



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

March 21, 2011

Mr. Mark Parker  
Landmark JCM  
209 South State Street  
Dover, De 19901

**RE: PLUS review – 2011-02-01; Silver Woods**

Dear Mr. Parker:

Thank you for meeting with State agency planners on February 23, 2011 to discuss the proposed plans for the Silver Woods project to be located on the south side of SCR 368, ½ mile east of SCR 84, across from Bear Trap Dunes.

According to the information received, you are seeking a rezoning of 115.5 acres from GR to MCPC for a mixed use residential community consisting of 178 residential units and 70,225 sq. ft. of commercial space. It is noted that you intend to annex this property into the Town of Ocean View. The Town should work with this office to ensure that a Plan of Services form is completed and approved prior to annexation.

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, if annexed, Ocean View will be the governing authority over the proposed project the developers will need to comply with any and all regulations/restrictions set forth by the Town. However, if developed without annexation, Sussex County is the governing authority and you will need to comply with any and all regulations/restrictions set forth by the County.**

**Strategies for State Policies and Spending – Contact: Bryan Hall 302-739-3090**

This project is located in Investment Levels 2 and 3 according to the *Strategies for State Policies and Spending*. In addition, you are seeking annexation into the Town of Ocean View. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. 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. Our office has

no objections to the proposed development of this project in accordance with the relevant County codes and ordinances.

### **Code Requirements/Agency Permitting Requirements**

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The proposed development meets DelDOT’s volume warrants for a Traffic Impact Study (TIS), as contained in Section 2.3.1 of the Standards and Regulations and we will require one as a condition for plan approvals. Accordingly, DelDOT recommends that the applicant’s engineer meet with them to set a scope for the TIS. To schedule a scoping meeting, please contact Mr. Troy Brestel of this office. Mr. Brestel may be reached at (302) 760-2167.
- In accordance with Section 3.5.4.2 of the Standards and Regulations, DelDOT anticipates requiring either a sidewalk or a shared use path along the property frontage on Beaver Dam Road. If the Town of Ocean View has a preference for one type of facility over the other, we will defer to them.
- The site access 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](http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf). While compliance with the entire manual is required, as relevant, we direct your attention to the following areas in particular:
  - Referring to Chapter 3 – Site Plan Design, Section 3.6.5: Dedication of Right-Of-Way, Figure 3-3 Minimum Standards for Total Roadway Right-Of-Way, page 3-19, the project will be required to dedicate right-of-way in accordance with our minimum standards if necessary. This dedication may have already been addressed by acquisitions for our SR 26 Detour Routes project.
  - Referring to Appendix J – General Notes for Construction Plan, page J-7, a note concerning the maintenance of the multi modal (shared use) path or sidewalk along Beaver Dam Road is required.
  - Referring to Chapter 3 – Site Plan Design, Section 3.5.5.5: Bus Stop Criteria, page 3-12, a bus stop will be required for this project.
  - Referring to Chapter 3 – Site Plan Design, Section 3.4.1: Traffic Information, page 3-3, a traffic generation diagram is required.

- Referring to Appendix D – Plan Review Checklist, pages D-2 thru D-39, contains the new checklists required for all plan type submittals.
- Referring to Chapter 3 – Site Plan Design, Section 3.1: Purpose, page 3-1, a “Letter of No Objection” will be required for this project.
- Referring to Chapter 1 – Introduction, Section 1.4: Review Fees, page 1-8, the Initial Stage review fee will be assessed for this project.
- Referring to Chapter 4 – Construction Plans, Section 4.4: Commercial Entrance Plan Checklist, page 4-8, an entrance plan should be prepared for review and approval.
- Referring to Chapter 1 – Introduction, Section 1.4: Review Fees, page 1-8, the Construction Stage review fee will be assessed for this project.
- Referring to Chapter 8 – Administrative Guidelines, Section 8.6: Property Change of Use/Change of Ownership, page 8-2, due to the re-subdivision of the property, it will be necessary to evaluate whether the existing entrance along Beaver Dam Road (Sussex Road 368) will warrant any improvements.
- Please contact the DeIDOT Subdivision Manager for eastern Sussex County, Mr. John Fiori, if you have questions regarding these requirements. Mr. Fiori may be reached at (302) 760-2260.

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

### **Wetlands**

- According to the Statewide Wetland Mapping Project (SWMP) maps, palustrine wetlands (PFO1A, PSS3/F01A & PEM1C et al.) were mapped throughout the proposed project area (Figure 1). Most of the wetlands on this site are forested (See figures 1 & 2).



