



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

July 15, 2004

Mr. Tom Ford  
Land Design  
Oak Square, Suite 3  
Central Avenue  
Ocean View, DE 19970

RE: PLUS review – PLUS 2004-06-12; Indigo Run

Dear Mr. Ford:

Thank you for meeting with State agency planners on June 30, 2004 to discuss the proposed plans for Indigo Run project to be located on 335.48 acres on De. Rt. 5 at SCR 303A and SCR 302, and adjacent to Unity Branch.

According to the information received, you are seeking a rezoning through Sussex County from AR-1 to AR-RPC for a residential subdivision consisting of 455 residential units.

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.

This office has received the following comments from State agencies:

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

The Office of State Planning Coordination notes that this proposal is located within the “Investment Level 4” area according to the draft 2004 *Strategies for State Policies and Spending* (endorsed by the Cabinet Committee on State Planning Issues and awaiting final approval by Governor Minner). In Investment Level 4 areas, the State’s policies

support preservation of agricultural and natural resources. It is also located in the low density area of the Sussex County Comprehensive Plan.

If the developer proceeds with a development on this site, we strongly encourage modifying the site plan to create a true conservation design that addresses the issues raised by DNREC regarding wetlands, buffers and general protection of natural resources. We encourage you to incorporate the techniques and core values discussed in our recent publication *Better Models for Development in Delaware*.

**State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685**

This project is proposed for the Rural Area; therefore SHPO does not favor the development. There is a cemetery located south of the east side of the development, north of Harmons Hill Road. The applicant and developers should be aware of the Delaware Unmarked Human Remains Act (7 Del Code 54). If any unmarked human remains are discovered during construction, they should contact Faye Stocum in our office at 302-739-5685. During the PLUS meeting, the developers said that the older house on the southeast corner of the development is no longer standing, only the foundation remains. There is a high probability for archaeological sites within the subject property.

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

Because the development is proposed for a Rural Area, it is inconsistent with the Strategies for State Policies and Spending. Therefore DelDOT will not participate in the cost of any road improvements needed to support this development. The comments that follow are technical, and are not intended to suggest that DelDOT supports this development proposal.

DelDOT received a traffic impact study for this project on November 12, 2003 and they expect to comment to Sussex County regarding it in July.

DelDOT does recommend that sidewalks be provided throughout the community to encourage walking.

DelDOT does see opportunities for stub streets to connect this project to the lands just south of it. Because the development is proposed for a Rural Area, DelDOT will suggest that those lands not be developed either. However, they recommend that the stub streets be provided in case the lands are proposed for development.

The applicant's engineer should continue to coordinate with the DelDOT Subdivision Manager for Sussex County, Mr. John Fiori, regarding the DelDOT requirements with regard to the design of the site entrances. Mr. Fiori may be reached at (302) 760-2260.

**The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-3091**

## Soils

According to the soil survey update, the following soils were mapped in the immediate vicinity of the proposed construction:

Well drained – Downer & Fort Mott/Henlopen complex

Somewhat well drained – Rosedale & Ingleside

Moderately well drained - Pepperbox

Somewhat poorly drained (**potentially hydric**) – Klej & Aquic Udorthents

Poorly drained (**hydric**) – Hurlock & Askecksy

Downer & Fort Mott/Henlopen complex are well-drained upland soils that, generally, have few limitations for development. Rosedale and Ingleside are somewhat well-drained soils that, generally, have few limitations for development. Pepperbox is a moderately well-drained soil that has moderate limitations for development. Klej and Aquic Udorthents Klej are transitional soils that contains both hydric (indicative of wetlands) and non-hydric (upland) soil components; development limitations range from moderate to severe depending on the site specific water table occurrence. Hurlock and Askecksy are poorly-drained wetland associated (hydric) soils that have severe limitations for development.

## Wetlands

The proposed development is bordered on the north by Unity Branch. State wetland maps (SWMP) indicate the presence of Palustrine wetlands bordering this stream.

**A wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified by the Corps of Engineers through the Jurisdictional Determination process.**

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.

Streets and lots should be laid out so as to not cross or intersect wetland areas or forested areas. DNREC recommends that vegetated buffers of no less than 100' be employed around wetlands and waterbodies. Site plans show that lot lines infringe into forested wetlands and/or their buffer areas. To minimize potential homeowner activities within wetlands, no lot lines should contain wetlands, their buffers or other resources of conservation concern.

Further, it is 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.

