



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

February 20, 2008

Ted Williams  
Landmark Engineering  
100 W. Commons Blvd., Ste. 301  
New Castle, DE 19720

RE: PLUS review – 2008-01-01; McIlvaine Elementary School

Dear Mr. Williams:

Thank you for meeting with State agency planners on January 23, 2008 to discuss the proposed plans for the McIlvaine Elementary School project located at 11 East Walnut Street in Magnolia.

According to the information received, you are seeking site plan approval for renovations of the existing school which will include providing a 22,000 sq. ft. expansion.

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

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

- This project will be located within the Town of Magnolia, within an Investment Level 1 area according to the Strategies for State Policies and Spending and on the site of an existing school. The State has no objections to the school addition being constructed provided it is in compliance with all Town of Magnolia ordinances and regulations.
- All school sites must be approved by the directors of the Department of Education, the Office of Management and Budget, and the Office of State Planning Coordination. It is noted that the School District has contacted the Department of Education to begin the school site approval process, and we are currently processing that request.

### **Street Design and Transportation**

- East Walnut Street is classified as a major collector road. DeIDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads. Therefore DeIDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.
- DeIDOT will require the District to provide a 5-foot wide sidewalk across the frontage within the dedicated right-of-way.

### **Natural and Cultural Resources**

- Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach 35 percent. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts.
- Ground Water Protection Branch recommends:
  1. Reduce impervious cover to 20% or less
  2. Relocate any open space areas to the part of the parcel within the wellhead protection area

3. Direct run off from the impervious surface away from the wellhead protection area.
  4. Augment ground-water recharge with clean rooftop run-off systems
- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site.

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

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

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All school sites must be approved by the directors of the Department of Education, the Office of Management and Budget, and the Office of State Planning Coordination. It is noted that the School District has contacted the Department of Education to begin the school site approval process, and we are currently processing that request.

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

No comments were received from the Division of Historical and Cultural Affairs.

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

- 1) East Walnut Street is classified as a major collector road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 40 feet from the centerline on collector roads. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.
- 2) DelDOT will require the District to provide a 5-foot wide sidewalk across the frontage within the dedicated right-of-way.
- 3) A bypass lane may be warranted due to the increased site trips. However, a bypass lane is not feasible in this situation because driveways are present on the opposite side of the street. Further, bypass lanes are not permitted on roadways classified as major collector roadways or higher. If, when the trip generation

diagrams are provided, DelDOT determines that the warrants for a bypass lane are met, then a center left turn lane will be required.

- 4) The developer's site engineer should contact the DelDOT project manager for Kent County, Mr. Brad Herb, to determine specific requirements for access and off-site improvements. Mr. Herb may be reached at (302) 266-9600.

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

**Soils**

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

**Impervious Cover**

Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach 35 percent. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts.

Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete paving materials in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

**TMDLs**

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the St. Jones 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 St. Jones watersheds, a post-development TMDL reduction level of 40% will be required for nitrogen and phosphorus. Additionally, a TMDL reduction level of 90% will be required for bacteria.

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

As stated above, Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the St. Jones watershed. The TMDL calls for a 40% reduction in nitrogen and phosphorus, while a TMDL reduction of 90% will be required for bacteria; both nutrient and bacteria reductions must be from baseline conditions. The Department developed an assessment tool to evaluate how your proposed development may reduce nutrients and bacteria to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as wider vegetated buffers along watercourses/wetlands, increasing the amount of passive, wooded open space, use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

### **Water Supply**

The project information sheets state water will be provided to the project by the Town of Magnolia via a public water system. DNREC records indicate that the project is located within the public water service area granted to the Town of Magnolia under Certificate of Public Convenience and Necessity 91-CPCN-10.

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.

### **Water Resource Protection Areas**

The Water Supply Section, Ground Water Protection Branch, has determined that a significant portion of the proposed development falls within a wellhead protection area for the Magnolia Water Department (see following map and attached map). Wellhead

protection areas are surface and subsurface areas surrounding a public water supply well where land use activities or impervious cover may adversely affect the quantity and quality of ground water moving toward such wells.

The Water Supply Section recommends that the portion of the new development within the wellhead protection area not exceed 20% impervious cover (DNREC, 2005). 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. However, the development should not exceed 50% regardless. The purpose of an impervious cover threshold is to minimize loss of recharge (and associated increases in storm water) and protect the quality and quantity of ground water and surface water supplies.

The proposed development would change the impervious cover from 15% to approximately 35%. The applicant provided these numbers on the PLUS Application form. Ideally, relocating any open space areas to the part of the parcel within the wellhead protection area would decrease the total impervious area in the wellhead protection area. Augmenting the ground-water recharge with clean rooftop run-off systems are another alternative to reducing the total impervious cover.

Ground Water Protection Branch recommends:

- Reduce impervious cover to 20% or less
- Relocate any open space areas to the part of the parcel within the wellhead protection area
- Direct run off from the impervious surface away from the wellhead protection area.
- Augment ground-water recharge with clean rooftop run-off systems

A water balance calculation will be necessary to determine the quantity of clean water to be recharged via a recharge basin (DNREC, 2005; Supplement 1).

