.013	.013	n/a	n/a	n/a	n/a
Drill Coeff.	= 0.50	0.50	0.50	0.50	0.50	0.50	0.50
Multi-Stage	= n/a	No	No	No	No	No	No

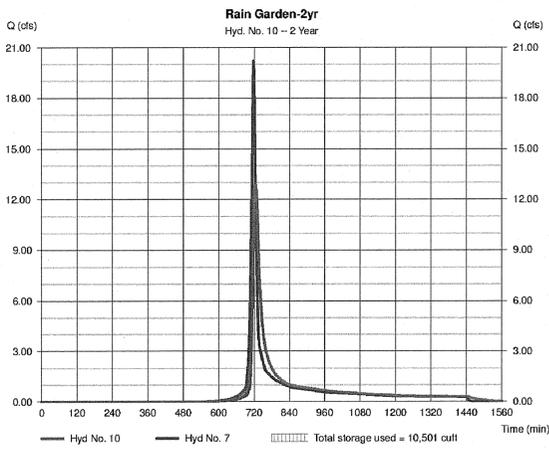


**Rain Garden-2yr**

Hydrograph type = Reservoir  
 Storm frequency = 2 yrs  
 Time interval = 2 min  
 Inflow hyd. No. = 7 - 2yr combined  
 Reservoir name = Rain Garden

Peak discharge = 12.93 cfs  
 Time to peak = 724 min  
 Hyd. volume = 50,109 cuft  
 Max. Elevation = 384.76 ft  
 Max. Storage = 10,501 cuft

Storage indication method used.

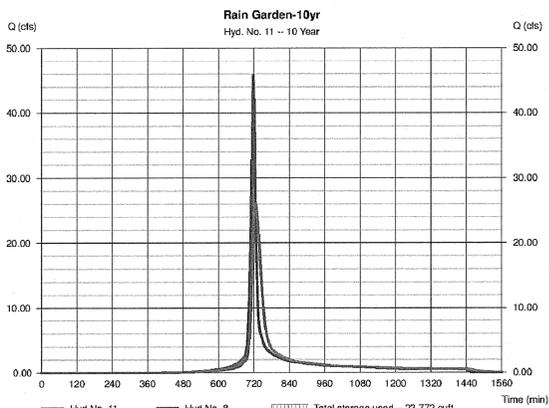


**Rain Garden-10yr**

Hydrograph type = Reservoir  
 Storm frequency = 10 yrs  
 Time interval = 2 min  
 Inflow hyd. No. = 8 - 10yr combined  
 Reservoir name = Rain Garden

Peak discharge = 26.03 cfs  
 Time to peak = 726 min  
 Hyd. volume = 112,593 cuft  
 Max. Elevation = 386.98 ft  
 Max. Storage = 23,772 cuft

Storage indication method used.



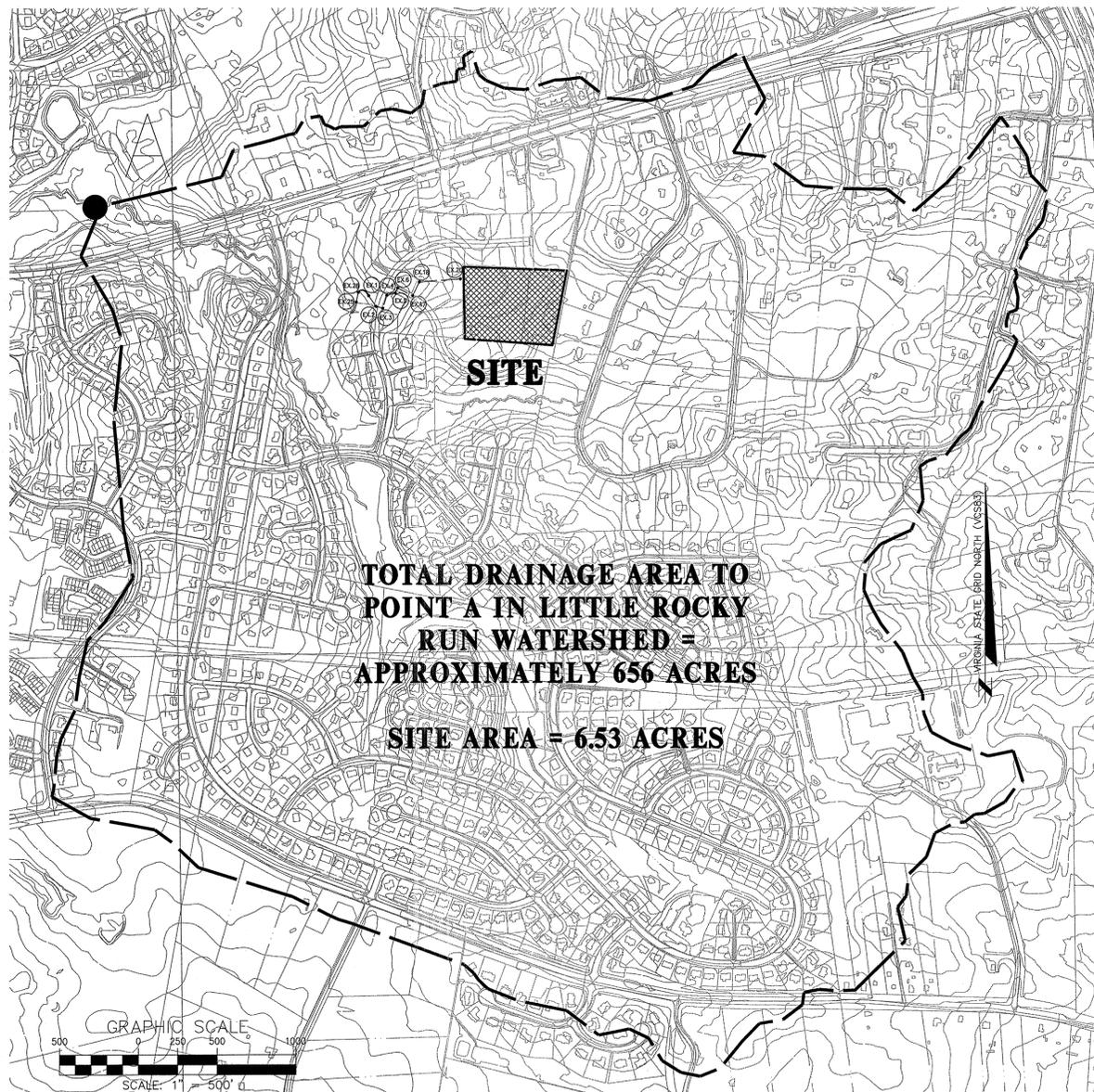
**10-YR STORM DRAIN DESIGN COMPUTATIONS**

FROM	TO	DRAIN AREA (ACRES)	RUNOFF COEF. C	C x A			TIME OF CONCENTRATION			DESIGN			PROFILE & ASBUILT (SD-1719-6)						
				INCR	ACCU	I	t <sub>c</sub> TO PIPE (min)	TIME (sec.)	Q (cfs)	INCR (c.f.s.)	ACCU (c.f.s.)	PIPE DIA. in	SLOPE F/FT	"n"	MAX Q (c.f.s.)	VEL F/Sec	LENGTH FT	FALL FT	UPPER INV
UGS RELEASE										26.03									
1	EX 20	0.97	0.35	0.34			5	7.27	2.47	28.50	24	0.0376	0.013	43.94	14.8	67.65	2.55	383.00	380.45
EX 20	EX 18	0.90	0.45	0.41			5	7.27	2.94	31.44	24	0.0212	0.013	33.00	12.1	284.00	5.60	380.20	374.00
EX 18	EX 17	1.60	0.44	0.70			5	7.27	5.12	36.66	27	0.0160	0.013	39.25	11.3	98.00	1.57	374.30	372.73
EX 17	EX 6	0.98	0.51	0.50			5	7.27	3.63	40.19	27	0.0283	0.013	52.20	14.5	112.00	3.17	372.53	369.32
EX 6	EX 5	0.16	0.58	0.09			5	7.27	0.67	40.87	42	0.0079	0.013	89.62	9.0	34.00	0.27	366.08	365.79
EX 5	EX 4	0.30	0.65	0.20			5	7.27	1.42	42.29	42	0.0076	0.013	87.90	9.0	59.00	0.45	365.59	365.14
EX 4	EX 3	0.34	0.67	0.23			5	7.27	1.90	44.19	42	0.0057	0.013	76.12	8.2	81.00	0.46	365.09	364.63
EX 3	EX 2	1.52	0.55	0.84			5	7.27	2.20	46.39	42	0.0095	0.013	98.27	10.0	42.00	0.40	364.53	364.13
EX 2	EX 1	1.13	0.56	0.63			5	7.27	10.30	56.69	48	0.0155	0.013	179.22	12.4	84.50	1.31	363.56	362.25

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

- 1. Plat 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 accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet 4.
- 3. Provide :
 

Facility Name/ Type & No.	On-site area served (acres)	Off-site area (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
Rain Garden #1	2.25±	0	2.25±	3,000±	4,950±	N/A
Rain Garden #2	2.25±	0	2.25±	3,000±	4,950±	N/A
UG Stone Storage	4.51±	5.94±	10.45±	15,000±	25,500±	N/A
Totals	4.51±	5.94±	10.45±	15,000±	35,400±	N/A
- 4. Onsite drainage channels, outfalls, and pipe systems are shown on Sheet X. Pond inlet and outlet pipe systems are shown on Sheet 4.
- 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 4. Type of maintenance access road surface noted on the plat is asphalt.
- 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 13.
- 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 13.
- 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 13.
- 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 Sheets 1 & 2.
- 11. A submission waiver is requested for N/A
- 12. Stormwater management is not required because N/A



**THE RESERVE AT HAMPTON SPRINGS**  
 SPRINGFIELD DISTRICT  
 FAIRFAX COUNTY, VIRGINIA  
 RZ 2015-SP-004



DESIGN	DRAFT	DATE	SCALE	HORIZ.	VERT.
ADC	ADC	FEB. 2015	1"=500'	---	---

NO.	DESCRIPTION	REVISIONS	DATE

SHEET 13 OF 13  
 PRJ NO: 14-501  
 TYPE: CDP/FDP

## **DESCRIPTION OF THE APPLICATION**

The applicant, Christopher Land, LLC. has requested the approval of a Rezoning and a Final Development Plan for two lots totaling 6.53 acres from the R-1: Residential District (One Dwelling Unit/Acre) to the Planned Development Housing District, Two Dwelling Units/Acre (PDH-2). The acreage would retain the existing Water Supply Protection Overlay District (WSPOD). The applicant's Conceptual/Final Development Plan (CDP/FDP) shows 13 single family detached dwellings; one of these dwellings is existing and would be retained within the proposed site design.

The site would have vehicular access from Crouch Drive to the immediate south. Crouch Drive would extend into the site and terminate at the northern property boundary. The applicant would construct a cul-de-sac to serve five of the dwellings. The applicant proposes public streets. Each dwelling would have a two-car garage, with additional space for visitors in each driveway. Parking would be permitted along Crouch Drive's extension and along one side of the proposed cul-de-sac.

The applicant's landscape plan shows new trees for each of the proposed lots and along the eastern boundary with the neighboring Crystal Springs community. The applicant would landscape the site's stormwater management area as well as the proposed passive recreation area. The applicant would meet the Public Facilities Manual's (PFM's) stormwater management requirements, primarily through the use of a two rain gardens with underground stormwater storage.

Copies of the draft proffers, statement of justification, and affidavit are included in Appendices 1, 2 and 3, respectively. A reduced copy of the applicant's GDP is included at the beginning of this staff report.

## **LOCATION AND CHARACTER**

The subject property consists of two lots located approximately 700 feet south of Lee Highway and one quarter mile east of Lee Highway's intersection with Hampton Forest Way. The two parcels are addressed 12727 and 12733 Lee Highway; and are connected to Lee Highway via a 16-foot wide outlet road between the Pleasant Acres Motel at 12723 Lee Highway and a single-family detached dwelling at 12729 Lee Highway. Figure 1 shows the subject property in relation to the surrounding development.

The smaller of the two lots (Parcel 29) contains a house constructed in 1946. This dwelling would be demolished to implement the site design shown on the CDP/FDP. The larger lot (Parcel 29A) contains a house constructed in 1972 and substantially renovated in 2006; this dwelling would be retained. Approximately 48% of the combined acreage is covered in existing tree canopy, which includes various species of oak, cedar, tulip poplar, and maple trees.



**Figure 1: The two lots that encompass the subject property (Source: Fairfax County DPZ GIS and 2015 aerial photography)**

The Hampton Woods neighborhood of 31 houses is located to the immediate northwest and is zoned R-2 Cluster. The larger Hampton Forest neighborhood is located adjacent to Hampton Woods and extends farther to the south and west. The subject property is bordered on the south by the 16 houses that made up the Senes property. The subject property is bordered on the northeast by Tax Map 55-4 ((1)) 30, which contains a vacant house.

The Crystal Springs community is located to the east of the subject property. Crystal Springs is a 53-house community served by Summit Drive; Summit's only street connections are to Lee Highway and Chronical Drive. Between the subject property and Crystal Springs, there is a 26,964 square foot lot that once served as the access road for the Senes Property prior to its rezoning in 1995 and subsequent redevelopment. There are currently no improvements on this lot (Tax Map 55-4 ((13)) D), which stretches approximately one quarter mile from Lee Highway to the southeastern corner of the subject property.

## COMPREHENSIVE PLAN PROVISIONS

Plan Area: Area III, Fairfax Center Area  
Land Unit E9

Plan Map: Low Density Residential Area

Land Use Chart: Baseline – Residential, 1 dwelling unit per acre (du/ac)  
Intermediate – Residential, 1.5 du/ac  
Overlay – Residential, 2 du/ac

Site Specific Text: “This land unit is planned for low density residential use at 2 dwelling units per acre at the overlay level and generally contains low density single-family homes. New development in this area must be compatible with the existing stable Crystal Springs subdivision. Buffering along Lee Highway should be incorporated in development plans for this area.”

## DESCRIPTION OF THE CONCEPTUAL/GENERALIZED DEVELOPMENT PLAN

### Proposed Dwelling Units

The applicant would demolish the older of the two houses and construct 12 single family detached dwellings. The lots sizes for the new dwellings would range from 10,512 square feet to 14,382 square feet, with an average lot size of 13,600 square feet. The site design would retain approximately 43,667 square feet of land area for the house currently located on Parcel 29A. Overall, the applicant’s proposal would be 2 du/ac. Figure 2 shows conceptual elevations to be constructed.