It should also be noted that this parcel contains sensitive headwater riparian wetlands associated with a headwater stream known as the Unity Branch. Headwater streams 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 downstream. Since headwater streams are a major avenue for nutrient-laden stormwater and sediment runoff, their protection deserves the highest priority. **In recognition of this concern, the Department strongly recommends that the applicant preserve the existing natural forested buffer adjacent to the Unity Branch in its entirety. Efforts to maximize or expand the existing natural buffer width via planting of native woody or herbaceous vegetation beyond the recommended 100-foot buffer width, is strongly recommended.**

### **ERES Waters**

This project is located adjacent to receiving waters of Inland Bays 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 11.5 of Delaware’s “Surface Water Quality Standards” (as amended August 11, 1999), specify that all designated ERES waters and receiving tributaries develop a “pollution control strategy” to reduce non-point sources of nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 11.5(e) of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

### **TMDLs**

With the adoption of Total Maximum Daily Loads (TMDLs) as a “nutrient-runoff-mitigation strategy” for reducing nutrients in the Inland Bays Watershed, reduction of nitrogen and phosphorus loading will be mandatory. A TMDL is the maximum level of pollution allowed for a given pollutant below which a “water quality limited water body” can assimilate and still meet water quality standards to the extent necessary to support

use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are authorized under federal code, states are charged with developing and implementing standards to support those desired use goals. The Jurisdictional authority for attaining these use goals will fall under the auspices of Section 11.5 of the State of Delaware's Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as "pollution control strategies."

Nutrient reductions prescribed under TMDLs are assigned on basis of water quality concerns – that is, those regions deemed to be of greatest environmental concern will require correspondingly higher levels of nutrient reduction than those regions deemed less sensitive. In this watershed, these regions are demarcated as high and low reduction zones. The high reduction zone corresponds to the western portion of the watershed, and requires a reduction of nitrogen and phosphorus by 85 and 65 percent, respectively. The low reduction zone corresponds to the eastern portion of the watershed, and requires a reduction of nitrogen and phosphorus by 40 percent. **This project is proposed within the low nutrient reduction zone.**

**In order for the applicant to verify compliance with the TMDL mandate, a full nutrient accounting process known as nutrient budget should be prepared. The developer/consultant should contact Lyle Jones in the Department's Watershed Assessment Section for further information regarding the acceptable protocol for calculating a nutrient budget. He can be reached as 739-4590.**

In recognition of the need to make further reductions in subsurface wastewater nutrient discharges (mainly nitrogen) to meet the existing TMDL mandate, the Department is currently pursuing efforts to implement more stringent onsite wastewater performance standards for all systems sited within the Inland Bays watershed. Although these standards are still pending development, they are expected to be codified into regulations in the near future. Therefore, until these regulations are fully promulgated, the Department strongly recommends the applicant implement the "best available technologies" (BATs) to pretreat or reduce all "end of pipe" nitrogen discharges to a level that meets or exceeds the 10 mg/l Federal drinking water standard.

### **Water Supply**

The project information sheets state water will be provided to the project by Artesian Water Company and/or Tidewater Utilities via a central water system. DNREC files reflect that Artesian Water Company and/or Tidewater Utilities do not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. Either one of them 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.

### **Stormwater Management**

Review and approval of the sediment and stormwater plan for this project will be handled by Sussex Conservation District. Contact Jessica Watson, Program Manager, at (302) 856-7219 to schedule a pre-application meeting as soon as possible.

The preferred methods of stormwater management are those methods that promote recharge of stormwater such as open swales, bioretention, and infiltration. Runoff may be directed to open spaces that are planted with infrequently mowed meadow grasses as a stormwater management practice.

The Sediment and Stormwater Program has expressed concern that the runoff from the biofiltration swale areas proposed along Unity Branch may become erosive as it flows over the slope. Please consider conveyance down the slope during the design of the biofiltration swales.

### **Habitat**

Based on review of topographic maps, aerial photographs, and because they have not visited the site previously, The Natural Heritage Program requests the opportunity to survey the project site. These observations will allow us to make more informed comments on this project. Please contact DNHESP staff at (302) 653-2880 to set up a site visit.

### **Open Space**

To maximize the existing buffering capacity on-site and wildlife habitat on site, it is recommended that the open space depicted in the center of the plan drawings as “amenity area” be relocated to border Unity Branch and lot lines be pulled away from this riparian corridor. Doing so will accomplish two things: it will preserve the existing riparian buffers on site and its value for birds and wildlife and it will create recreational opportunities for residents by allowing them access to and views of the forest and stream.

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.

## **Recreation**

It is recommended that sidewalks be built fronting every residence and stub streets. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities 2) provide opportunities for neighbors to interact in the community and 3) facilitate safe, convenient off-road access to neighboring communities, public mass transit stops, schools, stores, work etc.

