



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
Budget Development, Planning and Administration
State Planning Coordination

September 23, 2009

Mr. Frank Kea
Frank Kea Communities
27 Madaket Court
Rehoboth Beach, DE 19971

RE: PLUS review – 2009-08-08; Bakers Creek

Dear Mr. Kea:

Thank you for meeting with State agency planners on August 26, 2009 to discuss the proposed site plan for the Bakers Creek subdivision located adjacent to the Town of Bridgeville south of the Route 404 and US 13 at the intersection of Route 13 and Camp Road.

According to the information provided, the applicant is seeking to annex into the Town of Bridgeville and rezone to an RPC for a 400 unit residential subdivision.

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 need to comply with any additional Federal, State and local regulations regarding activities on this site. This office also notes that, until annexed by the Town of Bridgeville, Sussex County is the governing authority over this land and 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

- The project is located within the Investment Levels 2 and 3 according to the State Strategies for Policy and Spending. In addition the site is contiguous to the Town of Bridgeville and is also located within the future growth and annexation area for the Town. Finally the site is located within the Town Center / Developing Areas as defined by the Sussex County Comprehensive Land Use Plan. Our office has no objections to the proposed development of this project in accordance with the relevant local codes and ordinances.

Street Design and Transportation

- In 2008, DeIDOT completed a study of the US Route 13 Corridor through the Bridgeville area. This study accounted for the subject development and serves as a traffic impact study (TIS) for it. Therefore no separate TIS are needed.
- The first two blocks of the street leading into the site are proposed to be a boulevard with a raised median. DeIDOT recommends that these blocks be designed with alleys to allow residents easier driveway access and to minimize the number of U-turns at intersections.

Natural and Cultural Resources

- Based upon review by staff of the Wetlands and Subaqueous Lands section, the developer has been in contact with them and is designing an innovative headwater wetland system in place of the existing ditch that will further serve as their storm water management. The Wetlands Section, Sussex Conservation District and DNREC Storm water program have reviewed the concept plans and enthusiastically support their proposal.

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact: Bryan Hall 739-3090

The project is located within the Investment Levels 2 and 3 according to the State Strategies for Policy and Spending. In addition the site is contiguous to the Town of Bridgeville and is also located within the future growth and annexation area for the Town. Finally the site is located within the Town Center / Developing Areas as defined by the Sussex County Comprehensive Land Use Plan. Our office has no objections to the proposed development of this project in accordance with the relevant local codes and ordinances.

This office encourages the proposed annexation into the Town of Bridgeville to provide the necessary services need to support a project of this scope. If the applicant has any question regarding this process or requires assistance from our office, please contact me.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

There are no known archaeological or National Register listed site or property on the parcel (project area). However, according to the Pomeroy and Beers Atlas of 1868 (an historic map), it does show that there was dwelling associated with an S. M. Short on this parcel, and since Delaware has a strong agricultural and rural heritage, it might have been a farmstead. Farmsteads are usually associated with small, rural or family cemeteries and they often located a good distance behind or to the side of the house or nearby.

Since Delaware does have a strong agricultural and rural heritage there is a possible that there could be historic or archaeological resources, including a cemetery or unmarked human remains within this parcel. With this in mind, it is important that the developer be aware of the Delaware Unmarked Human Remains Act of 1987, outlined in Chapter 54 of Title 7 of the Delaware Code, which pertains to 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.

Finally, prior to any demolition or ground-disturbing activities, the developer may want to consider hiring an archaeological consultant to examine the parcel for archaeological resources or sites such as a cemetery or unmarked human remains. If you have any questions, or would like to discuss this further, please contact Terence Burns at 302-736-7404.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) DelDOT met with the developer and their engineer on May 18, 2009 to discuss traffic and off-site road improvements. The details of that discussion are contained in the enclosed letter dated May 27, but key points are as follows:
 - a) In 2008, DelDOT completed a study of the US Route 13 Corridor through the Bridgeville area. This study accounted for the subject development and serves as a traffic impact study (TIS) for it. Therefore no separate TIS is needed.
 - b) There is a north-south service road planned along the east side of US Route 13 that would tie into Camp Road through the northwest corner of this development. The developer would be expected to build the road through their property with 11-foot lanes and five-foot shoulders, and to improve Camp Road to match that typical section from the service road south to Route 18.

