

June 17, 2011

Stephen L. Marsh
George, Miles & Buhr, LLC
206 West Main Street
Salisbury, MD 21801

RE: PLUS review – 2011-04-06; Bishop's Landing

Dear Mr. Marsh:

Thank you for meeting with State agency planners on May 25, 2011 to discuss the proposed plans for the Bishop's Landing project to be located on the south side of Burbage Road between Substation road and Windmill Road.

According to the information received, you are seeking to re-subdivide a previously approved subdivision to include 457 residential units. This project was originally seen in 2004 as PLUS 2004-03-08 (Barrington Park) and approved by the Town of Millville.

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 Town of Millville is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.**

Strategies for State Policies and Spending

This project is located in Investment Level 3 according to the 2010 Strategies for State Policies and Spending. This site is located within the Town of Millville. 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. State investments will support growth in these areas, but please be advised that the State may have other priorities in the near term future. We encourage you to design the site with respect for the environmental features which are present.

According to the online Map for State Strategies, the site is considered Level 2, not Level 3. Regardless, we will work closely with the Town of Millville and other reviewing agencies to achieve the requirements set forth during the approval process.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are known cultural and historic resources on this parcel: the J. Hall House (S-2356) near the corner of Burbage Road and Windmill Road, the T. W. Steel Jr. House (S-10031) on the east side of Substation Road, and the Ocean View Post Master's House (S-11513) near Burbage Road. The J. Hall House (S-2356) and the T. W. Steel Jr. House (S-10031) are mid to late 19th-century structures, and the Ocean View Post Master's House (S-11513) is an early 20th-century structure. According to the Pomeroy and Beers Atlas of 1868, there were dwellings approximately in the same location as the T. W. Steel Jr. House (S-10031) on this parcel, and another nearby that was associated with T. W. Steel Sr. In addition, the USGS Topographic Map of 1918 also indicated these dwellings, along with the J. Hall House and the Ocean View Post Master's House (S-11513). There may be archaeological remains associated with the dwelling that was associated with T. W. Steel Sr. With this in mind, it is important that the developer be aware of the Delaware Unmarked Human Remains Act of 1987, in Chapter 54 of Title 7 of the Delaware Code, which pertains to the discovery and disposition of such remains. Prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for archaeological sites, such as a cemetery or unmarked human remains.
- Abandoned and unmarked family cemeteries are common on farms in Delaware. 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, please see following websites at: <http://history.delaware.gov/preservation/umhr.shtml> and <http://history.delaware.gov/preservation/cemeteries.shtml>)
- 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 culture 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. 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)

During construction, if any unmarked human remains are discovered, construction will be halted and the State Historic Preservation Office will be contacted immediately.

In the event that a Department of the Army permit is required by the Corps of Engineers for this project or should a similar federal action be proposed, the applicant will coordinate as required under Section 106 with the State Historic Preservation Office. However, no federal actions are anticipated as part of this project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Entrance plans and roadway improvement plans were previously approved on November 20, 2008, in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access that were current at that time, under the development name Barrington Park. Please contact our Subdivision Manager for eastern Sussex County, Mr. John Fiori, to process any necessary re-approvals associated with the name change. Mr. Fiori may be reached at (302) 760-2260.
- Funding for the road improvement plans was previously established by agreement between DelDOT and the developers of Barrington Park and Millville by the Sea. We understand that the developer of Bishop's Landing is interested in revisiting that agreement. We are open to discussing the matter. Mr. Fiori will serve as our initial point of contact in that regard.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 739-9071

Wetlands

- According to the Statewide Wetland Mapping Project (SWMP) maps, palustrine wetlands (PF01A) were mapped in the area proposed for development (See figure 1).



Figure1: SWMP mapping in the immediate vicinity of the proposed project

- The applicant is responsible for determining whether any State-regulated wetlands (regulated pursuant to 7 Del.C. Chapter 66 and the Wetlands Regulations) are present on the property. This determination can only be made by contacting the Division of Water Resources' Wetlands and Subaqueous Lands Section at (302) 739-9943 and consulting the State's official wetland regulatory maps, which depict the extent of State jurisdiction. The area regulated by State law may be very different from the area under federal authority. No activity may take place in State-regulated wetlands without a permit from DNREC's Wetlands Section.

