



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

November 22, 2005

Alan O. Thompson  
Thompson Elliott Associates, LLC  
22 Old Rudnick Lanes, Ste. 2  
Dover, De 19901

RE: PLUS review – PLUS 2005-10-01; Dawson Creek

Dear Mr. Thompson:

Thank you for meeting with State agency planners on November 2, 2005 to discuss the proposed plans for the Dawson Creek project to be located on Woodlytown Road, near Magnolia.

According to the information received, you are seeking site plan approval for 131 single family residential units on 58.14 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Kent County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

**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 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 has no objections to the proposed Development of this project in accordance with the relevant County codes and ordinances.

### **Street Design and Transportation**

- The tax parcel includes a 485-foot wide strip of frontage on Route 113A but that strip does not appear to be part of the proposed development. DelDOT believes part of that strip could be used to provide an additional point of access, which would be highly desirable from their perspective.
- A stub street should be provided for a future street connection to the adjoining parcel (Tax Parcel SM-00-113.00-01-01.00-00001) to the west of the site.
- The developer will be required to improve Woodlytown Road to meet DelDOT's standard typical section for local roads (two 11-foot lanes and two 5-foot shoulders) for the length of the site frontage.
- DelDOT will also require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the site's frontage, including any land along Route 113A to be retained by the owner.

### **Natural and Cultural Resources**

- Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex.
- The DNREC Water Supply Section has determined that two sections of the proposed development fall within an area of excellent groundwater recharge. The northern part and the eastern part of the parcel are in excellent recharge area. The proposed development would change the total impervious cover from 0% to approximately 20% in proposed development area. It is recommended that best management practices be employed to mitigate the impacts on the recharge areas

to the extent practical. DNREC supports the location of the open space on the eastern portion of the site as an ideal use and excellent example of a BMP that preserves the maximum amount of pervious surface in a recharge area.

- It is recommended that all lot lines be removed from the forested areas of the site, and that the riparian and forested areas be designated as open space. It is further recommended that the forested areas be placed in a conservation easement or other form of binding protection.

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 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 has no objections to the proposed Development of this project in accordance with the relevant County codes and ordinances.

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

Nothing is known within this parcel. There is a historic house (K-3825) across Woodleytown Rd. and west of the parcel. There is also the Mrs. Van Burkalow House (K-2709, as shown on Beers Atlas of 1868) adjacent to the parcel and fronting on State St. Ext. (Rt. 113A). From the discussion at the meeting, the developer is going to request an easement through this property to get an entrance onto State St. Ext. Beers Atlas shows the Mrs. Terry House within the parcel. This house is gone by the 1936 USGS 15' topographic map for Bowers; there may be an archaeological site associated with this house. While most of the parcel has a low potential for prehistoric-period archaeological sites, there may be a higher potential along the creek.

The DHCA would like the opportunity to check this parcel for archaeological sites, to learn something about their location, extent, and nature prior to any ground-disturbing activities. They recommend that sufficient landscaping be placed along the western corner and eastern side to protect the neighboring historic properties from visual and noise changes. If a street past the Mrs. Van Burkalow House is constructed, they recommend that sufficient landscaping also be placed along it to protect the house from visual and noise intrusions.

