



December 26, 2006

Mr. Melvin Haldeman
Ridgewood Manor II
3023 South DuPont Blvd.
Smyrna, De 19977

RE: PLUS review – PLUS 2006-11-05; Ridgewood Manor Expansion

Dear Mr. Haldeman:

Thank you for meeting with State agency planners on November 29, 2006 to discuss the proposed plans for the Ridgewood Manor Expansion project to be located at 3023 South DuPont Blvd near Smyrna.

According to the information received, you are seeking rezoning of 8 acres from AC to RMH for the expansion of an existing mobile home park. This PLUS review is for both the rezoning application and the comprehensive plan amendment that will be required should Levy Court choose to rezone this property.

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 Kent 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.

Executive Summary

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

State Strategies/Project Location

This rezoning is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the Kent County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas. Our office has no objections to the proposed rezoning of this parcel in accordance with the relevant County codes and ordinances.

Street Design and Transportation

- The proposed rezoning and the associated expansion of the park would not warrant a traffic impact study. However, the expansion of the park would constitute a change in use. For that reason, the developer would be required to obtain a new entrance permit and may be required to improve their existing entrance on Route 13.
- DelDOT would recommend that the developer have a noise study done to identify what, if any mitigation, such as berms or barriers, might be needed to shield prospective residents from traffic noise generated by Route 1.
- The existing park parcel has about 40 feet of frontage on West Big Woods Road (Kent Road 2A). DelDOT recommends that the developer examine the feasibility of connecting the park streets to West Big Woods Road to provide an alternative way in and out of the park

Natural and Cultural Resources

- Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of wetland complexes.

- Because there is strong evidence that federally regulated wetlands exist on site, a wetland field delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

The following are a complete list of comments received by State agencies:

Office of State Planning Coordination – Contact: David Edgell 739-3090

This PLUS review includes both a comprehensive plan amendment and a rezoning request. The rezoning of this property is at the discretion of Kent County Levy Court. Should the Levy Court ultimately choose to grant this rezoning request, the comprehensive plan amendment must be adopted prior to or concurrently with the zoning change. This rezoning is located in Investment Level 2 according to the *State Strategies for Policies and Spending*. This site is also located in the Kent County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and State plans in the near term future. State investments will support growth in these areas. Our office has no objections to the proposed rezoning of this parcel in accordance with the relevant County codes and ordinances.

Division of Historical and Cultural Affairs – Contact: Alice Guerrant 739-5685

This parcel contains the Dr. W. Daniel House (K-3830; as shown on Beers Atlas of 1868) near Dupont Hwy., outside of the expansion area. The soils in the expansion area are fairly wet, and there is only a low potential for prehistoric archaeological sites here. This area was part of the survey area for Rt. 1, and no sites were located at that time.

This project will not affect any historic properties.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) The proposed rezoning and the associated expansion of the park would not warrant a traffic impact study. However, the expansion of the park would constitute a change in use. For that reason, the developer would be required to obtain a new entrance permit and may be required to improve their existing entrance on Route 13. Possible improvements would include lengthening the northbound right turn lane and southbound left turn lane into the park. The developer's site engineer should contact our project manager for Kent County,

Mr. Brad Herb, regarding our specific requirements for access. Mr. Herb may be reached at (302) 266-9600.

- 2) DelDOT would recommend that the developer have a noise study done to identify what, if any mitigation, such as berms or barriers, might be needed to shield prospective residents from traffic noise generated by Route 1. If a letter of no objection is needed for the park expansion, we will require the completion of such a study and the addition of any needed mitigation measures to the plan before issuing that letter.
- 3) The existing park parcel has about 40 feet of frontage on West Big Woods Road (Kent Road 2A). DelDOT recommends that the developer examine the feasibility of connecting the park streets to West Big Woods Road to provide an alternative way in and out of the park.

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

Wetlands

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine wetlands on this parcel. Wetlands provide water quality benefits, attenuate flooding and provide important habitat for plants and wildlife. Vegetated buffers of no less than 100 feet should be employed from the edge of wetland complexes. The developer should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In situations where the applicant believes that the delineated wetlands on their parcel are nonjurisdictional isolated wetlands, the Corps must be contacted to make the final jurisdictional assessment. They can be reached by phone at 736-9763.

In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, a wetland field delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

Water Resource Protection Areas

The Water Supply Section has determined that it falls partially within a wellhead protection area for Green Valley Pavilion and Ridgewood Manor (see following map and attached map). 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.

The proposed development application lacks the necessary information to make site specific comments. The Water Supply Section reserves the right to review and comment the site plans when they are available.

The Water Supply Section recommends that that portion of the new development within the excellent ground-water recharge area not exceed 20% impervious cover. The purpose of an impervious cover threshold is to minimize loss of recharge (and associated increases in storm water) and protect the quality and quantity of ground water and surface water supplies.

In addition, because the wellhead protection area the 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.

