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Detailed Site Plan Alternative Compliance

DSP-04040-02
AC-10029

Application	General Data	
Project Name: Waterford Location: On the north side of Woodmore Road, approximately 2,000 feet east of its intersection with Pleasant Prospect Road. Applicant/Address: Washington Management Development 2812 Chesterfield Place NW Washington, DC 20008	Planning Board Hearing Date:	12/02/10
	Staff Report Date:	11/21/10
	Date Accepted:	06/28/10
	Planning Board Action Limit:	Waived
	Plan Acreage:	261.19
	Zone:	R-A
	Dwelling Units:	N/A
	Gross Floor Area:	N/A
	Planning Area:	74A
	Tier:	Developing
	Council District:	06
	Election District	07
	Municipality:	N/A
	200-Scale Base Map:	205NE11

Purpose of Application	Notice Dates	
At the Planning Board hearing of October 7, 2010, the applicant requested an indefinite continuance in order to revise the application. Subsequently, this case has been rescheduled to be heard on December 2, 2010. The addition of earthen berms within a previously approved afforestation area.	Informational Mailing:	05/28/10
	Acceptance Mailing:	06/30/10
	Sign Posting Deadline:	09/07/10

Staff Recommendation		Staff Reviewer: Meika Fields Phone Number: 301-780-2458 E-mail: Meika.Fields@ppd.mncppc.org	
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
	X		

THE MARYLAND-NATIONAL CAPITAL
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Detailed Site Plan DSP-04040-02
Alternative Compliance AC-10029
Type II Tree Conservation Plan TCPII/152/04-05
Waterford

Urban Design staff has completed its review of the subject application and appropriate referrals. The following evaluation and findings lead to a recommendation of APPROVAL with conditions, as described in the recommendation section of this report.

EVALUATION

The detailed site plan was reviewed and evaluated for conformance with the following criteria:

- a. The requirements of the Zoning Ordinance in the Residential-Agricultural (R-A) Zone.
- b. The requirements of Detailed Site Plan DSP-04040 for Waterford.
- c. The requirements of Preliminary Plan of Subdivision 4-03111 for Pleasant Prospect.
- d. The requirements of the *Prince George's County Landscape Manual*.
- e. The requirements of the Prince George's County Woodland and Wildlife Habitat Conservation Ordinance and the Tree Canopy Coverage Ordinance.
- f. The requirements of Aviation Policy Areas per Section 27-548.32 of the Zoning Ordinance.

FINDINGS

Based upon the analysis of the subject application, the Urban Design staff recommends the following findings:

1. **Request:** The subject application is for approval of an earthen landform or berm in a previously approved afforestation area located along the eastern property line adjacent to a public utility right-of-way.

2. **Development Data Summary**

Zone(s)	R-A
Use(s)	Residential
Acreage	261.19
Net tract area	232.56
Area within 100-year floodplain	28.63
Lots	126 lots and 4 parcels
Dwelling Units:	
Detached	126
Minimum Lot Area	43,560 sq. ft.

3. **Location:** The site is in Planning Area 74A, Council District 6. More specifically, the property is located on the south side of US 50 (John Hanson Highway), on the north side of Woodmore Road, approximately 2,000 feet east of its intersection with Pleasant Prospect Road.
4. **Surrounding Uses:** A Potomac Electric Power Company (PEPCO) right-of-way, Freeway Airport, undeveloped farmland, and large single-family lots within the Woodmore Subdivision surround the subject property.
5. **Previous Approvals:** The area included in this application was previously the subject of Pre-Preliminary Plan of Subdivision P-03011; Preliminary Plan of Subdivision 4-03111 and Type I Tree Conservation Plan TCPI/72/03; and Detailed Site Plan DSP-04040 and Type II Tree Conservation Plan TCPII/152/04. The Planning Board's action of approval for Preliminary Plan 4-03111 is found in Resolution No. 04-24, adopted on March 24, 2004; and for Detailed Site Plan DSP-04040 in Resolution No. 05-61, adopted on March 3, 2005. The District Council took action on DSP-04040 on September 12, 2005 and affirmed the Planning Board's Decision with additional conditions.

An -01 revision to DSP-04040 was reviewed at staff level for architecture on Lot 100, and an entrance monument, security cameras, and a meter pedestal where added under an -03 revision to the previously approved detailed site plan. Various revisions to the Type II tree conservation plan (TCPII) were also reviewed at staff level.

The current revisions, DSP-04040-02 and TCPII/152/04-05, are requesting approval for installation of four, 10- to 15-foot-high vegetated berms to be located along the PEPCO right-of-way from the northeastern corner of the property extending approximately 270 linear feet to the southeastern corner of Lot 28, Block A. Installation of entrance monuments, a security camera, and a meter pedestal are also included as a part of the TCPII revision because these elements, although previously shown on DSP-04040-03 and approved, were not included on previously approved TCPII plans.

