NOTES:

1. THE PROPERTY DELINEATED ON THIS PLAT IS LOCATED ON FAIRFAX COUNTY ASSESSMENT MAP No. 28-4 ((1)) 29 AND IS CURRENTLY ZONED R-1. THE PROPOSED ZONE IS R-3.

2. THE PROPERTY SHOWN HEREON IS CURRENTLY IN THE NAME OF THE FOLLOWING : HASTINGS ESTATES, L.C. BY DEED RECORDED IN DEED BOOK 21044 AT PAGE 1474 AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA.

3. DEVELOPER/CONTRACT PURCHASER:
SEKAS HOMES, LTD.
C/O JOHN P. SEKAS, PRESIDENT
407-L CHURCH STREET, NE
VIENNA, VA 22180
(703) 242-2300

4. BOUNDARY INFORMATION IS BASED UPON A FIELD RUN SURVEY BY LAND DESIGN CONSULTANTS, INC. FEBRUARY, 2010.

5. THE TOPOGRAPHIC INFORMATION IS BASED UPON A FIELD RUN SURVEY BY LAND DESIGN CONSULTANTS FEBRUARY, 2010. THE VERTICAL DATUM IS BASED ON NGVD 1929. THE CONTOUR INTERVAL IS TWO (2) FEET.

6. TITLE REPORT FURNISHED BY STEWART TITLE GUARANTY COMPANY, FILE NO. 10V-0076, EFFECTIVE DATE JANUARY, 2010.

7. THE PLAT OF THE PROPERTY SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 AS COMPUTED FROM A FIELD SURVEY WHICH TIES THIS BOUNDARY TO THE FAIRFAX COUNTY GEOGRAPHIC INFORMATION SYSTEM MONUMENT GPS 188. THE COMBINED GRID AND ELEVATION FACTOR IS 0.99994823.

8. ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS REQUESTED HEREON. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE MODIFICATIONS OF PFM DESIGN CRITERIA AT THE TIME OF SUBDIVISION / PLAT PREPARATION / SUBMISSION PROVIDED THE MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THE GDP.

9. EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION AS PER REQUIREMENTS OF THE STATE OF VIRGINIA AND THE CODE OF FAIRFAX COUNTY.

10. LAND DESIGN CONSULTANTS, INC. IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A WIDTH OF 25 FEET OR MORE.

11. ALL UTILITIES INSTALLED AS PART OF THIS PROJECT SHALL BE PLACED UNDERGROUND. THE UTILITY LOCATIONS SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING. LIMITS OF CLEARING AND GRADING SHALL BE IN GENERAL CONFORMANCE WITH THOSE SHOWN HEREON.

12. AIR QUALITY PERMITS SHALL BE OBTAINED IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.

13. THE SITE WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER. SANITARY SEWER SERVICE SHALL BE PROVIDED BY INDIVIDUAL LATERAL CONNECTIONS.

14. A RESOURCE PROTECTION AREA (RPA), AS DEFINED BY THE FAIRFAX COUNTY ZONING ORDINANCE, DOES NOT EXIST ON THE SUBJECT PROPERTY PER THE FAIRFAX COUNTY RPA MAPS. A RESOURCE MANAGEMENT AREA (RMA), AS DEFINED BY FAIRFAX COUNTY, DOES EXIST ON THE SUBJECT PROPERTY.

15. THE PROPERTY SHOWN HEREON LIES WITHIN A ZONE "X", AN AREA DETERMINED TO BE OUTSIDE A 500 YEAR FLOODPLAIN, AS DELINEATED ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 515525 0050 D, DATED MARCH 5, 1990.

16. THE COMPREHENSIVE PLAN RECOMMENDS DEVELOPMENT OF THE PROPERTY AS RESIDENTIAL AT A DENSITY OF 2 TO 3 DWELLING UNITS PER ACRE. THE PROPOSED DENSITY OF 2.6 DU/AC MEETS THE INTENT OF THE COMPREHENSIVE PLAN. THE SITE DESIGN, DENSITY, ADJOINING USES AND PROPOSED PLANTINGS WILL ENHANCE THIS PROPERTY AND WILL MEET THE APPLICABLE CRITERIA FOR STAFF REVIEW.

17. IN ACCORDANCE WITH THE FAIRFAX COUNTY TRAILS PLAN, A 8' MAJOR PAVED TRAIL AND IN ACCORDANCE WITH THE PFM, A 5' SIDEWALK IS REQUIRED ALONG THE SITE'S OLD COURTHOUSE ROAD FRONTAGE. THE APPLICANT IS PROPOSING A 10' SHARED USE PATH IN ACCORDANCE WITH VDOT REQUIREMENTS. SEE SHEET 2. THE APPLICANT WILL SUBMIT A WAIVER OF THE SIDEWALK REQUIREMENT ALONG OLD COURTHOUSE ROAD IN LIGHT OF THE PROPOSED TRAIL.

18. LDC IS NOT AWARE OF ANY BURIAL SITES LOCATED ON THE SUBJECT PROPERTY.

19. OLD COURTHOUSE ROAD IS NOT SHOWN ON THE VDOT 6 YEAR PLAN TO BE WIDENED OR IMPROVED. OLD COURTHOUSE ROAD IS NOT SHOWN ON THE COUNTY'S COMPREHENSIVE PLAN AND COUNTYWIDE TRANSPORTATION MAP TO BE WIDENED. HOWEVER THE APPLICANT IS PROPOSING ADDITIONAL DEDICATION FROM THE EXISTING CENTERLINE ALONG THE SUBJECT PROPERTY'S OLD COURTHOUSE ROAD FRONTAGE. PLEASE SEE SHEET 2.

20. AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES NOT EXIST ON THE SUBJECT PROPERTY. THE COMPONENTS OF A MAXIMUM DENSITY REDUCTION DO NOT EXIST ON SITE.

21. LDC DOES NOT BELIEVE ANY HAZARDOUS OR TOXIC SUBSTANCES HAVE BEEN GENERATED, UTILIZED, STORED, TREATED, AND / OR DISPOSED OF OR HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.

22. DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF OWNER / DEVELOPER.

23. A GEOTECHNICAL REPORT SHALL BE SUBMITTED FOR REVIEW BY FAIRFAX COUNTY CONCURRENTLY WITH THE FINAL SUBDIVISION PLAN, IF REQUIRED.

24. THE SUBJECT PROPERTY WILL MEET SWM/BMP REQUIREMENTS THROUGH THE PROVISION OF ONE INFILTRATION TRENCH TO BE MAINTAINED BY THE HOMEOWNER'S ASSOCIATION AS DETERMINED BY DPWES. A MAINTENANCE AGREEMENT WILL BE RECORDED IN THE LAND RECORDS OUTLINING MAINTENANCE RESPONSIBILITIES.

25. ALL DIMENSIONS ARE APPROXIMATE AND TYPICAL HOUSE FOOTPRINTS SHOWN ON THESE LOTS MAY BE MODIFIED PROVIDED THAT MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THE GDP, AND THE MINIMUM YARDS ARE PROVIDED.

26. THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY FOCUS OF CREATING A DEVELOPMENT THAT IS SIMILAR TO ADJACENT DEVELOPMENTS. ADDITIONAL PLANTING AROUND THE PERIMETER OF THE PROPERTY WILL BE PROVIDED. THE APPLICANT WILL ENSURE THAT THE POST DEVELOPMENT RUNOFF IS LESS THAN THE PRE DEVELOPMENT RUNOFF.

27. ADDITIONAL TREE PLANTINGS, AS SHOWN ON THE GDP, WILL PROVIDE ADEQUATE MEASURES OF SCREENING.

28. OWNERSHIP AND MAINTENANCE OF OUTLOT 'A' AS DEPICTED ON THE GDP, WITHIN THE SUBDIVISION SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS ASSOCIATION.

29. MINOR 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.

30. ALL EXISTING STRUCTURES CONSTRUCTED IN 1925 AND REMODELED IN 1965 AND WILL BE REMOVED.

31. A WAIVER OF THE SUBDIVISION STREET ACCEPTANCE REQUIREMENTS (SSAR) AND ACCESS MANAGEMENT REQUIREMENTS HAVE BEEN SUBMITTED CONCURRENTLY WITH THIS REQUEST. ADDITIONAL RIGHT-OF-WAY DEDICATION IS SHOWN ADJACENT TO PALM SPRINGS DRIVE TO FACILITATE A FUTURE CUL-DE-SAC FOR PALM SPRINGS DRIVE. THIS IS A REQUEST FROM VDOT AS A CONDITION OF APPROVING THE SSAR WAIVER.

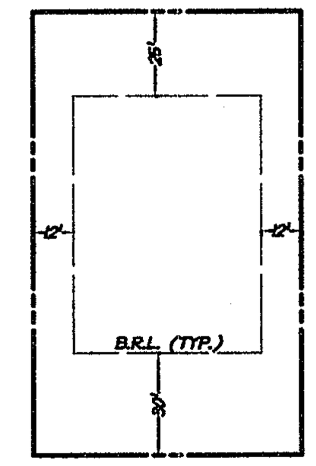
32. LOCATION OF EXISTING STRUCTURES ON OFFSITE PROPERTIES ARE APPROXIMATE AND FROM INFORMATION OF RECORD.

