



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

November 18, 2013

Mr. Jeff Seemans
Blenheim Homes
220 Continental Drive, Suite 410
Newark, DE 19713

RE: PLUS review 2013-10-02, Westhampton

Dear Mr. Seemans,

Thank you for meeting with State agency planners on October 23, 2013 to discuss the proposed plans for Westhampton. According to the information received, you are seeking review of the rezoning and subdivision of 41 acres from S to ST for the construction of 105 residential units.

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 Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the New Castle County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- It appears that there are a couple of known historic and cultural resources on this parcel (property), which do not appear there now. One of them was a dwelling (N-10923), probably built between the 19th or early 20th-century, and the other was the J. Crossan house/dwelling and estate (N-10934). Although both of these dwelling do not appear to be on the parcel now, the Pomeroy-Beers Atlas of 1868 does show and indicate that the J. Crossan estate (N-10934) did exist on this parcel, and the USGS Topographic Map of 1904 (West Chester Quad.) also indicated this as well. With this in mind, it is important that the developer be aware of the Delaware's Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

122 Martin Luther King Jr. Blvd. South – Haslet Armory · Third Floor · Dover, DE 19901
Phone (302)739-3090 · Fax (302) 739-5661 · www.stateplanning.delaware.gov

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 would like to know more information that pertains to unmarked human remains or cemeteries, please check the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.

- Therefore, 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

- Per Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access, Traffic Impact Studies (TIS) are warranted for developments generating

more than 400 vehicle trip ends per day or 50 vehicle trip ends per hour. A scoping meeting was held for such a study on February 8, 2013. Among other things, this study must be submitted by the developer and reviewed by us, and any necessary off-site improvements must be addressed on the record plan before we will issue our Letter of No Objection to Recordation.

- Section 3.3 of the Standards and Regulations for Subdivision Streets and State Highway Access requires the developer to submit a subdivision plan to DelDOT for review and approval prior to DelDOT issuing a Letter of No Objection to Recordation. DelDOT has had several meetings with the developer regarding this project. Parallel to completion of the TIS, they need to submit a plan to the Subdivision Section for review. As necessary they may contact Mr. Cliff Mumford, our Subdivision Manager for this part of New Castle County, for guidance in this regard. Mr. Mumford may be reached at (302) 760-2571.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

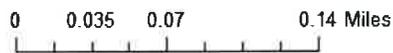
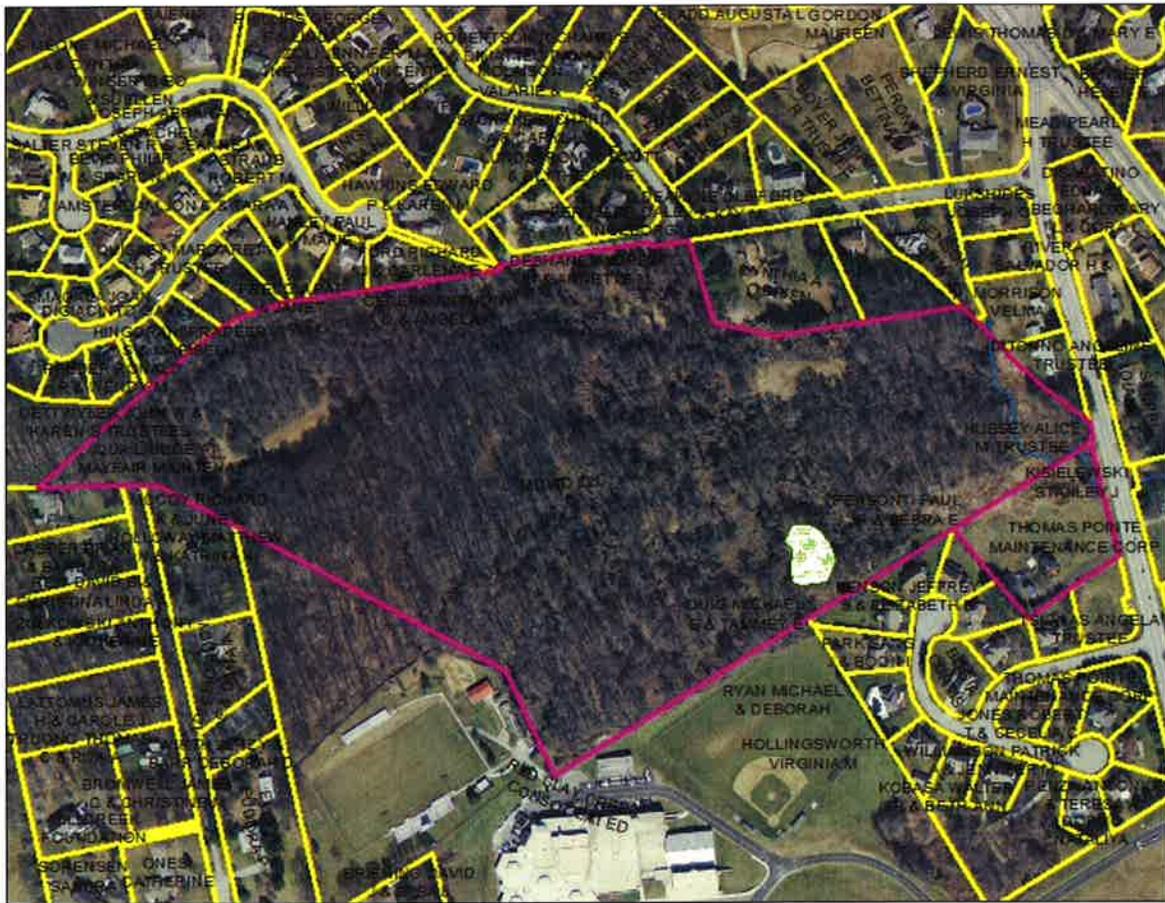
Wetlands

