



# DC GROUP

## DESIGN CONSULTANTS GROUP, L.L.C.

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September 28, 2007

Ms. Constance C. Holland, AICP  
Office of Management and Budget  
State Planning Coordination  
122 William Penn Street  
Dover, Delaware 19901

**RE: PLUS 2006-05-01; The Villas at the Cape (formerly  
Henlopen Landing)**

Dear Ms. Holland:

We are in receipt of your June 13, 2006 response letter to the PLUS meeting that was held on May 24, 2006 and would like to submit to your office the following written response to the comments received below along with changes made to the overall site in coordination with your comments.

The following responses below are in RED and follow your comments as they were presented in your above mentioned letter:

June 13, 2006

Mr. Mark Davidson  
DC Group, LLC  
18072 Davidson Drive  
Milton, DE 19968

RE: PLUS review – PLUS 2006-05-01; Henlopen Landing

2007 SEP 31 PM 3 21

RECEIVED  
O.F.C. NSMT AND BUDGET

Dear Mr. Davidson:

Thank you for meeting with State agency planners on May 24, 2006 to discuss the proposed plans for the Henlopen Landing project to be located on the south side of the intersection of Plantation Road and Beaverdam Road.

According to the information received, you are seeking a conditional use for 138 residential units and transportation facilities on 29.18 acres located within the Environmentally Sensitive Developing Area.

We have submitted an application for consideration to Sussex County Planning & Zoning for a Conditional Use of the existing zoned AR-1 and MR lands. The Conditional Use is for 138 Townhouses and a future dedication of lands to Del DOT for the proposed future Western Parkway project.

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.

### **Executive Summary**

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

### **State Strategies/Project Location**

- This proposed project is located primarily within an Investment Level 2 with a small portion within the Level 3 areas according to the Strategies for State Policies and Spending and the Environmentally Sensitive Developing Area according to the Sussex County comprehensive plan. For Level 2 areas, State policies support development activities. Also, in the Environmentally Sensitive Areas, State policies encourage growth that is sensitive to the natural resources on and surrounding the site.

It is recognized that this project is located primarily within an Investment Level 2 with a small portion within the Level 3 areas according to the Strategies for State Policies and Spending. It is also recognized that this project is located in the Environmentally Sensitive Development District. Sussex County's Comprehensive Plan, dated January 1, 2003, as approved by the State of Delaware, and defines the Environmentally Sensitive Developing District as a "Developing District". The Plan also emphasizes these areas for the County should be adjacent to existing infrastructure and services required for development. This project is in the Sussex County Sanitary Sewer District and is in the Water Service area for Tidewater Utilities, Inc.

### **Street Design and Transportation**

- 1) Beaver Dam Road and Plantation Road are both classified as collector roads. DeIDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads. DeIDOT believes that dedication was provided when the land was previously subdivided. The provision of that dedication should be verified and it should be provided now if necessary.

DeIDOT is correct in that the dedication has previously been made. The right-of-way line is 40-feet from the existing centerline of Plantations Road and Beaver Dam Road.

- 2) The plan for the development should include a shared use path in a 15-foot wide permanent easement across the frontage of the site on Beaver Dam Road and Plantation Road.

An approximate 3.8 acres of land along Beaver Dam Road and a portion of Plantations Road are being proposed as a conveyance of land to DeIDOT and can be used for the future shared use path. Along the remaining portion of the frontage along Plantations Road, there is a 15-foot wide proposed permanent easement shown on the Conditional Use Plan.

- 3) The subject development would have direct access only onto Salt Marsh Boulevard, which is presently a public right-of-way under private maintenance. However, DeIDOT anticipates that the developer will want to have it accepted for State maintenance when the subject development is complete. The developer's site engineer should contact Mr. John Fiori, the DeIDOT Subdivision Manager for

Sussex County, regarding their specific requirements in this regard. He may be reached at (302) 760-2260.

Both accesses to this project will be from Salt Marsh Boulevard. Salt Marsh Boulevard is a private road that is dedicated to public use.

The following are a complete list of comments received by State agencies:

**Office of State Planning Coordination – Contact: Herb Inden 739-3090**

This proposed project is located primarily within an Investment Level 2 with a small portion within the Level 3 areas according to the Strategies for State Policies and Spending and the Environmentally Sensitive Developing Area according to the Sussex County comprehensive plan. For Level 2 areas, State policies support development activities. Also, in the Environmentally Sensitive Areas, State policies encourage growth that is sensitive to the natural resources on and surrounding the site.

