

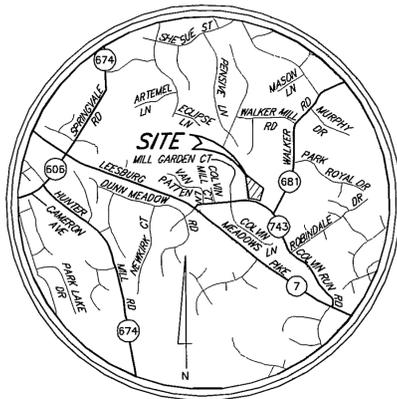
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 Department of Planning & Zoning  
 JUN 8 8 2011  
 Zoning Evaluation Division

# BRIGHTVIEW

## SPECIAL EXCEPTION

DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA  
 OCTOBER 19, 2010

REVISED: 01-11-11  
 REVISED: 04-07-11  
 REVISED: 04-22-11  
 REVISED: 05-5-11  
 REVISED: 06-27-11



VICINITY MAP  
SCALE: 1" = 2,000'

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (BOS) (PC) Approval July 26, 2011  
 Sheet 1 of 18

### CONTRACT PURCHASER/APPLICANT

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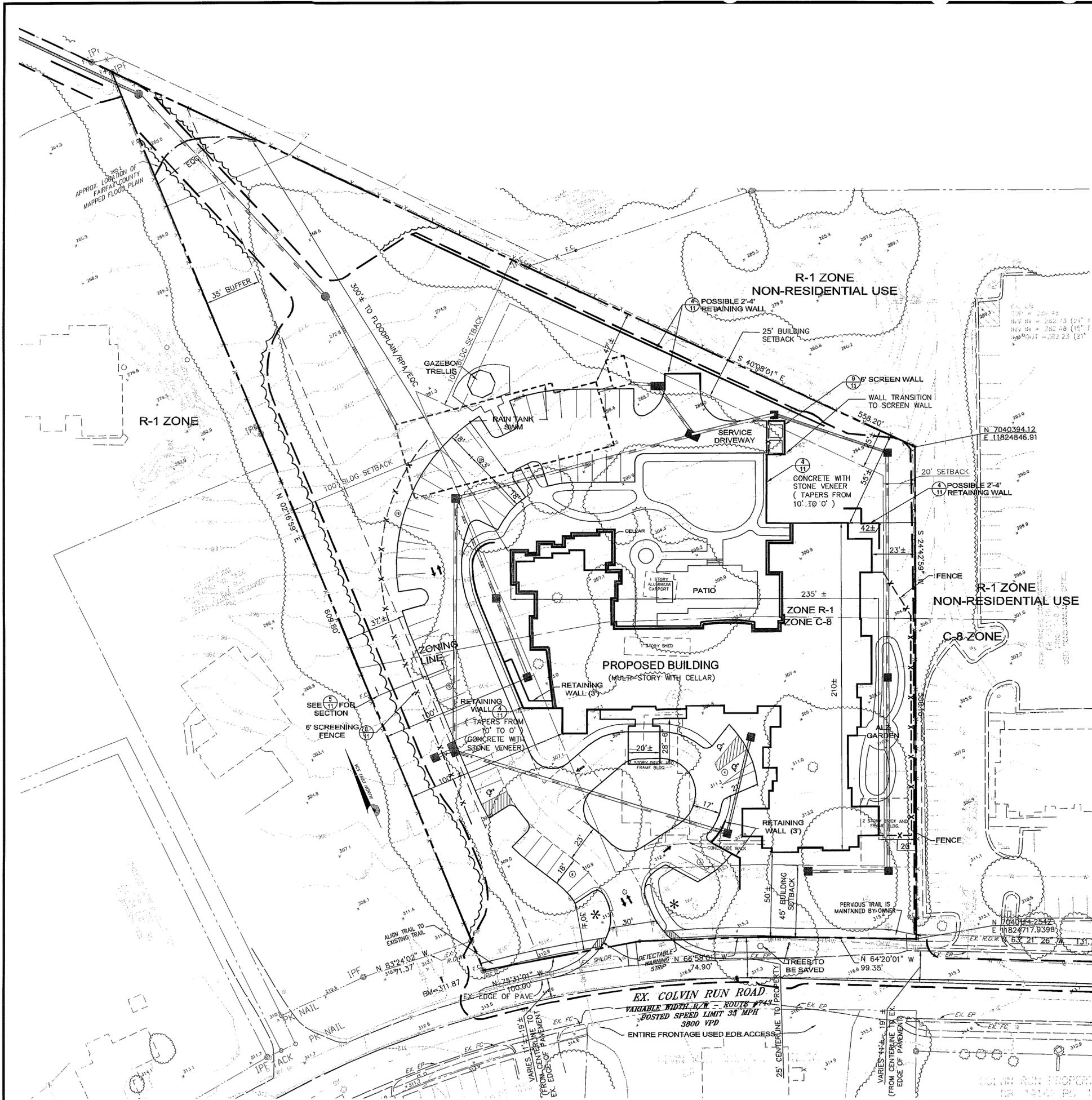
### ARCHITECT/AGENT

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SHEET 1 OF 18  
 PROJECT # 05073.11.00  
 DATE: OCTOBER 19, 2010

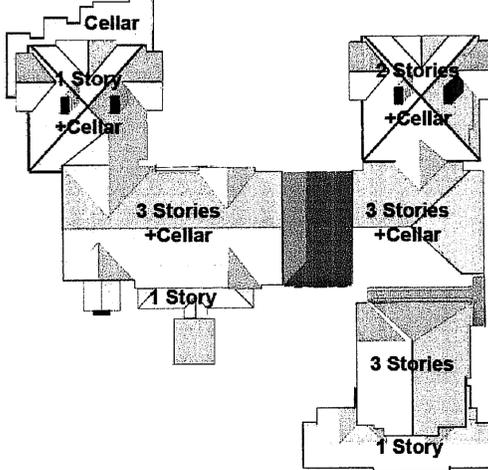


**LEGEND:**

|  |                                |  |   |
|--|--------------------------------|--|---|
|  | EXISTING TREELINE              |  | APPROXIMATE LIMITS OF CLEARING AND GRADING          |
|  | PROPOSED TREELINE              |  | APPROXIMATE LOCATION OF PROPOSED ENTRY FEATURE/SIGN |
|  | LIMITS OF FULLY EXPOSED CELLAR |  |   |

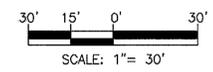
**SITE TABULATIONS:**

|  |   |
|--|---|
| EXISTING ZONES:  | R-1/C-8   |
| PROPOSED USE:  | ASSISTED LIVING FACILITY  |
| GROSS SITE AREA (GSA):   | 155,111 s.f.± or 3.56 Ac.±  |
| AREA BREAKDOWN BY ZONE:  | R-1 ZONE: 92,507 s.f.± or 2.12 Ac.±<br>C-8 ZONE: 62,604 s.f.± or 1.44 Ac.±  |
| MINIMUM LOT SIZE REQUIRED:   | R-1 ZONE: 5.0 Ac.<br>C-8 ZONE: 40,000 s.f.  |
| MINIMUM LOT SIZE PROVIDED:   | R-1 ZONE: 2.12 Ac.<br>C-8 ZONE: 62,604 s.f.   |
| MAXIMUM FLOOR AREA RATIO (FAR) ALLOWED AND PROPOSED:   | ALLOWED: 0.15<br>PROPOSED: 0.096<br>C-8 ZONE: 0.70<br>C-8 ZONE: 0.70  |
| OVERALL SITE:  | 0.37  |
| MAXIMUM GROSS FLOOR AREA (GFA) ALLOWED AND PROPOSED:   | ALLOWED: 13,876 s.f.±<br>PROPOSED: 8,876 s.f.±<br>C-8 ZONE: 43,822 s.f.±<br>C-8 ZONE: 57,698 s.f.±<br>TOTAL: 52,698 s.f.± |
| PARKING SPACES REQUIRED:   | 56*   |
| PARKING SPACES PROVIDED:   | 56 (INCLUDING 3 HANDICAP)   |
| LOADING SPACES REQUIRED:   | ONE**   |
| LOADING SPACES PROVIDED:   | TWO   |
| OPEN SPACE REQUIRED:   | R-1 ZONE: NO REQUIREMENT<br>C-8 ZONE: 15.0% OF ZONE AREA OR 9,390 s.f.<br>TOTAL: 9,390 s.f.                               |
| OPEN SPACE PROVIDED:   | R-1 ZONE: 65,048 s.f.±<br>C-8 ZONE: 45.5% or 28,484 s.f.±<br>TOTAL: 97,636 s.f.± 60.3%                                    |
| MAXIMUM BUILDING HEIGHT ALLOWED:   | R-1 ZONE: 60 FEET<br>C-8 ZONE: GREATER THAN 40 FEET   |
| MAXIMUM BUILDING HEIGHT PROPOSED:  | NO MORE THAN 40 FEET ***<br>CANOPY HEIGHT: 24'  |
| * ONE SPACE FOR EVERY 3 RESIDENTS/UNITS PLUS ONE SPACE FOR EVERY EMPLOYEE (90 RESIDENTS/UNITS AND 26 EMPLOYEES = 90/3 + 26 = 30 + 26 OR 56 SPACES) |   |
| ** ONE SPACE FOR THE FIRST 10,000 s.f. OF GFA PLUS ONE ADDITIONAL SPACE FOR EACH ADDITIONAL 100,000 s.f. OF GFA OR MAJOR FRACTION THEREOF          |   |
| *** HEIGHT AS DEFINED BY THE FAIRFAX COUNTY ZONING ORDINANCE   |   |
| NOTE: PATIO AND ALZ GARDEN DESIGN MAY CHANGE IN FINAL ENGINEERING  |   |



**BUILDING SHOWING AREA OF STORIES**

Application No. **SE 2010-DR-030** Staff **S.Z.**  
 APPROVED **SE** SP PLAN  
 Dev. Conditions Dated **July 21, 2011**  
 Date of **(BOS)** (PC) Approval **July 26, 2011**  
 Sheet **2** of **18**



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SPECIAL EXCEPTION PLAT  
**BRIGHTVIEW**  
 DRAVENSVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

|               |                                 |
|---------------|---------------------------------|
| BC REVISIONS: | 01-11-11                        |
| REVISIONS:    | 02-07-11                        |
| REVISIONS:    | 04-22-11                        |
| REVISIONS:    | 05-05-11                        |
| REVISIONS:    | 06-27-11                        |
| DESIGNED BY:  | PLR                             |
| DRAFTED BY:   | CAD                             |
| CHECKED BY:   | PLR                             |
| DATE:         | OCTOBER 19, 2010                |
| SCALE:        | HOR. 1" = 30'<br>VERT. 1" = 30' |
| SHEET:        | 2 OF 18                         |
| CO. NO.:      |                                 |
| CAD NAME:     | S50733SE                        |
| TITLE:        | SPE                             |
| NO.:          | 05073.11-00                     |

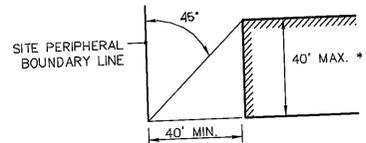
ZONING ORDINANCE, ARTICLE 9, SECTION 9-011 COMMENTS:

GENERAL NOTES:

- THE PROPERTY DELINEATED ON THIS SPECIAL EXCEPTION PLAT (SE) IS IDENTIFIED ON FAIRFAX COUNTY TAX ASSESSMENT MAP #012-4 ((1)), PARCEL 32 AND IS ZONED R-1 AND C-8.
- THE BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON A FIELD SURVEY BY BC CONSULTANTS DATED MAY 17, 2007.
- THE TOPOGRAPHIC INFORMATION SHOWN HEREON IS FROM AN AERIAL TOPOGRAPHIC SURVEY CONDUCTED BY MCKENZIE SNYDER IN MARCH, 2007 AND FIELD VERIFIED BY BC CONSULTANTS IN MAY, 2007. THE TOPOGRAPHY IS SHOWN AT TWO (2) FEET CONTOUR INTERVALS.
- THE PROPERTY SHOWN ON THIS SE IS IN THE DRANESVILLE MAGISTERIAL DISTRICT, THE BLUE PLAIN SEWER-SHED AND THE DIFFICULT RUN WATERSHED.
- TO THE BEST OF OUR KNOWLEDGE THIS DEVELOPMENT IS IN CONFORMANCE WITH THE FAIRFAX COUNTY COMPREHENSIVE PLAN FOR THIS PARCEL AND WILL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS AND CONDITIONS WITH THE EXCEPTION OF THE FOLLOWING REQUESTS:
  - \* REQUEST A WAIVER OF THE FIVE (5) ACRES MINIMUM DISTRICT SIZE AS REQUIRED BY ARTICLE 9, PART 3, SECTION 9-308, PARAGRAPH 6 OF THE ZONING ORDINANCE.
  - \* REQUEST A MODIFICATION OF THE TRANSITIONAL SCREENING, WHERE REQUIRED (SEE SHEET 5), TO USE THE EXISTING VEGETATION SUPPLEMENTED WITH ADDITIONAL TREES AND SHRUBS WHERE APPROPRIATE AND AS SHOWN ON THE PLAN. A SEPARATE REQUEST FOR WAIVER/MODIFICATION OF THE PROVISIONS OF ARTICLE 13 OF THE FAIRFAX COUNTY ZONING ORDINANCE APPLICATION WILL BE SUBMITTED CONCURRENTLY WITH THIS PLAN, INCLUDING ALL NECESSARY CALCULATIONS AND LETTER OF JUSTIFICATION.
  - \* REQUEST A WAIVER OF THE BARRIER REQUIREMENTS AT ALL TRANSITIONAL SCREENING, WHERE REQUIRED (SEE SHEET 5). SEE TRANSITIONAL SCREENING MODIFICATION REQUEST ABOVE FOR ADDITIONAL INFORMATION.
  - \* REQUEST A MODIFICATION OF THE YARD (SETBACK) DISTANCES TO 40 FEET ALONG THAT PORTION OF THE SITE'S EASTERN PROPERTY LINE ADJACENT TO THE R-1 NON-RESIDENTIAL USE ZONE AND TO 25' ALONG THAT PART OF THE SITE'S NORTHERN PROPERTY LINE ADJACENT TO THE R-1 NON-RESIDENTIAL USE ZONE. SEE THE ANGLE OF BULK PLANE SHOWN BELOW FOR ADDITIONAL INFORMATION.
  - \* REQUEST A MODIFICATION TO PROVIDE A SIX (6) FEET CONCRETE SIDEWALK ALONG THE SITE'S FRONTAGE IN LIEU OF THE SIX (6) FEET TO EIGHT (8) FEET NATURAL SURFACE OR STONE DUST TRAIL AS REQUIRED BY THE FAIRFAX COUNTY COUNTY-WIDE TRAILS PLAN.
- ACCORDING TO THE FAIRFAX COUNTY-COUNTYWIDE TRAILS PLAN (ADOPTED BY THE BOARD OF SUPERVISORS JUNE 17, 2002), A SIX (6) FEET TO EIGHT (8) NATURAL SURFACE OR STONE DUST TRAIL IS REQUIRED ALONG THE NORTHERN SIDE OF COLVIN RUN ROAD. A MODIFICATION HAS BEEN REQUESTED TO PROVIDE A SIX (FEET) CONCRETE SIDEWALK TO MATCH THE EXISTING SIDEWALK TO THE EAST.
- THE SITE IS SERVED BY PUBLIC WATER AND SANITARY SEWER. THE FAIRFAX COUNTY WATER AUTHORITY IS THE PUBLIC WATER SUPPLY AGENCY FOR THIS DEVELOPMENT. THE COUNTY OF FAIRFAX IS THE SANITARY SEWER SUPPLY AGENCY FOR THIS DEVELOPMENT.
- THIS PLAN SHOWS ALL KNOWN EXISTING UNDERGROUND UTILITIES AND ALL EXISTING UTILITY EASEMENTS OF 25' OR MORE. THE LOCATIONS OF THE EASEMENTS SHOWN ARE FROM TAX RECORDS AND/OR DEEDS AND INFORMATION OF RECORD AND SHOULD NOT BE REGARDED AS CORRECT AND FINAL.
- THIS PLAN DOES NOT SHOW PROPOSED UTILITIES. ALL NECESSARY PUBLIC UTILITIES ARE READILY ACCESSIBLE TO THE SITE AND WILL BE EXTENDED BY THE DEVELOPER OR UTILITY COMPANY. UTILITY PLANS AND PROFILES WILL BE SUBMITTED IN THE FUTURE FOR CONSTRUCTION PURPOSES.
- THERE ARE NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES ON THIS SITE. IF ANY SUBSTANCES ARE FOUND, THE METHODS FOR DISPOSAL SHALL ADHERE TO COUNTY, STATE AND/OR FEDERAL LAW.
- THERE ARE NO KNOWN GRAVES OR PLACES OF BURIAL ON SITE.
- THE PROPOSED LIMITS OF CLEARING AND GRADING ARE SHOWN ON THE PLAN. THESE LIMITS ARE APPROXIMATE AND SUBJECT TO ADJUSTMENT AT THE TIME OF FINAL GRADING, ENGINEERING AND LOCATION OF PROPOSED UTILITIES. WHERE THE LIMITS OF CLEARING AND GRADING ARE SHOWN ADJACENT TO A PROPERTY LINE, IT SHOULD BE ASSUMED THAT THE LIMITS EXTEND TO THE PROPERTY LINE.
- ANY AND ALL OFF-SITE GRADING, PARKING, ACCESS, UTILITY CROSSINGS, ETC. SHALL BE ALLOWED WITH THE PERMISSION OF THE ADJACENT HOMEOWNERS AND/OR THEIR ASSOCIATED HOMEOWNER'S ASSOCIATION.
- IN ACCORDANCE WITH PROVISIONS OF ARTICLE 9, PART 0, SECTION 9-004, PARAGRAPH 4 OF THE FAIRFAX COUNTY ZONING ORDINANCE, MINOR MODIFICATIONS TO AN APPROVED SPECIAL EXCEPTION PROPERTY LINE ADJACENT TO THE R-1 ZONE. MINIMUM SETBACK OF 100' REQUIRED IN ACCORDANCE WITH ARTICLE 9, PART 3, SECTION 9-308 OF THE ZONING ORDINANCE.
  - ALTHOUGH NO SETBACK IS REQUIRED ALONG THAT PORTION OF THE EASTERN PROPERTY LINE ADJACENT TO THE C-8 ZONE, A MINIMUM 40' SETBACK IS PROPOSED.