The DNREC Wetlands & Subaqueous Lands Section is charged with regulation of activities involving State-mapped wetlands and subaqueous lands which include tidal

waters and non-tidal streams. Environmental Resources, Inc. (ERI) performed a Delineation of Waters of the United States including wetlands subject to the Corps of Engineers' Regulation Program. The delineation map also included the location of State-regulated wetlands and subaqueous lands. A Jurisdictional Determination was made by the Corps. Therefore, the applicant has identified the locations of State-regulated waters and wetlands. No impacts to State-regulated wetlands or subaqueous lands are proposed as part of the project.

- In addition, most perennial streams and ditches and many intermittent streams and ditches are regulated pursuant to the Subaqueous Lands Act (7 Del.C. Chapter 72) and the Regulations Governing the Use of Subaqueous Lands. Ponds, which are connected to other waters, are also regulated, while isolated ponds are not. Any work in regulated streams, ditches or ponds requires a permit from the Wetlands and Subaqueous Lands Section. An on-site jurisdictional determination is recommended in order to determine whether any regulated watercourses exist on the property. Please contact the Wetlands and Subaqueous Lands Section at 302/739-9943 to schedule an on-site visit. Such appointments can usually be scheduled within 2 to 3 weeks.

As stated above, there are no proposed impacts to wetlands or subaqueous lands.

- The Wetlands and Subaqueous Lands Section (WSLS) completed a Jurisdictional Determination, JD-308/09, for the site and identified the presence of waterways regulated by the State as Subaqueous Lands pursuant to the Subaqueous Lands Act. The Wetlands and Subaqueous Lands Section recommends that impacts to subaqueous lands be avoided or minimized. However, any impact to these waterways would require the owner/developer to submit a permit application to the Wetlands and Subaqueous Lands Section for review and approval.

As stated above, there are no proposed impacts to wetlands or subaqueous lands.

- Based on the DNREC review of the project site, it is likely that federally regulated wetlands and waters of the United States are present on the site. The Wetlands and Subaqueous Lands Section suggests that the owner/developer contact the U.S. Army Corps of Engineers at (215) 656-6728 for information about their regulatory program. We also recommend that a wetlands delineation be completed prior to approval of the Plan.

A Jurisdictional Determination was previously made by the Corps. There are no impacts to federally regulated wetlands and waters of the United States.

- The adopted Inland Bays Pollution Control Strategy regulation was published in the Delaware Register of Regulations on November 11, 2008 and is now an enforceable regulatory directive. A Pollution Control Strategy (PCS) is an implementation strategy that identifies the actions necessary (regulatory and nonregulatory) to systematically reduce the pollutant loading to a given water body, and meet the TMDL reduction requirements specified for that water body. These regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf> and background information, guidance documents, and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm.

Stormwater Management approval was previously granted through Sussex Conservation District as part of the Barrington Park approval process. This project was handled through Sussex Conservation District as a revision to the previously approved plan. The project was “grand-fathered” according to Section 1.4 of the Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay, and Little Assawoman Bay watersheds.

Beazer Homes appreciates the sensitive nature of the Inland Bays, and proposes to donate \$50 and establish a membership to the Center for the Inland Bays for each new homeowner.

- The applicant should assess nutrient loading on their parcel through the DNREC developed 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. We strongly encourage 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.

Stormwater Management approval was previously granted through Sussex Conservation District as part of the Barrington Park approval process. This project was handled through Sussex Conservation District as a revision to the previously approved plan. The project was “grand-fathered” according to Section 1.4 of the Regulations Governing the Pollution Control Strategy for the Indian River, Indian River Bay, Rehoboth Bay, and Little Assawoman Bay watersheds.

Beazer Homes appreciates the sensitive nature of the Inland Bays, and proposes to donate \$50 and establish a membership to the Center for the Inland Bays for each new homeowner.

TMDLs and Nutrient Management Plans

- The project is located in 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 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 Low Reduction zone of the Inland Bays watershed calls for a 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 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>

A Nutrient Management Plan will be filed with the Delaware Nutrient Management Program.

Water Supply

- The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. Our records indicate that part of the project is located within the public water service area granted to Tidewater Utilities under Certificates of Public Convenience and Necessity (CPCN): 05-CPCN-02 and 04-CPCN-13; however, the southern portion of the project does not currently hold a CPCN to provide public water in this area. 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, it must be located at least 150 feet from the outermost boundaries of the project and 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 area. 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.

