LEGEND

- EXISTING INTERMEDIATE CONTOUR (252)
- EXISTING INDEX CONTOUR (250)
- PROPOSED CONTOUR (50)
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING CURB & GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING WATERLINE (W)
- PROPOSED WATERLINE (W)
- EXISTING TELEPHONE LINE (TEL.)
- PROPOSED TELEPHONE LINE (TEL.)
- EXISTING ELECTRIC SERVICE (E)
- PROPOSED ELECTRIC SERVICE (E)
- EXISTING GAS LINE (G)
- PROPOSED GAS LINE (G)
- EXISTING SANITARY SEWER (EX. SAN. SEW.)
- PROPOSED SANITARY SEWER (SAN. SEW.)
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING FENCE LINE
- PROPOSED FENCE LINE
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING SPOT ELEVATION (275.50)
- PROPOSED SPOT ELEVATION (75.50)
- PROPOSED STOP SIGN
- FLOW LINE OF SWALE
- PROPOSED FIRE LANE
- EXISTING SIDEWALK (EX. SIDEWALK)
- PROPOSED SIDEWALK (SIDEWALK)
- EXISTING HANDICAP RAMP (CG-12)
- PROPOSED HANDICAP RAMP (CG-12)
- EXISTING TEST HOLE
- PROPOSED TEST HOLE
- FOUNDATION DRAIN (GRAVITY) (G)
- FOUNDATION DRAIN (PUMP) (P)
- EXISTING STREET LIGHT
- PROPOSED STREET LIGHT
- PARKING SPACE INDICATOR (TOTAL NUMBER OF SPACES) (12)
- EXISTING TREE LINE
- TO BE REMOVED (TBR)
- PROPOSED LIMITS OF CLEARING AND GRADING AND/OR DISTURBANCE

GENERAL NOTES:

1. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION FROM A 2011 FIELD SURVEY BY DOMINION SURVEYORS, INC. THE CONTOUR INTERVAL IS 2 FEET. TOPOGRAPHIC DATUM IS BASED ON FAIRFAX COUNTY/USGS ELEVATIONS.
2. THE PROPERTIES DELINEATED HEREIN ARE SHOWN ON FAIRFAX COUNTY TAX MAPS AS:

PARCEL I.D.	CURRENT ZONING	PROPOSED ZONING
81-3 ((1)) 46	R-1	R-12
91-1 ((1)) 43	R-1	R-12

3. THE PROJECT WILL BE SERVED BY A SANITARY SEWER EXTENSION FROM THE THE EXISTING COUNTY SEWER MAIN LOCATED IN POTTERS LANE.
4. THE PROJECT WILL BE SERVED BY A WATERLINE EXTENSION FROM AN EXISTING F.C.W.A. WATERLINE LOCATED IN POTTERS LANE
5. THE STORMWATER DETENTION AND CHESAPEAKE BAY ACT REQUIREMENTS OF FAIRFAX COUNTY CAN BE MET THROUGH THE CONSTUCTION OF AN ON-SITE STORMWATER DETENTION / BMP POND. THE PRELIMINARY DESIGN OF THIS FACILITY IS DETAILED ON SHEETS 4 AND 5 OF THIS PLAN.

   THE OFFSITE POTTERS GLEN STORMWATER MANAGEMENT POND WAS DESIGNED FOR RUNOFF FROM THIS SITE (1988) AND WAS SUBSEQUENTLY (1995) MODIFIED TO FUNCTION AS A B.M.P. FACILITY. IF IT IS DETERMINED THAT THE FACILITY MAY BE USED FOR THIS SITE, AND SUBJECT TO THE APPROVAL OF THE APPROPRIATE WAIVERS BY BY D.P.W.E.S., THE ON-SITE DRY POND WILL BE ELIMINATED AND THE POND PORTION OF THE SITE WILL BE OPEN SPACE.
6. A TRAIL IS NOT REQUIRED, PER THE COUNTY MASTER TRAIL PLAN.
7. A MODIFICATION OF THE LANDSCAPING/TRANSITIONAL SCREENING REQUIREMENTS IS REQUESTED AS PART OF THIS PLAN.
8. THERE IS NO RESOURCE PROTECTION AREA (RPA) ON THE SITE. THE ENTIRE SITE IS WITHIN A RESOURCE MANAGEMENT AREA (RMA).
9. THERE IS NO KNOWN OR VISIBLE EVIDENCE OF A GRAVE, OBJECT OR STRUCTURE MARKING A PLACE OF BURIAL, AND HAZARDOUS OR TOXIC SUNSTANCES ON THIS SITE.
10. THERE IS NO FLOODPLAIN MAPPED ON THE SITE.
11. THERE ARE NO SCENIC ASSETS OR VISTAS PRESENT ON THE SITE.
12. THERE ARE NO EASEMENTS IN EXCESS OF 25 FEET IN WIDTH ON THE SITE.
13. THE EXISTING VEGETATION AND LIMITS OF EXISTING TREE COVERAGE ARE SHOWN ON ATTACHED SHEET 6.
14. THE PROPOSED DEVELOPMENT IS WITHIN THE ACCOTINK CREEK WATERSHED IMPROVEMENT PLANNING DISTRICT. APPROPRIATE MEASURES WILL BE APPLIED TO MEET THE POLICIES AND REQUIREMENTS OF THE P.F.M. AT THE TIME OF SITE PLAN REVIEW.
15. THE PROPOSED DEVELOPMENT SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION AND FAIRFAX COUNTY.
16. THE PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH THE COMPREHENSIVE PLAN.
17. ALL DIMENSIONS AND AREAS SHOWN ARE APPROXIMATE AND SUBJECT TO CHANGE WITH FINAL ENGINEERING. IN ACCORDANCE WITH ARTICLE 18 OF THE ZONING ORDINANCE, MINOR MODIFICATIONS MAY BE PERMITTED DUE TO ISSUES OF TOPOGRAPHY, DRAINAGE, UTILITY DESIGN, LAYOUT AND FINAL DESIGN AT THE TIME OF THE SITE PLAN.
18. DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO MARKET CONDITIONS.
19. THE EXISTING RESIDENTIAL STRUCTURES WERE CONSTRUCTED IN 1942 AND 1948 FOR PARCELS 43 AND 46, RESPECTIVELY, IN ACCORDANCE THE TAX TAX ASSESSMENT RECORDS, AND ARE TO BE REMOVED.
20. GIVEN THE NATURE OF THIS INFILL DEVELOPMENT, SPECIAL AMENTITIES ARE NEITHER NECESSARY NOR PROPOSED.
21. THE NEIGHBORING PROPERTIES ON THREE SIDES ARE TOWNHOUSE DO NOT REQUIRE SCREENING / PROTECTION FROM THIS DEVELOPMENT. THE NEIGHBORING SINGLE FAMILY DETACHED HOMES TO THE WEST OF THE SITE WILL BE APPROPRIATELY SCREENED.

SITE / ZONING TABULATIONS:

A. THE PROPERTY OWNERS ARE:

T.M. 81-3 ((1)) 46 — HEIRS OF ROBERT W. POTTER, C/O STEPHEN R. POTTER, 2765 GREENWAY BOULEVARD, FALLS CHURCH, VIRGINIA 22042, WB. 843, PG. 809

T.M. 91-1 ((1)) 43 — JAMES M. HOGAN, 6414 POTTERS LANE, ALEXANDRIA, VIRGINIA 22310-2507, DB.1819, PG. 505

B. PARCEL AREAS:

PARCEL I.D.	AREA (S.F.)	AREA (AC.)
83-1 ((1)) 46	37,647	0.86426
91-1 ((1)) 43	37,769	0.86706
TOTAL	75,416 S.F.	1.73131 AC.

C. PROPOSED RIGHT-OF-WAY DEDICATION:
0 S.F.

D. NET SITE AREA:
75,416 S.F. S.F.

E. ZONING REQUIREMENTS R-12 (12 UNITS PER ACRE):

MINIMUM DISTRICT SIZE: 4.0 ACRES
MINIMUM LOT WIDTH: 18 FEET

NOTE: A WAIVER TO THE MINIMUM DISTRICT SIZE IS REQUESTED. THESE ARE TWO RESIDUAL PARCELS THAT WERE NOT PART OF THE ORIGINAL POTTER'S GLEN TOWNHOUSE PROJECT WHICH SURROUNDS THE PARCELS ON THREE OF THE FOUR SIDES.

MAXIMUM BUILDING HEIGHT: 35 FEET
MINIMUM YARD REQUIREMENTS: SINGLE FAMILY ATTACHED DWELLINGS

FRONT YARD: CONTROLLED BY A 15 DEGREE ANGLE OF BULK PLANE, BUT NOT LESS THAN 5 FEET.

SIDE YARD: CONTROLLED BY A 15 DEGREE ANGLE OF BULK PLANE, BUT NOT LESS THAN 10 FEET.

REAR YARD: CONTROLLED BY A 30 DEGREE ANGLE OF BULK PLANE, BUT NOT LESS THAN 20 FEET.

THESE MINIMUM YARD REQUIREMENTS APPLY TO BUILDINGS COMPRISED OF SINGLE FAMILY ATTACHED DWELLING UNITS, AS THEY RELATE TO PERIPHERAL LOT LINES, STREETS AND TO OTHER BUILDINGS, BUT BUT SHALL NOT APPLY TO INDIVIDUAL SINGLE FAMILY ATTACHED UNITS WITHIN A BUILDING.

OPEN SPACE: 25 PERCENT OF GROSS AREA SHALL BE OPEN SPACE.

TREE CANOPY: 15 PERCENT

F. SITE TABULATIONS:

PROPOSED DENSITY: 17 UNITS, 9.82 D.U./ AC.

PROPOSED LOT WIDTH: INTERIOR LOTS = 22.0 FT.; END LOTS = 32.0 OR 34.0 FT.

PROPOSED BUILDING HEIGHT: ALLOWABLE: 35 FEET; PROPOSED: 35 FEET

BULK REGULATIONS:

FRONT YARD:
ALLOWABLE: 15 DEGREE BULK PLANE, NOT LESS THAN 5 FEET
PROPOSED: 18 FEET - INTERIOR LOTS; 10 FEET - END LOTS (DOUBLE FRONTS)

REAR YARD:
ALLOWABLE: 15 DEGREE BULK PLANE, NOT LESS THAN 10 FEET
PROPOSED: 10 FEET
ALLOWABLE: 30 DEGREE BULK PLANE, NOT LESS THAN 20 FEET
PROPOSED: 20 FEET

FINAL BUILDING ARCHITECTURAL PLANS / ROOF DESIGN SHALL BE ADJUSTED TO COMPLY WITH THE BULK PLANE REGULATIONS.

OPEN SPACE:
REQUIRED = 0.25(75,416) = 18,854 S.F.
PROVIDED:
ALTERNATIVE "A" = 21,178 S.F. = 28.08%
ALTERNATIVE "B" = 21,534 S.F. = 28.55%

TREE CANOPY:
REQUIRED = 0.15(75,416) = 11,312 S.F.
PROVIDED:
ALTERNATIVE "A" = 18,789 S.F. = 24.91%
ALTERNATIVE "B" = 12,656 S.F. = 16.78%

G. PARKING TABULATIONS:

PARKING REQUIRED: SIN. FAM ATTACHED - 2.7 SPACES PER UNIT, HOWEVER, ONLY ONE SUCH SPACE MUST HAVE CONVENIENT ACCESS TO A STREET.

PROVIDED:
INTERIOR UNITS HAVE SINGLE CAR GARAGE AND SINGLE DRIVEWAY SPACE. - 11 UNITS @ 2 SPACES EACH = 22 SPACES
END UNITS HAVE DOUBLE CAR GARAGE AND DOUBLE DRIVEWAY SPACE. - 6 UNITS @ 4 SPACES EACH = 24 SPACES

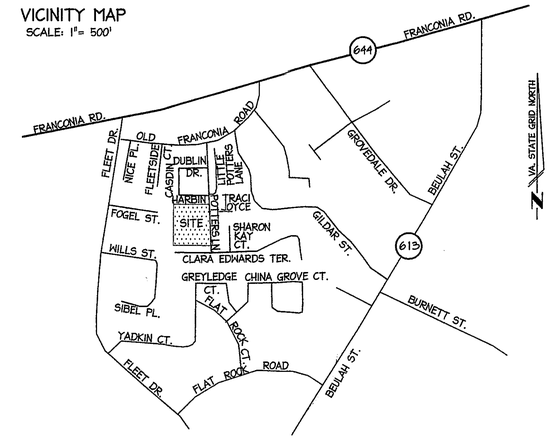
COMMON AREA SPACES:
ALTERNATIVE "A" = 11 SPACES
ALTERNATIVE "B" = 12 SPACES

TOTAL PARKING (GARAGE, DRIVEWAY & COMMON):
ALTERNATIVE "A" = 57 SPACES (3.35 / UNIT)
ALTERNATIVE "B" = 58 SPACES (3.41 / UNIT)

SPACES WITH DIRECT ACCESS TO STREET.
ALTERNATIVE "A" = 34 SPACES (2.0 / UNIT)
ALTERNATIVE "B" = 35 SPACES 2.06 / UNIT)

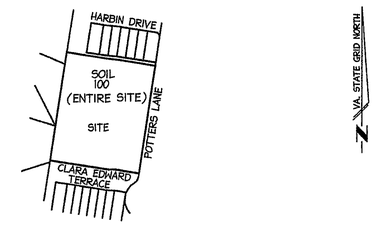
VICINITY MAP

SCALE: 1" = 500'



SOIL MAP

SCALE: 1" = 200'



SOIL INFORMATION FROM NRCS / COUNTY SOIL MAPS (2008)

SOIL ID NUMB.	SERIES NAME	PROBLEM CLASS	SOIL DRAINAGE	SUITABILITY FOR SEPTIC	SUIT. FOR INFILTR.	EROSION POTENTIAL	FOUNDATION SUPPORT
100	URBAN LAND, KINGSTOWN COMPLEX	IVB	FAIR	POOR	MARG.	MED.	FAIR

A GEOTECHNICAL INVESTIGATION AND RECOMMENDATIONS ARE REQUIRED.

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 2 & 4L)	PRC Plan (16-303 1E & 10)
FDP - P Districts (except PRC) 916-502 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 to accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet 4

☑ 3. Provide:

Facility Name/ Type & No.	On-Site area served (acres)	Off-Site are served (acres)	Drainage area (acres)	Footprint area (sf.)	Storage Volume (cf.)	If pond, dam height (ft.)
(e.g., dry pond A, infil. trench, underground vault, etc.)						
DRY POND	1.48	0.25	1.73	6080	10100 @ 100 YR W.S.E.	5.9' EXCAVATED DEPTH
				Totals		

☑ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 4. Pond inlet and outlet pipe systems are shown on Sheet 4.

☑ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 4. (POTTERS LN.) Type of maintenance access road surface noted on the plat is ASPH(asphalt, geoblock, gravel, etc.)

☑ 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 7.

☑ 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 5.

☑ 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 5.