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

- 1) The tax parcel includes a 485-foot wide strip of frontage on Route 113A but that strip does not appear to be part of the proposed development. DelDOT believes part of that strip could be used to provide an additional point of access, which would be highly desirable from their perspective. DelDOT understands from the discussion at the PLUS meeting that the sellers of the property, Mr. & Mrs. Hollinger want to retain all of their frontage on Route 113A. However, it is recommended that the developer do what they can to obtain at least a 60-foot right-of-way out to Route 113A. If a right-of-way in an appropriate location cannot be obtained now, a stub street should be provided so that a street connection can be built when and if the land for it becomes available.
- 2) A stub street should be provided for a future street connection to the adjoining parcel (Tax Parcel SM-00-113.00-01-01.00-00001) to the west of the site.
- 3) Woodlytown Road is classified as a local road and Route 113A is a minor arterial road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. Rights-of-way on arterial roads vary but are generally wider. 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 and 40 feet from the centerline on arterial roads. Therefore we will require right-of-way dedication along the frontage, including any lands retained by the owner, to provide any additional width needed from this project.
- 4) The developer will be required to improve Woodlytown Road to meet DelDOT's standard typical section for local roads (two 11-foot lanes and two 5-foot shoulders) for the length of the site frontage.
- 5) DelDOT will also require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the site's frontage, including any land along Route 113A to be retained by the owner.
- 6) There is a 47-foot wide strip of land, located at the north corner of the parcel that is proposed to be part of Lot 7. Presently, that strip is occupied by a driveway serving the properties on either side of it (Tax Parcels SM-00-113.00-01-04.00-00001 and SM-00-113.00-01-05.00-00001). It is recommended that a title search be done to determine whether easements have been granted to the owners of those properties. If no easements have been granted, DelDOT recommends the developer consider splitting the strip into two parts, establishing cross-easements between the two parts, and deeding them to the owners of those properties. In any

case, keeping the strip as part of Lot 7 would invite discord between the current users of the strip and the purchaser of Lot 7.

- 7) The Delaware Transit Corporation (DTC) provides transit service to within 800 feet of the proposed development through bus stops at the intersection of Route 113A and Woodlytown Road. This service is in the form of DART First State Bus Route 303, which provides eight round trips per day, Monday through Friday, from Dover to Georgetown by way of Milford and Milton. It is recommended that the developer contact Mr. Wayne Henderson, a service development planner with DTC, to discuss how the proposed development might best be connected to this service. He may be reached at (302) 577-3278.
- 8) The developer's site engineer should contact Mr. Brad Herb, our project manager for Kent County, regarding our specific requirements for streets 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 Kent County soil survey mapping Sassafras, Woodstown, and Johnston were mapped on subject parcel. Sassafras is a well-drained upland soil that, generally, has few limitations for development. Woodstown is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. Johnston is a very poorly-drained wetland associated (hydric) floodplain soil that has severe limitations for development.

### **Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel.

These wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

This project is located directly adjacent to sensitive headwater or near headwater riparian wetlands associated with Beaver Gut ditch of the St. Jones watershed – greatly

increasing the probability of harmful impacts to surface and groundwater quality of all waters within the greater Delaware Basin, and making it more difficult for the State to achieve future required TMDL nutrient reductions. Headwater streams and their associated wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system downstream. In recognition of this concern, the Watershed Assessment Section strongly recommends that the applicant consider preserving the existing natural forested buffer in its entirety. Otherwise, as mentioned previously, a 100-foot upland buffer width is the recommended minimum. Efforts to expand the existing buffer width beyond the recommended 100-foot minimum (if applicable) via plantings of native woody and herbaceous vegetation, would be greatly appreciated.

### **Wetland Permitting Information**

Impacts to palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland field delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

### **Impervious Cover**

Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline below their

predevelopment level. Based on information compiled by the University of Delaware through analysis of 2002 aerial photography, the St. Jones watershed has about 16.2 percent impervious cover. Since the amount of imperviousness generated by this project will be well over this 10 percent watershed threshold (approx. 20%), the applicant is strongly advised to pursue best management practices (BMPs) that mitigate or reduce some of its predictable impacts. Moreover, increases in a watershed's surface imperviousness have been shown to reflect proportional decreases in water and habitat quality when this threshold is exceeded. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with additional native tree and shrub plantings - are examples of practical BMPs that could easily be implemented to reduce surface imperviousness.

### **TMDLs**

A Total Maximum Daily Load (TMDL) is the maximum level of pollution for which a water quality limited water body can assimilate without compromising use and recreational goals such as swimming, fishing, drinking water, and shell fish harvesting. Although TMDLs as a "pollution runoff mitigation strategy" to reduce nutrient loading have not yet been developed for the St. River watershed to date, work is continuing on their development and they should be completed by December 2006.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATS) and/or best management practices (BMPs) as "methodological mitigative strategies" to reduce degradative impacts associated with development. Reducing imperviousness, preservation and/or planting trees, and maintaining at least a 100-foot upland buffer from all streams and wetlands are some examples of mitigative strategies to reduce nutrient runoff impacts.