- APPLICATION TO BE SUBMITTED WITH THIS PLAN.
- BOUNDARY INFORMATION AS SHOWN ON THE PLAN.
  - REFER TO THE SITE TABULATIONS ON SHEET 2 FOR SITE AREA.
  - SCALE AND NORTH ARROW AS SHOWN ON THE PLAN.
  - THE LOCATION, DIMENSIONS AND MAXIMUM HEIGHT OF THE PROPOSED BUILDING ARE SHOWN ON THE PLAN OR INCLUDED IN THE SITE TABULATIONS ON SHEET X. THE LOCATION, DIMENSIONS AND MAXIMUM HEIGHT OF ALL EXISTING BUILDINGS ARE SHOWN OF SHEET 4, EXISTING CONDITIONS AND EXISTING VEGETATION MAP. THE APPROXIMATE LOCATIONS OF POSSIBLE ENTRY FEATURES/SIGNS ARE SHOWN ON THE PLAN. THESE FEATURES HAVE NOT BEEN DESIGNED, CONSEQUENTLY, THEIR EXACT LOCATIONS AND DIMENSIONS AND, THE LOCATIONS AND THE TYPE OF LIGHTING FOR THESE FEATURES AND ALL SIGNS ARE NOT KNOWN AT THIS TIME. THERE ARE 4 EXISTING STRUCTURES ON SITE. ALL STRUCTURES ARE TO BE REMOVED. THE DATES OF CONSTRUCTION FOR ALL EXISTING STRUCTURES ARE NOT KNOWN.
  - THE ANGLE OF BULK PLANE IS SHOWN BELOW WITH ADDITIONAL INFORMATION CONCERNING ADDITIONAL STANDARDS AND/OR MODIFICATION OR WAIVER REQUESTS. REFER TO GENERAL NOTE 5 FOR ADDITIONAL INFORMATION.
  - THE REQUIRED DIMENSIONS FOR THE PROPOSED FACILITY ARE AS SHOWN ON THE PLAN. THE REQUIRED DIMENSIONS FOR THE EXISTING STRUCTURES ARE SHOWN ON SHEET 4, EXISTING CONDITIONS AND EXISTING VEGETATION MAP. TRANSITIONAL SCREENS AND BARRIERS, WHERE REQUIRED, ARE AS SHOWN ON SHEET 5, LANDSCAPE PLAN. A MODIFICATION OF THE TRANSITIONAL SCREENING AND A WAIVER OF THE BARRIER REQUIREMENTS HAS BEEN REQUESTED. REFER TO GENERAL NOTE 5 FOR ADDITIONAL INFORMATION CONCERNING THE TRANSITIONAL SCREENING AND BARRIER REQUIREMENTS.
  - PUBLIC RIGHT-OF-WAY INFORMATION IS AS SHOWN ON THE PLAN. ADDITIONAL RIGHT-OF-WAY DEDICATION AND FRONTAGE IMPROVEMENTS ARE AS SHOWN ON THE PLAN. THE REQUIRED DIMENSIONS ARE SHOWN ON THE PLAN.
  - MEANS OF INGRESS AND EGRESS ARE AS SHOWN ON THE PLAN.
  - PROPOSED PARKING SPACE INFORMATION IS AS SHOWN ON THE PLAN AND INCLUDED IN THE SITE TABULATIONS ON SHEET 2. EXISTING PARKING SPACE INFORMATION IS SHOWN ON SHEET 4, EXISTING CONDITIONS AND EXISTING VEGETATION MAP.
  - THE SITE IS SERVED BY PUBLIC WATER AND SANITARY SEWER.
  - REFER TO SHEETS 12, 13, 14, AND 15 FOR ALL REQUIRED STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES INFORMATION.
  - REFER TO THE SITE TABULATIONS ON SHEET 2 FOR THE NUMBER OF RESIDENTS, THE PROPOSED GRDSS FLOOR AREA AND THE PROPOSED FLOOR AREA RATIO.
  - REFER TO GENERAL NOTE 3 FOR TOPOGRAPHIC INFORMATION.
  - THE LIMITS OF CLEARING AND GRADING ARE AS SHOWN ON THE PLAN. PROPOSED LANDSCAPING AND, TRANSITIONAL SCREENING AND BARRIERS, WHERE REQUIRED, MODIFIED OR WAIVED, ARE AS SHOWN ON SHEET 5, LANDSCAPE PLAN. REFER TO SHEET 4, EXISTING CONDITIONS AND EXISTING VEGETATION MAP FOR ALL EXISTING VEGETATION INFORMATION.
  - THE APPROXIMATE LOCATION OF A FAIRFAX COUNTY MAPPED FLOODPLAIN IS AS SHOWN ON THE PLAN. THE APPROXIMATE LOCATION OF A FAIRFAX COUNTY MAPPED RESOURCE PROTECTION AREA AND AN ENVIRONMENTAL QUALITY CORRIDOR ARE AS SHOWN ON THE PLAN. THE DISTANCE TO THE PROPOSED STRUCTURE IS SHOWN ON THE PLAN. THE DISTANCE TO THE CLOSEST EXISTING STRUCTURE IS SHOWN ON SHEET 4, EXISTING CONDITIONS AND EXISTING VEGETATION MAP.
  - USEABLE OUTDOOR RECREATION AREAS ARE AS SHOWN ON THE PLAN.
  - REFER TO GENERAL NOTE 8 FOR INFORMATION CONCERNING EXISTING UTILITY EASEMENTS.
  - REFER TO GENERAL NOTES 5 AND 6 FOR INFORMATION CONCERNING COMPREHENSIVE PLAN TRAILS REQUIREMENTS.
  - THERE ARE NO KNOWN GRAVES OR PLACES OF BURIAL ON SITE.
  - SEAL AND SIGNATURE AS SHOWN ON THE PLAN.
- ZONING MAP WILL BE SUBMITTED WITH THIS PLAN.
- SITE PHOTOGRAPHS WILL BE SUBMITTED WITH THIS PLAN.
- SOILS MAP IS NOT REQUIRED.
- AFFIDAVIT WILL BE SUBMITTED WITH THIS PLAN.
- WRITTEN STATEMENT DESCRIBING THE PROPOSED USE GIVING ALL PERTINENT INFORMATION WILL BE SUBMITTED WITH THIS PLAN.
- APPLICANT AND CONTRACT PURCHASER: OWNER OF PARCEL 32:  
SHELTER DEVELOPMENT, LLC NEST ESTATES, LLC  
218 N. CHARLES STREET, SUITE 220 1538 CROWELL ROAD  
BALTIMORE, MD. 21201 VIENNA, VA 22182
  - THE SITE IS NOT WITHIN ANY OVERLAY DISTRICTS.
  - APPLICATION FEE WILL BE SUBMITTED WITH THIS PLAN.

Application No. SE 2010-DR-030 Staff S.Z.  
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 Sheet 3 of 18



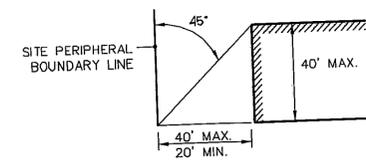
FRONT YARD ANGLE OF BULK PLANE FOR THE C-8 ZONE

NO REQUIREMENT

SIDE YARD ANGLE OF BULK PLANE FOR THE C-8 ZONE

ANGLE OF BULK PLANE DOES NOT APPLY TO THE WESTERN PROPERTY LINE ADJACENT TO THE R-1 ZONE. MINIMUM SETBACK OF 100' REQUIRED IN ACCORDANCE WITH ARTICLE 9, PART 3, SECTION 9-308 OF THE ZONING ORDINANCE.

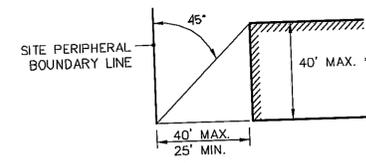
ALTHOUGH NO SETBACK IS REQUIRED ALONG THAT PORTION OF THE EASTERN PROPERTY LINE ADJACENT TO THE C-8 ZONE, A MINIMUM 40' SETBACK IS PROPOSED.



SIDE YARD ANGLE OF BULK PLANE FOR THE R-1 ZONE

ANGLE OF BULK PLANE DOES NOT APPLY TO THE WESTERN PROPERTY LINE ADJACENT AND THAT PORTION OF THE EASTERN PROPERTY LINE ADJACENT TO THE R-1 ZONE. MINIMUM SETBACK OF 100' REQUIRED IN ACCORDANCE WITH ARTICLE 9, SECTION 9-308 OF THE ZONING ORDINANCE.

REQUEST MODIFICATION TO USE A 40' SETBACK FOR THAT PORTION OF THE EASTERN PROPERTY LINE ADJACENT TO THE R-1 (NON-RESIDENTIAL USE) ZONE.



REAR YARD ANGLE OF BULK PLANE FOR THE R-1 ZONE

ANGLE OF BULK PLANE DOES NOT APPLY TO THE NORTHERN PROPERTY LINE ADJACENT TO THE R-1 ZONE. MINIMUM SETBACK OF 100' REQUIRED IN ACCORDANCE WITH ARTICLE 9, SECTION 9-308 OF THE ZONING ORDINANCE.

REQUEST MODIFICATION TO USE THE MINIMUM 25' SETBACK FOR THAT PORTION OF THE NORTHERN PROPERTY LINE ADJACENT TO THE R-1 (NON-RESIDENTIAL USE) ZONE.

ANGLE OF BULK PLANE

NO SCALE

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SPECIAL EXCEPTION PLAT  
 GENERAL NOTES AND COMMENTS  
**BRIGHTVIEW**  
 DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

|                                    |                        |
|------------------------------------|------------------------|
| BC REVISIONS                       | DESIGNED BY: PLR       |
| DATE: 01-11-11                     | DRAFTED BY: CAD        |
| DATE: 02-07-11                     | CHECKED BY: PLR        |
| DATE: 04-08-11                     | DATE: OCTOBER 19, 2010 |
| DATE: 05-05-11                     | SCALE: HOR.            |
| REVISED: 06-27-11                  | VERT.                  |
| APPLICANT: SHELTER DEVELOPMENT LLC | SHEET 3 OF 18          |
| 218 N. CHARLES STREET              | CO. NO.                |
| BALTIMORE, MD 21201                | CAD NAME: S5073NOT     |
|                                    | UT: NOTES              |
|                                    | NO. 05073.11-00        |



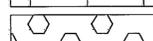
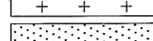
**EXISTING VEGETATION MAP SUMMARY TABLE AND NARRATIVE:**

| COVER TYPE       | PRIMARY SPECIES  | SUCCESSIONAL STAGE | CONDITION | AREA (Ac.±) | NARRATIVE  |
|------------------|--|--------------------|-----------|-------------|--|
| 2                | Maple, Eastern Redcedar  | Mature             | Fair/Good | 1.08        | THIS AREA IS DOMINATED BY MAPLE, EASTERN REDCEDAR AND SOME BLACK LOCUST. TREES IN THIS COVER TYPE RANGE FROM 8" TO 42" dbh. THIS COVER TYPE IS FOUND MOSTLY ALONG THE PROPERTY LINES AND ABANDONED FENCE ROWS. THERE ARE UNDERSTORY PATCHES OF BRIARS, VINES AND MULTIFLORA ROSE SCATTERED THROUGHOUT. CLIMBING BRIARS AND VINES ARE COMPROMISING THE HEALTH OF SOME OF THE TREES. THE OVERALL QUALITY OF THE TREES IS FAIR TO GOOD. |
| 3                | Large patches of briars, multiflora rose, and other herbaceous plants. | Juvenile, Emerging | N/A       | 1.06        | ABANDONED OPEN FIELDS IN THE EARLY STAGES OF NATURALIZING. ABUNDANCE OF BRIARS AND MULTIFLORA ROSE PROVIDE A NATURAL HABITAT FOR SMALL WILDLIFE.   |
| 5                | N/A  | N/A                | N/A       | 0.31        | AREAS OF CONSTRUCTED FEATURES INCLUDING BUILDINGS, PARKING AND ROADWAYS.   |
| 6                | N/A  | N/A                | N/A       | 0.98        | GRASSED AND LANDSCAPED AREAS, ATHLETIC FIELDS OR OTHER GREEN AREAS DEVOID OF NATURAL VEGETATION.   |
| 7                | Maples, Oaks   | Mature             | Fair/Good | 0.13        | THE DEFINED BOUNDARIES BETWEEN THIS COVER TYPE AND COVER TYPE 2 ARE HARD TO DETERMINE. BOTH COVER TYPES HAVE SIMILAR PRIMARY SPECIES AND UNDERSTORY COMPONENTS. TREES WITHIN THIS FLOODPLAIN AREA HAVE ADAPTED TO THE WET CONDITIONS. THE OVERALL QUALITY OF THE TREES IS FAIR TO GOOD.  |
| Total: 3.56 Ac.± |  |                    |           |             |  |

**EXISTING BUILDING INVENTORY**

| STRUCTURE  | TYPE                     | HEIGHT | DATE OF CONSTRUCTION | STATUS        |
|------------|--------------------------|--------|----------------------|---------------|
| BUILDING A | 2 STORY BRICK AND FRAME  | 30'±   | UNKNOWN              | TO BE REMOVED |
| BUILDING B | 2 STORY BRICK AND FRAME  | 25'±   | UNKNOWN              | TO BE REMOVED |
| BUILDING C | 1 STORY SHED             | 8'±    | UNKNOWN              | TO BE REMOVED |
| BUILDING D | 1 STORY ALUMINUM CARPORT | 10'±   | UNKNOWN              | TO BE REMOVED |

**LEGEND:**

-  COVER TYPE 2 (UPLAND FOREST)
-  COVER TYPE 3 (EARLY SUCCESSIONAL FOREST COMMUNITY)
-  COVER TYPE 5 (DEVELOPED LAND)
-  COVER TYPE 6 (MAINTAINED GRASS LAND)
-  COVER TYPE 7 (BOTTOMLAND FOREST)
-  EXISTING PRE-DEVELOPMENT TREE CANOPY AREA (69,371 s.f.±)
-  EXISTING TREE CANOPY LINE

SEE SHEET 7 FOR THE TREE PRESERVATION TARGET AND STATEMENT.

**CERTIFIED ARBORIST**


**International Society of Arboriculture**  
**CERTIFIED ARBORIST**  
 Dennis Dale Dixon  
 Certificate Number: MA-4913A  
 Expiration Date: Dec 31, 2014

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (603) (PC) Approval July 26, 2011  
 Sheet 4 of 18

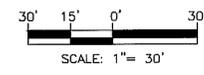
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SPECIAL EXCEPTION PLAT  
 EXISTING CONDITIONS AND EXISTING VEGETATION MAP  
**BRIGHTVIEW**  
 DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

|                |                        |
|----------------|------------------------|
| BC REVISIONS:  | DESIGNED BY: PLR       |
| DATE: 01-11-11 | DRAFTED BY: CAD        |
| DATE: 02-07-11 | CHECKED BY: PLR        |
| DATE: 04-22-11 | DATE: OCTOBER 19, 2010 |
| DATE: 05-05-11 | SCALE: HOR. 1" = 30'   |
|                | VERT. 1" = 30'         |
|                | SHEET 4 OF 18          |
|                | CD. NO.                |
|                | CAD NAME: S5073EVM     |
|                | PLOT: EVM              |
|                | NO. 05073.11-00        |

XREFS:



**LEGEND:**

- LIMITS OF CLEARING AND GRADING
- EXISTING TREELINE
- PROPOSED TREELINE
- LIMITS OF FULLY EXPOSED CELLAR
- AREA OF REQUIRED AND MODIFIED TYPE 2 TRANSITIONAL SCREENING. MODIFICATION APPLICATION TO BE SUBMITTED CONCURRENTLY WITH THIS PLAN. SEE GENERAL NOTE 5 ON SHEET 3 FOR ADDITIONAL INFORMATION.
- POST DEVELOPMENT 10-YEAR TREE CANOPY CREDIT AREA (14,516 S.F.)
- INTERIOR PARKING LOT AREA (26,771 S.F.)

- CATEGORY IV DECIDUOUS (SHADE) TREE
- PERIPHERAL PARKING LOT SHADE TREE ADJACENT TO PROPERTY LINE (CATEGORY IV DECIDUOUS TREE)
- PERIPHERAL PARKING LOT SHADE TREE ADJACENT TO R.O.W. (CATEGORY IV DECIDUOUS TREE)
- INTERIOR PARKING LOT SHADE TREE (CATEGORY IV DECIDUOUS TREE)
- CATEGORY II-III DECIDUOUS (ORNAMENTAL) TREE
- CATEGORY II-IV EVERGREEN TREE
- DECIDUOUS OR EVERGREEN SHRUB
- ROOF DECK WALL WITH PLANTINGS
- EXISTING TREES TO BE PRESERVED (SEE SHEET 7)
- EXISTING TREES TO BE REMOVED (SEE SHEET 7)

SEE SHEET 6 FOR PLANT LIST AND 10-YEAR TREE CANOPY CALCULATIONS.

PROPOSED TREES LOCATED OUTSIDE OF THE LIMITS OF CLEARING AND GRADING SHALL BE PLANTED MANUALLY. NO HEAVY EQUIPMENT WILL BE USED.

Application No. **SE 2010-DR-030** Staff **S.Z.**  
 APPROVED **SE** SP PLAN  
 Dev. Conditions Dated **July 21, 2011**  
 Date of **(BOS)** (PC) Approval **July 26, 2011**

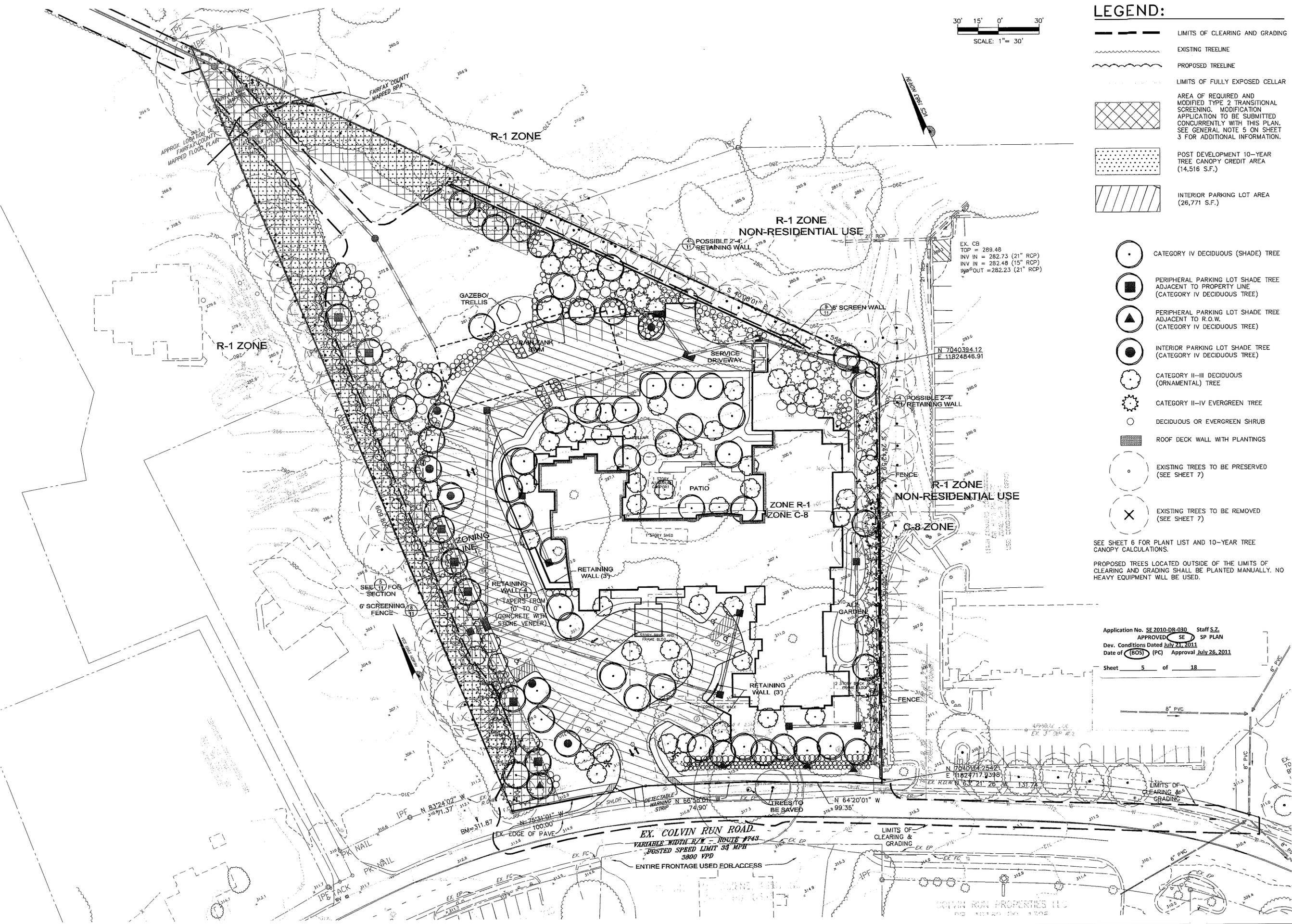
Sheet **5** of **18**

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SPECIAL EXCEPTION PLAT  
 LANDSCAPE PLAN  
**BRIGHTVIEW**  
 DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

|                                    |                        |
|------------------------------------|------------------------|
| BC REVISIONS                       | DESIGNED BY: PLR       |
| REVISED: 01-11-11                  | DRAFTED BY: CAD        |
| REVISED: 02-07-11                  | CHECKED BY: PLR        |
| REVISED: 04-22-11                  | DATE: OCTOBER 19, 2010 |
| DATE: 03-05-11                     | SCALE: HOR.            |
| REVISED: 06-27-11                  | VERT.                  |
| APPLICANT: SHELTER DEVELOPMENT LLC | SHEET 5 OF 18          |
| 210 N. CHARLES STREET              | CO. NO.                |
| BALTIMORE, MD 21201                | CAD NAME: S5073LSC     |
|                                    | OUT: LSC               |
|                                    | NO. 05073.11-00        |