- State regulated wetlands ARE NOT located on this property based on a review of the State wetland maps. State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. 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 likely to be located on this property based on a review of aerial photographs, State Wetland Mapping Project (SWMP) maps, Soil Surveys and/or USGS topographic maps. Hyde Run is at the eastern edge of the property. Any impact to this waterway must have a permit from this office. State subaqueous lands include all tidal waters (up to the mean high water line), most non-tidal rivers, streams, lakes, ponds, bays and inlets (up to the ordinary high water line), most perennial streams and ditches and many intermittent streams and ditches. Additional information about State regulated subaqueous lands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>
- Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. There is a possibility that a Delmarva Bay, a rare and ecologically important freshwater wetland, may be present on-site. We suggest a wetland delineation by a wetland consultant and permits may be needed by the U.S. Army Corps of Engineers if there is impact to this wetland area. Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent

streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce.

- The extent of Federal jurisdiction over Waters of the United States is determined by the U.S. Army Corps of Engineers and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the U.S. are located on the property and the limits of Federal jurisdictional. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at <http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm>.

Westhampton PLUS 2013-10-02



Reviewed By: Kitty Bronson
Source: New Castle County layers:
Parcels, DeIDOT Rds, Wetland
and Swmp maps



TMDLs

- Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the greater Christina River watershed. 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.
- TMDLs are required by federal law (Section 303(d) of the 1972 Clean Water Act), and the states are charged with developing and implementing specific land use practices that support these desired use goals. In the Christina River watershed, post-development nitrogen and phosphorus loading must be capped at the pre-development or baseline loading rate (or a 0% post-construction increase in N & P in Delaware’s portion of the Christina River Basin) to meet the required TMDL for each nutrient. Moreover, bacteria reductions that range from 29% to 95% are also required (depending upon location). The specific required nutrient and bacterial requirements for the various stream segments in the watershed, and background information is outlined in the report entitled “*Christina River Basin High-Flow TMDL*” by the EPA. This report can be retrieved from the following web link:

http://www.epa.gov/reg3wapd/tmdl/pa_tmdl/ChristinaMeetingTMDL/index.htm

Water Supply

- The project information sheets state water will be provided to the project by Artesian Water Company via a central water system. DNREC records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 85-WS-03.
- 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.

