



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF MANAGEMENT AND BUDGET  
Budget Development, Planning and Administration  
State Planning Coordination

February 18, 2009

Mr. Steven McCabe  
GMB, LLC  
400 High Street  
Seaford, De 19973

RE: PLUS review – 2009-01-02; Milford School District –Upper Elementary School

Dear Mr. McCabe:

Thank you for meeting with State agency planners on February 4, 2009 to discuss the proposed plans for the Milford Upper Elementary School to be located at 310 Lovers Lane in Milford.

According to the information received, you are seeking site plan approval through the City of Milford for a 78,871 sq. ft. elementary school.

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 school district will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the City of Milford is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

**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 proposed school is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. Public facilities, such as schools, are desirable in Investment Level 1 areas where they are located near infrastructure, public services, and the populations they serve. The State supports this location for new school construction.

### **Natural and Cultural Resources**

This elementary school project is one of four identified throughout the state as a candidate to receive \$950,000 for the district to design, construct and operate a LEED Silver Certified school as a demonstration project. The Department of Education sent a letter to the Milford School District on January 21 to announce the availability of those funds, to be spent on one project. The intention is to design, construct and operate a LEED Silver Certified school and track the operating costs of that school, in order to perform a cost/benefit analysis energy efficient school design and operation.

The deadline for responding to the request to participate in this joint partnership with DNREC and DOE is February 20. DNREC hopes Milford School District is planning to respond to this offer.

This office has received the following comments from State agencies:

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

This proposed school is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future redevelopment or infill projects are expected and encouraged by State policy. This site is also located within the City of Milford. Public facilities, such as schools, are desirable in Investment Level 1 areas where they are located near infrastructure, public services, and the populations they serve. The State supports this location for new school construction.

#### **State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685**

No comments received.

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

The Milford School District seeks to develop a 78,871 square foot elementary school on a 32.1-acre assemblage of parcels (Tax Parcels 3-30-11.05-217.00 and 218.00). Presently the Lulu M. Ross Elementary School is located on Parcel 3-30-11.05-217.00. The

proposed plan would place the new school building on Parcel 3-30-11.05-218.00 and add parking and driveways on the Parcel 3-30-11.05-217.00 to create a single campus. The land is located in downtown Milford between Bridgeham Avenue and Marshall Millpond and between Third and Fifth Streets. The land is zoned R-2 in the City and would be by right.

Because the existing and proposed schools would be accessed entirely by City streets, they are outside DelDOT jurisdiction. The proposed school would meet their warrants for a traffic impact study. If the City would like assistance from DelDOT in scoping and reviewing such a study or with other aspects of reviewing the proposed development, they may contact them. Inquiries regarding traffic impact studies may be addressed to Bill Brockenbrough. Inquiries regarding other aspects may be addressed to the DelDOT Subdivision Manager for western Sussex County, Mr. Derek Sapp. Mr. Sapp may be reached at (302) 760-4803.

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

DNREC commends the school district and designers for applying many green-technology stormwater practices to this site. Specific plans are to infiltrate almost twice the acreage that is required, create five bio-infiltration swales, divert almost 17 acres of runoff to groundwater, and infiltrate the total volume of a two-year storm. DNREC hopes the school can serve as a model to other schools contemplating whether to adopt more green practices.

The extra protection is critical because of the school site's location in an excellent recharge area, where DNREC calculates that post-construction impervious cover will be almost 60 percent.

In addition, the school is designed for geo-thermal heating and cooling. At the PLUS meeting, DNREC asked the project presenters whether the school was being designed to LEED specifications. The response was that LEED certification was cost-prohibitive.

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Comments by division and program follow.

## Fish and Wildlife

The DNREC Fish and Wildlife field scientists have not surveyed this project area; therefore, they are unable to provide information pertaining to the existence of state-rare or federally listed plants, animals or natural communities at this project site. According to the application, there will be no disturbance within 100 feet of wetlands and there are no tree clearing activities. Therefore, there is a low probability that impacts to rare species will occur. *Edna Stetzar - (302) 653-2880, Edna.Stetzar@state.de.us*

