Martin O'Malley

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Margaret G. McHale Chair

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Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

May 20, 2011

Ms. Suzy Schappert Anne Arundel County Office of Planning and Zoning 2664 Riva Road, MS 6301 Annapolis, Maryland 21401

Re: Howell, Denny

BA 24-10 V, 2010-0053-V

Dear Ms. Schappert:

I have received notice of the above-referenced variance appeal. This office provided the comments on this variance application when it was before the Anne Arundel County Hearing Officer. At this time, I am submitting comments to be included as part of the record for the appeal to the Anne Arundel County Board of Appeals. The applicant is seeking a variance to the County's prohibition on disturbance of habitat protection areas. In this case, the applicant proposes to disturb a 25-foot nontidal wetland buffer in order to construct a single family dwelling and driveway on an undeveloped 0.33 acre lot in the Limited Development Area (LDA).

In this office's previously submitted April 26, 2010 and August 24, 2010 comment letters, we indicated that the proposed nontidal wetland and buffer disturbance associated with the development of the lot could be further minimized. Specifically, we recommended that the proposed dwelling footprint be reduced in order to minimize disturbance to the forested wetland and buffer and in effect reduce the amount of resulting lot coverage on the property. We noted that similar properties have been developed with dwelling footprints of 900 square feet and less.

Since that time, the applicant has submitted a revised site plan. It appears that the applicant followed this office's recommendations as currently proposed disturbance to the habitat protection area has been significantly minimized when compared with what was shown on the previously submitted plan. Specifically, the revised plan's dwelling footprint is close to half of what was previously shown, since it was previously shown as approximately 1,750 square feet and it is now shown as approximately 960 square feet. As a result, the amount of proposed tree clearing has been reduced by 650 square feet, the proposed lot coverage has been reduced by 1,300 square feet, the proposed disturbance to the nontidal wetland has been eliminated and the proposed 25-foot nontidal wetland buffer disturbance has been reduced by 2,000 square feet.

Ms. Schappert May 20, 2011 Page 2 of 2

Based on the above described minimization of habitat protection area impacts as shown in the applicant's revised site plan, this office does not oppose the requested variance.

Thank you for the opportunity to provide comments regarding this variance request. Please include this letter within the file and submit it as a part of the record for this variance. In addition, please notify the Commission in writing of the decision made in this case. If you have any questions, please call me at 410-260-3481.

Sincerely,

Amber Widmayer

Natural Resources Planner

cc: AA 266-09

AA 48-09

Martin O'Malley Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale Chair

Ren Serey

Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

August 24, 2010

Ms. Suzy Schappert Anne Arundel County Office of Planning and Zoning 2664 Riva Road, MS 6301 Annapolis, Maryland 21401

Re: Howell Variance BA 24-10V

Dear Ms. Schappert:

I have received notice of the above-referenced variance appeal. This office provided comments on this variance application when it was before the Anne Arundel County Hearing Officer. At this time, I am submitting comments to be included as part of the record for the appeal to the Anne Arundel County Board of Appeals. The applicant is seeking a variance to disturb a Habitat Protection Area in the Critical Area. The subject property is 0.33 acres in size and is located entirely within the Limited Development Area (LDA) of the Chesapeake Bay Critical Area. The site is currently undeveloped and heavily wooded. The applicant proposes to develop the property with a single family dwelling and resulting lot coverage of 2,900 square feet. According to documentation provided by the applicant, the tidal wetlands boundary has been adjusted. The adjusted boundary of tidal wetlands now lies outside of the subject property. However, significant nontidal wetlands and their resulting 25-foot buffer encumber the property.

Based on this information, it is the position of this office that the project as proposed is not the minimum necessary to afford the applicant relief. The project as it is currently proposed by the applicant would result in the disturbance of 5,484 square feet of non-tidal wetlands and their associated buffer. The proposed footprint will account for approximately 1,200 square feet of disturbance to the wetland and wetland buffer. The immediate effect of the proposed development activity on the subject property would be to alter the hydrology of the site, thereby diminishing the ability of the land to function as a wetland. Specifically, there will be a reduction in the land's ability to adequately filter and absorb surface water as it continues down stream to tidal areas. For this reason, it is imperative that the applicant be required to further minimize the footprint of the development. There is ample evidence of similar properties in the County where footprints of 900 square feet and less have been permitted in order to afford relief

August 24, 2010 Howell Variance BA 24-10V Page 2 of 2

from any hardship to the applicant while preserving as much of the ecological integrity of the site as possible. Vertical construction could be used to achieve a larger interior living space if desired.

In summary, it is our recommendation that the applicant has not met each and every one of the variance standards in the context of the current variance proposal. The Board should therefore deny the variance or require the applicant to submit a revised site plan showing a further minimized footprint for development and impact to sensitive resources.

Thank you for the opportunity to provide comment. Please include this letter in the file and notify the Commission of the decision in this case. If you have questions, please call (410) 260-3479.

Sincerely,

L. Turcan Hockaday

Natural Resource Planner

Cc: AA 62-08

Martin O'Malley

Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale Chair

Ren Serey

Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

April 26, 2010

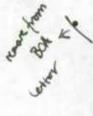
Ms. Pam Cotter Anne Arundel County Office of Planning and Zoning 2664 Riva Road, MS 6301 Annapolis, Maryland 21401

Re: Howell Variance

2010-0053-V

Dear Ms. Cotter:

Thank you for providing information on the above referenced variance request. The applicant is seeking a variance to disturb a Habitat Protection Area in the Critical Area. The subject property is 0.33 acres in size and is located entirely within the Limited Development Area (LDA) of the Chesapeake Bay Critical Area. The site is currently undeveloped and heavily wooded. The applicant proposes to develop the property with a single family dwelling and resulting lot coverage of 2,900 square feet. According to documentation provided by the applicant, the tidal wetlands boundary has been adjusted. The adjusted boundary of tidal wetlands now lies outside of the subject property. However, significant non-tidal wetlands and their resulting 25-foot buffer encumber the property. Based on the information provided on the plan, we have the following concerns outlined below:



According to the site plan that was provided to this office, the applicant proposes to clear 4,866 square feet of woodlands, or 68% of the woodlands on site. COMAR 27.01.02.04.C.2 provides that clearing is limited to 30% of the developed woodland on site unless the local jurisdiction has authorized granted a variance to allow greater clearing or alternative provisions that have been approved as part of a local program by the Commission are being utilized. The applicant must submit a revised plan which brings the proposed clearing within the limits allowed by law. County staff has informed this office that a newer, revised site plan has been submitted in reference to this project. This office has not been provided with the revised site plan as of the date of this letter.

April 26, 2010 Howell Variance Page 2 of 2

• The applicant proposes to disturb 5,484 square feet of non-tidal wetlands and their associated Buffer. A portion of the proposed footprint of the dwelling will account for 1,200 square feet of the disturbance. In requesting a variance, the applicant has the burden to prove that all of the County's variance standards have been met, specifically that the variance requested is the "minimum to afford relief" and that without the variance, the applicant would be subject to an unwarranted hardship. In this case, we believe there is opportunity to minimize disturbance to the non-tidal wetlands and their buffer by reducing the footprint of the proposed dwelling.

Thank you for the opportunity to provide comment. Please include this letter with the file and notify the Commission of the decision made in this case. If you have questions, please call (410) 260-3479.

Sincerely,

L. Turcan Hockaday

Natural Resources Planner

AA: 62-08

Martin O'Malley
Governor

Anthony G. Brown Lt. Governor



Margaret G. McHale Chair

Ren Serey
Executive Director

STATE OF MARYLAND CRITICAL AREA COMMISSION CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401 (410) 260-3460 Fax: (410) 974-5338 www.dnr.state.md.us/criticalarea/

February 5, 2008

Ms. Pam Cotter Anne Arundel County Office of Planning and Zoning 2664 Riva Road, MS 6401 Annapolis, Maryland 21401

Re: Local Case 2008-0022-V

Denny Howell, III

Dear Ms. Cotter:

Thank you for submitting the above referenced variance. The applicant is requesting a variance to disturb a nontidal wetland and the 25-foot nontidal wetland buffer in order to establish a single-family dwelling. The property is classified as a Limited Development Area and is currently undeveloped.

Provided this lot is properly grandfathered, this office does not oppose this request. Based on the information provided I have the following comments:

- 1. It appears that the applicant must also obtain a variance to the 100-foot Buffer expanded for hydric soils. It appears the nontidal wetland is connected to a tidal wetland, in which case the 100-foot Buffer must be expanded to include the extent of hydric soils.
- 2. Mitigation for impacts to the expanded 100-foot Buffer should be provided at a ratio of 3:1 for the area of disturbance.
- 3. Mitigation for impacts to the expanded 100-foot Buffer should be accommodated on site prior to payment of fee-in-lieu. Mitigation should consist of a mix of native shrubs and trees appropriate to the hydric soil conditions.
- 4. A nontidal wetlands letter of authorization from Maryland Department of the Environment must be obtained by the applicant and a copy provided to the County.

Thank you for the opportunity to provide comments. Please include this letter in your file and submit is as part of the record for this variance. Also, please notify the Commission in writing of the decision made in this case.

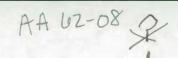
Sincerely,

Kate Schmidt

Natural Resources Planner

Kate Samide

AA62-08





RE: An Appeal From A Decision Of The Administrative Hearing Officer

Petitioner

BEFORE THE

COUNTY BOARD OF APPEALS

OF ANNE ARUNDEL COUNTY

CASE NO.: BA 24-10V (2010-0053-V)

Hearing Date: May 25, 2011

MEMORANDUM OF OPINION

Summary of Pleadings

LOT 18 ABR, LLC

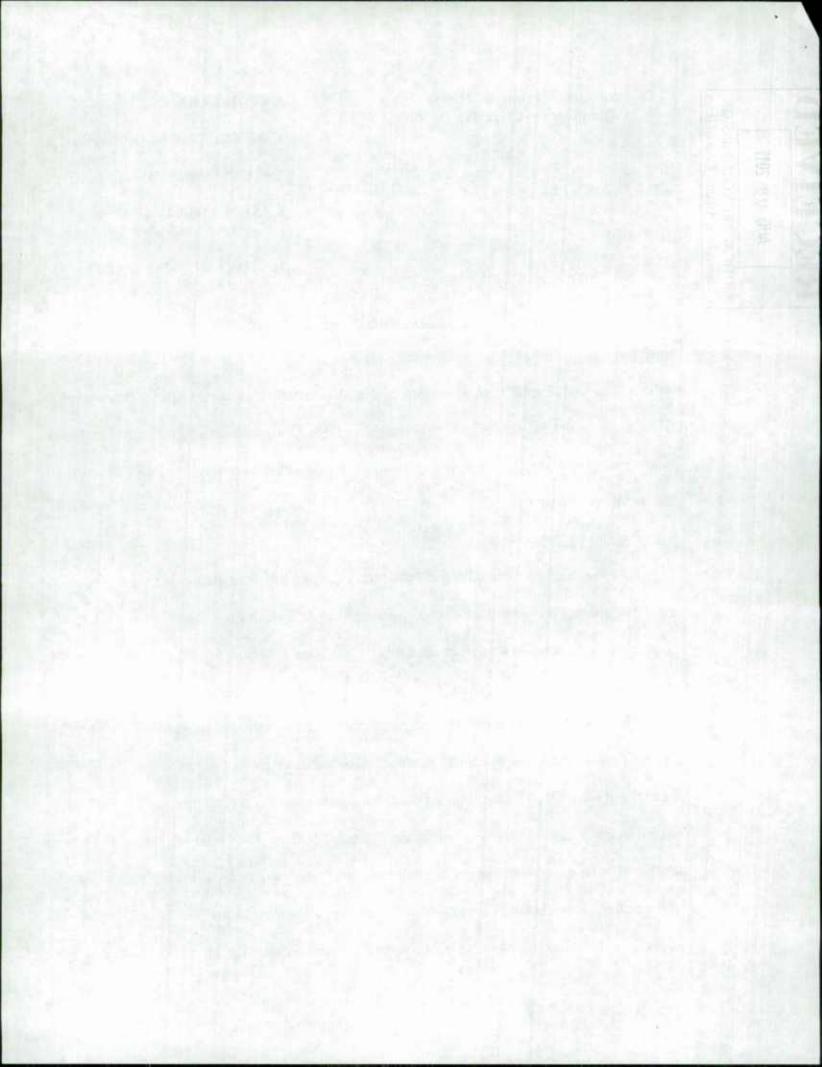
This is an appeal from a decision of the Administrative Hearing Officer. This appeal is taken from the denial of a variance to allow a dwelling and associated facilities with disturbance to a habitat protection area, on property known as Lot 18 and a 20 foot right of way, Arundel on the Bay Road, Annapolis.

Summary of Evidence

At the start of testimony, the Petitioner's counsel admitted into evidence a packet of exhibits outlining an agreement reached between the parties and the County. See Petitioner's Exhibits 1 to 5. Due to an agreement being reached, the Protestants were not present at this hearing.

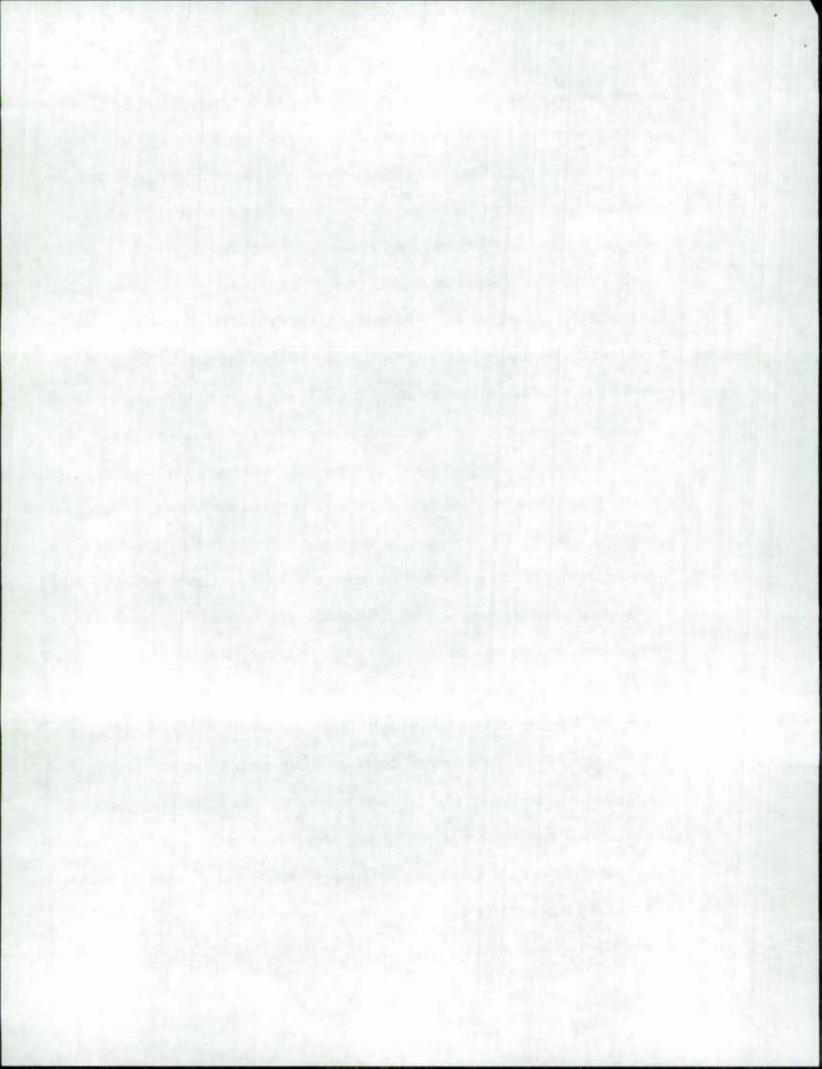
Mr. Roy Little, an expert in civil engineering, land use and planning, testified about the subject property and the agreement reached. The property is split zoned R2 - Residential District and OS - Open Space, with sufficient lot size to meet the zoning criteria. The difficulty with this lot is that it is entirely within the expanded buffer due to tidal wetlands, which are located off-site; the presence of hydric soils were discovered on-site, thus creating the expansion of the buffer. Therefore, any development on this site will require a variance. The Code permits impervious lot coverage of up to 5,445 square feet due to the size of the lot; however, the





Petitioner has proposed only a 1,732 square foot disturbance to the expanded buffer. The site plan and the agreement (Petitioner's Exhibits 3 and 5) demonstrate that there is a three to onc ratio of mitigation for disturbance in the buffer. The Maryland Department of Environment did not find evidence of any rare or threatened species on the subject property. Two raised rain gardens are to be installed for storm water management for the runoff from the house. The driveway will have permeable pavement, which will extend under the house to create a parking pad. The lot is narrow and has an irregular shape. The footprint of the house is 900 square feet on the ground. The principal dwelling would have a two foot overhang on the second floor creating a downward foot print of 960 square feet. The initial plan for development included 1,700 square feet. As part of the agreement between the parties, a conservation easement protecting approximately 6/10ths of an acre will be placed on the property. The easement will be deeded to the Scenic Rivers Land Trust within 90 days, unless the variance is denied. The conservation easement calls for particular conditions that are outlined in the agreement (Petitioner's Exhibit 5). The size of the home is consistent with the neighborhood and would be part of the Oyster Harbor community. Any future purchasers of the home would not have a need to expand on the property since the community offers several amenities. The principal dwelling will be raised on stilts. Due to the proximity of the wetlands, there is a minimum elevation requirement of four feet; however, this dwelling will have an elevation of eight feet. The grading permit will require the site plan to meet all stormwater management requirements. In addition to the conservation easement, four of the six large trees on the property have been flagged for preservation, and the Petitioner is looking into options to eradicate an invasive species (phragmites) from the non-tidal wetlands. The principal dwelling will not create a disturbance inside the actual non-tidal wetlands, but will create a disturbance to the expanded buffer and the





non-tidal wetland buffer. The principal dwelling will be served by public sewer and a private well, which the Health Department will have to approve.

Mr. Lomax, the Petitioner's attorney; proffered to the Board that the right of way on the site plan was deeded to the Petitioner by the Arminger family to create sufficient lot size for development in the R2 – Residential District.

Mr. John Fury, a planner with the Office of Planning and Zoning, clarified in his testimony that a non-tidal wetland variance is not needed for this site. Mr. Fury indicated that the Critical Area Commission does not have any objection to the variance request. The development has been sufficiently minimized since the project began. The denial of the variance would deny use of the entire parcel.

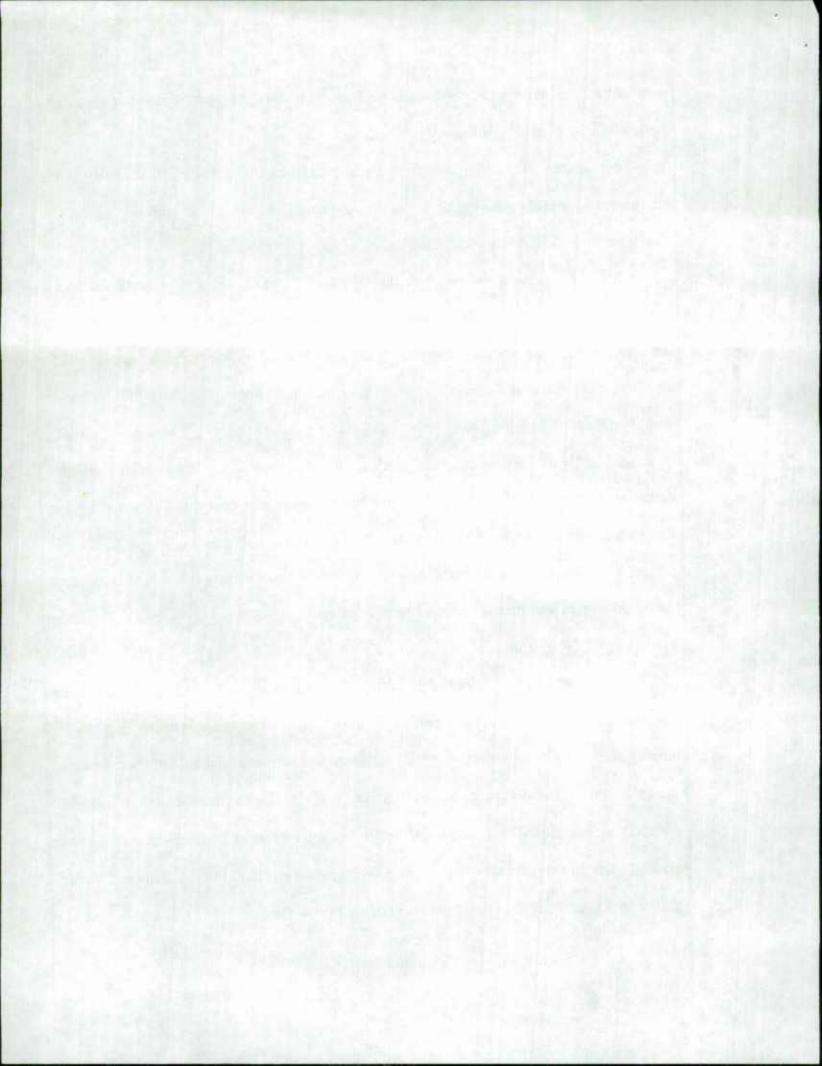
Ms. Sally Iliff, counsel for the County, proffered that the County does not typically hold easements in conjunction with land trusts and that this particular easement will be recorded in County land records, but will be held by the private land trust.

All testimony was stenographically recorded and the recording is available to be used for the preparation of a written transcript of the proceedings.

Findings and Conclusion

The appeal is taken from the denial of a variance to allow a dwelling and associated facilities with disturbance to a habitat protection area. Through the course of the hearing process before this Board, all parties including the Petitioner, the Protestants, and the County reached an agreement that is satisfactory to all, and requires one variance for development in a habitat protected area, specifically, the expanded buffer due to the presence of tidal wetlands (located off-site). This Board is satisfied with the agreement reached and finds that the Petitioner has met the burden of satisfying the strict requirements set out in the Code.

