

STATE OF DELAWARE Executive Department Office of State Planning Coordination

August 20, 2014

Mr. John Falkowski Becker Morgan Group 309 S Governors Avenue Dover, DE 19901

RE: PLUS review 2014-07-05, Laurel Elementary School

Dear Mr. Falkowski,

Thank you for meeting with State agency planners on July 23, 2014 to discuss the proposed plans for the Laurel Elementary School. According to the information received, you are seeking site plan review for the construction of a 133,794 sq. ft. elementary school in the Town of Laurel.

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 Laurel is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the Town.

Strategies for State Policies and Spending

• This project is located in Investment Level 1 according to the *Strategies for State Policies and Spending*. This site is also located in the Laurel Growth Zone. 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.

Code Requirements/Agency Permitting Requirements

State Historic Preservation Office – Contact Terrence Burns 736-7404

122 Martin Luther King Blvd. South • Dover, DE 19901 Phone (302)739-3090 • Fax (302) 739-5661 • www. stateplanning.delaware.gov

- The entire Laurel Elementary School is a National Register Contributing element within the Laurel Historic District, which is-listed in the National Register of Historic Places (S-7656.500 S-7656.506). SHPO recommends that you keep the historic school in use, and will be happy to discuss with you the best approaches of how to maintain the historic features of the school. Other school districts such as Brandywine, Caesar Rodney, and Indian River have had success in maintaining the historic fabric by renovating, expanding or enhancing various historic components of their schools. If you have any questions or would like to discuss this further, please Madeline Dunn at (302) 736-7417or Jesse Zanavich at (302) 736-7433, and they will be glad to assist you.
- With regards to the site of the new school, the developer may want to hire an archaeological consultant to examine the parcel for any potential archaeological site (historic or pre-historic), historic cemetery or unmarked human remains prior to any ground disturbing activities.
- If there is any federal involvement with the project, 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). Regulations promulgated for Section 106 of this Act stipulate that no ground-disturbing or demolition activities should take place before the Corps or other involved federal agency determines the area of potential effect of the project undertaking. These stipulations are in place to allow for comment from the public, the Delaware State Historic Preservation Office, and the Advisory Council for Historic Preservation activities without adherence to these stipulations may jeopardize the issuance of any permit or funds. If you need further information or additional details pertaining to the Section 106 process and the Advisory Council's website at www.achp.gov.

Department of Transportation - Contact Bill Brockenbrough 760-2109

• The response to Item 25 on the PLUS application shows that the school would generate 1,548 to 1,806 vehicle trips per day based on the number of students, which would vary by 200 depending on the final size of the building. Currently there are two alternative designs for the building. It is estimated, using the Institute of Transportation Engineers' <u>Trip Generation Manual</u>, that a 133,794 square foot elementary school will generate 2,064 vehicle trips per day. In discussions with the District's traffic engineer following the PLUS meeting, DelDOT determined that the school would generate about 228 vehicle trips in the morning peak hour. By either estimate, the proposed campus meets DelDOT's volume warrants for a Traffic Impact Study (TIS), as contained in Section 2.3.1 of the <u>Standards and Regulations for Subdivision Streets and State Highway Access</u>.

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DelDOT recommends that the District contact Mr. Troy Brestel of the DelDOT Planning Office to schedule a TIS scoping meeting in accordance with Section 2.5 of the <u>Standards</u> and <u>Regulations</u>. In that regard, the District should complete and submit the Scoping Meeting Information Form found in Appendix O of the <u>Standards and Regulations</u>. Mr. Brestel may be reached at (302) 760-2167.

- The site access on Central Avenue must be designed in accordance with DelDOT's <u>Standards</u> and <u>Regulations for Subdivision Streets and State Highway Access</u>. This manual is available on-line at <u>http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/</u> <u>Subdivision_Manual_Revision_1_proposed_060110.pdf</u>.
- Please be advised that DelDOT has advertised for comment a comprehensive revision of the <u>Standards and Regulations</u>. The comment period ran through June 30 and DelDOT could adopt this revision as soon as September 2014. Implementation guidance has not been developed but it is recommended that the developer's engineer become familiar with the proposed changes and assess whether any of them could be relevant to this project. Information on the proposed revision is available in the Register of Regulations and at http://www.deldot.gov/information/pubs_forms/revisions_to_ASR/index.shtml.

