



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET  
STATE PLANNING COORDINATION

October 24, 2007

Christopher Duke  
Becker Morgan Group, Inc.  
309 South Governors Avenue  
Dover, DE 19904

RE: PLUS review – PLUS 2007-09-10; Blue Hen Corporate Center Apartments

Dear Mr. Duke:

Thank you for meeting with State agency planners on September 26, 2007 to discuss the proposed plans for the Blue Hen Corporate Center Apartment Complex project to be located east of the Blue Hen Corporate Complex on Bay Road.

According to the information received, you are seeking site plan approval for 162 apartments on 20.66 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 the City or Dover is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

**Executive Summary**

The following section includes some site specific highlights from the agency comments found in this letter. This summary 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.***

### **State Strategies/Project Location**

This project is located in Investment Level 1 according to *Strategies for State Policies and Spending*. This site is also located in the City of Dover. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy.

### **Street Design and Transportation**

- Because the applicant has acquired all of the Blue Hen Mall and Corporate Center parcels, not just this one, it is recommended that they provide the City with a master plan for the project, so that it can be evaluated comprehensively rather than piecemeal. DelDOT would recommend that the City require the submission of such a plan before acting on this proposal.
- The street leading to the proposed apartments from South Little Creek Road (Kent Road 67) appears to be of adequate width, but it was designed and built in the 1970's as a shopping center driveway. It is recommended that the City require it to be rebuilt to current City standards for residential streets.
- Further regarding the street leading to the proposed apartments from South Little Creek Road, DART First State's Route 107 serves the area near the proposed apartments. The intersection at South Little Creek Road would be an ideal location to serve this property. DelDOT would request the developer install an accessible pathway, at least 5 feet wide and meeting ADA requirements, extending from the property along the street to South Little Creek Road. They would also need a 5-foot by 8-foot bus stop pad installed on the southeast corner of that street and South Little Creek Road.
- Regardless of whether DelDOT requires a TIS, they anticipate requiring the developer to improve the intersection of South Little Creek Road and the street leading to the apartments to accommodate the expected traffic.
- It is recommended that the City require a connection between the proposed apartments and the adjoining Schoolview subdivision using the stub street in that development. However DelDOT understands from the PLUS application that the residents of Schoolview are opposed to such a connection. If a driveway

connection is not possible, they recommend a bicycle/pedestrian/emergency vehicle connection.

- DelDOT supports the recommendation from the Office of State Planning Coordination that one or more pedestrian connections be provided from the complex to the mall and the recommendation from the Department of Education for a path to the East Dover Elementary School.

### **Natural and Cultural Resources**

- The Drainage Program is aware of existing drainage concerns downstream of this area. Please contact the Kent Conservation District to discuss the probability of a downstream analysis for this project. The Drainage Program requests that the engineer take precautions 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. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.
- Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.
- Please explore methods to filter excess nutrients in stormwater runoff from this site before releasing the stormwater into the Little River watershed.

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

#### **Office of State Planning Coordination – Contact: David Edgell 739-3090**

This project is located in Investment Level 1 according to *Strategies for State Policies and Spending*. This site is also located in the City of Dover. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. This project is an infill project providing multi-family residential units adjacent to a major employment center (Blue Hen Corporate Center). **Our office supports mixed use infill and redevelopment projects**

**as essential to the Livable Delaware strategy of concentrating growth in and around existing communities and infrastructure.** This is the type of project that is highly desirable to allow us to meet our goals of revitalizing our already urbanized areas while protecting agricultural lands and natural resource areas from encroachment by sprawling suburban and rural development. Our office has no objections to the proposed development of this project in accordance with the relevant City codes and ordinances.