As noted, this project is within the Environmentally Sensitive Developing District Overlay Zone and will provide for approximately 48% Open Space. With the introduction of townhouses to this site, only 39% of the area will be impervious (buildings, paving and sidewalk). Also, all stormwater management will be handled on site through the use of rain garden parks and bio-filtration practices in order to help mitigate groundwater recharge and pollutant removal.

**Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685**

Nothing is known within this parcel. The early 20<sup>th</sup>-century house shown in the aeriels and on maps has been demolished already. The project is adjacent to the Belltown Historic District (S-8393). Beers Atlas of 1868 shows the Mrs. Wright House on Plantation Rd, to the south of the clump of trees. There may be archaeological resources remaining associated with this dwelling. There is only a low potential for prehistoric-period archaeological sites here.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Mrs. Wright House, usually a good distance behind or to the side of the house. The developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out. We will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

The Division of Historical and Cultural Affairs recommend that the development include sufficient landscaping to protect the Belltown Historic District from visual and audible effects. They would also appreciate the opportunity to check the area for archaeological sites, to learn something about their location, nature, and extent prior to any ground-disturbing activities.

This project has provided an adequate buffer from the Belltown Historic District with the future conveyance of lands to Del DOT and the proposed location of the Bio-filtration pond and landscaping along this portion of the site.

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

- 4) Responding to a request from Sussex County, DelDOT wrote to them on March 20, 2006, regarding the subject development and more specifically the conditional use application associated with it. A copy of that letter is enclosed but the contents can be summarized as follows:
  - a) A traffic impact study was previously completed for the Henlopen Landing development in 2001 (See enclosed September 21, 2001, letter.) and DelDOT sees no need to require a new one now.
  - b) DelDOT sees the proposed application as being consistent with the 2003 SR 1 Land Use and Transportation Study.
  - c) DelDOT understands that the applicant is willing to dedicate about three acres at the north edge of the property for transportation purposes, and they would be willing to accept that acreage on that basis. However, DelDOT might want to use that land for several things, including right-of-way or a construction staging area. A park-and-ride lot is also a possibility, and they are seeking a site for one in the Five Points area. Because they do not have definite plans, we would ask that they show the future use as “transportation facilities.”

I have been working with Mr. Don Plows of DelDOT and their consultants in conceptualizing a layout for the future Western Parkway Expansion. Approximately 3.8 acres of land is being shown for a future conveyance to Del DOT.

- 5) Beaver Dam Road and Plantation Road are both classified as collector roads. DelDOT’s policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads. DelDOT

believes that dedication was provided when the land was previously subdivided. The provision of that dedication should be verified and it should be provided now if necessary.

DelDOT is correct in that the dedication has previously been made. The right-of-way line is 40-feet from the existing centerline of Plantations Road and Beaver Dam Road.

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- 7) The subject development would have direct access only onto Salt Marsh Boulevard, which is presently a public right-of-way under private maintenance. However, DelDOT anticipates that the developer will want to have it accepted for State maintenance when the subject development is complete. The developer's site engineer should contact Mr. John Fiori, the DelDOT Subdivision Manager for Sussex County, regarding their specific requirements in this regard. He may be reached at (302) 760-2260.

Both accesses to this project will be from Salt Marsh Boulevard. Salt Marsh Boulevard is a private road that is dedicated to public use.

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

### **Soils**

According to the Sussex County soil survey update, Downer was only soil mapping unit mapped on subject parcel.

According to Sussex County Soil Survey for 1974 and Recent Soil Update for 2002 soils mapped at the property include the following:

- 1) Downer Sandy Loam, with slopes ranging from 0-2, 2-5, 5-10 percent;

Downer is well-drained upland soil that has few limitations for development.

Extensive soils testing have been completed for this project and this site is suitable for infiltration practices due to the very sandy soils mapped on site.

