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March 31, 2015

Constance C. Holland, AICP  
Director  
Delaware Office of State Planning Coordination  
122 Martin Luther King Jr. Boulevard, South  
Dover, DE 19901

RE: **PLUS 2015-01-05 Response Letter**  
**KENT COUNTY SPORTS COMPLEX**  
Kent County, Delaware  
2008174.05

Dear Mr. Bayer:

Below you will find the required responses to your PLUS comment letter dated February 25, 2015 in reference to the proposed Kent County Sports Complex to be located off Bay Road near Frederica, DE. Each State comment is listed with the associated response in italics below:

**Strategies for State Policies and Spending**

This proposed sports complex is composed of 13 sports fields and associated parking areas and site amenities. It is located in Kent Count, south of Frederica and east of Route 1 on lands adjacent to the Kent County Wastewater Treatment Facility. These lands are in Investment Level 4 according to the *Strategies for State Policies and Spending*.

Investment Level 4 areas are typically rural in nature, comprised of open space, natural areas, and agricultural lands. Recreational uses, such as this proposed sports complex, are compatible with the State’s goals for Investment Level 4 as described in the 2010 *Strategies for State Policies and Spending*. Among the uses expected in Level 4 are “large recreational uses, such as state and county parks and fish and wildlife preserves. Sometimes, private recreational facilities...are also situated in Investment Level 4 areas.”<sup>1</sup> The *Strategies* document also identifies recreational uses and athletic fields as compatible uses in Investment Level 4 in association with educational facilities,<sup>2</sup> and parkland, and natural resource areas<sup>3</sup>.

It should be noted that Kent County has established a precedent for locating parks and athletic fields east of SR 1 and outside the Kent County Growth Zone. Both Big Oak Park, near Smyrna, and the smaller active park off Lewis Drive near Dover are examples of parks containing athletic fields east of SR 1.

<sup>1</sup> Delaware Strategies for State Policies and Spending, page 26

<sup>2</sup> Ibid, page 27

<sup>3</sup> Ibid, page 28

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Our office has no objections to the proposed Kent County Regional Sports Complex as presented in this PLUS application.

### **Code Requirements/Agency Permitting Requirements**

#### **State Historic Preservation Office – Contact Terrence Burns 736-7404**

- There is a potential for archaeological resources to be affected by the project. As part of its survey for the SR 1/Frederica South project, immediately adjacent and with connections to the proposed complex, DelDOT identified an historic period archaeological site on the south end of the project area. Although it was determined that no further work was needed at this site within DelDOT's project area, it should be noted that the boundaries of the site were not fully defined and likely extends into areas to be impacted by the proposed complex. Additionally, historic period maps indicate the potential for sites associated with 19<sup>th</sup> c. structures, beyond the limits of DelDOT's previous survey. Therefore, prior to any ground-disturbing activities, it would be prudent for the developer to hire an archaeological consultant to examine the parcel for any potential archaeological site or archaeological resources, such as cemetery, burial site, or unmarked human remains.

**Response:** *Comment is noted and currently under consideration.*

- The developer needs to be aware of the Unmarked Human Burials and Human Skeletal Remains Law, which is Chapter 54 of Title 7, of the Delaware Code (7 Del. C. Ch. 54). 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 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 (7 Del. C. 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 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 burial area on its own parcel or in an otherwise protected open space area. Please see the following websites for additional information on the protection of unmarked human remains and cemeteries:

[www.history.delaware.gov/preservation/umhr.shtml](http://www.history.delaware.gov/preservation/umhr.shtml) and  
[www.history.delaware.gov/preservation/cemeteries.shtml](http://www.history.delaware.gov/preservation/cemeteries.shtml)

**Response:** *Comment is noted and currently under consideration.*

- 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](http://www.achp.gov).

**Response:** *Comment noted.*

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

- Per Section 2.3.1 of the Standards and Regulations for Subdivision Streets and State Highway Access, Traffic Impact Studies (TIS) are warranted for developments generating more than 400 vehicle trip ends per day or 50 vehicle trip ends per hour.