6. **Design Features:** The applicant proposes earthen landforms or berms as a method to provide additional visual screening from the PEPCO pylons and transmission wires within the PEPCO right-of-way located adjacent to the site's easternmost lots. The proposed berms for visual screening are designed to integrate with the approved noise mitigation berm that is mostly constructed along US 50, which borders the northern portion of the site.

No changes are proposed on the detailed site plan in regard to the noise mitigation berm.

In an e-mail dated September 1, 2010, John Pyles to of Washington Management Development to Meika Fields of the Prince George's County Maryland-National Capital Park and Planning Commission (M-NCPPC) Development Review Division, the applicant further describes the purpose of the revision as follows:

“The lots which are the subject of the DSP/TCP Revision request are affected by their proximity at the northeast corner of the subdivision to Route 50, several hundred feet there from by proximity to Freeway Airport and for the entire length by the PEPCO high transmission wires, including very large structural pylons. At the northeast corner traffic visibility and noise negatively impacts several of the lots as does a large PEPCO pylon and an airport tower. There are other PEPCO pylons located along the subject lots. The purpose of the berm and request for revision is to provide visual screening from the dilatory impacts of Route 50, the pylons and the airport tower, as well as to complete noise and visual barriers along Route 50 at the northeast corner and approximate PEPCO right-of-way area impacted. The maximum berm height of 12'-15' will be located at these areas of maximum impact.”

Initially, the applicant submitted a design for one berm with a continuous height along the PEPCO right-of-way. In response to concerns raised about the design of the landform not relating to a natural landscape, the applicant revised the design concept and segmented the berm into four parts that have a more geomorphic shape and undulate in height.

The submitted DSP revision depicts four proposed berms covering a distance of approximately 2,900 feet in length. For simplicity in referencing the landforms, the berms are discussed as Berms A, B, C, and D, with the northernmost berm being Berm A.

Berm A is located on Lots 56 and 55, and is 390 feet in length. The berm measures 13.5 feet from the site's existing grade to the highest point of the berm. Berm B is located almost wholly on Lot 46 with a few contours crossing onto Lots 45 and 37. Berm B is 565 feet in length and has a maximum depicted height of 15 feet from the existing grade. Berm C is proposed on Lots 30 and 29 with a length of 578 feet and a maximum depicted height of 9.5 feet. Berm D, the southernmost berm, is proposed on Lots 28 and 27. This berm is 465 feet in length and 13 feet in height. As designed, Berm A will offer some additional site buffering from US 50 and two pylon towers, and Berms B, C, and D will provide some screening of six additional pylon towers located east of the site.

While none of the lots affected by the proposed berms have been sold, as stated in the applicant's submitted affidavit, the design of the berms has been reviewed with consideration to the experience of future homeowners. The applicant has been encouraged to minimize characteristics that could make the berms an unnecessary nuisance to future owners of the affected lots. The berms should not create an undue maintenance challenge to homeowners. The berm design should maximize level side and rear yards to the fullest extent possible. Additionally, the berms should not be designed at heights that block natural sunlight onto the single-family lots, or appear overwhelmingly unnatural in form.

The average slope proposed for the berms is approximately 30 percent or 3:1. Naturally sloping areas on the site are 13 percent. A sudden change in slope in the landscape appears unnatural to the eye in most settings. To create a berm that fits into its landscape, staff recommends that the slopes on the west side of the berms, the side facing the single-family homes, are reduced so that

the berms appear more natural from the single-family lots. The proposed contours should also vary in slope. The applicant should revise the slopes on the west side of the berms to be 4:1 or less. Slopes on the east side of the berm, the side facing the PEPCO right-of-way, may be as steep as permitted by the Prince George's County Building Code.

To reduce maintenance challenges that the slopes of the berms may pose to future homeowners of these individual lots, the applicant proposes to extend an on-site afforestation area to include the full extent of the berms. Afforestation areas are un-mowed areas planted with a variety of seedlings and smaller caliper trees that will develop into woodland. The plant materials proposed in the afforestation area will aid in stabilizing the slopes of the berms and, once planting maturity is reached, the berms will take on a more natural appearance.

Lots affected by the berms should be provided a rear yard area of at least 40 feet between the proposed house locations and the base of the berms. The rear yard should be one that is largely level, as permitted by existing site conditions, and allowing 15 feet for the slopes to connect to grade. The submitted site plans indicate that Lots 56, 46, and 27 have a rear yard depth slightly less than 40 feet between the proposed houses and the base of the berms. The building footprints shown on the site plan represent houses between 5,800 to 8,600 square feet. Staff recognizes that the square footages and placement of the individual homes on lots in Waterford are subject to change; therefore, prior to building permit the lots should be reviewed for adequate side and rear yard depths described in the below recommended note. The following note should be placed on the site plan:

“Berms for visual screening will be located within an afforestation area on Lots 27, 28, 29, 30, 37, 45, 46, 55, and 56 of Block A. Forty-foot rear yard depths and twenty-foot side yard depths are required between the proposed houses and the base of the berms/afforestation area. Rear yards adjacent to these berms shall be largely level, as permitted by existing site conditions, and allowing for minimal slopes in 15 feet of the yard where the base of the berms tie into grade.”

