



APPLICATION FILED: January 13, 2005  
APPLICATION AMENDED: May 24, 2005  
ORIGINAL PLANNING COMMISSION: July 13, 2005  
PLANNING COMMISSION REHEARING: March 23, 2006  
BOARD OF SUPERVISORS: April 3, 2006

## County of Fairfax, Virginia

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March 9, 2006

**STAFF REPORT ADDENDUM II**  
**APPLICATION RZ/FDP 2005-MV-001**  
**MOUNT VERNON DISTRICT**

<b>APPLICANT:</b>	Brookfield Ridge Road, LLC
<b>PRESENT ZONING:</b>	R-1
<b>REQUESTED ZONING:</b>	PDH-2
<b>PARCEL(S):</b>	89-4 ((1)) 56, 57A and 69
<b>ACREAGE:</b>	11.04 Acres
<b>DENSITY:</b>	1.82 du/ac
<b>OPEN SPACE:</b>	45%
<b>PLAN MAP:</b>	Residential, 2-3 du/ac
<b>PROPOSAL:</b>	Request to rezone to the PDH-2 District for the development of 20 single family detached dwelling units. (Two alternative plans are currently propose differing primarily in the means of providing SWM/BMPs).

**STAFF RECOMMENDATIONS:**

Staff recommends approval of RZ 2005-MV-001, subject to the execution of proffers consistent with those included in Attachment 1.

*O:\kabrah\RZ-FDP 2005-MV-001 ADDENDUM II COVER.doc*

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

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**Integrity \* Teamwork \* Public Service**

Staff recommends approval of FDP 2005-MV-001, subject to the proposed development conditions included in Attachment 2, and the Board's approval of RZ 2005-MV-001 and the Conceptual Development Plan.

Staff recommends approval of the modification of the maximum percentage of pipestem lots, to permit 30% pipestem lots as shown on the CDP/FDP.

Staff recommends denial of the requested modification of the trail location for the southern half of the site.

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

It should be 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.

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.



### Rezoning Application

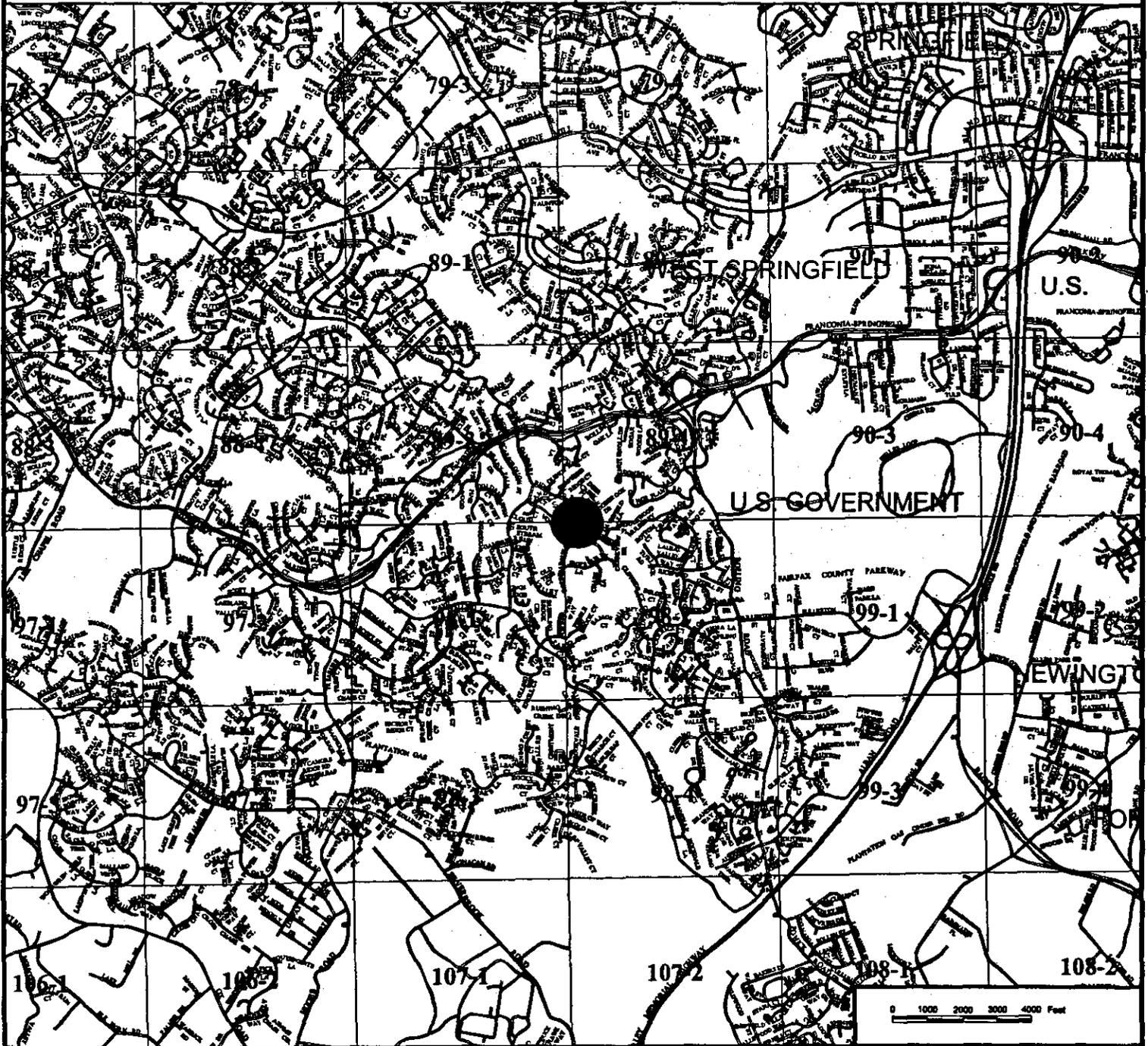
**RZ 2005-MV-001**

### Final Development Plan

**FDP 2005-MV-001**

Applicant: BROOKFIELD RIDGE ROAD, LLC  
Filed: 01/13/2005- AMENDED 05/24/2005  
Area: 11.04 AC OF LAND; DISTRICT - MOUNT VERNON  
Proposed: RESIDENTIAL  
  
Located: SOUTH OF RIDGE CREEK WAY NEAR ITS INTERSECTION WITH SHEPHERD RIDGEBROOK COURT  
  
Zoning: FROM R- 1 TO PDH- 2  
Overlay Dist:  
Map Ref Num: 089-4- /01/ /0056 /01/ /0057A /01/ /0069

Applicant: BROOKFIELD RIDGE ROAD, LLC  
Filed: 01/13/2005- AMENDED 05/24/2005  
Area: 11.04 AC OF LAND; DISTRICT - MOUNT VERNON  
Proposed: RESIDENTIAL  
  
Located: SOUTH OF RIDGE CREEK WAY NEAR ITS INTERSECTION WITH SHEPHERD RIDGEBROOK COURT  
  
Zoning: PDH- 2  
Overlay Dist:  
Map Ref Num: 089-4- /01/ /0056 /01/ /0057A /01/ /0069



# Rezoning Application

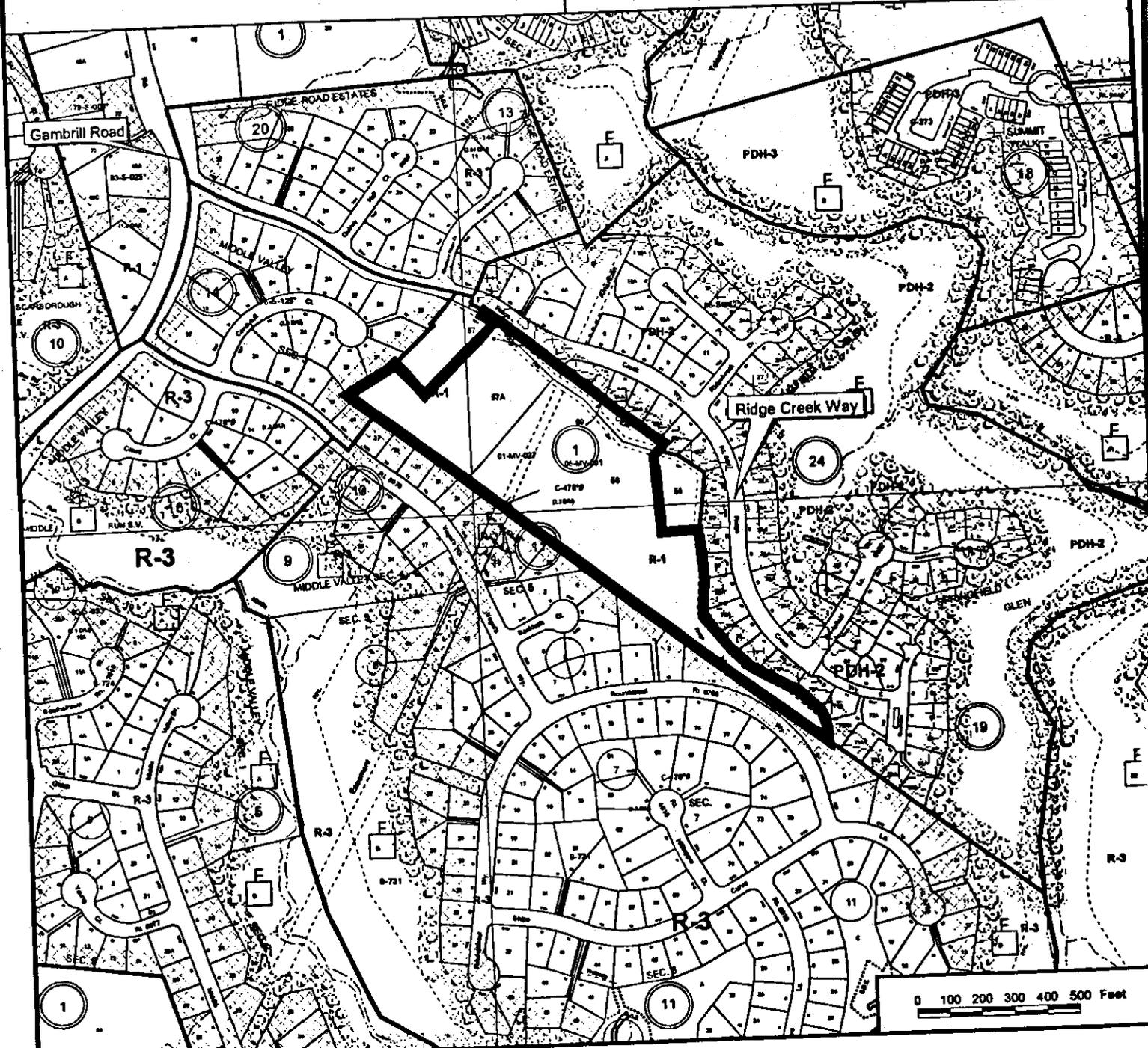
## RZ 2005-MV-001

# Final Development Plan

## FDP 2005-MV-001

Applicant: BROOKFIELD RIDGE ROAD, LLC  
Filed: 01/13/2005- AMENDED 05/24/2005  
Area: 11.04 AC OF LAND; DISTRICT - MOUNT VERNON  
Proposed: RESIDENTIAL  
Located: SOUTH OF RIDGE CREEK WAY NEAR ITS INTERSECTION WITH SHEPHERD RIDGEBROOK COURT  
Zoning: FROM R-1 TO PDH-2  
Overlay Dist:  
Map Ref Num: 089-4- /01/ /0056 /01/ /0057A /01/ /0069

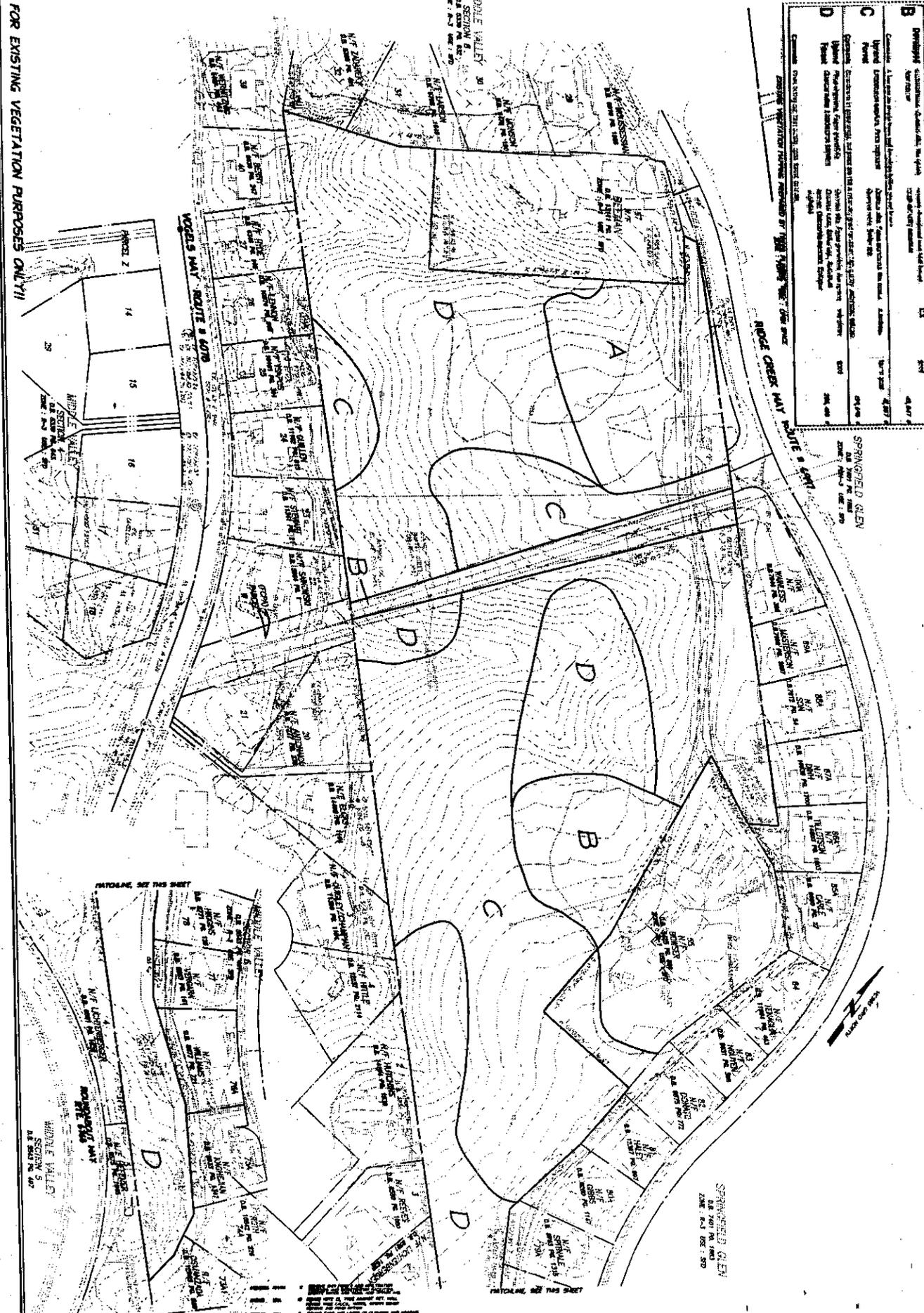
Applicant: BROOKFIELD RIDGE ROAD, LLC  
Filed: 01/13/2005- AMENDED 05/24/2005  
Area: 11.04 AC OF LAND; DISTRICT - MOUNT VERNON  
Proposed: RESIDENTIAL  
Located: SOUTH OF RIDGE CREEK WAY NEAR ITS INTERSECTION WITH SHEPHERD RIDGEBROOK COURT  
Zoning: PDH-2  
Overlay Dist:  
Map Ref Num: 089-4- /01/ /0056 /01/ /0057A /01/ /0069





**EXISTING VEGETATION TAPPING**

<b>A</b>	Contour	1:200	1/8" = 10'
<b>B</b>	Property Boundary	1:200	1/8" = 10'
<b>C</b>	Vegetation	1:200	1/8" = 10'
<b>D</b>	Other	1:200	1/8" = 10'



FOR EXISTING VEGETATION PURPOSES ONLY

SHEET 3 OF 7	DATE: 10/15/2010	SCALE: 1" = 40'
DRAWN BY: [Name]	CHECKED BY: [Name]	DATE: 10/15/2010
PROJECT: [Name]	LOCATION: [Name]	DATE: 10/15/2010

RENFRO PROPERTY

EXISTING VEG. MAP & EX. CONDITIONS PLAN OPT. A



### GENERAL NOTES

- THE PROPERTIES DELINEATED ON THIS SHEET ARE LOCATED ON FAIRFAX COUNTY TAX MAP # 848 (11) PARCELS 57A AND 57B AND ARE CURRENTLY OWNED BY JAMES A. J. WACHS, E. C. RENFRO TR. (PARCELS 57A & 57B) AS SHOWN IN DEED BOOK 4402, PAGE 578. PARCEL 57A CONTAINS THE CEMETERY OWNED BY BUCKFIELD HARBORVIEW, LLC AS SHOWN IN 88 080, PAGE 04.
- THE APPLICANT / CONTRACT PURCHASER: BUCKFIELD RIDGE ROAD, LLC 800 EXECUTIVE PARK AVE, STE 300 FAIRFAX, VA 22031 (703) 250-1450
- THE BOUNDARY INFORMATION IS BASED ON A FIELD RUN SURVEY BY LAND DESIGN CONSULTANTS, INC.
- THE TOPOGRAPHIC INFORMATION IS BASED ON AN AERIAL SURVEY CONDUCTED BY LAND DESIGN CONSULTANTS, INC. AT A 2' CONTOUR INTERVAL.
- A TITLE REPORT HAS BEEN FURNISHED BY COTERRIAL TITLE GROUP INC. COMMITMENT # 1432, EFFECTIVE DATE 8-17-2024.
- ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS REQUESTED HEREIN. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE WAIVER OR MODIFICATION AT THE TIME OF SUBDIVISION PLAN PREPARATION/REVISION.
- EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION AS PER REQUIREMENTS OF THE STATE OF VIRGINIA AND THE CODES OF FAIRFAX COUNTY.
- LAND DESIGN CONSULTANTS, INC. IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A NORTH OF 50' OR MORE.
- ALL UTILITIES INSTALLED AS PART OF THIS PROJECT SHALL BE PLACED UNDERGROUND.
- AIR QUALITY PERMITS SHALL BE OBTAINED, IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.
- THE SITE SHALL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. ALL DWELLING UNITS WITHIN THIS DEVELOPMENT SHALL BE SERVED BY GRAVITY FLOW AS NO PUMPING SHALL BE ALLOWED.
- THE COMPREHENSIVE PLAN RECOMMENDS DEVELOPMENT OF THE PROPERTY AS RESIDENTIAL AT A DENSITY OF 2-3 DWELLING UNITS PER ACRE.
- A RESOURCE PROTECTION AREA (RPA) AS DEFINED BY FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY. A RESOURCE MANAGEMENT AREA (RMA) AS DEFINED BY FAIRFAX CO. DOES EXIST ON THE SUBJECT PROPERTY.
- A FLOOD OR FLOOD FLOODPLAIN AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION, USFS, OR FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY.
- AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES NOT EXIST ON THE SUBJECT PROPERTY.
- ON-SITE PUBLIC STREETS SHALL BE CONVEYED IN FEE SIMPLE TO THE FAIRFAX COUNTY BOARD OF SUPERVISORS AND SHALL BE MAINTAINED BY VDOT. MATERIALS USED SHALL CONFORM TO COMMONWEALTH VDOT STANDARDS AND SPECIFICATIONS. THE COSTS HEREON SHALL BE CONTRIBUTED TO APPLICABLE COUNTY STANDARDS AND MAINTAINED BY THE HOMEOWNERS' ASSOCIATION.
- A GEOTECHNICAL REPORT WILL BE SUBMITTED BY FAIRFAX COUNTY CONCURRENTLY WITH THE FINAL SUBDIVISION PLAN, IF REQUIRED.
- NO HAZARDOUS OR TOXIC SUBSTANCES TO BE GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.
- DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF THE OWNER/DEVELOPER.
- A SIGNAGE IS REQUIRED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL AND SHALL BE PROVIDED INTERNALLY FOR THE SAME.
- OWNERSHIP AND MAINTENANCE OF THE OPEN SPACE PARCELS 'A' - 'E', AS DEPICTED ON THE CONVEYOR WITHIN THIS SUBDIVISION SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.
- THE APPLICANT SHALL CONSTRUCT 1 EXTENDED DRY STORMWATER MANAGEMENT POND TO MEET DETENTION AND BEST MANAGEMENT PRACTICES (BMP'S) AS SHOWN ON THE CONVEYOR. SEE SHEET 4 FOR ADDITIONAL INFORMATION.
- PRIOR TO SUBDIVISION PLAN REVISIONS BUT CONCURRENT WITH THIS REVISION APPLICATION, THE APPLICANT SHALL OBTAIN OFFICE SUSPENSIONS AND COURT-OF-MAY OVER TAX MAP # 848 (11) PARCEL 57B OF THE SPRINGFIELD GLEN SUBDIVISION FOR THE CONSTRUCTION OF THE PROPOSED ENTRANCE.
- PRIOR ADJUSTMENTS TO THE LOT LINES AND UTILITY LOCATIONS SHALL BE SUBMITTED IN ACCORDANCE WITH THE FINAL GRADING AND UTILITY LAYOUT AND SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THAT PROVIDED HEREIN.
- THE APPLICATION WILL PROVIDE FOR ONSITE PUBLIC IMPROVEMENTS OF SANITARY, STORM AND WATER UTILITIES AS WELL AS A PUBLIC STREET. SAID STREET WILL CONNECT TO RIDGE CREEK RD., AN IMPROVED ROADWAY DESIGNED TO ACCOMMODATE THIS DEVELOPMENT. OPPOSITE IMPROVEMENTS TO THE STORM SEWER LINES AND NEW SANITARY SEWER LINES WILL ALSO BE PROVIDED.
- THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY GOALS OF MINIMIZING ITS IMPACT ON ADJOINING NEIGHBORS AS AN APARTY, BY THE CLUSTERING OF HOUSES, TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY, ADDITIONAL PLANTING ON SITE AND INSTALLATION OF ADDITIONAL STORM SEWER, AS SHOWN ON SHEETS 3 & 4. THE APPLICANT HAS CREATED A DEVELOPMENT PLAN THAT PROTECTS NEIGHBORING PROPERTIES FROM ANY ADVERSE EFFECT AND REDUCES THE DRAINAGE ONTO INDIVIDUAL LOTS IN THE RIDGE VALLEY SUBDIVISION. POST DEVELOPMENT RUNOFF SHALL BE EQUAL TO OR LESS THAN PRE DEVELOPMENT RUNOFF TO THE RIDGE VALLEY SUBDIVISION, IN UNDISTURBED AREAS TO THE EAST AND WEST. POST DEVELOPMENT RUNOFF WILL BE EQUAL TO THE PRE DEVELOPMENT RUNOFF. NO CONCENTRATED FLOW WILL BE DIRECTED ONTO THE ADJACENT RIDGE VALLEY SUBDIVISION.
- THE AREAS TO BE PRESERVED HAVE BEEN DEPICTED ON THE CONVEYOR. THESE AREAS WILL BE PROTECTED DURING CONSTRUCTION THROUGH THE UTILIZATION OF TREE PROTECTION FENCING.
- TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY AND ADDITIONAL TREE PLANTINGS, AS SHOWN ON THE CONVEYOR, WILL PROVIDE ADEQUATE MEASURES OF SCREENING.
- NO BUILDINGS OR STRUCTURES CURRENTLY EXIST ON THE SUBJECT PROPERTY.
- LOT 5B WILL BE ACCESSED VIA OUTLOT A TO THE PUBLIC STREET.
- THE COMPONENTS OF A FAMILYPH DENSITY REDUCTION DO NOT APPLY.
- THE APPLICANT PROPOSES TO CONSTRUCT A MIGHTY METAL OR SIMILAR INTERNAL FENCE AROUND THE EXISTING BURIAL SITE, AS SHOWN ON SHEET 2.
- A CEMETERY EXISTS ON THE SUBJECT PROPERTY WHICH HAS BEEN IDENTIFIED AS VIRGINIA ARCHAEOLOGICAL SITE # 49748. THE PROPOSED DEVELOPMENT WILL NOT ENCRUSH WITHIN THE EXISTING BURIAL SITE.