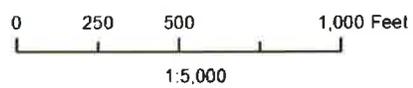
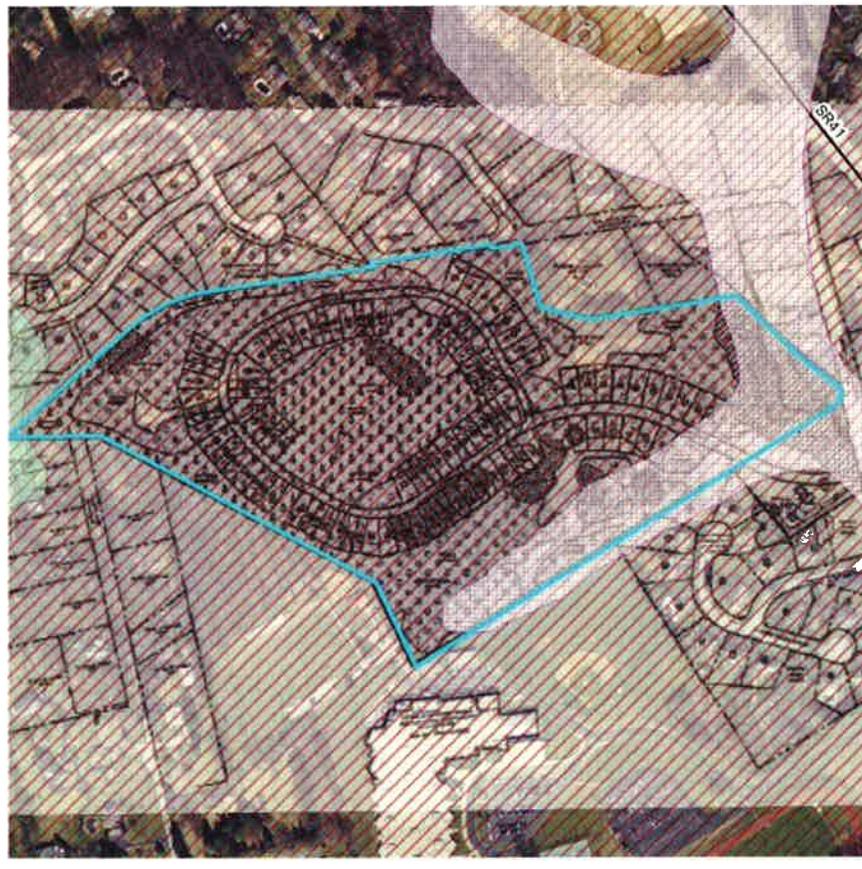
Water Resource Protection Areas

- This project does not fall within any wellhead protection or excellent groundwater recharge potential areas. However, the parcel falls entirely within the Red Clay Creek Drinking Water Watershed. This area is a Level 2 source water protection area for New

Castle County (NCC). In addition, the project falls partially within a flood plain that is protected as Level 1 source water protection area for NCC (see map).

- Level 2 Source Water Protection Areas are the delineated watershed upstream from public drinking water supply intakes. Land Use or Land Activity within these areas has the potential to influence water quality or quantity to the public drinking water systems.
- Level 1 Source Water Protection Areas are defined as flood plains. Land Use or Land Activity within this area has the potential to influence water quality or quantity to public drinking water systems. DNREC recommends referring to NCC Unified Development Code for regulations regarding development in these water resource protection areas.

Westhampton (PLUS 2013-10-02)



Legend

-  Project Location
-  Level 1 - Flood Plain
-  Red Clay Creek - Level 2 WRPA



As of August 2013. This map is provided by the DNREC solely for display and reference purposes and is subject to change without notice. DNREC will not be held responsible for the assumed accuracy contained in the map or for the use other than its intended purpose.