For more information, refer to:

Delaware Department of Natural Resources and Environmental Control (2005): Source Water Protection Guidance Manual for the Local Governments of Delaware:
Dover, DE., 144 p.

http://www.wr.udel.edu/publications/SWAPP/swapp_manual_final/swapp_guidance_manual_final.pdf

Kauffman, G.J., Wozniak, S.L., and Vonck, K.J., 2005, Delaware Ground-Water Recharge Design Manual: Newark, DE, Water Resources Agency, University of Delaware, p. 31.

Listed as: "Supplement 1 – Groundwater Recharge Design Methodology"

<http://www.wr.udel.edu/swaphome/Publications/SWPguidancemanual.html>

Map of Ridgewood Manor PLUS (2006-11-05) as it impacts the wellhead protection area. The dark red area shows the wellhead protection area with affected parcel in light blue.



Water Supply

The project information sheets state that water will be provided to the project by an individual on-site well. DNREC records indicate that the project is located within the public water service area granted to Artesian Water Company under Certificate of Public Convenience and Necessity 01-CPCN-03. It is recommended that the developer contact Artesian Water Company to determine the availability of public water. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well be needed, a minimum isolation distance of 150 feet is required between the well and any potential source of contamination, such as a septic tank and sewage disposal area. 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.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

Sediment and Erosion Control/Stormwater Management

A detailed Sediment and Stormwater Management Plan must be approved by our office prior to any land disturbing activity (i.e. clearing, grading, filling, etc.) over 5000 square feet.

Drainage

The Drainage Program requests that the engineer take precautions to ensure that 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 on site storm water. The Drainage Program requests that the engineer check existing downstream ditches and pipes for function and blockages prior to the construction. The engineer is encouraged to meet with downstream landowners to obtain their concerns of current drainage as well as the additional drainage impact this project will have on the area. Please notify downstream landowners if there will be a change in the volume of water released on them.

The Drainage Program does not support the removal of trees for the creation of stormwater management areas. However, the Drainage Program recognizes that tree removal is unavoidable in some cases. Where practical, plant native trees and shrubs to compensate for the loss of nutrient uptake and stormwater absorption the removed trees provided.

Open Space

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Doing so will provide wildlife habitat and it will create recreational opportunities for residents. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces. Natural habitat implementation efforts should be targeted to open space areas adjacent to forests and wetlands. Natural habitat could consist of reforesting portions of open space or establishing meadow grasses. The developer is encouraged to review "Community Spaces, Natural Places: A guide to restoration, management, and maintenance of community open space". This document provides a reference of practical and successful open space management techniques that emphasize natural landscape alternatives other than turf grass management. The guidebook is available online at: <http://www.dnrec.state.de.us/dnrec2000/Divisions/Soil/dcmp/>.

In addition, a detailed open space management plan should be recorded on the record plan. This plan should outline how to manage each open space area, as well as invasive species. Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

Forest Preservation

It is estimated that 20,000 acres of forested land has been converted by development since 2002, and DNREC highly recommends that the applicant consider minimizing forest loss. This would entail removing any lots or infrastructure from forested wetlands which are on the property. The county-required 25-foot buffer is highly inadequate and at least a 100-foot upland buffer should be left intact around the wetlands to protect water quality and to provide habitat for wetland dependent species that utilize these upland buffers for a portion of their life cycle.

Although this is a small woodlot, it may serve as a travel corridor for wildlife as it is connected to other wooded areas and across the road from a large wooded area. When forested areas are cleared, wildlife must disperse into surrounding areas and this can lead to human/animal conflicts including interactions on the roadways. DNREC recommends that connections between these areas be maintained.

In addition to wildlife value, forested wetlands also provide environmental services that benefit humans directly such as water quality protection (erosion control and sediment, nutrient, biological and toxics removal), climate moderation, aesthetic value and recreational opportunities.

Although leaving trees intact is more beneficial to most wildlife, if clearing has to occur we recommend it not occur April 1st to July 31st to reduce impacts to birds and other wildlife species that utilize trees for breeding. This recommendation would only protect those species during one breeding season, as once trees are cleared the result is an overall loss of habitat.

Nuisance Geese

Stormwater ponds may attract waterfowl like resident Canada geese and mute swans. 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. We recommend native plantings of tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area (50 feet) around the perimeter. Waterfowl do not feel safe when they can not see the surrounding area for possible predators. These plantings should be completed as soon as possible as it is easier to deter geese when there are only a few than it is to remove them once they become plentiful. 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 a reduction in the number of ponds, proper landscaping, monitoring, and other techniques, geese problems can be minimized.

Air Quality

Once complete, vehicle emissions associated with this project are estimated to be 3.8 tons (7,674.5 pounds) per year of VOC (volatile organic compounds), 3.2 tons (6,353.9 pounds) per year of NO_x (nitrogen oxides), 2.3 tons (4,688.1 pounds) per year of SO₂ (sulfur dioxide), 0.2 ton (417.3 pounds) per year of fine particulates and 321.0 tons (641,960.3 pounds) per year of CO₂ (carbon dioxide).