VICINITY MAP  
1"=500'



SOIL MAP  
1"=500'

### SOIL INFORMATION

PARCEL #	SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUBSTRAT	DRAINAGE	EROSION POTENTIAL	OTHER NOTES
PARCEL 56	10	GLENVILLE	B	FAIR-B, M	MARG-W	MOD	----
PARCEL 57A	20	HEADQUARTER	B	FAIR-B, M	MARG-W	MOD	----
PARCEL 56 & 57A	60	APPLING	C	GOOD	GOOD	HIGH	----
PARCEL 57A & 57B	80	LEASBURG	C	GOOD	GOOD	HIGH	----

### TABULATIONS

TOTAL SITE AREA	= 480,067 S.F./1.1098 AC
EXISTING ZONING	= R-1
PROPOSED ZONING	= FOM-2
FAMILYPH LOT AREA REQUIRED	= NO REQUIREMENT
PROVIDED	= 28,100 S.F.
AVERAGE LOT AREA REQUIRED	= NO REQUIREMENT
PROVIDED	= 245,700 S.F.
RANGE OF LOT SIZES	= 16,900 S.F. - 25,800 S.F.
MAX. BUILDING HEIGHT	= 36 FT
FAMILYPH PROPOSED YARDS	
FRONT YARD	= 10 FT
SIDE YARD	= 7 FT
REAR YARD	= 25 FT
OPEN SPACE REQUIRED	= 46,177 S.F. (9.6%)
PROVIDED	= 285,200 S.F. (59.4%)
PARCELS A-E AND OUTLOT A TABULATION	
PROVIDED	= 28,100 S.F. (5.9%)
PARKING PROVIDED	
4 PER LANT	80 SPACES
(2 IN GARAGE, 2 IN DRIVEWAY)	
DENSITY	
PERMITTED (22 SINGLE FAMILY DETACHED UNITS) 2.00 DU/AC	
PROPOSED (20 SINGLE FAMILY DETACHED UNITS) 1.80 DU/AC	
TREE COVER CALCULATIONS:	
SITE AREA	= 480,067 S.F.
TREE COVER REQUIRED (30%)	= 144,020 S.F.
TREE COVER PRESERVED (1.25%)	= 60,008 S.F.
**TREE COVER SHALL BE 12%*	

### SHEET INDEX - OPTION A

SHEET #	DESCRIPTION
1	COVER SHEET
2	CONCEPTUAL DEVELOPMENT PLAN
3	FINAL DEVELOPMENT PLAN
4	EXISTING VEGETATION MAP AND EXISTING CONDITIONS
5	STORMWATER MANAGEMENT DETAILS
6	HOUSE ELEVATIONS
7	CROSS SECTION

### SHEET INDEX - OPTION B

SHEET #	DESCRIPTION
1	COVER SHEET
2	CONCEPTUAL DEVELOPMENT PLAN
3	FINAL DEVELOPMENT PLAN
4	EXISTING VEGETATION MAP AND EXISTING CONDITIONS
5	STORMWATER MANAGEMENT DETAILS
6	HOUSE ELEVATIONS

### WAIVERS REQUESTED

THE APPLICANT HEREBY RESPECTFULLY REQUESTS A WAIVER OF SECTION 3-002.3 OF THE PUBLIC FACILITIES MANUAL IN ORDER TO PERMIT MORE THAN 50% OF THE TOTAL LOTS AS FAMILYPH LOTS, AS SHOWN ON THE SDP.

LAND DESIGN CONSULTANTS  
 CONSULTANT  
 PLAN FOR SUCCESS  
 CONSULTANTS  
 LAND DESIGN CONSULTANTS  
 CONSULTANT  
 PLAN FOR SUCCESS  
 CONSULTANTS  
 RENFRO PROPERTY  
 CONCEPTUAL DEV.  
 PLAN  
 FINAL DEV.  
 PLAN - OPT. A

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED ON THIS SHEET IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
 DATE: 6/18/2024  
 DRAFTY: CH  
 FILE NO: 24-00000000-0000-0000  
 SCALE: N/A  
 SHEET 1 OF 11

### GENERAL NOTES

- THE PROPERTIES DELINEATED ON THIS SHEET ARE LOCATED ON FAIRFAX COUNTY TAX MAP # 84-4 (11) PARCELS 54, 57A & 6A AND ARE CURRENTLY OWNED BY JAMES A. FLORES, F.C. PROPOSED TR. PARCELS 54 & 57A AS REFERRED IN DEED BOOK 1842, PAGE 516. PARCEL 6A CONTAINING THE COUNTRY CLUB OWNED BY BROOKFIELD HARBORING, LLC AS REFERRED IN DEED 840, PAGE 496.
- THE APPLICANT / CONTRACT PURCHASER: BROOKFIELD RIDGE HOMES, LLC 5600 EXECUTIVE PARK AVE, STE 200 FAIRFAX, VA 22030 (703) 270-4820
- THE BOUNDARY INFORMATION IS BASED ON A FIELD RUN SURVEY BY LAND DESIGN CONSULTANTS, INC.
- THE TOPOGRAPHIC INFORMATION IS BASED ON AN AERIAL SURVEY CONDUCTED BY LAND DESIGN CONSULTANTS, INC. AT A 2' CONTOUR INTERVAL.
- A TITLE REPORT HAS BEEN FURNISHED BY CENTRAL TITLE GROUP, INC. COMMITMENT # 8420, EFFECTIVE DATE 8-17-2020.
- ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS REQUESTED HEREIN. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE CHANGE OF MODIFICATION AT THE TIME OF SUBDIVISION PLAN PREPARATION/SUBVISION.
- EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION AS PER REQUIREMENTS OF THE STATE OF VIRGINIA AND THE CODE OF FAIRFAX COUNTY.
- LAND DESIGN CONSULTANTS, INC. IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A WIDTH OF 20' OR MORE.
- ALL UTILITIES INSTALLED AS PART OF THIS PROJECT SHALL BE PLACED UNDERGROUND.
- AIR QUALITY PERMITS SHALL BE OBTAINED, IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.
- THE SITE SHALL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. ALL DWELLING UNITS WITHIN THIS DEVELOPMENT SHALL BE SERVED BY GRAVITY FLOW AS NO PUMPING SHALL BE ALLOWED.
- THE COMPREHENSIVE PLAN RECOMMENDS DEVELOPMENT OF THE PROPERTY AS RESIDENTIAL AT A DENSITY OF 2-3 DWELLING UNITS PER ACRE.
- A RESOURCE PROTECTION AREA (RPA) AS DEFINED BY FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY. A RESOURCE MANAGEMENT AREA (RMA) AS DEFINED BY FAIRFAX CO. DOES EXIST ON THE SUBJECT PROPERTY.
- A FLOOD OR FLOODPLAIN AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION, 1986, OR FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY.
- AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES NOT EXIST ON THE SUBJECT PROPERTY.
- ON-SITE, PUBLIC STREETS SHALL BE CONVERTED IN FEE SIMPLE TO THE FAIRFAX COUNTY BOARD OF SUPERVISORS AND SHALL BE MAINTAINED BY VDOT. METHODS AND MATERIALS USED SHALL CONFORM TO CURRENT COUNTY VDOT STANDARDS AND SPECIFICATIONS. THE ON-SITE PAVEMENT SHALL BE CONSTRUCTED TO APPLICABLE COUNTY STANDARDS AND MAINTAINED BY THE APPLICANT'S JURISDICTION.
- A GEOLOGICAL REPORT WILL BE SUBMITTED BY FAIRFAX COUNTY CONCURRENTLY WITH THE FINAL SUBDIVISION PLAN, IF REQUIRED.
- NO HAZARDOUS OR TOXIC SUBSTANCES TO BE GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.
- DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF THE OWNER/DEVELOPER.
- A SIDEWALK IS REQUIRED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL AND SHALL BE PROVIDED INTERNALLY FOR THE SAFE.
- OWNERSHIP AND MAINTENANCE OF THE OPEN SPACE PARCELS 'X' - 'Y', AS DEPICTED ON THE COMPASS WITHIN THIS SUBDIVISION SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.
- THE APPLICANT SHALL CONSTRUCT / EXTENDED DRY STORMWATER MANAGEMENT POND TO MEET DETENTION AND BEST MANAGEMENT PRACTICES (BMP'S) AS SHOWN ON THE COMPASS. SEE SHEET # FOR ADDITIONAL INFORMATION.
- PRIOR TO SUBDIVISION PLAN RECORDED BUT CONCURRENT WITH THIS REGIONAL APPLICATION, THE APPLICANT SHALL OBTAIN OFFSITE EASEMENTS AND RIGHT-OF-WAY OVER TAX MAP 84-4 (11) PARCELS 6 OF THE SPRINGFIELD ALLEN SUBDIVISION FOR THE CONSTRUCTION OF THE PROPOSED ENTRANCE.
- RIGHT ADJUSTMENTS TO THE LOT LINES AND UTILITY LOCATIONS SHALL BE PERMITTED IN ACCORDANCE WITH THE FINAL GRADING AND UTILITY LAYOUT AND SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THAT PROVIDED HEREIN.
- THE APPLICATION WILL PROVIDE FOR ON-SITE PUBLIC IMPROVEMENTS OF SANITARY, STORM AND WATER UTILITIES AS WELL AS A PUBLIC STREET. SAID STREET WILL CONNECT TO RIDGE CREEK HWY. AN IMPROVED ROADWAY DESIGNED TO ACCOMMODATE THIS DEVELOPMENT. OFFSITE IMPROVEMENTS TO THE STORM SEWER LINES AND NEW SANITARY SEWER LINES SHALL ALSO BE PROVIDED.
- THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY FOCUS OF MINIMIZING ITS IMPACT ON ADJACENT NEIGHBORS AS AN AERIDITY. BY THE CLUSTERING OF HOUSES, TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY, ADDITIONAL PLANTING ON SITE AND INSTALLATION OF ADDITIONAL STORM SEWER, AS SHOWN ON SHEETS 2 & 4. THE APPLICANT HAS CREATED A DEVELOPMENT PLAN THAT PROTECTS NEIGHBORING PROPERTIES FROM ANY ADVERSE EFFECT AND REDUCES THE DRAINAGE ONTO INDIVIDUAL LOTS IN THE PROBLE VALLEY SUBDIVISION. POST DEVELOPMENT RUNOFF SHALL BE EQUAL TO OR LESS THAN PRE DEVELOPMENT RUNOFF TO THE PROBLE VALLEY SUBDIVISION. UNDEVELOPED AREAS TO THE EAST AND WEST, POST DEVELOPMENT RUNOFF WILL BE EQUAL TO THE PRE DEVELOPMENT RUNOFF. NO CONCENTRATED FLOW WILL BE DIRECTED ONTO THE ADJACENT PROBLE VALLEY SUBDIVISION.
- THE AREAS TO BE PRESERVED HAVE BEEN DEPICTED ON THE COMPASS. THESE AREAS WILL BE PROTECTED DURING CONSTRUCTION THROUGH THE UTILIZATION OF TREE PROTECTION FENCING.
- TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY AND ADDITIONAL TREE PLANTING, AS SHOWN ON THE COMPASS, WILL PROVIDE ADEQUATE FEATURES OF SCREENING.
- NO BUILDINGS OR STRUCTURES CURRENTLY EXIST ON THE SUBJECT PROPERTY.
- LOT 56 WILL BE ACCESSED VIA OUTLOT A TO THE PUBLIC STREET.
- THE COMPONENTS OF A FUTURE DENSITY REDUCTION DO NOT APPLY.
- THE APPLICANT PROPOSES TO CONSTRUCT A MIRRAGE FENCE OR SIMILAR MATERIAL FENCE AROUND THE EXISTING BURIAL SITE, AS SHOWN ON SHEET 2.
- A CEMETERY EXISTS ON THE SUBJECT PROPERTY WHICH HAS BEEN IDENTIFIED AS VIRGINIA ANCESTRAL SITE # 44768. THE PROPOSED DEVELOPMENT WILL NOT INTERFERE WITH THE EXISTING BURIAL SITE.



VICINITY MAP  
1"=500'



SOIL MAP  
1"=500'

### SOIL INFORMATION

PARCEL #	SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL	OTHER NOTES
PARCEL 54	10	ELMVILLE	B	FAIR-B, M	FAIR-M	MOD	----
PARCEL 57A	20	MEADOWVILLE	B	FAIR-B, M	FAIR-M	MOD	----
PARCEL 54 & 57A	60	APPLING	C	GOOD	GOOD	HIGH	----
PARCEL 57A & 6A	40	LOUNSBURG	C	GOOD	GOOD	HIGH	----

### TABULATIONS

- TOTAL SITE AREA - 482,807 S.F. (11.063 AC)
- EXISTING ZONING - R-1
- PROPOSED ZONING - PDN-2
- MINIMUM LOT AREA REQUIRED - NO REQUIREMENT
- PROVIDED - 28,500 S.F.
- AVERAGE LOT AREA REQUIRED - NO REQUIREMENT
- PROVIDED - 192,700 S.F.
- RANGE OF LOT SIZES - 24,420 S.F. - 10,800 S.F.
- MAX. BUILDING HEIGHT - 35 FT
- MINIMUM PROPOSED YARDS - FRONT YARD - 8 FT, SIDE YARD - 7 FT, REAR YARD - 20 FT
- OPEN SPACE REQUIRED - 46,177 S.F. (1.04)
- PROVIDED - 226,200 S.F. (5.12)
- PARCELS A-E AND OUTLOT A TABULATION PROVIDED - 28,500 S.F. (.65)
- PARKING PROVIDED - 4 PER UNIT - 80 SPACES (2 IN GARAGE, 2 IN DRIVEWAY)
- DENSITY PERMITTED (22 SINGLE FAMILY DETACHED UNITS) 2.00 DU/AC
- PROPOSED (20 SINGLE FAMILY DETACHED UNITS) 1.80 DU/AC
- TREE COVER CALCULATIONS: SITE AREA - 482,807 S.F., TREE COVER REQUIRED (30%) - 144,842 S.F., TREE COVER PRESERVED (1.28%) - 617,775 S.F.
- \*TREE COVER SHALL BE MET\*

### SHEET INDEX - OPTION A

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### SHEET INDEX - OPTION B

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### WAIVERS REQUESTED

THE APPLICANT HEREBY RESPECTFULLY REQUESTS A WAIVER OF SECTION 2-2 OF THE PUBLIC FACILITIES MANUAL IN ORDER TO PERMIT MORE THAN 50% OF THE TOTAL LOTS AS IMPERMEABLE LOTS, AS SHOWN ON THE COMPASS.

LAND DESIGN CONSULTANTS

CONCEPTUAL DEV. PLAN  
FINAL DEV. PLAN - OPT. A

RENFRO PROPERTY

NO.	DATE	BY	DESCRIPTION
1	08/17/20	JLH	PRELIMINARY PLAN
2	08/17/20	JLH	PRELIMINARY PLAN
3	08/17/20	JLH	PRELIMINARY PLAN
4	08/17/20	JLH	PRELIMINARY PLAN
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48	08/17/20	JLH	PRELIMINARY PLAN
49	08/17/20	JLH	PRELIMINARY PLAN
50	08/17/20	JLH	PRELIMINARY PLAN

I HEREBY CERTIFY OTHER THAN THE IN SIGN HEREON, NO CHANGES HAVE BEEN MADE TO THIS PLAN.  
JULIE L. HARRIS  
NO. 13728  
12/24/18  
SCALE: N/A

SHEET 1 OF 1  
DATE: JUNE 20  
DRAFT: 2  
FILE NAME: 0827-0-0

**PRE-DEVELOPMENT NARRATIVE**

THE SUBJECT PROPERTY MAINTAINS SEVERAL STORM DRAINAGE OUTFALLS AS DEPICTED HEREIN AND IDENTIFIED NUMERICALLY IN ACCORDANCE WITH THE PROPOSED CONCENTRATED DRAINAGE WHICH DEPARTS THE SUBJECT PROPERTY. THIS DRAINAGE ULTIMATELY IS COLLECTED BY THE STORM DRAINAGE SYSTEM IN THE ADJACENT COMMUNITY AND IS DISCHARGED APPROXIMATELY THREE HUNDRED FEET DOWNSTREAM OF THE SUBJECT PROPERTY TO EXISTING EXHAUSTED LINES WHICH ARE LOCATED ON PARCEL 7. THIS DRAINAGE PROCEEDS OVERLAND AND ULTIMATELY IS CONVEYED THROUGH PUBLIC AUTHORITY PROPERTY AND INTO THE THROAT OF THE PALMER FLOOD PLAIN OF PROBLE RUN WHICH IS A TRIBUTARY TO FORDS CREEK.

**PRE-DEVELOPMENT OUTFALL #1**

$Q_p = (1.49)(0.6)(100) = 91.02$   
 $Q_p = (1.49)(7.2)(100) = 107.28$

**PRE-DEVELOPMENT OUTFALL #2**

$Q_p = (1.49)(0.6)(100) = 91.02$   
 $Q_p = (1.49)(7.2)(100) = 107.28$

**PRE-DEVELOPMENT OUTFALL #3**

$Q_p = (1.49)(0.6)(100) = 91.02$   
 $Q_p = (1.49)(7.2)(100) = 107.28$

**STORMWATER MANAGEMENT INFORMATION**

TYPE OF FACILITY - EXTENDED DRY DETENTION  
 FACILITY MAINTENANCE - FAIRFAX COUNTY  
 APPROXIMATE DEPARTMENT HEIGHT - 20' (TOP OF DRY - DOWNSTREAM PIPE INVERT)  
 APPROXIMATE TOTAL VOLUME - 45,000 CUBIC FEET  
 APPROXIMATE D.I.P. VOLUME - 2,500 CUBIC FEET @ 20%  
 APPROXIMATE P-YEAR VOLUME - 5,000 CUBIC FEET @ 20%  
 APPROXIMATE 10-YEAR VOLUME - 5,000 CUBIC FEET @ 20%  
 TOP OF DRY - 235.8  
 BOTTOM OF FACILITY - 225.8  
 SLOPE - 3% UPSTREAM  
 TYPE OF SPILLWAY - COVERED

**STORMWATER MANAGEMENT NARRATIVE**

THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF ONE EXTENDED DRY FACILITY, SUBJECT TO THE DETERMINATION OF THE COUNTY, AND THE PROVISION OF UNDISTURBED OPEN SPACE TO BE ENCOURAGED BY CONSERVATION EASEMENTS. THE APPROXIMATE VOLUME DATA PROVIDED HEREIN IS BASED UPON PRELIMINARY ENGINEERING AND IS SUBJECT TO FINAL ENGINEERING. THIS FACILITY SHALL BE MAINTAINED BY FAIRFAX COUNTY AND WILL REDUCE THE PEAK FLOW AND VOLUME (1 YEAR STORM) FROM THE SUBJECT PROPERTY TO A LEVEL WHICH IS EQUAL TO OR LESS THAN THE EXISTING CONDITIONS. IN ADDITION, THE APPLICANT HAS OFFERED TO PROVIDE DETENTION FOR THE ONE YEAR 24 HOUR STORM WHICH IS BEYOND THE REQUIREMENT SET FORTH IN THE PLAN IN ORDER TO REDUCE THE POTENTIAL FOR ANY DOWNSTREAM EROSION. DUE TO THE CONSTRUCTION OF THIS FACILITY WITHIN THE NATIONAL OPEN OVERLAND SPILLWAY SHALL NOT BE PERMITTED, THIS COVERED SPILLWAY HAS BEEN PROPOSED. IN ADDITION, LANDSCAPING HAS BEEN PROVIDED IN THE AREAS THAT ARE ANTICIPATED TO BE BEYOND THE LIMITS OF THE FILL AREA.

