

September 1, 2005 –
TJFORD/LANDESIGN, inc
RESPONSE TO PLUS
COMMENTS



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

June 14, 2005

Mr. Richard Boyle Bethany Ridge, LLC Oak Square Professional Building Suite 1
Central Avenue Ocean View, DE 19970

RE: PLUS review – PLUS 2005-05-03; Bethany Ridge

Dear Mr. Boyle,

Thank you for meeting with State agency planners on May 25, 2005 to discuss the proposed plans for the Bethany Ridge project to be located on 104.32 acres on SCR 349 in Sussex County.

According to the information received, you are seeking to rezone the property from AR-1 to AR-1 Cluster to construct a residential development of 227 units in a Level 3 area.

These comments reflect only issues that are the responsibility of the agencies represented at the PLUS review meeting. Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. The developers must comply with any Federal, State and local regulations regarding this property. Specifically, 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

This section includes some site-specific highlights from the agency comments found in this letter and 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.***

Project Location

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This project is proposed for an Investment Level 3 area according to the *Strategies for State Policies and Spending* and the Environmentally Sensitive Developing Area according to the Sussex County Comprehensive Plan. In these areas, the State supports development that is sensitive to the natural environment. In this regard, we note the DNREC and Department of Agriculture comments specifically address forest preservation and protection of sensitive headwater wetlands on-site. There are no jurisdictional wetlands on this site. The forested areas comprise 25% of the total site acreage and we calculate that approximately 70% of existing cover shall be preserved post development. A letter from Environmental Resources, Inc. (ERI), is enclosed. ERI noted a one-acre isolated wooded wetland not subject to Corps' jurisdiction. Impact to this isolated wetland will be eliminated and ask that you consider design changes we have already made -to address these comments. An effort will be made to lessen impacts to existing forest.

Street Design

DelDOT recommends that stub streets be provided to the adjacent parcels to the east and west. The developers are uncomfortable opening the site to other unknown potential adjacent Communities and putting a potential future liability on the Homeowners Association. The privacy and containment of the Proposed Community is a design feature that is further reinforced by a 30' buffer between the adjacent properties to help contain and emphasis this private feature

The private access easement to the lands to the north should be clearly indicated on the plan and consideration should be given to making it a right-of-way and providing a stub street. DelDOT concerns are that the buyers of Lots 100 and 101 on either side be made aware of the potential for traffic there if those lands were to be redeveloped. The preliminary plan clearly states that this open area is reserved for a private access easement and shall be recorded as such. This access will not be improved with a paved street at this time.

The proposed cul-de-sacs on Grindstone Road and the west end of Meadow Way should be eliminated. These are looped roads and not typical cul-d-sac roads. Characteristically these roads have been conventional features of land plans for decades and desirable locations within developments for many homeowners seeking the benefits of low traffic volume, vehicular speed and accompanying safety for children associated with such. The lengths of the roads are within reasonable standards and provide alternative no thru traffic homesites readily accessible to the main traffic pattern.

Natural/Cultural Resources

USGS 1991 Geological Survey maps show a blue line stream present on site. This stream is shown as a drainage outfall on site plans. This matter should be discussed with DNREC and the U.S. Army Corps of Engineers to determine any jurisdictional issues. A jurisdictional determination has been issued by the Philadelphia District USACE- November 20th, 2002 and it has been determined as a non-jurisdictional area. See attached Addendum from Environmental Resources, Inc. dated Sept. 21, 2005 which field verifies their findings concerning this DNREC issue.

_____ The parcel borders or contains headwater riparian wetlands which eventually

drain to the environmentally-sensitive Inland Bays. The developer should make every effort to protect these wetlands. For example, a 100-foot buffer width is considered the minimum acceptable distance from all wetlands and waterbodies, including ditches. (see attached letter from ERI). Riparian wetlands or water bodies do not exist on this property. ERI identified a one-acre isolated wooded wetland which we intend to maintain in its current state.

This office has received the following comments from State agencies:

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

This project is proposed for an Investment Level 3 area according to the *Strategies for State Policies and Spending* and the Environmentally Sensitive Developing Area according to the Sussex County Comprehensive Plan. In these areas, the State supports development that is sensitive to the natural environment. In this regard, we note the DNREC and Department of Agriculture comments specifically address forest preservation and protection of sensitive headwater **wetlands on-site**, and ask that you **consider design changes to address these comments.** Please refer to above comment on forest preservation.

