



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

February 14, 2005

Mr. Zachary Crouch  
Davis, Bowen & Friedel  
23 North Walnut Street  
Milford, DE 19963

RE: PLUS review – PLUS 2005-01-02; Diemicke Subdivision

Dear Mr. Crouch:

Thank you for meeting with State agency planners on January 26, 2005 to discuss the proposed plans for the Diemicke Subdivision to be located approximately 1,782 feet east of the intersection of Alley Corner Road and Underwoods Corner Road.

According to the information received, you are seeking a rezoning from AG to R-1 to build a 410 unit residential development on 161.091 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 currently this land is under the jurisdiction of Kent County, but that annexation into the Town of Clayton is proposed. If the property is annexed the developers will have to comply with any and all regulations / restrictions set forth by the Town.

**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.***

- Our office supports the concept of having a new school in the municipal boundaries of Clayton, served by municipal utilities and services. We are eager to review the Town of Clayton comprehensive plan amendment which is expected to include details regarding the eventual annexation of this site for residential and educational uses.
- The subdivision plan should provide more stub streets and pedestrian access ways to adjoining parcels.
- There should be a connector street designed into the Moore parcel, which would one day allow more a direct connection to the Town of Clayton.
- The potential rail to trail project would be a tremendous recreational asset for this project, the school, and the town. It is strongly recommended that the open space design be revisited to focus on connections to this recreational asset.
- The 18<sup>th</sup> century house on the property appears to be in good condition, and the State Historic Preservation Office suggests that it be preserved and integrated into the subdivision plan.
- DelDOT indicates that pending the results of the TIS it is likely that Underwoods Corner Road will have to be upgraded from Route 300 to Alley Corner Road. The upgrade will be to local road standards, and may include increasing the shoulders from 4' to 5' and possibly overlaying the road. Signal agreements may also be requested.
- The Town should require the developer to build this portion of the rail / trail project if the various ownership and planning issues can be worked out in an acceptable time frame.
- Wetlands and / or farmed wetlands and hydric soils are mapped in the vicinity of the parcel. A wetlands delineation approved by the Army Corps of Engineers is strongly encouraged by DNREC.
- A significant portion of the parcel is in an “excellent groundwater recharge area.” DNREC encourages the developer to design to protect this recharge area, and has included some specific guidelines to follow in this letter.
- The lack of outlets for the stormwater basins shown on the west side of the property is a concern. Infiltration is an option of last resort due to high failure rates, so drainage easements may be required.

- The stormwater design should take into account the future school site, and any impervious surfaces anticipated on that site.

The following is a complete text of the comments received by State agencies:

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

This project is located in Investment Level 4 according to the 2004 State Strategies for Policies and Spending. This site is located outside of the Kent County Growth Zone. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4. The State Strategies do recognize that lands in Investment Level 4 may be appropriate locations for essential public services and facilities in certain cases.

Our office has been working closely with the Smyrna School District and the Department of Education for over one year to locate a school site in the vicinity of Smyrna. This property has emerged as a potential location for a new intermediate school facility. We have met with the developer, the District, the Town of Clayton, and Kent County regarding the viability of this location for school construction. The initial review of the site indicates that wastewater infrastructure is near-by; the parcel could be annexed by the Town of Clayton and provided with municipal services.

In order for this parcel to be served with utilities and public services to support school construction it is highly desirable (or in fact necessary) that the property be annexed into the Town of Clayton. A comprehensive plan amendment will be required from the Town of Clayton, and we understand that they are working on that amendment at the local level. The plan amendment will be reviewed through PLUS once it is finalized by the town.

Our office supports the idea of having a new public school facility in the Town of Clayton, served by public water, sewer and municipal services. We are looking forward to reviewing the Town of Clayton's Plan Amendment, and to working with the developer, the town, the school district, and the County on this project.

We have reviewed the subdivision design assuming that it would be developed in conjunction with a new public school, in the Town of Clayton. Regarding the subdivision design, we have a few design based comments:

- 1) There needs to be a stub street to the Moore Farm to allow eventual access directly to the Town of Clayton.
- 2) There should be other stub streets / pedestrian connections to encourage near-by students to walk to school and to also improve connectivity in general.
- 3) Recommend that there be some documentation regarding the rail crossing. The rail crossing appears to be critical to the success of the subdivision in its current form.