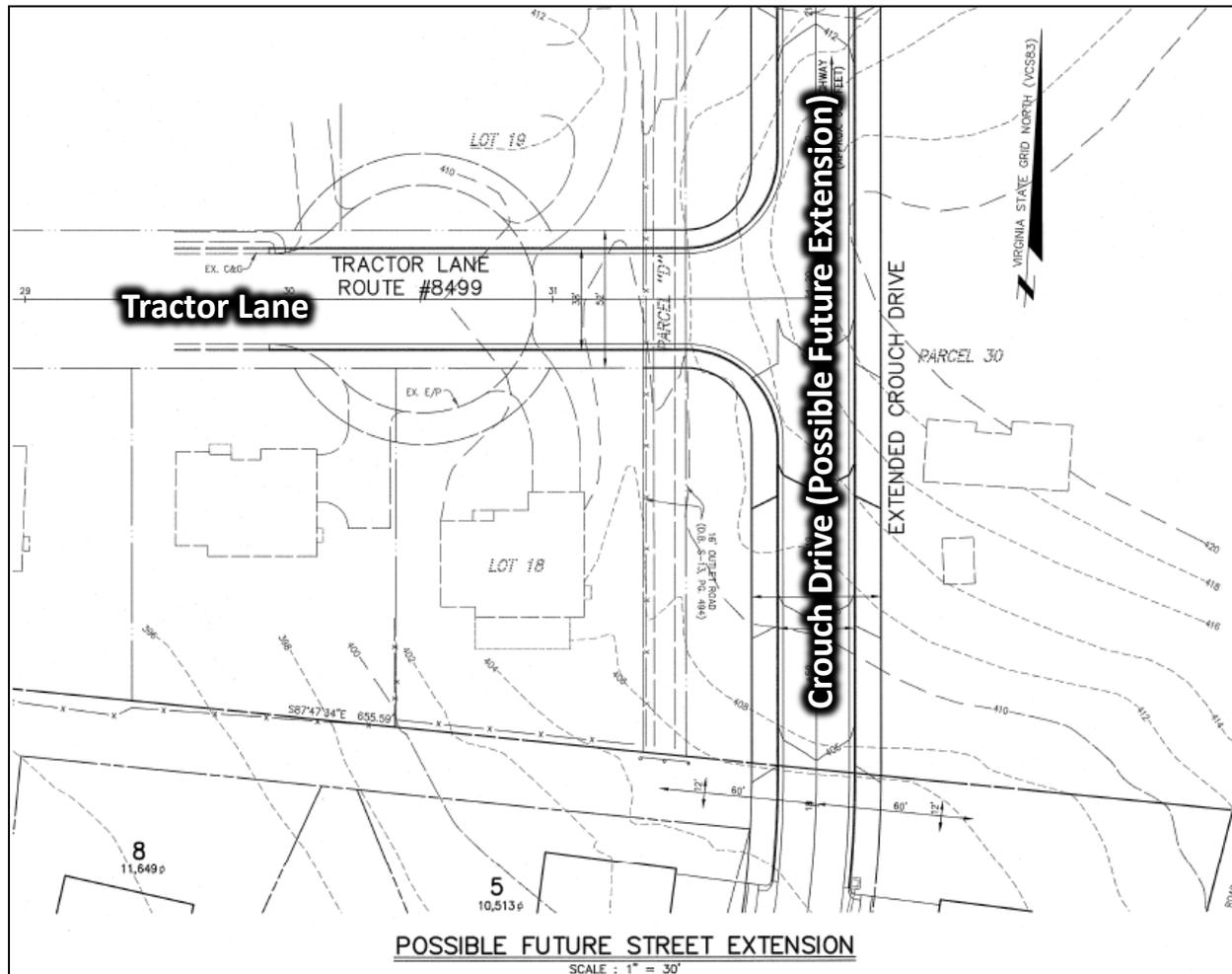
**Figure 2: The applicant has included these elevation drawings as examples of the design themes to be used for the proposed dwellings (Source: Charles P. Johnson & Associates Inc., 8/24/2015)**

### Access and Parking

The applicant would provide access to the subject property by extending Crouch Drive into the site from the south. Figure 3 displays the proposed site design.



The applicant has demonstrated on Sheet 8 of the CDP/FDP how Crouch Drive could connect with Tractor Lane should redevelopment occur on the parcels between the subject property and Lee Highway. Figure 4 shows this off-site connectivity.



**Figure 4: The applicant has demonstrated how Crouch Drive could be extended north should redevelopment occur by others to connect the subject property with Tractor Lane. No extension beyond the subject property would be constructed as part of this development proposal. (Source: Charles P. Johnson & Associates Inc., 8/24/2015)**

### Stormwater Management

The applicant would install two rain gardens with underground storage in the subject property's northwestern corner. The applicant intends to use a closed storm sewer system with gravel-filled chambers, and plant landscaping above the storage system. Based on calculations provided by the applicant, the proposed system would reduce the post-development stormwater flows exiting the site to below their current, pre-development levels. The rain gardens would meet the PFM's pollutant removal requirements. The applicant would notify prospective purchasers as part of the contract

of sale for each house of the maintenance responsibilities for the stormwater management facility.

**Landscaping**

For properties zoned PDH-2, the PFM requires a minimum of 30 percent tree canopy coverage after 10 years of mature tree growth post-development. Furthermore, the PFM requires tree preservation as part of the 30 percent post-development canopy equivalent to the percentage of the pre-development canopy. The existing canopy covers 136,230 square feet of the site (47.9 percent). The PFM requires a total of 85,369 square feet of canopy coverage (30 percent of the entire site), of which 40,869 square feet must be through preserved trees (47.9 percent of the required canopy).

Based on multiplier credit given for preserved tree canopy, the applicant's 34,640 square feet of tree preservation shown in Figure 5 would equate to 30.5 percent of the entire site and meet the PFM's tree preservation target. Preserved trees would primarily be located within open space along the subject property's boundaries. The applicant would provide 39,850 square feet of new tree canopy coverage to the site.



**Figure 5: The proposed landscape plan, with preserved trees and new plantings (Source: Charles P. Johnson & Associates Inc., 8/24/2015)**

## **Other Features**

The applicant's site design includes an approximately 5,700 square foot passive recreation area that would be linked to the proposed streets with a 5-foot wide asphalt path. This feature would include benches and a variety of landscaping, such as evergreen shrubs, shade trees, ornamental trees, and groundcover vegetation. Sheet 6 of the CDP/FDP includes greater detail on the features of this recreation area, as well as details for other site amenities such as proposed entry features and open space.

## **RESIDENTIAL DEVELOPMENT CRITERIA**

Fairfax County expects new residential development to enhance the community by fitting into the fabric of the neighborhood, respecting the environment, addressing transportation impacts, addressing impacts on public facilities, respecting the County's historic heritage, contributing to the provision of affordable housing, and being responsive to the unique site specific considerations of the property. To that end, the Comprehensive Plan requires the following criteria (Appendix 4) to be used in evaluating zoning requests for new residential development:

### **Site Design (Development Criterion #1)**

All rezoning applications for residential development should be characterized by high quality site design. Rezoning proposals for residential development, regardless of the proposed density, will be evaluated based upon the following principles, although not all of the principles may be applicable for all developments.

Consolidation: There is no site specific consolidation requirement in the Comprehensive Plan. The applicant's proposal consolidates two R-1 properties for a rezoning to a similar density (PDH-2) as the neighborhoods zoned R-2 to the west and south. The applicant has proffered to either annex the proposed dwellings into the adjacent HOA or establish a new one for the prospective purchasers. Furthermore, the proffers facilitate the future inclusion of more residents into the HOA should the parcels to the immediate north redevelop in the future.

The applicant's exhibit on Sheet 8 demonstrates how Crouch Drive could be connected with Tractor Lane if Tax Map 55-4 ((1)) 30 were combined with other parcels to the north for a consolidated development (Figure 4). Although the applicant has not consolidated these adjacent parcels, the proposed site design would facilitate a continued consolidated development pattern.

Layout: The proposed layout would provide appropriate relationships between the proposed dwellings and their respective front and rear yards.

- The layout provides logical, functional, and appropriate relationships among the proposed dwellings, landscaping, open space, and streets.
- The proposed dwellings would be oriented appropriately to the adjacent streets and homes.
- The site layout provides average yard sizes for the proposed dwellings which give ample space for the future construction of decks or other accessory structures.

Open Space: The proposed layout would provide 21.5 percent open space, or a total of 1.4 acres, which exceeds the Zoning Ordinance's minimum open space requirement of 20% of the gross area for PDH-2 districts. The applicant's recreation area is centrally located for residents' use. The site amenities shown on Sheet 6 of the CDP/FDP would succeed in integrating the open space into the greater site design.

Landscaping: Sheet 5 of the GDP shows the applicant's landscape plan, which would add new vegetation at scattered locations throughout the site. This even distribution of landscaping throughout the site is appropriate.

Amenities: The passive recreation area, optional pavilion, entry features, and enhanced landscaping shown on Sheet 6 would satisfy the Comprehensive Plan's recommendations for on-site amenities with new residential development.

Based on the features discussed above, Criterion #1 has been met.

### **Neighborhood Context (Development Criterion #2)**

All rezoning applications for residential development, regardless of the proposed density, should be designed to fit into the community within which the development is to be located. Developments should fit into the fabric of their adjacent neighborhoods, as evidenced by an evaluation of:

Transitions to abutting and adjacent uses: The proposed dwellings are a compatible use when compared to the surrounding residential development.

Lot sizes, particularly along the periphery: The proposed lot sizes are of a similar size and shape as the surrounding houses to the west and south. While the older Crystal Springs neighborhood to the east has larger lot sizes, the neighborhood is not served by public water and sewer, so the larger lot sizes accommodate the necessary square footage needed for septic drain fields.

Bulk/mass of the proposed dwelling units: The applicant proposes to construct 35-foot tall houses, which would be compatible with the bulk and mass of the surrounding neighborhoods.

Setbacks (front, side and rear): The proposed front, side and rear setbacks are similarly sized to the development to the west and south, but smaller than that of Crystal Springs. As previously discussed, the proposed units would be served by public water and sewer while Crystal Springs' larger lot sizes accommodate the well and septic fields serving the individual lots.

Orientation of the proposed dwelling units to adjacent streets and homes: As previously discussed, the proposed orientation is similar to elements seen in the adjacent neighborhoods with the continuation of Crouch Drive.

Architectural elevations and materials: The architectural elevations on Sheet 7 of the CDP/FDP show that the design and style of the proposed units would be compatible with the surrounding neighborhoods. These elevations are accompanied by a proffered commitment to brick, stone and siding supplemented with trim and detail features.

Pedestrian, bicycle and vehicular connections to off-site trails, roadways, transit facilities and land uses: The applicant proposes to extend Crouch Drive into the subject property and terminate it at the northern property boundary, which would facilitate future connectivity should redevelopment occur to the north.

Existing topography and vegetative cover and proposed changes to them as a result of clearing and grading: The applicant proposes to clear approximately two-thirds of the site's trees and preserve 34,640 square feet of canopy coverage. This clearing would be necessary to achieve the Comprehensive Plan's guidance for density in this area.

Based on the features discussed above, Criterion #2 has been met.

### **Environment (Development Criterion #3)**

All rezoning applications for residential development should respect the environment. Rezoning proposals for residential development, regardless of the proposed density, should be consistent with the policies and objectives of the environmental element of the Policy Plan, and will also be evaluated on the following principles, where applicable.

Preservation: Other than existing trees, there are no natural environmental resources located on the subject properties that warrant preservation. The applicant's landscape plan would meet the minimum tree preservation requirement of 30%.

Slopes and Soils: The subject property lacks steep slopes, and is characterized by soils with medium and high erosion potential, but good foundational support and good subsurface drainage.

Water Quality: The applicant's CDP/FDP proposes a stormwater management system that uses a rain garden low impact development (LID) technique that is anticipated to meet the PFM standards for water quality improvement.

Drainage: The applicant's underground gravel storage facility is an acceptable approach to meeting the PFM's stormwater volume control requirements.

Noise: The Comprehensive Plan's Policy Plan recommends that transportation generated noise in residential settings be mitigated so that noise levels inside homes do not exceed 45 dBA and levels for the homes' outdoor recreation areas not exceed 65 dBA. For homes impacted by a day-night average sound level (DNL) of 65-75 dBA, the Comprehensive Plan recommends mitigation.

Given that the site is over 600 feet from Lee Highway, the road with the highest transportation generated noise in proximity to the subject property, no mitigation measures were necessary in order to meet the Policy Plan's noise level recommendations.

Lighting: Any lighting proposed by the applicant must meet the performance standards specified in Article 14 of the Zoning Ordinance, which reduce the impacts of glare and overlighting.

Energy: The applicant has proffered to qualifying the proposed houses either under the 2012 National Green Building Standard or the Earth Craft House programs through a home energy rater certified to demonstrate that the homes have met the proper qualifications. This certification process meets the green building recommendations in the Comprehensive Plan.

Based on the features discussed above, Criterion #3 has been met.

#### **Tree Preservation and Tree Cover Requirements (Development Criterion #4)**

All rezoning applications for residential development, regardless of the proposed density, should be designed to take advantage of the existing quality tree cover. If quality tree cover exists on site as determined by the County, it is highly desirable that developments meet most or all of their tree cover requirement by preserving and, where feasible and appropriate, transplanting existing trees. Tree cover in excess of ordinance requirements is highly desirable. Proposed utilities, including stormwater management and outfall facilities and sanitary lines, should be located to avoid conflicts with tree preservation and planting areas. Air quality-sensitive tree preservation and planting efforts (see Objective 1, Policy C in the Environment section of the Policy Plan) are also encouraged.

The applicant has included several proffers related to tree preservation, construction monitoring, root pruning, and tree protection that are typically recommended by the Department of Public Works and Environmental Service's (DPWES) Urban Forest Management Division (UFMD). While staff is comfortable with these commitments, UFMD expressed concerns with tree preservation areas being located on individual home sites since long-term maintenance of the tree save area is best accomplished

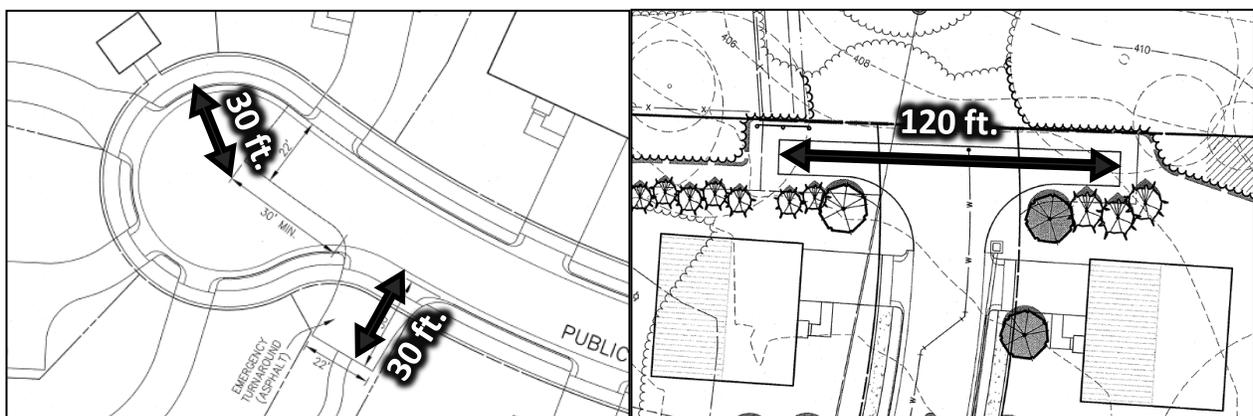
within property dedicated to common area and/or homeowners association (HOA) use. Staff recommends that the applicant proffer to ensure the initial home purchasers receive the tree maintenance and preservation information specified by UFMD in Appendix 5. This would include data collected from the tree inventory and information on the approved landscape plan included with the development's subdivision plan, since the information can be used as a basis of a long-term tree maintenance plan for managing the resource and budgeting maintenance costs over multiple years.