State Historic Preservation Office (SHPO) – Contact Alice Guerrant 739-5685

The State Historic Preservation Office opposes this development because of the **loss of the historic agricultural landscape in the area.** Historic agricultural practices have contributed significantly to the eutrophication of the inland bays. The development conversion of this land for residential use will provide Central sewer and be engineered with the best available technology's for storm water; lowering nutrient loadings on the bays. It is our assertion that this application is appropriate to this locale and is supported by infrastructure, the Comprehensive Land Use Plan, the State Strategies for Policies and Spending, is a "By Right" cluster plan within the guidelines of density for its zoning classification, as well as reflecting past and current development trends. In addition the Department of Agriculture **does not oppose** this development.

_____ There is a historic farmstead (S-2536) recorded within this parcel which will be demolished as part of the project. Beers Atlas of 1868 shows two houses, the J. Dickerson House and the Mrs. Cannon House, on a road section that is no longer in existence on the parcel. There is also a small area of medium potential for a prehistoric archaeological site near the head of the water course. The SHPO requests an **opportunity to document the farmstead and to locate any sites that may be within the parcel.** ACorps of Engineers' permit will not be required for this project. The project contains no water courses (see ERI letter)The developer is willing to provide an opportunity for the State Historic Preservation Office (SHPO) to document existing structures associated with the farmstead on this property prior to demolition. However, the SHPO must complete their work in a timely manner so as not to delay our

construction schedule and at no cost to the developer

Department of Transportation – Contact Bill Brockenbrough 760-2109

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- 1) Old Mill Road is classified as a local road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. DeIDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from centerline on local roads. Therefore we will require right-of-way dedication along the frontage to provide any additional width needed from this project. Will Comply. The existing R.O.W. is presently 50'. A dedication of 5' along the frontage shall provide for the 30' from centerline as indicated.
- 2) DeIDOT will also require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site. Will Comply with this request however to do so will involve the removal of additional forest cover along +/- 800 lin.ft..
- 3) DeIDOT recommends that stub streets be provided to the adjacent parcels to the east and west. Unless required by Sussex County P&Z Commission this development is comprised of private streets. The privacy and containment of the Proposed Community is a design feature that is further reinforced by a 30' buffer between the adjacent properties to help contain and emphasis this private feature.
- 4) The private access easement to the lands to the north should be clearly indicated on the plan and consideration should be given to making it a right-of-way and providing a stub street. DeIDOT concerns are that the buyers of Lots 100 and 101 on either side be made aware of the potential for traffic there if those lands were to be redeveloped. Final documents shall record a statement that this area is to remain as access to the properties north of this development. Physical road improvements of this section of access will be an option by those entitled to use such.
- 5) DeIDOT also recommends that the proposed cul-de-sacs on Grindstone Road and the west end of Meadow Way be eliminated. They understand that cul-de-sacs are necessary in some instances to make efficient use of the land where there are environmental constraints. However, they are not conducive to good traffic flow or a sense of community. Where possible they should be eliminated. The streets referred to above are purposefully designed for low volume, low speed and for the accommodation of the few homes contiguous with such. High volume is not an issue for these streets and there proximity doesn't interfere with good traffic flow within the remainder of the Community. The designer asserts that they are conducive to a sense of Community. A small street with few homes sharing a central low volume access tends to influence neighbors to socialize and children to utilize the pavement for various uses other then vehicular use. These tight pockets of neighbors make up portions of the overall Community and

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are very desirable by many individual homeowners. In addition these short length streets are not typical dead-end cul-d-sac designs whereas they are looped streets, creating a central green space, and easing the turning radius of large service vehicles.

- 6) DeIDOT is presently developing plans for the improvement of Route 26 from Clarksville to the Assawoman Canal. This project includes widening Route 26 to provide an 11-foot travel lane and a 5-foot paved shoulder in each direction, rehabilitating and adding curb and sidewalks from Whites Creek to the Canal, identifying driveway entrances, and providing left turn lanes on Route 26 at major intersections and other strategic locations. It also includes realigning the Clarksville intersection and the Central Avenue intersection and installing a new signal on Route 26 at West Avenue. On May 9, DeIDOT held a workshop regarding the latest plans for this project, which feature a center left turn lane on the eastern third of the project. The plans were generally well received and DeIDOT is moving forward with the development of construction plans on that basis, with a goal of beginning construction in the spring of 2008. We are pleased that DELDOT has commenced plan development of these improvement plans on Rte.26. This developer has voluntarily committed substantial funds over and above the required roadway and entryway improvements identified from a Traffic Impact Study that will help offset the above cost of infrastructure improvements. The developer recognizes the importance and obligation to maintain traffic flow along Rte.26.
- 7) **A traffic impact study (TIS) was completed in 2003 for two developments known collectively as Bay Forest. Both developments involved rezonings from AR-1 to MR-RPC. One of the two developments, known as Bay Forest Club, was located**

