



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
Budget Development, Planning and Administration
State Planning Coordination

May 18, 2009

Mr. Richard McCabe
George, Miles & Buhr, LLC
400 High Street
Seaford, De 19973

RE: PLUS 2009-04-01; Novosel Subdivision

Dear Mr. McCabe:

Thank you for meeting with State agency planners on April 22, 2009 to discuss the proposed plans for the Novosel Subdivision project to be located at the intersection of County Road 277 and County Road 277B in Sussex County.

According to the information received, you are seeking site plan approval through Sussex County for 209 residential units on 152 acres.

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.

This proposal is located in Investment Level 4 according to the *Strategies for State Policies and Spending*, and is within the Low Density area according to the Sussex County certified comprehensive plan. **The comments in this letter are technical, and are not intended to suggest that the State supports this development proposal. This letter does not in any way suggest or imply that you may receive or may be entitled to permits or other approvals necessary to construct the development you indicate or any subdivision thereof on these lands.**

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact: Bryan Hall (302)739-3090

Although the application states that this project is within the Environmentally Sensitive Development District, a growth zone within Sussex County, the Future Land Use map of the most recently adopted Sussex County comprehensive plan reflects this parcel as being in a Low Density Area; therefore, our standard Level 4 comments are noted below.

In the comments below from the Sussex County PLUS representative, criteria for a parcel within the Environmentally Sensitive Developing Area was given. I have included a copy of the Future Land Use map for Sussex County which clearly puts this project in a Low Density area. In addition, the proposed project lacks sensitive design to protect the unique natural and cultural resource found on this site. For these reasons, the State objects to the development of this property.

Standard Level 4 Comments

This project represents a major land development that will result in 209 residential units in an Investment Level 4 area according to the *2004 Strategies for State Policies and Spending*. This proposal is located in Investment Level 4 according to the *Strategies for State Policies and Spending*, and is within the Low Density area according to the Sussex County certified comprehensive plan. Investment Level 4 indicates where State investments will support agricultural preservation, natural resource protection, and the continuation of the rural nature of these areas. New development activities and suburban development are not supported in Investment Level 4 areas. These areas are comprised of prime agricultural lands and environmentally sensitive wetlands and wildlife habitats, which should be, and in many cases have been preserved.

From a fiscal responsibility perspective, development of this site is likewise inappropriate. The cost of providing services to development in rural areas is an inefficient and wasteful use of the State's fiscal resources. The project as proposed is likely to bring more than 500 new residents to an area where the State has no plans to invest in infrastructure upgrades or additional services. These residents will need access to such services and infrastructure as schools, police, and transportation. To provide some examples, the State government funds 100% of road maintenance and drainage improvements for the transportation system, 100% of school transportation and paratransit services, up to 80% of school construction costs, and about 90% of the cost of police protection in the unincorporated portion of Sussex County where this development is proposed. Over the longer term, the unseen negative ramifications of this development will become even more evident as the community matures and the cost of maintaining infrastructure and providing services increases.

Because the development is inconsistent with the *Strategies for State Policies and Spending*, the State is opposed to this proposed subdivision.

State Historic Preservation Office (SHPO) – Contact: Terrence Burns 739-5685

The role of the Division of Historical & Cultural Affairs in the Preliminary Land Use Service (PLUS) process is to provide information on the potential affect or impacts that a development or construction project may have on historic or cultural resources, and is an advocate for their protection. These historic or cultural resources can be a historic property, building, structure, landscape, district, object, archaeological site, cemetery, burial ground, or unmarked human remains.

Development projects, whether they are big or small, or whether they are located in rural areas or urban areas, have the capability to impact historic or cultural resources. In some cases, many of them, such as architectural resources and archaeological sites have been adversely affected by development projects through the demolition or ground-disturbing activities. These resources are also irreplaceable and quite valuable because of the important information they can provide about our state's past and a visual connection to our state's heritage.

In accordance with the Preliminary Land Use Service (PLUS) outlined in [Chapter 92 of Title 29](#) of the Delaware Code, here are the observations in reference to this PLUS Review Application. In addition, all of the information provided in reference to these observations is according to the archival resources or reference materials of the State Historic Preservation Office, which is the central research repository of the Division of Historical and Cultural Affairs.

According to Delaware's Strategies for State Policies and Spending, this parcel is in a Level 4 Investment Area, and the Division of Historical & Cultural Affairs does not approve or nor support any type of rezoning, construction project, or a development of any kind in a Level 4 Area, which are usually agricultural or open space lands or areas.

Delaware has a strong agricultural and rural heritage, and often there are Historic or Cultural Resources, such as architectural resource or archaeological sites that exist in these areas. By intruding on theses lands or areas, it could affect the historic context as well as historic or cultural resources that are historically associated with Delaware's agricultural or rural heritage, or potential historic or prehistoric archaeological sites, many of which have not been found or studied, but could contain important information about Delaware's history.

There are at least two Historic or Cultural Resources Sites that are nearby, one of them is an Archaeological Site along with cemetery (S-7075, 7S-G-87) southwest of the parcel, the other is a mid to late 19-century house (S-2932) northwest of the parcel, and it is also very close to the parcel as well.

According to the Pomeroy and Beers Atlas of 1868, which is a 19th-century historical map, it does show and indicate that there was a dwelling associated with T. Stockly existed apparently in the same location as the mid to late 19-century house (S-2932)

northwest of the parcel. In addition, the USGS Topo Map of 1918 did show and indicate the existence of a dwelling in that location as well.

