STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

April 20, 2016

May 6, 2016 Response to PLUS Comments
Prepared by: Mark Davidson, Principal Land Planner
Response is in red and is located immediately under the comment being responded to.

Mr. Mark Davidson
Pennoni Associates, Inc.
18072 Davidson Dr.
Milton, DE 19968

RE: PLUS review 2016-03-06; Estates at Cedar Grove

The subdivision has been renamed Dellwood Estates and has been approved by Sussex County Addressing Department.

Dear Mark:

Thank you for meeting with State agency planners on March 23, 2016 to discuss the Estates at Cedar Grove project. According to the information received you are seeking review of a 100 unit subdivision on 71.28 acres in Sussex County. It is noted that a subdivision on this site was reviewed in December 2015 for 90 single family homes on minimum 20,000 sq. ft. lots. This application is to review a redesigned site to cluster the homes on the southeastern portion of the site to allow 100 homes on minimum 7,500 sq. ft. lots. By clustering the lots, the new design saves an additional 13.7 acres of forested lands.

Careful attention was directed at clustering the lots on the environmentally suitable portions of the parcel, specifically those portions of the parcel least encumbered by the sensitive environmental features outlined through the PLUS process and during the extensive site reconnaissance and research completed on the parcel that includes but not limited to wetlands, mature woodlands, and waterway along the back of the parcel.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.**

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The project is being planned to comply with all written Federal, State, and local regulations. Dellwood Estates preliminary plan of the cluster subdivision provides for a total environment and design which are superior that would be allowed under the regulations for the standard option subdivision pertaining to the development of this property. The project is being planned in accordance with Sussex County Zoning Code Section 115-25 B (2). Cluster Development Option.

Section 115-25 C. (3) The number of dwelling units permitted shall be determined by dividing the gross area by 21,780 square feet. The area of land set aside for common open space or recreational use shall be included in determining the number of dwelling units permitted.

Strategies for State Policies and Spending

This project represents land development that will result in 90 residential units in an Investment Level 4 area according to the *2010 Strategies for State Policies and Spending* and is within an Agricultural Preservation District area according to the Sussex County certified comprehensive plan. In addition, this parcel is adjacent to several parcels under Ag easements. As discussed later more fully later in this letter please be aware of the special implications Ag protection programs will have on this development.

The took into consideration some of the comments made by the State Planning Group at the first PLUS meeting for 90-lots and reconsidered the design and decided to prepare the application for a cluster development whereby under the code, Section 115-25 C. (3) the parcel would be allowed 142 single family lots. The project as proposed will have a maximum of 100-lots.

Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

The County's current zoning map designates this parcel as AR-1, Agricultural Residential. In this district the county allows, by-right, low-density single-family residential development which should be confined to areas planned for efficient extension of public services.

Density – 1.4 Lots/Acre (< 2 Lots/Acre)
Sanitary Sewer – Tidewater Utilities, Inc. (extension from The Ridings at Rehoboth)
Water – Tidewater Utilities, Inc. (extension from The Ridings at Rehoboth)

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed will bring new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide

some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

The Developer of the property is providing for 100% of all improvements that will support the project, i.e. transportation, drainage, utilities, etc. Moreover, the tax revenue and fees that are part of the development of this project along with other developments and existing properties is what pays for the area services and infrastructure for the State.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

With that said, **the comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to build on this property, construct the development you indicate, or any subdivision thereof on these lands.**

Comments are noted.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Beaver Dam Road (Delaware Route 23) must be designed in accordance with DelDOT's Development Coordination Manual. A copy of the Manual is available at http://www.deldot.gov/information/business/subdivisions/changes/index.shtml.

  This comment is acknowledged. The applicant has every intent to design a safe, appropriate and appealing site access to Delaware Route 23.

- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review. The form needed to request this meeting and guidance on what will be covered there and how to prepare for it is located at http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.pdf.

  This comment is acknowledged. The applicant has previously met with the Department and will continue to work with Department prior to the submission of plans.

- Section P.5 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.

This comment is acknowledged. The applicant will be responsible for the timely payment of required fees as noted in the Department's comment.

- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. On the PLUS application, the total daily trips are estimated at 952 vehicle trip ends per day. This figure appears to have been calculated using an average rate per dwelling unit from the Institute of Transportation Engineers' Trip Generation Manual. Using the corresponding regression equation from the same source, we calculate 1,050 vehicle trip ends per day. By either method, this project would warrant a TIS.