### **Impervious Cover**

Based on information presented in the PLUS application, this parcel's post-development surface imperviousness was calculated to increase by 67%. Although this figure appears to be a reasonable characterization of the amount of this project's likely amount of created surface imperviousness, the applicant is still advised to make certain that all of these created forms of surface imperviousness (rooftops, roads, and sidewalks) are included in this calculation; otherwise, an inaccurate assessment of this project's actual environmental impacts will be made. It is strongly advised, therefore, that the applicant recalculate this project's surface imperviousness using the aforementioned considerations.

The revised plan shows that only 39% of the area will be impervious (buildings, paving and sidewalk). 48% of the site will be used for open space. If you exclude the 3.8 acres of the property that will be part of a future conveyance to Del DOT for their future use, then their will be approximately 55% of open space.

Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. Based on analyses of 2002 aerial photography by the University of Delaware, the Broadkill River watershed, at that time, had about 7.9 percent impervious cover. Although this data is about 4 years old and likely an underestimate, it illustrates the importance of a proactive strategy to mitigate for predictable and cumulative environmental impacts. Since the amount of imperviousness generated by this project (reported as 67%) will significantly exceed the desirable watershed threshold of 10 percent, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an significant efforts to protect more of the existing forest cover are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

Since the sites impervious service is at 39% and the introduction of Best Management Practices with be utilized along with the introduction of landscaping, there would not be an adverse effect on the water and habitat quality in this area. With the introduction of landscaping the habitat in this area should increase.

## **TMDLs**

With the adoption of Total Maximum Daily Loads (TMDLs) as a “nutrient-runoff-mitigation strategy” for reducing nutrients in the Broadkill River watershed, reduction of nitrogen and phosphorus loading will be mandatory. 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 water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Nutrient reductions prescribed under TMDLs are assigned to those watersheds or basins on the basis of recognized water quality impairments. Although TMDL nutrient reductions for nitrogen and phosphorus have not been officially finalized for the Broadkill River watershed to date, it is expected that a 40 percent reduction will be required for both nitrogen and phosphorus.

## **TMDL Compliance through the PCS**

As indicated above, Total Maximum Daily loads (TMDLs) for nitrogen and phosphorus have been proposed for the Broadkill Watershed. The TMDL calls for a 40% reduction for nitrogen and phosphorus from baseline conditions. The Department developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. According to this tool, your development plan, as proposed, will increase nitrogen by 144% and phosphorus by 78%. Additional reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses, increasing passive, wooded open space, using enhanced nutrient removal wastewater technologies, and the use of stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Thus, the applicant is strongly advised to be proactive and consider the use of appropriate BMPs and Best Available Technologies (BATS) as a means to ensure compliance with TMDL reduction requirements. Examples of BMPs or BATs that should be used to significantly reduce nutrient loading from this project, include: practices that prevent, mitigate or minimize created surface imperviousness; maintenance/restoration of recommended wetland buffer widths; reducing the amount of overall forest cover removal; utilization of performance-based wastewater disposal systems or, better yet, connection to public sewer (if available); and use of innovative “green-technology” stormwater methodologies rather than conventional open-water stormwater management

structures. As mentioned previously, the impervious cover figure should be recalculated to include all forms of created surface imperviousness (i.e., rooftops, sidewalks, and roads); otherwise, this project's true environmental impacts will be underestimated.

The site consists of soils mainly in the hydrologic soil group (HSG) A and it is located on Delaware Watershed Basin, specifically on the Broadkill River Watershed which mandates a 40% reduction in Total Nitrogen and Phosphorus concentrations to meet the Total Maximum Daily Load (TMDL) Regulations. The current site plan incorporated best management practices (BMP) such as ample rain garden park, bio-retention and infiltration ponds and open spaces.

Relevant site data was entered into DNREC's protocol to estimate the site nutrient loading. The site plan as proposed meets the required TMDL reduction for both Total Nitrogen and Phosphorus. The result of this assessment is shown below:

Tax Map #	3-34-5.00, Parcels 222, 222.00, 828, 1061-1084, 1090- 1106	
Number of Dwelling Units	<b>138</b>	
Pre-development Nutrient Loading rates	<b>1.67 lbs/day TN</b>	<b>0.92 lbs/day TP</b>
Post-development Nutrient Loading rates based on TMDL	<b>1.02 lbs/day TN</b>	<b>0.55 lbs/day TP</b>
Post-development Nutrient Loading with Wastewater Treatment utilizing Stormwater BMPs	<b>0.58 lbs/day TN</b>	<b>0.05 lbs/day TP</b>
Post-development Nutrient Loading with Wastewater Treatment utilizing Stormwater BMPs and Buffers	<b>0.58 lbs/day TN</b>	<b>0.05 lbs/day TP</b>

The current site plan in conjunction with the utilization of all available best management practices would adequately mitigate nutrient impacts associated with this development. The mandated TMDL goals were met for this proposed development.