We are near completion of the Tidewater Utilities, Inc. review process. Tidewater Utilities, Inc. will be providing water service.

- 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.

A water allocation permit will be obtained prior to any dewatering activities.

- 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.

We will provide for the necessary lead time prior to submitting an application for dewatering activities.

Sediment and Stormwater Program

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. A project application meeting is required for this 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 at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101).

Stormwater Management Plans and Computations have been approved through the Sussex Conservation District.

Drainage Program

- This proposed project is located in the Deep Hole Tax Ditch and the Derrickson Canal Tax Ditch and is affected by tax ditch rights-of-way.

Any change to the location of the tax ditch or existing tax ditch rights-of-way will require a change to the tax ditch court order. The placement of permanent obstructions within tax ditch rights-of-ways is prohibited. Using the drawing from the PLUS application, it appears there are proposed buildings lots, trails, and road crossings within the tax ditch rights-of-way. Please contact Matthew Grabowski, Environmental Program Manager with the Drainage Program in Georgetown at (302) 855-1930 to request a review of the tax ditch rights-of-way on this property to resolve any issues with the tax ditch rights-of-way for this project. (Title 7, Delaware Code, Chapter 41)

A Court Order Change was already processed for the Barrington Park project. This Land Plan follows the new Right of Way dictated by the Court Order Change. We have already coordinated with DNREC State Drainage Office in Georgetown.

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.

Comment duly noted.

Tank Management Branch. Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 Del.C. Chapter 60, 7 Del.C., Chapter 74 and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.

Comment duly noted.

- There are no LUST projects within a quarter mile from the proposed subdivision area.

Comment duly noted.

- 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 Branch by calling 302-395-2500.”

Comment duly noted.

Air Quality

- 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	<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)

<p>7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products</p>	<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.
<p>7 DE Admin. Code 1144 – Control of Stationary Generator Emissions</p>	<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.
<p>7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<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>.

We will consider each of these recommendations as an option.

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:**

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- Where a water distribution system is proposed for residential sites, including townhouse type dwellings, the infrastructure for fire protection water shall be provided, including the size of water mains.

We will comply with all State Fire Marshal water requirements.

- **Fire Protection Features:**

- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

We will comply with all State Fire Marshal notation requirements.

- **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 roads to the subdivision from Burbage Road and from Windmill Road 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 the subdivision. The same fire department access issue needs to be addressed regarding the “round-about” in the center of the complex.
- 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.

We will comply with all State Fire Marshal accessibility requirements.

- **Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

We will comply with all State Fire Marshal gas piping and system requirements.

- **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”
- Proposed Use
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Townhouse 2-hr separation wall details shall be shown on site plans
- Provide Road Names, even for County Roads

We will comply with all State Fire Marshal notation requirements.

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.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- The developer should consider putting a landscape barrier between the proposed development and the houses mentioned to block any noise or visual effects that may affect them in an adverse way

We plan to provide a planted buffer around the entire perimeter of the proposed development and will buffer the shared lot lines of those homes to the greatest extent possible.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT recommends that the triangular island and the three intersections of Brandywine Drive and Bellevue Court associated with it be redesigned, perhaps by forming a single intersection with a much smaller island. As it is presently proposed, it would be difficult to provide adequate guidance to drivers making left turns at the north end of the triangle.

We are currently considering this as an option.

- DelDOT also recommends that cul-de-sacs or similar turnaround features be provided at the ends of Pea Patch Lane, Holts Lane, Flagstone Court and, until it can be extended farther west, the end of Seashore Park Drive to avoid the need for visitors to turn around in private driveways.

We have included turnarounds where appropriate. Our goal is to limit unnecessary impervious surface.

- Consideration should be given to designing the circular intersection of Brandywine Drive and Barrington Parkway South as a roundabout. From the plan presented, it is not clear whether that is intended.

It is intended that the circular intersection will be used as a roundabout.

- There is a small swimming pool and an associated parking lot located on the west edge of the site at the end of Old Canal Lane. If there is an intention to allow for the future expansion of the development and the extension of Old Canal Lane west into it, then DelDOT recommends that the parking be shifted to the west side of the pool now so that it would not be affected by the street extension. If there is no such intention, DelDOT recommends that the pool be relocated more centrally within the current plan to place it within walking distance of more residents.