☑ 9. A description of how the outfall requirements, including known changes to contributing drainage areas (i.e. drainage diversions), of the Public Facilities Manual will be satisfied is provided on Sheet 5.

☑ 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 2-4. (NOTE IS ON SHEET 1)

☐ 11. A submission waiver is requested for _____

N/A

☐ 12. Stormwater management is not required because DETENTION & BMPS ARE PROVIDED BY AN OFFSITE FACILITY. SEE SHEET 5.

RECEIVED Department of Planning & Zoning OCT 28 2011 Zoning Evaluation Division

WETLANDS CERTIFICATE

I HEREBY CERTIFY THAT ALL WETLANDS PERMITS REQUIRED BY LAW WILL BE OBTAINED PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES.

SIGNATURE Alan R Dalton

OWNER/DEVELOPER AGENT FOR OWNER

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 1 of 12

SHEET INDEX

1 COVER SHEET / SITE TABULATIONS
2 EX. CONDITIONS PLAN
3A GENERALIZED DEVELOPMENT PLAN - ALTERNATIVE "A"
3B GENERALIZED DEVELOPMENT PLAN - ALTERNATIVE "B" WITH SWM POND
4 PRELIMINARY GRADING / STORMWATER POND PLAN
5 PRELIMINARY STORMWATER CALCULATIONS / OUTFALL NARRATIVE
6 EXISTING VEGETATION MAP
7A PRELIMINARY LANDSCAPE / TREE COVER PLAN - ALTERNATIVE "A"
7B PRELIMINARY LANDSCAPE / TREE COVER PLAN - ALTERNATIVE "B" WITH SWM POND
8A LANDSCAPING TABLULATION AND DETAILS - ALTERNATIVE "A"
8B LANDSCAPING TABLULATION AND DETAILS - ALTERNATIVE "B"
9 ILLUSTRATIVE TOWNHOUSE ELEVATION PLAN

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

NO.	DATE	DESCRIPTION
1	8/26/11	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
2	10/5/11	REVISE PER 2ND COUNTY COMMENTS, ADD ALT. "B" LAYOUT
3	10/25/11	REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL

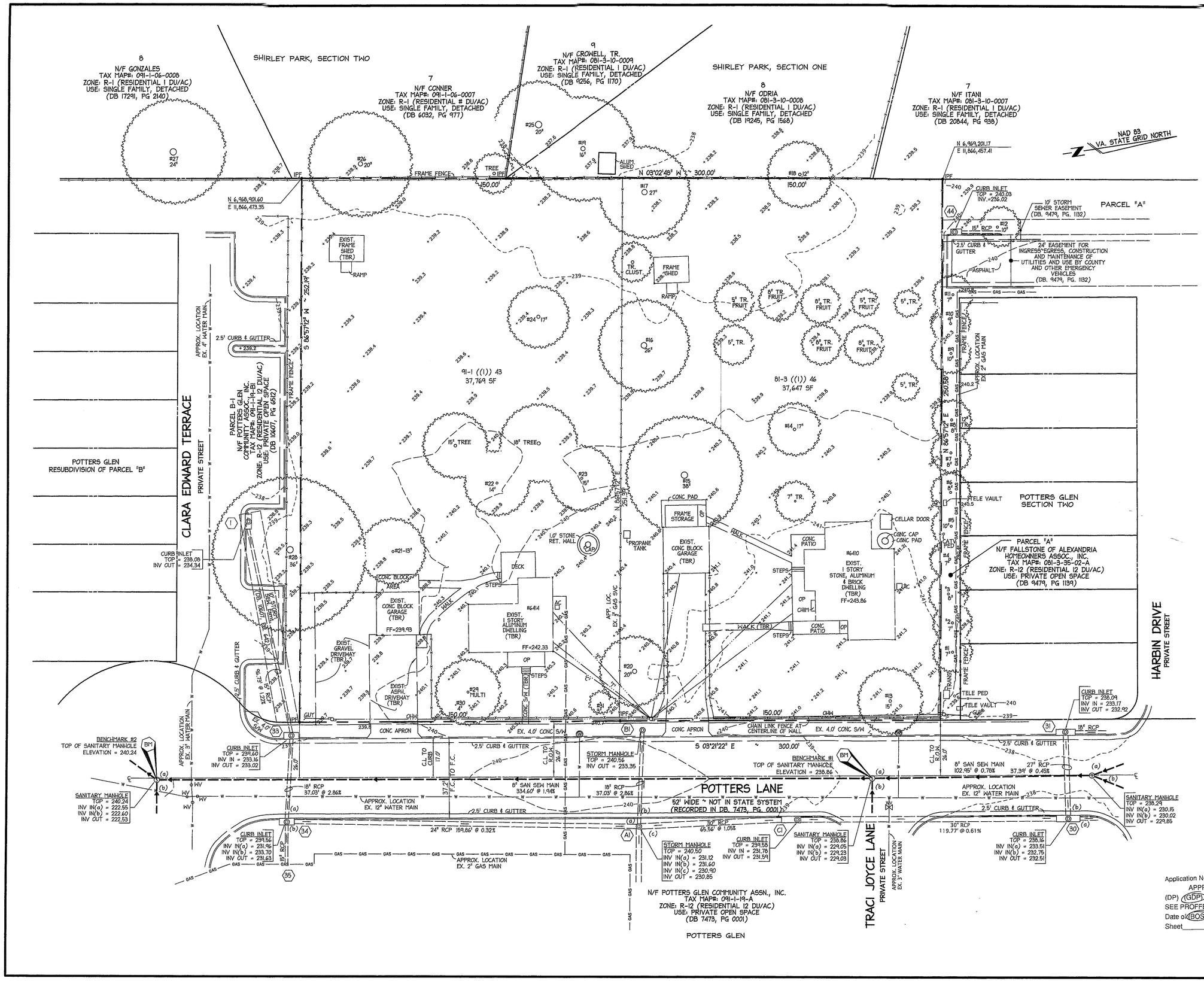
REVISION BLOCK

COVER SHEET - GENERALIZED DEVELOPMENT PLAN
POTTERS GLEN, SECTION 3
T.M 81-3 ((1)) 46 & 91-1 ((1)) 43
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: AS SHOWN
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
Alan R Dalton
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 1 OF 9



Application No. RZ 2011-LE-014 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 2 of 12

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
8/26/11	1	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
10/5/11	2	(NO CHANGE TO THIS SHEET) REVISE PER 2ND COUNTY COMMENTS, ADD TURNAROUND
10/25/11	3	(NO CHANGE TO THIS SHEET) REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL

ENGINEER — REVISION BLOCK

EXISTING CONDITIONS PLAN

POTTERS GLEN, SECTION 3

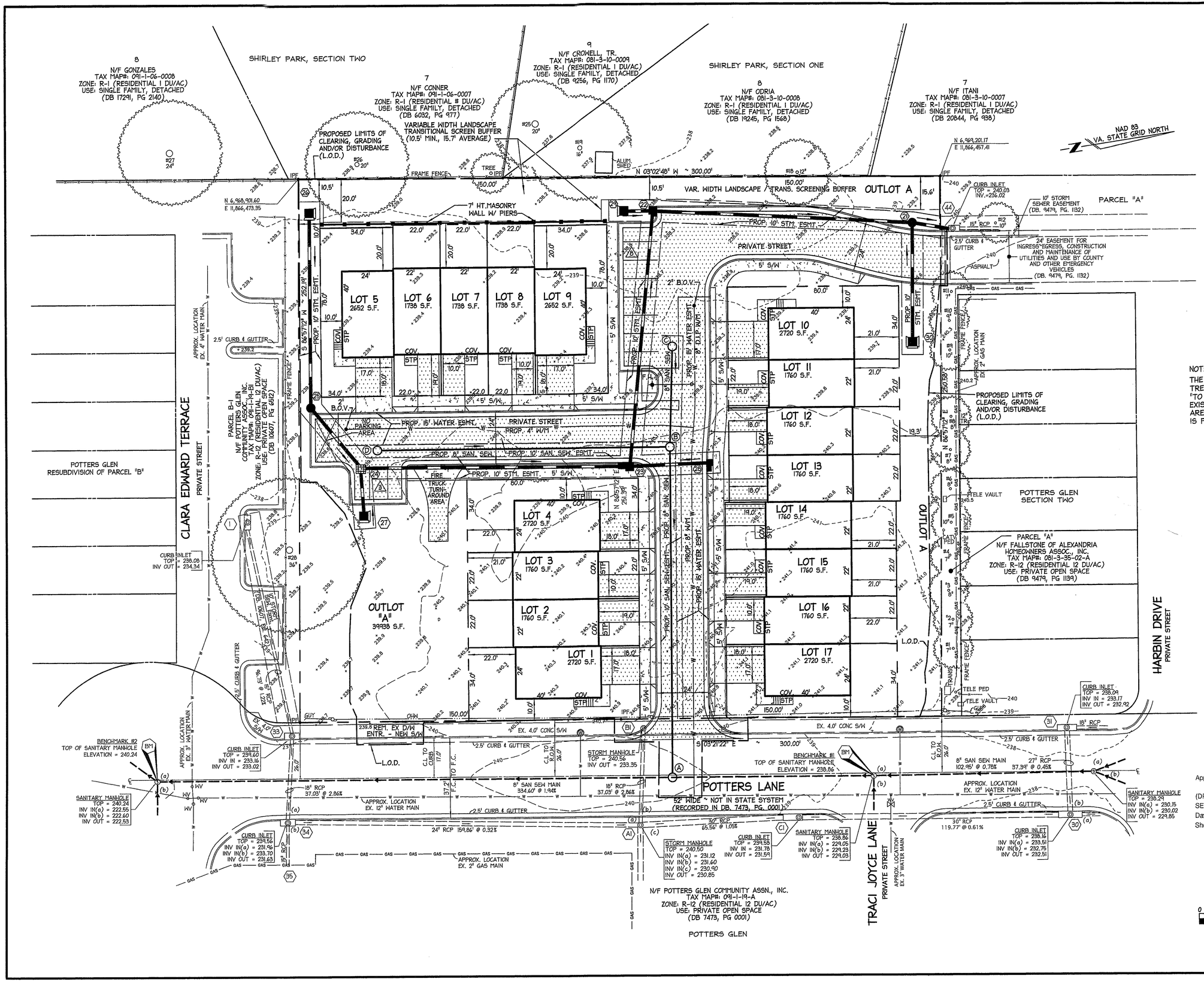
T.M 81-3 ((1)) 46 & 91-1 ((1)) 43

LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1" = 20'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 2 OF 9



NOTE:
THE EXISTING BUILDINGS, PAVEMENT, TREES, AND UTILITIES, SHOWN AS "TO BE REMOVED (TBR)" ON THE EXISTING CONDITIONS PLAN (SHEET 2), ARE NOT SHOWN ON THIS PLAN. THIS IS FOR PLAN CLARITY PURPOSES.

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 3 of 12

GRAPHIC SCALE
0 20' 40' 60'
SCALE: 1" = 20'

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
8/26/11	1	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
10/5/11	2	REVISE PER 2ND COUNTY COMMENTS, ADD TURNAROUND.
10/25/11	3	REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL

REVISION BLOCK

GENERALIZED DEVELOPMENT PLAN - ALTERNATIVE "A"

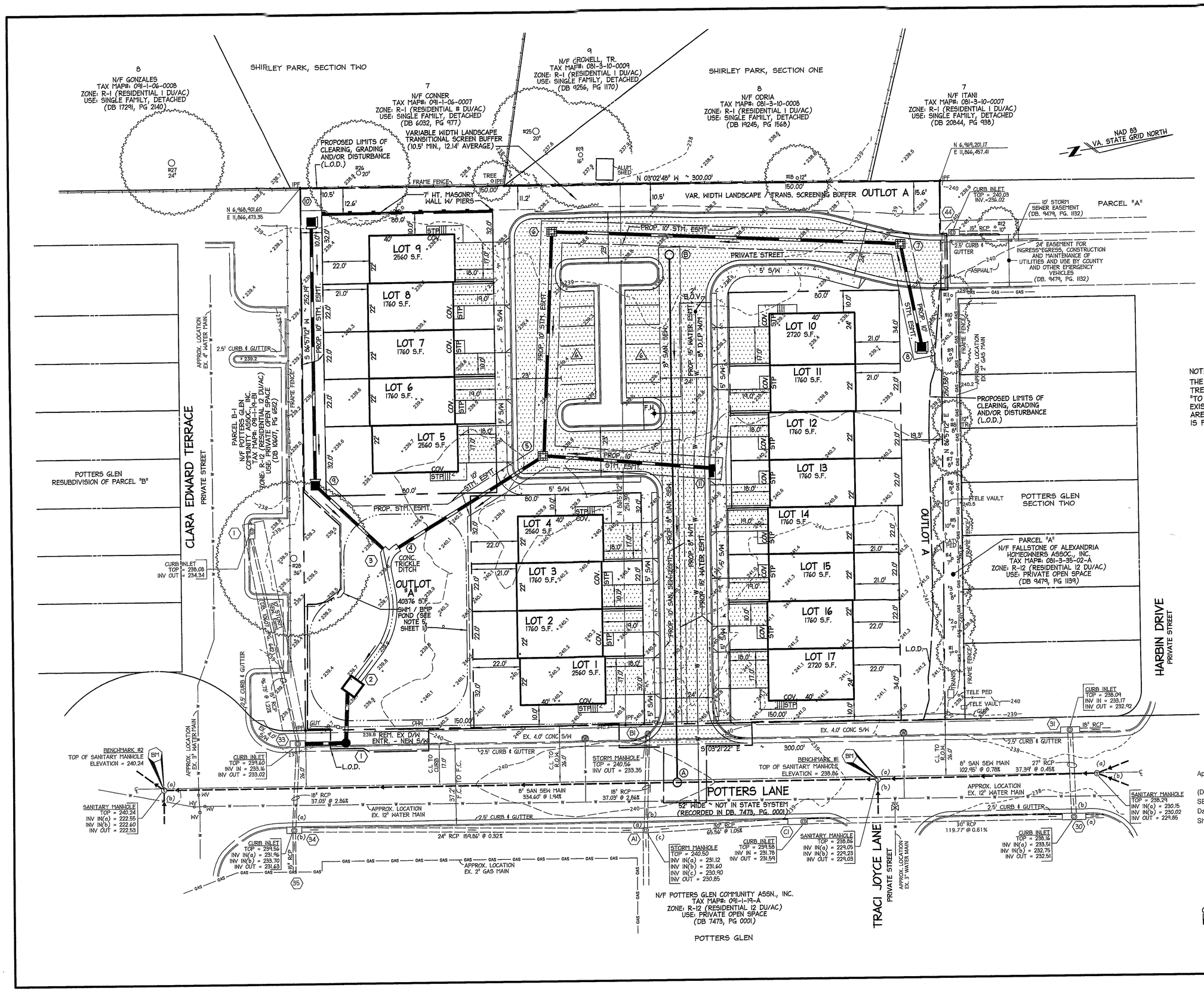
POTTERS GLEN, SECTION 3

T.M 81-3 ((1)) 46 & 91-1 ((1)) 43
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1" = 20'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
Alan R Dalton
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 3A OF 9



NOTE:
THE EXISTING BUILDINGS, PAVEMENT, TREES, AND UTILITIES, SHOWN AS "TO BE REMOVED (TBR)" ON THE EXISTING CONDITIONS PLAN (SHEET 2), ARE NOT SHOWN ON THIS PLAN. THIS IS FOR PLAN CLARITY PURPOSES.