**Figure 1:** 2009 USDA aerial photography of the proposed project



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.

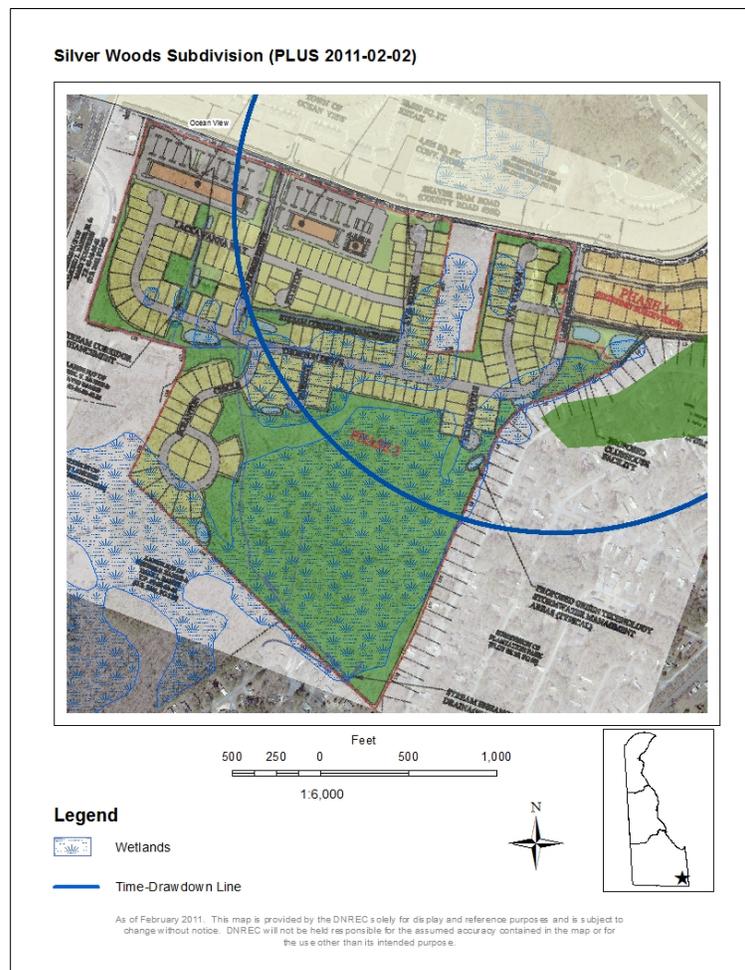
- A nutrient management plan is required under the *Delaware Nutrient Management law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's open space may exceed this 10-acre threshold. Please contact the Delaware Nutrient 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>
- 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](http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm). The regulations address sediment and stormwater controls for new development projects and additional measures and standards for onsite wastewater treatment and disposal systems.
- The regulations require that permanent sediment and stormwater management plans be designed and implemented to include design criteria to further reduce nutrient contributions.
- **Based on information supplied by the applicant, this project – as currently proposed – is not likely to meet the TMDL nutrient reduction requirements mandated by the PCS.**

## Water Supply

- The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. DNREC records indicate that the project is located within the public water service area granted to Public Water Supply (a.k.a. Tidewater Utilities) under Certificate of Public Convenience and Necessity 83-W-6.

- 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



- A large portion of the Phase 2 project proposed in this application is likely to fall within wellhead protection for Tidewater Utilities Bethany Bay/Ocean View District (see map).
- Tidewater Utilities contracted with Green Stone engineering to analyze the impact the pumping wells at the facility would have on the surrounding residential wells. Green Stone used a Time-Drawdown of the pumping well. Based on the findings the allowable pumping rate for the well was limited. The Time-Drawdown study examined the area to the southeast. The area indicated on the attached map shows the results of this study extended in all directions. It is probable that the delineated wellhead protection area will fall within this boundary. Its shape will be more refined as the model used in the Source Water Assessment Report is more complex.
- Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where land use activities or impervious cover may adversely affect the quantity and quality of ground water moving toward such wells.
- In addition, because the wellhead protection area is an existing source of public drinking water and the excellent ground-water recharge area so readily affects the underlying aquifer, the storage of hazardous substances or wastes should not be allowed within these areas unless specific approval is obtained from the relevant state, federal, or local program.
- DNREC recommends limiting impervious cover as allowed by the Sussex County source water protection ordinance with the Time-Drawdown line delineation.

### **Sediment and Stormwater Program**

- A project application meeting is required for this site. Due to extensive modifications, a new detailed sediment and stormwater plan may be required for the site prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees.