### **Water Supply**

The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. Our records indicate that the project is located within

the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity 83-W-15.

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.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

No Specific Site Plan changes required.

### **Sediment and Erosion Control/Stormwater Management**

#### Standard Comments:

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson, Program Manager, at (302) 856-7219 for details regarding submittal requirements and fees.

It is strongly recommended that you contact the Sussex Conservation District to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. 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.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to the Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.

Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, and limit the reliance

on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique.

Each stormwater management facility should have an adequate outlet for release of stormwater. Any drainage conveyed onto this site from neighboring properties must be adequately conveyed through the site to the discharge point without interruption.

Clearly address how Stormwater Quality and Quantity Treatment will be provided. If this project is eligible for a Quantity Waiver, please make the request in the stormwater narrative citing the specific regulation.

Please indicate on the sediment and stormwater management plan who shall be responsible for maintenance of the stormwater management facilities both during construction and after. During the design of the sediment control and stormwater management plan, considerations should be made for maintenance (i.e. access, easements, etc.) of any structures or facilities.

If a stormwater management pond is going to be utilized as a sediment trap/basin during construction it must be designed to accommodate 3600 cubic feet of storage per acre of contributing drainage area until project stabilization is complete.

All ponds are required to be constructed per Pond Code 378.

Please note that if the stormwater facilities will impact wetlands, a permit must be provided to the District prior to receiving approval. Please address.

DNREC regulations require no more than 20 acres to be disturbed at more time. A phased erosion and sediment control plan and sequence of construction will be required.

Under the DNREC Health and Safety Memo of 2000, all wet ponds are required to have an open space depth of 3 feet or more that comprises 50-75 percent of the area of the pond.

The District recommends providing a landscaping plan for the stormwater facilities.

This site is suitable for infiltration practices due to its sandy soils and deep water tables. With the introduction of landscaping to the project, the stormwater concept will be through the use of rain gardens, filter strips, bio-filtration and infiltration ponds. These BMP's will provide substantial filtering and nutrient removal before runoff is discharged into the water table.

During the design of the stormwater practices the designers and the developer will work with the Sussex Conservation District to achieve the best management practice for the development.

No specific plan change recommendations regarding Erosion Control and Storm Water Management. As part of our preparation of site storm water and grading plans for approvals by the Sussex Conservation District (SCD), all comment requirements will be addressed.

### **Open Space**

The developer is strongly urged to consider alternatives to mowed grass within community open space areas. Mowing and other maintenance costs from lawn areas can become a substantial burden for community maintenance associations. There may be areas within the development that are appropriate for warm or cool season grasses, especially around storm water management ponds. The maintenance costs associated with meadow type grasses are much lower than those of lawn grasses, and provide food and habitat for birds and other wildlife and can help reduce non-point source pollution. Efforts should be made to incorporate native plants into the open space planting design. Native meadow plant species and native pond species are particularly important and beneficial for the environmentally sensitive developing area.

The landscape plan that will be prepared for this project during plan design will utilize several of the strategies in "Community Spaces, Natural Places". For example, the landscape plan will utilize native species plantings along the perimeter of the property as well in the rain garden parks being proposed. Maintenance of natural areas will be outlined by the developer for use by the home owner's and home owner's association.

The overall recreational purpose for these open spaces consists of a clubhouse, swimming pool, and sidewalks/jogging paths. The project will have one "Hilton Head" styled path along the proposed roads. Passive recreation space in the form of improved landscape areas and related amenities is provided throughout the site and will provide opportunities for residents to engage in leisure activities. These amenities will offer opportunities for residents to enjoy the site's landscape.

All areas not planned as landscape beds will be improved and maintained to provide open space and useable lawn area for passive recreation. Stormwater management structures are included in the passive/active recreation space

calculations, due to the fact that these features act as an attractive landscape element that significantly enhances the park-like setting of the open space and the overall passive recreational experience for its users.