**TREE PRESERVATION TARGET AND STATEMENT  
(10-YEAR TREE CANOPY CALCULATIONS)**

| A. TREE PRESERVATION TARGET CALCULATIONS AND STATEMENT |   | Totals (s.f.) |
|--|---|---------------|
| A1   | Pre-development Area of Existing Tree Canopy  | 69,371        |
| A2   | Percentage of Gross Site Area Covered by Existing Tree Canopy (A1/B1)   | 44.7%         |
| A3   | Percentage of 10-year Tree Canopy Required for the Site (See Note 1 Below)  | 22%           |
| A4   | Percentage of the 10-Year Tree Canopy Requirement That Should be Met Through Tree Preservation  | 44.7%         |
| A5   | Proposed Percentage of Canopy Requirement That Will be Met Through Tree Preservation (C10/B7)   | 48.7%         |
| A6   | Has the Tree Preservation Target Minimum Been Met?  | Yes           |
| A7   | If A6 is no, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications 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. The narrative shall be prepared in accordance with §12-0507.4. | N/A           |
| B. TREE CANOPY REQUIREMENT                             |   |               |
| B1   | Identify Gross Area   | 165,111       |
| B2   | Subtract Areas Dedicated to Parks, and Road Frontage  | 2,885         |
| B3   | Subtract Area of Exemption  | 0             |
| B4   | Adjusted Gross Site Area B1 - (B2+B3)   | 162,226       |
| B5   | Identify Site's Zoning and/or Use   | R-1 and C-8   |
| B6   | Percentage of 10-Year Tree Canopy Required  | 22%           |
| B7   | Area of 10 Year Tree Canopy Required (B4xB6)  | 33,534        |
| B8   | Modification of 10-Year Tree Canopy Requirements Requested  | No            |
| B9   | If B8 is Yes, Then List Plan Sheets Where Modification Request is Located   | N/A           |
| C. TREE CANOPY PRESERVATION                            |   |               |
| C1   | Tree Preservation Target Area (B7 x A4)   | 14,997        |
| C2   | Total Canopy Area Meeting Standards of §12-0200   | 7,227         |
| C3   | C2 x 1.25   | 9,034         |
| C3.1   | Total Canopy Area Meeting Standards of §12-0200 But Does Not Qualify for Bonus Multiplier   | 6,370         |
| C4   | Total Canopy Area Provided by Unique or Valuable Forest or Woodland Community   | 0             |
| C5   | C4 x 1.5  | 0             |
| C6   | Total Canopy Area Provided by "Heritage," Memorial, "Specimen," or "Steel Tree"   | 0             |
| C7   | C6 x 1.5 to 3.0   | 0             |
| C8   | Canopy Area of Trees Within Resource Protection Areas and 100-Year Floodplains  | 919           |
| C9   | C8 x 1.0  | 919           |
| C10  | Totals of C3, C3.1, C5, C7 and C9   | 16,323        |
| D. TREE PLANTING                                       |   |               |
| D1   | Area of Canopy to be Met Through Tree Planting (B7-C10)   | 17,211        |
| D2   | Area of Canopy Planted for Air Quality Benefits   | 0             |
| D3   | D2 x 1.5  | 0             |
| D4   | Area of Canopy Planted for Energy Conservation  | 0             |
| D5   | D4 x 1.5  | 0             |
| D6   | Area of Canopy Planted for Water Quality Benefits   | 0             |
| D7   | D6 x 1.25   | 0             |
| D8   | Area of Canopy Planted for Wildlife Benefits  | 0             |
| D9   | D8 x 1.5  | 0             |
| D10  | Area of Canopy Provided by Native Species   | 0             |
| D11  | D10 x 1.5   | 0             |
| D12  | Area of Canopy Provided by Improved Cultivars and Varieties   | 0             |
| D13  | D12 x 1.25  | 0             |
| D14  | Area of Canopy Provided Through Tree Seeding  | 0             |
| D14.1  | D14 x 1.0   | 0             |
| D15  | Area of Canopy Provided Through Native Shrubs or Wood Seed Mix  | 0             |
| D15.1  | D15 x 1.0   | 0             |
| D16  | Percentage of D14 Represented by D15 (D15/D14) Must not exceed 33% of D14   | 0             |
| D16.1  | Area of Canopy Planted With No Multiplier (See Note 2 Below)  | 18,250        |
| D17  | Total Canopy Area Provided Through Tree Planting (Totals of D3, D5, D7, D9, D11, D13, D14.1, D15.1 and D16.1)   | 18,250        |
| D18  | Is an Offsite Planting Relief Requested?  | No            |
| D19  | Tree Bank or Tree Fund  | N/A           |
| D20  | Canopy Area Requested to be Provided Through Offsite Banking or Tree Fund   | 0             |
| D21  | Amount to be Deposited into the Tree Preservation and Planting Fund   | 0             |
| E. TOTAL OF 10-YEAR TREE CANOPY PROVIDED               |   |               |
| E1   | Total of Canopy Area Provided Through Tree Preservation (C10)   | 16,323        |
| E2   | Total of Canopy Area Provided Through Tree Planting (D17)   | 18,250        |
| E3   | Total of Canopy Area Provided Through Offsite Mechanism (D20)   | 0             |
| E4   | Total of 10-Year Tree Canopy Provided (Totals of E1, E2 and E3)   | 34,573        |

NOTE 1: THE SITE IS SPLIT BETWEEN THE R-1 ZONE (92,507 s.f.±) AND THE C-8 ZONE (62,604 s.f.±). FOR THE R-1 ZONE, 30% OF THE GROSS SITE AREA (GSA) IS REQUIRED TO BE COVERED BY 10 YEAR TREE CANOPY AND 10% OF THE GSA FOR THE C-8 ZONE. THE OVERALL PERCENTAGE OF 10 YEAR TREE CANOPY COVER REQUIRED FOR THE ENTIRE SITE IS 22% [(0.30 x 92,507) + [(0.10 x 62,604)] / 155,111 = 0.219 or 22%]

NOTE 2: BONUS MULTIPLIERS MAY BE APPLIED AT THE SITE PLAN PHASE DEPENDING ON THE FINAL TREE SELECTION.

**TRANSITIONAL SCREENING AND BARRIERS**

A MODIFICATION OF THE TRANSITIONAL SCREENING AND A WAIVER OF BARRIER REQUIREMENTS HAS BEEN REQUESTED. SEE GENERAL NOTE 5 ON SHEET 3 FOR ADDITIONAL INFORMATION.

**INTERIOR PARKING LOT LANDSCAPING CALCULATIONS**

INTERIOR PARKING LOT AREA: 26,847 s.f.±  
AREA REQUIRED FOR INTERIOR PARKING LOT LANDSCAPING: 0.05 X 26,847 s.f. = 1,342 s.f.±

NUMBER OF SHADE TREES REQUIRED AT 250 s.f. PER TREE: 1,342 s.f./250 s.f. = 5.36 OR 6  
NUMBER OF SHADE TREES PROVIDED AT 250 s.f. PER TREE: 6 TREES

**PERIPHERAL PARKING LOT LANDSCAPING CALCULATIONS**

PERIPHERAL PARKING LOT FRONTAGE ALONG R.O.W.: 158 l.f.±  
NUMBER OF SHADE TREES REQUIRED AT ONE TREE PER 40 l.f.: 3.95 OR 4 TREES  
NUMBER OF SHADE TREES PROVIDED ALONG R.O.W. FRONTAGE: 4 TREES  
PERIPHERAL PARKING LOT FRONTAGE ALONG ADJACENT PROPERTY: 344 l.f.±  
NUMBER OF SHADE TREES REQUIRED AT ONE TREE PER 50 l.f.: 6.88 OR 7 TREES  
NUMBER OF SHADE TREES PROVIDED ALONG ADJACENT PROPERTY: 7 TREES

**LANDSCAPE IMPLEMENTATION POLICY**

**URBAN FOREST MANAGEMENT  
POLICY ON LANDSCAPE IMPLEMENTATION  
January 1, 2009**

This compilation of selected portions of the Public Facilities Manual is intended to summarize and clarify regulations pertaining to the implementation of landscape plans on development sites subject to review and inspection by the County. Included are regulations governing the most common areas of noncompliance experienced by staff in the course of conducting landscape inspections, and a brief summary of the policy regarding seasonal landscape deferrals.

**Tree Species and Size**

- Trees and shrubs that are planted shall be of the species and size specified on the approved plans. There shall be no deviations from the approved sizes specified except as approved by Fairfax County Urban Forest Management (UFMD). (PFM 12-0705.1A)
- All trees and shrubs shall meet the standards for sizes and quality specified in the American Association of Nurserymen's American Standard for Nursery Stock. (ANSI Z60.1-1996). See attachment #1. (PFM 12-0705.1B)

**Species Substitutions**

- Species substitutions within the tree categories listed in Table 12.19 are generally accepted unless otherwise specified by proffered conditions, development conditions, special exceptions, or special permits. Any tree substitution shall also be in conformance with the following. (PFM 12-0705.1C)
  - Plant Diversity** - The use of substitutions shall not result in any species making up more than 10 percent of the total number of trees required to be planted on the site. (PFM 12-0514.1L)
  - Authorization** - A letter signed by the permittee shall be provided to UFMD acknowledging any proposed substitutions to trees and shrubs shown on the approved plans. (PFM 12-0705.1C(2))
  - Substitutions Outside of Tree Category** - Substitution of a tree shown on the approved plan from one tree category, as listed in Table 12.19, with a tree from a different category shall require a revision to the approved plan. (PFM 12-0805.1C(3))
  - Species Suitability** - Substituted species must be suited to the post-development conditions of the planting location for which it is intended. (PFM 12-0601.1E)
  - Additional Tree Cover Credit** - In cases where additional tree cover credit has been given, no tree substitutions shall be made except as approved by the Urban Forest Management. Examples of additional credit include the following:
    - Air Quality, PFM 12-0509.4B(1)
    - Energy Conservation, PFM 12-0509.4B(2)
    - Water Quality, PFM 12-0509.4B(3)
    - Wildlife Benefits, PFM 12-0509.4B(4)
    - Native Trees, PFM 12-0509.4B(5)

**Planting Locations**

- Planting locations of all trees on the site shall be in substantial conformance with the approved plan. UFMD acknowledges that not all trees may be optimally located, as shown on the plan, and encourage input from Permittees and their landscape professionals regarding proposed improvements that might be implemented. Any substantive deviations from the approved plan that are made in the field must be approved by UFMD and shall be in conformance with the following:
  - Planting Area** - At least the minimum size planting area shall be provided for each tree according to its projected 10-year tree cover area as found in Table 12.7. (PFM 12-0601.1B)
  - Environmental Conditions** - Light, moisture, and other conditions affecting the health and viability of the tree at the field location shall be suitable for the species. (PFM 12-0601.1E)
  - Compacted Soil** - If planting in areas that have been previously compacted, the soil shall be properly prepared (tilled and amended as needed based on soil samples) to a depth of 12 inches, prior to installation of landscape material. Soil within individual planting holes shall not be amended. (PFM 12-0705.3B)
  - Restrictive Barriers** - Trees shall be planted no closer than four feet from any restrictive barrier. (PFM 12-0509.4E(5))
  - Spacing** - Trees shall be spaced so that the outer limit of their projected 10-year tree cover area, as indicated in Table 12.19, does not significantly overlap, or as determined appropriate by UFMD for site conditions and to promote long-term survival. (PFM 12-0509.4E(6))
  - Easements** - Trees for tree cover credit shall not be planted within any existing or proposed public utility easement or within five feet of storm drainage easements that contain pipes. In addition, trees shall not be planted in an area that will interfere with existing or proposed utilities or with maintenance of the utility, as determined by the Director of DPWES. (PFM 12-0514.6B)

**Staking and Guying**

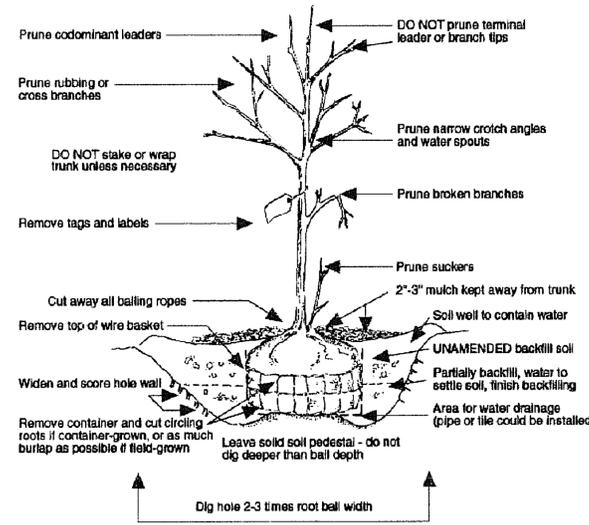
- Staking and guying should only be implemented where site conditions warrant their use. Planted trees should be assessed individually and staking and guying installed only as required. Conditions where staking and guying may be necessary to ensure stability include: windy locations, steep slopes, or where vandalism may be a concern. All staking and guying material must be removed within one year of plant installation. (PFM 12-0705.3C)

**Seasonal Landscape Deferrals**

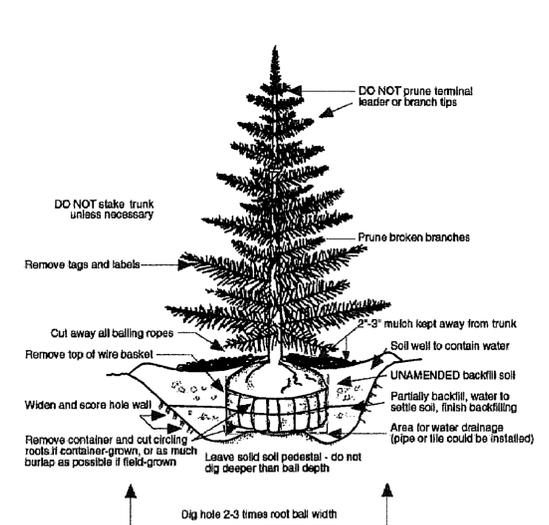
- A Seasonal Landscape Deferral may be granted when seasonal or weather-related conditions, such as excessively wet soil, extended periods of drought, or frozen ground, substantially reduce the survivability of the plant material, as determined by the Urban Forest Management. A request for a landscape deferral will not be granted for landscaping required prior to the issuance of a RUP or Non-RUP when seasonal or weather-related conditions on the site plan do not preclude planting. Lack of species availability may justify the approval of a Seasonal Landscape Deferral when specific plant species are required by proffers or conditions.
- The party responsible for the placement of the performance bond and conservation deposit for the project shall act as the Applicant for this seasonal deferral. Seasonal Landscape Deferral request forms can be obtained from the Environmental and Facilities Inspections Division or the Urban Forest Management.
- At the time of final inspection for release of performance bond and conservation deposit, all of the plant material is inspected. Plant material previously inspected, as part of the process to release any deferral deposit that may have existed, is not exempt from this final inspection. All plant material must be healthy and in good condition.

**Requirements Prior to Approval of RUP/Non-RUP**

- The landscaping and screening requirements of Article 13 or of any approved proffered condition, special permit, special exception or variance must be completed prior to approval of any Residential or Non-Residential Use Permit; provided, however, that completion of the requirements may be delayed when justification satisfactory to the Director is provided; such justification shall include an agreement and bond with surety satisfactory to the Director for completion in accordance with a firm schedule for timely completion. (ZO 18-704.3) See Seasonal Landscape Deferrals above.



**1 TREE PLANTING GUIDELINE** NOT TO SCALE  
12A-Tree Planting-VA



**2 EVERGREEN PLANTING GUIDELINE** NOT TO SCALE  
12A-Tree Planting-VA



**3 EVERGREEN HEDGE WITH ROSES**  
PHOTO

**PLANT SCHEDULE AND TREE CANOPY CALCULATIONS \***

| QTY. | TYPE                           | CULTURE ** | SIZE         | REMARKS | TREE CANOPY CALCULATIONS |                          |
|------|--------------------------------|------------|--------------|---------|--------------------------|--------------------------|
|      |                                |            |              |         | AREA/TREE (s.f.)         | TOTAL CANOPY AREA (s.f.) |
| 50   | CATEGORY IV DECIDUOUS TREE     | TBD        | 2" CAL.      | B&B     | 200                      | 10,000                   |
| 30   | CATEGORY II-III DECIDUOUS TREE | TBD        | 1"-1.5" CAL. | B&B     | NOT LESS THAN 75         | 2,250                    |
| 60   | CATEGORY II-IV EVERGREEN TREE  | TBD        | 2" CAL.      | B&B     | NOT LESS THAN 100        | 6,000                    |
|      |                                |            |              |         | SUBTOTAL                 | 18,250                   |
|      |                                |            |              |         | CULTURE MULTIPLIER       | TBD                      |
|      |                                |            |              |         | TOTAL                    | 18,250                   |

\* FINAL TREE GENUS AND SPECIES TO BE DETERMINED AT THE SITE PLAN PHASE. TREES WILL BE SELECTED FROM THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL, TABLE 12.19 TREE SELECTION AND CANOPY COVER GUIDE OR IN CONSULTATION WITH THE URBAN FOREST MANAGEMENT DIVISION.

\*\* BONUS MULTIPLIER FOR CULTURE (i.e. NATIVE SPECIES, WILDLIFE BENEFITS, ENERGY CONSERVATION, WATER QUALITY BENEFITS AND AIR QUALITY BENEFITS) TO BE DETERMINED.

