



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

November 16, 2004

Ms. Rebecca Michaels
McCrone, Inc.
119 Naylor Mill Road, Ste. 6
Salisbury, MD 21801

RE: PLUS review – PLUS 2004-10-07; River Oaks

Dear Ms. Michaels:

Thank you for meeting with State agency planners on October 27, 2004 to discuss the proposed plans for the River Oaks project to be located at the intersection of Phillips Branch Road and Hollymount Road.

According to the information received, you are seeking site plan approval for a 95 unit cluster residential subdivision on 47 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.

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 project is located within an "Investment Level 4" area according to the 2004 Strategies for State Policies and Spending and in the Low Density area according to the 2003 Sussex County Comprehensive Plan. In these areas, State policies support preservation of open space

and agriculture and not large scale development activity. The State will not participate in any infrastructure upgrades necessary to support this proposal.

We also recommend that you reconsider the project's design using the principles and concepts presented in our recent publication *Better Models for Development in Delaware* (copy enclosed). Particularly, we recommend that you look for opportunities to reduce or eliminate cul-de-sacs and provide more functional and natural open space. We note that several lots are located within a currently wooded portion of the site. Both DNREC and the Department of Agriculture recommend preserving trees on the site. We suggest that you speak with Bryan Hall, the urban and community forester at the Department of Agriculture (302-739-4811), to discuss forest preservation and/or tree planting on the project site.

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

There is a potential historic property located on the northeast corner of the subject property. According to the owner/developers, this property is currently inhabited and the house will either be demolished or moved to another location. Either way this development has an adverse effect on the historic property. It is requested that the developer keep the SHPO informed on the status of these buildings so that they can document them before they are demolished and be informed of the house's new location. Please contact Anne McCleave at 302-739-5685 to schedule a time she can visit the property before any demolition or removal. There are other potential historic properties on Hollymount Road, north and east of the subject property. It is recommended that landscaping be provided along the edges of the development to minimize the visual effects the development will have on these properties.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

Because the development is proposed for a Level 4 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.

- 1) The extensive use of cul-de-sacs is inconsistent with good circulation and community design. We suggest that the design be revised to provide better internal street connections.
- 2) In one corner of the property, there is an existing house. It takes access from a driveway that runs along the north property line and in places crosses over onto adjoining lots. The proposed plan appears to create a lot for the house and to delineate a right-of-way or easement for the driveway but does not label it. It is recommended that the right-of-way or easement be labeled to identify its status

and that an emergency access connection be provided from the west end of it to the subdivision streets.

- 3) The stormwater management basin at the intersection of Phillips Branch Road and Hollymount Road should be relocated away from both roads so that any future road improvements do not affect it.
- 4) Drive A, as drawn, meets Phillips Branch Road at a 90-degree angle but then bends to about a 70-degree angle only a short distance away from the road. It should be realigned so that the section perpendicular to Phillips Branch Road is longer. The easiest way to do that would seem to be moving the proposed pump station.
- 5) Both Phillips Branch Road and Hollymount Road are classified as local roads and have an existing right-of-way width of 50 feet or less. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. Therefore we will require right-of-way dedication on both roads from this project.
- 6) Additionally, the developer will be required to provide 15-foot wide permanent easements, for future multi-modal paths, adjacent to the new right-of-way lines.
- 7) While DelDOT has not determined what they would be, DelDOT anticipates requiring improvements to both Phillips Branch Road and Hollymount Road as part of the entrance construction. Those improvements would run the length of the property frontage and include the intersection of those roads.
- 8) The developer's site engineer should contact the DelDOT Subdivision Manager for Sussex County, Mr. John Fiori, regarding their requirements with regard to the design of the site entrance. Mr. Fiori may be reached at (302) 760-2260.
- 9) DelDOT understands that at the PLUS meeting, it was recommended that stub streets be provided to adjacent parcels. Generally DelDOT supports such connections; however, they will reserve judgment on these particular stub streets until they know their locations.