Our goal with the second “neighborhood” sized pool was to provide a less hectic location for swimming and passive recreation. Therefore, we have chosen a location away from the center of the development as we feel the main Clubhouse amenity is the true heart of the community and will be bustling with activity as such. There will not be a through connection at this location.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle
739-9071

Additional Information on Wetlands

- When designing a project on a site with regulated watercourses, any extensive piping, filling or burying of streams or ditches in excess of the minimum needed for road crossings should be avoided. Where road crossings are necessary, bridge spans which avoid significant impacts to stream banks and channels should be used wherever possible. Where placement of culverts is unavoidable, culvert designs which utilize multiple barrels at different elevations to preserve a low flow channel are usually preferred.

Soils Assessment

- Based on soils survey mapping update, Mullica (MuA) and Hurlock (HuA) are the principal soil mapping units mapped in the immediate vicinity of the proposed project. Mullica and Hurlock are wetland associated (hydric) soils that have severe limitations (considered unsuitable) for development. Building on such soils is likely to increase the potential for on-site and off-site flooding potentials (See figure 2).

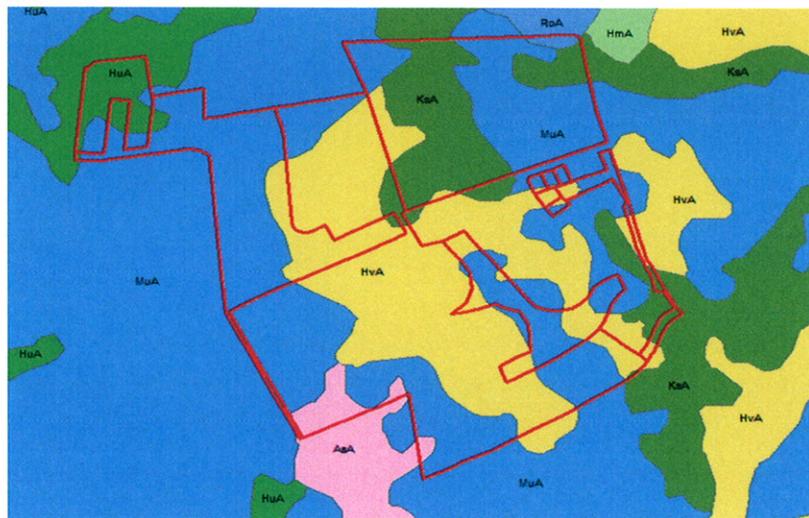


Figure 2: Soils mapping in the immediate vicinity of the proposed project area

Additional information on TMDLs

- The applicant should maintain as much of the existing forest cover as possible. DNREC further suggests additional native tree and native herbaceous planting wherever possible.

The bulk of forested areas on site are being maintained.

- Maintenance of 100-foot buffer width(s) from all delineated wetlands (USACOE and State approved wetland delineations) is strongly recommended. The USACE can be reached by phone at 736-9763.

A 100-foot buffer was maintained in most areas.

- The applicant should calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation.

Comment noted. Stormwater Management approval through Sussex Conservation District was granted.

- Since this project will likely generate large amounts of impervious cover, we strongly advise, wherever practicable, the use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP(s) to reduce the impacts of surface imperviousness.

Comment noted.

- DNREC recommends the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff from impervious surfaces.

Comment noted.

Additional information on drainage

- The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of onsite stormwater. Notify downstream landowners of the change in volume of water released on them.

Comment noted.

Rare Species and Wildlife Habitat Impacts

- Division of Fish and Wildlife scientists have not surveyed this project area; therefore, we are unable to provide information pertaining to the existence of State-rare or federally listed plants, animals or natural communities at this project site. In the absence of site specific information we offer the following comments:

- Of the 10+ stormwater management ponds being proposed, one rather large pond is being proposed that will require forest removal. The functional necessity for creating a pond of this size in the only area of the site that is forested should be evaluated. In addition, State wetland maps indicate that there are wetlands in this forest. Forested wetlands can support an array of plants and animals rather than they are jurisdictional or 'non-jurisdictional'. If the wetlands to be filled and converted into a stormwater pond are considered 'isolated' it should be noted that isolated wetlands perform many of the same environmental functions as other wetlands, including filtering pollutants, recharging streams and aquifers, storing flood waters, and providing wildlife habitat. A lack of regulatory protection is not based on science and does not reflect the ecological importance of this wetland type. Other states in the U.S. have state acts and regulations that make no distinction between isolated and non-isolated wetlands.