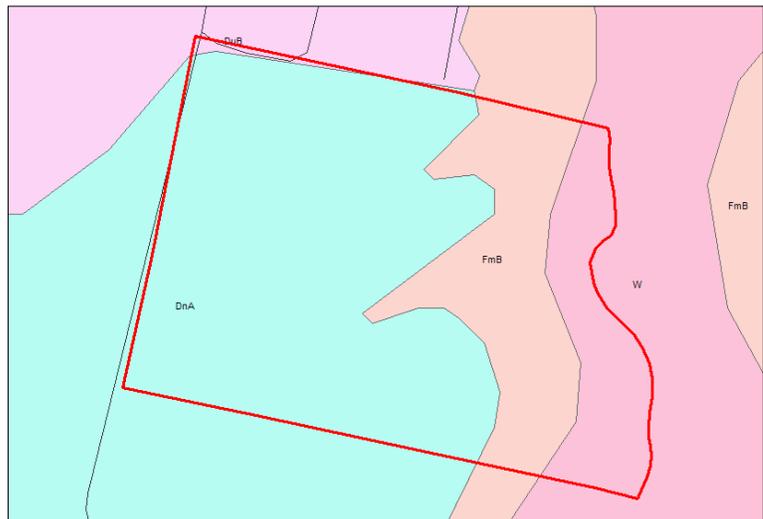
## Soil and Water

**Sediment and Stormwater Program.** The designer has held a pre-application meeting with the Sediment and Stormwater Program and is incorporating green technology best-management practices throughout the project. Please continue to work with the Stephen Wright of the Sediment and Stormwater Program during final design of the site. *James Sullivan - (302) 739-9921, James.Sullivan@state.de.us*

**Flood Management.** DNREC approves of the proposed site plan in relation to the Special Flood Hazard Area. Please be aware when you are determining a Base Flood Elevation be sure to refer to the Flood Insurance Study on detailed streams such as this one. Do not rely solely on the whole number that is indicated on the FIRM panel. (The General Notes on the site plan indicates the map panel may have been used). *Gregory Williams - (302) 739-9921, Gregory.Williams@state.de.us*

## Water Resources

**Soils Assessment.** According to the NRCS soil survey update Downer (DnA; 0-2% slopes) and Fort Mott (FmB; 2-5% slopes), and Water (W) were mapped on subject parcel. Downer and Fort Mott are well-drained upland soils that, generally, have few limitations for development. The area mapped as water also includes wetlands and is unsuitable for development (Figure 1).



**Figure 1: NRCS soil survey update mapping in the vicinity of the Milford Upper Elementary School.**

**Water Allocation.** The project information sheets state water will be provided to the project by the City of Milford via a public water system. DNREC records indicate that the project is located within the

public water service area granted to the City of Milford under Certificate of Public Convenience and Necessity 91-CPCN-09.

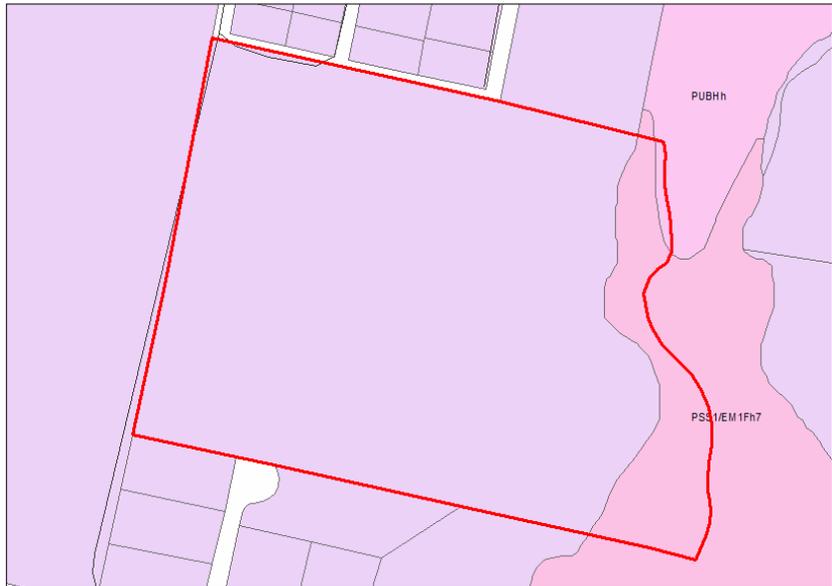
Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per 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. *Ricardo Rios - (302) 739-9944, Ricardo.Rios@state.de.us*

**Wetlands.** According to the Statewide Wetlands Mapping Project (SWMP) maps palustrine scrub-shrub/emergent riparian wetlands (PSS1/EM1Fh7) and palustrine unconsolidated bottom (PUBHh; diked pond) bottom wetlands were mapped on subject parcel (Figure 2).