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 4 of 12

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
8/29/11	1	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
10/5/11	2	REVISE PER 2ND COUNTY COMMENTS, ADD ALT. "B" LAYOUT.
10/25/11	3	REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL

REVISION BLOCK

GENERALIZED DEVELOPMENT PLAN - ALTERNATIVE "B" WITH SWM POND

POTTERS GLEN, SECTION 3

T.M 81-3 ((1)) 46 & 91-1 ((1)) 43

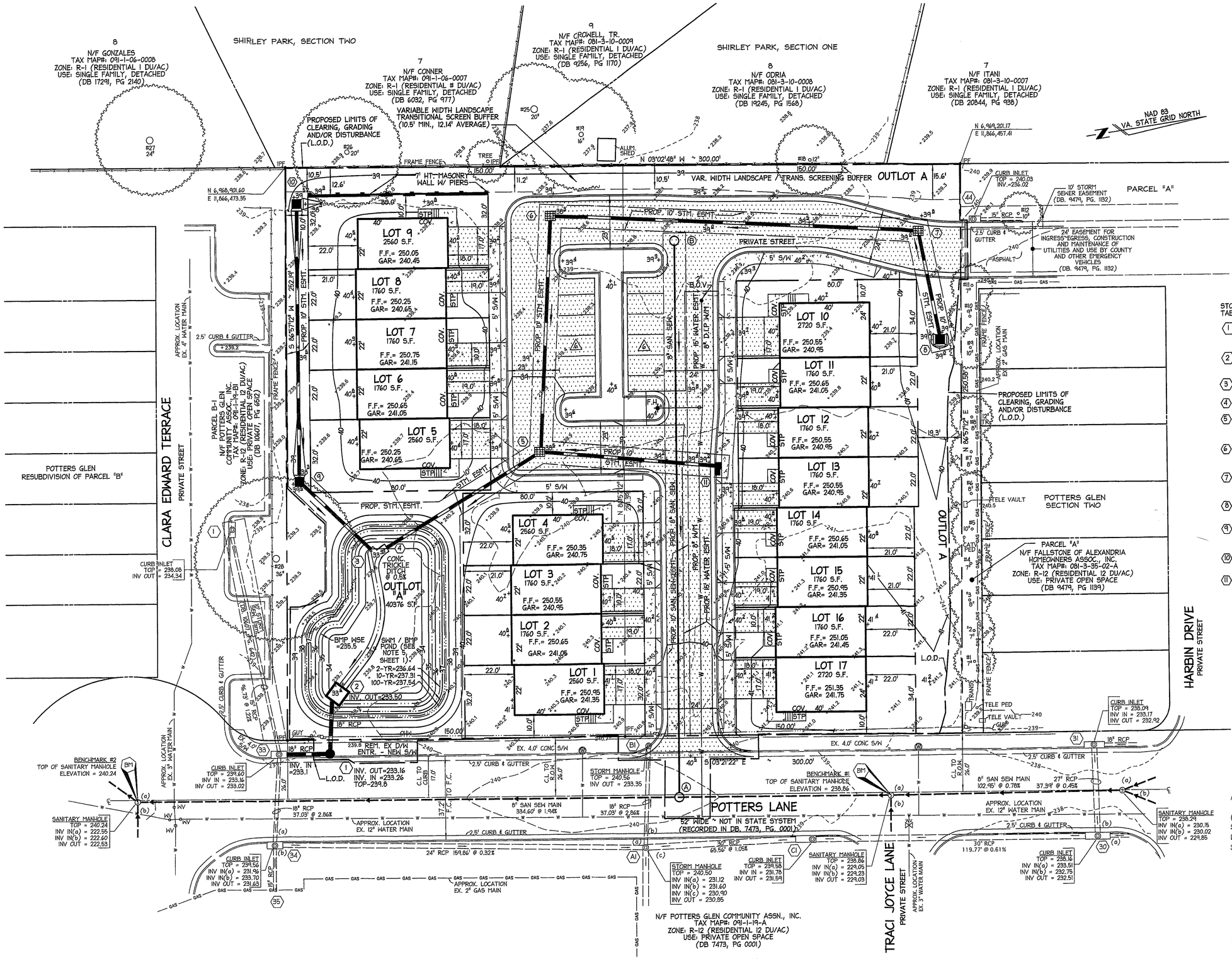
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1" = 20'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 3B OF 9

NOTE:
THE EXISTING BUILDINGS, PAVEMENT, TREES, AND UTILITIES, SHOWN AS "TO BE REMOVED (TBR)" ON THE EXISTING CONDITIONS PLAN (SHEET 2), ARE NOT SHOWN ON THIS PLAN. THIS IS FOR PLAN CLARITY PURPOSES.



STORM STRUCTURES TABULATIONS

1. TOP-239.8 INV. OUT=233.16 INV. IN =233.26
2. POND OUTLET STR. INV. OUT=233.5 INV. IN =233.6
3. INV. OUT=233.93
4. INV. OUT=233.93
5. TOP ELEV. =238.5 INV. OUT=234.41 INV. IN =234.51
6. TOP ELEV. =238.3 INV. OUT=234.82 INV. IN =234.92
7. TOP ELEV. =239.2 INV. OUT=235.42 INV. IN =235.52
8. TOP ELEV. =239.4 INV. OUT=235.67
9. TOP ELEV. =239.5 INV. OUT=234.16 INV. IN =234.26
10. TOP ELEV. =239.5 INV. OUT=234.87
11. TOP ELEV. =239.5 INV. OUT=234.81

Application No. RZ 2011-LE-019 Staff N. Regis
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of BOS (PC) approval 1/10/2012
Sheet 11 of 12

GRAPHIC SCALE
0 20' 40' 60'
SCALE: 1" = 20'

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
8/26/11	1	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
10/5/11	2	REVISE PER 2ND COUNTY COMMENTS, ADD ALT "B" LAYOUT.
10/25/11	3	REVISE PER 3RD COUNTY COMMENTS, ADD MASONRY WALL

REVISION BLOCK

PRELIMINARY GRADING / SWM POND

POTTERS GLEN, SECTION 3

T.M 81-3 ((1)) 46 & 91-1 ((1)) 43

LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1" = 20'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 4 OF 9

PRELIMINARY STORMWATER MANAGEMENT NARRATIVE:

THIS G.D.P. INCLUDES AN ONSITE STORMWATER DETENTION / STORMWATER QUALITY "DRY" POND THAT WILL COMPLY WITH ALL COUNTY REQUIREMENTS FOR STORMWATER DETENTION AND WATER QUALITY IMPROVEMENTS (BMPS). HOWEVER, AN EXISTING S.W.M. FACILITY IN POTTERS GLEN SECTION 1 WAS DESIGNED / CONTRUCTED TO PROVIDE DETENTION AND B.M.P.S FOR THIS PROJECT. SUBSEQUENT TO THE REZONING, WAIVERS OF DETENTION AND WILL BE SUBMITTED TO D.P.W.E.S. IF THE WAIVERS ARE APPROVED, PLAN ALTERNATIVE "A" WILL BE CONSTRUCTED.

THE ORIGINAL POTTERS GLEN TOWNHOUSE PROJECT INCLUDED A STORMWATER DETENTION FACILITY AND THE DESIGN PLANS (CIRCA 1988, PACUILL, SIMMONS, & ASSOCIATES) INCLUDED THIS PROPERTY AS PART OF "FUTURE SECTION 2" TRIBUTARY TO THE POND. THE POND WAS DESIGNED USING RATIONAL METHOD HYDROLOGY AND USED A POST-DEVELOPMENT "C" OF 0.62 FOR RUNOFF FROM THIS SITE.

THE SUBSEQUENT DEVELOPMENT OF POTTERS GLEN, SECTION 2, REQUIRED THE MODIFICATION OF THE ORIGINAL POND TO PROVIDE WATER QUALITY IMPROVEMENTS (BMPS), IN ACCORDANCE WITH THE CHESAPEAKE BAY ACT. THAT PLAN, (CIRCA 1995, R.C. FIELDS & ASSOCIATES), REQUIRED THE MODIFICATION OF THE EXISTING OUTLET STRUCTURE AND PROVIDED BMPS FOR SECTION 2, PLUS AN ADDITIONAL 18.25 ACRES OF TRIBUTARY AREA. THE 1.73 ACRE SECTION 3 SITE IS PART OF THAT AREA.

THE USE OF THE OFFSITE POND FOR THIS SITE WILL REQUIRE CONCURRENCE FROM FAIRFAX COUNTY D.P.W.E.S., POSSIBLE WAIVERS, AND POSSIBLE AGREEMENT BY THE POTTERS GLEN H.O.A.

IF AGREEMENT FROM D.P.W.E.S. AND/OR THE H.O.A. CANNOT BE OBTAINED, THEN THE ON-SITE POND WILL BE CONSTRUCTED.

DESIGN SUMMARY ON-SITE SWM FACILITY:

EXISTING CONDITIONS:

PEAK DISCHARGE RATES FOR THE EXISTING SITE CONDITIONS WERE CALCULATED USING WINTR-55.

SITE AREA 1.73 ACRES
TYPE II DISTRIBUTION, 24 HR. STORM, TYPE "D" SOIL
LAND USE - 1 ACRE LOTS
24 HR. RAINFALL:
FAIRFAX COUNTY HYDROGRAPH

PEAK DISCHARGE (EXISTING)
2 YEAR STORM = 4.48 CFS
10 YEAR STORM = 9.79 CFS

THIS IS THE ALLOWABLE, POST-DEVELOPMENT DISCHARGE FROM THE SITE.

PROPOSED CONDITIONS:

PEAK DISCHARGE RATES FOR THE PROPOSED SITE CONDITIONS WERE CALCULATED USING WINTR-55.

SITE AREA = 1.73 ACRES
TYPE II DISTRIBUTION, 24 HR. STORM, TYPE "D" SOIL
LAND USE - TOWNHOUSES
24 HR. RAINFALL:
FAIRFAX COUNTY HYDROGRAPH

PEAK DISCHARGE (EXISTING)
2 YEAR STORM = 6.08 CFS
10 YEAR STORM = 11.42 CFS

THE SITE IS RELATIVELY FLAT, WITH POTENTIAL LOCATIONS OF AN SWM FACILITY BEING THE PROPERTY'S NORTHERN CORNER (OFFSITE STORM STRUCTURE 44) OR THE PROPERTY'S SOUTHERN CORNER (EXISTING STORM STRUCTURE 33). THE SOUTHERN CORNER WAS SELECTED BECAUSE THE EXISTING STORM OUTFALL SEWER IS DEEPER AT THAT LOCATION, ALLOWING FOR A DEEPER ON-SITE POND. RUNOFF FROM THE NORTHERN PORTION OF THE SITE WILL BE COLLECTED IN THE STORM SEWER SYSTEM AND PIPED TO THE SWM POND. IT SHOULD BE NOTED THAT THE RUNOFF FROM NORTHERN STRUCTURE 44 IS ACTUALLY PIPED BACK TO THE FRONT OF THE SITE, ACROSS POTTERS LANE AND INTO THE POTTERS GLEN SWM FACILIITY. THE STRUCTURE FLOW IS 44-41-40-31-30-C1-A1.

RUNOFF FROM A SMALL PORTION OF THE SITE'S GRASSED / OPEN AREA WILL CONTINUE TO DISCHARGE OFFSITE AS NON-EROSIVE SHEET FLOW. THIS WOULD PRIMARILY BE FROM THE LANDSCAPED BUFFER AREA AT THE REAR OF THE PROPERTY. THE UNCONTROLLED RUNOFF IS ESTIMATED TO BE:

POST-DEVELOPED UNCONTROLLED:
2 YEAR STORM = 0.67 CFS
10 YEAR STORM = 1.47 CFS

THE ALLOWABLE POND DISCHARGE IS THE PRE-DEVELOPED RATE MINUS THE UNCONTROLLED RUNOFF:

DESIGN STORM	PRE-DEVELOPED	UNCONTROLLED	ALLOWABLE DISCHARGE
2 YEAR STORM	4.48 CFS	0.67 CFS	3.81 CFS
10 YEAR STORM	9.79 CFS	1.47 CFS	8.32 CFS

THE SWM/BMP POND IS DESIGNED AS AN EXCAVATED POND, WITH NO CONSTRUCTED DAM EMBANKMENT. IT WILL BE AN EXTENDED DETENTION, DRY POND WITH A BMP VOLUME OF APPROXIMATELY 3007 CUBIC FEET. THE BMP VOLUME IS BASED ON THE SITE'S IMPERVIOUS AREA AND A RESULTANT "C".

IMPERVIOUS AREA: ALT. "A" = 34659 S.F.
ALT. "B" = 34392 S.F.

GRASSED / LANDSCAPED OPEN SPACE: ALT. "A" = 35757 S.F.
ALT. "B" = 36024 S.F.

USING A "C" OF 0.9 FOR THE ROOFS / PAVEMENT AND 0.25 FOR GRASS, RESULTS IN A POSTDEVELOPED "C" OF 0.592 FOR ALTERNATIVE "A" AND 0.590 FOR ALTERNATIVE "B".

BMP VOLUME REQUIRED = ALT. "A" (4375 x 0.592 - 875) X 1.7313 = 2969 CUBIC FEET
ALT. "B" (4375 x 0.590 - 875) X 1.7313 = 2954 CUBIC FEET

THE EXCAVATED POND, GRADED AS SHOWN ON SHEET 4, PROVIDED A BMP VOLUME OF 3007 C.F. AT ELEVATION 235.5 FEET. FOR ALL STORM ROUTINGS THIS IS CONSIDERED AS THE BOTTOM ELEVATION OF THE POND, ASSUMING THE THE BMP VOLUME IS FILLED AT THE TIME OF A STORM.

POND INFLOW RATES WERE CALCULATED USING TR55 / TR20 METHODOLOGY AND ROUTINGS WERE PERFORMED USING "HYDROFLOW HYDROGRAPHS" SOFTWARE.

DESIGN STORM	ALLOWABLE DISCHARGE	POND DISCHARGE
2 YEAR STORM	3.81 CFS	3.59 CFS
10 YEAR STORM	8.32 CFS	7.28 CFS
10 YEAR STORM	N/A	11.49 CFS

DUE TO THE SMALL FLOWS AND EXCAVATED CONDITION BY THE EXISTING POTTERS LANE ROADWAY, THE FACILITY WILL USE A COMBINED PRINCIPLE / EMARGENCY SPILLWAY. THE PFM ALLOWS THIS, WITH THE APPROVAL OF THE DIRECTOR.