TABULATIONS

SITE AREA = 104,150± OR 2.39 ACRES
EXISTING ZONING = R-1
PROPOSED ZONING = R-3
PROPOSED USE = SINGLE FAMILY DETACHED
MAXIMUM BUILDING HEIGHT REQD. = 35 FEET
MAXIMUM BUILDING HEIGHT PROVIDED = 35 FEET MAX.
AVERAGE LOT SIZE REQUIRED = 11,500 SF
AVERAGE LOT SIZE PROVIDED = ±12,200 SF
MINIMUM LOT SIZE REQUIRED = 10,500 SF.
MINIMUM LOT SIZE PROVIDED = ≥ 10,500 SF.
MINIMUM LOT WIDTH REQUIRED/PROVIDED = 80' (INTERIOR), 105' (CORNER)
MINIMUM YARDS:
REQUIRED: FRONT YARD: 30'
SIDE YARD: 12'
REAR YARD: 25'
PROVIDED: FRONT YARD: 30'
SIDE YARD: 12'
REAR YARD: 25'
OPEN SPACE REQUIRED/PROVIDED: NONE

PARKING:
REQUIRED (2 SPACES/UNIT) = 12 SPACES
PROVIDED (4 SPACES/UNIT) = 24 SPACES
TOTAL PARKING PROVIDED = 24 SPACES

DENSITY:
PERMITTED (6 UNITS) = 3.00 DU/AC
PROPOSED (6 UNITS) = 2.60 DU/AC



TYPICAL INTERIOR LOT DETAIL
(N.T.S.)

GENERAL STATEMENT

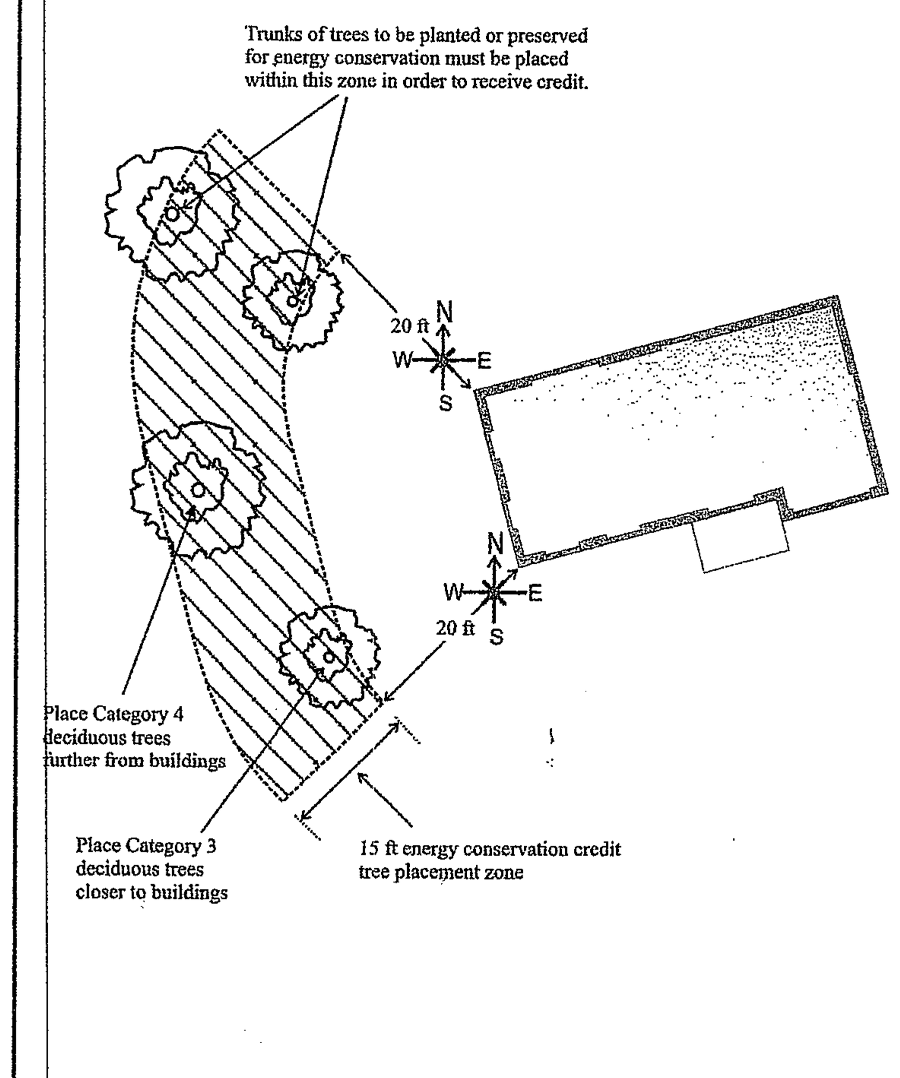
THE PROPERTY PROPOSED FOR THIS REZONING IS LOCATED ON FAIRFAX COUNTY TAX MAP 28-4((1)) PARCEL 29 AND IS CURRENTLY ZONED R-1. THE TOTAL AREA OF THE PROPERTY SUBJECT TO THIS APPLICATION IS 2.39 ACRES. THE APPLICANT PROPOSES A REZONING OF THE PROPERTY TO THE R-3 DISTRICT FOR THE PURPOSES OF CONSTRUCTING SIX NEW HOUSES.

WAIVERS/MODIFICATIONS REQUESTED:

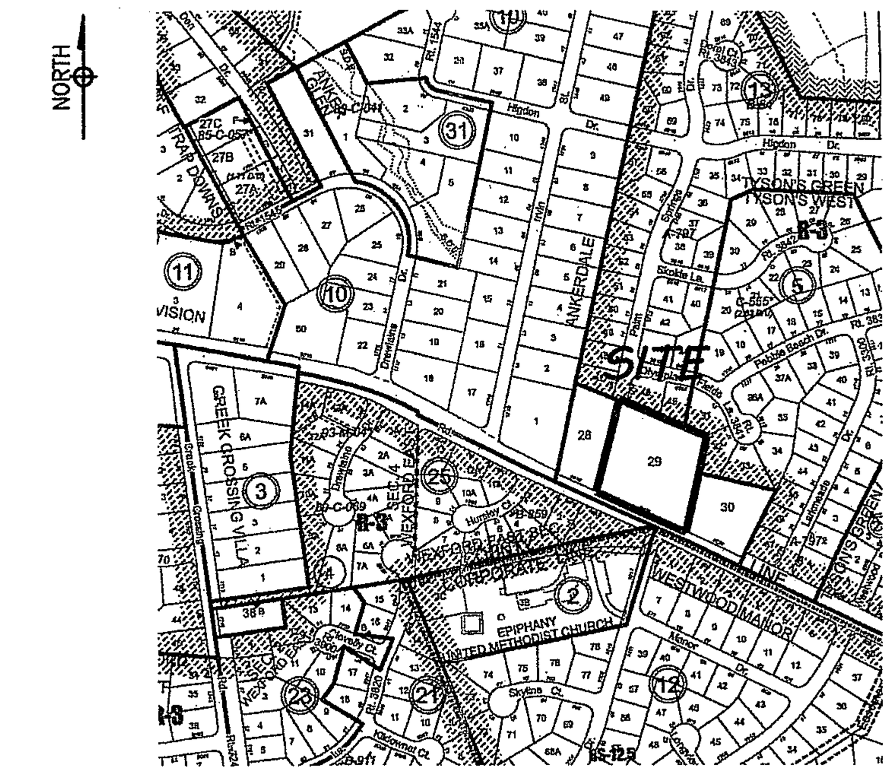
IN ACCORDANCE WITH THE FAIRFAX COUNTY ZONING ORDINANCE AND PUBLIC FACILITIES MANUAL, THE FOLLOWING WAIVERS/MODIFICATIONS ARE RESPECTFULLY REQUESTED:

1. A WAIVER OF THE 5' SIDEWALK REQUIREMENT ALONG THE PROPERTY'S OLD COURTHOUSE ROAD FRONTAGE IN ACCORDANCE WITH CHAPTER 101 OF THE SUBDIVISION ORDINANCE AND THE PUBLIC FACILITIES MANUAL. A MODIFICATION OF THE MAJOR PAVED TRAIL REQUIREMENT ALONG THE PROPERTY'S OLD COURTHOUSE ROAD FRONTAGE IN ACCORDANCE WITH CHAPTER 101 OF THE SUBDIVISION ORDINANCE AND THE PUBLIC FACILITIES MANUAL. THE APPLICANT WILL PROVIDE A 10' SHARED USE PATH ALONG THE SUBJECT PROPERTY'S OLD COURTHOUSE ROAD FRONTAGE AS DEPICTED ON SHEET 2 AND IN ACCORDANCE WITH THE PFM AND VDOT REQUIREMENTS FOR VDOT MAINTAINED TRAILS. THIS SHARED USE PATH WILL PROVIDE ADEQUATE PEDESTRIAN MOVEMENT AND MINIMIZE MAINTENANCE RESPONSIBILITIES FOR TWO PARALLEL FACILITIES.

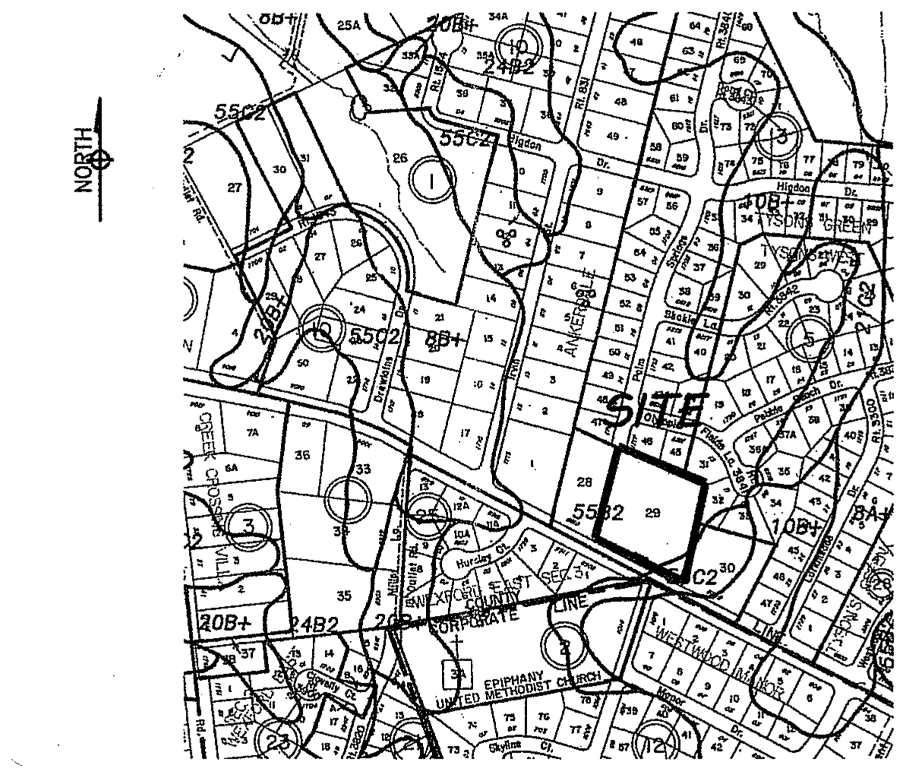
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Ref. Sec. 12-0509.4B(2)(a) / Rev. 10-08	ENERGY CONSERVATION TREE CANOPY CREDIT	PLATE NO.	STD. NO.
		4-12	



VICINITY MAP
SCALE : 1" = 500'



SOILS MAP
SCALE : 1" = 500'

SOIL INFORMATION

SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL
55	GLENELG	C	GOOD	GOOD	HIGH

PLANTING SCHEDULE

SYMBOL	TYPE	SIZE
(evergreen symbol)	LARGE EVERGREEN	6'-8' HT.
(deciduous symbol)	LARGE DECIDUOUS	2" CAL.
(shrub symbol)	SHRUB	18"-30" HT.