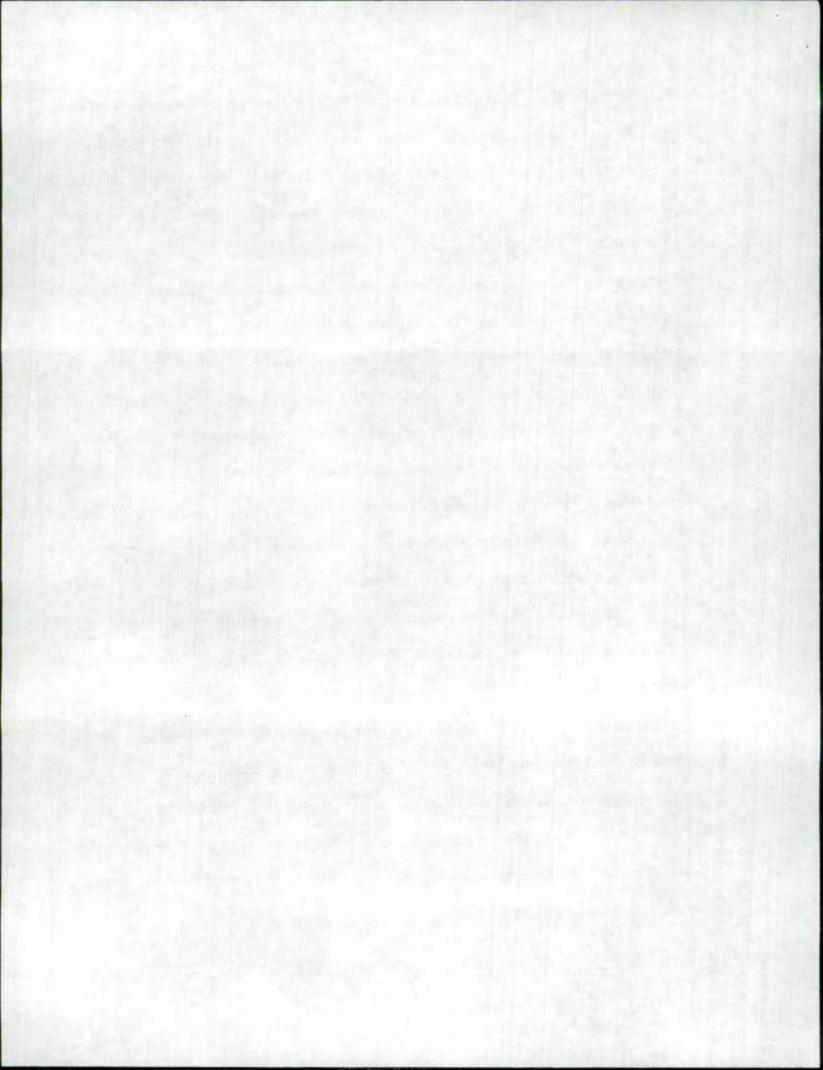




The Petitioner must first establish "that because of certain unique physical conditions, such as exceptional topographical conditions peculiar to and inherent in the particular lot or irregularity, narrowness or shallowness of lot size and shape, strict implementation of the County's critical area program or bog protection program would result in an unwarranted hardship..." § 3-1-207(b)(1). The lot is currently undeveloped and is located in the Oyster Harbor community. The property is located near tidal wetlands whose expanded buffer is within the lot lines. Non-tidal wetlands are also present on the subject property as well as a 25 foot non-tidal wetland buffer. Due to the presence of hydric soils on the subject property, the expanded buffer for the tidal wetlands is expanded almost to the road frontage; therefore, the entire lot is within the expanded buffer of the Critical Area Program. The lot is split zoned R2 – Residential District and OS – Open Space, and is irregularly shaped. The shape of the lot and the inherent conditions of the hydric soils result in strict conformance with the Code unreasonable for development of this lot and create an unwarranted hardship on the Petitioner; therefore, we find that the Petitioner has satisfied the first requirement necessary for a variance.

The Petitioner must also establish that "[a] literal interpretation of COMAR, 27.01, Criteria for Local Critical Area Program Development or the County's Critical Area Program and related ordinances will deprive the applicant of rights commonly enjoyed by other properties in similar areas as permitted in accordance with the provisions of the critical area program within the Critical Area of the County." § 3-1-207(b)(2)(i). Without a variance, the Petitioner would be prevented from constructing a dwelling on an unimproved, residentially zoned lot. It is this Board's finding that by granting this variance, the Petitioner would be granted the same rights of those commonly enjoyed by other properties in similar areas; specifically, development of an unimproved residential lot.



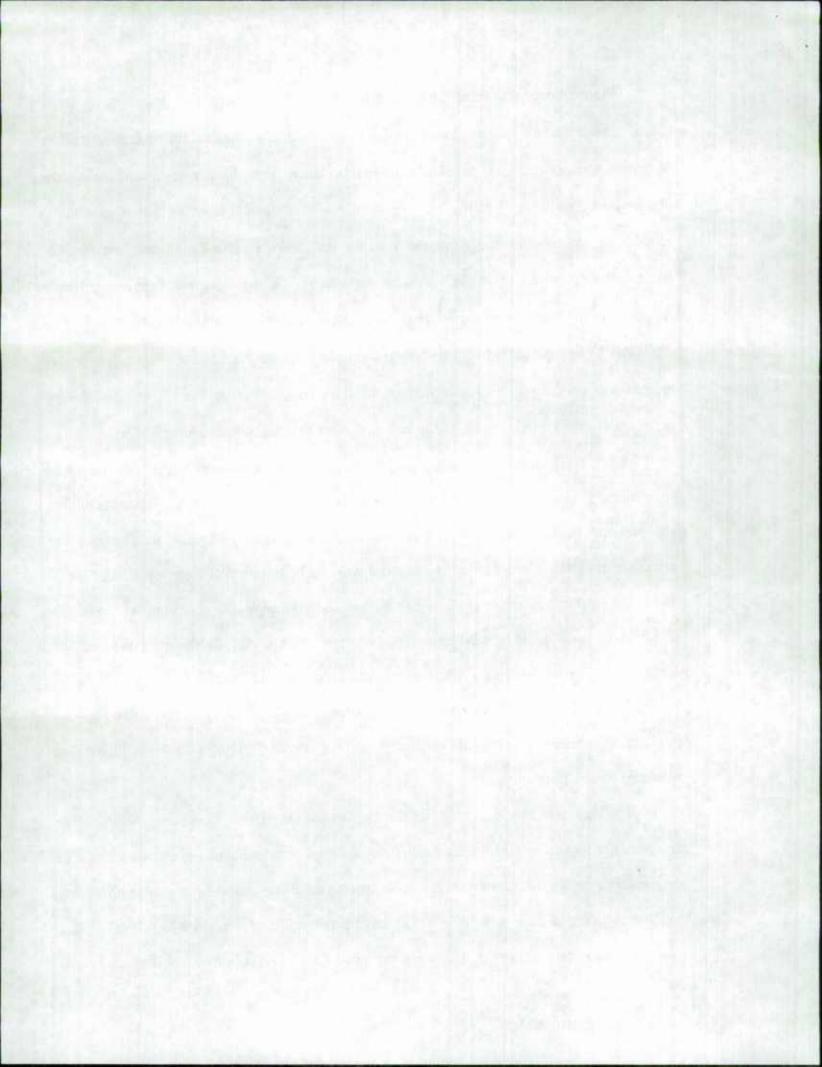


The Petitioner also must show that "the variance is the minimum variance necessary to afford relief." *Id.* §3-1-207(c)(1). It is clear to this Board that the Petitioner has requested the minimum variance necessary to afford relief in this matter. There have been numerous site plans and revisions, and alterations made by the Petitioner to reduce the scope of the variance that is requested. Specifically, the requested variance (as shown on the Petitioner's site plan) is environmentally sensitive to the non-tidal wetlands buffer and there has been a significant reduction in the footprint of the home (thereby reducing disturbance to the hydric soils). The Petitioner has proposed a dwelling that will have a footprint of only 960 square feet and is located outside the non-tidal wetlands as much as reasonably possible, given the inherent constraints of the subject property. The request is the minimum necessary to afford relief.

Next, the Petitioner must show that "[t]he granting of a variance will not confer on an applicant any special privilege that would be denied by COMAR, 27.01, the County's critical area program, to other lands or structures within the County's critical Area, or the County's bog protection program to other lands or structures within a bog protection area." § 3-1-207(b)(3). The conservation easement as described below and the minimum footprint the Petitioner proposes to develop on the subject property comprises minimal coverage on the lot, and sensitivity to the surrounding Critical Area. The variance would permit the construction of a modest, single family dwelling on site – a right commonly enjoyed by others — not a special privilege. Therefore, granting this variance would not confer a privilege on the Petitioner that would be denied others.

The Petitioner also must establish that "[t]he variance request is not based on conditions or circumstances that are the result of actions by the applicant, including the commencement of development before an application for a variance was filed, and does not arise from any condition relating to land or building use on any neighboring property." § 3-1-207(b)(4). The location of the subject property within the expanded Critical Area buffer, and the presence of





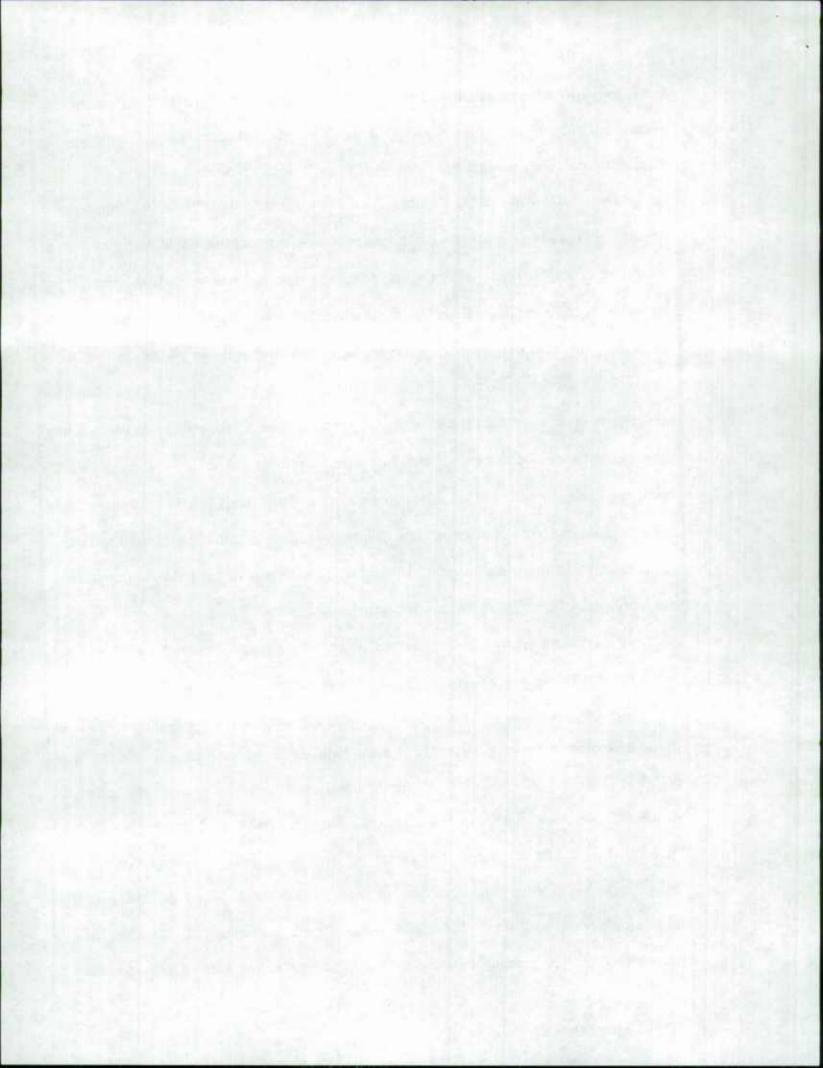
hydric soils are inherent conditions of the lot that the Petitioner did not create. The Petitioner has made every effort to reduce the impact of those conditions, and accordingly, we find that the requested variance is not based on conditions or action by the Petitioner.

The next burden that the Petitioner must overcome is to show that "[t]he granting of a variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitat within the County's critical area or a bog protection area; and will be in harmony with the general spirit and intent of the County's critical area program or bog protection program." § 3-1-207(b)(5)(i)-(ii). The Petitioner has entered into an agreement with the Protestants to place a permanent conservation easement wherein all but the footprint of the house and a ten foot area immediately bordering it and the area of the driveway would be permanently protected from any further disturbance or development; including all existing trees and shrubs and any planted to fulfill the three to one reforestation requirement. The Board finds that the granting of this variance, given the terms of this agreement, will be in harmony with the general spirit and intent of the County's Critical Area Program. The Board also notes that the Critical Area Commission did not offer any opposition to the requested variance.

The subject property is not within the County's bog protection area and, therefore, Code Section 3-1-207(b)(6) does not apply and need not be addressed.

The Petitioner's next burden is to establish "by competent and substantial evidence, [that it] has overcome the presumption contained in the Natural Resources Article, § 8-1808(d)(2), of the State Code." § 3-1-207(b)(7). Under the above-cited section of the Natural Resources Article, it is *presumed* "that the specific development activity in the critical area that is subject to the application and for which a variance is required does not conform with the general purpose and intent of this subtitle, regulations adopted under this subtitle, and the requirements of the local jurisdiction's program." Md. Code Ann., Natural Resources Art., §8-1808(d)(2)(i) (emphasis added). By granting the agreement that was presented to this Board by the parties, the





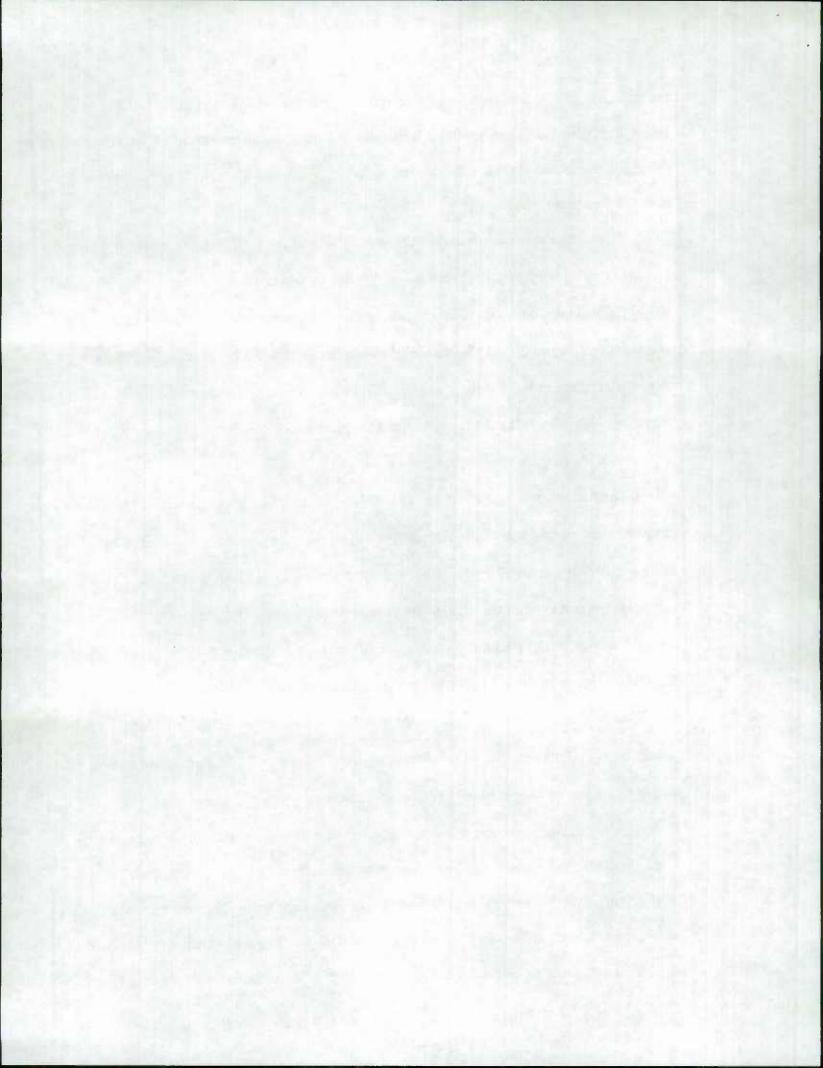
general goal of this variance will be to reduce coverage on this particular lot and to create minimal intrusion into the non-tidal wetlands. Along with the execution of the conservation easement, this Board finds that the requested variance is consistent with the general purpose and intent of the statute.

Next, the Petitioner needs to show that "the granting of the variance will not alter the essential character of the neighborhood or district in which the lot is located." *Id.* § 3-1-207(c)(2)(i). Testimony was offered regarding the surrounding neighborhood of Oyster Harbor. The proposed dwelling conforms to the development of surrounding homes. Furthermore, the careful placement of the dwelling will create minimal impact on the surrounding environment. Therefore, we find that the Petitioner has met the burden to show that the variance will not alter the essential character of the neighborhood or district.

The Petitioner must also establish that "the granting of the variance will not substantially impair the appropriate use or development of adjacent property." *Id.* § 3-1-207(c)(2)(ii). Mr. Little testified that across the street from the subject property is Fishing Creek Farm, there is a culvert on the north end of the site that goes under Arundel on the Bay Road which runs down to the right of way out to the tidal wetlands; hence there are minimal options to develop adjacent properties. However, the Petitioner has made significant proposals to insure that the appropriate use of the wetlands is not impaired by the proposed development of this site for the reasons stated above. Therefore, the Board finds that the variance will not substantially impair the appropriate use or development of the adjacent properties.

The Petitioner next must show "the granting of the variance will not reduce forest cover in the limited development and resource conservation areas of the critical area." § 3-1-207(c)(2)(iii). Mr. Little stated that four of the six large trees on the lot have been marked for preservation, as well as the construction of rain gardens are meant to reduce the impact of the impervious surface to be placed on the lot. The conservation easement will preserve the entire





property with the exception of the dwelling, driveway, and a ten foot border. Therefore, this Board finds that the granting of this variance will not reduce forest cover, and the three to one reforestation is satisfactory.

Likewise, where the grant of the variance will require minimum clearing, as stated above, with a three to one mitigation, it "will not be contrary to acceptable clearing and replanting practices required for development in the critical area or a bog protection area." § 3-1-207(c)(2)(iv). Therefore, the Board finds that the Petitioner satisfies § 3-1-207(c)(2)(iv).

Lastly, the Petitioner must show that "the granting of the variance will not be detrimental to the public welfare." *Id.* § 3-1-207(c)(2)(v). The Petitioner has made every effort to be sensitive to the environment, the Critical Area Program, and the surrounding properties based on the testimony, evidence, and agreement presented to this Board. Therefore, we find that the variance will be beneficial to the public welfare overall.

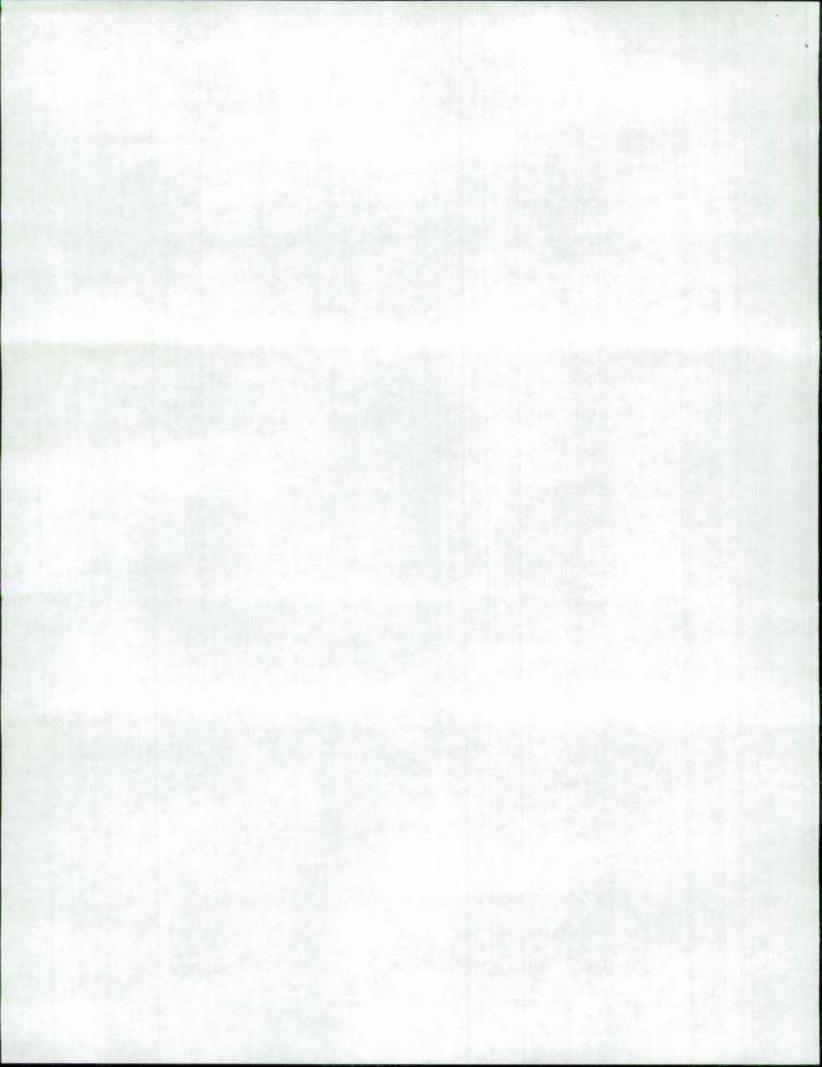
ORDER

For the reasons set forth in the foregoing Memorandum of Opinion, it is this day of Aveust, 2011, by the County Board of Appeals of Anne Arundel County, ORDERED, that the Petitioner's request for a variance to construct a single-family dwelling that would disturb 1,732 square feet of property located within the Critical Area expanded buffer, is hereby GRANTED, in accordance with the Agreement reached by the Petitioner and the Protestants as outlined in Petitioner's Exhibit 5 (attached hereto), which is hereby incorporated, but not merged into this Order.

Any appeal from this decision must be in accordance with the provisions of Section 604 of the Charter of Anne Arundel County, Maryland.

If this case is not appealed, exhibits must be claimed within 90 days of the date of this Order; otherwise, they will be discarded.





Any notice to this Board required under the Maryland Rules shall be addressed as follows: Anne Arundel County Board of Appeals, Arundel Center, P.O. Box 2700, Annapolis, Maryland 21404, ATTN: Deana L. Gibbs, Clerk.