Based upon the observations that were mentioned above, it appears that there is a possibility that there could be other historic or cultural resources on or within this parcel, which have not been discovered yet, such as a potential historic or prehistoric archaeological site, a cemetery, burial ground or unmarked human remains. Since there is a possibility that there could be other historic or cultural resources on or within this parcel, the developer should be aware of the Delaware Unmarked Human Remains Act of 1987, outlined in Chapter 54 of Title 7 of the Delaware Code, which pertains to the discovery and disposition of such remains. The unexpected discovery of unmarked human remains during construction can result in significant delays while the process is carried out.

Finally, prior to any demolition, ground-disturbing activities, or before any construction proceeds, the developer may want to consider hiring an archaeological consultant to examine the parcel to see if there are other historic or cultural resources here such as a potential historic or prehistoric archaeological site, a cemetery, burial ground or unmarked human remains. If you have any questions, or would like to discuss this information further, please contact Terence Burns at (302) 736-7404

Department of Transportation – Contact: Bill Brockenbrough 739-760-2109

John and Linda Novosel and the Adkins Company seek to develop a 209-lot residential subdivision on a 152.35-acre assemblage of parcels (Tax Parcel 2-34-6.00-84.00 and part of Tax Parcel 2-34-6.00-67.00). The land is located on the northwest corner of Robinsonville Road (Sussex Road 277) and Webbs Landing Road (Sussex Road 277B).

Because this land is located in a Level 4 Area, development of it as proposed is inconsistent with the *Strategies for State Policies and Spending*. As part of our commitment to support the *Strategies*, DelDOT refrains from participating in the cost of any road improvements needed to support this development and is opposed to any road improvements that will substantially increase the transportation system capacity in this area. DelDOT will only support taking the steps necessary to preserve the existing transportation infrastructure and make whatever safety and drainage related improvements are deemed appropriate and necessary. The intent is to preserve the open space, agricultural lands, natural habitats and forestlands that are typically found in Level 4 Areas while avoiding the creation of isolated development areas that cannot be served effectively or efficiently by public transportation, emergency responders, and other public services.

DelDOT strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in approved Comprehensive Plans. We encourage the use of transfer of development rights where this growth management tool is available.

If this development is approved, notwithstanding inconsistencies with the relevant plans and policies, DelDOT will provide technical review and comments.

**The Department of Natural Resources and Environmental Control – Contact:
Kevin Coyle 739-9071**

Besides its location in a Level 4 area and the Inland Bays Watershed, DNREC has several concerns about this project:

1. **Impervious cover estimation.** The applicant estimates post-construction impervious cover will be 6.6%. A Review of the application of the TR-55 methodology and an ARC-GIS analysis of the proposal indicate a significantly higher percentage of impervious cover. In a watershed regulated for nutrient reduction, an accurate estimate is critical. Please tell us, or the Sussex Planning and Zoning Commission, how you calculated impervious cover.
2. **Poor soil quality.** A significant percentage of soils on the site contain poorly drained wetland associated (hydric), which have a seasonal high water table occurring at or near the soil surface (within one-foot of soil surface or less). Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to future flooding problems from groundwater-driven surface water ponding. The State respectfully requests that the County deny this application in accordance with Sussex County Code (Chapter 99, Section 16A), stating that lands compromised by improper drainage or flooding potential pose significant threats to the safety and general welfare of future residents and, therefore, shall not be developed
3. **Critical wildlife habitat and forest removal.** The forest on this property is mapped as key wildlife habitat in the Delaware Wildlife Action Plan. The plan is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the State's natural resources. The estimate of forest cover removal appears to be understated, leaving only 3 acres (out of 152) for open space that does not contain stormwater, wastewater or other structures. By copy of this letter to Sussex County, DNREC asks the Sussex County Planning and Zoning Commission for support in their request for a site survey.

DNREC rarely comments on design, but this project is obviously focused on maximum yield and coverage, to the serious detriment of natural amenities that, if preserved, could create a much more livable community that does not create sustainability problems for residents, neighbors, wildlife and taxpayers in the short and long runs.

Normally, DNREC's comments – even on Level 4 applications – stick to the facts and some degree of boilerplate language and try not to be confrontational. However, this projects hits on several recurring and troubling themes that are routinely raised, but rarely addressed by the local government. The accumulation of serious concerns lead us to call on the county to become a partner for improved transparency on such critical

information such as impervious cover estimates and a site survey. Further both DNREC and the County should work to better enforce of existing ordinances, and require improved design that not only conserves resources but may be more attractive to potential buyers in a depressed market.

Investment Level 4 Policy Statement

This project is proposed for an Investment Level 4 area as defined by the *Strategies for State Policies and Spending* and is also located outside of a designated growth area in the relevant municipal and County certified comprehensive plans. According to the *Strategies*, this project is inappropriate in this location. In Investment Level 4 areas, the State's investments and policies, from DNREC's perspective, should retain the rural landscape and preserve open spaces and farmlands. Open space investments should emphasize the protection of critical natural habitat and wildlife to support a diversity of species, and the protection of present and future water supplies. Open space investments should also provide for recreational activities, while helping to define growth areas. Additional state investments in water and wastewater systems should be limited to existing or imminent public health, safety or environmental risks only, with little provision for additional capacity to accommodate further development.

