



DC GROUP

DESIGN CONSULTANTS GROUP, L.L.C.

Phone: (302) 684-8030

18072 Davidson Drive • Milton, DE 19968

Fax (302) 684-8054

September 13, 2005

Ms. Constance C. Holland, AICP - Director
Office of State Planning and Coordination
State of Delaware
540 DuPont Highway
Thomas Collins Building, Third Floor
Dover, DE 19901

RE: PLUS 2004-12-01
Holland Mills

Dear Ms. Holland:

We are in receipt of PLUS comments from your office dated January 10, 2005 for the above referenced project and have incorporated many of these comments into the revised site plan. Our specific reply comments are as follows:

Office of State Planning and Coordination (OSPC)

The Developer is proposing 136 single-family lots situated on 68.29± acres of land located on the South side of SCR 260 (Walker Road), approximately one mile West of SCR 258 (Hudson Road). The property is presently zoned Agricultural Residential (AR-1). The total proposed density for this site is less than 2 lots per acre (1.99 Lots per Acre) based on the Sussex County Cluster Development Option.

This project will be developed according to Future Land Use map in the Comprehensive Plan, which supports projects that are being developed in rural areas under its current zoning. This project is located approximately one-half mile from the Investment Level 2 and 3 areas depicted on the State strategies map for State Policies and Spending. Therefore, it is anticipated that future County planning and annexation areas might be extended to this subdivision.

Although there is not an ordinance established for a buffer from Section 404 Wetlands, the developer recognizes the need to preserve the existing aquatic resource on site, so per OSPC recommendations lot lines will be removed from the recommended 100-foot buffer setback to the wetland. Site plan was revised so that significant forest resources on site were retained.

It should also be noted that street trees will also be furnished throughout the site. Street trees play a prominent role in carbon sequestration, air pollution absorption, street traffic calming and asphalt life cycle extension, energy conservation, and provide intangible sociological benefits.

Design Consultant Services Through Land Use Planning

State Historic Preservation Office (SHPO)

Per SHPO recommendations, 100% of existing woodlands in wetland areas will be preserved and only approximately 5% of onsite forested resources will be disturbed. However, caution will be exercised to preserve as much as possible forested area on site. This has been achieved by the buffers being placed around the perimeter of the site as shown on the subdivision plans.

The developer does not anticipate any issues with regards to Section 106 of the National Historic Preservation Act, but per SHPO request, the developer will contact Anne McCleave should artifacts be discovered on site.

Department of Transportation (DeIDOT)

To support existing traffic and additional traffic from this development, road development plans were finalized with Subdivision Manager for Sussex County, Mr. John Fiori. DeIDOT has issued a letter of "No Objection" for the entrance location plan of this Project.

Per DeIDOT requirements, a right-of-way dedication for an additional 5 ft is provided.

Per DeIDOT requirements, a 15' easement for a multimodal path is provided.

Per DeIDOT request, accesses to adjacent properties in the form of pedestrian paths are provided in the development plan.

Per DeIDOT request, entrance on Walker Road was aligned with the entrance to the proposed Anthem subdivision

Department of Natural Resources and Environmental Control (DNREC)

General Comment

The developer of this project and the developer of adjacent subdivision (Anthem) are proposing to connect the Wastewater Treatment and Disposal systems of both subdivisions together, thus, making it more efficient to manage the operation of this Community OWTDS.

Stub streets and pedestrian access easements are also provided throughout both subdivisions with the sole purpose of meeting the recreational need for walking and biking facilities and providing opportunities for residents to interact within both communities. The entrance plans of both Holland Mills and Anthem subdivisions are interconnected for easy access and connectivity thus, encouraging mobility within both subdivisions.

Soils

The excessively drained Evesboro (EvA 0-2%, EsD 5-15%); the somewhat excessively drained Sassafras (SaA) and Rumford (RuA 0-2%); and the poorly drained Johnston (Jo) series were mapped over the entire project area in the Soil Survey of Sussex County (1974).

Evesboro, Sassafras and Rumford soils have few limitations for development. Johnston is a very poorly-drained soil associated with floodplain wetlands (Hydric) and has severe limitation for development.