4) Our understanding is that the railroad right of way could one day become a pedestrian and bicycle trail (“rails to trails”). This would be an outstanding recreational asset for the project and for the Town in general. The current plan does not take advantage of this potential future recreational asset. The only open space associated with it appears to be dominated by stormwater management ponds. We recommend two specific design changes to the plan:

- a. Locate a central active open space area along the trail. One of more of the smaller park areas could be combined and placed along the trail to create a “trailhead park”, a place where pedestrians and cyclists could begin and end their trail activity, and perhaps a place where people along trail could stop along the way.
- b. Provide additional easements for future pedestrian and bicycle connections to the trail throughout the development.

5. Design the central street (the one that goes by the school) as a collector street that will one day have access through to the other side of the property, via the stub street to the Moore Farm.

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

The State Historic Preservation Office does not favor this project because it is in Level 4 of the State Strategies. There is a 19<sup>th</sup> century farmhouse and agricultural complex on the subject property. The house appears to be in good condition and the SHPO would like it to be preserved. If the buildings on the property cannot be preserved, they request access for documentation of the house and the outbuildings.

There are also potential historic structures existing to the west and south of the property. The agricultural and open space context of the area contributes to the historic significance of these historic properties; hence the development would affect the historic contexts and properties. The SHPO suggests providing some landscaping along the west and south borders to help lessen the visual effects on the surrounding properties. There is a high probability for historic archaeological sites on the subject property.

If there is any federal involvement with the project, in the form of licenses, permits, or funds, the federal agency is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project’s effects on cultural resources.

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

- 1) Although the development is proposed for a Level 4 Area, DeIDOT recognizes that it is near a Level 3 Area, that the Smyrna School District has searched diligently but unsuccessfully for school sites in higher-level areas, and that the Town of Clayton is considering amending its comprehensive plan and annexing

- the subject lands. Therefore, while the proposed development is inconsistent with the Strategies for State Policies and Spending as the Strategies map currently exists, they recognize that the map may change in this area. While DelDOT will not participate in the cost of any road improvements needed to support this development, they are not opposed to this development occurring as part of the Town of Clayton.
- 2) The subject annexation, if it occurs, would place a significant number of homes beyond walking distance from the retail uses found downtown. Therefore it may be appropriate to provide a small commercial lot to provide for neighborhood convenience shopping, similar to the Corner Store in downtown Clayton.
  - 3) DelDOT has required a traffic impact study for this project. They received the completed study on January 5, 2005 and anticipate offering detailed comments to the County and Town in early February after they have reviewed the study.
  - 4) DelDOT recognizes that the developer intends to seek annexation into the Town of Clayton. Because annexation is not a certainty, it is recommended that the development's streets be designed to meet both Town and DelDOT standards if possible. If the development is built in the Town, DelDOT would not accept the streets for maintenance and their design and construction would be outside DelDOT jurisdiction. If the development is built in the County, DelDOT would expect to accept the streets for maintenance and therefore their design and construction would be within their jurisdiction and subject to their standards.
  - 5) While DelDOT will use the TIS to determine what off-site road improvements would be needed to support this project, the developer should expect to be required to improve Underwoods Corner Road from Delaware Route 300 to Alley Corner Road to DelDOT's local road standards. If, as indicated in the answer to Item 37 on the PLUS form, the road has 11-foot lanes and 4-foot unpaved shoulders, the improvement would consist of widening those shoulders by a foot, paving them and perhaps overlaying the road.
  - 6) While they are not included in the TIS, the developer should anticipate being asked to enter signal agreements for the School Lane and Bassett Street intersections on intersections on Route 300. A significant amount of the site traffic can be expected to pass through both intersections and some of it will turn on and off of Bassett Street. Because they are close together and separated by railroad tracks, it is undesirable to place a signal at either intersection, but if one is signalized they both must be.
  - 7) The property is bisected by an inactive railroad line that runs from Clayton, Delaware to Easton, Maryland. Access to the south portion is proposed at a single at-grade crossing of that line. This situation prompts three related comments:

- a) Delaware law prohibits the creation of new at-grade railroad crossings. They believe that the proposed crossing is permissible because the railroad line is inactive. However, it is recommended that the developer and the County or Town verify that that is the case before proceeding with this plan.
  - b) Presuming that the railroad line is crossable, DelDOT recommends that the plan be revised to provide for two crossings, so that there is more than one way in and out of the rear portion of the development.
  - c) DelDOT is aware that the Department of Natural Resources and Environmental Control is pursuing the development of a bicycle and pedestrian trail along the railroad line. DelDOT supports the Office of State Planning Coordination's recommendation that the rail trail be treated as a feature. Such a trail has great potential as a safe walking path to the school for children in the Winds of Wheatleys Pond subdivision, in that they could walk along the trail rather than walking along Underwoods Corner Road. If the ownership issues relating to the railroad line can be resolved, the Town should require the developer to build a portion of the trail.
- 8) Related to item 7)b) above, DelDOT notes that the rear portion of the development would be only about 600 feet from Route 300 and the Providence Crossing development, which is in the Town of Clayton. The Strategies Map notwithstanding, it seems likely that the Green Gable Farm (Tax Parcel KH-00-27.00-01-10.00), which separates the subject land from Route 300, will be eventually be developed. Annexation of the Green Gable Farm may also be the way in which contiguity to the Town is established for the Diemicke Property. Therefore we recommend that the Town require a stub street connecting to that parcel.
  - 9) To provide for connectivity between developments, DelDOT recommends that the Town require stub streets to the north and south (on both sides of the railroad tracks), as well as to the Green Gable Farm (See comment 8 above.).
  - 10) The developer should consider revising the plan to eliminate the seven driveways on the collector street running through the west portion of the site.
  - 11) DelDOT also supports the Office of State Planning Coordination's recommendations that a collector street be designed through the subdivision from Underwoods Corner Road to the Green Gable Farm and that a pedestrian easement be provided to the Pheasant Pointe subdivision.
  - 12) DelDOT will require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site.

- 13) The developer's engineer should contact the DelDOT project manager for Kent County, Mr. Brad Herb of Johnson, Mirmiran & Thompson, regarding their requirements for streets and access. Mr. Herb may be reached at (302) 266-9080.

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

### **Soils**

According to the Kent County soil survey Sassafras and Fallsington were mapped in the immediate vicinity of the proposed construction. Sassafras is a well-drained upland soil that has few limitations for development. Fallsington is a poorly-drained wetland associated (**hydric**) soil that has severe limitations for development.

### **Wetlands and Buffers**

According to Statewide Wetland Mapping Project (SWMP) maps, palustrine farmed wetlands were mapped in the immediate vicinity of subject parcel.

The applicant should be reminded that they must avoid construction/filling activities in those areas containing wetlands or wetland associated hydric soils as they may be subject to regulatory provisions under the Federal 404 Clean Water Act governing jurisdictional wetlands. **On the basis of the above-referenced information, the Department strongly recommends an Army Corps of Engineers (ACOE) approved wetlands delineation be conducted prior to proceeding beyond the initial planning stage.**

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether the farmed wetlands on subject parcel meet the recognized criteria for classification as "prior converted wetlands." Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous "fallow period" of five years or greater in that parcel's cropping history. Parcels converted after said date regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel's cropping history is Sally Griffin at the USDA – she can be reached at 678-4182.

**The applicant is strongly encouraged to maintain a 100-foot minimum buffer width from the landward edge of all delineated wetlands and/or watercourses (including ditches).** In cases where natural buffer vegetation has been removed or reduced by past development or farming activities, the developer is encouraged to restore/establish to said buffer width or greater with native herbaceous and/or woody vegetation.

**Should the applicant decide to construct a pond(s) on subject parcel, the Department strongly recommends that the periphery of said pond(s) (including stormwater detention pond(s)) contain a 50-foot buffer of native woody and/or herbaceous vegetation.** Vegetated buffer(s) are an important mitigative methodology that helps to remove excess nutrient runoff from overland flow while discouraging geese habitation. It is further recommended that all stormwater ponds be at least 100 feet from all delineated wetlands and/or watercourses.