THE BMP POND WILL COLLECT RUNOFF FROM ALL OF THE ON-SITE IMPERVIOUS AREA AND A SMALL AMOUNT OF OFFSITE AREA, RESULTING IN A BMP REMOVAL EFFICIENCY OF 40%, AS REQUIRED BY THE P.F.M.

ELEVATION STORAGE / DISCHARGE INFORMATION

Pond Data

Pond storage is based on known contour areas

Stage / Storage Table

Stage ft	Elevation ft	Contour area sqft	Incr. Storage cuft	Total storage cuft
0.00	235.50	2,485	0	0
0.50	236.00	2,686	1,293	1,293
1.50	237.00	3,363	3,025	4,317
2.50	238.00	4,097	3,730	8,047
3.50	239.00	4,883	4,490	12,537
4.50	240.00	5,727	5,305	17,842

Culvert / Orifice Structures

	[A]	[B]	[C]	[D]
Rise in	= 18.0	0.0	0.0	0.0
Span in	= 18.0	0.0	0.0	0.0
No. Barrels	= 1	0	0	0
Invert El. ft	= 233.50	0.00	0.00	0.00
Length ft	= 40.0	0.0	0.0	0.0
Slope %	= 1.00	0.00	0.00	0.00
N-Value	= .013	.000	.000	.000
Orif. Coeff.	= 0.60	0.00	0.00	0.00
Multi-Stage	= -----	No	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len ft	= 1.00	16.00	14.30	0.00
Crest El. ft	= 235.50	237.40	238.00	0.00
Weir Coeff.	= 3.00	3.00	3.00	0.00
Eqn. Exp.	= 1.50	1.50	1.50	0.00
Multi-Stage	= Yes	Yes	Yes	No

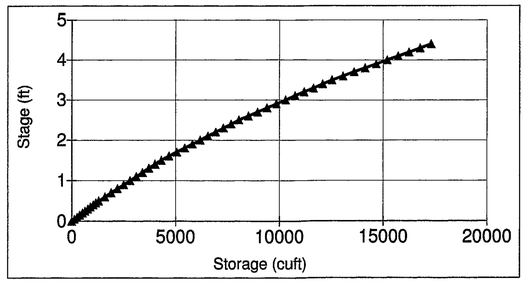
Tailwater Elevation = 0.00 ft

Note: All outflows have been analyzed under inlet and outlet control.

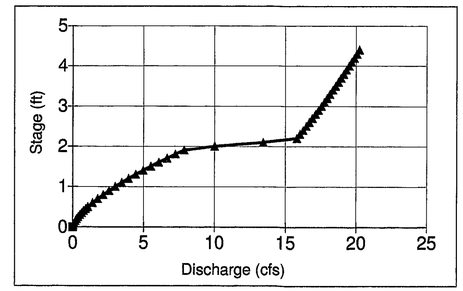
Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	Clv D cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Discharge cfs
0.00	0	235.50	9.02	---	---	---	0.00	0.00	0.00	---	0.00
0.50	1,293	236.00	11.25	---	---	---	1.06	0.00	0.00	---	1.06
1.50	4,317	237.00	14.11	---	---	---	5.51	0.00	0.00	---	5.51
2.50	8,047	238.00	16.48	---	---	---	11.86	22.31	0.00	---	16.48
3.50	12,537	239.00	18.54	---	---	---	19.64	97.15	42.90	---	18.54
4.50	17,842	240.00	20.40	---	---	---	28.64	201.23	121.34	---	20.40

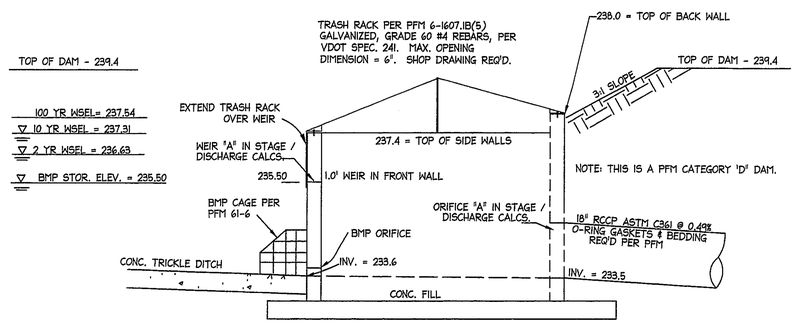
NOTE: ALL POND ROUTINGS AND ELEVATION / STORAGE / DISCHARGE INFORMATION ASSUMES THAT THE POND IS FILLED TO THE B.M.P. STORAGE LEVEL (235.5 FT.), AT THE TIME OF THE RAINFALL EVENT.



ELEVATION : STORAGE



ELEVATION : DISCHARGE



OUTLET CROSS SECTION
COMBINED PRINCIPLE / EMER. SPILLWAY
(NOT TO SCALE)

2 YEAR ROUTING

2-Year Rout

Hydrograph type = Reservoir
Storm frequency = 2 yrs
Inflow hyd. No. = 1
Max. Elevation = 236.64 ft

Peak discharge = 3.63 cfs
Time interval = 2 min
Reservoir name = Filled BMP
Max. Storage = 3,216 cuft

Storage Indication method used. Total Volume = 12,767 cuft

Hydrograph Discharge Table

Time (hrs)	Inflow cfs	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	Clv D cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Outflow cfs
9.20	0.06	235.55	9.28	-----	-----	-----	0.04	-----	-----	-----	0.04
9.40	0.06	235.56	9.31	-----	-----	-----	0.04	-----	-----	-----	0.04
9.60	0.07	235.56	9.33	-----	-----	-----	0.05	-----	-----	-----	0.05
9.80	0.08	235.57	9.36	-----	-----	-----	0.06	-----	-----	-----	0.06
10.00	0.09	235.57	9.39	-----	-----	-----	0.06	-----	-----	-----	0.06
10.20	0.10	235.58	9.42	-----	-----	-----	0.07	-----	-----	-----	0.07
10.40	0.12	235.59	9.46	-----	-----	-----	0.08	-----	-----	-----	0.08
10.60	0.14	235.60	9.51	-----	-----	-----	0.09	-----	-----	-----	0.09
10.80	0.16	235.61	9.57	-----	-----	-----	0.11	-----	-----	-----	0.11
11.00	0.19	235.63	9.64	-----	-----	-----	0.14	-----	-----	-----	0.14
11.20	0.25	235.64	9.71	-----	-----	-----	0.16	-----	-----	-----	0.16
11.40	0.32	235.67	9.84	-----	-----	-----	0.21	-----	-----	-----	0.21
11.60	0.74	235.72	10.06	-----	-----	-----	0.31	-----	-----	-----	0.31
11.80	2.73	236.00	11.26	-----	-----	-----	1.07	-----	-----	-----	1.07
12.00	4.72	236.63	13.11	-----	-----	-----	3.59	-----	-----	-----	3.59
12.20	0.77	236.31	12.20	-----	-----	-----	2.17	-----	-----	-----	2.17
12.40	0.57	236.07	11.47	-----	-----	-----	1.29	-----	-----	-----	1.29
12.60	0.39	235.92	10.93	-----	-----	-----	0.82	-----	-----	-----	0.82
12.80	0.35	235.83	10.56	-----	-----	-----	0.58	-----	-----	-----	0.58
13.00	0.30	235.78	10.34	-----	-----	-----	0.45	-----	-----	-----	0.45
13.20	0.27	235.75	10.19	-----	-----	-----	0.37	-----	-----	-----	0.37
13.40	0.24	235.72	10.08	-----	-----	-----	0.32	-----	-----	-----	0.32
13.60	0.22	235.70	9.99	-----	-----	-----	0.28	-----	-----	-----	0.28
13.80	0.20	235.69	9.93	-----	-----	-----	0.25	-----	-----	-----	0.25
14.00	0.18	235.68	9.87	-----	-----	-----	0.22	-----	-----	-----	0.22
14.20	0.17	235.67	9.82	-----	-----	-----	0.20	-----	-----	-----	0.20
14.40	0.16	235.66	9.78	-----	-----	-----	0.19	-----	-----	-----	0.19
14.60	0.16	235.65	9.75	-----	-----	-----	0.18	-----	-----	-----	0.18
14.80	0.15	235.65	9.73	-----	-----	-----	0.17	-----	-----	-----	0.17
15.00	0.14	235.64	9.71	-----	-----	-----	0.16	-----	-----	-----	0.16
15.20	0.14	235.64	9.69	-----	-----	-----	0.15	-----	-----	-----	0.15
15.40	0.13	235.63	9.66	-----	-----	-----	0.15	-----	-----	-----	0.15
15.60	0.12	235.63	9.64	-----	-----	-----	0.14	-----	-----	-----	0.14
15.80	0.12	235.62	9.63	-----	-----	-----	0.13	-----	-----	-----	0.13
16.00	0.11	235.62	9.61	-----	-----	-----	0.13	-----	-----	-----	0.13
16.20	0.11	235.62	9.59	-----	-----	-----	0.12	-----	-----	-----	0.12

10 YEAR ROUTING

10 year route

Hydrograph type = Reservoir
Storm frequency = 10 yrs
Inflow hyd. No. = 2
Max. Elevation = 237.31 ft

Peak discharge = 7.28 cfs
Time interval = 2 min
Reservoir name = Filled BMP
Max. Storage = 5,459 cuft

Storage Indication method used. Total Volume = 24,938 cuft

Hydrograph Discharge Table

Time (hrs)	Inflow cfs	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	Clv D cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Outflow cfs
7.40	0.09	235.58	9.43	-----	-----	-----	0.07	-----	-----	-----	0.07
7.60	0.09	235.59	9.45	-----	-----	-----	0.08	-----	-----	-----	0.08
7.80	0.10	235.59	9.47	-----	-----	-----	0.08	-----	-----	-----	0.08
8.00	0.10	235.60	9.49	-----	-----	-----	0.09	-----	-----	-----	0.09
8.20	0.11	235.60	9.51	-----	-----	-----	0.09	-----	-----	-----	0.09
8.40	0.13	235.61	9.54	-----	-----	-----	0.10	-----	-----	-----	0.10
8.60	0.14	235.61	9.57	-----	-----	-----	0.11	-----	-----	-----	0.11
8.80	0.15	235.62	9.60	-----	-----	-----	0.13	-----	-----	-----	0.13
9.00	0.17	235.63	9.64	-----	-----	-----	0.14	-----	-----	-----	0.14
9.20	0.18	235.64	9.68	-----	-----	-----	0.15	-----	-----	-----	0.15
9.40	0.18	235.64	9.71	-----	-----	-----	0.16	-----	-----	-----	0.16
9.60	0.19	235.65	9.73	-----	-----	-----	0.17	-----	-----	-----	0.17
9.80	0.21	235.65	9.76	-----	-----	-----	0.18	-----	-----	-----	0.18
10.00	0.23	235.66	9.80	-----	-----	-----	0.20	-----	-----	-----	0.20
10.20	0.26	235.67	9.86	-----	-----	-----	0.22	-----	-----	-----	0.22
10.40	0.30	235.69	9.92	-----	-----	-----	0.25	-----	-----	-----	0.25
10.60	0.34	235.70	9.99	-----	-----	-----	0.28	-----	-----	-----	0.28
10.80	0.40	235.72	10.08	-----	-----	-----	0.32	-----	-----	-----	0.32
11.00	0.46	235.75	10.19	-----	-----	-----	0.37	-----	-----	-----	0.37
11.20	0.58	235.77	10.30	-----	-----	-----	0.43	-----	-----	-----	0.43
11.40	0.72	235.82	10.50	-----	-----	-----	0.54	-----	-----	-----	0.54
11.60	1.60	235.91	10.87	-----	-----	-----	0.77	-----	-----	-----	0.77
11.80	5.42	236.37	12.39	-----	-----	-----	2.44	-----	-----	-----	2.44
12.00	8.53	237.31 <<	14.87	-----	-----	-----	7.28	0.00	-----	-----	7.28 <<
12.20	1.37	236.70	13.30	-----	-----	-----	3.92	-----	-----	-----	3.92
12.40	1.00	236.29	12.16	-----	-----	-----	2.12	-----	-----	-----	2.12
12.60	0.69	236.09	11.53	-----	-----	-----	1.35	-----	-----	-----	1.35
12.80	0.61	235.97	11.12	-----	-----	-----	0.95	-----	-----	-----	0.95
13.00	0.52	235.89	10.81	-----	-----	-----	0.73	-----	-----	-----	0.73
13.20	0.46	235.84	10.60	-----	-----	-----	0.60	-----	-----	-----	0.60
13.40	0.42	235.81	10.46	-----	-----	-----	0.52	-----	-----	-----	0.52
13.60	0.38	235.79	10.35	-----	-----	-----	0.46	-----	-----	-----	0.46
13.80	0.34	235.76	10.27	-----	-----	-----	0.41	-----	-----	-----	0.41
14.00	0.31	235.75	10.19	-----	-----	-----	0.37	-----	-----	-----	0.37
14.20	0.29	235.73	10.12	-----	-----	-----	0.34	-----	-----	-----	0.34
14.40	0.28	235.72	10.08	-----	-----	-----	0.32	-----	-----	-----	0.32

100 YEAR ROUTING

100 year route

Hydrograph type = Reservoir
Storm frequency = 100 yrs
Inflow hyd. No. = 5
Max. Elevation = 237.54 ft

Peak discharge = 11.49 cfs
Time interval = 2 min
Reservoir name = Filled BMP
Max. Storage = 6,344 cuft

