



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF STATE PLANNING COORDINATION

March 24, 2015

Mr. Robert J. Palmer, PE
Beacon Engineering, LLC
24594 Hollytree Circle
Georgetown, DE 19947

RE: PLUS review 2015-02-06; Rudy South

Dear Mr. Palmer,

Thank you for meeting with State agency planners on February 25, 2015 to discuss the proposed plans for the Rudy South development. According to the information received, you are seeking review of a 100,000 square foot commercial development on Webb's Landing Road & Robinsonville Road in Sussex County.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. **The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as 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 Levels 2 and 3 according to the *Strategies for State Policies and Spending*. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. State investments will support growth in these areas.

Code Requirements/Agency Permitting Requirements

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. However, Section 2.3.2 provides that for developments generating less than 2,000 vehicle trip ends per day and less than 200 vehicle trip ends per hour, DelDOT may accept an Area Wide Study Fee of \$10 per daily trip in lieu of a TIS.
- From the plan accompanying the PLUS application, DelDOT can see that the development would generate 328 vehicle trip ends per day per typical weekday. Using the same land use assumptions, DelDOT estimates that the proposed development would generate 71 vehicle trip ends per hour during the peak hour of that day. DelDOT believes there is an error in the developers' calculations in that the daily rate they used for the boat storage use is actually a peak hour rate for RV sales, but DelDOT anticipates that a more correct daily rate would still leave them with a total daily trip generation of fewer than 2,000 vehicle trip ends per day. Therefore, a TIS would be warranted but payment of the Area Wide Study Fee is an option.
- If the applicant would like to obtain a scope of work for a TIS, the applicant may have their engineer contact Mr. Troy Brestel of the DelDOT Planning office. Mr. Brestel may be reached at (302) 760-2167. If they would prefer to pay the Area Wide Study Fee, this topic should be discussed at the Pre-Submittal Meeting, which is discussed below under Suggestions. Paying the Area Wide Study Fee would not relieve them of responsibility for off-site road improvements such as a TIS might identify.
- The site access on Robinsonville Road must be designed in accordance with DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access, which is available at http://www.deldot.gov/information/pubs_forms/manuals/subdivisions/pdf/Subdivision_Manual_Revision_1_proposed_060110.pdf.
- Please be advised that DelDOT is about to advertise for adoption, in the March Register of Regulations, a comprehensive revision of the Standards and Regulations. While in most respects, the changes are incremental, they are located throughout the manual and could well have some effect on the entrance design. DelDOT anticipates holding training sessions for the consulting engineering community but those sessions have yet to be scheduled.
- As necessary, in accordance with Section 3.6.5 and Figure 3-3 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require dedication of right-of-way along the site's frontage on Robinsonville Road to provide a

minimum of 30 feet of right-of-way from the road centerline. The right-of-way dedication note has been revised to the following, “**An X-foot wide right-of-way is hereby dedicated to the State of Delaware, as per this plat.**”

- In accordance with Section 3.6.5 of the Standards and Regulations for Subdivision Streets and State Highway Access, DelDOT will require the establishment of a 15-foot wide permanent easement across the property frontage on Robinsonville Road. The location of the easement shall be outside the limits of the ultimate right-of-way. The easement area can be used as part of the open space calculation for the site. The following note is required, “**A 15-foot wide permanent easement is hereby established to the State of Delaware, as per this plat.**”
- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Initial Stage review fee shall be assessed to this project.
- Referring to Section 1.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, the Construction Stage review fee shall be assessed to this project.
- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, any off-site improvements and when those improvements are warranted need to be noted on the record plan.
- In accordance with Section 3.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a site plan shall be prepared prior to issuing “Letter of No Objection”. The following information will be required for the “Letter of No Objection” review:
 - Copy of the Initial Stage Fee Calculation Form
 - Copy of the Initial Stage Review Fee
 - Gate-Keeping Checklist – Site Plan
 - Sight Distance Spreadsheet
 - Design Checklist – Record Plan*
 - Owners and Engineer’s name and e-mail address
 - Three (3) paper sets of the Record Plan
 - Conceptual Entrance Plan
 - CD with a pdf of the Site Plan
 - Submission of the Area-Wide Study Fee (if applicable)

*For the design checklist for the site plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, pages D-2 and D-3.

