



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

November 21, 2012

Mr. Dev Sitaram
17 Polly Drummond Center
Newark, DE 19711

RE: PLUS review – 2012-10-02; Colony at Summit Bridge-West

Dear Mr. Sitaram:

Thank you for meeting with State agency planners on October 26 to discuss the proposed plans for the Colony at Summit Bridge – West project located on the west side of Summit Bridge Road, north of the subdivision of Clairborne at Lexington Farms.

According to the information received, you are seeking site plan approval through New Castle County for a 150 lot subdivision consisting of 48 single family detached, 28 twin homes and 74 townhomes.

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 New Castle 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 3 according to the Strategies for State Policies and Spending. 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 may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There are no known historic resources, such as archeological sites or National Register listed properties on this parcel. However, if there is going to be any type of construction or development project of any kind, on this parcel, the developer should be aware of Delaware's 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, and often they are either on or near a historic farm site, in rural areas or open space lands. Disturbing unmarked burials triggers 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. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area for the presence of such a cemetery. If a cemetery is discovered, it is very costly to have it archaeologically excavated and the burials moved. In the event of such a discovery, the Division of Historical & Cultural Affairs recommends that the plans be re-drawn 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. If you need or would like to read more information in reference to cemeteries, burial grounds or unmarked human remains, 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 archaeological sites, such as 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. 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. 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

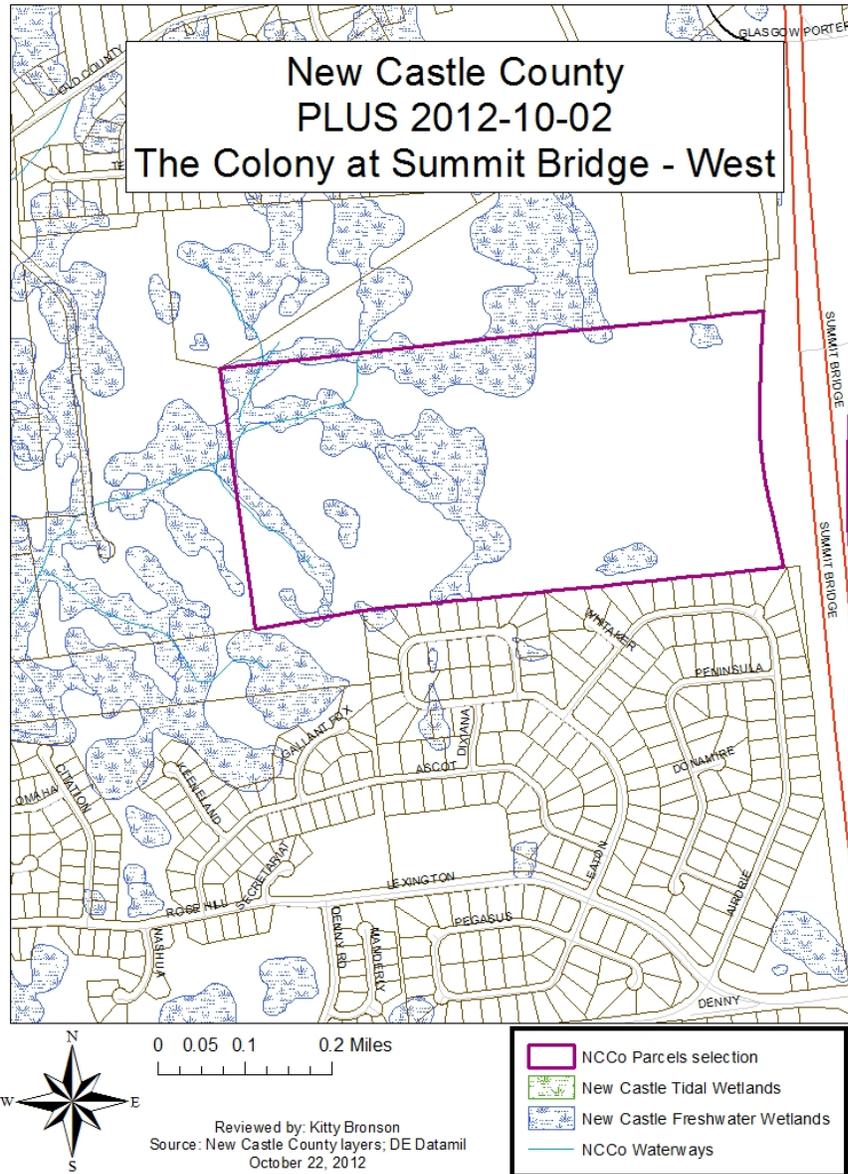
- The site access and streets must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. This manual is available on-line at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf.
- DelDOT Development Coordination Section staff met with the applicant and their engineer on October 11, 2012, and discussed the following points:
 - If New Castle County does not require a Traffic Impact Study (TIS), then in accordance with Section 2.3.2 of the Standards and Regulations, the developer may pay an Area Wide Study Fee of \$10 per daily trip, or by our calculations \$11,850, in lieu of doing a TIS. However, they should consider the following points in deciding whether to do that:
 - Payment of the fee would not exempt them from making off-site improvements;
 - Payment of the fee would not, in itself, exempt them from any County requirement for a TIS; and
 - DelDOT expects to require a TIS with a similar scope for Colony at Summit Bridge – East. Because of a planned extension of Mansion Farm Drive through that development, we would not accept a fee in lieu of that TIS.
 - Because the proposed development fronts on a principal arterial highway, a noise analysis will be required, in accordance with Section 3.7 of the Standards and Regulations.
 - A study by DelDOT's Traffic Section has identified an existing need to extend the northbound left turn lane on Route 896 at Porter Road by 200 feet, but there is no current State project to build it. DelDOT will likely require that the developer extend that left turn lane by more than 200 feet to accommodate the traffic generated by the subject development and Colony at Summit Bridge – East, in accordance with Section 3.10.2 of the Standards and Regulations.
- DelDOT anticipates requiring a signal agreement for the development entrance, in accordance with Section 3.10.1 of the Standards and Regulations. This entrance would be about 1,870 feet south of the existing traffic signal at Porter Road. At this distance, a signal would likely be feasible. However, to preserve the smooth flow of traffic on Route