- c) The developer will be required to enter signal agreements for the intersections of US Route 13 with Delaware Route 18 and the Heritage Shores/Bridgeville 90 entrance.
 - d) DelDOT will likely impose left turn restrictions at the intersection of Route 13 and Camp Road, but the nature and timing of those restrictions has not been determined yet.
 - e) The developer will be required to participate with others in improvements at the intersection of Delaware Routes 18 and 404.
 - f) The developer will be required to improve the intersection of Route 18 and Camp Road to provide an eastbound protected left turn lane and a westbound right turn lane.
 - g) The developer will be required to provide a right turn deceleration lane and a left-turn bypass lane at the site entrance on Camp Road.
 - h) The developer will be required to provide a 10-foot wide multi-use path in a 15-foot wide permanent easement along the Camp Road and service road frontage.
- 2) Path connections should be provided from the cul-de-sac bulbs proposed along Camp Road to the multi-use path that would parallel the road.
 - 3) The first two blocks of the street leading into the site are proposed to be a boulevard with a raised median. DelDOT recommends that these blocks be designed with alleys to allow residents easier driveway access and to minimize the number of U-turns at intersections.
 - 4) DelDOT also recommends that the developer have their site engineer contact the Subdivision Manager for western Sussex County, Mr. Derek Sapp, for more detailed comments if the annexation is approved. Mr. Sapp may be reached at (302) 760-4803.

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

According to Jim Chaconas and Laura Herr of the Wetlands and Subaqueous Lands section, the developer has been in contact with them and is designing an innovative headwater wetland system in place of the existing ditch that will further serve as their stormwater management. The Wetlands Section, Sussex Conservation District and DNREC Stormwater program have reviewed the concept plans and enthusiastically support their proposal.

Comments by division and program follow.

Fish and Wildlife

Rare Species. A review of the DNREC database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at this project site. State-rare fish, plant and freshwater mussel species occur downstream. Run-off generated by this development could impact water quality downstream so efforts to protect downstream water quality are of utmost importance.

Forest Preservation. Although the forest on this parcel is small and somewhat isolated, there is likely some wildlife use of the habitat for resting, foraging and breeding. DNREC recommends that clearing be minimized and not take place April 1st to July 31st when most species are breeding and nests and young would be impacted. This recommendation would only protect those species during one breeding season; once trees are cleared the result is an overall loss of habitat. *Edna Stetzar - (302) 653-2880, Edna.Stetzar@state.de.us*

Soil and Water

Sediment and Stormwater Program. Your participation in a pre-application meeting is appreciated. As a reminder, 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 at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees.

Drainage Program. This project is located within the Middleford Tax Ditch watershed; however, it is not affected by Tax Ditch rights-of-way.

This project is located along the Main of the Priestly Tax Ditch and is affected by existing Tax Ditch rights-of-way. A change to the Priestly Tax Ditch court order has been proposed to eliminate the Tax Ditch Main on this property. Please continue to work with the Drainage Program office in Georgetown during this process.

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 stormwater. Notify downstream landowners of the change in volume of water released on them.

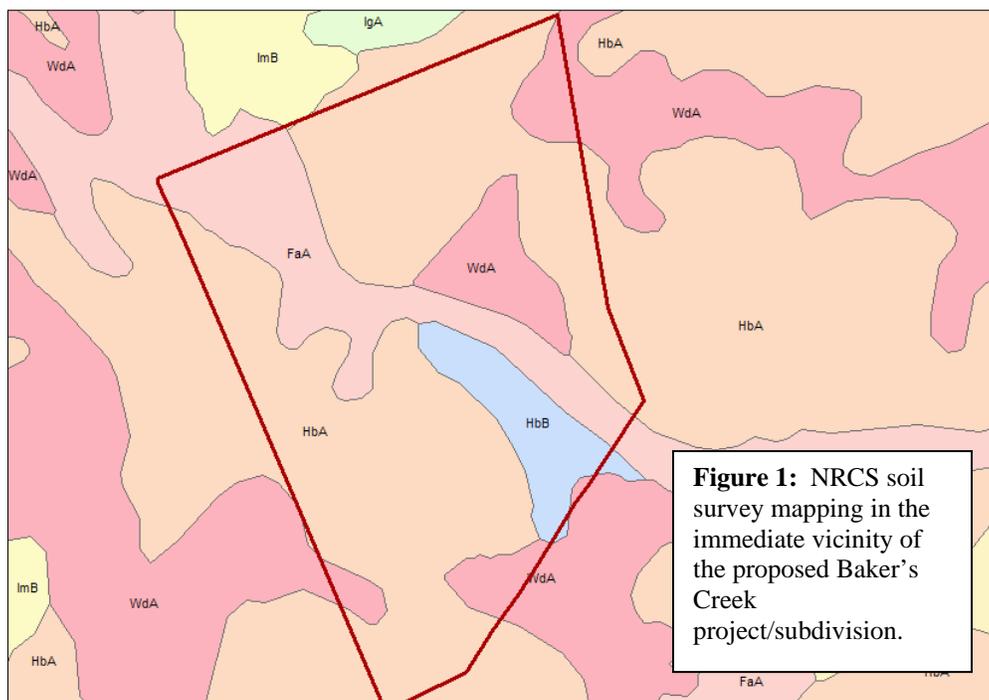
Since annexation into the Town of Bridgeville is being actively pursued, stormwater conveyances should be located within street right-of-ways or open space. Drainage easements on private property should be recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future reconstruction. 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.