There is no evidence that the heights of the berms will have any detrimental effect on natural sunlight to the lots. Any revision to the design of the berms, including extensions or increased heights in the field, will require a revision to the detailed site plan.

The subject subdivision contains floodplain, areas of steep slopes with highly erodible soils, and wetlands. An important issue for this plan revision is appropriate sediment and erosion control measures, and storm water management during the construction of the berm for the protection of sensitive environmental features within and nearby the site; therefore, the subject application was referred to the Environment Planning Section for additional analysis and comment.

COMPLIANCE WITH EVALUATION CRITERIA

7. **Zoning Ordinance:** The subject application has been reviewed for compliance with the requirements in the R-A (Rural Residential) Zone. The subject site is in compliance with the requirements of Section 27-426 of the Zoning Ordinance for the R-A Zone.
8. **Detailed Site Plan DSP-04040:** Detailed Site Plan DSP-04040 was approved by the District Council on September 12, 2005 with 24 conditions. The detailed site plan revision is subject to all of the previous conditions of approval. The following warrant discussion:

5. The following note shall be placed on the final plat:

“All lots in Waterford that back up to US 50 are provided noise mitigation through the construction of berms and a noise barrier. On each individual lot, the property owner shall allow reasonable homeowners maintenance of the berms and noise barriers.”

Comment: The subject DSP revision will be an extension of the previously approved noise mitigation berms and an addition of visual screening berms. Lots affected by the berm additions (Lots 27, 28, 29, 30, 37, 45, 46, 55, and 56 of Block A) should additionally be offered some homeowners association assistance with the maintenance of the berms, which are designed as a benefit to the Waterford subdivision as a whole, as necessary.

7. Prior to certificate approval of the detailed site plan, the TCPII shall be revised as follows:

- i. Fill in the blank in the Afforestation/Reforestation Agreement on Sheet 14 to identify the party responsible for the five required annual field inspections of these woodland treatment areas.**

8. The TCPII shall be approved prior to final plat. All approved afforestation areas shall be placed in conservation easements at time of final plat.

Comment: These two TCPII related conditions were addressed during the review and approval of the original DSP-04040 and prior to final plat approval; however, verification of several afforestation areas has been provided subsequent to the original approval of DSP-04040. This information should be added to Sheet 14 of the TCPII as a follow-up to Condition 7(i) above.

Because several revisions to the tree conservation plan have been approved at staff level subsequent to the original approval, on which the recorded plats were based, and because the revisions currently under review propose to further alter the afforestation areas on-site, a plat of correction should be filed that reflects the afforestation areas as approved with this DSP revision.

Recommended Condition: Prior to signature approval of the DSP, Sheet 14 of the TCPII shall be revised to document the results of all afforestation survival checks that have been performed to date including the dates, the responsible party, and the afforestation area numbers.

Recommended Condition: Prior to the release of a grading permit for the proposed berms, plats of correction must be recorded in the land records that reflect the limits of afforestation as shown on TCPII/152/04-05, signed as part of the DSP-04040-02 approval.

Recommended Condition: All lots in Waterford that back up to US 50 are provided noise mitigation through the construction of a berm and a noise barrier. Additionally Lots 27, 28, 29, 30, 37, 45, 46, 55, and 56 of Block A are provided visual screening berms. On each individual lot, the property owner shall allow reasonable homeowners association maintenance of the berms and noise barriers, as needed.

19. Prior to signature approval, the plans shall be revised to provide the following information:

- d. The plans shall be revised to demonstrate conformance to Sections 4.1, 4.6,**

and 4.7 of the *Landscape Manual* in accordance with Finding 8.

Comment: Although DSP-04040 has since received signature approval, during review of the subject revision it became apparent that one condition required to be met prior to signature approval of the original plans had not been met. With this review, the applicant is required to come into conformance with all previous conditions of approval including those required prior to signature approval of DSP-04040.

Prior Condition 19(e) refers to previous Finding 8 from PGCPB Resolution No. 05-61, which states:

Section 4.6 requires the minimum of a 50-foot-wide landscape strip along the right-of-way of an arterial roadway, US 50. The plans show the area planted in afforestation; however, the plans must also demonstrate that the requirements of the *Landscape Manual* in regard to the size of plant material and the quantities of plant material are being met. There is sufficient space on the plan to provide the plant material.

In regard to Section 4.7, the property is adjacent to a public utility use, the PEPCO right-of-way that contains overhead wires. The public utility use is categorized as a medium intensity use and a “C” bufferyard is required. The plans currently show a bufferyard of afforestation and existing woodland. Where woodland does not exist, the plans must be revised to demonstrate conformance to the *Landscape Manual* in regard to size of plant material as well as quantity. The property is also adjacent to a townhouse subdivision within the Woodmore development. The plans currently show afforestation but must also demonstrate conformance to the *Landscape Manual*. The plans must be revised prior to signature approval to include the required schedules from the *Landscape Manual* and to show the planting materials on the plans.

