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May 16, 2007

Constance C. Holland, AICP
State of Delaware
Planning and Coordination
Haslet Armory – Third Floor
122 William Penn Street
Dover, DE 19901

RE: **PLUS 2006-07-12 Response Letter**
ANDERSON FARM
Kent County, Delaware
2005176.00

Dear Ms. Holland:

Below you will find the required PLUS response to your PLUS letter dated August 21, 2006 in reference to the above referenced project. Each State comment is listed with the associated response in italics below.

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

This project is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the Kent County Growth Zone. 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 is particularly encouraged that the developer is taking advantage of the Kent County Transfer of Development Rights (TDR) ordinance. We support equity transfer programs such as TDRs which preserve land in our rural areas while concentrating growth in designated growth zones where infrastructure and services will be available to new residents. In addition, Kent County's ordinance contains high standards for subdivision design and architecture in TDR developments, which will assure that the development is unique, attractive, and of a high quality. Our office has no objections to the development of this parcel in accordance with all relevant Kent County codes and ordinances.

(Action: As required by the TDR ordinance, a public workshop was held on March 15, 2007. The public opinion supported a community that consisted of only single-family homes. The public did not support the inclusion of townhouses and multiplex buildings that were proposed for this development. For this reason, this project will be designed as a "by right" subdivision and include only single-family residential homes.)

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Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685

The Division of Historical and Cultural Affairs support the use of the Transfer of Development Rights program to concentrate development in Kent County's growth zone, and commend the developer on utilizing it here.

Nothing is known on this parcel. Beers Atlas of 1868 shows two D. J. Jackson houses in or near this parcel. One is close to the Irish Hill Road in the vicinity of the pond, and one appears to be the adjacent agricultural complex (K-2752) to the east. The USDA 1937 aerial photograph shows a building within the parcel near the pond, which may relate to the Jackson House in this vicinity. There is medium and high potential for prehistoric archaeological sites. There is one historic house (K-2712), possibly a Jackson House across Anderson Road from the parcel.

Small, rural, family cemeteries often are found in relation to historic farm complexes, such as the Jackson House, usually a good distance behind or to the side of the house. 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. The DHCA will be happy to discuss these issues with the developer; the contact person for this program is Faye Stocum, 302-736-7400.

The DHCA requests that the development include sufficient landscaping to screen this development from the view of the neighboring historic properties. They would like the opportunity to check the area for archaeological sites and learn something about their location, nature, and extent prior to any construction activities.

(Action: The developer will notify your department if any unmarked human remains are encountered during the site development process. We are not aware of any archeological sites. We will inform your department should anything be encountered during construction.)

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) This development is proposed to be a receiving area in a TDR. DelDOT supports TDR as a growth management tool and we applaud its use.

(Action: No action required.)

- 2) A traffic impact study will be required for this development. In that regard, DelDOT held a scoping meeting with the developer's traffic engineer on June 13, 2006.

(Action: We have retained a consultant that is preparing the traffic study.)

- 3) Anderson Road is classified as a local road. 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 they will require right-of-way

dedication along the frontage to provide any additional width needed from this project.

(Action: We will dedicate the required right-of-way.)

- 4) The plan for the development should include a 10-foot wide shared use path in a 15-foot wide permanent easement across the frontage of the site.

(Action: We will provide the easement and shared use path as requested.)

- 5) A large property on the west side of Anderson Road will be proposed for subdivision in the near future. DeIDOT will require that the developers of both properties work together to align their entrances opposite each other. Also, the south entrance should be moved farther south, into the area where the stormwater management basin is proposed, to better separate the two entrances to the subject site.

(Action: To our knowledge, no subdivision is currently proposed for the property across Anderson Road. However, we understand that this property could be developed in the future. For this reason, we have proposed an entrance location that provides an opportunity for a future entrance to the property across Anderson Road to align with our proposed entrance.)