THE LANDSCAPING DEPICTED HEREIN SHALL CONSIST OF NATIVE AND PROVEN DESIRABLE SPEICIS WHICH INCLUDE BUT ARE NOT LIMITED TO EASTERN RED CEDAR, NORWAY SPRUCE, AMERICAN HOLLY, RED MAPLE, WILLOW OAK, RIVER BIRCH, BLACK GUM, DOGWOOD, JAPANESE MAPLE, AND CHERRY. PLEASE NOTE THAT THE RED MAPLE, WILLOW OAK, RIVER BIRCH, AND BLACK GUM TREES QUALIFY FOR ENERGY CONSERVATION CREDIT IN ACCORDANCE WITH THE PFM PLATE 4-12 (SEE THIS SHEET). THE SPECIFIC TREE TYPES AND LOCATION SHALL BE DESIGNATED ON A LANDSCAPE PLAN SUBMITTED WITH THE SUBDIVISION PLAN. THE TREES SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE APPLICANT RESERVES THE RIGHT TO MODIFY THE SPECIES AND LOCATION FROM THAT PROVIDED HEREIN AT TIME OF FINAL SUBDIVISION PLAN AND SUBJECT TO APPROVAL BY UFM.

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 1 of 8

RECEIVED
Department of Planning & Zoning
MAR 17 2011
Zoning Evaluation Division

SHEET INDEX

1. COVER SHEET
2. GENERALIZED DEVELOPMENT PLAN
3. EXISTING CONDITIONS PLAN
4. EXISTING VEGETATION MAP
4A. TREE PRESERVATION & PROTECTION PLAN
4B. TREE PRESERVATION NARRATIVE
5. ELEVATIONS
6. STORMWATER MANAGEMENT INFORMATION

LDC
UNLOCKING YOUR LAND'S POTENTIAL
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5600 FX: 703-257-5656

COVER SHEET
RZ 2010-HM-014

TYSONS CREST

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED DATE
8/10	KMA	1	UPDATE NOTES 1, 2, 17, 26; REMOVE 27, UPDATE NOTES AND ADD NOTE 31, 32		
11/10	KMA	2	ADD LOT TYPICAL, REMOVE FENCE DETAIL		
12/10	KMA	3	UPDATE WAIVERS/MODS AND AVG. LOT AREA TAB.; CHANGE SD NAME		
3/11	KMA	4	ADD ROW DEDICATION AT PALM SPRINGS, UPDATE NOTE 31		
ENGINEER			REVISION APPROVED BY:		

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525-B
3/14/11
LAND SURVEYOR

SCALE: N/A

SHEET 1 OF 6

DATE: APRIL, 2010

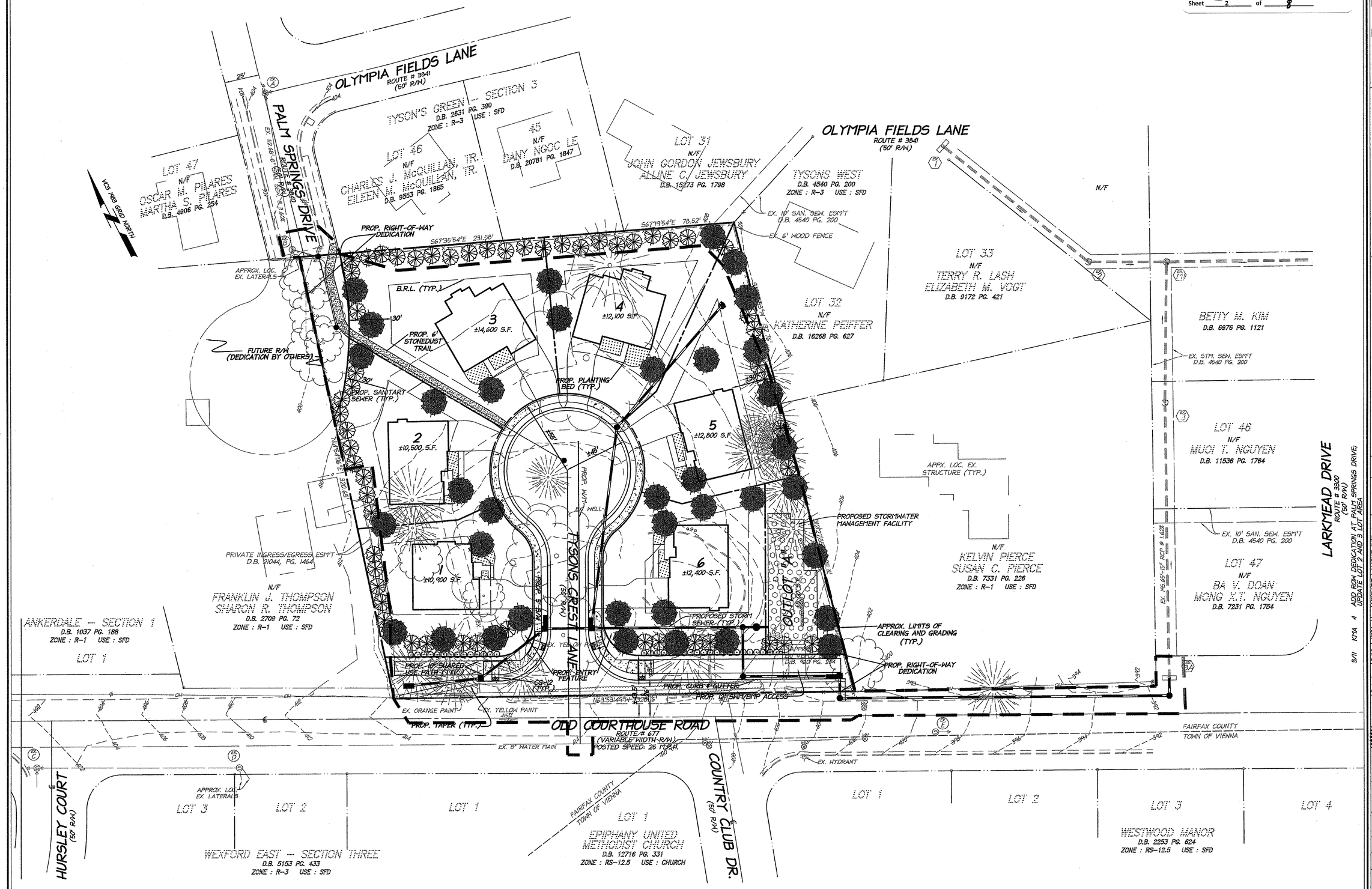
DRAFT: KMA | CHECK: MTM

FILE NUMBER: 10016-1-0 3.0B

P:\PY 2010\10016-1-0 8900 Old Courthouse Road\ENG\GDP\10016cv.dwg

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 2 of 8



LDC
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5600 FX: 703-257-5656
UNLOCKING YOUR LAND'S POTENTIAL

GENERALIZED DEVELOPMENT PLAN

TYSONS CREST

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
8/10	KMA	1	UPDATE LAYOUT PER R-3 CONVEN.			
11/10	KMA	2	ADD CAP-P, REVISE FENCE LOCATION, ADD ENTRANCE FEATURE, UPDATE			
			REMOVE FENCE DETAIL, UPDATE DRIVEWAY LOCATIONS AND PLANTING BEDS.			
12/10	KMA	3	REVISE 2-5 LOT LINES, ADD TRAIL CHANGE SD & STREET NAME			
3/11	KMA	4	ADD RPA DEDICATION AT PALM SPRINGS DRIVE; UPDATE LOT 2 AND 3 LOT AREA			

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525.B
3-14-11
LAND SURVEYOR

SCALE:
1" = 30'