**OUTFALL NARRATIVE**

THE SUBJECT PROPERTY MAINTAINS NUMEROUS STORM DRAINAGE OUTFALLS WITHIN THE ADJACENT PROBLE VALLEY SUBDIVISION IN THE FORM OF CONCENTRATED AND NON-CONCENTRATED FLOWS. THIS APPLICATION SEEMS TO PROMOTE THE AVOIDANCE OF FURTER OVERLAND DRAINAGE THROUGH THE PROVISION OF OPEN SPACE. THE PRIMARY OUTFALLS #1, #2 AND #3 WILL DISCHARGE INTO A COMBINATION OF PROPOSED AND EXISTING CLOSED STORM SEWER SYSTEMS AND OVERLAND WITHIN PROBLE VALLEY PARCELS #1 AND #2. THESE PRIMARY OUTFALLS WILL CONVEY THE MAJORITY OF THE RUNOFF FROM THE SUBJECT PROPERTY FROM THE PROPOSED STORM WATER MANAGEMENT FACILITY.

AN ADDITIONAL STORM SEWER SYSTEM AND EARTHEN BERVENIALE HAS BEEN PROPOSED ALONG THE REAR OF LOTS 5-10 WHICH WILL COLLECT THE RUNOFF FROM THE REAR OF THESE LOTS IN ORDER TO REDUCE THE AMOUNT OF OVERLAND RUNOFF THAT CURRENTLY DRAINS TO THE ADJACENT PROBLE VALLEY PROPERTIES AS SHEETFLOW. THE UNCONTROLLED DRAINAGE AT THE REARS OF THESE LOTS WILL NOT EXCEED THE CURRENT RATE OF RUNOFF FOR THE DRAINAGE SHED IN ACCORDANCE WITH THE P.F.F.R. IN ADDITION, THE REAR DRAINS OF LOTS 5-8 SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM AND DRAINED TOWARDS THE PROPOSED STORM WATER FACILITY. THIS APPLICATION WILL SIGNIFICANTLY REDUCE THE RATE AND VOLUME OF RUNOFF WHICH DEPARTS FROM THE SUBJECT PROPERTY.

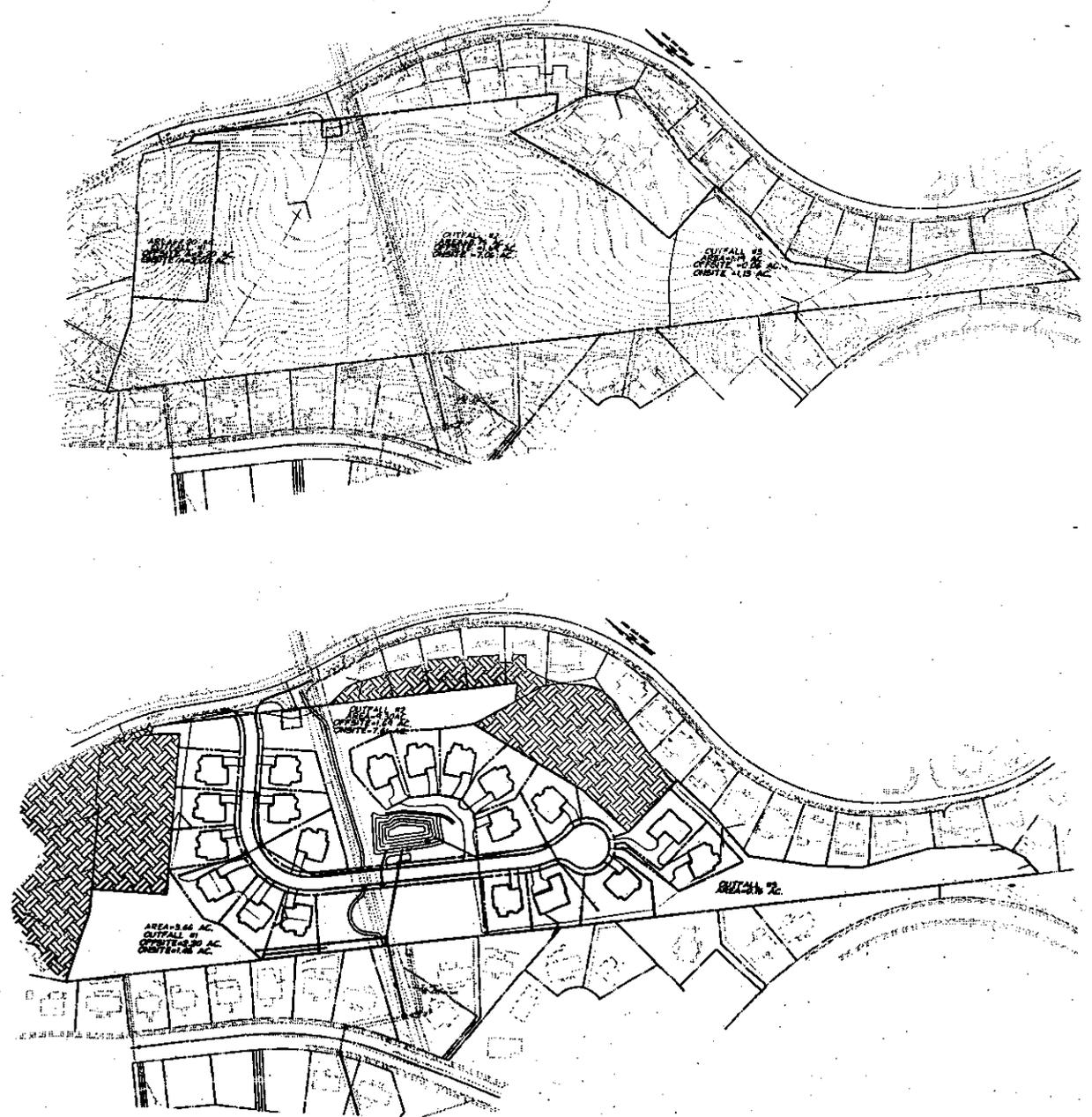
IN CONNECTION WITH THE DEVELOPMENT OF THIS COMMUNITY, THE APPLICANT HAS OBTAINED STORM SEWER AND SANITARY SEWER EASEMENTS FROM PARCEL #1. THE APPLICANT WILL REPLACE THE EXISTING STORM SEWER INLETS #1-7 IN ACCORDANCE WITH THE PROFFERS. AT THE REAR OF LOT #8 AND WITHIN PARCEL #2, AN IMPROVEMENT TO THE EXISTING SW RAMP CHANNEL SHALL BE MADE PARTLY WITHIN THE EXISTING STORM AND THE PARTLY WITHIN THE EXISTING STORM CHANNEL SHALL PROVIDE A LETTER OF PERMISSION FROM THE PUBLIC AUTHORITY. THIS IMPROVEMENT SHALL INCLUDE REMOVAL OF THE EXISTING STONE AND RECONSTRUCTION OF THE ENERGY DISSIPATOR THAT WILL BE MORE EFFECTIVE.

THE OTHER PRIMARY OUTFALL (OUTFALL #3) IS COLLECTED BY AN EXISTING STORM SEWER SYSTEM ON LOTS #7 AND #10 WITHIN PROBLE VALLEY. IN ACCORDANCE WITH THE PROFFERS AND THIS PLAN, THESE STRUCTURES SHALL BE CONNECTED TO FUNCTION PROPERLY. THIS APPLICATION PROPOSES TO REDUCE THE RATE AND VOLUME OF RUNOFF TO THIS OUTFALL FROM NOT ADVERSELY IMPACTING ANY DOWNSTREAM PROPERTIES.

THE TERTIARY OUTFALL (OUTFALL #4) CONSISTS OF AN EXISTING SHALE MARCH CONVEYS DRAINAGE FROM THE SUBJECT PROPERTY AND THROUGH BRUNSWICK GLEN SUBDIVISION THROUGH PROBLE VALLEY AND INTO THE CUL-DE-SAC. AS A RESULT OF THE CONSTRUCTION OF A SERIES OF BERVENIALES AND A STORM SEWER SYSTEM THAT WILL COLLECT THE DEVELOPED AREAS CONSISTING OF LOTS 9-10 THE RUNOFF WILL BE REDUCED TO THIS POINT.

ULTIMATELY, THIS DRAINAGE PROCEEDS DOWNSTREAM OF THE SUBJECT PROPERTY APPROXIMATELY THREE HUNDRED FEET TO PROBLE RUN WHICH IS A PALMER FLOOD PLAIN AND ADJACENT OUTFALL AND THIS OUTFALL, AT THE POINT OF CONVERGENCE, CONVEYS DOWN THE THOUSAND ACRES OF DRAINAGE. THE APPROXIMATE DRAINAGE AREA TO THIS POINT IS IN EXCESS OF ONE THOUSAND FEET AND ONE HUNDRED TIMES THE SITE AREA.

ALL OF THE OUTFALLS WILL BE ADHERENT IN ACCORDANCE WITH SECTIONS 4-882.6, 4-882.6B, 4-882.6A, B AND C OF THE P.F.F.R.



LAND DESIGN CONSULTANTS

STORMWATER MANAGEMENT

RENFRO PROPERTY

NO.	DATE	DESCRIPTION
1	10/1/00	PRELIMINARY PLAN
2	10/1/00	REVISED PLAN
3	10/1/00	REVISED PLAN
4	10/1/00	REVISED PLAN
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98	10/1/00	REVISED PLAN
99	10/1/00	REVISED PLAN
100	10/1/00	REVISED PLAN

I HEREBY CERTIFY THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

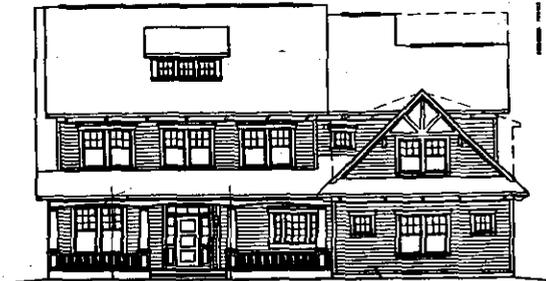
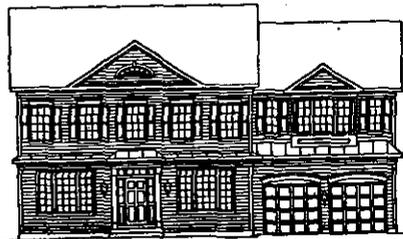
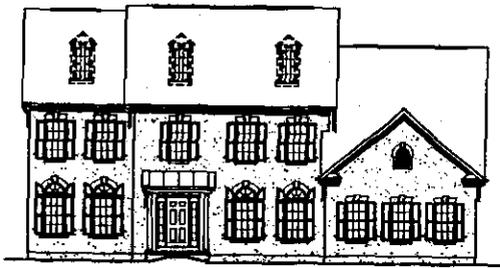
DATE: 10/1/00

BY: [Signature]

SHEET 4

DATE: 10/1/00

BY: [Signature]



THIS SHEET IS FOR ILLUSTRATIVE PURPOSES BUT THE ELEMENTS PROVIDED WILL BE IN GENERAL CONFORMANCE WITH THAT SHOWN, AND AS SPECIFIED IN THE PROFFERS.

LAND DESIGN  
CONSULTANTS



HOUSE  
ELEVATIONS - OPT. A

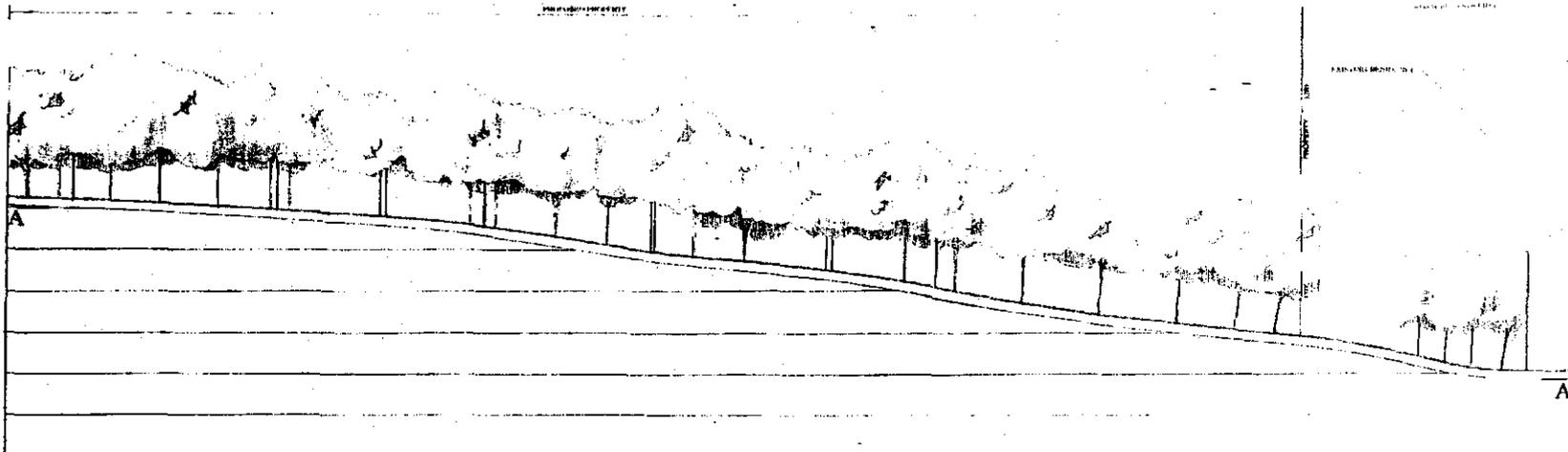
RENFRO  
PROPERTY



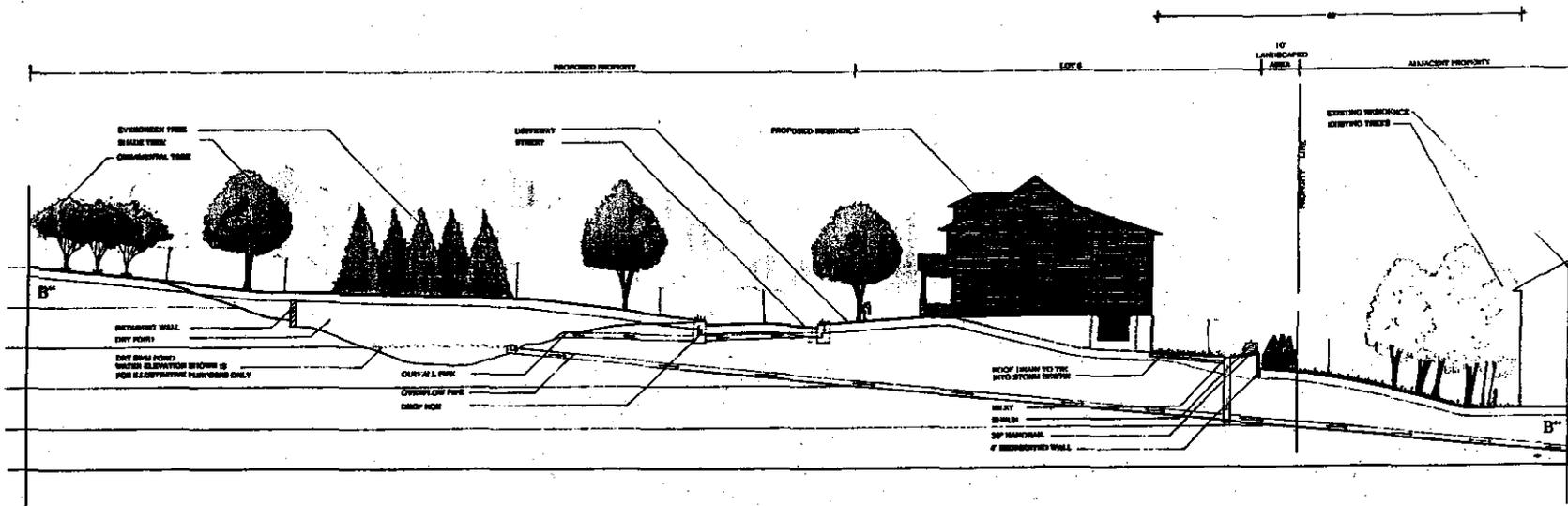
DATE: 1/23/06  
SCALE: N/A

JOHN L. MARSH  
NO. 13788  
1/23/06  
LAND SURVEY  
SCALE: N/A

SHEET 5  
OF 1  
DATE: 1/23/06  
DRAFT: C  
FILE NUMBER  
2007-4-8



SECTION A - A' EXISTING CONDITIONS



SECTION B - B' PROPOSED CONDITIONS

SCALE: N.T.S.

NOT TO SCALE  
 ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED  
 ALL ELEVATIONS ARE TO FINISH UNLESS OTHERWISE NOTED  
 ALL FINISHES ARE TO BE AS SHOWN UNLESS OTHERWISE NOTED  
 ALL MATERIALS ARE TO BE AS SHOWN UNLESS OTHERWISE NOTED  
 ALL NOTES ARE TO BE READ IN CONJUNCTION WITH THE DRAWING

**RENFRO PROPERTY**

**Illustrative Sections**

November 2005

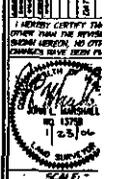
**THE LAND PLANNING & DESIGN GROUP, INC.**  
 LAND PLANNING • SITE PLANNING • LANDSCAPE ARCHITECTURE  
 2800 Westview Drive • Suite 100 • Philadelphia, Maryland 21108  
 Phone: 301-981-8174  
 Fax: 301-981-8884



CROSS SECTION  
 OF T.A

RENFRO PROPERTY  
 FRONT YARD DISTRICT

NO.	DATE	DESCRIPTION	BY	APPROVED BY
1	11/15/05	ISSUED FOR PERMIT	[Signature]	[Signature]
2	11/15/05	REVISED PER PERMIT COMMENTS	[Signature]	[Signature]



SCALE: N.T.S.  
 SHEETS: 11  
 DATE: 11/20/05  
 DESIGNED BY: [Name]  
 CHECKED BY: [Name]  
 FILE NUMBER: 11071-4-0-30

**GENERAL NOTES**

- THE PROPERTIES DELINEATED ON THIS SHEET ARE LOCATED ON FAIRFAX COUNTY TAX MAP # 04-4 (711) PARCELS 56, 57A & 58 AND ARE CURRENTLY OWNED BY JAMES A. & BRIGGS E. C. ROWING TR. (PARCELS 56 & 57A) AS RECORDED IN DEED BOOK 1682, PAGE 679. PARCEL 58 CONTAINING THE CEMETERY OWNED BY BRIDGFIELD WASHINGTON, LLC AS RECORDED IN DE 1682, PAGE 681.
- THE APPLICANT'S CONTRACT NUMBER IS BRIDGFIELD PROPOSED ROAD, LLC. 5840 EXECUTIVE PARK AVE, SUITE 300 FAIRFAX, VA 22031 (703) 370-1400.
- THE BOUNDARY INFORMATION IS BASED ON A FIELD RUN SURVEY BY LAND DESIGN CONSULTANTS, INC.
- THE TOPOGRAPHIC INFORMATION IS BASED ON AN AERIAL SURVEY CONDUCTED BY LAND DESIGN CONSULTANTS, INC. AT A 2' CONTOUR INTERVAL.
- A TITLE REPORT HAS BEEN FURNISHED BY COMMERCIAL TITLE GROUP INC. COMMITMENT # 1676, EFFECTIVE DATE 8-17-2008.
- ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS REQUESTED HEREIN. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE VARIATION OR MODIFICATION AT THE TIME OF SUBDIVISION PLAN PREPARATION/REVISION.
- EROSION AND SEDIMENTATION CONTROL SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION OR PER REQUIREMENTS OF THE STATE OF VIRGINIA AND THE CODE OF FAIRFAX COUNTY.
- LAND DESIGN CONSULTANTS, INC. IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A NOTION OF JO or MORE.
- ALL UTILITIES INSTALLED AS PART OF THIS PROJECT SHALL BE PLACED UNDERGROUND.
- AN QUALITY PERMITS SHALL BE OBTAINED, IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.
- THE SITE SHALL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. ALL DWELLING UNITS WITHIN THIS DEVELOPMENT SHALL BE SERVED BY GRAVITY FLOW AS NO PUMPING SHALL BE ALLOWED.
- THE COMPREHENSIVE PLAN RECOMMENDS DEVELOPMENT OF THE PROPERTY AS RESIDENTIAL AT A DENSITY OF 2-3 DWELLING UNITS PER ACRE.
- A RESOURCE PROTECTION AREA (RPA) AS DEFINED BY FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY. A RESOURCE MANAGEMENT AREA (RMA) AS DEFINED BY FAIRFAX CO. DOES EXIST ON THE SUBJECT PROPERTY.
- A MAJOR OR MINOR FLOODPLAIN AS DESIGNATED BY THE FEDERAL INSURANCE ADMINISTRATION, USGS, OR FAIRFAX CO. DOES NOT EXIST ON THE SUBJECT PROPERTY.
- AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES NOT EXIST ON THE SUBJECT PROPERTY.
- ON-SITE PUBLIC STREETS SHALL BE CONVEYED IN FEE SIMPLE TO THE FAIRFAX COUNTY BOARD OF SUPERVISORS AND SHALL BE MAINTAINED BY VDOT. METHODS AND MATERIALS USED SHALL CONFORM TO CURRENT COUNTY VDOT STANDARDS AND SPECIFICATIONS. THE COSTS THEREOF SHALL BE CONSTRUCTED TO APPLICABLE COUNTY STANDARDS AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
- A GEOLOGICAL REPORT WILL BE SUBMITTED BY FAIRFAX COUNTY CONCURRENTLY WITH THE FINAL SUBDIVISION PLAN, IF REQUIRED.
- NO HAZARDOUS OR TOXIC SUBSTANCES TO BE GENERATED, UTILIZED, STORED, TREATED AND/OR DISPOSED OF HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.
- DEVELOPMENT OF THIS PROJECT SHALL CONFORM AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF THE DEVELOPER.
- A SIGNAGE IS REQUIRED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL AND SHALL BE PROVIDED INTERNALLY FOR THE SITE.
- OWNERSHIP AND MAINTENANCE OF THE OPEN SPACE PARCELS "A" - "C", AS DEPICTED ON THE COMPON, WITHIN THIS SUBDIVISION SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.
- THE APPLICANT SHALL SATISFY THE STORM WATER MANAGEMENT REQUIREMENTS AS SET FORTH IN THE OPTIONS PROVIDED HEREIN.
- PRIOR TO SUBDIVISION PLAN RECORDED BUT CONCURRENT WITH THIS ZONING APPLICATION, THE APPLICANT SHALL OBTAIN OFFSITE EASEMENTS AND RIGHT-OF-WAY OVER TAX MAP #04-4 (704) PARCEL B OF THE SPRINGFIELD GLEN SUBDIVISION FOR THE CONSTRUCTION OF THE PROPOSED ENTRANCE.
- TRAILER ADJUSTMENTS TO THE LOT LINES AND UTILITY LOCATIONS SHALL BE PERMITTED IN ACCORDANCE WITH THE FINAL GRADING AND UTILITY LAYOUT AND SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THAT PROVIDED HEREIN.

