



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

August 5, 2013

Mr. Terry Little
Sussex Technical School District
P.O. Box 351
Georgetown, DE 19947

RE: PLUS review 2013-06-07, Sussex Tech School District
(Option 3)

Dear Mr. Little:

Thank you for meeting with State agency planners on June 26, 2013 to discuss the feasibility of a school site for the Sussex Technical School district on 267 acres located west of Georgetown near Vaughn Road, South of Route 18 in Sussex County. The application materials identify this site as "Option 3."

According to the information received, you are seeking review of a potential site for a 420,000 square foot career and educational facility with related amenities.

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 Sussex 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 Level 1 and Level 2 according to the *Strategies for State Policies and Spending*. In addition, a portion of the site is located within the Town of Georgetown.

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. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the

near term future. State investments will support growth in these areas. This option would be preferable because it is located in an Investment Level 1 or 2 area. The Office of State Planning has no objections to this site as a possible school site if it is determined to be the most feasible by the School District.

Code Requirements/Agency Permitting Requirements

Delaware Department of Transportation – Contact Bill Brockenbrough 760-2109

- DelDOT would expect the proposed school to warrant a Traffic Impact Study (TIS) per Section 2.3.1 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access. They will make a final determination in this regard and determine a scope for that study when more information is available on expected traffic to be generated by the proposed school.
- If this site is selected, improvements may be needed on Delaware Route 18, Vaughn Road (Sussex Road 520) between Route 18 and Ennis Road (Sussex Road 519) and/or on Ennis Road between US Route 113 and Ennis Road. In accordance with Section 3.10.2, the District should expect to be held responsible for those costs and factor them into their consideration of this site.

DelDOT is working with other developers to get improvements on Route 18 between Vaughn Road and Route 113. While the District might need to participate in improvements there, they probably would not be responsible for building them.

While DelDOT does not have a timetable for doing so, they anticipate prohibiting minor street through and left-turn movements at the intersection of US Route 113, Ennis Road and North Street.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There is a small agricultural complex (S-8465) on this parcel, which consists of a house and barn, near the road (Route 18/404). The USGS Topographic Map of 1917 does indicate there was a dwelling approximately in the same location. It may have built between the mid-19th and early 20th century. If there is going to be any kind of development or construction project on this parcel, it is important that the developer be aware of the Delaware Unmarked Human Burials and Human Skeletal Remains Law, which is outlined in Chapter 54 of Title 7 of the Delaware Code.

Abandoned or unmarked family cemeteries are very common in the State of Delaware. They are usually in rural or open space areas, and sometimes near or within the boundary of an historic farm site. Even a marked cemetery can frequently have unmarked graves or burials outside of the known boundary line or limit. Disturbing unmarked graves or burials triggers the Delaware's Unmarked

Human Burials and Human Skeletal Remains Law (Delaware Code Title 7, Chapter 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 any unmarked graves, burials or a cemetery, it is very costly to have them archaeologically excavated and the burials moved. The Division of Historical & Cultural Affairs recommends that owners and/or developers have a qualified archaeological consultant investigate their project area, to the full extent, to see if there is any unmarked cemetery, graves, or burial sites. In the event of such a discovery, the Division of Historical & Cultural Affairs also 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 know more information that pertains to unmarked human remains or cemeteries, please check the following websites for additional information: www.history.delaware.gov/preservation/umhr.shtml and www.history.delaware.gov/preservation/cemeteries.shtml .

- Prior to any demolition or ground-disturbing activities, the developer should consider hiring an archaeological consultant to examine the parcel for potential historic or cultural resources, such as a potential archaeological site, a cemetery or unmarked human remains.
- The school district should also include a barrier or sufficient landscaping between the proposed development and the agricultural complex (S-8465), to protect it from adverse effects such as noise or visual effects.
- 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 about the project's effects on historic properties. Furthermore, any preconstruction 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 role, please review the Advisory Council's website at www.achp.gov .

Department of Natural Resources and Environmental Control – Contact Kevin Coyle
735-3495

Wetlands

- State regulated wetlands **ARE NOT** located on this property based on a review of the State wetland maps. State regulated wetlands are those wetlands identified on the State's official State Regulated Wetland Maps. Additional information about State regulated wetlands is available by contacting the Wetlands and Subaqueous Lands Section at (302) 739-9943 or on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.
- State regulated subaqueous lands **ARE NOT** likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and USGS topographic maps. 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 on line at <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>.

Water Supply

- The information provided indicates that the Town of Georgetown will provide water to the proposed projects through a public water system. DNREC files reflect that the Town of Georgetown does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-736-7547. Should an on-site public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as a septic tank and sewage disposal area, and at least 150 feet from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any 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. 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.