Storage Indication method used. Total Volume = 31,642 cuft

Hydrograph Discharge Table

Time (hrs)	Inflow cfs	Elevation ft	Clv A cfs	Clv B cfs	Clv C cfs	Clv D cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Outflow cfs
7.60	0.13	235.61	9.58	-----	-----	-----	0.12	-----	-----	-----	0.12
7.80	0.14	235.62	9.60	-----	-----	-----	0.12	-----	-----	-----	0.12
8.00	0.14	235.62	9.62	-----	-----	-----	0.13	-----	-----	-----	0.13
8.20	0.16	235.63	9.64	-----	-----	-----	0.14	-----	-----	-----	0.14
8.40	0.17	235.63	9.67	-----	-----	-----	0.15	-----	-----	-----	0.15
8.60	0.19	235.64	9.71	-----	-----	-----	0.16	-----	-----	-----	0.16
8.80	0.21	235.65	9.75	-----	-----	-----	0.18	-----	-----	-----	0.18
9.00	0.23	235.66	9.80	-----	-----	-----	0.19	-----	-----	-----	0.19
9.20	0.24	235.67	9.84	-----	-----	-----	0.21	-----	-----	-----	0.21
9.40	0.24	235.68	9.87	-----	-----	-----	0.22	-----	-----	-----	0.22
9.60	0.25	235.68	9.89	-----	-----	-----	0.23	-----	-----	-----	0.23
9.80	0.28	235.69	9.92	-----	-----	-----	0.25	-----	-----	-----	0.25
10.00	0.31	235.70	9.97	-----	-----	-----	0.27	-----	-----	-----	0.27
10.20	0.35	235.71	10.03	-----	-----	-----	0.30	-----	-----	-----	0.30
10.40	0.40	235.73	10.11	-----	-----	-----	0.33	-----	-----	-----	0.33
10.60	0.45	235.75	10.20	-----	-----	-----	0.37	-----	-----	-----	0.37
10.80	0.52	235.77	10.30	-----	-----	-----	0.43	-----	-----	-----	0.43
11.00	0.60	235.80	10.42	-----	-----	-----	0.49	-----	-----	-----	0.49
11.20	0.75	235.83	10.54	-----	-----	-----	0.57	-----	-----	-----	0.57
11.40	0.93	235.88	10.78	-----	-----	-----	0.72	-----	-----	-----	0.72
11.60	2.05	235.99	11.21	-----	-----	-----	1.03	-----	-----	-----	1.03
11.80	6.85	236.55	12.91	-----	-----	-----	3.24	-----	-----	-----	3.24
12.00	10.62	237.54 <<	15.44	-----	-----	-----	8.77	2.73	-----	-----	11.49 <<
12.20	1.70	236.83	13.67	-----	-----	-----	4.61	-----	-----	-----	4.61
12.40	1.24	236.38	12.42	-----	-----	-----	2.48	-----	-----	-----	2.48
12.60	0.86	236.15	11.73	-----	-----	-----	1.58	-----	-----	-----	1.58
12.80	0.75	236.02	11.33	-----	-----	-----	1.14	-----	-----	-----	1.14
13.00	0.65	235.94	11.02	-----	-----	-----	0.89	-----	-----	-----	0.89
13.20	0.58	235.89	10.80	-----	-----	-----	0.73	-----	-----	-----	0.73
13.40	0.52	235.85	10.65	-----	-----	-----	0.63	-----	-----	-----	0.63
13.60	0.47	235.83	10.53	-----	-----	-----	0.56	-----	-----	-----	0.56
13.80	0.43	235.80	10.43	-----	-----	-----	0.50	-----	-----	-----	0.50
14.00	0.39	235.78	10.35	-----	-----	-----	0.45	-----	-----	-----	0.45
14.20	0.36	235.77	10.27	-----	-----	-----	0.41	-----	-----	-----	0.41
14.40	0.35	235.75	10.22	-----	-----	-----	0.39	-----	-----	-----	0.39
14.60	0.34	235.75	10.18	-----	-----	-----	0.37	-----	-----	-----	0.37

OUTFALL NARRATIVE:

THE RUNOFF FROM THE SITE WILL BE REDUCED TO BELOW THE PRE-DEVELOPMENT RATE BY ON-SITE DETENTION. THE REDUCED RUNOFF WILL BE DISCHARGED BY STORM SEWER, INTO THE EXISTING STORM SEWER SYSTEM WHICH HAS BEEN DESIGNED FOR THE POST-THE POST-DEVELOPED FLOWS FROM THIS SITE. AS SUCH, IT IS CONSIDERED AS AN "ADEQUATE OUTFALL" BY STATE AND COUNTY REGULATIONS.

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12 / 9 / 2011
Date of (BOS) (PC) approval 1 / 10 / 2012
Sheet 6 of 12

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
8/26/11	1	REVISE PER INITIAL COUNTY COMMENTS, ADD ALTERNATIVE PLAN
10/5/11	2	REVISE PER 2ND COUNTY COMMENTS, ADD ALT "B" LAYOUT.
10/25/11	3	REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL (NO CHANGES THIS SHEET)

ENGINEER REVISION BLOCK

PRELIMINARY SWM POND DESIGN / OUTFALL NARRATIVE

POTTERS GLEN, SECTION 3

T.M 81-3 ((1)) 46 & 91-1 ((1)) 43

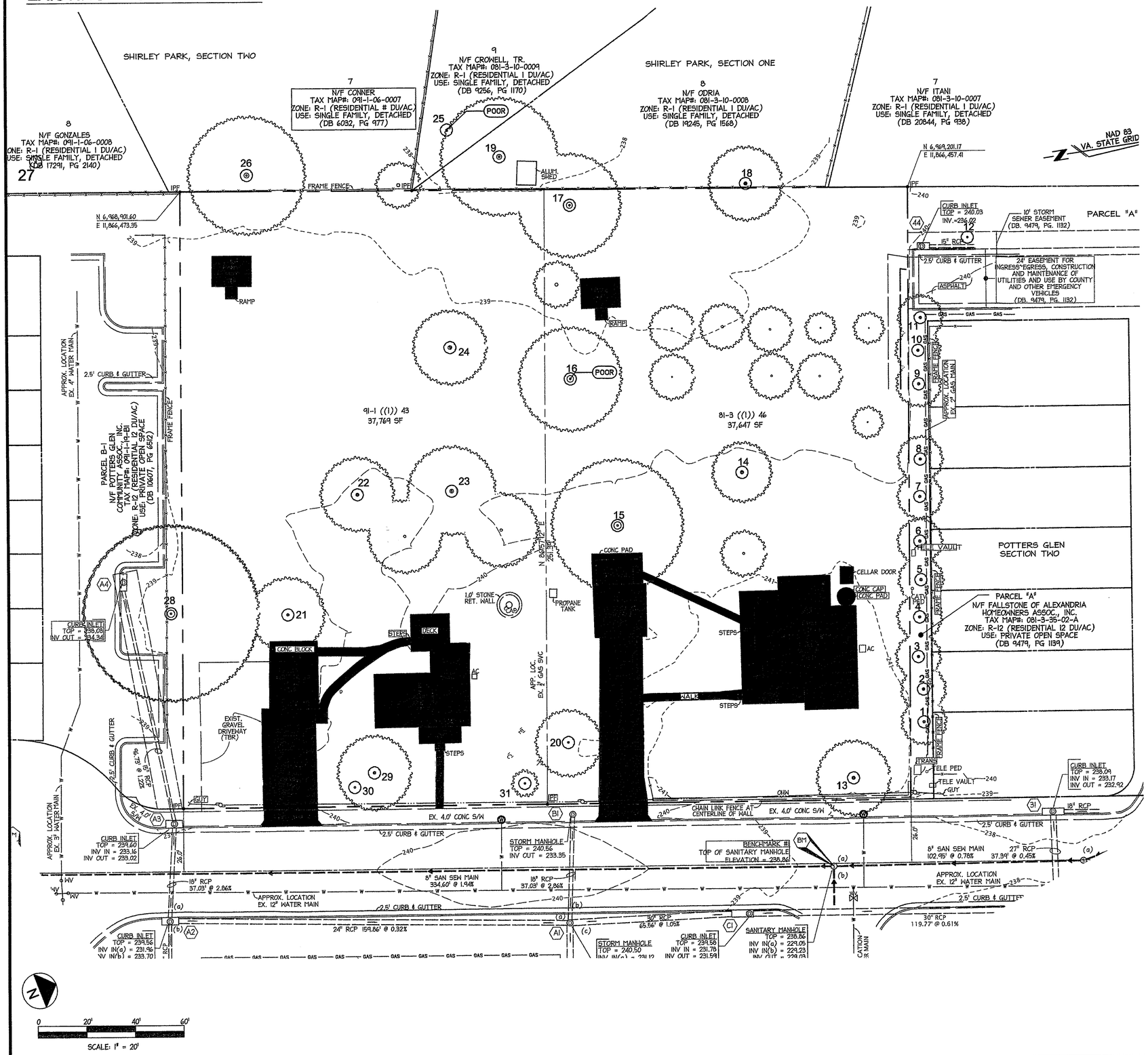
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1" = 20'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
Alan R Dalton
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 5 OF 9

EXISTING VEGETATION MAP



EXISITING					
Tree#	DBH	Common Name	CRZ	Condition	Field Comments
1	7	Callery Pear	11	Fair	Narrow Crown,
2	7	Callery Pear	11	Good	
3	8	Callery Pear	12	Good	
4	7	Callery Pear	11	Fair	Narrow Crown,
5	10	Callery Pear	15	Fair	Narrow Crown, One Sided,
6	8	Callery Pear	12	Good	Narrow Crown, One Sided,
7	8	Callery Pear	12	Fair	Narrow Crown,
8	8	Callery Pear	12	Fair	Included Bark, Weak Union,
9	10	Callery Pear	15	Good	Included Bark, Weak Union,
10	9	Callery Pear	14	Fair	
11	7	Callery Pear	11	Good	
12	10	David's Pine	15	Good	
13	15	Callery Pear	23	Fair	Included Bark, Weak Union,
14	17	Fruiting Pear	26	Good	Included Bark, Weak Union,
15	38	Silver Maple	57	Good	Deadwood, Broken Branches,
16	26	White Pine	39	Poor	Broken Branches, Lean,
17	27	White Pine	41	Very Good	Full Crown, Deadwood,
18	12	Red Cedar	18	Fair	Narrow Crown, Adjacent Property,
19	16	Sugar Maple	24	Fair	Narrow Crown, One Sided, Adjacent Property,
20	18	Red Maple	27	Fair	Deadwood, Overhead Utility,
21	13	Callery Pear	20	Fair	
22	14	Sugar Maple	21	Fair	Trunk Scar,
23	15	Sugar Maple	23	Fair	Broken Branches, Stressed,
24	17	Spruce	26	Good	
25	24	Sugar Maple	36	Poor	One Sided, Deadwood, Trunk Decay, Basal Decay, Broken Branches, Adjacent Property,
26	20	Sweet Cherry	30	Fair	Trunk Scar, Adjacent Property,
27	24	Silver Maple	36	Fair	Trunk Scar, Adjacent Property,
28	36	Silver Maple	54	Good	Full Crown, Deadwood, Broken Branches, Adjacent Property,
29	7,7,6,6	Japanese Maple	7	Good	Full Crown,
30	4	Japanese Maple 'Waterfall'	6	Good	Full Crown,
31	3	Weeping Japanese Maple	5	Good	Full Crown,

TABLE 12.2

1. DEVELOPED LAND
   - 1.1. AREA SQ. FT = 8,638
   - 1.2. DESCRIPTION: PAVEMENT AREAS SUCH AS EXISTING STRUCTURES AND DRIVEWAYS
   - 1.3. SUCCESSIONAL STAGE OF VEGETATION: N/A
2. MAINTAINED GRASSLANDS
   - 2.1. AREA SQ. FT = 66,778
   - 2.2. DESCRIPTION: EXISTING LAWN TURF AND LANDSCAPED AREAS
   - 2.3. PRIMARY TREE SPECIES: SMALL FRUIT TREES, CALLERY PEAR, WHITE PINE (SEE LIST FOR ALL)
   - 2.4. SUCCESSIONAL STAGE OF VEGETATION: MATURE LANDSCAPE PLANT MATERIAL
   - 2.5. GENERAL HEALTH AND CONDITION IS FAIR WITH NO MAJOR CONCERNS, DISEASE, OR ISSUES.

LEGEND

EXISTING TREE WITH CRITICAL ROOT ZONE (CRZ)

MAINTAINED GRASSLAND

DEVELOPED LAND

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 7 of 12

Design with Nature

1100 Wisconsin St, Suite 310
Baltimore, MD 21230
t 410.962.9470

INTERNATIONAL SOCIETY OF ARBORICULTURE
DIANE SPARKS
ISA No. MA-4359A
CERTIFIED ARBORIST

TREE CONSERVATION PLAN

POTTERS GLEN SECTION 3

LEE DISTRICT
FAIRFAX COUNTY, VIRIGINA

CLIENT:
Nick Morris
5928 Jane Way
Alexandria, Virginia 22310

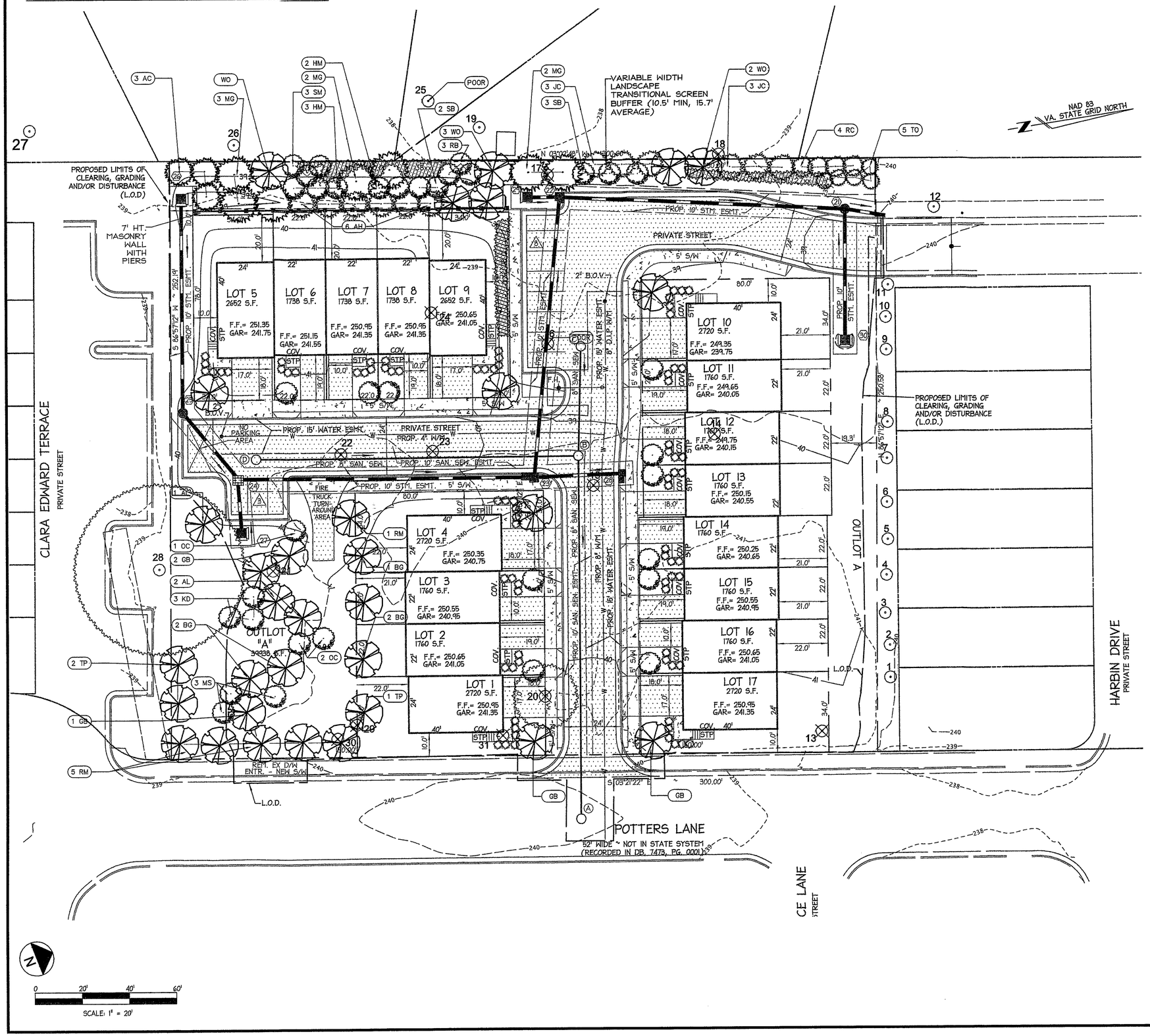
NO.	DATE	DESCRIPTION
1	10/20/11	ADDRESS PER NATIVAL COUNTY COMMENTS, REVISE PER BOS COMMENTS
2	10/24/11	ADDRESS PER BOS COUNTY COMMENTS, REVISE PER BOS COMMENTS
3	12/20/11	ADDRESS PER BOS COUNTY COMMENTS, REVISE PER BOS COMMENTS

PROJECT #: 2011009
SCALE: AS NOTED
DATE: 2011.08.26
DESIGNER: DES

SHEET TITLE:
EXISTING VEGETATION MAP

SHEET NUMBER:
6

LANDSCAPE PLAN - ALTERNATIVE "A"



PLANTING LEGEND

- PROPOSED CANOPY TREE
- PROPOSED EVERGREEN
- PROPOSED FLOWERING TREE
- PROPOSED SHRUB PLANTING AREA
- KEY — PLANT KEY
- 1 — EXISTING TREE WITH CRITICAL ROOT ZONE (CRZ) TO REMAIN
- 1 — EXISTING TREE TO BE REMOVED

NOTE:
- SEE PLANTING SCHEDULE FOR SPECIES
- PLANT SIZE CORRELATES TO PROJECTED 10 YR TREE CANOPY AREA
- PLANTINGS SHALL NOT BE PLANTED WITHIN FIVE (5) FEET OF AN EASEMENT, IF THAT EASEMENT INCLUDES A PIPE.