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

General Comments

The site plan shows little consideration for walkability, connectivity of open space, and preservation of existing natural resources. The developer might wish to consider innovative storm water management to reduce the acreages of open water storm water

management facilities. The developer is encouraged to reduce the number of cul-de-sacs; this will improve walkability and reduce the amount of impervious surfaces.

Soils

According to the soil survey update, the following soils were found in the immediate vicinity of the proposed construction and grouped on the basis of drainage class:

- Excessively well drained - Evesboro
- Well drained – Fort Mott/Henlopen complex
- Moderately well drained – Hammonton

Evesboro is an excessively well-drained upland soil that has moderate limitations for development on account of its rapid permeability. Fort Mott/Henlopen complex is a well drained upland soil that, generally, has few limitations for development. Hammonton is a moderately well-drained upland soil 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 waterbodies, these impacts are greatly intensified.

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, the those regions deemed to be of greatest environmental concern will require correspondingly higher levels of nutrient reduction than those regions deemed less environmentally 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.

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. 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 302-739-3665.

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 Jessica

Watson, Program Manager, at (302) 856-7219 for details regarding submittal requirements and fees.

It is strongly recommended that you contact Sussex Conservation District to schedule a pre-application 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.

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.

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.

A Certified Construction Reviewer (CCR) will be required for the site during construction. You should contact Sussex Conservation District for details regarding the CCR requirement.

Forests

According to 2002 aerial photos there is a forested area in the western portion of this parcel; site plans show that this forest will be removed. Lot lines should be redesigned to avoid all impact to the forested area. This area provides important water quality, air quality and habitat benefits both to the site itself and the region. Impacts to these woodlands will cause “fragmentation” of the larger forest, resulting in a significant decrease in habitat value. The developer is strongly encouraged to preserve, and where possible, enhance forested resources on site.

Any lands set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection mechanism. These areas should be clearly marked and delineated so that commercial activities do not infringe upon these areas.

Open Space

To maximize the existing buffering capacity and wildlife habitat on site, it is recommended that lot lines be pulled out of the forest and areas of community open space

be designated along the forest edges. Doing so will preserve the existing forest on site for birds and wildlife and it will create recreational opportunities for residents by allowing them access to and views of the forest.

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.

Stormwater Ponds/Nuisance Species

It is recommended that the number of ponds incorporated in the subdivision design be reduced or landscaped to deter nuisance species. The ponds scattered throughout the subdivision will likely attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. Although small numbers of these species are enjoyed by residents, geese and swans can quickly multiply and overwhelm the area. 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.

Ponds that remain in the subdivision plan should be landscaped to deter nuisance species. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around ponds, are not as attractive to geese because they do not feel as safe from predators and other disturbance when their view of the area is blocked. 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 of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Revegetation/Landscaping

It is requested that no invasive species be used in the revegetation of disturbed or landscaped areas. A list of species considered invasive in Delaware can be found on the DNHP web site, www.dnrec.state.de.us/fw/invasive.htm. DNREC further encourages the use of native plants, where possible/feasible, for habitat restoration projects on-site, and their Botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

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. Mobility is limited by a single access point, 6 cal-de-sacs and no stub streets.

Air Quality

Air pollution threatens the health of human beings and other living things on our planet. While often invisible, pollutants in the air create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere, and contribute to the potential for world climate change. Breathing polluted air can have numerous effects on human health, including respiratory problems, hospitalization for heart or lung disease, and even premature death. Some can also have effects on aquatic life, vegetation, and animals.