**Hazardous Waste Sites**

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C. Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware *Regulations Governing Hazardous Substance Cleanup* shall be followed.”
- There is one SIRB site found within a ½-mile radius of the proposed project. The Estates of Fairway Village Site was historically used as agricultural land. The Site entered the Voluntary Clean-up Program in July of 2008. Fifty-five (55) drums and 7.2 tons of impacted soil were removed. Post excavation analytical results showed that there were no contamination exceedances in the soil or groundwater. The Site is currently being developed into residential properties.

**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:

<b>Table 1: Potential Regulatory Requirements</b>	
<b>Regulation</b>	<b>Requirements</b>
<b>7 DE Admin. Code 1106</b> - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> <li>• Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads.</li> <li>• Use covers on trucks that transport material to and from site to prevent visible emissions.</li> </ul>
<b>7 DE Admin. Code 1113</b> – Open Burning	<ul style="list-style-type: none"> <li>• Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year.</li> <li>• Prohibit the burning of land clearing debris.</li> <li>• Prohibit the burning of trash or building materials/debris.</li> </ul>
<b>7 DE Admin. Code 1135</b> – Conformity of General Federal Actions	<ul style="list-style-type: none"> <li>• Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and</li> </ul>

to the State Implementation Plan	indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
<b>7 DE Admin. Code 1141</b> – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> <li>• Use structural/ paint coatings that are low in Volatile Organic Compounds.</li> <li>• Use covers on paint containers when paint containers are not in use.</li> </ul>
<b>7 DE Admin. Code 1144</b> – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> <li>• Ensure that emissions of nitrogen oxides (NO<sub>x</sub>), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) from emergency generators meet the emissions limits established. (See section 3.2).</li> <li>• Maintain recordkeeping and reporting requirements.</li> </ul>
<b>7 DE Admin. Code 1145</b> – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> <li>• Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.</li> </ul>

- 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 1500 gpm for 2-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 Mercantile sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

- Fire Protection Features:
  - All structures over 10,000 sq. ft. aggregate will require automatic sprinkler protection installed.
  - Buildings greater than 10,000 sq. ft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements
  - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
  - Show Fire Lanes and Sign Detail as shown in Delaware State Fire Prevention Regulation
  
- 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 Beaver dam Road must be constructed so fire department apparatus may negotiate it.
  - Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
  - Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
  - The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
  - The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
  
- Gas Piping and System Information:
  - Provide type of fuel proposed, and show locations of bulk containers on plan.
  
- Required Notes:
  - Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
  - Proposed Use
  - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
  - Square footage of each structure (Total of all Floors)
  - National Fire Protection Association (NFPA) Construction Type
  - Maximum Height of Buildings (including number of stories)

- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in Delaware State Fire Prevention Regulation ) if Building is to be sprinklered
- Provide Road Names, even for County Roads

### **Recommendations/Additional Information**

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

#### **Department of Transportation – Contact Bill Brockenbrough 760-2109**

- DelDOT recommends that the developer contact the developer of Forest Landing to discuss possible connections to Fairway Drive, Dogleg Court and Bunker Court.

If possible, Lackawanna Way should be extended through to connect to Fairway Drive. Failing that, a pedestrian connection from Thorton Drive near Lackawanna Way to Fairway Drive should be provided. DelDOT would expect residents of Forest Landing to attempt to walk through the proposed residential development to reach the proposed retail center, so it is in the best interest of both developers to plan for such a connection and make it a feature.

Extensions of Dogleg Court to Thorton Drive and of Bunker Court to Scranton Circle could be considered but might create problems with cut-through traffic. In these locations, pedestrian connections to promote walking for short trips should be the first consideration.

- Similarly, DelDOT recommends that pedestrian connections be designed between the retail center and the cul-de-sac bulbs on Thorton Drive and Exeter Way and between Beaver Dam Road and the cul-de-sac bulb on Favata Way.
- DelDOT requires sidewalks on subdivision streets built for State maintenance. DelDOT recommends that the Town require them in this development.
- If they have not done so, DelDOT recommends that the developer consult with one or more convenience store operators regarding the design of their retail center. While they are amenable to the design presented, their experience is that store operators want more