From the PLUS application, we see that the proposed development would generate 5,850 vehicle trip ends per day, presumably on a Saturday or Sunday. Therefore, considering only our volume warrants, a TIS would be warranted and payment of the Area Wide Study Fee would not be an option.

Further, as we understand it, Kent County has a volume warrant of 50 vehicle trip ends per hour for requiring a TIS, which necessarily would be met if the site generates 5,850 vehicle trip ends per day.

However, as discussed in a January 27 letter to Kent County (copy attached) we have applied State and County criteria for determining study areas and have determined that, due to the location of the proposed complex, a TIS is not needed to analyze the facilities that would be within the study area.

**Response:** *Comment noted.*

- The Master Plan accompanying the PLUS application shows an entrance design that would involve the construction of two ramps planned as part of DelDOT's South Frederica Grade Separated Intersection project. That project

is scheduled to begin in Fiscal Year 2017. These ramps would be built by the applicant and would serve as a right-in, right-out access for about two years while we complete our grade separation project. We are in agreement with this concept. As we complete the grade separation, the complex will need to transition to an access on a newly realigned Milford Neck Road. That access will need to be designed in accordance with the Standards and Regulations for Subdivision Streets and State Highway Access.

***Response:*** *Comment noted. We will coordinate all entrance related construction with DelDOT.*

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

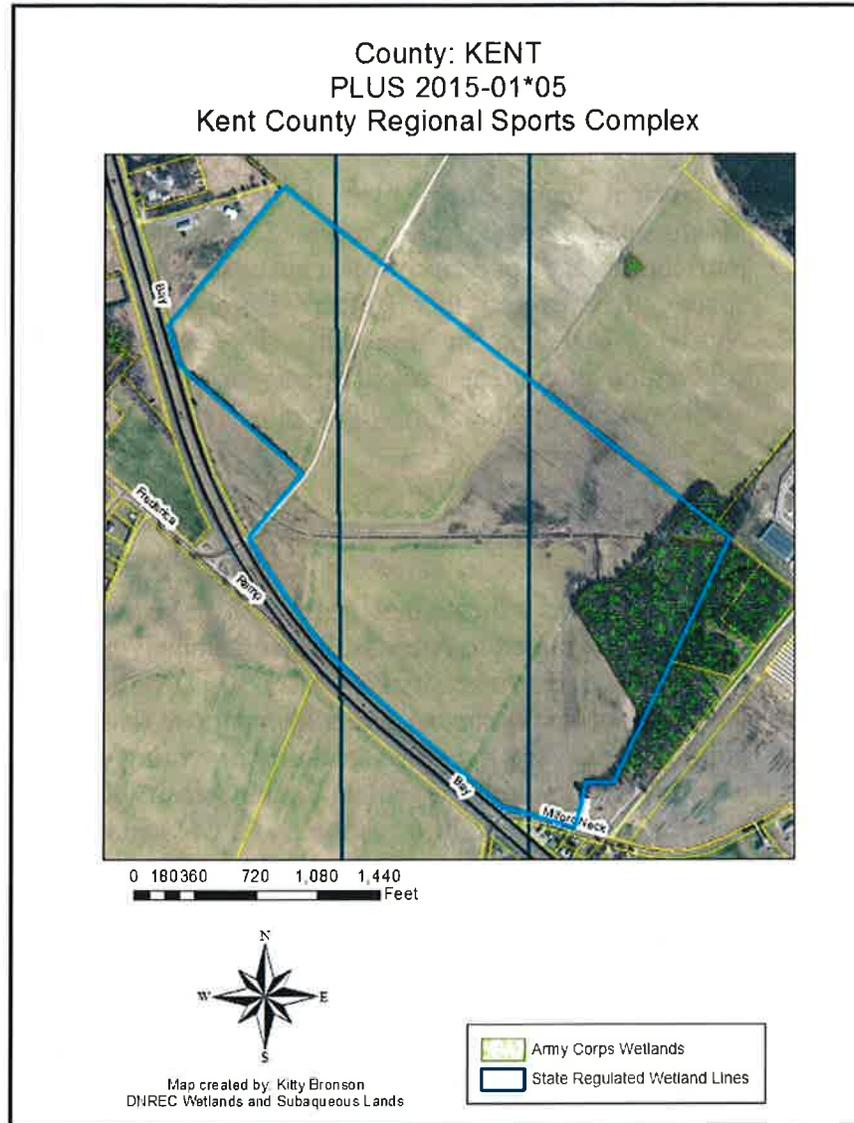
**Wetlands.**

- Waters of the U.S. regulated by the U.S. Army Corps of Engineers ARE likely to be located on this property based on a review of aerial photographs, SWMP maps, Soil Surveys and/or USGS topographic maps. According to our GIS SWMP maps, there are wetlands regulated by the U.S. Army Corps of Engineers. A wetland delineation by a consultant and contact with the U.S. Army Corps of Engineers is recommended.

***Response:*** *We are currently coordinating wetland delineation with an environmental scientist.*

- 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 jurisdiction. The U.S. Army Corps of Engineers can be contacted at (215) 656-6728 or online at <http://www.nap.usace.army.mil/cenap-op/regulatory/regulatory.htm>.