SHEET 2 OF 6

DATE: APRIL, 2010

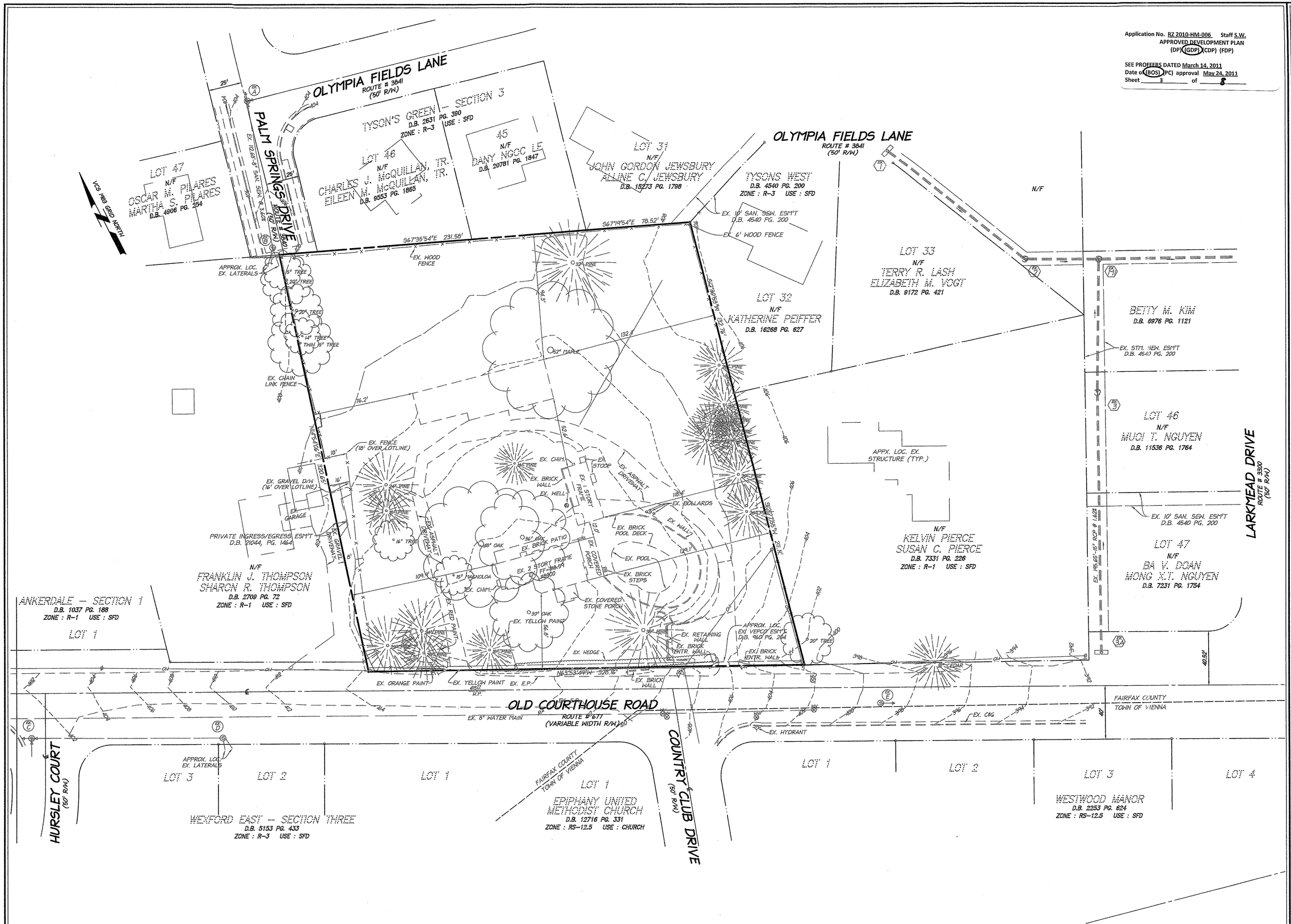
DRAFT: KMA CHECK: MTM

FILE NUMBER: 10016-1-0 3.0B

P:\PT 2010\10016-1-0 8400 Old Courthouse Road\ENG\GDP\10016gdp.dwg

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP)(GDP)(CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 3 of 8



LDC
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5800 FX: 703-257-5805
UNLOCKING YOUR LAND'S POTENTIAL

EXISTING CONDITIONS PLAN

TYSONS CREST

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVISION BY	APPROVED	DATE
8/10	KMA 1	NO CHANGES			
8/10	KMA 2	NO CHANGES			
12/10	KMA 3	CHANGE SD NAME			
3/11	KMA 4	NO CHANGES			

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1535-B
LAND SURVEYOR

SCALE:
1" = 30'

SHEET 3 OF 6

DATE:
FEB., 2010

DRAFT: KMA
CHECK: MTM

FILE NUMBER:
10016-1-0 3.0B

P:\PY 2010\10016-1-0 8400 Old Courthouse Road\ENG\GDP\10016ec.dwg

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 4 of 8

LEGEND

- TREELINE
- EXISTING CANOPY (2) UPLAND FOREST (±42,545-SF)
- CRITICAL ROOT ZONE (CRZ)
- T-16 TREE LOCATION

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Notes
1	Sweetgum	22.0	22.0	Fair		Off-site tree - Portions topped
2	Sweetgum	14.0	14.0	Good		Off-site tree
3	Sweetgum	12.0	12.0	Good		Off-site tree
4	White Pine	19.3	19.3	Fair	x	Inside LOC
5	Hemlock	21.0	21.0	Fair	x	
6	White Pine	17.8	17.8	Fair	x	
7	White Pine	24.5	24.5	Fair	x	Inside LOC
8	White Pine	14.4	14.4	Fair	x	
9	White Pine	11.9	11.9	Fair	x	
10	White Pine	17.4	17.4	Fair	x	Inside LOC
11	White Pine	17.1	17.1	Fair	x	
12	White Pine	20.2	20.2	Fair	x	
13	Unknown Deciduous Tree	16.3	16.3	Poor		Off-site Tree
14	White Pine	31.0	31.0	Poor	X	Poor condition - To be removed
15	Black Cherry	19.8	19.8	Fair	x	Shared tree
16	Slippery Elm	22.7	22.7	Fair	x	Inside LOC
17	Mulberry	17.0	17.0	Fair	x	Inside LOC
18	Black Walnut	12.4	12.4	Fair	x	Inside LOC
19	Slippery Elm	36.4	36.4	Fair	x	Double trunk
20	White Pine	20.5	20.5	Fair	X	Inside LOC
21	White Pine	19.0	19.0	Fair	X	Inside LOC
22	Callery Pear	17.5	17.5	Good	X	Inside LOC
23	White Pine	24.4	24.4	Poor	X	Poor condition - To be removed
24	White Pine	24.5	24.5	Good	X	Inside LOC
25	White Pine	18.3	18.3	Poor	X	Poor condition - To be removed
26	Norway Spruce	18.4	18.4	Fair	X	Inside LOC
27	Hemlock	28.2	28.2	Fair	X	Inside LOC

NOTES:
1. ALL SHARED TREES SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM AFFECTED ADJACENT PROPERTY OWNER(S).

2. THIS EXISTING VEGETATION MAP AND ASSOCIATED TREE PRESERVATION & PROTECTION PLAN WERE PREPARED BY AVI M. SAREEN (CERTIFICATION#: MA-4724A).

SPRINGS DRIVE
ROUTE # 3840
(50' R/W)
12.68'-8" SAN. SEW. @ 3.60%
S67°35'54"E 231.58'
S67°19'54"E 78.52'
EX. 10' SAN. SEW. ESM'T D.B. 4540 PG. 200
EX. 6' WOOD FENCE
APPROX. LOC. EX. LATERALS
EX. CANOPY MORE THAN 25' FROM LOC.
EX. 1 STORY BLOCK & FRAME
S52°29'53"W 132.76'
N47°54'06"E 320.65'
EX. WELL
EX. CANOPY MORE THAN 25' FROM LOC.
S12°27'55"W 211.74'
PRIVATE INGRESS/EGRESS ESM'T D.B. _____, PG. ___
N63°53'49"W 328.76'
41527 H.P.
OLD COURTHOUSE ROAD
ROUTE # 677
(VARIABLE WIDTH R/W)
POSTED SPEED: 25 M.P.H.
EX. HYDRANT
SCALE (IN FEET) 10 20 20 0

LAND DESIGN CONSULTANTS
PLAN FOR SUCCESS
www.ldc-va.com
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5600 FX: 703-257-5656

COMMONWEALTH OF VIRGINIA
MATTHEW P. HIRSHALL
LICENSED
LAND SURVEYOR
12210
3-14-11

ECS - MID-ATLANTIC, LLC
14026 THUNDERBOLT PLACE
SUITE 100
CHANTILLY, VA 20151
1-800-822-3489
703-471-8400
(FAX) 703-834-5527

