



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

July 19, 2005

Ms. Kelli Racca  
Christina School District  
925 Bear Corbit Road  
Bear, DE 19701

RE: PLUS 2005-06-06, Porter Road Elementary School

Dear Ms. Racca,

Thank you for meeting with State agency planners on June 29, 2005 to discuss the proposed plans for the Porter Road Elementary School project to be located 16 acres at US 40 and Porter Road in New Castle County. According to the information received, the Christina School District is seeking to construct a 68,900 square foot elementary school.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. These comments reflect only issues that are the responsibility of the agencies represented at the meeting. The applicants will also need to comply with any Federal, State and local regulations regarding the site. New Castle County is the governing authority over the site.

**Office of State Planning Coordination – Contact Herb Inden 739-3090**

The proposed project is consistent with the State Spending Strategies. It is our hope and expectation that since this school will be placed within a residentially developing area that appropriate connections will be made between the community and school in a manner to promote a livable community. We refer you to the **Better Models for Development in Delaware** booklet distributed by our office for such design considerations. Feel free to contact our office to obtain a copy of this booklet at 302 - 739-7090.

**State Historic Preservation Office (SHPO) – Contact Alice Guerrant 739-5685**

The line of the National Register-listed New Castle and Frenchtown Railroad (N-422) ran close to the rear of the site. There is a historic house (N-13616) to the rear on Porter

Road and the Beers Atlas of 1868 shows the A.S. Moore House on the site. There are areas of high potential for prehistoric-period archaeological sites around the small stream heads.

Landscape screening should be provided along the rear of the parcel if there will be no intervening development between the school and N-13616. SHPO requests the opportunity to check for archaeological sites to learn something of their character before construction begins.

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

The Christina School District seeks to develop a 68,900 square foot elementary school on an approximately 16-acre parcel (Tax Parcel 11-023.20-417). The site is located in the proposed St. Andrews Addition residential subdivision, which is presently a par-3 golf course. The land is zoned ST in New Castle County and the school would be developed by right.

- 1) The response to Question 36 on the PLUS form indicates that the proposed development will not generate additional traffic. Further explanation is required as an elementary school of the size proposed normally expected to generate about 880 vehicle trips per day.
- 2) DelDOT does not typically require traffic impact studies for elementary and middle schools, but New Castle County's standards are more stringent. The school district should contact the New Castle County Department of Land Use to determine if they will require a TIS.
- 3) As proposed, St. Andrews Addition, and by extension the school, would have sole access by way of Keats Way and Cardiff Way in the existing St. Andrews residential development. It is understood that the school district and the developer of St. Andrews Addition would like the development to have two additional access points, one on Route 40 opposite Becks Woods Drive and one on Porter Road (New Castle Road 48) opposite Joan Drive. The developer of St. Andrews Addition does not own all of the land necessary to provide access to Route 40 and additional land acquisition would also be needed to provide access to Porter Road using a design acceptable to DelDOT. DelDOT supports efforts to acquire the land and make the connections and will assist to the extent possible to make that happen.

The District's engineer should contact the Subdivision Manager for New Castle County, Mr. John Schneider, regarding requirements for the design of the subdivision streets and access. Mr. Schneider may be reached at (302) 760-2263.

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

## **Soils**

Although the soils on the site were mapped as well-drained Matapeake soils with few limitations, geologic maps suggest that construction suitability may be limited by an underlying geologic formation containing acid-forming marine deposits. Such deposits, when exposed to atmospheric oxygen, become highly acidic and highly corrosive to concrete. It is strongly recommended that the applicant consult with a knowledgeable geologist to verify if this concern has any basis in fact for this specific site.

## **Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of wetlands on the site. If wetland impacts are considered, note that they are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. Individual 404 permits and certain nationwide permits from the Corps also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Coastal Programs Section. Each certification represents a separate permitting process. The applicant is encouraged to attend a Joint Permit Process Meeting, held monthly and attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding, (302) 739-4691.

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## **Wetland Buffers**

According to the PLUS application, there will be disturbance within 100 feet of wetlands on the property. A vegetative (forested if possible) buffer of at least 100 feet should be maintained around all wetlands to protect water quality. The buffer should not contain infrastructure or stormwater management ponds. Buffers are integral components of aquatic and wetland habitats. They reduce sediments, pollutants, and other non-point source material that affect the integrity of habitat and the condition and survivability of aquatic organisms. Forested buffers also serve as habitats for many terrestrial species dependent on aquatic and wetlands habitats for portions of their annual life cycles.

## **Impervious Cover**

The applicant should reduce the projected impervious cover (approximately 28%). Following the above buffer recommendation will mitigate the impact of the impervious cover. The Department was pleased to hear that the school district plans to employ green-roof technology and would like to discuss this further. Please contact Lyle Jones at (302) 739-4590.