Sediment and Stormwater Program

- A sediment and stormwater plan will be required for 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 possible. 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 New Castle County Department of Land Use Engineering Section. Contact the Department of Land Use at (302) 395-5470 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

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.
- The following confirmed leaking underground storage tank (LUST) projects are located within a quarter mile from the proposed project area:
 - DiTonno Property, Facility: 3-002082, Project: N0008104 (Inactive)
 - TG Robinson Jr, Facility: 3-000813, Project: N9510231 (Inactive)
- 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 Branch by calling 302-395-2500

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 to your project:

Table 1: Potential Regulatory Requirements	
Regulation	Requirements
7 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year. Prohibit the burning of land clearing debris. Prohibit the burning of trash or building materials/debris.
7 DE Admin. Code 1135 – Conformity of General Federal Actions to the State Implementation Plan	Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	Ensure that emissions of nitrogen oxides (NO _x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO ₂), carbon monoxide (CO), and carbon dioxide (CO ₂) from emergency generators meet the emissions limits established. (See section 3.2). Maintain recordkeeping and reporting requirements.
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

For a complete listing of all Delaware applicable regulations, please look at our website:
<http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

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 townhouse type dwelling sites, the infrastructure for fire protection water shall be provided, including the size of water mains.
- **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
- **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.
 - 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.
- **Required Notes:**
 - 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

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

- The proposed entrance on McKennans Church Road (New Castle Road 276) requires that the road leading into the site pass through a Riparian Buffer Area. The parcel has frontage on two existing State-maintained subdivision streets, Oak Ridge Road and Riblett Lane, and

DelDOT understands that the County may be considering a requirement that the developer use one or both of these roads for access instead. As discussed below, DelDOT advises against using either of these roads for vehicular access to the proposed development. In our opinion, McKennans Church Road is the only appropriate place to serve the subject development.

Oak Ridge Road serves the Oakwood Hills subdivision and the proposed development has frontage at the west end of the street, where it connects to Valleybrook Drive. By current standards, Oak Ridge Road is adequate for the number of houses it serves (about 50) but it would need to be widened to a uniform 60-foot right-of-way and a 32-foot pavement width to accommodate any significant increase in the number of houses served.

Perhaps more importantly, the intersection of Oak Ridge Road and McKennans Church Road is undesirably close to the intersection of McKennans Church Road and Newport Gap Pike (Delaware Route 41), with turning lanes for Newport Gap Pike beginning where the Oak Ridge Road intersection ends. During peak periods, traffic queuing back from Newport Gap Pike already blocks the Oak Ridge Road intersection. While there is not a demonstrated safety problem there, DelDOT cannot recommend adding more traffic to the Oak Ridge Road approach.

Riblett Lane serves the Dogwood Farms subdivision and the proposed development has frontage at the north end of the street. This street is substandard for the number of homes it serves now. Beginning at Mill Creek Road (New Castle Road 282), the first 2,700 feet of Riblett Lane have a pavement width of about 18 feet, which is too narrow by six feet. If that were the only issue, improving this street might be feasible, but it is not. The last 1,000 feet of street leading to the subject land has a pavement width of about 12 feet. Presently, Riblett Lane serves 43 lots and has a right-of-way width of 50 feet, so if one widened the road to 24 feet, it could serve another 7 lots. By current standards, however, to serve more than 50 houses a subdivision street should have a 60-foot right-of-way width and a 32-foot pavement width. That typical section does not seem achievable without undue impact on the existing residents and would almost certainly require us to acquire the right-of-way through eminent domain, which we would not do.

Perhaps more importantly, the intersection of Riblett Lane and Mill Creek Road is also significantly substandard, having no left-turn or right-turn lanes and having inadequate sight distance for eastbound drivers on Mill Creek Road to see or be seen by drivers entering or exiting Riblett Lane. To improve it would require significant amounts of right-of-way along Mill Creek Road. Because the Delcastle Recreation Area is a public facility, if the improvement were done by DelDOT, those rights-of-way would have to come from the church and residential properties along the north side of the road. While there is not a demonstrated safety problem at this intersection, we cannot recommend adding more traffic to Riblett Lane.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

Soils Assessment

- Based on NRCS soils survey mapping update, Talleyville (TaB), Neshaminy (NtB), and Glenelg (GeB) soil mapping units were mapped on subject parcel(s). These map units are well-drained and have relatively few limitations for development.