Most of the bufferyards discussed in the above finding are areas approved for afforestation. Because afforestation areas are not standard bufferyards, as described in the Landscape Manual, the applicant has requested alternative compliance to achieve a determination that the bufferyards proposed through providing new forests will be equal to or better than bufferyards required by the Landscape Manual.

The Alternative Compliance Committee’s recommendations are as follows:

Alternative compliance is requested from Section 6.2(b)(3), Landscape Specifications, in conjunction with 4.7, Buffering Incompatible Uses, along the eastern and western property lines, and from Section 4.6, Buffering Residential Development from Streets, along US 50.

Location

The subject property is located on the south side of US 50 and on the north side of Woodmore Road, approximately 2,000 feet east of its intersection with Pleasant Prospect Road.

Background

The underlying case is a Detailed Site Plan, DSP-04040-02, for 126 single-family detached lots and an existing historic site. The plans propose to create landforms,

approximately 10–15 feet in height, with afforestation that will screen the adjacent transmission lines along the eastern property line. The plans also propose to adjust the size and number of plant materials along US 50 and the western property line.

The Waterford property measures approximately 261.19 acres and is zoned Residential-Agricultural (R-A). The site is bounded to the north by US 50, to the west by a single-family detached development and a townhouse development in the R-A Zone, to the south by Woodmore Road, and to the east by Potomac Electric Power Company (PEPCO) utilities.

The site is subject to Section 4.7, Buffering Incompatible Uses, and Section 4.6, Buffering Residential Development from Streets, of the *Prince George's County Landscape Manual*. The applicant has filed this request for alternative compliance from Sections 4.7 and 4.6 to allow the required landscaping to be met through afforestation which proposes shade trees planted at a reduced caliper from that which is required by Section 6.2 of the *Prince George's County Landscape Manual*.

REQUIRED: 4.7 Buffering Incompatible Uses, along the eastern property line, adjacent to the PEPCO utility.

Length of bufferyard	6,182 feet
Building setback	40 feet
Landscape yard	30 feet
Fence or wall or berm	Yes (partial berming)
Percentage of required bufferyard occupied by existing woodland	37.8%
Plant units (120 per 100 l.f.)	3,579

PROVIDED: 4.7 Buffering Incompatible Uses, along the eastern property line, adjacent to the PEPCO utility.

Length of bufferyard	6,182 feet
Building setback	40+ feet
Landscape yard	30+ feet
Fence or wall or berm	Yes (partial berming)
Plant units (Afforestation list #1)	7,515

REQUIRED: 4.7 Buffering Incompatible Uses, along the western property line, adjacent to the townhouse development.

Length of bufferyard	918 feet
Building setback	20 feet
Landscape yard	10 feet
Fence or wall or berm	No
Percentage of required bufferyard occupied by existing woodland	9.5%
Plant units (40 per 100 l.f.)	332

PROVIDED: 4.7 Buffering Incompatible Uses, along the western property line, adjacent to the townhouse development.

Length of bufferyard	918 feet
Building setback	20+ feet
Landscape yard	10+ feet
Fence or wall or berm	No
Plant units (Afforestation list #3)	2,955

REQUIRED: 4.6 Buffering Residential Development from Streets, along US 50

Length of bufferyard	3,092 feet
Landscaped yard width	75 feet (for freeway and expressway)
Fence or wall	Yes
Plant materials (with 50% reduction for wall)	124 shade trees 310 evergreen trees 743 shrubs

PROVIDED: 4.6 Buffering Residential Development from Streets, along US 50

Length of bufferyard	3092 feet
Landscaped yard width	75+ feet (for freeway and expressway)
Fence or wall	Yes
Plant materials (Afforestation list #9)	659 shade trees 229 evergreen trees 95 ornamental trees 0 shrubs

Justification of Recommendation

The *Prince George's County Landscape Manual*, Section 6.2, requires the minimum size for planting shade trees to be 2½ to 3 inches in caliper or 12 to 14 feet in height. The applicant is proposing planting shade trees at 1 to 1½-inch caliper in the required landscaped yards for Section 4.7 along the eastern and western property lines and Section 4.6 along the northern property line but are planted at least double the rate of shade trees normally required. The landscaped yard plantings are dually recognized as afforestation areas. These afforestation areas extend beyond the required width of the landscaped yards, providing a wider buffer. Additionally, it should be noted that the 1 to 1½-inch caliper proposed by the applicant is more generous than the standard seedling size requirement for afforestation plantings.

In regard to Section 4.6, along US 50, the applicant is also proposing additional shade and ornamental trees in lieu of 743 shrubs and 81 of the 310 required evergreen trees. The *Prince George's County Landscape Manual* requirement of shrubs and evergreen trees has been converted to shade trees in order to conform closely with afforestation requirements in this area.