  The applicant acknowledges that the development as proposed will generate more than 500 vehicle trip ends per day, but less than 2000 vehicle trips per day.

  - Per Section 2.2.2.2 of the Manual, for developments generating between fewer than 2,000 vehicle trip ends per day and fewer than 200 vehicle trip ends per hour in any hour of the day, DelDOT may accept an Area-Wide Study Fee in lieu of a TIS. Payment of the Fee does not excuse the developer from building or participating in off-site road improvements or from providing a Traffic Operational Analysis (TOA) for a site entrance if DelDOT identifies the need for one in their review of the site plan.

  - Presently we are willing to accept the Area-Wide Study Fee but have made no determination regarding off-site improvements or the need for a TOA.

  - To obtain a scope of work for the TIS, the applicant may have their engineer contact Mr. Troy Brestel of this office. Mr. Brestel may be reached at (302) 7602167.

  The comments are acknowledged. DelDOT has indicated that they are willing to accept an Area Wide Study Fee in lieu of conducting a TIS. The applicant accepts the offer for payment of an Area-Wide Study Fee in lieu of a TIS. The Area Wide Study fee was determined at the first meeting with DelDOT and the applicant acknowledges that he will have to pay approximately $9,600.00 to DelDOT.

- Section 3.2.4.2 of the Manual addresses the placement of right-of-way monuments (markers) along the roads on which a property fronts, in this case Beaver Dam Road. Monuments sufficient to re-establish the permanent rights-of-way after the dedication discussed below should be shown on the plan and provided in the field in accordance with this section.

  The comment is acknowledged.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Beaver Dam

Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of way from the road centerline on Beaver Dam Road. The following right-of-way dedication note is required, "**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**" We see from the plan that the road has an existing 60-foot right-of-way and that an additional 10 feet of right-of-way would be dedicated but the wording of the dedicating note should be amended and we cannot verify from the plan provided that the road is centered in the existing right-of-way.

The comment is acknowledged and the dedication note will be amended to read as noted above with the appropriate dimension added to the text.

- Section 3.2.5.1.1 of the Manual provides DelDOT's requirements regarding easements for signs and structures at neighborhood entrances. In accordance with this section, if this development is proposing a neighborhood sign or structure, then a permanent easement shall be established at the entrance. The easement shall be located outside of any existing and/or proposed right-of-way. It will also need to be verified that the sign or structure does not pose a sight distance and/or safety hazard.

  The comment is acknowledged. Should the applicant choose to install and maintain signage or architectural enhancements at the site entrance, a driver sight distance study will be performed in accordance with DelDOT requirements to preclude any potential safety issues at the site access with Beaver Dam Road.

- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Beaver Dam Road. The location of the easement shall be outside the limits of the ultimate `11`site. The following note is required, "**A 15-foot wide permanent easement is hereby established to the State of Delaware, as per this plat.**"

  The comment is acknowledged. A note will be added to the plans establishing the right of way.

- In accordance with Section 3.4 of the Manual, a record plan shall be prepared prior to issuing "Letter of No Objection". The following information will be required for the "Letter of No Objection" review:

  - Initial Stage Fee Calculation Form
  - Initial Stage Review Fee
  - Gate-Keeping Checklist – Site Plan
  - Design Checklist - Record Plan
  - Sight Distance Spreadsheet
  - Owners and Engineers' name and e-mail address
  - Record Plan
  - Conceptual Entrance Plan
  - Submission of the Area-Wide Study Fee (If applicable)

The comment is acknowledged. The requested data shall be provided.

- Referring to Section 3.4.2.1 of the Manual, the following items, among other things, are required on the Record Plan:
    - A Traffic Generation Diagram. See Figure 3.4.2-a for the required format and content.
    - Depiction of all existing entrances within 600 feet of the proposed entrance.
    - Notes identifying the type of off-site improvements, agreements (signal, letter) contributions and when the off-site improvements are warranted.

The comment identifying required items to be included in the plans is noted.

- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT maintained public road for subdivisions. Private or municipal streets should follow the local land use agency's requirements for connectivity.