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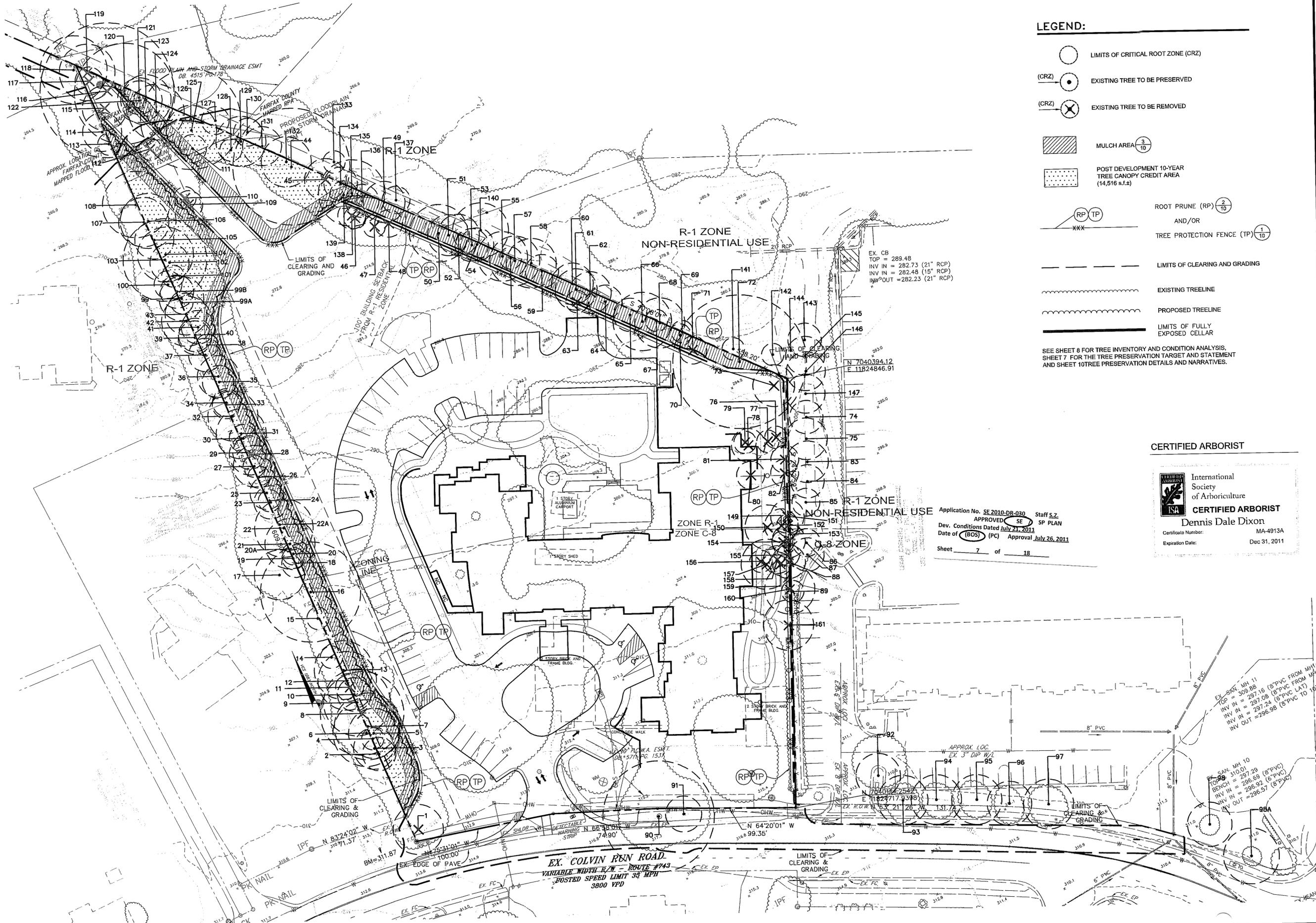


SPECIAL EXCEPTION PLAT  
LANDSCAPE DETAILS  
**BRIGHTVIEW**  
DRANESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 23, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 6 of 18

EC REVISIONS  
REVISED: 01-11-11  
REVISED: 02-07-11  
DATE: 04-22-11  
DATE: 05-08-11  
REVISED: 06-27-11  
APPLICANT: SHELTER DEVELOPMENT LLC  
2101 CHARLES STREET  
BALTIMORE, MD 21201

DESIGNED BY: PLR  
DRAFTED BY: CAD  
CHECKED BY: PLR  
DATE: OCTOBER 19, 2010  
SCALE: HOR.  
VERT.  
SHEET 6 OF 18  
CO. NO.  
CAD NAME: S5073LSC  
LAYOUT: LSC DETAILS  
NO. 05073.11-00



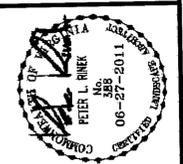
- LEGEND:**
- LIMITS OF CRITICAL ROOT ZONE (CRZ)
  - EXISTING TREE TO BE PRESERVED
  - EXISTING TREE TO BE REMOVED
  - MULCH AREA (3/10)
  - POST DEVELOPMENT 10-YEAR TREE CANOPY CREDIT AREA (14,516 s.f.)
  - ROOT PRUNE (RP) (2/10) AND/OR TREE PROTECTION FENCE (TP) (1/10)
  - LIMITS OF CLEARING AND GRADING
  - EXISTING TREELINE
  - PROPOSED TREELINE
  - LIMITS OF FULLY EXPOSED CELLAR
- SEE SHEET 8 FOR TREE INVENTORY AND CONDITION ANALYSIS, SHEET 7 FOR THE TREE PRESERVATION TARGET AND STATEMENT AND SHEET 10 FOR TREE PRESERVATION DETAILS AND NARRATIVES.

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (BOS) (PC) Approval July 26, 2011  
 Sheet 7 of 18

**CERTIFIED ARBORIST**

International Society of Arboriculture  
**CERTIFIED ARBORIST**  
 Dennis Dale Dixon  
 Certificate Number: MA-4913A  
 Expiration Date: Dec 31, 2011

**BC Consultants**  
 Planners • Engineers • Surveyors • Landscape Architects  
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 (703)449-8100  
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**SPECIAL EXCEPTION PLAN**  
**TREE PRESERVATION PLAN**  
**BRIGHTVIEW**  
 DRAVESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

|  |
|--|
| DESIGNED BY: PLR                       |
| DRAFTED BY: CAD                        |
| CHECKED BY: PLR                        |
| DATE: OCTOBER 19, 2010                 |
| SCALE: HOR. 1" = 30'<br>VERT. 1" = 30' |
| SHEET 7 OF 18                          |
| CO. NO.                                |
| CAD NAME: S5073TPP                     |
| LAYOUT: TPP                            |
| NO. 05073.11-00                        |

| TREE INVENTORY AND CONDITION ANALYSIS |                                       |      |       |           |                 |               |                      |              |            |       |           |       |             |                                   |                          |
|---------------------------------------|---------------------------------------|------|-------|-----------|-----------------|---------------|----------------------|--------------|------------|-------|-----------|-------|-------------|-----------------------------------|--------------------------|
| TREE KEY                              | BOTANICAL NAME / COMMON NAME          | SIZE | **CRZ | CONDITION | CANOPY POSITION | CROWN DENSITY | AVERAGE CROWN SPREAD | FINAL STATUS | ACTIVITIES |       |           |       |             | PROBLEMS                          | COMMENTS                 |
|                                       |                                       |      |       |           |                 |               |                      |              | ROOT PRUNE | MULCH | FERTILIZE | PRUNE | TREAT PESTS |                                   |                          |
| 1                                     | Juniperus virginiana/Eastern Redcedar | 18   | 18    | 34        | Codominant      | 70            | 15                   | R            |            |       |           |       |             | Vine Covered                      | Poor Condition           |
| 2                                     | Juniperus virginiana/Eastern Redcedar | 12   | 12    | 38        | Codominant      | 50            | 15                   | PC           | X          | X     |           |       |             |                                   | Poor Condition Co-Owned  |
| 3                                     | Prunus serotina/Black Cherry          | 15   | 15    | 34        | Codominant      | 10            | 10                   | POS          |            |       |           |       |             |                                   | Poor Condition Off Site  |
| 4                                     | Robinia pseudoacacia/Black Locust     | 8    | 8     | 28        | Codominant      | 10            | 15                   | PC           | X          | X     |           |       |             |                                   | Poor Condition           |
| 5                                     | Prunus serotina/Black Cherry          | 18   | 18    | 38        | Codominant      | 15            | 12                   | PC           | X          | X     | X         |       |             | Leaning, In Decline               | Poor Condition           |
| 6                                     | Acer sp./Maple                        | 24   | 24    | -         |                 |               |                      | POS          |            |       |           |       |             |                                   | Off Site                 |
| 7                                     | Acer sp./Maple                        | 24   | 24    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 8                                     | Dead                                  | 30   | 30    | -         |                 |               |                      | RWP          |            |       |           |       |             |                                   | Dead                     |
| 9                                     | Acer Maple sp./Maple                  | 24   | 24    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Multi Stem               |
| 10                                    | Acer Maple sp./Maple                  | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 11                                    | Dead                                  | 10   | 10    | -         |                 |               |                      | RWP          |            |       |           |       |             |                                   | Dead Co-Owned            |
| 12                                    | Prunus serotina/Black Cherry          | 21   | 21    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Co-Owned                 |
| 13                                    | Prunus serotina/Black Cherry          | 24   | 24    | 28        | Dominant        | 40            | 30                   | PC           | X          | X     | X         |       |             | Leaning, In Decline, Vine Covered | Poor Condition           |
| 14                                    | Robinia pseudoacacia/Black Locust     | 8    | 8     | 38        | Codominant      | 35            | 25                   | POS          |            |       |           |       |             | Vine Covered                      | Poor Condition; Off Site |
| 15                                    | Acer sp./Maple                        | 8    | 8     | 34        | Codominant      | 35            | 20                   | POS          |            |       |           |       |             | Vine Covered, In Decline          | Poor Condition; Off Site |
| 16                                    | Acer sp./Maple                        | 36   | 36    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 17                                    | Quercus sp./Oak                       | 18   | 18    | -         |                 |               |                      | POS          |            |       |           |       |             |                                   | Off Site                 |
| 18                                    | Acer sp./Maple                        | 10   | 10    | 34        | Codominant      | 65            | 20                   | PC           | X          | X     |           |       |             |                                   | Poor Condition Co-Owned  |
| 19                                    | Acer sp./Maple                        | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Co-Owned                 |
| 20                                    | Juniperus virginiana/Eastern Redcedar | 10   | 10    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 20A                                   | Fagus grandifolia/American Beech      | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 21                                    | Juniperus virginiana/Eastern Redcedar | 18   | 18    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 22                                    | Acer sp./Maple                        | 21   | 21    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 22A                                   | Acer sp./Maple                        | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 23                                    | Cornus florida/Flowering Dogwood      | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 24                                    | Ilex opaca/American Holly             | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 25                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 26                                    | Acer sp./Maple                        | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 27                                    | Prunus serotina/Black Cherry          | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 28                                    | Dead                                  | 15   | 15    | -         |                 |               |                      | RWP          |            |       |           |       |             |                                   | Dead                     |
| 29                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 30                                    | Acer sp./Maple                        | 10   | 10    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 31                                    | Acer sp./Maple                        | 13   | 13    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Multi Stem               |
| 32                                    | Acer sp./Maple                        | 18   | 18    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Multi Stem               |
| 33                                    | Juniperus virginiana/Eastern Redcedar | 10   | 10    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Co-Owned                 |
| 34                                    | Acer sp./Maple                        | 10   | 10    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 35                                    | Juglans nigra/Black Walnut            | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 36                                    | Acer sp./Maple                        | 15   | 15    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Multi Stem               |
| 37                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Multi Stem               |
| 38                                    | Fagus grandifolia/American Beech      | 8    | 8     | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 39                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | POS          |            |       |           |       |             |                                   | Off Site                 |
| 40                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Co-Owned                 |
| 41                                    | Acer sp./Maple                        | 12   | 12    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   |                          |
| 42                                    | Acer sp./Maple                        | 18   | 18    | -         |                 |               |                      | POS          |            |       |           |       |             |                                   | Off Site                 |
| 43                                    | Prunus serotina/Black Cherry          | 15   | 15    | -         |                 |               |                      | P            | X          | X     |           |       |             |                                   | Twin Stem Co-Owned       |
| 44                                    | Acer sp./Maple                        | 36   | 36    | 25        | Dominant        | 50            | 35                   | PC           |            |       | X         | X     |             | Dead/Broken Branch                | Poor Condition           |
| 45                                    | Dead                                  | 20   | 20    | -         |                 |               |                      | RWP          |            |       |           |       |             |                                   | Dead                     |
| 46                                    | Fagus grandifolia/American Beech      | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                   |                          |
| 47                                    | Acer sp./Maple                        | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                   |                          |

| TREE INVENTORY AND CONDITION ANALYSIS |                                       |      |       |           |                 |               |                      |              |            |       |           |       |             |                                  |                |
|---------------------------------------|---------------------------------------|------|-------|-----------|-----------------|---------------|----------------------|--------------|------------|-------|-----------|-------|-------------|----------------------------------|----------------|
| TREE KEY                              | BOTANICAL NAME / COMMON NAME          | SIZE | **CRZ | CONDITION | CANOPY POSITION | CROWN DENSITY | AVERAGE CROWN SPREAD | FINAL STATUS | ACTIVITIES |       |           |       |             | PROBLEMS                         | COMMENTS       |
|                                       |                                       |      |       |           |                 |               |                      |              | ROOT PRUNE | MULCH | FERTILIZE | PRUNE | TREAT PESTS |                                  |                |
| 48                                    | Juniperus virginiana/Eastern Redcedar | 8    | 8     | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 49                                    | Prunus serotina/Black Cherry          | 14   | 14    | -         |                 |               |                      | P            | X          |       |           |       |             |                                  |                |
| 50                                    | Acer sp./Maple                        | 24   | 24    | 28        | Dominant        | 55            | 40                   | RWP          |            |       |           |       |             | Dead/Broken Branches, In Decline | Poor Condition |
| 51                                    | Acer Maple sp./Maple                  | 15   | 15    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 52                                    | Acer Maple sp./Maple                  | 15   | 15    | -         |                 |               |                      | P            |            |       |           |       |             |                                  | Twin Stem      |
| 53                                    | Acer Maple sp./Maple                  | 12   | 12    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 54                                    | Juniperus virginiana/Eastern Redcedar | 12   | 12    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 55                                    | Acer Maple sp./Maple                  | 18   | 18    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 56                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 57                                    | Prunus serotina/Black Cherry          | 18   | 18    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 58                                    | Acer Maple sp./Maple                  | 18   | 18    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 59                                    | Acer Maple sp./Maple                  | 12   | 12    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 60                                    | Acer Maple sp./Maple                  | 15   | 15    | -         |                 |               |                      | P            |            |       |           |       |             |                                  | Co-Owned       |
| 61                                    | Acer Maple sp./Maple                  | 15   | 15    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 62                                    | Dead                                  | 15   | 15    | -         |                 |               |                      | RWP          |            |       |           |       |             |                                  | Dead           |
| 63                                    | Quercus sp./Oak                       | 8    | 8     | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 64                                    | Dead                                  | 12   | 12    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 65                                    | Juniperus virginiana/Eastern Redcedar | 12   | 12    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 66                                    | Acer Maple sp./Maple                  | 21   | 21    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 67                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | P            |            |       |           |       |             |                                  | Co-Owned       |
| 68                                    | Dead                                  | 18   | 18    | -         |                 |               |                      | P            |            |       |           |       |             |                                  | Co-Owned       |
| 69                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 70                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 71                                    | Sassafras albidum/Common Sassafras    | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 72                                    | Acer Maple sp./Maple                  | 48   | 48    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |
| 73                                    | Fagus grandifolia/American Beech      | 15   | 15    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 74                                    | Pinus strobus/Eastern White Pine      | 12   | 12    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 75                                    | Pinus strobus/Eastern White Pine      | 15   | 15    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 76                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 77                                    | Acer Maple sp./Maple                  | 8    | 8     | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 78                                    | Acer Maple sp./Maple                  | 12   | 12    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 79                                    | Quercus sp./Oak                       | 8    | 8     | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 80                                    | Acer Maple sp./Maple                  | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 81                                    | Acer Maple sp./Maple                  | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 82                                    | Acer Maple sp./Maple                  | 10   | 10    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 83                                    | Pinus strobus/Eastern White Pine      | 15   | 15    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 84                                    | Acer Maple sp./Maple                  | 15   | 15    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 85                                    | Pinus strobus/Eastern White Pine      | 12   | 12    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 86                                    | Pinus strobus/Eastern White Pine      | 10   | 10    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 87                                    | Platanus acerifolia/London Planetree  | 12   | 12    | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 88                                    | Sassafras albidum/Common Sassafras    | 12   | 12    | -         |                 |               |                      | R            |            |       |           |       |             |                                  |                |
| 89                                    | Sassafras albidum/Common Sassafras    | 8    | 8     | -         |                 |               |                      | POS          |            |       |           |       |             |                                  | Off Site       |
| 90                                    | Quercus sp./Oak                       | 40   | 40    | -         |                 |               |                      | P            |            |       |           |       |             |                                  |                |

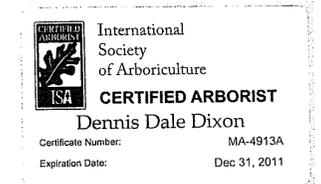
**LEGEND:**  
 PC : POOR CONDITION. STATUS TO BE DETERMINED IN CONSULTATION WITH THE URBAN FOREST MANAGEMENT DIVISION (UFMD).  
 TBD : POTENTIAL HAZARD. STATUS TO BE DETERMINED IN CONSULTATION WITH THE UFMD.  
 P : PRESERVE  
 R : REMOVE  
 POS : PRESERVE OFF-SITE  
 RWP : REMOVE WITH PERMISSION FROM THE UFMD. TREE IS WITHIN UNDISTURBED AREA BUT CONDITIONS WARRANT ITS REMOVAL.  
 X : CONDUCT ACTIVITY INDICATED  
 \* : DBH/DIAMETER BREAST HEIGHT AS MEASURED 4.5 FEET ABOVE GROUND.  
 \*\* : CRZ/CRITICAL ROOT ZONE (ONE FOOT OF RADIUS FOR EVERY INCH OF TREE DIAMETER. CRZ FOR TREES WITH MULTIPLE STEMS ARE CALCULATED BASED ON THE DIAMETER OF A TREE WITH A BASAL AREA EQUIVALENT TO THE SUM OF THE BASAL AREAS FOR ALL STEMS MEASURED.  
 \*\*\* : CONDITION RATINGS ARE PROVIDED AS PERCENTAGES BASED ON METHODS OUTLINED IN THE LATEST EDITION OF THE GUIDE FOR PLANT APPRAISAL PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE.

SEE SHEET 7 FOR THE TREE PRESERVATION PLAN, SHEET 8 FOR THE TREE PRESERVATION TARGET AND STATEMENT AND SHEET 10 FOR THE TREE PRESERVATION DETAILS AND NARRATIVES.

NOTE: NO OFF-SITE TREES OR CO-OWNED TREES SHALL BE REMOVED WITHOUT THE PRIOR PERMISSION OF THE OFF-SITE OWNER OR CO-OWNER OF THE TREES.

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (BOS) (PC) Approval July 26, 2011  
 Sheet 8 of 18

CERTIFIED ARBORIST



**IBC Consultants**  
 Planners • Engineers • Surveyors • Landscape Architects  
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 (703)449-8100 (Fax)  
 www.ibccoon.com



SPECIAL EXCEPTION PLAT  
 TREE INVENTORY AND CONDITION ANALYSIS  
**BRIGHTVIEW**  
 DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