With continued development in Investment Level 4 areas, the State will have a difficult, if not impossible, time attaining water quality (e.g., TMDLs) and air quality (e.g., non-attainment areas for ozone and fine particulates) goals. Present and future investments in green infrastructure will be threatened. DNREC strongly supports new development in and around existing towns and municipalities and in areas designated as growth zones in certified Comprehensive Plans. DNREC encourages the use of transfer of development rights where this growth management tool is available.

This particular development certainly compromises the integrity of the State Strategies and the preservation goals inherent in many of DNREC's programs. Of particular concern are the potential impacts to all three layers of the Green Infrastructure map (natural resource and recreation priorities, cropland, and forest lands), the loss/fragmentation of forest (35 out of 142 acres or 24.6%), and potential impacts to wetlands. Furthermore, the project will be subject to the Inland Bays Pollution control Strategy (PCS). While mitigating measures such as conservation design, central wastewater systems instead of individual on-site septic systems, and other best management practices may help mitigate impacts from this project, not doing the project at all is the best avenue for avoiding negative impacts. As such, this project will receive no financial, technical or other support of any kind from DNREC. Any required permits or other authorizations for this project shall be considered in light of the project's conflict with our State growth strategies.

Comments by division and program follow.

Fish and Wildlife

Rare Species/Site Visit Request

The Division scientists have not surveyed this project area; therefore, they are unable to provide information pertaining to the existence of state-rare or federally listed plants, animals or natural communities at this project site. In the absence of site-specific information, we offer the following comments:

DNREC has records of State-rare birds as well as neotropical migratory birds using forest blocks in this general vicinity and it is possible that your project area is an important stop-over site for these species.

In order to provide informed comments, division scientists request the opportunity to conduct a survey of the property to evaluate habitat and determine the potential for species of conservation concern. Please note that DNREC scientists have decades of experience in comprehensive rare species survey methods. They have extensive knowledge of the flora and fauna of the state and are qualified in making rare species identifications. The survey will be conducted at no expense to the landowner.

Please contact Edna Stetzar at (302) 653-2880 ext. 101 or at Edna.Stetzar@state.de.us if the landowner will grant a site visit.

Forested Wildlife Habitat

Cumulative forest loss throughout the State is of utmost concern to the Division of Fish and Wildlife which is responsible for conserving and managing the State's wildlife resources (see www.fw.delaware.gov and the Delaware Code, Title 7). The forest on this property is mapped as key wildlife habitat in the Delaware Wildlife Action Plan (DEWAP). DEWAP is a comprehensive strategy for conserving the full array of native wildlife and habitats-common and uncommon- as vital components of the state's natural resources. This document can be viewed via the program website at <http://www.dnrec.state.de.us/nhp>.

According to the PLUS application, 35 out of 142 acres of trees will be cleared. However, that estimate seems quite conservative given the level of development being proposed (209 lots and associated infrastructure). This is a maximum yield site plan with only 3 acres of open space that is not associated with stormwater or wastewater facilities (question #33 on PLUS application). In addition, once this site is built out and residents construct play areas, sheds, swimming pools, etc. the amount of forest removal could be much higher. The small, disconnected forest that will be left as open space is not as valuable to wildlife as a larger, contiguous area of habitat. Forest fragmentation separates wildlife populations, increases road mortality, and increases "edge effects" that leave

many forest dwelling species vulnerable to predation and allows the infiltration of invasive species.

Also, when forested areas are cleared, wildlife must either disperse into surrounding areas or attempt to co-exist with the new homeowners. Either scenario can result in human/animal conflicts. This type of clearing also causes greater pressure on nearby public lands to support displaced wildlife which then have to compete for a finite set of resources.

Recommendation:

If the applicant would consider habitat preservation, there are incentive-based programs for wildlife management available to private landowners through our agency. Please contact Shelley Tovell at (302) 735-3605 if the landowner(s) is interested in more information.

If preservation is not an option, then DNREC recommends the following:

- 1) Downside or redesign the project to allow for larger, connected areas of forested open space.
- 2) There are forested wetlands on this site, and this habitat type can support an array of plant and animal species. The applicant should consider omitting lot #s 47- 52 which will require filling and crossing wetlands to access them. It is hard to discern distances just by looking at the site plan, but approximately lot #s 6-10, 15- 18, 46-48, and 51-53 are within 100 feet of wetlands. In order to protect the function and integrity of those wetlands, scientific evidence supports the need for at least 100-foot upland buffers. This buffer not only protects water quality but provides valuable habitat for wetland-dependent species during a large portion of their life cycle. These wetlands will be further degraded if the applicant is allowed to use wetlands as the intended outlet for stormwater generated by this project (question #32) making the buffer all that more important.

Nuisance Species

Wet ponds created for stormwater management purposes may attract resident Canada geese. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Recommendations:

- 1) DNREC recommends native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. 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. The vegetation also blocks the ability to easily move between land and water.
- 2) At this time, DNREC does not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the landowner or property manager. *Edna Stetzar - (302) 653-2880, Edna.Stetzar@state.de.us*

Soil and Water

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 pre-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.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, green technology BMPs and low impact development practices should be considered a priority to reduce stormwater flow and to meet water quality goals.

Drainage Program. The existing drainage outlets for the parcel may not be suitable for a development. The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of onsite storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.