The comment is noted. Since all streets within the proposed cluster development will be privately maintained, there is no plan to provide vehicular connectivity to adjacent parcels.

- Section 3.5.4.2 of the Manual addresses requirements for shared-use paths and sidewalks. Projects located in Level 4 Investment Areas are required to install a shared-use path or sidewalk along the State-maintained road frontage if the project abuts an existing facility. The Subdivision Engineer may waive the requirement where there is no facility on an abutting parcel. At the Pre-submittal Meeting on June 18, 2015, it was noted that the site was in a developing area and it would be unlikely that the pedestrian facilities would be waived.

According to State Planning the site is not in a "developing area" and is located in a Level 4 where the State waives shared use paths. However, the developer is committed to safe pedestrian access to and from the property and therefore is planning to provide a shared use path along the frontage of the property.

- Section 3.5.5 of the Manual addresses transit facilities and connectivity to them from proposed developments. Such facilities and connections to them may be required by the Delaware Transit Corporation or DelDOT in consultation with Sussex County. Presently, there are no transit routes on Beaver Dam Road but facilities may be required to serve school buses.

The comment is acknowledged. In the event that such a facility is required to support school buses, the applicant will work with DelDOT for construction of facilities.

- Section 3.5.6 of the Manual addresses requirements for subdivision street intraconnectivity and specifies a minimum Connectivity Ratio, the ratio of street sections to intersections, of 1.4 or greater. DelDOT calculates that the plan presented has a ratio of 1.375, which does not meet this requirement. Adding one linkage street stub to the plan, if adding it does not create another intersection, would raise the ratio to 1.4375 and meet this requirement. Preliminarily, we recommend extending Addie Avenue, Legacy Lane, Lady Mabel Lane or Morris Trail to abut the cultivated portion of Parcel 234-2.00-1.10 as a way of meeting this requirement. Alternatively, an extension of Legacy Lane to abut Parcel 234-6.00-1.00 would also meet the requirement but appears to have less value in terms of future development.

- Section 3.5.7.3 of the Manual addresses requirements for connections to undeveloped or re-developable land, including a requirement for linkage street stubs at a ratio of one per 1,320 linear feet of the boundary line or fraction thereof, which adjoins such land. With about 5,500 feet of such boundary, this development should have four linkage stub streets. Our comment regarding Section 3.5.6 of the Manual suggests five possible linkage stub streets.

- In accordance with Section 3.8 of the Manual, storm water facilities, excluding filter strips and bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.

  The comment is acknowledged. The applicant shall evaluate the impact of the suggested location of stormwater facilities to the development's overall soil conditions, topography, and aesthetics.

- Referring to Section 4.3 of the Manual, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Entrance Plan review:

  - Construction Stage Fee Calculation Form
  - Construction Review Fee
  - Gate-Keeping Checklist – Entrance Plan
  - Design Checklist - Entrance Plan
  - Auxiliary Lane Spreadsheet o Entrance Plan
  - Pipe/Angle Spreadsheet (If applicable)
  - SWM Report and Calculations (If applicable)

  Comment is noted

- In accordance with Section 5.2.5.6 of the Manual, Turning Movement Diagrams shall be provided to verify vehicles can safely enter and exit the site entrance. As per Section 5.2.3 of the Manual, the entrance shall be designed for the largest vehicle using the entrance.

  The comment is acknowledged.

- In accordance with Section 5.2.9 of the Manual, the Auxiliary Lane Worksheet should be used to determine whether auxiliary lanes are warranted at the site entrance and how long those lanes should be. The worksheet can be found at http://www.deldot.gov/information/business/subdivisions/auxiliary_lane_worksheet.xls.

  The comment is acknowledged

- In accordance with Section 5.4 of the Manual, sight distance triangles are required and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at o http://www.deldot.gov/information/business/subdivisions/Intersection-SightDistance.xls.

  The comment is acknowledged.

- In accordance with Section 5.14 of the Manual, all existing utilities must be shown on the plan and a utility relocation plan will be required for any utilities that need to be relocated.

  The comment is acknowledged.

