



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

June 20, 2018

Ted Williams, P.E.
Landmark Science & Engineering
200 Continental Drive, Suite 400
Newark, DE 19713

RE: PLUS Review 2018-05-04; Appoquinimink School District – Whitehall Campus

Dear Ted,

Thank you for meeting with State agency planners on May 23, 2018 to discuss the proposed plans for the Appoquinimink School District – Whitehall Campus. According to the information received you are seeking review of a school site feasibility for a new 250,000 square foot high school along Lorewood Grove Rd in New Castle County..

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 New Castle 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.**

Strategies for State Policies and Spending

This project is located in Investment Levels 3 and 4 according to the *Strategies for State Policies and Spending*. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments may support future growth in these areas, but please be advised that the State has other priorities for the near future. We encourage you to design the site with respect for the environmental features which are present. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

Code Requirements/Agency Permitting Requirements

Department of Transportation – Contact Bill Brockenbrough 760-2109

- The site access on Lorewood Grove Road (New Castle Road 412) must be designed in accordance with DelDOT's Development Coordination Manual, which is available at <http://www.deldot.gov/Business/subdivisions/index.shtml?dc=changes>.
- Consistent with Section 1.2.1 of the Manual, DelDOT anticipates requiring the site access on Lorewood Grove Road to be located opposite Airmont Drive. Other access locations may be acceptable on further review.
- Pursuant to Section P.3 of the Manual, a Pre-Submittal Meeting is required before plans are submitted for review.
- Section P.5 of the Manual addresses fees that are assessed for the review of development proposals. DelDOT anticipates collecting the Initial Stage Fee when the record plan is submitted for review and the Construction Stage Fee when construction plans are submitted for review.
- Per Section 2.2.2.1 of the Manual, Traffic Impact Studies (TIS) are warranted for developments generating more than 500 vehicle trip ends per day or 50 vehicle trip ends per hour in any hour of the day. DelDOT calculates that a 250,000 square foot high school would generate 3,518 vehicle trip ends per day. Therefore the proposed development meets those warrants.

The proposed campus is located in the Southern New Castle County Transportation Improvement District (TID). See Section 2.4 of the Manual for a general treatment of TIDs. In a TID, developments consistent with the planning for the TID pay a fee and in exchange are relieved of responsibility for traffic studies and off-site improvements. The proposed campus would replace Village 2 in the Whitehall subdivision and land development plan. It may be possible to show that the traffic generated by the proposed campus will be sufficiently consistent with the traffic that Village 2 would have generated. In that case, the campus could be treated as part of the TID.

For more information on the TID, the District may contact Ms. Sarah Coakley, a planner in DelDOT's Statewide and Regional Systems Planning Section. Ms. Coakley may be reached at (302) 760-2236 or Sarah.Coakley@state.de.us.

The TID discussion notwithstanding, schools generally have much more intense peak period traffic than other uses, especially in the morning peak hour. For that reason, DelDOT may require a Traffic Operational Analysis (TOA) in its review of the site access. Per Section 2.3.2 of the Manual, DelDOT may require a TOA for any development project that is expected to generate 200 or more vehicle trips per day and for which a TIS was not completed.

- As necessary, in accordance with Section 3.2.5 and Figure 3.2.5-a of the Manual, DelDOT will require dedication of right-of-way along the site's frontage on Lorewood Grove Road. By this regulation, this dedication is to provide a minimum of 40 feet of right-of-way from the physical centerline of that road. The following right-of-way dedication note is required, **"An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat."**
- In accordance with Section 3.2.5.1.2 of the Manual, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Lorewood Grove Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, **"A 15-foot wide permanent easement is hereby established for the State of Delaware, as per this plat."**
- Section 3.5 of the Manual provides DelDOT's requirements with regard to connectivity. The requirements in Sections 3.5.1 through 3.5.3 shall be followed for all development projects having access to state roads or proposing DelDOT-maintained public streets for subdivisions. The Master Plan for Whitehall includes two streets that would connect Village 2 to the rest of the community, Trek Street connecting to Village 1 and an as-yet-unnamed street connecting to Hamlet 3. It is unclear how those streets could be incorporated into the plan for the campus but DelDOT would expect the District to make reasonable efforts to at least connect the campus to Trek Street so that trips to the school from Village 1 could be made without using Lorewood Grove Road.
- Referring to Section 3.5.4.2.A of the Manual, all developments generating 2,000 or more vehicle trip ends per day are required to install a sidewalk or Shared Use Path along their frontage.
- This project is located within the regulated airspace zones of Summit Airport (EVY), which is a public-use facility. Federal Aviation Regulation (FAR) Part 77 imposes height restrictions on any structures within these zones. DelDOT requires that the applicant for this project submit a "Proposed Construction/Alteration in Airport Zones Notification Form" in accordance with Delaware Code (2 Del. C. § 602).