COUNTY BOARD OF APPEALS OF ANNE ARUNDEL COUNTY

William C. Knight, VII, Chairman

John W. Boring, Vice Chairman

W Jay Breitenbach, Member

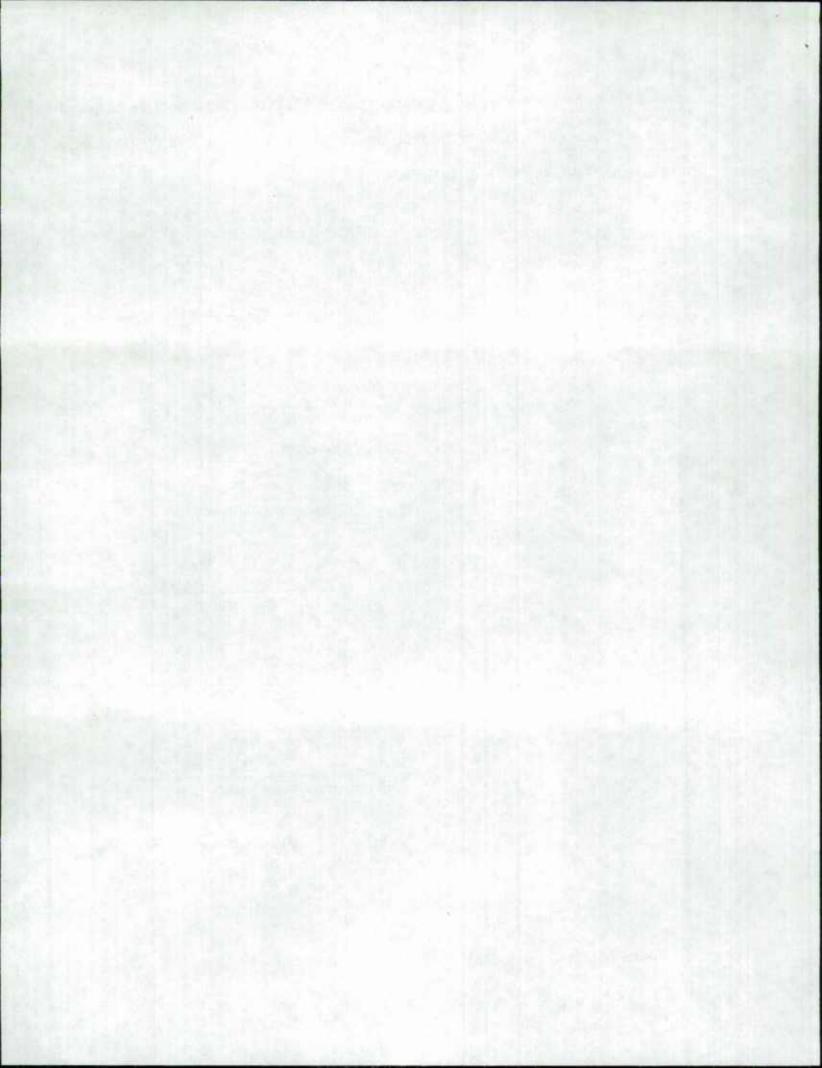
Carroll P. Hicks, Jr., Member

William Moulden, Member

Doreen Strothman, Member

(Robert R. Costa, III, Member, did not participate in this appeal.)





ANNE ARUNDEL COUNTY BOARD OF APPEALS

Case No. BA 24-10V

BOARD OF APPEALS

PETITIONER'S

NAME LOT ISABRILLO

CASE BI 24-10V

DATE 5/25/11

AGREEMENT

Appeal of Lot18ABR, LLC and Denny Howell, III

This Agreement (the "Agreement") is made by and among Lot18ABR, LLC and Denny L. Howell, II, the Appellants, and nine Oyster Harbor residents who previously had opposed the granting of the variance requested for Lot 18, Arundel on the Bay Road, Annapolis, MD 21403 collectively, the "Oyster Harbor Opponents".

I. Background

The Oyster Harbor Opponents have opposed the granting of the variance request as submitted by the Appellants on March 11, 2010, and submitted a copy of a report on Lot 18 by Vince Berg, a professional engineer. Gerald Winegrad subsequently represented the Oyster Harbor Opponents at meetings with Appellants and their engineer, Roy Little, on various occasions from May 21, 2010, through May 12, 2011. As a result of those meetings, the Oyster Harbor Opponents have all agreed to the following numbered provisions that are to be included in the granting of the amended variance request in this case and are intended to be legally binding on the parties and Appellants' successors in ownership. Tarrant Lomax, Esq., Appellants' attorney, has signed the agreement and concurs in its provisions on behalf of his clients. The Oyster Harbor Opponents also are in agreement with its provisions and Gerald Winegrad is representing them in signing this agreement on their behalf.

II. Agreement

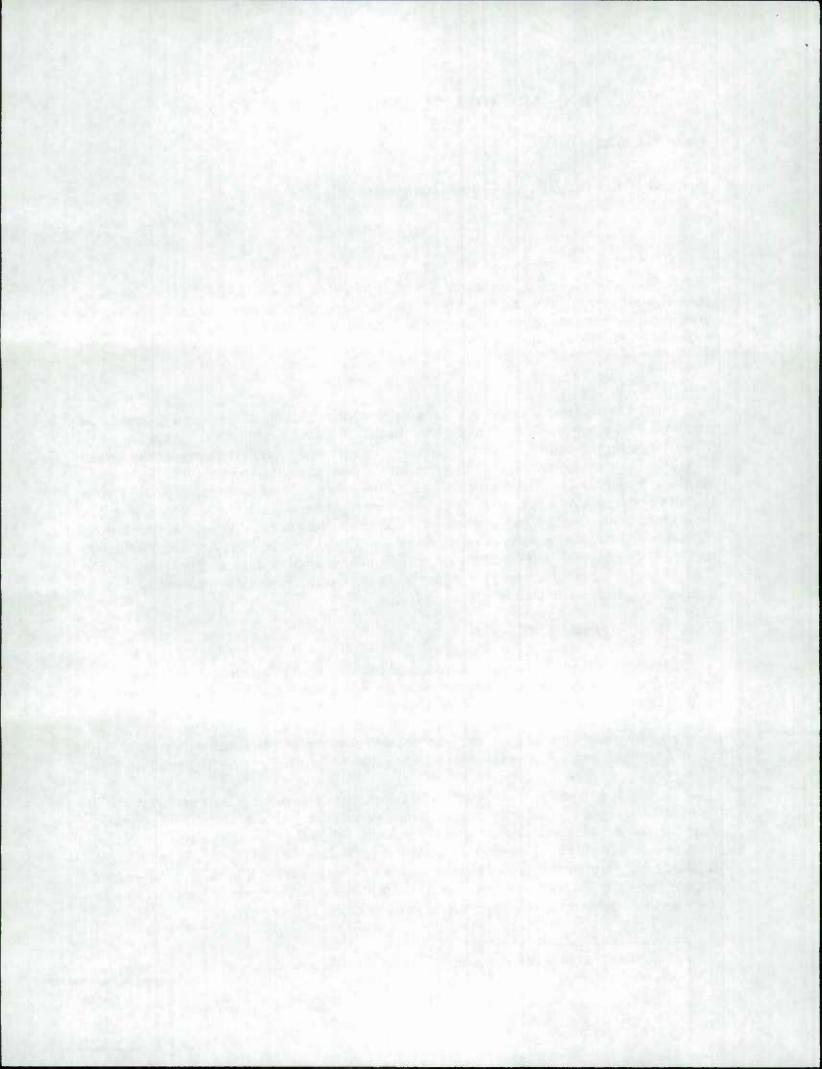
The Oyster Harbor Appellants have agreed that they wish to withdraw their opposition to the amended variance request and to withdraw Vince Berg's (the professional engineer) statement as well. In return, Appellants have agreed to the following provisions to be incorporated in the approval of the amended variance request that would allow the construction of the single family home and driveway with no more than the size and footprint as proposed in the May, 2011, "Grading, Erosion and Sediment Control Plan" prepared by Terrain, Inc. (the "Grading Plan").

The 18 foot wide driveway and the at-grade surface parking under the house would be constructed of porous concrete pavement with a gravel base. Absorbent pads will be placed under the house where vehicles are parked to absorb oil and grease. These pads would be comparable to those used in auto shops. The area beneath the 30' by 30' surface footprint of the proposed house may contain 1) an enclosed storage area not to exceed 8'x 30' on a non-porous concrete pad or other floor material, and/or 2) an at-grade parking area on porous concrete pavement that would serve as a garage; and 3) stairway access to floor above.

The names of the nine Oyster Harbor residents who opposed the variance request are set forth on Attachment A.





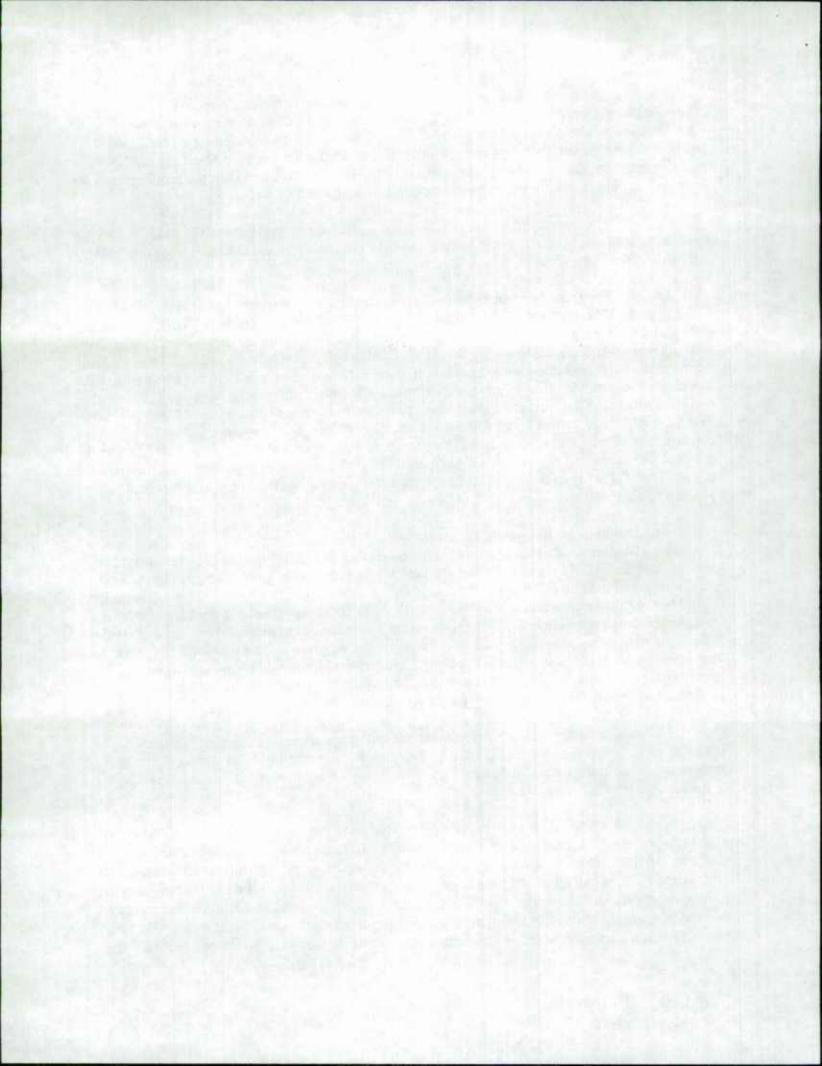


- 2. Stormwater from the roof of the house will drain via down spouts to two 4' x 18' "Proposed Rain Gardens" as detailed on the "Plan Sheet" of the Grading Plan. These two 4' x 18' Rain Gardens will be contained in a 6" by 6" timber planter box with geotextile fabric on the sides and contain the gravel, recharge area, planting soil as detailed in the Plan Sheet for the Lot. The rain Gardens shall be permanently properly maintained in accordance with the requirements set forth on the Plan to assure proper functioning in retaining stormwater.
- 3. The house will be built up from the ground on concrete, steel, or wooden stilts the same as or similar to other newer homes built in the flood plain in the Oyster Harbor community are constructed.
- 4. The three large trees located to the North of the proposed house and identified as "1", "2" and "3" in the "Tree Table" on the "Plan Sheet" of the Grading Plan shall be preserved during and after the grading and construction process and the soil immediately around them shall be protected from compaction during the grading and development process and both trees shall be permanently protected under the conservation easement discussed under item 6. The owner will make every reasonable effort to preserve during and after the grading and construction process the two trees located to the North and West of the proposed house and identified as "4" and "6" in the "Tree Table". The parties agree that these trees may not be able to be protected while allowing construction of the planned house and driveway, but the owner will make a good faith effort to preserve these trees. The one tree located to the North of the proposed house and identified as "5" in the "Tree Table" is in the footprint of the proposed clearing for the house and the owner may proceed to clear that tree.

In addition to the foregoing, the owner will reforest Lot 18 at a rate of 3-1 per square foot of woodland disturbance which is estimated to be 4,211 sq. ft. (12,633 sq. ft. of reforestation) to be done on site and would do this first on the land where phragmites grow after getting rid of the phragmites, and then on other parts of the lot needing better vegetative cover. This reforestation would be with the number and size of trees, shrubs, and/or other vegetation as described in Critical Area reforestation requirements. The reforestation and phragmites removal would be done under a buffer management plan and would be done under the supervision of an ecologically sensitive landscape architect of the appellant's choosing. This reforestation would be accomplished within 6 months of the clearing occurring and there would be a plan to be implemented by the owner or the contractor to assure the plantings are watered for the first two years.

- 5. The owner shall provide for on-site mitigation at a rate of 3-1 per square foot of disturbance for the maximum of 1,732 sq. ft. of wetlands buffer that will be disturbed, 5,196 sq. ft. maximum total mitigation. Mitigation on site would be done within 6 months of the disturbance occurring.
- 6. The Appellants shall place a permanent conservation easement on the entire 0.61 acre lot wherein all but the footprint of the house and a 10 foot area immediately bordering it and the area of the driveway would be permanently protected from any further disturbance or development, including all existing trees and shrubs and any planted to fulfill the 3-1 reforestation requirement; provided, however, that 1) tree or shrub clearing would be permitted necessary to prevent threat to the house from a falling tree or to control phragmites, and 2) the owner may plant and maintain a garden, flowers or ornamentals outside of the non-tidal wetlands provided that





any such clearing to prevent damage to the house or any such plantings shall be done only with the written permission of the Easement Holder. The easement would be donated by the Appellants to the Scenic River Land Trust or another land trust if the Scenic River Land Trust does not wish to accept the easement (the "Easement Holder").

The Oyster Harbor Opponents shall draft a standard conservation easement based on other such easement language and submit it to Appellants' counsel to be reviewed and then executed and filed in the land records of Anne Arundel County. The easement shall be filed within 90 days of the execution of this document unless this variance request is denied or an appeal is taken from the grant of this variance request.

- 7. Appellants will pay to Gerald Winegrad on behalf of the Oyster Harbor Opponents the sum \$1,000, to be applied to Mr. Berg's engineering fees, within 60 days from the execution of this document or within 15 days from final approval of the amended variance including the terms of this Agreement, including all appeals, whichever occurs last.
- 8. The Oyster Harbor Opponents agree to withdraw all objections to the issuance of a wetland permit by MDE.
- The Oyster Harbor Opponents agree not to oppose a building permit application that fully complies with this Agreement.
- 10. The parties agree that this Agreement is void if any of these occur: 1) If the amended variance is denied by the Board of Appeals; 2) If an appeal is taken by any one of the Oyster Harbor Opponents; 3) If an appeal is taken and is successful by any one not an Oyster Harbor Opponent; 4) If Lot18 is subsequently determined to be not buildable; or 5) If tidal wetlands are located on the property or would be disturbed.
- 11. The parties agree that this Agreement shall be submitted by the Appellants or subsequent owners to the appropriate County officials at the time the owner submits applications for grading, building, or other County permits so that the terms of the Agreement can be incorporated into any relevant permits and the terms of this agreement are intended to be legally binding on the Appellants and any subsequent property owners.
- 12. The parties agree that the name of the Applicant may be amended to include Lot18ABR, LLC, the title owner of the property.

This agreement is signed and agreed to this 2320 day of May, 2011 by:

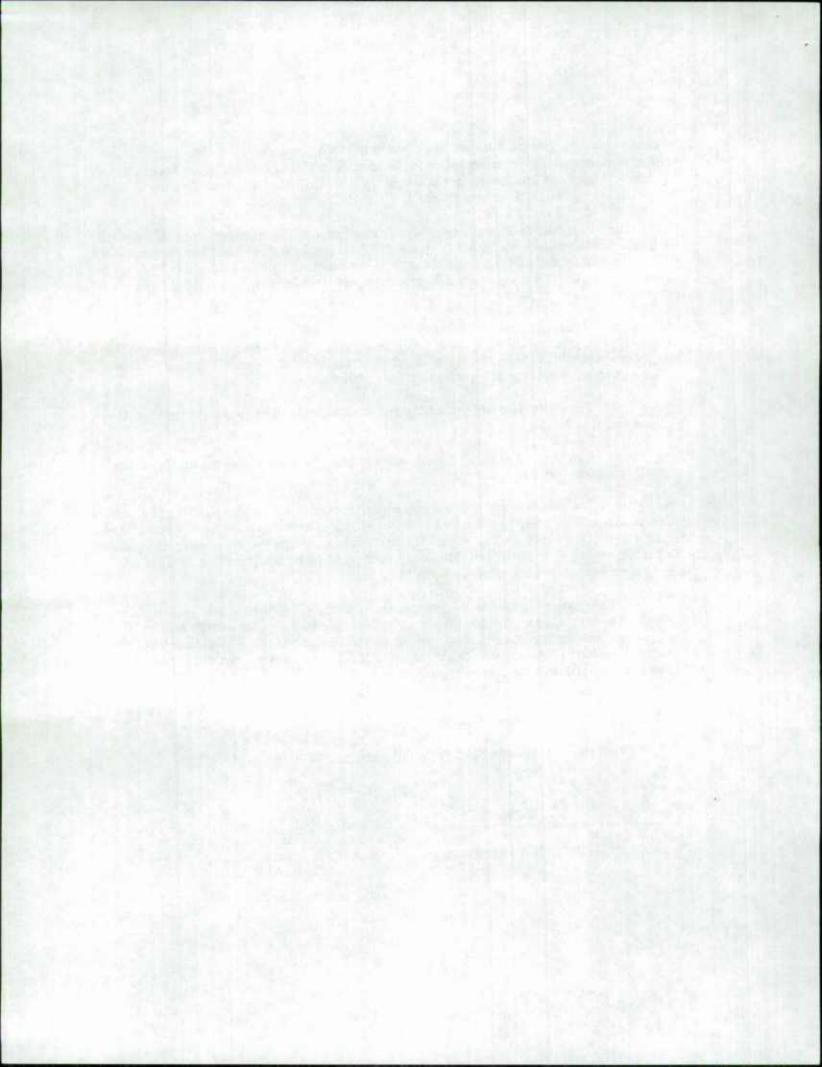
Gerald Winegrad

On behalf of the Oyster Harbor Opponents

Tarrant H. Lomax, Esq.

On behalf of Appellants Denny L. Howell, II

and Lot18ABR, LLC



Attachment A

The Oyster Harbor Opponents are:

Gerald Winegrad 1328 Washington Drive Annapolis, MD 21403

Carol L. Swan 1328 Washington Drive Annapolis, MD 21403

Jane O. Miller 3357 Thomas Point Road Annapolis, MD 21403

Charles R. Whitehill 3357 Thomas Point Road Annapolis, MD 21403

April F. Kohles 3273 Arundel on the Bay Road Annapolis, MD 21403

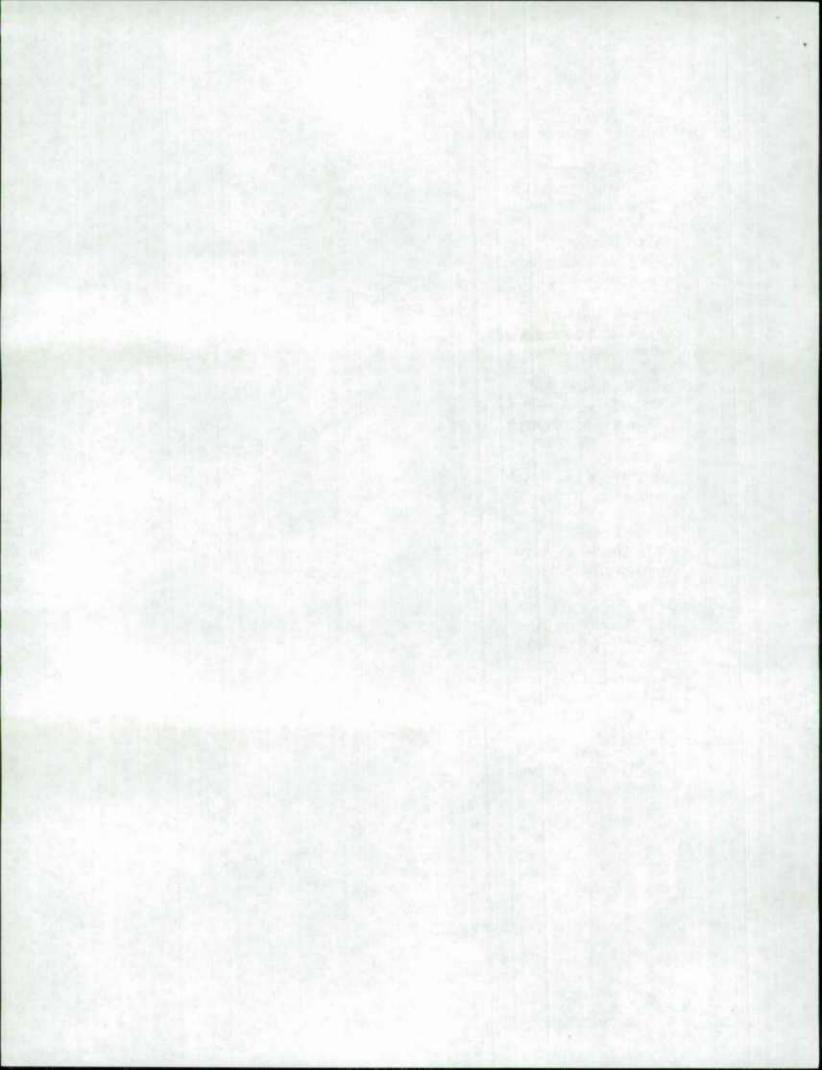
Robert Kohles 3273 Arundel on the Bay Road Annapolis, MD 21403

Elvia Thompson 1346 Washington Drive Annapolis, MD 21403

Norman MacLeod 1224 Washington Drive Annapolis, MD 21403

Anne MacLeod 1224 Washington Drive Annapolis, MD 21403





IN THE OFFICE OF ADMINISTRATIVE HEARINGS

CASE NUMBER 2010-0053-V

LOT 18ABR, LLC

THIRD ASSESSMENT DISTRICT

DATE HEARD: APRIL 27, 2010 LAST EVIDENCE SUBMITTED: JUNE 2, 2010

ORDERED BY:

DOUGLAS CLARK HOLLMANNADMINISTRATIVE HEARING OFFICER

PLANNER: JOHN R. FURY

DATE FILED: JUNE 8, 2010

PLEADINGS

Lot 18ABR, LLC, the applicant, seeks a variance (2010-0053-V) to allow a dwelling and associated facilities with disturbance to a habitat protection area on property located on the east side of Arundel on the Bay Road, southeast of Bay Highlands Drive, Annapolis.

PUBLIC NOTIFICATION

The hearing notice was posted on the County's web site in accordance with the County Code. The file contains the certification of mailing to community associations and interested persons. Each person designated in the application as owning land that is located within 175 feet of the property was notified by mail, sent to the address furnished with the application. The applicant submitted the affidavit of Roy Little, the applicant's engineer, indicating that the property was posted on April 12, 2010 (Applicant's Exhibit 1). I find and conclude that there has been compliance with the notice requirements.

¹ The application was filed in the name of Denny L. Howell, II, and processed in that name throughout the administrative proceedings. However, the deed shows the subject property is owned by LOT18ABR, LLC. Accordingly, the name of the applicant has been changed to the true owner. For clarity, the applicant will be referred to as "Lot 18ABR, LLC" in this decision.