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold 735-3495

Wetlands

- State regulated wetlands <u>ARE NOT</u> located on this property based on a review of the State wetland maps. State regulated subaqueous lands <u>ARE</u> likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps but do not look to be impacted by the planned construction. State subaqueous lands include all tidal waters (up to the mean high water line), most non-tidal rivers, streams, lakes, ponds, bays and inlets (up to the ordinary high water line), most perennial streams and ditches and many intermittent streams and ditches. Additional information about State regulated subaqueous lands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or online at http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx.
- Waters of the U.S. regulated by the U.S. Army Corps of Engineers <u>ARE</u> likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. Waters of the United States include the following: navigable waters of the United States; wetlands; tributaries to navigable waters of the United States, including adjacent wetlands and lakes and ponds; interstate waters and their tributaries, including adjacent wetlands; and all other waters of the United States not identified above, such as isolated wetlands, intermittent streams, and other waters that are not part of a tributary system to interstate waters or to navigable waters of the United States, where the use, degradation or destruction of these waters could affect interstate or foreign commerce. The extent of Federal jurisdiction over Waters of the United States is determined by the U.S. Army Corps of Engineers and is based on site specific conditions. Therefore, an on-site inspection by an environmental consultant is recommended to determine if Waters of the

U.S. are located on the property and the limits of Federal jurisdictional. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at <u>http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm</u>. According to the application, these wetlands have been delineated and will not be impacted.

TMDLs

• The project is located in the greater Chesapeake Bay drainage area. In this watershed, the EPA and the State of Delaware have developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for nutrients (e.g., nitrogen & phosphorus), and bacteria (under the auspices of Section 303(d) of the Clean Water Act). 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 State water quality standards (e.g., dissolved oxygen, nutrients, and bacteria; State of Delaware Surface Water Quality Standards, as amended July 11, 2004) to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. The TMDL for nutrients and sediment in the Chesapeake Bay drainage have been recently revised and made more stringent by the EPA. The TMDL by EPA now requires a 60 percent reduction in nutrients (previously was 30 and 50 percent in N & P) and sediment from baseline conditions.

Water Supply

- The information provided indicates that the Town of Laurel will provide water to the proposed project through a public water system. DNREC records indicate that the project is located within the public water service area granted to the Town of Laurel under Certificate of Public Convenience and Necessity 95-CPCN-12.
- 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.

Source Water Protection Areas

- The DNREC Water Supply Section, Groundwater Protection Branch (GPB) has determined that a portion of the eastern side of the project falls within excellent ground-water recharge areas for the Town of Laurel. A small portion of the southwestern corner of the project falls within the wellhead protection area for the Town of Laurel (see-attached map).
- 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

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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 (Andres, 2004). Land use activities or impervious cover on areas of excellent ground-water recharge potential may adversely affect ground water in these areas.

The construction phase of stormwater ponds requires excavation, hauling, and grading. The heavy equipment used in this phase has the capacity to compact and degrade the structure of the strata that defines the area as an excellent ground-water recharge area (Schueler, 2000). Changes to the structural soil properties may cause significant reduction in recharge capacity. Installing stormwater management ponds in excellent ground-water recharge areas has the potential to contaminate the ground water beneath it and infiltrate into the aquifer. 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. Impervious cover prevents precipitation from infiltrating through the soil to the water table aquifer. Impervious cover refers to structures including but not limited to roads, sidewalks, parking lots, and buildings. Any impervious cover within this wellhead protection area has the potential to have a negative affect the quality and quantity of drinking water available. In addition, because wellhead protection and excellent ground water recharge potential areas can readily affect the underlying aquifer if contaminants are spilled or discharged across the area, 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

Andres, A. Scott, 2004, Ground-Water Recharge Potential Mapping in Kent and Sussex Counties, Delaware: Delaware Geological Survey Report of Investigations No. 66, p. 14. http://www.udel.edu/dgs/Publications/pubform.html#nvestigations

Schueler, T. R., 2000, The Compaction of Urban Soils, in Schueler, T.R., and Holland, H.K., eds., The Practice of Watershed Protection: Ellicott City, MD, Center for Watershed Protection, p. 752.

Sediment and Stormwater Program

• A Sediment and Stormwater Management Plan must be approved for this project prior to beginning construction. The DNREC Sediment and Stormwater Program will be the reviewing agency for this project. A Notice of Intent for Stormwater Discharges Associated with Construction Activity must be submitted prior to construction beginning on the site. The NOI fee of \$195 must be submitted as well. The owner representative and designer should complete the Stormwater Assessment Study and submit it to DNREC prior to scheduling a project application meeting.

