## SPECIMEN TREE LIST

| TREE #                                                                                          | PLAN #                                                                                                                               | FIELD # <sup>8</sup>                                                                             | COMMON NAME                                                                                                                                                                                                         | SCIENTIFIC NAME                                                                                                                                                                                                                                                                                             | D.B.H. <sup>C</sup><br>(Inches)                                                                                | VIGORD                                                                                                                                                                         | TOI <sup>E</sup>                                                                                     | FATE                                    |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 97<br>96<br>98<br>103<br>30<br>32<br>135<br>134<br>133<br>132<br>107<br>108<br>106<br>104<br>33 | 2413<br>2414<br>2415<br>2419<br>2427<br>2428<br>2431<br>2432<br>2433<br>2434<br>2435<br>2436<br>2438<br>2440<br>2442<br>ST 1<br>ST 2 | B77<br>B78<br>B76<br>B71<br>4<br>2<br>120<br>118<br>119<br>117<br>B65<br>125<br>B168<br>B72<br>1 | White oak White oak Pin oak Southern red oak Scarlet oak Scarlet oak Tulip poplar American beech American beech Southern red oak Sycamore Pin oak hybrid Black walnut Tulip poplar Scarlet oak Sycamore River birch | Quercus alba Quercus alba Quercus palustris Quercus falcata Quercus coccinea Quercus coccinea Liriodendron tulipifera Fagus grandifolia Fagus grandifolia Quercus falcata Platanus occidentalis Quercus palustris Juglans nigra Liriodendron tulipifera Quercus coccinea Platanus occidentalis Betula nigra | (Inches)  33.0  35.0  35.3  32.7  34.2  36.0  43.4  32.0  45.0  38.8  33.3  30.8  31.4  38.0  42.0  32  32  32 | Excellent Excellent Good Good Good Poor Good Fair Good Excellent Fair Good Fair/Good | Good Moderate Good Moderate/Poor Fair Good Poor Fair Fair Fair Good Good Moderate Moderate/Poor Good | TBR |
|                                                                                                 | ST 3<br>ST 4<br>ST 5<br>ST 6<br>ST 7                                                                                                 |                                                                                                  | Sycamore Red Maple River birch River birch River birch                                                                                                                                                              | Platanus occidentalis Acre rubrum Betula nigra Betula nigra Betula nigra                                                                                                                                                                                                                                    | 32<br>31<br>30<br>34<br>42                                                                                     | Fair/Good<br>Poor<br>Fair/Good<br>Poor<br>Fair                                                                                                                                 |                                                                                                      | TBR<br>TBR<br>TBS<br>TBR<br>TBR         |

Trees that do not have a plan # are either in poor health or are saved based on development layout Several different numbering systems were used to insure that different field crews did not duplicate numbers

Diameter at Breast Height Estimate of health of tree Tolerance to Disturbance

TRS: To Be Saved TBR: To Be Removed

# Index of Sheets:

| Sheet 1  | Cover Sheet                     |
|----------|---------------------------------|
| Sheet 2  | Notes & Details                 |
| Sheet 3  | Edelen Village South 1 (EVS-1)  |
| Sheet 4  | Edelen Village South 2 (EVS-2)  |
| Sheet 5  | Edelen Village South 3 (EVS-3)  |
| Sheet 6  | Edelen Village South 4 (EVS-4)  |
| Sheet 7  | Edelen Village South 5 (EVS-5)  |
| Sheet 8  | Edelen Village South 6 (EVS-6   |
| Sheet 9  | Edelen Village North 1 (EVN-1)  |
| Sheet 10 | Edelen Village North 2 (EVN-2)  |
| Sheet 11 | Edelen Village North 3 (EVN-3)  |
| Sheet 12 | Edelen Village North 4 (EVN-4)  |
| Sheet 13 | Edelen Village North 5 (EVN-5)  |
| Sheet 14 | Edelen Village North 6 (EVN-6)  |
| Sheet 15 | Edelen Village North 7 (EVN-7)  |
| Sheet 16 | Off-Site Sewer Alignment (OS-1) |