CELEBRATING 20 YEARS OF EXCELLENCE

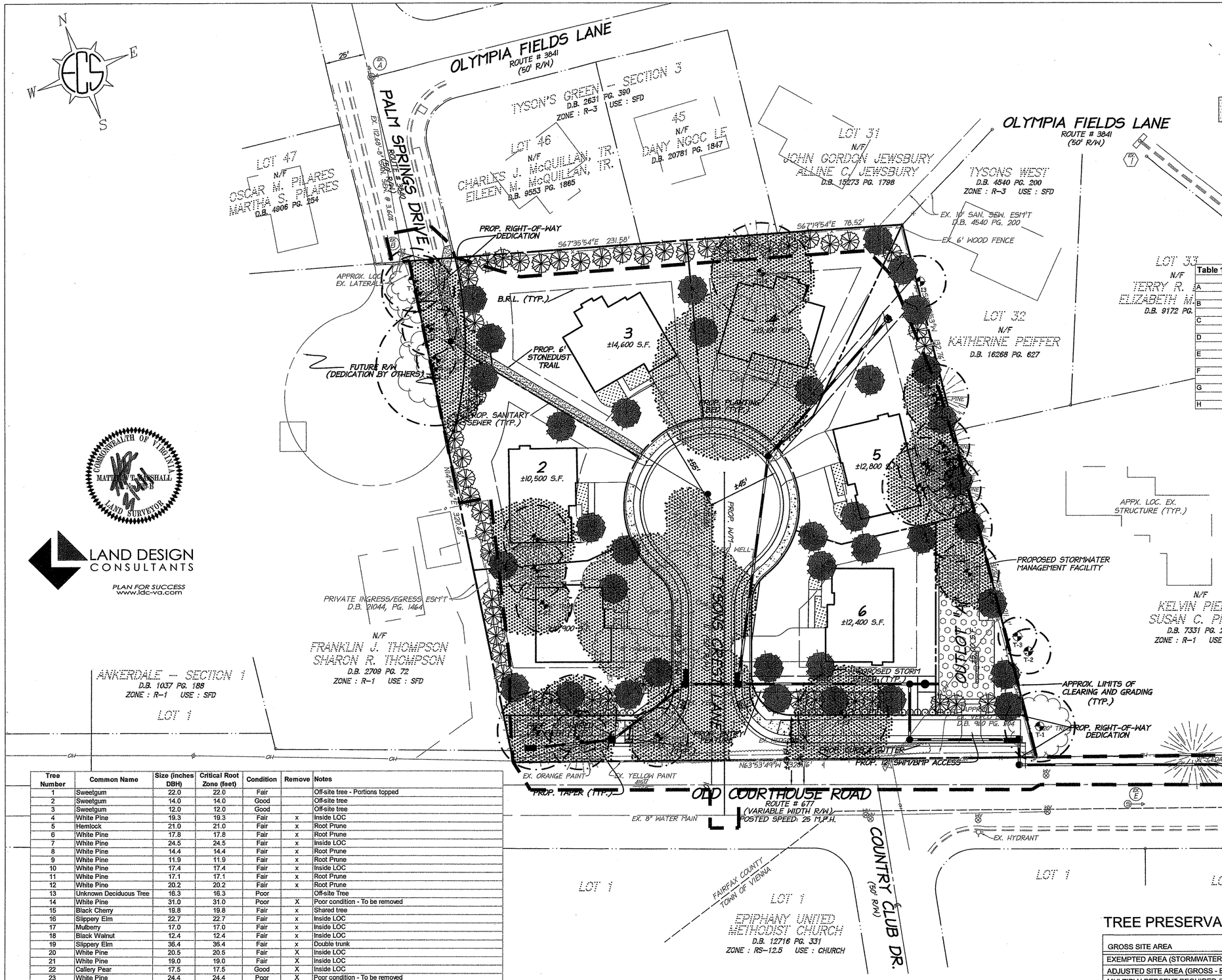
SETTING THE STANDARD FOR SERVICE

8900 OLD COURTHOUSE DR.
VIENNA, VIRGINIA
FAIRFAX COUNTY

EXISTING VEGETATION MAP
SEKAS HOMES, LTD

ECS REVISIONS
8/11/10 - AMS

ENGINEER	DRAFTING
AMS	AMM
SCALE	1" - 20'
PROJECT NO.	16535
SHEET	4 OF 6
DATE	5/21/10



LEGEND

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 5 of 8

- TREELINE
- EXISTING CANOPY (2) UPLAND FOREST (42,545-SF)
- CRITICAL ROOT ZONE (CRZ)
- N/F TREE LOCATION
- TREE PROTECTION FENCING & ROOT PRUNING

Table 12.3 - Tree Preservation Target Calculations & Statement

A	Pre-development area (sf) of existing tree canopy (From Existing Vegetation Map) =	42,545.0
B	Percentage of gross site area covered by existing tree canopy =	40.9%
C	Percentage of 10-year tree canopy required for site per zoning =	30.0%
D	Percentage of the 10-year tree canopy requirement that should be met through preservation =	40.9%
E	Proposed percentage of canopy requirement that will be met through tree preservation =	0.0%
F	Has the Tree Preservation Target minimum been met?	No
G	If no for line F, provide sheet number where deviation request is located	
H	If step G requires a narrative it shall be prepared and attached	

Table 12.12 - 10-Year Tree Canopy Calculation Worksheet

Step		Totals
A. Tree Preservation Target & Statement		
A1	Tree Preservation Target calculations and statement	
B. Tree Canopy Requirement		
B1	Gross Site Area =	104,095.0
B2	Subtract area dedicated to parks, road frontage =	0.0
B3	Subtract area of exemptions (SW BMP) =	5,063.0
B4	Adjusted gross site area =	99,032.0
B5	Identify site's zoning and/or use =	R1
B6	Percentage of 10-year canopy required =	30.0%
B7	Area of 10-year canopy required =	29,710
B8	Modification of 10-year Tree Canopy Requirement Requested?	No
B9	If B8 is yes, list plan sheet where modification is located	N/A
C. Tree Preservation		
C1	Tree Preservation Target Area =	12,460.0
C2	Total canopy area meeting standards of § 12-0400 =	0.0
C3	C2 x 1.25 =	0.0
C4	Total canopy area provided by unique or valuable forest/woodland communities =	0.0
C5	C4 x 1.5 =	0.0
C6	Total of canopy area provide by Heritage, Memorial, Specimen, or Street Trees =	0.0
C7	C6 x 1.5 to 3.0 =	0.0
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	0.0
C9	C8 x 1.0 =	0.0
C10	Total of C3, C5, C7, and C9 =	0.0
D. Tree Planting		
D1	Area of canopy to be met through tree planting =	29,850.0
D2	Area of canopy planted for air quality benefits =	0.0
D3	D2 x 1.5 =	0.0
D4	Area of canopy planted for energy conservation =	0.0
D5	D4 x 1.5 =	0.0
D6	Area of canopy planted for water quality benefits =	0.0
D7	D6 x 1.25 =	0.0
D8	Area of canopy planted for wildlife benefits =	0.0
D9	D8 x 1.5 =	0.0
D10	Area of canopy provided by native trees =	19,900.0
D11	D10 x 1.5 =	29,850.0
D12	Area of canopy provided by improved cultivars and varieties =	0.0
D13	D12 x 1.5 =	0.0
D14	Area of canopy provided through tree seedlings =	0.0
D15	Area of canopy provided through native shrubs or woody seed mix =	0.0
D16	Percentage of 14 represented by D15 (must be less than 33%) =	0.0%
D17	Total of canopy area provided through tree planting =	29,850.0
D18	Is an offsite planting relief requested?	No
D19	Tree Bank or Tree Fund?	No
D20	Canopy area requested to be provided through offsite banking or tree fund?	No
D21	Amount to be desposited into the Tree Preservation and Planting Fund =	$0.0
E. Total of 10-year Tree Canopy Provided		
E1	Total of canopy area provided through tree preservation =	0.0
E2	Total of canopy area provided through tree planting =	29,850.0
E3	Total of canopy area provided through offsite mechanism =	0.0
E4	Total of 10-year Tree Canopy Provided =	29,850.0

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Notes
1	Sweetgum	22.0	22.0	Fair		Off-site tree - Portions topped
2	Sweetgum	14.0	14.0	Good		Off-site tree
3	Sweetgum	12.0	12.0	Good		Off-site tree
4	White Pine	19.3	19.3	Fair	x	Inside LOC
5	Hemlock	21.0	21.0	Fair	x	Root Prune
6	White Pine	17.8	17.8	Fair	x	Root Prune
7	White Pine	24.5	24.5	Fair	x	Inside LOC
8	White Pine	14.4	14.4	Fair	x	Root Prune
9	White Pine	11.9	11.9	Fair	x	Root Prune
10	White Pine	17.4	17.4	Fair	x	Inside LOC
11	White Pine	17.1	17.1	Fair	x	Root Prune
12	White Pine	20.2	20.2	Fair	x	Root Prune
13	Unknown Deciduous Tree	16.3	16.3	Poor		Off-site Tree
14	White Pine	31.0	31.0	Poor	X	Poor condition - To be removed
15	Black Cherry	19.8	19.8	Fair	x	Shared tree
16	Slippery Elm	22.7	22.7	Fair	x	Inside LOC
17	Mulberry	17.0	17.0	Fair	x	Inside LOC
18	Black Walnut	12.4	12.4	Fair	x	Inside LOC
19	Slippey Elm	36.4	36.4	Fair	x	Double trunk
20	White Pine	20.5	20.5	Fair	X	Inside LOC
21	White Pine	19.0	19.0	Fair	X	Inside LOC
22	Callery Pear	17.5	17.5	Good	X	Inside LOC
23	White Pine	24.4	24.4	Poor	X	Poor condition - To be removed
24	White Pine	24.5	24.5	Good	X	Inside LOC
25	White Pine	18.3	18.3	Poor	X	Poor condition - To be removed
26	Norway Spruce	18.4	18.4	Fair	X	Inside LOC
27	Hemlock	28.2	28.2	Fair	X	Inside LOC

NOTES:
1. ALL SHARED TREES SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM AFFECTED ADJACENT PROPERTY OWNER(S).

2. THIS EXISTING VEGETATION MAP AND ASSOCIATED TREE PRESERVATION & PROTECTION PLAN WERE PREPARED BY AVI M. SAREEN (CERTIFICATION#: MA-4724A).

TREE PRESERVATION & CANOPY CALCULATIONS

GROSS SITE AREA	2.390 AC	104,095 SF
EXEMPTED AREA (STORMWATER BMP)		5,063 SF
ADJUSTED SITE AREA (GROSS - EXEMPTED AREAS)		99,032 SF
MULTIPLY PERCENT REQUIRED (ZONED R1)		30%
EQUALS TREE COVER TO BE PROVIDED		29,710 SF
EXISTING TREES TO BE PRESERVED		0 SF
PROPOSED CREDIT REQUIRED BY PLANTING		29,850 SF
HAS THE TREE PRESERVATION TARGET BEEN MET?		NO
ADJUSTED CANOPY COVER PER SECTION 12-0200		0 SF
TOTAL TREE COVER PROVIDED	30.1%	29,850 SF

SCALE (IN FEET)
15 30
30 0

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COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
LAND SURVEYOR

ECS - MID-ATLANTIC, LLC
14026 THUNDERBOLT PLACE
SUITE 100
CHANTILLY, VA 20151
1-800-232-0232
703-471-6400
(FAX) 703-834-5527

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FAIRFAX COUNTY

TREE PRESERVATION & PROTECTION PLAN
SEKAS HOMES, LTD

ECS REVISIONS
8/11/10 - AMS

ENGINEER	DRAFTING
AMS	AMM

SCALE 1" - 30'
PROJECT NO. 16535
SHEET 2 OF 3
DATE 5/23/10

Tree Inventory & Condition Analysis

ECS Mid-Atlantic, LLC (ECS) conducted a site reconnaissance to evaluate the wooded habitat on the project site in May 2010. Dominant site vegetation is listed below in Table 1. The undeveloped portions of the site are comprised of Upland Hardwoods, Softwoods and maintained grasslands.