***Response:*** *We are currently coordinating a site inspection with an environmental scientist regarding the presence of Waters of the U.S.*



**TMDLs.**

- The project is located in the greater Delaware River and Bay drainage area, specifically within the Murderkill River watershed. In this watershed, the State of Delaware has developed specific Total Maximum Daily Load (TMDL) pollutant reduction targets for 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 waterbody” 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 the Murderkill River watershed calls for a 30% reduction in nitrogen and a 50% reduction in phosphorus from baseline conditions. The TMDL also calls for a 32%

reduction in bacteria from baseline conditions (65% reduction in marine waters).

**Response:** *Comment noted.*

- A nutrient management plan is required under the *Delaware Nutrient Management Law (3 Del. Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres; the area of open space may exceed this 10 acre threshold. Please contact the Delaware Nutrient Management Program at 739-4811 for further information concerning compliance requirements or view the following web link for additional information: <http://dda.delaware.gov/nutrients/index.shtml>

**Response:** *Comment noted.*

#### **Water Supply.**

- DNREC records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 06-CPCN-30. DNREC recommends that the developer contact Artesian Water Company to determine the availability of public water. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCN's and the application process can be obtained by contacting the Public Service Commission at 302-739-4247.

**Response:** *Comment noted, however, we are currently planning on using on-site system to supply water.*

- Should an on-site Public/Miscellaneous 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 it must also be located 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.

**Response:** *Any on-site wells constructed will comply with the required regulations.*

- 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.

**Response:** *Comment noted.*

- Potential Contamination Sources exist in the area, and any well permit applications will undergo a detailed review that may increase turnaround time and may require site specific conditions/recommendations. In this case, there is a Sludge Application Site associated with Kent County Frederica Sludge Farm located within 1,000 feet of the proposed project.

**Response:** *Comment noted.*

#### **Sediment and Stormwater Program.**

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. It is strongly recommended that the owner and consultant contact the Kent Conservation District to schedule a project application meeting 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. The plan review and approval as well as construction inspection will be coordinated through the Kent Conservation District. Contact Jared Adkins, Program Manager, at the Kent Conservation District at (302) 741-2600, ext. 3 for details regarding submittal requirements and fees (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101).

