



**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
STATE PLANNING COORDINATION**

March 26, 2008

Mr. Ramesh Batta
Ramesh C. Batta Associates
4600 New Linden Hill Road
Wilmington, De 19808

RE: PLUS review – 2008-02-05; Wickersham

Dear: Mr. Batta:

Thank you for meeting with State agency planners on February 27, 2008 to discuss the proposed Wickersham project to be located on Johnson Road approximately ¼ mile southwest of Coastal Highway in Milford.

According to the information received, you are seeking site plan approval through the City of Milford for 205 residential units on 40 acres.

Please note that additional plan changes, 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 development will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the City of Milford is the governing authority over this land, you will need to comply with any and all regulations/restrictions set forth by the City.

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 area is designated as an “Area of Study” according to the Strategies for State Policies and Spending. At the time the current version of the Strategies was being developed, this area was the subject of a study to determine potential alignments for a limited access highway along the Route 113 corridor. This study is still ongoing, although it has currently been suspended in the Milford area. Since the Strategies were completed, the City of Milford proposed and the State certified an amendment to Milford’s comprehensive plan which includes this area as an annexation area. The City met all annexation requirements of the Delaware Code and the parcel was annexed on March 12, 2007. Our office considers this parcel and the City of Milford to be in compliance with the Strategies.

Street Design and Transportation

- In the context of the Corridor Capacity Preservation Program, DelDOT is developing plans for future improvements to Delaware Route 1 that would significantly affect the proposed development.
- DelDOT will require the developer to provide a 10-foot wide shared-use path in a 15-foot wide permanent easement along the property frontage on Johnson Road.
- DelDOT anticipates requiring the developer to improve some portion of Johnson Road to meet local road standards. These standards include 11-foot wide travel lanes and 5-foot wide shoulders.
- DelDOT anticipates recommending that the City require stub streets to the properties on the sites northwest and southwest boundaries.

Natural and Cultural Resources

- In recognition of 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 wetlands and water bodies (including ditches).

- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction.
- The Drainage Program does not support the removal of trees functioning as a riparian buffer for the placement of stormwater management ponds.
- DNREC recommends that consideration be given for preservation of the forest

If not preserved, DNREC recommends:

1. That trees not be cleared for stormwater purposes especially on a site that has a large area of non-forested land.
2. To protect rare species, maintain water quality and to reduce forest loss DNREC highly recommends that the existing forested buffer be maintained and not contain lots or infrastructure.

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

Office of State Planning Coordination – Contact: David Edgell 739-3090

This area is designated as an “Area of Study” according to the Strategies for State Policies and Spending. At the time the current version of the Strategies was being developed, this area was the subject of a study to determine potential alignments for a limited access highway along the Route 113 corridor. This study is still ongoing, although it has currently been suspended in the Milford area. Since the Strategies were completed, the City of Milford proposed and the State certified an amendment to Milford’s comprehensive plan which includes this area as an annexation area. The City met all annexation requirements of the Delaware Code and the parcel was annexed on March 12, 2007. Our office considers this parcel and the City of Milford to be in compliance with the Strategies.

The State has no objections to the development of this project in compliance with the City of Milford’s certified comprehensive plan and all local codes and ordinances.

At the PLUS meeting, the applicant described their urban design approach for the townhouses. The applicant intends to reduce the front yard setback in order to place the units closer to the street, while at the same time providing more open space at the rear of the units for a meaningful private open space and garages / parking pads accessed by alley. Our office supports this approach, as it is consistent with well established urban

design practices as described in our design publication Better Models for Development in Delaware. Moving the townhouses closer to the street and placing parking in the rear will greatly enhance the attractiveness of the streetscape, and improve the connectivity of the sidewalk network. While the streetscape and public open space areas will be public amenities for the development, it will be similarly important to provide small but meaningful private open spaces on the lots to enhance individual homeowner's enjoyment of their units. These relatively simple design elements will greatly increase the functionality and attractiveness of this townhome development.

Division of Historical and Cultural Affairs – Contact: Terrance Burns 739-5685

The State Historic Preservation Office of the Delaware Division of Historic & Cultural Affairs, would like to advise the developer of the following historical observations and information in reference to this project area.