Park (P)

EVN-7 EVS-5 EVS-6 EVN-1 OS-1 OS-1 EVS-1 EVS-2

SCALE: 1" = 600'

SHEET LAYOUT

**EXISTING WETLANDS** ~~~~~~~ EXISTING TREELINE LIMIT OF DISTURBANCE VILLAGE BOUNDARY 100-YEAR FLOOD PLAIN EXISTING 2 FOOT CONTOUR **EXISTING 10 FOOT CONTOUR** PROPOSED CONTOUR 8" SEWER PROPOSED SEWER PROPOSED WATER MAIN PROPOSED STORM DRAIN PROPOSED TREE PRESERVATION EXISTING FOREST T.B.R. CLEARED FLOODPLAIN AREA TREE PROTECTION SIGNAGE TREE PROTECTION FENCE 2197 PROPOSED ROOT PRUNING SPECIMEN TREE SPECIMEN TREE SIGNAGE EXPANDED STREAM BUFFER

LEGEND

---- TPF ----- TPF ----

PREPARED FOR: **NVR MS Cavalier Preserve, LLC.** 8614 WESTWOOD CENTER DRIVE SUITE 900 VIENNA, VIRGINIA 22182

Take of hand 08/11/14 Leslie Wood Date Qualified Professional as per the 1991 Maryland Forest Conservation Act Issued July 1, 2004

Contract Purchaser

HISTORIC PISCATAWAY STREAM VALLEY PRESERVEAT PISCATAMAY EUGENE BURROUGHS JR. HIGH SCHOOL HARRY G. FERGUSON ADC 27TH EDITION PRINCE GEORGE'S COUNTY MAP NO. 30 GRIDS: J & K 12 VICINITY MAP SCALE: 1" = 2000'

## **GENERAL NOTES**

 Existing Zoning:
 This plan has been prepared in accordance with: Villages at Piscataway Basic Plan Villages at Piscataway Comprehensive Design Plan Comprehensive Design Plan Resolution Preliminary Plan 4-03027 Preliminary Plan Resolution

Conceptual Stormwater Management Plan

Other plan references:
 Specific Design Plan for Glassford Village
 Specific Design Plan for Twin Entry Ponds
 Specific Design Plan for Piscataway Road and Bailey's Pond

4. The site is located on Tax Map 142, Grid F-3.

SMA CD-160-1993 CDP-9306 PGCPB 94-98

PGCPB 03-122 TCP 1/09/94 Rev. 6-17-03 96-8003830

Property Owners Awareness Certificate

05

SDP-9804-01 SDP-9805 SDP-9806-01 Bailey's Pond

## REVISIONS

January 10, 2004 October 4, 2004 November 16, 2004 June 25, 2010 August 9, 2010

March 6, 2012 September 26, 2012

December 12, 2013

TCPII - 046 - 04 Scale: 12/29/04 Date 08/25/10 10/12 /12 Approved by KIF

M-NCPPC

Environmental Planning Section

APPROVAL TREE CONSERVATION PLAN

Sheet No. 17

I/We <u>NVR MS Cavalier Preserve</u>, <u>LLC</u> hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2. August 13, 2014 hereby acknowledge that we are aware of this Type 2 Tree Conservation Plan (TCP2) and that we understand the requirements as set forth in this TCP2. Prince George's County Planning Department

June 10, 2013 January 16, 2014 August 11, 2014

Date: Date:

Checked

Project/File No.

PROJECT NAME: EDELYN VILLAGE, NORTH & SOUTH PROJECT NUMBER: SDP-0318 For Conditions of Approval see Site Plan Cover Sheet or Approval Sheet Revisions Listed Below Apply to This Sheet Approvalor Reviewer's Revision = Initials Certification Date Approval Date 6 24 2004 1 4 2005

M-NCPPC APPROVALS

2. The Department of Environmental Resources (DER) must be contacted prior to the start of any work on the site to address implementation of Tree Conservation measures shown on this Plan.