ADDITIONAL FRONT LANDSCAPING:
- EDGE TOWNHOUSES WILL AVERAGE SIX (6) SHRUBS AND ONE (1) CANOPY TREE OR EVERGREEN FROM SUGGESTED LIST.
- INTERIOR TOWNHOUSES WILL AVERAGE FOUR (4) SHRUBS AND ONE (1) FLOWERING TREE FROM SUGGESTED LIST.
- TOTALING APPROXIMATELY AN ADDITIONAL THREE (3) CANOPY OR EVERGREEN TREES, ELEVEN (11) FLOWERING TREES, AND EIGHTY (80) SHRUBS.

Application No. RZ-2011-LE-014 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 8 of 12

Design with Nature
1100 Wisconsin St, Suite 340
Baltimore, MD 21230
P. 410.987.9470

INTERNATIONAL SOCIETY OF ARBORICULTURE — DIANE SPARKS — ISA No. MA-4088A — CERTIFIED ARBORIST

TREE CONSERVATION PLAN
POTTERS GLEN SECTION 3
LEE DISTRICT
FAIRFAX COUNTY, VIRIGINA

CLIENT:
Nick Morris
5928 Jane Way
Alexandria, Virginia 22310

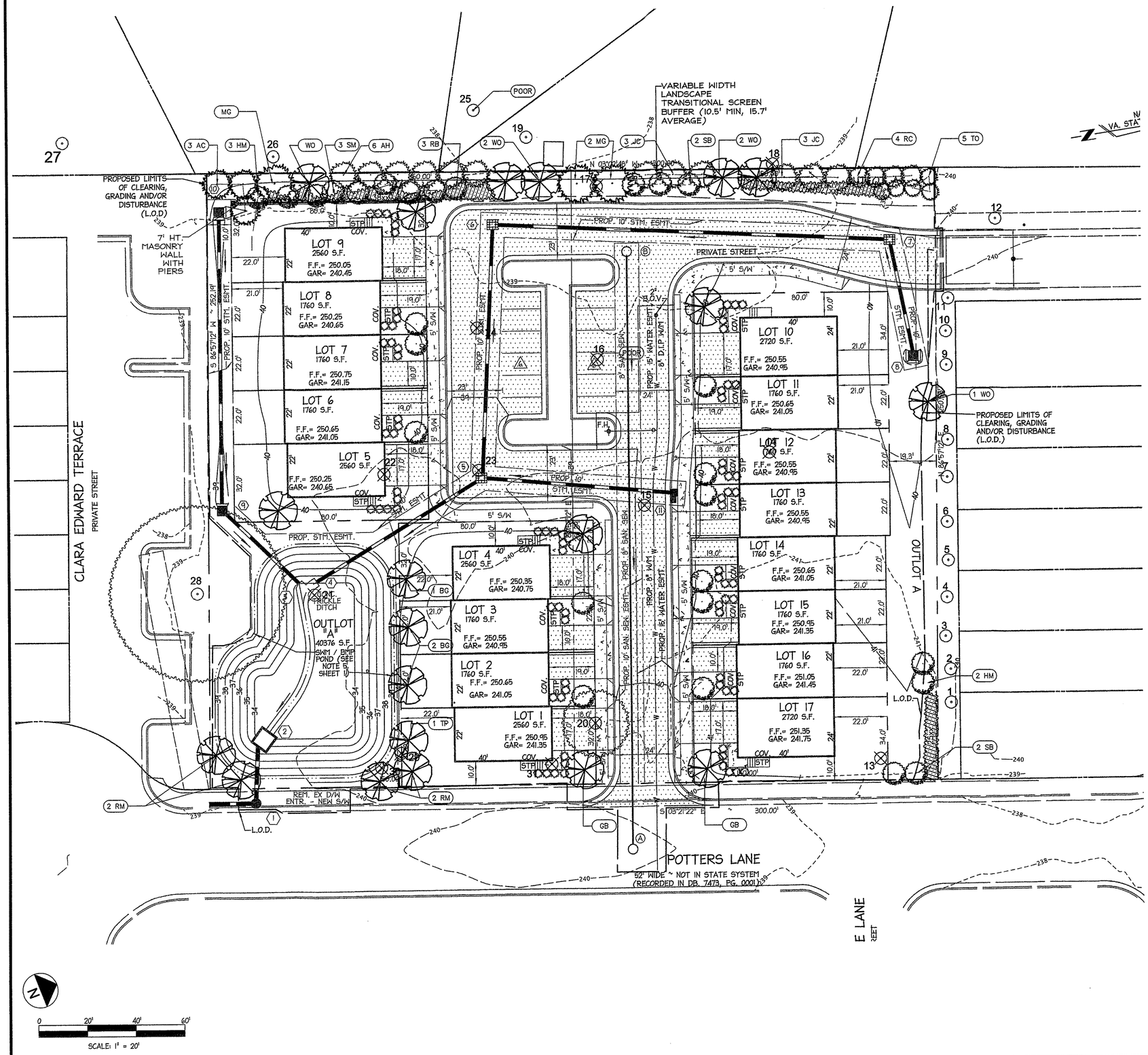
NO.	DATE	DESCRIPTION
1	9/29/11	ISSUED FOR INITIAL COUNTY COMMENTS.
2	10/31/11	ISSUED FOR 2ND COUNTY COMMENTS.
3	12/20/11	ISSUED FOR 3RD COUNTY COMMENTS. ADDITIONS PAGE.

PROJECT #: 2011009
SCALE: AS NOTED
DATE: 2011.08.26
DESIGNER: DES

SHEET TITLE:
LANDSCAPE PLAN ALTERNATIVE "A"

SHEET NUMBER:
7A

LANDSCAPE PLAN - ALTERNATIVE "B"



PLANTING LEGEND

- PROPOSED CANOPY TREE
- PROPOSED EVERGREEN
- PROPOSED FLOWERING TREE
- PROPOSED SHRUB PLANTING AREA
- KEY — PLANT KEY
- 1 — EXISTING TREE WITH CRITICAL ROOT ZONE (CRZ) TO REMAIN
- 1 — EXISTING TREE TO BE REMOVED

NOTE:
- SEE PLANTING SCHEDULE FOR SPECIES
- PLANT SIZE CORRELATES TO PROJECTED 10 YR TREE CANOPY AREA
- PLANTINGS SHALL NOT BE PLANTED WITHIN FIVE (5) FEET OF AN EASEMENT, IF THAT EASEMENT INCLUDES A PIPE.

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- INTERIOR TOWNHOUSES WILL AVERAGE FOUR (4) SHRUBS AND ONE (1) FLOWERING TREE FROM SUGGESTED LIST.
- TOTALING APPROXIMATELY AN ADDITIONAL THREE (3) CANOPY OR EVERGREEN TREES, ELEVEN (11) FLOWERING TREES, AND EIGHTY (80)

Application No. RZ-2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 9 of 12

Design with Nature
1100 Wisconsin St, Suite 310
Baltimore, MD 21230
t: 410.947.9470

INTERNATIONAL SOCIETY OF ARBORICULTURE — DIANE SPARKS — ISA No. MA-0268 — CERTIFIED ARBORIST

TREE CONSERVATION PLAN
POTTERS GLEN SECTION 3
LEE DISTRICT
FAIRFAX COUNTY, VIRIGINIA

CLIENT:
Nick Morris
5928 Jane Way
Alexandria, Virginia 22310

NO.	DATE	DESCRIPTION
1	8/09/11	ISSUED FOR INITIAL COUNTY COMMENTS, ADDED PLAN, COUNTY COMMENTS.
2	10/21/11	ISSUED FOR 2ND COUNTY COMMENTS, ADDED DETAILS.
3	12/09/11	ISSUED FOR 3RD COUNTY COMMENTS.

PROJECT #: 2011009
SCALE: AS NOTED
DATE: 2011.08.26
DESIGNER: DES

SHEET TITLE:
LANDSCAPE PLAN ALTERNATIVE "B"

SHEET NUMBER:
7B

TABULATIONS - ALTERNATIVE "A"

PLANTING SCHEDULE

PLANTING SCHEDULE							
KEY	BOTANICAL NAME	COMMON NAME	QTY.	STOCK SIZE	STOCK TYPE	10-YR TREE CANOPY FT^2	TREE CANOPY SUB-TOTAL FT^2
CATEGORY IV DECIDUOUS TREES							
RM	*Acer rubrum*	Red Maple	6	2 in caliper	B&B	200	1200
GB	*Ginkgo biloba*	Ginkgo (male only)	4	2 in caliper	cont.	200	800
TP	*Liriodendron tulipifera*	Tulip Poplar	3	2 in caliper	B&B	200	600
AL	*Tilia americana*	American Linden	3	2 in caliper	B&B	200	600
WO	*Quercus phellos*	Willow Oak	6	2 in caliper	B&B	200	1200
CATEGORY III DECIDUOUS TREES							
BG	*Nyssa sylvatica*	Blackgum	7	2 in caliper	B&B	200	1400
CATEGORY II DECIDUOUS TREES							
SB	*Amelanchier arborea*	Serviceberry	5	1 in caliper	cont.	75	375
HM	*Carpinus caroliniana*	American Hornbeam/Ironwood	5	1 in caliper	cont.	75	375
RB	*Cercis canadensis*	Eastern Redbud	3	2 in caliper	cont.	75	225
KD	*Cornus kousa*	Kousa Dogwood	3	1 in caliper	cont.	75	225
MS	*Magnolia soulangiana*	Saucer Magnolia	3	1 in caliper	cont.	75	225
SM	*Magnolia virginiana*	Sweetbay Magnolia	3	1 in caliper	cont.	75	225
OC	*Prunus x incam 'Okame'*	Okame Cherry	3	2 in caliper	cont.	75	225
CATEGORY IV EVERGREEN TREES							
MG	*Magnolia grandiflora*	Southern Magnolia	7	2 in caliper	B&B	200	1400
CATEGORY III EVERGREEN TREES							
AC	*Cedrus atlantica*	Atlas Cedar	3	4'-5'	cont.	125	375
CATEGORY II EVERGREEN TREES							
JC	*Crytomeria japonica*	Japanese crytomeria	6	5'-6'	B&B	100	600
AH	*Ilex opaca*	American Holly	6	5'-6'	B&B	100	600
RC	*Juniperus virginiana*	Eastern Redcedar	4	4'-5'	B&B	75	300
CATEGORY I EVERGREEN TREES							
TO	*Thuja occidentalis* 'Nigra'	Dark Green American Arborvitae	5	4'-5'	cont.	40	200
SHRUBS							
	Ilex crenata 'Steeds'	Steeds' Japanese Holly	8	1-3 Gallon Cont.			
	Ilex verticilla 'Sparkleberry'	Sparkleberry' Winterberry Holly (Female)	9	1-3 Gallon Cont.			
	Ilex verticilla 'Apollo'	Apollo' Winterberry Holly (Male)	1	1-3 Gallon Cont.			
	Juniperus squamata 'Blue Star'	Blue Star Juniper	9	1-3 Gallon Cont.			
	Pieris japonica 'Mountain Fire'	Japanese Andromeda	9	1-3 Gallon Cont.			
	Pieris japonica 'Brouwer's Beauty'	Japanese Andromeda	9	1-3 Gallon Cont.			
	Myrica pensylvanica	Bayberry	9	1-3 Gallon Cont.			
	Pruus larocerocerasus 'Otto Luyken'	Cherry Laurel	9	1-3 Gallon Cont.			
	Spiraea japonica 'Little Princess'	Japanese Spirea	9	1-3 Gallon Cont.			
	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	9	1-3 Gallon Cont.			
	Syringa patula 'Miss Kim'	Miss Kim Lilac	9	1-3 Gallon Cont.			
*ADDITIONAL PLANTINGS FOR TOWNHOUSES SEE NOTE AND TABLE L1							