- THE APPLICATION WILL PROVIDE FOR ONSITE PUBLIC IMPROVEMENTS OF SANITARY, STORM AND WATER UTILITIES AS WELL AS A PUBLIC STREET. SAID STREET WILL CONNECT TO RIDGE CREEK WAY, AN APPROVED ROADWAY DESIGNATED TO ACCOMMODATE THIS DEVELOPMENT. OFFSITE IMPROVEMENTS TO THE STORM SEWER LINES AND NEW SANITARY SEWER LINES WILL ALSO BE PROVIDED.
- THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY FOCUS OF MINIMIZING ITS IMPACT ON ADJOINING NEIGHBORS AS AN ALTERNATE. BY THE CLUSTERING OF HOUSES, TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY, ADDITIONAL PLANTING ON SITE AND INSTALLATION OF ADDITIONAL STORM SEWER, AS SHOWN ON SHEETS 2 & 3, THE APPLICANT HAS CREATED A DEVELOPMENT PLAN THAT PROTECTS NEIGHBORING PROPERTIES FROM ANY ADVERSE EFFECT AND REDUCES THE DRAINAGE ONTO INDIVIDUAL LOTS IN THE MIDDLE VALLEY SUBDIVISION. POST DEVELOPMENT RUNOFF SHALL BE EQUAL TO OR LESS THAN PRE DEVELOPMENT RUNOFF TO THE MIDDLE VALLEY SUBDIVISION IN UNDISTURBED AREAS TO THE EAST AND WEST. POST DEVELOPMENT RUNOFF WILL BE EQUAL TO THE PRE DEVELOPMENT RUNOFF. NO CONCENTRATED FLOW WILL BE DIRECTED ONTO THE ADJACENT MIDDLE VALLEY SUBDIVISION.
- THE AREAS TO BE PRESERVED HAVE BEEN DEPICTED ON THE COMPON. THESE AREAS WILL BE PROTECTED DURING CONSTRUCTION THROUGH THE UTILIZATION OF TREE PROTECTION FENCING.
- TREE PRESERVATION AROUND THE PERIMETER OF THE PROPERTY AND ADDITIONAL TREE PLANTING, AS SHOWN ON THE COMPON, WILL PROVIDE ADEQUATE MEASURES OF SCREENING.
- NO BUILDINGS OR STRUCTURES CURRENTLY EXIST ON THE SUBJECT PROPERTY.
- LOT 58 WILL BE ACCESSED VIA OUTLOT A TO THE PUBLIC STREET.
- THE COMPONENTS OF A MAXIMUM DENSITY REDUCTION DO NOT APPLY.
- THE APPLICANT PROPOSES TO CONSTRUCT A MIGHTMET METAL OR SIMILAR MATERIAL FENCE AROUND THE EXISTING BURIAL SITE, AS SHOWN ON SHEET 2.
- A CEMETERY EXISTS ON THE SUBJECT PROPERTY WHICH HAS BEEN IDENTIFIED AS VIRGINIA ARCHAEOLOGICAL SITE # 477414. THE PROPOSED DEVELOPMENT WILL NOT ENCRUMB WITHIN THE EXISTING BURIAL SITE.



VICINITY MAP  
1"=500'



SOIL MAP  
1"=500'

**SOIL INFORMATION**

PARCEL #	SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL	OTHER NOTES
PARCEL 56	10	GLENVILLE	B	FAIR-B, M	FAIR-B, M	MOD	----
PARCEL 57A	20	WHEELHURST	B	FAIR-B, M	FAIR-B, M	MOD	----
PARCEL 56 & 57A	60	APLING	C	GOOD	GOOD	HIGH	----
PARCEL 57A & 58	63	LOUNGBURG	C	GOOD	GOOD	HIGH	----

**TABULATIONS**

TOTAL SITE AREA = 40,807 S.F./0.928 AC.  
 DISTING ZONING = R-1  
 PROPOSED ZONING = PDH-2  
 MINIMUM LOT AREA REQUIRED PROVIDED = NO REQUIREMENT / 16,000 S.F.  
 AVERAGE LOT AREA REQUIRED PROVIDED = NO REQUIREMENT / 24,700 S.F.  
 RANGE OF LOT SIZES = 16,000 S.F. - 10,300 S.F.  
 MAX. BUILDING HEIGHT = 35 FT  
 MINIMUM PROPOSED YARDS: FRONT YARD = 8 FT, SIDE YARD = 1 FT, REAR YARD = 25 FT  
 OPEN SPACE PROVIDED = 46,177 S.F. (20%)  
 PROVIDED = 128,000 S.F. (60%)  
 PARCELS A-C AND OUTLOT A TABULATION PROVIDED = 290,500 S.F. (14%)  
 PARKING PROVIDED: 4 PER UNIT = 60 SPACES (2 IN GARAGE, 2 IN DRIVEWAY)  
 DENSITY PERMITTED (20 SINGLE FAMILY DETACHED UNITS) 2.00 DU/AC. PROPOSED (20 SINGLE FAMILY DETACHED UNITS) 1.82 DU/AC  
 TREE COVER CALCULATIONS: SITE AREA = 40,807 S.F., TREE COVER REQUIRED (20%) = 8,161 S.F., TREE COVER PRESERVED (12%) = 120,500 S.F.  
 \*\*TREE COVER SHALL BE NET\*\*

**WAIVERS REQUESTED**

THE APPLICANT HEREBY RESPECTFULLY REQUESTS A WAIVER OF SECTION 3-208.2 OF THE PUBLIC FACILITIES MANUAL IN ORDER TO PROVIDE MORE THAN 30% OF THE TOTAL LOTS AS RESIDENTIAL LOTS, AS SHOWN ON THE COMP.

LAND DESIGN CONSULTANTS  
 5800 BUCKLE UP ROAD, SUITE 200, FALLS CHURCH, VA 22041  
 (703) 261-1100

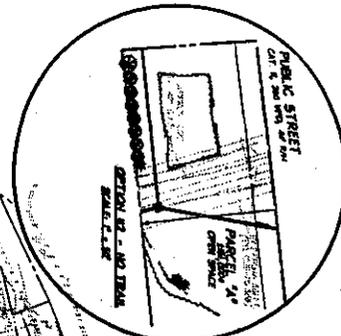
CONCEPTUAL DEV.  
 PLANNING DEV.  
 PLAN - OPT. B

RENFRO PROPERTY  
 COUNTY, VIRGINIA DISTRICT

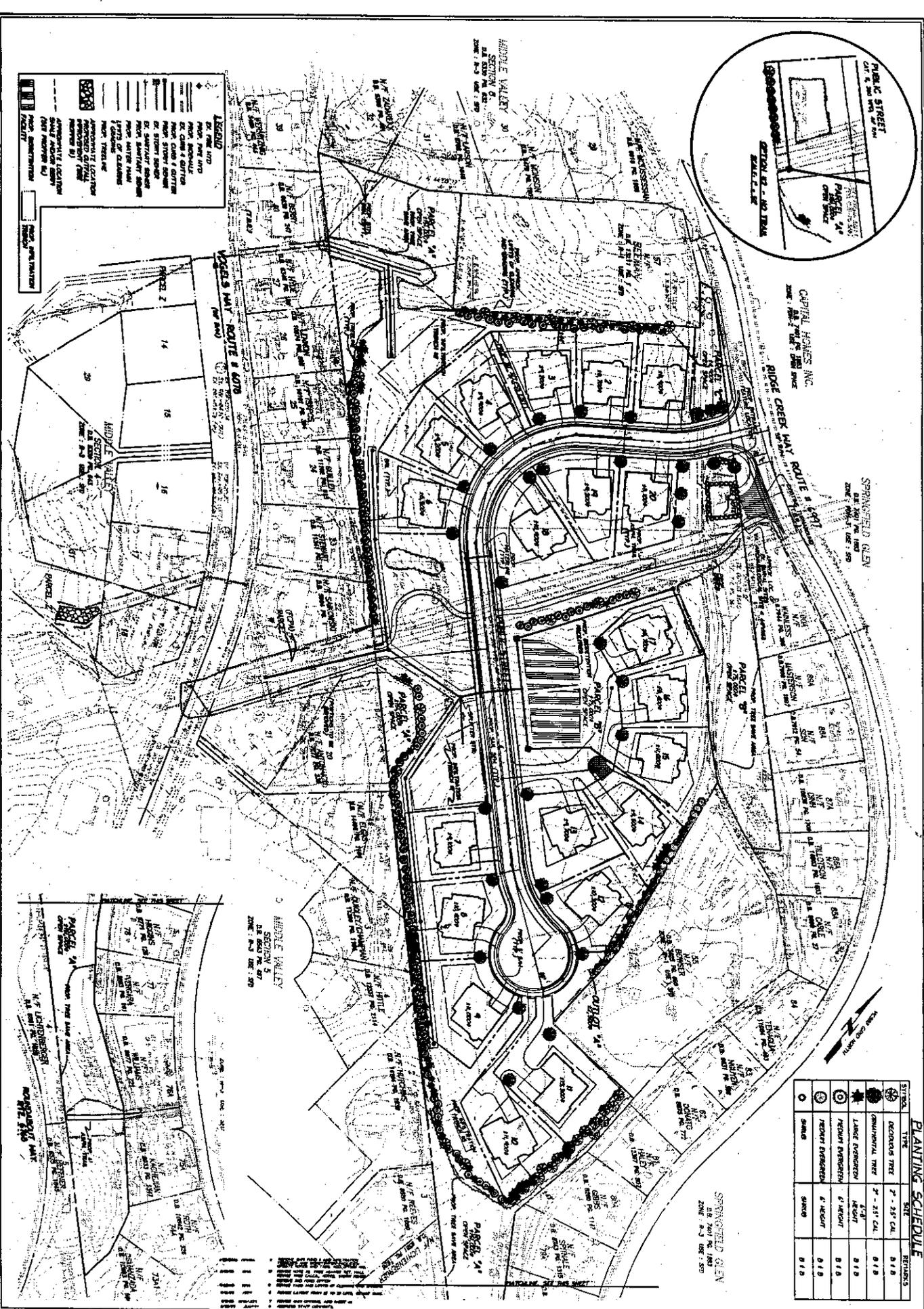
NO.	DATE	DESCRIPTION	BY	DATE	APPROVED BY
1					
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3					
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9					
10					

I HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF VIRGINIA AND THAT I AM THE DESIGNER OF THIS PLAN AND THAT I AM NOT PROVIDING ANY SERVICES TO THE CLIENT THAT WOULD CONSTITUTE A VIOLATION OF THE ENGINEERING ACT.  
 JOHN L. WATSON  
 10011 WOODBURN DRIVE  
 FALLS CHURCH, VA 22041  
 (703) 261-1100  
 SCALE: N/A

SHEET 7 OF 11  
 DATE: JUNE 2008  
 DRAFT: CMB  
 101 101  
 FILE NUMBER: 0807-4-3 28



- LEGEND**
- DR. TIME AND DATE
  - PROJ. NAME AND NO.
  - PROJ. LOCATION
  - PROJ. OWNER & CONTACT
  - PROJ. STREET ADDRESS
  - PROJ. STREET NUMBER
  - PROJ. STREET WIDTH
  - PROJ. STREET TYPE
  - PROJ. STREET CLASSIFICATION
  - PROJ. STREET DESIGN
  - PROJ. STREET MATERIALS
  - PROJ. STREET FINISHES
  - PROJ. STREET UTILITIES
  - PROJ. STREET LIGHTING
  - PROJ. STREET TREES
  - PROJ. STREET LANDSCAPE
  - PROJ. STREET SIGNAGE
  - PROJ. STREET FURNITURE
  - PROJ. STREET ART
  - PROJ. STREET SECURITY
  - PROJ. STREET SAFETY
  - PROJ. STREET ACCESSIBILITY
  - PROJ. STREET SUSTAINABILITY
  - PROJ. STREET RESILIENCE
  - PROJ. STREET INNOVATION
  - PROJ. STREET FUTURE



**PLANTING SCHEDULE**

SYMBOL	TYPE	SIZE	QUANTITY
(Symbol)	DECIDUOUS TREE	2" - 2 1/2" CAL.	818
(Symbol)	ORNAMENTAL TREE	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818
(Symbol)	LANE PLANTING	2" - 2 1/2" CAL.	818

DATE: 11/11/2020  
 SHEET: 8 OF 11  
 SCALE: 1" = 40'  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 APPROVED BY: [Name]

RENFRO PROPERTY

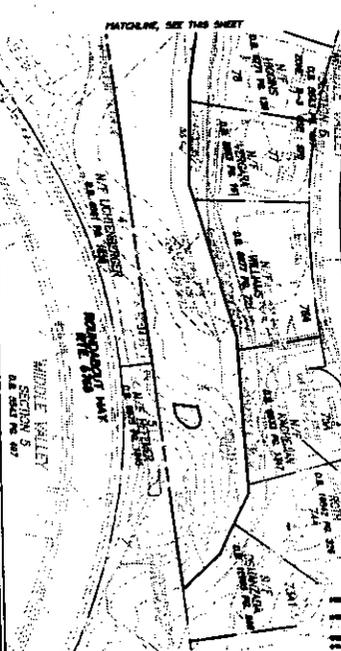
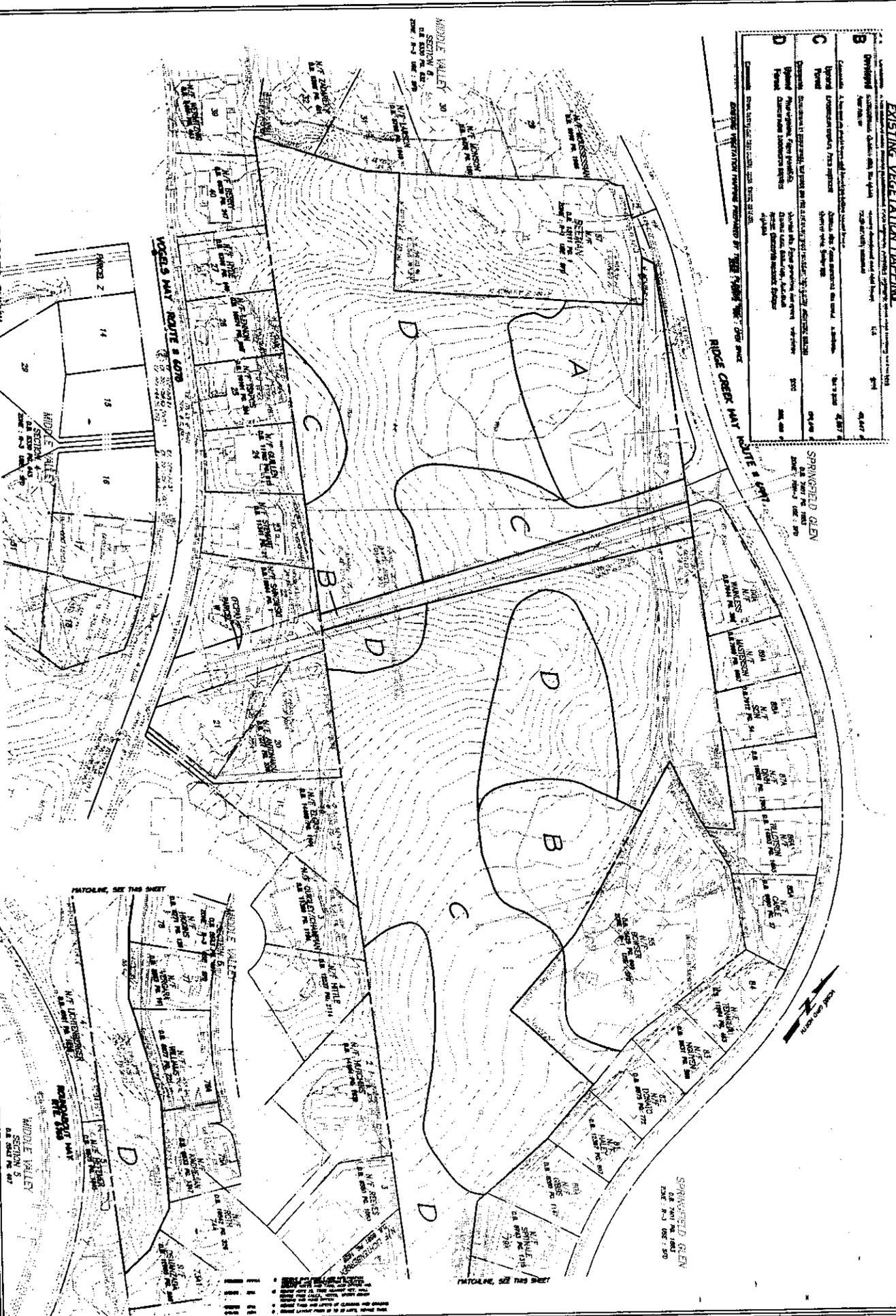
CONCEPTUAL DEV. / AN/FINAL DEV.  
 PLAN - OPT. B

LAND DESIGN CONSULTANTS  
 PLAN FOR SUCCESS  
 www.ldc-ny.com

**EXISTING VEGETATION MAPPING**

<b>A</b>	Open	Open	Open
<b>B</b>	Open	Open	Open
<b>C</b>	Open	Open	Open
<b>D</b>	Open	Open	Open

FOR EXISTING VEGETATION PURPOSES ONLY



DATE	1/15/08
DRAWN BY	...
CHECKED BY	...
DATE	...
SCALE	...