FINDINGS

A hearing was held on April 27, 2010, in which witnesses were sworn and the following evidence was presented with regard to the proposed variances requested by the applicant.

The Property

This undeveloped property has frontage along Arundel on the Bay Road at the entrance to Oyster Cove, Annapolis. The property is identified as Lot 18 of Parcel 9 in Block 14 on Tax Map 57 and an adjacent abandoned 20-foot right-of-way that was merged with Lot 18 in 2009. The property is split-zoned R2 Residential District and OS Open Space, and classified in the Chesapeake Bay Critical Area as limited development area (LDA) and resource conservation area (RCA).

The Proposed Work

The applicant seeks a variance to construct a single-family dwelling on the property that will disturb approximately 1,691 square feet of nontidal wetlands and 3,793 square feet of their associated buffer, as shown on the revised site plan admitted into evidence as Applicant's Exhibit 2.

The Anne Arundel County Code

Article 17, § 17-8-502 provides that a habitat protection area shall be preserved and protected.

The Variance Requested

The work proposed, therefore, will require a critical area variance to § 17-8-502 to disturb 1,691 square feet of nontidal wetlands and 3,793 square feet of wetland buffer.

The Evidence Submitted At The Hearing

John R. Fury, a planner with the Office of Planning and Zoning (OPZ), testified that the subject property is triangular in shape and consists of 26,813 square feet, more or less. The site has been split-zoned R2 – Residential district and OS – Open Space since the adoption of the Annapolis Neck Small Area Plan zoning maps effective July 21, 2007. Nontidal wetlands comprise the majority of the parcel. The subject property is unimproved and substantially vegetated. It is a grandfathered lot in the critical area.

Mr. Fury testified that the subject property slopes to the east and ultimately drains to Oyster Creek. The applicant indicated that the location of the proposed dwelling has been shifted to the south in order to minimize wetlands disturbance. The project would disturb 1,691 square feet of nontidal wetlands and 3,793 square feet of wetland buffer; thus, a variance is required to permit disturbance in a habitat protection area. The proposal would also result in the clearing of 4,866 square feet of woodland in the critical area, which is within the limitation for the site. Mitigation and stormwater management would be provided in accordance with Code requirements. The applicant also indicated that the limits of nontidal wetlands have been established accordingly, and a State permit would be obtained.

The proposed dwelling meets zoning setback requirements for the R2 district. A private well and public sewer have been proposed to service the dwelling. The height of the proposed dwelling is thirty-two feet.

Mr. Fury testified that the Critical Area Commission does not oppose the variance request and recommended mitigation at a ratio of 3:1 for the area of ground disturbance in the buffer. Should the request be approved, the applicant must provide a Buffer Management Plan that conforms to the specifications found in COMAR 27.01.09.01.

The Department of Health requested plan approval.

Based upon the standards set forth in § 18-16-305 under which a variance may be granted, Mr. Fury testified that OPZ recommends that the applicant's variance request be granted with the condition that the recommendation(s) of the aforementioned agencies and the Maryland Department of the Environment are satisfied prior to the issuance of a building permit for the project.

The applicant, represented by Tarrant H. Lomax, Esquire, presented evidence that the property could not be developed without variances, and that the requested variances are the minimum needed for relief from the Code.

Applicant's Exhibit 2, the new site plan, shows the proposed relocated facilities as they have been shifted south to lessen the impact on nontidal wetlands on the rear of the property.

Mr. Little explained that the location of the nontidal wetlands on the property and the proposed disturbance to wetlands and wetland buffer. The

proposed clearing is within limits, as is impervious surface. Mr. Little testified that the abandoned right-of-way to the north of the property has been acquired by the applicant and a lot consolidation agreement will be filed.

A number of nearby residents testified in opposition to the granting of the variance request. Former State Senator Gerald W. Winegrad lives in the neighborhood and testified first-hand to the continued silting-in of the headwaters of Oyster Creek. He testified that he believes that development of the Lot 18 would damage Oyster Creek.² He stated that the low-lying nature of the property, being lower than Arundel on the Bay Road, which runs alongside it, and the fact that the property drains into Oyster Creek, means that the property acts as the catch-basin and environmental filter for many lots in this area on both sides of Arundel on the Bay Road. The property floods during high winds and tropical depressions. It was completed flooded by Hurricane Isabel.

Senator Winegrad testified that he did not have notice of the hearing and asked for time to assemble expert evidence to supplement the record. His request was granted and the record was held open for 14 days.

April Kohles and her husband Robert Kohles testified that they live at 3273 Arundel on the Bay Road and are the closest developed property to Lot 18. They repeated Senator Winegrad's testimony as to the physical features of the property and testified that surface water flows across their property (Lot 13) and over Lots

² References to Lot 18, for shorthand purposes, will include the abandoned right-of-way behind it. Although Lot 18 and the right-of-way were not consolidated as of the date of the hearing, all parties referred to the two as one for purposes of impervious surface, clearing, minimum area requirements, etc.

14, 15, 16, and 17 onto the subject property. Mr. & Mrs. Kohles are opposed to developing Lot 18.

Norman MacLeod testified that he lives at 1224 Washington Drive on Oyster Creek and is familiar with the need to prevent development of Lot 18 which serves to filter water flowing into the headwaters of Oyster Creek.

Jane Miller, who lives at 3357 Thomas Point Road, testified that she is a board member of the Oyster Harbor Community Association. She spoke as an individual and not for the Association and is opposed to development of Lot 18 because of its sensitive nature.

Daniel Butler testified that he lives at 1413 Howard Road, about 3 blocks away, and was not opposed to the development of Lot 18. He admitted that he was also in the process of developing another lot in Oyster Harbor.

By agreement of the parties, the record was held open 14 days. The Protestants filed the report of Vincent H. Berg, P.E. on or about May 11, 2010. As a result, further continuances were granted as the parties negotiated a possible settlement of their differences.

On June 2, 2010, Mr. Lomax for the applicant and the Protestants, submitted a letter that contained a "Supplemental Submission." The Supplemental Submissions stated that:

- 1. The Protestants agree to withdraw their opposition;
- 2. The Protestants agree to withdraw Mr. Berg's report;

- The Protestants agree to the amendment of the application to name Lot18ABR, LLC as the applicant;
- 4. The Protestants and the Applicant agree to the 12 conditions set forth in the Letter Agreement referred to below.

The letter agreement on Senator Winegrad's stationery, dated May 28, 2010, set forth a number of points:

- 1. Details of how the driveway and at-grade surface covering under the house would be constructed;
- 2. Details of how dry wells would handle surface runoff;
- 3. Details of how the house would be built on stilts;
- 4. Details about preserving as many trees as possible on the site;
- 5. Mitigation the applicant would undertake;
- 6. Most of the site would be placed in a permanent conservation easement;
- 7. Payment of a portion of Mr. Berg's fee;
- 8. The Protestants agree to withdraw their opposition;
- 9. The Protestants agree not to oppose the granting of a building permit;
- 10. Conditions under which the agreement would become void;
- 11. The applicant will submit future applications for development of Lot 18 through Mr. Lomax; and
- 12. The parties agree to amend the name of the applicant in this case.

The Supplemental Submission and the Letter Agreement were accepted into evidence.

The Hearing Officer visited the subject property but spoke with no one. The property is flat and impacted by nontidal wetlands and buffers to nontidal wetlands. The lands to the rear of the property have nontidal wetlands on them that drain into Oyster Creek. There are a number of large (48" circumference at chest height) that will be removed if the house is built in the proposed location.

DECISION

State Requirements for Critical Area Variances

§ 8-1808(d)(2) of the Natural Resources Article, Annotated Code of Maryland, provides in subsection (ii), that "[i]n considering an application for a variance [to the critical area requirements], a local jurisdiction shall presume that the specific development in the critical area that is subject to the application and for which a variance is required does not conform to the general purpose and intent of this subtitle, regulations adopted under this subtitle, and the requirements of the jurisdiction's program." (Emphasis added.) "Given these provisions of the State criteria for the grant of a variance, the burden on the applicant is very high." Becker v. Anne Arundel County, 174 Md. App. 114, 124; 920 A.2d 1118, 1124 (2007).

In *Becker v. Anne Arundel County, supra*, 174 Md. App. at 131; 920 A.2d at 1128, the Court of Special Appeals discussed the history of the critical area law in reviewing a decision from this County. The court's discussion of the recent amendments to the critical area law in 2002 and 2004, and the elements that must

be satisfied in order for an applicant to be granted a variance to the critical area, is worth quoting at length:

In 2002, the General Assembly amended the [critical area] law. ... The amendments to subsection (d) provided that, (1) in order to grant a variance, the Board had to find that the applicant had satisfied each one of the variance provisions, and (2) in order to grant a variance, the Board had to find that, without a variance, the applicant would be deprived of a use permitted to others in accordance with the provisions in the critical area program. ... The preambles to the bills expressly stated that it was the intent of the General Assembly to overrule recent decisions of the Court of Appeals, in which the Court had ruled that, (1) when determining if the denial of a variance would deny an applicant rights commonly enjoyed by others in the critical area, a board may compare it to uses or development that predated the critical area program; (2) an applicant for a variance may generally satisfy variance standards rather than satisfy all standards; and, (3) a board could grant a variance if the critical area program would deny development on a specific portion of the applicant's property rather than considering the parcel as a whole.

In 2003, the Court of Appeals decided *Lewis v. Dep't of Natural Res.*, 377 Md. 382, 833 A.2d 563 (2003). *Lewis* was decided under the law as it existed prior to the 2002 amendments (citation omitted), and held, *inter alia*, that (1) with respect to variances in buffer areas, the correct standard was not whether the property owner retained reasonable and significant use of the property outside of the buffer, but whether he or she was being

denied reasonable use within the buffer, and (2) that the unwarranted hardship factor was the determinative consideration and the other factors merely provided the board with guidance. *Id.* at 419-23, 833 A.2d 563.

Notwithstanding the fact that the Court of Appeals expressly stated that *Lewis* was decided under the law as it existed prior to the 2002 amendments, in 2004 Laws of Maryland, chapter 526, the General Assembly again amended State law by enacting the substance of Senate Bill 694 and House Bill 1009. The General Assembly expressly stated that its intent in amending the law was to overrule *Lewis* and reestablish the understanding of unwarranted hardship that existed before being "weakened by the Court of Appeals." In the preambles, the General Assembly recited the history of the 2002 amendments and the *Lewis* decision. The amendment changed the definition of unwarranted hardship [found in § 8-1808(d)(2)(i)] to mean that, "without a variance, an applicant would be denied reasonable and significant use of the <u>entire</u> parcel or lot for which the variance is requested." (Emphasis added.)

The question of whether the applicant is entitled to the variances requested begins, therefore, with the understanding that, in addition to the other specific factors that must be considered, the applicant must overcome the presumption, "that the specific development in the critical area that is subject to the application ... does not conform to the general purpose and intent of [the critical area law]."

³ § 8-1808(d)(2)(ii) of the Natural Resources Article. References to State law do not imply that the provisions of the County Code are being ignored or are not being enforced. If any difference exists between County law and State law, or if some State criteria were omitted from County law, State law would prevail. See, discussion on this subject in Becker v. Anne Arundel County, supra, 174 Md. App. at 135; 920 A.2d at 1131.

Furthermore, the applicant carries the burden of convincing the Hearing Officer "that the applicant has satisfied <u>each</u> one of the variance provisions." (Emphasis added.) "Anne Arundel County's local critical area variance program contains ... separate criteria. ... Each of these individual criteria must be met." Becker v. Anne Arundel County, supra, 174 Md. App. at 124; 920 A.2d at 1124. (Emphasis in original.) In other words, if the applicant fails to meet just one of these criteria, the variance is required to be denied.

County Requirements for Critical Area Variances

§ 18-16-305 sets forth the requirements for granting a variance for property in the Critical Area. Subsection (b) reads, in part, as follows: a variance may be granted if the Administrative Hearing Officer finds that:

- (1) Because of certain unique physical conditions, such as exceptional topographical conditions peculiar to and inherent in the particular lot or irregularity, narrowness, or shallowness of lot size and shape, strict implementation of the County's critical area program would result in an unwarranted hardship, as that term is defined in the Natural Resources Article, § 8-1808(d)(1) of the State Code, to the applicant. Subsection (b)(1).
- (2) A literal interpretation of COMAR, 27.01 Criteria for Local Critical Area Program Development or the County's critical area program and related ordinances will deprive the applicant of rights commonly enjoyed by other properties in similar areas as permitted in accordance with the provision of

⁴ § 8-1808(d)(4)(ii).

- the critical area program within the critical area of the County. Subsection (b)(2).
- (3) The granting of a variance will not confer on an applicant any special privilege that would be denied by COMAR, 27.01, the County's critical area program to other lands or structures within the County critical area. Subsection (b)(3).
- (4) The variance request is not based on conditions or circumstances that are the result of actions by the applicant, including the commencement of development before an application for a variance was filed, and does not rise from any condition relating to land or building use on any neighboring property. Subsection (b)(4).
- (5) The granting of a variance will not adversely affect water quality or adversely impact fish, wildlife, or plant habitat within the County's critical area and will be in harmony with the general spirit and intent of the County's critical area program. Subsection (b)(5).
- (6) The applicant, by competent and substantial evidence, has overcome the presumption contained in the Natural Resources Article, § 8-1808(d)(2)(ii), of the State Code. Subsection (b)(7).⁵

Furthermore, a variance may not be granted unless it is found that: (1) the variance is the minimum variance necessary to afford relief; (2) the granting of the variance will not alter the essential character of the neighborhood or district in which the lot is located; (3) the variance will not substantially impair the appropriate use or development of adjacent property; (4) the variance will not reduce forest cover in the limited development and resource conservation areas of the critical area; (5) the variance will not be contrary to acceptable clearing and

Subsection (b)(6) refers to bogs, which are not present on the property.

replanting practices required for development in the critical area; or (6) the variance will not be detrimental to the public welfare.

Findings - Critical Area Variances

The requested variances will be denied for reasons that follow. It is apparent from the evidence and documents submitted in support of the application, as well as a visit to the property, that the subject property should not be developed in the manner proposed by the applicant. The reasons to deny the requested variances are many. Some of the salient facts that support this decision are:

- The site, where the applicant wishes to build a dwelling and associated improvements, is 4 feet above mean high water at its highest;⁶
- The site is not isolated from other water courses, as many upland nontidal wetlands sites are, but lies directly upgrade from the headwaters of Oyster Creek, which periodically floods the property in periods of low-pressure systems and high winds from the east and south;⁷
- The site serves as a catch-basin for properties lying to the south, west, and east, if not the north (indeed, a culvert funnels water from the west side of Arundel on the Bay Road under the road, 2 feet above the site, and onto Lot 18);

The Site Plan indicates that "contours shown on this plan are taken from a field survey Howellkline Land Surveying [sic]." The connection between this company and Mr. Howell, the developer and principal of the owner of the subject property, Lot18ABR, LLC, was not made apparent at the hearing.

⁷ The subject property is obviously a sediment-filled valley at the head of Oyster Creek. See, County Exhibit 5, Topography Map. That it floods, see, FEMA Map as part of County Exhibit 5.

- The site, with a difference of only 2 feet across its total extent in any direction, slows surface water on its way toward Oyster Creek and allows some of it to percolate into the ground, which is of significant benefit to Oyster Creek and the Bay;
- In order to construct the dwelling and associated facilities onto this property, the well will have to be located on a portion of the site that is not only in nontidal wetlands but also in Open Space; and
- A significant portion of the dwelling is to be located in nontidal wetlands.
 The findings of the State Legislature in enacting the critical area law clearly state why sites such as this need to be protected:

Natural Resources Article, § 8-1801 Declaration of public policy.

- (a) Findings.- The General Assembly finds and declares that:
- (1) The Chesapeake and the Atlantic Coastal Bays and their tributaries are natural resources of great significance to the State and the nation, and their beauty, their ecological value, and their economic impact all reach far beyond any one local jurisdiction;
- (2) The shoreline and adjacent lands, particularly the buffer areas, constitute a valuable, fragile, and sensitive part of this estuarine system, where human activity can have a particularly immediate and adverse impact on water quality and natural habitats:
- (3) The capacity of these shoreline and adjacent lands to withstand continuing demands without further degradation to water quality and natural habitats is limited;

(4) <u>Human activity is harmful in these shoreline areas, where the new development of nonwater-dependent structures or an increase in lot coverage is presumed to be contrary to the purpose of this subtitle, because these activities may cause adverse impacts, of both an immediate and a long-term nature, to the Chesapeake and the Atlantic Coastal Bays, and thus it is necessary wherever possible to maintain a buffer of at least 100 feet landward from the mean high water line of tidal waters, tributary streams, and tidal wetlands;</u>

(Emphasis added.)

To drive the point home, the Legislature made it clear that there was a presumption that development in the critical area did not conform to the critical area law. "The current Critical Area variance criteria are very strict. The statute requires the [administrative agency] to presume that the requested development activity does not conform to the general purpose and intent of the Critical Area Program [citing Maryland Annotated Code, Natural Resources Article, § 8-1808(d)(2)(i)]." Becker v. Anne Arundel County, 174 Md. App. 114, 124; 920 A.2d 1118, 1124 (2007). The Court of Special Appeals has reiterated this point in the recent decision of Critical Area Commission, et al. v. Moreland, LLC, et al, No. 823, September Term 2008, March 25, 2010.

The denial of a variance to build in the nontidal wetlands shown on the Site Plan may deny the applicant "reasonable and significant use of the entire parcel or

⁸ The Court of Special Appeals capitalizes the initial letters of "critical area," while the Anne Arundel County Code does not. The Critical Area Commission should be referred to with the initial letter of each word capitalized because it is the name of an organization, but the "critical area" is an "area ... shown on the maps adopted by Bill No 49-99." I will follow the capitalization (or lack thereof) adopted by the Code.

lot for which the variance is requested." If so, this may amount to an "unwarranted hardship." In *Becker v. Anne Arundel County, supra*, 174 Md.App. at 132-3; 920 A.2d at 1129, the Court of Special Appeals discussed the definition of unwarranted hardship found in § 8-1808(d)(1) of the Natural Resources Article in the State Code: "The amendment changed the definition of unwarranted hardship to mean that, 'without a variance, an applicant would be denied reasonable and significant use of the *entire* parcel or lot for which the variance is requested." (Emphasis in original.)

This language raises two questions: first, what is the reasonable and significant use of this property; and, second, will the applicant be denied use of the reasonable and significant use of the entire parcel if the requested variance is denied. Oyster Harbor is developed with residences. Therefore, a residential structure is a reasonable use of Lot 18.

However, is the applicant denied reasonable and significant use of the entire parcel if the variance is denied? Not if the proposed use is in excess of the minimum needed to allow the applicant to use its property. The relationship between the "minimum" requirement of all variances and the "reasonable and significant use of the entire parcel" was made clear in the *Moreland* decision as discussed below.

Before reaching a determination as to whether the applicant will be denied reasonable and significant use of the entire property, the development proposed by the applicant must be considered. In this case, the applicant proposes to construct

a dwelling 50' x 30' in size. In some other cases, evidence has been presented about the sizes of nearby houses for comparison with the development proposed by the applicant. That was not done here. However, even without such a comparison, the dwelling proposed for Lot 18 is not the minimum size that could be built on Lot 18. As shown by the Site Plan, the house proposed by the applicant would be located at the 30-foot building restriction line along Arundel on the Bay Road and at the 7-foot setback from the southeast side lot line. In other words, the dwelling will be as close as possible to the street in front of it and to the side lot line. Furthermore, the footprint of the proposed dwelling, the driveway, and the accompanying disturbance during construction would significantly affect the nontidal wetlands on Lot 18: 1,691 square feet of nontidal wetlands would be disturbed; 3,793 of wetlands buffer would be disturbed, for a total of 5,484. The property is cramped, to say the least, by virtue of its odd shape and the presence of sensitive soils, but the proposed house is not the minimum that could be built on this property.

Not that what the neighbors have been able to build would be the most important factor in determining whether a critical area variance should be granted, particularly where, as here, the lot is unique, i.e., not the same type of ground on which other houses have been built.

County Exhibit 2 - Plan Sheet. How much the right-of-way added square footage to Lot 18 was not disclosed at the hearing. The addition of the right-of-way has increased the size of the "envelope" in which the applicant can develop the property but will add nothing to the ability of Lot 18 and the surrounding areas to absorb the loss of habitat that would ensue from the proposed construction.

The applicant points out that the parcels it wants to develop - Lot 18 and the right-of-way - were platted before the critical area law went into effect. Even though the failure to minimize the proposed development is fatal to the applicant's request, the grandfathered status of the parcels must be evaluated to see whether the decision to deny the variance should be changed.

Any such determination begins with a review of *Belvoir Farms*Homeowners Ass'n, Inc. v. North, 355 Md. 259, 734 A.2d 227 (1999): An unconstitutional "taking" of property is generally proved when a "regulation deprives a property owner of all economically beneficial or productive use of land." At 282, citing *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003, 1015, 112 S.Ct. 2886, 120 L.Ed.2d 798 (1992). The *Belvoir Farms* court did not pass on a specific set of facts in that case. Its comment on an unconstitutional taking was made as it remanded the case to the lower courts and to the Anne Arundel County Board of Appeals to consider whether a denial of the requested variance would deny the applicant "all economically beneficial or productive use of the land." *Ibid.* 12

In *Becker v. Anne Arundel County*, 174 Md. App. 114, 920 A.2d 1118 (2007), Judge James R. Eyler repeated this concern while remanding another appeal back to Anne Arundel County:

For purposes of this part of this decision, the right-of-way is irrelevant. It has not been formally combined with Lot 18.

¹² This standard is set forth in § 8-1808(d)(1) of the Natural Resources Article.

At some point, however, assuming new and different variance requests in the future, a denial of variances would effect [sic] an unconstitutional taking. Under the circumstances of this case, the Board's opinion is deficient, and we shall direct that the matter be remanded to the Board. On remand, the Board may receive additional evidence, if offered by any or all of the parties. The Board must provide a statement of reasons for its decision that go beyond repeating the words in the Code, and which include references to the evidence, so as to enable the parties to make reasonable decisions, if the variance requests are denied, and to permit meaningful judicial review, if that is requested.

At 145, 1136-7. Emphasis added.

In Critical Area Commission for the Chesapeake and Atlantic Coastal Bay, et al. v. Moreland, LLC, et al., Court of Special Appeals, September Term, No. 823, filed March 25, 2010, the Court of Special Appeals reiterated at page 20 of the slip opinion the language quoted above from the Becker decision as it remanded another appeal to Anne Arundel County. However, in passing, it set down guidelines for determining whether a variance can be granted in a critical area case:

The statutory mandate to grant only the 'minimum variance necessary to afford relief' refers to variances necessary to allow a 'reasonable and significant use,' not a minimal use, of the property in question.

In the context of cases [such as the one before the court in *Moreland*], a variance does not, in and of itself, protect the Bay's environment. A variance permits the construction of a structure that is otherwise prohibited by the terms of the County's critical area program. The distinction goes beyond semantics. The purpose of the variance procedure is to permit the

Board to determine, based upon the evidence, whether the variances requested are the minimum necessary to permit a reasonable and significant use of the property and, if they are, whether the proposal can be accommodated on the property in compliance with the statutory criteria.