### Transportation (Development Criterion #5)

All rezoning applications for residential development should implement measures to address planned transportation improvements. Applicants should offset their impacts to the transportation network. Accepted techniques should be utilized for analysis of the development's impact on the network. Residential development considered under these criteria will range widely in density and, therefore, will result in differing impacts to the transportation network. Some criteria will have universal applicability while others will apply only under specific circumstances. Regardless of the proposed density, applications will be evaluated based upon the following principles, although not all of the principles may be applicable

Transportation Improvements: As FCDOT notes in Appendix 6, the standard terminus for a public street in the Virginia Department of Transportation's (VDOT's) Road Design Manual is a 45-foot radius cul-de-sac. The standard terminus may be modified, subject to VDOT approval in consultation with a locality's emergency services staff.

For the cul-de-sac near the proposed rain garden, the applicant would use a 30-foot radius with a 30-foot turnaround for fire trucks and other emergency services vehicles (Figure 6). The applicant would bring Crouch Drive's extension directly to the northern property boundary and provide a temporary T-type alternative turnaround with 60-foot branches for a total width of 120 feet.



**Figure 6: The applicant would need approval from both VDOT and the Fire Marshal to construct the above designs and dimensions (Source: Charles P. Johnson & Associates Inc., 8/24/2015)**

In VDOT's analysis of the CDP/FDP, no issues were identified with the proposed turnarounds (Appendix 7). Should the applicant be unable to obtain approval from VDOT and the Fire Marshal during site plan review for the alternative turnarounds shown in Figure 6, the applicant would be required to demonstrate that the site design can accommodate either a 45-foot radius cul-de-sac at each street terminus or the alternative cul-de-sac shown in Exhibit A of the proffers. The applicant would also need to demonstrate that any changes to the design layout would be in substantial conformance with the CDP/FDP if the application is approved by the Board of Supervisors. Should the applicant be unable to modify the site design, the applicant would need to seek the approval of a Final Development Plan Amendment.

The applicant has proffered to contribute to the Fairfax Center Area Road Fund. This contribution would equate to \$1,313 per new dwelling.

Transit/Transportation Management: Staff did not identify a need for transportation management measures given the minimal impacts the proposed dwelling units would have on the nearby transportation network.

Interconnection of Street Network: As previously discussed, the applicant's extension of Crouch Drive, coupled with the site layout facilitating future development to the north and prospective connection to Tractor Lane, would connect the site with adjacent neighborhoods and allow future consolidation. The applicant's CDP/FDP shows a sign to be installed notifying residents that the road could be extended in the future. The applicant has proffered to fund the removal of the temporary turnaround to enable the adjacent site's connection upon redevelopment.

Streets: The applicants have proposed to construct public streets, which is appropriate given that Crouch Drive is also a public street.

Non-motorized Facilities: The applicant has proposed an adequate sidewalk network for the CDP/FDP.

Alternative Street Designs: The cul-de-sac proposed in the CDP/FDP along with the temporary T-turnaround would require waivers from VDOT based upon the geometry shown for each street terminus. As previously discussed, the applicant would justify to VDOT through a waiver request that the design shown would be permissible.

Based on the features discussed above, Criterion #5 has been met.

### **Public Facilities (Development Criterion #6)**

All rezoning applications for residential development are expected to offset their public facility impact and to address public facility needs in the vicinity of the proposed development. Impact offset may be accomplished through the dedication of land suitable for the construction of an identified public facility need, the construction of

public facilities, the contribution of specified in-kind goods, services or cash earmarked for those uses, and/or monetary contributions to be used toward funding capital improvements projects. Selection of the appropriate offset mechanism should maximize the public benefit of the contribution.

Fairfax County Park Authority (FCPA): To mitigate the impacts to off-site recreational facilities, FCPA has calculated a recommended contribution of \$32,148 for development of park facilities in the area (Appendix 8). FCPA also requested that the applicant conduct a Phase 1 archaeological analysis of the site to identify any historical artifacts of significance.

While the applicant has committed to conducting the Phase 1 study, the applicant's contribution to off-site recreation facilities is only \$15,000. The applicant has targeted these funds for improvements to a park or a recreational area within the Springfield District. The applicant's rationale for the reduced contribution is to deduct the cost of the Phase 1 study from the recommended contribution amount as well as the cost of \$1,800 per new dwelling for on-site recreation in compliance with Section 16-404 of the Zoning Ordinance. FCPA's continued recommendation is for fully funding both the adverse impacts to off-site facilities and the Phase 1 study. Staff recommends that the applicant fully fund the FCPA request for off-site recreational facilities, which would mitigate long-term impacts on nearby facilities in addition to funding FCPA's recommended pre-development archaeological analysis of the site.

Fairfax County Public Schools (FCPS): The Fairfax County Public Schools' Office of Facilities Planning Services anticipates that the 12 new dwelling units proposed by the applicants, when compared with the by-right development potential of the subject property, would generate three new students attending County schools (Appendix 9). In order to address the need for capital improvements associated with the new students, a proffer contribution of \$35,247 has been calculated to offset this impact. The applicants have included a commitment to contribute this amount for capital improvements.

Fairfax County Water Authority (FCWA): FCWA notes that the closest water main is an 8-inch main in Crouch Drive. This water line is adequate to provide water service (Appendix 10).

Sanitary Sewer Analysis: DPWES has indicated in Appendix 11 that ample sanitary sewer capacity is available in the immediate sewer network. The proposed rezoning would not adversely impact nearby sanitary sewer capacity (Appendix 11).

Based on the features discussed above, Criterion #6 has been met.

### **Affordable Housing (Development Criterion #7)**

Ensuring an adequate supply of housing for low and moderate income families, those with special accessibility requirements, and those with other special needs is a goal of

the County. Part 8 of Article 2 of the Zoning Ordinance requires the provision of Affordable Dwelling Units (ADUs) in certain circumstances. Criterion #7 is applicable to all rezoning applications and/or portions thereof that are not required to provide any Affordable Dwelling Units, regardless of the planned density range for the site.

The Zoning Ordinance specifies that rezoning applicants should provide ADUs for single family attached development plans proposing 50 or more dwelling units. While the Zoning Ordinance would not require ADUs in this instance, the Comprehensive Plan recommends a contribution to the County's Housing Trust Fund in rezoning applications where the Zoning Ordinance's ADU provisions are not applicable.

The Residential Development Criteria specify that this criterion can be satisfied with a contribution of 0.5 percent of the anticipated sales price of each new dwelling unit to the Housing Trust Fund. Prior to an applicant making the aforementioned contribution, the Residential Development Criteria specify that the Fairfax County Department of Housing and Community Development (HCD) review the comparable sales for the surrounding neighborhoods to ensure that the applicant is making a contribution reflecting accurate and current sales data.

The applicant has proffered to contribute a lump sum of \$54,000 to Habitat for Humanity of Northern Virginia or the Fairfax County Housing Trust Fund at the direction of the Springfield District Supervisor. The flexibility to contribute the money to an entity whose mission is to provide affordable housing in Fairfax County is supported by the Residential Development Criteria. The applicant's contribution is based on a \$900,000 sales price per dwelling unit, and would escalate should the sales price be higher than that anticipated by the applicant

Staff's preference is for the applicant to contribute 0.5 percent of the anticipated sales price as a lump sum to the Housing Trust Fund or Habitat for Humanity upon verification from HCD of the anticipated sales price for all of the proposed dwellings. This verification process is consistent with the Board of Supervisors' adopted housing affordability policy.

As discussed above, Criterion #7 has been generally met despite lack of full compliance with the Board of Supervisors' policy.

### **Heritage Resources (Development Criterion #8)**

Heritage resources are those sites or structures, including their landscape settings, that exemplify the cultural, architectural, economic, social, political, or historic heritage of the County or its communities.

No heritage resources have been identified by staff for documentation or preservation in association with the rezoning request. However, the applicant has proffered to conduct

a Phase I archaeological analysis of the site and Phase II and Phase III surveys if deemed necessary.

### **FAIRFAX CENTER CHECKLIST ANALYSIS**

The Fairfax Center Checklist is a tool utilized by staff in evaluating a zoning application for conformance with the Comprehensive Plan for the Fairfax Center Area. The Checklist contains transportation, environmental, site design, land use, and public facilities elements.

In order to justify development at the Overlay Level, the Comprehensive Plan recommends that the zoning application satisfy all applicable basic elements; all transportation elements relating to highway improvements (rights-of-way dedication, highway construction, and off-site roadway contributions) and ridesharing programs; all essential elements; and either three-fourths of the applicable minor elements and one-half of the applicable major elements, or the inclusion of all applicable minor elements and one-third of the major elements.

Based on staff's analysis as found in Appendix 12, the application satisfies 93% of the applicable basic elements, 75% of the applicable minor development elements, all applicable major elements, all applicable essential elements, and all applicable major transportation elements. While not fully satisfying the complete recommendation for Overlay Level development, the applicant's CDP/FDP and proffers would meet the purpose and intent of the Fairfax Center Checklist. The proposal would also generally achieve the overarching objectives of the Fairfax Center Area section of the Comprehensive Plan. , justifying development at the Overlay Level.

### **ZONING ORDINANCE PROVISIONS**

Article 6, Sect. 108 of the Zoning Ordinance states that the maximum building height, minimum yard requirements, and maximum floor area ratio shall be controlled by the standards set forth in Par. 1 of Article 16. For the proposed site design in this rezoning case, the applicable bulk regulations are those of the conventional residential district closest to the requested PDH-2. In this case, that zoning district is R-2. The comparison between the R-2 single family detached residential standards and the proposal are summarized in Table 1.

<b>TABLE 1 – BULK STANDARDS FOR R-2 ZONING</b>		
<b>Standard</b>	<b>Required</b>	<b>Provided</b>
Lot Size	15,000 square foot minimum 18,000 square foot average	10,500 square foot minimum 13,600 square foot average
Lot Width	Interior Lot – 100 feet minimum Corner Lot – 125 feet minimum	≈65-100 feet
Building Height	35 feet maximum	35 feet maximum
Front Yard	35 feet minimum	20 feet minimum
Rear Yard	25 feet minimum	25 feet minimum
Side Yard	15 feet minimum	10 feet minimum
Density	2.0 du/ac maximum	2.0 du/ac
Open Space	N/A	21.5%
Parking Spaces	Minimum 26 spaces <sup>1</sup>	52 spaces

### **General Standards for Planned Developments (Sect. 16-101)**

All development proposed for rezoning to a PDH district must satisfy the following general standards:

*1. The planned development shall substantially conform to the adopted comprehensive plan with respect to type, character, intensity of use and public facilities. Planned developments shall not exceed the density or intensity permitted by the adopted comprehensive plan, except as expressly permitted under the applicable density or intensity bonus provisions.*

Based on the analysis discussed with the Residential Development Criteria, the applicants' proposal substantially conforms to the Comprehensive Plan with respect to type, character, intensity of use, and public facilities. The density and intensity have not exceeded the Plan's site specific recommendations.

*2. The planned development shall be of such design that it will result in a development achieving the stated purpose and intent of the planned development district more than would development under a conventional zoning district.*

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<sup>1</sup> Article 11 of the Zoning Ordinance sets for the requirement for single family detached dwellings - Two spaces per unit for lots with frontage on a public street, provided that only one (1) such space must have convenient access to a street.

The proposal would achieve the purpose and intent of the PDH district. The applicants' site design includes ample and efficient use of open space and a layout that complements the nearby neighborhoods in density, type, layout, and construction.

*3. The planned development shall efficiently utilize the available land, and shall protect and preserve to the extent possible all scenic assets and natural features such as trees, streams and topographic features.*

No scenic assets and natural features were identified for preservation during the review of the applicants' proposal. The houses have been clustered together while exceeding the Zoning Ordinance's minimum requirement of 20% open space. Of the existing on-site tree canopy, the applicant would preserve 34,640 square feet of canopy coverage for 30.5% of tree preservation, which would exceed the minimum 30% requirement.

*4. The planned development shall be designed to prevent substantial injury to the use and value of existing surrounding development, and shall not hinder, deter or impede development of surrounding undeveloped properties in accordance with the adopted comprehensive plan.*

The proposed dwellings have been designed and laid out in a continuance of the development pattern to the south, while facilitating future redevelopment to the north. This would not hinder, deter, or impede development of surrounding undeveloped properties in accordance with the Comprehensive Plan.

*5. The planned development shall be located in an area in which transportation, police and fire protection, other public facilities and public utilities, including sewerage, are or will be available and adequate for the uses proposed; provided, however, that the applicant may make provision for such facilities or utilities which are not presently available.*

In the staff analysis of Residential Development Criterion #6, the sanitary sewer, parks and recreation, and public water availability were deemed adequate. The proposed street network, with modifications subject to the review and approval of VDOT and the Fire Marshal, would conform with VDOT's Road Design Manual. The applicant has also committed to an on-site strategy for managing any increases in stormwater runoff that would occur.

*6. The planned development shall provide coordinated linkages among internal facilities and services as well as connections to major external facilities and services at a scale appropriate to the development.*

The applicant's proposed streets and sidewalks would allow for connections to Crouch Drive while facilitating future connections to Tractor Lane.

### **Design Standards for Planned Developments (Sect. 16-102)**

All development proposed for rezoning to a PDH district must satisfy the following design standards:

*1. In order to complement development on adjacent properties, at all peripheral boundaries of the PDH, PRM, PDC, PRC Districts the bulk regulations and landscaping and screening provisions shall generally conform to the provisions of that conventional zoning district which most closely characterizes the particular type of development under consideration. In the PTC District, such provisions shall only have general applicability and only at the periphery of the Tysons Corner Urban Center, as designated in the adopted comprehensive plan.*

The subject property is bordered by R-1 zoning to the northeast and east. The Crystal Springs community to the east is separated from the subject property by the former access road to the Senes property. To the northwest, south, and west, the property is bordered by R-2 zoned residential development. The bulk dimensions proposed by the applicants substantially conform to those used in Hampton Woods, Hampton Forest, and the Senes property. A comparison with the R-2 District, which closely resembles the applicants' proposal, is shown in Table 1.

*2. Other than those regulations specifically set forth in Article 6 for a particular P district, the open space, off-street parking, loading, sign and all other similar regulations set forth in this Ordinance shall have general application in all planned developments.*

The applicants' proposal would comply with the applicable provisions of the Zoning Ordinance outlined above, and would need to comply during subsequent stages of the development process.

