



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION**

January 19, 2016

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

RE: PLUS review 2015-12-04; Estates at Cedar Grove

Dear Mark:

Thank you for meeting with State agency planners on December 16, 2015 to discuss the Estates at Cedar Grove project. According to the information received you are seeking review of a 90 unit subdivision on 71.28 acres in Sussex County.

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.**

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.

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.

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.

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.**

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Per Section 2.2.2.1 of the Development Coordination 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. From the PLUS application, we see that the total daily trips are estimated at 864 vehicle trip ends per day. Based on that volume, this project would warrant a TIS.
 - Per Section 2.2.2.2 of the Development Coordination 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 DelDOT is 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) 760-2167.
- The site access on Beaver Dam Road (Delaware Route 23) must be designed in accordance with DelDOT's Development Coordination Manual (formerly the Standards and Regulations for Subdivision Streets and State Highway Access), which is available at <http://www.deldot.gov/information/business/subdivisions/changes/index.shtml>.
- Section 3.2.4.2 of the Development Coordination 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.
- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Development Coordination 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.**" DelDOT sees 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.
- In accordance with Section 3.2.5.1.2 of the Development Coordination 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 right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, "**A 15-foot wide permanent easement is hereby established to the State of Delaware, as per this plat.**"
- Referring to Section 3.4.2 of the Development Coordination Manual, the Initial Stage review fee shall be assessed to this project.
- In accordance with Section 3.4 of the Development Coordination 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)
- Referring to Section 3.4.2.1 of the Development Coordination 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.
- Section 3.5 of the Development Coordination 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.
- Section 3.5.4.2 of the Development Coordination 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. However, it was determined at the presubmittal meeting that the site is in a developing area. Therefore a shared use path will be required.
- In accordance with Section 3.8 of the Development Coordination 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.
- Referring to Section 4.3 of the Development Coordination Manual, the Construction Stage review fee shall be assessed to this project.
- Referring to Section 4.3 of the Development Coordination 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
 - Entrance Plan
 - Pipe/Angle Spreadsheet (If applicable)
 - SWM Report and Calculations (If applicable)
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- In accordance with Section 5.2.5.6 of the Development Coordination 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 Development Coordination Manual, the entrance shall be designed for the largest vehicle using the entrance.
 - In accordance with Section 5.2.9 of the Development Coordination 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.
 - In accordance with Section 5.4 of the Development Coordination 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 <http://www.deldot.gov/information/business/subdivisions/Intersection-Sight-Distance.xls>.
 - Section 7.7.2 of the Development Coordination 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.

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

The proposed development will result in loss of a valuable large forest block, increased impervious surface, and new sources of greenhouse gas emissions. Opportunities exist to preserve natural resources while reducing the environmental impact on-site and providing additional recreational amenities to homeowners.

The woodland portion of this parcel has retained its natural character and is within the Love Creek Natural Area. DNREC has specific concerns with the intended clearing/fragmentation of 22 of 31 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 focusing development away from the forest/wetland resources and taking steps to further preserve an undeveloped forest block. There is also the potential for vernal

pool wetlands, with their associated high habitat value. 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. Our scientists are very interested in surveying the property, to evaluate the habitat and provide guidance on how best to protect it.

As stated in the PLUS application, the style and market segment target for these homes are second home, retirement home and possibly first-time homebuyers. DNREC would anticipate that these potential homebuyers do not want to spend their time maintaining a large lot. This could translate into an incentive for smaller lot sizes, allowing the same number of units within a smaller developed footprint. A suggestion made during the December 16th, 2015, PLUS meeting, was to create a loop with Legacy and Lady Mable Lanes. DNREC would be in support of this change to the plan, as it would provide an opportunity to preserve a larger proportion of the forest block and opportunities for passive recreation.

In addition, DNREC generally recommends high energy efficiency building standards (with consideration for alternative energy sources), and the use of green infrastructure, wherever practicable, to protect 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. If this development is approved, DNREC 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.

TMDLs

- 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. 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. 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. 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 at: <http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved at: 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. 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 open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements, or view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

Flood Management.

- Sussex County's floodplain ordinance 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 a flood study be done.

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) 736-7547. 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.
- Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the DNREC 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 Sussex Conservation District. Contact Jessica Watson of the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees.

DNREC recommends a 20-foot wide maintenance open space to access the SWM pond behind lots 44 & 45. (Delaware Code: Title 7 Chapter 40) (Delaware Regulations: Administrative Code: Title 7: 5101):

Air Quality.

- The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 2 – Potential Regulatory Requirements may apply:

Table 2: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 de minimus levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) 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	<ul style="list-style-type: none"> • 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.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

Tank Management

- No environmental impacts are anticipated; however, per the UST Regulations: Part E, § 1. Reporting Requirements:
 - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to:
 - The Department's 24-hour Release Hot Line by calling (800) 662-8802; and
 - The DNREC Tank Management Section by calling (302) 395-2500.

Department of Agriculture – Contact Scott Blaier

- 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:

§ 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:

(2) 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.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- Because this is a Level 4 area, the SHPO does not support this development. While nothing is known on this parcel, the E. Walls House is indicated on Beers Atlas of 1868, and the location of this farmstead continues to be marked by a tree. This may also indicate the presence of a family cemetery.

Abandoned and unmarked family cemeteries are common on farms in Delaware. Burials have also been found associated with prehistoric-period archaeological sites. Disturbing unmarked burials triggers Delaware's Unmarked Human Burials and Human Skeletal Remains Law of 1987 (7 Del. Code Ch. 54). Such discoveries can result in substantial delays while the procedures required under this law are carried out. DHCA recommends that owners and/or developers have a qualified archaeological consultant investigate their project area for the presence of such a cemetery. If one is discovered and delineated, it is very costly to have it archaeologically excavated and the burials moved. DHCA

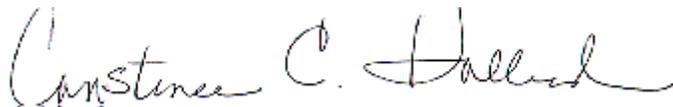
recommends that in the event of such a discovery, the plans be redrawn to leave the cemetery on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with a homeowners association or development owner. (For further information, see <http://history.delaware.gov/preservation/umhr.shtml> and <http://history.delaware.gov/preservation/cemeteries.shtml>)

- 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. Any preconstruction activities without adherence to these stipulations may jeopardize the issuance of a permit or receipt of funding if it is determined that such opportunity to comment has been foreclosed. (For further information on Section 106 and the Advisory Council's role, please review the Advisory Council's website at: www.achp.gov)

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,

A handwritten signature in cursive script that reads "Constance C. Holland".

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

CC: Sussex County