There did not appear to be any known historic or cultural resource site such as a known archaeological site or national register listed property on this project area.

Another historical aspect that the developer should be aware of is the historical background of the location of the project area. According to the **Beers Atlas of 1868**, this project area is within the vicinity of Cedar Creek Hundred, and there is a variety of historical attributes within the vicinity of Cedar Creek Hundred. **The Beers Atlas of 1868** also indicates that there was structure of some type very close to where the project area is located today. That structure was associated to **Mrs. Gosewisch**, and there is a possibility that there could probably be potential historic and cultural resources or archaeological resources affiliated with or related to those structure.

Since this project area is located where there is a known historic or cultural resource site nearby, there is possibility that there could probably be a potential historic or cultural resource of some type within this project area.. This historic or cultural resource could also be some type of archaeological resource such as cemetery, burial ground, unmarked human remains, or some other type of hidden contents or remains that has significant historical attributes or aspects. It is very important that the developer become familiar with the laws and regulations of the state of Delaware that pertains to the discovery and disposition of archaeological resources and unmarked human burials or skeletal remains.

The State Historic Preservation Office strongly recommends that the developer read **Chapters 53 and 54, in Title 7, of the Delaware State Code** prior to or before any ground-disturbing activities, demolition, or construction starts or begins on this project area (parcel/property). **Chapter 53** pertains to the “Conservation of Archaeological Resources In or On State Lands”, and **Chapter 54 pertains to the Delaware Unmarked**

Human Remains Act of 1987. The unexpected discovery archaeological resources or unmarked human remains during construction can result in significant delays.

The State Historic Preservation Office also recommends strongly that the developer should consider hiring an archaeological consultant to check and examine the project area thoroughly prior to or before any ground-disturbing activities, demolition, or construction starts or begins on this project area. The purpose of this is to make sure that there is no indication or evidence of a potential historic or cultural resource or archaeological resource of some type such as a cemetery, burial ground, unmarked human remains, or some other type of hidden contents or remains, which has historical attributes or aspects. If the developer would like to discuss this information in further detail, please contact Mr. Terence Burns at State Historic Preservation Office of Division of Historic & Cultural Affairs at (302) 736-7400 ext.25.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) In the context of the Corridor Capacity Preservation Program, DelDOT is developing plans for future improvements to Delaware Route 1 that would significantly affect the proposed development. DelDOT asks that the developer contact the manager of that program, Mr. Charles Altevogt, to become familiar with the proposed improvements and work cooperatively with DelDOT as they further develop their plans for the property. Mr. Altevogt may be reached at (302) 760-2124.
- 2) With a projected trip generation of 1,180 trips per day, the proposed development would warrant a traffic impact study under DelDOT's newly adopted Standards and Regulations for Subdivision Streets and State Highway Access. Grandfathering provisions will exempt this development because an application has been filed with the City and accepted for review by them before March 31, 2008. DelDOT anticipates having detailed comments regarding the site access and off-site improvements when they have reviewed the completed study. If, for some reason, the application is withdrawn, a TIS would be required for any subsequent development generating more than 200 vehicles per day or 50 vehicles per hour.
- 3) The relevant segments of Delaware Route 1 and Johnson Road are classified as a principal arterial road and a local road, respectively. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 50 feet from the centerline on principal arterial roads and 30 feet from the centerline on local roads. Where the road is divided by a median, as Route 1 is in this location, the distance is measured from the inside edge of the travelway,

rather than from the center of the median. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.

- 4) DelDOT will also require the developer to provide a 10-foot wide shared-use path in a 15-foot wide permanent easement along the property frontage on Johnson Road.
- 5) DelDOT anticipates requiring the developer to improve some portion of Johnson Road to meet local road standards. These standards include 11-foot wide travel lanes and 5-foot wide shoulders.
- 6) DelDOT is encouraged to read in response to item 42 on the PLUS application that the developer is willing to attempt connections to future developments on the site's northwest and southeast boundaries. They anticipate recommending that the City require stub streets in this regard.
- 7) The developer's site engineer should contact the DelDOT Subdivision Manager for eastern Sussex County, Mr. John Fiori, to determine specific requirements for access and off-site improvements. Mr. Fiori may be reached at (302) 760-2260.