Tank Management Section

• Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance of 7 <u>Del.C.</u>, Chapter 60, 7 <u>Del.C.</u>, Chapter 74 and DE Admin. Code 1351, State of Delaware *Regulations Governing Underground Storage Tank Systems* (the UST Regulations) is required.
- The following confirmed leaking underground storage tank (LUST) project is located directly on the proposed project parcel:
 - Laurel Central Middle School, Facility: 5-000042, Project: S8601009 (Inactive)
- Several heating fuel USTs have been closed in place at this facility since the late 1980s and one 500-gallon gasoline UST was removed from this facility in 1991. The abovementioned project number corresponds to the closure in place of a 6000-gallon heating fuel UST in 1990. According to the file, limited investigation was required and all relative monitoring wells were abandoned prior to project closure in 2003. Please be aware of the historical use of the property and note the reporting requirements should any digging be performed within this parcel.
- The following confirmed leaking underground storage tank (LUST) projects are located within a quarter mile from the proposed project area:
 - o Laurel Fire Department, Facility: 5-000436, Project: S9207196 (Inactive)
 - o Laurel Central Grain, Facility: 5-000944, Project: S0101008 (Inactive)
 - o Wynn's Dairy #4, Facility: 5-000193, Project: S9109192 (Inactive)
- No environmental impacts are anticipated; however, per the UST Regulations: Part E, § 1. Reporting Requirements:
 - Any indication of a Release of a Regulated Substance that is discovered by any Person, including but not limited to environmental consultants, contractors, utility companies, financial institutions, real estate transfer companies, UST Owners or Operators, or Responsible Parties shall be reported within 24 hours to: The Department's 24-hour Release Hot Line by calling 800-662-8802; and The DNREC, Tank Management Section by calling 302-395-2500.

Air Quality

• The applicant shall comply with all applicable Delaware air quality regulations. Please note that the following regulations in Table 1 – Potential Regulatory Requirements may apply:

Table 1: Potential Regulatory Requirements				
Regulation	Requirements			

7 DF Admin Code 1106	Use dust suppressents and measures to prevent transport of					
7 DE Aumin. Coue 1100 -	dust off site from motorial stockails, motorial movement and					
Particulate Emissions from	dust off-site from material stockpile, material movement and					
Construction and Materials	use of unpaved roads.					
Handling	Use covers on trucks that transport material to and from site					
	to prevent visible emissions.					
7 DE Admin. Code 1113 – Open	Prohibit open burns statewide during the Ozone Season from					
Burning	May 1-Sept. 30 each year.					
	Prohibit the burning of land clearing debris.					
	Prohibit the burning of trash or building materials/debris.					
7 DE Admin. Code 1135 –	Require, for any "federal action," a conformity					
Conformity of General Federal	determination for each pollutant where the total of direct and					
Actions to the State	indirect emissions would equal or exceed any of the de					
Implementation Plan	minimus levels (See Section 3.2.1)					
7 DE Admin. Code 1141 –	Use structural/ paint coatings that are low in Volatile					
Limiting Emissions of Volatile	Organic Compounds.					
Organic Compounds from	Use covers on paint containers when paint containers are not					
Consumer and Commercial	in use.					
Products						
7 DE Admin. Code 1144 –	Ensure that emissions of nitrogen oxides (NO _x), non-					
Control of Stationary Generator	methane hydrocarbons (NMHC), particulate matter (PM),					
Emissions	sulfur dioxide (SO ₂), carbon monoxide (CO), and carbon					
	dioxide (CO_2) from emergency generators meet the					
	emissions limits established. (See section 3.2).					
	Maintain recordkeeping and reporting requirements.					
7 DE Admin. Code 1145 –	Restrict idling time for trucks and buses having a gross					
Excessive Idling of Heavy Duty	vehicle weight of over 8,500 pounds to no more than three					
Vehicles	minutes.					

For a complete listing of all Delaware applicable regulations, please look at DNREC website: <u>http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx</u>.

Delaware State Fire Marshall's Office - Contact Duane Fox 739-4394

Fire Protection Water Requirements:

- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20psi residual pressure is required. Fire hydrants with 800 feet spacing on centers.
- 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.

<u>Fire Protection Features:</u>

- All structures over 10,000 sqft aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sqft, 3-stories or more, over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements

- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR

Accessibility

- All premises, which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus.
- 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.
- The use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- The local Fire Chief, prior to any submission to our Agency, shall approve in writing the use of gates that limit fire department access into and out of the development or property.