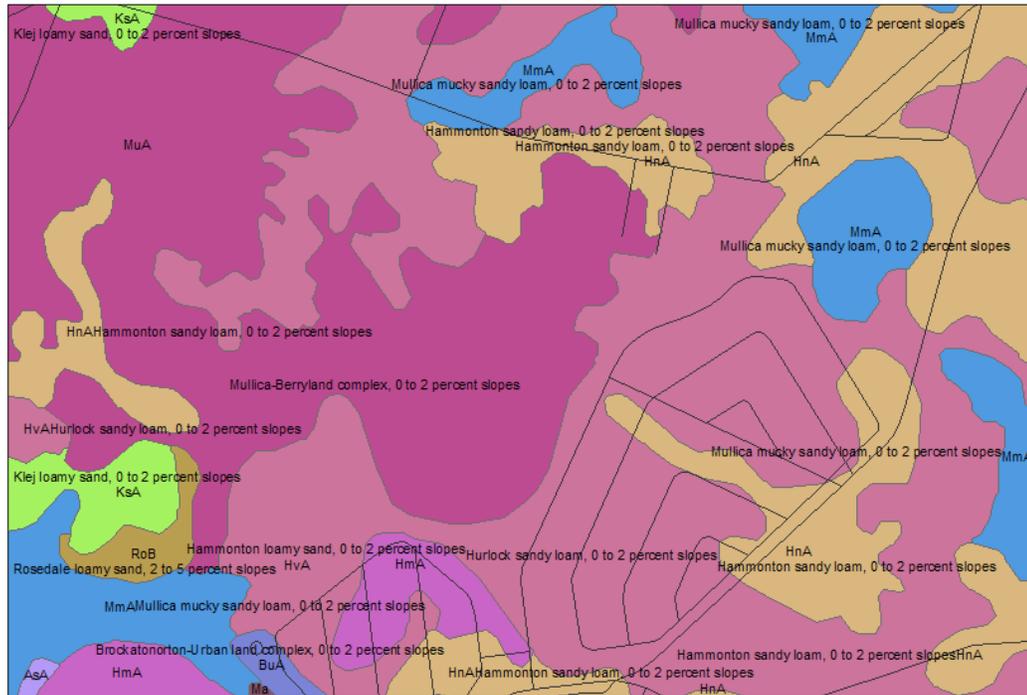
convenient access for their customers who drive and need more open access for their fuel deliveries. If the plan needs to change significantly, it is important to make those changes before the Town acts on the assumption that the retail center would be developed essentially as shown.

- DelDOT recommends that Brenda Lane be extended as a stub street to provide for a future connection to the 4.25-acre outparcel on Beaver Dam Road (Tax Parcel No. 1-34-16.00-46.00).
- As proposed, this annexation would make an enclave of the tax parcel just mentioned. Enclaves often necessitate duplicate sets of utilities in a right-of-way and can lead to confusion in the provision of public services such as policing and trash pickup. DelDOT recommends that the Town encourage the owner of that parcel seek annexation at the same time, regardless of their development plans or lack thereof.
- Because this development would generate more than 200 trips per day, the developer's engineer should schedule a pre-submittal meeting with the DelDOT Subdivision Section to help identify and address any issues not already apparent before making their first plan submission. Information on what to bring to the meeting and a form for requesting the meeting are available on our website at <http://www.deldot.gov/information/business/>.
- It will be necessary to coordinate the entrance and roadway improvement plans for this development with DelDOT's ongoing SR 26 Detour Routes project.

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

## **Soils**

- Based on soils survey mapping update, Mullica-Berryland complex (MuA) and Hurlock (HvA) are the principal soil mapping units that were mapped in the immediate vicinity of the proposed project area. Mullica-Berryland complex and Hurlock are wetland associated (hydric) soils that have severe limitations for development, and are considered unsuitable for development. Building on such soils is likely to increase both on-site and off-site flooding potentials (See figure 3).



**Figure 3:** Soils mapping in the immediate vicinity of the proposed project

- Please maximize open space through voluntary preservation of the existing forest cover and/or establishment of additional native tree cover on this parcel.
- A United States Army Corps of Engineers approved wetlands delineation is strongly recommended before proceeding beyond the initial planning stage. The applicant should keep in mind that in addition to Federal wetland regulatory requirements, additional and more stringent State wetland regulatory requirements may also apply.
- Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands (See figure 1).
- We strongly recommend that the applicant calculate post-construction surface imperviousness with all forms of created surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, and roads) included in the calculation. We also strongly encourage the use of pervious paving

materials (in lieu of conventional asphalt and concrete) to mitigate surface imperviousness and its' impacts on water quality wherever practicable.

- We strongly 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.