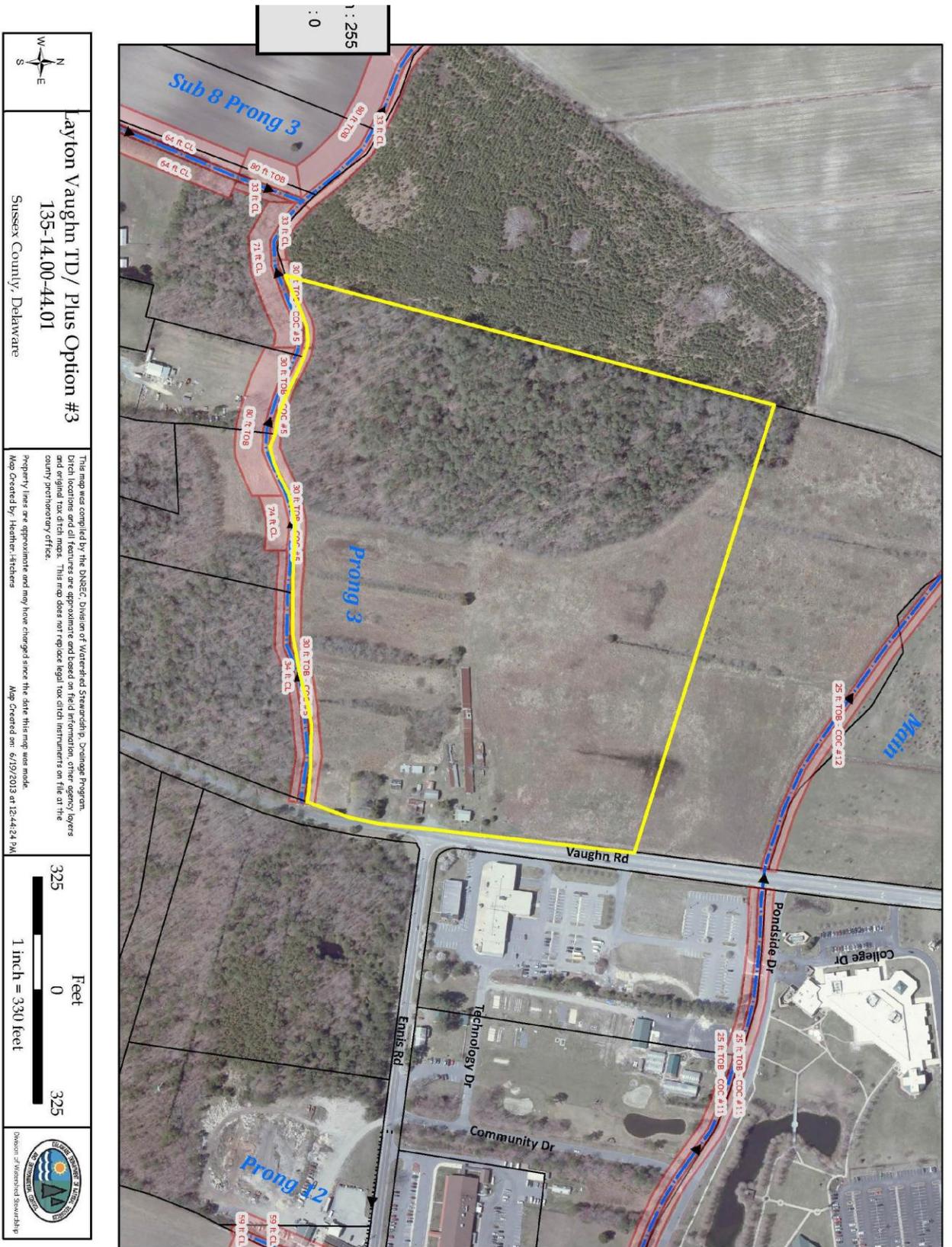
- All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