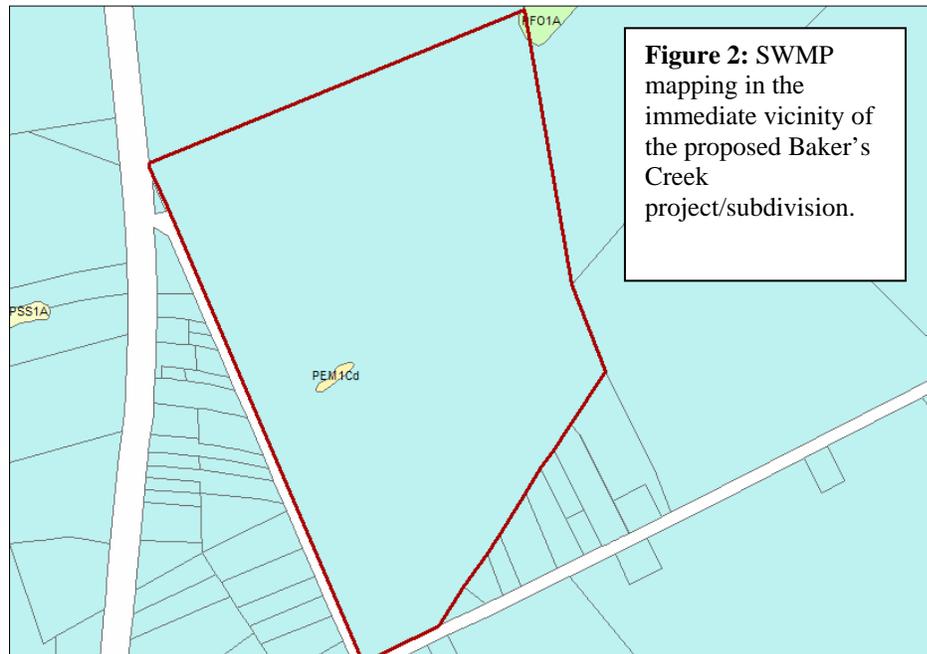
Sediment/Stormwater and Drainage comments provided by James Sullivan - (302) 739-9921, James.Sullivan@state.de.us

Water Resources

Soils Assessment. According to the NRCS soil survey update Hambrook (HbA & HbB), Woodstown (WdA), and Fallsington (FaA) were mapped in the immediate vicinity of the proposed construction. Hambrook is a well-drained upland soil that, generally, has few limitations for development. Woodstown is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. Fallsington is a poorly-drained wetland associated (hydic) soil that has severe limitations for development (Figure 1).



Wetlands. According to the Statewide Wetland Mapping Project (SWMP) maps, a tiny area of palustrine emergent wetlands (PEM1Cd) was mapped in the west-central portion of this parcel (Figure 2).



Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. *Wetland and Stream Buffer Requirements – A Review*. J. Environ. Qual. 23: 878-882), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches) and wetlands.

Impervious Surfaces and Best Management Practices. The applicant estimates this project's post-development surface imperviousness to reach 55 percent. Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. Even though the project is within Bridgeville town limits, 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 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 Nanticoke 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 greater Nanticoke watershed, “target-rate-nutrient reductions” of 30 and 50 percent will be required for nitrogen and phosphorus, respectively. Additionally, “target-rate-reductions” of 2 percent will be required for bacteria.

A pollution control strategy 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 increasing the amount of passive, wooded open space, use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

Soils, wetlands, subaqueous lands and TMDL comments provided by John Martin, Watershed Assessment Section, (302) 739-9939, John.Martin@state.de.us

Water Supply. The information provided indicates that the Town of Bridgeville will provide water to the proposed project through a public water system. Our files reflect that the Town of Bridgeville does not currently hold a Certificate of Public Convenience and Necessity (CPCN) to provide public water in these areas. According to §203C, Subchapter II, Chapter 1, Title 26, Delaware Code, the municipality is required to give notice to the Public Service Commission when the annexation is complete. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-736-7547. 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. *Ricardo Rios - (302) 739-9944, Ricardo.Rios@state.de.us*

Air and Waste

Air Quality. Housing developments may unnecessarily emit, or cause to be emitted, significant amounts of air contaminants into Delaware’s air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:

- Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
- The emission of greenhouse gases which are associated with climate change, and
- The emission of air toxics.