- Referring to Section 4.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, an entrance plan shall be prepared prior to issuing entrance approval. The following information will be required for Entrance Plan review:
 - Copy of the Construction Stage Fee Calculation Form
 - Copy of the Construction Review Fee
 - Gate-Keeping Checklist – Entrance Plan
 - Auxiliary Lane Spreadsheet
 - Design Checklist – Entrance Plan**
 - Three (3) paper sets of the Entrance Plan
 - SWM Report and Calculations (if applicable)
 - CD with a pdf of the Entrance Plan

**For the design checklist for the entrance plan, please refer to the Standards and Regulations for Subdivision Streets and State Highway Access, Appendix D, Plan Review Checklist, pages D-9 and D-13.

- In accordance with Section 4.8 of the Standards and Regulations for Subdivision Streets and State Highway Access, stormwater facilities, excluding bioswales, shall be located a minimum of 20 feet from the ultimate State right-of-way along Beaver Dam Road.
- In accordance with Section 5.4 of the Standards and Regulations for Subdivision Streets and State Highway Access, a sight distance triangle is required for the site access on Beaver Dam Road and shall be established in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards. A spreadsheet has been developed to assist with this task. It can be found at <http://www.deldot.gov/information/business/subdivisions/Intersection-Sight-Distance.xls>.
- Metes and bounds and total areas need to be shown for any drainage easements. Section 5.7.2.5 of DelDOT's Standards and Regulations for Subdivision Streets and State Highway Access requires, in part, a minimum 20-foot wide drainage easement for storm drainage systems, open or closed, that fall outside the existing right-of-way or the drainage/utility easement. These easements must be shown and noted on the record plan.

Department of Natural Resources and Environmental Control – Contact Kevin Coyle 739-9071 TMDLs

- The project is located in the low nutrient reduction zone of the greater Inland Bays watershed. In this watershed, Total Maximum Daily Load (TMDL) pollutant reduction targets have been developed by the State of Delaware (under the auspices of Section 303(d) of the 1972 Federal Clean Water Act) for nutrients (e.g., nitrogen, phosphorus), and bacteria. 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 the low reduction zone of the Inland Bays watershed calls for 40 percent reduction in nitrogen and phosphorus from baseline conditions. The TMDL also calls for a 40 percent reduction (17 percent for marine waters) in bacteria from baseline conditions. Please view the following web link for further information on the regulatory requirements and technical analysis involved in the development of the specific TMDLs: <http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessmentTMDLs.aspx>

- The Inland Bays Pollution Control Strategy (PCS) and the accompanying regulations were finalized by order of the DNREC Secretary on October 2008. The PCS regulations can be reviewed at <http://regulations.delaware.gov/documents/November2008c.pdf>. Background information about the PCS with guidance documents and mapping tools can be retrieved from http://www.dnrec.state.de.us/water2000/Sections/Watershed/ws/ib_pcs.htm
- A nutrient management plan is required under the *Delaware Nutrient Management Law (3 Del.C., Chapter 22)* for all persons or entities who apply nutrients to lands or areas of open space in excess of 10 acres. This project's 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>