It is our understanding that the Blue Hen Corporate Center property and this parcel are under common ownership. We also understand that the owners are contemplating a revitalization of the entire project. In this context, our office offers the following additional comments:

- A significant trend in infill and redevelopment across the country is the conversion of already developed or underdeveloped parcels into more modern, higher density, and mixed use projects. This entire project (the parcel under review in this application plus the other holdings of the applicant) represents an excellent opportunity for this type of redevelopment.
- It is recommended that the developer consider the design of these apartments in the context of a larger redevelopment plan which integrates all elements of the site in a more cohesive fashion. Here are some more specific recommendations:
  - A network of sidewalks and pedestrian paths should link all components of this site together. For this application, there should be more sidewalk and pedestrian connections from the apartments to the corporate center and the day care center. There also should be a pedestrian linkage between the apartments and the adjacent school (East Dover Elementary).
  - A pedestrian and vehicular connection to the adjacent residential development (School View) is recommended.
  - The applicants are encouraged to develop a comprehensive circulation plan which adds clear drive lanes /drive aisles to what is now an open parking lot area. It might be helpful to think this as developing a network of local streets that will serve to link the uses on the site.
  - The existing single story pad sites and the underutilized parking areas have the potential to be redeveloped as more intense, multi-story, mixed use structures.

There are examples of similar projects elsewhere in the country that have been successfully implemented. Please do not hesitate to contact David Edgell if you would like to learn more and see pictures of some examples.

**Division of Historical and Cultural Affairs – Contact: Terrance Burns 739-5685**

According to the historical resources and documents at the State Historic Preservation Office, there are no historic features, such as a National Register property, or Archaeological site on or within this parcel.

However, because of the nature of where this parcel is located there is a possibility that there still could be an un-discovered prehistoric or historic archaeological site on this parcel (property/project area), or nearby. In addition, the developer should be aware of Delaware's Unmarked Human Remains Act of 1987, which governs the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out, and the developer may want to hire an archaeological consultant to check for the possibility of a cemetery here if this development is approved.

If any construction proceeds on this parcel, the State Historic Preservation Office of the Division of Historical & Cultural Affairs would like the opportunity to examine the area prior to any demolition or ground-disturbing activities, to see if there are any archaeological sites on it, in order to learn more information about this area in detail. If you (the developer) would like to discuss this information or other issues further, contact the State Historic Preservation Office Division of Historical & Cultural Affairs at (302) 744-7400 ext.25, and they will be more than happy to assist you.

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

- 1) Because the applicant has acquired all of the Blue Hen Mall and Corporate Center parcels, not just this one, it is recommended that they provide the City with a master plan for the project, so that it can be evaluated comprehensively rather than piecemeal. DelDOT would recommend that the City require the submission of such a plan before acting on this proposal.
- 2) DelDOT's current volume warrant for requiring a traffic impact study (TIS) for a residential development is 2,100 vehicles per day. With an average daily traffic volume of 1,124 vehicles per day, the proposed development would not meet that warrant.

However, under new standards that they expect to adopt this calendar year, DelDOT would have a daily traffic warrant of 400 vehicles per day and a peak hour warrant of 50 vehicles per hour for all land uses. Pending legislative approval, they propose to allow some developments with daily volumes less than 2,000 vehicles per day and peak hour volumes less than 200 vehicles per hour to

- pay a fee (so DeIDOT can undertake the required analysis) in lieu of doing such studies. Currently that fee is proposed to be \$5.00 per daily trip. Therefore, depending on the project schedule, it is possible that the developer may be required to prepare a TIS or to pay a \$5,620 fee toward a DeIDOT traffic analysis.
- 3) The street leading to the proposed apartments from South Little Creek Road (Kent Road 67) appears to be of adequate width, but it was designed and built in the 1970's as a shopping center driveway. It is recommended that the City require it to be rebuilt to current City standards for residential streets.
  - 4) Further regarding the street leading to the proposed apartments from South Little Creek Road, DART First State's Route 107 serves the area near the proposed apartments. The intersection at South Little Creek Road would be an ideal location to serve this property. DeIDOT would request the developer install an accessible pathway, at least 5 feet wide and meeting ADA requirements, extending from the property along the street to South Little Creek Road. They would also need a 5-foot by 8-foot bus stop pad installed on the southeast corner of that street and South Little Creek Road.
  - 5) Regardless of whether DeIDOT requires a TIS, we anticipate requiring the developer to improve the intersection of South Little Creek Road and the street leading to the apartments to accommodate the expected traffic. Given the proximity of other entrances along South Little Creek Road, these improvements could affect some of them too.
  - 6) It is recommended that the City require a connection between the proposed apartments and the adjoining Schoolview subdivision using the stub street in that development. However DeIDOT understands from the PLUS application that the residents of Schoolview are opposed to such a connection. If a driveway connection is not possible, they recommend a bicycle/pedestrian/emergency vehicle connection.
  - 7) DeIDOT supports the recommendation from the Office of State Planning Coordination that one or more pedestrian connections be provided from the complex to the mall and the recommendation from the Department of Education for a path to the East Dover Elementary School.
  - 8) The developer's site engineer has met with the DeIDOT Subdivision Manager for the City of Dover, Mr. Richard Woodhall, regarding requirements for access and site plan approval. DeIDOT asked that they maintain that coordination through the plan development process. Mr. Woodhall may be reached at (302) 760-2262.