### **Water Resource Protection Areas**

The DNREC Water Supply Section has determined that two sections of the proposed development falls within an area of excellent groundwater recharge. The northern part and the eastern part of the parcel are in excellent recharge area (see following map and attached map).

The proposed development would change the total impervious cover from 0% to approximately 20% in proposed development area. The proposed development area impacts the excellent recharge area. The numbers were provided by the developer on the PLUS application.

The northern part of development area is proposed to be single family home lots. If possible, the amount of open space in this area should be increased to decrease the amount of excellent recharge area that is impacted by development.

The eastern section of the parcel in excellent recharge area is proposed as open space park land. This is the ideal use of the forested section of the excellent recharge area. We encourage this part of the proposed development as it places no impervious cover in the excellent recharge area.

DNREC Water Supply Section recommends that that portion of the new development within the excellent recharge area not exceed 20% impervious cover. Further, some allowance for augmenting ground-water recharge should be considered if the impervious cover exceeds 20% but is less than 50% of that portion of the parcel within this area.

For more information refer to the Final Source Water Protection Guidance Manual for the Local Governments of Delaware

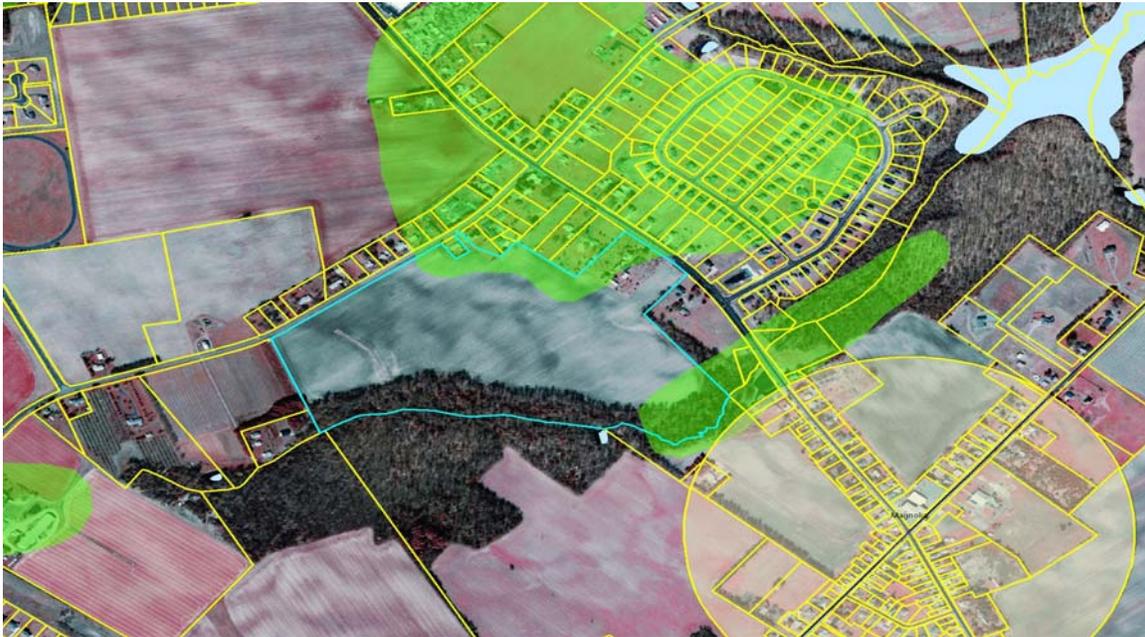
<http://www.wr.udel.edu/swaphome/phase2/SWPguidancemanual.html>

and

Ground-Water Recharge Design Methodology

[http://www.wr.udel.edu/swaphome/phase2/Publications/swapp\\_manual\\_final/swapp\\_guidance\\_manual\\_supp\\_1\\_2005\\_05\\_02.pdf](http://www.wr.udel.edu/swaphome/phase2/Publications/swapp_manual_final/swapp_guidance_manual_supp_1_2005_05_02.pdf).