Water Supply

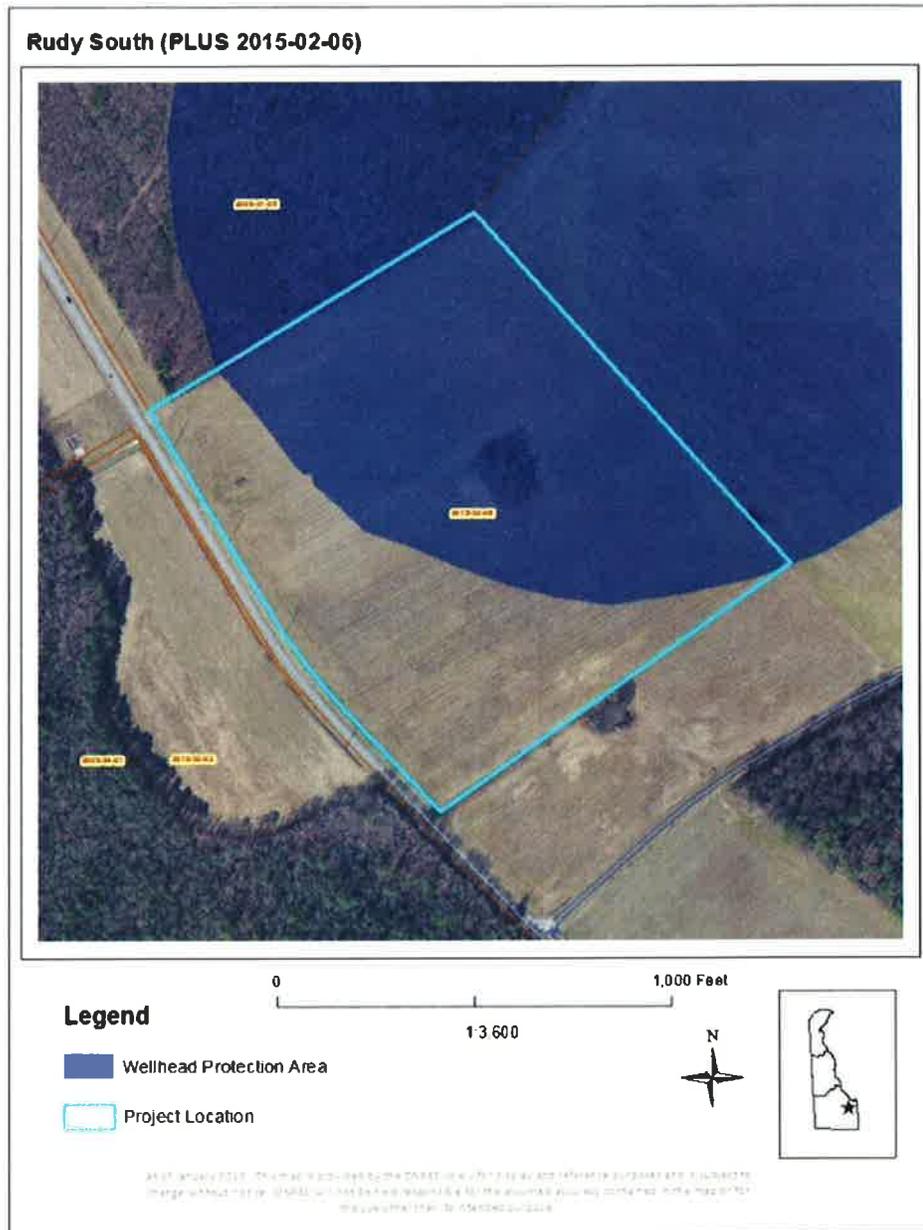
- The project information sheets state that individual on-site well(s) will be used to provide water for the proposed project. DNREC records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity 83-W-15. I recommend that the developer contact Tidewater Utilities 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. 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.
- 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, Ground-Water Protection Branch (GPB) has determined that a significant portion of the parcel falls within a wellhead protection area for Sussex County (see map). The wellhead protection area protects a well owned by Tidewater Utilities Inc.
- 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 to consumers.
- Chapter 115 Zoning Article IV §115-19 Of the Sussex County's Code states in part that agricultural districts are also intended for protection of water resources. This parcel is zoned as an agricultural district and the drinking water supply would be afforded more protection if it remains agricultural.
- In addition, because the project is located within a wellhead protection area and the wellhead is a source of public drinking water, 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.



Sediment and Stormwater Program

- A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a project application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable. 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

Sussex Conservation District. Contact Jessica Watson at the Sussex Conservation District at (302) 856-2105 for details regarding submittal requirements and fees. (Title 7, Delaware Code, Chapter 40 and Delaware Regulations, Title 7, Administrative Code, 5101).