**Response:** *Comment noted. We will schedule a project application meeting with Kent Conservation District in the near future.*

#### **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 to your project:

**Table 1: Potential Regulatory Requirements**

<b>Regulation</b>	<b>Requirements</b>
<b>7 DE Admin. Code 1106 -</b> Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> <li>• Use dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads.</li> <li>• Use covers on trucks that transport material to and from site to prevent visible emissions.</li> </ul>
<b>7 DE Admin. Code 1113 –</b> Open Burning	<ul style="list-style-type: none"> <li>• Prohibit open burns statewide during the Ozone Season from May 1-Sept. 30 each year.</li> <li>• Prohibit the burning of land clearing debris.</li> <li>• Prohibit the burning of trash or building materials/debris.</li> </ul>
<b>7 DE Admin. Code 1135 –</b> Conformity of General Federal Actions to the State Implementation Plan	<ul style="list-style-type: none"> <li>• 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)</li> </ul>
<b>7 DE Admin. Code 1141 –</b> Limiting Emissions of Volatile Organic Compounds from Consumer and Commercial Products	<ul style="list-style-type: none"> <li>• Use structural/ paint coatings that are low in Volatile Organic Compounds.</li> <li>• Use covers on paint containers when paint containers are not in use.</li> </ul>
<b>7 DE Admin. Code 1144 –</b> Control of Stationary Generator Emissions	<ul style="list-style-type: none"> <li>• Ensure that emissions of nitrogen oxides (NO<sub>x</sub>), non-methane hydrocarbons (NMHC), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and carbon dioxide (CO<sub>2</sub>) from emergency generators meet the emissions limits established. (See section 3.2).</li> <li>• Maintain recordkeeping and reporting requirements.</li> </ul>
<b>7 DE Admin. Code 1145 –</b> Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> <li>• Restrict idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.</li> </ul>
<b>Regulation 21 Section 10</b> – Emission Standards for Hazardous Air Pollutants, Asbestos	<ul style="list-style-type: none"> <li>• Ensure no visible residue of asbestos materials remains in the work area after all asbestos materials are removed in accordance with NESHAP.</li> <li>• Display DANGER signs whenever airborne asbestos may be present in accordance with NESHAP and OSHA</li> <li>• Use wet removal techniques.</li> <li>• Dispose of all asbestos containing waste in clearly labeled sealed containers and store in a secure location</li> </ul>

	awaiting transport to an authorized disposal facility, not to exceed a period of 45 days.
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For a complete listing of all Delaware applicable regulations, please look at our website: <http://www.awm.delaware.gov/AQM/Pages/AirRegulations.aspx>.

**Response:** *The applicant will comply with the above referenced regulatory requirements.*

**Hazardous Waste Sites.**

- If it is determined by the Department that there was a release of a hazardous substance on the property in question and the Department requires remediation pursuant to the Hazardous Substance Cleanup Act, the provisions of 7 Del.C., Chapter 91, Delaware Hazardous Substance Cleanup Act and the Delaware Regulations Governing Hazardous Substance Cleanup shall be followed.

**Response:** *Comment noted.*

**Tank Management Section.**

- Please be aware:

If a release of a Regulated Substance occurs at the proposed project site, compliance of 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:
  - Kent County Waste Water Treatment Facility: 1-000314, Projects:
    - K9105085, K9707102, K9902030 (All Inactive)
- 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.

**Response:** *Comment noted.*

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

At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation:

**Fire Protection Requirements**

- If a central or public water source is within 1000 feet, a water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. Where the water distribution system is proposed for business sites, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

**Response:** *Comment noted.*

**Fire Protection Features**

- Where a water distribution system of hydrants is not available, commercial buildings greater than 5000 square feet will require a fire alarm signaling system and monitored off-site.

**Response:** *Comment noted.*

**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 door.
- 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.

**Response:** *Comment noted. We will coordinate the installation of any site access related gates with your office.*

**Gas Piping and System Information**

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

**Response:** *Comment noted.*

**Required Notes**

- 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)
- Provide Road Names, even for County Roads

***Response:*** All required notes shall be included in the final plan set.

### **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 the suggestions can benefit the project.

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

- Please be advised that DeIDOT has advertised for comment a comprehensive revision of the Standards and Regulations. One comment period ran through June 1 through June 30, 2014, a second comment period ran December 1 through December 31, 2014, and DeIDOT could adopt this revision as soon as February 2015. Implementation guidance has not been developed but we recommend that the applicant'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](http://www.deldot.gov/information/pubs_forms/revisions_to_ASR/index.shtml).