Table 1 Dominant Site Vegetation

Common Name	Scientific Name
Sweetgum	*Liquidambar styraciflua*
Eastern Hemlock	*Tsuga canadensis*
Black Cherry	*Prunus serotina*
White Pine	*Pinus strobus*
Slippery Elm	*Ulmus fulva*
Black Walnut	*Juglans nigra*
Callery Pear	*Pyrus calleryana*
Norway Spruce	*Picea abies*
Mulberry	*Morus rubra*

Based on our site reconnaissance, invasive and/or noxious species (i.e.: English Ivy) are present within the property boundary. The invasive species are predominantly located within the proposed limits of clearing and grading, and as such, most should be eradicated during the proposed construction activities. Any invasive species located within the areas to be preserved should be removed by hand wherever practicable to minimize site disturbance. Towards the end of the growing season, an application of an environmentally sensitive approved herbicide may be applied to these areas by a Virginia certified applicator. The trees onsite are in fair/good condition, except where otherwise noted on the EVM (i.e.: Poor or Dead). Onsite trees within 150-feet of the proposed limits of clearing meet the standards for structural integrity and health identified in § 12-0403.2A and 12-0403.2B and are identified on the Existing Vegetation Map. At the time of inspection there were poor and dead trees located within 150-feet of the proposed limits of clearing and are identified on the Existing Vegetation Map.

Tree Preservation Narrative

§ 12-0508.3B: Any dead or potentially hazardous trees shall be removed upon their discovery if they are located within 150-feet of the proposed limits of clearing. Dead trees not within this area shall be left in place to serve as wildlife habitat. Dead or potentially hazardous trees will be removed by hand (i.e.: chainsaw) wherever practical and will be conducted in a manner that incurs the least amount of damage to surrounding trees and vegetation proposed for preservation. Felled trees shall be left in place and brush should be removed by hand. No heavy equipment shall be used within tree preservation areas.

§ 12-0508.3C: Based on the current condition of the existing wooded areas, no adverse human health risks are anticipated.

§ 12-0508.3D: Invasive and/or noxious species (i.e.: English Ivy) are present within the property boundary and are predominantly located within the limits of clearing and grading. Any invasive species located within the areas to be preserved should be removed by hand wherever practicable to minimize site disturbance. Towards the end of the growing season, an application of an environmentally sensitive approved herbicide may be applied to these areas by a Virginia certified applicator. Most of the forested areas within the tree preservation area do not contain invasive plant species at levels that endanger the long-term ecological functionality, health, and regenerative capacity of any native plant communities present onsite.

§ 12-0508.3E: The Applicant is not requesting official Specimen Tree designation for any of the large trees located onsite and is not using a multiplier for tree canopy calculations.

§ 12-0508.3F: Non-impacted Specimen trees located on and off-site shall be protected throughout all phases of construction by utilizing tree protection fencing as required by § 12-0506.2D(1).

TARGET TREE PRESERVATION DEVIATION

August 16 , 2010

Mr. Mike Knapp, Director
Fairfax County Urban Forest Management
12055 Government Center Parkway, 5th Floor
Fairfax, VA 22035

Re: 8900 Old Courthouse Road
Fairfax County Parcel #28-4 ((1)), Parcels 28 and 29
Currently Zoned R-1, Approximately 3.4427 Acres (Combined)
LDC Project #10016-1-0

Dear Mr. Knapp,

Land Design Consultants, Inc. (LDC) has submitted a Rezoning Application and Generalized Development Plan for the development of the subject property with 6 new single-family dwellings and associated infrastructure. The subject property currently has one single-family dwelling with various accessory structures.

The Applicant has retained ECS, Ltd. to complete an Existing Vegetation Map, Tree Inventory and Condition Analysis for the above referenced property in accordance with Section 12 of the Public Facilities Manual (PFM). Copies of this information are provided herein.

In accordance with Section 12-0507.3A(1)(2)(3), LDC is respectfully requesting permission to deviate from the Tree Preservation Target requirements. Currently, the subject property is approximately 40.9% covered by existing tree canopy. Upon development, 30% of the subject property shall be required as tree canopy. Of the required 30%, 40.9% of this should be provided via preservation. At this time, the Applicant is proposing no areas of preservation. The tree preservation target cannot be met on site due to the poor condition and species of existing vegetation, proposed right-of-way dedication and the fact that construction activities could be reasonably expected to impact existing vegetation, as further discussed below. The following serves as our justification for this request:

1. Of the twenty-seven trees inventoried in accordance with the PFM, all but four are located on the subject property. Twenty-one of these twenty-three onsite trees are in fair to poor condition. In accordance with the PFM (12-0403.2), trees designated for preservation shall be in fair to excellent condition at time of plan submission. LDC notes that some of the trees that were originally planned to be saved are white pines, which are non-native, low quality trees. These trees are no longer being preserved. The two trees that are in good condition will need to be removed due to their close proximity to the proposed construction.

   Further, a few of the trees on site have varying degrees of problems, which will impact their structural integrity and will lead to further decline meeting the definition of "poor condition". In accordance with the PFM (12-0403.2A), trees designated for preservation should have a high degree of structural integrity. In accordance with Section 12-0507.3A(1), deviations from the Tree Preservation Target are permitted if meeting the Tree Preservation Target would preclude the development of uses or densities otherwise allowed by the Zoning Ordinance. Further, in accordance with Section 12-0507.3A(2), deviations from the Tree Preservation Target are permitted if meeting the tree preservation target would require the preservation of trees that do not meet the standards for health and structural condition. These trees should not be preserved

   and are recommended for removal. Further, in accordance with Section 12-0507.3A(3), deviations from the Tree Preservation Target are permitted if construction activities could be reasonably expected to impact existing trees or forested areas used to meet the tree preservation target to the extent they would not likely survive in a healthy manner for a minimum of ten years. LDC notes that the originally submitted application was for a cluster development, which provided more flexibility in design requirements and provided greater opportunity for tree save. At the request of Staff, it was suggested the Applicant re-design the site in accordance with the R-3 Conventional subdivision requirements. This requires construction of a public street and larger lot areas, which has affected the previously anticipated tree preservation areas. The proposed construction will negatively impact these fair to poor quality trees. Finally, LDC notes that trees 15-19 and 23-27 are located within the required right-of-way dedication area.

2. The subject property does not contain any "champion", "heritage", "specimen", "memorial" or "street" trees as designated in Chapter 120 of the County Code.

3. In order to meet Tree Canopy requirements, the Applicant will plant quality, native and proven desirable species on site including but not limited to Eastern Red Cedar, American Holly, Red Maple, Norway Spruce, Dogwood, Cherry, Willow Oak, River Birch, Black Gum and Japanese Maple. In total, the Applicant is proposing 26,183 square feet of new vegetation, resulting in tree cover of 30%. This will result in meeting the 30% Tree Canopy Requirements as required by the PFM. In addition, these plantings provide opportunity for energy conservation and screening.

For the reasons stated above, we respectfully request your approval of a deviation from the Tree Preservation Target.

Sincerely,

Kelly M. Atkinson, AICP
Senior Planner

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 6 of 8

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
LAND SURVEYOR
8/9/10
11.5.10
12.22.10
3.14.11

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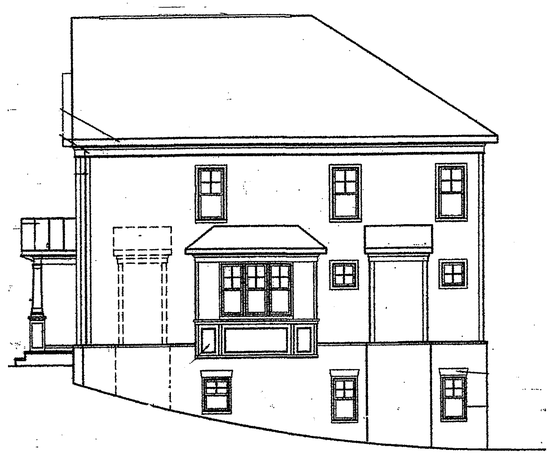
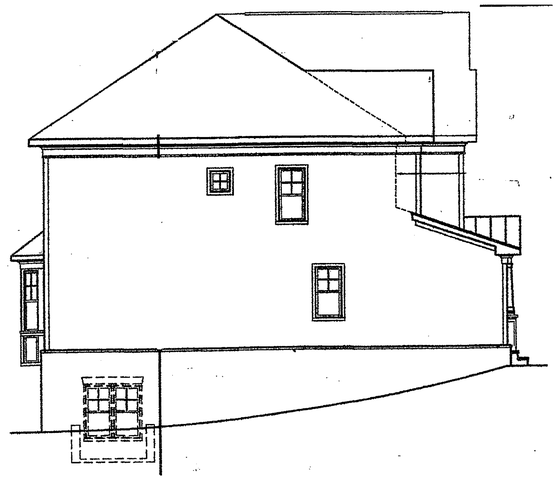
FAIRFAX COUNTY

TREE PRESERVATION NARRATIVES
SEKAS HOMES, LTD

ECS REVISIONS	
8/11/10 - AMS	
ENGINEER AMS	DRAFTING AMM
SCALE	NTS
PROJECT NO.	16535
SHEET	4B OF 6
DATE	5/23/10

CONCEPTUAL FRONT ELEVATIONS





CONCEPTUAL SIDE ELEVATIONS
FOR ILLUSTRATIVE PURPOSES ONLY!

Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS) (PC) approval May 24, 2011
Sheet 7 of 8

LDC
UNLOCKING YOUR LAND'S POTENTIAL
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5900 FX: 703-257-5656

ELEVATIONS

TYSONS CREST

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
1	UPDATE ELEVATIONS			
2	NO CHANGES			
3	NO ELEVATIONS, CHANGE SO-NAME			
4	NO CHANGES			

REVISION APPROVED BY:

DATE	DESIGN	ENGINEER
6/10	KMA	
11/10	KMA	
5/11	KMA	

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525-B
3/9/11
LICENSED SURVEYOR

SCALE:
N/A

SHEET 5 OF 6

DATE:
APRIL, 2010

DRAFT: KMA
CHECK: MTM

FILE NUMBER:
10016-1-0 3.0B

P:\PY 2010\10016-1-0 8400 Old Courthouse Road\ENG\GDP\10016cv.dwg

STORMWATER MANAGEMENT NARRATIVE

THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF A RAINTANK INFILTRATION TRENCH SYSTEM. THIS FACILITY SHALL BE DESIGNED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL (PFM) AND LETTER TO INDUSTRY 01-11.

THE INFILTRATION TRENCH HAS BEEN DESIGNED FOR THE 10 YEAR 2 HOUR STORM IN ORDER TO PROVIDE DETENTION FOR THE 1, 2 & 10 YEAR STORM EVENTS AND TO MEET BMP REQUIREMENTS. THE SITE CURRENTLY HAS SEVERAL EXISTING BUILDINGS, PAVED SURFACES, AND SOME TREES. CURRENTLY, APPROXIMATELY 6.45 CFS OF RUNOFF IS LEAVING THE SUBJECT PROPERTY UNCONTROLLED AND UNTREATED. WITH THE PROPOSED ATTENUATION, THE POST DEVELOPMENT RUNOFF WILL BE REDUCED SUBSTANTIALLY. THEREFORE, THERE WILL BE A REDUCTION IN RUNOFF LEAVING THE PROPERTY AS A RESULT OF THE PROPOSAL. THE TRENCH HAS BEEN SIZED TO PROVIDE WATER QUALITY AND QUANTITY CONTROL FOR THE SUBJECT PROPERTY.

ON JANUARY 28, 2010, TERRA ENGINEERING SERVICES, INC. COMPLETED INFILTRATION TESTING IN THE VINCITY OF THE INFILTRATION TRENCH. PER THIS FIELD INVESTIGATION, NO ROCK OR GROUNDWATER WAS ENCOUNTERED THROUGH A DEPTH OF 11 FEET, WHICH IS APPROX. 4.0 FEET BELOW THE PROPOSED BOTTOM OF THE INFILTRATION TRENCH. AN AVERAGE INFILTRATION RATE GREATER THAN THE MINIMUM REQUIRED (3.0 INCHES/HOUR OBSERVED) WAS OBSERVED THEREFORE LDC BELIEVES THE RESULTS OF THIS SUBSURFACE EXPLORATION ILLUSTRATES ADEQUACY OF THE PROPOSED INFILTRATION TRENCH.

THE FINAL DESIGN OF THE INFILTRATION TRENCH IS SUBJECT TO FURTHER REVIEW BY A GEOTECHNICAL ENGINEER AND FINAL ENGINEERING. ADDITIONAL INFILTRATION TESTING WILL OCCUR AT THE TIME OF SUBDIVISION PLAN SUBMISSION PER THE REQUIREMENTS OF THE PFM. ALL MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH CHAPTER 3, STANDARD 3.10 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

THE FACILITY SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION AND THE MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS.

DRAINAGE DIVIDE DIVERSION STATEMENT:

THE PROJECT IS LOCATED WITHIN THE DIFFICULT RUN WATERSHED. MINOR CHANGES IN THE NATURAL DRAINAGE DIVIDES ARE PROPOSED AS A PART OF THIS PROJECT. THE CHANGES ARE INTENDED TO ASSIST IN COLLECTING STORMWATER DISCHARGE IN ORDER TO MEET DETENTION, BMP & ADEQUATE OUTFALL REQUIREMENTS AS OUTLINED IN THE PFM. THE MINOR DIVERSION TAKES DRAINAGE AREA FROM OUTFALL #2 AND DIVERTS IT TO THE RAINTANK INFILTRATION TRENCH WHICH HAS AN OVERFLOW OUTFALL TOWARD OUTFALL #1. OUTFALL #2 DISCHARGES IN A SHEET FLOW MANNER ONTO ADJACENT PARCEL 28 AND THEN TO A DEFINED CHANNEL WITHIN THE ANKERDALE SUBDIVISION THEN THROUGH THE ANKERDALE AND ANKER GLEN SUBDIVISIONS AND THEN TO A CROSSING WITH MONTMORENCY DRIVE IN THE BLUFFS OF WOLFTRAP SECTION 2 THEN TO WOLFTRAP CREEK AND UNDER THE DULLES ACCESS ROAD TO WHERE WOLFTRAP CREEK JOINS WITH OLD COURTHOUSE SPRING BRANCH. OUTFALL #1 DISCHARGES INTO AN EXISTING STORM SEWER SYSTEM WITHIN THE TYSON WEST SUBDIVISION AND THEN THROUGH THE TYSONS WEST AND TYSONS GREEN SUBDIVISIONS AND INTO THE OLD COURTHOUSE SPRING BRANCH NATURAL CHANNEL NORTH OF HIGDON DRIVE THEN UNDER THE DULLES ACCESS ROAD TO WHERE OLD COURTHOUSE SPRING BRANCH JOINS WITH WOLFTRAP CREEK WHERE THE OUTFALL MEETS UP WITH OUTFALL #2. THE EXISTING OPEN CHANNELS AND CULVERTS IN THE AREA OF THE OUTFALLS ARE IN GOOD TO SLIGHTLY EROSIVE CONDITIONS. DETENTION RELEASE RATE COMPUTATIONS WILL BE PROVIDED ON THE SUBDIVISION PLAN THAT DEMONSTRATE THAT THE POST DEVELOPED FLOW TO ALL OUTFALLS IS LESS THAN THE PREDEVELOPED AND NO ADVERSE IMPACTS WILL BE EXPERIENCED BY ANY DOWNSTREAM PROPERTIES. NO CHANGES ARE PROPOSED TO ANY MAJOR DRAINAGE SHED DIVIDES. THIS MINOR DIVERSION WITHIN AN INDIVIDUAL MAJOR WATERSHED AREA IS ALLOWED PER PFM SECTION 6-0202.2A (SEE THE OUTFALL ANALYSIS ON THIS SHEET).

OUTFALL NARRATIVE

THE SUBJECT PROPERTY IS LOCATED WITHIN THE DIFFICULT RUN WATERSHED. THE SUBJECT PROPERTY MAINTAINS TWO STORM DRAINAGE OUTFALLS. NO FLOODPLAIN OR RPA AREAS EXIST ON THE SUBJECT PROPERTY.

OUTFALL #1 DISCHARGES FROM THE PROPERTY TO THE SOUTH-EAST ONTO THE FRONT OF ADJACENT LOT 30. STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES FOR THE SITE ARE PROVIDED BY A PROPOSED RAINTANK INFILTRATION TRENCH ON PROPOSED OUTLOT "A" (SEE "STORMWATER MANAGEMENT INFORMATION" ON THIS SHEET FOR INFILTRATION TRENCH INFORMATION). THE DOWNSTREAM RECEIVING SWALE IS THE ROADSIDE DITCH ADJACENT TO OLD COURTHOUSE ROAD AND A PROPOSED STORM SEWER SYSTEM THAT CONNECTS TO AN EXISTING STORM SEWER SYSTEM WITHIN THE TYSONS WEST SUBDIVISION. THE SWALE MAINTAINS A STAND OF GRASS AND PER A FIELD INSPECTION IS IN EXCELLENT CONDITION AND NOT EXPERIENCING ANY SIGNS OF EROSION OR FLOODING.

THIS OUTFALL CONVEYS APPROXIMATELY 1.28 ACRES OF DRAINAGE FROM THE SUBJECT PROPERTY IN THE PRE-DEVELOPED CONDITION. AS A RESULT OF THE CONSTRUCTION OF THE PROPOSED INFILTRATION TRENCH WITHIN THIS DRAINAGE SHED NEARLY ALL SURFACE RUNOFF SHALL BE ELIMINATED DURING PRINCIPAL STORM EVENTS (TWO AND TEN YEAR). ADEQUATE OUTFALL REQUIREMENTS FOR THIS OUTFALL ARE PROPOSED TO BE MET BY THE EXISITNG STORM SEWER SYSTEM AND POINT OF CONFLUENCE AS OUTLINED IN PFM SECTION 6-0203.2A. THE PROPOSED RAINTANK INFILTRATION TRENCH SHALL BE DESIGNED TO STORE THE TWO AND TEN YEAR STORM AND THE DISCHARGE TO THIS OUTFALL WILL BE LESS THAN THE PREDEVELOPED DISCHARGE. THE FIRST AREA AT EXISTING STRUCTURE #EX-3A FOR POINT OF CONFLUENCE PURPOSES IS 2.10 ACRES. AT EXISTING STRUCTURE #EX-M-1, THE EXISTING STORM SEWER SYSTEM IS JOINED BY A RUN WITH A DRAINAGE AREA OF 1.90 ACRES WHICH IS GREATER THAN 90% OF THE FIRST AREA OF 2.10 ACRES MAKING THIS THE POINT OF CONFLUENCE FOR THE OUTFALL. THE EXISTING STORM SEWER SYSTEM WAS INVESTIGATED AND FOUND TO BE ADEQUATE FOR THE SITE DISCHARGE TO A POINT 150' DOWNSTREAM OF THE POINT OF CONFLUNCE. THIS OUTFALL IS ADEQUATE IN ACCORDANCE WITH SECTIONS 6-0203.2A, 6-0203.3B(4), AND 6-0203.3C OF THE PUBLIC FACILITIES MANUAL.