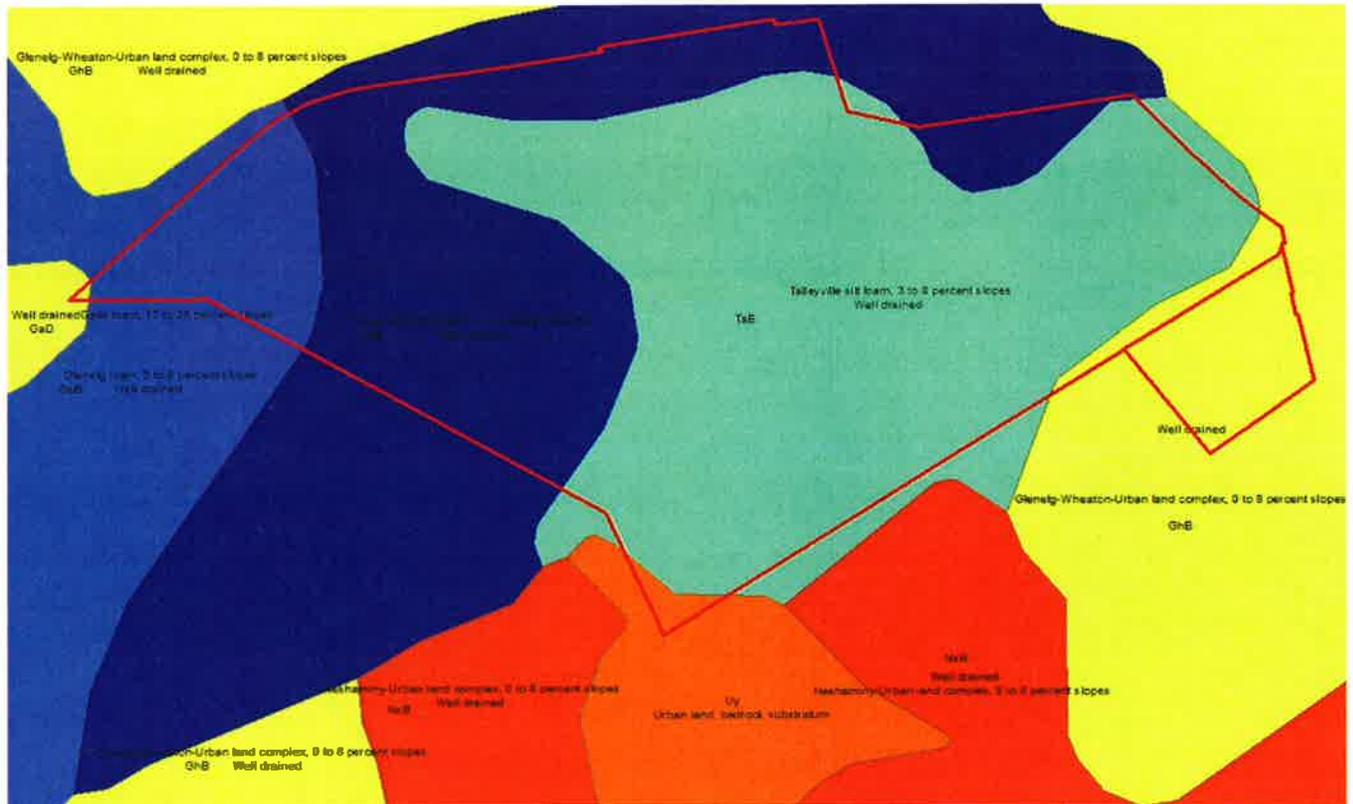


Figure 1: NRCS soil mapping in the immediate vicinity of the proposed project

Additional information on TMDLs and water quality

- A Pollution Control Strategy (PCS) to achieve the required TMDL nutrient and bacterial load reduction requirements has been established for the Christina watershed. The web link for the Christina watershed PCS strategies is as follows:
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>

DNREC strongly encourage the applicant reduce nutrient and bacterial pollutants on their parcel through voluntary implementation of the following recommended BMPs:

- Based on information presented in the PLUS application, it is the intention of the applicant to remove a significant portion of the existing forested land cover in subject parcel(s). SNREC strongly recommends that the applicant consider the preservation of more forest cover than currently proposed in said PLUS project application.

- 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.
- Use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP to mitigate the impacts associated with surface imperviousness, wherever practicable.
- 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.
- 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 encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Jen Walls or John Martin at 302-739-9939 for more information on the protocol.