The Alternative Compliance Committee finds that providing 1 to 1½-inch caliper shade trees at a minimum rate of two per every required 2½ to 3-inch caliper shade tree, providing wider landscaped/afforestation yards, and replacing required shrubs and evergreen trees with a greater amount of equivalent plant units conducive to the creation of woodland, is equal to or better than normal compliance with the *Prince George's County Landscape Manual*.

Recommendation

The Alternative Compliance Committee recommends approval of alternative compliance for the Waterford property pursuant to Section 4.7 of the *Prince George's County Landscape Manual* in the areas along the eastern and western property lines and Section 4.6 along US 50.

- 24. All fencing and berms separating the project from surrounding residential property shall be maintained in perpetuity by the Waterford homeowners' association.**

Comment: The berms subject to this proposal do not separate the project from surrounding residential development.

9. **Preliminary Plan of Subdivision 4-03111:** The detailed site plan is in conformance with approved Preliminary Plan 4-03096. The proposed landforms affect few prior conditions of approval. The following conditions warrant discussion.

- 4. A limited detailed site plan shall be approved by the Planning Board or its designee prior to approval of building permits for Lots 27-33 and 46-53 to address noise mitigation measures, including the location and design of the noise barrier along the south side of US 50, and the building shell design shall be approved by the Planning Board. A Phase II Noise Study shall be included as part of the DSP application submittal package and shall include specific noise attenuation measures based on the site's topography and the proposed locations of houses.**

Comment: The noise barrier was previously approved under DSP-04040 in accordance with the above condition and it is currently under construction on the site. The noise barrier was approved at six feet in height along US 50 and higher in some areas to provide effective mediation. The subject DSP revision proposes to expand upon the previously approved noise mitigation berms to continue the landforms along the eastern portion of the site from US 50 to the southeastern corner of Lot 28, Block A.

10. **The Prince George's County Landscape Manual:** The proposed detailed site plan revision is exempt from any additional requirements of the applicable sections of the Landscape Manual because the berm construction does not involve either an increase in gross floor area of any existing building or a change of use from a less intensive to a more intensive use category as defined in the Landscape Manual.

As discussed in Finding 8, the applicant is required to conform to each previous condition of approval, including those that relate to Landscape Manual conformance. The proposed berms are located within a required buffer for incompatible uses along the eastern property line. Pursuant to Section 4.7 of the Landscape Manual, five-foot-high berms within a buffer area may reduce the plant materials required in that area by 50 percent.

The addition of the berms has no effect on the required plant densities within the afforestation area.

11. **The Woodland and Wildlife Habitat Conservation Ordinance and the Tree Canopy Conservation Ordinance:** A revised Type II tree conservation plan (TCPII) has been submitted and reviewed. This property is subject to the provisions of the Woodland and Wildlife Habitat Conservation Ordinance because it has approved plans associated with it, Type I Tree Conservation Plan TCPI/72/03 and Type II Tree Conservation Plan TCPII/152/04. A revised TCPII was submitted with the current review package. This plan shows a minor revision to the approved TCPII and does not result in a reconfiguration of lots. As such, this TCPII meets the grandfathering provisions of Section 25-119(g) of the Prince George's County Code.

The plan requires some technical changes to be in conformance with the Woodland Conservation Ordinance. Staff recommends that, prior to signature approval of the DSP, the TCPII be revised as outlined under the recommendation section of this report.

The site is subject to Subtitle 25, Division 3, Tree Canopy Coverage (TCC) Ordinance, which requires that a minimum percentage of a site is covered by tree canopy, as determined by a property's zone. The property is located in the Residential Agricultural (R-A) Zone, which has no TCC requirement. Prior to signature approval of the detailed site plan, the applicant should add a note to the TCPII that states no tree canopy coverage percentage is required in the R-A Zone.

12. **Aviation Policy Area (APA-6):** The property is also located in Aviation Policy Area APA-6, as defined by the Zoning Ordinance, around the Freeway Airport. Properties in this area are required to disclose to prospective purchasers information regarding their proximity to Freeway Airport and an acknowledgment of the potential nuisances associated with this location. The increased height of vegetation within the afforestation area due to the proposed berms will not negatively impact the site's ability to conform to the applicable regulations of Sections 27-548.32 through 27-548.49 of the Zoning Ordinance.