3 Property owners shall be notified by the Developer or Contractor of any Woodland Conservation Areas (Tree Save Areas, Reforestation Areas, Afforestation Areas, or Selective Clearing Areas) located on their lot or parcel of land and the associated fines for unauthorized disturbances to these areas. Upon the sale of the property the owner / developer or owners representative shall notify the purchaser of the property of any Woodland Conservation Areas.

4. All appropriate bonds will be posted with the Building Official prior to the issuance of any permits. These bonds will be retained as surety by the Building Official until all required activities have been satisfied.

5. The location of all Tree Protective Devices (TPD's) shown on this Plan shall be flagged or staked in the field prior to the pre-construction meeting with the Sediment and Erosion Control Inspector from DER. Upon approval of the flagged or staked TPD locations by the Inspector, installation of the TPD's may begin. TPD installation shall be completed prior to installation of initial Sediment Controls. No cutting or clearing of trees may begin before final approval of TPD installation.

7. Since work on this project will be initiated in several phases all TPD's required for a given phase shall be installed prior to any disturbance within that phase of work.

8. Woodland Conservation - Tree Save Areas shall be posted as shown at the same time as Tree Protective Device installation.. These signs shall remain in place for a period of two (2) years.

## General Type II T.C.P. Notes

#### **NARRATIVE**

This Type II Tree Conservation Plan has been prepared for the 169.92 acre Edelen Village North and South and Park Property which is part of the Preserve at Piscataway development located in Prince George's County, Maryland. The plan identifies 46.77 acres of existing forest to be cleared for the placement of infrastructure and proposed single family residential housing. 29.68 acres of forest will be preserved. The remaining Woodland Conservation that is required will be addressed on future TCPII's for The Preserve project. The goals of forest preservation at the Preserve at Piscataway property include:

-provide a biofiltering buffer for the existing wetlands -provide a visual screen for the adjacent residential communities

-preserve wildlife habitat

#### -protect steep slopes **GENERAL NOTES**

1. This reforestation plan is provided in accordance with the requirements of the Prince George's County Woodland Conservation and Tree Preservation Acts (CB-106-1992 and CB-107-1992).

2. These Type II plans are to be used for Tree Conservation purposes only. 3. No tree cutting or clearing shall take place on this site without the expressed written consent of the Prince George's County

Planning Board, its designee, or the approval of this Type II Tree Conservation Plan (TCP). 4. The Prince George's County Department of Environmental Resources (DER) is in charge of enforcement of the Tree Conservation Plan. Any violation of the approved Type II TCP may result in the issuance of a stop work order and/or a mitigation fee of \$1.50 per square foot of woodland area destroyed unless otherwise agreed to by both DER and the Maryland-National Capital Park & Planning Commission (M-NCPPC).

TREE PROTECTION 1. Following approval of the Type II TCP and prior to construction, the Limits of Disturbance (LOD) will be marked in the field.

2. The Owner's representative will hold a pre-construction meeting before any grading or clearing activities. This meeting will include the construction manager, the chief equipment manager and operator, a representative of the Department of Environmental Resources Permits and Review Division/Inspection & Code Compliance Section (301-731-8790), and any other personnel involved in construction activities within 100 feet of the Limits of Disturbance (LOD). During this meeting, the LOD will be inspected and the location of all tree protection devices will finalized. Adjustments to the LOD may be made at this time. In addition, the following items will be covered by the owner's representative: -the importance and overall goal of the Tree Conservation Program

-the critical role of construction personnel in the success of the Tree Conservation Program

#### -the reasons for tree protection devices -construction methods to ensure the protection of Woodland Conservation Areas

3. Tree Protection Devices for this site will consist of orange safety fence with temporary tree protection signs. These devices will be installed along the LOD boundary prior to any disturbance or clearing activity. Typical details and installation methods for these devices appear on this sheet. Tree protection signs shall be freestanding and not attached in any fashion to existing trees. The installation of tree protection signs and tree protection devices is the responsibility of the general contractor.