Species of Concern/Site Visit Request

- Our Wildlife Species Conservation and Research Program (WSCR) scientists have not surveyed this project area; therefore, DNREC is unable to provide information pertaining to the existence of state-rare or federally listed plants, animals or natural communities at this project site. However, study of aerial maps suggests that Species of Concern may exist on the tax parcels.
- In order to provide more informed comments, we request the opportunity to conduct a survey to evaluate habitat and determine the potential for species of conservation concern. Please note that our scientists have extensive knowledge of the flora and fauna of the state. The survey will be conducted at no expense to the landowner. In the event that authorizations will be needed from DNREC's Coastal Management Program and/or Wetlands and Subaqueous Lands Section, they will require complete and up to date info from the Species Conservation and Research Program as part of their review. Therefore, allowing access to the site will increase the efficiency of the State authorization process. Please contact Matthew Bailey at (302) 735-8677 or matthew.bailey@state.de.us if the landowner will grant a site visit.

Mature Forest Preservation

- Review of aerial photographs of the parcels in question reveals that there is likely mature forest present. Mature forest in this region of Delaware is becoming increasingly rare.

WSCRCP recommends that every practicable effort be made to minimize impacts to forest during the implementation of this project.

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

Additional information on air quality

- New businesses and 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 the new homes, and
 - All transportation activity.
- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) for the development were quantified. Table 2 represents the actual impact the Westhampton development may have on air quality.

Table 2: Projected Air Quality Emissions for Westhampton					
Emissions Attributable to Westhampton (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile	4.8	5.0	0.1	0.1	3,103.3
Electric Power	*	1.3	4.5	*	660.9
Area Source	3.3	0.4	0.3	0.4	13.2
Total	8.1	6.7	4.9	0.5	3,777.4

(*) Indicates data is not available.

- Note that emissions associated with the actual construction of the homes and retail space, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.
- DNREC encourages sustainable growth practices that:
 - Control sprawl;
 - Preserve rural and forested areas;
 - Identify conflicting land use priorities;
 - Encourage growth on previously developed sites and denser communities while at the same time protect our diminishing land base;
 - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and
 - Demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.
- Additional measures may be taken to substantially reduce the air emissions identified above. 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 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.
 - **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.
 - **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions. **For every vehicle trip that is replaced by the use of a sidewalk, a bike path or mass transit, 7 pounds of VOC and 11.5 pounds of NOx are reduced each year.**
 - **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.

- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- **Planting trees in vegetative buffer areas.** Trees reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, thereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

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 DNREC DAQ which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into this project.

- **Incentive programs for Energy Efficient and Green Home Construction**

The Green for Green is a residential rebate program that incentivizes green and energy efficient home construction in the state of Delaware. The program offers \$1,000 to \$4,500 to home buyers who purchase Green new construction high energy efficient homes certified by the National Green Building Standard, LEED Home, or HERS Rating in accordance with the program guidelines. Additional information about the program can be found at:

<http://www.degreen4green.com/>

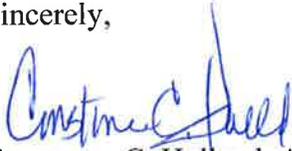
Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

- Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from: www.statefiremarshal.delaware.gov, technical services link, plan review, applications or brochures.
- The local fire company recommends that access to the properties be made from an additional direction besides McKennan's Church Road. However, the local fire chief strongly discourages connection with Riblett Lane. Riblett Lane terminates onto Mill Creek Road and that intersection has been determined by him to be "extraordinarily dangerous". Feel free to contact the Fire Chief (Frederick Eystaltdt) direct if you would like to further discuss. The Station phone number is 998-8911 or he can be contacted through e-mail at chief@millcreekfireco.org .
- In order to provide better water service, allow for a circulating distribution layout, and provide the ability to segregate any impairing service work, consideration should be given to extending the water main, not just off of the water main from McKennan's Church Road, but also connecting to the water main on Mill Creek Road via Riblett Lane. By so doing, the size of the water main will not have to be upsized due to a single, dead-end feed.

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 New Castle County