This notification form can be submitted during the plan approval process with the local land use jurisdiction, but DelDOT's Office of Aeronautics is willing to test hypothetical height numbers to prevent any future project complications. Please contact Mr. Nate Attard with the Office of Aeronautics at (302) 760-2174 or Nathan.Attard@state.de.us with any questions or concerns. A copy of the notification form is available at

https://www.deldot.gov/Programs/aviation_svcs/pdfs/aviation_obstruction_review_form.pdf?012913

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Development of this parcel will result in increased impervious surface, new sources of greenhouse gas emissions and potential habitat loss. Opportunities exist to preserve natural resources while reducing the environmental impact on-site. As discussed at the May 23rd, 2018 PLUS meeting, the Department recommends reduced impervious surface cover and protection of the excellent groundwater recharge area on which the parcel is located. Habitat and protected species protection are also a concern within this region. Due to these concerns, DNREC has provided specific information and outlined a number of best management practices to assist in protecting these resources and the overall health of the community.

The State of Delaware is threatened by climate change and has a goal of reducing greenhouse gas emissions by 30 percent by 2030. Appropriate development and re-development that provides access to public transportation, opportunities to walk and bike to shopping and recreation, and that employs energy efficient building standards are among key strategies to meet these goals. DNREC encourages the use of high performance building standards and consideration of alternative energy sources to promote clean sustainable energy and reduce greenhouse gas emissions. This could mean siting the buildings to take advantage of solar and geothermal systems, and/or including infrastructure for electric vehicle charging stations (funding assistance may be found at www.de.gov/cleantransportation). DNREC further recommends an abundant use of native vegetation and shade trees throughout the landscape, as well as other green infrastructure, where practicable, to absorb carbon dioxide, protect water quality and provide relief to students and staff on hot days.

The following pages provide information about applicable regulations and detailed recommendations associated with this project from various DNREC Divisions. DNREC would like to be a partner in creating appropriate development that protects and highlights the environment as a natural amenity of the landscape. The Department has resources and expertise that are available to help make this a reality, often at no expense to the landowner.

Source Water Protection.

- A portion of the southeastern side of project falls within an area of excellent groundwater recharge (see map). No wellhead protection areas were identified.

Excellent Ground-Water Recharge Areas are those areas mapped by the Delaware Geological Survey where the first 20 feet of subsurface soils and geologic materials are exceptionally sandy. These soils are able to transmit water very quickly from the land surface to the water table. This map category (excellent) is an indicator of how fast contaminants will move and how much water may become contaminated (Butoryak and Talley, 1993). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.

- DNREC recommends referring to NCC Unified Development Code for regulations regarding development in these areas.

- *Reference:*

Butoryak, K. R., and Talley, J. H., 1993, Delineation of Ground-Water Recharge Resource Protection Areas in the Coastal Plain of New Castle County, Delaware: Delaware Geological Survey Project Report for the Water Resources Agency for New Castle County, p. 26.

Bog Turtle.

- Habitat for the federally threatened bog turtle (*Glyptemys muhlenbergii*) occurs near the project site. Bog turtles typically occur in freshwater wetlands with open canopies, mucky soils, and tussock vegetation. Because bog turtles are a federally listed species, protected under the Endangered Species Act, their presence can affect the scope of projects. Prior to commencing work on or near potential bog turtle habitat you are required to either:
 - Completely avoid all direct and indirect project impacts to the wetland, in consultation with the U.S. Fish and Wildlife Service (Andy Moser) and Delaware Division of Fish and Wildlife;
- OR
- Have surveys conducted to determine if bog turtles are present. Please note that surveys may confirm presence of turtles, but cannot confirm absence and recommendations to minimize impact to the habitat may be applicable even if bog turtles are not found during surveys. In accordance with Delaware's bog turtle site survey procedures, surveys must be conducted by a State-approved bog turtle surveyor between April 15 and June 15. A list of qualified surveyors is available upon request.

For more information, please contact our Endangered Species Biologist, Holly Niederriter, at (302) 735-8670.

Wetland Permitting.