4. No equipment, vehicles, machinery, waste, or construction materials shall be stored or dumped within the Woodland Preservation Areas. Moreover, no disturbance to these areas shall be allowed. In the event of a violation of this approved Type II TCP, fines may be levied and/or enforcement action taken by the Prince George's County Department of Environmental Resources as specified above.

5. The general contractor shall provide a "WASH-OUT" area for concrete trucks on site. This area shall be selected so that no run-off from this area may enter the Woodland Conservation Areas. The location of this "WASH-OUT" area shall be identified by the contractor during the pre-construction meeting.

6. The owner's representative shall monitor the general contractor's construction from time to time to ensure the proper protection of the Woodland Conservation Areas and adherence to these plans and specifications. The owner may issue a "Stop Work Order" if, in the opinion of his representative, the general contractor is exercising procedures that are detrimental to the vitality of the trees within the Woodland Conservation Areas. At that time, the County Inspector shall determine if any trees have been damaged beyond repair. If the contractor has damaged trees beyond repair, then the general contractor shall be responsible for all forest mitigation required by the Prince George's County Department of Environmental Resources.

7. All trees to be removed within 50 feet of designated Woodland Conservation Areas shall be felled away from Woodland

Conservation Areas to avoid any damage to preserved trees. The stumps of trees removed within this 50 foot zone shall be ground out with a stump grinder or other method in order to minimize damage to root systems of trees to be preserved. This work shall be completed by a Maryland Licensed Tree Expert.

8. Unless otherwise approved by Prince George's County, Tree Protection Devices shall be maintained in place until construction completion and final inspection by the Department of Environmental Resources Permits & Review Division 9. If damage to woodland preservation areas is found during final inspection, the owner may be required to perform the

-stress reduction measures (e.g., root pruning)

## -tree or limb removal

#### -replacement planting SPECIMEN TREES

Specimen Tree 2430 requires root pruning because of its proximity to the proposed LOD. The critical root zone has been calculated using a formula applicable to trees existing either in a forested and an isolated environment. The formula used for calculating the critical root zone for specimen trees located in a forested area is; one inch of trunk diameter at breast height equals a one foot radius of the critical root zone. The formula used for calculating the critical root zone for isolated specimen trees is; one inch of trunk diameter at breast height equals a one and one-half foot radius of the critical root zone

## SEQUENCE OF STRESS REDUCTION MEASURES

1. These protection measures apply to specimen tree 2430. 2. During the flagging of the Limits of Disturbance, every possible step shall be taken in the field to avoid disturbance to the CRZ of the above listed specimen tree. If avoidance of specimen tree 2430 is determined to be impossible, then a licensed arborist shall evaluate the benefit of root pruning considering the condition of the tree. Root pruning shall be conducted for specimen 2428, 2442, & 2427 only if recommended by the arborist.

3. Root pruning and any other stress reduction measures recommended during the pre- or post-construction meetings shall be conducted by a Maryland Licensed Tree Expert.

## General Type II T.C.P. Notes Con't

#### 4. Root pruning:

A. Trench the area 1' beyond the LOD and excavate approximately 24 inches deep with a 4-6 inch trencher. Refer to this sheet for the root pruning detail and notes.

B. Immediately after trenching and cutting through all roots in the trench area, prune the root so as to provide good clean cuts. Backfill the trench with the excavated material or other high organic soil. C. Water the backfilled trench immediately, until trench overflows. Settled areas should be filled with backfill until level

with the existing ground. D. Apply a 3" deep, 3' wide band of mulch to the tree's critical root zone at the limit of forest clearing (adjacent to the

5. Install tree protection devices per these plans.

LONG TERM MANAGEMENT PLAN FOR WOODLAND PRESERVATION AREAS

1. The objective of woodland preservation is to allow the forest community to develop naturally with little or no interference by man. Activities within these areas shall be limited to passive recreation.