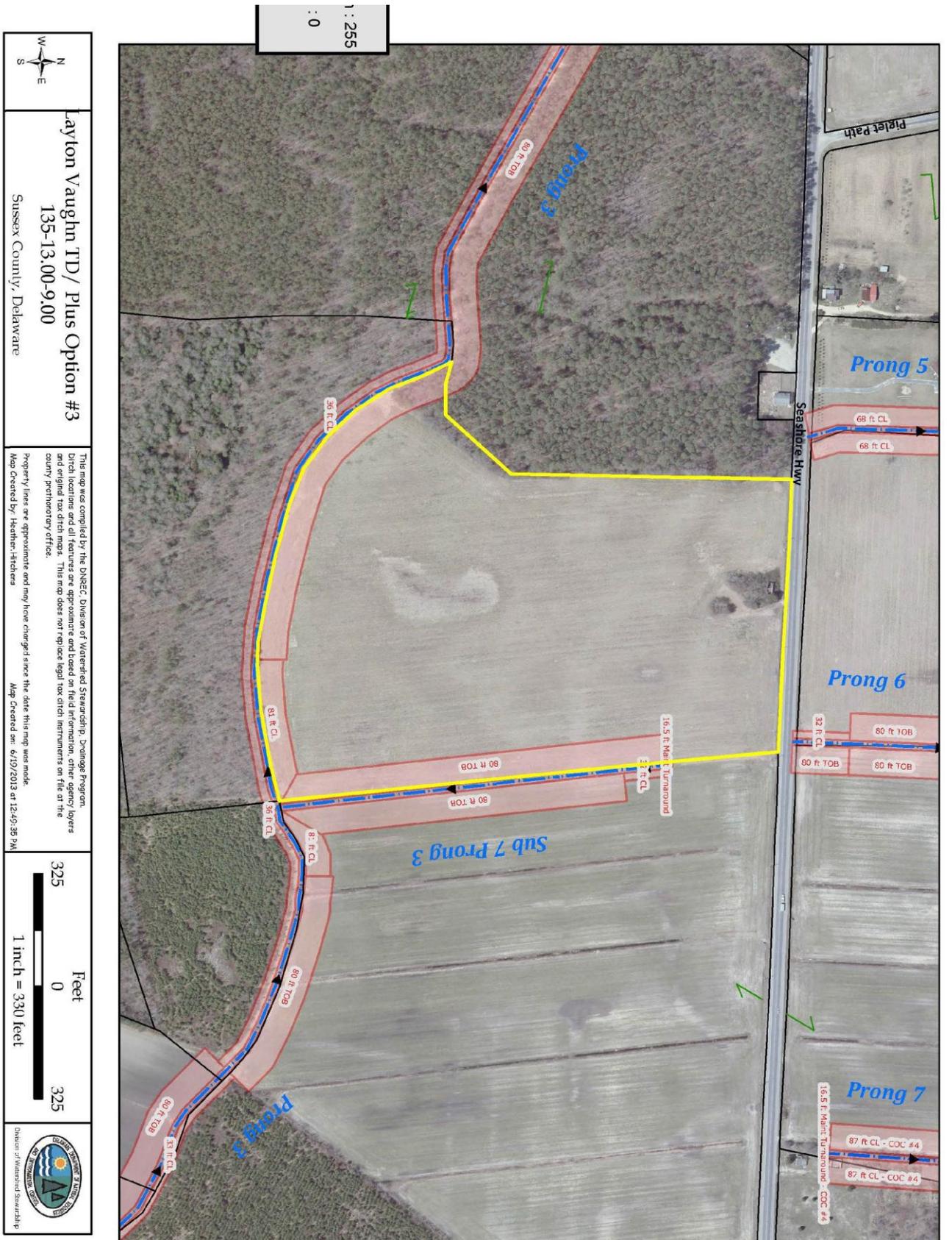
Sediment and Stormwater Program

- A detailed Sediment and Stormwater Management Plan must be approved prior to any land disturbing activity taking place on the site. The project will be reviewed for compliance with the Delaware Sediment and Stormwater Regulations by the DNREC Sediment and Stormwater Program. A Notice of Intent (NOI) for Discharge of Stormwater from Construction Activities and the \$195 NOI fee must be submitted prior to DNREC prior to Sediment and Stormwater Plan approval. A pre application meeting is strongly recommended prior to putting a lot of effort into a design. Contact Elaine Webb, DNREC Sediment and Stormwater Program, at (302) 739-9921 or Elaine.Webb@state.de.us to schedule a pre application meeting.
- The first preferred practices for management of stormwater quality are practices that mimic the pre development hydrology and promote recharge, including Green Technology BMPs. Other practices may only be considered for stormwater quality management when Green Technology BMPs have been ruled out for engineering reasons. The Sediment and Stormwater Regulations are currently undergoing a revision. It is anticipated that revised regulations will be effective in January 2014.
- Projects received for review after the effective date will be expected to comply with the revised regulations. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101)

Drainage Program

- This property is located in the **Layton Vaughn Tax Ditch** and is affected by tax ditch rights-of-way.
- Any change to the location of the tax ditch or existing tax ditch rights-of-way will require a change to the Layton Vaughn Tax Ditch court order. The placement of permanent obstructions within tax ditch rights-of-ways is prohibited.
- Please contact Matthew Grabowski, Environmental Program Manager with the Drainage Program in Georgetown at (302) 855-1930 to discuss the tax ditch rights-of-way on this property. (Title 7, Delaware Code, Chapter 41)