Emissions from area sources associated with this project are estimated to be 1.5 tons (3,095.5 pounds) per year of VOC (volatile organic compounds), 0.2 ton (340.6 pounds) per year of NO_x (nitrogen oxides), 0.1 ton (282.6 pounds) per year of SO₂ (sulfur dioxide), 0.2 ton (364.7 pounds) per year of fine particulates and 6.3 tons (12,548.3 pounds) per year of CO₂ (carbon dioxide).

Emissions from electrical power generation associated with this project are estimated to be 0.6 tons (1,226.8 pounds) per year of NO_x (nitrogen oxides), 2.1 tons (4,267.2 pounds) per year of SO₂ (sulfur dioxide) and 314.7 tons (629,412.0 pounds) per year of CO₂ (carbon dioxide).

	VOC	NO _x	SO ₂	PM _{2.5}	CO ₂
Mobile	3.8	3.2	2.3	0.2	321.0
Residential	1.5	0.2	0.1	0.2	6.3
Electrical Power		0.6	2.1		314.7
TOTAL	5.3	4.0	4.5	0.4	642.0

For this project the electrical usage via electric power plant generation alone totaled to produce an additional 0.6 tons of nitrogen oxides per year and 2.1 tons of sulfur dioxide per year.

A significant method to mitigate this impact would be to require the builder to construct Energy Star qualified homes. Every percentage of increased energy efficiency translates into a percent reduction in pollution. Quoting from their webpage, <http://www.energystar.gov/>:

“ENERGY STAR qualified homes are independently verified to be at least 30% more energy efficient than homes built to the 1993 national Model Energy Code or 15% more efficient than state energy code, whichever is more rigorous. These savings are based on heating, cooling, and hot water energy use and are typically achieved through a combination of:

building envelope upgrades,
high performance windows,
controlled air infiltration,
upgraded heating and air conditioning systems,
tight duct systems and
upgraded water-heating equipment.”

The Energy office in DNREC is in the process of training builders in making their structures more energy efficient. The Energy Star Program is excellent way to save on energy costs and reduce air pollution. They highly recommend this project development and other residential proposals increase the energy efficiency of their homes.

They also recommend that the home builders offer geothermal and photo voltaic energy options. Applicable vehicles should use retrofitted diesel engines during construction. The development should provide tie-ins to the nearest bike paths, links to mass transit, and fund a lawnmower exchange program for their new occupants.

State Fire Marshal’s Office – Contact: Duane Fox 855-5298

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):

❖ *This Agency has no objection to the re-zoning request. The information provided below shall be considered when plans are being designed.*

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.

- Expanding the water system from the current MHP shall require fire hydrants to be placed throughout the new and existing park.

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 duPont Highway must be constructed so fire department apparatus may negotiate it.
- 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.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Scott Blaier 698-4500

The Delaware Department of Agriculture has no objections to the proposed application for rezoning. The *Strategies for State Policies and Spending* encourages environmentally responsible development in areas in Investment Levels 2.

The Department would also like to make the landowner aware that the Delaware Legislature recently passed legislation to create a Forest Preservation Program. This program presents an attractive option to landowners with forestland interested in other preserving their land. Please contact the Department at 698-4530 to learn more and an information package.

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.

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.

Tree Mitigation

The Delaware Forest Service encourages the developer to implement a tree mitigation program to replace trees at a 1:1 ratio within the site and throughout the community. This will help to meet the community’s forestry goals and objectives and reduce the environmental impacts to the surrounding natural resources. To learn more, please contact our offices at (302) 349-5754.

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 State Housing Authority – Contact Vicki Walsh 739-4263

This proposal is for a rezoning of 8 acres from AC to RMH to expand an existing mobile home park. The proposal is located on US 13 south of Smyrna adjacent to the existing Ridgewood Mobile Home Park. According to the *State Strategies Map*, the proposal is located in an Investment Level 2 area and inside the growth zone. DSHA strongly supports this proposal because of the following:

- The site's location within the growth zone will ensure the residents have proximity to services, markets, and employment opportunities.
- Manufactured housing is an affordable housing option to stick-built housing.
- Finally, the proposal targets units for first-time homebuyers.

According to the most recent real estate data collected by DSHA, the average home price in Kent County is \$235,000. However, families earning respectively 80%-100% of Kent County's median income only qualify for mortgages of \$138,205-\$176,741, thus creating an affordability gap of \$96,795-\$58,259. The provision of units within reach of families earning at least 80%-100% of Kent County's median income will ensure housing that is affordable for first time homebuyers.

Department of Education – Contact: John Marinucci 739-4658

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

1. It is not clear what the impact of the proposed mobile home park expansion will be on the Smyrna school district student population.
2. In a letter dated March 20, 2006, addressed to Commissioner David R. Burris, President, Kent County Levy Court, the Superintendent of the **Smyrna School District** officially informed the Kent County Levy Court that it does not have capacity to accommodate the students resulting from any continued development.
3. The developer is strongly encouraged to contact the Smyrna School District Administration to address the issue of school over-crowding that this development will exacerbate and potential resolutions.

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: Kent County
Town of Smyrna