Cases such as this present an appeals board [and, by extension, an administrative hearing office] with a spectrum of choices. A board may deny an application because it determines that requested variances would permit the construction of a house that exceeds what the board finds to be a reasonable and significant use for the property. A board may deny an application because, even though the variances requested are the minimum necessary to permit a reasonable and significant use, there is a threat of real harm to the environment or other violation of the standards that is not adequately addressed in the application. Finally, a board may deny an application because, even though the variance request meets the "minimum necessary" test, there will be a real harm to the environment or other violation of the variance standards that cannot be adequately addressed or remediated by the applicant. But in any case, the zoning appeals board must clearly explain the basis for its decision so that an unsuccessful applicant may, depending upon the circumstances and the basis of the decision, either amend its proposal or explore other remedies.¹³

¹³ The statement in the *Moreland* opinion at page 29 that, if the Board decides the requested variances are not the minimum necessary to permit a reasonable and significant use, the Board "must determine what the minimum variances are to permit such a use" is *dictum*. With all due respect, neither the Board nor this Office is charged with setting out for an applicant what the minimum variance is to allow the applicant to develop a property in the critical area. The application is judged by the evidence that is presented. The real-world result of adopting the suggestion in *Moreland* would require this Office to educate applicants as to how they did not meet the critical law variance requirements, and then set out for them how they can successfully obtain a variance. The process would go from weighing the evidence in order to determine whether the required elements have been met to analyzing the entire factual circumstances of each case and rendering a decision as to how the applicant can develop the property involved. The position of this Office was summed up in a decision by my predecessor in granting a special exception for a cell tower: "In closing, I am constrained to note that this Office is not charged with determining the best siting for a cell tower - or for that matter, any other particular use. Rather, my task is to determine whether a particular application meets the applicable criteria." *In re: Southwestern Bell Mobile Systems*, Case No. 2004-0051-S.

At page 27-28.

Applying the standards enunciated in *Moreland*, I find that building a house in nontidal wetlands presents "a real harm to the environment or other violation of the variance standards that cannot be adequately addressed or remediated by the applicant."

The applicant claims that stormwater management devices and other actions will prevent harm to the environment. The applicant also claims that it can remediate any negative effects by constructing nontidal wetlands elsewhere. But constructing wetlands elsewhere cannot compensate for the disappearance of the nontidal wetlands that presently exist on this property.

However, the findings of the State Legislature in enacting the critical area law clearly state why sites such as this one need to be protected:

Natural Resources Article, § 8-1801 Declaration of public policy.

- (a) Findings.- The General Assembly finds and declares that:
- (1) The Chesapeake and the Atlantic Coastal Bays and their tributaries are natural resources of great significance to the State and the nation, and their beauty, their ecological value, and their economic impact all reach far beyond any one local jurisdiction;
- (2) The shoreline and adjacent lands, particularly the buffer areas, constitute a valuable, fragile, and sensitive part of this estuarine system, where human activity can have a particularly immediate and adverse impact on water quality and natural habitats;

- (3) The capacity of these shoreline and adjacent lands to withstand continuing demands without further degradation to water quality and natural habitats is limited;
- (4) <u>Human activity is harmful in these shoreline areas, where the new development of nonwater-dependent structures or an increase in lot coverage is presumed to be contrary to the purpose of this subtitle, because these activities may cause adverse impacts, of both an immediate and a long-term nature, to the Chesapeake and the Atlantic Coastal Bays, and thus it is necessary wherever possible to maintain a buffer of at least 100 feet landward from the mean high water line of tidal waters, tributary streams, and tidal wetlands;</u>

(Emphasis added.)

Nontidal wetlands are different from other sensitive areas, such as the 100foot buffer and steep slopes. ¹⁴ Development in the 100-foot buffer is prohibited
unless it can be accomplished without damage to the buffer and the Bay.

Development in steep slopes is prohibited unless it can be accomplished without
damage to the slopes or the Bay. These prohibitions are based on a presumption
that development in these areas has a negative effect upon the shoreline and the
Bay.

In contrast, however, development in nontidal wetlands is of greater concern because, once the development is completed, a significant and permanent change will have taken place, i.e., the nontidal wetlands on a lot that are replaced

¹⁴ And properties that have already been developed with impervious surfaces. If limits on impervious surfaces have been reached, impervious surfaces can be removed and re-installed elsewhere. § 17-8-702(c). And, if impervious surfaces exceed limitations, they can be reduced to bring a property into compliance.

by structures and paving will no longer be there to filter and absorb surface water. This is in contrast to the loss of a tree, which can be replaced by another tree planted somewhere else, or remediation that increases vegetation elsewhere to compensate for the loss of vegetation on a particular site. A wetland that is paved over is a permanent loss to the location where it once existed. Creating nontidal wetlands somewhere else will not help the land that has been forever altered by the removal of wetlands on it. The ability of the remaining wetlands to absorb surface water and to filter surface water on its way downstream to tidal areas will be reduced. This reduction will have an adverse effect downstream because, unlike Las Vegas, whatever happens in a nontidal wetland does *not* stay there.

This is confirmed by the report submitted by Vincent Berg, who is accepted as an expert witness on matters relating to environmental matters based on his education and experience. (Mr. Berg was Director of the Sediment and Stormwater Administration in the Maryland Department of the Environment from 1989 to 1992, among other offices he has held.) ¹⁵ Among other things, Mr. Berg concluded that "[a]ll water from the roof and driveway will discharge into the rain garden underdrains and then directly into the critical area and to the adjacent wetlands and waterways." At page 3. This is not a surprising conclusion, given

¹⁵ Mr. Berg's report had been received and reviewed before the Letter Agreement was submitted in which the parties agree to withdraw his report. Mr. Berg's report confirmed the conclusions the Hearing Officer had reached on other evidence and the site visit. If his report were withdrawn, the decision to deny the requested variance would not be reversed. There is ample evidence to support the denial. However, the applicant and the Protestants cannot control what is considered by this Office. Even if it were granted, the parties cannot "unring the bell."

that the water table is near the surface of the ground and is the reason nontidal wetlands are delineated on the site.

For all these reasons, therefore, I find that a variance to allow the proposed dwelling to be built as proposed in nontidal wetlands would result in real harm to the environment that cannot be adequately addressed or remediated by the applicant.¹⁶

As noted above, the applicant and the Protestants sat down and, in good faith, negotiated what they all believe is a fair resolution as to how the applicant can improve the development proposed for Lot 18. The size of the proposed dwelling was not reduced, however. The restrictions set forth in the Letter Agreement do not, in my mind, move this application from one that should be denied to one that should be granted. Variances have never been granted by consent of the owners of neighboring property, although input from neighboring property owners is a valuable part of the administrative hearing process.

Acknowledging the input from the neighbors expressed at the hearing and in the Letter Agreement, a variance to build the house in the location shown on the Site Plan must be denied.

Subsection (b)(1) - Unwarranted Hardship.

In *Becker v. Anne Arundel County, supra*, 174 Md. App. at 132-3; 920 A.2d at 1129, the Court of Special Appeals discussed the definition of unwarranted

This does not mean that every variance application for a property with nontidal wetlands must be denied. The facts of each application are different.

hardship found in § 8-1808(d)(1) of the Natural Resources Article in the State Code: "The amendment changed the definition of unwarranted hardship to mean that, 'without a variance, an applicant would be denied reasonable and significant use of the entire parcel or lot for which the variance is requested."

I find that the denial of the variance does not constitute an unwarranted hardship that would deny the applicant use of the entire parcel. As noted in the *Moreland* decision, there is no denial if the requested relief is not the minimum needed to provide the property owner relief. The evidence shows that the applicant wants to build a house that is approximately 50' x 30' with a garage. This is not the minimum needed to obtain a variance to build in nontidal wetlands.¹⁷

I also find that building a house on a lot that has nontidal wetlands on it to the extent in this case presents "a real harm to the environment or other violation of the variance standards that cannot be adequately addressed or remediated by the applicant." The applicant asserts that stormwater management devices and other actions it will take will prevent harm to the environment. The applicant also claims that it can remediate any negative effects by constructing nontidal wetlands elsewhere. But constructing wetlands elsewhere cannot compensate for the disappearance of the nontidal wetlands *from this property*. Therefore, the applicant has not met the requirements of subsection (b)(1).

¹⁷ As noted above, it is not the duty of this Office, despite the *dictum* in the *Moreland* decision, to inform the applicant of what would qualify as the minimum development needed to obtain a variance to the habitat protection law. Any change in any direction would change other factors and thus require fresh analysis and evidence.

Subsection (b)(2) - Deprive Applicant Of Rights

I find that the applicant would not be deprived of rights commonly enjoyed by other properties in similar areas as permitted in accordance with the provisions of the critical area program, i.e., the right to construct a dwelling of this size on nontidal wetlands. Therefore, I find that the applicant has not met the requirements of subsection (b)(2).

Subsection (b)(3) - Special Privilege

I find that the granting of the requested critical area variance will confer on the applicant a special privilege that would be denied by COMAR, 27.01, the County's critical area program, to other lands or structures within the County's critical area. While there was testimony that the proposed improvements would be comparable to other improvements in the neighborhood, allowing the applicant to build a home in wetlands is not something other property owners would be granted. Therefore, I find that the applicant has not met the requirements of subsection (b)(3).

Subsection (b)(4) - Actions By Applicant Or Neighboring Property

I find that the critical area variances requested are not based on conditions or circumstances that are the result of actions by the predecessor in interest of the applicant, for the reasons set forth above, nor does the need arise from any condition relating to land or building use on any neighboring property. Therefore, I find that the applicant has met the requirements of subsection (b)(4).

Subsection (b)(5) - Water Quality, Intent Of Critical Area Program

I cannot find, for reasons set forth above, that the granting of the requested critical area variance will not adversely affect water quality or adversely impact fish, wildlife or plant habitat within the County's critical area or a bog protection area and be in harmony with the general spirit and intent of the County's critical area program. Therefore, I find that the applicant has not met the requirements of subsection (b)(5).

Subsection (b)(7) - § 8-1808(d)(2)(ii) Presumption

In *Becker v. Anne Arundel County, supra*, 174 Md. App. at 133; 920 A.2d at 1129, the Court of Special Appeals discussed the presumption found in § 8-1808(d)(2)(ii) of the Natural Resources Article: "The amendment also created a presumption that the use for which the variance was being requested was not in conformity with the purpose and intent of the critical area program."

I find that the applicant has not overcome the presumption contained in the Natural Resources Article, § 8-1808(d)(2) for the reasons set forth above.

Therefore, I find that the applicant has not met the requirements of subsection (b)(7).

ORDER

PURSUANT to the application of Lot 18ABR, LLC, petitioning for a variance to allow a dwelling and associated facilities with disturbance to a habitat protection area; and

PURSUANT to the notice, posting of the property, and public hearing and in accordance with the provisions of law, it is this 8th day of June, 2010,

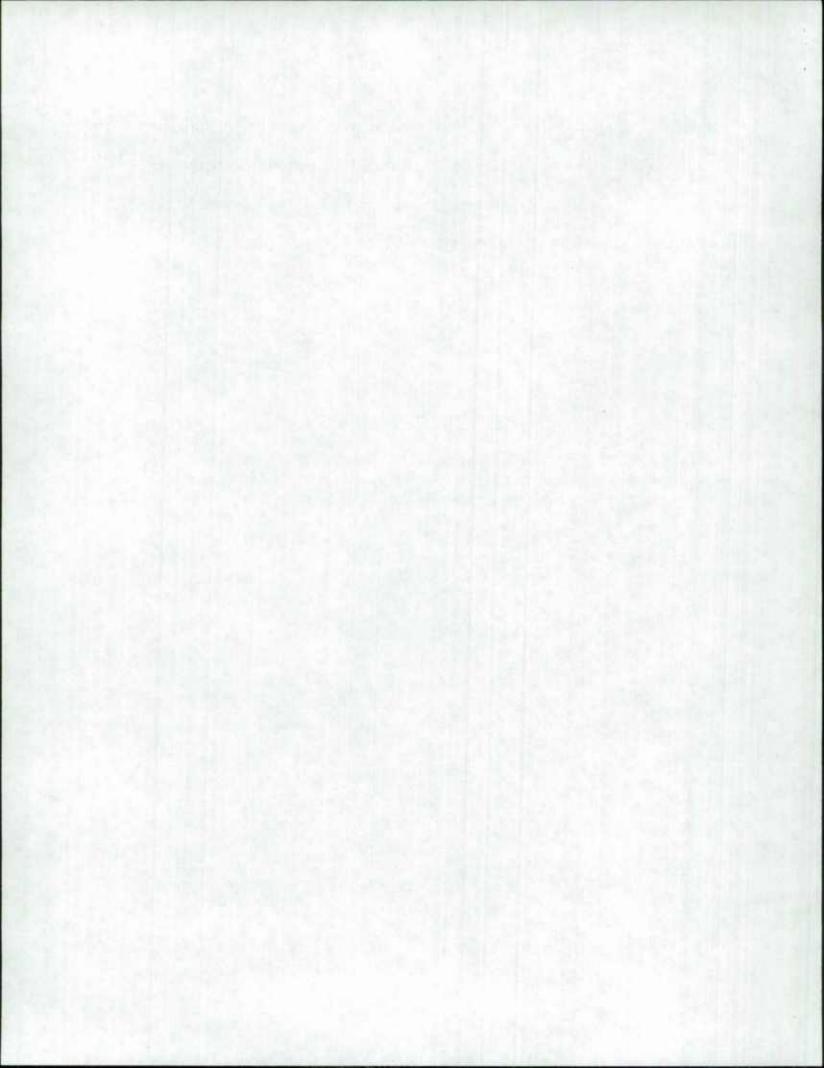
ORDERED, by the Administrative Hearing Officer of Anne Arundel County, that the applicant's request is **denied**.

Douglas Clark Hollmonn Administrative Hearing Officer

NOTICE TO APPLICANT

Within thirty days from the date of this Decision, any person, firm, corporation, or governmental agency having an interest therein and aggrieved thereby may file a Notice of Appeal with the County Board of Appeals.

If this case is not appealed, exhibits must be claimed within 60 days of the date of this Order, otherwise they will be discarded.



FINDINGS AND RECOMMENDATION OFFICE OF PLANNING AND ZONING ANNE ARUNDEL COUNTY, MARYLAND

APPLICANT: Lot 18ABR, LLC ASSESSMENT DISTRICT: Second

CASE NUMBER: 2010-0053-V COUNCIL DISTRICT: Sixth

BOARD OF APPEALS: BA 24-10V

HEARING DATE: April 27, 2010 PREPARED BY: John R. Fury BOARD OF APPEALS: August 25, 2010 Planner

REQUEST

The applicant is requesting a variance to allow a dwelling with less setbacks and buffer than required and with disturbance to a habitat protection area.

LOCATION AND DESCRIPTION OF SITE

The subject property is triangular in shape and consists of 26,813 square feet, more or less. It is located on the east side of Arundel on the Bay Road, approximately 340 feet southeast of Bay Highlands Drive in Annapolis. The property is identified as Lot 18 of Parcel 9 in Block 14 on Tax Map 57. An adjacent twenty-foot right-of-way was abandoned and is proposed to be merged with Lot 18. The site has been split-zoned R2 – Residential district and OS – Open Space district since the adoption of the Annapolis Neck Small Area Plan zoning maps effective July 21, 2007.

This is a non-waterfront site that is located in the Chesapeake Bay Critical Area and is classified as LDA – Limited Development Area and RCA – Resource Conservation Area. Non-tidal wetlands comprise the majority of the parcel

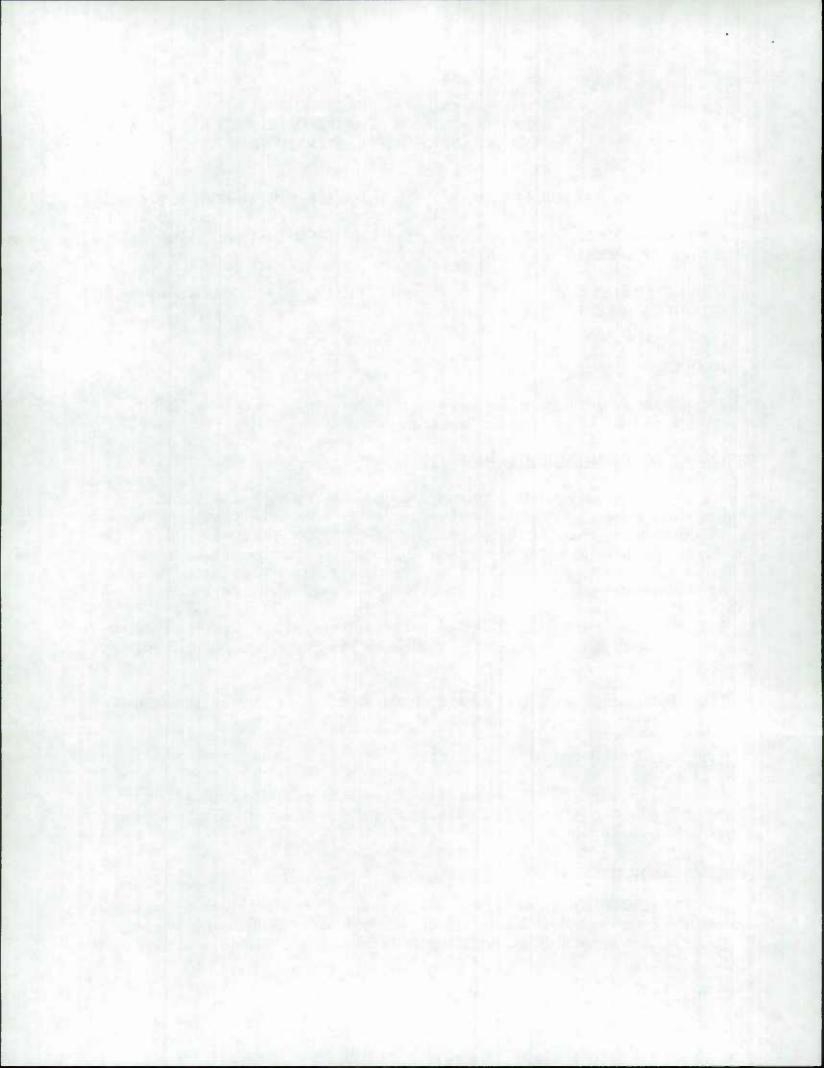
The subject property is unimproved and substantially vegetated. It is a grandfathered lot in the Critical Area and is located in the subdivision of Oyster Harbor.

APPLICANT'S PROPOSAL

Should the request be granted, the applicant proposes to construct a single-family dwelling as indicated on the site plan that would disturb approximately 5,484 square feet of non-tidal wetlands and their associated buffer.

REQUESTED VARIANCE

Article 17-8-502 states that a habitat protection area shall be preserved and protected in connection with all development as set forth in this subtitle and as required by the Office of Planning and Zoning in accordance with the recommendation of the Department of Natural Resources and other



BA 24-10V

reviewing agencies. Whereas non-tidal wetlands are defined as a habitat protection area, a variance of 1,691 square feet is required for the proposed disturbance to non-tidal wetlands.¹

FINDINGS

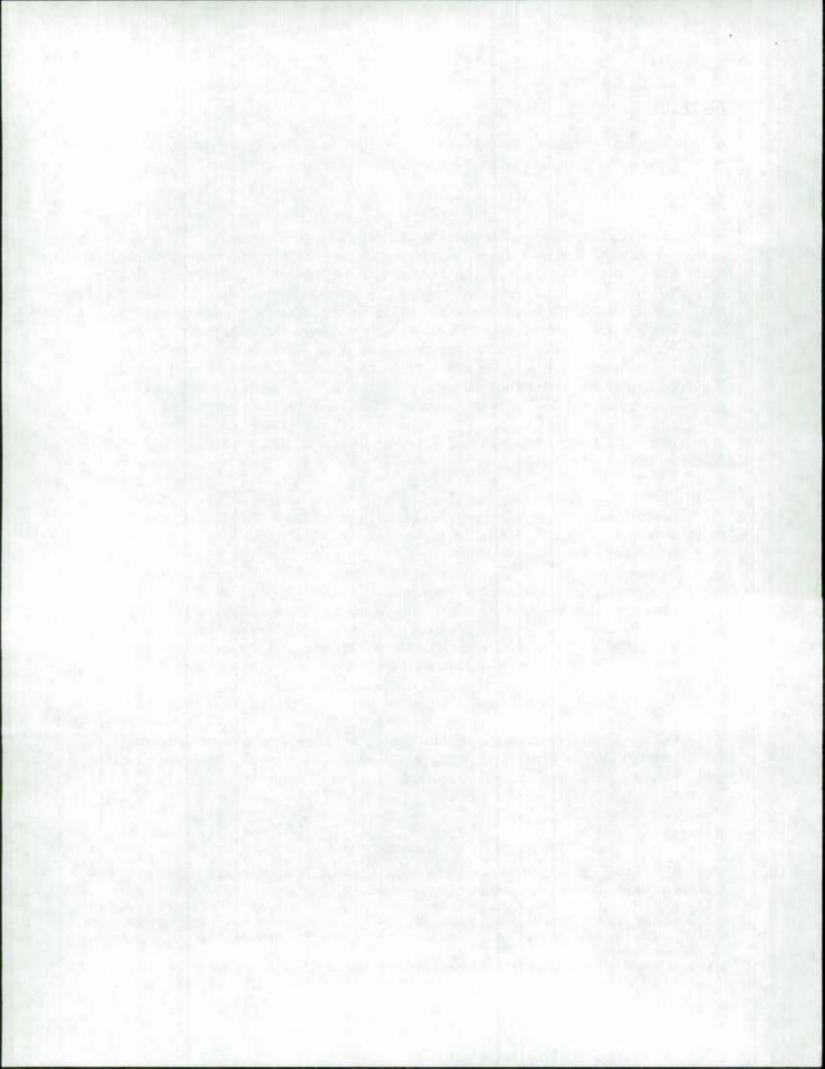
The subject site is an undeveloped lot with non-tidal wetlands throughout, and the site is located entirely within the Critical Area. The subject property slopes to the east and ultimately drains to Oyster Creek. The applicant indicated that the location of the proposed dwelling has been shifted to the south in order to minimize wetlands disturbance. The project would disturb 1,691 square feet of non-tidal wetlands and 3,793 square feet of wetland buffer; thus, a variance is required to permit disturbance in a habitat protection area. The proposal would also result in the clearing of 4,910 square feet of woodland in the Critical Area, which is within the limitation for the site. Mitigation and stormwater management would be provided in accordance with County Code requirements. The proposed dwelling meets zoning setback requirements for the R2 district. A private well and public sewer is proposed. The height of the proposed dwelling is thirty-two feet.