	<p>Wayton Vaughn TD/ Plus Option #3 135-13.00-9.00 Sussex County, Delaware</p>	<p>This map was compiled by the DWS&C, Division of Watershed Stewardship, Drainage Program. Ditch locations and all features are approximate and based on field information, other agency layers and original tax ditch maps. This map does not replace legal tax ditch instruments on file at the county prothonotary office.</p> <p>Property lines are approximate and may have changed since the date this map was made.</p> <p>Map Created by: Heather Henders Map Created on: 6/19/2013 at 12:49:38 PM</p>	<p>325 Feet 0 325</p> <p>1 inch = 330 feet</p>	
<p>Wayton Vaughn TD/ Plus Option #3 135-13.00-9.00 Sussex County, Delaware</p>				

Tank Management Branch

Please be aware:

- If a release of a Regulated Substance occurs at the proposed project site, compliance with 7 Del.C., Chapter 60, 7 Del.C., 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) projects are located within a quarter mile from the proposed project area:
 - Howard T Ennis School, Facility: 5-000551, Project: S9911235 (Inactive)
 - Friendly Farm Store, Facility: 5-000129, Projects: S9206157 (Active)
- 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 DE Admin. Code 1106 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Use covers on trucks that transport material to and from site to prevent visible emissions.
7 DE Admin. Code 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibit open burns statewide during the Ozone Season from 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 – Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> Require, for any “federal action,” a conformity determination for each pollutant where the total of direct and indirect emissions would equal or exceed any of the de minimus levels (See Section 3.2.1)
7 DE Admin. Code 1141 – Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> Use structural/ paint coatings that are low in Volatile Organic Compounds. Use covers on paint containers when paint containers are not in use.
7 DE Admin. Code 1144 – Control of Stationary Generator Emissions	<ul style="list-style-type: none"> Ensure that emissions of nitrogen oxides (NO_x), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), and carbon dioxide (CO₂) from emergency generators meet the emissions limits established. (See section 3.2). Maintain recordkeeping and reporting requirements.
7 DE Admin. Code 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

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

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

At the time that a site has been selected, it is the suggestion of the Delaware State Fire Marshall’s Office that a preliminary meeting with a fire protection specialist take place prior to formal submittal of the site and/or buildings. 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.

Some of the concerns that will be addressed includes, but is not limited to the following:

- **Fire Protection Water Requirements:**
 - 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.
- **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 main entrance.
 - 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.
 - 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.

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.

Delaware Department of Transportation – Contact Bill Brockenbrough 760-2109

- The subject site is superior in that it within reasonable cycling distance for parts of Georgetown and within walking distance of at least some neighborhoods.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 735-3495

Soils Assessment

- The NRCS soil survey shows that this site is mostly comprised of poorly and very poorly drained (hydric) Hurlock (HuA) and Mullica (MmA) soil mapping units (Figure 3a). Poorly and very poorly-drained hydric soils are indicative of wetland conditions and are considered unsuitable for development (Figure 3a & 3b). /

- A United States Corps of Engineers (USACE) approved wetlands delineation is recommended. According to information presented in the PLUS application, an approved wetlands delineation was conducted; however, it was not made available to DNREC at the time of review. The USACE can be reached by phone at 736-9763. It should also be noted that compliance with USACE regulations does not preclude compliance with State wetland-regulatory requirements.
- 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) and wetlands (field delineated and approved by the USACE).
- DNREC recommends that the applicant 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, and roads) included in the calculation.
- Since this project that will likely generate large amounts of impervious cover, we advise, wherever practicable, the 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.
- DNREC encourages the use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to mitigate or reduce nutrient and bacterial pollutant impacts via runoff from impervious surfaces.
- The applicant should voluntarily 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) that result from the conversion of individual or combined land parcels to a different land use(s), while providing applicants with quantitative information about their 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 the Watershed Assessment Section 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.

Additional information on air quality

- DNREC encourages developers and builders to consider all sustainable growth practices in their design, but we believe, however, that the air quality impacts associated with the project should be completely considered. 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 school 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 Sussex Technical School District project may have on air quality.

Emissions Attributable to Sussex Technical School District (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile Source emissions	17.4	23.0	*	*	*

(*) 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:
 - 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 on-site 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, whereby 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 Division of Air Quality (DAQ) which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Sussex Technical School District.

Department of Agriculture – Contact Scott Blaier 698-4529

- Options 3 and 4 seem more suitable in both size and location for the intent of the project. Of those two, the Department would support Option 3 over 4, and either one over Options 1 and 2.

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 of the site(s) to the Department of Education. The letter should be directed to the Education Associate responsible for School Plant Planning and Maintenance. The letter should contain a tax parcel ID #, PLUS review #, and all relevant information regarding the site and the proposed school.

Once a school site has been selected and approved, and the site plan for the school has been designed, a new PLUS review will be required prior to submission of the plan to the local government.

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
Terry Little, Sussex Tech School District
Mike Horsey, Common Sense Solutions