TABLE L1

SUGGESTED PLANTS FOR TOWNHOUSES FRONT LANDSCAPE PLANTING SCHEDULE						
KEY	BOTANICAL NAME	COMMON NAME	STOCK SIZE	STOCK TYPE	10-YR TREE CANOPY FT^{2*}	Native
CATEGORY III & IV DECIDUOUS TREES / CATEGORY I EVERGREEN TREES (CANOPY TREES)						
RM	*Acer rubrum*	Red Maple	2 in caliper	B&B	200	x
GB	*Ginkgo bioloba*	Ginkgo (male only)	2 in caliper	cont.	200	x
NS	*Ilex x Nellie Stevens'*	Nellie Stevens' Holly	5-6'	B&B	200	
BG	*Nyssa sylvatica*	Blackgum	2 in caliper	B&B	200	x
WO	*Quercus phellos*	Willow Oak	2 in caliper	B&B	200	x
MG	*Magnolia grandiflora*	Southern Magnolia	2 in caliper	B&B	200	
CATEGORY II DECIDUOUS TREES (UNDERSTORY TREES)						
SB	*Amelanchier arborea*	Serviceberry	1 in caliper	cont.	75	x
RB	*Cercis canadensis*	Eastern Redbud	2 in caliper	cont.	75	x
KD	*Cornus kousa*	Kousa Dogwood	1 in caliper	cont.	75	x
MS	*Magnolia soulangiana*	Saucer Magnolia	1 in caliper	cont.	75	x
SM	*Magnolia virginiana*	Sweetbay Magnolia	1 in caliper	cont.	75	x
OC	*Prunus x incam 'Okame'*	Okame Cherry	2 in caliper	B&B	75	x
SHRUBS						
	Hydrangea arborescens	Wild Hydrangea	1-3 Gallon Cont.			x
	Ilex crenata 'Steeds'	Steeds' Japanese Holly	1-3 Gallon Cont.			
	Ilex verticilla 'Sparkleberry'	Sparkleberry' Winterberry Holly (Female)	1-3 Gallon Cont.			x
	Ilex verticilla 'Apollo'	Apollo' Winterberry Holly (Male)	1-3 Gallon Cont.			x
	Itea virginica	Virginia Willow	1-3 Gallon Cont.			x
	Juniperus squamata 'Blue Star'	Blue Star Juniper	1-3 Gallon Cont.			
	Kalmia latifolia	Mountain Laurel	1-3 Gallon Cont.			x
	Leucothoe reacemosa	Fetterbush	1-3 Gallon Cont.			x
	Myrica pensylvanica	Bayberry	1-3 Gallon Cont.			x
	Pieris japonica ' Mountain Fire'	Japanese Andromeda	1-3 Gallon Cont.			
	Pieris japonica 'Brouwer's Beauty'	Japanese Andromeda	1-3 Gallon Cont.			
	Pruus larocerocerasus 'Otto Luyken'	Cherry Laurel	1-3 Gallon Cont.			
	Rhododendron atlanticum	Dwarf Azalea	1-3 Gallon Cont.			x
	Spiraea japonica ' Little Princess'	Japanese Spirea	1-3 Gallon Cont.			
	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	1-3 Gallon Cont.			
	Syringa patula 'Miss Kim'	Miss Kim Lilac	1-3 Gallon Cont.			
	Viburnum dentatum	Southern Arrowwood Viburnum	1-3 Gallon Cont.			x

Planting Buffer	
13-303 Transitional Screening Requirement (sq. ft.):	7,500
13-305 Transitional Screening Modifications:	2/3
Proposed (sq. ft):	5,000
10 yr Canopy Credit Mix of LE, ME, & LD 75% (sq. ft.):	3,750
10 yr Canopy Credit Mix of 70% must be evergreens (sq. ft.):	2,625
Number of Proposed Buffer Plantings Provided:	
Canopy Trees:	43
Understory Trees:	16
Shrubs:	90

NOTE:
- SEE PLANTING SCHEDULE FOR SPECIES
- PLANT SIZE CORRELATES TO PROJECTED 10 YR TREE CANOPY AREA
- PLANTINGS SHALL NOT BE PLANTED WITHIN FIVE (5) FEET OF AN EASEMENT, IF THAT EASEMENT INCLUDES A PIPE.

ADDITIONAL FRONT LANDSCAPING:
- EDGE TOWNHOUSES WILL AVERAGE SIX (6) SHRUBS AND ONE (1) CANOPY TREE OR EVERGREEN FROM SUGGESTED LIST.
- INTERIOR TOWNHOUSES WILL AVERAGE FOUR (4) SHRUBS AND ONE (1) FLOWERING TREE FROM SUGGESTED LIST.
- TOTALING APPROXIMATELY AN ADDITIONAL THREE (3) CANOPY OR EVERGREEN TREES, ELEVEN (11) FLOWERING TREES, AND EIGHTY (80) SHRUBS.

TABLE 12.3

Table 12.3 Tree preservation Target Calculations and Statement		
A	Pre-development area of existing tree canopy (From Existing Vegetation Map) =	15,238
B	Percentage of gross site area covered by existing tree canopy =	20%
C	Percentage of 10-year tree canopy required for site (see Table 12.4)	15%
D	Percentage of the 10-year tree canopy required that should be met through tree preservation =	20%
E	Proposed percentage of cannopy requirements that will be met through tree preservation=	0%
F	Has the Tree Preservation Target minimum been met?	NO
G	If No for line F, then a request to deviate from tehTree Preservation Target shall be provided on the plan that states one or more of thejustifications listed in §12-0507.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	Sheet 8
H	If step G requires a narrative, it shall be prepared in accordance with §12-0507.4	
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.12	

TREE PRESERVATION DEVIATION REQUEST

Design with Nature, LLC
17424 Falls Road
Upperco, Maryland 21155
September 27, 2011

Director of DPWES or Board of Supervisors to UFMD
Fairfax County, Virginia; DPWES & UFMD
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035-5503

RE: Potters Glen, Section 3; RZ 2011-LE-019

Dear Director:

This letter is a request to deviate from the Tree Preservation Target, Table 12.3, for the Potters Glen project.

The site cannot meet the Tree Preservation Target due to the conflict between the existing trees and the layout of proposed development. The preservation of tree #13 was considered but it does not meet the pre-development standards of PFM 120400. The request is based on justifications listed in §12-0507.3A (1) "Meeting the Tree Preservation Target would preclude the development of uses or densities otherwise allowed by the Zoning Ordinance" and §12-0507.3A (2) "Meeting the tree preservation target would require the preservation of trees that do not meet standards for health and structural condition and other vegetation and risk management requirements of §12-0400". In order to meet the 10yr Canopy Requirements in Table 12.12 proposed plantings will be increased to ensure the required canopy requirements.

Sincerely,

Diane Sparks
ISA Certified Arborist, MA4966A

Design with Nature, LLC
T: 410.967.9470, F: 410.374.4251
www.designwithtrees.com

TABLE 12.12 - ALTERNATIVE "A"

Table 12.12 10-year Tree Canopy Calculation Worksheet			
Step		Total	Reference
A. Tree Preservation Target and Statement			
A 1	Place the Tree Preservation Target calculations and statement here preceding the 10-year tree canopy calculations	20%	see § 12-0507.2 for list of required elements and worksheet
B. Tree Canopy Requirements			
B 1	Identify gross site area =	75,416	§ 12-0510.1A
B 2	Subtract area dedicated to parks and road frontage =	-	§ 12-0510.1B
B 3	Subtract area of exemptions =	-	§ 12-0510.1C(1-6) see below
B 4	Adjusted gross site area (B1-B2) =	75,416	
B 5	Identify site's zoning and/or use	R-12	
B 6	Percentage of 10 year tree canopy required =	15%	§ 12-509.1 & Table 12.4
B 7	Area of 10-year tree canopy required (B4 x B6) =	11,312	
B 8	Modification of 10-year Tree Canopy Requirements requested?	NO	Yes or No
B 9	If B8 is yes, then list plan sheet where modification request is located		Sheet Number
C. Tree Preservation			
C 1	Tree Preservation Target Area =	2,286	Sqft
C 2	Total canopy area meeting standards of § 12-0200 =	-	
C 3	C 2 x 1.25 =	-	§ 12-509.3B
C 4	Total canopy area provided by unique or valuable forest or woodland communities =	-	
C 5	C4 x 1.5 =	-	§ 12-509.3B(1)
C 6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	-	
C 7	C6 x 1.5 to 3.0 =	-	§ 12-509.3B(2)
C 8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	-	
C 9	C8 x 1.0 =	-	§ 12-509.3C(1)
C 10	Total of C3, C5, C7 and C9 =	-	If area of C10 is less than B7 remainder of requirement must be met through tree planting - go to D
D. Tree Planting			
D 1	Area of canopy to be met through tree planting (B7-C10) =	11,312	
D 2	Area of canopy planted for air quality benefits =	-	
D 3	x 1.5 =	-	§ 12-509.4B(1)
D 4	Area of canopy planted for energy conservation =	-	
D 5	x 1.5 =	-	§ 12-509.4B(2)
D 6	Area of canopy planted for water quality benefits =	-	
D 7	x 1.25 =	-	§ 12-509.4B(3)
D 8	Area of canopy planted for wildlife benefits =	1,400	
D 9	x 1.5 =	2,100	§ 12-509.4B(4)
D 10	Area of canopy provide by native trees =	10,800	
D 11	x 1.5 =	16,200	§ 12-509.4B(5)
D 12	Area of canopy provided by improved cultivars and varieties =	375	
D 13	x 1.25 =	469	§ 12-509.4B(6)
D 14	Area of canopy provided through tree seedlings =	-	§ 12-509.4D(1)
	x 1.00	-	
D 15	Area of canopy provided thought native shrubs or woody seed mix =	-	§ 12-509.4D(1)(a)
	x 1.0	-	§ 12-509.4D(1)(a)
D 16	Percentage of D14 represented by D15 =	-	Must not exceed 33% of D14
D 17	Total of canopy area provided through tree planting =	18,769	
D 18	Is an offsite planting relief requested?	NO	Yes or No
D 19	Tree Bank or Tree Fund?	-	§ 12-5011
D 20	Canopy area requested to be provided through offsite banking or tree fund	-	
D 21	Amount to be deposited into the Tree Preservation and Planting Fund	-	
E. Total of 10-year Tree Canopy Provided			
E 1	Total of canopy area provided through tree preservation (C10) =	-	
E 2	Total of canopy area provided through tree planting (D17) =	18,769	
E 3	Total of canopy area provided through offsite mechanism (D19) =	-	
E 4	Total of 10-year Tree Canopy Provided =	18,769	Total of E1 through E3. Area should meet or exceed area in B6

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 10 of 12

Design with Nature
1100 Wicomico St, Suite 310
Baltimore, MD 21230
t: 410.967.9470

INTERNATIONAL SOCIETY OF ARBORICULTURE
DIANE SPARKS
ISA No. MA-4966A
CERTIFIED ARBORIST

TREE CONSERVATION PLAN
POTTERS GLEN SECTION 3
LEE DISTRICT
FAIRFAX COUNTY, VIRIGINA

CLIENT:
Nick Morris
5928 Jane Way
Alexandria, Virginia 22310

REV.	DATE	DESCRIPTION
1	8/29/11	REVISE PER INITIAL COUNTY COMMENTS, ADD ALT PLAN
2	10/5/11	REVISE PER 2ND COUNTY COMMENTS, ADD TURNAROUND
3	10/26/11	REVISE PER 3RD COUNTY COMMENTS, ADD BRICK WALL

PROJECT #: 2011009
SCALE: AS NOTED
DATE: 2011.08.26
DESIGNER: DES

SHEET TITLE:
TABULATIONS ALTERNATIVE "A"

SHEET NUMBER:
8A

TABULATIONS - ALTERNATIVE "B"

PLANTING SCHEDULE

PLANTING SCHEDULE ALTERNATIVE "B"							
KEY	BOTANICAL NAME	COMMON NAME	QTY.	STOCK SIZE	STOCK TYPE	10-YR TREE CANOPY FT^2	TREE CANOPY SUB-TOTAL FT^2
CATEGORY IV DECIDUOUS TREES							
RM	*Acer rubrum*	Red Maple	2	2 in caliper	B&B	200	400
GB	*Ginkgo bioloba*	Ginkgo (male only)	2	2 in caliper	cont.	200	400
TP	*Liriodendron tulipifera*	Tulip Poplar	3	2 in caliper	B&B	200	600
WO	*Quercus phellos*	Willow Oak	6	2 in caliper	B&B	200	1200
CATEGORY III DECIDUOUS TREES							
BG	*Nyssa sylvatica*	Blackgum	3	2 in caliper	B&B	200	600
CATEGORY II DECIDUOUS TREES							
SB	*Amelanchier arborea*	Serviceberry	5	1 in caliper	B&B	75	375
HM	*Carpinus caroliniana*	American Hornbeam/Ironwood	5	1 in caliper	B&B	75	375
RB	*Cercis canadensis*	Eastern Redbud	3	2 in caliper	B&B	75	225
SM	*Magnolia virginiana*	Sweetbay Magnolia	3	1 in caliper	B&B	75	225
CATEGORY IV EVERGREEN TREES							
MG	*Magnolia grandiflora*	Southern Magnolia	3	2 in caliper	B&B	200	600
CATEGORY III EVERGREEN TREES							
AC	*Cedrus atlantica*	Atlas Cedar	3	4'-5'	cont.	125	375
CATEGORY II EVERGREEN TREES							
JC	*Crytomeria japonica*	Japanese crytomeria	6	5'-6'	B&B	100	600
AH	*Ilex opaca*	American Holly	6	5'-6'	B&B	100	600
RC	*Juniperus virginiana*	Eastern Redcedar	4	4'-5'	B&B	75	300
CATEGORY I EVERGREEN TREES							
TO	*Thuga occidentalis* 'Nigra'	Dark Green American Arborvitae	5	4'-5'	cont.	40	200
SHRUBS							
	Ilex crenata 'Steeds'	Steeds' Japanese Holly	8	1-3 Gallon Cont.			
	Ilex verticilla 'Sparkleberry'	Sparkleberry' Winterberry Holly (Female)	9	1-3 Gallon Cont.			
	Ilex verticilla 'Apollo'	Apollo' Winterberry Holly (Male)	1	1-3 Gallon Cont.			
	Juniperus squamata 'Blue Star'	Blue Star Juniper	9	1-3 Gallon Cont.			
	Pieris japonica ' Mountain Fire'	Japanese Andromeda	9	1-3 Gallon Cont.			
	Pieris japonica ' Brouwer's Beauty'	Japanese Andromeda	9	1-3 Gallon Cont.			
	Myrica pensylvanica	Bayberry	9	1-3 Gallon Cont.			
	Pruus larocerocerasus 'Otto Luyken'	Cherry Laurel	9	1-3 Gallon Cont.			
	Spiraea japonica ' Little Princess'	Japanese Spirea	9	1-3 Gallon Cont.			
	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	9	1-3 Gallon Cont.			
	Syringa patula 'Miss Kim'	Miss Kim Lilac	9	1-3 Gallon Cont.			
*FOR ADDITIONAL PLANTINGS FOR TOWNHOUSES SEE NOTE AND TABLE L2							

