



February 15, 2006

John H. Plummer
615 Eastern Shore Drive
Salisbury, MD 21804

RE: PLUS review – PLUS 2006-01-04; Heritage Point

Dear Mr. Plummer:

Thank you for meeting with State agency planners on January 25, 2006 to discuss the proposed plans for the Heritage Point project to be located on Old Stage Road, 700 ft. south of Route 24.

According to the information received, you are seeking site plan approval for 80 units on 40 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 Sussex County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

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

Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

This project represents a major land development that will result in 80 residential units in an Investment Level 4 area according to the *2004 Strategies for State Policies and Spending*. This project is also located outside of a designated growth area in relevant municipal and county certified comprehensive plans. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and

the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 200 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Additionally, we reviewed a proposal for this site last year that proposed only 53 units. We had similar objections because of the location in an Investment Level 4 area. We note that this proposal is for 27 more units than the prior proposal, and it proposes to utilize the County's cluster ordinance. Additionally, other than the required stormwater management facilities and wastewater disposal area, there is very little open space shown on the site plan. Under the cluster ordinance, the design should be a superior design that preserves open space. On January 31, 2006, the Sussex County Council amended the cluster ordinance, and it does not appear that the project as proposed complies with the amended ordinance. We recommend that you meet with Sussex County Planning and Zoning before proceeding any further.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

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

This project was reviewed under PLUS as Old Stage Estates (2005-06-03), and the comments are essentially unchanged.

The DHCA is opposed to this development because it is in State Investment Level 4, and will have an adverse effect on the remaining historic agricultural landscape in this area. It may also lead to the destruction of several archaeological sites. Although nothing is

known on the parcel at the moment, the Beers Atlas of 1868 shows a stream and a road through the area; both are now gone from the landscape. The E. Taylor House and the Mrs. Kersey House apparently stood along that road to the rear of the development parcel. In addition, there are areas of high and medium potential for prehistoric-period archaeological sites on the parcel.

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

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Gray Properties, LLC seeks to develop 80 single-family detached houses on an approximately 42.57-acre parcel (Tax Parcel 3-32-2.00-60.00). The subject land is located east of Laurel, and more specifically on the east side of Old Stage Road (Sussex Road 461) about 700 feet south of Delaware Route 24. The land is zoned AR-1 in Sussex County and it would be developed by right.

This development is proposed for an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies for State Policies and Spending* have deemed the type of development being proposed inappropriate for this area. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development proposal is approved, notwithstanding inconsistencies with the relevant plans and policies, DeIDOT will provide technical review and comments.

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

Investment Level 4 Policy Statement

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and county certified comprehensive plans. According to the *Strategies* this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure, as defined in Governor Minner's Executive Order No. 61, will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. DNREC encourages the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are: potential impacts to two of the three layers of green infrastructure (natural resource and recreation priorities and cropland), the project's location in an excellent recharge area, a high percentage (30%) of impervious cover, and the project's proximity to the James Branch Nature Preserve. While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will

receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

Green Infrastructure

Portions or all of the lands associated with this proposal are within the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61 that represents a network of ecologically important natural resource lands of special state conservation interest.

Green infrastructure is defined as Delaware's natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value. Preserving Delaware's Green Infrastructure network will support and enhance biodiversity and functional ecosystems, protect native plant and animal species, improve air and water quality, prevent flooding, lessen the disruption to natural landscapes, provide opportunities for profitable farming and forestry enterprises, limit invasive species, and foster ecotourism.

Voluntary stewardship by private landowners is essential to green infrastructure conservation in Delaware, since approximately 80 percent of the State's land base is in private hands. It is in that spirit of stewardship that the Department appeals to the landowner and development team to protect sensitive resources through an appropriate site design.

Soils

According to the Sussex County soil survey Evesboro and Klej were mapped in the immediate vicinity of the proposed construction. Evesboro is an excessively well-drained upland soil that has limitations associated with rapid permeability. Klej is a moderately well-drained soil of low-lying uplands that has moderate limitations for development.