The applicant is responsible for determining whether any State-regulated wetlands (regulated pursuant to 7 Del.C. Chapter 66 and the Wetlands Regulations) are present on the property. This determination can only be made by contacting the Division of Water Resources' Wetlands and Subaqueous Lands Section at 302/739-9943 and consulting the State's official wetland regulatory maps, which depict the extent of State jurisdiction. The area regulated by State law may be very different from the area under federal authority.

No activity may take place in State-regulated wetlands without a permit from DNREC's Wetlands Section.



**Figure 2: SWMP mapping in the vicinity of the Milford Upper Elementary School.**

In addition, most perennial streams and ditches and many intermittent streams and ditches are regulated pursuant to the Subaqueous Lands Act (7 Del.C. Chapter 72) and the Regulations Governing the Use of Subaqueous Lands. Ponds which are connected to other waters are also regulated, while isolated ponds are not. Any work in regulated

streams, ditches or ponds requires a permit from the Wetlands and Subaqueous Lands Section. An on-site jurisdictional determination is recommended in order to determine whether any regulated watercourses exist on the property. Please contact the Wetlands and Subaqueous Lands Section at 302/739-9943 to schedule an on-site visit. Such appointments can usually be scheduled within 2 to 3 weeks.

The applicant should also be reminded that they must avoid construction/filling activities in those areas containing wetlands or wetland associated hydric soils as they are also subject to regulatory requirements specified under Federal 404 provisions of the Clean Water Act. A site-specific field wetlands delineation using the methodology described in the 1987 United States Army Corps of Engineers (USACE) manual is the basis for making a jurisdictional wetland determination for nontidal wetlands in Delaware.

The applicant is forewarned that the USACE views the use of the National Wetlands Inventory (NWI) mapping or the Statewide Wetlands Mapping Project (SWMP) mapping as an unacceptable substitute for a field-based jurisdictional wetland delineation (i.e., 1987 USACE manual). To ensure compliance with said USACE regulatory requirements, it is strongly recommended that a field wetlands delineation using the above-referenced methodology be performed on this parcel before commencing any construction activities.

It is further recommended that the USACE be given the opportunity to officially approve the completed delineation. In circumstances where the applicant or applicant's consultant delineates what they believe are nonjurisdictional isolated (SWANCC) wetlands (as asserted by the applicant in the PLUS application), the USACE must be contacted to evaluate and assess the jurisdictional validity of such a delineation. The final jurisdictional authority for making isolated wetlands determinations rests with the USACE. The USACE can be reached by phone at 736-9763.

Palustrine headwater water riparian wetlands associated with the Deep Branch stream tributary and Marshall's pond bound the eastern boundary of the proposed project area. Headwater riparian wetlands serve to protect water quality which helps maintain the ecological integrity and functions throughout the length of the stream, including the floodplain system and/or water bodies further downstream. Since headwater riparian wetlands serve as natural buffers that protect the water and habitat quality of streams from sediment and nutrient-laden runoff, their protection deserves the highest priority. Therefore, the Watershed Assessment Section strongly recommends that a 100-foot upland buffer be maintained or established from all wetlands bounding the Deep Branch tributary and Marshall's Pond. A literature review of existing buffer research by Castelle et al. (1994) has documented consensus among researchers that a 100-foot upland buffer is the minimum buffer width necessary- under most circumstances - to protect water quality.

**Impervious Surfaces and Best Management Practices.** Based on the information presented by the applicant in the PLUS application, this project's post-construction estimate for surface imperviousness should not exceed 23%. DNREC estimates that

impervious cover in the excellent recharge area (see map below) is close to 60%. When calculating surface imperviousness, it is important to consider all created forms of constructed surface imperviousness (i.e., rooftops, sidewalks, roads, and stormwater management structures) in the calculation for surface imperviousness; otherwise, an inaccurate assessment of this project's environmental impacts will result. Surface imperviousness should be recalculated if the above-mentioned forms of constructed surface imperviousness were not included.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. DNREC recognizes that the applicant plans to implement green-technology best-management practices that will reduce or mitigate some of the most likely adverse impacts. Since this project is a commercial-scale project that will generate a significant amount of post-construction surface imperviousness, it is strongly recommended that at least 50% of the paved surface area contain pervious paving materials in lieu of conventional paving materials.