- Because state-rare species are present, this project is within a State Natural Heritage Site. State Natural Heritage Sites and Delaware National Estuarine Research Reserves are identified as "Designated Critical Resource Waters" by the Army Corps of Engineers (ACOE), and as such are subject to the restrictions and limitations imposed through Nationwide Permit General Condition No. 22. A copy of this letter shall be included in any permit application or pre-construction notification submitted to the Army Corps of Engineers for activities on this property.
- If you propose to use Nationwide Permit No. 3, 13, 18, 29, 39 or 42, please note that the State of Delaware has denied 401 Water Quality Certification (WQC) and Coastal Zone Federal Consistency Concurrence (CZM) for these Nationwide Permits in Designated Critical Resource Waters. In order to use any of these six Nationwide Permits at this site

you must apply for a project-specific Water Quality Certification (WQC) and Coastal Consistency Determination (CZM) from the appropriate offices at DNREC. To obtain the application materials and for all information regarding WQC, contact DNREC's Wetlands and Subaqueous Lands Section at (302) 739-9943. For information pertaining to CZM, contact DNREC's Coastal Programs at (302) 739-9283.

- If you propose to use Nationwide Permit No. 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, or 44, this Designated Critical Resource Water designation may require you to obtain authorization through some other nationwide or general permit, or an individual permit from the Army Corps of Engineers. You should review the Nationwide Permit General Conditions and Regional Conditions for Delaware (see, in particular, Nationwide Permit General Condition No. 19) to determine what notification requirements or restrictions might be applicable for your activity. Please contact the Army Corps of Engineers at (215) 656-6728 if you have questions or require additional information regarding the Nationwide Permit Program.

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. It is strongly recommended that you contact the reviewing agency to schedule a pre-application meeting with the Sediment and Stormwater Section 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.

State Historic Preservation Office – Contact Carlton Hall 736-7404

- There are no known National Register listed buildings on the parcel. However there is a known National Register listed building (**N05193**) which is a two-and-a-half story frame building known as Fairview located close to the project area on the neighboring parcel. According to our files, it does not appear that there has been an archaeological survey of this property and our office recommends an archaeological survey be conducted.
- DNREC also recommends providing sufficient landscaping between the NR listed house (**N05193**) and new development, to help block any adverse noise or visual effects.
- If any project or development proceeds, the developer should also be aware of the Unmarked Human Burials and Human Skeletal Remains Law. Prior to any demolition or ground-disturbing activities, the developer should hire an archaeological consultant to

examine the parcel for archaeological resources, including unmarked human burials or human skeletal remains, to avoid those sites or areas.

- Disturbing unmarked graves or burials triggers the Delaware's Unmarked Human Burials and Human Skeletal Remains Law (Del. C. Title 7, Ch. 54), and such remains or discoveries can result in substantial delays while the procedures required under this law are carried out. If there is a discovery of unmarked graves, burials or a cemetery, the Division of Historical & Cultural Affairs recommends that the plans be re-drawn to leave the full extent of the cemeteries or any burials on its own parcel or in the open space area of the development, with the responsibility for its maintenance lying with the landowner association or development. If you would like to see more information, please review the following websites: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml.
- If there is federal involvement, in the form of licenses, permits, or funds, the federal agency, often through its client, is responsible for complying with Section 106 of the National Historic Preservation Act (36 CFR 800) and must consider their project's effects on any known or potential cultural or historic resources. Owners and developers who may plan to apply for an Army Corps of Engineers permit or for federal funding, such as HUD or USDA grants, should be aware of the National Historic Preservation Act of 1966 (as amended). If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's role; please review the Advisory Council's website at the following: www.achp.gov

Recommendations/Additional Information

This section includes a list of site specific suggestions that are intended to enhance the project. These suggestions have been generated by the State Agencies based on their expertise and subject area knowledge. **These suggestions do not represent State code requirements.** They are offered here in order to provide proactive ideas to help the applicant enhance the site design, and it is hoped (**but in no way required**) that the applicant will open a dialogue with the relevant agencies to discuss how these suggestions can benefit the project.

Department of Transportation – Contact Bill Brockenbrough 760-2109

- Related to the TID mentioned above, DelDOT is developing a project to widen Lorewood Grove Road from Jamison Corner Road to Delaware Route 1. More information is available at https://www.deldot.gov/information/projects/lorewood_grove_rd/ but the project would necessarily affect the site frontage on Lorewood Grove Road.

Department of Natural Resources and Environmental Control – Contact Michael Tholstrup 735-3352

Site Visit Request.