Have all drainage easements recorded on deeds and place restrictions on obstructions within the easements to ensure access for periodic maintenance or future re-construction. Future property owners may not be aware of a drainage easement on their property if the easement is only on the record plan. However, by recording the drainage easement on the deed, the second owner, and any subsequent owner of the property, will be fully aware of the drainage easement on their property.

Sediment/Stormwater and Drainage comments provided by James Sullivan - (302) 739-9921, James.Sullivan@state.de.us

Water Resources

Soils Assessment. Based on the NRCS soil survey update Hammonton (HnA), Pineyneck (PyA), and Fallsington (FgA) were mapped in the immediate vicinity of the proposed construction (Figure 1). Hammonton and Pineyneck are moderately well-drained soils of low-lying upland that have moderate limitations for development. Fallsington is a poorly-drained wetland associated (hydric) soil that has severe limitations for development and should be avoided.

A significant portion of this parcel contains poorly drained wetland associated (hydric) Fallsington soils (approximately 30-40% of the project area) which have a seasonal high water table occurring at or near the soil surface (within one-foot of soil surface or less). Building in such soils is likely to leave prospective residents of this and adjoining properties susceptible to future flooding problems from groundwater-driven surface water ponding, especially during extended periods of high-intensity rainfall events such as tropical storms/hurricanes or “nor’easters.” This is in addition to increased flooding probabilities from surface water runoff emanating from future created or constructed forms of structural imperviousness (e.g., rooftops, roads, sidewalks, and stormwater management structures).

Based on the Chapter 99, Section 16A of the Sussex County Code (paraphrased), lands compromised by improper drainage or flooding potential pose significant threats to the safety and general welfare of future residents and, therefore, shall not be developed. Soils mapped as Fallsington fit the criterion for improper drainage or high flooding potential, and should be avoided. The Watershed Assessment Section believes permitting development on such soils would be inconsistent with above-mentioned regulatory guidelines in the Sussex County Code.

specific field wetlands delineation using the methodology described in the 1987 United States Army Corps of Engineers (USACE or “the Corps”) manual is the acceptable basis for making a jurisdictional wetland determination for nontidal wetlands in Delaware. The applicant is forewarned that the Corps views the use of the National Wetlands Inventory (NWI) mapping or the Statewide Wetlands Mapping Project (SWMP) mapping as an unacceptable substitute for making such delineations. To ensure compliance with said Corps regulatory requirements, it is strongly recommended that a field wetlands delineation using the above-referenced methodology be performed on this parcel before commencing any construction activities. It is further recommended that the Corps be given the opportunity to officially approve the completed delineation. In circumstances where the applicant or applicant’s consultant delineates what they believe are nonjurisdictional isolated (SWANCC) wetlands, the Corps must be contacted to evaluate and assess the jurisdictional validity of such a delineation. The final jurisdictional authority for making isolated wetlands determinations rests with the Corps; they can be reached by phone at 736-9763.

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.

Impervious Surfaces and Best Management Practices. The applicant estimates this project’s post-construction surface imperviousness to reach only about 7 percent. However, given the scope and density of this project (i.e., as viewed from the conceptual project layout) this estimate appears a significant underestimate. According to the TR-55 methodology for determining impervious cover, given the average lot size of 8,583 square feet (approximately .2 acres), impervious cover is more likely to be between 38 and 65 percent. When calculating surface imperviousness it is important to include all forms of constructed surface imperviousness, such as: all paved surfaces including rooftops, sidewalks, driveways, and roads; open-water stormwater management structures and/or ponds; and community wastewater systems (if applicable); this will ensure a realistic assessment of this project’s likely post-construction environmental impacts. Surface imperviousness should be recalculated to reflect all of the above-mentioned forms of surface imperviousness in the finalized calculation for surface imperviousness. Wetlands should be excluded from the parcel’s total open space area when calculating the parcel’s total surface imperviousness.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed’s overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of this project’s most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials (“pervious pavers”) in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or

additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

TMDLs. Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Inland Bays Watershed. 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 water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals.

This project is located in the low nutrient reduction area requiring a 40 percent reduction in nitrogen and phosphorus; a 40 percent reduction in bacteria is also required. Additional nutrient reductions may be possible through the implementation of Best Management Practices such as wider vegetated buffers along watercourses (and wetlands), increasing passive, wooded open space, use of pervious paving materials to reduce surface imperviousness (i.e., pervious pavers), and the use of green-technology stormwater management technologies.

A Pollution Control Strategy (PCS) is an implementation strategy that identifies the actions necessary to systematically reduce the pollutant loading rate for a given water body, and meet the TMDL reduction requirements specified for that water body. As mentioned previously, the pollutants specifically targeted for reduction in the Inland Bays watershed are nutrients (e.g., nitrogen and phosphorus) and bacteria. A variety of site-specific best management practices (BMPs) will be the primary actions required by the PCS to reduce pollutant loadings associated with nutrients and bacteria. The PCS for the Inland Bays was approved on November 11, 2008, and is now an enforceable regulatory directive.

The Department has developed an assessment tool that will help evaluate whether your proposed development meets the required TMDL nutrient reduction requirements specified by the PCS. Contact Lyle Jones at 302-739-9939 for more information on the PCS and the assessment tool.