on the northeast corner of Old Mill Road and Whites Neck Road. The rezoning for it was approved and that development is proceeding. The other development, known as Bay Forest West, was proposed for the subject land. The rezoning for it was denied. For clarifying the record: Bay Forest West was approved by Sussex County Planning and Zoning Commissioners unanimously; however denied by County Council as an RPC application. Since the prior hearing and decision the County has passed a cluster ordinance which allows this application "By Right" to be heard as a subdivision by the Planning and Zoning Commission solely.

Because the TIS contemplated 244 lots on the subject land and the number now proposed is quite similar albeit slightly lower, it seems reasonable to us to apply the recommendations from our review of the 2003 proposal to the current proposal. The recommendations from the TIS that are still relevant to the subject land are as follows:

- a)Prior to the issuance of building permits, the developer should be required to

- develop plans for the Route 26 and Irons Lane intersection. The plans should be of sufficient detail to determine whether the improvements can be built within the existing right-of-way. The improvements should include separate southbound Irons Lane left-turn and right-turn lanes. To the extent that the improvements can be built within the existing right-of-way or additional rights-of-way can be obtained, the developer should be required to build those improvements in conjunction with the site entrance construction. If no significant improvements can be implemented because of the right-of-way limitation, the developer should be required to enter into an agreement with DelDOT whereby funds equaling the cost of the recommended improvements would be **escrowed** for use in a future DelDOT project to improve the intersection. Will comply.
- b) Prior to the issuance of building permits, the developer should be required to **enter into an agreement with DelDOT**, whereby the developer would fund there equitable share of traffic signals at the intersection of Irons Lane and Route 26. The costs shall include pedestrian signals and crosswalks at DelDOT's discretion and all costs associated with coordinating this signal with others along Route 26. Will comply
- c) Prior to the issuance of building permits, the developer should be required to enter into an agreement with DelDOT, whereby the developer would fund the addition of improvements to DelDOT's currently planned Route 26 improvements at the intersections of Route 26 and Old Mill Road and Route 26 and Central Avenue. *The improvements to be funded shall be at DelDOT's discretion but shall be limited to work that would directly serve traffic generated by Bethany Ridge and work that would allow more signal time to be allocated to movements that do so.* Will comply.
- d) As part of the entrance design, the developer should be required to provide space for a concrete pad at the future location of a bus shelter. The space should be provided in a location acceptable to the Delaware Transit Corporation. Will comply. In addition, since our first meeting with the PLUS professionals, we have been made aware that an adjacent application has been made for a sub-division directly across the Old Mill Rd. and we have re-designed the entrance alignment to Bethany Ridge to coordinate both sub-divisions at aligned intersections. This should ease DELDOT concerns of these entryways and associated improvements being mis-aligned.
- e) **Coincident with the street construction, the developer should be required to provide pedestrian and bicycle facilities internal to the site to promote walking and bicycling. All streets shall be closed section with sidewalks on both sides of the road. In addition a multi-use path shall weave through the open space areas**
- 8) The developer's site engineer/landscape architect should contact the DelDOT Subdivision Manager

for Sussex County, Mr. John Fiori, regarding their requirements for drainage and access. Mr. Fiori may be reached at (302) 760-2260. Will comply.

The Department of Natural Resources and Environmental Control Contact Kevin Coyle 739-3091 Soils

According to the soil survey update Fort Mott, Downer, Ingleside, Hammonton, Pepperbox, and Hurlock were mapped in the immediate vicinity of the proposed construction. Fort Mott, Ingleside and Downer are well-drained upland soils that, generally, have few limitations for development. Hammonton and Pepperbox are moderately well-drained soils of low-lying uplands that have moderate limitations for development. Hurlock is a poorly-drained wetland associated (**hydric**) soil that has severe limitations for development.