*3. Streets and driveways shall be designed to generally conform to the provisions set forth in this Ordinance and all other County ordinances and regulations controlling the same, and where applicable, street systems shall be designed to afford convenient access to mass transportation facilities. In addition, a network of trails and sidewalks shall be coordinated to provide access to recreational amenities, open space, public facilities, vehicular access routes, and mass transportation facilities.*

The applicants have provided streets and sidewalks that connect the proposed dwellings to the vehicular and pedestrian transportation network. No connections to mass transportation facilities were made given the site's distance from mass transportation facilities.

In summary, the applicants have satisfied the General and Design Standards for Planned Developments.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Staff Conclusions**

The proposed rezoning would provide a compatible site design in an infill setting amongst the surrounding neighborhoods. Staff considers the proposal to be in conformance with the Comprehensive Plan and all applicable provisions of the Zoning Ordinance.

### **Recommendations**

Staff recommends approval of RZ 2015-SP-004, subject to the execution of proffers consistent with those contained in Appendix 1.

Staff recommends approval of FDP 2015-SP-004.

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

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

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

## **APPENDICES**

1. Draft Proffers
2. Affidavit
3. Applicant's Statement of Justification
4. Residential Development Criteria
5. Urban Forest Management Analysis
6. Fairfax County Department of Transportation Analysis
7. Virginia Department of Transportation Analysis
8. Park Authority Analysis
9. Schools Analysis
10. Fairfax County Water Authority Analysis
11. Sanitary Sewer Analysis
12. Fairfax Center Analysis
13. Glossary of Terms

**PROFFER STATEMENT****October 7 , 2015****The Reserve at Hampton Springs****RZ/FDP 2015-SP-004****Christopher Land, L.L.C.**

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 55-4 ((1)) parcels 29 and 29A (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 PDH-2 Zoning District is granted. In the event 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:

**I. GENERAL**

1. **Substantial Conformance.** Subject to the provisions of Article 18 of the Fairfax County Zoning Ordinance (hereinafter referred to as the "Zoning Ordinance"), development of the Property shall be in substantial conformance with the Conceptual Development Plan/Final Development Plan (CDP/FDP) titled "The Reserve at Hampton Springs" prepared by Charles P. Johnson & Associates, Inc. consisting of 13 sheets, dated August 24, 2015.
  - A. As an option, the applicant may implement the alternative design for the temporary turnaround of Crouch Drive's extension as shown on Attachment A of these proffers. The design of the temporary turnaround shall be subject to the review and approval of the Office of the Fire Marshal and the Virginia Department of Transportation (VDOT).
2. **Minor Modifications.** Minor modifications from what is shown on the CDP/FDP and these Proffers, which may become occasioned as a part of final architectural and/or engineering design, may be permitted as determined by the Zoning Administrator in accordance with the provisions set forth in Section 18-204 of the Zoning Ordinance. Additionally, except as may be further qualified by these proffered conditions, minor modifications to the building envelopes including footprints, lot areas, dimensions, utility layouts and house location may be permitted in accordance with Section 18-204 of the Zoning Ordinance as long as

such changes do not materially decrease the amount of open space, and the building setbacks are not violated on the CDP/FDP's typical lot layout.

3. Architectural Design. The primary building materials shall be a combination of brick, stone and siding supplemented with trim and detail features; modifications may be made with final architectural designs provided such modifications are in substantial conformance with the illustrative elevations shown on Sheet 7 of the CDP/FDP. Bay windows, patios, chimneys, areaways, stairs, mechanical equipment and other similar appurtenances may encroach into the minimum yards as depicted on the "lot typical" as shown on the CDP/FDP and as permitted by Section 2-412 and Article 10 of the Zoning Ordinances. Decks, porches (including screened in porches) or sunrooms may be permitted in the rear yard in the area identified as "Available Deck Area" on the lot typical included on Sheet 6 of the CDP/FDP. Deck modifications including but not limited to lattice work, pergolas, trellis, and overhang planter boxes may also be constructed within this area. The restrictions and limitations of this proffer shall be disclosed to Purchasers as part of the Purchasers' contract and further disclosed in the homeowners association documents.
4. Universal Design. Dwelling units shall offer optional features designed with a selection of Universal Design features as determined by the Applicant which may include, but not be limited to, grab bars in the bathrooms, a seat in the Master Bath shower where possible, emphasis on lighting in stairs and entrances, lever door hardware, slip resistant flooring, optional hand-held shower heads at tubs and showers, and optional front-loading washers and dryers.

## II. RECREATION FACILITIES

5. On-Site Recreation Facilities. Pursuant to Sect. 16-404 of the Zoning Ordinance regarding developed recreational facilities, the Applicant shall provide recreational facilities to serve the property as shown on the CDP/FDP. Per Sect. 16-404, recreational facilities such as, pavilion, trails and sitting areas and similar features may be used to fulfill this requirement. The siting and installation of such features shall not interfere with tree save areas. At the time of the issuance of the first Residential Use Permit, the Applicant shall demonstrate that the value of any proposed recreational amenities is equivalent to a minimum of \$1,800 per new dwelling unit for the Twelve (12) homes to be built on the site. In the event it is demonstrated that the proposed facilities do not have sufficient value the Applicant shall contribute funds in the amount needed to achieve the overall required amount of \$1,800 per unit for the Twelve (12) homes to be built on the Property for recreational facilities intended to serve the future residents, as determined by the Fairfax County Park Authority (FCPA) in consultation with the Supervisor for the Springfield District.
6. Off-Site Recreation. The Applicant shall contribute \$15,000.00 to FCPA to be used for improvements to a park or recreational area that is in the Springfield

District. This contribution shall be made prior to the issuance of the first Residential Use Permit (RUP).

### III. SCHOOLS

7. Contribution. Prior to issuance of the first RUP the Applicant shall contribution \$35,247.00 to Fairfax County and to transfer to the Fairfax County School Board to be utilized for capital improvements or capacity enhancements to schools within the pyramid which serves the Property. Following approval of this Application and prior to the Applicant's payment of the amount set forth in this Proffer, 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, notwithstanding the amount of increase shall not exceed Five Percent (5%) of the original amount.

### IV. ESCALATION

8. Escalation. All monetary contributions required by these proffers, with the exception of the Schools Contribution, shall escalate on a yearly basis, from the base month of January 2017, and change effective each January 1 thereafter, by a percentage equal to the annual rate of inflation, as calculated by referring to the Consumer Price Index for all urban consumers (CPI-U), 1982-198=100 (not seasonally adjusted) as reported by the United States Department of Labor, Bureau of Labor Statistics or the Marshall and Swift Building Cost Index, whichever is lesser, as permitted by VA Code Ann. Section 15.2-2303.3(B).

### V. CONSTRUCTION HOURS

9. Construction Hours. Construction shall occur between the hours of 7:00 a.m. until 7:00 p.m. Monday through Friday, 9:00 a.m. until 6:00 p.m. on 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 construction hours shall be posted on the property. The allowable hours of construction as specified in this proffer shall be listed within any contract with future sub-contractors associated with construction on the site. Construction hours do not apply to any work related to VDOT.

### VI. ENERGY CONSERVATION

10. Energy Conservation. The dwelling units shall be constructed to achieve one of the following:
  - 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 the 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. Certification testing shall be accomplished prior to the issuance of a RUP for each dwelling. The Certification testing requirement shall be met by emailing the building inspector, the preliminary inspection report of the third party inspector prior to the issuance of the RUP.
- C. Prior to Bond Release, the Applicant shall show proof to the Department of Public Works and Environmental Services (DPWES) that all units met either condition A or B.

#### VIII. GARAGE CONVERSION

- 11. Garage Conversion. Any conversion of garages that will preclude the parking of vehicles within the garage shall be prohibited. A covenant setting forth this restriction shall be recorded among the land records of Fairfax County in a form approved by the County Attorney prior to the sale of any lots and shall run to the benefit of the Homeowners Association (HOA) and the Board of Supervisors. This restriction shall also be disclosed in the HOA documents. Prospective purchasers shall be advised of this use restriction, in writing, prior to entering into a contract of sale. The driveway provided for each unit shall be a minimum of seventeen (17) feet in width and twenty (20) feet in length from the garage door to the sidewalk. Garages shall be designed to accommodate two (2) vehicles.

#### IX. HOME OWNERS ASSOCIATION

- 12. Establishment of HOA. The Applicant shall establish a HOA in accordance with Sect. 2-700 of the Zoning Ordinance for the purpose of, among other things, establishing the necessary residential covenants governing the design and operation of the approved development and to provide a mechanism for ensuring the ability to complete the maintenance obligations and other provisions noted in these proffer conditions. The HOA shall be responsible for the maintenance of the common areas and the enforcement of the restrictions on the Property. Maintenance responsibilities shall include, but not limited to, snow removal, private access ways, storm water management facilities and common area maintenance. Initial and subsequent homeowners shall be made aware of these maintenance responsibilities in the HOA documents. As an alternative to establishing a HOA, the applicant may annex the Property into

the existing Senes Property HOA, identified as Tax Map 55-4((13)). If the Property is annexed into the Hampton Woods or Hampton Forest HOA, the applicant shall submit a copy of the annexation documentation to DPWES prior to site plan approval.

13. Annexation of Future Development. The properties identified as Tax Map 55-4 ((1)) Parcels 30 – 35 shall be allowed to either annex into the Property’s HOA or to form their own. If the Property forms its own HOA, then it shall structure the HOA to identify the adjacent parcels identified as Tax Map 55-4 ((13)) as additional land that can be added to the HOA upon a mutual agreement.
14. Dedication to HOA. At the time of Record Plat recordation, open space, common areas, fencing, and amenities not otherwise conveyed or dedicated to the County shall be dedicated to the HOA and maintained by the same. The HOA reserves the right to grant easements for any purpose on the common areas as the HOA deems necessary, provided that any easements are consistent with the CDP/FDP.
15. Best Management Practice ("BMP") Maintenance. After establishing the HOA, the Applicant shall provide the HOA with written materials describing proper maintenance of the approved BMP facilities.
16. Disclosure. As part of the contract of sale, prospective purchasers shall be notified in writing by the Applicant of the maintenance responsibility for the storm water management facilities, common area landscaping, any other open space amenities and the obligations. In addition, the prospective purchasers shall be notified in writing that parking on the emergency turn-around shown on the CDP/FDP is prohibited. The homeowner association covenants shall contain clear language delineating the tree save areas as shown on the CDP/FDP. The covenants shall prohibit the removal of the trees except those trees which are dead, diseased, noxious or hazardous as determined by UFMD and shall outline the maintenance responsibility of the homeowners association and individual homeowners. The initial deeds of conveyance and HOA governing documents shall expressly contain these disclosures. The HOA documents shall stipulate that a reserve fund to be held by the HOA be established for the maintenance of common facilities and areas.

## X. STORMWATER MANAGEMENT

17. Storm water Management and Best Management Practices.
  - A. The Applicant shall implement storm water management techniques to control the quantity and quality of storm water runoff from the Property in accordance with the current County Storm water Ordinances and Fairfax County Public Facilities Manual as reviewed and approved by DPWES. Notwithstanding the facilities shown on the CDP/FDP, the storm water management techniques may include but not limited to the following: rain gardens, dry ponds, filtera

systems, infiltration ditches, bay filters, storm tech changer and drainage swales. The Applicant reserves the right to pursue additional or alternative storm water management measures provided those measures are in substantial conformance with the CDP/FDP.

## XI. LANDSCAPING

18. Landscape Plan: As part of the site plan submission, the Applicant shall submit to UFMD 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 CDP/FDP. 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.

## XII. TREE PRESERVATION

19. Tree Preservation Plan. The applicant shall submit a Tree Preservation Plan and Narrative as part of the first and all subsequent subdivision 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, Department of Public Works and Environmental Services ("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 individual trees to be preserved, on and off-site trees, living or dead with trunks 12 inches in diameter and greater (measured at 4 ½ 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 25 feet outside the limits of clearing and grading and 10 feet inside of the limits of clearing and grading. The tree preservation plan and narrative shall include all applicable items specified in PFM 12-0506 and 12-0508. Specific tree preservation activities designed to maximize the survivability of any tree identified to be preserved, such as crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.

20. Tree Preservation Walk-Through. The applicant 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 appointed representative and a Certified Arborist (the Project Arborist), shall walk the limits of clearing a grading with a 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 within the tree preservation area 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.

21. Limits of Clearing and Grading. The Applicant shall conform strictly to the limits of clearing and grading as shown on the CDP/FDP, subject to allowances specified in these development conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the CDP/FDP, 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 area protected by the limits of clearing and grading that must be disturbed for such utilities.
  
22. Tree Preservation Fencing. All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fencing. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot tall steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees shall be erected at the limits of clearing and grading as shown on the 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. Root pruning and the installation of all tree protection fencing shall be performed under the supervision of the Project 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, UFMD shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. No grading or construction activities shall occur until the fencing is installed correctly, as determined by UFMD.

23. Root Pruning. The Applicant shall root prune as needed to comply with the tree preservation requirements below. 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 minimum depth of 18 inches.
  - Root pruning shall take place prior to any clearing and grading, or demolition of structures.
  - An UFMD representative shall be informed when all root pruning and tree protection fence installation is complete.
24. Monitoring. During any clearing or tree/vegetation/structure removal on the Applicant's 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 Project Arborist should be present on site and monitor clearing and demolition work during Phase I Erosion and Sediment (E&S) Control Plan implementation. Subsequent to approval of Phase I E&S implementation, the Project Arborist shall visit the site on a weekly basis to ensure conformance with all tree preservation proffers, and UFMD approvals. During the implementation of Phase II Erosion and Sediment Control and throughout the construction phase of the project, monitoring visits to the site shall be made at least monthly. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan, and reviewed and approved by UFMD.
25. Tree Protection Signage. The Applicant shall provide signs that identify and help protect all areas to be left undisturbed. These signs will be highly visible, posted as generally shown on the CDP/FDP P along the limits of clearing and grading, and attached to the tree protection fencing throughout the duration of construction. Under no circumstances will the signs be nailed or in any manner attached to the trees or vegetation within the areas to be left undisturbed.

### XIII TRANSPORTATION

26. Fairfax Center Area ("FCA") Road Fund. At the time of the issuance of the first RUP, the applicant shall contribute \$1,313 per new dwelling unit to the FCA Road Fund in accordance with the Procedural Guidelines adopted by the Board of Supervisors on November 22, 1982, as amended, subject to credit for all creditable expenses as determined by Fairfax County Department of Transportation and/or DPWES.