Soils, wetlands, subaqueous lands and TMDL comments provided by John Martin, Watershed Assessment Section, (302) 739-9939, John.Martin@state.de.us

Water Supply. The project information sheets state water will be provided to the project by Tidewater Utilities via a public water system. 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.

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. *Ricardo Rios - (302) 739-9944, Ricardo.Rios@state.de.us*

Parks and Recreation

In May and June 2008, the Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2008-20011 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. An overwhelming ninety-one percent of the respondents in eastern Sussex County said that Outdoor Recreation was very or somewhat important to them. The highest facility needs in Eastern Sussex County include: Walking and Jogging Paths, Bicycle Paths, Beach Access, Swimming Pools, Fishing Access, Open Space and Passive Recreation Areas, Access to Historic Sites, Picnic Areas, Playgrounds, Hiking Trails. Moderate priorities include: Powerboat Access, Nature Programs, Golf Courses, Canoe and Kayak Access, Camping Areas, Baseball and Softball Fields, Basketball Courts, Tennis Courts, Football Fields, Soccer Fields, Hunting Areas. Consideration should be given to address and including some of these facilities in your 'Community Amenities Area'. *Kendall Sommers - (302) 739-9242, Kendall.Sommers@state.de.us*

Air and Waste

Air Quality. Housing developments may unnecessarily emit, or cause to be emitted, significant amounts of 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 housing developments include emissions from:

- Area sources like painting, lawn and garden equipment and the use of consumer products like roof coatings and roof primers.
- The generation of electricity needed to support the homes in your development, and
- Car and truck activity associated with the homes in your new development.

These three air emissions components (i.e., area, electric power generation, and mobile sources) are quantified below, based on a per household/residential unit emission factor that was developed using 2002 Delaware data. These emissions in the table represent the actual impact the Novosel development may have.

Emissions Attributable to Novosel Subdivision (Tons per Year)

	Volatile Organic Compounds (VOC)	Nitrogen Oxides (NOx)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Carbon Dioxide (CO ₂)
Direct Residential	6.5	0.7	0.6	0.8	26.2
Electrical Power Generation	ND*	2.6	8.9	ND*	1,315.5
Mobile	9.6	10.0	0.3	0.1	6,177.0
Total	16.1	13.3	9.8	0.9	7,518.7

(*) Indicates data is not available.

Note that emissions associated with the actual construction of the subdivision, 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.

Recommendations:

The applicant shall comply with all applicable Delaware air quality regulations. These regulations include:

Regulation 6 - Particulate Emissions from Construction and Materials Handling	<ul style="list-style-type: none"> • Using dust suppressants and measures to prevent transport of dust off-site from material stockpile, material movement and use of unpaved roads. • Using covers on trucks that transport material to and from site to prevent visible emissions.
Regulation 1113 – Open Burning	<ul style="list-style-type: none"> • Prohibiting open burns statewide during the Ozone Season from May 1-Sept. 30 each year. • Prohibiting the burning of land clearing debris. • Prohibiting the burning of trash or building materials/debris.
Regulation 1145 – Excessive Idling of Heavy Duty Vehicles	<ul style="list-style-type: none"> • Restricting idling time for trucks and buses having a gross vehicle weight of over 8,500 pounds to no more than three minutes.

Additional measures may be taken to substantially reduce the air emissions identified above. These measures include:

- **Constructing only energy efficient homes.** Energy Star qualified homes are up to 30% more energy efficient than typical homes. These 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 increased 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.
- **Funding a lawnmower exchange program.** New lawn and garden equipment emits significantly less than equipment as little as 7 years old, and may significantly reduce emissions from this new development. The builder could fund such a program for the new occupants.

Additionally, the following measures will reduce emissions associated with the actual construction phase of the development:

- **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 at residential units and in vegetative buffer areas.** Trees reduce emissions by trapping dust particles and by 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 on air quality. The applicant should submit a plan to the DNREC Air Quality Management Section which address the above listed measures, and that details all of the specific emission mitigation measures that will be incorporated into the Novosel development. Air Quality Management Section points of contact are Phil Wheeler and Deanna Morozowich, and they may be reached at (302) 739-9402. *Deanna Morozowich* - (302) 739-9402, Deanna.Morozowich@state.de.us

State Fire Marshal’s Office – Contact: Duane Fox 856-5298

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal’s Office. 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):

a. **Fire Protection Water Requirements:**

- Where a water distribution system is proposed for single-family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

b. **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 the access road to the subdivision from Robinsonville Rd must be constructed so fire department apparatus may negotiate it. If a “center island” is placed at an entrance into the subdivision, it shall be arranged in such a manner that it will not adversely affect quick and unimpeded travel of fire apparatus into the subdivision.
- 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.
- 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.

c. **Gas Piping and System Information:**

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

d. 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”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

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.

Department of Agriculture - Contact: Scott Blaier 739-4811

The Department is opposed to development in areas designated as Investment Level 4 under the *Strategies for State Policies and Spending*. The *Strategies* do not support isolated development of these areas. The intent of this plan is to preserve the agricultural lands, forestlands, recreational uses, and open spaces that are preferred uses in Level 4 areas. The Department of Agriculture opposes development which conflicts with the preferred land uses, making it more difficult for agriculture and forestry to succeed, and increases the cost to the public for services and facilities.