- Although bog turtle surveys have been completed in this area, our Division scientists have not surveyed the project area for other state-rare plant and animal species. In order to provide more informed comments, DNREC requests the opportunity to conduct a survey to evaluate habitat and determine the potential for species of conservation concern. Please note that our scientists have extensive knowledge of the flora and fauna of the state. The survey will be conducted at no expense to the landowner. Please contact Kate Fleming at (302) 735-8658 or at Kate.Fleming@state.de.us to coordinate a site visit.

Fish and Wildlife.

- Herps: The wetlands on this parcel are associated with habitat known to be herp-rich, and in particular are known to provide habitat to state-rare reptiles and amphibians, including: *Hemidactylium scutatum* (four-toed salamander – ranked S1) and *Regina septemvittata* (queen snake – Ranked S1). The four-toed salamander typically breeds in forested wetlands, bogs, and spring seepage areas, but upland buffer areas around wetlands are equally important habitat. Additionally, the queen snake feeds solely on crayfish, which require unpolluted streams for survival. Stream degradation has been known to lead to the deterioration or complete elimination of crayfish populations.

Efforts should be made to avoid direct impacts to wetlands (including forested ‘isolated’ wetlands) and to maintain as large an upland buffer as possible (300 ft. is preferable). This buffer should be comprised of the existing vegetation not of maintained lawn areas. This is especially important given that the project would be only a portion of a much larger project area that will certainly bring large amounts of impervious surfaces.

- State Wildlife Area: The proposed project is within ½ mile of the boundary of Chesapeake and Delaware Canal Wildlife Area, a State Wildlife Area managed by the Division of Fish and Wildlife, DNREC. To ensure that the quantity and quality of wildlife habitat in the State Wildlife Area is not negatively affected by development activities, please contact the Regional Wildlife Biologist, Eric Ludwig, at (302) 834-8433. Additionally, the developer should be aware that people using the property in question could be subject to the effects of legal hunting activities in the Wildlife Area, such as firearm noise or dogs barking when pursuing game.
- Wetland Buffers: Given that this project is one portion of a much larger development project that is bringing a great deal of impervious surfaces to support new homes and buildings, it would be best to retain as much natural vegetation and woodlands as possible and certainly avoid fragmenting these areas.

Although the project plans indicate that there will be no ground disturbance within 100 ft of wetlands that does not appear to be the case based on the site plans provided. To