Air emissions generated from housing developments include emissions from:

- Area sources like painting, lawn and garden equipment and the use of consumer products like roof coatings and roof primers.
- The generation of electricity needed to support the homes in your development, and
- Car and truck activity associated with the homes in your new development.

Recommendations:

The applicant shall comply with all applicable Delaware air quality regulations. These regulations include:

<p>Regulation 6 - Particulate Emissions from Construction and Materials Handling</p>	<ul style="list-style-type: none"> • Using dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Using covers on trucks that transport material to and from site to prevent visible emissions.
<p>Regulation 1113 – Open Burning</p>	<ul style="list-style-type: none"> • Prohibiting open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibiting the burning of land clearing debris. • Prohibiting the burning of trash or building materials/debris.
<p>Regulation 1145 – Excessive Idling of Heavy Duty Vehicles</p>	<ul style="list-style-type: none"> • Restricting idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:

- **Constructing only energy efficient homes.** Energy Star qualified homes are up to 30% more energy efficient than typical homes. These savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and

upgraded water-heating equipment. Every percentage of increased energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.

- **Offering geothermal and/or photo voltaic energy options.** These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.
- **Providing tie-ins to the nearest bike paths and links to any nearby mass transport system.** These measures can significantly reduce mobile source emissions.
- **Funding a lawnmower exchange program.** New lawn and garden equipment emits significantly less than equipment as little as 7 years old, and may significantly reduce emissions from this new development. The builder could fund such a program for the new occupants.

Additionally, the following measures will reduce emissions associated with the actual construction phase of the development:

- **Using retrofitted diesel engines during construction.** This includes equipment that are on-site as well as equipment used to transport materials to and from site.
- **Using pre-painted/pre-coated flooring, cabinets, fencing, etc.** These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
- **Planting trees at residential units and in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and by replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, whereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.

This is a partial list, and there are additional things that can be done to reduce the impact of the development on air quality. The applicant should submit a plan to the DNREC Air Quality Management Section which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Bakers Creek development. *Deanna Morozowich - (302) 739-9402, Deanna.Morozowich@state.de.us*

Hazardous Waste Sites. DNREC's Site Investigation and Restoration Branch (SIRB) have reviewed the proposed project. No SIRB sites or salvage yards were found within a ½-mile radius of the proposed development. However, based on the previous agricultural use of the proposed project site, which may have involved the use of pesticides and herbicides, SIRB recommends that a Phase I Environmental Site Assessment be performed prior to development. In addition, should a release or imminent threat of a

release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions. Krystal Stanley - (302) 395-2644, Krystal.Stanley@state.de.us

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

No comments were received regarding this project. You should contact the State Fire Marshal's Office to determine the relevant regulations for this project.

Department of Agriculture - Contact: Scott Blaier 739-4811

The Delaware Department of Agriculture has no objections to the proposed project. The *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 2 and 3 areas.

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 / Bradford Pear Species (*Pyrus spp.*)
Green / White Ash Tree Species (*Fraxinus spp.*)
Leyland Cypress (*Cupressocyparis leylandii*)
Red Oak Tree Species (*Quercus spp.*) (except for Willow Oak (*Quercus phellos*))

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 Economic Development Office – Contact: Jeff Stone 672-6849

No comments were received regarding this project.

Delaware Division of Public Health- Health Promotion Bureau- Contact: Michelle Eichinger (302) 744-1011

No comments were received regarding this project.

Delaware State Housing Authority – Contact Valerie Miller 739-4263

No comments were received regarding this project.

Department of Education – Contact: John Marinucci 735-4055

This proposed development is within the Woodbridge School District boundaries. DOE offers the following comments on behalf of the Woodbridge School District.

1. This development also borders the Seaford School District.
2. Using the DOE standard formula, this development will generate an estimated 200 students.
3. DOE records indicate that the Woodbridge School Districts' *Elementary and Middle schools exceed 100% of current capacity* based on September 30, 2008 elementary enrollment.
4. DOE records indicate that the Woodbridge School Districts' *High School do not exceed 100% of current capacity* based on September 30, 2008 secondary enrollment.
5. This development will create additional elementary and middle school student population growth which the school district will need to address.
6. The developer is strongly encouraged to contact the Woodbridge School District Administration to address the additional students that this development will likely generate.
7. DOE requests developer work with the Woodbridge 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 that school district.

Sussex County – Contact: 855-7878

No comments were received regarding this project.

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 Bridgeville
Sussex County