***Response:*** Comment noted.

- Because the proposed development 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 [http://www.deldot.gov/information/business/subdivisions/Pre-Submittal\\_Meeting\\_Requirements.doc](http://www.deldot.gov/information/business/subdivisions/Pre-Submittal_Meeting_Requirements.doc). The form needed to request this meeting is available at [http://www.deldot.gov/information/business/subdivisions/Meeting\\_Request\\_Form.doc](http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.doc).

***Response:*** Comment noted.

- As shown on the Investment Level map associated with the Strategies for State Policies and Spending, the subject development is located in a Level 4 area. DelDOT's Shared-Use Path and/or Sidewalk Process policy (available at [http://www.deldot.gov/information/business/subdivisions/SUP\\_Sidewalk\\_Process.pdf](http://www.deldot.gov/information/business/subdivisions/SUP_Sidewalk_Process.pdf)) states that in Level 3 and 4 areas a path or sidewalk shall be installed along the State-maintained road frontage if the subject development abuts an existing facility. As there are no existing paths or sidewalks near the proposed complex, no paths or sidewalks will be required along the site frontage. However, the complex is directly across Route 1 from a Level 3 area that is ripe for development and is a land use that could attract bicycle traffic, and possibly pedestrian traffic, when that area develops. Therefore we recommend that the applicant plan for, and at the appropriate time provide, facilities such as paths and amenities such as bicycle racks, for bicycle and pedestrian traffic in the design of their ultimate entrance and in their internal site design.

**Response:** *Comment noted.*

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

#### **Soils Assessment**

- Based on soils survey mapping update, the Fallsington (FaA) and Carmichael (CaA) soil mapping units have the most limitations for development in the immediate vicinity of the proposed project. Fallsington and Carmichael are poorly-drained wetland associated (hydric) soils that have severe limitations for development (considered unsuitable for development). We strongly discourage building on hydric soils because they are functionally important source of water storage (functions as a “natural sponge”); the loss of water storage through excavation, filling, or grading of intact native hydric soils increases the probability for more frequent and destructive flooding events (Figure 1). The probability for flooding is further compounded by increases in surface imperviousness as building density in the area increases over time. Moreover, destruction of hydric soils increases the amount pollutant runoff (i.e., hydric soils sequester pollutants) which contributes to lower observed water quality in regional waterbodies and wetlands.

DNREC strongly recommends the applicant contact a licensed (Delaware Class D) soil scientist to make a site specific assessment (i.e., soil survey mapping) of the soils on this site to ensure that the hydric soils in this site are set aside and not disturbed. A list of licensed soil scientists can be obtained from the Ground Water Discharges Branch; the Branch can be reached by phone at 739-9947.