**TMDLs .** Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Mispillion watershed. These standards are not yet in the form of a regulation. 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 Mispillion watershed, "target-rate-nutrient reductions" of 57 percent will be required for nitrogen and phosphorus. Additionally, "target-rate-reductions" of 87 percent will be required for bacteria.

The TMDL for the Mispillion Watershed calls for a 57 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for an 87 percent reduction in bacteria from baseline conditions. A pollution control strategy eventually will be used as a regulatory framework to ensure that these nutrient reduction targets are attained. The department has developed an assessment tool to evaluate how your proposed development may reduce nutrients to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as increasing the amount of passive, wooded open space (planted with native woody and herbaceous vegetation), use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies as planned for this project. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

*Soils, wetlands, subaqueous lands and TMDL comments provided by John Martin, Watershed Assessment Section, (302) 739-9939, John.Martin@state.de.us*

**Water Supply.** The site falls entirely within an excellent ground water recharge potential area for The City of Milford (see map below). The Application states that the

development is on TMP 3-30-11.05 218. The site plan shows development on two parcels, TMP 3-30-11.05 218 and 3-30-11.05 217.

The application states that the proposed development would change the impervious cover from 15 to 23%. It appears that this calculation is based on the total area of the two parcels (~32 acres) not just the area within the excellent ground water recharge potential area (~20 acres). This would indicate that we are looking at both parcels.

Based on a calculation using an ArcMap software program, it is estimated that approximately 20 acres of the two parcels are in an area of excellent ground water recharge potential. It is also estimated that there is approximately 5.17 acres of impervious cover present. The site plan indicates that the development will increase the impervious cover to a total of 10.77 acres. Based on the ArcMap calculation the impervious cover within the excellent ground water recharge potential area will increase from 26% to 58%.

The proposed development falls within the municipal boundaries of the City of Milford. The City's Ordinance No. 2008-2 §230-19.2 D 7) 2; limits impervious cover in excellent ground-water recharge potential areas to 60%. The applicant must submit an environmental assessment report including a climatic water budget that will insure post-development recharge quantity will meet or exceed the existing (pre-development) recharge quantity.

The following clause, §230-19.2 D 7) 3, allows construction to exceed the 60% limit set in §230-19.2 D 7) 2 if the developer uses rooftop drains. It also allows for impervious cover in excess of 60% if an environmental assessment report shows that post-development recharge is less than pre-development. This clause nullifies the impervious cover threshold necessary to protect the resource and does not address water quality.

DNREC's Groundwater Protection Branch recommends:

1. That impervious cover is limited to sixty (60) percent or less. The Climate Budget Report must demonstrate that post-development recharge is greater than or equal to pre-development recharge using the elements outlined in the City of Milford Source Water Protection Ordinance No. 2008-2 §230-19.2 F.
2. In addition, the report must show that water quality as well as water quantity of post development recharge is equal to or greater than pre-development recharge.

Title 7 Chapter 60 Subchapter VI, § 6082 requires that regulations governing land use within excellent ground-water recharge potential areas are designed to protect those areas from activities and substances that may harm water quality and subtract from overall water quantity.

**Map of Milford School District (PLUS 2009-01-02)** The site plan provided in the PLUS application is overlain the parcels. Excellent ground-water recharge potential area shown in green.



## Air and Waste

The Air Quality Management section has no comments.

**Hazardous Waste Sites.** DNREC's Site Investigation and Restoration Branch (SIRB) has reviewed the proposed project. No SIRB sites or salvage yards were found within a ½-mile radius of the proposed development. However, based on the previous agricultural use of the proposed project site, which may have involved the use of pesticides and herbicides, SIRB recommends that a Phase I Environmental Site Assessment be performed prior to development.

In addition, should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

**Tank Management Branch.** The Delaware Department of Natural Resources and Environmental Control-Tank Management Branch (TMB) appreciates the opportunity to comment on the proposed development. There is one active Leaking Underground Storage Tank (LUST) site with ongoing remediation located within a quarter mile of the proposed project.