27. Future Interparcel Access. In the event the property to the North (Tax Map 55-4 ((1)) 30) (hereinafter the “Adjacent Property”) is subdivided, rezoned, or otherwise developed, the Applicant (or successor HOA) shall permit an extension of the Public Street in the location shown on the CDP/FDP as “ROW DEDICATION FOR FUTURE PUBLIC STREET EXTENSION” (the “Future Road Extension Area”). If development of the Adjacent Property includes a public street, then upon demand by the Board of Supervisors, the Applicant (or successor HOA) shall dedicate and convey in fee simple, and for no additional consideration, to the Board right-of-way for public street purposes in the general location of the Future Road Extension Area. If a private street is proposed on the Adjacent Property, then the Applicant (or successor HOA) shall grant all easements necessary for inter-parcel access to the Adjacent Property. Whether a public or private street extension is proposed, the Applicant (or successor HOA) shall not be responsible for off-site construction on the Adjacent Property of the street extension, shall have no maintenance obligations for the same, and shall not be responsible for any costs associated with the maintenance of the extension. Prior to site plan approval, the Applicant shall escrow funds equivalent to that required for removal of the cul-de-sac and construction of the Public Street extension from the end of the existing cul-de-sac to the property line based on Fairfax County’s Unit Price Schedule then in effect.
28. Extension of Crouch Drive. The Applicant shall construct the extension of the public street Crouch Drive to the proposed development. The Applicant will remove the temporary turn around on Tax Map 55-4 ((13)) parcels 14 & 15 and establish front yards on both parcels and extend the sidewalks where they currently exist.
29. Maintenance Access. The applicant shall provide a maintenance access to the storm water management facilities generally as shown on the CDP/FDP.

#### XIV. ARCHAEOLOGICAL STUDY

30. Archaeological Review. At least 30 days prior to any land disturbing activities on the Property, the Applicant shall conduct a Phase I archaeological survey on the area to be disturbed and provide the results of such study to the Cultural Resources Management and Protection Section of the Fairfax County Park Authority (“CRMP”) for review. The survey shall be conducted by a qualified archaeological professional approved by CRMP. No land disturbance activities shall be conducted until this survey is submitted to CRMP. If the Phase I survey concludes that additional Phase II archaeological testing of the area to be disturbed is warranted, the Applicant shall complete said testing and provide the results to CRMP prior to any land disturbing activities on the Property. If the Phase II survey concludes that additional Phase III evaluation and/or recovery is warranted, the Applicant shall also complete said work in consultation and coordination with CRMP prior to any land disturbing activities on the Property. Within 30 days of the completion of any cultural resource studies, the applicant shall provide a copy of archaeology reports, field notes, photographs, and artifacts to the Fairfax County Park Authority CRMP.

XV. AFFORDABLE HOUSING

31. Housing Trust Fund. At the time each residential lot is issued a building permit, the Applicant shall contribute to Habitat for Humanity of Northern Virginia or the Fairfax County Housing Trust Fund , at the direction of the Springfield District Supervisor, the sum of four thousand five hundred dollars (\$4,500), equal to fifty four thousand dollars (\$54,000.00 for the 12 new dwelling units), which is equivalent to one half of one percent (1/2%) of the projected sale price of Nine Hundred Thousand Dollars (\$900,000.00) for the new dwelling units.. At the time of transfer to an initial third party purchaser, the Applicant shall contribute an amount equal to one half of one percent (1/2%) of that portion of the actual sale price over \$900,000.00 (i.e. if the sale price is \$950,000, the ½% is equal to \$250.00) to Habitat for Humanity of Northern Virginia or the Fairfax County Housing Trust Fund, at the direction of the Springfield District Supervisor.

XVI. SIGNS

32. Signs. Any sign installed by the Applicant shall be in conformance with Article 12 of the Zoning Ordinance.

XVII. SUCCESSORS AND ASSIGNS

33. Successors and Assigns. These proffers shall bind and inure to the benefit of the Applicant and his/her successors and assigns.

**SIGNATURES BEGIN ON THE FOLLOWING PAGE**

APPLICANT/TITLE OWNER OF TAX MAP  
55-4 ((1)) 29

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Nga K. Strom

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Nhung Nguyen Kim

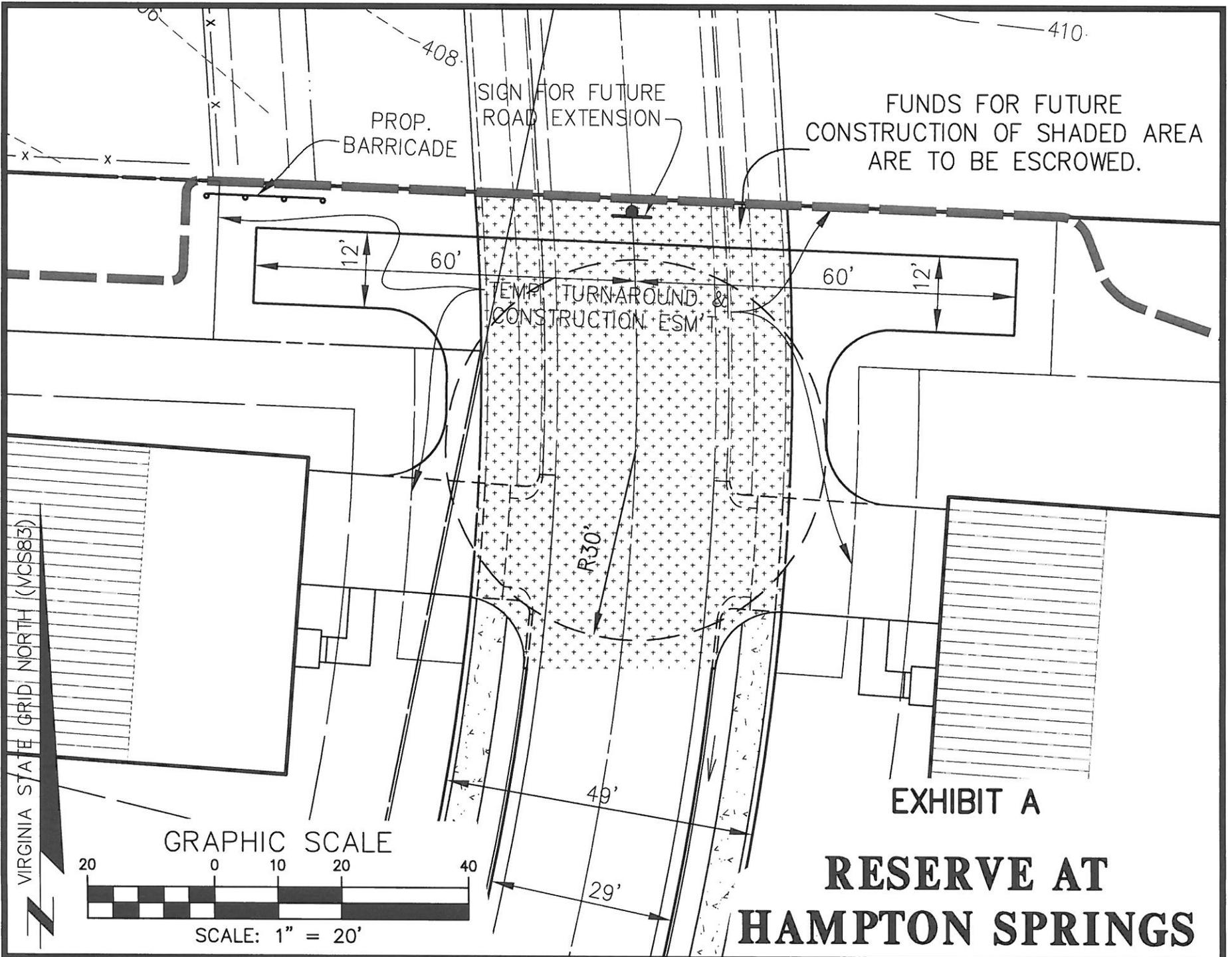
APPLICANT/TITLE OWNER OF TAX MAP  
55-4 ((1)) 29A

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Anita E. Cruz

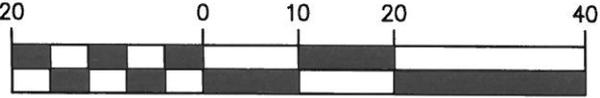
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Roel D. Cruz



VIRGINIA STATE GRID NORTH (VCS83)

GRAPHIC SCALE



SCALE: 1" = 20'

FUNDS FOR FUTURE CONSTRUCTION OF SHADED AREA ARE TO BE ESCROWED.

SIGN FOR FUTURE ROAD EXTENSION

PROP. BARRICADE

TEMP TURNAROUND & CONSTRUCTION ESM

R30'

EXHIBIT A

# RESERVE AT HAMPTON SPRINGS

REZONING AFFIDAVIT

DATE: 6/6/2015 (enter date affidavit is notarized)

I, Christopher Land, LLC, do hereby state that I am an (enter name of applicant or authorized agent)

129119

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

in Application No.(s): RZ 2015-SP-004 (enter County-assigned application number(s), e.g. RZ 88-V-001)

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

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

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

Table with 3 columns: NAME, ADDRESS, RELATIONSHIP(S). Includes entries for Christopher Land, LLC, E. John Regan, Jr., W. Craig Havenner, Agent; Tetra Corporation, Clark L. Massie, Agent, Kenneth R. Dondero, Agent; Charles P. Johnson & Associates, Inc., Allan D. Baker, Agent, Henry M. Fox, Jr., Agent, Paul B. Johnson, Agent, Anthony Owens, Agent, Charles P. Johnson, II; Nga K. Strom & Kim Nhung N. Nguyen, Roel and Anita Cruz. Includes a note about more relationships and a reference to a Rezoning Attachment form.

\* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.
\*\* List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

REZONING AFFIDAVIT

DATE: 6/6/2015  
(enter date affidavit is notarized)

129119

for Application No. (s): RZ 2015-SP-004  
(enter County-assigned application number(s))

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

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

CORPORATION INFORMATION

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

*EJR*  
Christopher Land, LLC.  
10461 White Granite Drive  
Oakton, Virginia 22124

**DESCRIPTION OF CORPORATION:** (check one statement)

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

**NAMES OF SHAREHOLDERS:** (enter first name, middle initial, and last name)

W. Craig Havenner  
E. John Regan, Jr.

**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name & title, e.g. **President, Vice President, Secretary, Treasurer,** etc.)

(check if applicable)  There is more corporation information and Par. 1(b) is continued on a "Rezoning Attachment 1(b)" form.

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

**Rezoning Attachment to Par. 1(b)**

DATE: 6/6/2015  
(enter date affidavit is notarized)

129119

for Application No. (s): RZ 2015-SP-004  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Charles P. Johnson & Associates, Inc,  
3959 Pender Drive, Suite 210  
Fairfax, Virginia 22030

**DESCRIPTION OF CORPORATION:** (check one statement)  
 There are 10 or less shareholders, and all of the shareholders are listed below.  
 There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.  
 There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDER:** (enter first name, middle initial, and last name)  
Charles P. Johnson  
Paul B. Johnson  
Charles P. Johnson, II

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**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. **President, Vice-President, Secretary, Treasurer,** etc.)  
Paul B. Johnson - President  
Charles P. Johnson, II CFO

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**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Tetra Corporation  
2653 Black Fir Court  
Reston, Virginia 20191

**DESCRIPTION OF CORPORATION:** (check one statement)  
 There are 10 or less shareholders, and all of the shareholders are listed below.  
 There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.  
 There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDERS:** (enter first name, middle initial, and last name)  
Clark L. Massie

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**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. **President, Vice-President, Secretary, Treasurer,** etc.)  
Clark L. Massie - President

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

REZONING AFFIDAVIT

DATE: 6/6/2015  
(enter date affidavit is notarized)

129119

for Application No. (s): RZ 2015-SP-004  
(enter County-assigned application number(s))

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

PARTNERSHIP INFORMATION

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

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

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

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

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

REZONING AFFIDAVIT

DATE: 6/6/2015  
(enter date affidavit is notarized)

129119

for Application No. (s): RZ 2015-SP-004  
(enter County-assigned application number(s))

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

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

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

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

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

none

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

REZONING AFFIDAVIT

DATE: 6/6/2015  
(enter date affidavit is notarized)

129119

for Application No. (s): RZ 2015-SP-004  
(enter County-assigned application number(s))

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney or holds 10% or more of the outstanding bonds or shares of stock of a particular class, has, or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of more than \$100, singularly or in the aggregate, with any of those listed in Par. 1 above.

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

Friends of Supervisor John Cook - In Excess of \$100.00 by: W. Craig Havenner

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

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

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

WITNESS the following signature:

(check one)

Applicant

Applicant's Authorized Agent

E. John Regan, Jr., Executive Vice President, Manager of Christopher Land, LLC  
(type or print first name, middle initial, last name, and title of signee)

Subscribed and sworn to before me this 6th day of June, 2015, in the State/Comm. of Virginia, County/City of Fairfax.

Laurie E. Strong  
Notary Public

My commission expires:

**Laurie E. Strong, ID No. 7510728**  
**Notary Public Comm. Of Virginia**  
**My Commission Expires November 30, 2015**

APR 02 2015

Zoning Evaluation Division

NARRATIVE STATEMENT OF JUSTIFICATION

Pursuant to Section 1/-204 of the Fairfax County Zoning Ordinance, dated August 14, 1978, as amended (the "Ordinance"), Christopher Land, LLC (the "Applicant"), hereby requests approval of a rezoning application from the R-1 to the PDH-2 District as further described below.

The Applicant is the contract purchaser of two parcels of land containing approximately 6.53 acres in the Springfield Magisterial District, which is identified among the Fairfax County tax map records as 55-4 001 parcels 29 and 29A (the "Subject Property"). Parcel 29 is improved with a single family home built in 1946 which will be removed. Parcel 29A contains a single family home originally built in 1974 that has been substantially expanded and updated and will be retained by the current owners. The Subject Property is located at the northern terminus of Crouch Drive, approximately 850 feet south of Lee Highway (Rt. 29) and is bordered on the north by a 2.06 acre parcel of land improved with a single family home, on the east by the Crystal Springs community developed with single homes and on the south and west by the Hampton Woods and Senes Property developed with single family homes. The surrounding area includes properties zoned and developed to the R-1 and R-2 Cluster. The Applicant proposes a rezoning for residential development that will be compatible with the surrounding area.

The Subject Property is located within the Fairfax Center Area of the Area III Comprehensive Plan (the "Plan"); specifically, within the Land Unit S Planning Sector. The Plan recommends that development in this sector should be single-family residential at 2 dwelling units per acre at the overlay level. New development in this area must be compatible with the existing Crystal Springs Subdivision. The Applicant is proposing a rezoning of the Subject Property from the R-1 to the PDH-2 District in accordance with the Plan recommendation. The adjacent 2.06 acre parcel located to the north is zoned R-1 and the neighborhoods to the south and west are zoned R-2 Cluster. A 20' outlet road separates the Subject Property from the Crystal Springs neighborhood located to the east. The 20' outlet road is zoned R-2 Cluster and the Crystal Springs neighborhood is zoned R-1.

The Applicant proposes a residential community in harmony with the Plan recommendation of one to two dwelling units per acre and compatible with the surrounding area. The Applicant has prepared and submitted a conceptual/final development plan (CDP/FDP) that illustrates a total of thirteen single-family detached dwelling units at a density of 1.99 dwelling units per acre, which is within the Plan density range. The current owners of Parcel 29A will retain their existing home on an approximate one acre lot. The approximate one acre lot is necessitated due to the location of the existing home, measuring approximately 120' x 48' and the location of various outbuildings which are to remain. The proposed residential subdivision results in 20% open space on the Subject Property, meeting the 20% required in the PDH-2 District. The

proposed residential community will allow for the further completion of the infill development.