No wetlands are impacted. There is some forest clearing for the pond but the bulk of the forest is retained.

The pond and surrounding fringe should provide habitat benefit.

- Potential impacts to wildlife and wildlife habitat could be reduced by: 1) avoiding direct impacts to wetlands including those in forested areas that are considered 'isolated', 2) leaving a 100-foot upland buffer intact around wetlands to provide habitat for wetland dependent species which utilize this buffer area for a portion of their life cycle, 3) reconfiguration of the site plan such that forest removal for a stormwater pond is not part of the plan and/or reducing the size of the pond such that forest removal is minimal and 4) avoiding tree removal during April 1 to July 31, which is the most sensitive time of year for birds and other wildlife which depend on forested areas for breeding.

Comment noted.

Nuisance Waterfowl

- Numerous and somewhat large wet ponds are being created for stormwater management purposes. These ponds may attract resident Canada geese and mute swans that could create a nuisance for community residents. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. We recommend native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds (to be planted in accordance with the Sediment and Stormwater Plan approval agency requirements). When the view of the surrounding area from the pond is blocked,

geese can't scan for predators and are less likely to reside and nest in the area of the pond.

We have included a native seed mix for selected areas around each pond that will be considered "no mow" areas, allowed to grow taller than the adjacent manicured areas. We do however; plan to allow for pond side reflection in these manicured areas.

The Division of Fish and Wildlife does not provide pest control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the size and/or number of ponds, proper landscaping, monitoring, and other techniques, waterfowl problems can be minimized. At this time, we do not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the homeowners association or land manager.

If the home owners consider any future geese as nuisance, then the proper permits will be applied for and obtained to cull the flock's numbers.

Additional information on hazardous waste sites

- SIRB 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.

We do not agree that a Phase I Environmental Assessment is warranted at this time. This project has already been through a full approval process through the Town of Millville and Sussex County.

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

Comment duly noted.

- There are no SIRB sites within a ½ mile radius of the proposed project.

Comment duly noted.

- 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.

Comment duly noted.

Additional information on tank management.

- When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

Comment duly noted.

- If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMB. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMB.

Comment duly noted.

- Should the municipality anticipate being more restrictive than Delaware's Regulations Governing Underground Storage Tank Systems or Delaware's Regulations Governing Aboveground Storage Tanks, please be aware that the municipality shall be responsible for enforcing the more restrictive rules.

Comment duly noted.

Additional information on air quality

- Homes may emit, or cause to be emitted, air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
 - Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
 - The emission of greenhouse gases which are associated with climate change, and
 - The emission of air toxics.
- Air emissions generated from new homes include emissions from the following activities:

- Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
 - The generation of electricity needed to support your home, and
 - Car and school bus activity associated with a new home.
- The three air emissions components (i.e., area, electric power generation, and mobile sources) were quantified. The emissions in Table 1 represent the projected impact the Bishops' Landing development may have on air quality.

Emissions Attributable to the Bishops Landing Development (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Direct Area Source	14.1	1.6	1.3	1.7	57.3
Electrical Power Generation	*	5.6	19.5	*	2876.4
Mobile	20.9	21.9	0.6	0.2	13506.6
Total	35.0	29.1	21.4	1.9	16440.3

(*) Indicates data is not available.

- Note that emissions associated with the actual construction of the development, 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.

Comments duly noted.

- Measures may be taken to substantially reduce the air emissions. These measures include:
 - **Constructing with only energy efficient products.** Energy Star qualified products are up to 30% more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of increased energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.

The Developer's goal is to maximize energy efficiency throughout the building process.

- **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.

Comment duly noted.

- **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions.

The Developer has provided an extensive internal sidewalk network as well as connection points to the multi-modal trail system along the perimeter roads. We are also working with the town of Millville regarding potential shuttle stops at selected intersections adjacent to the proposed development.