Name: Roberts Service Station  
Facility ID: 5-000102  
Project: S9406149

Should any underground storage tanks or petroleum contaminated soil be discovered by any person during construction, the DNREC-TMB at (302) 395-2500 and the DNREC Emergency Response Hotline at (800) 662-8802 must be notified within 24 hours.

Should any contamination be encountered, PVC pipe materials would have to be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas.

Also, please note that if any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMB. If any ASTs greater than 12,500

gallons are installed, they are also subject to installation approval by the TMB. *Elizabeth Wolff* - (302) 395-2500, *Elizabeth.Wolff@state.de.us*

**State Fire Marshal's Office – Contact: Duane Fox 856-5298**

At the PLUS meeting of 2/2/09, it was learned that the principals for this project has already met with our Office in Georgetown (D. Fox and S. Callaway) for a Preliminary Plan Review meeting and that plans have been submitted, reviewed and Comments generated. (Ref: our file # 2008-04-1195-MJS-01)

As such, no additional Comments are made at this time.

**Department of Agriculture - Contact: Scott Blaier 739-4811**

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

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. To further support this concept the Delaware Forest Service does not recommend the planting of the following species due to the high risk of mortality from insects and disease:

Callery Pear  
Leyland Cypress

Ash Trees  
Red Oak (except for Willow Oak)

If you would like to learn more about the potential problems or impacts associated with these 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.

**Delaware Economic Development Office – Contact: Jeff Stone 672-6849**

No comments received.

**Delaware Division of Public Health- Health Promotion Bureau- Contact: Michelle Eichinger (302) 744-1011**

Ensuring that new residential and commercial development incorporates pedestrian- and bicycle-friendly features allows people to travel by foot or by bicycle and promotes physical activity as part of daily routines. Regular physical activity offers a number of health benefits, including maintenance of weight and prevention of heart disease, type 2 diabetes and other chronic diseases.<sup>1</sup> Research shows that incorporating physical activity into daily routines has the potential to be a more effective and sustainable public health strategy than structured exercise programs.<sup>2</sup> This is particularly important considering about 65% of adult Delawareans are either overweight or obese.<sup>3</sup> This current obesity crisis is also affecting children. Approximately 37% of Delaware's children are overweight or obese<sup>4</sup>, which places them at risk for a range of health consequences that include abnormal cholesterol, high blood pressure, type 2 diabetes, asthma, depression and anxiety.<sup>1</sup>

In Delaware, as in other states across the nation, certain patterns of land use can act as a barrier to physical activity and healthy eating for children and adults alike. Examples of such barriers include neighborhoods constructed without sidewalks or parks and shopping centers with full-service grocery stores situated too far from residential areas to allow for walking or biking between them.

This proposed development is in a Level 1 area. Developing in such an area is consistent with the *Strategies for State Policies and Spending*. DPH is committed to the *Strategies* and therefore, does support development in the proposed area.

DPH supports new development in and around existing towns and municipalities where compact and mixed land use patterns facilitate physical activity. As a way to promote physical activity and access to healthy foods, we recommend that the following amenities be included in the Milford Upper Elementary School plan:

**Increase opportunities for physical activity**

- Design the school site in a way that promotes walking and biking to school, such as by:
  - Connecting sidewalks and walking/biking paths on the school grounds to the larger bike/pedestrian network surrounding the school site to provide continuous travel routes

- Providing well identified crossings for students
- Providing secure and convenient bicycle parking
- Protecting pedestrian areas (e.g. playgrounds, bike racks and sidewalks) from bus loading zones and student drop-off/loading zones
- Designing student drop-off/loading zones so that students are protected from other vehicles
- Providing a continuous curb and sidewalk adjacent to the drop-off/loading area leading into the school

**Delaware State Housing Authority – Contact Vicki Powers 739-4263**

No comments regarding this project.

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

The DOE has commented previously through the PLUS process on the location of this school. The DOE supports the site and location of the school on the site in general. The DOE has the Design Development plans for this proposed school and will make specific general and project specific comments directly to the architect.

It is noted however that this PLUS application specifies a 78,871 square foot Elementary School, however Certificate of Necessity (CN) # 0818 A-B authorizes a 74,321 (+- 1%) square foot Elementary School. The additional 3,807 square feet represents \$875,610.00 at the CN value of \$230.00 per square foot. Any square footage beyond that authorized in the CN must be funded through district local funds.

**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,



Constance C. Holland, AICP  
Director

CC: City of Milford