**Dawson Creek (PLUS 2005-10-01) with excellent recharge in green and affected parcels outlined in light blue.**



### **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 302-739-9944.

### **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. The plan review and approval as well as construction

inspection will be coordinated through **Kent Conservation District**. Contact Jared Adkins at (302) 741-2600, ext. 3, for details regarding submittal requirements and fees.

As of April 2005, stormwater best management practices must first consider green technology (for example bioretention, biofiltration, filter strips and infiltration) for use.

### **Drainage**

The Drainage Program does not have a clear understanding how stormwater is to be conveyed to the stormwater management area.

The Drainage Program requests the majority of the stormwater pipes on this project be located on drainage and utility easements along the streets.

The Drainage Program discourages the routing of major stormwater pipes through rear yards and discourages the placement of catch basins in the rear and side yards. The Drainage Program promotes the elevation of rear yards to direct stormwater towards the street for accessible maintenance of stormwater pipes.

The Subdivision and Land Development Ordinance of Kent County, Delaware requires a 100-foot building setback from the center of blue-line streams. Since Beaver Gut Ditch is a blue-line stream on the Federica Quadrangle Map, and Kent County prohibits the subdivision of wetlands, the Drainage Program requests the wooded area along Beaver Gut Ditch be designated as open space. During prolonged wet periods, this area may become too wet for normal residential use. Designation as open space will aid in the prevention of decks, sheds, fences, and kennels placed within said area thereby reducing nuisance drainage complaints.

The Drainage Program 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 Program recommends that Beaver Gut Ditch be checked for function and blockages prior to the construction of homes.

### **Forest Preservation**

According to 2002 aerial photos forested areas exist on this parcel; site plans show that lot lines will contain portions of the forest. 1937 images show that the existing trees were present at the time. This forested area is connected to a larger stretch of forest along Beaver Gut Ditch. This forest is extremely beneficial as it is an old growth forest which provides important habitat for wildlife. Although PLUS materials state that “as little as

possible” forest will be removed, clearing portions of the forest within the parcel will reduce the habitat value of the entire forest stretch.

Old growth forests support a variety of species. The plants, wildlife, and insects found in this forest are dependent upon the ecological conditions that are present. These conditions do not occur in younger, less mature forests. Many species of birds that are present in old growth forests rely on these conditions, species such as; raptors, owls, and songbirds. Critical nutrient recyclers, like lichens and fungi appear in mature forests rather than younger forests. The fallen trees in a mature forest provide shelter for insects and small mammals, such as bats. Because of the maturity of this forest, the developer is strongly encouraged to preserve, and where possible, enhance forested resources on site. This includes removing lots 1-6, 10-26 and infrastructure (such as storm water management ponds) from forested areas to the extent possible and minimizing any clearing activities. The forested areas on-site should be viewed as a community asset and managed appropriately.

Forested areas on-site set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

Although leaving a forest intact is usually more beneficial to the existing wildlife and is preferential to clearing, DNREC recommends that clearing not occur April 1st to July 31st to reduce impacts to nesting birds and other wildlife species that utilize forests for breeding.

### **Open Space**

To maximize the existing buffering capacity and wildlife habitat on site, it is recommended that lot lines and other infrastructure (such as storm water management ponds) be pulled out of the forest and that areas of community open space be designated along the forested/riparian areas. Doing so will preserve and expand the existing buffers on site and its value for birds and wildlife and it will create recreational opportunities for residents.

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. For more information, please contact Ron Vickers, Land Protection Office, at 739-9235. Conservation areas should also be demarked to avoid infringement by homeowners.

### **Rare Species/Buffers**

DNREC has not surveyed this project site, however, there are two rare species that may occur within the project area. Broad-Winged Hawk (*Buteo platypterus*) and great purple hairstreak (*Atlides halesus*) were found at the edge of an adjacent fallow field and forested area. Broad-Winged Hawk utilize a combination of forest and field for nesting and foraging. Adult great purple hairstreak inhabit wet woodlands, and prefer to nectar on goldenrod, sweet pepperbush, and Hercule's club, although other nectar sources are likely. The larva feed solely on mistletoe.