- Section 6.4.3 of the Manual addresses construction inspection for commercial entrances, which is applicable here because the development streets would not be built for State maintenance. From DelDOT's 2014 Vehicle Volume Summary, the Annual Average Daily Traffic volume on Beaver Dam Road in front of this site is 5,818 vehicles per day. As discussed in another comment, we estimate this development's trip generation to be 1,050 vehicle trip ends per day. Entering these numbers into Figure 6.4.3-a, the site entrance will require Level II construction inspection, meaning that the applicant will be required to enter into a construction inspection agreement with an inspection firm currently under contract with DelDOT.

  The comment is acknowledged.

- Section 7.7.2 of the Manual addresses the need to provide 20-foot wide drainage easements for all storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. In accordance with this section, metes and bounds and total areas need to be shown for any drainage easements. The easements should be shown and noted on the record plan.

  The comment is acknowledged.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Executive Summary

The Department recognizes and appreciates the efforts that have been expended by the developer to conserve and protect sensitive habitat in the northern portion of the project parcel, including the Love Creek Natural Area and its forested buffer. While the conservation and protection of this area will have benefit for wildlife, neighboring parcels, water quality and air quality, there remain several opportunities to conserve and protect important sensitive habitat, improve air and water quality, protect drinking water supplies and reduce greenhouse gas emissions.

The woodland portion of this parcel has retained its natural character and is within the Love Creek Natural Area. DNREC has concerns with the intended clearing/fragmentation of 8.5 forested acres, which are part of a larger block of contiguous forest, recognized by the State for its outstanding habitat value and potential to host rare, threatened and endangered species.

DNREC recommends taking additional steps to move development away from the forest/wetland resources and formally preserve the undeveloped forest block. Maintaining the forest helps in the overall reduction of greenhouse gasses present in our atmosphere and can aid in meeting water quality standards. Furthermore, the presence of a wetland resource and the associated buffer recommendations in support of wildlife and water quality concerns, reinforce the need for preservation and would provide an opportunity for passive recreation. Our wildlife scientists are very interested in surveying the property, to evaluate the habitat and provide more site-specific guidance on how best to protect it.

DNREC generally recommends high energy efficiency building standards (with consideration for alternative energy sources), and the use of green infrastructure, wherever practicable, to protect air and water quality, in all development. DNREC further recommends an abundant use of native vegetation and shade trees throughout the landscape.

The following pages provide applicable regulations and detailed recommendations associated with this project from various DNREC Divisions. We would like to be a partner in creating appropriate development that highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

State regulated subaqueous lands.

- These lands are likely to be located adjacent to this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. Upon review of the GIS layers, a stream is located on the western edge of the property. An on-site inspection by a representative of the Wetlands and Subaqueous Lands Section or an environmental consultant is recommended to determine the limits of jurisdictional State subaqueous lands.

  State subaqueous lands include all tidal waters (up to the mean high water line), most non-tidal rivers, streams, lakes, ponds, bays and inlets (up to the ordinary high water line), most perennial streams and ditches and many intermittent streams and ditches. Additional information about State regulated subaqueous lands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or online: http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx.