Although most of the soils on subject parcel are fairly well drained, they have limitations associated with rapidly permeable sandy surface and subsurface horizons. Such soils are conducive to nutrient leaching via groundwater or surface runoff into the surrounding watershed. In soils containing shallow water tables or found in close proximity to water bodies, these impacts are greatly intensified.

Impervious Cover

Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline. Based on analyses of 2002 aerial photography by the University of Delaware, the Broad Creek watershed, at that time, had about 6.4 percent impervious cover. Although this data is about 4 years old and likely an underestimate, it illustrates the importance of a proactive strategy to mitigate for predictable and likely cumulative environmental impacts. Since the amount of imperviousness generated by this project will be much higher than the desirable watershed threshold of 10 percent, the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

Based on a review of the submitted PLUS application, the applicant projects that only about 30% of this parcel will be rendered impervious following this parcel’s development. However, this figure appears to be a significant underestimate given the scope and density of this project. The applicant should be made aware that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks and roads) should be included in the impervious surface calculation; otherwise, an inaccurate assessment of this project’s actual environmental impacts will result.

ERES Waters

This project is located adjacent to receiving waters of the Chesapeake Bay designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 5.6 of Delaware’s “Surface Water Quality Standards” (as amended July 11, 2004), specify that all designated ERES waters and receiving tributaries develop a “pollution control strategy” to reduce non-point sources of pollutants through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 5.6.3.5 of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree achievable and, where practicable, implementation of a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Broad Creek. 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 shellfish harvesting. In the Broad Creek watershed, “target-rate-reductions” of 30 and 50 percent will be required for nitrogen and phosphorus, respectively.

Compliance with TMDLs through the PCS

Significant nitrogen and phosphorus loading reductions must be realized from all sources, including onsite wastewater systems. The Department has developed performance-based standards for on-site wastewater treatment and disposal systems that have been presented as a part of the proposed Pollution Control Strategy (PCS). Upon promulgation of the proposed PCS regulation, new and existing wastewater disposal systems must reduce nitrogen and phosphorus loading in the Broad Creek watershed. Such reductions, known as “Performance Standards,” will require (where applicable) nitrogen and phosphorus loading not exceed average annual discharge concentration levels of 5 and 2 mg/l for nitrogen and phosphorus, respectively.

In the Broad Creek watershed, the primary source of water quality impairment is associated with nutrient runoff from agricultural and/or residential development. In order to mitigate for the aforementioned impairments, a post-development TMDL reduction level of 30 and 50 percent will be required for nitrogen and phosphorus, respectively. Compliance with the post-development TMDL nutrient loading reduction requirements will be assessed via nutrient budget protocol, a computer-based model that quantifies post-development nutrient loading under 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 this model, the development as currently conceived **does not** meet the TMDL nutrient reduction requirements for nitrogen and phosphorus. The applicant is strongly advised to consider the use of appropriate BMPs and Best Available Technologies (BATs) to ensure compliance. Examples of BMPs or BATs that should be used to significantly reduce nutrient loading from this project include practices that prevent or mitigate surface imperviousness, use of innovative or “green technology” stormwater methodologies, and compliance with wastewater system performance standards or, better yet, connection to central sewer. As mentioned previously, it is suggested that the applicant recalculate the projected amount of post-development

impervious cover on the basis of a more realistic assessment (see the impervious surfaces section) since surface imperviousness is an important variable in the nutrient budget calculation. We then suggest that the applicant verify their project's compliance (using the corrected impervious cover figure) 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 the project site falls partially within an excellent recharge area. Excellent recharge areas are areas where the aquifer may be adversely affected by land use activities or impervious cover.

The DNREC Water Supply Section recommends that the portion of the new development within the excellent recharge area not exceed 20% impervious cover. 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. However, the development should not exceed 50% regardless. A water balance calculation will be necessary to determine the quantity of clean water to be recharged via a recharge basin.

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.

The proposed development may increase the impervious cover from 0% to 30% as indicated on the PLUS form. Ideally, relocating any open space areas to the part of the parcel within the excellent recharge area would decrease the total impervious area in the excellent recharge area. Augmenting the groundwater recharge with clean rooftop run-off systems are another alternative to reducing the total impervious cover.