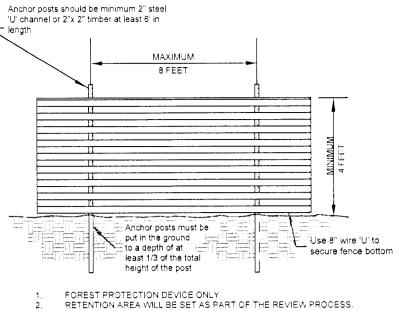
2. Any disturbance to these areas following construction must first be approved by Prince George's County Planning Director. Cutting or clearing of these areas without approval shall be subject to a \$1.50 per square foot mitigation fee. 3. Upon the sale of each lot, the owner/developer or the owner's representative shall be responsible for notifying the purchaser of any Woodland Conservation Areas and the associated fines for unauthorized disturbances to these areas.

#### Tree Preservation Areas

| Label | Acreage (±) | Label | Acreage (±) |
|-------|-------------|-------|-------------|
| Α     | 8.41        | E     | 4.31        |
| В     | 0.88        | F     | 7.65        |
| С     | 0.00        | G     | 0.85        |
| D     | 3.66        | Н     | 3.65        |
|       |             |       |             |

29.41 acres (±)

#### Type 2 (Temporary) Tree Protection Fence



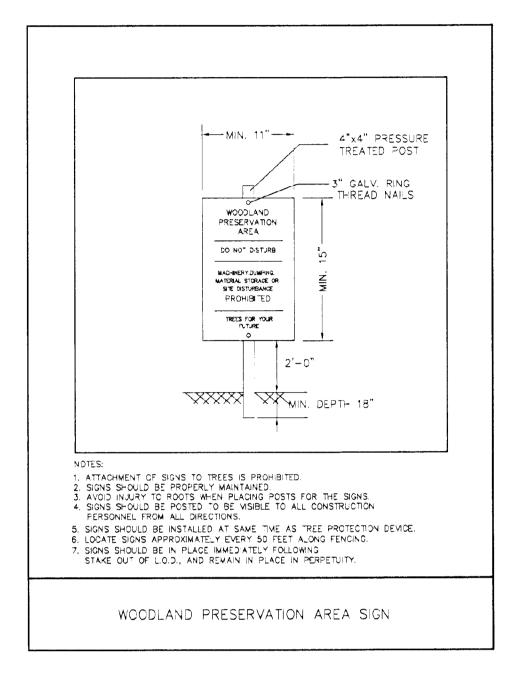
Tree Protection Fence

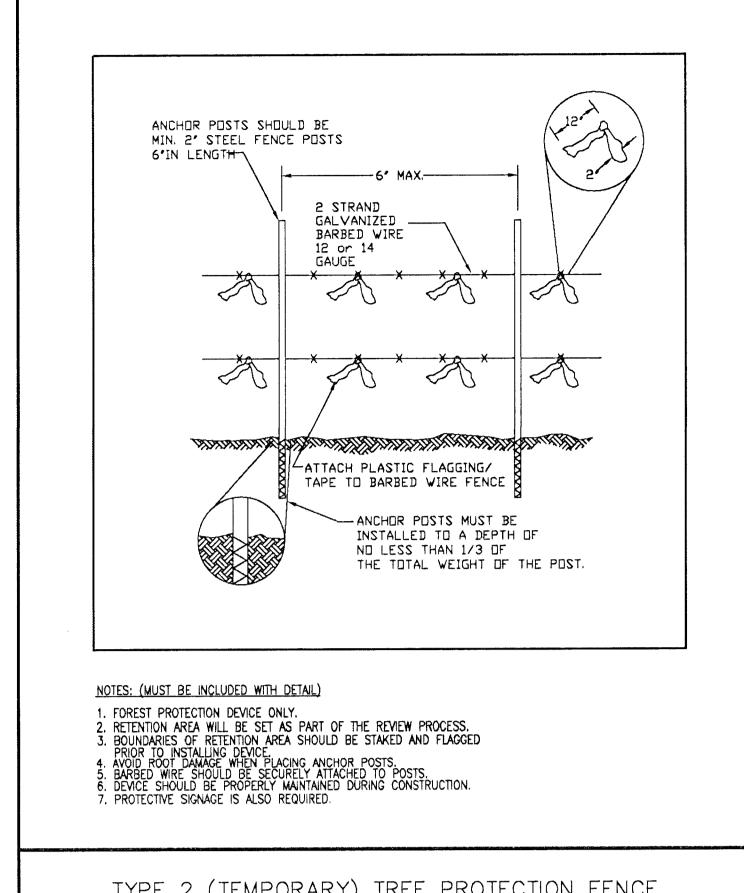
Blaze Orange Plastic Fence

BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE. ROOT DAMAGE SHOULD BE AVOIDED. PROTECTIVE SIGNAGE MAY ALSO BE USED.

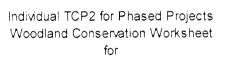
DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

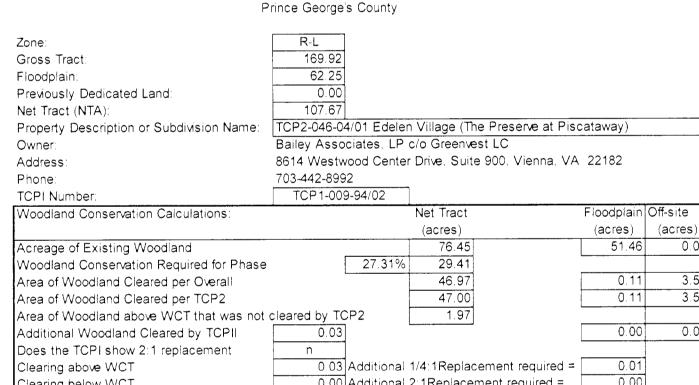
SIGNAGE Forest Protection Signage





TYPE 2 (TEMPORARY) TREE PROTECTION FENCE FOR REFORESTATION AREAS





| Total Woodland Conseravion Required for this TCP2:           | 29.42   |   |     |
|--------------------------------------------------------------|---------|---|-----|
| Woodland Conservation Provided:                              | (acres) |   |     |