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

Soils

According to the Sussex County soil survey, Downer, Ingleside, and Fallsington were mapped in the immediate vicinity of the proposed construction. Downer and Ingleside are well-drained upland soils that, generally, have few limitations for development. Fallsington is a poorly-drained wetland associated (hydric) soil that has severe limitations for development. These soils should not be developed because of their potential to increase the intensity and frequency of future flooding events (both onsite and offsite) should they be filled, graded, or further disturbed.

Wetlands

Based on Statewide Wetlands Mapping Project (SWMP) mapping, palustrine riparian wetlands were mapped along the southern boundary of subject parcel.

Impacts to Palustrine wetlands are regulated by the U.S. Army Corps of Engineers (USACE, or “the Corps”) through Section 404 of the Clean Water Act. The applicant should be reminded that they must avoid construction/filling activities in those areas containing wetlands or wetland associated hydric soils that are subject to regulatory jurisdiction under Section 404. A site-specific field wetlands delineation using the methodology described in the 1987 United States Army Corps of Engineers (USACE) manual is the basis for making a jurisdictional wetland determination for nontidal wetlands in Delaware. The Corps views the use of the National Wetlands Inventory (NWI) mapping or the Statewide Wetlands Mapping Project (SWMP) mapping as an unacceptable substitute for making such delineations. To ensure compliance with Corps regulatory requirements, it is strongly recommended that a field wetlands delineation using the above-referenced methodology be performed on this parcel before commencing any construction activities. It is further recommended that the Corps be given the opportunity to officially approve the completed delineation. In circumstances where the applicant or applicant’s consultant delineates what they believe are nonjurisdictional isolated (SWANCC) wetlands, the Corps must be contacted to evaluate and assess the jurisdictional validity of such a delineation as the final jurisdictional authority for making isolated wetlands determinations ultimately rests with the Corps. The Corps can be reached by phone at 736-9763.

Certain other wetlands (mainly in tidal areas) are accorded additional regulatory protection under Title 7, Chapter 66, provisions of the Delaware Code. Compliance with these statutes may require a Corps-approved wetlands delineation and/or an official DNREC wetland jurisdictional determination.

In addition, individual 404 permits and certain Nationwide Permits from the Corps 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 Management Program (DCMP) Section. Each of these certifications represents a separate permitting process. Please be advised that Nationwide permits have been suspended in Delaware and are pending further coordination with the Corps. Therefore, contrary to past practices, Coastal Zone Management approval can no longer be assumed. Individual certifications must be granted from the DCMP office for each project intending to utilize a Nationwide Permit. For more information on the Federal Consistency process, please contact the DCMP office at 302.739.9283. 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.

Based on a review of existing buffer research by Castelle et al. (1994), 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 wetlands and water bodies (including ditches).

Impervious Cover

Based on information provided by the applicant in the PLUS application form, this project's post-development surface imperviousness is estimated to reach 33%. However, given the scope and density of this project (i.e., via review of information submitted and the conceptual project layout) this estimate appears to be a significant underestimate. When calculating surface imperviousness, it is important to include all forms of constructed surface imperviousness (i.e., rooftops, parking lots, sidewalks, stormwater management structures, and roads) in the calculation for surface imperviousness; this will ensure a realistic assessment of this project's likely post-construction environmental impacts. Impervious cover should be recalculated with all of the above-mentioned forms of constructed surface imperviousness. Failures to do so will significantly understate this project's true environmental impacts.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its 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 increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Cedar Creek watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet 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. In the Cedar Creek watershed, "target-rate-nutrient reductions" of 45 percent will be required for

nitrogen and phosphorus. Additionally, “target-rate-reductions” of 96 percent will be required for bacteria.

TMDL Compliance through the PCS

As indicated above, TMDLs for nitrogen and phosphorus have been proposed for the Cedar Creek watershed. The TMDL calls for a 45 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 96 percent reduction in bacteria from baseline conditions. A Pollution Control Strategy (PCS) will be used as a regulatory framework to ensure that these nutrient reduction targets are attained. The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as increasing the amount of passive, wooded open space (planted with native woody and herbaceous vegetation), use of pervious paving materials to reduce surface imperviousness, connection to a central sewer (if available), and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Water Supply

The information provided indicates that the City of Milford will provide well water to the proposed projects through a public water system. Our files reflect that the City of Milford does not currently hold a Certificate of Public Convenience and Necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well be needed, it must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

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. Contact the reviewing agency to schedule a pre-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.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, green technology BMPs and low impact development practices should be considered a priority to reduce stormwater flow and to meet water quality goals.