- 6) Anderson Road is presently substandard with regard to its cross-section, presently 10-foot lanes without shoulders, and its geometry, sharp curves south of the Beaver Runne subdivision. Further its pavement, bituminous surface treatment (tar and chip), is inadequate to support the expected traffic. Therefore DeIDOT will require the developer to reconstruct Anderson Road from Irish Hill Road (Kent Road 31) to Woodleytown Road (Kent Road 106) to provide 11-foot lanes, 5-foot shoulders, hot-mix pavement with a design to be specified, and geometry acceptable to DeIDOT's Subdivision Engineer. The developer of the large property on the west side of Anderson Road will be required to contribute funding toward this improvement.

(Action: We will work with DeIDOT to improve Anderson Road.)

- 7) DeIDOT appreciates the proposed stub streets to the tilled parcel to the east, but they noticed that none are proposed to the wooded parcel to the north. DeIDOT understands from the discussion at the PLUS meeting that the subject parcel is separated from the wooded parcel by a significant ditch. While DeIDOT may drop this recommendation after viewing the ditch, they recommend that at least one stub street be provided to the wooded parcel as well.

(Action: We will provide a stub street to the property to the north.)

- 8) The developer's site engineer should contact Mr. Brad Herb, project manager for Kent County, regarding specific requirements for road improvements and access. He may be reached at (302) 266-9600.

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

Soils

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

(Action: We will consider the soils appropriately. As part of the design, we will perform a more detailed soil investigation and base our design on its findings.)

Impervious Cover

Based on a review of the PLUS application, post-development surface imperviousness is estimated to be about 39 percent. However, given the scope and density of this project, this estimate may understate the actual amount of created post-development surface imperviousness. The applicant should recognize that all forms of constructed surface imperviousness (i.e., rooftops, sidewalks and roads) should be accounted for when calculating surface imperviousness and should make certain that these are included in the calculation.

Studies link increases in impervious cover to decreases in water and habitat quality. Studies have also firmly established that irreversible declines in water and habitat quality begin once aggregate watershed surface imperviousness exceeds 10 percent. Based on analyses of 2002 aerial photography by the University of Delaware, the Murderkill watershed had about 8.1 percent impervious cover. Although this data is about 4 years old and likely an underestimate, it underscores the importance of a proactive strategy to mitigate for predictable and likely cumulative environmental impacts. Since the amount of imperviousness generated by this project is likely to be much higher than the desirable watershed threshold of 10 percent (reported as 39%), the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of the 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 examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

(Action: We will consider the above-mentioned recommendations.)

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Murderkill 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 Murderkill watershed, a post-development TMDL reduction level of 50 and 30 percent will be required for nitrogen and phosphorus, respectively.

(Action: We will work with Kent Conservation District regarding this issue.)

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 Murderkill Watershed. The TMDL calls for a 50% reduction for nitrogen and 30% for phosphorus from baseline conditions. The Department developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional reductions may be possible through the implementation of Best Management Practices as, reducing surface imperviousness, increasing passive wooded open space, and the use of stormwater management treatment trains. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

(Action: We will work with Kent Conservation District regarding this issue.)

Water Supply

The project information sheets indicate that the source of water service to the project is unknown at this time and/or yet to be determined. Our records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 03-CPCN-28. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well be needed, it must be located at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

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.

(Action: We will determine the water supplier as the project progresses into to the design phase.)

Sediment and Erosion Control/Stormwater Management

Requirements:

1. Land disturbing activities in excess of 5,000 square feet are regulated under the Delaware Sediment and Stormwater Regulations. A detailed sediment and stormwater management plan must be reviewed and approved by the Kent Conservation District for this project prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.) taking place.
2. The review fee and a completed Application for a Detailed Plan are due at the time of plan submittal to the Kent Conservation District. Construction inspection fees based on developed area and stormwater facility maintenance inspection fees based on the number of stormwater facilities are due prior to the start of construction. Please refer to the fee schedule for those amounts.
3. The following notes must appear on the record plan:
 - The Kent Conservation District reserves the right to enter private property for purposes of periodic site inspection.
 - The Kent Conservation District reserves the right to add, modify, or delete any erosion or sediment control measure, as it deems necessary.
 - A clear statement of defined maintenance responsibility for stormwater management facilities must be provided on the Record Plan.
4. Ease of maintenance must be considered as a site design component and a maintenance set aside area for disposal of sediments removed from the basins during the course of regular maintenance must be shown on the Record Plan for the subdivision.
5. All drainage ways and storm drains should be contained within drainage easements and clearly shown on the plan to be recorded by the City of Dover.
6. A soils investigation supporting the stormwater management facility design is required to determine impacts of the seasonal high groundwater level and soils for any basin design.