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine forested and palustrine emergent wetlands on site. USGS 1991 Geological Survey maps show a blue line stream present on site. This stream is shown as a drainage outfall on site plans. This matter should be discussed with **DNREC and the U.S. Army Corps of Engineers to determine any jurisdictional issues.** (see letter from ERI). The site has a current jurisdictional determination letter from the Philadelphia District, Corps of Engineers. No jurisdictional waters or wetlands including streams or farmed wetlands are present on the property. Riparian wetlands are, therefore, not present. An isolated, forested wetland approximately one acre in size, not subject to the Corps' Regulatory Program, will be retained within open space.

Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Lots should be removed in their entirety from the wetland, wetland buffers and the forested areas. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from **unauthorized and/or illegal activities and disturbances that can be caused by homeowners.** Not applicable.

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether the farmed wetlands on subject parcel meet the recognized criteria for classification as "prior converted wetlands." —Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous "fallow period" of five years or greater in that parcel's cropping history. Parcels converted after said date regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel's cropping history is Sally Griffin at the USDA – she can be reached at 678-4182. Not applicable, see above response.

It should also be noted that this parcel borders or contains headwater riparian wetlands which eventually drain to the environmentally-sensitive Inland Bays. Headwater riparian wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system and/or waterbodies (Inland Bays) further downstream. There are no headwater riparian wetlands on or immediately adjacent to this site. **In recognition of this concern, the Department strongly recommends that the applicant preserve as much of the existing natural buffer as possible, including any immediately adjoining forested uplands. Otherwise a 100-foot buffer width is considered the minimum acceptable distance from all wetlands and waterbodies (including ditches).** In cases where natural buffer vegetation has been removed or reduced by past development or farming activities, the developer is encouraged to restore/establish to said buffer width or greater with native herbaceous and/or woody vegetation.

Stormwater Management ponds should also be at least 100-feet from all wetlands and waterbodies. Not applicable-riparian wetlands are not present on this site

Wetland Permitting Information

Impacts to wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process. Impacts to streams and associated riparian wetlands, including road crossings, are regulated by the DNREC Wetlands and Subaqueous Lands Section, and by the Corps of Engineers.

Site plans indicate that a road crossing will run through the stream on site. Impacts to streams and associated riparian wetlands, including road crossings, are regulated by the Subaqueous Land Section from DNREC Division of Water Resources and the Army Corps of Engineers. No regulated waters, including wetlands have been found on-site. (see ERI letter).

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) 739-4691 to schedule a meeting.

ERES Waters

This project is located adjacent to receiving waters of the Inland Bays designated as having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State. Section 11.5 of Delaware's "Surface Water Quality Standards" (as amended August 11, 1999), specifies that all designated ERES

waters and receiving tributaries have a "pollution control strategy" to reduce non-point sources of nutrient runoff. Subsection 11.5(e) expressly authorizes the Department to provide standard Best Management Practices (BMPs) for controlling, reducing, or **eliminating** the discharge of pollutants to the greatest degree practicable or attainable. Will comply

TMDLs

Adoption of Total Maximum Daily Loads (TMDLs) as a nutrient-runoff-mitigation strategy for the Inland Bays Watershed makes reduction of nitrogen and phosphorus loading mandatory. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are authorized under federal code, states are charged with developing and implementing standards to support these desired use goals. The jurisdictional authority for these use goals falls under Section 11.5 of the Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as "pollution control strategies."

Nutrient reductions are assigned on the basis of water quality concerns. Regions of greatest environmental concern will require higher levels of nutrient reduction than those deemed less environmentally sensitive. In the subject watershed, regions are demarcated as high and low reduction zones. The high reduction zone is in the western part of the watershed and requires nitrogen and phosphorus reduction by 85 and 65 percent, respectively. The low reduction zone is in the eastern part of the watershed and requires a reduction of nitrogen and phosphorus by **40 percent. This project is proposed within the low nutrient reduction zone. This project will be serviced by the South Coastal Sewer Treatment plant and thus an ocean outfall securing the elimination of nutrients due to waste water.**

This project is proposed within the low nutrient reduction zone and the applicant plans to remove a considerable portion of the existing forest cover. 30% of the forest cover is projected for removal with 70% preserved. This may reduce the possibility for attaining the required TMDL loading-rate reduction for phosphorus. It is strongly recommended, and may in fact be required, that the applicant consider placing greater emphasis on the retention of native forest cover. Research has shown that there is usually a large increase in sediment-bound phosphorus following extensive forest clearing activities.