**Response:** *Comment noted.*

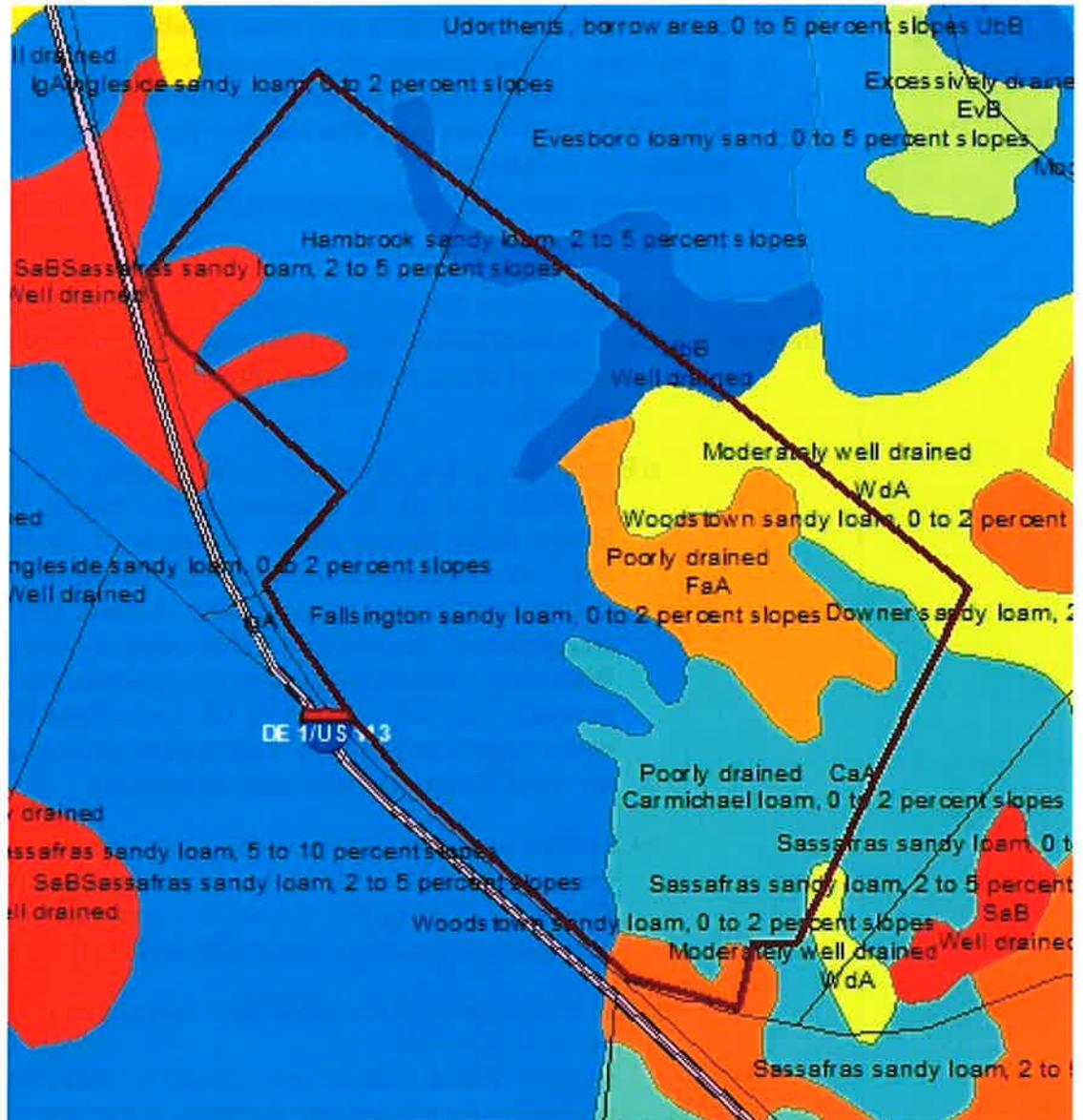


Figure 1: NRCS soil survey mapping update in the immediate vicinity of the proposed project

### Wetland Buffer

- To protect the function and integrity of wetlands on the parcel, a minimum 100 foot buffer should be left intact around the perimeter. 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.

**Response:** Comment noted.

**Additional information on TMDLs and water quality**

- A Pollution Control Strategy (PCS) to achieve the required TMDL nutrient and bacterial load reduction requirements has been established for the Murderkill River watershed. The web link for the Murderkill River PCS strategies is as follows:  
<http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedManagementPlans.aspx>

DNREC strongly encourage the applicant reduce nutrient and bacterial pollutants through voluntary implementation of the following recommended BMPs:

- Additional native woody tree/shrub/herbaceous plantings, wherever possible.
- 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 waterbodies and wetlands (as determined by USACE approved wetlands delineation).
- 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.
- Use of rain gardens, as a BMP(s) to mitigate or reduce nutrient and bacterial pollutant impacts via runoff/discharges from impervious surfaces. Please contact Lara Allison for information about the possibility for siting a rain garden(s) in this parcel. Lara can be contacted by phone at 739-9922.
- Employ pervious paving materials (e.g., pervious pavers) as a BMP(s) for parking lots or roadways to help reduce the potential for on-site and offsite flooding events. Moreover, pervious paving materials also help reduce the volume of pollutant-laden runoff ultimately draining to local waterways and wetlands in the greater Murderkill River watershed. Pervious paving materials can be used as a substitute for all conventional paving materials (e.g., asphalt and concrete).
- Use of rain gardens, and green-technology storm water management structures (in lieu of open-water management structures) as BMPs to reduce nutrient pollutant impacts. Please contact Lara Allison for further information on raingardens at 739-9922.

- 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. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact Jen Walls at 302-739-9939 for more information on the protocol.

***Response:*** *This project will be designed in accordance with the applicable Delaware Sediment and Stormwater Regulations. We are planning to use several green BMPs, including infiltration areas, bio-swales and bio-retention areas.*

#### **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.

***Response:*** *Comment noted.*

#### **Additional information on hazardous waste sites**

- DNREC strongly recommends that the land owner perform environmental due diligence of the property by performing a Phase I Environmental Site Assessment (including a title search to identify environmental covenants) in accordance to Section 9105(c) (2) of the Delaware Hazardous Substance Cleanup Act (HSCA). While this is not a requirement under HSCA, it is good business practice and failure to do so will prevent a person from being able to qualify for a potential affirmative defense under Section 9105(c) (2) of HSCA. Additional remediation may be required if the project property or site is rezoned by the county.
- Should a release or imminent threat of a release of hazardous substances be discovered during the course of development (e.g., contaminated water or soil), construction activities should be discontinued immediately and DNREC should be notified at the 24-hour emergency number (800-662-8802). SIRB should also be contacted as soon as possible at 302-395-2600 for further instructions.

***Response:*** *Comment noted.*

**Additional information on air quality**

- The existing property is largely used for field crops, with 11.3 acres of wooded area located at the southern extent. According to the application, zero forested acres will be removed for this project. The applicant states that, while "open space" will be part of the project, the acreage has not yet been determined. The intent is that the open space will be used for active recreation, which would seem to apply to the majority of the property.

**Response:** *Comment noted.*

- The existing property has neither sidewalks nor bike paths, and there is no public transportation in the area. While the developer indicates that sidewalks will be added as part of this project, it is unclear whether the sidewalks will be limited to the project's interior. Even with sidewalk provisions, the proximity to US Route 1 may make pedestrian or bicycle access undesirable and/or unsafe, especially during the summer months when beach traffic is at its peak.

**Response:** *Comment noted.*

- DNREC encourages developers and builders to consider all sustainable growth practices in their design, and we believe that the air quality impacts associated with the project should be completely considered. New businesses may emit, or cause to be emitted, additional 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; Delaware currently violates federal health-based air quality standards for ozone. New Castle County, Delaware is classified as non-attainment for not meeting federal and state 8-hour ozone standards. Compared to Kent and Sussex Counties, short term 1-hour average peak ozone levels are usually highest in New Castle County, as well,
  - The emission of greenhouse gases which are associated with climate change, and
  - The emission of air toxics.

Air emissions generated from new businesses 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, and
- All transportation activity.

**Response:** *Comment noted.*

- Based on the information provided, the three air emissions components (i.e., area, electric power generation, and mobile sources) for the project 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, 8<sup>th</sup> Edition. Table 2 represents the actual impact the Kent County Sports Complex project may have on air quality.

**Table 2: Projected Air Quality Emissions for Kent County Sports Complex**

Emissions Attributable to Kent County Sports Complex (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO <sub>x</sub> )	Sulfur Dioxide (SO <sub>2</sub> )	Fine Particulate Matter (PM <sub>2.5</sub> )	Carbon Dioxide (CO <sub>2</sub> )
Mobile	19.43	25.62	*	*	*

(\* ) Indicates data is not available

**Response:** Comment noted.

- Note that emissions associated with the actual construction of the business, 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.