(Action: We will adhere to the above-mentioned requirements.)

Comments:

1. From the concept plan it is unclear what is intended for stormwater management. The preferred methods of stormwater management are those practices that maximize the use of the natural features of a site, promote recharge and minimize the reliance on structural components. The designer is encouraged to consider the conservation design approach and limit the amount of tree clearing required for the development of the site including the stormwater management facilities.
(Action: We will design the stormwater management facilities in conformance with the requirements of Kent Conservation District.)

2. Proper drainage of developed lots and active open space must be considered in the development of the grading plan for this subdivision.
(Action: We will consider this requirement during the design of the development.)
3. The Kent Conservation District recommends that no residential lot be recorded within a subdivision that contains wetlands. Placing wetlands in open space will aid in protecting those areas from disturbance and reduce individual property owner complaints regarding poor drainage of areas on their property.
(Action: We will consider this requirement during the design of the development.)
4. Access to the proposed stormwater facility must be provided for periodic maintenance. This access should be at least 12 feet wide to leading to the facility and around the facility's perimeter.
(Action: We will consider this requirement during the design of the development.)
5. It is recommended that the stormwater management areas be incorporated into the overall landscape plan to enhance water quality and to make the stormwater facility an attractive community amenity.
(Action: We will consider this recommendation during the design of the development.)
6. A letter of no objection to recordation will be provided once the detailed Sediment and Stormwater Management plan has been approved.
(Action: No action required.)
7. Based on the site characteristics, a pre-application meeting is suggested to discuss stormwater management and drainage for this site.
(Action: We will arrange a pre-application when it is necessary.)

Drainage

The Drainage Program is aware of existing drainage concerns along the south side of this project. The area of concern is the ditch south of the proposed stormwater management pond that parallels Irish Hill Road, and extends to the west across Anderson Road. The Drainage Program requests that the engineer evaluate the ditch on both sides of Anderson Road as well as the road crossing pipe for function and blockages. The engineer should notify downstream landowners of the proposed change in volume of water to be released on them.

The Drainage Program does not have a clear understanding how stormwater is to be conveyed to the stormwater management areas. The Drainage Program requests that the routing of major stormwater pipes through yards be prohibited.

The Drainage Program encourages the elevation of rear yards to direct water towards the streets where storm drains are accessible for maintenance. However, the Drainage Program recognizes the need for catch basins in rear yards in certain cases. Therefore, catch basins placed in rear yards will need to be clear of obstructions and be accessible for maintenance. Decks, sheds, fences, kennels, and other structures placed along the storm drains, or within 10 feet of the catch basins, can hinder drainage patterns as well as future maintenance to the storm drains or catch basins. Deed restrictions, along with drainage easements recorded on deeds, should ensure adequate future maintenance access.

The Drainage Program requests a 15-foot side yard setback on all lots with a drainage easement on the side. A 15-foot side yard setback will allow room for equipment to utilize the entire drainage easement and maneuver free of obstructions if the drainage conveyance requires periodic maintenance or future re-construction.

The Drainage Program requests a 10-foot drainage easement around all catch basins located on private property to ensure adequate room for maintenance. The Drainage Program recommends restrictions on fences, sheds, and other structures within the easement to prevent obstructions from being placed within 10 feet of the catch basin.

Record all drainage easements on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction.

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.