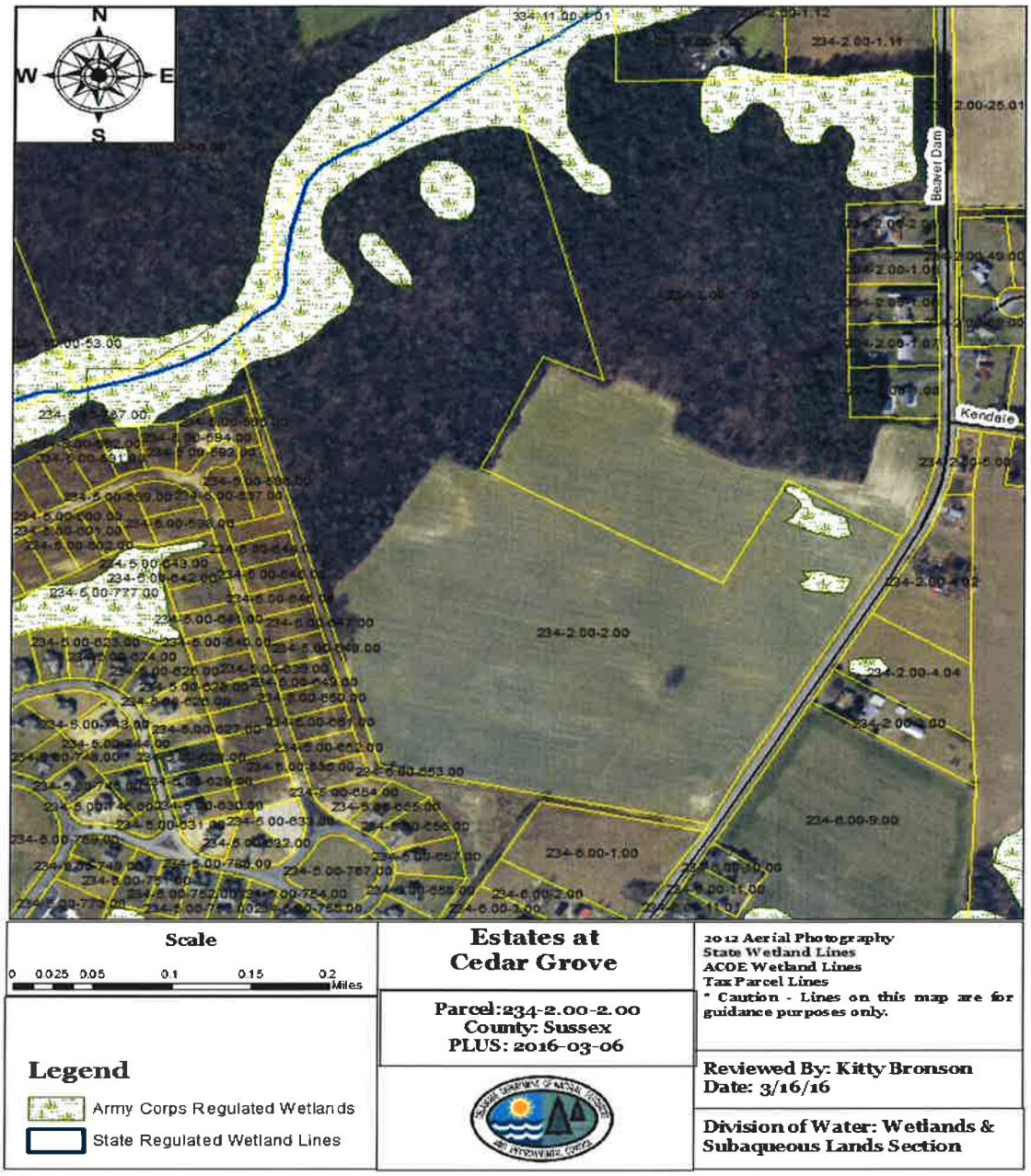
Wetlands are located along the north end of the property. No development is anticipated in this area. The separation between the area to be developed and the wetlands is anticipated to be at least 330 feet at a minimum.

Waters of the U.S.

- These waters, regulated by the U.S. Army Corps of Engineers (USACE), are likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. According to our GIS SWMP maps, there are wetlands regulated by the Army Corps of Engineers on this property. The extent of Federal jurisdiction over Waters of the United States is determined by USACE and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the U.S. are located on the property and the limits of Federal jurisdictional. The application states that a delineation has been done and there will be no impacts to the wetlands. USACE may need to sign off on the delineation if there will be any impact to the wetlands on the property.

  Waters of the U.S. include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the U.S. not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the U.S., where the use, degradation or destruction of these waters could affect interstate or foreign commerce. USACE can be contacted at (215) 656-6728 or online at: http://www.nap.usace.army.mil/cenapop/regulatory/regulatory.htm.

  Waters of the US are located along the north end of the property. No development is anticipated in this area. The separation between the area to be developed and the waters of the US is anticipated to be more than 330 feet.



TMDLs, PCS, and Nutrient Management plans.

- The project is located in the low nutrient reduction zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. The TMDL for the *low reduction* zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions.