Gas Piping and System Information

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

<u>Required Notes</u>:

- 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"
- Proposed Use
- Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
- Square footage of each structure (Total of all Floors)
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Note indicating if building is to be sprinklered
- Name of Water Provider
- Letter from Water Provider approving the system layout
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
- Provide Road Names, even for County Roads

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

• Because the proposed school would generate more than 200 vehicle trips per day, a Pre-Submittal Meeting is required before plans are submitted for review. Guidance on what will be covered at this meeting and how to prepare for it is located at <u>http://www.deldot.gov/information/business/subdivisions/Pre-</u> <u>Submittal_Meeting_Requirements.doc</u>. The form needed to request this meeting is available at <u>http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.doc</u>.

Department of Natural Resources and Environmental Control – Contact Bahareh Van Boekhold 735-3495

• Soils Assessment

Based on soils survey mapping update, Manahawkin muck (Ma) is the most environmentally sensitive soil mapping units in the immediate vicinity of the proposed project (See figure 1). Manahawkin muck is a very poorly-drained wetland associated (hydric) soil mapping unit that has severe limitations for development (considered unsuitable). Therefore, we strongly recommend that the applicant avoid development on this particular soil mapping unit.



Figure 1: NRCS soil mapping update in the immediate vicinity of the proposed project

Additional information on TMDLs and water quality

- Compliance with the TMDL nutrient and bacterial reduction requirements specified for the Chesapeake Bay drainage watershed can be facilitated through implementation of the following recommended BMPs:
 - Based on a review of existing buffer research by Castelle et al. (Castelle, A. J., A. W. Johnson and C. Conolly. 1994. Wetland and Stream Buffer Requirements A Review. J. Environ. Qual. 23: 878-882.), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of

this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from all water bodies (including ditches), hydric soils, and wetlands (field delineated and approved by the United States Army Corps of Engineers). The USACE can be reached by phone at 736-9763.

- Use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures as currently proposed) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff/discharges from impervious surfaces. Please contact Lara Allison at 739-9939 for further information about the possibility for installing a rain garden(s) on this parcel.
- Calculate post-construction surface imperviousness with all forms of created (or constructed) surface imperviousness (e.g., rooftops, driveways, parking lots, sidewalks, open-water storm water management structures, ponds, and roads) included in the calculation.
- Use of pervious paving materials (instead of conventional asphalt and concrete) as a BMP(s) to reduce the impacts from all forms of created surface imperviousness.
- Assess nutrient and bacterial pollutant loading at the preliminary project design phase. To this end, the Watershed Assessment Section has developed a methodology known as the "Nutrient Load Assessment protocol." The protocol is a tool used to assess changes in nutrient loading (e.g., nitrogen and phosphorus) resulting from the conversion of individual or combined land parcels to a changed land use(s); thus providing applicants and governmental entities with quantitative information about the project's impact(s) on baseline water quality. DNREC strongly encourages the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Jen Walls or John Martin at (Division of Watershed Stewardship) at 302-739-9939 for more information on the protocol.

Additional information on tank management

• When contamination is encountered, PVC pipe materials should be replaced with ductile steel and nitrile rubber gaskets in the contaminated areas. If any aboveground storage tanks (ASTs) less than 12,500 gallons are installed, they must be registered with the TMS. If any ASTs greater than 12,500 gallons are installed, they are also subject to installation approval by the TMS.

Wetland Habitats and Buffers

- The legend on the site plan that was provided is illegible and as such, it is unclear what the green area on the aerial photograph is meant to depict. These comments are provided in the event that the green area is not open space.
- There is a non-tidal coastal plain stream to the north and east of the parcel that is mapped as Key Wildlife Habitat in the Delaware Key Wildlife Action Plan (DEWAP -

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http://www.dnrec.state.de.us/nhp). DEWAP is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state's natural resources. Forested wetlands surround the stream. To protect the function and integrity of wetlands, a minimum 100-foot buffer should be left intact around the perimeter of the wetlands. This recommendation is based on peer reviewed scientific literature that shows an adequately-sized buffer that effectively protects wetlands and streams - in most circumstances - is about 100 feet in width. Upland buffers also 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.

Additional information on air quality

- New homes, businesses, and schools may emit, or cause to be emitted, air contaminants into Delaware's air, which will negatively impact public health, safety and welfare. These negative impacts are attributable to:
 - Emissions that form ozone and fine particulate matter; two pollutants relative to which Delaware currently violates federal health-based air quality standards,
 - The emission of greenhouse gases which are associated with climate change, and
 - The emission of air toxics.
- Air emissions generated from new schools include emissions from the following activities:
 - Area sources such as painting, maintenance equipment and the use of consumer products like roof coatings and roof primers.
 - The generation of electricity needed to support the school, and
 - All transportation activity.
- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) could not be quantified. DAQ was able, however, to quantify the mobile emissions based on the proposed daily trip data presented in the application and data taken from the ITE Trip Generation Manual, 8th Edition. Table 2 Projected Air Quality Emissions represents the actual impact the Laurel Elementary School may have on air quality.

