



December 15, 2005

Mr. Andrew C. Hayes  
ForeSite Associates, Inc.  
208 Delaware Street  
New Castle, DE 19720

RE: PLUS review – PLUS 2005-11-12; The Highlands at Middletown

Dear Mr. Hayes:

Thank you for meeting with State agency planners on November 22, 2005 to discuss the proposed plans for the Highlands at Middletown project to be located north of Main Street on both sides of Cleaver Farms Road in Middletown.

According to the information received, you are seeking site plan approval for 1246 residential units on 124.65 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the Town of Middletown is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.

**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 project is located in Investment Level 1 according to the 2004 State Strategies for Policies and Spending. This site is also located in the Town of Middletown. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Our office supports development projects in Investment Level 1 as essential to the Livable Delaware strategy of concentrating growth in and around existing communities and infrastructure.
- We compliment the use of a grid-like development design and the noted expectations of connections to the surrounding communities and future communities.

### **Street Design and Transportation**

- A TIS was done for the 1996 plan under the name Villagebrook II. From the letter commenting on that study, DelDOT finds that several of the recommendations, as noted below, are still relevant.

### **Natural and Cultural Resources**

- Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex.
- The Watershed Assessment Section feels that the amount of imperviousness (approximately 50%) generated by this project is excessive and should be reduced. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.
- According to 2002 aerial photos there is a forested area in this parcel. PLUS materials indicate that 18.26 acres will be removed. The forest provides important riparian habitat, wildlife connectors, and air quality and water quality benefits.

This forest tract is extremely beneficial to the region. Fragmentation of this forest can have irreversible effects to the regional ecosystem. Lot lines should be redesigned to avoid all impacts to the forested area. The developer is strongly encouraged to preserve, and where possible, enhance forested resources on site. This includes removing lot lines and infrastructure (such as storm water management ponds) from forested areas to the extent possible and minimizing any clearing activities. The forested areas on-site should be viewed as a community asset and managed appropriately.

- PLUS materials indicate that 41.71 acres are proposed for open space. In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

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

**Office of State Planning Coordination – Contact: Herb Inden 302-739-3090**

This project is located in Investment Level 1 according to the 2004 State Strategies for Policies and Spending. This site is also located in the Town of Middletown. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. Our office supports development projects in Investment Level 1 as essential to the Livable Delaware strategy of concentrating growth in and around existing communities and infrastructure.

We compliment the use of a grid-like development design and the noted expectations of connections to the surrounding communities and future communities.

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

Nothing is known within this parcel. Historic maps and aerials show no buildings in this area, and it is far enough removed from the 19<sup>th</sup> c. farmsteads that it is not likely to contain a family cemetery related to them. There are areas of high potential for both prehistoric-period and early historic-period (17<sup>th</sup> and 18<sup>th</sup> centuries) archaeological sites.

We would like the opportunity to look for any sites that may be here, to learn something about their location, extent, and nature prior to any ground-disturbing activities

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

The land is zoned R-2 and R-3 and the R-2 areas would need to be rezoned to R-3 to permit the proposed development. The present proposal would replace an existing plan approved in 1996 for a comparable development (692 townhouses, 192 duplex houses, and 240 apartments).

- 1) This development clearly meets DelDOT's warrants a traffic impact study (TIS). As the developer pointed out at the PLUS meeting, a TIS was done for the 1996 plan under the name Villagebrook II. From the letter commenting on that study, DelDOT finds that the following recommendations are still relevant:
  - a) The developer should be required to enter a signal agreement for the intersection of Main and New Streets and to build a protected eastbound left turn lane on Main Street at New Street.
  - b) The developer should be required to enter a signal agreement for the intersection of Main Street and Cleaver Farm Road and improve the intersection to provide for double left turns out of Cleaver Farm Road.
  - c) The developer should be required to build sidewalks throughout the development and on both sides of Cleaver Farm Road from the development to Main Street.
  - d) The developer should be required to connect their project to Ashland Street in the Greenlawn development.

Of these recommendations, the improvements to Main Street and Cleaver Farm Road will require further study because DelDOT currently does not plan to add a second eastbound through lane on Main Street and Cleaver Farm Road may be too close to Silver Lake Road (New Castle Road 442) to otherwise accommodate the double left turn.