### **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 subwatersheds of the Mill Creek subwatershed to date, work is continuing on their development and should be available in the near future.

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.

### **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.

### **Water Resource Protection Areas**

A significant portion of the parcel is located in an excellent recharge area (see map). According to the State law that created the Source Water Protection Program, county and municipal governments will be required to enact ordinances to protect Water Resource Protection Areas. The following language has been excerpted from the Source Water Protection Guidance Manual for Local Governments, Supplement 1 - Ground-Water

Recharge Design Methodology. While the local ordinances are not yet in place, the developer may find the language useful in modifying the site plan to protect the excellent recharge area.

Water Resource Protection Areas (WRPAs) are defined as (1) surface water areas such as floodplains, limestone aquifers, and reservoir watersheds, (2) wellhead areas, or (3) excellent recharge areas. The purpose of an impervious cover threshold is to minimize loss of recharge and protect the quality and quantity of ground and surface water supplies in WRPAs.

New development in WRPAs may exceed the 20 % impervious cover threshold, but be no more than 50 % impervious, provided the applicant submits an environmental assessment report recommending a climatic water budget and facilities to augment recharge. The environmental assessment must document that post-development recharge will be no less than predevelopment recharge when computed on an annual basis.

Commonly, the applicant offsets the loss of recharge due to impervious cover by constructing recharge basins that convey relatively pure rooftop runoff for infiltration to ground water.

The Department recommends the following (ranked in order of preference):

1. Preserve WRPAs as open space and parks by acquisition or conservation easement.
2. Limit impervious cover of new development to 20 % by right within WRPAs.
3. Allow impervious cover of new development to exceed 20% within WRPAs (but no more than 50% impervious) provided the applicant develops recharge facilities that directly infiltrate rooftop runoff.
4. Allow impervious cover of new development to exceed 20% within WRPAs (but no more than 50% impervious) provided the applicant
5. develops recharge facilities that infiltrate stormwater runoff from forested and/or grassed surfaces with pretreatment.

## **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 prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.) taking place. 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.
2. 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.
3. 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.
4. All drainage ways and storm drains should be contained within drainage easements and clearly shown on the plan to be recorded by Kent County.
5. 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.

### Comments:

1. The four (or eight) stormwater management areas shown on the western side of the project do not appear to have outfalls. Due to a high failure rate, infiltration designs must be considered as a last resort. If drainage easements are necessary to provide the site with a positive outfall, those easements must be obtained prior to the approval of the stormwater management plan.

2. If stormwater management is to be provided for the school site, any design assumptions regarding impervious cover should be clearly stated to assist in determining future stormwater requirements for that project. Drainage easements and/or maintenance agreements must be provided between the two projects if they are to share stormwater facilities.
3. 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.
4. A letter of no objection to recordation will be provided once the detailed Sediment and Stormwater Management plan has been approved.
5. Proper drainage of developed lots and active open space should be considered in the development of the grading plan for this subdivision.
6. Based on the site characteristics, a pre-application meeting is suggested to discuss stormwater management and drainage for this site.

### **Drainage**

The Drainage Section is not aware of any existing drainage problem directly associated with this project. The anticipated outlet for this project is not a tax ditch as stated on the application. The outlet for this project would be a private ditch that may require a downstream analysis.

The Drainage Section requests all existing ditches on the property be checked for function and cleaned if needed prior to the construction of homes. Wetland permits may be required before cleaning ditches.

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.

The Drainage Section strongly recommends any drainage conveyance between two parcels within a subdivision be dedicated as a drainage easement and such easement be designated as passive open space, not owned by individual landowners. The easement should be of sufficient width to allow for future drainage maintenance as described below.

- Along an open ditch or swale, the Drainage Section recommends a maintenance equipment zone of 20' measured from the top of bank on the maintenance side, and a 10' setback zone measured from top of bank on the non-maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges

planted within these zones should be selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

- Along a stormwater pipe the Drainage Section recommends a maintenance equipment zone of 15' each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

The Drainage Section requests any drainage/utility easement owned by an individual landowner should not have structures, decks, buildings, sheds, kennels, fences or trees within the drainage easement to allow for future drainage maintenance.