| Woodland Preservation                                        | 29.41   |   |     |
| Reforestation / Replacement                                  | 0.00    |   |     |
| Afforestation                                                | 0.00    |   |     |
| Area approved for fee-in-lieu                                | 0.00    | = | 0.0 |
| Credits Received for Off-site Mitigation on another property | 0.00    |   |     |
| Off-site Mitigation provided on this property                | 0.00;   |   |     |
| Total Woodland Conservation Provided                         | 29.41   |   |     |

| Total Woodland Conservation Provided   | 29.41                               |
|----------------------------------------|-------------------------------------|
| Area of net tract woodland not cleared | 29.45 acres                         |
| Prepared by:                           | Leslie Wood                         |
| Address                                | Environmental Systems Analysis, Inc |
|                                        | 162 West Street, Annapolis, MD 2140 |
| Phone                                  | 410-267-0495                        |
| License                                | Qualified Professional from DNR     |

#### Woodland Conservation Worksheet for Prince George's County, Maryland

| R-L    | L-A-C | Totals |                                          |
|--------|-------|--------|------------------------------------------|
| 858.74 | 19.98 | 878.72 | Include acreages only in columns         |
| 85.67  | 0.00  | 85.67  | for which there is a corresponding zone. |
| 0.00   | 0.00  | 0.00   |                                          |
| 773.07 | 19.98 | 793.05 |                                          |

