



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

March 26, 2013

Mr. Ring Lardner
Davis, Bowen & Friedel
23 N. Walnut Street
Milford, DE 19963

RE: PLUS review – 2013-02-03; Point Farm

Dear Mr. Lardner:

Thank you for meeting with State agency planners on February 27, 2013 to discuss the proposed plans for the Point Farm subdivision to be located off of Park Road, North of the Canary Creek subdivision.

According to the information received, you are seeking site plan approval through Sussex County for 69 residential units on 100 acres.

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 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 is located in Investment Levels 1 and 3 according to the 2010 *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. It appears that, in this case, there are environmental features on this site. While State investments may support future growth in this area, we encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

Office of State Planning Coordination – Contact David Edgell 739-3090

- At the PLUS meeting there was discussion about the future maintenance of the main access road, currently owned and maintained by DNREC. It was indicated that one option to be explored is the transfer of the road to the City of Lewes for maintenance. Title 22, Section 101 (2) of the Delaware Code addresses the contiguity requirements for municipal annexation. This section explicitly prohibits “corridor annexations” which involve annexation of a right-of-way. If the City of Lewes wishes to have the road within its boundaries in order to assume maintenance responsibilities, then the parcels adjacent to the road will have to be annexed as well.
- Here is the text of Title 22, Section 101 (2), for your information:

(2) Anything in this chapter or in any municipal charter notwithstanding, a municipal corporation shall have the ability to annex a parcel only if and to the extent that such parcel is contiguous with existing municipal boundaries. "Contiguous" means that a part of the boundary of the parcel sought to be annexed by a municipal corporation is conterminous with a part of the boundary of the municipal corporation. The separation of the parcel sought to be annexed from the annexing municipal corporation by (i) a right of way for a highway, road railroad, canal or utility, or (ii) a body of water or watercourse, running parallel with and between the parcel sought to be annexed and the annexing municipality shall not prevent annexation pursuant to this section; provided, however, that nothing herein shall be construed to allow rights of way, utility easements, waterways or like entities to be annexed in corridor fashion or to be utilized as a corridor route for annexation to gain contiguity.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known historic or cultural resources such as an archaeological site or National Register-listed property on this parcel. However, there is a known archaeological site (S-9146, 7S-D-073) nearby, towards the east. With this in mind, it is very important that the developer be aware of the Delaware Unmarked Human Burials and Human Skeletal Remains Law, which is outlined 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 (Delaware Code Title 7, Chapter 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 need or would like to read more information in reference to unmarked human remains, burials 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.

- Prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for potential historic or cultural resources, such as a potential archaeological site, 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.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The proposed development meets DelDOT's volume-based criteria, found in Section 2.3.2 of the Standards and Regulations for Subdivision Streets and State Highway Access, for recommending that a Traffic Impact Study (TIS) be required (400 vehicle trips per day or 50 vehicle trips per hour) and a scoping meeting was held in that regard on January 16, 2012. Requirements regarding off-site improvements may be forthcoming following our review of the completed study.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Wetlands