TABLE L2

SUGGESTED PLANTS FOR TOWNHOUSES FRONT LANDSCAPE PLANTING SCHEDULE						
KEY	BOTANICAL NAME	COMMON NAME	STOCK SIZE	STOCK TYPE	10-YR TREE CANOPY FT^{2*}	Native
CATEGORY III & IV DECIDUOUS TREES / CATEGORY I EVERGREEN TREES (CANOPY TREES)						
RM	*Acer rubrum*	Red Maple	2 in caliper	B&B	200	x
GB	*Ginkgo bioloba*	Ginkgo (male only)	2 in caliper	cont.	200	x
NS	*Ilex x Nellie Stevens'*	Nellie Stevens' Holly	5-6'	B&B	200	
BG	*Nyssa sylvatica*	Blackgum	2 in caliper	B&B	200	x
WO	*Quercus phellos*	Willow Oak	2 in caliper	B&B	200	x
MG	*Magnolia grandiflora*	Southern Magnolia	2 in caliper	B&B	200	
CATEGORY II DECIDUOUS TREES (UNDERSTORY TREES)						
SB	*Amelanchier arborea*	Serviceberry	1 in caliper	cont.	75	x
RB	*Cercis canadensis*	Eastern Redbud	2 in caliper	cont.	75	x
KD	*Cornus kousa*	Kousa Dogwood	1 in caliper	cont.	75	x
MS	*Magnolia soulangiana*	Saucer Magnolia	1 in caliper	cont.	75	x
SM	*Magnolia virginiana*	Sweetbay Magnolia	1 in caliper	cont.	75	x
OC	*Prunus x incam 'Okame'*	Okame Cherry	2 in caliper	B&B	75	x
SHRUBS						
	Hydrangea arborescens	Wild Hydrangea	1-3 Gallon Cont.			x
	Ilex crenata 'Steeds'	Steeds' Japanese Holly	1-3 Gallon Cont.			
	Ilex verticilla 'Sparkleberry'	Sparkleberry' Winterberry Holly (Female)	1-3 Gallon Cont.			x
	Ilex verticilla 'Apollo'	Apollo' Winterberry Holly (Male)	1-3 Gallon Cont.			x
	Itea virginica	Virginia Willow	1-3 Gallon Cont.			x
	Juniperus squamata 'Blue Star'	Blue Star Juniper	1-3 Gallon Cont.			
	Kalmia latifolia	Mountain Laurel	1-3 Gallon Cont.			x
	Leucothoe reacemosa	Fetterbush	1-3 Gallon Cont.			x
	Myrica pensylvanica	Bayberry	1-3 Gallon Cont.			x
	Pieris japonica ' Mountain Fire'	Japanese Andromeda	1-3 Gallon Cont.			
	Pieris japonica ' Brouwer's Beauty'	Japanese Andromeda	1-3 Gallon Cont.			
	Pruus larocerocerasus 'Otto Luyken'	Cherry Laurel	1-3 Gallon Cont.			
	Rhododendron atlanticum	Dwarf Azalea	1-3 Gallon Cont.			x
	Spiraea japonica ' Little Princess'	Japanese Spirea	1-3 Gallon Cont.			
	Spiraea x bumalda 'Anthony Waterer'	Anthony Waterer Spirea	1-3 Gallon Cont.			
	Syringa patula 'Miss Kim'	Miss Kim Lilac	1-3 Gallon Cont.			
	Viburnum dentatum	Southern Arrowwood Viburnum	1-3 Gallon Cont.			x

Planting Buffer	
13-303 Transitional Screening Requirement (sq. ft.):	7,500
13-305 Transitional Screening Modifications:	2/3
Proposed (sq. ft):	5,000
10 yr Canopy Credit Mix of LE, ME, & LD 75% (sq. ft.):	3,750
10 yr Canopy Credit Mix of 70% must be evergreens (sq. ft.):	2,625
Number of Proposed Buffer Plantings Provided:	
Canopy Trees:	43
Understory Trees:	16
Shrubs:	90

NOTE:
- SEE PLANTING SCHEDULE FOR SPECIES
- PLANT SIZE CORRELATES TO PROJECTED 10 YR TREE CANOPY AREA
- PLANTINGS SHALL NOT BE PLANTED WITHIN FIVE (5) FEET OF AN EASEMENT, IF THAT EASEMENT INCLUDES A PIPE.

ADDITIONAL FRONT LANDSCAPING:
- EDGE TOWNHOUSES WILL AVERAGE SIX (6) SHRUBS AND ONE (1) CANOPY TREE OR EVERGREEN FROM SUGGESTED LIST.
- INTERIOR TOWNHOUSES WILL AVERAGE FOUR (4) SHRUBS AND ONE (1) FLOWERING TREE FROM SUGGESTED LIST.
- TOTALING APPROXIMATELY AN ADDITIONAL THREE (3) CANOPY OR EVERGREEN TREES, ELEVEN (11) FLOWERING TREES, AND EIGHTY (80) SHRUBS.

TABLE 12.3

Table 12.3 Tree preservation Target Calculations and Statement		
A	Pre-development area of existing tree canopy (From Existing Vegetation Map) =	15,238
B	Percentage of gross site area covered by existing tree canopy =	20%
C	Percentage of 10-year tree canopy required for site (see Table 12.4)	15%
D	Percentage of the 10-year tree canopy required that should be met through tree preservation =	20%
E	Proposed percentage of cannopy requirements that will be met through tree preservation=	0%
F	Has the Tree Preservation Target minimum been met?	NO
G	If No for line F, then a request to deviate from tehTree Preservation Target shall be provided on the plan that states one or more of thejustifications listed in §12-0507.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	Sheet 8
H	If step G requires a narrative, it shall be prepared in accordance with §12-0507.4	
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.12	

TREE PRESERVATION DEVIATION REQUEST

Design with Nature, LLC
17424 Falls Road
Upperco, Maryland 21155
September 27, 2011

Director of DPWES or Board of Supervisors to UFMD
Fairfax County, Virginia; DPWES & UFMD
12055 Government Center Parkway, Suite 518
Fairfax, Virginia 22035-5503

RE: Potters Glen, Section 3; RZ 2011-LE-019

Dear Director:

This letter is a request to deviate from the Tree Preservation Target, Table 12.3, for the Potters Glen project.

The site cannot meet the Tree Preservation Target due to the conflict between the existing trees and the layout of proposed development. The preservation of tree #13 was considered but it does not meet the pre-development standards of PFM 120400. The request is based on justifications listed in §12-0507.3A (1) "Meeting the Tree Preservation Target would preclude the development of uses or densities otherwise allowed by the Zoning Ordinance" and §12-0507.3A (2) "Meeting the tree preservation target would require the preservation of trees that do not meet standards for health and structural condition and other vegetation and risk management requirements of §12-0400". In order to meet the 10yr Canopy Requirements in Table 12.12 proposed plantings will be increased to ensure the required canopy requirements.

Sincerely,

Diane Sparks
ISA Certified Arborist, MA4966A

Design with Nature, LLC
T: 410.567.9470; F: 410.374.4251
www.designwithtrees.com

TABLE 12.12 - ALTERNATIVE "B"

Table 12.12 10-year Tree Canopy Calculation Worksheet			
Step		Total	Reference
A. Tree Preservation Target and Statement			
A 1	Place the Tree Preservation Target calculations and statement here preceding the 10-year tree canopy calculations	20%	see § 12-0507.2 for list of required elements and worksheet
B. Tree Canopy Requirements			
B 1	Identify gross site area =	75,416	§ 12-0510.1A
B 2	Subtract area dedicated to parks and road frontage =	0	§ 12-0510.1B
B 3	Subtract area of exemptions =	0	§ 12-0510.1C(1-6) see below
B 4	Adjusted gross site area (B1-B2) =	75,416	
B 5	Identify site's zoning and/or use	R-12	
B 6	Percentage of 10 year tree canopy required =	15%	§ 12-509.1 & Table 12.4
B 7	Area of 10-year tree canopy required (B4 x B6) =	11,312	
B 8	Modification of 10-year Tree Canopy Requirements requested?	NO	Yes or No
B 9	If B8 is yes, then list plan sheet where modification request is located		Sheet Number
C. Tree Preservation			
C 1	Tree Preservation Target Area =	2,286	Sqft
C 2	Total canopy area meeting standards of § 12-0200 =	-	
C 3	C 2 x 1.25 =	-	§ 12-509.3B
C 4	Total canopy area provided by unique or valuable forest or woodland communities =	0	
C 5	C4 x 1.5 =	0	§ 12-509.3B(1)
C 6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	0	
C 7	C6 x 1.5 to 3.0 =	0	§ 12-509.3B(2)
C 8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	0	
C 9	C8 x 1.0 =	0	§ 12-509.3C(1)
C 10	Total of C3, C5, C7 and C9 =	-	If area of C10 is less than B7 remainder of requirement must be met through tree planting - go to D
D. Tree Planting			
D 1	Area of canopy to be met through tree planting (B7-C10) =	11,312	
D 2	Area of canopy planted for air quality benefits =	0	
D 3	x 1.5 =	0	§ 12-509.4B(1)
D 4	Area of canopy planted for energy conservation =	0	
D 5	x 1.5 =	0	§ 12-509.4B(2)
D 6	Area of canopy planted for water quality benefits =	0	
D 7	x 1.25 =	0	§ 12-509.4B(3)
D 8	Area of canopy planted for wildlife benefits =	600	
D 9	x 1.5 =	900	§ 12-509.4B(4)
D 10	Area of canopy provide by native trees =	7,525	
D 11	x 1.5 =	11,288	§ 12-509.4B(5)
D 12	Area of canopy provided by improved cultivars and varieties =	375	
D 13	x 1.25 =	469	§ 12-509.4B(6)
D 14	Area of canopy provided through tree seedlings =	0	§ 12-509.4D(1)
	x 1.00	0	
D 15	Area of canopy provided thought native shrubs or woody seed mix =	0	§ 12-509.4D(1)(a)
	x 1.0	0	§ 12-509.4D(1)(a)
D 16	Percentage of D14 represented by D15 =	0	Must not exceed 33% of D14
D 17	Total of canopy area provided through tree planting =	12,656	
D 18	Is an offsite planting relief requested?	NO	Yes or No
D 19	Tree Bank or Tree Fund?	-	§ 12-5011
D 20	Canopy area requested to be provided through offsite banking or tree fund	-	
D 21	Amount to be deposited into the Tree Preservation and Planting Fund	-	
E. Total of 10-year Tree Canopy Provided			
E 1	Total of canopy area provided through tree preservation (C10) =	-	
E 2	Total of canopy area provided through tree planting (D17) =	12,656	
E 3	Total of canopy area provided through offsite mechanism (D19) =	-	
E 4	Total of 10-year Tree Canopy Provided =	12,656	Total of E1 through E3. Area should meet or exceed area in B6

Application No. RZ 2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 12/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 11 of 12

Design with Nature

INTERNATIONAL SOCIETY OF ARBORICULTURE
DIANE SPARKS
ISA No. MA-4966A
CERTIFIED ARBORIST

TREE CONSERVATION PLAN
POTTERS GLEN SECTION 3
LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

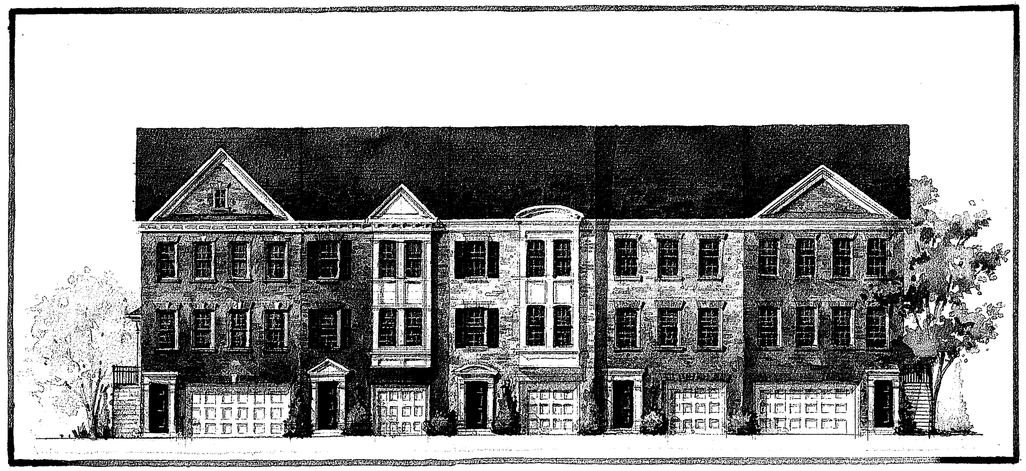
CLIENT:
Nick Morris
5928 Jane Way
Alexandria, Virginia 22310

REV.	DATE	DESCRIPTION

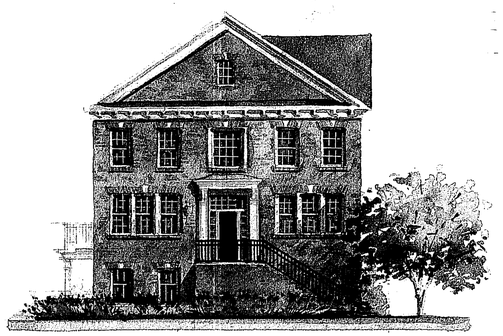
PROJECT #: 2011009
SCALE: AS NOTED
DATE: 2011.08.26
DESIGNER: DES

SHEET TITLE:
TABULATIONS ALTERNATIVE "B"

SHEET NUMBER:
8B

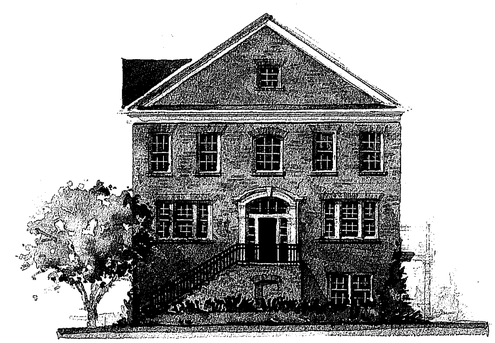


FRONT ELEVATION



LEFT SIDE ELEVATION

REAR ELEVATION



RIGHT SIDE ELEVATION

REAR ELEVATION FOR LOTS 5-9, ALTERNATIVE "A" ONLY.
ALL OTHER LOTS IN ALTERNATIVE "A" DO NOT HAVE THE LANDSCAPING / TRANSITIONAL SCREENING BARRIER.

Application No. RZ-2011-LE-019 Staff N. Rogers
APPROVED DEVELOPMENT PLAN
(DP) (GDP) (CDP) (FDP)
SEE PROFFERS DATED 10/9/2011
Date of (BOS) (PC) approval 1/10/2012
Sheet 12 of 12

W. C. Ralston ARCHITECTS
4400 CENTERVIEW DRIVE, SUITE 100 | CHANTILLY, VA 20151
P: 703.263.1100 | F: 703.817.4210 | WWW.WCRALSTON.COM
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CONCEPTUAL ELEVATIONS

Potter's Glen

FOR ILLUSTRATIVE PURPOSES ONLY

0 2 4 8
SCALE 1/8" = 1'-0"

DOMINION Surveyors Inc.®
8808-H PEAR TREE VILLAGE COURT
ALEXANDRIA, VIRGINIA 22309
703-619-6555
FAX 703-799-6412

DATE	NO.	DESCRIPTION
10/5/11	2	REVISE PER 2ND COUNTY COMMENTS, ADD TURNAROUND
10/25/11	3	REVISE PER 3RD COUNTY COMMENTS, ADD SCREENING WALL

ENGINEER — REVISION BLOCK

ILLUSTRATIVE ELEVATION PLAN

POTTERS GLEN, SECTION 3

T.M 81-3 ((1)) 46 & 91-1 ((1)) 43

LEE DISTRICT
FAIRFAX COUNTY, VIRGINIA

SCALE: 1/8" = 1'
DATE: 26 AUG. 2011
DRAWN BY: A.R.D.
DESIGNED BY: A.R.D.

COMMONWEALTH OF VIRGINIA
10/25/2011
ALAN R. DALTON
LIC. NO. 11789
PROFESSIONAL ENGINEER

JOB NO. #110308029
FILE NO. #34-11
SHEET 9 OF 9