RENPRO PROPERTY

EXISTING VEG. MAP & ENV. CONDITIONS PLAN - OPT. R



LAND DESIGN CONSULTANTS  
PLAN FOR SUCCESS

NO.	DATE	DESCRIPTION
1	10/1/2018	ISSUED FOR PERMITS
2	10/1/2018	ISSUED FOR PERMITS
3	10/1/2018	ISSUED FOR PERMITS
4	10/1/2018	ISSUED FOR PERMITS
5	10/1/2018	ISSUED FOR PERMITS
6	10/1/2018	ISSUED FOR PERMITS
7	10/1/2018	ISSUED FOR PERMITS
8	10/1/2018	ISSUED FOR PERMITS
9	10/1/2018	ISSUED FOR PERMITS
10	10/1/2018	ISSUED FOR PERMITS

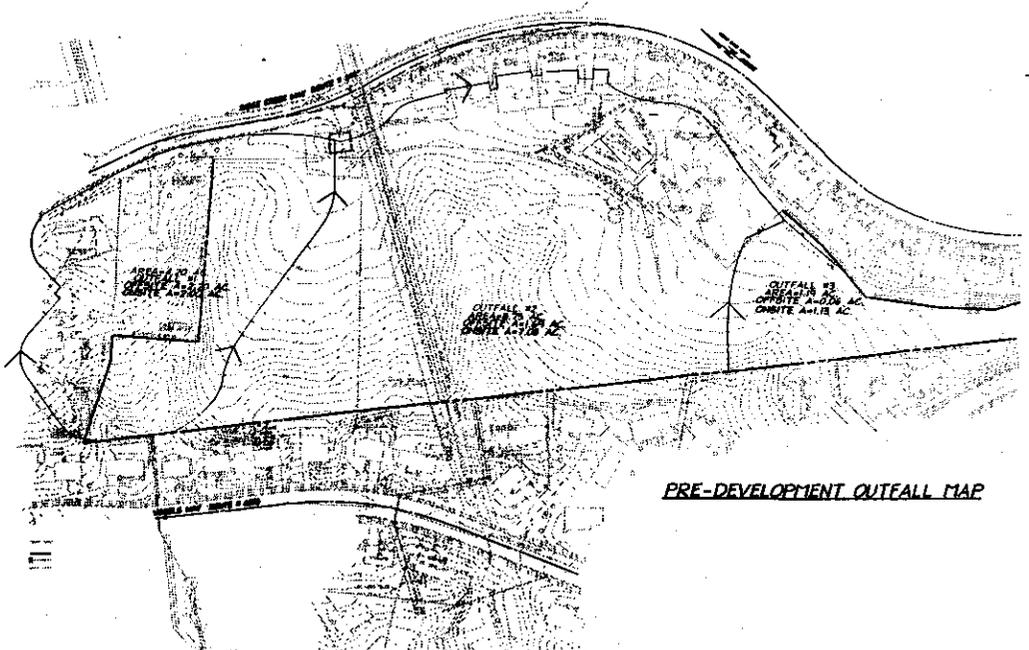
I HEREBY CERTIFY OTHER THAN THE DESIGNER, ARCHITECT, ENGINEER, OR SURVEYOR HAVE SEE

JOHN L. MARSH  
 MS 13708

SCALE: 1"=100'

SHEET 10 of 1

DATE: JUNE 28, 2018  
 DRAFT: C  
 BY: JLM  
 CHECK: JLM



PRE-DEVELOPMENT OUTFALL MAP

- PRE-DEVELOPMENT OUTFALL #1**  
 Q<sub>1</sub> (1.0)(1.0)(1.0) = 1.0 CFS  
 Q<sub>2</sub> (1.0)(1.0)(1.0) = 1.0 CFS
- PRE-DEVELOPMENT OUTFALL #2**  
 Q<sub>1</sub> (1.0)(1.0)(1.0) = 1.0 CFS  
 Q<sub>2</sub> (1.0)(1.0)(1.0) = 1.0 CFS
- PRE-DEVELOPMENT OUTFALL #3**  
 Q<sub>1</sub> (1.0)(1.0)(1.0) = 1.0 CFS  
 Q<sub>2</sub> (1.0)(1.0)(1.0) = 1.0 CFS

**STORMWATER MANAGEMENT INFORMATION**

TYPE OF FACILITIES = INFILTRATION TRENCHES, OPEN SPACE AND DETENTION FACILITIES  
 FACILITY MAINTENANCE = FARMERS/PROFESSIONALS ASSOCIATION

**INFILTRATION TRENCH #1**  
 APPROXIMATE REQUIRED 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE PROPOSED VOLUME = 0.00 C.F.  
 APPROXIMATE SURFACE AREA = 1,000 S.F.  
 APPROXIMATE FINISHED GRADE = 2.0  
 APPROXIMATE GRADE TRENCH BOTTOM = 2.0

**INFILTRATION TRENCH #2**  
 APPROXIMATE REQUIRED 10-YEAR VOLUME = 4.00 C.F.  
 APPROXIMATE 10-YEAR VOLUME = 4.00 C.F.  
 APPROXIMATE PROPOSED VOLUME = 4.00 C.F.  
 APPROXIMATE SURFACE AREA = 1,000 S.F.  
 APPROXIMATE FINISHED GRADE = 2.0  
 APPROXIMATE GRADE TRENCH BOTTOM = 2.0

**INFILTRATION TRENCH #3**  
 APPROXIMATE REQUIRED 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE PROPOSED VOLUME = 0.00 C.F.  
 APPROXIMATE SURFACE AREA = 1,000 S.F.  
 APPROXIMATE FINISHED GRADE = 2.0  
 APPROXIMATE GRADE TRENCH BOTTOM = 2.0

**INFILTRATION TRENCH #4**  
 APPROXIMATE REQUIRED 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE 10-YEAR VOLUME = 0.00 C.F.  
 APPROXIMATE PROPOSED VOLUME = 0.00 C.F.  
 APPROXIMATE SURFACE AREA = 1,000 S.F.  
 APPROXIMATE FINISHED GRADE = 2.0  
 APPROXIMATE GRADE TRENCH BOTTOM = 2.0

**OUTFALL NARRATIVE**

THE SUBJECT PROPERTY MAINTAINS SEVERAL STORM DRAINAGE OUTFALLS WITHIN THE ADJACENT PROBLE VALLEY SUBDIVISION IN THE FORM OF CONCENTRATED AND NON-CONCENTRATED FLOWS. THIS APPLICATION REQUESTS TO MAINTAIN THE AMOUNT OF IMPERVIOUS AREA THROUGH THE PRESERVATION OF OPEN SPACE. THE PRIMARY OUTFALLS, OUTFALLS #1, #2 AND #3 WILL DISCHARGE INTO A COMBINATION OF PROPOSED AND EXISTING CLOSED STORM SEWER SYSTEM AND OVERLAND WITHIN PROBLE VALLEY SUBDIVISION, PARCELS #1 AND 2. THE POST DEVELOPMENT RATE AND VOLUME OF RUNOFF WILL NOT EXCEED THE PRE DEVELOPMENT RATE OR VOLUME IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL.

AN EASTERN BERRY-SHALE HAS BEEN PROPOSED ALONG THE REARS OF PROPOSED LOTS 8-10 WHICH WILL COLLECT THE RUNOFF FROM THE REAR OF THESE LOTS IN ORDER TO REDUCE THE AMOUNT OF OVERLAND RUNOFF THAT CURRENTLY DRAIN TO THE ADJACENT PROBLE VALLEY PROPERTIES AS SHOWN ON THIS MAP. THIS RUNOFF SHALL BE DIRECTED TO ONE OF SEVERAL PROPOSED INFILTRATION TRENCHES WHICH WILL ELIMINATE ALL SURFACE DRAINAGE FOR THE TWO AND TEN YEAR STORMS. THE UNCONTROLLED DRAINAGE AT THE REARS OF THESE LOTS WILL NOT EXCEED THE CURRENT RATE OF RUNOFF FOR THE DRAINAGE SHED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL. IN ADDITION, ALL ROOF DOWNSPOUTS SHALL BE TIED DIRECTLY INTO THE TRENCHES WHERE FEASIBLE AND PERMITTED BY THE COUNTY SPECIFICALLY LOT 4. THIS APPLICATION WILL SIGNIFICANTLY REDUCE THE RATE AND VOLUME OF RUNOFF WHICH DEPARTS FROM THE SUBJECT PROPERTY.

**PRE-DEVELOPMENT NARRATIVE**

THE SUBJECT PROPERTY MAINTAINS SEVERAL STORM DRAINAGE OUTFALLS AS DEPICTED HEREIN AND IDENTIFIED APPROPRIATELY IN ASCENDING ORDER. THESE OUTFALLS REPRESENT CONCENTRATED DRAINAGE WHICH DEPARTS THE SUBJECT PROPERTY. THIS DRAINAGE ULTIMATELY IS COLLECTED BY THE STORM DRAINAGE SYSTEM IN THE ADJACENT COMMUNITY AND IS DISCHARGED APPROXIMATELY THREE HUNDRED FEET DOWNSTREAM OF THE SUBJECT PROPERTY VIA EXISTING EASTERN LINED CHANNEL WHICH IS LOCATED UPON PARCELS 1. THIS DRAINAGE PASSES OVERLAND AND ULTIMATELY IS CONVERTED THROUGH PARK AUTHORITY PROPERTY AND INTO THE THREAT OF THE MAJOR FLOOD PLAIN OF PROBLE RUN WHICH IS A THREAT TO PARKS CREEK.

**STORMWATER MANAGEMENT NARRATIVE**

THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF THREE INFILTRATION TRENCHES AND TWO DETENTION FACILITIES, ULTIMATE LOW IMPACT DEVELOPMENT TECHNIQUES. THESE FACILITIES SHALL BE DESIGNED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL, LETTER TO INDUSTRY #1-8 AND THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

THE PROPOSED INFILTRATION TRENCHES SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE PRELIMINARY SURFACE EXPLORATION REPORT PREPARED BY E.H. TICH AND THE DETAIL PROVIDED HEREIN. THE REPORT PREVIOUSLY RETROFITTED DID NOT ENCOUNTER GROUNDWATER WITH BEDROCK. FURTHERMORE, THE PRELIMINARY DESIGN PROVIDED HEREIN ASSUMED NO DETRIMENTAL TO A CONSERVATIVE EFFORT. ALL MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH CHAPTER 3, STANDARD 3.02 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK, LASTLY, AS AN ADDITIONAL SAFETY FEATURE, IN THE EVENT THAT ALL OF THE ASSOCIATED STORM DRAINAGE INFRASTRUCTURE BECOMES IMPERMEABLE AND ONE HUNDRED YEAR STORM OCCURS, THESE FACILITIES HAVE BEEN DESIGNED WITH ADEQUATE VOLUME FOR THE APPROXIMATE ONE HUNDRED YEAR STORM. THEREFORE, IN THE EVENT OF OVERLAND RELIEF THESE FACILITIES MAY CAPTURE PORTIONS OF THE OVERLAND DRAINAGE PRIOR TO ENTERING THE SUBJECT PROPERTY IN STRIKE A SUBSURFACE OF SURFACE WATER AND CONTROL IT WITHOUT ADVERSELY IMPACTING DOWNSTREAM PROPERTIES.

THESE TRENCHES HAVE BEEN ANALYZED FOR THE TEN YEAR AND ONE HUNDRED YEAR, TWO HOUR STORM THREE INCHES AND FOUR AND A HALF INCHES OF RUNOFF DEPTH RESPECTIVELY AND CONTROL ALL OF THE PROPOSED IMPERVIOUS SURFACES. THE FINAL DESIGN OF THESE TRENCHES IS SUBJECT TO THE REVIEW OF THE GEOTECHNICAL, DESIGN AND FINAL ENGINEERING.

THE PROPOSED DETENTION FACILITIES HAVE BEEN DESIGNED TO ACCOMMODATE THE TEN YEAR STORM AS DISCUSSED ABOVE. THESE STORAGE FOR THESE FACILITIES SHALL BE ABOVE THE PLANT MEMORY AND SHALL PROVIDE A MINIMUM PONDING DEPTH OF ONE FOOT. IN ADDITION, THESE FACILITIES SHALL BE CONSTRUCTED WITH REINFORCED UNDERDRAINS IN ACCORDANCE WITH CHAPTER 3, STANDARD 3.02 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

ALL OF THESE FACILITIES SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION AND THE MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS. A MAINTENANCE AGREEMENT SHALL BE REQUIRED WITH THIS SUBDIVISION WITH FARMERS COUNTY. IN ADDITION, THE APPLICANT SHALL SECURE THE TEN YEAR MAINTENANCE COSTS OF THESE FACILITIES ALTHOUGH THIS PRACTICE IS NOT REQUIRED FOR THE PROPOSED INFILTRATION TRENCHES FOR THE APPROPRIATED LETTER TO INDUSTRY.

IN CONNECTION WITH THE DEVELOPMENT OF THIS COMMUNITY, THE APPLICANT HAS OBTAINED STORM SEWER AND STORM DRAINAGE EASEMENTS FROM THE CURRENT OWNER OF PARCEL #1 IN ORDER TO PROVIDE ADEQUATE EASEMENT WIDTH WITHIN WHICH A LARGER STORM SEWER SYSTEM MAY BE CONSTRUCTED TO ADEQUATELY CONVEY THE UPSTREAM DRAINAGE (OUTFALL #2). AN IMPROVEMENT TO THE EXISTING SWP RAP CHANNEL SHALL BE MADE PARTIALLY WITHIN THE EXISTING STORM SEWER EASEMENT AND THE PORTION BEYOND THIS EASEMENT SHALL REQUIRE A LETTER OF PERMISSION OR EASEMENT FROM THE FARMERS COUNTY PARK AUTHORITY WITHIN PROBLE VALLEY. THIS IMPROVEMENT SHALL INCLUDE REMOVAL OF THE EXISTING STONE AND RECONSTRUCTION OF AN ENERGY DISSIPATION DEVICE THAT WILL BE MORE EFFECTIVE AND IMPROVE THE EXISTING RECEIVING CHANNEL FOR A SHORTER DISTANCE BEYOND THIS DEVICE THAT HAS EXPERIENCED MODERATE EROSION AND SETTLEMENT. THE EXISTING STORM SEWER SYSTEM SHALL REMAIN IN PLACE AND MAINTAINS ADEQUATE CAPACITY TO CONVEY THE TEN YEAR STORM IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS. ANY DOWNSTREAM EXISTING STRUCTURES SHALL BE ADVERSELY IMPACTED BY THE OVERLAND FLOW FROM THE SUBJECT PROPERTY. IF AN EXISTING STRUCTURE CURRENTLY FLOODS IN THE APPLICABLE THEORETICAL STORM NO ADDITIONAL FLOOD DEPTH SHALL OCCUR AS A RESULT OF THIS DEVELOPMENT.

THE OTHER PRIMARY STORM DRAINAGE OUTFALL (OUTFALL #1) IS COLLECTED BY AN EXISTING STORM SEWER SYSTEM ON LOTS #7 AND #8 WITHIN PROBLE VALLEY. IN ACCORDANCE WITH THE PROVISIONS AND THIS PLAN, THESE STRUCTURES SHALL BE CORRECTED FROM THE EXISTING CONDITION TO FUNCTION PROPERLY. THIS APPLICATION REQUESTS TO REDUCE THE DRAINAGE TO THIS OUTFALL VIA THE PROVISION OF AN INFILTRATION TRENCH THIS NOT DEGRADATING ANY EXISTING DRAINAGE SECTION DOWNSTREAM.

THE TERTIARY OUTFALL (OUTFALL #3) CONSISTS OF AN EXISTING SHALE MARCH CONVEYS DRAINAGE FROM THE SUBJECT PROPERTY AND THE ADJACENT SPRINGFIELD GLEN SUBDIVISIONS THROUGH PROBLE VALLEY AND INTO THE C&P CANAL. DURING THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS ON-SITE THE APPLICANT SHALL CONSTRUCT A SERIES OF BERRY-SHALES AND AN INFILTRATION TRENCH THAT WILL COLLECT A PORTION OF THE DEVELOPED AREAS CONSISTING OF LOTS 4-8 HEREBY REDUCING THE DRAINAGE AREA TO THIS POINT AND THE REMAINDER OF THE DRAINAGE SHALL BE COLLECTED BY AN INFILTRATION TRENCH AND ELIMINATING THE SURFACE DRAINAGE. THIS, THE POST-DEVELOPMENT RATE AND VOLUME OF RUNOFF WILL BE EQUAL TO OR LESS THAN THE EXISTING RATE OF RUNOFF FOR THIS OUTFALL.

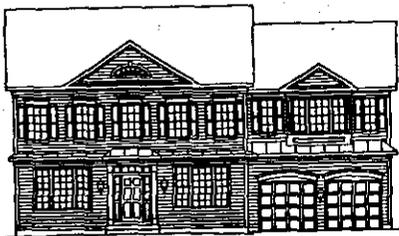
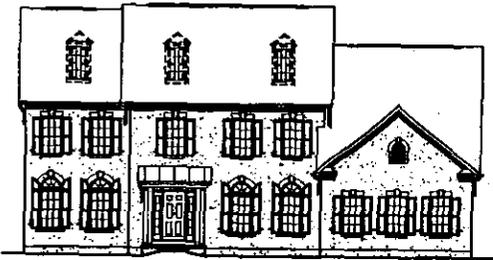
ULTIMATELY, THIS DRAINAGE PROCEEDS DOWNSTREAM OF THE SUBJECT PROPERTY APPROXIMATELY THREE HUNDRED FEET TO MEET PARK CREEK AS A MAJOR FLOOD PLAIN AND ADJACENT OUTFALLS AND THIS OUTFALL AT THE POINT OF CONVERGENCE CONVEYS OVER TWO THOUSAND ACRES OF DRAINAGE. THE APPROPRIATE DRAINAGE AREA TO THIS POINT IS IN EXCESS OF ONE SQUARE MILE AND ONE HUNDRED TIMES THE DRAINAGE FROM THE SUBJECT PROPERTY TO THIS POINT.

ALL OF THE OUTFALLS WILL BE ADEQUATE IN ACCORDANCE WITH SECTIONS 4-000.5, 4-000.6A, 4-000.6B, AND C OF THE PUBLIC FACILITIES MANUAL.



- 1. SEE THE PERCOLATION TRENCH AND INFILTRATION TRENCH FOR THE PERCOLATION TRENCH AND INFILTRATION TRENCH.
- 2. SEE THE PERCOLATION TRENCH AND INFILTRATION TRENCH FOR THE PERCOLATION TRENCH AND INFILTRATION TRENCH.
- 3. SEE THE PERCOLATION TRENCH AND INFILTRATION TRENCH FOR THE PERCOLATION TRENCH AND INFILTRATION TRENCH.
- 4. SEE THE PERCOLATION TRENCH AND INFILTRATION TRENCH FOR THE PERCOLATION TRENCH AND INFILTRATION TRENCH.

PERCOLATION TRENCH	PLACE NO.	STYL. NO.
	41-6	



THIS SHEET IS FOR ILLUSTRATIVE PURPOSES BUT THE ELEMENTS PROVIDED WILL BE IN GENERAL CONFORMANCE WITH THAT SHOWN, AND AS SPECIFIED IN THE PROFFERS.

LAND DESIGN CONSULTANTS



HOUSE ELEVATIONS - OPT. B

RENFRU PROPERTY

NO.	DATE	DESCRIPTION	BY	APPROVED (DATE)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

I HEREBY CERTIFY  
OTHER THAN THE DESIGNED HEREON NO CHANGES HAVE BEEN MADE

AND SURVEY  
SCALE: N/A

SHEET 11 OF 11  
DATE: JUNE 2002  
DRAFT: C.  
THE NATIONAL ARCHITECTURAL ASSOCIATION

## **BACKGROUND**

RZ/FDP 2005-MV-001 is a request to rezone 11.04 acres located approximately 1000 feet east of Gambrell Road and south of Ridge Creek Way, from the R-1 District to the PDH-2 District. The Staff Report, which was published on June 29, 2005, recommended approval of the applicant's request to develop 22 single family detached houses at a density of 1.99 du/ac, with 41% open space. On July 13, 2005, the Planning Commission held a public hearing; during the hearing a number of concerns were raised by citizens, primarily issues associated with storm drainage. In order to give the applicant adequate time to address these concerns, the Planning Commission deferred decision until October 19, 2005. Subsequent to the public hearing, the applicant revised the CDP/FDP and proffers, and Staff published Addendum I on October 14, 2005, which recommended approval of the applicant's revised request for 20 single family detached lots at a density of 1.82 du/ac and 45% open space. On October 19, 2005, the Planning Commission voted to recommend that the application be approved, and a Board date of January 9, 2006, was scheduled. On January 9, 2006, the Board of Supervisors deferred the public hearing to allow the applicant additional time to work with the citizens on their remaining concerns. On January 25, 2006, the applicant submitted revised plans which include a new option for the provision of SWM/BMPs; this plan and the revised proffers which accompanied it are the subject of this addendum. After discussion with the Planning Commissioner and Supervisor of the Mount Vernon District, it was determined that the revised plans, including the new alternative stormwater management design, represented a substantive change from the previous plans which were the subject of the original public hearing; therefore it was determined that the revised plans should be sent back to the Planning Commission for a new public hearing; this hearing is currently scheduled for March 23, 2006.

A reduction of the applicant's revised CDP/FDP is attached to the front of this addendum; the revised draft proffers are contained in Attachment I.

## **DISCUSSION**

Title of Combined CDP/FDP:	Renfro Property
Prepared by:	Land Design Consultants
Original and Revision Dates:	June 2004, as revised through January 23, 2006
Revised Draft Proffer Statement:	January 26, 2006

In an effort to address the concerns of the neighborhood, which continue to center around site drainage and stormwater management, the applicant submitted a revised CDP/FDP, which now includes two options for development. The first Option, Option A, is depicted on Sheet 2 of the CDP/FDP; this option shows a traditional

central stormwater management facility (dry pond) which remains essentially unchanged from the previous submission. The focus of this Addendum is Option B, which is depicted on Sheet 8 of the CDP/FDP. Although the two options both depict 20 single family detached dwelling units in an almost identical site layout, Option B employs innovative, low-impact development (LID) techniques to manage stormwater quantity and quality on the site. Specifically, Option B incorporates the following modifications:

- The proposed public street serving the development has been shifted approximately 15 feet to the north, resulting in a larger, continuous buffer strip along the southern and western boundaries of the site. This irregularly shaped strip (Parcel A) contains approximately 151,000 sf, and is a minimum of ten feet in width at its narrowest point along the southern boundary. As illustrated on the CDP/FDP, this area will contain areas of tree save and supplemental landscaping. The minimum separation between the existing homes in the Middle Valley subdivision and the proposed subdivision has been increased to 80 feet, which has permitted the deletion of the retaining walls proposed in Option A.
- The large extended detention stormwater management dry pond shown in Option A has been eliminated and replaced with a combination of LID techniques, designed to address concerns expressed by the neighborhood (including potential flooding resulting from a dam breach; surface flow and ponding of stormwater runoff; and the potential damage to neighboring properties resulting from the proposed upgrading of the existing stormwater drainage pipes to the south of the site). Specifically, Option B proposes the construction of three infiltration trenches along the southern property line (#1, the largest facility, is located just west of proposed Lot 7; #2 is located in the southwestern corner of the site, behind proposed Lots 4 and 5; and #3, the smallest facility, is located in the southeastern section of the site, to the south of proposed Lot 10). Two bioretention facilities (raingardens) are proposed side by side in the center of the site, in the location of the stormwater management pond proposed in Option A.
- A stormwater drainage pipe in the southwestern corner of Parcel A, connecting to the existing storm drain located between Lots 27 and 40 on Vogels Way, has also been added with this Option.

In addition to the revised plans, the applicants have also submitted revised draft proffers, which have been amended primarily to reflect the provision of the two CDP/FDP options and to clarify conditions pertaining to Option B; a copy of the latest proffers is contained in Attachment 1. The applicant has also had a Subsurface

Exploration Report prepared for the property, to demonstrate the appropriateness of the proposed LID facilities for the site; this report is available for review in the offices of the Zoning Evaluation Division, Department of Planning and Zoning.

Both options depict 20 single family detached residences at a density of 1.82 du/ac, which is below the Comprehensive Plan's recommended density range of 2-3 du/ac. As the site design and amenities are also almost identical for the two options, the following discussion centers on stormwater management.

