Mr. Zachary Crouch  
Davis, Bowen & Friedel  
P.O. Box 809  
Milford, DE  19963

RE:  PLUS review – PLUS #2004-05-09 – Cypress Creek Phase II at Johathan’s Landing

Dear Mr. Crouch:

Thank you for meeting with State agency planners on June 2, 2004 to discuss the proposed plans for the Cypress Creek Phase II project to be located on Plaindealing Road, and West Birdie Lane in Kent County.

According to the information received, you are seeking a PUD approval for a planned unit development of 411 residential homes on 154.40 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Kent 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:  David Edgell 739-3090**

This project is located in Investment Level 2 according to the June 3 version of the 2004 State Strategies for Policies and Spending, which has been approved by the Cabinet Committee for State Planning Issues. Investment Level 2 reflects areas where growth is anticipated by local, county, and state plans in the near term future. State investments will support growth in these areas. Our office has no objections to the development of this project in accordance with the relevant county codes and ordinances.
Our office recommends that the applicants and their engineers work with DelDOT and the Kent Conservation District to resolve the numerous issues surrounding previous road agreements and drainage issues which were discussed at the meeting. It is likely that the solutions to these issues will involve other nearby property owners and developers.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

DelDOT noted that according to information received, access is proposed by way of connections to Plaindealing Road, West Birdie Lane, and Nicklaus Lane. The latter two roads are recorded but as yet unbuilt subdivision streets.

The developer is seeking a waiver of the requirement for a traffic impact study (TIS) based on previous studies, off-site improvements, and the fact that this project represents a reduction in dwelling units from previous development proposals for the same property. DelDOT anticipates making a decision in this regard later this month.

Previously, Del-Homes, Inc. sought to develop the subject land as Sterling Creek (Phase III of Jonathan’s Landing). In that capacity, they entered several agreements with DelDOT regarding road improvements. They are now seeking to sell the land to Cross Check Communities. Since the PLUS meeting, DelDOT has provided copies of the agreements to Cross Check Communities’ engineer and will be meeting with them to clarify the responsibilities that they would assume under those agreements. Specific issues from those agreements include the following:

a) Improvements to Plaindealing Road must be completed prior to the Department’s approval of this development. As of this date, construction plans have not been submitted, for review and approval, for those improvements.

b) Improvements to Ponderosa Drive must be completed prior to the 67th building permit within Cypress Creek Phase II. Construction plans have not been submitted for this work either.

c) Del-Homes submitted plans that were approved for the construction of the entrance road to the Thomas More Academy, off of Plaindealing Road. This entrance road was to be dedicated to public use. There is some question as to whether a plan dedicating the right-of-way to public use has been recorded.

d) The record plan for this development must state whether the section of Ponderosa Drive, between Nicklaus Lane and Plaindealing Road, is to be vacated or widened and overlaid. According to the agreements, any work was to be completed prior to the completion of this development.
Access to corner lots and other lots with frontage on two or more roads will be from the secondary road, as determined by DelDOT, and not from the primary.

On the road mentioned in comment 1(c), neither of the proposed streets that would connect to it aligns opposite the existing school entrance. On further review of the plans for this project, DelDOT will determine whether that is acceptable.

It is understood that the existing infiltration drainage systems on Nicklaus Lane and West Birdie Lane have failed. These failures will have to be remedied before DelDOT will accept these streets for State maintenance.

The developer’s engineer should coordinate with the DelDOT Subdivision Manager, Mr. George Shaw, regarding the above and more generally regarding our requirements for access and subdivision street plans. Mr. Shaw may be reached at (302) 760-2261.

Although DelDOT did not mention it at the meeting, they recommend that sidewalks be provided on both sides of all internal streets.

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

**Soils**

According to the Kent County soil survey, Sassafras and Woodstown were mapped in the immediate vicinity of the proposed construction. Sassafras is well-drained upland soils that have few limitations for development. Woodstown is a moderately well-drained soil of low-lying uplands that have moderate limitations for development.

**Wetlands**

According to Statewide Wetland Mapping Project (SWMP) maps, no wetlands were mapped on subject parcel. However, the applicant is strongly encouraged to maintain a 100-foot minimum buffer width from the landward edge of all other delineated wetlands and watercourses (including ditches).

**TMDLs**

Although Total Maximum Daily Loads (TMDLs) as a “pollution runoff mitigation strategy” to reduce nutrient loading have not yet been developed for most of the tributaries or sub watersheds of the Delaware Bay watershed to date, work is continuing on their development. TMDLs for the St. Jones River sub watershed, of which this parcel is part, are scheduled for completion in December 2006.
Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATS) and/or best management practices (BMPs) as “methodological mitigative strategies” to reduce degradative impacts associated with development.

**Stormwater Management**

The applicant is encouraged to contact Jared Adkins, Kent Conservation District stormwater program, at (302) 697-2600 as soon as possible for a pre-application meeting. The use of “Green Technology” stormwater practices is encouraged as well, and DNREC is available to provide technical assistance for this project. Contact DNREC Sediment and Stormwater at (302) 739-4411.

**Drainage**

The Drainage Section does not have any knowledge of existing drainage complaints or concerns associated with the project. The Drainage Section requests that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water.

**Habitat**

A review of our database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at or adjacent to this project site.

We also strongly encourage the preservation of upland, riparian, and wetland forests on these parcels. Forests provide environmental services that benefit humans directly such as water quality protection (erosion control and sediment, nutrient, biological and toxics removal), climate moderation, aesthetic value and recreational opportunities. In addition, forests provide habitat for many species of plants and animals. Forest fragmentation resulting from development separates wildlife populations, increases road mortality, and increases “edge effects” that leave many forest dwelling species, particularly songbirds, vulnerable to predation. We would gladly assist the landowner(s) in evaluating these parcels for wildlife habitat. Many new incentive-based programs for wildlife management are available to private landowners through our agency. Please contact our office if the landowner(s) is interested in more information.

We request that no invasive species be used in the revegetation of disturbed areas. A list of species considered invasive in Delaware can be found on the DNHP web site.
We further recommend the use of native plants and our botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

Recreation

We recommend that sidewalks be built fronting every residence. 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.

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 Kent 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, swimming pools, picnic areas, playgrounds and fishing areas.

- Moderate priorities include skate facilities, hiking trails, baseball/softball fields, campgrounds, soccer fields, volleyball courts, basketball courts, and canoe/kayak access.

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: Kevin McSweeney 739-3696

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 and Townhouses)
   - 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
   - For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

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 Plaindealing, Nicklaus Lane, and West Birdie Lane 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)
   - Townhouse 2-hr separation wall details shall be shown on site plans
   - Note indicating if building is 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**

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.

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: Kent County