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

**Soils**

According to the Kent County soil survey update, Greenwich was mapped in the immediate vicinity of the proposed construction. Greenwich is a well-drained upland soil that, generally, has few limitations for development.

**Impervious Cover**

Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach 34 percent. However, given the projected scope and density of this project, this estimate appears to significantly understate the actual amount of created surface imperviousness.

The applicant should realize that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks, stormwater management structures, and roads) should be included in the calculation for surface imperviousness; it was unclear from the submittal whether constructed surface imperviousness was comprehensively considered. Nonetheless, it is strongly recommended that the applicant include all of aforementioned forms of surface imperviousness in their finalized calculation for surface imperviousness. This will ensure a realistic assessment of this project's likely post-construction environmental impacts.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

**TMDLs**

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Creek watershed. 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 required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the Little Creek watershed, a post-development TMDL reduction level of 40% will be required for nitrogen and phosphorus. Additionally, a TMDL reduction level of 75% will be required for bacteria.

### **TMDL Compliance through the Pollution Control Strategy (PCS)**

As stated above Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Creek Watershed. The TMDL for nutrients and bacteria calls for a 40% reduction in nitrogen and phosphorus and a 75% percent reduction in bacteria, respectively; both nutrient and bacterial reductions must be from baseline conditions.

The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients and bacteria to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as increasing passive, wooded open space (through native tree and shrub plantings), use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

### **Water Supply**

The project information sheets state water will be provided to the project by the City of Dover via a public water system. Our records indicate that the project is located within the public water service area granted to the City of Dover under Certificate of Public Convenience and Necessity 90-CPCN-07.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

### **Sediment and Erosion Control/Stormwater Management**

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. 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. The plan review and approval as well as construction inspection will be coordinated through the Kent Conservation District. Contact Jared Adkins, Program Manager, at (302) 741-2600, ext. 3, for details regarding submittal requirements and fees.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, consider incorporating more green technology BMPs and low impact development practices to reduce stormwater flow and to meet water quality goals.

### **Drainage**

1. The Drainage Program is aware of existing drainage concerns downstream of this area. Please contact the Kent Conservation District to discuss the probability of a downstream analysis for this project. The Drainage Program requests that the engineer take precautions 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. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.
2. Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.
3. Please explore methods to filter excess nutrients in stormwater runoff from this site before releasing the stormwater into the Little River watershed.

For questions or clarifications, please contact Jim Sullivan at (302) 739-9921.

### **Open Space**

The developer is strongly urged to consider alternatives to mowed grass within community open space areas, especially along wetland buffers/stormwater management facilities. Mowing and other maintenance costs from lawn areas can become a substantial burden for community maintenance associations. There may be areas within the development that are appropriate for warm or cool season grasses. The maintenance costs associated with meadow type grasses are much lower than those of lawn grasses, and provide food and habitat for birds and other wildlife and can help reduce non-point source pollution. The developer is encouraged to review "Community Spaces, Natural

Places: A guide to restoration, management, and maintenance of community open space". This document provides a reference of practical and successful open space management techniques that emphasize natural landscape alternatives other than turf grass management. The guidebook is available online at:  
<http://www.dnrec.state.de.us/dnrec2000/Divisions/Soil/dcmp/>.