### **Natural Heritage Program**

- Division 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:
- Supplemental information included with the application includes a list of “opportunities” that Phase 2 will incorporate into the project. This list includes a “walking trail with interpretive signs” and “nature education at the clubhouse.” However, the location of the clubhouse and walking trails are not obvious on the site plan so it is difficult to provide input. Where exactly are they to be located? Will these features require additional forest clearing above the estimated removal of 43.5 acres? If so, forest loss estimates should be adjusted accordingly. Will there be additional impacts to the forest at this site for stormwater management that is not currently depicted on the site plan? Again, if so, forest loss estimates should be adjusted accordingly.
- The applicant indicated that Phase 2 will incorporate the “Enhancement/Restoration of forest blocks.” Our Division’s community ecologist, Robert Coxe, would like to conduct a field visit to map vegetation communities and assess the potential for habitat to support species of concern. This type of information will enable a more thorough review of this project and could help guide enhancement efforts. In addition, evaluation of type and condition of existing vegetation communities should be part of the “enhancement/restoration” plan. Question #30 on the application indicates that a site visit is being scheduled with DNREC through John Phelps of Landmark Engineering/JCM Environmental. We will get in touch with Mr. Phelps to take part in the site visit or arrange another date. We would also like the opportunity to review the proposed “enhancement/restoration” plan including a list of plants to be established. Once a site visit has been conducted we can provide additional input into this project. At this time we recommend efforts be made to minimize the amount of forest to be cleared, especially from April 1st to July 31st when birds and other wildlife species utilize forest for breeding and/or nesting.

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

#### **Additional information on 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. Contact the Wetlands and Subaqueous Lands Section for further information regarding preferred designs.

#### **Additional information on air quality**

- In 2007, the applicant intended on developing the property into 346 homes. According to the current Preliminary Land Use Service Application, the applicant has requested a review for rezoning the site plan located on the south side of SCR 368, east of SCR#84 across from Bear Trap Dunes from Residential (GR) to a Mixed Use Planned Community (MXPC). The applicant now intends to seek National Green Building Standards Certification by developing the property into 179 residential units with a 7,025 sq. ft. commercial space.
- National Green Building Standards Certification requires that environmental considerations and resource efficiency be incorporated into every step of the home building and land development process to minimize environmental impacts. These impacts include:
  - **Energy efficiency** improvements such as high levels of insulation, efficient HVAC systems, high-performance windows and energy-efficient appliances and lighting

- **Resource conservation** using materials and techniques such as engineered wood and wood alternatives, recycled building materials, sustainably harvested lumber, and more durable products
  - **Indoor environmental quality** considerations such as effective HVAC equipment, formaldehyde-free finishes, low-allergen materials, and products with minimum off-gassing or low volatile organic compounds (VOCs)
  - **Site design** planning such as minimizing disruption and preserving open space
  - **Homeowner education** through manuals and operating guides
  - **Green business practices** that adopt ideas from other industries for saving resources and money in the home and office.
- In 2007, the three air emissions components (i.e., area, electric power generation, and mobile sources) were quantified and the emissions in Table 2a represent the projected impacts the Silver Woods development would have had on air quality.

Emissions Attributable to the Silver Woods in 2007 (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO <sub>x</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )	Carbon Dioxide (CO <sub>2</sub> )
Direct Area Source	10.7	1.2	1.0	1.3	43.5
Electrical Power Generation	*	4.2	14.8	*	2177.8
Mobile	15.8	16.6	0.5	0.2	10225.9
<b>Total</b>	26.5	22.0	16.3	1.5	12447.2

- Based on the application submitted, the three air emissions components were again quantified and the emissions in Table 2b represent the projected impacts the Silver Woods development may have on air quality.

Emissions Attributable to the Silver Woods in 2011 (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO <sub>x</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )	Carbon Dioxide (CO <sub>2</sub> )
Direct Area Source	5.5	0.6	0.5	0.7	22.5
Electrical Power Generation	*	2.2	7.6	*	1126.6

Mobile	8.2	8.6	0.2	0.1	5290.3
<b>Total</b>	13.7	11.4	8.3	0.8	6439.4

(\*) *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 tables above.
- DAQ strongly supports all efforts for growth and we applaud the efforts of the applicant to implement National Green Building Standards Certification in Delaware homes and mixed communities.
- 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 Silver Woods development.

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

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

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 90 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.

Department of Agriculture – Contact Scott Blaier 698-4529

- The Delaware Department of Agriculture Forest Service encourages the school district 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:

Hybrid Pear

Ash Trees

Leyland Cypress

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.

Native Landscapes

- The Delaware Department of Agriculture and the Delaware Forest Service encourages 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.

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

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

Sincerely,

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

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

CC: Sussex County