#### **Option A:**

The existing storm sewer outfall of the application property is inadequate according to current Public Facilities Manual (PFM) standards. This option proposes off-site improvements, including upgrading the existing 24" storm drainage pipe located in an easement on Tax Map Parcels 98-1 ((9)) 17, 18 and Z of the Middle Valley subdivision to the south, to provide an improved outfall. The access for the construction of these improvements is shown to be through the existing easement on Lots 17 and 18; the improvements for Parcel Z will require additional storm drainage easements to be obtained and recorded prior to construction plan approval by DPWES. The applicant has proffered to coordinate closely with the owners of the affected properties regarding the time and duration of the construction and restoration of the access.

There has been a concern raised by the owner of a downhill parcel (Tax Map 98-1 ((9)) 21) with respect to the adequacy of the necessary flow paths to meet the dam breach analysis requirements of the PFM. The applicant has indicated that the proposed development will adequately meet PFM requirements and sufficient analysis to demonstrate such will be provided on the subdivision plan. The applicant has proffered that he will submit a dam breach analysis as required by PFM 6-1603.4.

The applicant will be required, per PFM 6-0201.3, to convey with the subdivision Record Plat storm drainage easements over the existing natural drainage way to provide for the adequate conveyance of surface waters, from the existing storm sewer located between Tax Map Parcels 89-3 ((14)) 31 and 32, as well as to the natural water course on Tax Map 89-4 ((1)) 57, to the existing system located on Tax Map parcels 89-3 ((13)) 27 and 89-3 ((14)) 40. The applicant has shown proposed easements in these locations.

#### **Option B:**

The applicant, as an option, has proposed the use of bioretention filters and infiltration trenches on site to meet stormwater quality and quantity control requirements in lieu of the extended detention dry pond.

The applicant has stated that the infiltration trenches have been sized to provide control of storm water runoff in excess of the 100 year storm volume in response to the downstream drainage issues. Staff believes that the applicant should provide proffer commitments to the additional amount of control that is proposed.

The applicant has also stated that the proposed bioretention filters (raingardens) are designed to provide quantity control for up to the 10 year storm. Innovative facilities not included in the PFM at this time are approvable by the Director in accordance with PFM 6-0402.4.

The applicant has proffered that the infiltration trenches and bioretention filters will be privately maintained. A maintenance agreement will be required to be executed with the County prior to subdivision plan approval. The applicant has proffered that they will provide an escrow for the estimated maintenance costs of the facilities.

### **Proffers**

In addition to the addition of Option B to the CDP/FDP, the applicant has revised the draft proffers, which are now dated March 8, 2006, to incorporate the following changes:

1. Editorial changes have been made throughout the proffers to reflect the provision of two plan alternatives (Option A and Option B); proffers now state that the selection of which Option will be developed will be made by the applicant at the time of subdivision plan submission.
2. The tree preservation proffers have been revised to provide the most recently recommended language concerning the calculation method for tree replacement value.
3. A new proffer has been added (5b) to address the provision of infiltration trenches, should Option B be selected.
4. Language has been added in proffer 5k, clarifying that the proposed improvements to the existing outfall located on Tax Map 98-1 ((9)) Z, which is owned by the Fairfax County Park Authority, will be subject to the receipt of the necessary permission.
5. A new proffer (5r) has been added, stating that, if Option B is selected, a maintenance fund will be established for the HOA in an amount equal to the twenty year maintenance cycle for both the raingardens and the infiltration trenches.

6. A new proffer (5s) has been added, stating that, if Option B is selected, an interceptor trench will be installed along the southern property line to intercept groundwater prior to its leaving the site.
7. Language has been added to Proffer 6b to clarify how the stormwater outfall will be handled with either option.
8. Language has been added to Proffer 11c, to specifically identify Ridge Creek Way and Vogels Way as the streets which will be cleaned daily during construction.
9. Language has been added to Proffer 13, stating that, if Option B is selected, a specific budget line item shall be established for the HOA, and escrowed with the County, for the maintenance of the bioretention facilities and infiltration trenches.

#### **Soil Exploration/Geotechnical Review**

In order to address concerns about the functioning of the proposed infiltration trenches on the application property, the applicant had a geotechnical review conducted. Staff's evaluation of the Subsurface Exploration Report concludes that the geotechnical engineers made very conservative assumptions that actually show an increase in flow of groundwater towards the houses downhill. (These assumptions included a fully saturated ground condition, a condition which is unlikely to occur in nature given the permeability of the soil types; and a shallow elevation for both the ground water table and the bedrock, both of which would favor more water flowing downhill.) Staff identified three deficiencies in the report which should be addressed to the satisfaction of DPWES, should Option B be selected as the preferred alternative:

1. The impact of infiltration trench #3 (located on Parcel A) on the adjoining properties; (The adjoining houses are much closer in this area than in the sections that were analyzed.)
2. The actual permeability of the soils or the infiltration rates should be determined;
3. The location, depth, size, outfall and details of the recommended interceptor drains should be specified. (These interceptor drains, if installed, would cut off any groundwater flows towards the downhill properties.)

Staff is continuing to work with the applicant to refine the draft proffer commitments to address these issues (see Attachment 4).

## CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

The applicant is proposing two CDP/FDP alternatives; both depict a subdivision consisting of 20 single family detached lots at a density of 1.82 du/ac, which is under the recommended Comprehensive Plan range for the property (which is 2-3 du/ac). Both alternatives have almost identical site designs and amenities; the primary difference between the options lies in how the stormwater management and Best Management Practices are to be provided. Option A proposes a traditional extended detention dry pond; Option B proposes the use of bioretention facilities and LIDs. Staff believes that both options are in harmony with the Comprehensive Plan and are in conformance with the applicable Zoning Ordinance requirements.

### Recommendations

Staff recommends that RZ 2005-MV-001 be approved, subject to the execution of proffers consistent with those found in Attachment 1.

Staff recommends that the Planning Commission approve FDP 2005-MV-001, subject to the proposed development conditions found in Attachment 2, and subject to the Board's approval of RZ 2005-MV-001 and the Conceptual Development Plan.

Staff recommends approval of a modification of the maximum percentage of pipestem lots, to permit 30% pipestems.

Staff recommends denial of the requested modification of the trail requirement located in the southern half of the site.

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

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

**ATTACHMENTS**

1. Revised Draft Proffers
2. Proposed Development Conditions
3. Revised Affidavit
4. DPWES memorandum, stormwater
5. Department of Transportation Addendum

## PROFFERS

## BROOKFIELD RIDGE ROAD, LLC

RZ 2005-MV-001

March 8, 2006

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Pursuant to Section 15.2-2303(A) Code of Virginia, 1950, as amended, the owners and Brookfield Ridge Road, LLC (hereinafter referred to as the "Applicant"), for themselves, their successors and assigns in RZ 2005-MV-001, filed on property identified as Fairfax County tax map reference 89-4 ((1)) 56, 57A and 69 (hereinafter referred to as the "Application Property") hereby proffers to the following, provided that the Board of Supervisors approves the rezoning of the Application Property to the PDH-2 District in conjunction with a Conceptual/Final Development Plan for residential development. If accepted, these proffers shall replace and supersede any previous proffers approved on the Application Property.

## 1. CONCEPTUAL/FINAL DEVELOPMENT PLAN ("CDP/FDP")

- a. Subject to the provisions of Section 16-401 and 16-402 of the Fairfax County Zoning Ordinance (hereinafter referred to as the "Zoning Ordinance"), development of the Application Property shall be in substantial conformance with either option A or option B of the CDP/FDP entitled "Renfro Property," containing eleven (11) sheets prepared by Land Design Consultants, dated January 26, 2005, as revised through January 23, 2006. Selection of option A or option B shall be made by the Applicant at the time of subdivision plan submission. Unless specifically identified herein, these proffers shall apply to both options.
- b. Pursuant to Paragraph 4 of Section 16-403 of the Zoning Ordinance, minor modifications from the CDP/FDP may be permitted as determined by the Zoning Administrator. The Applicant reserves the right to make minor adjustments to the layout, internal lot lines, and lot sizes of the proposed subdivision at time of subdivision plan submission based on final building footprints, utility locations and final engineering design, provided that such do not decrease the amount and location of open space, tree save areas (including Parcel B), distances to peripheral lot lines, or change the access points.
- c. Notwithstanding that the CDP/FDP is presented on eleven (11) sheets and said CDP/FDP is the subject of Proffer 1.a. above, it shall be understood that the CDP shall be limited to the points of access, location and amount of open space, limits of clearing and grading, the total number and general location of residential units and type of units. The Applicant has the option to request Final Development Plan Amendments ("FDPAs") for elements other than CDP elements from the Planning Commission for all of, or a portion of, the CDP/FDP in accordance with the provisions set forth in Section 16-402 of the Zoning Ordinance. The President of the

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Middle Valley Civic Association, as on file with the Mount Vernon District Supervisor's office, shall be notified by certified mail of the submission of an application for an FDPA and/or a proffered condition amendment. Said notification shall be provided within ten (10) days of application submission and shall include the location where the application is available for review.

## 2. TRANSPORTATION

- a. The Applicant shall construct a public street with curb and gutter within the residential community as shown on the CDP/FDP.
- b. The private driveway constructed to serve proposed Lots 13-17, as shown on the CDP/FDP, shall be constructed to pavement thickness standards set forth in subdivision street regulations published in the Public Facilities Manual (PFM) standards as approved by the Department of Public Works and Environmental Services (DPWES). Nothing contained in this proffer shall be construed to require the developed property to meet other geometrical standards (e.g. width of pavement, horizontal geometry) published by VDOT.
- c. The Applicant shall construct a five (5) foot wide sidewalk along both sides of the street within the residential development, as shown on the CDP/FDP.
- d. The Applicant reserves density credit as may be permitted by the provisions of Paragraph 4 of Section 2-308 of the Zoning Ordinance for all dedications as may be reasonably required by Fairfax County or VDOT, whether such dedications occur prior to or at time of subdivision record plat approval.
- e. That portion of the outlet road adjacent to properties identified as tax map 98-2 ((19)) 73A1, 74A, 75A, 76A, 77, 78, 79A, 80A, and 81, and recorded in Deed Book Y-8 at page 567 among the Fairfax County land records, that serves property identified as tax map 89-4 ((1)) 55, and located on the Application Property within Parcel B and west of the right of way of the proposed public street as shown on the CDP/FDP, shall be vacated and abandoned prior to subdivision plan approval for the Application Property.
- f. The Applicant shall provide written notice to initial prospective contract purchasers of the possible future development of the property identified as tax map 89-4 ((1)) 55 with more than one house, and its access to the cul-de-sac as shown on the CDP/FDP. The homeowners' association documents shall also include said notification.
- g. The Applicant shall convey Outlot A as shown on the CDP/FDP, to the owner of the adjacent property identified as tax map 89-4 ((1)) 55 (Lot 55) so that the cul-de-sac may be used for access. If the owner of Lot 55 does not accept title to Outlot A, title to Outlot A shall be held by the homeowners' association established for the proposed development until such time as a conveyance is requested by the owner of Lot 55.

The homeowners' association documents shall reflect the obligation to convey Outlot A to the owner of Lot 55. No density or open space associated with Outlot A shall be applied to the density and open space calculations shown on the CDP/FDP.

- h. The Applicant shall construct a six (6) foot wide asphalt trail on the Application Property as shown on the CDP/FDP. Said trail shall connect to an existing trail located on properties identified as tax map 98-2 ((19)) 75A and 76A, which shall be resurfaced as part of construction. The Applicant shall diligently pursue acquisition of a trail easement, at a reasonable cost based upon the appraised value of the easement, across those properties identified as tax map 98-2 ((11)) (11) 4 and 5 to provide a complete connection from Ridge Creek Way to Roundabout Way. Should the Applicant acquire a trail easement, in a form reviewed and approved by the Fairfax County Attorney's Office and recorded among the Fairfax County land records, the Applicant shall construct a six (6) foot wide asphalt trail in accordance with Fairfax County standards, and request that the trail be accepted by Fairfax County into the trail system. The trail shall be located and constructed to maximize the preservation of the existing trees as coordinated with Urban Forest Management. If the Applicant is unable to acquire the necessary easement, at a reasonable cost as described herein, there shall be no further obligation to construct that portion of the trail not located on the Application Property and the Applicant shall escrow an amount, as determined by DPWES, equivalent to the cost of constructing that portion of the trail with DPWES at time of subdivision plat recordation. Evidence of attempts to acquire said easement shall be provided to DPWES at time of subdivision plan submission for the Application Property.
- i. The final location of the turnaround shown on the CDP/FDP in front of proposed Lot 14 shall be determined at time of subdivision plan submission in coordination with the Office of the Fire Marshal.
- j. At time of subdivision plat recordation, the Applicant shall grant a trail easement, in a form reviewed and approved by the County Attorney, on Parcel C south of the proposed public street in the location shown on the CDP/FDP to facilitate an off-site connection to Vogels Way. The final location of the trail for construction on the Application Property shall be determined in consultation with DPWES, and in a location that shall not require the approval of an amendment to the CDP/FDP and/or these proffers. If it is determined by DPWES that a safe trail connection cannot be constructed to PFM standards in this general location, the area shall be open space as shown on Option #2 on the CDP/FDP, and the Applicant shall escrow funds equivalent to the cost of construction as determined by DPWES. The escrowed funds may be applied to the construction of other trail connections in the Mount Vernon area.
- k. If a safe trail location is determined as described in proffer 2.j., the Applicant shall attempt to obtain an off-site easement from the Fairfax County Park Authority and permission from other utilities to locate and construct an off-site trail on property

identified as tax map 98-2 ((11)) W to connect the trail described in proffer 2.j. to Vogels Way. The Applicant shall attempt to obtain the necessary easement and permission with the submission of a written request by certified mail. The letter shall include a request to receive a response within thirty (30) days. If no response is received within forty-five (45) days, a second written request shall be submitted by certified mail. If no response is received within thirty (30) days of the date of the second certified mailing, this shall be deemed to be a negative response. If the Applicant is unable to acquire the necessary easement and permission at no cost, there shall be no further obligation under this proffer. Evidence of attempts to acquire said easement and permission shall be provided to DPWES at time of subdivision plan submission for the Application Property.

### 3. LANDSCAPING AND OPEN SPACE

- a. The Applicant shall conform to the limits of clearing and grading as shown on the CDP/FDP subject to the installation of utilities and/or trails as determined necessary by the Director of DPWES. If it is determined necessary to install utilities and/or trails within the limits of clearing and grading, as shown on the CDP/FDP, they shall be located in the least disruptive manner possible as determined by Urban Forest Management. A replanting plan shall be developed and implemented, subject to approval by Urban Forest Management, for any areas within the limits of clearing and grading that must be disturbed. The replanting plan shall be outside of the utility easements as approved by DPWES.
- b. The Applicant shall submit a tree preservation plan as part of the first and all subsequent subdivision plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a certified arborist or landscape architect and reviewed and approved by Urban Forest Management.
- c. The tree preservation plan shall consist of a tree survey that includes the location, species, size, crown spread and condition rating percentage of trees that are ten (10) inches or greater in diameter, and within twenty (20) feet to either side of the limits of clearing and grading shown on the CDP/FDP for the entire site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the CDP/FDP, and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the *Guide for Plant Appraisal* published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of trees to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.
- d. All trees shown to be preserved on the tree preservation plan shall be protected by a tree protection fence, and super silt fence as approved by Urban Forest Management. The tree protection fence shall be four (4) foot high, fourteen (14) gauge welded wire

attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart, and shall include orange (or similar bright color) plastic fence for visibility. Tree protection fencing shall be erected at the limits of clearing and grading as shown on the demolition, Phase I and Phase II erosion and sedimentation control sheets.

- e. The Applicant shall retain the services of a certified arborist or landscape architect, and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the pre-construction meeting. Before or during the pre-construction meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an Urban Forest Management 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 only at the edge of the limits of clearing and grading, and such adjustments shall be implemented, as long as said adjustments do not interfere with the improvements shown on the CDP/FDP. Trees that are identified specifically by Urban Forest Management, in writing, as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump is removed, this shall be done using a stump grinding machine in a manner causing as little disturbance as possible to the adjacent trees and associated understory vegetation and soil conditions.
- f. All tree protection fencing shall be installed prior to any clearing and grading activities, including the demolition of any existing structures. The installation of all tree protection fence types shall be performed under the supervision of a certified arborist, and accomplished in a manner that minimizes harm to the existing vegetation that is to be preserved. Three days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, Urban Forest Management and the District Supervisor 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 Urban Forest Management.
- g. The Applicant shall submit a detailed landscaping plan as part of the first and all subsequent plan submissions that is consistent with the location, quality and quantity of landscaping shown on the CDP/FDP and these proffers. The landscaping plan shall utilize a variety of tree species of various sizes planted throughout the site. The native species, measuring at least two to two and one-half inches (2" - 2 1/2") in caliper, may include, but are not limited to, white oak, red maple, red oak, American holly, American beech, willow oak, dogwood and others. Pursuant to the PFM, the Applicant shall receive additional tree cover credit if native and desirable trees comprise a minimum of 90% of all trees listed on site. The Applicant shall also receive additional tree cover credit for utilizing tree species and planting locations that are effective for energy conservation as determined by DPWES.

h. In order to protect co-owned trees from construction damage, the Applicant shall remove any dead, dying, or hazardous, on-site, and co-owned trees adjacent to the limits of clearing and grading that are damaged as a result of construction activities permitted on the approved plan and replace the lost tree canopy in accordance with the guidelines of the PFM. Off-site mitigation associated with co-owned trees shall only be conducted with permission of the appropriate off-site owner, which shall be diligently pursued and acknowledgment of receipt of notice to any co-owner shall be provided to DPWES. Prior to subdivision plat approval, a replacement value shall be assigned by Urban Forest Management to all healthy on-site or co-owned trees measuring ten (10) inches or larger in diameter, which are located within twenty (20) feet of the limits of clearing and grading as shown on the CDP/FDP. Trees recommended for removal on the tree preservation plan shall not be assigned a value. At the time of subdivision plan approval, the Applicant shall post cash or a letter of credit payable to the County of Fairfax to ensure removal and replacement of any on-site or co-owned trees that are left dead, dying, or hazardous as a result of damage by normal construction activities permitted on the approved plan. The calculated replacement values shall be reviewed and approved by Urban Forest Management prior to posting the cash bond or letter of credit. The terms of the letter of credit shall be subject to approval by the County Attorney. The replacement value of each designated tree shall be determined by a certified arborist according to the methods contained in the latest edition of the Valuation of Landscape Trees, Shrubs and Other Plants published by the International Society of Arboriculture, subject to review and approval by Urban Forest Management. ~~The replacement value shall take into consideration the age, size and condition of these trees and shall be determined by the so-called "Trunk Value Method" contained in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture, subject to review and approval of UFM.~~ The total amount of the cash bond, escrow or letter of credit shall not exceed the replacement value as determined above, in addition to any conservation escrow that is required at the time of subdivision plan approval. From time to time, funds, or a portion thereof, may be drawn on the cash bond or letter of credit and expended for the purposes of this proffer. Any funds remaining in the letter of credit or cash bond will be released one year from the date of the issuance of the final residential use permit for the Application Property, or sooner, if approved by Urban Forest Management.

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i. Concurrent with development of the Application Property, the Applicant shall remove the existing turnaround located east of the site entrance as shown on the CDP/FDP. Subject to any restrictions of record, the area shall be landscaped with a minimum of three (3) native tree species measuring a minimum of two and one-half inches (2½") in caliper at time of planting, such as white oak, red maple, red oak, American holly, American beech, Willow oak and dogwood. The selection of species and number of plantings shall be coordinated with Urban Forest Management.

j. The retaining walls shown on the CDP/FDP to be located along the southern property line of the Application Property shall not exceed a height of four (4) feet from surface ground elevation and shall be maintained by the homeowners' association established

for the proposed development. The landscaping to be provided in this area shall be installed between the retaining wall and the property line so as to buffer the adjacent residential community. Landscaping in this area shall consist of evergreens (Leland cypress or species with similar growth habits and shape) a minimum of six (6) to eight (8) feet in height at time of planting.

- k. Subsequent to the vacation of the outlet road as described in Proffer 2.e. and installation of the trail as described in Proffer 2.h., Parcel B (if option A is selected) or Parcel A (if Option B is selected), as shown on the CDP/FDP, shall remain as tree save area and open space. Said parcel shall not be utilized for construction nor improved with recreation or other facilities.

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**4. PARKS AND RECREATION**

- a. Pursuant to Paragraph 2 of Section 6-110 and Paragraph 2 of Section 16-404 of the Zoning Ordinance regarding developed recreational facilities, the Applicant shall expend, at a minimum, the sum of Nine Hundred and Fifty-five Dollars (\$955.00) per approved lot on recreation facilities, including escrows. Any funds not expended on site shall be contributed to the Fairfax County Park Authority for the provision of recreational facilities located in proximity to the Application Property at the time of subdivision plan approval.
- b. In addition to the recreation and/or contribution provided in proffer 4.a., at the time of subdivision plan approval, the Applicant shall contribute Eight Hundred and Fifty Dollars (\$850.00) per approved lot to the Fairfax County Park Authority for recreational facilities located in the vicinity of the Application Property. The Applicant shall receive credit for the acquisition and construction costs associated with the off-site portion of the trails as described in proffers 2.h. and 2.k.

**5. STORMWATER MANAGEMENT**

- a. If option A is selected, in accordance with a determination of DPWES regarding drainage divides, the Applicant shall provide one stormwater management (SWM) extended dry pond and Best Management Practices (BMPs) on the Application Property in the general location shown on the CDP/FDP, and in accordance with the requirements of the PFM and the Chesapeake Bay Preservation Ordinance, unless modified by DPWES. At the Applicant's option, additional innovative SWM techniques may be installed, subject to the approval of DPWES. As shown on the CDP/FDP, the Applicant shall install a storm drainage pipe to collect runoff from the rear of Lots 1 through 3 to direct stormwater to the proposed extended dry pond located on Parcel D. Any area not utilized as a SWM pond pursuant to any granted modifications shall remain as open space owned by the homeowners' association established for the community. Any increases to the peripheral size of the SWM pond shown on the CDP/FDP may necessitate the need for approval of a proffered condition amendment.