More importantly, the Department of Agriculture opposes this project because it negatively impacts those land uses that are the backbone of Delaware’s resource industries - agriculture, forestry, horticulture - and the related industries they support. Often new residents of developments like this one, with little understanding or appreciation for modern agriculture and forestry, find their own lifestyles in direct conflict with the demands of these industries. Often these conflicts result in compromised health and safety; one example being decreased highway safety with farm equipment and cars competing on rural roads. The crucial economic, environmental and open space benefits of agriculture and forestry are compromised by such development. We oppose the creation of isolated development areas that are inefficient in terms of the full range of public facilities and services funded with public dollars. Public investments in areas such as this are best directed to agricultural and forestry preservation.

The proposed development is adjacent to a property currently enrolled in the State’s Agricultural Lands Preservation Program (Hopkin’s Covered Bridge Agricultural District, (Parcel # 234-6.00-90.00). Therefore, the activities conducted on this preserved property will be protected by the agricultural use protections outlined in Title 3, Del. C., Chapter 9. These protections effect adjoining developing properties. The 300 foot notification requirement affects **all new deeds** in a subdivision located in whole or part within 300 feet of an Agricultural District. Please take note of these restrictions as follows:

§ 910. Agricultural use protections.

(a) Normal agricultural uses and activities conducted in a lawful manner are preferred and priority uses and activities in Agricultural Preservation Districts. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land use adjacent to Agricultural Preservation Districts shall be subject to the following restrictions:

(1) For any new subdivision development located in whole or in part within 300 feet of the boundary of an Agricultural Preservation District, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

This property is located in the vicinity of an established Agricultural Preservation District in which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities."

(2) For any new subdivision development located in whole or in part within 50 feet of the boundary of an Agricultural Preservation District, no improvement requiring an occupancy approval shall be constructed within 50 feet of the boundary of the Agricultural Preservation District.

(b) Normal agricultural uses and activities conducted in accordance with good husbandry and best management practices in Agricultural Preservation Districts shall be deemed protected actions and not subject to any claim or complaint of nuisance, including any such claims under any existing or future county or municipal code or ordinance. In the event a formal complaint alleging nuisance related to normal agricultural uses and activities is filed against an owner of lands located in an Agricultural Preservation District, such owner, upon prevailing in any such action, shall be entitled to recover reasonably incurred costs and expenses related to the defense of any such action, including reasonable attorney's fees (68 Del. Laws, c. 118, § 2.).

In addition, if any wells are to be installed, Section 4.01(A)(2) of the Delaware Regulations Governing the Construction and Use of Wells will apply. This regulation states:

(2) For any parcel, lot, or subdivision created or recorded within fifty (50) feet of, or within the boundaries of, an Agricultural Lands Preservation District (as defined in Title 3, Del. C., Chapter 9); all wells constructed on such parcels shall be located a minimum of fifty (50) feet from any boundary of the Agricultural Lands Preservation District. This requirement does not apply to parcels recorded prior to the implementation date of these Regulations. However, it is recommended that all wells be placed the maximum distance possible from lands which are or have been used for the production of crops which have been subjected to the application of land applied federally regulated chemicals.

Section 1, Chapter 99, Code of Sussex Section 99-6 may also apply to this subdivision. The applicant should verify the applicability of this provision with Sussex County. This Section of the Code states:

G. Agricultural Use Protections.

(1) Normal agricultural uses and activities conducted in a lawful manner are preferred. In order to establish and maintain a preference and priority for such normal agricultural uses and activities and avert and negate complaints arising from normal noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations, land uses adjacent to land used primarily for agricultural purposes shall be subject to the following restrictions:

(a) For any new subdivision development located in whole or in part within three hundred (300) feet of the boundary of land used primarily for agricultural purposes, the owner of the development shall provide in the deed restrictions and any leases or agreements of sale for any residential lot or dwelling unit the following notice:

“This property is located in the vicinity of land used primarily for agricultural purposes on which normal agricultural uses and activities have been afforded the highest priority use status. It can be anticipated that such agricultural uses and activities may now or in the future involve noise, dust, manure and other odors, the use of agricultural chemicals and nighttime farm operations. The use and enjoyment of this property is expressly conditioned on acceptance of any annoyance or inconvenience which may result from such normal agricultural uses and activities.”

(b) For any new subdivision development located in whole or in part within fifty (50) feet of the boundary of land used primarily for agricultural purposes no improvement requiring and occupancy approval for a residential type use shall be constructed within fifty (50) feet of the boundary of land used primarily for agricultural purposes.

This site overlaps with the State’s Green Infrastructure Investment Strategy Plan. The Forest Land and Natural Areas layers are present on the entire site. This designation identifies areas of the state that contain inherently valuable resources, as discussed in Governor Minner’s Executive Order Number 61. Areas such as these should be preserved as such, and not developed for residential use.

The Delaware Department of Agriculture supports growth which expands and builds on existing urban areas and growth zones in approved State, county and local plans. Where additional land preservation can occur through the use of transfer of development rights, and other land use measures, we will support these efforts and work with developers to implement these measures. If this project is approved we will work with the developers to minimize impacts to the agricultural and forestry industries.

Right Tree for the Right Place

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

Do Not Plant List

Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear
Leyland Cypress
Red Oak (except for Willow Oak)
Ash Trees

Native Landscapes

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive

to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

Public Service Commission - Contact: Andrea Maucher 739-4247

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

Delaware Economic Development Office – Contact: Jeff Stone 672-6849

No Comments were received regarding this application.