  A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited waterbody" can assimilate and still meet State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; *State of Delaware Surface Water Quality Standards, as amended July 11, 2004*) to the extent necessary to support

use goals such as, swimming, fishing, drinking water and shell fish harvesting. Please view the following web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs:
http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx

The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. The PCS regulations can be reviewed here: http://regulations.delaware.gov/documents/November2008c.pdf. Background information about the PCS with guidance documents and mapping tools can be retrieved here:
http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm

A nutrient management plan is required under the *Delaware Nutrient Management Law* (3 Del.C., Chapter 22) for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's proposed open space will exceed this 10acre threshold. Please contact the Delaware Nutrient Management Program at (302) 7394811 for further information concerning compliance requirements, or view additional information here: http://dda.delaware.gov/nutrients/index.shtml

It is the stated goal of the project to provide in general, all Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Best Management Practices (BMPs) which will comply with DNREC standards and specifications in accordance with current guidance documents and policies. Green Technologies and Pollution Control Strategies will be implemented to reduce nitrogen and phosphorus loads. As part of the stormwater management design, the DURMM analysis process assists with addressing TMDL's. In the event that open space exceeds 10-acres, a Nutrient Management Plan will be prepared.

Flood Management.

DNREC recognizes that this new site plan proposes an added buffer to the Zone A floodplain, however the Sussex County Floodplain ordinance may still apply. Section 115.141.3(D)(1)(d) requires: *For subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, and where base flood elevations are not shown on Flood Insurance Rate Maps, hydrologic and hydraulic engineering analyses and studies as required by Section 115-141.4.B.(4).* Studies, analyses, computation, etc., shall be submitted in sufficient detail to allow thorough technical review by the Office of Planning and Zoning and/or the Sussex County Engineering Department. Since a portion of this parcel is located in a Zone A floodplain and no base flood elevation has been established, the County may require that a flood study be done

Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) dated March 16, 2015, Map Number 10005C0330 J, the majority of subject parcel is located in a Zone "X" unshaded, which is an area outside the 500-year floodplain, less than 0.2% annual probability of flooding. A portion of the parcel is located in Flood Zone A and is primarily the area designated as the wetlands on the property.

Water Supply.

- The information provided indicates that Tidewater Utilities will provide water to the proposed project through a public water system. DNREC files reflect that Tidewater Utilities does not currently hold a Certificate of Public Convenience and Necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at (302) 736-7500. Should an on-site public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as a septic tank and sewage disposal areas, and at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

  From: Jeremy Kalmbacher <Jkalm@middlesexwater.com>
  Sent: Wednesday, March 25, 2015 5:19 PM
  To: Mark Davidson; Kirsten Higgins
  Cc: Daniel Barbato; Carlton Savage
  Subject: RE: Tax Map 234-2.00 Parcel 2.00 Sussex County Delaware
  Hi Mark,

  Tidewater does serve the Ridings with water and wastewater. There is capacity for both water and wastewater….

  Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

  All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications take approximately four weeks to process, which allows the necessary time for technical review and advertising. Should you have any questions concerning these comments, please contact Rick Rios, at (302) 739-9944.

Sediment and Stormwater Management.

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre and post development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the

Sussex Conservation District. Contact Jessica Watson of the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees. (Delaware Code: Title 7 Chapter 40) (Delaware Regulations: Administrative Code: Title 7: 5101):

It is the stated goal of the project to provide in general, all Erosion & Sediment Control (ESC) and Stormwater Management (SWM) Best Management Practices (BMPs) which will comply with DNREC standards and specifications in accordance with current guidance documents and policies. Green Technologies and Pollution Control Strategies will be implemented to reduce nitrogen and phosphorus loads to their mandated levels.

Air Quality.

- DNREC encourages developers and builders to consider all sustainable growth practices in their design, but they believe, however, that the air quality impacts associated with the project should be completely considered. The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1 – Potential Regulatory Requirements may apply:

Table 1: Potential Regulatory Requirements

Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	• Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	• Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibit the burning of land clearing debris. • Prohibit the burning of trash or building materials/debris.
7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan	• Require, for any "federal action," a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the minimum levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	• Use structural/ paint coatings that are low in Volatile Organic Compounds. • Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	• Ensure that emissions of nitrogen oxides (NO_x), nonmethane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO_2), carbon monoxide (CO), and carbon dioxide (CO_2) from emergency generators meet the emissions limits established. (See section 3.2). • Maintain recordkeeping and reporting requirements.

7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	• Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at our website: http://www.dnrec.delaware.gov/Air/Pages/Air-Regulations.aspx.

- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) for this project were quantified. Table 2 – Projected Air Quality Emissions represents the actual impact the Estates at Cedar Grove may have on air quality.