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- b. If option B is selected, the Applicant shall provide a series of infiltration trenches and BMPs on the Application Property in the general locations shown on the CDP/FDP, and in accordance with the requirements of the PFM, the Chesapeake Bay Preservation Ordinance, and the Virginia Stormwater Management Handbook. All facilities shall be subject to the approval of DPWES. As shown on the CDP/FDP, the Applicant shall install a storm drainage pipe to collect runoff from the rear of Lots 1 through 3 to direct stormwater to the infiltration facilities.
  
- c. In accordance with State and local provisions, the Applicant shall not discharge surface drainage onto lower lying property (i.e., Middle Valley Subdivision) at a rate or volume greater than the pre-development rate or volume.
  
- d. In addition to the requirements of the PFM, the Applicant shall install a combination of swales and/or earthen berms to convey the overland drainage from the rear of proposed Lots 5 through 10 (if option A is selected) or within Parcel A (if option B is selected) to the internal storm sewer system generally within the limits of the proposed storm sewer easement, as depicted on the CDP/FDP. Any earthen berms shall be located either within a storm drainage easement to the benefit of the homeowners' association established for the proposed development, or, if required by DPWES, located within a storm drainage easement to the benefit of Fairfax County. In either circumstance, a covenant shall be recorded among the Fairfax County land records on those lots improved with a berm. Said covenant in a form as review and approved by the Fairfax County attorney shall preclude removal and/or regrading of the berm. These restrictions shall be disclosed in the homeowners' association documents.
  
- e. If option A is selected, in addition to the requirements of the PFM, the Applicant shall connect a series of roof drains/downspouts/underground pipes and tie these facilities into the proposed storm sewer system for proposed Lots 5 through 11 to minimize any drainage from the rear of the proposed roofs entering onto the downstream properties overland.
  
- f. If option A is selected, in order to restore a natural appearance to the proposed stormwater management pond, a landscape plan shall be submitted as part of the first submission of the subdivision plan. The plan shall show the restrictive planting easement for the pond, and landscaping in all areas outside of that restrictive planting easement, to the maximum extent feasible in accordance with the planting policies of Fairfax County.
  
- g. If option A is selected, at time of subdivision plan submission, the Applicant shall submit a dam breach analysis as required by Section 6-1603.4 of the PFM for all proposed SWM ponds as approved by DPWES. The President of the Middle Valley Civic Association, as on file with the Mount Vernon District Supervisor's office, shall be notified by certified mail of the submission of the dam breach analysis to DPWES.

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Said notification shall be provided within ten (10) days of the analysis submission and shall include the location where the analysis is available for review.

~~h. If option A is selected, subject to the approval of DPWES, the Applicant shall install fencing, landscaping, or a combination thereof, around the perimeter of the SWM pond as shown on the CDP/FDP to deter pedestrian access. Any fencing around the perimeter of the SWM pond shall be located outside of the Fairfax County maintenance easement, and shall not be constructed of chain link materials.~~

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~~i. If option A is selected, the wall(s) shown in proximity to the pond located on Parcel D and shown on the CDP/FDP shall not exceed a height of six (6) feet as measured from surface ground elevation to top of wall.~~

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~~j. If option A is selected, relative to the outfall for the pond located on Parcel D as shown on the CDP/FDP, and as approved by DPWES, the Applicant shall improve the existing drainage swale/channel located on properties identified as tax map 98-1 ((9)) Z and 18 in accordance with the detail shown on the CDP/FDP. Improvements shall be in compliance with PFM standards and may include weirs, stone, rip-rap and/or similar materials relative to outfall improvements, subject to DPWES approval. Access to construct these improvements shall be provided within existing recorded easements located on those properties identified as tax map 98-1 ((9)) 17 and 18 or as otherwise negotiated with those property owners. The Applicant shall coordinate with the property owners regarding the time and duration of construction and restoration of any disturbed areas, including the replacement of shrubs and fencing, and reseeding of any disturbed lawn areas, and shall implement those measures agreed to, subject to the approval of DPWES.~~

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~~k. If required by DPWES, the Applicant shall improve the outfall located on property identified as tax map 98-1 ((9)) Z, which is owned by the Fairfax County Park Authority, subject to the receipt of any necessary letter of permission. Improvements shall be consistent with the requirements of the PFM. Construction of improvements shall be subject to receipt of any necessary letter of permission from the Fairfax County Park Authority. The Applicant shall restore any disturbed areas, including the replacement of shrubs, and reseeding any disturbed lawn areas. Access to construct these improvements shall be provided from Vogels Way.~~

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~~l. Applicant shall remove debris from existing storm sewer inlets located within easements on properties identified as tax map 89-3 ((13)) 27 (Lot 27) and 89-3 ((14)) 40 (Lot 40) to restore their function consistent with that shown on the approved subdivision plan for the Middle Valley Subdivision. Applicant shall reconstruct storm sewer inlets and end walls, as approved by DPWES, on Lot 27 and Lot 40 only to the extent possible within existing recorded easements, and consistent with that shown on the approved subdivision plan for the Middle Valley Subdivision. The Applicant shall coordinate with the owners of Lot 27 and Lot 40 regarding the time and duration of construction and the reseeding of any disturbed lawn areas, and shall implement those~~

measures agreed to, subject to approval of DPWES. Restoration shall not include the replacement or installation of landscaping within easement areas.

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m. Subject to the receipt of any necessary letter of permission or temporary grading and construction easement from the owners of properties identified as tax map 89-3 ((13)) 27 (Lot 27) and/or 89-3 ((14)) 40 (Lot 40), at no cost, the Applicant shall grade Lot 27 and/or Lot 40 to improve overland relief, subject to the approval of DPWES. Applicant shall submit a written request by certified mail to the owners of Lot 27 and Lot 40 asking for permission to enter and grade the property. The letter shall include a requirement to receive a written affirmative or negative response within thirty (30) days. If no response is received within forty-five (45) days of the date of the certified mailing, this shall be deemed to be a negative response. Evidence shall be provided to DPWES at time of subdivision plan review of Applicant's attempts to receive permission from the owners of Lot 27 and Lot 40.

n. If option A is selected, and in coordination with DPWES at time of subdivision plan approval, the Applicant shall design the proposed extended dry SWM facility located on Parcel D on the CDP/FDP, beyond the minimum requirements of the PFM to control the one-year, twenty-four hour storm, as approved by DPWES in order to reduce storm drainage velocity which may contribute to downstream erosion.

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o. If option A is selected, and subject to the receipt of the necessary permission from the property owner, the Applicant shall construct an areaway at the rear of the existing dwelling located on property identified among the Fairfax County tax assessment records as 98-2 ((11)) 21 (Lot 21). The areaway shall be located and constructed in accordance with the applicable code requirements. The backyard of Lot 21 shall be graded to divert surface water away from the existing house, and the existing yard inlet on Lot 21 shall be converted to a manhole, if approved by DPWES. If necessary, the existing deck and heat pump shall be removed for grading then restored on the property. After grading is completed, an areaway shall be constructed with the top of the areaway a minimum of three (3) feet above the one hundred year water surface elevation as a safety factor as determined by the Applicant's engineer. The actual size, location and extent of the improvements shall be negotiated with the owner of Lot 21 and in accordance with building code requirements. Improvements, as negotiated with the owner of Lot 21, may include replacement of improvements, but shall not include a cash payment directly to the property owner. The Applicant shall submit a written proposal by certified mail to the owner of Lot 21, including detailed engineering drawings, at time of subdivision plan submission for the Application Property. The letter shall include a requirement for a written affirmative or negative response within thirty (30) days. A written response indicating a willingness to enter into a negotiation process shall be deemed an affirmative response. The Applicant and the owner of Lot 21 shall complete negotiation of actual improvements within ninety (90) days of the receipt of an affirmative response, unless additional time is mutually agreed to by the parties. Construction shall be completed prior to the commencement of any land disturbing activities on the Application Property. If an

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agreement cannot be reached, as evidenced to DPWES, the Applicant shall escrow the sum of Five Thousand Dollars (\$5,000.00) with Fairfax County for future construction by others. The escrow shall be released only upon the submission of a written request by the owner of Lot 21 and shall be used solely for the construction of drainage improvements and replacement of any trees lost due to grading on Lot 21. If a negative response is received to the certified mailing, or if no response is received within forty-five (45) days of the certified mailing, the Applicant shall submit the escrow described herein and evidence of mailings to DPWES.

p. If option A is selected, and subject to the approval of DPWES, the Applicant shall replace the existing storm sewer pipe between off-site structures 16 and 17 as identified on the CDP/FDP with a minimum thirty (30) inch concrete pipe utilizing the existing easement. The Applicant shall coordinate with the individual property owners to relocate the easement if desired to preserve existing vegetation, as determined appropriate by Urban Forest Management, subject to the approval of DPWES. The Applicant shall submit a written request by certified mail to the owner of each lot encumbered by the storm drainage easement requesting input on relocation of the easement at no cost. The letter shall include a requirement to receive a response within thirty (30) days. If no response is received within forty-five (45) days of the date of the certified mailing, this shall be deemed to be a negative response. There must be general consensus among the property owners to allow for the logical realignment of the easement to meet the requirements of DPWES. The Applicant shall prepare necessary plats and documents for recordation among the Fairfax County land records. Exclusive of engineering, legal and recordation fees, said easement relocation shall be at no cost to the Applicant.

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q. Any swales created by the Applicant on the property identified as tax map 98-2 ((11))W shall not be improved with stone and/or rip-rap. The Applicant shall coordinate with DPWES to determine if the swale should be located within a Fairfax County storm drainage easement, and record said easement, as necessary. If a storm drainage easement is not required, the Applicant shall request permission from the Fairfax County Park Authority for the homeowners' association established for the development to cut the grass and maintain the swale.

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r. If option B is selected, the Applicant shall establish a maintenance fund for the homeowners' association established for the residential development equal to the twenty (20) year maintenance cycle per Letter to Industry 01-11. Said maintenance fund shall be escrowed with DPWES at time of subdivision plan approval and shall include maintenance for both the bioretention facilities and the infiltration trenches. The amount of the escrow shall be reviewed and approved by DPWES.

s. If option B is selected, the Applicant shall install an interceptor trench along the southern property line. Said trench shall be designed to intercept groundwater prior to the flowing off-site. Said trench shall be subject to the review and approval of DPWES.

6. CONSTRUCTION SEQUENCE/EROSION AND SEDIMENTATION CONTROL

The Applicant shall phase construction of improvements on the Application Property in the following order:

- a. Construction of a triple-tiered super silt fence adjacent to the Middle Valley Subdivision, specifically along the southern boundary of the Application Property (at the rear of proposed Parcel C, and lots 5-9) and along the limits of that property identified as tax map 98-2 ((11)) W. (Parcel W) The distance between the fences shall be generally four (4) feet, except as determined by DPWES where necessary to permit utility installation.

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- b. ~~If option A is selected, construction of a permanent storm sewer outfall within Parcel W to the proposed public street. The facility shall be constructed and stabilized to act as a temporary sediment basin. If option B is selected, a temporary sediment basin shall be installed on the north side of the public street and shall connect to the storm sewer outfall.~~ Clearing and grading shall be the minimum necessary for construction.

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- c. Upon completion of the improvements identified in (a) and (b) above, a diversion dike shall be constructed and stabilized, which shall be generally located along the northern portion of the proposed public street, and a temporary sediment basin shall be generally located along the southern portion of the proposed public street. This shall allow the construction of the proposed public street, associated subsurface utilities, and the grading for proposed lots 7-11.

Deleted: excluding the storm sewer located at the rear of proposed lots 5-6 and 7, and the grading for proposed lots 1-4 and 12-20.

- d. Once grade has been established for the areas identified above, and stabilization has occurred, the remainder of the Application Property, specifically, proposed lots 5-9, may be cleared and graded subject to the following:

- i. The contractor and Fairfax County inspector verify that the triple-tiered super silt fence along the southern property boundary is in good condition and functioning properly. In the event that it requires repair, all repairs shall be completed prior to any grading in this area.
- ii. ~~If option A is selected, the retaining walls, if required based upon final engineering, shall be constructed and backfilled appropriately, and the clearing and grading in these areas shall be minimized to allow the construction of the retaining walls and adjacent storm sewer only. The retaining wall located behind proposed Lot 6 shall not exceed four (4) feet in height from surface ground elevation. Upon completion of the retaining wall or concurrent with its installation, the Applicant shall commence installation of the storm sewer located at the rear of proposed lots 5 and 6~~

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and the construction of the berm. The residue of the lots shall be cleared and the final grade established.

**7. HERITAGE RESOURCES**

The Applicant shall retain a professional archaeologist to monitor the initial clearing and removal of topsoil from the Application Property. The archaeologist shall ensure that the Virginia Antiquities Act concerning the treatment of human burials is followed, adequate information is gathered and recorded if a potential domestic site associated with the cemetery is encountered, and that all artifact data which may be uncovered during initial site clearing is recovered. If potentially significant archaeological resources are discovered, the Applicant shall conduct Phase II testing, and, if necessary, Phase III data recovery, and forward these studies to the cultural resources protection section of the Fairfax County Park Authority for review.

**8. AFFORDABLE HOUSING**

At the time of first building permit approval, a contribution shall be made to the Fairfax County Housing Trust Fund for one-half percent (0.5%) of the sales price of each new single-family dwelling actually constructed on the Application Property to assist Fairfax County's low and moderate income housing goals.

**9. SCHOOLS**

Applicant shall contribute the sum of Thirty-seven Thousand Five Hundred Dollars (\$37,500.00) to the Fairfax County Board of Supervisors for capital improvements to West Springfield High School, which is located in the vicinity of the Application Property. Said contribution shall be payable prior to subdivision plat approval for the Application Property.

**10. CEMETERY**

The Applicant, by covenants and restrictions within the homeowners' association documents, shall provide the following:

- i. A fenced memorial plot around the located grave sites;
- ii. A memorial marker identifying the burial area; and
- iii. Perpetual maintenance of the cemetery area.
- iv. A public access easement to the cemetery.

In addition, landscaping, that is consistent with the location, quality and quantity of landscaping shown on the CDP/FDP, shall be installed by the Applicant around the perimeter of the cemetery. Potential purchasers shall be notified of the existence of the cemetery and maintenance obligations prior to entering into a purchase contract. This information shall

also be disclosed in the homeowners' association documents prepared in conjunction with development of the Application Property.

**11. SITE MANAGEMENT**

- a. The President of the Middle Valley Civic Association, as on file with the Mount Vernon District Supervisor's office, shall be notified by certified mail of the submission of a subdivision plan. Said notification shall be provided within ten (10) days of subdivision plan submission and shall include the location where the plan is available for review.
- b. Construction activity shall be limited to the hours between 7:00 a.m. and 7:00 p.m., Monday through Friday; the hours between 8:00 a.m. and 7:00 p.m. on Saturday; and on Sunday, for interior work only, from 9:00 a.m. to 6:00 p.m. This proffer applies to the original construction only and not to future additions and renovations by homeowners.
- c. Following the completion of clearing and grading activities, all construction vehicles shall be parked within the Application Property. The area within the Application Property to be dedicated for public street purposes pursuant to these proffers may be used for such parking and for the construction entrance. For on-site construction, there shall be no construction vehicle parking on any off-site street.
- d. The Applicant shall inspect Ridge Creek Way and Vogels Way that are adjacent to the Application Property on a daily basis, as required by DPWES and VDOT, and shall remove all mud, rocks, nails and other construction debris created by the Applicant and shall wash those roads as required by VDOT and DPWES to remove dirt and debris.
- e. The Applicant shall install a construction vehicle wash rack at the construction access to the Application Property to clean construction vehicles of dirt and debris.
- f. The Applicant shall provide the name and telephone number of the construction site superintendent to the presidents of the Middle Valley Civic Association and Springfield Glen Homeowners' Association, as on file with the Mount Vernon District Supervisor's office, and the Mount Vernon District Supervisor for matters of concern which may arise during construction.

Deleted: the adjacent subdivision access street

**12. DESIGN**

- a. The Applicant shall design the residential dwellings on the Application Property in general conformance with the architectural elevations as shown on Sheet 5 of the CDP/FDP. Final design shall be selected by the Applicant upon the submission of architectural drawings for building permits. Front façade materials may include brick, cementitious or wood siding (not vinyl or aluminum) or stone. A minimum two-car

garage shall be provided for each residential dwelling. Garages may be front or side load.

- b. A minimum eighteen (18) foot long driveway, measured from the garage door to the nearest sidewalk base, shall be provided for each unit.
- c. There shall be a minimum side yard setback for each dwelling unit of seven (7) feet. Chimneys, stoops, bay windows, and similar features may encroach within the side yard setback, provided that no encroachments (other than fencing) shall be permitted within five (5) feet of any side yard lot line. Said restriction shall be included in the homeowners' association documents prepared in conjunction with the proposed development.
- d. There shall be a minimum rear yard setback of twenty-five (25) feet for all proposed lots. Features such as decks and patios shall be permitted in any rear yard, but no closer than five (5) feet to the rear yard lot line. Said restriction shall be included in the homeowners' association documents prepared in conjunction with the proposed development.
- e. All new homes constructed on the Application Property shall meet the thermal standards of the Council of American Building Officials ("CABO") Model Energy Program for energy efficient homes or its equivalent for electric or gas energy systems, as determined by DPWES.
- f. A covenant shall be recorded which provides a garage shall only be used for a purpose that will not interfere with the intended purpose of the garages, e.g., parking of vehicles. This covenant 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 in Fairfax County. Initial purchasers shall be advised of the use restriction prior to entering into contract of sale. Said use restriction shall be included in the homeowners' association documents prepared in conjunction with the proposed development.
- g. All lighting shall comply with Zoning Ordinance Article 14, Part 900, Outdoor Lighting Standards.

### 13. HOMEOWNERS' ASSOCIATION

The Applicant shall establish a homeowners' association for the proposed development, to own, manage, and maintain the open space areas, including the tree save areas, cemetery, retaining walls, and all other community owned land and improvements. If option A is selected, a specific budget line item shall be established for the maintenance of the retaining wall located on proposed Lot 6, and shown on the CDP/FDP. If option B is selected, a specific budget line item shall be established for the maintenance of the bioretention facilities and infiltration trenches as shown on the CDP/FDP, which shall be escrowed with DPWES as described herein. Restrictions placed on the use of the open space/buffer areas, minimum

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setbacks, and the maintenance responsibilities of the homeowners' association, shall be disclosed to all prospective homeowners in a disclosure memorandum prior to entering into a contract of sale and included in the homeowners' association documents. The homeowners' association documents shall allow for the future inclusion of that property identified as tax map 89-4 ((1)) 55 and disclose that this property may redevelop with more than one house.

**14. SIGNAGE**

- a. No temporary signs (including "popsicle" style, paper or cardboard signs), which are prohibited by Article 12 of the Zoning Ordinance, and no signs, which are prohibited by Chapter 7 of Title 33.1, or Chapter 8 of Title 46.2 of the Code of Virginia, shall be placed on or off-site to assist the initial sale of homes on the Application Property. Furthermore, the agents and employees involved in the marketing and sale of the residential units on the Application Property shall be directed to adhere to this proffer.
- b. All entry features installed on the Application Property shall be in accordance with the requirements of Article 12 of the Zoning Ordinance.

**15. SUCCESSORS AND ASSIGNS**

These proffers will bind and inure to the benefit of the Applicant and his/her successors and assigns.

**16. COUNTERPARTS**

These proffers may be executed in one or more counterparts, each of one when so executed and delivered shall be deemed an original document and all of which when taken together shall constitute one and the same instrument.

**17. MISCELLANEOUS**

The Applicant shall be permitted to process separate public improvement plans with DPWES for any of the improvements described herein that require cooperation from off-site property owners. The submission of said plans, and their evaluation by DPWES, shall not delay the processing and approval of the Applicant's subdivision plan.

***[SIGNATURES BEGIN ON THE FOLLOWING PAGE]***

APPLICANT/CONTRACT PURCHASER  
Tax Map 89-4 ((1)) 56, 57A and 69

BROOKFIELD RIDGE ROAD, LLC

By Brookfield Washington, LLC, Its Sole Managing  
Member

---

By: Richard J. Dengler  
Its: Vice President & COO, Land Development

***[SIGNATURES CONTINUED ON NEXT PAGE]***

TITLE OWNER  
Tax Map 89-4 ((1)) 69

BROOKFIELD WASHINGTON, LLC.

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By: Richard J. Dengler  
Its: Vice President

***[SIGNATURES CONTINUED ON NEXT PAGE]***

TITLE OWNERS:  
TAX MAP 89-4 ((1)) 56 and 57A

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JAMES G. RENFRO, TRUSTEE

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RACHEL E.C. RENFRO, TRUSTEE

*[SIGNATURES END]*

**PROPOSED FINAL DEVELOPMENT PLAN CONDITIONS**

FDP 2005-MV-001

March 9, 2006

If it is the intent of the Planning Commission to approve FDP 2005-MV-001 for a single family detached development at Tax Map 89-4 ((1)) 56, 57A and 69, staff recommends that the Planning Commission condition the approval by requiring conformance with the following development conditions.

1. Development of the property shall be in substantial conformance, as defined by Section 16-403 of the Zoning Ordinance, with the Final Development Plan entitled "Renfro Property", prepared by Land Design Consultants, dated June, 2004, as revised through January 26, 2006.
2. The proposed infiltration trenches shall be sized to provide control of stormwater in excess of the 100 year storm in response to the downstream drainage issues, as determined by DPWES.

The proposed conditions are staff recommendations and do not reflect the position of the Planning Commission unless and until adopted by that Commission.