### **Underground Storage Tanks**

There are three inactive LUST site(s) located near the proposed project:

East Dover Elementary School, Facility # 1-000060, Project # K9811202

Shore Stop # 53, Facility # 1-000198, Project # K9602029

Former Roses Department Store, Facility # 1-000554, Project # K9502032

No environmental impact is expected from the above inactive/active LUST site(s). 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 need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

### **Air Quality**

Once complete, vehicle emissions associated with this project are estimated to be 12.4 tons (24,865.3 pounds) per year of VOC (volatile organic compounds), 10.3 tons (20,586.8 pounds) per year of NOx (nitrogen oxides), 7.6 tons (15,189.3 pounds) per year

of SO<sub>2</sub> (sulfur dioxide), 0.7 ton (1,352.1 pounds) per year of fine particulates and 1,040.0 tons (2,079,951.5 pounds) per year of CO<sub>2</sub> (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 5.0 tons (10,029.3 pounds) per year of VOC (volatile organic compounds), 0.6 ton (1,103.5 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 0.5 ton (915.8 pounds) per year of SO<sub>2</sub> (sulfur dioxide), 0.6 ton (1,181.8 pounds) per year of fine particulates and 20.3 tons (40,656.6 pounds) per year of CO<sub>2</sub> (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 2.0 tons (3,974.9 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 6.9 tons (13,825.7 pounds) per year of SO<sub>2</sub> (sulfur dioxide) and 1,019.6 tons (2,039,294.9 pounds) per year of CO<sub>2</sub> (carbon dioxide).

	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Mobile	12.4	10.3	7.6	0.7	1040.0
Residential	5.0	0.6	0.5	0.6	20.3
Electrical Power		2.0	6.9		1019.6
TOTAL	17.4	12.9	15.0	1.3	2079.9

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 2.0 tons of nitrogen oxides per year and 6.9 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

- building envelope upgrades,
- high performance windows,
- controlled air infiltration,
- upgraded heating and air conditioning systems,

tight duct systems and  
upgraded water-heating equipment.”

The Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

**State Fire Marshal’s Office – Contact: Duane Fox 739-4394**

This agency makes no comments regarding projects located in the jurisdiction of the City of Dover. Preliminary meetings with the Dover Fire Marshal are encouraged prior to formal submittal.

**Department of Agriculture - Contact: Scott Blaier 698-4500**

The Delaware Department of Agriculture has no objections to the proposed project. The project is within the City of Dover, and the *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 1 areas.

*Right Tree for the Right Place*

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource. Please feel free to contact the Delaware Forest Serve at (302) 698-4500 for more information.

*Native Landscapes*

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon

dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

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

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

**Delaware State Housing Authority – Contact Vicki Walsh 739-4263**

This is a site plan review for 162 apartments on 20.66 acres in Dover located on Route 113, behind the Blue Hen Corporate Center. According to the State Strategies Map, the proposal is located in an Investment Level 1 area. 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 Map. In addition, DSHA strongly supports the development of rental communities. They can be the most economical to construct and are needed to meet the needs of low- and moderate-income families. DSHA's most recent Statewide Housing Needs Assessment has identified a need for the construction of an additional 1,489 rental units over the 2008 to 2012 time period.

While it is unclear at this time what income level this rental community will be serving, it would be beneficial if some of the units were set aside for low- and moderate-income families.

**Department of Education – Contact: John Marinucci 735-4055**

This proposed development is within the Capital School District boundaries. DOE offers the following comments on behalf of the Capital School District.

1. Using the DOE standard formula, this development will generate an estimated 81 students.
2. DOE records indicate that the Capital School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2006 elementary enrollment.
3. DOE records indicate that the Capital School Districts' *secondary schools are not at or beyond 100% of current capacity* based on September 30, 2006 secondary enrollment.

4. This development will create additional elementary and secondary student population growth which will further compound the existing shortage of space.
5. The developer is strongly encouraged to contact the Capital School District Administration to address the issue of school over-crowding that this development will exacerbate.
6. DOE requests developer work with the Capital School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the school district.

**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: City of Dover