Efforts should be made to maintain the existing forested area, and areas containing the nectar sources listed above.

### **Nuisance Waterfowl**

Stormwater management ponds that remain in the site plan may attract waterfowl like resident Canada geese and mute swans. 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. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. 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 proper landscaping, monitoring, and other techniques, geese problems can be minimized.

### **Underground Storage Tanks**

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

Magnolia Service Station, Facility # 1-000204, Project # K9103051

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 be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

**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.

**Air Quality**

Once complete, vehicle emissions associated with this project are estimated to be 10.1 tons (20,107.1 pounds) per year of VOC (volatile organic compounds), 8.3 tons (16,647.3 pounds) per year of NOx (nitrogen oxides), 6.1 tons (12,282.7 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (1,093.4 pounds) per year of fine particulates and 841.0 tons (1,681,936.1 pounds) per year of CO2 (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 4.1 tons (8,110.1 pounds) per year of VOC (volatile organic compounds), 0.4 ton (892.4 pounds) per year of NOx (nitrogen oxides), 0.4 ton (740.5 pounds) per year of SO2 (sulfur dioxide), 0.5 ton (955.6 pounds) per year of fine particulates and 16.4 tons (32,876.6 pounds) per year of CO2 (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 1.6 tons (3,214.3 pounds) per year of NOx (nitrogen oxides), 5.6 tons (11,180.1 pounds) per year of SO2 (sulfur dioxide) and 824.5 tons (1,649,059.4 pounds) per year of CO2 (carbon dioxide).

	VOC	NOx	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Mobile	10.1	8.3	6.1	0.5	841.0
Residential	4.1	0.4	0.4	0.5	16.4

Electrical Power		1.6	5.6		824.5
TOTAL	14.2	10.3	12.1	1.0	1681.9

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 1.6 tons of nitrogen oxides per year and 5.6 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 DNREC Energy office 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. We highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

DNREC 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: 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 Woodlytown 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.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- 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.

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: Milton Melendez 698-4500**

The Delaware Department of Agriculture has no objections to the Dawson Creek application. The *Strategies for State Policies and Spending* encourages responsible development in areas within a Growth Level 2 Zone. This site is a part of a “good recharge” area. Department of Natural Resources and Environmental Control (DNREC) have mapped all ground water potential recharge areas. A “good” rating is the second highest rating and designates an area as having important groundwater recharge qualities. Maintaining pervious cover in “Excellent” and “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 “excellent” and “good” recharge areas adversely impacts the future prospect for agriculture in Delaware.

Neither the Delaware Department of Agriculture nor the Delaware Forest Service opposes the proposed subdivision. In addition, the Delaware Forest Service would ask the Developer to place a 30’ forest/agricultural buffer along the sides and rear of the property to lessen impact to the water resources and other properties adjacent to this site. Also, we ask that the developer try to stay out of the wooded area within this property. The Delaware Forest Service encourages the developer to contact our office for any information on landscape design, tree planting, tree care, and/or any other questions related to the development of this property.

*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 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.

The information provided indicates that Artesian Water Company will provide water to the proposed projects through a central public water system. Our files reflect that Artesian Water Company does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-739-4247.

### **Delaware State Housing Authority – Contact Jimmy Atkins 739-4263**

DSHA supports this proposal because residents will have proximity to services, markets, and employment opportunities. However, it is important to note that the Magnolia area has significant affordable housing needs and the proposal does not target first time homebuyers. This proposal is located in the Central Kent County Census Division (CCD). The 2003 Statewide Housing Needs Assessment indicated that of the 6,552 occupied housing units in this CCD, 209 are substandard and 2,491 are occupied by low-income persons. In addition, this area is experiencing rapid price increases. Real estate data collected by DSHA indicated that in the third-quarter of 2005, the median housing price for this area was \$236,000 - which is outside the affordability level of low- and moderate-income households earning 80% of area median income or \$45,320. We recommend the provision of units affordable to low- and moderate-income households, which will help address the area's affordable housing needs.

**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". The signature is written in black ink and is positioned below the word "Sincerely,".

Constance C. Holland, AICP  
Director

CC: Kent County