### **Nuisance Species**

Consider nuisance waterfowl when placing stormwater management ponds within the subdivision and on school property. Stormwater management ponds on school property should not be placed adjacent to athletic fields due to goose droppings and aggressive behavior during the nesting season. See additional recommendations below.

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, land managers, 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.

### **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.

## 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 31.5 tons (62,930.7 pounds) per year of VOC (volatile organic compounds), 26.1 tons (52,102.4 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 19.2 tons (38,442.1 pounds) per year of SO<sub>2</sub> (sulfur dioxide), 1.7 ton (3,422.0 pounds) per year of fine particulates and 2,632.0 tons (5,264,074.7 pounds) per year of CO<sub>2</sub> (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 12.7 tons (25,382.8 pounds) per year of VOC (volatile organic compounds), 1.4 ton (2,792.9 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 1.2 ton (2,317.7 pounds) per year of SO<sub>2</sub> (sulfur dioxide), 1.5 ton (2,990.9 pounds) per year of fine particulates and 51.4 tons (102,896.3 pounds) per year of CO<sub>2</sub> (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 5.0 tons (10,059.9 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 17.5 tons (34,991.0 pounds) per year of SO<sub>2</sub> (sulfur dioxide) and 2,580.6 tons (5,161,178.4 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	31.5	26.1	19.2	1.7	2632.0
Residential	12.7	1.4	1.2	1.5	51.4
Electrical Power		5.0	17.5		2580.6
TOTAL	44.2	32.5	37.9	3.2	5264.0

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.

**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:**

- 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 Underwoods Corner 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](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

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

Overall Comments

The Delaware Department of Agriculture and the Delaware Forest Service commends the developer for their efforts to work with the local school system to allow for future growth of this essential service within the communities of Smyrna and Clayton. However, because this parcel is located within a state designated investment level 4 and due to its proximity to important and viable agricultural lands, DDA will only support development of this parcel under the following conditions:

- The school site must be a part of the development. If the school district opts not to utilize this site, then we do not support development of the parcel.
- The parcel must be annexed into the town of Clayton.
- The developer should redesign the site, giving due consideration to both vehicular and pedestrian mobility, and the environmental features of the site.

There is an opportunity to create a model affordable development which could serve as an example to others which should not be lost in the development of this site. DDA and DFS encourages the developer to work with our office and DNREC Division of Parks and Recreation to better design this site to capture the full potential of this site to tie to these communities through the open space opportunities identified within the site plan. To learn more please contact our office at (302) 698-4500.

*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.

*Native Landscapes*

The 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 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.

*Berm Design and Construction*

The Delaware Department of Agriculture Forest Service encourages the developer to design a landscape feature above the current county code that reflects the local topography and utilizes native trees and shrubs. A well designed berm can create an attractive feature that is welcoming to the community and will be beneficial to both desired economic and environmental issues.

*Open Space Considerations*

The Delaware Department of Agriculture and the Delaware Forest Service supports comments made by DNREC Parks & Recreation Department to allow for improved design to open space and provide areas of connectivity to both passive and open space areas within the planned community.

The Delaware Department of Agriculture Forest Service offers its assistance to the developer to implement these practices, please contact our office at (302) 698-4500.

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

The information provided indicates that the Town of Clayton will provide water to the proposed projects through a central public water system. Files reflect that the Town of Clayton 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.

If this project lies outside of the County's service territory, the County must update the information it filed with the Commission during October 2004.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

According to the State Strategies Map, the proposal is located in Investment Level 4 and outside the growth zone. As a general 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. The proposal is located in an area targeted for agricultural activities and natural resource protection, and therefore inconsistent with where the State would like to see new residential development.

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

Due to the large number of residential units being proposed, a significant 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 Kent County or the Town of Clayton, if annexed, to keep them apprised of all development activities.

**Department of Education – Contact: Nick Vacirca 739-4658**

410 dwelling units could generate an estimated 205 additional students for the Smyrna School District.

The developer is offering to donate acreage for the location of a new school for the Smyrna School District.