- Additionally, the following mitigation measures will reduce emissions associated with the actual construction phase of the project:
 - **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.

Comment duly noted.

- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.

Comment duly noted.

- **Planting trees at residential units and in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and by replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

We have proposed a significant number of large maturing and understory trees throughout the development.

This is a partial list, and there are additional things that can be done to reduce the impact of the development. The applicant should submit a plan to the DAQ which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Bishop's Landing development.

- 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.

Comment duly noted.

Delaware Department of Education – Contact John Marinucci 735-4199

DOE offers the following comments on behalf of the Indian River School District:

- Using the DOE standard formula, this development will generate an estimated 229 students.
- DOE records indicate that the Indian River School Districts' *elementary schools are at or beyond 100% of current capacity* based on September 30, 2010 elementary enrollment.
- DOE records indicate that the Indian River School Districts' *secondary schools are very close to 100% of current capacity* based on September 30, 2010 secondary enrollment.
- The Indian River School District does not have sufficient capacity given the number of previously approved and recorded sub-division lots.
- The developer is strongly encouraged to contact the Indian River School District Administration to address the issue of school over-crowding that this development will exacerbate.
- DOE requests developer work with the Indian River School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district.

Comments duly noted.

Delaware State Housing Authority – Contact Karen Horton 739-4263

- The Bishop's Landing proposal is located in a Level 1 and 2 Investment Area according to the *2010 State Strategies for Policies and Spending*, and is also located in the coastal resort area of Sussex County. As such, DSHA supports this proposal as it will provide a variety of housing types and price points in an area with close proximity to existing services, markets, and employment opportunities. As noted in the application, the proposed development will target first-time homebuyers and retirees; we strongly encourage and support home prices that fall into an affordable

range for such buyers. For informational purposes, a household earning 100 percent of the area median income can only qualify for mortgages of \$218,000.

Comment duly noted. A number of different housing options, with a variety of price points, are being proposed.

- DSHA recommends the consideration of alleys for the townhome section of the development. Alleys can hide unsightly utilities and vehicles. Considering that 427 homes are proposed for this development, of which approximately half are townhomes, the sheer volume of having that many vehicles on the streets without alleys can be unattractive and within time lead to neighborhood decline.

The product type being offered “lives” out the back and therefore would not warrant a paved alley to the rear, when rear views of water or woods are available. We agree that a large volume of vehicles can at times be unattractive, but we would also suggest that the architectural detail and quality of product will help avoid the supposed neighborhood decline mentioned above.

- Finally, DSHA submits the following information for both the applicant and the Town of Millville:

- While large suburban homes have dominated development in Delaware for several decades, a growing body of research indicates that we are in the midst of a significant market shift. The baby boomers that once drove suburban development are now aging and are looking to downsize into something more manageable. The Delaware Population Consortium (DPC) projections for the next ten years indicate that not only will there be a large amount of suburban homes placed on the market by baby boomers, but that there will be a *decline* in households in age ranges that typically seek large homes. These same DPC projections show growth in the younger age ranges most likely at stages in their life and income to support apartments, condominiums and entry level homes.

The combination of excess suburb housing supply currently on the market, additional supply being added by aging baby boomers, additional lending standards, along with a changing market indicate that it is *critical* that communities move away from large lot single family-detached housing and *proactively* provide a variety of housing options to meet market demand.

We have noticed the same market shifts and have adjusted the site plan accordingly. We believe we have enough variety in product type to capture the portion of the market looking for smaller size / better quality of not only home product, but also amenities offered as well.

Department of Agriculture – Contact Scott Blaier 698-4529

- The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to reduce heating and cooling costs. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource. To further support this concept the Delaware Forest Service does not recommend the planting of the following species due to the high risk of mortality from insects and disease:

Callery Pear
Leyland Cypress

Ash Trees
Red Oak (except for Willow Oak)

If you would like to learn more about the potential problems or impacts associated with these trees, please contact the Delaware Forest Service for more information at (302) 698-4500.

We are well aware of the limitations of the above mentioned species. We have utilized Delaware natives where possible and any non-native species must be non-invasive to be included in the proposed planting plan.

- The Delaware Department of Agriculture and the Delaware Forest Service encourage the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

See above comment.

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,

PLUS review – 2011-04-06
Page 25 of 25

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

CC: Town of Millville