- 2) As the developer mentioned at the PLUS meeting, DelDOT is studying alternatives for improving east-west capacity in the Main Street (Delaware Route 299) corridor. These alternatives include a parallel street that would, in part, run through the subject development. DelDOT appreciates the developer's willingness to accommodate this connection, and other possible connections,

which may require modifications to the plan, specifically to the southernmost street. The results of our study could affect our 1996 recommendations regarding the New Street and Cleaver Farm Road intersections.

- 3) DelDOT commends the developer for providing the two roundabouts proposed on Cleaver Farm Road. They understand that speeding is a significant problem there and the proposed roundabouts should help to address that problem.
- 4) DelDOT further commends the developer for providing the three stub streets that are proposed. These streets as well as other connections, currently under study with the Town will provide for better circulation in the area north of Route 299.

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

### **Soils**

Based on the New Castle County soil survey Reybold-Sassafras, Matapeake, and Zekiah-Longmarsh were mapped on subject parcel. Reybold-Sassafras and Matapeake are well-drained uplands soils that, generally, have few limitations for development. Zekiah-Longmarsh is a very poorly-drained wetland associated (hydric) that has the highest severity level for development.

### **Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel.

These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

### **Wetland Permitting Information**

PLUS application materials indicate that wetlands have been delineated (presumably a field delineation). This delineation should be verified by the Army Corps of Engineers through the Jurisdictional Determination process. Please note that impacts to palustrine

wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

### **Impervious Cover**

The Watershed Assessment Section feels that the amount of imperviousness (approximately 50%) generated by this project is excessive and should be reduced. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. Since the amount of imperviousness generated by this project will be well over this 10 percent threshold, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate and reduce its predictable 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 additional native tree and shrub plantings - are examples of practical BMPs that could easily be implemented to reduce surface imperviousness. Even better, reducing the amount of constructed structural imperviousness (i.e., building and parking lots) in the first place is probably the best BMP and should also be considered.

### **TMDLs**

With the adoption of Total Maximum Daily Loads (TMDLs) as a “nutrient-runoff-mitigation strategy” for reducing nutrients in the Appoquinimink 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.. Although TMDLs are required by federal law, states are charged with

developing and implementing standards to support these desired use goals. Based on the water quality goals desired for the Appoquinimink, a TMDL reduction level of 60 percent will be required for both nitrogen and phosphorus. In order for the applicant to verify compliance with the TMDL mandate, a full nutrient accounting process known as a nutrient budget should be prepared. The protocol used for calculating the nutrient budget involves a computer-based model to calculate post-development nutrient loading utilizing a variety of land use scenarios in combination with a variety (or absence) of BMP types and intensities. This post-development loading rate is then compared with the pre-development loading rate as a means to assess whether the project meets the acceptable TMDL reduction levels. Based on a preliminary evaluation of this project using said model, the development as currently conceived does **not meet** the TMDL reduction requirements for phosphorus. The applicant should realize that extensive forestland clearing, little or no wetland buffering, and the creation of large amounts of impervious cover – can increase a given parcel's nutrient runoff significantly above the acceptable or prescribed TMDL nutrient reduction levels. It is recommended, therefore, that the applicant consider some of the above-suggested BMPs in conjunction with other applicable redesign changes to ensure that these reductions are attained. We suggest that the applicant verify their project's compliance with the specified TMDL loading rates by running the model themselves. Please contact Lyle Jones of Watershed Section at 739-9939 for the acceptable model protocol.

### **Water Resource Protection Areas**

The DNREC Water Supply Section has determined that most of the proposed development falls within an area of excellent groundwater recharge. The northern section of the development is not in an excellent recharge area (see following map and attached map).

The proposed development would change the total impervious cover from approximately 0.01% to approximately 49.60%. These numbers were provided by the developer on the PLUS application. This number far exceeds the values set forth by New Castle County. The parcel is located in the Town of Middletown. Currently, the Town of Middletown does not have a Source Water Protection Component to their comprehensive plan that limits impervious cover.

DNREC Water Supply Section recommends that that portion of the new development within the excellent recharge area not exceed 20% impervious cover. Further, some allowance for augmenting ground-water recharge should be considered if the impervious cover exceeds 20% but is less than 50% of that portion of the parcel within this area. The purpose of an impervious cover threshold is to minimize loss of recharge (and associated

increases in storm water) and protect the quality and quantity of ground water and surface water supplies.

41.71 acres are proposed as open space in the development. The areas are spread throughout the development with a larger section in the northern part of the proposed development area. Steps could be taken to increase the open space in the excellent recharge area to decrease the amount of impervious cover in the proposed development.