### Fairfax Center Development Elements

Pursuant to the Plan language adopted for the Fairfax Center area, this proposal satisfies the relevant elements for the development at the overlay level and meets the performance criteria for residential/single family detached housing. A detailed table describing the application's conformance with the Fairfax Center Development Elements follows:

#### **Basic Development Elements**

##### **Transportation**

Roadways Crouch Drive will be extended through the development to the adjoining 2.06 acre parcel to the north

Transit NA

Non-motorized Transportation Sidewalks are provided within the development and will tie into the existing sidewalk on Crouch Drive

##### **Environmental Systems**

EQC No EQC is present on the site

SWM A stormwater management facility will be constructed on Parcel B consisting of a rain garden with underground stone storage and a piped outfall.

Preservation of Natural Features Parcels A and C contain approximately 8,700 and 24,000 square feet, respectively, and will be preserved as undisturbed open space.

Other Environmental Improvements The majority of the homes will have southern facing exposures. The homes shall be constructed with Certification from either ENERGY STAR or the EarthCraft Virginia Program.

##### **Provision of Public Facilities**

Park Dedication NA

Public Facilities Dedication NA

**Land Use/Site Planning**

Site Consideration Crouch Drive will be extended into the site and a 5' sidewalk will be installed on all streets and will tie into the existing sidewalk on Crouch Drive. Public water and sewer will be extended to serve the property. Development of the site will allow for further completion of the infill development.

Landscaping Landscaping will be provided on individual lots, as well as within Parcel A, B, C. However, no landscaping will be planted within the VDOT right of way.

**Detailed Design**

Site Entry Zone An entry sign is proposed for the development.

Street Furnishings NA

**Minor Development Elements**

**Transportation**

Roadways NA

Transit NA

Non-motorized Transportation NA

Transportation Strategies NA

**Environmental Systems**

Increased Open Space Open space will be provided on Parcel A and B and undisturbed open space will be provided on Parcel C.

Protection of Ground Two rain gardens will be constructed on Parcel B.

Water Resources

SWM Two rain gardens with underground stone storage will be provided. A closed storm sewer system will be installed to collect most of the site's runoff into the proposed rain garden. This rain garden will provide stormwater management and stormwater quality control for this site. The post development peak flow will be below the pre development peak flows.

Energy Conservation	The majority of the homes will have southern facing exposure. The homes will be constructed with certification from either ENERGY STAR or the EarthCraft Virginia Program.	
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**Provision of Public Facilities**

Park Dedication		NA
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Public Facility Site Dedication		NA
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**Land Use/Site Plan**

Parcel Consolidation	Parcel 29 and 29B have been consolidated. A contribution will be made for affordable housing in accordance with adopted policies.	
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Mixed Use Plan		NA
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**Detailed Design**

Building Entry Zone		NA
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Structures	Architectural designs will be compatible with the surrounding communities.	
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Parking		NA
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Other Considerations		NA
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**Major Development Elements**

**Transportation**

Roadways	A contribution will be made to the Fairfax Center Area Road Fund.	
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Transit		NA
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Transportation Strategies		NA
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Non-motorized	Sidewalks will be provided on both sides of the public streets.	
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Circulation

**Environmental Systems**

Innovative Techniques	A stormwater management facility will be constructed consisting of a rain garden with underground stone storage and a piped outfall.	
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**Provision of Public Facilities**

Park Dedication NA

Public Indoor or Passive open space is being provided.

Outdoor Activity  
Space

**Land Use/Site Planning**

Extraordinary Innovation Open spaces have been strategically placed to provide buffering to the adjoining neighborhoods. The majority of the homes will have southern facing exposure. Two rain gardens will be installed on Parcel B.

**Detailed Design**

Detailed site design NA

Major Plazas NA

Street Furnishings NA

Landscaping of Major Public Spaces Buffering is proposed to most adjacent neighborhoods.

The Applicant's proposed residential layout is compatible in density and scale with the surrounding development. Surrounding properties are developed with similar use, type, and intensity to the Applicant's proposal. In addition, the Applicant meets the Plan's residential development criteria as follows:

**Site Design**

A rezoning of the Subject Property to the PDH-2 District will allow for the further completion of the infill development of the Hampton Woods and Senes Property communities, located to the south and west of the Subject Property that are already zoned and developed residentially in accordance with Plan recommendations. The Applicant attempted to consolidate the two parcels located to the north of the Subject Property that would provide access to Rt. 29 but has been unsuccessful despite several meetings and conversations with the owner and the owner's representatives. The 20' outlet road located to the east of the Subject Property is zoned R-2 Cluster and provides a buffer to the Crystal Springs community zoned R-1. The proposed layout integrates the elements of open space, landscaping, and functional quality design in a residential development that conforms to the Plan recommendations. Twenty percent (20%) of the site will be open space. The open space has been strategically designed to allow the majority of the homes to back to open space or the 20' outlet road located east of the subject property and acting as de facto open space. The open space will also provide buffering of the proposed homes to the existing homes in the Hampton Woods and Senes Property communities. The entry to the proposed community will be provided by an extension of

communities. The entry to the proposed community will be provided by an extension of Crouch Drive. Crouch Drive will be extended to the northern portion of the site to provide future interparcel connection to the 2.06 acre parcel of land currently zoned R-1. The Applicant proposes a 5' concrete sidewalk to be installed along the public roads in the community. Landscaping will be provided on individual lots, as well as within Parcel A, B and C. Landscape details have been provided on the CDP/FDP to illustrate the quality and quantity of the proposed vegetation.

It should be noted that the usable open space provided under the PDH-2 zoning district would not be possible under convention R-2 zoning. Much of the open space in this proposal is located in out lots that are accessible and usable by the residents. The larger lots required by the R-2 district would move most of this open space into private backyards, which provides less community benefit.

### Neighborhood Context

The Applicant proposes a residential development that will allow for further completion of established residential development patterns. The proposed new detached residential units will be developed at a density of 1.99 dwelling units per acre. The Hampton Woods community, located to the west of the Subject Property, was rezoned in 1995. The site contains 19.24 acres and has been developed with 31 single family homes. However, approximately 2.67 acres of the open space generally coincides with the boundaries of the Resource Protection Area (RPA), as defined by the Chesapeake Bay Preservation Act. Deducting the RPA area from the 19.24 acre site, results in an effective density of 1.87 dwelling units per acre. Similarly, the Senes Property contains 10.91 acres and has been developed with 17 lots but contains over 3.38 acres of RPA, resulting in an effective density of 2.12 dwelling units per acre. The Subject Property contains no RPA. The proposed new residential development will provide a transition from the 2.06 acre parcel zoned R-1 located north of the Subject Property to the surrounding single family detached communities developed at effective densities ranging from 1.87 to 2.12 dwelling units per acre and located south and west of the Subject Property. The Applicant rezoned the neighboring Hampton Estates community, tax map 66-2 007, in 2003. The property was rezoned to the PDH-2 zoning category at a density of 1.91 dwelling units per acre. The community adjoins the Hampton Forest community to the west zoned R-2 Cluster, the Willow Springs Elementary School to the north zoned R-1 and several residential parcels zoned R-C located to the east.

### Environment

The Applicant's proposed residential development results in 20% open space on the subject Property as required in the PDH-2 District. A stormwater management facility will be constructed on Parcel B consisting of two rain gardens. There are no scenic assets or natural features deserving of preservation on the property. The slopes and soils on the property are well suited for the proposed development. Since the property is being developed at the Comprehensive Plan density with the type of use envisioned in the Plan and due to the layout and buffering provided, the addition of 12 new homes (13 homes,

less 1 existing home to remain) should not create a noise or lighting issue for the existing residences in the area. Through proffers, the Applicant will commit that all homes shall be constructed with certification from either ENERGY STAR or the EarthCraft Virginia Program.

#### Tree Preservation and Tree Cover Requirements.

The Applicant will submit proffers during the processing of the rezoning application to ensure appropriate tree preservation measures that will increase survivability. The remainder of the proposed development's tree cover requirements will be satisfied by plantings, as depicted on the CDP/FDP.

#### Transportation

The Applicant proposes safe and adequate access to the adjacent road network. The Applicant will remove the temporary cul-de-sac located at the northern terminus of Crouch Drive and extend the road north to provide a future interparcel connection to the 2.06 acre site zoned R-1 located adjacent to the Subject Property. The existing driveway providing access from Rt. 29 to the existing two homes located on the Subject Property will be abandoned. The existing home located on parcel 29A will be served by the public streets to be installed by the Applicant. The proposed residential development includes a 5' concrete sidewalk to be constructed by the Applicant along both sides of the public streets. The sidewalk along the new section of Crouch Drive extended will tie into the existing sidewalk located along the west side of the existing Crouch Drive in the Senes Property community. A minimum driveway length of twenty feet as measured from the back of the sidewalk to the garage door is provided for each unit to insure adequate parking on site.

#### Public Facilities

The proposed residential community may be classified as infill development that will be served by existing adequate public facilities. The Applicant's proposal of twelve new single-family detached homes (13 homes, less 1 existing home to remain) will not have a measurable impact on public facilities. The Applicant will address the issue of a contribution to public schools in accordance with adopted formulas adopted by the Board of Supervisors in the proffers that will be submitted during the processing of the rezoning application.

#### Affordable Housing

The requirements of the Affordable Dwelling Unit Ordinance do not apply to the Applicant's proposal, as it is less than fifty residential dwelling units. The Applicant will address the issue of a contribution for affordable housing in accordance with policies adopted by the Board of Supervisors in the proffers that will be submitted during the processing of the rezoning application.

Heritage Resources

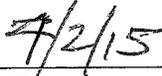
The Applicant is unaware of any heritage resources that may be located on the subject Property.

Summary

The Applicants proposal meets the objectives of the Plan, which recommends residential development at a density of one to two dwelling units per acre. Further, the Applicant's proposal may be characterized as infill development that is compatible in use, type, and intensity with the surrounding area. The Applicant's proposal will complete an existing and established residential development pattern. Further, the layout and design of the proposed residential developments satisfies the residential development criteria as outlined herein. Lastly, the proposed development may be supported by existing transportation and public facilities.

Christopher Land, LLC

  
By: W. Craig Havenner, Member

  
Date

## APPENDIX 9

## RESIDENTIAL DEVELOPMENT CRITERIA

Fairfax County expects new residential development to enhance the community by: fitting into the fabric of the neighborhood, respecting the environment, addressing transportation impacts, addressing impacts on other public facilities, being responsive to our historic heritage, contributing to the provision of affordable housing and, being responsive to the unique site specific considerations of the property. To that end, the following criteria are to be used in evaluating zoning requests for new residential development. The resolution of issues identified during the evaluation of a specific development proposal is critical if the proposal is to receive favorable consideration.

Where the Plan recommends a possible increase in density above the existing zoning of the property, achievement of the requested density will be based, in substantial part, on whether development related issues are satisfactorily addressed as determined by application of these development criteria. Most, if not all, of the criteria will be applicable in every application; however, due to the differing nature of specific development proposals and their impacts, the development criteria need not be equally weighted. If there are extraordinary circumstances, a single criterion or several criteria may be overriding in evaluating the merits of a particular proposal. Use of these criteria as an evaluation tool is not intended to be limiting in regard to review of the application with respect to other guidance found in the Plan or other aspects that the applicant incorporates into the development proposal. Applicants are encouraged to submit the best possible development proposals. In applying the Residential Development Criteria to specific projects and in determining whether a criterion has been satisfied, factors such as the following may be considered:

- the size of the project
- site specific issues that affect the applicant's ability to address in a meaningful way relevant development issues
- whether the proposal is advancing the guidance found in the area plans or other planning and policy goals (e.g. revitalization).

When there has been an identified need or problem, credit toward satisfying the criteria will be awarded based upon whether proposed commitments by the applicant will significantly advance problem resolution. In all cases, the responsibility for demonstrating satisfaction of the criteria rests with the applicant.

**1. Site Design:**

All rezoning applications for residential development should be characterized by high quality site design. Rezoning proposals for residential development, regardless of the proposed density, will be evaluated based upon the following principles, although not all of the principles may be applicable for all developments.

- a) *Consolidation:* Developments should provide parcel consolidation in conformance with any site specific text and applicable policy recommendations of the Comprehensive Plan. Should the Plan text not specifically address consolidation, the nature and extent of any proposed parcel consolidation should further the integration of the development with adjacent parcels. In any event, the proposed consolidation should not preclude nearby properties from developing as recommended by the Plan.

- b) *Layout*: The layout should:
- provide logical, functional and appropriate relationships among the various parts (e. g. dwelling units, yards, streets, open space, stormwater management facilities, existing vegetation, noise mitigation measures, sidewalks and fences);
  - provide dwelling units that are oriented appropriately to adjacent streets and homes;
  - include usable yard areas within the individual lots that accommodate the future construction of decks, sunrooms, porches, and/or accessory structures in the layout of the lots, and that provide space for landscaping to thrive and for maintenance activities;
  - provide logical and appropriate relationships among the proposed lots including the relationships of yards, the orientation of the dwelling units, and the use of pipestem lots;
  - provide convenient access to transit facilities;
  - Identify all existing utilities and make every effort to identify all proposed utilities and stormwater management outfall areas; encourage utility collocation where feasible.
- c) *Open Space*: Developments should provide usable, accessible, and well-integrated open space. This principle is applicable to all projects where open space is required by the Zoning Ordinance and should be considered, where appropriate, in other circumstances.
- d) *Landscaping*: Developments should provide appropriate landscaping: for example, in parking lots, in open space areas, along streets, in and around stormwater management facilities, and on individual lots.
- e) *Amenities*: Developments should provide amenities such as benches, gazebos, recreational amenities, play areas for children, walls and fences, special paving treatments, street furniture, and lighting.

## 2. Neighborhood Context:

All rezoning applications for residential development, regardless of the proposed density, should be designed to fit into the community within which the development is to be located. Developments should fit into the fabric of their adjacent neighborhoods, as evidenced by an evaluation of:

- transitions to abutting and adjacent uses;
- lot sizes, particularly along the periphery;
- bulk/mass of the proposed dwelling units;
- setbacks (front, side and rear);
- orientation of the proposed dwelling units to adjacent streets and homes;
- architectural elevations and materials;
- pedestrian, bicycle and vehicular connections to off-site trails, roadways, transit facilities and land uses;
- existing topography and vegetative cover and proposed changes to them as a result of clearing and grading.

It is not expected that developments will be identical to their neighbors, but that the development fit into the fabric of the community. In evaluating this criterion, the individual circumstances of the property will be considered: such as, the nature of existing and planned development surrounding and/or adjacent to the property; whether the property provides a transition between different uses or densities; whether access to an infill development is through an existing neighborhood; or, whether the property is within an area that is planned for redevelopment.

### **3. Environment:**

All rezoning applications for residential development should respect the environment. Rezoning proposals for residential development, regardless of the proposed density, should be consistent with the policies and objectives of the environmental element of the Policy Plan, and will also be evaluated on the following principles, where applicable.