Delaware Division of Public Health- Health Promotion Bureau- Contact: Michelle Eichinger (302) 744-1011

Ensuring that new residential and commercial development incorporates pedestrian- and bicycle-friendly features allows people to travel by foot or by bicycle and promotes physical activity as part of daily routines. Regular physical activity offers a number of health benefits, including maintenance of weight and prevention of heart disease, type 2 diabetes and other chronic diseases.¹ Research shows that incorporating physical activity into daily routines has the potential to be a more effective and sustainable public health strategy than structured exercise programs.² This is particularly important considering about 65% of adult Delawareans are either overweight or obese.³ This current obesity crisis is also affecting children. Approximately 37% of Delaware's children are overweight or obese⁴, which places them at risk for a range of health consequences that include abnormal cholesterol, high blood pressure, type 2 diabetes, asthma, depression and anxiety.¹

In Delaware, as in other states across the nation, certain patterns of land use can act as a barrier to physical activity and healthy eating for children and adults alike. Examples of such barriers include neighborhoods constructed without sidewalks or parks and shopping centers with full-service grocery stores situated too far from residential areas to allow for walking or biking between them.

This proposed development is in a Level 4 area. Developing in such an area is inconsistent with the *Strategies for State Policies and Spending*. DPH is committed to the *Strategies* and therefore, does not support development in the proposed area.

DPH supports new development in and around existing towns and municipalities where compact and mixed land use patterns facilitate physical activity and healthy living.

¹Nemours Health and Prevention Services (2005). *Delaware Children's Health Chartbook*, Newark, DE.

² Active Living by Design. *Transportation Fact Sheet*. Retrieved May 17, 2007, from http://www.activelivingbydesign.org/fileadmin/template/documents/factsheets/Transportation_Factsheet.pdf.

³ Delaware Health and Social Services (2008), *Division of Public Health, Behavioral Risk Factor Surveillance System (BRFSS), 1990-2007*.

⁴ Nemours Health and Prevention Services (2007). *2006 Delaware Survey of Children's Health Descriptive Statistics Summary, Volume 1*.

Delaware State Housing Authority – Contact Vicki Powers 739-4263

This proposal is for a site plan review of 209 residential units on 152.35 acres, located at the intersection of Robinsonville Road and Webbs Landing Road in Sussex County. According to the *State Strategies Map*, the proposal is located in an Investment Level 4 area. As a general planning practice, DSHA encourages residential development only in areas where residents will have proximity to services, markets, and employment opportunities, such as Investment Level 1 and 2 areas outlined in the State Strategies Map. Since the proposal is located in an area targeted for agricultural and natural resource protection, and therefore inconsistent with where the State would like to see new residential development, DSHA does not support this proposal.

Department of Education – Contact: John Marinucci 735-4055

DOE recognizes that this development project is in level 4 of the State Strategies for Policies and Spending and as such, DOE does not support projects located in level 4.

This proposed development is within the Cape Henlopen School District boundaries. DOE offers the following comments on behalf of the Cape Henlopen School District.

1. Using the DOE standard formula, this development will generate an estimated 105 students.
2. DOE records indicate that the Cape Henlopen School Districts' *elementary schools are at or beyond 100% of current capacity* based on September 30, 2008 elementary enrollment.
3. DOE records indicate that the Cape Henlopen School Districts' *secondary schools are at or beyond 100% of current capacity* based on September 30, 2008 secondary enrollment.
4. The Cape Henlopen School District ***does NOT have adequate student capacity to accommodate the additional students likely to be generated from this development*** given the number of planned and recorded residential sub divisions within district boundaries.
5. Continued development will cause significant burden to the Cape Henlopen School District without the provision for additional educational infrastructure. The developer is strongly encouraged to the Cape Henlopen School District Administration to address the issue of school over-crowding that this development will exacerbate.
6. DOE requests the developer work with the Cape Henlopen School District transportation department to establish developer supplied bus stop shelter ROW and shelter structures, interspersed throughout the development as determined and recommended by the school district.

Sussex County – Contact: Richard Kautz 855-7878

The application appears to show more lots than are allowable in the ESDA Overlay zone. To verify the number allowable the County application should include an accurate calculation of the acreage within the ESDA Overlay zone.

The application and the concept plan are inconsistent as to the parcels involved in the application. The County application should identify the correct parcels or parts of parcels included in the project.

Concerning that part of the project within the ESDA, Page 3-17 of the Comprehensive Plan notes that developments in the Environmentally Sensitive Developing Area should “provide information that analyzes the development’s potential environmental impacts, including effects on stormwater runoff, nitrogen and phosphorous loading, wetlands, woodlands, wastewater treatment, water systems, and other matters that affect the ecological sensitivity of the inland bays.” Use of Low Impact Design principals and Green Technology could help address the environmental issues

The applicant has identified Federal jurisdictional wetlands and a contiguous minimum 50 riparian buffer. In order to prevent damage to that buffer and to protect the headwaters of the tidal streams, please place the silt fence to the upland side of the buffer.

The Sussex County Engineer Comments:

Part of the proposed project (front 600 feet of parcel 84 & 85) is in the Environmentally Sensitive Developing Zone and the Angola Neck Planning Area. Connection of the whole project to the Angola Neck sewer system is mandatory. Sussex County plans to serve the area within the Angola Neck Sanitary Sewer District but does not expect to provide service to these parcels before 2010.