Net Tract (NTA): Property Description or Subdivision Name: The Preserve at Piscataway -- Overall Worksheet Break-even Point (preservation acres) = 291.88 Acres of Net Tract clearing permitted w/o reforestion=

Existing Woodland in Floodplain (acres) Woodland Conservation Threshold (NTA) = 196.04 Smaller of a or c Woodland above WCT (d) Plan Number: (This must be completed for each phase) TCP Revision Number: TCP Approval Date: Plan Phase or Name: SDP Revision Number: SDP Approval Date:

SDP Certification Date: SDP Certification Status: Total Area in the application (acres) Floodplain area in this application (acres) Net Tract area in the application (acres) Woodland on the Net Tract for this phase (acres) Woodland in the Floodplain for this phase Woodland Cleared on Net Tract for this phase Woodland Cleared in Floodplain for this phase Off-site Woodland Clearing (1:1 Off-site Woodland Preservation/Regeneration provided on this property Cummulative acres of Net Tract Woodland cleared (e) Cummulative acres of Floodplain woodland cleared

Smaller of d or e Woodland Clearing below WCT Replacement for clearing above the WCT (0.25:1) Replacement for clearing below the WCT (2:1) Afforestation Threshold (AFT) = Cumulative Woodland Conservation Required

Gross Tract:

Previously Dedicated Land:

Floodplain:

Woodland Conservation Provided: Preservation Afforestation/Reforestation Natural Regeneration Area approved for fee-in-lieu

Off-site Afforestation/Reforestation provided on this property Total Woodland Conservation Provided Woodland saved on this phase but not counted Existing Net Tract Woodland in later phases

Credit for Off-site Mitigation on another property

Off-site Preservation provided on this property

Minimum Woodland Conservation Required (acres) 35% of Net Tract Woodland Conservation Provided Surplus Natural Regeneration for Woodland Bank

PREPARED FOR:

**NVR MS Cavalier Preserve, LLC.** 8614 WESTWOOD CENTER DRIVE

SUITE 900

VIENNA, VIRGINIA 22182

Woodland Conservation Requirement Calculations: Existing Woodland on Net Tract (acres) Twin Entry Pisc. Rd Edelen Danville Lusby Bailey Open Space II-046-04 II-048-04 II-068-04 II-001-05 II-044-07 4/29/2004 2/16/1999 6/15/2005 4/4/2012 12/28/2004 12/28/2004 4/10/2006 3/5/2008 SDP-9804 | SDP-9805 | SDP-9806 | SDP-0318 | SDP-0320 | SDP-0401 | SDP-0319 | SDP-0608 Pending Approved Pending In Review Approved Approved Pending SDP Approval Status Pending Certified Pending In Review Certified Certified Pending 85.67 793.05 560.89 74.72 244.30 46.58 4.81 198.69 198.88 199.16 214.42 234.94 256.84 257.16 265.10 Latest phase indicates cumulative requirement through that phase of work 276.83 0.00 81.32

0.00 0.00 0.00 0.00 0.00 0.00

08/11/14

Date

7.00 7.19 15.40 44.81 75.07 96.99 97.04 358.15

543.03 542.07 532.75 456.3 315.04 204.89 204.54 179.96

Qualified Professional as per the

1991 Maryland Forest Conservation Act

Issued July 1, 2004

Leslie Wood

M-NCPPC Prince George's County Planning Department Environmental Planning Section APPROVAL TREE CONSERVATION PLAN TCPII - 046 - 04

0.00

358.15

277.57

277.57

12/29/04 JLS Date Approved by 08/25/10 KIF 10/12 /12 10/01/14 05

Scale: Project/File No.

\_\_\_\_

**REVISIONS** 

November 16, 2004

September 26, 2012

December 12, 2013

Checked

January 16, 2014

August 11, 2014

Date:

Date:

January 10, 2004

October 4, 2004

June 25, 2010

August 9, 2010

March 6, 2012

June 10, 2013

Sheet No. 2 of 17