In order to verify compliance, a full nutrient accounting process known as nutrient budget should be prepared by the applicant. Lyle Jones in the Department's Watershed Assessment Section can be contacted at (302) 739-4590 for further information regarding the acceptable protocol for calculating a nutrient budget. This protocol is presently undergoing significant revisions.

Water Supply

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. 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. Dewatering well permit applications take approximately four weeks to process. Questions concerning these comments can be directed to Rick Rios, (302)739-3665. Will comply.

Sediment and Erosion Control/Stormwater Management

- 1) 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 and construction inspection will be coordinated through the Sussex Conservation District. Contact Jessica Watson, Program Manager, at (302) 856-7219 for details regarding submittal requirements and fees. Will comply.
- 2) It is strongly recommended that the applicant contact the Sussex Conservation District to schedule a pre-application meeting to discuss 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. Will comply.
- 3) 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. Will comply.
- 4) Applying practices to mimic pre-development hydrology, promote recharge, maximize the use of existing natural features, 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. Will comply.
- 5) Each stormwater management facility should have an adequate outlet for release of stormwater. Any drainage conveyed onto this site from neighboring properties must be adequately conveyed through the site to the discharge point without interruption. Will comply.
- 6) Clearly address how stormwater quality and quantity treatment will be provided. If the project is eligible for a Quantity Waiver, make the request in the stormwater narrative citing the specific regulation. Will comply.
- 7) Indicate on the sediment and stormwater management plan who shall be responsible for maintenance of the stormwater management facilities both during and after construction. The design of the sediment control and stormwater management plan, considerations should consider maintenance of any structures or facilities. Will

comply.

- 8) If a stormwater management pond is going to be utilized as a sediment trap/basin during construction it must be designed to accommodate 3,600 cubic feet of storage per acre of contributing drainage area until project stabilization is complete. Will comply.
- 9) All ponds are required to be constructed per pond code 378. Will comply.
- 10) If stormwater facilities will impact wetlands, a permit must be provided to the District prior to receiving approval. Not applicable.
- 11) A Certified Construction Reviewer (CCR) is required for this project. Will comply.
- 12) The District will require a phased plan and sequence of construction for this project. DNREC regulations require no more than 20 acres to be disturbed at more time. Please address. Will coordinate with the district during the implementation of the project.
- 13) Under the DNREC Health and Safety Memo of 2000, all wet ponds are required to have an open space depth of 3 feet or more that comprises 50-75 percent of the area of the pond. Will comply.
- 14) Consideration should be made for any adjacent properties during the design of this project, including drainage and erosion/sediment control. Will comply.

Drainage- will comply

The Drainage Section recommends that all ditches on the property be checked for function and cleaned if needed prior to construction. Wetland permits may be required before cleaning ditches.

Precautions should be taken to ensure the project does not hinder any off-site drainage upstream or create problems downstream by the release of on-site storm water.

The Drainage Section strongly recommends any drainage conveyance between two parcels within the subdivision be dedicated as passive open space drainage easements and not owned by individual landowners. The easements should be of sufficient width to allow future drainage maintenance as follows.

- 1) Along an open ditch or swale, a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured from top of bank on the non-maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be

native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.

- 2) Along stormwater pipe, a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffer to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

The Drainage Section recommends any drainage/utility easements not have structures, decks, buildings, sheds, kennels, fences or trees within them allow for future drainage maintenance.

Forests

According to 2002 aerial photos there is a forested area in parcel. The PLUS application indicates that 4.82 acres will be removed for development. The forest provides important riparian habitat, wildlife connectors, and air quality and water quality benefits. This forest tract is extremely beneficial to the region. Fragmentation (not) of this forest can have irreversible effects to the regional ecosystem.

A large continuous area of forest is recommended over small and disconnected areas of open space for wildlife habitat and forest preservation. Forest fragmentation separates wildlife populations, increases road mortality, and increases "edge effects" that leave many forest-dwelling species vulnerable to predation and allow infiltration of invasive species. There are no large tracts of contiguous forest on this site however the site does have forest cover in the northern portion of the site that directly connects to a larger more extensive adjacent cover from which we have removed proposed lots to lessen the affects of clearing and fragmentation on this section. This project impacts only edges of existing forest blocks in a limited manner and, as such, it does not result in fragmentation or results of which as indicated above.