896, DeIDOT will consider alternatives, such as prohibiting left turns out of the site, before installing a signal at this location.

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

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, SWMP maps, Soil Surveys and USGS topographic maps. 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 USGS topographic maps. According to our GIS SWMP maps, there are considerable wetlands regulated by the U.S. Army Corps of Engineers. We suggest contacting them for an on-site inspection. 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 jurisdiction. 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>.



Water Supply

- The project information sheets state water will be provided to the project by Artesian Water Company via a public water system. Our 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.

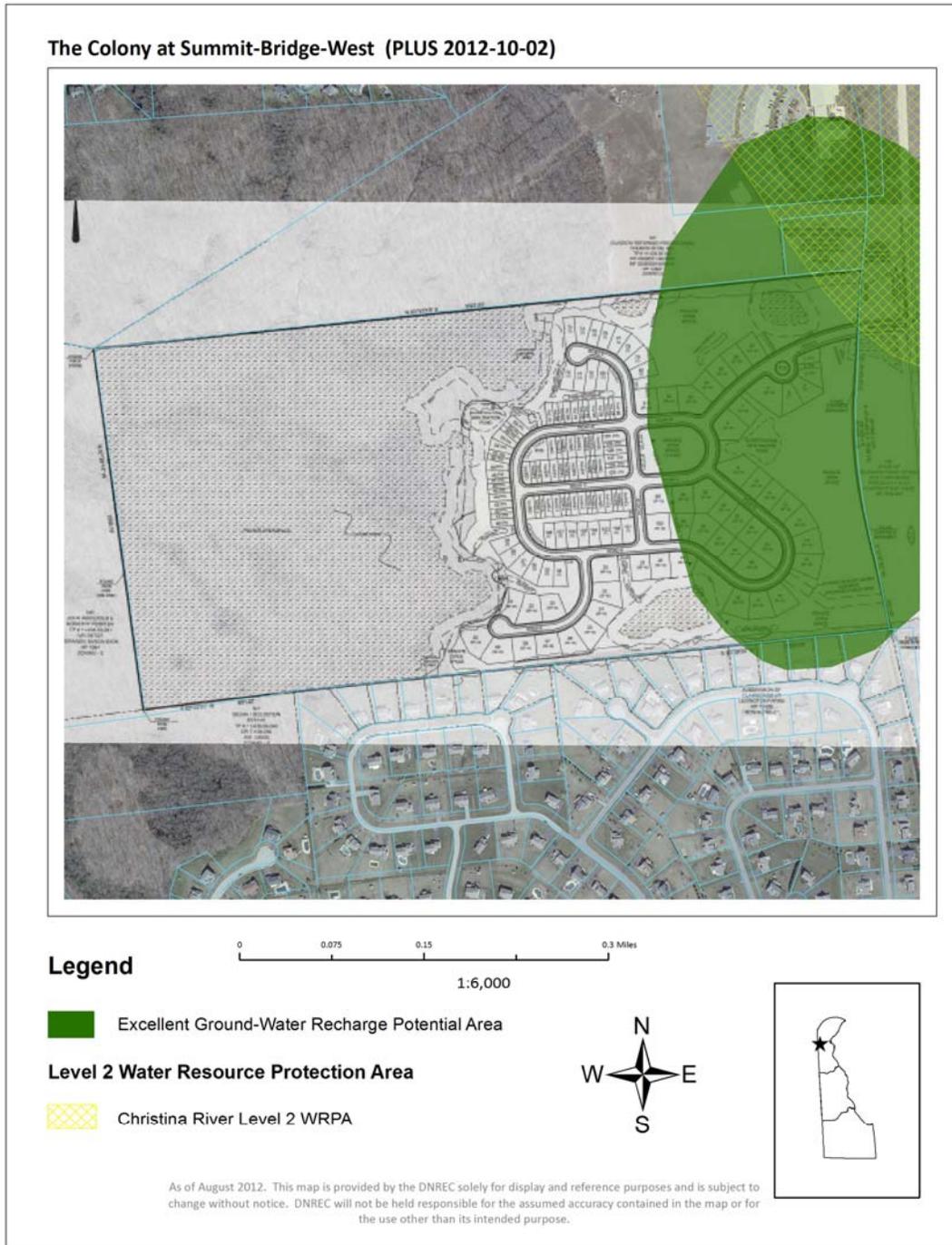
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Water Resource Protection Areas