Once complete, vehicle emissions associated with this project are estimated to be 7.3 tons (14,581.5 pounds) per year of VOC (volatile organic compounds), 6.0 tons (12,072.5 pounds) per year of NOx (nitrogen oxides), 4.5 tons (8,907.3 pounds) per year of SO2 (sulfur dioxide), 0.4 ton (792.9 pounds) per year of fine particulates and 609.9 tons (1,219,724.6 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.2 tons (2,331.0 pounds) per year of NOx (nitrogen oxides), 4.1 tons (8,107.7 pounds) per year of SO2 (sulfur dioxide) and 597.9 tons (1,195,882.8 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 2.9 tons (5,881.4 pounds) per year of VOC (volatile organic compounds), 0.3 ton (647.1 pounds) per year of NOx (nitrogen oxides), 0.3 ton (537.0 pounds) per year of SO2 (sulfur dioxide), 0.3 ton (693.0 pounds) per year of fine particulates and 11.9 tons (23,841.8 pounds) per year of CO2 (carbon dioxide).

| | VOC | NOx | SO ₂ | PM _{2.5} | CO ₂ |
|------------------|------|-----|-----------------|-------------------|-----------------|
| Mobile | 7.3 | 6.0 | 4.5 | 0.4 | 609.9 |
| Residential | 2.9 | 0.3 | 0.3 | 0.3 | 11.9 |
| Electrical Power | | 1.2 | 4.1 | | 597.9 |
| TOTAL | 10.2 | 7.5 | 8.9 | 0.7 | 1219.7 |

The Department of Natural Resources and Environmental Control is asking that local jurisdictions consider mitigation to help resolve this issue. Mitigation might involve limiting large new developments to growth zones, focusing development to urban areas capable of providing mass transit services, requiring more energy efficient homes which would lessen air quality impacts, and promoting walkability and bikability within and between developments and town centers.

Both the design of this proposal and its location outside of a growth area and away from services cause challenges for mitigation of air quality impacts. Redesigning the proposal to provide a layout that better lends itself to walking and bicycling would help to mitigate some of these impacts. Retaining trees on the site will also help mitigate potential air quality impacts.

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

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. 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 Phillips Branch 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.

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: Mark Davis 739-4811

The Delaware Forest Service recommends the following:

- Preservation of trees during the construction process.
- Use of a Diverse Landscape Plan the use the “right tree for the right place” concept which encourages native trees and shrubs when possible.
- The use of forest buffers for adjacent subdivisions, critical areas and agricultural sites.

Public Service Commission - Contact: Andrea Maucher 739-4247

The information provided indicates that Artesian Water Company will provide water to the proposed projects through a central public water system. PSC records reflect that Artesian Water Company 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.

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.

The Application notes that Artesian will provide wastewater services to the project. If the project is not within the service territory of another wastewater utility or governmental entity, Artesian will need to apply to the Commission for a CPCN in order to provide wastewater services.

Delaware Emergency Management Agency – Contact: Don Knox 659-3362

Due to the number of residential units being proposed, an 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.

Department of Education – Contact: Nick Vacirca 739-4658

95 dwelling units could generate an estimated 48 additional students for the Indian River School District. While Sussex County does not have school concurrence at this time, it is recommended that you submit a package to the school district for informational purposes.

If the development is approved and build, please use the following information for school transportation planning. If there are homes more than ½ mile from the nearest public road (outside the development), you should plan wide enough streets so that large school busses can access and turn around (without backing) from the furthest areas within the development while picking up and dropping off students. Should there not be any sites more than ½ mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be included.

Sussex County – Contact: Richard Kautz 855-7878

Road "A" should intersect Phillips Branch Road at 90 degrees for 100 feet and there should be stub road access to contiguous parcels on the west and south.

The Sussex County Engineering Departments commented through Rick that the project proposes to develop using a private central community wastewater system. They recommended that the wastewater system be operated under a long-term contract with a capable wastewater utility that meets TMDL limits for Delaware's Inland Bays. The proposed project is located outside of the Inland Bays Planning Area where Sussex County expects to provide sewer service. Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A review of the treatment and disposal system by the Sussex County Engineering Department is also required. 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 developers and/or homeowners association expense.

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For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

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