### **TMDLs**

Total Maximum Daily Loads (TMDLs) reductions for enterococci bacteria have been developed for all stream segments of the Christiana River 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 authorized under federal code, states are charged with developing and implementing standards to support these desired use goals. The jurisdictional authority falls under Section 11.5 of the Surface Water Quality Standards (as amended August 11, 1999), and will be achieved via nutrient reductions referred to as “pollution control strategies.” Based on the reduction zone prescribed for the vicinity of this project, enterococci must be reduced by 85 percent. The applicant is encouraged to use BMPs such as buffers and pervious paving materials to mitigate impacts from bacteria and nutrient-laden surface runoff.

### **Water Supply**

The Division of Water Resources will consider applications for the construction of on-site wells if they can be constructed and located in compliance with Regulations Governing the Construction and Use of Wells. Well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. A water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation. Dewatering well permit applications typically take approximately four weeks to process. Questions concerning these comments can be directed to Rick Rios, (302)739-3665.

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

Stormwater management for the site will be incorporated into the overall stormwater management design for St. Andrew’s Addition. The New Castle County Dept. of Land Use Engineering Section will review the overall stormwater management design for St. Andrew’s Addition, including the proposed school site. A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval. DNREC Sediment and Stormwater Program will review and approve the sediment and stormwater construction plans for the proposed school site. The Sediment and Stormwater Plan must be approved and the Notice of Intent for Construction Activities submitted prior to any land disturbing activity taking place on the site. Any stormwater facilities constructed to meet the regulatory requirements of runoff from the proposed school site shall be maintained by the school, not conveyed to a homeowner’s association for maintenance. The school may enter into a shared maintenance agreement

and collect funds from the homeowner's association to aid in maintenance costs. If a mechanism exists to convey maintenance of the shared stormwater facilities to New Castle County, it should be considered. A Certified Construction Reviewer (CCR) will be required for the site during construction.

### **Floodplains**

Portions of the site appear to be within the 100-year floodplain. The project must comply with the floodplain regulations in the New Castle County Unified Development Code.

### **Forest Preservation**

There are 5 acres of forest on the property that will not be removed. It is difficult to discern from the site plan provided, but it appears that the stormwater management area may be located within this forested area. Given the benefit of trees in erosion control and flood abatement, it doesn't make sense to clear trees for a stormwater management pond. If not already located in a cleared area of the parcel, the stormwater management pond should be relocated.

### **Rare Species**

There are currently no records of state-rare or federally listed plants, animals or natural communities at the site. There are rare species associated with Becks Pond and its tributaries that could be impacted by run-off from this project. Therefore, adequate buffers are important as are measures to prevent sedimentation and erosion.

### **Nuisance Geese**

Ponds will likely attract resident waterfowl like Canada geese and mute swans. Typical methods of goose control utilized on golf courses are not advisable. It is easier to control a few geese than to remove a plentiful population. The best method is one of prevention. Native tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around the perimeter of ponds are recommended. Planting should be completed as soon as possible. Waterfowl do not feel safe when they cannot see possible predators in the surrounding area. The Division of Fish and Wildlife does not provide goose control services and residents will have to accept this burden (for example permit applications and fees, securing services of certified wildlife professionals). Solutions can be costly and labor intensive. Reducing the number and/or size of ponds and providing proper landscaping and monitoring techniques will minimize nuisance geese.

### **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):

1) Fire Protection Water Requirements:

- A. Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- B. Where a water distribution system is proposed for (Educational) sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

2) Fire Protection Features:

- A. All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- B. Buildings greater than 10,000 sq.ft., 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- C. Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- D. Show Fire Lanes and Sign Detail as shown in DSFPR.

3) Accessibility:

- A. 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 Caledonia Way must be constructed so fire department apparatus may negotiate it.
- B. 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.
- C. 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.
- D. The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- E. 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.

4) Gas Piping and System Information

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

5) Required Notes

- A. 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”
- B. Proposed Use
- C. Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- D. Square footage of each structure (Total of all Floors)
- E. National Fire Protection Association (NFPA) Construction Type
- F. Maximum Height of Buildings (including number of stories)
- G. Note indicating if building is to be sprinklered
- H. Name of Water Provider
- I. Letter from Water Provider approving the system layout
- J. Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- K. 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 [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com).

**Department of Agriculture - Contact Milton Melendez 739-4811**

The Delaware Department of Agriculture has no objections to development proposed for the site. *Strategies for State Policies and Spending* promote growth in the location proposed by this application.

**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.

**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.**

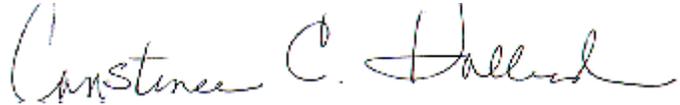
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Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in cursive script that reads "Constance C. Holland". The signature is written in black ink and is positioned above the printed name and title.

Constance C. Holland, AICP  
Director

CC: New Castle County