With regard to the standards by which a Critical Area variance may be granted, this Office would submit the following findings:

- 1. The site presents unique physical conditions consisting of the location and extent of non-tidal wetlands and their buffer such that a strict implementation of the Critical Area Program would result in an unwarranted hardship to the applicant.²
- 2. A literal interpretation of the Critical Area Program would deprive the applicant of rights commonly enjoyed by other properties in similar areas of the Critical Area, namely, to allow the construction of a dwelling on an unimproved, residentially-zoned lot.
- 3. The granting of a modified variance would not confer a special privilege that the program typically denies. The granting of a variance to allow the construction of a single-family dwelling on a lot in residential zoning district would not amount to a special privilege.
- 4. The variance request is not based on conditions that are the result of actions by the applicant. The applicant is not seeking a retroactive variance.
- 5. With mitigation and stormwater management, the granting of the variance would not adversely affect water quality of adversely impact fish, wildlife, or plant habitat within the County's Critical Area and would be in harmony with the general spirit and intent of the County's Critical Area program. The project shall meet the requirements of Article 16, as well as to provide mitigation in accordance with Code requirements.

¹ More specifically, the Anne Arundel County Habitat Assessment Manual states that the Critical Area Act requires that protection is given to wildlife and plant habitats, "which are of particular significance...owing to their uniqueness, rarity, or likely diminution in the future, and which are not already protected or addressed by other existing programs". Non-tidal wetlands are set forth in the Habitat Assessment Manual as a habitat protection area. The applicant proposes to disturb non-tidal wetlands and their buffer. As such, a variance is required to allow non-tidal wetlands disturbance in a habitat protection area.

² Maryland Natural Resources Article 8-1808 defines unwarranted hardship as meaning that, without a variance, the applicant would be denied reasonable and significant use of the entire parcel or lot (emphasis added).



BA 24-10V

Concerning the standards for all variances, it is the opinion of this Office that the granting of a modified variance would not:

- 1. alter the essential character of the neighborhood or district in which the lot is located;
- 2. substantially impair the appropriate use or development of adjacent property;
- 3. result in a net reduction of forest cover in the limited development area of the critical area;
- 4. be contrary to acceptable clearing and replanting practices required for development in the critical area; nor
- 5. be detrimental to the public welfare.

However, this Office would submit that the requested variance is not the minimum necessary to afford relief. Projects in environmentally sensitive areas such as non-tidal wetlands should be considered carefully with regard to ultimate impact within the Critical Area. In this case, the proposed footprint and corresponding amount of disturbance to non-tidal wetlands is excessive and should be reduced. It would be inappropriate at this time to discuss an exact dwelling square footage or configuration that would constitute minimal relief for this site; however, it should be noted that this Office has recommended approval of variances in other environmentally sensitive areas that resulted in new dwelling footprints of less than 900 square feet. Whereas the applicant proposes a dwelling footprint of 1,500 square feet, a substantial portion of which would be located directly in areas of non-tidal wetlands, this Office finds that there is ample opportunity to further minimize the variance request.

The State of Maryland Critical Area Commission commented in pertinent part that in requesting a variance, the applicant has the burden to prove that all of the County's variance standards have been met, specifically that the variance requested is the "minimum to afford relief" and that without a variance, the applicant would be subject to an unwarranted hardship (emphasis in original). In this case, the Commission believes there is opportunity to minimize disturbance to the non-tidal wetlands and their buffer by reducing the footprint of the proposed dwelling.

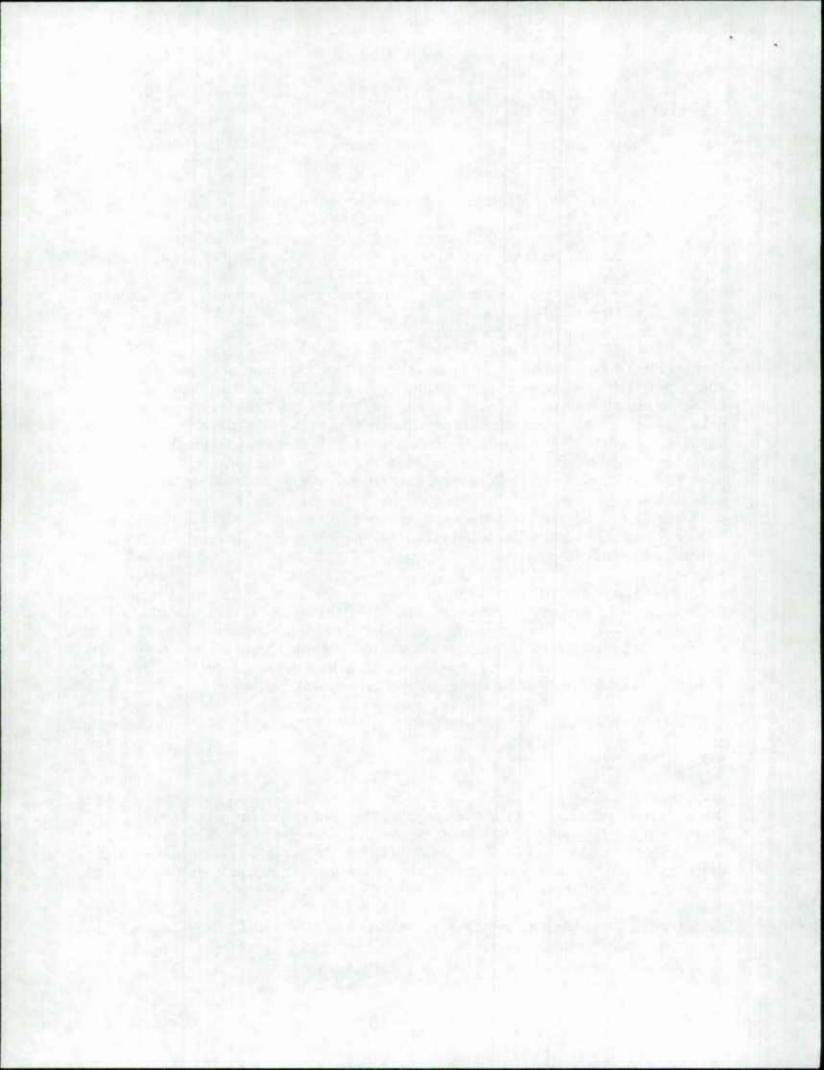
The County Health Department requested plan approval.

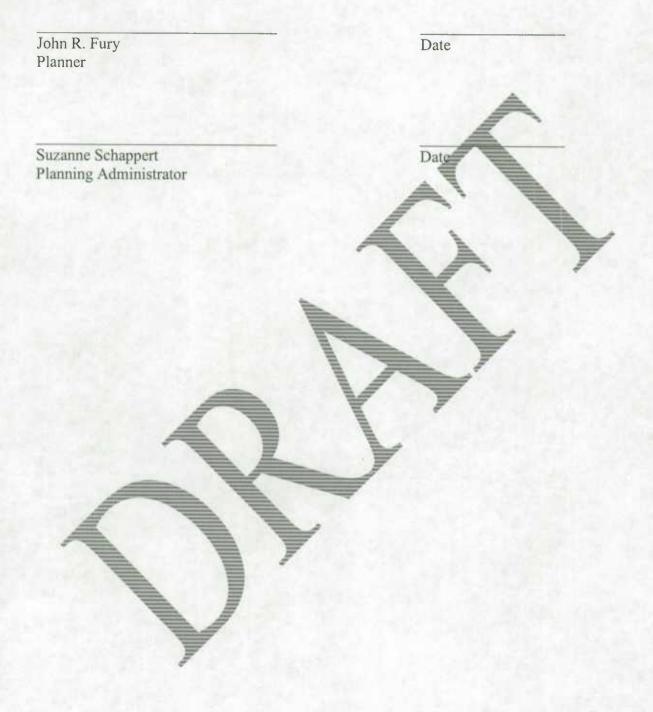
RECOMMENDATION

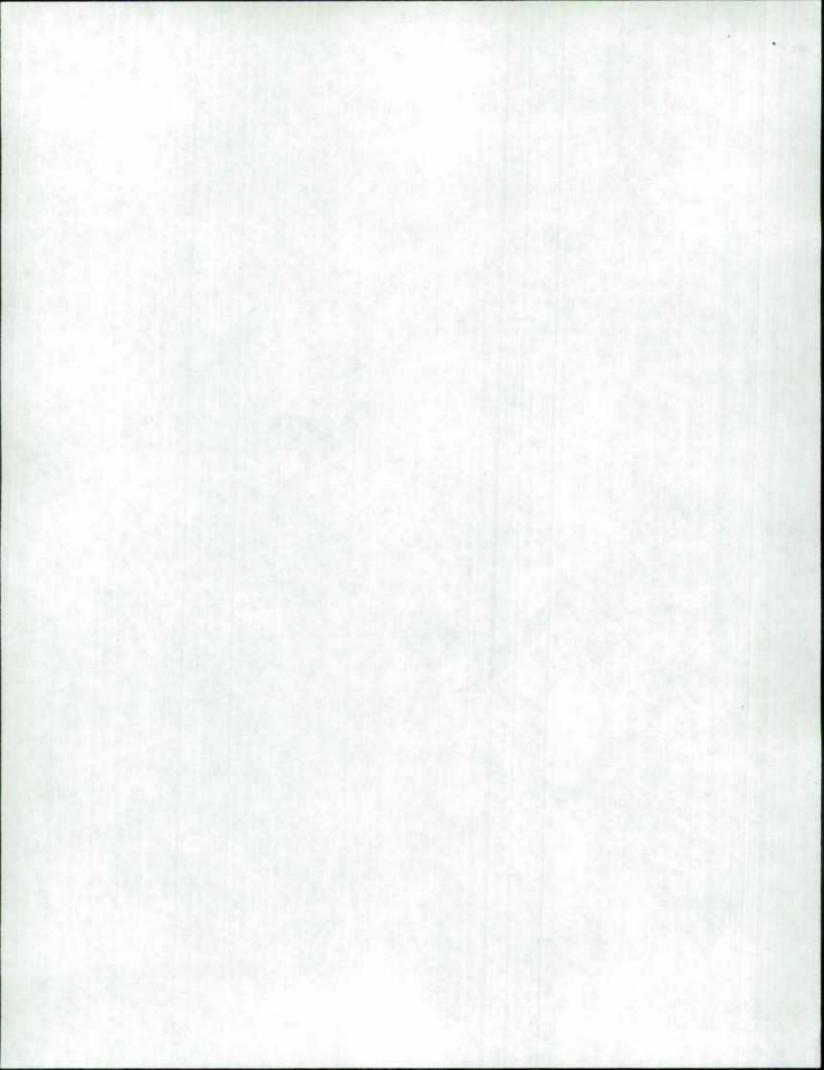
Based upon the standards set forth in Section 3-1-207, under which a variance may be granted, the Office of Planning and Zoning would recommend that the applicant's variance request be **granted with conditions** that the footprint of the proposed dwelling shall be reduced to the satisfaction of the Critical Area Commission and the Office of Planning and Zoning, and the project shall comply with any other recommendation(s) by the aforementioned agencies and the Maryland Department of the Environment prior to the issuance of a building permit.

This recommendation does not confirm the legal status of a lot. The legality of a lot is determined through the building permit process.

³ See BA 65-06V (Barry) and BA 30-09V (Leonard).







I(We) certify that:

- a. All development construction will be done in accordance with this sediment and erosion control plan, and further, authorize the right of entry for periodic on-site evaluation by the Anne Arundel County Soil Conservation District Board of Supervisors or their authorized agents.
- Any responsible personnel involved in the construction project will have a certificate of attendance from the Maryland Department of the Environment's approved training program for the control of sediment and erosion before beginning the project.

Responsible personnel on site:

- c. If applicable, the appropriate enclosure will be canstructed and maintained on sediment basin(s) included in this plan. Such structure(s) will be in compliance with the Anne Arundel County Code.
- The developer is responsible for the acquisition of all easements, right and/or rights-of-way that may be required for the sediment and erosion control practices, stormwater management practices and the discharge of stormwater onto or across adjacent or downstream properties included in the plan.
- Initial soil disturbance or re-disturbance, permanent stabilization shall be completed within seven calendar days for the surface of all controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site. Temporary stabilization of the surface of per controls, dikes, swales, ditches and perimeter slopes may be allowed at the discretion of the sediment control inspector.
- The sediment control approvals on this plan extend only to areas and practices identified
- 5. The approval of this plan for sediment and erosion control does not relieve the developer/consultant from complying with Federal, State or county requirements appertaining to environmental issues.
- 6. The developer must request that the Sediment Control Inspector approve work completed in accordance with the approved erosion and sediment control plan, the grading or building permit and the ordinance.
- 7. All material shall be taken to a site with in approved sediment and erosion control plan.
- 8. On all sites with disturbed areas in excess of two acres, approval of the sediment and erosion control inspector shall be required on completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. This will require first phase approval by the sediment and erosion control inspector is given. Other building or grading inspection approvls may not be authorized until the initial approval by the sediment and erosion control inspector is given.
- Approval shall be requested on final stabilization of all sites with disturbed areas in excess of two acres before removal of controls.
- Twisting tangaranty must be field verified by responsible personnel to the satisfaction of

the sediment control inspection prior to commencing work	7-1-08
Signature(s) of Developer/Owner	Date
Print: NameDENNY_L. HOWELL, II Title	DEVELOPER
Address 1195 McDERMOTT DRIVE, WEST CHESTER, PA. 19.	382

CONSULTANT'S CERTIFICATION

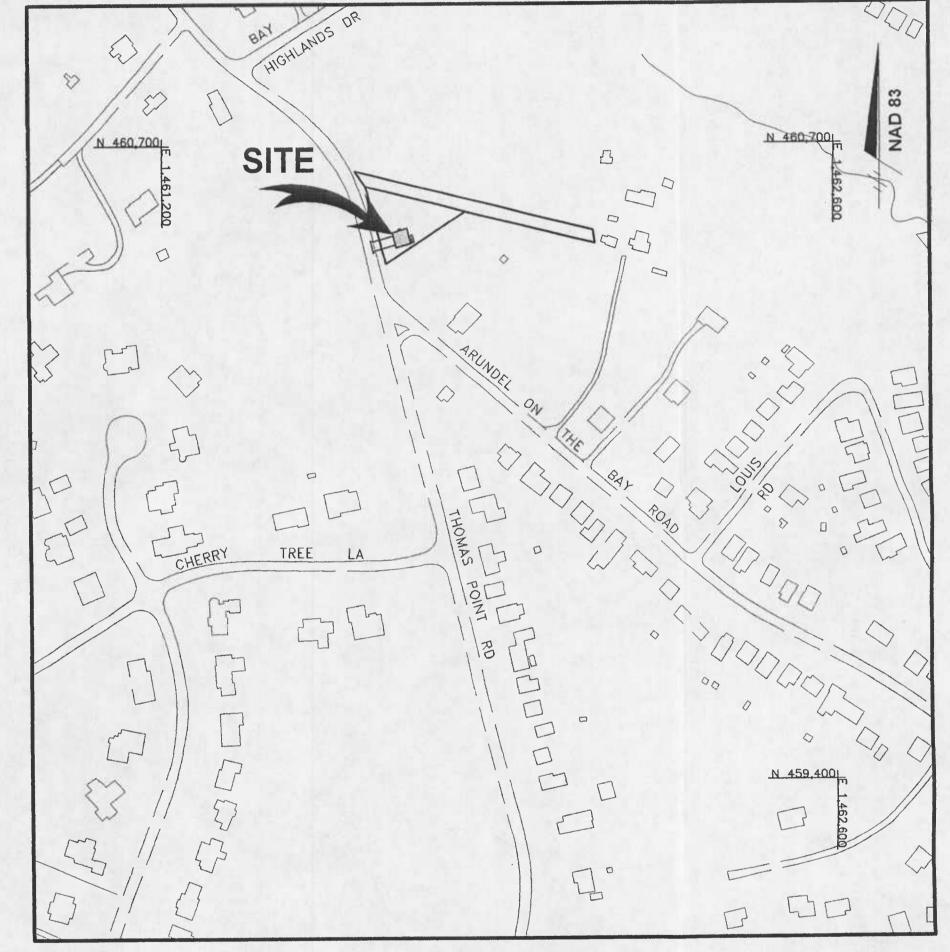
610-918-9006

ANNAPOLIS, MD. 21401

The developer's plan to control silt and erosion is adequate to contain the silt and erosion on the property covered by the plan. I certify that this plan of erosion and sediment control represents a practical and workable plan based on my personal knowledge of this stelland was prepared in accordance with the requirements of the Anne Arundel Set Canservation District Plan Submittal Guidelines and the current Maryland Standards and Specifications for Sediment and Erosion Control. I have reviewed this wision and sediment control plan with the owner/developer.

Feviewed mis world sentition control plan with	1 1
Signature Miss of Market MD. P.E. License #	18858 DATE 5/10/11
MD. Land Surveyor License #	DATE
Name (Print) THOMASON. SETTLE, P.E. Fir	m Name_TERRAIN, INC.
Address 106 OLD SOLOMONS ISLAND RD.	

SITE DEVELOPMENT AND GRADING PLAN OYSTER HARBOR



LOCATION MAP

Scale: 1"=200'

REVISION BLOCK

DESCRIPTION

NO. DATE

STORMWATER MANAGEMENT SUMMARY TABLE				
MINIMUM SIZING CRITERIA	SYMBOL	VOLUME REQ'D (CUBIC-FEET)	SWM PRACTICE	
WATER QUALITY VOLUME	(WQv)	442 CF	ESD METHOD/ REDUCED RCN	
RECHARGE VOLUME	(REv)	37 CF	ESD METHOD/ REDUCED RCN	
CHANNEL PROTECTION STORAGE VOLUME	(Cpv)	N/A	ESD METHOD/ REDUCED RCN	
OVERBANK FLOOD PROTECTION	(Qp10)	N/A	INDIVIDUAL LOT DEVELOPMENT DISTURBING LESS THAN 15,000SF WITH STABLE OUTFALL	
EXTREME FLOOD	(Qf)	N/A	INDIVIDUAL LOT DEVELOPMENT DISTURBING LESS THAN 15,000SF WITH STABLE OUTFALL	

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OUTFALL STATEMENT

A FIELD INVESTIGATION OF THE SITE OUTFALL WAS PERFORMED BY TERRAIN INC. ON DECEMBER, 2007. THE SITE IS AN UNDEVELOPED 0.33 ACRE R2 LOT WHICH SLOPES TO THE EAST TO DRAINAGE THAT DRAINS TO OYSTER CREEK. THE SITE IS A WELL VEGETATED, WITH A LARGE AREA OF WETLANDS .. THE PROPOSED DEVELOPMENT IS THE CONSTRUCTION OF A HOUSE, WELL, SHC AND SWM DEVICES. THIS OUTFALL IS STABLE WELL VEGETATED AND SHALL NOT CHANGE AS A RESULT OF THIS DEVELOPMENT. THE OUTFALL CONFIGURATION, SOIL TYPE AND VEGETATIVE COVERS ARE SUCH THAT EROSION OR SEDIMENTATION IS NOT OCCURRING OR SHALL NOT OCCUR AS A RESULT OF THE PROPOSED DEVELOPMENT, IF ALL CONSTRUCTION IS IN ACCORDANCE WITH THESE PLANS AND THE AA. CO. DESIGN CRITERIA UTILIZING THE DETAILS AND SPECIFICATION STANDARDS.

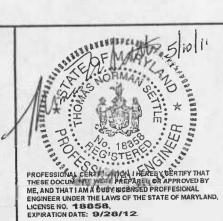
SWM NOTE

SWM SHALL BE PROVIDED FOR THIS INDIVIDUAL LOT DEVELOPMENT (DISTURBING LESS THAN 15,000 SF, WITH A STABLE ADEQUATE OUTFALL) BY ESD DESIGN USING ROOFTOP DISCONNECT AND RAINGARDEN TO PROVIDE THE REQUIRED ESDV TARGET FOR THE ENTIRE SITE.

BY

DEVELOPER

DENNY L. HOWELL, I D. HOWELL DEVELOPMENT CORP. 1195 McDERMOTT DRIVE WEST CHESTER, PA. 19382 610-918-9006



SITE ANALYSIS

D. PARKING PROVIDED= 2

TO REVIEW THE APPROVED PLANS.

5. INSTALL ALL UTILITIES* INCLUDING

8. FINAL CLEANUP AND MAINTENANCE. ___

1. CUT 100 ± CUBIC YARDS

2. FILL 100 ± CUBIC YARDS - ±CUBIC YARDS SPOIL/BORROW

4A. TOTAL AREA STRUCTURALLY STABILIZED 0.04 AC. ± 1,564 SQ. FT. ±

4B. TOTAL AREA VEGETATIVELY STABILIZED 0.06 AC. ± 2,647 SQ. FT. ±

4C. TOTAL AREA OF DISTURBANCE IS ______O.10 AC.± 4,211 SQ. FT.±

= 32 FT. (PROVIDED)

3. PREDOMINANT SOIL TYPE: CkA - COLEMANTOWN - 'C' (MAP # 34)

STRUCTURE ANALYSIS

A. MAXIUM HEIGHT FOR PRINCIPLE STRUCTURE ______ 35 ___ FT. (ALLOW)

C. FLOOR AREA PRINCIPLE STRUCTURE = 2,880 SQ. FT.

HAVE MET ON SITE WITH THE SEDIMENT AND EROSION CONTROL INSPECTOR

ALL REMAINING AREAS HAVE BEEN PERMANENTLY OR TEMPORARILY STABILIZED, FOUNDATIONS HAVE BEEN BACKFILLED AND A CERTIFICATION HAS BEEN

PATTERNS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN

OBTAINED. DURING BUILDING CONSTRUCTION BEYOND THE GROUND FLOOR, ALL

DISTURBED AREAS MUST BE STABILIZED AT THE END OF EACH BUSINESS DAY.

2. INSTALL S.C.E. AND REINFORCED SILT FENCE AS INDICATED.

PROVIDED TO THE INSPECTOR VERIFYING THE GRADES AND DRAINAGE

4. WITH INSPECTOR'S APPROVAL HOUSE FRAMING MAY COMMENCE

AND DRIVEWAY. FINISH CONSTRUCTION OF HOUSE.

6. FINE GRADE SITE AND INSTALL SWM DEVICE**

B. MAXIUM COVERAGE(___30__ % OF GROSS AREA)= _8,044 SQ. FT. (ALLOW)

SEQUENCE OF CONSTRUCTION

1. PRE-CONSTRUCTION MEETING: NOTIFY THE DEPARTMENT OF INSPECTIONS _____ 2 DAYS AND PERMITS AT LEAST 48 HOURS BEFORE COMMENCING WORK-(410)222-7780.

3. BUILDING CONSTRUCTION MAY NOT PROCEED PAST THE GROUND FLOOR UNTIL ___ 2 WEEKS

7. STABILIZE ALL DISTURBED AREAS WITH SEED AND MULCH AS INDICATED. WITH___ 2 DAYS

INSPECTOR'S APPROVAL REMOVE ANY REMAINING SEDIMENT CONTROL DEVICES.

* UTILITIES NOTE: DISTURB ONLY THAT AREA THAT CAN BE BACKFILLED AND STABILIZED IN ONE WORKING DAY.