Forested areas set aside for conservation purposes should be placed into permanent conservation easements or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe them.

Open Space

Large open spaces abutting back yards are not well used by the community and are expensive to maintain. It is recommended that most open space be placed along the wooded area and that plans incorporate forest and meadow restoration. This will

increase its value for birds and wildlife and create recreational opportunities for residents by enhancing access and views of the forest. It will also reduce the long term cost of open space maintenance for the community. The plan calls for 2.67acs. of reforestation. Lot lines were laid out in respect for existing paddock fence lines where tree growth has occurred and will be preserved.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and homeowner activities do not infringe upon them. Covenants and Conditions shall provide guidelines on the management of these areas.

Rare/Threatened/Endangered Species

DNREC has not surveyed this site and has no record of state-rare or federally listed plants, animals or natural communities at this project site. However, tiger salamander (*Ambystoma tigrinum*) and purple mecardonia (*Mecardonia acuminata*) occur in adjacent forested wetlands and may also be present on the subject site. While rare in Delaware, the tiger salamander and purple mecardonia are, in fact, globally secure species and are not federally listed. These species rely on wetlands for their habitat needs.

The project site does not contain regulated wetlands. A small isolated wooded wetland depression exists on the property within an open space area. All impacts to the unregulated wetland have been eliminated as per our latest site plan.

Potential Hunting Issue

Because portions of this project area are part of a larger forest block, legal hunting activities may take place on adjacent properties. Hunting within 100 yards of a dwelling is prohibited. The applicant should contact adjacent landowners whom may be lose 100 yards of property for hunting if a buffer is not provided between lot lines and adjacent property lines. There is a minimum 30' buffer between all adjacent lands and the seller of this land owns the greater portion of adjacent lands it is contiguous with.

Nuisance Geese

Ponds that remain in the subdivision will likely attract waterfowl like resident Canada geese and mute swans. Because this is a mixed residential community, typical methods of goose control utilized on golf courses are not advisable. The best method would be one of prevention. Native tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around the perimeter are recommended. Waterfowl do not feel safe when they cannot possible predators in the surrounding area. It is easier to control a few geese than to remove a plentiful population. Planting should be completed as soon as possible. The Division of Fish and Wildlife does not provide goose control services and residents will have to accept this burden (for example permit applications and fees, securing services of certified wildlife professionals). Solutions can be costly and labor

intensive. Reducing the number and/or size of ponds and providing proper landscaping and monitoring techniques will minimize nuisance geese.

Recreation

DNREC positively notes pathways with access to recreation amenities are planned throughout the community. A passive network of trails connects the community to the roadside path and other off-site destinations. Long, continuous, perimeter-only trail systems with few access points often go unused and neglected. Pervious, low-maintenance surface, such as crushed stone, is recommended. For trail design/construction specifications, contact Susan Moerschel, (302) 739-9235.

The plan provides several recreation opportunities for this community, fulfilling many facility needs outlined in the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP). The high facility needs in Eastern Sussex County are Walking and Jogging, Bike Paths and Fishing Areas. The moderate facility needs are Picnic Areas, Skate Facilities, Canoe/Kayak Access, Hiking Trails, Swimming Pools, Playgrounds, Soccer Fields, Tennis Courts, Power Boat Access and Baseball/Softball Fields. For additional information about the outdoor recreation priorities, contact Bob Ehemann at (302) 739-9235.

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact it will have on existing landfill capacity, the applicant is requested to estimate the amount of solid waste that will be generated as a result of construction and occupancy of this development.

Delaware State Housing Authority – Contact Jimmy Atkins 739-4263

This proposal is to develop 227 units on 104 acres located on the north side of Old Mill Road, west of Whites Neck Road, north of Millville. The proposal is located in the Level 4 area and outside of Sussex County's growth zone. It is located within Level 3 and is serviced by sewer and water. As a general planning practice, DSHA encourages residential development 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 for Policies and Spending. The proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State has planned for new residential development. This is inaccurate.

Department of Education – Contact Nick Vacirca

It is estimated that 227 dwelling units will generate 114 additional students for the Indian River School District. Sussex County does not have school concurrence legislation at this time. We recommend that the developer submit a package to the school district for

informational purposes. Will comply

If the development is approved and built, please use the following information for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), developers should plan wide enough streets so that large school buses can access and turn around without backing from the furthest areas within the development. Should there not be any homes more than 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be made. The developer should work closely with the school district transportation supervisor. Will comply.