In addition, because the excellent recharge areas could be the source of public drinking water, the storage of hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.

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

<http://www.wr.udel.edu/swaphome/phase2/SWPguidancemanual.html>

and

Ground-Water Recharge Design Methodology

http://www.wr.udel.edu/swaphome/phase2/Publications/swapp_manual_final/swapp_guidance_manual_supp_1_2005_05_02.pdf.

Please contact John Barndt at 302.739.9945 for more information.

Water Supply

The information provided indicates that the Tidewater Utilities will provide water to the proposed projects through a central public water system. Our files reflect that Tidewater Utilities 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 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 Sussex Conservation District. Contact Sussex Conservation District at (302) 856-7219 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. Ponds may be used for additional quantity management if necessary. This site is located in an area designated to have excellent recharge potential; we suggest using open swale conveyance and providing stormwater management facilities throughout the site to take advantage of the recharge potential of the soil, reducing the total volume of runoff being released from the site.

Each stormwater management facility should have an adequate outlet for release of stormwater. Documentation of a permanent easement across adjacent parcels will be required if it is necessary to convey flow across another parcel to the discharge point. Again, due to the excellent recharge potential of the site, we recommend using an open swale rather than a closed pipe system to discharge runoff to promote recharge within the swale, further reducing the volume of discharge.

It is strongly recommended that you contact the Sussex Conservation District 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. As of July 1, 2005, a new two-step review process is now in place. The first step, referred to as the "Conceptual SWM Plan", does not require completion of the construction drawings for submission. Additional information, including checklists, regarding these new procedures is available on the Sediment & Stormwater Program Web site.

James Branch Nature Preserve

The proposed development directly abuts the James Branch Nature Preserve. Nature Preserve status is the highest quality and most important natural lands that remain in Delaware. Therefore, DNREC encourages the developer to re-design the development plan to provide a 100-foot vegetated buffer to the Nature Preserve. Further, please contact the Office of Nature Preserves (302-739-9235) if you are planning to discharge stormwater across the state Nature Preserve.

Open Space

The developer is encouraged to increase the designated buffer along James Branch Nature Preserve to 100 feet. This will provide adequate buffers for the forest and reduce homeowner disturbance to the Nature Preserve. The developer should seriously consider habitat improvements such as revegetating portions of this designated buffer. Planting of additional trees and shrubs can help improve water quality, would improve habitat and provide the community with additional aesthetic and recreational resources.

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.

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.

Rare Species

The Delaware Natural Heritage Program has not surveyed this parcel; therefore, a review of their database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at this project site. However, they have records of numerous rare species within James Branch and run-off from this development could be detrimental to water quality. Therefore, rigorous sediment and erosion control procedures should be implemented. A 100-foot buffer along the perimeter of the project will also aide in controlling run-off and trash from this development. If there are plans to create wildlife habitat in this buffer area, our botanist Bill McAvoy can be of assistance in drafting a plant list. Bill can be contacted at 302-653-2880.

Nuisance Waterfowl

Stormwater management ponds could attract waterfowl like resident Canada geese and mute swans. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel

safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with a reduction in the number and/or size of the ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Underground Storage Tanks

There are no LUST site(s) located near the proposed project. 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 6.1 tons (12,279.2 pounds) per year of VOC (volatile organic compounds), 5.1 tons (10,166.3 pounds) per year of NO_x (nitrogen oxides), 3.8 tons (7,500.9 pounds) per year of SO₂ (sulfur dioxide), 0.3 ton (667.7 pounds) per year of fine particulates and 513.6 tons (1,027,136.5 pounds) per year of CO₂ (carbon dioxide).

However, because this project is in a level 4 area, mobile emission calculations should be increased by 118 pounds for VOC emissions for each mile outside the designated growth areas per household unit; by 154 pounds for NO_x; and by 2 pounds for

particulate emissions. A typical development of 100 units that is planned 10 miles outside the growth areas will have additional 59 tons per year of VOC emissions, 77 tons per year of NOx emissions and 1 ton per year of particulate emissions versus the same development built in a growth area (level 1,2 or 3).