DESIGNED BY: PLR  
 DRAFTED BY: CAD  
 CHECKED BY: PLR  
 DATE: OCTOBER 19, 2010  
 SCALE: HOR. VERT.  
 SHEET 8 OF 18  
 CO. NO.  
 CAD NAME: S5073TTP  
 LAYOUT: TTP-INVENTORY(1)  
 E. NO. 05073.11-00

| TREE INVENTORY AND CONDITION ANALYSIS |   |           |        |           |                 |               |                      |              |            |       |           |                                   |          |                          |
|---------------------------------------|---|-----------|--------|-----------|-----------------|---------------|----------------------|--------------|------------|-------|-----------|-----------------------------------|----------|--------------------------|
| TREE KEY                              | BOTANICAL NAME / COMMON NAME              | SIZE      | **CRZ  | CONDITION | CANOPY POSITION | CROWN DENSITY | AVERAGE CROWN SPREAD | FINAL STATUS | ACTIVITIES |       |           |                                   | PROBLEMS | COMMENTS                 |
|                                       |   |           |        |           |                 |               |                      |              | ROOT PRUNE | MULCH | FERTILIZE | TREAT PESTS                       |          |                          |
|                                       |   | *DBH (in) | R (ft) | % ***     |                 | %             | D (ft)               |              |            |       |           |                                   |          |                          |
| 91                                    | Juniperus virginiana/Eastern Redcedar     | 15        | 15     | -         |                 |               |                      | P            |            |       |           |                                   |          |                          |
| 92                                    | Pyrus calleryana 'Bradford'/Bradford Pear | 16        | 16     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 93                                    | Quercus sp./Oak                           | 18        | 18     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 94                                    | Quercus sp./Oak                           | 18        | 18     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 95                                    | Quercus sp./Oak                           | 18        | 18     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 96                                    | Quercus sp./Oak                           | 16        | 16     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 97                                    | Quercus sp./Oak                           | 18        | 18     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 98                                    | Magnolia sp./Magnolia                     | 24        | 24     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 98A                                   | Magnolia sp./Magnolia                     | 20        | 20     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 99                                    | Acer sp./Maple                            | 16        | 16     | 34        | Codominant      | 65            | 40                   | PC           | X          | X     |           |                                   |          | Poor Condition           |
| 99A                                   | Juniperus virginiana/Eastern Redcedar     | 8         | 8      | 38        | Codominant      | 40            | 25                   | PC           | X          | X     |           |                                   |          | Poor Condition           |
| 99B                                   | Acer sp./Maple                            | 12        | 12     | 34        | Codominant      | 65            | 15                   | PC           | X          | X     |           |                                   |          | Poor Condition           |
| 100                                   | Prunus serotina/Black Cherry              | 10        | 10     | -         |                 |               |                      | P            | X          | X     |           |                                   |          | Off Site                 |
| 101                                   | Dead                                      | 8         | 8      | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 102                                   | Dead                                      | 14        | 8      | -         |                 |               |                      | P            | X          | X     |           |                                   |          | Co-Owned                 |
| 103                                   | Acer sp./Maple                            | 30        | 30     | -         |                 |               |                      | P            | X          | X     |           |                                   |          | Co-Owned                 |
| 104                                   | Acer Maple sp./Maple                      | 20        | 20     | 28        | Dominant        | 40            | 30                   | PC           | X          | X     | X         | Leaning, In Decline, Vine Covered |          | Poor Condition           |
| 105                                   | Prunus serotina/Black Cherry              | 14        | 14     | 38        | Codominant      | 35            | 25                   | POS          | X          | X     |           | Vine Covered                      |          | Poor Condition; Off Site |
| 106                                   | Prunus serotina/Black Cherry              | 20        | 20     | 34        | Codominant      | 35            | 20                   | PC           | X          | X     |           | Vine Covered, In Decline          |          | Poor Condition           |
| 107                                   | Acer sp./Maple                            | 18        | 18     | -         |                 |               |                      | POS          | X          | X     |           |                                   |          | Off Site                 |
| 108                                   | Acer sp./Maple                            | 24        | 24     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 109                                   | Allanthurus altissima/Tree of Heaven      | 10        | 10     | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 110                                   | Allanthurus altissima/Tree of Heaven      | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 111                                   | Acer sp./Maple                            | 10        | 10     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 112                                   | Allanthurus altissima/Tree of Heaven      | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 113                                   | Allanthurus altissima/Tree of Heaven      | 8         | 8      | -         |                 |               |                      | POS          |            |       |           |                                   |          | OFF SITE                 |
| 114                                   | Prunus serotina/Black Cherry              | 14        | 14     | -         |                 |               |                      | POS          |            |       |           |                                   |          | OFF SITE                 |
| 115                                   | Allanthurus altissima/Tree of Heaven      | 16        | 16     | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 116                                   | Acer sp./Maple                            | 48        | 48     | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 117                                   | Allanthurus altissima/Tree of Heaven      | 10        | 10     | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 118                                   | Dead                                      | 24        | 24     | -         |                 |               |                      | POS          |            |       |           |                                   |          | OFF SITE                 |
| 119                                   | Dead                                      | 20        | 20     | -         |                 |               |                      | R            |            |       |           |                                   |          |                          |
| 120                                   | Acer sp./Maple                            | 36        | 36     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 121                                   | Acer sp./Maple                            | 12        | 12     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 122                                   | Prunus serotina/Black Cherry              | 16        | 16     | -         | Multi           |               |                      | P            | X          | X     |           |                                   |          | Multi Stem               |
| 123                                   | Acer sp./Maple                            | 18        | 18     | -         | Multi           |               |                      | P            | X          | X     |           |                                   |          | Multi Stem               |
| 124                                   | Acer sp./Maple                            | 20        | 20     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 125                                   | Acer sp./Maple                            | 18        | 18     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 126                                   | Acer sp./Maple                            | 36        | 36     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 127                                   | Allanthurus altissima/Tree of Heaven      | 10        | 10     | -         | Multi           |               |                      | POS          |            |       |           |                                   |          | OFF SITE                 |
| 128                                   | Allanthurus altissima/Tree of Heaven      | 8         | 8      | -         | Multi           |               |                      | P            | X          | X     |           |                                   |          | Multi Stem               |
| 129                                   | Sassafras albidum/Common Sassafras        | 18        | 18     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |
| 130                                   | Allanthurus altissima/Tree of Heaven      | 10        | 10     | -         |                 |               |                      | POS          |            |       |           |                                   |          | Off Site                 |
| 131                                   | Dead                                      | 14        | 14     | -         |                 |               |                      | POS          |            |       |           |                                   |          | OFF SITE                 |
| 132                                   | Acer sp./Maple                            | 18        | 18     | -         |                 |               |                      | P            | X          | X     |           |                                   |          |                          |

| TREE INVENTORY AND CONDITION ANALYSIS |                                      |           |        |           |                 |               |                      |              |            |       |           |                                  |          |                         |
|---------------------------------------|--------------------------------------|-----------|--------|-----------|-----------------|---------------|----------------------|--------------|------------|-------|-----------|----------------------------------|----------|-------------------------|
| TREE KEY                              | BOTANICAL NAME / COMMON NAME         | SIZE      | **CRZ  | CONDITION | CANOPY POSITION | CROWN DENSITY | AVERAGE CROWN SPREAD | FINAL STATUS | ACTIVITIES |       |           |                                  | PROBLEMS | COMMENTS                |
|                                       |                                      |           |        |           |                 |               |                      |              | ROOT PRUNE | MULCH | FERTILIZE | TREAT PESTS                      |          |                         |
|                                       |                                      | *DBH (in) | R (ft) | % ***     |                 | %             | D (ft)               |              |            |       |           |                                  |          |                         |
| 133                                   | Allanthurus altissima/Tree of Heaven | 8         | 8      | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 134                                   | Acer sp./Maple                       | 12        | 12     | -         |                 |               |                      | P            | X          | X     |           |                                  |          | Twin Stem               |
| 135                                   | Acer sp./Maple                       | 24        | 24     | 25        | Dominant        | 50            | 35                   | PC           |            | X     | X         | Dead/Broken Branch               |          | Poor Condition          |
| 136                                   | Prunus serotina/Black Cherry         | 12        | 12     | -         |                 |               |                      | P            | X          | X     |           |                                  |          |                         |
| 137                                   | Allanthurus altissima/Tree of Heaven | 10        | 10     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 138                                   | Fagus grandifolia/American Beech     | 10        | 10     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 139                                   | Prunus serotina/Black Cherry         | 10        | 10     | -         |                 |               |                      | P            | X          | X     |           |                                  |          |                         |
| 140                                   | Fraxinus sp./Ash                     | 20        | 20     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 141                                   | Prunus serotina/Black Cherry         | 8         | 8      | 28        | Dominant        | 55            | 40                   | POS          |            |       |           | Dead/Broken Branches, In Decline |          | POOR CONDITION OFF SITE |
| 142                                   | Prunus serotina/Black Cherry         | 8         | 8      | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 143                                   | Pinus strobus/White Pine             | 12        | 12     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 144                                   | Morus alba/Common Mulberry           | 20        | 20     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 145                                   | Pinus strobus/White Pine             | 12        | 12     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 146                                   | Pinus strobus/White Pine             | 14        | 14     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 147                                   | Pinus strobus/White Pine             | 14        | 14     | -         |                 |               |                      | POS          |            |       |           |                                  |          | OFF SITE                |
| 148                                   | Not Used                             |           |        |           |                 |               |                      |              |            |       |           |                                  |          |                         |
| 149                                   | Prunus serotina/Black Cherry         | 12        | 12     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 150                                   | Liriodendron tulipifera/Tulip Poplar | 16        | 16     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 151                                   | Acer sp./Maple                       | 12        | 12     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 152                                   | Ulmus sp./Elm                        | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 153                                   | Ulmus sp./Elm                        | 12        | 12     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 154                                   | Ulmus sp./Elm                        | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 155                                   | Prunus serotina/Black Cherry         | 8         | 12     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 156                                   | Prunus serotina/Black Cherry         | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 157                                   | Acer sp./Maple                       | 18        | 18     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 158                                   | Prunus serotina/Black Cherry         | 10        | 10     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 159                                   | Sassafras albidum/Common Sassafras   | 8         | 8      | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 160                                   | Prunus serotina/Black Cherry         | 18        | 18     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |
| 161                                   | Acer sp./Maple                       | 18        | 18     | -         |                 |               |                      | R            |            |       |           |                                  |          |                         |

**LEGEND:**

- PC : POOR CONDITION. STATUS TO BE DETERMINED IN CONSULTATION WITH THE URBAN FOREST MANAGEMENT DIVISION (UFMD).
- TBD : POTENTIAL HAZARD. STATUS TO BE DETERMINED IN CONSULTATION WITH THE UFMD.
- P : PRESERVE
- R : REMOVE
- POS : PRESERVE OFF-SITE
- RWP : REMOVE WITH PERMISSION FROM THE UFMD. TREE IS WITHIN UNDISTURBED AREA BUT CONDITIONS WARRANT ITS REMOVAL.
- X : CONDUCT ACTIVITY INDICATED
- \* : DBH/DIAMETER BREAST HEIGHT AS MEASURED 4.5 FEET ABOVE GROUND.
- \*\* : CRZ/CRITICAL ROOT ZONE (ONE FOOT OF RADIUS FOR EVERY INCH OF TREE DIAMETER. CRZ FOR TREES WITH MULTIPLE STEMS ARE CALCULATED BASED ON THE DIAMETER OF A TREE WITH A BASAL AREA EQUIVALENT TO THE SUM OF THE BASAL AREAS FOR ALL STEMS MEASURED.
- \*\*\* : CONDITION RATINGS ARE PROVIDED AS PERCENTAGES BASED ON METHODS OUTLINED IN THE LATEST EDITION OF THE GUIDE FOR PLANT APPRAISAL PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE.

SEE SHEET 7 FOR THE TREE PRESERVATION PLAN, SHEET 8 FOR THE TREE PRESERVATION TARGET AND STATEMENT AND SHEET 10 FOR THE TREE PRESERVATION DETAILS AND NARRATIVES.

NOTE: NO OFF-SITE TREES OR CO-OWNED TREES SHALL BE REMOVED WITHOUT THE PRIOR PERMISSION OF THE OFF-SITE OWNER OR CO-OWNER OF THE TREES.

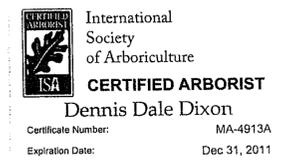
**BC Consultants**  
 Planners • Engineers • Surveyors • Landscape Architects  
 12600 Fair Lakes Circle, Suite 100, Fairfax, VA 22033  
 (703)449-8100 (703)449-8108 (Fax)  
 www.bccocon.com



SPECIAL EXCEPTION PLAT  
 TREE INVENTORY AND CONDITION ANALYSIS  
**BRIGHTVIEW**  
 DRANESVILLE DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (BOS) (PC) Approval July 26, 2011  
 Sheet 9 of 18

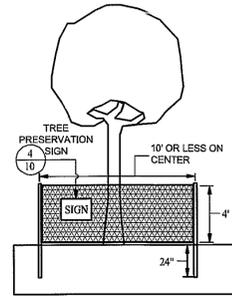
**CERTIFIED ARBORIST**



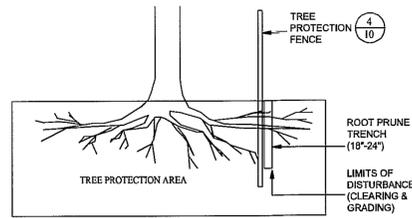
|                           |
|---------------------------|
| DESIGNED BY: PLR          |
| DRAFTED BY: CAD           |
| CHECKED BY: PLR           |
| DATE: OCTOBER 19, 2010    |
| SCALE: HOR. VERT.         |
| SHEET 9 OF 18             |
| CO. NO.                   |
| CAD NAME: S5073TPP        |
| LAYOUT: TTP-INVENTORY (2) |
| FILE NO. 05073,11-00      |

BC REVISIONS  
 REVISED 01-31-11  
 REVISED 02-07-11  
 REVISED 04-22-11  
 DATE: 05-05-11  
 TYPED BY: SHELLEY DEVELOPMENT LLC  
 218 N. CHARLES STREET  
 SUIT 220  
 BALTIMORE, MD 21201

- PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL INDIVIDUAL AND GROUPS OF TREES MARKED FOR PRESERVATION SHALL BE PROTECTED WITH TREE PROTECTION FENCING.
- TREE PROTECTION FENCE SHALL BE POSITIONED DIRECTLY IN THE ROOT PRUNING TRENCH AND BACKFILLED FOR STABILITY OR JUST OUTSIDE THE TRENCH WITHIN THE DISTURBED AREA.
- TREE PROTECTION FENCING SHALL CONSIST OF FOUR FOOT 14-GUAGE WELDED WIRE FENCE ATTACHED TO SIX FOOT TALL T-POSTS DRIVEN 18 INCHES INTO THE GROUND. POSTS SHALL BE NO FURTHER THAN 10 FEET APART.
- WHERE APPROPRIATE, BASED ON EROSION AND SEDIMENT CONTROL PLANS, SUPER SILT FENCE MAY BE USED AS TREE PROTECTION FENCING WITH THE APPROVAL OF FAIRFAX COUNTY.
- TREE PROTECTION FENCING SHALL BE MADE CLEARLY VISIBLE TO ALL CONSTRUCTION PERSONNEL. SIGNS, IN ENGLISH AND SPANISH, WHICH STATES "TREE PRESERVATION AREA - KEEP OUT" SHALL BE INSTALLED ON TREE PROTECTION FENCING EVERY 30 FEET.
- A CERTIFIED ARBORIST SHALL MONITOR THE INSTALLATION OF TREE PROTECTION FENCING.

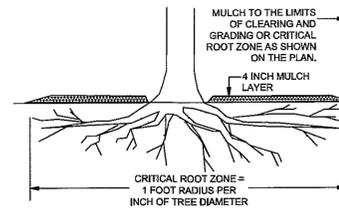


**1 TREE PROTECTION FENCE**  
10 NOT TO SCALE  
12A1-8085Tree Protect



- PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL TREES MARKED FOR PRESERVATION ALONG THE LIMITS OF CLEARING AND GRADING SHALL BE ROOT PRUNED WHERE SHOWN ON THE PLAN.
- ROOT PRUNING SHALL BE CONDUCTED USING A TRENCHER OR VIBRATORY FLOW.
- THE ROOT PRUNING TRENCH SHALL BE A MAXIMUM OF 8 INCHES WIDE AND 18-24 INCHES DEEP. ONCE COMPLETED, THE ROOT PRUNING TRENCH SHALL BE IMMEDIATELY BACK FILLED.
- ROOT PRUNING SHALL BE CONDUCTED UNDER THE SUPERVISION OF A CERTIFIED ARBORIST.

**2 ROOT PRUNING**  
10 NOT TO SCALE  
12A1-8096 Root Pruning



- SPREAD MULCH BY HAND TO A UNIFORM THICKNESS OF 4 INCHES.
- MULCH SHALL COVER AS MUCH OF THE ENTIRE CRITICAL ROOT ZONE AS POSSIBLE UP TO 10' FROM THE LIMITS OF CLEARING AND GRADING.
- MULCH SHALL CONSIST OF A WOODY MATERIAL THAT HAS BEEN CHIPPED OR SHREDDED OR OTHER APPROVED MATERIAL.
- MULCH SHALL NOT TOUCH THE BASE OF THE TREE.

**3 PROTECTIVE MULCHING**  
10 NOT TO SCALE  
12A1-8088 Protect Mulch

**TREE PRESERVATION AREA  
KEEP OUT**

NO EQUIPMENT OR MATERIALS ARE TO BE STORED OR DEPOSITED WITHIN THIS AREA. TRAFFIC BY CONSTRUCTION EQUIPMENT AND PERSONNEL IS PROHIBITED.

(CONSTRUCTION COMPANY NAME)  
(COMPANY CONTACT PERSON & TELEPHONE NUMBER)

**PENALTY FOR VIOLATIONS  
STRICTLY ENFORCED**

- SPECIFICATIONS:**
- DIMENSIONS: WIDTH: 17 INCHES MINIMUM  
HEIGHT: 11 INCHES MINIMUM
- BACKGROUND COLOR: WHITE  
LETTER COLOR: BLACK
- LETTER SIZE:  
LETTER 1: 1.5 INCH MINIMUM (LARGEST)  
LETTER 2: 0.75 INCH MINIMUM  
LETTER 3: 0.5 INCH MINIMUM  
LETTER 4: 0.375 INCH MINIMUM (SMALLEST)
- LANGUAGE: ENGLISH AND SPANISH (SEPARATE SIGNS)
- NOTE: ALTERNATE SIGNAGE MAY BE SUBMITTED TO FAIRFAX COUNTY FOR APPROVAL.
- 4 TREE PRESERVATION SIGN**  
10 NOT TO SCALE  
12A1-8089Tree Preser Sign

**SITE MONITORING SCHEDULE**

| LIST OF DUTIES   | DATE   | DESCRIPTION OF DUTIES   |
|--|--|---|
| PRE-CONSTRUCTION MEETING IN FIELD TO WALK LIMITS OF CLEARING AND GRADING | SPECIFIED BY UFMD                                | PRIOR TO THE PRE-CONSTRUCTION MEETING AND BEFORE ANY CLEARING, GRADING OR DEMOLITION ACTIVITIES HAVE OCCURRED, A CERTIFIED ARBORIST SHALL WALK THE LIMITS OF CLEARING AND GRADING WITH A REPRESENTATIVE FROM FAIRFAX COUNTY'S URBAN FOREST MANAGEMENT DIVISION (UFMD) TO DETERMINE WHERE ADJUSTMENTS TO THE CLEARING LIMITS CAN BE MADE TO INCREASE THE SURVIVABILITY OF TREES TO BE PRESERVED THAT OCCUR ALONG THE EDGE OF THE LIMITS OF CLEARING AND GRADING, AND/OR TO IDENTIFY HAZARDOUS, DAMAGED OR DISEASED TREES THAT NEED TO BE REMOVED.  |
| INSTALLATION OF TREE PROTECTION FENCE                                    | AFTER UFMD'S APPROVAL OF LOCATION                | THE INSTALLATION OF ALL TREE PROTECTION FENCING SHALL BE PERFORMED UNDER THE SUPERVISION OF A CERTIFIED ARBORIST AND ACCOMPLISHED IN A MANNER THAT DOES NOT HARM EXISTING VEGETATION THAT IS REQUIRED TO BE PRESERVED. AT LEAST THREE DAYS PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRADING OR DEMOLITION ACTIVITIES AND PRIOR TO THE INSTALLATION OF TREE PROTECTION FENCING, UFMD SHALL BE NOTIFIED IN WRITING AND GIVEN THE OPPORTUNITY TO INSPECT THE SITE TO ASSURE THAT ALL INDIVIDUAL TREES TO BE PRESERVED AND ALL AREAS TO BE LEFT UNDISTURBED HAVE BEEN CORRECTLY DELINEATED. |
| CONSTRUCTION/ SITE ANALYSIS  | MONTHLY ANALYSIS OF SITE OR AS SPECIFIED BY UFMD | THE APPLICANT SHALL ACTIVELY MONITOR THE SITE TO ENSURE THAT INAPPROPRIATE ACTIVITIES SUCH AS THE STORAGE OF CONSTRUCTION MATERIALS, DUMPING OF CONSTRUCTION DEBRIS, AND TRAFFIC BY CONSTRUCTION EQUIPMENT AND PERSONNEL DO NOT OCCUR WITHIN THESE AREAS  |

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 10 of 18

**INVASIVE SPECIES ASSESSMENT AND MANAGEMENT NARRATIVE:**

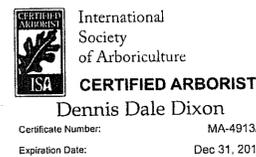
**INVASIVE SPECIES ASSESSMENT:**

IN COVER TYPES 2, 3 AND 7, LARGE AREAS BRIARS AND MULTIFLORA ROSE ARE PRESENT IN THE FOREST UNDERSTORY OR AS INDIVIDUAL STANDS. IT DOES NOT APPEAR THAT THESE INVASIVE PLANTS HAVE ACHIEVED A LEVEL THAT WOULD ENDANGER THE LONG-TERM HEALTH OF THE FORESTED AREAS TO BE PRESERVED. IN SOME AREAS VINES HAVE CLIMBED THE TRUNKS OF TREES AND ARE BEGINNING TO IMPACT THE CROWNS OF THE TREES.

**INVASIVE SPECIES MANAGEMENT:**

CLIMBING VINES MAY HAVE A NEGATIVE IMPACT TO EXISTING TREES IF ALLOWED TO GROW INTO THE CANOPY OF PRESERVED TREES. AS PART OF THE INITIAL TREE PRESERVATION WORK, A 4' SECTION OF VINES THAT IMPACTS ROOTS, TRUNKS OR CANOPY SHALL BE REMOVED FROM PRESERVED TREES WITHIN THE ABOVE NOTED COVER TYPES. CARE SHALL BE TAKEN TO NOT DAMAGE TREE TRUNKS, ROOTS OR BARK. VINES IN THE TREE CANOPY THAT ARE NOT EASILY REMOVED SHOULD BE LEFT IN PLACE TO DIE AND FALL OUT NATURALLY.