** S.W.M. DEVICE TO BE INSPECTED AND CERTIFIED BY A REGISTERED P.E.

WORK MAY NOT COMMENCE UNTIL THE PERMITTEE OR THE RESPONSIBLE PERSONNEL

ZONE R2

TERRAIN, INC.

LAND ENGINEERING & DEVELOPMENT SERVICES 106 OLD SOLOMON'S ISLAND ROAD **ANNAPOLIS, MARYLAND 21401** 410-266-1160 FAX (410) 266-6129 E-MAIL: TERRAIN@COMCAST.NET

SHEET INDEX

1 COVER SHEET

DETAILS

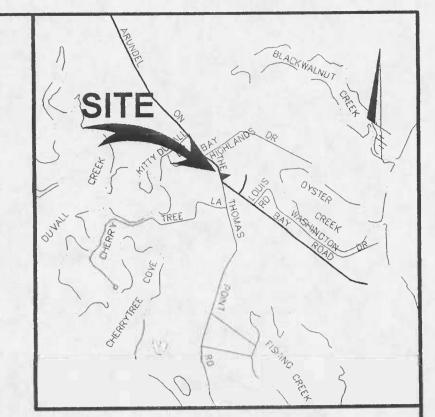
20 SCALE PLAN

20 SCALE PLAN

RESOURCE MAP

2 DA MAPS

DESCRIPTION



Copyright ADC The Map People VICINITY MAP

GENERAL NOTES

1. TOTAL AREA OF SITE IS 0.61 AC. = 26,813 SQUARE FEET. R2 ZONE AREA OF LOT = 11,796 SF AREA OF R/W= 9,999 SF TOTAL AREA IN R2 ZONE = 21,795 SF OS ZONE AREA OF LOT = 2,910 SF AREA OF R/W= 2,108 SF

TOTAL AREA IN OS ZONE = 5,018 SF

2. EXISTING ZONING IS: R2/OS SETBACKS: FRONT- 30' REAR- 25'

SIDE- 7'MIN./20'COMB. 3. EXISTING USE OF THE SITE IS VACANT

4. PROPOSED USE OF THE SITE IS S.F.D.

5. SITE IS KNOWN AS ARUNDEL ON THE BAY ROAD 6. PRIVATE WELL AND PUBLIC SEWER TO BE INSTALLED AND UTILIZED.

7. F.E.M.A. #240008-0044 D ZONE A8 AND B ELEV. 7

8. SITE IS THE CRITICAL AREA ZONE. (LDA)

9. THIS SITE IS NOT LOCATED WITHIN THE SEVERN RIVER WATERSHED. 10. CONTOURS SHOWN ON THIS PLAN ARE TAKEN FROM A FIELD SURVEY HOWELLKLINE LAND SURVEYING (FOR ON-SITE AREAS). FOR OFF-SITE AREAS IT IS BASED ON A.A.CO. TOPO AND UTILITY

OPERATIONS MAPS. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS TO HIS OWN SATISFACTION PRIOR TO STARTING WORK, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. 11. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO

UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REPLACING ANY EXISTING FENCES, DRIVEWAYS ETC. DAMAGED OR REMOVED DURING

THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF

13. THE CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777, FIVE(5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

14. THIS PLAN IS INTENDED TO PROVIDE SEDIMENT CONTROL DURING THE GRADING OF THE ROADS AND LOT(S) AND THE CONSTRUCTION OF HOUSE MEASURES HAVE BEEN TAKEN TO PREVENT SEDIMENT FROM LEAVING THE SITE.

15. TERRAIN INC. HAS NOT FIELD VERIFIED EXISTING UTILITY INFORMATION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT AND OBTAIN ALL RECORDS, INFORMATION AND LOCATION PRIOR TO COMMENCEMENT OF GRADING OPERATIONS, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY.

16. ANY PERTINENT INFORMATION WITHIN 100' OF PROPERTY LINE IS SHOWN.

AS-BUILT NOTE

ALL GRADING, DRAINAGE, STRUCTURES, AND/ OR SYSTEMS, EROSION AND SEDIMENT CONTROL PRACTICES INCLUDING FACILITIES AND VEGETATIVE MEASURES HAVE BEEN COMPLETED IN GENERAL CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS.

(OWNER)

THOMAS N. SETTLE (ENGINEER)

RECEIVE MAY 12 2011 CRITICAL AREA COMMISS Chesapeake & Atlantic Coasta G. P. NO. G02013290

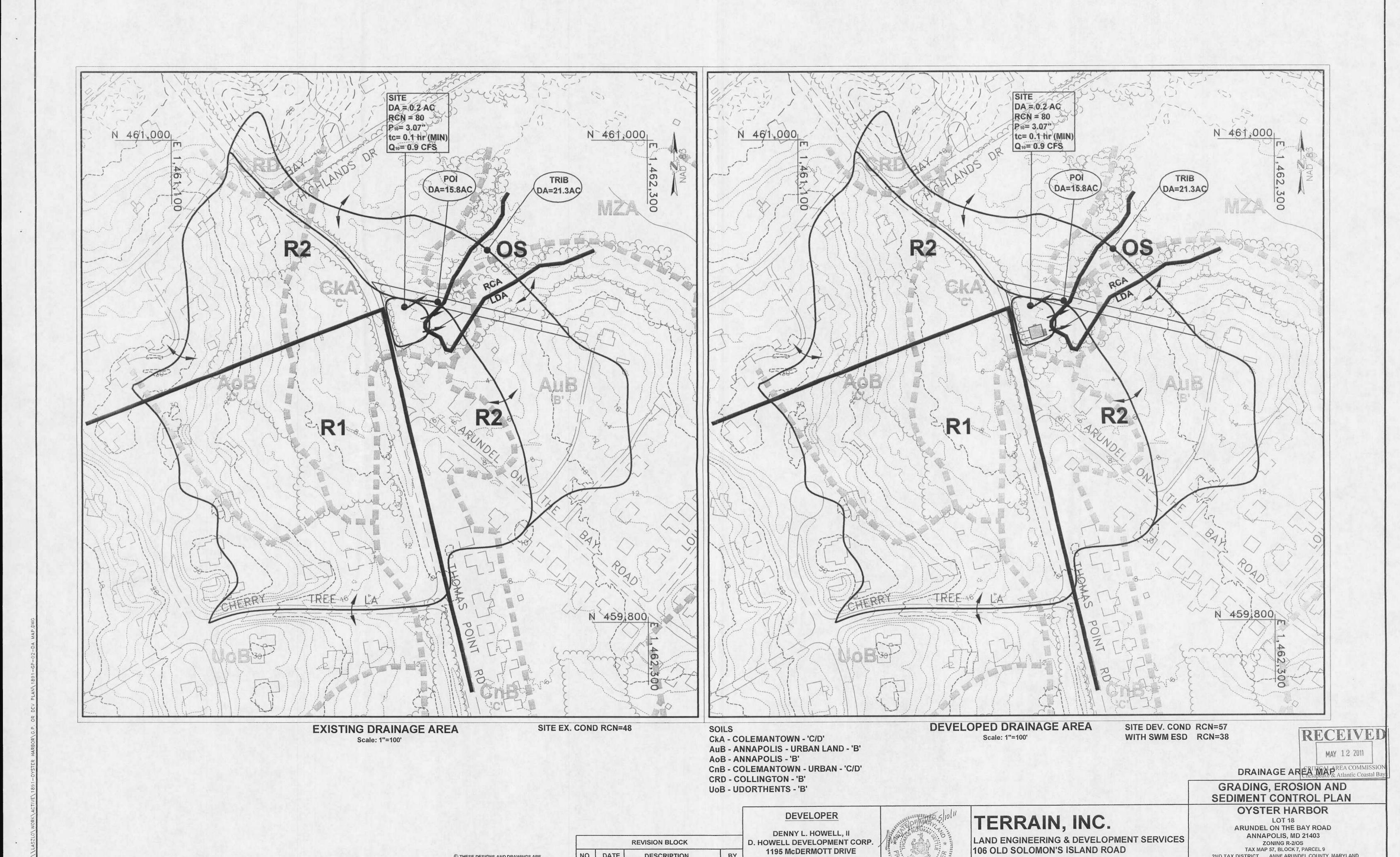
COVER SHEET

GRADING, EROSION AND SEDIMENT CONTROL PLAN

OYSTER HARBOR ARUNDEL ON THE BAY ROAD ANNAPOLIS, MD 21403

ZONING R-2/OS TAX MAP 57, BLOCK 7, PARCEL 9

2ND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: K.L.B. DATE: MAY, 2011 CHECKED BY: T.N.S. SCALE: AS SHOWN TERRAIN JOB NO. 1891-18 SHEET: 1 OF 6



BY

WEST CHESTER, PA. 19382

610-918-9006

ANNAPOLIS, MARYLAND 21401

410-266-1160 FAX (410) 266-6129 E-MAIL: TERRAIN@COMCAST.NET

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CONSENT OF TERRAIN, INC., 2011

NO. DATE

DESCRIPTION

2ND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND

DATE: MAY, 2011

SCALE: AS SHOWN

SHEET: 2 OF 6

DRAWN BY: K.L.B.

CHECKED BY: T.N.S.

TERRAIN JOB NO. 1891-18

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation. Conditions Where Practice Applies

- 1. This practice is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
- d. The soil is so acidic that treatment with limestone is not feasible.
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Area having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- II. Topsoil Specifications Soil to be used as topsoil must meet the following:
 - i. Topsoil shall be loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½" in. diameter.
 - ii. Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
- iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- II. For sites having disturbed areas under 5 acres:
- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and
- III. For sites having disturbed area over 5 acres:
 - i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - b. Organic content of topsoil shall be not less than 1.5 percent by weight.
 - c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - d. No sad or seed shall be placed on sail which has been treated with sail sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

- ii. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials
- V. Topsoil Application
- i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation. iii. Topsoil shall be uniformly distributed in a 4"-8" layer and lightly compacted to a
- minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- VI. Alternative for Permanent Seeding Instead of applying for full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified
 - i. Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements: a. Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - b. Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - c. Composted sludge shall be applied at a rate of 1 ton/1,000 square feet. iv. Composted sludge shall be amended with a potassium fertilizer applied at the rate
 - of 4 lb./1,000 square feet, and 1/3 the normal lime application rate. References: Guideline Specifications, Soil Preparation and Sodding. MD -VA, Pub #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

DETAILS AND SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT

Following initial soil disturbances or redisturbances, permanent or temporary stabilization shall be completed within seven calendar days for the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and fourteen days for all other disturbed or graded areas on the project site.

- A. Soil Tests: Lime and fertilizer will be applied per soil tests for sites greater than 5 acres. Soil tests will be done at completion of initial rough grading or as recommended by the sediment control inspector. Rates and analyses will be provided to the grading inspector as well as the contractor.
- 1. Occurrence of acid sulfate (gravish black color) will require covering with a minimum of 12 inches of clean soil with 6 inches minimum capping of top soil. No stockpiling of material is allowed. If needed, soil tests should be done before and after a 6

week incubation period to allow oxidation of sulfates. The minimum soil conditions required per permanent vegetative establishment are:

- a. Soil pH shall be between 6.0 and 7.0.
- Soluble salts shall be less than 500 parts per million (ppm) The soil shall contain less than 40% clay but enough fine grained
- material (>30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedeza is to be planted, then a sandy soil (<30 silt plus clay) would be acceptable.
- Soil shall contain 1.5% minimum organic matter by weight.
- Soil must contain sufficient pore space to permit adequate root penetration.
- If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil or amendments made as recommended by a certified agronomist.
- B. Seedbed Preparation: Area to be seeded shall be loose and friable to a depth of at least 3 inches. The top layer shall be loosened by raking, disking or other acceptable means before seeding occurs. For sites less than 5 acres, apply 100 pounds dolomitic limestone and 21 pounds of 10-10-10 fertilizer per 1,000 square feet. Harrow or disk lime and fertilizer into the soil to a depth of at least 3 inches on slopes flatter than 3:1.
- C. Seeding: Apply 5-6 pounds per 1,000 square feet of tall fescue between February 1 and April 30 or between Aught 15 and October 31. Apply seed uniformly on a moist firm seed bed with a cyclone seeder, cultipacker seeder or hydroseeder (slurry includes seeds and fertilizer, recommended on steep slopes only). Maximum seed depth should be ? inch in clayey soils and « inch in sandy soils when using other than the hydroseeder method. Irrigate where necessary to support adequate growth until vegetation is firmly established. I other seed mixes are to be used, select from Table 25, entitled "Permanent Seeding For Low Maintenance Areas" from the current Standards and Specifications for Soil Erosion and Sediment Control. Mixes suitable for this are 1, 3 and 5-7. Mixes 5-7 are suitable in non-movable situations.
- D. Mulching: Mulch shall be applied to all seeded areas immediately after seeding. During the time periods when seeding is not permitted, mulch shall be applied immediately after grading.
 - Mulch shall be unrotted, unchopped, small grain straw applied at a rate of 2 tons per acre or 90 pounds per 1,000 square feet (2 bales). If a mulch-anchoring tool is used, apply 2.5 tons per acre. Mulch materials shall be relatively free of all kinds of weeds and shall be completely free of prohibited noxious weeds. Spread mulch uniformly, mechanically or by hand, to a depth of 1-2 inches.
- E. Securing Straw Mulch: Straw mulch shall be secured immediately following mulch application to minimize movement by wind or water. The following methods are permitted. (I) Use a mulch-anchoring tool which is designed to punch and anchor mulch into the soil surface to a minimum depth of 2 inches. This is the most effective method for
 - securing mulch, however, it is limited to relatively flat areas where equipment can operate (ii) Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder to a net dry weight of 750 pounds per acre. If mixed with water, use 50 pounds of wood
 - (iii) Liquid binders may be used. Apply at higher rates at the edges where wind catches mulch, such as in valleys and on crests of slopes. The remainder of the grea should appear uniform after binder application. Binders listed in the 1994 Standards and Specifications for Soil Erosion and Sediment Control or approved equal shall be applied at rates recommended by the manufactures.
 - (iv) Lightweight plastic netting may be used to secure mulch. The netting will be stapled to the ground according to manufacture's recommendations.
- Temporary Seeding:
- Lime: 1000 pounds of dolomitic limestone per 1,000 square feet.

cellulose fiber per 100 gallons of water.

- Fertilizer: 15 pounds of 10-10-10 per 1,000 square feet. Seed: Perennial rye - 0.92 pounds per 1,000 square feet (February 1
- through April 30 or August 15 through November 1). Millet - 0.92 pounds per 1,00 square feet (May 1 through August 15) Mulch: Same as 1 D and E above.
- 3. No fill may be placed on frozen ground. All fill to be placed in approximately horizontal layers, each layer having a loose thickness of not more than 8 inches. All fill in roadways and parking areas is to classified Type 2 as per Anne Arundel County Code— Article 21, Section 2-308, and compacted to 90% density; compaction to be determined by ASTM D1557-66T (Modified Proctor). Any fill within the building area is to be compacted to a minimum of 95% density as determined by methods previously mentioned. Fills for pond embankments shall be compacted as per MD-378 Construction Specifications. All other fills shall be compacted sufficiently so as to be stable and prevent erosion and slippage.
- Permanent Sod: Installation of sod should follow permanent seeding dates. Seedbed preparation for sod shall be as noted in section (B) above. Permanent sod is to be tall fescue, state approved sod; lime and fertilizer per permanent seeding specification and lightly irrigate soil prior to laying sod. Sod is to be laid on the contour with all ends tightly abutting. Joints are to be staggered between rows. Water and roll or tamp sod to insure positive root contact with the soil. All slopes steeper than 3:1, as shown, are to be permanently sodded or protected with an approved erosion control netting. Additional watering for establishment may be required. Sod is not to be installed on frozen ground. Sod shall not be transplanted when moisture content (dry or wet) and/or extreme temperature may adversely affect its survival. In the absence of adequate rainfall, irrigation should be performed to ensure establishment of sod.
- Mining Operations: Sediment control plans for mining operations must include the following seeding dates and mixtures:

Aviation Administration's seeding specification restrictions.

- For seeding dates of: February 1 through April 30 and August 15 through October 31, use seed mixture of tall fescue at the rate of 2 pounds per 1,000 square feet and sericea lespedeza at the minimum rate of 0.5 pounds per 1,000 square feet.
- Topsoil shall be applied as per the Standards and Specifications for Topsoil from the current Maryland Standards and Specifications for Soil Erosion and Sediment Control. NOTE: Use of this information does not preclude meeting all of the requirements of the current Maryland Standards and Specifications for Soil Erosion and Sediment Control. NOTE: Projects within 4 miles of the BWI Airport will need to adhere to Maryland

PLANTING SCHEDULE FOR

SWM (RAIN G	ARDEN)			
10	BLUE FLAG	IRIS VERSI COLOR	CLUSTERED	PLANTED 1 1/2-3' O.C.	FAC
10	YELLOW WATER IRIS	IRIS PSATT COLOR	CLUSTERED	PLANTED 1 1/2-3' O.C.	FAC
10		CARER SP ELEOCHARIS SP	CLUSTERED	INTERSPACED W/FLOWERING PLANTS	FAC

TEMPORARY SEEDING SPECIFICATIONS

If temporary seeding is to be utilized, the following applies:

- Fertilizer: 15 pounds of 10-10-10 per 1,000 square feet.

Temporary Seeding:

- Lime: 100 pounds of dolomitic limestone per 1,000 square feet.
- Seed: Perennial rye 0.92 pounds per 1,000 square feet (February 1 through April 30 or August 15 through November 1). Millet - 0.92 pounds per 1,000 square feet (May 1 through August 15). - Mulch: As stated below.
- Mulching: To prevent erosion of freshly graded sites.
- During the time periods when seeding is not permitted, mulch shall be applied
- immediately after grading. - Mulch shall be unrotted, unchopped, small grain straw applied at a rate of 2 tons per acre (90 pounds per 1,000 square feet (2 bales)). If a mulch-anchoring tool is used, apply 2.5 tons per acre. Mulch materials shall be relatively free of all kinds of weeds and shall be completely free of prohibited noxious weeds. Spread mulch uniformly, mechanically or by hand, to a depth of 1-2 inches.

Securing Straw Mulch: Straw mulch shall be secured immediately following mulch application to minimize movement by wind or water. The following methods are permitted:

- Use a mulch-anchoring tool which is designed to punch and anchor mulch into the soil surface to a minimum depth of 2 inches. This is the most effective method for securing mulch; however, it is limited to relatively flat areas where equipment can operate safely.
- Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. If mixed with water, use 50 pounds of wood cellulose fiber per 100 gallons of water.
- Liquid binders may be used. Apply at higher rates at the edges where wind catches mulch, such as in valleys and on crests of slopes. The remainder of the area should appear uniform after binder application. Binders listed in the 1994 Standards and Specifications for Soil Erosion and Sediment Control or approved equal shall be applied at rates recommended by the manufacturers.

- Lightweight plastic netting may be used to secure mulch. The netting will be stapled to the ground according to manufacturer's recommendations.

SPECIFICATIONS FOR RAINGARDENS

- The allowable materials to be used in raingardens are detailed in Table R.1
- A. PLANTING SOIL
- The characteristics of planting soil for raingardens are as important to the longevity and success of the design as location, size, and treatment volume. The soil must be permeable enough to allow stormwater runoff to filter through the raingarden, while still being capable of promoting and sustaining vigorous vegetative cover. Additionally, much of the nutrient pollulant uptake is through the absorption and microbial activity within the soil profile. As a result, planting soils must balance chemical and physical properties to support biotic communities both above and below the cround
- Planting soil should be sandy learny learny sand, or a learny sand mix and should contain a minimum 35 to 60% sand by volume. The day content should be less than 25%. The soil should be free of siones, stumps, roots, or other wood material over 1" in diameter. Brush of seeds from noxious weeds (e.g., Johnson Grass, Mugwort, Nuisedge, and Canada Thistle) should not be present in the soils. One simple method for producing suitable planting soil is to mix three pans of commercially available washed sand with two parts topsoil to produce a homogeneous soil. Planting soil should be placed in 12° to 18° layers that are loosely compacted (e.g., lamped lightly with a backhoe bucket) to a depth of 21/2 to 4 feet
- Another important feature of the raingarden is the surface mulch layer. Mulch helps maintain soil moisture and traps finer sediments that may lead to premature failure. Mulch also prevents crosion and serves as an important microenvironment for soil biota.
- Reingerden mulch used should be standard landscape style, single or double stredded hardwood mulch. The mulch should be well agod (stockpiled or stored for at least twelve months), uniform in color, and free of other meterials such as weeds or roots. Grass dippings are unacceptable as a mulch material. Mulch should be applied to a maximum depth of three inches. Raingardens should be re-mulched on an annual basis.
- C. UNDERDRAINS
- Raingardens require positive drainage conditions and germeable soils for long term, trouble-free performance. Installing a perforated pipe underdrain system provides consistent drainage for the raingarden. While optional in porous well-drained soils, underdrains are regulted in siit or clay soils (hydrologic soil groups C and D) or in areas. where groundwater is less than two feet below the bottom of the raingarden. Underdrains should be installed below the planting soil bed (between 21/2 to 4 feet below surface). The undercrain
- may be installed as shallow as 18° below the surface if necessary to provide an outlet. In this extreme case, that underdrain should be installed within the planting soil bed. Underdrains shall consist of a 4 to 6" diameter rigid schedule 40 (or SDR 35) FVC plpe (slotted HDPE is also acceptable) that is perforated within the raingarden. Perforations shall be 3/s" diameter minimum at 6" on center with a inimum of 4 holes per row. Underdrains shall be placed on a 3' wide section of filter cloth (Class, "C" geotextile, see Table R.1). The pipe is placed next, followed by the gravel bedding: The main collector pipe for undergrain systems shall be constructed at a minimum slope of 0.5%. At least one observation well/cleanout must be provided per
- A rodent guard should be installed at the downstream end of underdrains to prevent mice and larger rodents from entry. A typical redent cuard consists of a 1/2" hex-head boilt through the pipe horizontally. Nuts are placed on both the inside and outside of the pipe. This discourages rodents and prevents crushing of the pipe.

MISCELLANEOUS

Raingardens shall not be constructed until all contributing drainage area has been stabilized.