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

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 central water system will be provided through Tidewater Utilities Company. The service pressure will exceed 1,000 gpm for a one-hour duration at an operational pressure of 20psi as required. The applicant will meet with SFMO prior to preparing plans. Plans meeting SFMO requirements will be submitted depicting line types, sizes, and hydrant locations as well as fire lanes and signs.

1) Fire Protection Water Requirements:

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly)
- ¾ Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
- ¾ Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

2) Fire Protection Features: All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.

- ¾ Buildings greater than 10,000 sq.ft., 3-stories of more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- ¾ Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- ¾ Show Fire Lanes and Sign Detail as shown in DSFPR

3) 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 Mill 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.

4) Gas Piping and System Information Provide type of fuel proposed, and show size and location of bulk containers on plan.

5) Required Notes Provide a note on the final plans submitted for review to read " All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations"
 Proposed Use Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units Square footage of each structure (Total of all Floors) National Fire Protection Association (NFPA) Construction Type Maximum Height of Buildings (including number of stories) Townhouse 2-hr separation wall details shall be shown on site plans Note indicating if building is to be sprinklered

Name of Water Provider

- ¾ Letter from Water Provider approving the system layout
- ¾ Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- ¾ 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 www.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures. Will comply

Department of Agriculture - Contact Mark Davis 739-4811

The Delaware Department of Agriculture does not oppose this development located in the Level 3 area.

Right Tree for the Right Place

The Department of Agriculture encourages the developer to use the "Right Tree for the Right Place" concept in any design considerations. This concept outlines the proper placement of trees to increase property value and reduce heating and cooling costs by an average of 20 to 35 dollars per month. A landscape design that uses this approach reduces maintenance costs to property owners and ensures a lasting forest resource. Will comply.

Native Landscapes

The Department of Agriculture encourages the developer to use native trees and shrubs to buffer the property from adjacent land-use activities near the site. A Large perimeter natural buffer has been accommodated within the site plan layout with a min. spacing of 30' at the narrowest point. A properly designed forested buffer can create wildlife habitat corridors, clean our rivers and creeks of storm-water run-off pollutants, and improve air quality to the area by removing six to eight tons of carbon dioxide annually. To learn more about acceptable native trees and how to avoid plants considered invasive to local landscapes, contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Tree Preservation

The Department of Agriculture encourages the developer to implement tree preservation activities to ensure the health and vigor of the resource. Will comply. Trees are affected by compaction of soils during the construction process; guidelines established by the International Society of Arboriculture (ISA) serve to lessen this impact and provide increase value to the site.

Tree Mitigation

The Department notes the relocation of the on-site waste-water system and understands the challenges of its design and placement. It is acknowledged that tree removal will be necessary to this aspect of the development. The Forest Service encourages the developer to implement tree mitigation at a 1:1 ratio within the site to replace trees lost in construction.

Public Service Commission - Contact Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must comply with Federal Pipeline Safety guidelines. Will comply

Delaware Emergency Management Agency – Contact Don Knox 659-3362

Due to the large number of residential units being proposed, a significant impact to public safety is foreseen by implementation of this project. The developer should notify the police, fire service, and emergency medical response organization serving this portion of Sussex County to keep them apprised of all development activities. This area could experience possible flooding from a category 3 or greater hurricane. Routes 26, and 113 are coastal storm evacuation routes and this development will be affected by traffic volume on these routes during a coastal storm event. Will comply

Sussex County – Contact Richard Kautz 855-7878

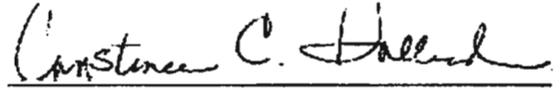
This project is situated in an Environmentally Sensitive Development Area. The required report should include how the PLUS comments have been addressed and how the plan has been revised accordingly.

The Sussex County Engineer comments that the proposed project is within the North Millville Expansion of the Bethany Beach Sanitary Sewer District. Service is currently scheduled to be provided by November 2008. The project request is for 227 units on 104 acres resulting in a gross density of 2.18 EDUs/acre. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications, as well as the South Coastal Area Planning Study (Update 2004). For questions regarding these comments, contact Chris Calio, Sussex County Engineering Department at (302) 855-7839 Will comply.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely



Constance C. Holland, AICP Director

CC: Sussex County