**CERTIFIED ARBORIST**



**TREE PRESERVATION NARRATIVE:**

- ALL WORK PERFORMED IN ASSOCIATION WITH THIS PLAN SHALL MEET OR EXCEED CURRENT INDUSTRY STANDARDS AS PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), OR THE TREE CARE INDUSTRY ASSOCIATION (TCIA). IN THE EVENT TREATMENTS PRESCRIBED ARE NOT COVERED BY AN EXISTING STANDARD, WORK SHALL MEET OR EXCEED STANDARDS APPROVED BY FAIRFAX COUNTY'S URBAN FOREST MANAGEMENT DIVISION (UFMD).
- THE DEVELOPER SHALL RETAIN A CERTIFIED ARBORIST ("THE ARBORIST") TO ENSURE THE PROPER IMPLEMENTATION OF THE TREE PRESERVATION PLAN ("THIS PLAN"). ALL WORK REQUIRED BY THIS PLAN SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF THE ARBORIST AS SPECIFIED IN THE SITE MONITORING SCHEDULE AND TO ENSURE THAT ALL ACTIVITIES ARE CONDUCTED IN ACCORDANCE WITH THIS PLAN, ANY APPLICABLE DEVELOPMENT CONDITIONS AND/OR AS APPROVED BY UFMD. MONITORING SHALL OCCUR AT ALL TIMES DURING THE INSTALLATION OF TREE PROTECTION FENCING AND, DURING ANY CLEARING OR GRADING, REMOVAL OF TREES, VEGETATION, OR STRUCTURES OR, THE TRANSPLANTING OF TREES OR VEGETATION OR, ANY OTHER SIMILAR ACTIVITIES ON THE SITE WITHIN 25 FEET OF THE LIMITS OF CLEARING AND GRADING.
- PRIOR TO ANY CONSTRUCTION ACTIVITY, ALL INDIVIDUAL TREES AND GROUPS OF TREES SHOWN TO BE PRESERVED ON THIS PLAN SHALL BE PROTECTED BY FENCING AS SPECIFIED ON THIS PLAN. THE PROTECTIVE FENCE INSTALLATION SHALL BE MONITORED AS NOTED IN THE SITE MONITORING SCHEDULE. THE FENCING SHALL BE MADE CLEARLY VISIBLE TO ALL CONSTRUCTION PERSONNEL. THE FENCING SHALL BE INSTALLED PRIOR TO ANY WORK BEING CONDUCTED ON THE SITE, INCLUDING THE DEMOLITION OF ANY EXISTING STRUCTURES OR FENCES. THE ARBORIST MUST VERIFY IN WRITING THAT THE FENCING HAS BEEN INSTALLED PRIOR TO ANY WORK OR DEMOLITION ACTIVITIES AND IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THIS PLAN.
- THE ARBORIST SHALL WALK THE LIMITS OF CLEARING AND GRADING WITH AN URBAN FORESTER FROM UFMD AS NOTED IN THE SITE MONITORING SCHEDULE. ANY ADJUSTMENTS AGREED TO BY THE ARBORIST AND UFMD SHALL BE MEMORIALIZED IN WRITING BY BOTH PARTIES BEFORE ANY SUCH ADJUSTMENTS ARE IMPLEMENTED. TREES TO BE REMOVED SHALL BE TAGGED IN THE FIELD. TREES WITHIN THE UNDISTURBED AREA THAT ARE IDENTIFIED IN WRITING BY UFMD AS DEAD OR DYING, IN POOR CONDITION (INCLUDING DISEASED AND DAMAGED, OR TREES THAT POSE A POTENTIAL HAZARD TO HUMAN HEALTH OR PROPERTY MAY BE REMOVED AS PART OF THE CLEARING OPERATION. ANY TREE THAT IS SO IDENTIFIED SHALL BE REMOVED USING A CHAIN SAW AND SUCH REMOVAL SHALL BE ACCOMPLISHED IN A MANNER THAT AVOIDS DAMAGE TO SURROUNDING TREES AND ASSOCIATED UNDERSTORY VEGETATION. IF A STUMP MUST BE REMOVED, THIS SHALL BE DONE USING A STUMP GRINDING MACHINE IN A MANNER CAUSING AS LITTLE DISTURBANCE AS POSSIBLE TO THE ADJACENT TREES AND ASSOCIATED UNDERSTORY VEGETATION AND SOIL CONDITIONS.
- ALL TREE PRESERVATION RELATED WORK OCCURRING IN OR ADJACENT TO TREE PRESERVATION AREAS SHALL BE ACCOMPLISHED IN A MANNER THAT MINIMIZES DAMAGE TO VEGETATION TO BE PRESERVED, INCLUDING ANY WOODY AND/OR HERBACEOUS VEGETATION OCCURRING IN THE UNDERSTORY. TREES DESIGNATED FOR REMOVAL ALONG THE LIMITS OF DISTURBANCE SHALL BE REMOVED USING A CHAINSAW SO AS TO AVOID DAMAGE TO SURROUNDING TREES TO BE PRESERVED AND UNDERSTORY VEGETATION. THE USE OF POWER EQUIPMENT IN THESE AREAS SHALL BE LIMITED TO SMALL HAND-OPERATED EQUIPMENT SUCH AS CHAINSAWS. ANY WORK THAT REQUIRES THE USE OF LARGER MOTORIZED EQUIPMENT SUCH AS, BUT NOT LIMITED TO, TREE TRANSPLANTING SPADES, SKID LOADERS, TRACTORS, OR ANY ACCESSORY OR ATTACHMENT CONNECTED TO SUCH EQUIPMENT SHALL NOT OCCUR UNLESS REVIEWED AND APPROVED IN WRITING BY UFMD.
- AS PART OF THE IMPLEMENTATION OF THIS PLAN AND THE SITE PLAN, MANAGEMENT PRACTICES SHALL PROVIDE FOR THE PROTECTION OF UNDERSTORY PLANT MATERIALS, LEAF LITTER AND SOIL CONDITIONS FOUND IN AREAS TO BE LEFT UNDISTURBED, SUBJECT TO THE APPROVAL OF UFMD. THE APPLICANT SHALL ACTIVELY MONITOR THE SITE TO ENSURE THAT INAPPROPRIATE ACTIVITIES SUCH AS THE STORAGE OF CONSTRUCTION MATERIALS, DUMPING OF CONSTRUCTION DEBRIS, AND TRAFFIC BY CONSTRUCTION EQUIPMENT AND PERSONNEL DO NOT OCCUR WITHIN THESE AREAS. THE UNDERSTORY PLANT MATERIALS, LEAF LITTER AND SOIL CONDITIONS SHALL BE RESTORED BY THE APPLICANT TO THE SATISFACTION OF UFMD IF THESE ARE FOUND TO BE DAMAGED, REMOVED OR ALTERED IN A MANNER NOT ALLOWED IN WRITING BY UFMD.
- PRIOR TO THE SITE PRE-CONSTRUCTION MEETING AND SITE WALK WITH AN URBAN FORESTER FROM UFMD AND THE ARBORIST, THE APPLICANT SHALL HAVE THE LIMITS OF CLEARING AND GRADING MARKED WITH A CONTINUOUS LINE OF FLAGGING.
- AT LEAST THREE DAYS PRIOR TO THE COMMENCEMENT OF ANY CLEARING, GRADING, OR DEMOLITION ACTIVITIES AND PRIOR TO THE INSTALLATION OF TREE PROTECTION FENCING, UFMD SHALL BE NOTIFIED IN WRITING AND GIVEN THE OPPORTUNITY TO INSPECT THE SITE TO ASSURE THAT ALL INDIVIDUAL TREES TO BE PRESERVED AND ALL AREAS TO BE LEFT UNDISTURBED HAVE BEEN CORRECTLY DELINEATED. UFMD SHALL PROVIDE WRITTEN NOTICE TO THE APPLICANT AS TO WHETHER OR NOT THE AREAS HAVE BEEN DELINEATED CORRECTLY. IF IT IS DETERMINED BY UFMD THAT THE AREAS ARE NOT DELINEATED CORRECTLY, NO GRADING OR CONSTRUCTION ACTIVITIES SHALL OCCUR ON THE SUBJECT PROPERTY UNTIL THE DELINEATION IS CORRECTED AND FIELD VERIFIED BY THE UFMD.
- ROOT PRUNING:** ROOT PRUNING SHALL BE PERFORMED WHEREVER GRADES WILL BE ALTERED WITHIN THE CRITICAL ROOT ZONE OF A TREE TO BE PRESERVED AND SHALL BE CONDUCTED WHERE SHOWN ON THE PLAN OR AS MOST PRACTICAL GIVEN SITE CONSTRAINTS. A VIBRATING PLOW, TRENCHER, STUMP CUTTER OR ARBORIST APPROVED EQUAL SHALL BE USED TO A DEPTH OF 18 INCHES. IF A TRENCHER IS USED THE TRENCH SHALL BE BACKFILLED IMMEDIATELY TO PREVENT ROOT DEHYDRATION. IF SILT FENCE IS TO BE INSTALLED AT THE LIMITS, THE ROOT PRUNING TRENCH MAY BE USED FOR THE INSTALLATION OF SILT FENCE. WHEREVER POSSIBLE, ROOT PRUNING TRENCHES SHOULD BE MULCHED WITH WOOD CHIPS OR MULCH FOUR INCHES DEEP.
- WOOD CHIPS OR MULCH:** WOOD CHIPS OR LEAF AND BRANCH MULCH SHALL BE PLACED AROUND THE LIMITS OF CLEARING AND GRADING IN AREAS WHERE TREES ARE WITHIN 20' OF THE LIMITS OF CLEARING AND GRADING AS SHOWN ON THIS PLAN. CHIPS OR MULCH THAT ARE PRODUCED AS A RESULT OF CLEARING OPERATIONS ON-SITE MAY BE USED FOR THIS PURPOSE AND SHALL BE PLACED BY HAND WITHOUT THE USE OF ENGINE-DRIVEN MACHINERY. CHIPS OR MULCH ARE NOT TO BE PLACED MORE THAN TEN FEET BEYOND THE LIMITS OF CLEARING AND GRADING AND SHALL NOT BE PLACED AT A DEPTH OF NO MORE THAN FOUR INCHES WITHIN THE PRESERVATION AREAS. OUTSIDE THE PRESERVATION AREAS, (WITHIN THE DISTURBED AREA), CHIPS OR LEAF AND BRANCH MULCH MAY BE PLACED AT A DEPTH NOT TO EXCEED TEN INCHES.

SPECIAL EXCEPTION PLAT  
TREE PRESERVATION DETAILS

**BRIGHTVIEW**

BRANESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

BC REVISIONS

|                             |                        |
|-----------------------------|------------------------|
| DATE: 01-11-11              | DESIGNED BY: PLR       |
| REVISED: 02-07-11           | DRAFTED BY: CAD        |
| DATE: 04-22-11              | CHECKED BY: PLR        |
| DATE: 03-05-11              | DATE: OCTOBER 19, 2010 |
| APPLICANT: DEVELOPMENT, LLC | SCALE: HOR.            |
| 218 N. CHARLES STREET       | VERT.                  |
| SUIT 220                    | SHEET 10 OF 18         |
| BALTIMORE, MD 21201         | CO. NO.                |
|                             | CAD NAME: S5073TPP     |
|                             | LAYOUT: TPP-DETAILS    |
|                             | FILE NO. 05073.11-00   |

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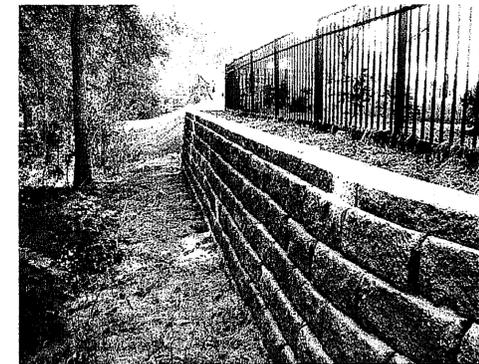
1 ROCKING CHAIR  
11 NO SCALE



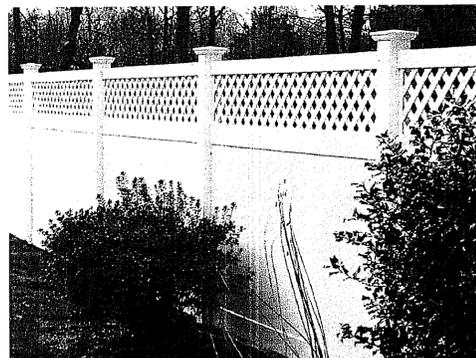
2 PATIO TABLE AND CHAIRS  
11 NO SCALE



3 LIGHT FIXTURE  
11 NO SCALE



4 PRECAST STONE RETAINING WALL  
11 NO SCALE



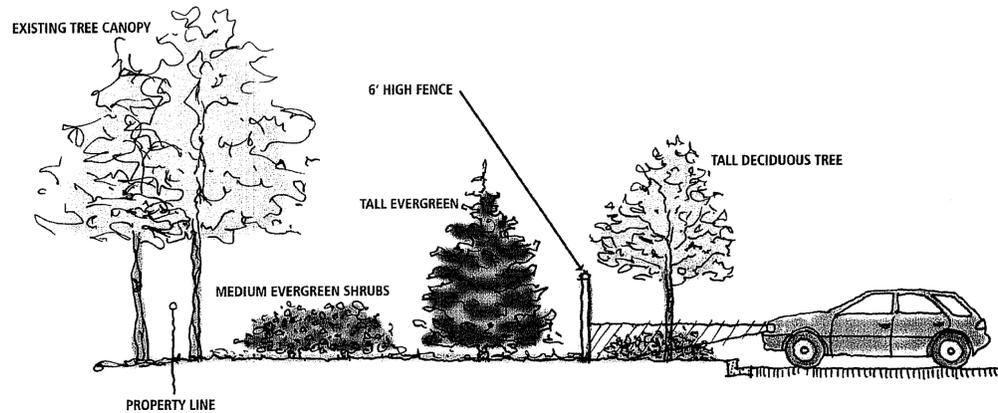
5 LATTICE TOP WOOD FENCE  
11 NO SCALE



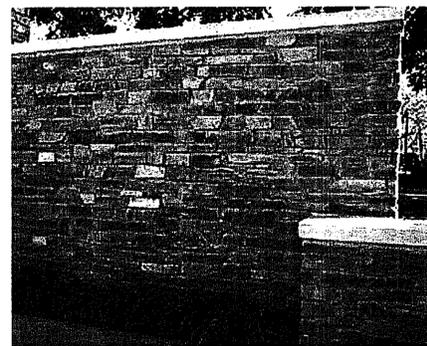
6 OUTDOOR LIVING SPACE  
11 NO SCALE



7 ENTRANCE SIGNAGE  
11 NO SCALE  
NOTE: SIGN WILL CONFORM TO FAIRFAX COUNTY SIGNAGE REGULATIONS



8 SCREENING FENCE SECTION  
11 NO SCALE



9 SCREEN WALL  
11 NO SCALE

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Sheet 11 of 18

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SPECIAL EXCEPTION PLAT  
SITE AMENITIES  
**BRIGHTVIEW**  
DRANESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

|                            |
|----------------------------|
| BC REVISIONS               |
| DATE: 01-11-11             |
| REVISED: 02-07-11          |
| DATE: 04-22-11             |
| DATE: 05-05-11             |
| REVISED: 06-27-11          |
| APPLICANT: DEVELOPMENT LLC |
| 218 N. CHARLES STREET      |
| SUIT 220                   |
| BALTIMORE, MD 21201        |
| DESIGNED BY: PLR           |
| DRAFTED BY: CAD            |
| CHECKED BY: PLR            |
| DATE: OCTOBER 19, 2010     |
| SCALE: HOR. AS SHOW        |
| VERT.                      |
| SHEET 11 OF 18             |
| CO. NO.                    |
| CAD NAME: S5073AMENITY     |
| LAYOUT: AMENITIES          |
| FILE NO. 05073.11-00       |



**OUTFALL ANALYSIS COMPUTATIONS**  
**OUTFALL A**

PART 1: LIST ALL OF THE SUBAREAS WITH CN NUMBERS AND COMPUTE THE AVERAGE CN FOR THE OUTFALL

| GOOD FORESTED CONDITION   |    | CN           | AREA (AC.)                      | PRODUCT       |
|---------------------------|----|--------------|---------------------------------|---------------|
| (A) SUBAREA & DESCRIPTION |    |              |                                 |               |
| A1 Woods: Soil B          | 55 | X 1.91       | =                               | 105.05        |
| A2 Woods: Soil C          | 70 | X 0.77       | =                               | 53.90         |
|                           |    | <b>TOTAL</b> |                                 | <b>158.95</b> |
| (B) WEIGHTED AVERAGE CN   |    |              | <b>TOTAL = AREA / PRODUCT =</b> | <b>59</b>     |
| POST DEVELOPMENT          |    | CN           | AREA (AC.)                      | PRODUCT       |
| (C) SUBAREA & DESCRIPTION |    |              |                                 |               |
| A3 Lawn: Soil B           | 61 | X 1.06       | =                               | 64.66         |
| A4 Impervious: Soil B     | 98 | X 1.39       | =                               | 136.22        |
| A5 Lawn: Soil C           | 74 | X 0.43       | =                               | 31.82         |
| A6 Impervious: Soil C     | 98 | X 0.70       | =                               | 68.60         |
|                           |    | <b>TOTAL</b> |                                 | <b>301.30</b> |
| (D) WEIGHTED AVERAGE CN   |    |              | <b>TOTAL = AREA / PRODUCT =</b> | <b>84</b>     |

PART 2: COMPUTE THE DEPTH OF RAINFALL AT OUTFALL

(A) CALCULATE THE RAINFALL AMOUNT (P) FOR THE 1-, 2-, AND 10-YEAR, 24-HOUR STORM. (FROM TABLE 6.23 OF THE PFM)

P<sub>1</sub> = 2.7" P<sub>2</sub> = 3.2" P<sub>10</sub> = 5.2"

(B) DETERMINE THE RUNOFF DEPTH (d) IN INCHES

| GOOD FORESTED CONDITION             | POST DEVELOPMENT        |
|-------------------------------------|-------------------------|
| $S = \frac{1000}{CN} - 10$          | S = 6.95                |
| $d = \frac{(P - 0.2S)^2}{P + 0.8S}$ |                         |
| d <sub>1</sub> = 0.21"              | d <sub>1</sub> = 1.28"  |
| d <sub>2</sub> = 0.37"              | d <sub>2</sub> = 1.68"  |
| d <sub>10</sub> = 1.35"             | d <sub>10</sub> = 3.46" |

PART 3: CALCULATE THE 1-YEAR POST DEVELOPMENT VOLUME

(A) DETERMINE TOTAL VOLUME OF WATER TO BE DETAINED FOR 1-YEAR STORM

V<sub>1</sub> = DRAINAGE AREA (ACRES) x d (INCHES) / 12 (INCHES/FOOT) V<sub>1</sub> = 0.3819 ac.-ft. = 16,636 cu.-ft.

(B) SUBTRACT VOLUME DETAINED IN BMP VOLUME (FROM BMP COMPUTATIONS)

V<sub>1-YR</sub> = V<sub>1</sub> - V<sub>wo</sub> V<sub>wo</sub> = 2,686 cu.-ft. V<sub>1-YR</sub> = 13,950 cu.-ft.

PART 4: DETERMINE ORIFICE SIZE FOR 1-YEAR STORM

(A) MAXIMUM HEAD (h) AT THE REQUIRED 1-YEAR STORAGE FROM THE ELEVATION STORAGE CURVE FOR THE FACILITY.

h = 1.40 ft

(B) PEAK OUTFLOW RATE (Q<sub>p</sub>) AT THE MAXIMUM HEAD FOR DRAWDOWN TIME OF 24 HOURS.

$$Q_p = \frac{V_{1-YR}}{0.5 \times 3,600 \times 24}$$

Q<sub>p</sub> = 0.3229 cfs

(C) REQUIRED ORIFICE AREA

$$A_{1-YR} = \frac{Q_p}{0.6 \sqrt{64.4h}}$$

A<sub>1-YR</sub> = 0.0567 sq. ft.