- a) *Preservation:* Developments should conserve natural environmental resources by protecting, enhancing, and/or restoring the habitat value and pollution reduction potential of floodplains, stream valleys, EQCs, RPAs, woodlands, wetlands and other environmentally sensitive areas.
- b) *Slopes and Soils:* The design of developments should take existing topographic conditions and soil characteristics into consideration.
- c) *Water Quality:* Developments should minimize off-site impacts on water quality by commitments to state of the art best management practices for stormwater management and better site design and low impact development (LID) techniques.
- d) *Drainage:* The volume and velocity of stormwater runoff from new development should be managed in order to avoid impacts on downstream properties. Where drainage is a particular concern, the applicant should demonstrate that off-site drainage impacts will be mitigated and that stormwater management facilities are designed and sized appropriately. Adequate drainage outfall should be verified, and the location of drainage outfall (onsite or offsite) should be shown on development plans.
- e) *Noise:* Developments should protect future and current residents and others from the adverse impacts of transportation generated noise.
- f) *Lighting:* Developments should commit to exterior lighting fixtures that minimize neighborhood glare and impacts to the night sky.
- g) *Energy:* Developments should use site design techniques such as solar orientation and landscaping to achieve energy savings, and should be designed to encourage and facilitate walking and bicycling. Energy efficiency measures should be incorporated into building design and construction.

### **4. Tree Preservation and Tree Cover Requirements:**

All rezoning applications for residential development, regardless of the proposed density, should be designed to take advantage of the existing quality tree cover. If quality tree cover exists on site as determined by the County, it is highly desirable that developments meet most or all of their tree cover requirement by preserving and, where feasible and appropriate, transplanting existing trees. Tree cover in excess of ordinance requirements is highly desirable. Proposed utilities, including stormwater management and outfall facilities and

sanitary sewer lines, should be located to avoid conflicts with tree preservation and planting areas. Air quality-sensitive tree preservation and planting efforts (see Objective 1, Policy c in the Environment section of this document) are also encouraged.

## 5. Transportation:

All rezoning applications for residential development should implement measures to address planned transportation improvements. Applicants should offset their impacts to the transportation network. Accepted techniques should be utilized for analysis of the development's impact on the network. Residential development considered under these criteria will range widely in density and, therefore, will result in differing impacts to the transportation network. Some criteria will have universal applicability while others will apply only under specific circumstances. Regardless of the proposed density, applications will be evaluated based upon the following principles, although not all of the principles may be applicable.

- a) *Transportation Improvements:* Residential development should provide safe and adequate access to the road network, maintain the ability of local streets to safely accommodate traffic, and offset the impact of additional traffic through commitments to the following:
  - Capacity enhancements to nearby arterial and collector streets;
  - Street design features that improve safety and mobility for non-motorized forms of transportation;
  - Signals and other traffic control measures;
  - Development phasing to coincide with identified transportation improvements;
  - Right-of-way dedication;
  - Construction of other improvements beyond ordinance requirements;
  - Monetary contributions for improvements in the vicinity of the development.
- b) *Transit/Transportation Management:* Mass transit usage and other transportation measures to reduce vehicular trips should be encouraged by:
  - Provision of bus shelters;
  - Implementation and/or participation in a shuttle bus service;
  - Participation in programs designed to reduce vehicular trips;
  - Incorporation of transit facilities within the development and integration of transit with adjacent areas;
  - Provision of trails and facilities that increase safety and mobility for non-motorized travel.
- c) *Interconnection of the Street Network:* Vehicular connections between neighborhoods should be provided, as follows:
  - Local streets within the development should be connected with adjacent local streets to improve neighborhood circulation;
  - When appropriate, existing stub streets should be connected to adjoining parcels. If street connections are dedicated but not constructed with development, they should be identified with signage that indicates the street is to be extended;
  - Streets should be designed and constructed to accommodate safe and convenient usage by buses and non-motorized forms of transportation;
  - Traffic calming measures should be implemented where needed to discourage cut-through traffic, increase safety and reduce vehicular speed;

- The number and length of long, single-ended roadways should be minimized;
  - Sufficient access for public safety vehicles should be ensured.
- d) *Streets*: Public streets are preferred. If private streets are proposed in single-family detached developments, the applicant shall demonstrate the benefits for such streets. Applicants should make appropriate design and construction commitments for all private streets so as to minimize maintenance costs which may accrue to future property owners. Furthermore, convenience and safety issues such as parking on private streets should be considered during the review process.
- e) *Non-motorized Facilities*: Non-motorized facilities, such as those listed below, should be provided:
- Connections to transit facilities;
  - Connections between adjoining neighborhoods;
  - Connections to existing non-motorized facilities;
  - Connections to off-site retail/commercial uses, public/community facilities, and natural and recreational areas;
  - An internal non-motorized facility network with pedestrian and natural amenities, particularly those included in the Comprehensive Plan;
  - Offsite non-motorized facilities, particularly those included in the Comprehensive Plan;
  - Driveways to residences should be of adequate length to accommodate passenger vehicles without blocking walkways;
  - Construction of non-motorized facilities on both sides of the street is preferred. If construction on a single side of the street is proposed, the applicant shall demonstrate the public benefit of a limited facility.
- f) *Alternative Street Designs*: Under specific design conditions for individual sites or where existing features such as trees, topography, etc. are important elements, modifications to the public street standards may be considered.

## 6. Public Facilities:

Residential development impacts public facility systems (i.e., schools, parks, libraries, police, fire and rescue, stormwater management and other publicly owned community facilities). These impacts will be identified and evaluated during the development review process. For schools, a methodology approved by the Board of Supervisors, after input and recommendation by the School Board, will be used as a guideline for determining the impact of additional students generated by the new development.

Given the variety of public facility needs throughout the County, on a case-by-case basis, public facility needs will be evaluated so that local concerns may be addressed.

All rezoning applications for residential development are expected to offset their public facility impact and to first address public facility needs in the vicinity of the proposed development. Impact offset may be accomplished through the dedication of land suitable for the construction of an identified public facility need, the construction of public facilities, the contribution of specified in-kind goods, services or cash earmarked for those uses, and/or monetary contributions to be used toward funding capital improvement projects. Selection of the appropriate offset mechanism should maximize the public benefit of the contribution.

Furthermore, phasing of development may be required to ensure mitigation of impacts.

## 7. Affordable Housing:

Ensuring an adequate supply of housing for low and moderate income families, those with special accessibility requirements, and those with other special needs is a goal of the County.

Part 8 of Article 2 of the Zoning Ordinance requires the provision of Affordable Dwelling Units (ADUs) in certain circumstances. Criterion #7 is applicable to all rezoning applications and/or portions thereof that are not required to provide any Affordable Dwelling Units, regardless of the planned density range for the site.

- a) *Dedication of Units or Land:* If the applicant elects to fulfill this criterion by providing affordable units that are not otherwise required by the ADU Ordinance: a maximum density of 20% above the upper limit of the Plan range could be achieved if 12.5% of the total number of single-family detached and attached units are provided pursuant to the Affordable Dwelling Unit Program; and, a maximum density of 10% or 20% above the upper limit of the Plan range could be achieved if 6.25% or 12.5%, respectively of the total number of multifamily units are provided to the Affordable Dwelling Unit Program. As an alternative, land, adequate and ready to be developed for an equal number of units may be provided to the Fairfax County Redevelopment and Housing Authority or to such other entity as may be approved by the Board.
- b) *Housing Trust Fund Contributions:* Satisfaction of this criterion may also be achieved by a contribution to the Housing Trust Fund or, as may be approved by the Board, a monetary and/or in-kind contribution to another entity whose mission is to provide affordable housing in Fairfax County, equal to 0.5% of the value of all of the units approved on the property except those that result in the provision of ADUs. This contribution shall be payable prior to the issuance of the first building permit. For for-sale projects, the percentage set forth above is based upon the aggregate sales price of all of the units subject to the contribution, as if all of those units were sold at the time of the issuance of the first building permit, and is estimated through comparable sales of similar type units. For rental projects, the amount of the contribution is based upon the total development cost of the portion of the project subject to the contribution for all elements necessary to bring the project to market, including land, financing, soft costs and construction. The sales price or development cost will be determined by the Department of Housing and Community Development, in consultation with the Applicant and the Department of Public Works and Environmental Services. If this criterion is fulfilled by a contribution as set forth in this paragraph, the density bonus permitted in a) above does not apply.

## 8. Heritage Resources:

Heritage resources are those sites or structures, including their landscape settings, that exemplify the cultural, architectural, economic, social, political, or historic heritage of the County or its communities. Such sites or structures have been 1) listed on, or determined eligible for listing on, the National Register of Historic Places or the Virginia Landmarks Register; 2) determined to be a contributing structure within a district so listed or eligible for listing; 3) located within and considered as a contributing structure within a Fairfax County Historic Overlay District; or 4) listed on, or having a reasonable potential as determined by the County, for meeting the criteria for listing on, the Fairfax County Inventories of Historic or Archaeological Sites.

In reviewing rezoning applications for properties on which known or potential heritage resources are located, some or all of the following shall apply:

- a) Protect heritage resources from deterioration or destruction until they can be documented, evaluated, and/or preserved;
- b) Conduct archaeological, architectural, and/or historical research to determine the presence, extent, and significance of heritage resources;
- c) Submit proposals for archaeological work to the County for review and approval and, unless otherwise agreed, conduct such work in accordance with state standards;
- d) Preserve and rehabilitate heritage resources for continued or adaptive use where feasible;
- e) Submit proposals to change the exterior appearance of, relocate, or demolish historic structures to the Fairfax County Architectural Review Board for review and approval;
- f) Document heritage resources to be demolished or relocated;
- g) Design new structures and site improvements, including clearing and grading, to enhance rather than harm heritage resources;
- h) Establish easements that will assure continued preservation of heritage resources with an appropriate entity such as the County's Open Space and Historic Preservation Easement Program; and
- i) Provide a Fairfax County Historical Marker or Virginia Historical Highway Marker on or near the site of a heritage resource, if recommended and approved by the Fairfax County History Commission.

### **ROLE OF DENSITY RANGES IN AREA PLANS**

Density ranges for property planned for residential development, expressed generally in terms of dwelling units per acre, are recommended in the Area Plans and are shown on the Comprehensive Plan Map. Where the Plan text and map differ, the text governs. In defining the density range:

- the “base level” of the range is defined as the lowest density recommended in the Plan range, i.e., 5 dwelling units per acre in the 5-8 dwelling unit per acre range;
- the “high end” of the range is defined as the base level plus 60% of the density range in a particular Plan category, which in the residential density range of 5-8 dwelling units per acre would be considered as 6.8 dwelling units per acre and above; and,
- the upper limit is defined as the maximum density called for in any Plan range, which, in the 5-8 dwelling unit per acre range would be 8 dwelling units per acre.
- In instances where a range is not specified in the Plan, for example where the Plan calls for residential density up to 30 dwelling units per acre, the density cited in the Plan shall be construed to equate to the upper limit of the Plan range, and the base level shall be the upper limit of the next lower Plan range, in this instance, 20 dwelling units per acre.



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** September 8, 2015

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

**FROM:** Ian Fuze, Urban Forester II  
Forest Conservation Branch, DPWES

**SUBJECT:** The Reserve at Hampton Springs. RZ/FDP 2015-SP-004

This review is based on the resubmission of the rezoning application RZ/FDP 2015-SP-004 and Conceptual/Final Development Plan stamped as, received by the Zoning Evaluation Division August 25, 2015.

- 1. Comment:** The individual lot owners will have the responsibility to manage and maintain trees and forested areas on their property. Information prepared to satisfy tree preservation plan requirements of the subdivision plan should be transferred to the individual lot owners as a resource for the management of trees on their property. This information can be used as the basis of a tree maintenance plan for managing the resource and budgeting maintenance cost over several years. Tree issues identified early can often be addressed before they become significant problems that require greater expense.

**Recommendation:** Obtain a commitment to the following:

The Applicant shall convey forested area and tree management information prepared to satisfy Tree Conservation Plan requirements to the purchaser of each lot at the time the RUP is issued. Information shall include data collected for the Tree Inventory, updated to note completion of tree preservation activities required by the Tree Preservation Plan approved with the subdivision plan and planting schedules and the landscape plan provided with the approved subdivision plan. This information can be used as the basis of a tree maintenance plan for managing the resource and budgeting maintenance cost over several years. Transfer of information shall be verified by a notice of receipt signed by the property buyer.

If further assistance is desired, please contact me at 703-324-1770.

if/

UFMDID #: 203281

cc: DPZ File

Department of Public Works and Environmental Services  
Urban Forest Management Division  
12055 Government Center Parkway, Suite 518  
Fairfax, Virginia 22035-5503  
Phone 703-324-1770, TTY: 711, Fax: 703-653-9550  
[www.fairfaxcounty.gov/dpwes](http://www.fairfaxcounty.gov/dpwes)





# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** September 3, 2015

**TO:** Barbara Berlin, Director  
Zoning Evaluation Division, Department of Planning & Zoning

**CC:** Nick Rogers, Staff Coordinator  
Zoning Evaluation Division, Department of Planning & Zoning

**FROM:** Michael A. Davis, Acting Chief   
Site Analysis Section, Department of Transportation

**FILE:** RZ/FDP 2015-SP-004

**SUBJECT:** RZ/FDP 2015-SP-004 Christopher Land, LLC  
(The Reserve at Hampton Springs)  
12727 and 12733 Lee Highway, VA 22030 Tax Map: 55-4 ((1)) 29 and 29A

This department reviewed the subject application, the Conceptual Development Plan/Final Development Plan (CFD/FDP) dated April 1, 2015, revised through August 24, 2015, and proffers dated August 24, 2015; the following comments are offered. Proffer comments were submitted under separate cover.

- The applicant should provide a minimum 45-foot radius cul-de-sac for the north/south roadway to allow for emergency and service vehicle maneuvering.
- FCDOT does not object to the waiver request to reduce the east/west roadway cul-de-sac to a 30-foot radius with an integrated emergency turnaround. The narrow pavement section and smaller radius cul-de-sac is appropriate for a low traffic volume residential street.
- The applicant should design all roadway improvements to VDOT standards.

The applicant has addressed all other previous comments from FCDOT.

MAD/RP

Fairfax County Department of Transportation  
4050 Legato Road, Suite 400  
Fairfax, VA 22033-2895  
Phone: (703) 877-5600 TTY: 711  
Fax: (703) 877-5723  
[www.fairfaxcounty.gov/fcdot](http://www.fairfaxcounty.gov/fcdot)





COMMONWEALTH of VIRGINIA  
DEPARTMENT OF TRANSPORTATION

CHARLES A. KILPATRICK, P.E.  
COMMISSIONER

4975 Alliance Drive  
Fairfax, VA 22030

September 11, 2015

**To:** Ms. Barbara Berlin  
Director, Zoning Evaluation Division

**From:** Kevin Nelson  
Virginia Department of Transportation – Land Development Section

**Subject:** RZ/FDPA 2015-SP-004 Christopher Land LLC  
Tax Map # 55-4((01))0029 & 29A  
Fairfax County

All submittals subsequent to the first submittal shall provide a response letter to the previous VDOT comments. Submittals without comment response letters are considered incomplete and will be returned without review.