This project is within the Murderkill River Watershed, a designated critical area, with a promulgated Total Maximum Daily Load (TMDL). Existing riparian buffers should be preserved to aid in the reduction of nutrients, sediment, and other pollutants. For the further enhancement of water quality, the Drainage Program encourages additional water quality best management practices on this project.

(Action: We will work with Kent Conservation District regarding the drainage design.)

Open Space

Large isolated pockets of open space are rarely used by community residents. The developer is encouraged to eliminate these isolated pockets and designate more passive open space areas along the woodland edge to maximize the existing buffering capacity and wildlife habitat on site. In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Doing so will provide wildlife habitat and it will create recreational opportunities for residents. 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. Reforestation efforts should be targeted to open space areas adjacent to the forest. In addition, the community should be provided with a detailed landscape management plan that outlines how to manage each open space area, as well as how to manage for invasive species.

(Action: We will consider the recommendations above. We will provide a detailed landscape plan for the development.)

Nuisance Waterfowl

Stormwater management ponds may attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. 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. 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 (at least 50 feet) around ponds, are not as attractive to geese because they do not feel safe from predators and other disturbance when their view of the area is blocked. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. 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.

(Action: We will consider the options mentioned above.)

Solid Waste

Each Delaware household generates approximately 3,600 pounds of solid waste per year. On average, each new house constructed generates an additional 10,000 pounds of construction waste. Due to Delaware's present rate of growth and the impact that growth will have on the state's existing landfill capacity, the applicant is requested to be aware of the impact this project will have on the State's limited landfill resources and, to the extent possible, take steps to minimize the amount of construction waste associated with this development.

(Action: We understand the concerns mentioned above. However, it is difficult for a developer to control the amount of waste generated by a development.)

Underground Storage Tanks

There is one inactive LUST site(s) located near the proposed project:

Air Enterprises, Inc, Facility # 1-000260, Project # K9403064

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.

(Action: If any underground tanks are encountered during construction, the tank management branch will be notified.)

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 25.5 tons (50,958.5 pounds) per year of VOC (volatile organic compounds), 21.1 tons (42,190.2 pounds) per year of NOx (nitrogen oxides), 15.6 tons (31,128.7 pounds) per year of SO2 (sulfur dioxide), 1.4 ton (2,771.0 pounds) per year of fine particulates and 2,131.3 tons (4,262,616.6 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 10.3 tons (20,553.9 pounds) per year of VOC (volatile organic compounds), 1.1 ton (2,261.6 pounds) per year of NOx (nitrogen oxides), 0.9 ton (1,876.8 pounds) per year of SO2 (sulfur dioxide), 1.2 ton (2,421.9 pounds) per year of fine particulates and 41.7 tons (83,320.9 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 4.1 tons (8,146.1 pounds) per year of NOx (nitrogen oxides), 14.2 tons (28,334.2 pounds) per year of SO2 (sulfur dioxide) and 2,089.6 tons (4,179,295.7 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO ₂	PM _{2.5}	CO ₂
Mobile	25.5	21.1	15.6	1.4	2131.3
Residential	10.3	1.1	0.9	1.2	41.7
Electrical Power		4.1	14.2		2089.6
TOTAL	35.8	26.3	30.7	2.6	4262.6

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 4.1 tons of nitrogen oxides per year and 14.2 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.

(Action: We will consider "Energy Star" options.)

State Fire Marshal's Office – Contact: John Rossiter 739-4394

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 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly and Townhouses)

(Action: We will design a water distribution system that meets the above 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. (One & Two- Family Dwelling)

(Action: We will design a water distribution system that meets the above requirements.)

- 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.

(Action: We will design a water distribution system that meets the above requirements.)

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.

(Action: The buildings proposed in this development will be less than 10,000 S.F. in floor area, so no sprinkler protection will be required.)

- Buildings greater than 10,000 sq.ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.

(Action: The buildings proposed in this development will be less than 10,000 S.F. in floor area, less than 3-stories, less 35 feet, and not classified as High Hazard, so no fire lane markings are required.)

- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
(Action: The buildings proposed in this development are single-family homes which are exempt from the above requirement.)
- Show Fire Lanes and Sign Detail as shown in DSFPR
(Action: The buildings proposed in this development are single-family homes which are exempt from the above requirement.)
- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.
(Action: There will be no townhouse homes in this development.)

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 Anderson Road must be constructed so fire department apparatus may negotiate it.
(Action: The proposed access roads will be designed to meet requirements of the DelDOT and the State Fire Marshal's Office.)
- 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.
(Action: We will design the subdivision to meet the above-mentioned requirement.)
- 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.
(Action: This development includes no dead end roads that are more than 300 feet in length.)
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
(Action: We will design methods of traffic speed reduction to meet DelDOT standards.)
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.
(Action: We will have no proposed gates that would limit fire department access into and out of the development.)

d. **Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

(Action: If proposed, we will show the locations of bulk fuel containers on the plans.)

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
- (Action: We will provide all notes as required.)*

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: Milton Melendez 698-4500

The Delaware Department of Agriculture has no objections to the proposed development. The *Strategies for State Policies and Spending* encourages responsible development in areas within Investment Level 2.

Much of this site has been designated as having “good” ground-water recharge potential. DNREC has mapped all ground-water recharge-potential recharge areas for the state. A “good” rating designates an area as having important groundwater recharge qualities. Maintaining pervious cover in good recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure a safe drinking water supply for future generations. Retention of pervious cover to ensure an adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as having “good” recharge adversely impacts the future prospects for agriculture in Delaware. The developer should make every effort to protect and maintain valuable ground-water recharge potential areas.

(Action: We will consider groundwater recharge during our design.)

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 excess 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.

(Action: We will prepare a landscape plan per Kent County requirements.)

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.

(Action: We will prepare a landscape plan per Kent County requirements.)

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.

(Action: No further action required.)

Delaware State Housing Authority – Contact Karen Horton 739-4263

This proposal is a site plan review for 332 residential units on 68.76 acres located on the easterly side of Anderson Road, north of Irish Hill Road, west of Magnolia. According to the *State Strategies Map*, the proposal is located in an Investment Level 2 area and inside the growth zone. As a general planning practice, DSHA encourages residential development inside growth zones and where residents will have proximity to services, markets, and employment opportunities. Furthermore, the proposal targets units for first time homebuyers. According to the most recent real estate data collected by DSHA, the average home price in Kent County is \$191,500. However, families earning respectively 80%-100% of Kent County's median income only qualify for mortgages of \$138,205-\$176,741, thus creating an affordability gap of \$51,295-\$12,759. The provision of units within reach of families earning at least 80%-100% of Kent County's median income will ensure housing that is affordable for first time homebuyers.

(Action: No further action required.)

Department of Education – Contact: John Marinucci 739-4658

This proposed development is within the Caesar Rodney School District boundaries.



ARCHITECTURE
ENGINEERING

DOE offers the following comments on behalf of the Caesar Rodney School District.

Using the DOE standard formula, this development will generate an estimated 166 students.

1. DOE records indicate that the Caesar Rodney School Districts' *elementary schools are not at or beyond 100% of current capacity* based on September 30, 2005 elementary enrollment.
2. DOE records indicate that the Caesar Rodney School Districts' *secondary schools are at or beyond 100% of current capacity* based on September 30, 2005 secondary enrollment.
3. The Superintendent of the Caesar Rodney School District has issued multiple letters to the Kent County Department of Planning Services communicating the district's opposition to continued residential growth in light of the district's lack of capacity given the number of planned and recorded residential sub divisions within district boundaries.
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 Caesar Rodney School District Administration to address the issue of school over-crowding that this development will exacerbate.
6. DOE requests developer work with the Caesar Rodney 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 local school district.

(Action: We will coordinate with the school district as suggested.)

If you have any questions, feel free to contact me at your earliest convenience.

Sincerely,

BECKER MORGAN GROUP, INC.

A handwritten signature in black ink, appearing to read "Brian Hollenbach".

Brian C. Hollenbach, P.E.
Civil Engineer

BCH/rlh

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