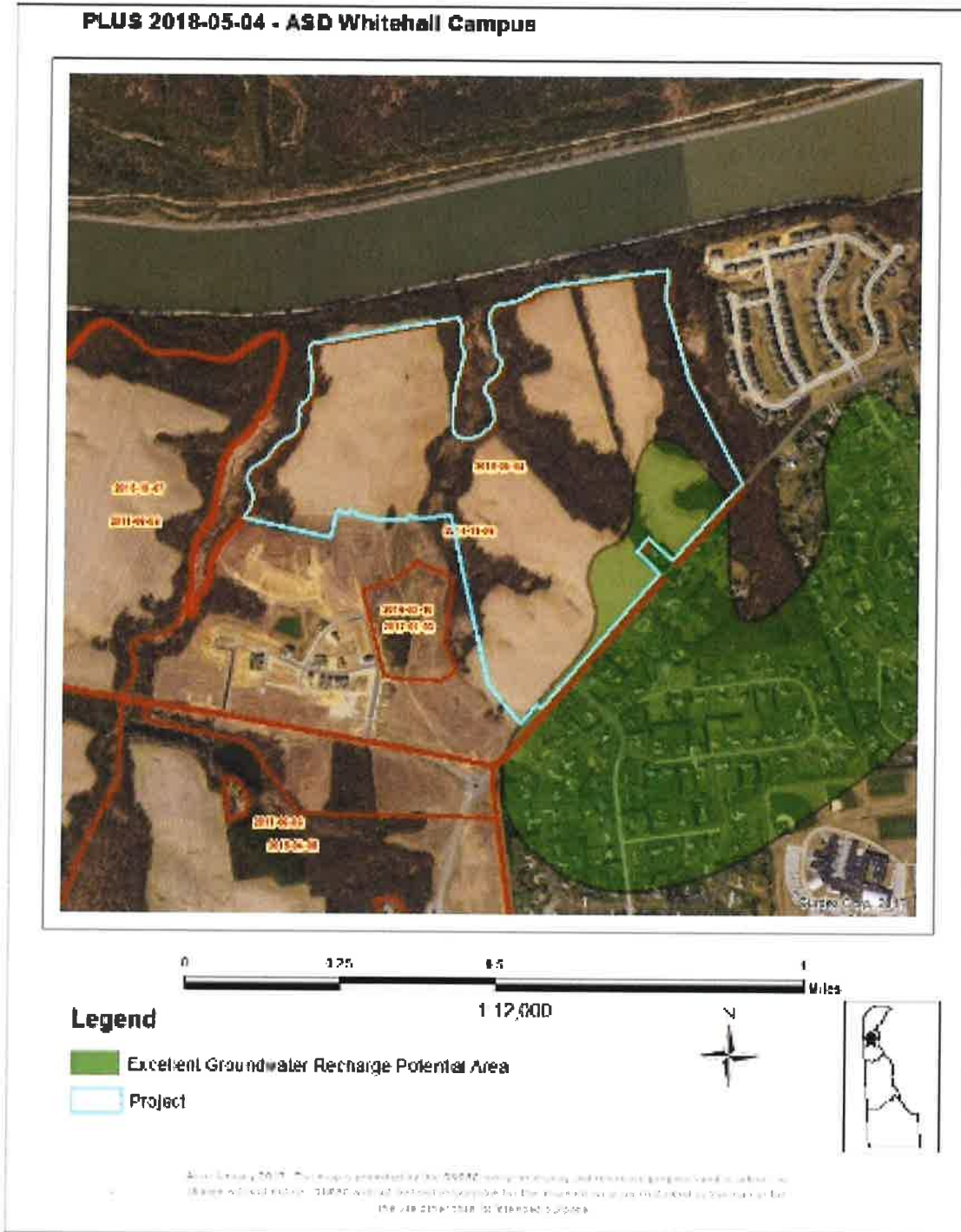
protect the function and integrity of wetlands, a minimum 100-ft. buffer should be left intact around its perimeter. Upland buffers serve as habitat for many terrestrial species that are dependent on aquatic and wetlands habitats for a portion of their annual life cycle. Lot lines, roadways, and infrastructure should not be placed within this buffer zone. Buffers are an integral component of aquatic and wetland habitats, reducing the amount of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of aquatic organisms.

Air Quality.

- DNREC recommends the following considerations for the ASD Whitehall Campus to mitigate potential air pollution impacts:
 - Preservation of open space where appropriate,
 - Expansion of the current bicycle and pedestrian network,
 - Encouraging the use of alternative transportation modes,
 - Planting native trees and landscaping.
- As an added component to address air quality concerns in the area, the applicant is encouraged to add electric vehicle supply equipment (EVSE) and charging where feasible in common areas to accommodate cleaner vehicular transportation through the area. DNREC's clean transportation website has more information about the various electric charging options and where they are best deployed. DNREC also offers rebates to lower the cost of electric vehicle charging stations at the workplace. For additional information on how the District can become involved with this growing and successful program, please visit the following link: www.de.gov/cleantransportation.
- DNREC encourages the expansion of alternative transportation modes such as walking and biking, including the use of sidewalks and bike paths. It is recommended that efforts be coordinated to maximize the availability of alternative travel modes such as walking and biking to the school. Bike racks could be included in multiple campus common areas.
- DNREC also recommends native trees in the school expansion plan. The planting of native tree species improves the ability to reduce air pollution by taking in carbon dioxide and converting it into oxygen and particulate matter (PM) through leaves surfaces. The ideal tree species to use are those with large leaf surface areas, high transpiration rates and have hairy or sticky leaves which are amenable to particle collection.

Reference Map.

- Excellent Groundwater Recharge Potential:



Approval Process

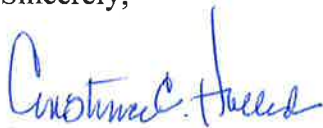
School sites must be approved by the Secretary of Education, the Director of OMB, and the Director of the Office of State Planning Coordination. The *Strategies for State Policies and Spending*, the information contained within this PLUS letter, and other factors will be considered when the Secretary and the two Directors make the determination about whether or not to approve a school site.

Once the District decides on a school site or sites to pursue for approval, the district must submit a letter requesting approval for the site(s) to the Department of Education. The letter should be directed to the DOE staff responsible for the Capital Program. The letter should contain a tax parcel ID number, PLUS review number, and all relevant information regarding the site and the proposed school.

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, Office of State Planning Coordination

CC: Sussex County
James Pennewell, Department of Education