It should also be noted that street trees will also be furnished throughout the site. The benefits of street trees have been thoroughly documented. They play a vital role in carbon sequestration, air pollution absorption, street traffic calming and asphalt life cycle extension, energy conservation, and provide intangible sociological benefits.

### **Nuisance Waterfowl**

Stormwater management ponds may attract waterfowl like resident Canada geese and mute swans. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. DNREC recommends native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

There are no wet ponds being proposed for this project. With the use of vegetated dry ponds, nuisance geese should not be a problem.

### **Underground Storage Tanks**

There are two inactive and one active LUST site(s) located near the proposed project:

Randell S. Best, Facility # 5-000710, Project # S9212279  
Confidential Services, Facility # 5-000600, Project # S9510238  
Uncle Willies, Facility # 5-000356, S9605085

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be

discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

No Specific Site Plan changes required.

**Solid Waste**

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

No Specific Site Plan changes required.

**Air Quality**

Once complete, vehicle emissions associated with this project are estimated to be 10.6 tons (21,181.6 pounds) per year of VOC (volatile organic compounds), 8.8 tons (17,536.9 pounds) per year of NOx (nitrogen oxides), 6.5 tons (12,939.0 pounds) per year of SO2 (sulfur dioxide), 0.6 ton (1,151.8 pounds) per year of fine particulates and 885.9 tons (1,771,810.5 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 4.3 tons (8,543.5 pounds) per year of VOC (volatile organic compounds), 0.5 ton (940.0 pounds) per year of NOx (nitrogen oxides), 0.4 ton (780.1 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (1,006.7 pounds) per year of fine particulates and 17.3 tons (34,633.4 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.7 tons (3,386.0 pounds) per year of NOx (nitrogen oxides), 5.9 tons (11,777.5 pounds) per year of SO2 (sulfur dioxide) and 868.6 tons (1,737,177.1 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
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Mobile	10.6	8.8	6.5	0.6	885.9
Residential	4.3	0.5	0.4	0.5	17.3
Electrical Power		1.7	5.9		868.6
TOTAL	14.9	11.0	12.8	1.1	1771.8

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 1.7 tons of nitrogen oxides per year and 5.9 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,  
high performance windows,  
controlled air infiltration,  
upgraded heating and air conditioning systems,  
tight duct systems and  
upgraded water-heating equipment.”

The Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

No Specific Site Plan changes required. It should be noted that street trees will be furnished throughout the site. The benefits of street trees have been

thoroughly documented. They play a vital role in carbon sequestration, air pollution absorption, street traffic calming and asphalt life cycle extension, energy conservation, and provide intangible sociological benefits.

**State Fire Marshal's Office – Contact: Duane Fox 856-5298**

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. 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 (DSFPR):

❖ *This Agency has no objection to the re-zoning request. The information provided below shall be considered when plans are being designed.*

a. **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. (Assembly and Townhouses)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

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

c. **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 Salt Marsh Blvd 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.

d. **Gas Piping and System Information:**

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

e. **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)
- Townhouse 2-hr separation wall details shall be shown on site plans
- 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 DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

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.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

No specific plan change recommendations by DSFMO. Per DSFMO comments, detailed plans will be submitted in accordance with DSFPR for Fire Marshal approval.

**Department of Agriculture - Contact: Milton Melendez 698-4500**

The Delaware Department of Agriculture has no objections to the proposed rezoning. The *Strategies for State Policies and Spending* encourages responsible development in areas within Investment Level 2.

*Right Tree for the Right Place*

The Delaware Department of Agriculture Forest Service encourages the developer to use the "Right Tree for the Right Place" for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

*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.

Per DDA preferences, landscape architectural specification of plant species for this project will be biased towards Delaware natives or sturdier varieties of native trees and shrubs.