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	
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>.

Tank Management. 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.
- There are no confirmed leaking underground storage tank (LUST) projects located within a quarter mile from the proposed project area.
- 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.

State Historic Preservation Office – Contact Terrence Burns 736-7404

- There was a known agriculture complex (S-2927) on this parcel that was associated with a M. B. Vessels, according to the Pomeroy and Beers Atlas of 1868. Although this agriculture complex is gone now, there is a cemetery (S-4970) also on the parcel. Since SHPO has no detailed information about this cemetery, the developer may want to hire an archaeological consultant to examine or delineate the cemetery (S-4970) further. With this in mind, the developer should be aware of the Unmarked Human Burials and Human Skeletal Remains Law, 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 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 (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 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 pertaining 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 may want 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. After the archaeological consultant has examined the cemetery (S-4970), the developer should use sufficient landscaping or barrier around the cemetery (S-4970), in order to protect it from adverse, intrusion, impact or affect.
- Furthermore, 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 CAR 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.

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 (DSFPR):

Fire Protection Water Requirements:

- Since the structures of the complex are proposed to be served by individual on-site wells (No Central or Public Water System within 1000' of property), set back and separation requirements may apply.

Fire Protection Features:

- All structures over 10,000 ft² aggregate will require automatic sprinkler protection installed. All mini-storage buildings greater than 2500 ft² throughout will require automatic sprinkler system installed where any of the individual storage units are separated by less than 1-hour fire resistance-rated barrier.
- 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. This means that access roads to the various buildings must be constructed so fire department apparatus may negotiate them.
- 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.

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)
- Note indicating if building is to be sprinklered
- Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered Provide Road Names, even for County Roads

Sussex County – Contact Janelle Cornwell 855-7878

- The parcel is located within the Angola Neck planning area for sewer service. Sussex County does not have a schedule to provide central sewer service to the parcel at this time. When Sussex County provides sewer service, it is required that the onsite system be abandoned and a connection made to the central sewer system.
- The use of a billboard or cell tower require Special Exception approval from the Board of Adjustment and the other uses require Conditional Use approval from the Planning Commission and County Council.

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 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. The form needed to request this meeting is available at http://www.deldot.gov/information/business/subdivisions/Meeting_Request_Form.doc.
- In accordance with Section 3.5.7 of the Standards and Regulations for Subdivision Streets and State Highway Access, cross-access easements are recommended for allow for future connections to the adjacent properties that have the potential to be developed. As discussed below, residential development is presently proposed on the Vessels Property (Tax Parcel No.2-34-6.00-90.00) to the northwest, so an easement on that side may not be useful, but potential still exists for compatible developments to the northeast on the Deerfield Farm, Inc. (Tax Parcel No. 2-34-6.00-95.01) property and the southeast on the lands of Annie S. and James W. Eighmie (Tax Parcel No.2-34-6.00-97.00). At a minimum, DeIDOT recommends shifting the proposed cell tower site to the right or left of the proposed access road to allow for the future extension of that road.
- As shown on the Investment Level map associated with the Strategies for State Policies and Spending, the subject development is located in a Level 3 area. DeIDOT's Shared-

Use Path and/or Sidewalk Process policy (available at http://www.deldot.gov/information/business/subdivisions/SUP_Sidewalk_Process.pdf) requires that a path or sidewalk be installed along the State-maintained road frontage if the development abuts an existing facility, which this development does not. Where the development does not abut an existing facility, it is at the discretion of DeIDOT's Subdivision Engineer to require, or not require a path. This matter should be discussed at the Pre-Submittal Meeting mentioned above.