- The DNREC Ground-Water Protection Branch (GPB) has determined that the eastern portion of the project falls within an area of excellent groundwater recharge potential. The northeast corner of the project falls within a Level 2 Source Water Protection Area for New Castle County.
- Level 2 Source Water Protection Areas are the delineated watershed upstream from a surface water intake that supplies water to a drinking water system. Land Use or Land Activity within this area has the potential to influence water quality or quantity to the system.
- Excellent Ground-Water Recharge Areas are those areas mapped by the Delaware Geological Survey where the first 20 feet of subsurface soils and geologic materials are exceptionally sandy. These soils are able to transmit water very quickly from the land surface to the water table. This map category (excellent) is an indicator of how fast contaminants will move and how much water may become contaminated (Andres, 2004). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.
- DNREC recommends referring to NCC Unified Development Code for regulations regarding development in these areas.

Andres, A. Scott, 2004, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware: Delaware Geological Survey Report of Investigations No. 66, p. 14.

<http://www.udel.edu/dgs/Publications/pubform.html#nvestigations>



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)

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.

Soils Assessment. Based on the NRCS soils survey mapping update, Fallsington (FgA) is the most environmentally-sensitive soil mapping unit mapped in the immediate vicinity of the proposed project. Fallsington is a very poorly-drained wetland associated hydric soil mapping unit indicative of wetland presence; soils in this mapping unit have severe limitations (considered unsuitable) for development. Moreover, large acreages of SWMP mapped wetlands further suggest that this parcel may contain significantly more acreage of hydric soil than the soil mapping indicates. Hence, we strongly recommend the applicant hire a State licensed (Class D) and ARCPACs certified soil scientist to conduct a more intensive soil survey for purposes of validating the location and extent of hydric soils on this parcel. A list of State licensed and certified soil scientists can be obtained from the Division of Water Resources at 739-9948.