Emissions from area sources associated with this project are estimated to be 2.5 tons (4,952.7 pounds) per year of VOC (volatile organic compounds), 0.3 ton (545.0 pounds) per year of NOx (nitrogen oxides), 0.2 ton (452.2 pounds) per year of SO₂ (sulfur dioxide), 0.3 ton (583.6 pounds) per year of fine particulates and 10.0 tons (20,077.3 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.0 tons (1,962.9 pounds) per year of NOx (nitrogen oxides), 3.4 tons (6,827.5 pounds) per year of SO₂ (sulfur dioxide) and 503.5 tons (1,007,059.2 pounds) per year of CO₂ (carbon dioxide).

	VOC	NOx	SO ₂	PM _{2.5}	CO ₂
Mobile	6.1	5.1	3.8	0.3	513.6
Residential	2.5	0.3	0.2	0.3	10.0
Electrical Power		1.0	3.4		503.5
TOTAL	8.6	6.4	7.4	0.6	1027.1

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 1.0 tons of nitrogen oxides per year and 3.4 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: Duane Fox 302-856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal’s Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- 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.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

b. **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 Old Stage 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.

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

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

d. **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”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- 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, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Milton Melendez 698-4500

The proposed development is in an area designated as Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* and the Kent County Comprehensive Plan do not support this type of isolated development in this area. The intent of these plans is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes the proposed development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

More importantly, the Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware's resource industries - agriculture, forestry, horticulture - and the related industries they support. Often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. They oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation. This site is also designated as a "Good Recharge" area, meaning that the area has valuable ground water recharge qualities.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, they will support these efforts and work with developers to implement these measures. If this project is approved they will work with the developers to minimize impacts to the agricultural and forestry industries. This site is a part of a "good recharge" area. DNREC 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.

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

The proposal is to develop 80 units on 40 acres located on the east side of Old Stage Road, south of Route 24 and east of Laurel, adjacent to Sandy Ridge on the south and the James Branch Nature Preserve on the east. According to the *State Strategies Map*, the proposal is located in an Investment Level 4 area. As a general planning practice, DSHA encourages residential development only in areas where residents will have proximity to

services, markets, and employment opportunities, such as Investment Level 1 and 2 areas outlined in the State Strategies Map. Since the proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development, DSHA does not support this proposal.

Department of Education – Contact: John Marinucci 739-4658

DOE acknowledges and notes that this development is outside the development zone as identified in the *Strategies for State Policies and Spending*.

Accommodation of DelDOT and State Fire Marshal requirements for road widths, turning radii and fire lanes will address the needs of school bus access.

Request developer work with the local school district transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the local school district

Sussex County – Contact: Richard Kautz 855-7878

This fiscal year Sussex County will be considering implementation of a Source Water Protection Program required by the State. Depending on the requirements adopted by the County Council this project might be affected. Any well location should insure that the wellhead protection area is entirely on site.

Because this project is an AR-1 Cluster subdivision, the developer must include in the application a plan for the management of all open space. Also, the developer must document for the Planning and Zoning Commission how the proposed development: provides for a total environment and design which are superior to that which would be allowed under the standard lot option; preserves the natural environment and historic or archeological resources; and, will not have an adverse effect on any of the items included under Ordinance Number 1152 (County Code 99-9C). For example, the reduction of 80 lots from 20,000 sq. ft. to an average of 11,000 sq. ft. per lot allows for more than 16 acres of open space yet only 2 acres of "useable" open space is provided. As a result, many of the lots do not have direct access to open space. The remaining open space is that which would otherwise be required with or without the clustering (i.e. stormwater management, buffers, and utilities). These issues can be addressed by including in the application an explanation of how the developer plans to mitigate the issues raised by the State agencies.