If a trail system is planned, it is recommended that a series of stacking trail loops be designed with access points in each subdivision “pod” and connections to adjacent communities. Community trail systems with long continuous trails, perimeter-only trails, and systems with few access points, often go unused and neglected. For trail design/construction specifications, contact Susan Moerschel at (302) 739-5285.

We discourage building trails or other recreational facilities adjacent to storm water basins where standing water and the potential flash flooding exist. Storm water infrastructure and active recreation facilities are not compatible.

The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. The high and moderate facility needs in Eastern Sussex County are listed below. Consideration should be given to incorporate some of these recreation opportunities into the project.

High Priorities include walking or jogging paths, bike paths, and fishing areas.

Moderate priorities include picnic areas, skate facilities, canoe/kayak access, hiking trails, swimming pools, playgrounds, soccer fields, tennis courts, power boat access, and baseball/softball fields.

## **Underground Storage Tanks**

There are no LUST sites 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 in the contaminated areas.

**State Fire Marshal's Office – Contact: Duane Fox 856-5800**

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

- a. **Fire Protection Water Requirements:**
  - Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Mercantile)
  - 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)
  - Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required. (One & Two- Family Dwelling)
  - Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.
  
- b. **Fire Protection Features:**
  - All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
  - Buildings greater than 10,000 sq.ft., 3-stories of more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
  - Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
  - Show Fire Lanes and Sign Detail as shown in DSFPR
  
- c. **Accessibility**
  - All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Indian Mission 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.
  - If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- d. **Gas Piping and System Information:**
- Provide type of fuel proposed, and show locations of bulk containers on plan.
- e. **Required Notes:**
- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
  - Proposed Use
  - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
  - Square footage of each structure (Total of all Floors)
  - National Fire Protection Association (NFPA) Construction Type
  - Maximum Height of Buildings (including number of stories)
  - Note indicating if buildings are to be sprinklered
  - Name of Water Provider
  - Letter from Water Provider approving the system layout
  - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
  - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Mark Davis 739-4811**

DDA is not in favor of this subdivision. Although the area in which this subdivision is proposed continues to be part of a viable agricultural community, we understand this area is changing. However, the area is not designated for growth within the Strategies for State Policies and Spending document. The DDA would prefer that this area remain in agricultural use.

If a proposed new subdivision borders or is near an agricultural preservation district, then the owner of the preservation district is entitled to the following use protections, quoted from the Delaware Code: (and mirrored in Sussex County ordinances)

**§ 910. Agricultural use protections.**

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

*“This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”*

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees. (*68 Del. Laws, c. 118, § 2.*)

A forested buffer is required between the proposed subdivision and all adjacent properties in active agricultural use. In addition, a forest buffer should be maintained for those pre-existing residential properties and along all streams, wetlands, and river that border the proposed subdivision.

The developer should consider a diverse landscape plan that uses Delaware native tree and shrub species and encourages the “Right Tree for the Right Place” concept.

Precautions should be made to preserve some of the larger pre-existing trees during the construction process. Preservation of select trees will add value to the subdivision and improve the overall appearance. It is recommended that a certified arborist be utilized in species selection and for developing guidelines for tree care during construction.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Recent legislation placed non-governmental companies providing wastewater services to 50 or more customers (in the aggregate) under the regulatory control of the PSC. While rules are not yet in place, the service provider will need to apply to become a regulated entity (if not already), as well as apply for a CPCN to provide sewer services.

If any expansion of natural gas or installation of a closed propane system is installed, it must fall within Pipeline Safety guidelines.

**Delaware Emergency Management Agency – Contact: Kevin Kille 659-3362**

Developer is aware that the land is within the 100-year (1% chance per year) flood zone. Route 5 is a Coastal Storm Evacuation Route, and the development will add to the traffic amount on this route in the event of a coastal storm. Police, Firefighter, and Emergency Medical Response organizations serving the town of Georgetown should be notified and kept apprised of all intentions and development activities in this project.

**Sussex County – Contact: Rick Kautz 855-7878**

The County Engineering Department stated that the project proposes to develop using a central community wastewater system. It is located in Sussex County's North Coastal Planning Area. The project is not in a Developing Area and Sussex County does not expect to provide sewer service. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. When Sussex County provides sewer service, it is required that the treatment system be abandoned and a direct connection made to the County system at the developer's and or homeowners association expense. For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

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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". The signature is written in black ink and is positioned above the printed name and title.

Constance C. Holland, AICP

Director

CC: Sussex County