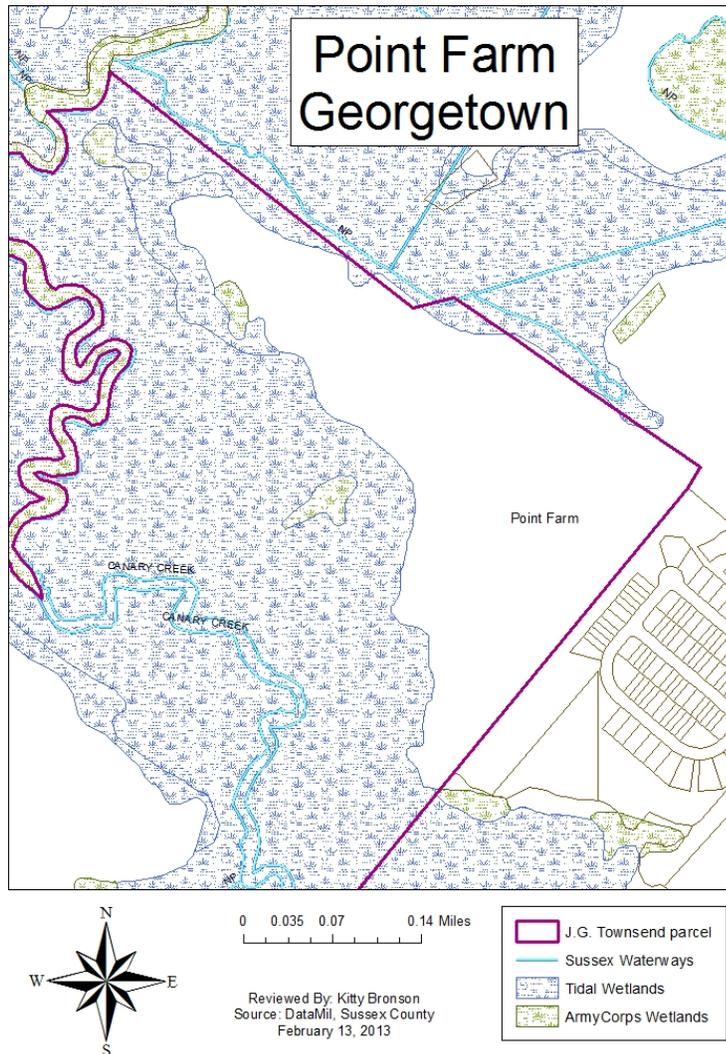
- State regulated wetlands do not look to be directly impacted on this portion of the property based on a review of the State wetland maps. However, we recommend a Jurisdictional Determination to be sure wetlands are not physically impacted. Also, a review of County setback requirements regarding wetlands will be necessary.

State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. State regulated wetlands **are** located **adjacent** to this property based on a review of the State wetland maps. Please refer to State Wetland map number 85. Any activity in State regulated wetlands may require a permit from DNREC's

Wetlands and Subaqueous Lands Section. *There are lots on this parcel that are very close to the mapped wetland line; therefore, any construction in this area should remain clear of impacting the wetlands.* Additional information about State regulated wetlands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.

- State regulated subaqueous lands are not likely to be directly impacted on this portion of the property based on a review State Wetland Mapping Project (SWMP) maps and Sussex County Waterway maps. Review of the GIS information shows a perennial river or stream is located directly adjacent to this property. Again, a review of County setbacks from the waterways and wetlands will be necessary.

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. State regulated subaqueous 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. 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. Additional information about State regulated subaqueous lands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.



TMDLs

- The project is located in the greater Delaware River and Bay drainage, specifically within the Broadkill River watershed. In this watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nitrogen, phosphorus, and bacteria (under the auspices of Section 303(d) of the Clean Water Act). A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” 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 Broadkill River watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 75 percent reduction in bacteria from baseline conditions.
- 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>

Water Supply

- The project information sheets state water will be provided to the project by City of Lewes Board of Public Works via a public water system. Our records indicate that the project is located within the public water service area granted to Lewes Board of Public Works under Certificate of Public Convenience and Necessity 01-CPCN-07.
- 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 typically take approximately four weeks to process, which allows the necessary time for technical review and advertising

Sediment and Stormwater Program

- 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 at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees.

Hazardous Waste Sites

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C., Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.

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.

- **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.
 - 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.
 - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
 - 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.

- **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

Recommendations/Additional Information

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in

order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- A pre-submittal meeting was held with DelDOT on January 16, 2013, to discuss the need for a TIS (see above), site access location and design, the existing and future ownership and maintenance of Park Road (see below) and whether the existing intersection of Park Road and New Road would require any improvements (dependent in part on TIS results).
- Presently, the portion of Park Road where the site would have access is maintained by the Department of Natural Resources and Environmental Control. The developer has expressed interest in having the road transferred to DelDOT and then improving it with DelDOT inspection but with the goal of having it transferred again to the City of Lewes. While DelDOT is not necessarily opposed to such an arrangement, having done it before for the section of Park Road immediately to the south, much coordination will need to take place between all parties involved. A meeting in that regard is scheduled for March 19, 2013.
- DelDOT recommends that the developer have their site engineer maintain contact with our Subdivision Manager for this part of Sussex County, Mr. John Fiori, regarding the site access, the ownership and maintenance of Park Road and the need to improve the intersection of Park Road and New Road. As necessary, Mr. Fiori can be reached at (302) 760-2260.