- We are aware of a pending plan to develop a residential subdivision on the Vessels Property (Tax Parcel No.2-34-6.00-90.00), which adjoins this property to the northwest, and that may bear on the decision to require a path or sidewalk.
- Be advised that the standard general notes have been updated and posted to the DeIDOT website. Please begin using the new versions and look for the revision date of May 21, 2014. The notes can be found at http://www.deldot.gov/information/business/subdivisions/DeIDOT_Development_Coordination_Plan_Sheet_Notes.doc
- The applicant should expect a requirement that all PLUS and/or TAC comments be addressed prior to submitting record, subdivision or entrance plans for review.
- The applicant should expect a requirement that a separate turning template plan be provided to verify that vehicles can safely enter/exit the entrance. Each entrance shall be designed for the largest vehicle using that entrance.
- Please check to determine whether any utilities will need to be relocated as part of this project.
- Please use the Auxiliary Lane Worksheet to determine whether auxiliary lanes are warranted at the site entrance. The worksheet can be found at http://www.deldot.gov/information/business/subdivisions/auxiliary_lane_worksheet.xls.
- Please be advised DeIDOT's check handling procedures changed in 2012. For specific information, see the letter available at <http://www.deldot.gov/information/business/subdivisions/PaymentProcedure.pdf>.

best to mow the open space area surrounding the pond only once a year, either in February or March. If mowing must occur more often, it would be helpful to leave a minimum buffer of 15-30 feet in width to be mowed annually. This area would be necessary to adequately deter the waterfowl from inhabiting the area (when the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond). In addition to deterring nuisance waterfowl, the native wildflower mix will also serve to attract bees, butterflies, and other pollinators, and reduce run-off, which can contain oil and other pollutants that homeowners may use on their lawns and driveways.

- Our program botanist, Bill McAvoy would gladly assist in drafting a list of plants suitable for this site. Bill can be contacted at (302) 735-8668 or William.McAvoy@state.de.us.

Additional information on TMDLs and water quality

- Compliance with the specified TMDL nutrient and bacterial reduction requirements specified for the Inland Bays watershed can be facilitated by the strategies and requirements described in the Inland Bays PCS, and the implementation/adherence to the following recommended BMPs:
- Maintain as much of the existing open space as possible; we further suggest additional native tree and native herbaceous planting, wherever possible.
- 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. Using open-water management structures as part of calculation for open space results in an underestimate of actual surface imperviousness, and is not considered an acceptable best management practice.
- Since this project will create additional surface imperviousness that will increase the probability for increased flooding and increased pollutant load runoff impacts to adjoining streams and wetlands in the greater Inland Bays watershed we strongly encourage, wherever practicable, the use of pervious paving materials (instead of conventional asphalt and concrete) to mitigate these impacts. We suggest that the applicant use pervious paving materials in all parking areas and consider the use of pervious pavers in roadways as well. According to information provided in the PLUS application, the applicant is proposing the use of pervious paving material, however, it not clear where or what extent these pavers will actually be used upon completion of the project.
- Use of green-technology storm water management (in lieu of open-water management structures) and rain gardens as BMPs for mitigating nutrient and bacterial pollutant runoff

from increases in surface imperviousness. Please contact Lara Allison at 739-9939 for further information about the possibility for installing a rain garden(s) on this parcel.

- 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. We strongly encourage the applicant/developer use this protocol to help them design and implement the most effective BMPs. Please contact John Martin or Jen Walls 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. 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,
- 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.

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, 8th Edition. Table 2 represents the actual impact the Rudy South project may have on air quality.

Emissions Attributable to Rudy South (Tons per Year)	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NO _x)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Mobile	1.09	1.44	*	*	*

(*) *Indicates data is not available.*

Note that emissions associated with the actual construction of the residential community, 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 while at the same time protect our diminishing land base;
- Coordinate transportation, 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 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 an 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 lot 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.
- **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.** Native 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 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 Rudy South project. The DAQ point of contact is Rachel Yocum, and she may be reached at (302) 739-9402 or Rachel.yocum@state.de.us.

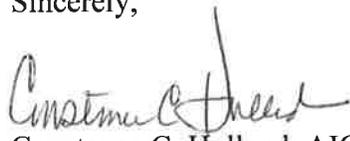
Delaware State Fire Marshall's Office – Contact Duane Fox 739-4394

- 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,

A handwritten signature in cursive script, appearing to read "Constance C. Holland".

Constance C. Holland, AICP
Director, Office of State Planning Coordination

CC: Sussex County