Should the Town of Middletown approve the development plan as proposed, DNREC Water Supply Section strongly recommends that augmentation of groundwater recharge be required through engineering to achieve the impervious cover goals. Recommended engineering includes rooftop run-off systems that limit the potential for contamination of precipitation. These recommendations are made due to existence of the parcel entirely within an excellent recharge area and close proximity to a wellhead protection area.

For more information refer to the Final: Source Water Protection Guidance Manual for the Local Governments of Delaware:

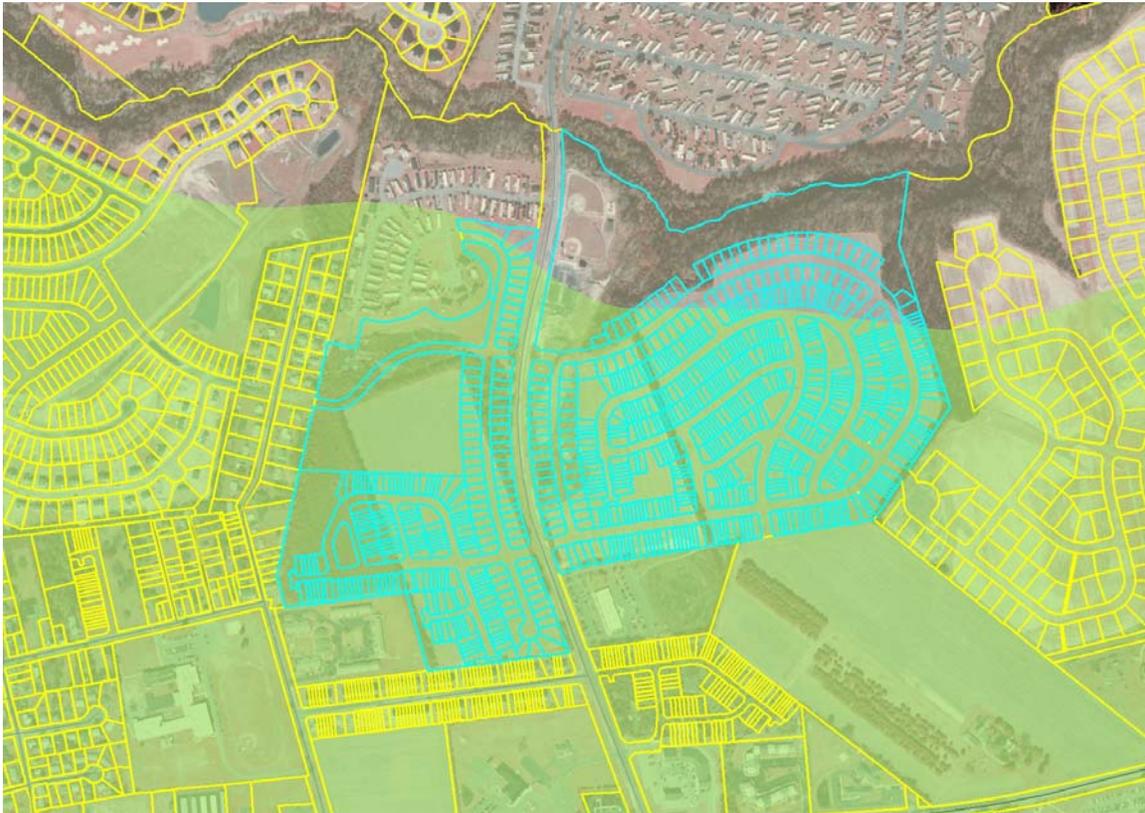
[http://www.wr.udel.edu/publications/SWAPP/swapp\\_manual\\_final/swapp\\_guidance\\_manual\\_final.pdf](http://www.wr.udel.edu/publications/SWAPP/swapp_manual_final/swapp_guidance_manual_final.pdf)

and

Ground-Water Recharge Design Methodology:

[http://www.wr.udel.edu/publications/SWAPP/swapp\\_manual\\_final/swapp\\_guidance\\_manual\\_supp\\_1\\_final.pdf](http://www.wr.udel.edu/publications/SWAPP/swapp_manual_final/swapp_guidance_manual_supp_1_final.pdf)

**Highlands at Middletown with affected parcels in light blue and excellent recharge in green**



**Water Supply**

The project information sheets state water will be provided to the project by the Town of Middletown via a central water system. Records indicate that the project is located within the public water service area granted to the Town of Middletown under Certificate of Public Convenience and Necessity 91-CPCN-12.