The landscape plan that will be prepared for this project during plan design will utilize several of the strategies in "Community Spaces, Natural Places". For example, the landscape plan will utilize native species plantings along the perimeter of the property as well in the rain garden parks being proposed.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

No Specific Site Plan changes required.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

This proposal is a site plan review for 138 multi-family units on 29 acres located on the south side Intersection of Plantation Road and Beaverdam Road. According to the State Strategies Map, the proposal is located in an Investment Level 2 area. However, the proposal does not include units for first time homebuyers. The 2003 Statewide Housing Needs Assessment indicates that much of the housing in the Lewis CCD is outside of the affordability level of low- and moderate-income households. For example, real estate data collected by DSHA for the fourth quarter of 2005 indicated that the median home price was \$295,000, which is outside the affordability level of low- and moderate-income households. Conversely, the affordability price for households earning 100% of area median income is estimated to be \$171,633. Moreover, of the 10,128 units in the CCD, 699 are substandard, and 2,711 are occupied by low-income households. Households that cannot afford to live in the coastal resort area have been displaced to western Sussex County. The provision of moderately priced units for first time homebuyers would help support the housing needs of low- and moderate-income families employed by the local retail, service, and tourism economy.

To facilitate the units targeted for first time homebuyers, we encourage the developer to apply for Sussex County's Moderately Price Housing Unit Program which provides the following incentives to developers who provide a percentage of units affordable to Sussex County residents of modest income:

- An expedited review;
- Waivers of some or all County fees associated with the County approval process;
- Density bonus.

NOTE: Proposals must be located in Town Centers, Developing Areas, and Environmentally Sensitive Areas according to the County's most recent certified Comprehensive Plan.

A Request for Proposal (RFP) process has been established to select initial program participants. The developer is encouraged to call William C. Lecates, Director of Sussex

County's Community Development and Housing Division at (302) 855-7777 to learn more about the RFP application process.

No Specific Site Plan changes required.

**Department of Education – Contact: John Marinucci 739-4658**

DOE offers the following comments on behalf of the Cape Henlopen School District.

1. Using the DOE standard formula, this development will generate an estimated 68 students.
2. DOE records indicate that the Cape Henlopen School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2005 elementary enrollment.
3. DOE records indicate that the Cape Henlopen School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2005 secondary enrollment.
4. DOE requests developer work with the Cape Henlopen 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.

The area in front of the clubhouse has been planned to safely accommodate a stop for school buses. Since the community center will be connected via several walking paths, sidewalks and parking spaces, and with the project having two site access points, it is anticipated that this would be the ideal area for a school bus stop that will safely transport kids to and from local schools.

**Sussex County – Contact: Richard Kautz 855-7878**

All sidewalks and trails within the development and any constructed at the request of DelDOT should tie together internally and with adjacent development so that persons using wheelchairs or pushing strollers can navigate without hindrance. In that regard, the "typical 6 unit townhouse layout" design appears to be too shallow in that the second vehicle parking space blocks access to the sidewalk.

At this time neither Del DOT nor the adjacent developments have sidewalks. This development is proposing sidewalks that will tie to Salt Marsh Boulevard and along Plantations Road.

Because this project is situated in an Environmentally Sensitive Development Area, the required report should include how this requirement and the PLUS comments have been addressed and how the plan has been revised accordingly.

An Environmental Assessment Report will be provided prior to the public hearing.

The zoning districts shown on the plan should be reversed. That part of the site nearest the intersection of Rt 9 and Rt 275 (Plantation Rd not Beaverdam Road) is zoned AR-1.

Corrected as noted.

The Sussex County Engineer Comments: The project proposes to add an additional 138 multifamily units to an undeveloped portion of the previously approved Henlopen Landing project. The proposed project is within the West Rehoboth Expansion Area for central sewer and connection to the sewer system is mandatory.

The project is within planning study and system design assumptions for sewer service. The proposed development will require a developer installed collection system in accordance with Sussex County's standard requirements and procedures. Extension of the existing system in Henlopen Landing and any required upgrades to serve the project will be at the developer's expense. The Sussex County Engineer must approve the connection point. A sewer concept plan must be submitted for review and approval prior to construction plan approval. A checklist for preparing sewer concept plans is attached.

One time System Connection Charges will apply. Please contact Mrs. Christine Fletcher at 302 854-5086 for additional information on charges.

No Specific Site Plan changes required.

For questions regarding these comments, contact Rob Davis, Sussex county Engineering Department at (302) 855-7820.

**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

CC: Sussex County

Sincerely,

For Design Consultants Group, L.L.C.

A handwritten signature in black ink, appearing to read 'Mark H. Davidson', with a large, stylized flourish extending to the right.

Mark H. Davidson  
Owner/Project Consultant

Pc: Bridle Ridge Properties, LLC  
Bridle Ridge Investments, LLC  
Sussex County