I have reviewed the above plan submitted on August 27, 2015, and received on September 1, 2015. I have no additional comments regarding this application.

cc: Ms. Angela Rodeheaver

fairfaxrezoning2015-SP-004rz3ChristopherLandLLCHamptonSprings9-11-15BB



# FAIRFAX COUNTY PARK AUTHORITY



## M E M O R A N D U M

**TO:** Barbara Berlin, AICP, Director  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Sandy Stallman, AICP, Manager  
Park Planning Branch, PDD 

**DATE:** July 10, 2015

**SUBJECT:** RZ-FDP 2015-SP-004, The Reserve at Hampton Springs (Christopher Land, LLC) - **REVISED**  
Tax Map Numbers: 55-4 ((1)) 29, 29A

### BACKGROUND

The Park Authority staff has reviewed the proposed Development Plan dated April 01, 2015, for the above referenced application. The Development Plan shows 12 new single-family detached dwelling units on a 6.533 acre parcel to be rezoned from R-1 to PDH-2 with proffers. Based on an average single-family detached household size of 3.28 in the Bull Run Planning District, the development could add 36 new residents (12 new dwellings – 1 existing dwelling =  $11 \times 3.28 = 35.86$ ) to the Springfield Supervisory District.

### COMPREHENSIVE PLAN GUIDANCE

The County Comprehensive Plan includes both general and specific guidance regarding parks and resources. The Policy Plan describes the need to mitigate adverse impacts to park and recreation facilities caused by growth and development; it also offers a variety of ways to offset those impacts, including contributions, land dedication, development of facilities, and others (Parks and Recreation, Objective 6, p.8). Resource protection is addressed in multiple objectives, focusing on protection, preservation, and sustainability of resources (Parks and Recreation Objectives 2 and 5, p.5-7).

Finally, text from the Bull Run Planning District chapter of the Great Parks, Great Communities Park Comprehensive Plan echoes recommendations in the Countywide Comprehensive Plan. Specific District chapter recommendations include protecting the remaining natural areas, encouraging private land owners to plant trees and use natural landscaping techniques on-site, working with private land owners to capture and treat stormwater on-site, and identifying and protecting cultural resources.

## **ANALYSIS AND RECOMMENDATIONS**

### **Park Needs:**

Using adopted service level standards, staff has identified a need for all types of parkland and recreational facilities in this area. Existing nearby parks (Arrowhead Park, Lincoln Lewis-Vannoy Park, Piney Branch Stream Valley Park, Rocky Run Stream Valley Park, Stringfellow Park, and Willow Pond Park) meet only a portion of the demand for parkland generated by residential development in the Fairfax Center Area. In addition to parkland, the recreational facilities in greatest need in this area include rectangle fields, adult baseball fields, adult and youth softball fields, basketball courts, playgrounds, neighborhood dog parks, neighborhood skate parks, and trails.

### **Recreational Impact of Residential Development:**

The Fairfax County Zoning Ordinance requires provision of open space and recreational features within Planned Development Districts (see Zoning Ordinance Sections 6-110 and 16-404). The minimum expenditure for park and recreational facilities within these districts is set at \$1,800 per non-ADU residential unit for outdoor recreational facilities to serve the development population. Whenever possible, the facilities should be located within the residential development site. With 12 non-ADUs proposed, the Ordinance-required amount to be spent on-site is \$21,600. Any portion of this amount not spent on-site should be conveyed to the Park Authority for recreational facility construction at one or more park sites in the service area of the development. The development plan does not show any on-site recreational facilities.

The \$1,800 per unit funds required by Ordinance offset only a portion of the impact to provide recreational facilities for the new residents generated by this development. Typically, a large portion if not all of the Ordinance-required funds are used for recreational amenities on-site. As a result, the Park Authority is not compensated for the increased demands caused by residential development for other recreational facilities that the Park Authority must provide.

With the Countywide Comprehensive Policy Plan as a guide (Appendix 9, #6 of the Land Use section, as well as Objective 6, Policy a, b and c of the Parks and Recreation section), the Park Authority requests a fair share contribution of \$893 per new resident with any residential rezoning application to offset impacts to park and recreation service levels. This allows the Park Authority to build additional facilities needed as the population increases. To offset the additional impact caused by the proposed development, the applicant should contribute \$34,827 to the Park Authority for recreational facility development at one or more park sites located within the service area of the subject property.

### **Cultural Resources Impact:**

The Park Authority staff conducted an archival review of cultural resources for the application. The parcels have moderate to high potential to contain significant cultural resources as the area is known for its Civil War campsites. The Park Authority recommends the parcels undergo a Phase I archaeological survey in order to determine the presence or absence of cultural resources. If significant resources are found, the Park Authority recommends that the parcels undergo Phase II archaeological testing in order to determine eligibility onto the National Register of Historic Places. If sites are found eligible, avoidance or Phase III data recovery is recommended.

At the completion of any cultural resource studies, the Park Authority requests that the applicant provide two copies (one hard copy, one digital copy) of the archaeology report as well as field notes, photographs, and artifacts to the Park Authority's Resource Management Division (Attention: Liz Crowell) within 30 days of completion of the study. Materials can be sent to 2855 Annandale Road Falls Church, VA 20110 for review and concurrence. For artifact catalogues, please include the database in Access™ format, as well as digital photography, architectural assessments, including line drawings. If any archaeological, architectural or other sites are found during cultural resources assessments, the applicant should update files at VDHR, using the VCRIS system.

### **SUMMARY OF RECOMMENDATIONS**

This section summarizes the recommendations included in the preceding analysis section. Following is a table summarizing recreation contribution amounts consistent with the Zoning Ordinance and Comprehensive Plan guidance:

<b>Proposed Uses</b>	<b>P-District On-site Expenditure</b>	<b>Requested Park Proffer Amount</b>	<b>Total</b>
Single-family detached units	\$21,600	\$32,148	\$53,748

In addition, the Park Authority recommends the following:

- Conduct a Phase I archaeological study and any needed follow up studies

Please note the Park Authority would like to review and comment on proffers and development conditions related to park and recreation issues. We request that draft and final proffers and development conditions be submitted to the assigned reviewer noted below for review and comment prior to completion of the staff report and prior to final Board of Supervisors approval.

FCPA Reviewer: Andrea L. Dorlester / Paul Ngo

DPZ Coordinator: Nicholas Rogers

Copy: Cindy Walsh, Director, Resource Management Division

Liz Crowell, Manager, Cultural Resource Management & Protection Section

Nicholas Rogers, DPZ Coordinator

Chron File

File Copy



**FAIRFAX COUNTY  
PUBLIC SCHOOLS**

Department of Facilities and Transportation Services

Office of Facilities Planning Services  
8115 Gatehouse Road, Suite 3300  
Falls Church, Virginia 22042

May 11, 2015

RECEIVED  
Department of Planning & Zoning

MAY 18 2015

Zoning Evaluation Division

**TO:** Barbara Berlin, Director  
Zoning Evaluation Division  
Fairfax County Department of Planning & Zoning

**FROM:** Aimee Holleb, Assistant Director *ah*  
Office of Facilities Planning Services

**SUBJECT:** RZ/FDP 2015-SP-004, Christopher Land

**ACREAGE:** 6.53

**TAX MAP:** 55-4 ((1)) 29 and 29 A

**PROPOSAL:**

The rezoning application requests to rezone the site from the R1 District to PDH-2 District. The proposal would permit a maximum of 13 single family detached units. The site currently contains two single family detached homes. The home on parcel 29 will be removed, but the home on parcel 29 A will be retained.

**ANALYSIS:**

The schools serving this area are Willow Springs Elementary, Lanier Middle and Fairfax High schools. The chart below shows the existing school capacity, enrollment, and projected enrollment.

School	Capacity 2014 / 2019	Enrollment (9/30/14)	Projected Enrollment 2015-2016	Capacity Balance 2015-2016	Projected Enrollment 2019-20	Capacity Balance 2019-20
Willow Springs ES	931 / 931	983	1028	-97	1,024	-93
Lanier MS	1,306 / 1,306	1,082	1,017	289	1,126	180
Fairfax HS	2,413 / 2,413	2,573	2,426	-13	2,624	-211

*Capacities based on 2016-20 Capital Improvement Program (December 2014)*

*Project Enrollments based on 2014-15 to 2019-20 6-Year Projections (April 2014)*

The school capacity chart above shows a snapshot in time for student enrollments and school capacity balances. Student enrollment projections are done on a six year timeframe, currently through school year 2019-20 and are updated annually. At this time, if development occurs within the next five years, Willow Springs Elementary and Fairfax High School are projected to have capacity deficits. Lanier Middle School is projected to have sufficient capacity. Beyond the six year projection horizon, enrollment projections are not available.

Capital Improvement Program Projects

The FY 2016-20 Capital Improvement Program (CIP) does not include any capital projects at the subject schools. The CIP recommends opening a new AAP Center at Lanier Middle School to accommodate Fairfax High School pyramid students. AAP students residing in the City of Fairfax are currently assigned to the AAP center at Rocky Run. The CIP also recommends monitoring enrollments at Fairfax HS as the phasing from the Fairfax/Lanier Boundary Study is completed. Additionally, the CIP recommends temporary facilities or interior architectural modifications at Willow Springs to accommodate capacity deficits.

Development Impact

Based on the number of residential units proposed, the chart below shows the number of anticipated students by school level based on the current countywide student yield ratio.

Existing (6 By-Right SFD)

School level	Single-family detached ratio	Potential # of units	Potential Student yield
Elementary	.270	6	2
Middle	.085	6	1
High	.175	6	1

4 total

2013 Countywide student yield ratios (November 2014)

Proposed

School level	Single-family detached ratio	Proposed # of units	Proposed Student yield
Elementary	.270	13	4
Middle	.085	13	1
High	.175	13	2

7 total

2013 Countywide student yield ratios (November 2014)

**RECOMMENDATIONS:**

Proffer Contribution

A net of 3 new students is anticipated (2 Elementary, and 1 High). Based on the approved Residential Development Criteria, a proffer contribution of \$35,247 (3 x \$11,749) is recommended to offset the impact that new student growth will have on surrounding schools. It is recommended that the proffer contribution funds be directed as follows:

*...to be utilized for capital improvements to Fairfax County public schools to address impacts on the school division resulting from [the applicant's development].*

It is also recommended proffer payment occur at the time of site plan or first building permit approval. A proffer contribution at the time of occupancy is not recommended since this does not allow the school system adequate time to use the proffer contribution to offset the impact of new students.

In addition, an "escalation" proffer is recommended. The suggested per student proffer contribution is updated on an annual basis to reflect current market conditions. As a result, an escalation proffer would allow for payment of the school proffer based on the current suggested per student proffer contribution in effect at the time of development. This would better offset the impact that new student yields will have on surrounding schools at the time of development. For your reference, below is an example of an escalation proffer that was included as part of an approved proffer contribution to FCPS.

*Adjustment to Contribution Amounts. Following approval of this Application and prior to the Applicant's payment of the amount(s) set forth in this Proffer, if Fairfax County should modify the ratio of students per unit or the amount of contribution per student, the Applicant shall pay the modified contribution amount for that phase of development to reflect the then-current ratio and/or contribution.*

Proffer Notification

It is also recommended that the developer proffer notification be provided to FCPS when development is likely to occur or when a site plan has been filed with the County. This will allow the school system adequate time to plan for anticipated student growth to ensure classroom availability.

AJH/ar

Attachment: Location Map

cc: Elizabeth Schultz, School Board Member, Springfield District  
Megan McLaughlin, School Board Member, Braddock District  
Patty Reed, School Board Member, Providence District  
Kathy Smith, School Board Member, Sully District  
Ted Velkoff, Vice-Chairman, School Board Member, At-Large  
Ilryong Moon, School Board Member, At-Large  
Ryan McElveen, School Board Member, At-Large  
Jeffrey Platenberg, Assistant Superintendent, Facilities and Transportation Services  
Frances Ivey, Assistant Superintendent, Region 5  
Kevin Sneed, Special Projects Administrator, Capital Projects and Planning  
David Goldfarb, Principal, Fairfax High School  
Dan Meier, Interim Principal, Lanier Middle School  
Elizabeth R. Rhein, Principal, Willow Springs Elementary School



FAIRFAX COUNTY WATER AUTHORITY  
8560 Arlington Boulevard, Fairfax, Virginia 22031  
www.fairfaxwater.org

RECEIVED  
Department of Planning & Zoning  
APR 21 2015  
Zoning Evaluation Division

**PLANNING & ENGINEERING  
DIVISION**

Jamie Bain Hedges, P.E.  
Director  
(703) 289-6325  
Fax (703) 289-6382

April 17, 2015

Ms. Barbara Berlin, Director  
Fairfax County Department of Planning and Zoning  
12055 Government Center Parkway, Suite 801  
Fairfax, Virginia 22035-5505

Re: RZ 2015-SP-004  
FDP 2015-SP-004  
The Reserve at Hampton  
Springs  
Tax Map: 55-4

Dear Ms. Berlin:

The following information is submitted in response to your request for a water service analysis for the above application:

1. The property can be served by Fairfax Water.
2. Adequate domestic water service is available at the site from an existing 8-inch water main located in Crouch Drive. See the enclosed water system map.
3. Depending upon the configuration of any proposed on-site water mains, additional water main extensions may be necessary to satisfy fire flow requirements and accommodate water quality concerns.

If you have any questions regarding this information please contact Ross Stilling, Chief, Site Plan Review at (703) 289-6385.

Sincerely,

Gregory J. Prelewicz, P.E.  
Manager, Planning Department

Enclosure



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** May 19, 2015

**TO:** Nicholas Rogers  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Sharad Regmi, P.E.  
Engineering Analysis and Planning Branch

**SUBJECT:** Sanitary Sewer Analysis Report

**REF:** **Application No. : RZ/FDP 2015-SP-004**  
**Tax Map No. : 055-4-01-0029**

The following information is submitted in response to your request for a sanitary sewer analysis for above referenced application:

- The application property is located in the Little Rocky Run (S-1) watershed. It would be sewerred into the Upper Occoquan Sewage Authority (UOSA) Treatment Plant.
- Based upon current and committed flow, there is excess capacity in the UOSA Treatment. For purposes of this report, committed flow shall be deemed that for which fees have been paid, building permits have been issued, or priority reservations have been established by the Board of Supervisors. No commitment can be made, however, as to the availability of treatment capacity for the development of the subject property. Availability of treatment capacity will depend upon the current rate of construction and the timing for development of this site.
- An existing 8" inch line located approximately 72 ft from the property is adequate for the proposed use at this time.
- The following table indicates the condition of all related sewer facilities and the total effect of this application.

<u>Sewer Network</u>	<u>Existing Use +Application</u>		<u>Existing Use + Application +Previous Applications</u>		<u>Existing Use + Application + Comp Plan</u>	
	<u>Adeq.</u>	<u>Inadeq</u>	<u>Adeq.</u>	<u>Inadeq</u>	<u>Adeq.</u>	<u>Inadeq</u>
Collector	X		X		X	
Submain	X		X		X	
Main/Trunk	X		X		X	

- Other pertinent comments:**



## GLOSSARY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Abbreviations Commonly Used in Staff Reports

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