If the development is approved and built, please use the following information for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), developers should plan wide enough streets so that large school buses 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 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be included. The developer should work closely with the school district transportation supervisor.

The Department and the district support the location of a new school on this site. It is recommended that all plan approvals include both sites at the same time. For example, when DNREC reviews the development site have them include the location of the school at the same time. Approvals can be given to both projects as a whole. This effort will help expedite the planning for the new school. This process should be followed by all State agencies if possible.

**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".

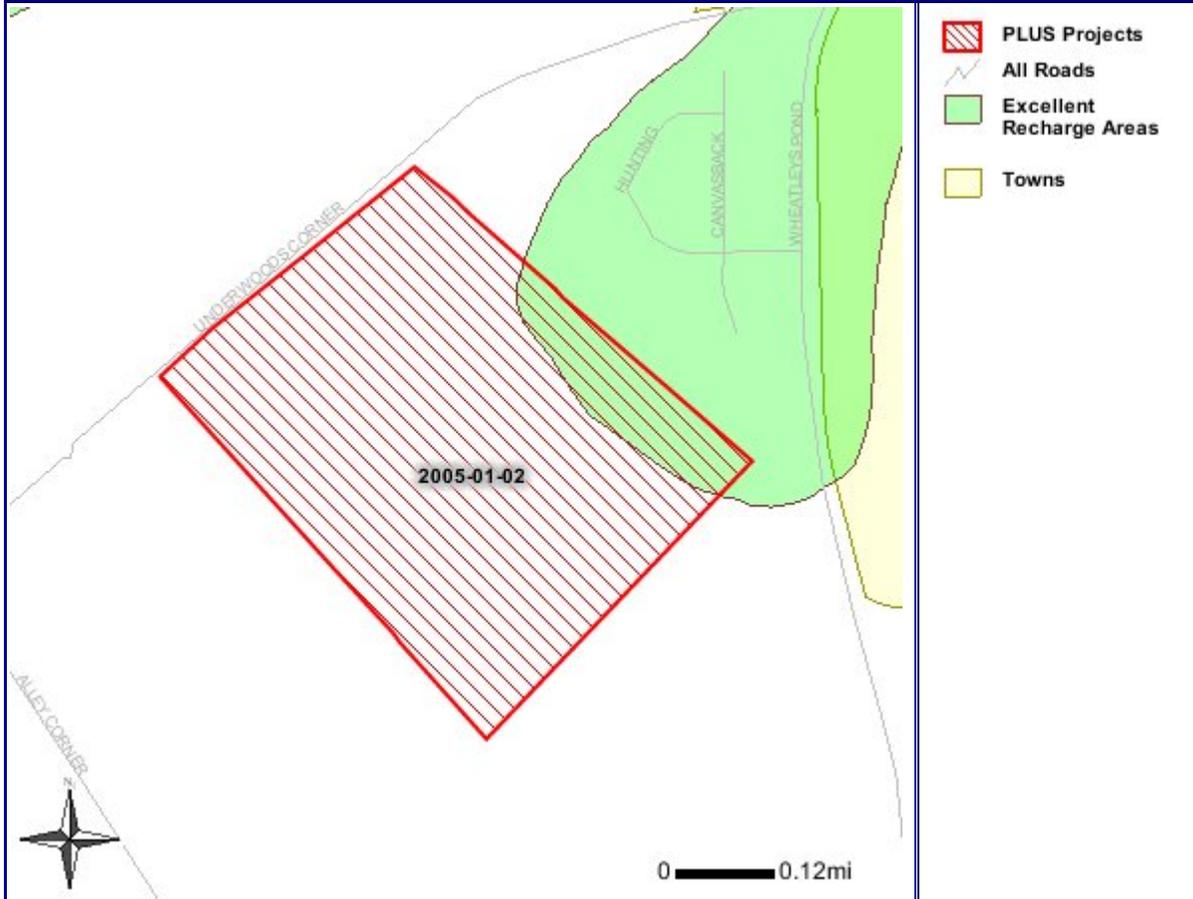
Constance C. Holland, AICP  
Director

CC: Kent County  
Town of Clayton



# Diemicke Property

2005-01-02



This map was produced by the Delaware Department of Natural Resources and Environmental Control.