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.

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

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 Town of Middletown. Contact Town of Middletown at (302) 378-9120 for details regarding submittal requirements and fees.

A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC 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. Green Technology BMPs must be given first consideration for stormwater quality management. Each stormwater management facility should have an adequate outlet for release of stormwater.

It is strongly recommended that you contact the reviewing agency to schedule a preliminary 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.

### **Floodplains**

Portions of the proposed project are located within the 100-year floodplain. It is recommended that development be limited to those areas which are outside of the 100-year floodplain.

### **Forest Preservation**

According to 2002 aerial photos there is a forested area in this parcel. PLUS materials indicate that 18.26 acres will be removed. The forest provides important riparian habitat, wildlife connectors, and air quality and water quality benefits. This forest tract is extremely beneficial to the region. Fragmentation of this forest can have irreversible effects to the regional ecosystem. Lot lines should be redesigned to avoid all impacts to the forested area. The developer is strongly encouraged to preserve, and where possible, enhance forested resources on site. This includes removing lot lines and infrastructure (such as storm water management ponds) from forested areas to the extent possible and minimizing any clearing activities. The forested areas on-site should be viewed as a community asset and managed appropriately.

### **Open Space**

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Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

### **Underground Storage Tanks**

There is one inactive LUST site located near the proposed project:

Redding Middle School, Facility # 3-001107, Project #s N8705012, N8705013, and N0002025

No environmental impact is expected from the above inactive LUST sites. 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 be 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.

**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.

**Air Quality**

Once complete, vehicle emissions associated with this project are estimated to be 95.9 tons (191,708.5 pounds) per year of VOC (volatile organic compounds), 79.4 tons (158,721.6 pounds) per year of NOx (nitrogen oxides), 58.6 tons (117,107.7 pounds) per year of SO2 (sulfur dioxide), 5.2 ton (10,424.6 pounds) per year of fine particulates and 8,018.1 tons (16,036,169.0 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 38.7 tons (77,324.7 pounds) per year of VOC (volatile organic compounds), 4.3 ton (8,508.1 pounds) per year of NOx (nitrogen oxides), 3.5 ton (7,060.5 pounds) per year of SO2 (sulfur dioxide), 4.6 ton (9,111.2 pounds) per year of fine particulates and 156.7 tons (313,457.2 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 15.3 tons (30,646.0 pounds) per year of NOx (nitrogen oxides), 53.3 tons (106,594.7 pounds) per year of SO2 (sulfur dioxide) and 7,861.4 tons (15,722,711.8 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Mobile	95.9	79.4	58.6	5.2	8018.1
Residential	38.7	4.3	3.5	4.6	156.7
Electrical Power		15.3	53.3		7861.4
<b>TOTAL</b>	<b>134.6</b>	<b>99.0</b>	<b>115.4</b>	<b>9.8</b>	<b>16036.2</b>

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 15.3 tons of nitrogen oxides per year and 53.3 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. We 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.

**State Fire Marshal’s Office – Contact: John Rossiter 302-323-5365**

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):

- 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, Apartments, and Townhouses)

- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- 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 of more or 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 Cleaver Farm 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.

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.

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

Neither the Delaware Department of Agriculture nor the Delaware Forest Service has any objections to the Highlands at Middletown application. The site is located within a long-range designated controlled development area. The *Strategies for State Policies and Spending* encourages responsible development in areas within a Growth Level 1 Zone. DDA requests that you consider limiting impervious cover as much as possible when designing this site. This site is a part of a “good recharge” area. The State of Delaware has mapped all ground water potential recharge areas. A “good” rating is the second highest rating and designates an area as having important groundwater recharge qualities. Maintaining pervious cover in “Excellent” and “Good” recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure a safe drinking water supply for future generations. Retention of pervious cover to ensure an

adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as “excellent” and “good” recharge areas adversely impacts the future prospects for agriculture in Delaware.

### *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.

### *Tree Mitigation*

The Delaware Forest Service encourages the developer to implement a tree mitigation program to replace trees at a 1:1 ratio within the site and throughout the community. This will help to meet the community’s forestry goals and objectives and reduce the environmental impacts to the surrounding natural resources. To learn more, please contact our offices at (302) 349-5754.