The Sussex County Engineer Comments:

Proposed use is for 80 units on 40 acres, which results in a gross density of 2.0 units per acre. The project proposes to develop using a private central community wastewater system. We recommend that the wastewater system be operated under a long-term contract with a capable wastewater utility. In addition, we recommend they have a wastewater utility provider prior to approving the project. The proposed project is within any current Sussex County Engineering Department Planning Areas. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review and approval of the treatment and disposal system by the Sussex County Engineering Department is also required and plan review fees may apply. Disposal fields should not be counted as open space. Wastewater disposal fields should be clearly identified on recorded plots. A sewer concept plan review and approval will be required.

If Sussex County ever provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developers and/or homeowners association expense.

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".

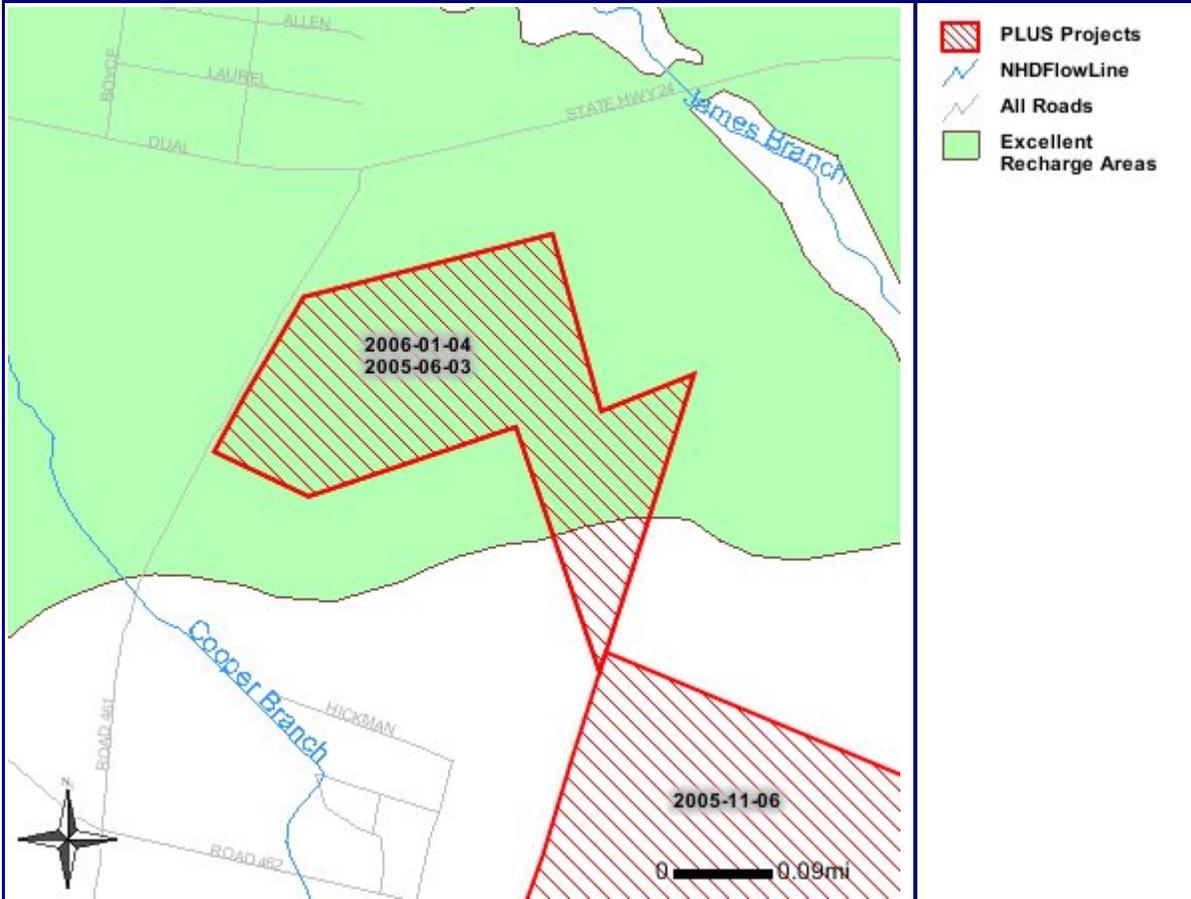
Constance C. Holland, AICP
Director

CC: Sussex County



Heritage Point

2006-01-04



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