13. **Referral Comments:** The subject application was referred to the concerned agencies and divisions. The referral comments are as follows:

- a. **Historic Preservation Section**—In a memorandum dated June 2, 2010, the Historic Preservation Section stated that the proposed DSP for a berm along the eastern property line will have no effect on identified historic sites, resources, or districts.
- b. **Environmental Planning Section**—In a revised memorandum dated November 16, 2010, the Environmental Planning Section recommended approval of DSP-04040-02 and TCPII/152/04-05 with conditions as follows:

Site Description

The 261.19-acre site in the R-A Zone is located on the north side of Woodmore Road, approximately 2,000 feet east of its intersection with Pleasant Prospect Road. A review of the available information indicates that streams, wetlands, 100-year floodplain, areas of steep slopes with highly erodible soils, and severe slopes are found to occur within the limits of this application. Many of the wetlands found on this property have been identified by the State of Maryland as Wetlands of Special State Concern which require a 100-foot-wide wetland buffer. John Hanson Highway (US 50) has been identified as a transportation-related noise generator that will impact some of the proposed lots on this site. The soils found to occur on the site, according to the *Prince George's County Soil Survey*, include Bibb silt loam, Collington fine sandy loam, Monmouth fine sandy loam, mixed alluvial land, and Shrewsbury fine sandy loam. These soils generally have no limitations that would affect the proposed application with the exception of the mixed alluvial that are associated with the stream and wetland areas. According to available information, Marlboro clay is not found to occur on this property. According to information from the Maryland Department of Natural Resources, Natural Heritage Program, publication titled "Ecologically Significant Areas in Anne Arundel and Prince George's Counties," December 1997, there are no rare, threatened, or endangered species found to occur in the vicinity of this property. The site is located in the Northeast Branch watershed of the Patuxent River basin and the Developing Tier as reflected in the 2002 *Prince George's County Approved General Plan*.

- (1) The detailed forest stand delineation (FSD) submitted with Preliminary Plan of Subdivision 4-03111, date stamped received by the Environmental Planning Section on January 8, 2004, was found to address the requirements for a FSD in accordance with the Woodland Conservation Ordinance. Because the site conditions have not changed since the submittal and review of that FSD, no additional information is required.
- (2) This property is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because it has approved tree conservation plans associated with it, Type I Tree Conservation Plan TCPI/72/03 and Type II Tree Conservation Plan TCPII/152/04. A revised Type II tree conservation plan (TCPII) was submitted with the current review package. This plan shows minor revisions to the approved TCPII and does not result in a reconfiguration of lots. As such, this TCPII meets the grandfathering provisions of Section 25-119(g) of the Zoning Ordinance.

The subject TCPII amendment requires some technical changes to be in conformance with the Woodland and Wildlife Habitat Conservation Ordinance.

- (3) The Subdivision Regulations provide for the protection of streams, 50-foot stream buffers, wetlands, 25-foot wetland buffers, 100-year floodplain, adjacent areas of slopes in excess of 25 percent, adjacent areas of slopes between 15 and 25 percent with highly erodible soils, and areas of rare or sensitive habitat. These features comprise the Patuxent River primary management area (PMA). The buffer associated with Wetlands of Special State Concern is shown as being 100 feet in width, not the 25-foot width typically associated with wetlands.

The entire entrance area is located within the PMA. The impacts to the PMA were evaluated in detail as part of the preliminary plan and detailed site plan

review and approval process. The current TCPII shows the removal of 0.03 acres of afforestation within the PMA for the installation of the proposed entrance features, security camera, and meter pedestal. However, the proposed location of these features is within the original limits of disturbance; therefore, no additional impacts are proposed. The entrance features were approved at staff level on June 14, 2010 under DSP-04040-03. The subject TCPII is currently being revised to incorporate that additional change.

- (4) A copy of the stormwater management concept plan and the approved 100-year floodplain study, date stamped as received by the Environmental Planning Section on January 8, 2004, were reviewed with the preliminary plan of subdivision; however, no stormwater management information was submitted as part of the current application. Because it is unclear how the proposed berm will affect site drainage, a revised stormwater management plan needs to be submitted which shows how the drainage from the proposed berm will be handled.

Recommended Condition: Prior to signature approval of the DSP, if a revised technical stormwater management plan showing the location of the proposed berm and the associated changes in grading is required by DPW&T, it shall also be submitted to the Environmental Planning Section of The Maryland-National Capital Park and Planning Commission (M-NCPPC).

- (5) A separate berm cross-section exhibit was submitted by the applicant that shows a typical profile of the proposed berm. The profile shows 6 to 8 inches of proposed topsoil and 2 to 4 inches of mulch. Under the scenario provided in the cross section, the trees would have as little as 6 inches of topsoil and as little as 2 inches of mulch.

The American Standard for Nursery Stock (ANSI Z60.1-2004) states in section 1.6.3 Root ball depths, that a two inch caliper tree requires a root ball to be at least 12 inches deep. A tree that is 1½ inches requires a root ball to be at least 10.4 inches. Trees must be planted in soil and not mulch.

The plantings on the berm include trees that are 1½ to 2 inches in caliper, thus the trees will have root balls between 10.4 and 12 inches. This is after being harvested from the nursery and losing up to 90 percent of their root systems.

Trees need soil to grow and they cannot grow in mulch in perpetuity. Mulch provides the root systems with adequate protection from temperature and moisture extremes. If the recommended 12 inches of topsoil is not provided on these berms, the trees will likely die and need to be replaced.