### **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.

### **Delaware State Housing Authority – Contact Jimmy Atkins 739-4263**

This proposal is to develop 1,246 units on 124 acres located on Cleaver Farm Road, north of Main Street, in Middletown. According to the State Strategies Map, the proposal is

located in an Investment Level 1 area. DSHA supports this proposal because residents will have proximity to services, markets, and employment opportunities. The proposal also targets first time homebuyers. For informational purposes, the most recent real estate data collected by DSHA, the median home price in Middletown is \$243,258. However, families earning 80% of New Castle County's median income only qualify for mortgages of \$199,283. The provision of units within reach of families earning at least 80% of New Castle County's median income would help increase housing opportunities for first time homebuyers.

**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".

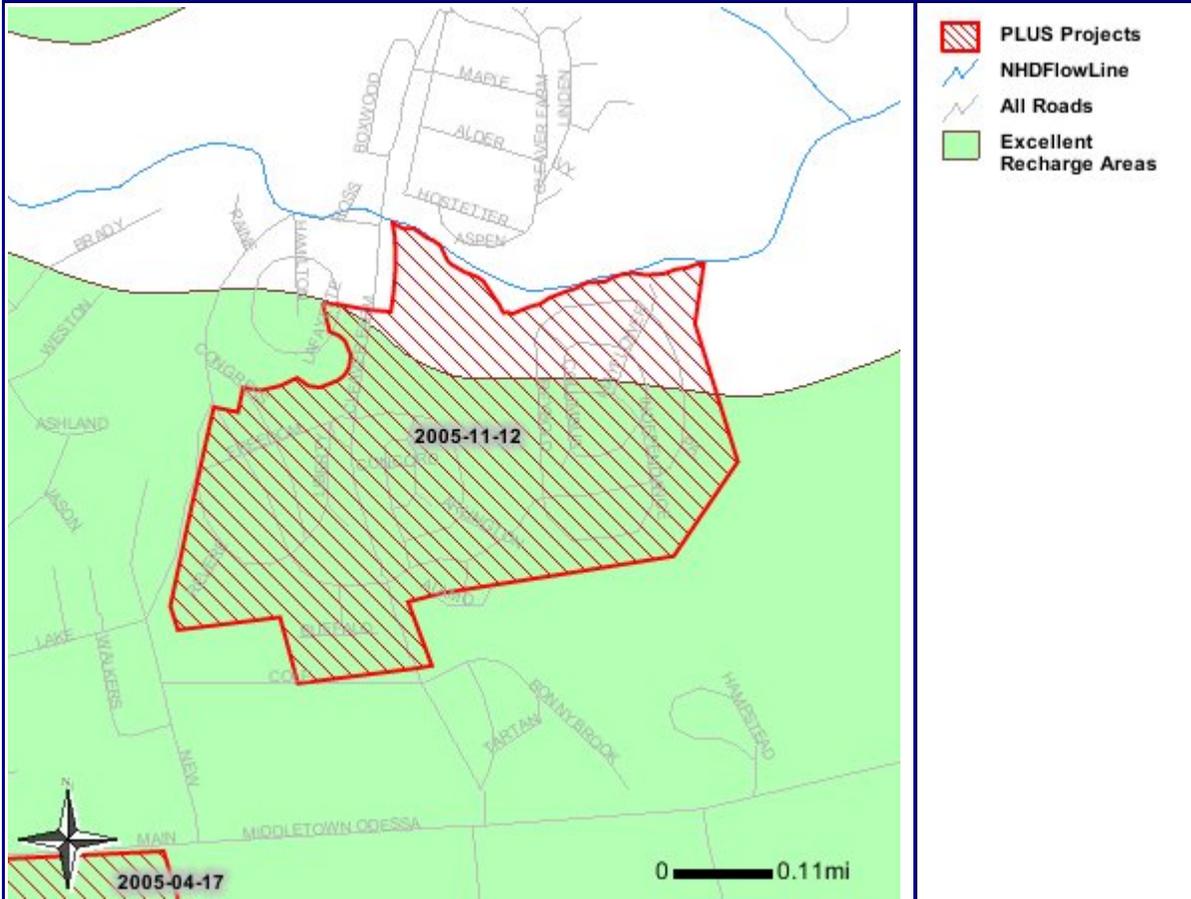
Constance C. Holland, AICP  
Director

CC: Town of Middletown



# Highlands at Middletown

2005-11-12



This map was produced by the Delaware Department of Natural Resources and Environmental Control.