Material	Specification	Size	Notes A Section 1981
Plantings	See Table R.5	n/a	Plantings are site specific
Planting Scil (2½' to 4' deep)	Sand: 30% to 60% Silt: 30% to 55% Clay: 0% to 25%	n/a	USDA soil types loamy sand, sandy loam or loam
Muich	Shredded hardwood	n/a	Aged six months minimum
Geotextile	Class "C" – apparent opening size (ASTM-D-4751), grab tensile strength (ASTM-D- 4632), puncture resistance (ASTM-D-4833)	n/a	Use as necessary beneath underdrains only
Undergrain:			
Gravel	AASHTO M-43 #57 or #67	1/8 to 3/4"	
Piping	F 758; Type PS 28 or ASSHTO M-278	4" to 6" ngid schedule 40" PVC, SDR35, or	3/8" perforations @ 5" on center, 4 holes per row, minimum of 3" grave! over pipes; gravel not necessary beneath pipes

D. PLANT INSTALLATION

E. PLANTING GUIDANCE

- Mutch should be placed to a uniform thickness of 2 to 3 inches. Root stock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so that $V_0^{\pm 0}$ of the ball is acove final grade surface. The diameter of the planting pit should be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight (upright) during the planting process. Thoroughly water ground bed cover after
- Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball Grasses and logume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall
- be planted following the non-grass ground cover specifications The topsoil specifications provide enough organic material to adequately supply nutnerts from natural cycling. The primary function of the raingarden is to improve water quality. Adding fertilizers defeats, or at a minimum, impedees this goal. Only and fertilizer if wood chips or mulch is used to amend the soil.
- Plant material selection should be based on the goal of simulating a terrestrial community of native species but may be tailored to various gardening themes. Raingardens simulate upland-species ecosystems that are dominated by shrubs and herbaceous materials but may also contain trees. By creating a diverse, dense plant cover, the raingarden will be able to treat stormwater runoff and withstand urban stresses from insects, disease, drought,
- The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a rangarden. The lowest elevation supports plant species that are adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions but may tolerate occasional indation by water. The outer edge is the highest elevation and generally supports plants adapted to drier conditions. A listing of appropriate plant materials is included in Appendix A of the Design Manual and Appendix 1 of these instructions. The layout of plant material should be flexible, but should also follow the general principles outlined in Table 45. The objective is to have a system that resembles a random and natural plant layout, while maintaining optimal plant conditions for plant establishment and growth.

MITIGATION PLANT SCHEDULE					
SPECIES	GENUS	SPACING	SIZE	NO.	SYMBOL
SYCAMORE	PLATANUS OCCIDENTALIS	10' 0/C	2 1/2CAL	16	1
WILLOW OAK	QUERCUS PHELLOS	10' 0/0	2 1/2CAL	16	2
INK BERRY	ILEX GGLABRA	7' 0/C	RANDOM	48	
SOUTHERN BAY BERRY	MYRICA CERIFERA	7' O/C	RANDOM	48	

IAMLE AL - PLANTING DESIGN CUNSIDERATIONS

Appropriate vegetation should be selected based on the zone of tolerance. Species layout should generally be random and natural. A canopy may be established with an understory of shrups and herbaceous material. Woody vegetation (shrubs and trees) should not be in the vicinity of inflow locations.

Native plant species should be specified over exotic or foreign species.

Trees and shrips should be planted primarily along the perimeter of the raingarden. Stressors (e.g., wind, sun, exposure, insects and disease infestation, and drought) should be considered when developing the planting plan.

NOTE: FENCE POST SPACING

SHALL NOT EXCEED 10 CENTER TO CENTER

TRIBURIN

CHAIN LINK FENCING-

FLOW ____FILTER CLOTH-

EMBED FILTER CLOTH 8"---

every 24° at the top and mid section.

Tensile Strength

U.S. DEPARTMENT OF AGRICULTURE

Flaw Rate

*IF MULTIPLE LAYERS ARE

21/2" DIAMETER

DETAIL 33 - SUPER SILT FENCE

10' MAXIMUM

34" MINIMUM

Construction Specifications

for a 6' fence shall be used, substituting 42" fabric and 6' length

4. Filter cloth shall be embedded a minimum of 8" into the ground.

develop in the silt fence, or when silt reaches 50% of fence height

Fencing shall be 42" in height and constructed in accordance with the

atest Maryland State Highway Details for Chain Link Fencing. The specification

2. Chain link fence shall be fastened securely to the fence posts with wire ties.

The lower tension wire, brace and truss rods, drive anchors and post caps are not

. When two sections of filter cloth adjoin each other, they shall be overlapped

7. Filter cloth shall be fastened securely to each fence post with wire ties or

20 lbs/in (min.)
0.3 gal/ft²/minute (max.)

staples at top and mid section and shall neet the following requirements for

34" MINIMUM

36" MINIMUM

- 8" MINIMUM

STANDARD SYMBO

SSF -

Test: MSMT 509

Test: MSMT 322

Test: MSMT 322

ARYLAND DEPARTMENT OF ENVIRONM

FLOW

- 16" MIN. 1ST LAYER OF FILTER CLOTH*

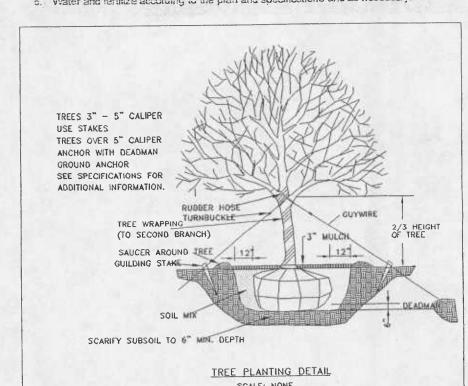
- Nexicus weeds shall not be specified or used. Aesthetics and visual characteristics should be a prime consideration.
- Safety issues must be considered... Existing and proposed utilities (e.g., water, sewer, or electric) must be identified and considered.
- Plant materials should conform to the American Association of Nurserymen's publication, the American Standard Nursery Stock. The planting plan should include a sequence of construction, a description of the contractor's responsibilities, a planting schedule and installation specifications, initial maintenance requirements, and a warranty period stipulating requirements for plant survival. Table 40, presents some typical issues for planting specifications.

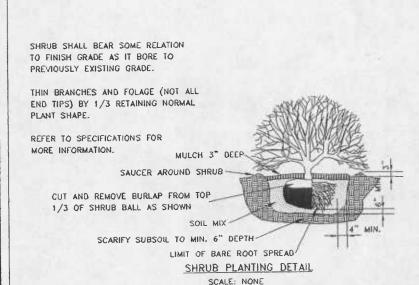
TABLE AD . PLANTING SPECIFICATION ISSUES

Specification Element	Issues
Sequence of Construction	Describe the preparation activities, soil amendments, etc.; address erosion and sediment control procedures; specify step-by-step procedure for plant installation through site clean-up.
Contractor's Responsibilities	Specify the contractor's responsibilities such as watering, care of plant material during transport, timeliness of installation, repairs due to vancalism, etc.
Planting Schedule and Specifications	Specify the plants to be installed, the type of materials (e.g., baked and burlap, bare root, containerized), time of year for installations, sequence of installation, fertilization, stabilization seeding if needed, watering, and general care
Maintenance	Specify mulching frequency (annual mulching is most common), removal and replacement of dead or diseased vegetation, watering schedule (once per day for 14 days is common).
326	Specify the warranty period the required survival rate; and the expected condition of

plant species at the end of the warranty period TABLE 4E. - RAINGARDEN SEQUENCE OF CONSTRUCTION

- Subsequent to final grading and stabilization of lot, expande raingarden area to proper dimensions. Instali gravel envelope, geotextile, underdrain, and observation well. Place and locsely compact planting soil.
- Install plants at proper depth and location (see species and zone specifications) according to the planting plan. Mulch the surface of the raingarden to a thickness of 2° to 3". Water and fertilize according to the plan and specifications and as necessary.





- FENCE POST DRIVEN A A MINIMUM OF 8" VERTICALLY MINIMUM OF 16" INTO IN. 2' OVERLAP AT JOINT ONNECT WITH WIRE OR ZIP TI STANDARD SYMBOL RSF -I DR "T" POST - WELDED WIRE FENCE JOINING TWO ADJACENT FABRIC SECTIONS TOP VIEW 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced Metal fence post shall be a minimum of 48" long driven 16" minimum into the round. Post shall be standard I or U section weighting not less than 1.00 pounder linear foot. Geotextile shall be fastened securely to each fence post with wire ties zip ties at top and mid section and shall meet the following requirement: 6. Maintenance shall be performed as needed and silt buildups removed when "bulges" Test: MSMT 509 Test: MSMT 509 Tensile Modulus 20 lbs/in (min.) 0. 3 gal ft*/ minute (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.) Where ends of geotextile fabric came together, they shall be overlapped, lded and wired tied or zip tied to prevent sediment bypass. 4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment occumulation reached 50% of the fabric height. DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE - 50' MINIMUM -STING PAVEMEN EARTH FILL
PIPE AS NECESSARY ** GEDTEXTILE CLASS 'C'-OR BETTER MINIMUM 6" OF 2" -3" AGGREGATE OVER LENGTH AND WIDTH OF STRUCTURE EXISTING GROUND PROFILE Y MIN. EXISTING PAVEMENT MINIMUM 'C

DETAIL 22A - REINFORCED SILT FENCE APPROVED BY MDE 2-7-05

DRIVEN A MINIMUM OF 16" INTO

-16" MINIMUM HEIGHT OF

8" MINIMUM DEPTH IN

FENCE POST SECTION MINIMUM 20" ABOVE

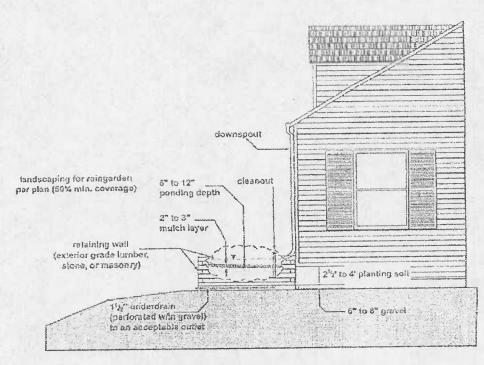
GROUND

8' MAXIMUM CENTER TO

PERSPECTIVE VIEW

PLAN VIEW STANDARD SYMBOL Length - minimum of 50' (*30' for single residence lot). Width - 10' minimum, should be flored at the existing road to provide a turning Geotextile fabric (filter cloth) shall be placed over the existing ground prior sidences to use geotextile. 4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the . Surface Water - all surface water flowing to or diverted toward construction ntrances shall be piped through the entrance, maintaining positive drainage. Pip istalled through the stabilized construction entrance shall be protected with a ountable berm with 5:1 slapes and a minimum of 6" of stone over the pipe. Pipe h to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized coording to the amount of runoff to be conveyed. A 6" minimum will be required. 6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters ar leaves a construction site. Vehicles leaving he site must travel over the entire length of the stabilized construction entrance

Option 3. Raingardens - Profile View



U.S. DEPARTMENT OF AGRICULTURE PAGE

RAIN GARDEN-PROFILE N.T.S.

MAY 12 2011

NOTES AND DETAILS SHEET antic GRADING, EROSION AND SEDIMENT CONTROL PLAN

OYSTER HARBOR LOT 18 ARUNDEL ON THE BAY ROAD

ANNAPOLIS, MD 21403 **ZONING R-2/OS** TAX MAP 57, BLOCK 7, PARCEL 9

2ND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: K.L.B. DATE: MAY, 2011 CHECKED BY: T.N.S. SCALE: AS SHOWN TERRAIN JOB NO. 1891-18 SHEET: 3 OF 6

DEVELOPER

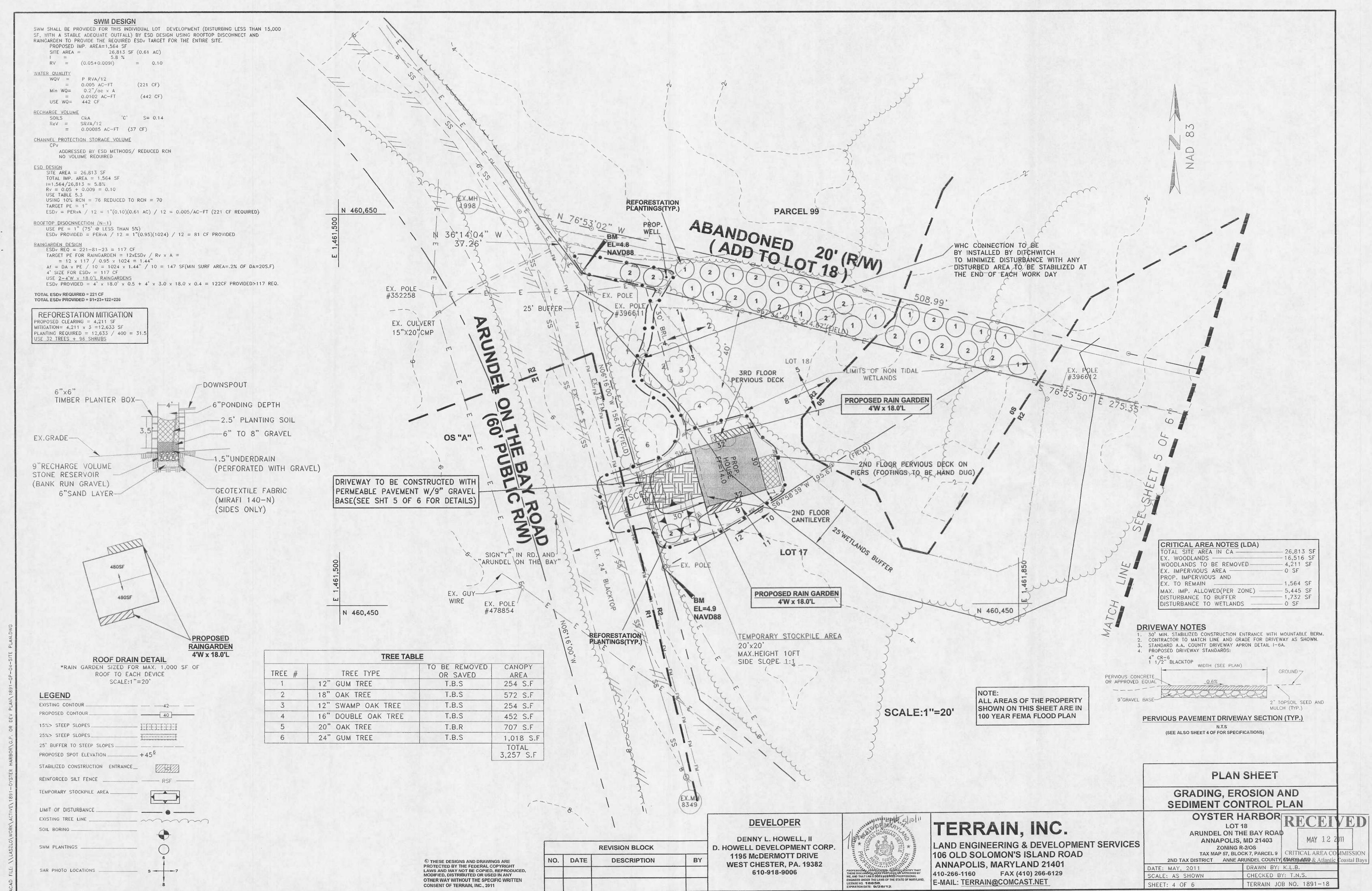
DENNY L. HOWELL, II D. HOWELL DEVELOPMENT CORP. 1195 McDERMOTT DRIVE WEST CHESTER, PA. 19382 610-918-9006

MADER THE LAWS OF THE STATE OF MARYL

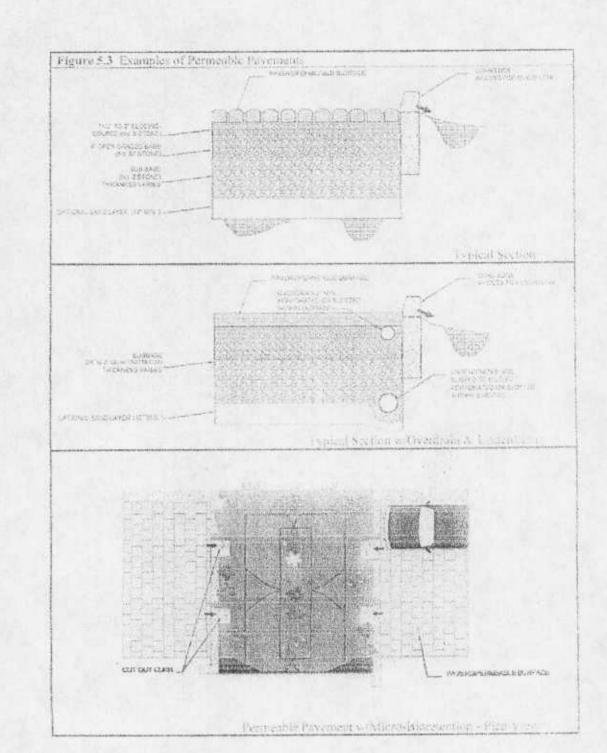
TERRAIN, INC.

LAND ENGINEERING & DEVELOPMENT SERVICES 106 OLD SOLOMON'S ISLAND ROAD **ANNAPOLIS, MARYLAND 21401** 410-266-1160 FAX (410) 266-6129 E-MAIL: TERRAIN@COMCAST.NET

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- Serbacks:

- 6. Permeable pavements skall be toward down gradient of hallding structures and be setback at least 10 feet from buildings. 30 feet from confined water supply wells, but feet from unconfined wence supply wells, and 25 feet from septic systems. Permeable pavements should also be sized and located to meet minimum local requirements for underground autility elementee.
- > Structures. All permeable pavement systems strul he capable of bearing the militipanen. vehicle and traffic loads. Pavement systems conforming to the specifications found in Appendix B 4 should be structurally stable for typical (e.g., light day) applications.
- * Landscaping: Permeable preveners shall be deutified outlandscaping plans. Yvees and shriths should not be located adjacent to aspirant and concrete if damage by root neutration and clogging from leaves is a concern

Construction Criteria:

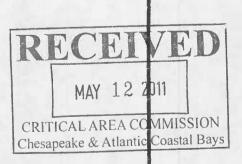
The following items should be addressed during construction of projects with permeable OUNGBROWN:

- the surrounding site is stabilized. If this cannot be accomplished caucif from assumed area shall be diverted around proposed pavenient sociations.
- Soil Compaction: Sub-soils shall not be compacted. Construction should be performed with lightweight, wide tracked equipment to minimize compaction. Hycovared materials should be placed in a contained area.
- Distribution Systems: Overtrain, underdrain, and drawibution pipes shell be checould to cosmice that both the material and performings never specifications (see Appendix B. L. Anapstream ends of pipes should be emposet prior to instalnation. All underdrain or distribution pipes used should be installed that along the bed is storn.
- > Subbase Installation: Subbase aggregate small reveign and free of fires. The subbase shell be placed to thus and lightly rolled according to the specifications (see Approxitix B.-)
- Regular inspections shall be made doeing the juliowing stages of constitution:
 - Disring executation to subgroup.
 - During placement and backfill of any drawinge or distribution systems. c. During placement of the crushed store, subbase meterial.
- Course placement of the surface material. c. Upon completion of final grading and establishment of normalism stabilization

Maintenance Criteria:

The following procedures should be considered essential for maintaining permeable pavement

- Pay orients should be used only where regular maintanance can be performed. Whitehamed agreements chouse clearly specify now in conduct runtime tasks to ensure long-term performance.
- Pavement surfaces should be swept and camumica to remove sediment accumulation and ensure continued surface perosity. Sweeping should be performed at least twice annually with a commercial cleaning unit. Wasting systems and compressed air unity should not be used to perform surface cleaning.
- Desiring pipes, inlets, sione edge drains, and other structures within or draining to the subbase should be cleaned out at regular intervals
- Trucks and other heavy vericles can grind dist and grit into the percus stateses, leading to clogging and premature failure. These vehicles should be presented from macking and spitting material care the pavement
- Dateers should be used in moderation. When used, delicers should be non-wait and organic and can be applied either as ealeium magnesium acetate or as pretreated sait. Snow plowing should be done carefully with blades set one-men higher than normal. Plowed snow piles and showmen should not be directed to permeable pavement.



LEGEND EXISTING CONTOUR _ PROPOSED CONTOUR_ 15%> STEEP SLOPES_ 25%> STEEP SLOPES_ 25' BUFFER TO STEEP SLOPES _ PROPOSED SPOT ELEVATION +456 STABILIZED CONSTRUCTION ENTRANCE_ REINFORCED SILT FENCE TEMPORARY STOCKPILE LIMIT OF DISTURBANCE EXISTING TREE LINE _ SOIL BORING

SWM PLANTINGS ____

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OTHER WAY WITHOUT THE SPECIFIC WRITTEN CONSENT OF TERRAIN, INC., 2011			

DEVELOPER DENNY L. HOWELL, II D. HOWELL DEVELOPMENT CORP. 1195 McDERMOTT DRIVE WEST CHESTER, PA. 19382 610-918-9006 ENGINEER UNDER THE LAWS OF THE STATE LICENSE NO. 18858, EXPIRATION DATE: 9/28/12.

BY

TERRAIN, INC.

LAND ENGINEERING & DEVELOPMENT SERVICES 106 OLD SOLOMON'S ISLAND ROAD **ANNAPOLIS, MARYLAND 21401** 410-266-1160 FAX (410) 266-6129 E-MAIL: TERRAIN@COMCAST.NET

PLAN SHEET GRADING, EROSION AND

SEDIMENT CONTROL PLAN OYSTER HARBOR

LOT 18

ARUNDEL ON THE BAY ROAD ANNAPOLIS, MD 21403 ZONING R-2/OS TAX MAP 57, BLOCK 7, PARCEL 9

2ND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND DRAWN BY: K.L.B. DATE: MAY, 2011 SCALE: AS SHOWN CHECKED BY: T.N.S. TERRAIN JOB NO. 1891-18 SHEET: 5 OF 6

PLAN SCALE: 1"=40"

MAY 12 2011

CRITICAL AREA COMM SSION
Chesapeake & Atlantic Coa. tal Bays

ZONING: R2 SOILS-CKA-COLEMANTOWN-C/D

RESOURCE MAP

GRADING, EROSION AND SEDIMENT CONTROL PLAN

OYSTER HARBOR

ARUNDEL ON THE BAY ROAD

ANNAPOLIS, MD 21403

ZONING R-2/OS

TAX MAP 57, BLOCK 7, PARCEL 9

X DISTRICT

ANNE ARUNDEL COUNTY, MARYLANE

2ND TAX DISTRICT ANNE ARUNDEL COUNTY, MARYLAND

DATE: MAY, 2011 DRAWN BY: K.L.B.

SCALE: AS SHOWN CHECKED BY: T.N.S.

SHEET: 6 OF 6 TERRAIN JOB NO. 1891–18

LEGEND

EXISTING CONTOUR

15-25% STEEP SLOPES

25%+ STEEP SLOPES

PROPOSED SPOT ELEVATION +456

EXISTING TREE LINE

SOIL BORING

EXISTING BUILDING

EXISTING FENCE

30° BRL

BUILDING RESTRICTION LINE © THESE DESIGNS AND DRAWINGS ARE PROTECTED BY THE FEDERAL COPYRIGHT LAWS AND MAY NOT BE COPIED, REPRODUCED, MODIFIED, DISTRIBUTED OR USED IN ANY

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REVISION BLOCK

NO. DATE DESCRIPTION BY

DEVELOPER TO THE PROPERTY OF T

DENNY L. HOWELL, II
D. HOWELL DEVELOPMENT CORP.
1195 McDERMOTT DRIVE
WEST CHESTER, PA. 19382
610-918-9006



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