**Response:** Comment noted.

- 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 while at the same time protect our diminishing land base;
  - 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.

**Response:** Comment noted.

- Additional measures may be taken to substantially reduce the air emissions identified above. These measures 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.
- Constructing with high albedo, high solar reflectance materials. This includes roofing and hardscape. These materials help to reduce heat island impacts and, by extension, help to minimize the potential for localized ground-level ozone formation. These materials also help reduce demands on air conditioning systems and save on energy costs.
- Providing shade for parking areas. Approaches may include architectural devices, vegetation, or solar panels. Providing shade for parking areas helps to reduce heat island impacts, and, by extension, helps to minimize the potential for localized ground-level ozone formation. Such measures can also have the additional benefit of channeling or infiltrating stormwater.
- Providing no more than the minimum local code requirements for parking capacity. This measure minimizes the environmental harms associated with parking facilities, such as automobile dependency, vehicle emissions, land consumption, and stormwater runoff.
- Providing charging stations for plug-in electric vehicles. This measure helps to reduce localized air pollution by supporting the use of non-gasoline powered vehicles. Please refer to the US Department of Energy's website for electric vehicle readiness information: [http://www1.eere.energy.gov/cleancities/electric\\_vehicle\\_projects.html](http://www1.eere.energy.gov/cleancities/electric_vehicle_projects.html).
- Encouraging the use of safe multimodal transportation. This measure can significantly reduce mobile source emissions. For every vehicle trip that is replaced by the use of a sidewalk, 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 is 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, particularly those between the site and adjacent residential areas/educational facilities. 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.

***Response:*** *Comments noted.*

This is a partial list, and there are additional things that can be done to reduce the impact of the development. The applicant should submit a plan to the DNREC DAQ which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Kent County Sports Complex project.

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

- The local fire chief should be contacted in order to communicate proposed method of creating paths for EMS vehicles to be able to access an injured party on any of the athletic fields.

***Response:*** *Comment noted. We will be contacting the fire chief regarding this project.*

- 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](http://www.statefiremarshal.delaware.gov), technical services link, plan review, applications or brochures.

***Response:*** *Comment noted.*

Delaware Economic Development Office – Contact Jeff Stone 672-6849

- The Delaware Economic Development Office (DEDO) has and continues to support the establishment of the Kent County Sports Complex. It is clear that there is sufficient demand to support a sports facility on the scale of the Kent County Regional Sports Complex Project, and that the level of interest is high enough to ensure the complex would be a steady economic engine for both the region and the state. The Delaware Tourism unit routinely receives RFPs for sporting events that require “long fields”, but have been forced to pass on the opportunities because of the state's lack of suitable facilities.

***Response:*** *Comment noted.*

- It is estimated that such a facility could generate more than \$18 million in economic impact annually, increasing day and overnight visitation thereby providing a significant community benefit while enhancing the quality of life

in Delaware. The many businesses that would be positively impacted by the increased visitation of parents and children include hotels, restaurants, gas stations and convenience stores. These positive impacts are why the State of Delaware, through the Building Delaware's Future Now Fund, committed over \$3.2 million to support the construction of infrastructure to support the creation of the complex.

**Response:** *Comment noted.*

- While the particular location envisioned for the facility is in a Level 4 area, it is primarily an open space use and therefore compatible with Level 4 while also being especially favorable because of its visibility and ease of access off of Delaware 1. DEDO is aware of that there are multiple development issues that must be addressed prior to any formal go ahead for this project. DEDO pledges to work with the developers and appropriate State and Local agencies to resolve these issues to ensure that this project is constructed to the highest standards and becomes a showcase for the State of Delaware.

**Response:** *Comment noted.*

If you have any questions, please do not hesitate to contact me.

Sincerely,

BECKER MORGAN GROUP, INC.



Jon S. Falkowski  
Associate

JSF/jsf

Cc: Shelly Cecchett – Kent County ([sc\\_gkc@icloud.com](mailto:sc_gkc@icloud.com))