THE ROADSIDE DITCH ADJACENT TO OLD COURTHOUSE ROAD AND THE PROPOSED AND EXISTING STORM SEWER SYSTEM SHALL ACT AS THE OUTFALL FOR OUTFALL #1. THE ROADSIDE DITCH DRAINAGE WILL BE PICKED UP BY EXISTING STRUCTURE #EX-3A. THE EXISTING STORM SEWER SYSTEM THEN CONTINUES THROUGH THE TYSONS WEST AND TYSONS GREEN SUBDIVISIONS AND THEN DISCHARGES INTO THE FLOODPLAIN LIMITS OF OLD COURTHOUSE SPRING BRANCH. AT THE POINT JUST BEFORE THE DISCHARGE CHANNEL ENTERS THE MAIN CHANNEL OF OLD COURTHOUSE SPRING BRANCH, THE TOTAL DRAINAGE AREA IS 188 ACRES WHICH IS GREATER THAN 100 TIMES THE SITE AREA DISCHARGING TOWARD OUTFALL #1 (1.87 AC.).

OUTFALL #2 DISCHARGES FROM THE PROPERTY TO THE NORTH-WEST ONTO ADJACENT LOT 28. RUNOFF TOWARD OUTFALL #2 DISCHARGES OVERLAND IN A NON-CONCENTRATED MANNER AND WILL BE LESS THAN THE EXISTING RATE AND VOLUME IN ACCORDANCE WITH PFM SECTION 6-0202.6A. THE EXISTING OUTFALL MAINTAINS A GOOD STAND AND IS IN EXCELLENT CONDITION AND BASED UPON VISUAL INSPECTION DOES NOT APPEAR TO BE EXPERIENCING ANY EROSION. THIS OUTFALL CONVEYS APPROXIMATELY 0.52 ACRES OF UNCONTROLLED, POST DEVELOPED RUNOFF FROM THE SUBJECT PROPERTY. THE OUTFALL CONTINUES DOWNSTREAM TO A DEFINED CHANNEL WITHIN THE ANKERDALE SUBDIVISION. THIS OUTFALL IS ADEQUATE IN ACCORDANCE WITH SECTION 6-0202.6A OF THE PUBLIC FACILITIES MANUAL.

THE DEFINED CHANNEL WITHIN THE ANKERDALE SUBDIVISION CONTINUES THROUGH THE ANKERDALE AND ANKER GLEN SUBDIVISIONS AND THEN CONTINUES TO A CROSSING WITH MONTMORENCY DRIVE IN THE BLUFFS OF WOLFTRAP SECTION 2 SUBDIVISION. THE TOTAL DRAINAGE AREA AT THE CROSSING WITH MONTMORENCY DRIVE IS 112 ACRES WHICH IS GREATER THAN 100 TIMES THE SITE AREA DISCHARGING TOWARD OUTFALL #2 (0.52 AC.).

IT IS OUR PROFESSIONAL OPINION THAT ALL OUTFALLS ARE ADEQUATE IN ACCORDANCE WITH THE PFM AS STATED ABOVE.

STORMWATER MANAGEMENT CHECKLIST

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

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

This information is required under the following Zoning Ordinance paragraphs:

Special Permits (8-011 2J & 2L)	Special Exceptions (9-011 2J & 2L)
Cluster Subdivision (9-615 1G & 1N)	Commercial Revitalization Districts (9-622 2A (12) & (14))
Development Plans PRC District (16-302 3 & 4L)	PRC Plan (16-303 1E & 1O)
FDP P Districts (except PRC) (16-502 1F & 1Q)	Amendments (18-202 10F & 10I)

☒ 1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100').

☒ 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet 2.

☒ 3. Provide:

Facility Name/ Type & No. (e.g. dry pond A, infil. trench, underground stock, etc.)	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
I.T. #1	1.53 AC.	N/A	1.53 AC.	2,700 SF	7,413 CF	
Totals						

☒ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 2 & 4
Pond inlet and outlet pipe systems are shown on Sheet N/A.

☒ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 2.
Type of maintenance access road surface noted on the plat is GRAVEL (asphalt, geoblock, gravel, etc.).

☒ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 2.

☒ 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 4.

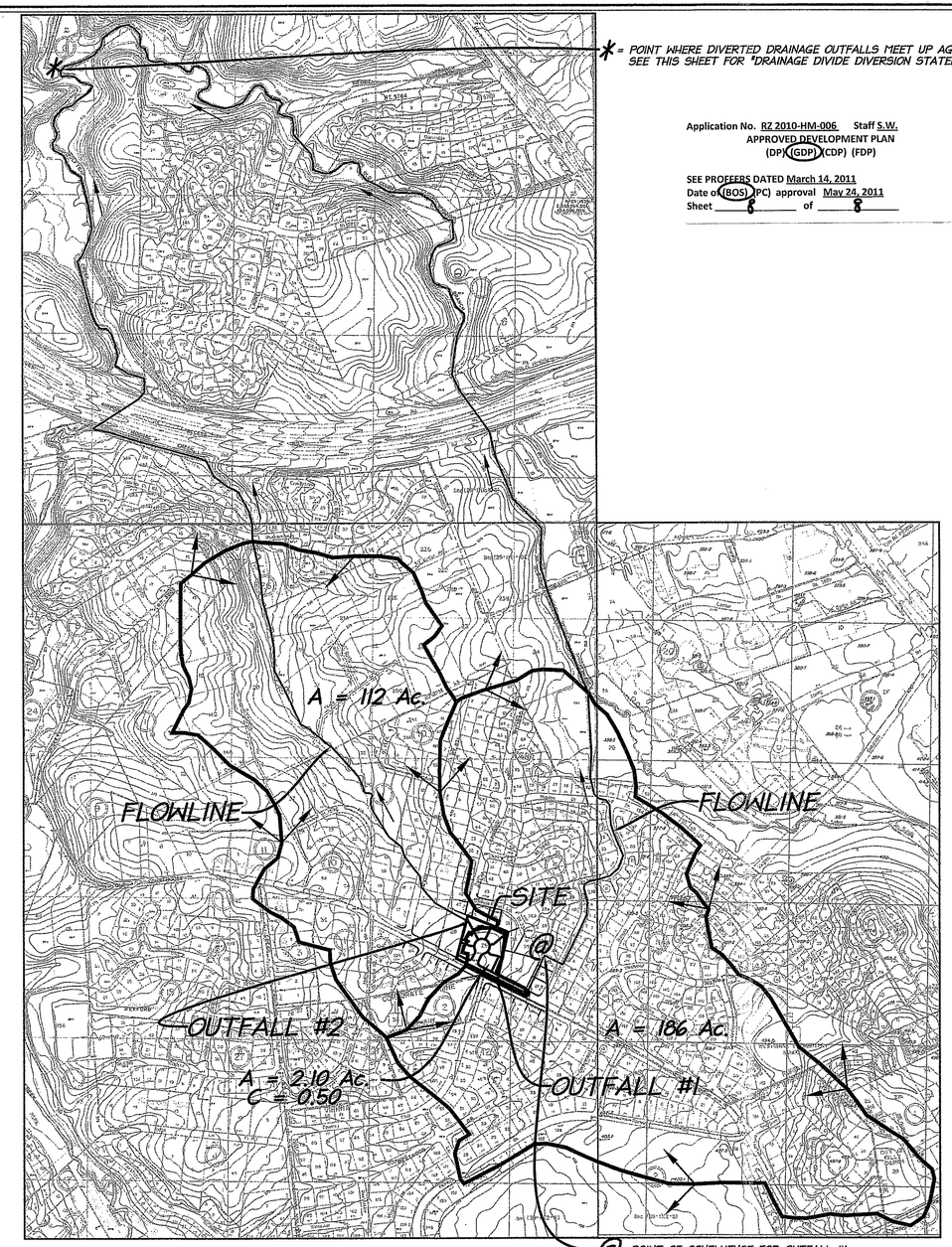
☒ 8. A description of the existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet 4.

☒ 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 4.

☒ 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheets 1, 2.

☒ 11. A submission waiver is requested for N/A.

☒ 12. Stormwater management is not required because N/A.



Application No. RZ 2010-HM-006 Staff S.W.
APPROVED DEVELOPMENT PLAN
(DP)(GDP)(CDP) (FDP)

SEE PROFFERS DATED March 14, 2011
Date of (BOS)(PC) approval May 26, 2011
Sheet 6 of 6

DRAINAGE AREA MAP

SCALE : 1" = 500'

STORMWATER MANAGEMENT INFORMATION

TYPE OF FACILITY = INFILTRATION TRENCH W/RAINTANKS
FACILITY MAINTENANCE = PRIVATE/HOMEOWNERS ASSOCIATION

INFILTRATION TRENCH #1
APPROXIMATE REQUIRED 10-YEAR VOLUME = 7,405 C.F.
APPROXIMATE PROPOSED VOLUME = 7,413 C.F.
APPROXIMATE SURFACE AREA = 2,700 S.F.
APPROXIMATE FINISHED GRADE = 404.0
APPROXIMATE GRADE TRENCH BOTTOM = 400.0

PRE-DEVELOPMENT SUBJECT PROPERTY

Q_2 = (0.40)(5.45)(2.39) = 5.21 CFS

Q_{10} = (0.40)(7.27)(2.39) = 6.95 CFS

POST-DEVELOPMENT SUBJECT PROPERTY

Q_2 = 2.06 CFS AFTER ATTENUATION

Q_{10} = 2.75 CFS AFTER ATTENUATION

LDC
UNLOCKING YOUR LAND'S POTENTIAL
9401 CENTREVILLE ROAD, SUITE 300
MANASSAS, VIRGINIA 20110
PH: 703-257-5900 FX: 703-257-5956

STORMWATER MANAGEMENT INFORMATION

TYSONS CREST

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVISION BY
8/10	KCHA 1	UPDATE SWMT CALCS.	
11/10	KCHA 2	NO CHANGES	
12/10	KCHA 3	CHANGE SD NAME	
3/11	KCHA 4	NO CHANGES	

ENGINEER

APPROVED
DATE

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
No. 1825
LAND SURVEYOR

SCALE:
AS SHOWN

SHEET 6 OF 6

DATE: APRIL, 2010

DRAFT: SDR | CHECK: TTTM

FILE NUMBER: 10016-1-D 3.0B

P:\PY 2010\10016-1-D Old Courthouse Road - 8400\ENG\GDP\10016swm.dwg