(D) MAXIMUM DIAMETER OF CIRCULAR ORIFICE

MAXIMUM DIAMETER = 3.22"

PART 8: DETERMINE ALLOWABLE RELEASE

(A) DETERMINE THE VOLUME OF RUNOFF FOR EACH STORM TO BE ANALYZED

V = DRAINAGE AREA (ACRES) x d (INCHES) / 12 (INCHES/FOOT)

| GOOD FORESTED CONDITION          | POST DEVELOPMENT                 |
|----------------------------------|----------------------------------|
| V <sub>2</sub> = 3,600 cu.-ft.   | V <sub>2</sub> = 21,832 cu.-ft.  |
| V <sub>10</sub> = 13,133 cu.-ft. | V <sub>10</sub> = 44,964 cu.-ft. |

(B) DETERMINE THE PROPORTIONAL IMPROVEMENTS FOR EACH STORM TO BE ANALYZED

$$R_i = \left[ 1 - \frac{V_i}{V_p} \right] \times 100$$

R<sub>2</sub> = 83.51%  
R<sub>10</sub> = 70.79%

(C) DETERMINE THE ALLOWABLE PEAK RELEASES

| GOOD FORESTED CONDITION RELEASE | PROPORTIONAL IMPROVEMENT RELEASE                           |
|---------------------------------|--|
| Q <sub>2</sub> = 0.95 cfs       | Q <sub>2</sub> = 0.16 cfs = 0.95 x (1 - R <sub>2</sub> )   |
| Q <sub>10</sub> = 4.64 cfs      | Q <sub>10</sub> = 1.36 cfs = 4.64 x (1 - R <sub>10</sub> ) |

PART 9: MAXIMUM ALLOWABLE OUTFALL

| STORM FREQUENCY | PROPORTIONAL IMPROVEMENT RELEASE (CFS) | UNDETAILED TO OUTFALL A (CFS) | + OFFSITE DETAILED (CFS) | = | MAX ALLOWABLE OUTFLOW (CFS) |
|-----------------|--|-------------------------------|--------------------------|---|-----------------------------|
| Q <sub>2</sub>  | 0.16                                   | 0.37                          | 0.57                     | = | 0.36                        |
| Q <sub>10</sub> | 1.36                                   | 1.81                          | 0.93                     | = | 0.48                        |

**OUTFALL 'A' PRE-DEVELOPMENT**  
**TIME OF CONCENTRATION CALCULATOR**

Segment #1: Tc: TR-55 Shallow

Hydraulic Length 503.00 ft  
Slope 0.090000 ft/ft  
Unpaved

Avg. Velocity 4.84 ft/sec

Segment #1 Time: .0289 hrs

---

Segment #2: Tc: TR-55 Sheet

Mannings n .1500  
Hydraulic Length 100.00 ft  
2yr, 24hr P 2.7000 in  
Slope .040000 ft/ft

Avg. Velocity .21 ft/sec

Segment #2 Time: .1347 hrs

**Total Tc: .1636 hrs**

**OUTFALL 'A' ONSITE PRE-DEVELOPMENT**

| Return Event | Total Depth in | Rainfall Type   | RNF ID      |
|--------------|----------------|-----------------|-------------|
| 2            | 3.2000         | Synthetic Curve | TypeII 24hr |
| 10           | 5.2000         | Synthetic Curve | TypeII 24hr |
| 1            | 2.7000         | Synthetic Curve | TypeII 24hr |

MASTER NETWORK SUMMARY  
SCS Unit Hydrograph Method  
(\*Node=Outfall; +Node=Diversion;)  
(Trun= HYG Truncation; Blank=None; L=Left; R=Rt; LR=Left&Rt)

| Node ID    | Return Type Event | HYG Vol ac-ft | Trun | Qpeak hrs | Qpeak cfs | Max WSEL ft | Max Pond Storage ac-ft |
|------------|-------------------|---------------|------|-----------|-----------|-------------|------------------------|
| *OUT 10    | JCT 2             | .084          |      | 12.0500   | .95       |             |                        |
| *OUT 10    | JCT 10            | .301          |      | 12.0000   | 4.64      |             |                        |
| *OUT 10    | JCT 1             | .046          |      | 12.0500   | .35       |             |                        |
| SUBAREA 10 | AREA 2            | .084          |      | 12.0500   | .95       |             |                        |
| SUBAREA 10 | AREA 10           | .301          |      | 12.0000   | 4.64      |             |                        |
| SUBAREA 10 | AREA 1            | .046          |      | 12.0500   | .35       |             |                        |

**DETENTION VOLUME**

| Elevation (ft) | Planimeter (sq.in) | Area (sq.ft) | A1+A2+sq(A1*A2) (sq.ft) | Volume (cu.ft) | Volume Sum (cu.ft) |
|----------------|--------------------|--------------|-------------------------|----------------|--------------------|
| 280.00         | -----              | 6049         | 0                       | 0              | 0                  |
| 284.30         | -----              | 6049         | 18147                   | 25995          | 25995              |

POND VOLUME EQUATIONS

\* Incremental volume computed by the Conic Method for Reservoir Volumes.

$$Volume = (1/3) * (EL2-EL1) * (Area1 + Area2 + sq.rt.(Area1*Area2))$$

where: EL1, EL2 = Lower and upper elevations of the increment  
Area1, Area2 = Areas computed for EL1, EL2, respectively  
Volume = Incremental volume between EL1 and EL2

**DETENTION FACILITY DISCHARGE SUMMARY**

| Return Event | Total Depth in | Rainfall Type   | RNF ID      | Return Event | Total Depth in | Rainfall Type   | RNF ID      |
|--------------|----------------|-----------------|-------------|--------------|----------------|-----------------|-------------|
| 1            | 2.7000         | Synthetic Curve | TypeII 24hr | 1            | 2.7000         | Synthetic Curve | TypeII 24hr |
| 2            | 3.2000         | Synthetic Curve | TypeII 24hr | 2            | 3.2000         | Synthetic Curve | TypeII 24hr |
| 10           | 5.2000         | Synthetic Curve | TypeII 24hr | 10           | 5.2000         | Synthetic Curve | TypeII 24hr |

| MASTER NETWORK SUMMARY<br>SCS Unit Hydrograph Method |                   |               |      |           |           |             |                        |
|--|-------------------|---------------|------|-----------|-----------|-------------|------------------------|
| Node ID  | Return Type Event | HYG Vol cu.ft | Trun | Qpeak min | Qpeak cfs | Max WSEL ft | Max Pond Storage cu.ft |
| ONSITE   | AREA 2            | 16242         |      | 717.00    | 6.58      |             |                        |
| ONSITE   | AREA 10           | 31388         |      | 717.00    | 12.36     |             |                        |
| ONSITE   | AREA 1            | 12640         |      | 717.00    | 5.15      |             |                        |
| *OUTFLOW   | JCT 2             | 10412         |      | 927.00    | .15       |             |                        |
| *OUTFLOW   | JCT 10            | 25558         |      | 774.00    | .69       |             |                        |
| *OUTFLOW   | JCT 1             | 6810          |      | 909.00    | .11       |             |                        |
| POND   | IN POND 2         | 16242         |      | 717.00    | 6.58      |             |                        |
| POND   | IN POND 10        | 31388         |      | 717.00    | 12.36     |             |                        |
| POND   | IN POND 1         | 12640         |      | 717.00    | 5.15      |             |                        |
| POND   | OUT POND 2        | 10412         |      | 927.00    | .15       | 281.98      | 11383                  |
| POND   | OUT POND 10       | 25558         |      | 774.00    | .69       | 283.41      | 19594                  |
| POND   | OUT POND 1        | 6810          |      | 909.00    | .11       | 281.57      | 9029                   |

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 13 of 18

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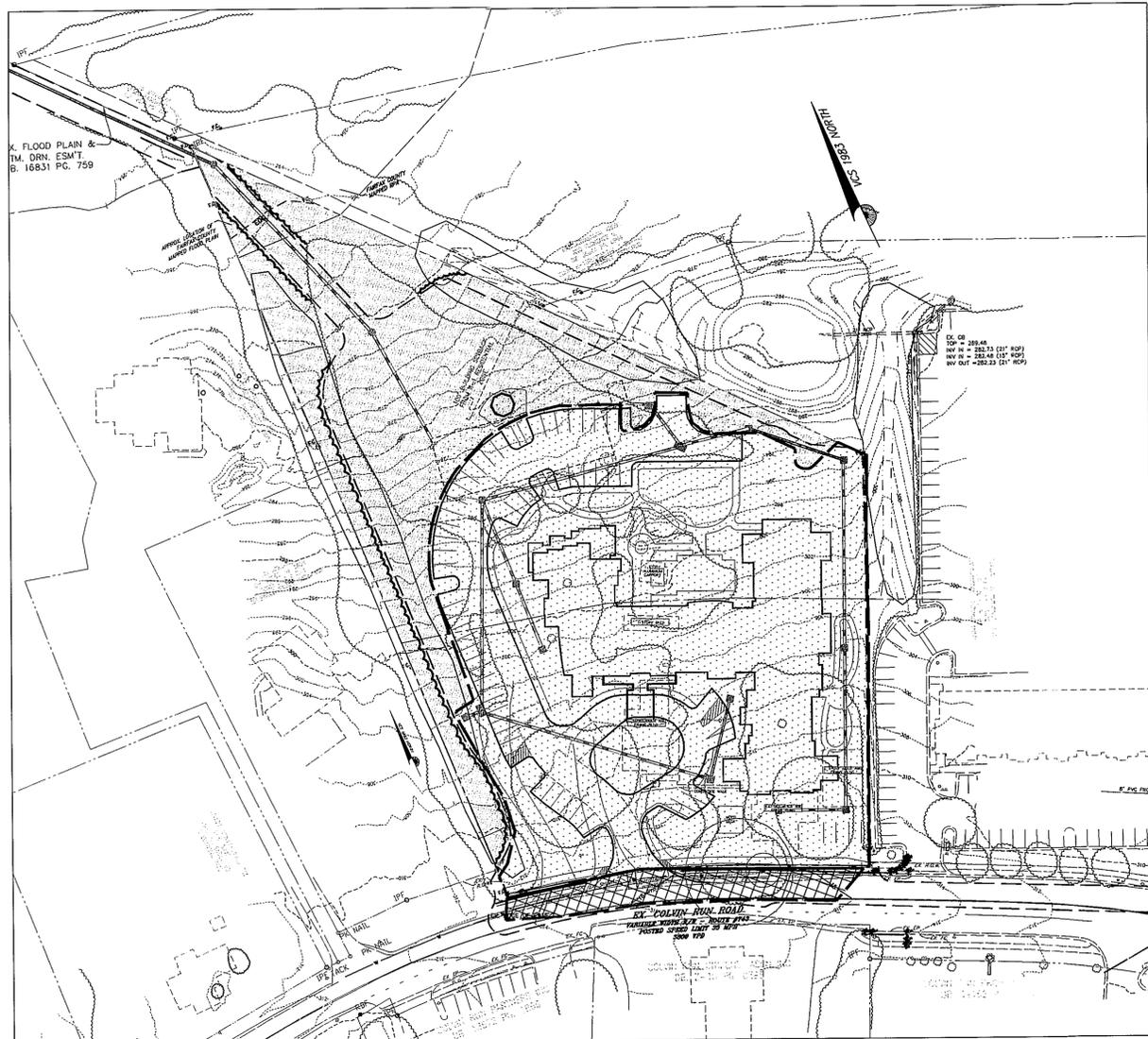
SPECIAL EXCEPTION PLAN  
STORMWATER MANAGEMENT CALCULATIONS  
**BRIGHTVIEW**  
DRAVESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

DESIGNED BY: PLR  
DRAFTED BY: CAD  
CHECKED BY: PLR  
DATE: OCTOBER 19, 2010  
SCALE: HOR: 1" = 100'  
VERT: 1" = 10'  
SHEET 13 OF 18  
CO. NO.  
CAD NAME: P5073SWM.DWG  
LAYOUT: SWM2  
FILE NO. 05073.11-00

BC REVISIONS  
DATE: 01-11-11  
REVISED 02-07-11  
DATE: 04-22-11  
DATE: 05-05-11  
APPLICANT: SHELTER DEVELOPMENT LLC  
218 N. CHARLES STREET  
SUITE 220  
BALTIMORE, MD 21201

**BMP MAP**

1"=60'



**BEST MANAGEMENT PRACTICE (BMP) NARRATIVE**  
 THE 3.56 ACRE SITE IS IN THE DIFFICULT RUN WATERSHED. THIS SITE REQUIRES 40% PHOSPHORUS REMOVAL EFFICIENCY AS IT IS CONSIDERED A 'NEW DEVELOPMENT' IN FAIRFAX COUNTY. BMP COMPUTATIONS ARE BASED ON THE OCCOQUAN METHOD AND RESULT IN A 40.16% PHOSPHORUS REMOVAL. (SEE COMPUTATIONS ON THIS SHEET). THE BMP REQUIREMENTS WILL BE MET BY INFILTRATING THE FIRST 0.5" OF RUNOFF THROUGH A GRAVEL BED BENEATH THE RAINTANK SYSTEM. GENERALLY, SOILS IN THIS AREA HAVE INFILTRATION RATES SUFFICIENT TO FACILITATE THE PROPER USE OF THE RAINTANK FACILITIES, BUT FINAL DESIGN AND LOCATION IS DEPENDENT UPON FIELD VERIFICATION OF THE SOIL INFILTRATION RATES BY A QUALIFIED GEOTECHNICAL ENGINEER.

**LEGEND**

- B1 ONSITE TO INFILTRATION TRENCH
- B2 OFFSITE TO INFILTRATION TRENCH
- B3 ONSITE UNTREATED

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

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

This information is required under the following Zoning Ordinance paragraphs:  
 Special Permits (9-011 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 (16-202 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 2.11.
3. Provide:  

| Facility Name/ Type & No. | On-site area served (acres) | Off-site area served (acres) | Drainage area (acres) | Footprint area (sq ft) | Storage Volume (cu ft) | If pond, dam height (ft) |
|---------------------------|-----------------------------|------------------------------|-----------------------|------------------------|------------------------|--------------------------|
| Infiltration              | 2.10                        | 0.14                         | 2.24                  | 6049                   | 25925                  | N/A                      |
| Totals                    |                             |                              |                       |                        |                        |                          |
4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 2.11. Pond inlet and outlet pipe systems are shown on Sheet 2.11.
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 ASPHALT (asphalt, geoblock, gravel, etc.).
6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 2.9.
7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 11.
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 11.14.
9. A description of how the outfall requirements, including known changes to contributing drainage areas (i.e. drainage diversions), of the Public Facilities Manual will be satisfied is provided on Sheet 11.
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 2.3.
11. A submission waiver is requested for \_\_\_\_\_.
12. Stormwater management is not required because \_\_\_\_\_.

Application No. SE 2010-DR-030 Staff S.Z.  
 APPROVED SE SP PLAN  
 Dev. Conditions Dated July 21, 2011  
 Date of (805) (PC) Approval July 26, 2011

**BMP FACILITY DESIGN CALCULATIONS**

**II. WATERSHED INFORMATION**

PART 1: LIST ALL OF THE SUBAREAS AND "C" FACTORS USED IN THE BMP COMPUTATIONS

| SUBAREA DESIGNATION & DESCRIPTION | "C"  | AREA (AC.) |
|-----------------------------------|------|------------|
| (1)                               | (2)  | (3)        |
| B1 Onsite- Treated                | 0.68 | 2.44       |
| B2 Offsite- Treated               | 0.90 | 0.14       |
| B3 Onsite - Untreated             | 0.35 | 1.12       |

PART 2: COMPUTE THE WEIGHTED AVERAGE "C" FACTOR FOR THE SITE

(A) AREA OF THE SITE (a) 3.56 ACRES

| (B) SUBAREA DESIGNATION | "C"  | AREA (AC.) | PRODUCT |
|-------------------------|------|------------|---------|
| (1)                     | (2)  | (3)        | (4)     |
| B1 Onsite- Treated      | 0.68 | X 2.44     | = 1.66  |
| B2 Offsite- Treated     | 0.35 | X 1.12     | = 0.39  |
|                         |      | X          | =       |
| (b) TOTAL               |      |            | = 2.05  |

(C) WEIGHTED AVERAGE "C" FACTOR (b) / (a) = (c) 0.58

PART 3: COMPUTE THE TOTAL PHOSPHORUS REMOVAL FOR THE SITE

| SUBAREA DESIGNATION | BMP TYPE           | REMOVAL EFF. (%) | AREA RATIO | "C" FACTOR RATIO | PRODUCT |
|---------------------|--------------------|------------------|------------|------------------|---------|
| (1)                 | (2)                | (3)              | (4)        | (5)              | (6)     |
| B1                  | Onsite- Treated    | 50               | X 0.69     | X 1.17           | = 40.37 |
| B2                  | Offsite- Treated   | 50               | X 0.04     | X 1.55           | = 3.10  |
| B3                  | Onsite - Untreated | 0                | X 0.31     | X 0.60           | = 0.00  |
| (a) TOTAL           |                    |                  |            |                  | = 43.47 |

PART 4: DETERMINE COMPLIANCE WITH PHOSPHORUS REMOVAL REQUIREMENT

- (A) SELECT REQUIREMENT: (a) 40 %  
 (FAIRFAX COUNTY CHESAPEAKE BAY PRESERVATION AREA - 40%)  
 OR (FAIRFAX COUNTY WATER SUPPLY OVERLAY DISTRICT - 50%)
- (B) IF LINE 3 (a) 43.47 % > LINE 4(a) 40 % THEN PHOSPHORUS REMOVAL REQUIREMENT IS SATISFIED.

PART 5: DETERMINE THE STORAGE REQUIRED FOR EACH PROPOSED FACILITY

(A) INFILTRATION DESIGN  
 PER PFM WATER QUALITY VOLUME = 1,815 CF / ACRE OF IMPERVIOUS IMPERVIOUS AREA TO SYSTEM (ACRE) 1.48

WATER QUALITY VOLUME REQUIRED (CU. FT.) 2,686

**INFILTRATION TRENCH DESIGN CALCULATIONS**

PART 1: DETERMINE DESIGN INFILTRATION RATE

(A) SOIL CLASSIFICATION LOAM

(B) HYDROLOGIC SOIL GROUPING B

(C) MINIMUM INFILTRATION RATE (f) (TABLE 3.10-2) 0.52

(D) DESIGN INFILTRATION RATE (f<sub>d</sub>)  
 f<sub>d</sub> = 0.5 f (a) .260 in./hr

PART 2: DETERMINE MAXIMUM STORAGE TIME

(A) MAXIMUM STORAGE TIME, T<sub>max</sub> = (b) 48 hr

PART 3: DETERMINE MAXIMUM ALLOWABLE DEPTH OF THE FACILITY

(A) VOID RATIO FOR STONE RESERVOIRS USING 1.5 TO 3.5 INCH STONE - VDOT NO. 1 COARSE-GRADED AGGREGATE  
 V<sub>r</sub> (c) 0.40

(B) MAXIMUM ALLOWABLE DEPTH OF THE FACILITY  
 d<sub>max</sub> = f<sub>d</sub> \* t<sub>max</sub> / V<sub>r</sub> (a) \* (b) / (c) = (d) 31.2 ft

PART 4: DETERMINE MINIMUM BOTTOM SURFACE AREA REQUIRED

(A) WATER QUALITY VOLUME REQUIREMENTS FOR SITE, VOL<sub>WQ</sub> (e) 2,686 cf

(B) MINIMUM BOTTOM SURFACE AREA OF THE FACILITY  
 SA<sub>min</sub> = VOL<sub>WQ</sub> / (f<sub>d</sub> \* T<sub>max</sub>) (e) / ((a) \* (b)) = (f) 215 sq. ft

PART 5: ACTUAL BMP VOLUME PROVIDED IN THE INFILTRATION TRENCH

(A) SURFACE AREA AND DEPTH PROVIDED  
 LENGTH = (g) 89.0 ft  
 WIDTH = (h) 68.0 ft  
 LENGTH \* WIDTH = (g) \* (h) = (i) 6052.0 sq. ft

(B) DEPTH PROVIDED (j) 1.25 ft

(C) BMP VOLUME PROVIDED FOR IN THE INFILTRATION TRENCH  
 VOLUME = (c) \* (i) \* (j) = (k) 3026.0 cu. ft

PART 6: RUNOFF PRETREATMENT CONSIDERATIONS

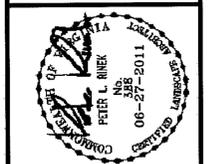
(A) CONCENTRATED RUNOFF AND SHEET FLOW RUNOFF PRETREATED BY

(i) SUMP MAN-HOLES WITH SNOUTS

(ii) \_\_\_\_\_

(iii) \_\_\_\_\_

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 BEST MANAGEMENT PRACTICES  
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|                   |                        |
|-------------------|------------------------|
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| REVISED: 01-11-11 | DRAFTED BY: CAD        |
| REVISED: 02-07-11 | CHECKED BY: PLR        |
| REVISED: 04-22-11 | DATE: OCTOBER 19, 2010 |
| DATE: 05-05-11    | SCALE: HOR. 1" = 60'   |
|                   | VERT. 1" = 60'         |
|                   | SHEET 14 OF 18         |
|                   | CO. NO.                |
|                   | CAD NAME: P5073SWM.DWG |
|                   | LAYOUT: BMP            |
|                   | FILE NO. 05073.11-00   |

**DOWNSTREAM IMPOUNDMENTS MAP**  
1"=500'



**DOWNSTREAM IMPOUNDMENTS NARRATIVE**

ALL THE OUTFALLS EVENTUALLY FLOW TO THE PINEY RUN FLOODPLAIN WHICH HAS A DRAINAGE AREA GREATER THAN 640 ACRES AT POINT X. THE TOTAL DISTURBED AREA APPROXIMATELY 3.6 ACRES. THE DRAINAGE AREA TO POINT X IS GREATER THAN 100-TIMES THE TOTAL DISTURBED AREA FOR THE SITE. THERE ARE NO DOWNSTREAM IMPOUNDMENTS IN THE INFLUENCE AREA, THUS DOWNSTREAM IMPOUNDMENTS HAVE BEEN SATISFIED PER LETTER TO INDUSTRY 03-05.