In addition, because the wellhead protection area the source of public drinking water, the storage of hazardous substances or wastes should not be allowed within the area unless specific approval is obtained from the relevant state, federal, or local program.

References

Delaware Department of Natural Resources and Environmental Control, 2005, Source Water Protection Guidance Manual for the Local Governments of Delaware, p. 144.

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

**Caesar Rodney School District (PLUS 2008-01-01)**

Map of proposed development as it influences the wellhead protection area. The dark red area shows the wellhead protection area. The parcel under review is outlined in light blue.



**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 the Division of Soil and Water Conservation

Sediment and Stormwater Program. Contact Elaine Webb with the Sediment and Stormwater Program at (302) 739-9921, for details regarding submittal requirements and fees. Contact Elaine Webb to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. A schedule for submittal dates will be set at the pre-application meeting to facilitate the review and approval process so that the bid documents will most closely reflect the approved Sediment & Stormwater Plan, limiting change-orders during construction related to implementation of the approved Sediment & Stormwater Plan.

The design consultant has indicated that due to extremely high infiltration rates, infiltration will be used to manage all regulatory storm events, including full infiltration of the 100-year-storm. Pre-treatment of the runoff prior to discharge to the underground infiltration system is a requirement. The location of the overflow from the infiltration system must also be demonstrated by the design consultant.

Since the proposed method of stormwater management is an underground system, a separate sediment trap will be likely during construction with diversions to direct runoff to the trap rather than the underground system.

A Notice of Intent (NOI) for Construction Activities needs to be submitted prior to plan approval. The NOI fee is \$195.

### **Drainage**

The Drainage Program is aware of existing drainage concern near this project. The area of concern is a tributary of Beaver Gut Ditch on the north side of Barkers Landing Road. The preliminary site plan does not show where this project's stormwater will be released. 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.

### **Rare Species**

A review of our database indicates that there are records of the following State-rare species adjacent to this project site:

Great purple hairstreak (*Atlides halesus*), S1- extremely rare within the State (typically 5 or fewer occurrences). This State-rare butterfly inhabits wet woodlands and old fields. It prefers to nectar on goldenrod, sweet pepperbush, and Hercule's club, although other nectar sources are likely. The larva feed solely on mistletoe. It is unlikely that this project would impact this species as most of the property is routinely mowed. When re-vegetating disturbed areas, the applicant could consider plantings that include nectar sources as listed above.

Broad-winged Hawk (*Buteo platypterus*), S1-extremely rare within the State (typically 5 or fewer occurrences). This State-rare bird utilizes a combination of forest and field for nesting and foraging. This project site represents very little suitable habitat for this species; therefore, impacts to this species from this project is unlikely.

### **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 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.

### **State Fire Marshal's Office – Contact: R.T. Leicht 739-4394**

The State Fire Marshal's Office was unable to attend this meeting. You should contact this office to determine site plan submittal requirements.

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

The Delaware Department of Agriculture has no objections to the proposed school expansion. The school is located within the Town of Magnolia, and the *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 1 areas.

*Right Tree for the Right Place*

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

*Do Not Plant List*

Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear  
Leyland Cypress  
Red Oak (except for Willow Oak)  
Ash Trees

Please contact the Delaware Forest Service for more information at (302) 698-4500.

*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.

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

The DOE supports locating school facilities on parcels with existing or reasonable access to civil infrastructure to include but not limited to:

- Roads, pedestrian walkways and shared use paths
- Waste water/sewerage and domestic water
- Electric, and telecommunications
- Storm water drainage and conveyance

School sites with public water and sewer utilities or access to public water and sewer utilities are recommended by DOE over sites requiring on-site facilities. This project is an expansion project to an existing school facility that is vital to the district's implementation of Full Day Kindergarten, and offers access to adequate public civil utilities.

The DOE supports the State Strategies for Policies and Spending. When considering school facility locations, the DOE considers proximity and access to basic support services as a high priority. This school expansion project is to a current school facility on a site offering access to adequate public support services.

The DOE supports locating school facilities strategically within the geographic region and/or community the facility is intended to serve in order to:

- Encourage non-student pedestrian access to the school facility in an effort to reduce vehicle miles traveled to the extent practical
- Encourage student pedestrian access to the school facility, in order to contain the school's life-cycle operating costs associated with student transportation, as practicable
- Create education campuses by co-locating educational facilities and services in an effort to reduce life-cycle costs as a result of the co-located schools sharing common spaces, facilities and services.

This school expansion project is to a current school facility on a site which appears to be strategically located geographically within a rapidly growing area designated as a growth zone. Pedestrian access may be limited, however the DOE understand that the ultimate use of the expanded, renovated school is a kindergarten center, to which student pedestrian traffic will most likely be limited.

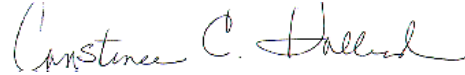
As a result, the DOE supports this school expansion construction project on the existing parcel and to the existing McIlvaine Elementary School.

Specific comments regarding the site plan and school designs will be forwarded to the architect when Schematic designs, Design Development and Construction Documents are presented for review.

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: Town of Magnolia  
Kent County