Recommended Condition: Prior to certificate approval of the DSP, the TCPII shall be revised to show a cross section of the berm and the proposed materials for its construction, the proposed side slope elevations, twelve inches of topsoil to adequately support tree growth in perpetuity, and 2 to 4 inches of mulch.

- c. **The City of Bowie**—The application was sent to the City of Bowie and the city responded without comment.
- d. **The Potomac Electric Power Company (PEPCO)**—In e-mail correspondence dated

July 23, 2010, William D. Spruill of PEPCO to Claudia Shehata of Dewberry, PEPCO stated that they reviewed the plans submitted by Dewberry & Davis, LLC on behalf of P-M Woodmore Estates, LLC (Washington Management & Development Co., LLC) titled “Waterford (formerly known as Walker Property), Election District 7, Prince George’s County, Maryland, Limited Detailed Site Plan.”

PEPCO has no objections to the proposed berm being located adjacent to PEPCO’s Burtonsville to Oak Grove 230kV Transmission Line Property No. PG-380 and PG-381.

- e. **The Department of Public Works and Transportation (DPW&T)**—At the time of the writing of this technical staff report, DPW&T had not submitted written comment on the subject revision.
14. Letters dated June 15, 2010 and August 26, 2010 addressed to Meika Fields of the Development Review Division (M-NCPPC) from Janine Mauersberg of Chesapeake Geologic Consulting, Inc. outline numerous concerns. The letters describe and provide photos of material that has been placed on-site to date, allegedly compromised of sediment erosion control devices and cloudy stream conditions flowing off-site associated with the construction of the previously approved noise mitigation berm located along US 50.

The major concerns discussed in the above referenced letters are as follows:

- a. Concerns about inappropriate fill materials being brought in from off-site.
- b. Sediment from berms affecting water quality.
- c. General inspection and code enforcement concerns.

Comment: Many of the issues raised are related to code enforcement, which is regulated by the county, and more specifically the Department of Public Works and Transportation (DPW&T). Development Review staff initiated follow-up telephone conversations with the Site Development Inspection Section (SDIS) of DPW&T for additional insight into the concerns raised.

In a conversation with Joe Brown, Chief Inspector of District V, DPW&T, Mr. Brown stated that the site was previously issued at least one violation for inappropriate fill in the Spring of 2010. At that time, inspectors required inappropriate fill to be removed from the site. The fill currently deposited in the noise mitigation berm along US 50 was described as Class 2 fill to Development Review staff. Mr. Brown discussed that there are no major sediment control issues at the present time and most of the failed inspections relate to site maintenance. The site was ultimately described as largely in compliance with current regulations.

The type of fill material allowed for berm construction is also regulated and enforced by the county in accordance with Subtitle 4 of the County Code. Subtitle 4 uses the following definitions of fill classes:

Section 4-302. Fill—Classes.

- (1) **Class 1 fill—Load-bearing fills proposed for support of buildings, walls, and other structures, the function thereof which would be especially impaired by settlement.**
- (2) **Class 2 fill—Load-bearing fills proposed for support of roadways, pavements, rigid utility lines, house connections, and structures which would not be especially impaired by moderate settlement.**

(3) Class 3 fill—Common fills proposed for lawns, landscape plantings, or for other nonload-bearing usage.

Class 3 fill is a common type of fill often composed of rock, rubble, and similar irreducible materials, without limit as to size. Overlying soils are often washed over the larger materials to reduce voids. Topsoil can also be intermittently layered with the nonorganic soil. County Council Bill CB-87-2003 states that, while Class 3 fill operations involving the spreading or depositing of Class 3 fill materials require special exception approval in most residential zones, incidental fill operations associated with the development of subdivisions and other preliminary work of a developing site shall not be considered a Class 3 fill operation.

In e-mail correspondence dated November 18, 2010, John Pyles of Washington Management Development to Meika Fields of the Development Review Division (M-NCPPC), Mr. Pyles stated that in construction of berms, as with all dirt operations, some materials brought in by truck are unsuitable. Any unsuitable materials are detected immediately by onsite personnel, either the individual stationed to direct and inspect trucks or by the machine operator. Mr. Pyles further stated that all operations are conducted under DPW&T and are subject to the supervision, inspection and regulation by them and other appropriate Federal, State and County authorities with the necessary developer and County safeguards already in place.

No conditions are recommended by staff on the topic of fill materials. Fill materials are regulated by the Prince George's County Building Code and directly enforced by DPW&T.

The approval, inspection, and enforcement of sediment and erosion control and stormwater management are under the purview of the county; however, in an effort to address concerns regarding sediment and erosion control issues, a copy of the sediment and erosion control plan should be submitted to the Planning Department for the official file for comparison of the limits of disturbance between the sediment and erosion control plan and the tree conservation plan. The limits of disturbance shown on both sets of plans must be consistent.

Recommended Condition: Prior to signature approval of the DSP, a copy of the approved sediment and erosion control plan shall be submitted to the Environmental Planning Section of M-NCPPC. The limits of disturbance shown on the sediment and erosion control plan shall be consistent with the limits of disturbance shown on the TCPII.