The Sediment and Stormwater Management Program ensures sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, we do not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

Drainage

1. The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.
2. Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage

- easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.
3. The Drainage Program does not support the removal of trees functioning as a riparian buffer for the placement of stormwater management ponds.
 4. Please explore methods to filter excess nutrients in stormwater runoff from this site before releasing the stormwater into the Cedar Creek watershed.

Floodplains

If this subdivision is approved, DNREC recommends that additional measures be taken to increase the stormwater capacity above the required minimums. Although this property is not located in the floodplain, the adjacent subdivision does have homes located in the floodplain. There should be no adverse impact to any downstream properties as a result of this development being approved.

Rare Species

DNREC has never surveyed the project area; therefore, it is unknown if there are State-rare or federally listed plants, animals or natural communities at this project site. They do have records of Yellow-Throated Warbler (*Dendroica dominica*) just east of this site and it may occur within forest on the project site. This State-rare species typically inhabits pine and mixed forests along streams. Swamp pink (*Helonias bullata*), a federally listed plant, has been documented downstream and run-off from this development could impact this species as it appears to be very sensitive to water quality degradation. This rare plant typically occurs in Atlantic white cedar and maple/gum swamps in the Coastal Plain.

Forested Wildlife Habitat

This project proposes to clear forest that forms part of the riparian buffer to a tributary of Cedar Creek. Most of the clearing will be for two stormwater ponds. Cumulative forest loss throughout the State is of utmost concern to the Division of Fish and Wildlife, which is responsible for conserving and managing the State's wildlife (see www.fw.delaware.gov and the Delaware Code, Title 7). Because of an overall lack of State and local forest protection, we have to rely on landowners/developers and/or the entity that approves projects (i.e. Counties and municipalities) to consider implementing recommendations that will aid in reducing forest loss.

Recommendations:

It is recommended that consideration be given for preservation of the forest. There are incentive-based programs for wildlife management available to private landowners through our agency. Please contact Shelley Tovell at (302) 735-3605 if the landowner(s) is interested in more information.

If preservation is not going to be considered, DNREC recommends the following:

1. They highly recommend that trees not be cleared for stormwater purposes especially on a site that has a large area of non-forested land. If deemed feasible by the entity that approves the stormwater plan, the applicant should also consider using alternative methods of stormwater management that do not require tree clearing.
2. The applicant indicates that disturbance will take place within 100 feet of existing wetlands. To protect rare species, maintain water quality and to reduce forest loss DNREC highly recommends that the existing forested buffer be maintained and not contain lots or infrastructure. At the very least a minimum 100-foot buffer comprised of existing vegetation should be left intact between wetland boundaries and ponds, roadways or lot lines. Current County buffer width requirements do not appear to recognize scientific research which supports the need for 100-foot wetland buffers for adequate protection of water quality. Riparian buffers also serve as critical habitat for wetland dependent species which utilize upland buffers during a portion of their life cycle, and as a travel corridor for wildlife which often travel along water courses during migratory, foraging or seasonal movements.
3. If trees are still going to be cleared despite our objections, we recommend clearing not occur April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize forests for breeding. This clearing recommendation would only protect those species during one breeding season; once trees are cleared the result is an overall loss of habitat.

Nuisance Waterfowl

Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance for community residents. 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. We recommend native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. When the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond.

At this time, we do not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the homeowners association or land manager.