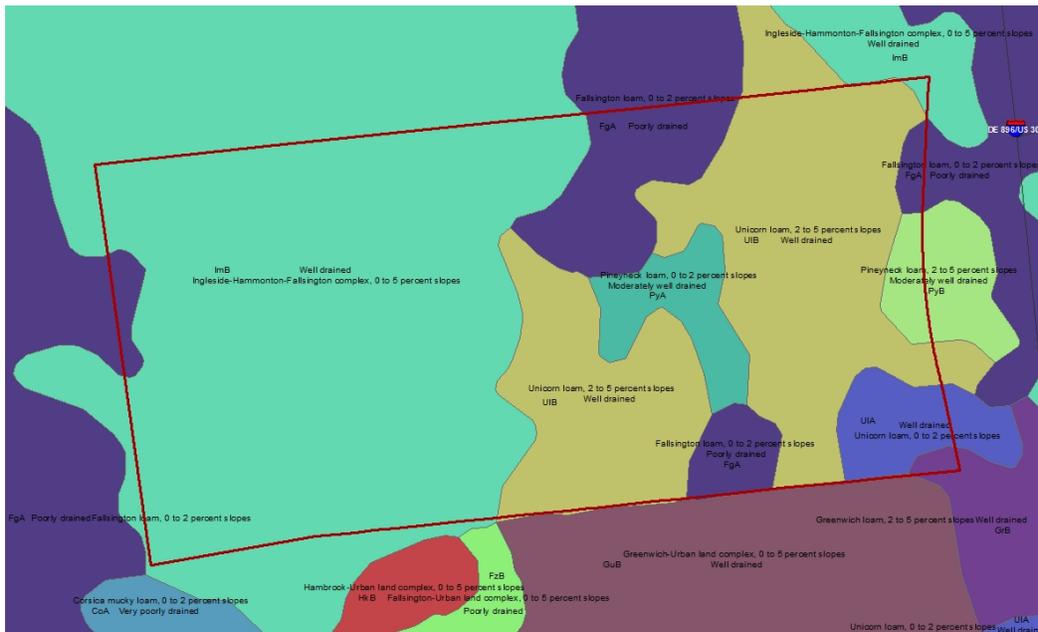


Figure 1: NRCS soil survey mapping in the immediate vicinity of proposed project

Additional information on TMDLs and water quality.

- The applicant is encouraged to maintain as much of the existing forest cover as possible and/or establishing additional tree cover on this parcel, wherever possible.
- According to information submitted in the PLUS application, a United States Army Corps of Engineers (USACE) approved wetland delineation has been conducted and approved. If the applicant has not had an approved USACE wetlands delineation conducted on this parcel, we strongly recommend that they do so.
- 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, DNREC recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.
- 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.
- Since this is a large project that will likely generate a great amount of impervious cover, we strongly advise the use of pervious paving materials (instead of conventional asphalt

and concrete) as a BMP to reduce the impacts associated with surface imperviousness, wherever practicable.

- We recommend 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.
- 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 (e.g., nitrogen and phosphorus) and bacterial loading 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 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.

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. This means that the access road to the subdivision from the main entrance off of Summit Bridge 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.

- 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. The display of, and dimensions for cul-de-sac is also applicable to the “round-about(s)” in the center of the subdivision. 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”
 - 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

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

Site Visit Request

- According to the PLUS application, the applicant is not open to a State agency site visit; however 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 Natural Heritage and Endangered Species Program as part of their review. Therefore, allowing access to the site will increase the efficiency of the State authorization process. An opportunity to conduct a survey to evaluate habitat and determine the potential for species of conservation concern would allow us to provide more informed comments for planning purposes. Please note that our scientists have extensive knowledge of the flora and fauna of the State. The survey would be conducted at no expense to the landowner. Please contact Edna Stetzar at (302) 735-8654 or at Edna.Stetzar@state.de.us if the landowner will grant a site visit.

Rare Species and Unique Wetlands

- According to our database, there are several State-endangered species and one globally rare species that occur in an adjacent forest. These species are dependent on undisturbed freshwater wetlands and according to our GIS database and wetland maps; there are unique freshwater wetlands within the forest on this property. This type of wetland is typically small in size but supports a high diversity of species. These wetlands typically provide breeding habitat for a variety of animals, including amphibians and invertebrates, and often support a unique and rare assemblage of plants. Upland forested buffers around these wetlands provide critical habitat and are important for protecting the wetland from excess nutrients and invasion by non-native species.

According to the PLUS application 86.6 acres will be left as open space to be used for stormwater management, passive and active recreation. If any of these activities will impact the forest either directly or indirectly (by altering hydrology or from inputs of runoff) we recommend that efforts be made to draft a plan that will recognize the presence of these wetlands and avoid impacts. Upland buffers should be left intact to the widest width possible, but at the very least, 100ft. We would be willing to provide guidance and work with the applicant on how to best minimize impacts.

Wildlife Habitat

- According to our database, the forest on this property is identified as core wildlife habitat by the Delaware Ecological Network (DEN). The DEN is a statewide conservation network developed using GIS and field collected datasets that help to identify and prioritize ecologically 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.

Additional information on hazardous waste sites

- 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). SIRS should also be contacted as soon as possible at 302-395-2600 for further instructions.

Delaware State Housing Authority – Contact Karen Horton 739-4263

- The Colony at Summit Bridge proposal is a 150-unit development comprised of single family detached, duplexes and townhomes on 117 acres, located at the west side of Summit Bridge Road in New Castle County. This proposal is located in a Level 3 Investment Area according to the *2010 State Strategies for Policies and Spending*. 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. DSHA submits the following information for both the applicant and New Castle County:
 - DSHA recommends the consideration of alleys for the townhome section of the development, as alleys can hide unsightly utilities and vehicles.
 - 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, more stringent 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.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

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

Sincerely,

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

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

CC: New Castle County