Department of Natural Resources and Environmental Control – Contact Bahareh van Boekhold 735-3495

Soils Assessment

- Based on soils survey mapping update, the following soil mapping units were mapped on subject parcel:
 - Rumford (RuA & RuB) - Excessively well drained (high permeability, low runoff and little or no water holding capacity). Excessively well drained soils have little or no clay (and organic matter) in their subsoils which are likely to lead to leaching losses of nitrogen and dissolved forms of phosphorus into ground and surface waters.
 - Transquaking & Mispillion (TP) -Very poorly drained (hydric) – The Transquaking & Mispillion (TP) soil mapping units contain hydric soils considered to have severe limitations for development (or considered unsuitable for development).
 - The Statewide Wetland Mapping Project (SWMP) often uses the soil survey as the basis for mapping and delineating wetlands. The presence of a hydric soil is one of three parameters that must be met in order to meet jurisdictional wetland requirements (as specified by the USACOE). The other parameters are hydrophytic vegetation and hydrology. Thus the presence of hydric soils is a correlate with wetland presence. Building on hydric soils is likely

to increase the potential for on-site and off-site flooding potentials (See figure 1). DNREC recommends avoiding those areas containing hydric soil mapping units.

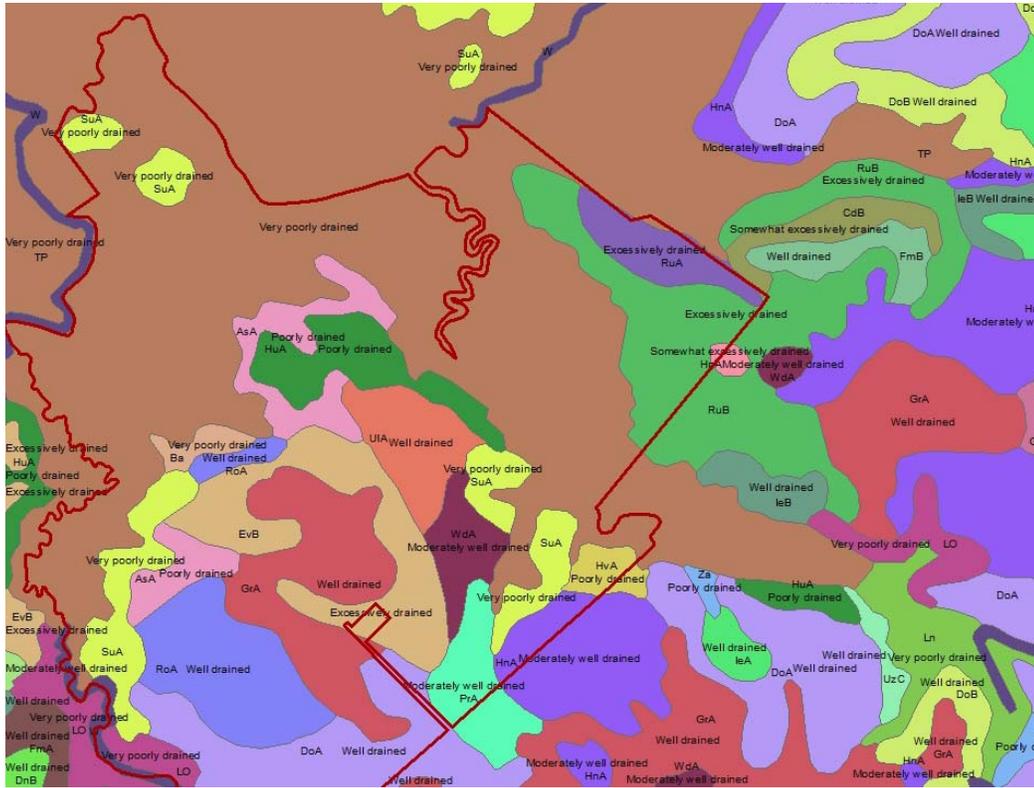


Figure 1: NRCS soil mapping update in the immediate vicinity of the proposed project

Additional information on hazardous waste sites

- The Site Investigation and Restoration Section (SIRS) strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA.

Additional remediation may be required if the project property or site is re-zoned by the county.

- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

Additional information on TMDLs and water quality

- In response to concerns about the need for reducing nonpoint source nutrient (nitrogen and phosphorus) and bacterial pollutants to levels sufficient to meet the prescribed TMDL reduction requirements in Delaware's portion of the Broadkill River Basin, a multifaceted and comprehensive process known as a Pollution Control Strategy (PCS) has been developed to enable such reductions. Specifically, a PCS is a combination of best management practices and control technologies that reduce nutrient and bacterial pollutant runoff loading in waters of a given watershed to level(s) consistent with the TMDL(s) reduction levels specified for that watershed. The PCS for the Broadkill River watershed consists of recommendations from the following three areas: Agriculture, stormwater, and wastewater. Additional information about Broadkill River PCS is available from the follow web link:
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>
- DNREC strongly encourages the applicant reduce nutrient and bacterial pollutants through voluntary implementation of the following recommended BMPs:
 - Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands (field delineated and approved by the USACE).
 - Applicant should calculate post-construction surface imperviousness with all forms of created surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.
 - Since this project will create additional impervious surface that will increase the probability for increased pollutant load runoff to adjoining streams and wetlands, we strongly encourage the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate the negative impacts from pollutant runoff.
 - DNREC encourages the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to reduce nutrient pollutant impacts.
 - The applicant should voluntarily assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the “Nutrient Load Assessment protocol.” The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about

their project’s impact(s) on baseline water quality. DNREC strongly encourages the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Lyle Jones at 302-739-9939 for more information on the protocol.

State-Endangered and State-Rare Species

- According to Delaware Natural Heritage and Endangered Species Program current database, the following state-rare and Species of Greatest Conservation Need¹ (SGCN) have been documented adjacent to this project and could be utilizing the wetlands for nesting and foraging:

Scientific Name	Common Name	Taxon	State Rank	State Status	SGC N Tier
<i>Accipiter cooperii</i>	Cooper’s hawk	Bird	S1B	E	Tier 1
<i>Buteo platypterus</i>	Broad-winged hawk	Bird	S1B	-	Tier 1
<i>Circus cyaneus</i>	Northern harrier	Bird	S1B/S4N	E	Tier 1

- In addition to the species noted above, there could be additional species of marsh nesting birds utilizing the surrounding wetlands. There is very little upland buffer between this project and the adjacent marsh area to protect water quality and provide wildlife habitat. Buffers are an integral component of aquatic and wetland habitats, reducing the amount of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of wetland dependent species.
- This project will result in an increase in the percentage of impervious surface and introduce human disturbance which can degrade water quality and eliminate wildlife habitat. The lots appear to extend to the edge of the wetlands. Cumulative impacts should also be considered given this project abuts “Canary Creek” which proposed to remove more than 50% of the forested buffer along the marsh and also sited roadways and stormwater management areas within 100 feet of the wetlands.

Wildlife Habitat

- The surrounding wetlands as well as an area within the parcel that forms an upland buffer greater than 100 feet in width have been identified as ecologically important by the Delaware Ecological Network (DEN). The DEN, although non-regulatory, is a statewide conservation network developed using GIS and field collected datasets that help to identify and prioritize ecologically

¹ Species of greatest conservation need (SGCN) are indicative of the overall diversity and health of the State’s wildlife resources. Some may be rare or declining, others may be vital components of certain habitats, and still others may have a significant portion of their population in Delaware. SGCN are identified in the Delaware Wildlife Action Plan (DEWAP) which is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state’s natural resources. Congress challenged the states to demonstrate comprehensive wildlife conservation. Delaware, along with all of the other states and provinces throughout the country are working to implement their wildlife action plans. This document can be viewed via the Division of Fish and Wildlife’s website at <http://www.fw.delaware.gov/dwap/Pages/default.aspx>.

important areas for natural resource protection. The DEN includes ecologically important areas such as forests, wetlands, streams, habitat that supports rare species and areas of especially high quality. The DEN includes the following key elements: 1) core areas - contain relatively intact natural ecosystems, and provide high-quality habitat for native plants and animals, 2) hubs-slightly fragmented aggregations of core areas, plus contiguous natural cover and 3) corridors-link core areas together, allowing wildlife movement and seed and pollen transfer between them.

- The sketch provided with the PLUS application depicts the lot lines extending all of the way to the edge of the wetlands. It is highly recommended that these lot lines be pulled back so that there is *at least* a 100-foot buffer between the edge of the wetlands and the lot lines. Consideration could then be given to improving the buffer by allowing succession within the buffer area or planting Delaware native trees, shrubs, grasses or wildflowers. Perhaps the large pond in the center is not a necessity for stormwater management and could be reduced in size or re-sited to allow for a more environmentally sensitive plan that will accommodate larger wetland buffers.

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

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.

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