**REZONING AFFIDAVIT**

DATE: February 10, 2006  
 (enter date affidavit is notarized)

I, Lynne J. Strobel, attorney/agent, do hereby state that I am an  
 (enter name of applicant or authorized agent)

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

864898

in Application No.(s): RZ/FDP 2005-MV-001  
 (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.)

NAME (enter first name, middle initial, and last name)	ADDRESS (enter number, street, city, state, and zip code)	RELATIONSHIP(S) (enter applicable relationships listed in <b>BOLD</b> above)
Brookfield Ridge Road, LLC  Agents: Sara V. Kroll Antonio R. Cutrufello Richard J. Dengler	8500 Executive Park Avenue, Suite 300 Fairfax, Virginia 22031	Applicant/Contract Purchaser of Tax Map 89-4 ((1)) 56, 57A, and 69
Brookfield Washington, LLC  Agents: Sara V. Kroll Antonio R. Cutrufello Richard J. Dengler	8500 Executive Park Avenue, Suite 300 Fairfax, Virginia 22031	Title Owner of Tax Map 89-4 ((1)) 69 (cemetery) (Settlement may take place prior to 4/3/06)

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

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

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

DATE: February 10, 2006  
 (enter date affidavit is notarized)

86489x

for Application No. (s): RZ/FDP 2005-MV-001  
 (enter County-assigned application number (s))

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

NAME (enter first name, middle initial, and last name)	ADDRESS (enter number, street, city, state, and zip code)	RELATIONSHIP(S) (enter applicable relationships listed in <b>BOLD</b> above)
-James G. Renfro, Trustee of the James Gordon Renfro Revocable Trust u/t/a dated May 18, 1998 for the benefit of Rachel E.C. Renfro -Rachel E. C. Renfro, Trustee of the Rachel Elizabeth Cantrell Renfro Revocable Trust u/t/a dated May 18, 1998 for the benefit of James G. Renfro	8615 Kerry Lane Springfield, Virginia 22152	Title Owners of Tax Map 89-4 ((1)) 56 and 57A (Settlement may take place prior to 4/3/06)
Land Design Consultants, Inc.	8569-E Sudley Road Manassas, Virginia 20110	Engineers/Agent
Agents: John L. Marshall Matthew T. Marshall Kelly M. Atkinson Shane D. Reveille Patrick A. Gough, Jr. (former)		
Walsh, Colucci, Lubeley, Emrich & Terpak, P.C.	2200 Clarendon Boulevard, 13th Floor Arlington, Virginia 22201	Attorneys/Planners/Agents
Agents: Martin D. Walsh Timothy S. Sampson Lynne J. Strobel M. Catharine Puskar Elizabeth D. Baker Inda E. Stagg Kara M. Whisler Susan K. Yantis James P. Downey Jerry K. Emrich Jason B. Heinberg Jane W. Gwinn Tara E. Wiedeman Megan C. Shilling Susan S. Blakely (former) Abby C. Denham Elizabeth A. McKeeby		

(check if applicable)

There are more relationships to be listed and Par. 1(a) is continued further on a "Rezoning Attachment to Par. 1(a)" form.

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

DATE: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

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

<b>NAME</b> (enter first name, middle initial, and last name)	<b>ADDRESS</b> (enter number, street, city, state, and zip code)	<b>RELATIONSHIP(S)</b> (enter applicable relationships listed in <b>BOLD</b> above)
The Land Planning and Design Group, Inc.  Agent: James L. Baish	5300 Westview Drive, #103 Frederick, Maryland 21703	<b>Landscape Architect/Agent</b>
Geo-Technology Associates, Inc.  Agent: Amin Rahman (nmi)	45064 Underwood Lane, Suite A Sterling, Virginia 20166	<b>Soils Consultant/Agent</b>
Engineering & Materials Technologies, Inc.  Agents: Shahzad S. Moosa Alex Adu-Osei (nmi)	10428 Business Center Court Manassas, Virginia 20110	<b>Soils Consultant/Agent</b>

(check if applicable)

[ ]

There are more relationships to be listed and Par. 1(a) is continued further on a "Rezoning Attachment to Par. 1(a)" form.

REZONING AFFIDAVIT

DATE: February 10, 2006
(enter date affidavit is notarized)

86489x

for Application No. (s): RZ/FDP 2005-MV-001
(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)

Brookfield Washington, Inc.
8500 Executive Park Avenue, Suite 300
Fairfax, Virginia 22031

DESCRIPTION OF CORPORATION: (check one statement)

- [x] 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)

Brookfield Homes, Inc., Sole Shareholder

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

Directors: Robert C. Hubbell, Ian G. Cockwell, Peter Nesbitt (nmi)
Officers: Robert C. Hubbell, President; Richard J. Dengler, VP-COO-Land Dev.; James T. Devine, VP, COO-Housing; Janet Howell (nmi), VP, Sales & Marketing; Kimberly S. Mackmin, VP, Finance; Michael Zenner (nmi), Asst. Secretary

(check if applicable) [x] 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: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Brookfield Ridge Road LLC  
8500 Executive Park Avenue, Suite 300  
Fairfax, Virginia 22031

**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)  
Brookfield Washington, LLC, Sole Managing Member

=====

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

=====

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Brookfield Washington, LLC  
8500 Executive Park Avenue, Suite 330  
Fairfax, Virginia 22031

**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)  
Robert C. Hubbell, Managing Member  
Brookfield Home Holdings, Inc., Member  
Brookfield Washington, Inc., Former Managing Member  
Brookfield Homes Rabbi Trust for the benefit of Robert C. Hubbell, Former Member

=====

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

Board of Managers: Robert C. Hubbell, Ian G. Cockwell, Paul G. Kerrigan  
Robert C. Hubbell, President; Richard J. Dengler, VP and COO, Land Development; Janet L. Howell, VP, Sales & Marketing; Kimberly S. Mackmin, VP, Finance & Secretary/Treasurer; John F. McDonough, III, President, Custom Homes Group; Dorothy E. Harper, VP, Active Adult Community Development; James T. Devine, VP & COO, Housing

(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 Attachment to Par. 1(b)**

DATE: February 10, 2006  
(enter date affidavit is notarized)

86489x

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

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

Brookfield Homes, Inc.  
BCE Place, 181 Ray Street, Suite 4200, P.O. Box 763  
Toronto, Ontario M5J 2T3

**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)

Brookfield Homes, Ltd.

=====

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

Officers: Ian G. Cockwell, Chairman, Director; William J. Pringle, President, Director; Peter Nesbitt (nmi), Pres, Eastern Reg.; Paul G. Kerrigan, CFO; David B. Adler, SVP; Robert C. Hubbel, SVP; L. Ross Cullingworth, SVP; Albert Piazza (nmi), SVP; Richard T. Whitney, SVP; John M. Stewart, SVP; Keith Hyde (nmi), VP & Asst Sec; Michael Zenner (nmi), Secretary; J. Bruce Flatt, Director.

=====

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

Brookfield Homes, Ltd.  
BCE Place, 181 Ray Street, Suite 4200, P.O. Box 763  
Toronto, Ontario M5J 2T3

**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)

Brookfield Properties Corporation

=====

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

Directors: Ian G. Cockwell, L. Ross Cullingworth, Peter Nesbitt (nmi), J. Bruce Flatt, William J. Pringle  
Officers: Ian G. Cockwell, Chairman; William J. Pringle, President; Peter Nesbitt (nmi), Pres, Eastern Reg.; William J. Pringle, CEO; Paul Kerrigan (nmi), CFO, VP; Keith Hyde (nmi) VP; Michael Zenner (nmi), Secretary

(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 Attachment to Par. 1(b)**

DATE: February 10, 2006  
(enter date affidavit is notarized)

86489f

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

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

Brookfield Properties Corporation  
BCE Place, 181 Ray Street, Suite 4200, P.O. Box 763  
Toronto, Ontario M5J 2T3

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

- There are 10 or less shareholders, and all of the shareholders are listed below.
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**NAMES OF THE SHAREHOLDER:** (enter first name, middle initial, and last name)

=====

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

Officers: Gordon E. Arnell, Chairman; Ian G. Cockwell, Dep. Chairman; John E. Zuccotti, Dep. Chairman; J. Bruce Flatt, President, CFO; Steven J. Douglas, CFO, SVP; Michael Zenner, Secretary; John D. Kennedy, VP, Finance-Comm.; Paul G. Kerrigan, VP, Finance-Home Bldg.; Michael K. Amos, VP, Human Resources; Keith Hyde (nmi), VP; Robert A. Ross, VP-Corp. Relations; Gordon E. Widdes, VP-Info.

=====

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

Land Design Consultants, Inc.  
8569-E Sudley Road  
Manassas, Virginia 20110

**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)

John L. Marshall  
Matthew T. Marshall

=====

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

(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 Attachment to Par. 1(b)**

DATE: February 10, 2006  
(enter date affidavit is notarized)

86489x

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

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

Walsh, Colucci, Lubeley, Emrich & Terpak, PC  
2200 Clarendon Boulevard, 13th Floor  
Arlington, Virginia 22201

**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)

Susan S. Blakely (former), David J. Bomgardner, Thomas J. Colucci, James P. Downey, Jay du Von, Jerry K. Emrich, William A. Fogarty, John H. Foote, H. Mark Goetzman, Bryan H. Guidash, Michael D. Lubeley, J. Randall Minchew, M. Catharine Puskar, John E. Rinaldi, Lynne J. Strobel, Nan E. Terpak, Garth M. Wainman, Martin D. Walsh

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

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

Brookfield Home Holdings, Inc.  
BCE Place, 181 Ray Street, Suite 4200, P.O. Box 763  
Toronto, Ontario M5J 2T3

**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)

Brookfield Homes Corporation

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

Directors: Ian G. Cockwell, Bruce Flatt (nmi), Richard T. Whitney  
Ian G. Cockwell, President; Paul G. Kerrigan, CFO; Richard T. Whitney, VP; Casey Schnor, VP; Shane Pearson, Asst. Secretary

(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 Attachment to Par. 1(b)**

DATE: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Brookfield Homes Corporation  
BCE Place, 181 Ray Street, Suite 4200, P.O. Box 763  
Toronto, Ontario M5J 2T3

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

- There are 10 or less shareholders, and all of the shareholders are listed below.
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- 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)  
Traded on NYSE

=====

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

=====

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
The Land Planning and Design Group, Inc.  
5300 Westview Drive, #103  
Frederick, Maryland 21703

**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)  
James L. Baish

=====

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

(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 Attachment to Par. 1(b)**

DATE: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Geo-Technology Associates, Inc.  
45064 Underwood Lane, Suite A  
Sterling, Virginia 20166

**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)

Mark Grande (nmi)                      David A. Quaranta  
J. Patrick Klima  
Craig T. Rodana  
Amin Rahman (nmi)

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

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Engineering & Materials Technologies, Inc.  
10428 Business Center Court  
Manassas, Virginia 20110

**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)

Shahzad S. Moosa

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

(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: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(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)  
None

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

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

(check if applicable)  There is more partnership information and Par. 1(c) is continued on a "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: February 10, 2006  
(enter date affidavit is notarized)

864898

for Application No. (s): RZ/FDP 2005-MV-001  
(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: February 10, 2006  
(enter date affidavit is notarized)

864 898

for Application No. (s): RZ/FDP 2005-MV-001  
(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.)

Land Design Consultants, Inc. and Supervisor Elaine McConnell have a business relationship; however, the business relationship is not related to any party to this application.  
John L. Marshall of Land Design Consultants, Inc. donated in excess of \$100 to Supervisor Elaine McConnell.

(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 Lynne J. Strobel [x] Applicant's Authorized Agent

Lynne J. Strobel, attorney/agent  
(type or print first name, middle initial, last name, and title of signee)

Subscribed and sworn to before me this 10 day of February 2006, in the State/Comm. of Virginia, County/City of Arlington.

Kenneth K. Feller  
Notary Public

My commission expires: 11/30/2007



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** February 28, 2006

**TO:** Kris Abrahamson, Branch Chief  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:**  Jeremiah Stonefield, Chief Stormwater Engineer  
Site Review East, Environmental and Site Review Division  
Department of Public Works and Environmental Services

**SUBJECT:** Rezoning Application, RZ 2005-MV-001, Renfro Property, Conceptual Development Plan/ Final Development Plan (CDP/FDP) - Renfro Property, dated January 23, 2006, draft Proffers dated January 26, 2006 (Proffers), and Subsurface Exploration Report, prepared by Engineering & Materials Technologies, dated February 17, 2006, Tax Map #089-4-01-0056, 0057A, and 0069 (Property), Mount Vernon District

We have reviewed the subject CDP/FDP, Proffers and Subsurface Exploration Report, and offer the following comments:

### Chesapeake Bay Preservation Ordinance

There are no mapped Resource Protection Areas on the property. The applicant has proposed to meet water quality control requirements with the installation of an extended detention dry pond.

### Downstream Drainage Complaints

There are several drainage complaints on file downstream of the Property. In addition, there have been several requests from adjacent, downhill property owners asking that the applicant provide on-site swales, berms, inlets and storm sewers to redirect the stormwater runoff away from the existing drainage path and into the proposed system to help resolve existing drainage problems. The applicant has proffered on and off-site storm drainage systems, swales, berms, and an oversized detention pond, to address the existing deficiencies.

### Stormwater Management

#### Option A:

The existing storm sewer outfall of the property is inadequate according to current Public Facilities Manual (PFM) standards and the proposed plan proposes off-site improvements to

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



provide an improved outfall. The access for the construction is shown within the existing storm drainage easement located between Parcels 098-1-09-0017 and 098-1-09-0018 on Vogels Way. The off-site improvements on Parcel 098-1-09-0000-Z will require additional storm drainage easements to be obtained and recorded prior to construction plan approval by DPWES. The applicant has proffered to coordinate closely with the owners of the properties regarding the time and duration of the construction and restoration of the access.

There has been a concern raised by the downhill property owner with respect to the adequacy of the necessary flow paths to meet dam breach analysis requirements of the PFM. The applicant has indicated that the proposed development will adequately meet PFM requirements and sufficient analysis will be provided on the subdivision plan. The applicant has proffered that he will submit a dam breach analysis as required by PFM 6-1603.4.

The applicant will be required per PFM 6-0201.3 to convey with the subdivision Record Plat storm drainage easements over the existing natural drainage way to provide for the adequate conveyance of surface waters, from the existing storm sewer located between Tax Map Parcels 089-3-14-0031 and 0032 (lots 31 and 32 of Middle Valley Section 8), as well to the natural water course on Parcel 089-4-01-0057, to the existing system located on Tax Map Parcels 089-3-13-0027 and 089-3-14-0040. The applicant has shown proposed easements in the location.

#### Option B:

The applicant, as an optional stormwater management plan, proposed the use of bioretention filters and infiltration trenches on site to meet stormwater quality and quantity control requirements in lieu of the extended detention dry pond.

The applicant indicates that infiltration trenches are sized to provide control of storm water runoff in excess of the 100-year storm volume in response to the downstream drainage issues. The applicant should provide proffer commitments to the additional amount of control that is proposed.

The applicant indicates that the proposed bioretention filters (a.k.a. raingardens) are designed to provide quantity control for up to the 10-year storm. Innovative facilities not included in the PFM at this time are approvable by the Director in accordance with PFM 6-0402.4.

The applicant has indicated that the infiltration trenches and bioretention filters will be privately maintained. A maintenance agreement will be required to be executed with the County prior to subdivision plan approval. The applicant has indicated that they will provide an escrow for the estimated maintenance costs of the facilities. The escrow for the maintenance of the raingardens is a minimum requirement. The escrow for the maintenance of the infiltration trenches is above and beyond minimum requirements, and the applicant should provide a commitment in the proffers for the additional escrow amount.

#### Floodplain Regulations

There are no regulated floodplains on the Property.

Additional Comments

In Proffer 5.j, the applicant commits to coordinating with the specified property owners and implementing drainage swale/channel improvement. Any measures to be installed within a County storm drain easement must be approved by the County. The proffer must include "subject to approval of DPWES" in the last sentence.

In Proffer 5.k, the applicant commits to improvements to the outfall located on Parcel 098-1-09-0000-Z owned by the FCPA if required by DPWES and based on a determination of adequate outfall, and the improvements are to be consistent with the requirements of the PFM and Letter to Industry 03-10. The adequate outfall provisions in the PFM have been amended, and LTI 03-10 is no longer applicable. The existing outfall is in need of repair and the applicant should continue to provide a proffer commitment to repair the outfall regardless of the minimum adequate outfall requirements. The proffer should clearly specify the extent of the proposed improvements that are above and beyond the minimum requirements.

In Proffer 5.l, the applicant has proffered, at the request of DPWES, to repair and restore the existing storm sewer system as shown on the approved original Middle Valley Section 4 subdivision plan with respect to throat openings in the yard inlet of Structure 9 and the reconstruction of the endwall of Structure 8 located on Parcels 089-3-13-0027 and 089-3-14-0040, respectively. DPWES can not require these improvements without a proffer commitment. The applicant indicates that landscaping will not include the easement areas that is consistent the limitation that trees are not allowed to be planted inside, or within 5 feet of, any storm drainage easement that contains pipes (PFM 12-0701.11B). In addition, the applicant commits to coordinating with the specified property owners and implementing improvements. Any measures to be installed within a County storm drain easement must be approved by the County. The proffer must include "subject to approval of DPWES" in the second to last sentence.

In Proffer 5.m, the applicant has proffered, at the request of DPWES, to offer to the respective owners of Parcels 27 and/or 40 to regrade the area(s) outside the existing storm sewer easements in the rear and/or side yards in order to provide overland relief, subject to approval of the owner(s). Since these existing deficiencies are not caused by the applicant, DPWES can not require these improvements without a proffer commitment. DPWES recommends the acceptance of this Proffer.

In Proffer 5.n, the applicant commits to providing control of the 1-year, 24-hour storm, as approved by DPWES. DPWES recommends the acceptance of this Proffer.

In Proffer 5.o, the applicant commits, among other things, to construct an areaway with the top a minimum of 3 feet above the 100-year flood elevation subject to necessary permission obtained from the owner prior. The location and extent of the grading and fill associated with the construction of the areaway shall be negotiated. DPWES recommends the acceptance of this Proffer.

In Proffer 5.p, the applicant commits to replace the existing storm sewer with 30" pipe within the existing easements, or relocate the pipes if sufficient new easements are provided, subject to the approval of DPWES. DPWES recommends the acceptance of this Proffer.

In Proffer 5.q, the applicant provides a commitment that any proposed swale on Parcel 098-2-11-0000-W shall not be improved with stone or rip-rap, and shall coordinate with DPWES to

determine if any swale should be located within a County storm drainage easement, and to record an easement, if necessary.

In Proffer 5.r, the applicant commits to establishing a maintenance fund for the HOA association equal to the 20-year maintenance cycle per Letter to Industry 01-11. LTI 01-11 only addresses the bioretention filters and would not include the infiltration trenches. The C/FDP indicates the maintenance escrow would include the maintenance costs of the trenches. The proffer should be revised to specifically include the infiltration trenches. DPWES can not require the additional escrow amount without a proffer commitment.

Proffer 6.a commits the applicant to provide a triple-tiered super-silt fence adjacent to Middle Valley, with the distance between rows of fences shall be generally 4 feet, except as determined by DPWES. DPWES recommends the acceptance of this Proffer.

Proffer 6.c commits the applicant to providing a diversion dike along the north side of the proposed road to direct stormwater into the stormwater management facility during construction of the road and additional temporary sediment basin located on the southern side of the proposed road. DPWES recommends the acceptance of this Proffer.

#### Geotechnical Review

The subject Subsurface Exploration Report was reviewed. Specifically, the review focused on the potential impact of the incorporation of stormwater infiltration trenches on the adjoining properties. Three infiltration trenches are identified on the plans prepared by Land Consultants dated June, 2005 (sheet 8).

The geotechnical engineers have made very conservative assumptions that actually show increase in flow of groundwater towards the houses downhill. They have assumed a fully saturated condition of the ground; a condition that is unlikely in nature given the permeability of the soil types. They have also assumed a shallow elevation for the ground water table and the bedrock both of which would favor more water flowing downhill. However, they have not addressed the following:

1. The impact of infiltration trench #3 located on Parcel A on the adjoining properties. The adjoining houses are much closer than the sections that were analyzed.
2. The actual determination of the permeability of the soils or the infiltration rates.
3. The location depth, size, outfall and details of the recommended interceptor drains. These interceptor drains if installed would cut off any groundwater flow towards the downhill properties.

If you have any questions, or need further assistance, please contact me at 703-324-1720.

cc: Steve Aitcheson, Director, Stormwater Planning Division, DPWES  
Wale Ayodeji, Chief Geotechnical Engineer, Site Review East, ESRD, DPWES  
Valerie Tucker, Chief Stormwater Engineer, Site Review East, ESRD, DPWES  
Zoning Application File (14623-ZONA-001)



## County of Fairfax, Virginia

**MEMORANDUM**

DATE: February 3, 2006

**TO:** Barbara A. Byron, Director  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Angela Kadar Rodeheaver, Chief  
Site Analysis Section  
Department of Transportation *AKR*

**FILE:** 3-4 (RZ 2005-MV-001)

**SUBJECT:** Transportation Impact, Addendum

**REFERENCE:** RZ 2005-MV-001, Brookfield Ridge Road  
Traffic Zone: 1581  
Land Identification: 89-4 ((1)) 56, 57A, 69

Transmitted herewith are further comments from the Department of Transportation with respect to the referenced application. These comments are based on plats made available to this office dated June 2004, and revised through January 23, 2006.

The applicant should demonstrate that sight distance at the public street entrance is adequate and clarify why there is a proposed turnaround on Lot 14. All other transportation issues have been resolved.

AKR/LAH/lah

cc: Michelle Brickner, Director, Office of Site Development Services, Department of Public Works and Environmental Services