Sussex County requires design and construction of the collection and transmission system to meet Sussex County sewer standards and specifications. A sewer concept must be submitted for review and approval prior to design of the sewer system. The applicant representative has the checklist for preparing concept plans.

For questions regarding these comments, contact Rob Davis, Sussex County Engineering Department at (302) 855-7820.

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 that reads "Constance C. Holland".

Constance C. Holland, AICP
Director

CC: Sussex County

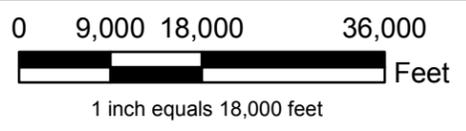
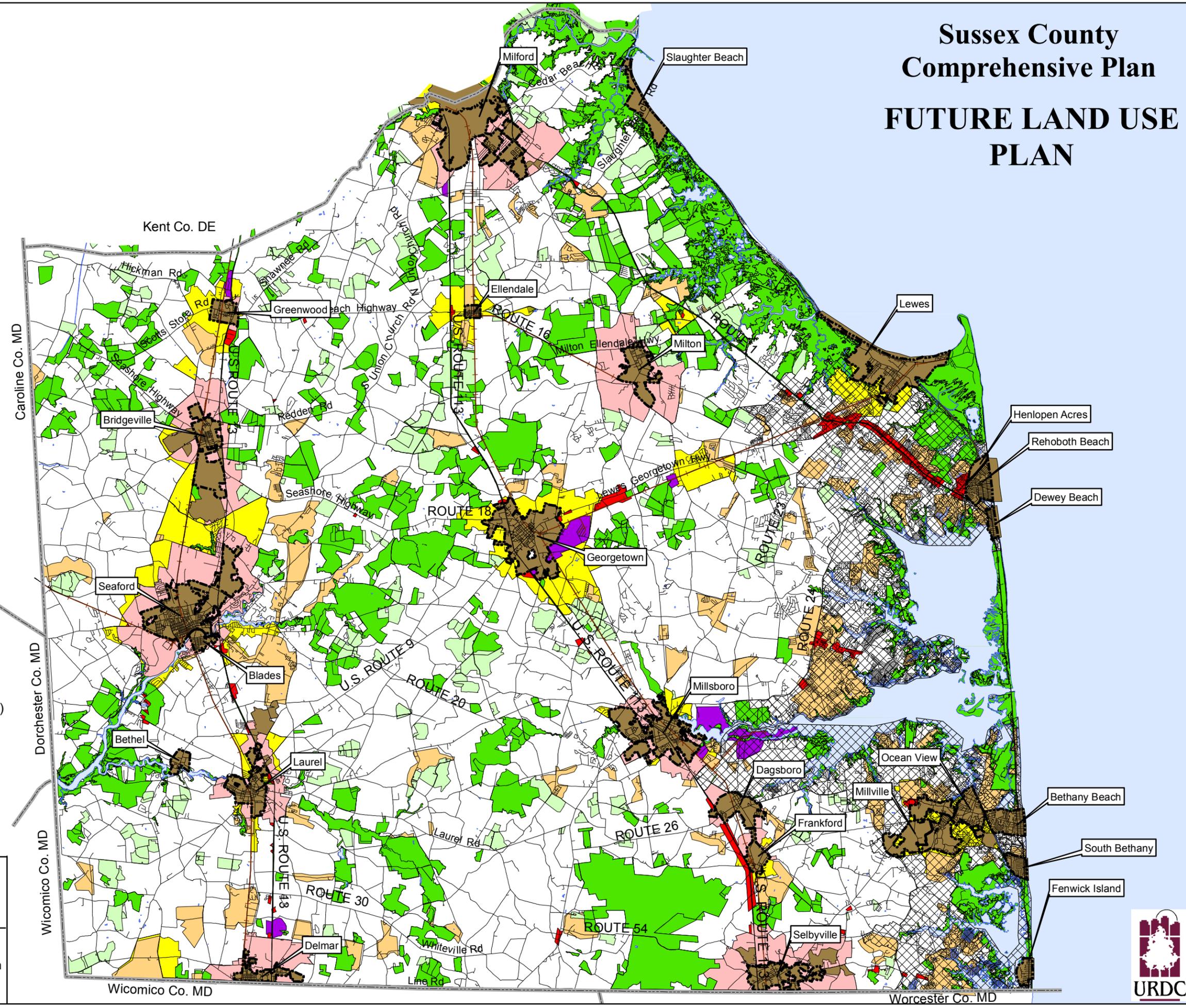
Sussex County Comprehensive Plan FUTURE LAND USE PLAN

Growth Areas

- Municipality
- Town Center
- Developing Area
- Environmentally Sensitive Developing Area
- Mixed Residential Areas
- Highway Commercial Areas
- Planned Industrial Areas

Rural Areas

- Low Density Area
- Protected Lands
(All Federal lands, State lands, agricultural easements, private conservancy lands, major wetlands and lands preserved by other conservation easements)
- Agricultural Preservation Districts Under the State Program
(A voluntary program. Only a very limited number of homes allowed on a tract under State regulations during the time of an agreement. Participating landowners are eligible to sell development rights to the State.)



Base Map Provided By:
Sussex County
Mapping Department

Sources:
DNREC
DE Office of State Planning Coordination
DE Office of Transportation
United States Geological Survey