Table 2: Projected Air Quality Emissions for Laurel Elementary School								
Emissions Attributable to Laurel Elementary School (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)			

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Mobile Source emissions	6.0	7.9	*	*	*
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(*) Indicates data is not available.

Note that emissions associated with the actual construction of the road, including automobile and truck traffic from working in, or delivering products to the site, as well as site preparation, earth moving activities, road paving and other miscellaneous air emissions, are not reflected in the table above.

- DNREC encourages sustainable growth practices that:
 - o Control sprawl;
 - Preserve rural and forested areas;
 - Identify conflicting land use priorities;
 - Encourage growth on previously developed sites and denser communities;
 - Coordinate transportation, housing, environment, and climate protection plans with land use plans; and
 - Demonstrate that communities can achieve the qualities of privacy, community, and contact with nature without degrading the natural environment or generating unacceptable environmental costs in terms of congestion, use of natural resources, or pollution.
- Additional measures may be taken to substantially reduce the air emissions which include:
 - Constructing with only energy efficient products. Energy Star qualified products are up to 30% more energy efficient. Savings come from building envelope upgrades, high performance windows, controlled air infiltration, upgraded heating and air conditioning systems, tight duct systems and upgraded water-heating equipment. Every percentage of energy efficiency translates into a percent reduction in pollution. The Energy Star Program is excellent way to save on energy costs and reduce air pollution.
 - Offering geothermal and/or photo voltaic energy options. These systems can significantly reduce emissions from electrical generation, and from the use of oil or gas heating equipment.
 - Providing tie-ins to the nearest bike paths and links to any nearby mass transport system. These measures can significantly reduce mobile source emissions. For every vehicle trip that is replaced by the use of a sidewalk, a bike path or mass transit, 7 pounds of VOC and 11.5 pounds of NOx are reduced each year.
 - Using retrofitted diesel engines during construction. This includes equipment that are onsite as well as equipment used to transport materials to and from site.
 - Using pre-painted/pre-coated flooring, cabinets, fencing, etc. These measures can significantly reduce the emission of VOCs from typical architectural coating operations.
 - Planting trees in vegetative buffer areas. Trees reduce emissions by trapping dust particles and replenishing oxygen. Trees also reduce energy emissions by cooling during the summer and by providing wind breaks in the winter, thereby reducing air conditioning needs by up to 30 percent and saving 20 to 50 percent on fuel costs.
- This is a partial list, and there are additional things that can be done to reduce the impact of the project. The applicant should submit a plan to the DNREC DAQ which address the

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above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into Laurel Elementary School.

Department of Education-Contact Despina Wilson 735-4040

• The DOE will continue to work with the district, architect, site engineer, municipal government and various state agencies regarding the project. The DOE reserves the right to provide continued and on-going comments and input as the project develops.

Division of Public Health – Contact: Laura Saperstein 744-1011

- The Delaware Division of Public Health (DPH) is pleased to be able to participate in the PLUS application process. In keeping with its mission to protect and promote the health of all people in Delaware, DPH looks for opportunities to encourage and enhance our population's health behaviors that will result in healthy people and healthy communities.
- Community design can impact the health of a population. Studies show that persons in lowerincome communities, the elderly, and children often suffer more from consequences of inadequate land-use and transportation. Additionally, physical activity has a direct correlation to many chronic diseases, including hypertension, diabetes and obesity. In 2012, 39.1% of Delawareans reported a BMI of "overweight," and 26.9% reported a BMI as "obese." To that end, DPH looks to make recommendations for land-use that can empower Delawareans to make good health behaviors a part of their daily lives.
- DPH is pleased to see the many different areas in which the new Laurel Elementary School aligns with the SCORP regional priorities. The students and surrounding neighborhood can look forward to many opportunities of active recreation.
- DPH believes the Laurel Elementary School has the opportunity to increase positive health behaviors for its residents by incorporating the following recommendations into its land development proposal:
 - Provide pedestrian connection to the existing development to further active transportation (walking/Biking) among residents (students).
 - Consider joint-use agreements as part of the school's wellness plan.
 - Consider a Safe-Routes-to-School program as part of a Comprehensive School Physical Activity plan.

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Delaware State Fire Marshall's Office - Contact Duane Fox 739-4394

• Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.statefiremarshal.delaware.gov technical services link, plan review, applications or brochures.

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: Town of Laurel