Many of the issues that have been raised have been addressed in the body of this report. Any outstanding issues will be addressed at the Planning Board hearing.

15. As required by Section 27-285(b) of the Zoning Ordinance, the detailed site plan represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9, of the Prince George's County Code without requiring unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use.

RECOMMENDATION

Based upon the foregoing evaluation and analysis, the Urban Design staff recommends that the Planning Board adopt the findings of this report and APPROVE Detailed Site Plan DSP-04040-02, Waterford, Alternative Compliance AC-10029, and Type II Tree Conservation Plan TCPII/152/04-05, with the following conditions:

1. All lots in Waterford that back up to US 50 are provided noise mitigation through the construction of berms and a noise barrier. Additionally Lots 27, 28, 29, 30, 37, 45, 46, 55, and 56 of Block A are provided noise mitigation and/or visual screening berms. On each individual lot, the property owner shall allow reasonable homeowners association maintenance of the berms and noise barriers.
2. Prior to release of a grading permit for the proposed berms, plats of correction shall be recorded in the land records that reflect the limits of afforestation as shown on TCPII/152/04-05, signed as a part of the DSP-04040-02 approval.
3. Prior to signature approval of the DSP, the TCPII shall be revised as follows:
 - a. Provide a single label for each afforestation area.
 - b. Revise the afforestation planting schedules to accurately reflect the number of plants proposed to meet the afforestation required for each area. If landscape planting is proposed to meet any portion of the afforestation requirement, then the associated landscape planting schedule must be clearly referenced in the respective afforestation planting schedule.
 - c. Submit only the sheets relevant to the TCPII and remove all extraneous (blank) sheets (Sheet 13A) from the TCPII plan set.
 - d. Revise the worksheet to include a total of 0.65 acre of fee-in-lieu (as approved with the -02 and -04 single-lot revisions to the TCP). Revise the remainder of the worksheet as necessary to account for the addition of fee-in-lieu.
 - e. Revise the notes below the TCP worksheet located on Sheet 14 as follows:
 - (1) Revise Note 1 to include a list of the lots affected by the -03 revision and update the acreage listed as the outstanding balance of off-site mitigation credits based on the required revisions to the worksheet.
 - (2) Add the following sentence to Note 2: "A fee-in-lieu was approved and paid for 0.49 acre of afforestation removed from Lot 5, Block A on August 5, 2010."
 - f. Sheet 14 of the Type II tree conservation plan (TCPII) shall be revised to document the results of all afforestation survival checks that have been performed to date including the dates, the responsible party, and the afforestation area numbers.
 - g. Provide a copy of all recorded transfer certificates for off-site mitigation credits used to meet the requirements of the subject site.
 - h. Add a note to the TCPII that states there is no minimum tree canopy coverage percentage in the R-A Zone.
 - i. TCPII shall be revised to show a cross section of the berm, the proposed side slope elevations, twelve inches of topsoil to adequately support tree growth in perpetuity, and two to four inches of mulch.

- j. After all revisions have been made, have the qualified professional who prepared the plan sign and date it and update the revision box with a summary of the revisions made.
4. Prior to signature approval of the DSP, the following revisions shall be made or information provided:
- a. The following note shall be placed on the site plan and enforced prior to building permit for each affected lot listed below:

“Berms for visual screening will be located within an afforestation area on Lots 27, 28, 29, 30, 37, 45, 46, 55, and 56 of Block A. Forty-foot rear yard depths and twenty-foot side yard depths are the minimum required between the proposed houses and the base of the berms/afforestation area. Rear yards adjacent to these berms shall be largely level, as permitted by existing site conditions, and allowing for minimal slopes in 15 feet of the yard where the base of the berms tie into grade.”
 - b. The applicant shall revise the site plan to reduce slopes on the west side of the berms to 4:1 or less. The proposed contours shall also vary in slope to appear more natural from the single-family lots.
 - c. Submit revised technical stormwater management plan, if one is required by DPW&T, showing the location of the proposed berm and the associated changes in grading shall be submitted to the Environmental Planning Section of the Maryland-National Capital Park and Planning Commission (M-NCPPC), Countywide Planning Division.
 - d. Submit a copy of the approved sediment and erosion control plan shall be submitted to the Environmental Planning Section of the Maryland-National Capital Park and Planning Commission (M-NCPPC), Countywide Planning Division. The limits of disturbance shown on the sediment and erosion control plan shall be consistent with the limits of disturbance shown on the TCPII.
5. All afforestation/reforestation and associated fencing on common areas shall be installed prior to the issuance of the first building permit. All afforestation/reforestation and associated fencing on lots shall be installed prior to the issuance of the building permit for that lot. A certification prepared by a qualified professional may be used to provide verification that the afforestation/reforestation has been completed. It must include, at a minimum, photos of the afforestation/reforestation areas and the associated fencing for each lot, with labels on the photos identifying the locations and a plan showing the locations where the photos were taken.