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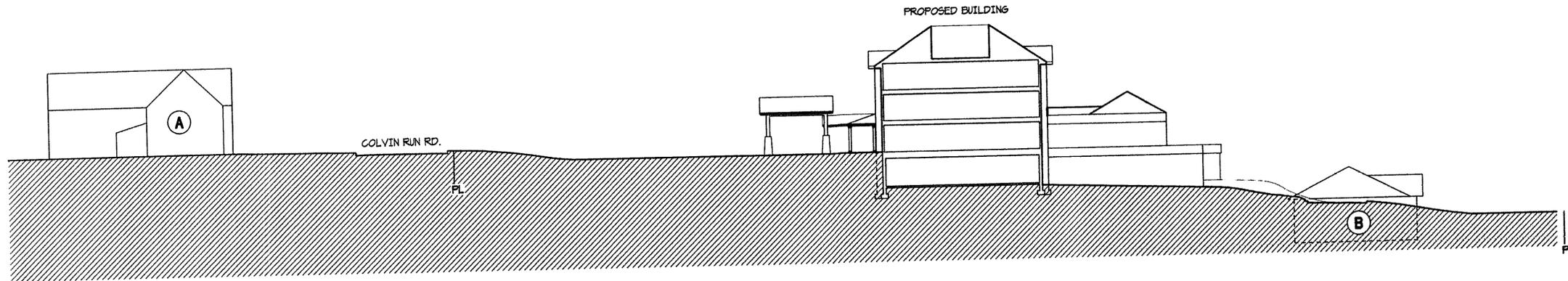


SPECIAL EXCEPTION PLAT  
DOWNSTREAM IMPOUNDMENT ANALYSIS  
**BRIGHTVIEW**  
DRAWNSVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

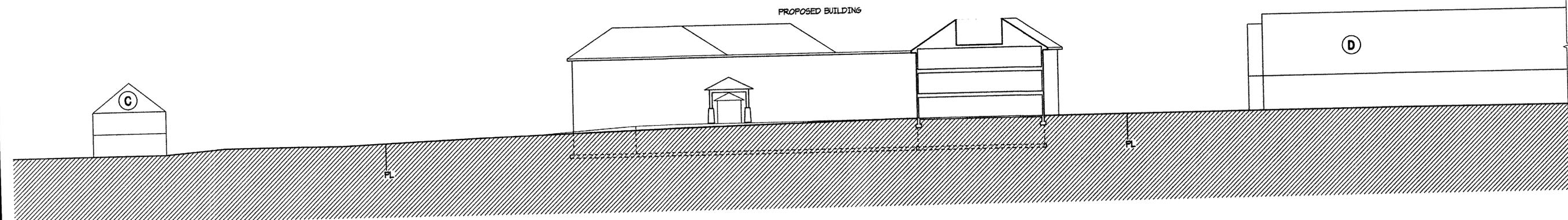
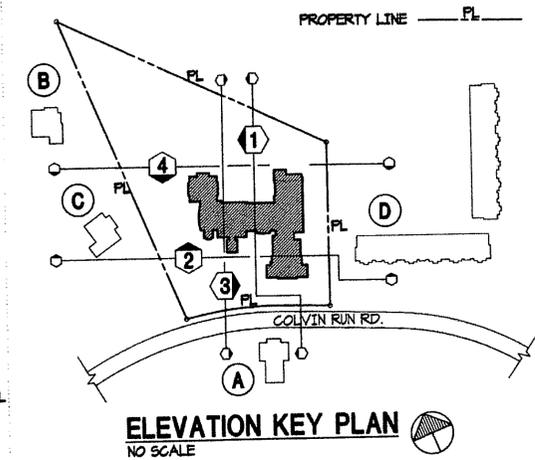
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APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 15 of 18

BC REVISIONS:  
REVISED: 01-11-11  
REVISED: 02-07-11  
REVISED: 04-22-11  
DATE: 05-05-11  
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DRAFTED BY: CAD  
CHECKED BY: PLR  
DATE: OCTOBER 19, 2010  
SCALE: HOR. AS SHOWN  
VERT. N/A  
SHEET 15 OF 18  
CO. NO.  
CAD NAME: P5073SWM.DWG  
LAYOUT: DOWNSTREAM IMP  
FILE NO. 05073.11-00

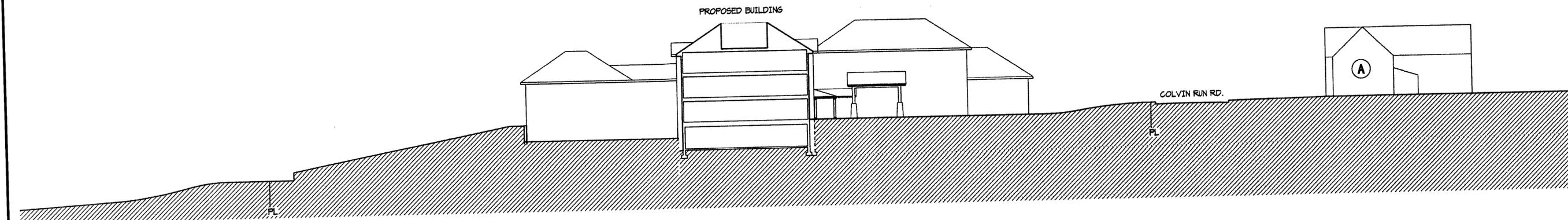
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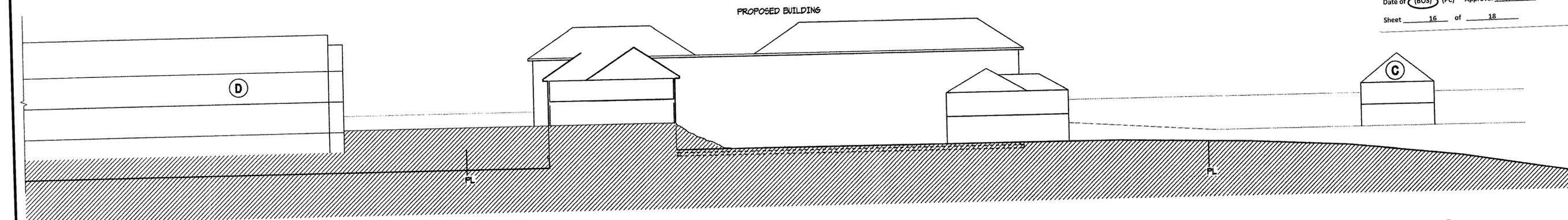
**1 WEST ELEVATION**  
1" = 20'-0"



**2 NORTH ELEVATION**  
1" = 20'-0"



**3 EAST ELEVATION**  
1" = 20'-0"



**4 SOUTH ELEVATION**  
1" = 20'-0"

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 16 of 18

**BC Consultants**  
Planners • Engineers • Surveyors • Landscape Architects  
12800 Fair Lakes Circle, Suite 100, Fairfax, VA 22033  
(703)449-8100 (Fax)  
www.bccoll.com



SPECIAL EXCEPTION PLAT  
SITE SECTIONS  
**BRIGHTVIEW**  
DRAKESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

|                                    |                        |
|------------------------------------|------------------------|
| BC REVISIONS                       | DESIGNED BY: PLR       |
| SHEET ADDED: 2-7-11                | DRAFTED BY: CAD        |
| DATE: 04-22-11                     | CHECKED BY: PLR        |
| DATE: 05-05-11                     | DATE: OCTOBER 19, 2010 |
| DATE: 06-27-11                     | SCALE: HOR: 1"=20'     |
| APPLICANT: SHELTER DEVELOPMENT LLC | VERT:                  |
| 218 N. CHARLES STREET              | SHEET 16 OF 18         |
| SUIT 220                           | CO. NO.                |
| BALTIMORE, MD 21201                | CAD NAME: S5073SECT    |
|                                    | LAYOUT: SECTIONS       |
|                                    | FILE NO. 05073.11-00   |

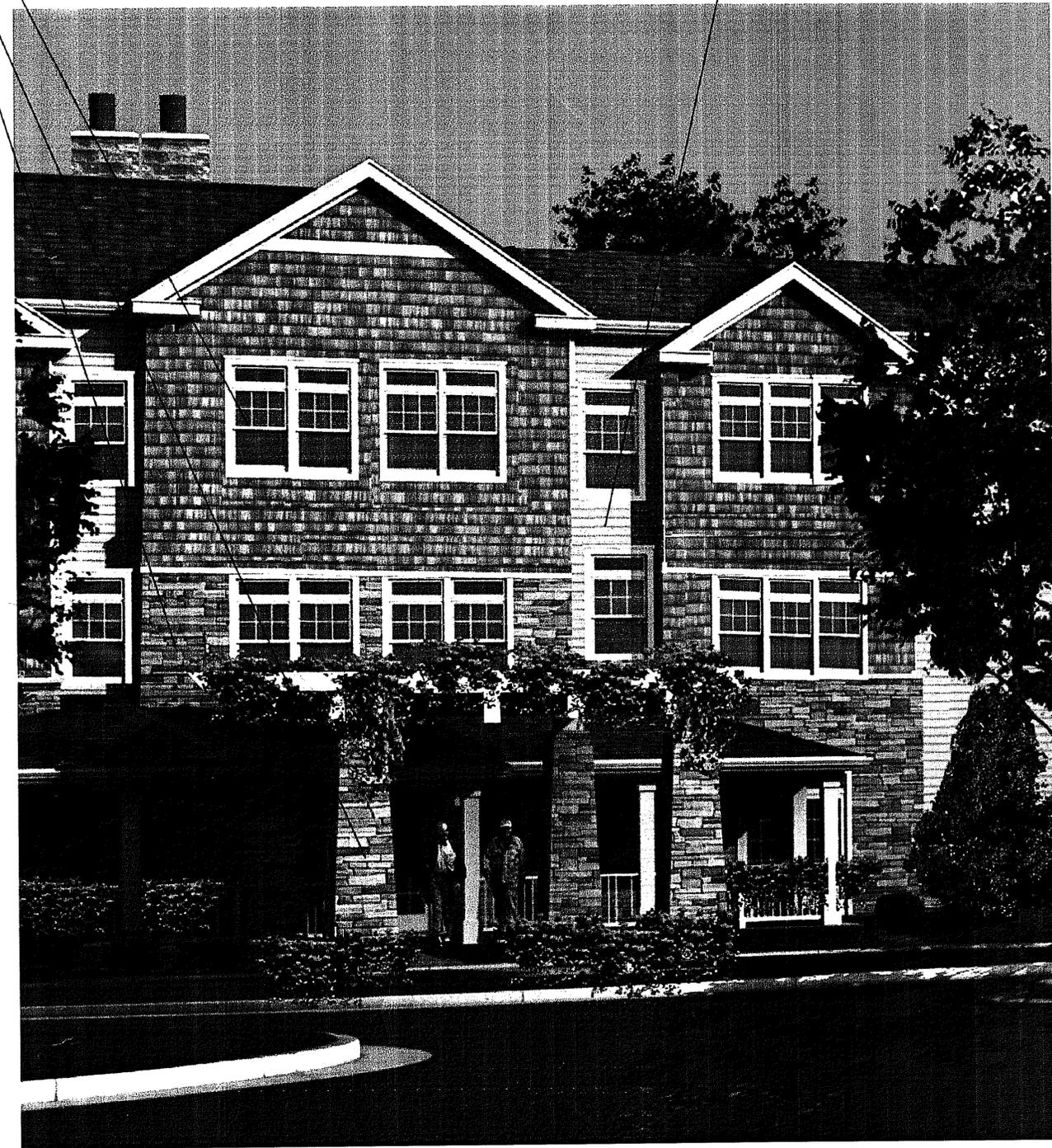
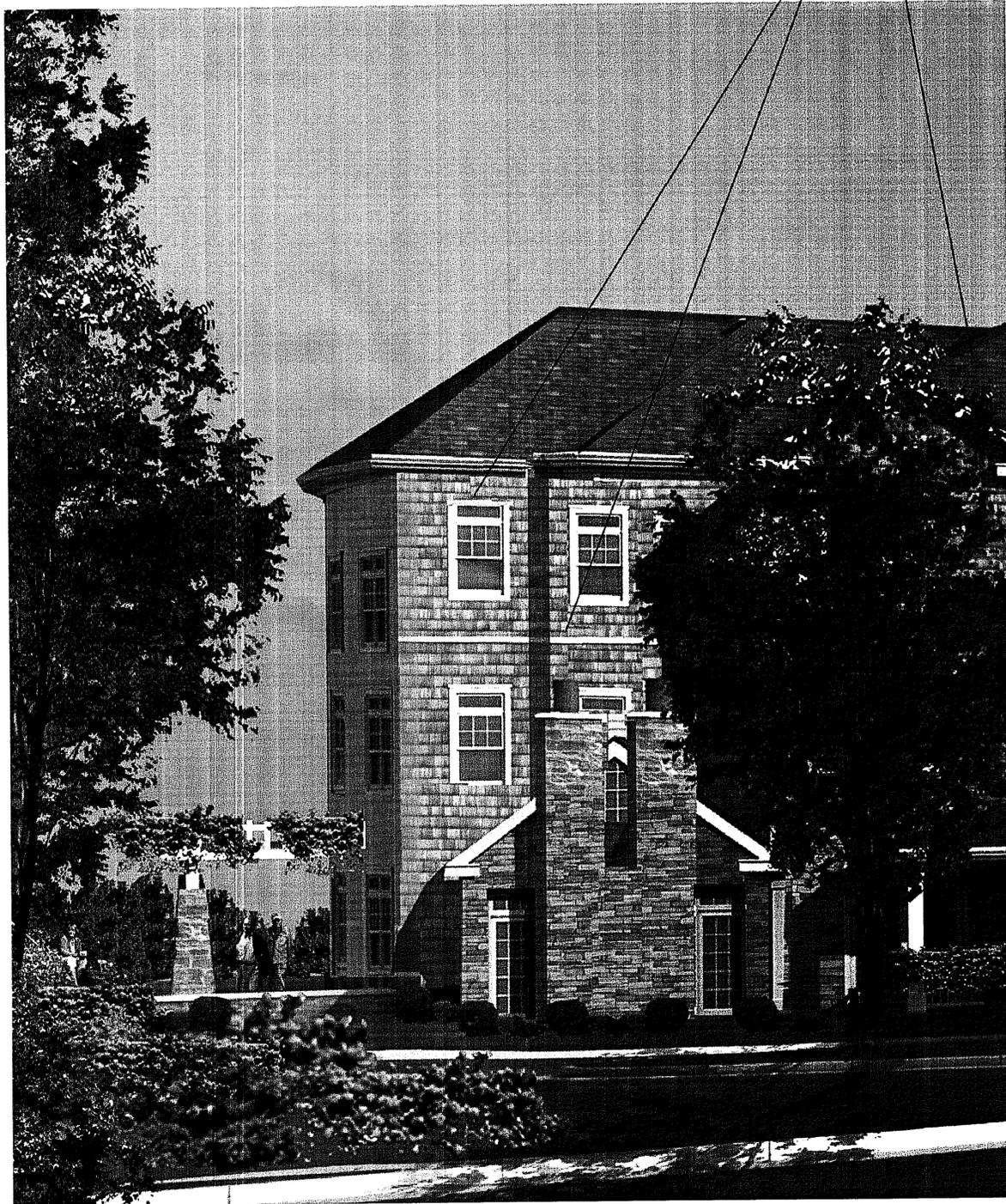
dark roof shingles throughout

cementitious siding - shingle pattern  
earthtone color with accent trim

earth tone -regional pattern-manufactured stone veneer - approx 2" thick

double hung aluminum window

horizontal cementitious siding - muted trim color



West Property Line  
View from Colvin Run Road

Front Entrance

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(703)449-8100 (703)449-8108 (Fax)  
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SPECIAL EXCEPTION PLAT  
PERSPECTIVE 1

**BRIGHTVIEW**

BRANESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

|  |
|--|
| BC REVISIONS   |
| SHEET ADDED 02-07-11   |
| DATE: 04-22-11   |
| DATE: 05-05-11   |
| APPLICANT:<br>SHELTER DEVELOPMENT LLC<br>218 N. CHARLES STREET<br>SUITE 220<br>BALTIMORE, MD 21201 |
| DESIGNED BY: PLR   |
| DRAFTED BY: CAD  |
| CHECKED BY: PLR  |
| DATE: OCTOBER 19, 2010   |
| SCALE: HOR. NO SCALE<br>VERT.  |
| SHEET 17 OF 18   |
| CO. NO.  |
| CAD NAME: S5073PERSPECTIVE1  |
| LAYOUT: PERSP1   |
| FILE NO. 05073.11-00   |

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (BOS) (PC) Approval July 26, 2011  
Sheet 17 of 18

XREFS:

dark roof shingles throughout

cementitious siding - shingle pattern  
earthtone color with accent trim

earth tone -regional pattern-manufactured stone veneer - approx 2" thick

double hung aluminum window

horizontal cementitious siding - muted trim color



Front Facade



East Property Line  
View from Colvin Run Road

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(703)449-8100 (703)449-8108 (Fax)  
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SPECIAL EXCEPTION PLAT  
PERSPECTIVE 2

**BRIGHTVIEW**

DRANESVILLE DISTRICT  
FAIRFAX COUNTY, VIRGINIA

BC REVISIONS  
SHEET ADDED 02-07-11  
DATE: 04-22-11  
DATE: 05-05-11

APPLICANT:  
SHELTER DEVELOPMENT LLC  
100 CHARLES STREET  
SUITE 200  
BALTIMORE, MD 21201

DESIGNED BY: PLR  
DRAFTED BY: CAD  
CHECKED BY: PLR  
DATE: OCTOBER 19, 2010  
SCALE: HOR. NO SCALE  
VERT.  
SHEET 18 OF 18  
CO. NO.  
CAD NAME: S5073PERSPECTIVE1  
LAYOUT: PERSP2  
FILE NO. 05073.11-00

Application No. SE 2010-DR-030 Staff S.Z.  
APPROVED SE SP PLAN  
Dev. Conditions Dated July 21, 2011  
Date of (60S) (PC) Approval July 26, 2011  
Sheet 18 of 18

XREFS