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 and/or size of the ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 15.7 tons (31,465.4 pounds) per year of VOC (volatile organic compounds), 13.0 tons (26,051.2 pounds) per year of NOx (nitrogen oxides), 9.6 tons (19,221.0 pounds) per year of SO2 (sulfur dioxide), 0.9 ton (1,711.0 pounds) per year of fine particulates and 1,316.0 tons (2,632,037.3 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 6.3 tons (12,691.4 pounds) per year of VOC (volatile organic compounds), 0.7 ton (1,396.4 pounds) per year of NOx (nitrogen oxides), 0.6 ton (1,158.8 pounds) per year of SO2 (sulfur dioxide), 0.7 ton (1,495.4 pounds) per year of fine particulates and 25.7 tons (51,448.1 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 2.5 tons (5,030.0 pounds) per year of NOx (nitrogen oxides), 8.7 tons (17,495.5 pounds) per year of SO2 (sulfur dioxide) and 1,290.3 tons (2,580,589.2 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO ₂	PM _{2.5}	CO ₂
Mobile	15.7	13.0	9.6	0.9	1316.0
Residential	6.3	0.7	0.6	0.7	25.7

Electrical Power		2.5	8.7		1290.3
TOTAL	22.0	16.2	18.9	1.6	2632.0

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 2.5 tons of nitrogen oxides per year and 8.7 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 DNREC Energy Office 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.

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. The developer will be required, at the time of formal submittal, to 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.
- Where a water distribution system is proposed for townhouse type dwelling sites, the infrastructure for fire protection water shall be provided, including the size of water mains.

b. **Fire Protection Features:**

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

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 Johnson Rd. must be constructed so fire department apparatus may negotiate it. . If a "center island" is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. 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
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Townhouse 2-hr separation wall details shall be shown on site plans
- Provide Road Names, even for County Roads

Department of Agriculture - Contact: Scott Blaier 698-4500

The Delaware Department of Agriculture has no objections to the proposed project. It is properly zoned within the City of Milford and consistent with the Strategies for State Policies and Spending.

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. 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:

Callery Pear
Leyland Cypress

Ash Trees
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.

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 Vicki Powers 739-4263

This proposal is for a site plan review of 205 residential units on 40.69 acres located on Route 1 between Johnson Road and Lady Slipper Lane in the City of Milford. This proposal has been annexed into the City of Milford and is therefore consistent with the State Strategies Map. As a general planning practice, DSHA encourages residential development in areas where residents will have proximity to services, markets, and employment opportunities. DSHA supports the fact that this proposal targets first time homebuyers. For informational purposes, the most recent real estate data collected by DSHA shows the median home price in Sussex County to be \$280,000. However, households earning 100% of Sussex County's median income only qualify for mortgages of \$164,791, thus creating an affordability gap of \$115,209. We recommend that some of the units be set-aside at this price level to ensure that working households have access to affordable housing.

Furthermore, we support the design of this community. Well-designed communities create psychological benefits for residents such as being proud of their home and neighborhood, which will lead to better maintenance of property. For the homeowner, well-designed housing presents benefits immediately at move-in, as well as throughout the years.

Department of Education – Contact: John Marinucci 735-4055

1. This proposed development is within the Milford School District.
2. DOE offers the following comments on behalf of the Milford School District.
3. Using the DOE standard formula, this development will generate an estimated 103 students.
4. DOE records indicate that the Milford School Districts' *elementary schools are at or beyond 100% of current capacity* based on September 30, 2007 elementary enrollment.
5. DOE records indicate that the Milford School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2007 secondary enrollment.
6. The Milford School District has communicated to the DOE the district's lack of capacity at all grade levels given the number of planned and recorded residential sub divisions within district boundaries.
7. This development will create significant additional elementary and secondary student population growth which will further compound the existing shortage of space experienced by the Milford School District.
8. The developer is strongly encouraged to contact the Milford School District Administration to address the issue of school over-crowding that this development will exacerbate.
9. DOE requests developer work with the Milford 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 school district.

Sussex County – Contact: Richard Kautz 855-7878

Some variation of the following right to farm legislation should be imposed by Milford on this development in order to protect the right to farm for contiguous unincorporated W. Nelson Hall and Thomas W. Bennett properties. Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:

1. For any new subdivision development located in whole or in part within 300 feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice: "This property is

located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

2. For any new subdivision development located in whole or in part within 50 feet of the boundary of land used primarily for agricultural purposes, no improvement requiring an occupancy approval for a residential type use shall be constructed within 50 feet of the boundary of land used primarily for agricultural purposes.

The town is encouraged to avoid the creation of new enclaves when annexing, to eliminate existing enclaves during its negotiation of the annexation agreement, and to notify the Sussex County Planning Department when the annexation becomes effective.

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: City of Milford
Sussex County