Table 2: Projected Air Quality Emissions for Estates at Cedar Grove

Emissions Attributable to Estates at Cedar Grove (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO_2)	Fine Particulate Matter ($PM_{2.5}$)	Carbon Dioxide (CO_2)
Area Source	3.1	0.3	0.3	0.4	12.5
Electric Power Generation	*	1.2	4.3	*	629.4
Mobile Source	4.6	4.8	0.1	0.1	2955.5
Total Emissions	7.7	6.3	4.7	0.5	3597.4

(*) *Indicates data is not available.*

Note that emissions associated with the actual construction of the road, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

- DNREC encourages sustainable growth practices that:
  - Control sprawl;
  - Preserve rural and forested areas; o Identify conflicting land use priorities;
  - Encourage growth on previously developed sites and denser communities while at the same time protect our diminishing land base;
  - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.

Comments and suggestions are noted

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known archaeological sites or National Register-listed properties on this parcel. If any development or construction project proceeds, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law, in Chapter 54, of Title 7, of the Delaware Code.

- Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (7 Del. C. Ch. 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you would like to know more information pertaining to unmarked human remains or cemeteries, please go to the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

  Based on our studies performed on the property we concur with the states assessment that there are no known archaeological sites or National Register-listed properties on this parcel.

- Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant, to examine the parcel for archaeological resources, especially a cemetery or unmarked human remains. Furthermore, if there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation about the project's effects on historic properties. Furthermore, any preconstruction activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106

process and the Advisory Council's role, please review the Advisory Council's website at www.achp.gov.

Comments are noted in the event that federal funding or an Army Corps of Engineers permit is required, the appropriate correspondence will be initiated.

Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

- **Fire Protection Water Requirements**:
  - Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure.
  - Fire hydrants with 1000 feet spacing on centers are required.
  - The infrastructure for fire protection water shall be provided, including the size of water mains.

    Potable water for the subdivision is to be provided by Tidewater. The distribution system shall be designed to provide both water distribution and fire protection

- **Accessibility**:
  - All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from the main thoroughfare must be constructed so fire department apparatus may negotiate it. If a "center island" is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into, or through, the subdivision.
  - Additionally, when there is an island proposed to be situated in the center of the cul-de-sac, extra attention should be directed to verify that fire apparatus will be able to freely negotiate through the cul-de-sac without impediment. Generally, the width between the property lines and the edge of the island is a minimum of 24 feet or more.
  - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
  - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
  - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

    Comments and requirements are noted. Final plans shall address and include the access features listed. On-site road geometrics will be evaluated using autoturn methods employing the appropriate design vehicle.

- Gas Piping and System Information:
  - Provide type of fuel proposed, and show locations of bulk containers on plan.

- Required Notes:
  - Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
  - Name of Water Supplier
  - Proposed Use
  - National Fire Protection Association (NFPA) Construction Type
  - Maximum Height of Buildings (including number of stories)
  - Provide Road Names, even for County Roads

Request is noted. Requested details shall be added to the final plans

Department of Agriculture – Contact Scott Blaier 698-4532

- The proposed project is adjacent to a property permanently protected through the State's Agricultural Lands Preservation Program (Hopkins Covered Bridge Farm District), (Parcel # 334-10.00-56.00). Therefore, the activities conducted on this preserved property are protected by the agricultural use protections outlined in **Title 3, Del. C., Chapter 9.** These protections effect adjoining developing properties. The 300 foot notification requirement affects **all new deeds** in a subdivision located in whole or part within 300 feet of an Agricultural District. Please take note of these restrictions as follows:

The advisory is noted. The layout of the lots is such that the closet lot is about 500 feet from Parcel 334-10.00-56.00

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and

activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.
(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an
Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

In addition, if any wells are to be installed, **Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells** will apply. This regulation states:

(3) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Comments are noted

In addition to the comments above our office has received a letter from Brandy Nauman, Sussex County Housing Coordinator & Fair Housing Compliance Officer. A copy of that letter is enclosed wit this letter.

The Dellwood Estates residential subdivision being planned for this property will strive to integrate local community through environmental stewardship that will provide a lively family neighborhood. The belief is that such a project will generate a strong sense of belonging while also enabling a collective sense of place within the community. BDRP, LLC foresee a future where projects such as this allow communities to keep growing, each influencing its neighborhood. Through their efforts in development of the property, the vision is to inspire change in the way people live.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application

process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County
Enclosure