Atlantic Resource Management, Inc. mapped the soils in the vicinity of this development as follows:

- (1) Typic Hapludults (Ingleside, Hambrook series) – soils of this mapping unit pose slight to no limitation for development and siting of OWTDS.
- (2) Aquic Hapludults (Woodstown Series) – Soils of this mapping unit pose moderate limitations for development and siting of OWTDS.
- (3) Aquic Arenic Hapludults (Rockawalkin Series) – soils within this mapping unit pose moderate limitations for development and siting of OWTDS due to shallower depths to seasonal high water tables and steep slopes.

Wastewater

Community Large On-site Wastewater Treatment and Disposal systems (LOWTDS) are proposed for this Development. Based on the Soil Reconnaissance conducted by Atlantic Resource Management, Inc. 80-90% of the soils encountered onsite have the potential to support community large, on-site Wastewater treatment and disposal systems (LOWTDS). Vast majority of these soils have fluctuating water table greater than 40 inches and nutrient leaching via groundwater or surface runoff is not anticipated.

A performance-based Community OWTDS with a mechanical type pre-treatment system which utilizes Rapid infiltration basins for Disposal area is currently being planned for this development. The average capacity proposed for this LOWTDS will be approximately 40,800 gallons per day based on 300 gallons per day per residence. An additional 45,300 GPD of wastewater from adjacent property (Anthem) will be conveyed into this community OWTDS facility, bringing the total average capacity to approximately 86,100 GPD.

At this time the Developers have entered into an agreement with Tidewater Utilities, Inc., and a CPCN has been filed at this time.

Wetlands

Wetlands and waters of the United States boundaries within the subject parcel were delineated in the field by Atlantic Resource Management, Inc. The presence of approximately 2.46 acres of non-tidal wetlands was identified within this Property. A wetland delineation report was submitted to the Philadelphia District U.S. Army Corps of Engineers (USACE) to obtain a jurisdictional determination on the wetland boundary. We are currently waiting on a letter, verifying the extent of these non-tidal wetlands from USACE.

Wetlands provide water quality benefits by attenuating flooding and providing important habitat for plants and wildlife. As stated above, a 100-foot forested buffer will be employed from the edge of the wetland complex and other waterbodies on-site. 100% of wooded wetlands will be preserved. No lots are within the 100-foot buffer from the wetlands.

TMDLs

The Property is located adjacent to receiving waters of Delaware Bay watershed, for which TMDLs have not yet been established. Since such receiving waters are a major avenue for nutrient-laden stormwater and sediment runoff, the State affords the highest protection status to

these waters. TMDLs for Broadkill subwatershed, to which this parcel belongs, are scheduled for completion in December of 2006.

The developer recognizes the need for protection of the environment and although not mandatory, a detailed nutrient budget analysis was prepared via DNREC's Nutrient Protocol to ascertain this site's post-development nutrient loading rate. The post-development loading rate of this development was compared to an established loading rate of Inland Bays Low Reduction Area and final data are in compliance with the mandated TMDL of the Inland Bays Low Reduction Area. However, practicable best available technologies (BATs, BMPs) will be employed by the developer to mitigate nutrient impacts associated with this development.

Mitigating measures such as conservation design, central wastewater systems in place of individual on-site septic systems and all available BMPs will be utilized to the greatest degree practicable to protect sensitive headwaters and waterbodies.

Water Supply

No specific plan change recommendations regarding water supply. At this time the Developers have entered into an agreement with Tidewater Utilities, Inc., and a CPCN is being initiated at this time.

Should dewatering permit be needed during construction, the developer will follow all necessary procedures to obtain permit from the Water Supply Section prior to construction of well points.

Water Resource Protection Areas

Sussex County is currently drafting local ordinances that may limit future development in area mapped as conducive to groundwater recharge. The developer has incorporated into the revised site plan those pertinent recommendations to augment recharge in this development by increasing area of open space from 30% as required under the Cluster ordinance to 35% and provision of adequate stormwater management structure (wet pond).

Sediment and Erosion Control/ Stormwater Management

Stormwater structures are one of the most effective techniques for providing channel protection and pollutant removal prior to discharging into the existing streams or discharge points. Stormwater structures are among the most adaptable, effective and widely employed stormwater treatment practices in developing areas. The popularity of stormwater structures can be attributed to their proven ability to attenuate runoffs from stormwater. Stormwater structures and wetlands are common practices for treating stormwater runoffs.

The fact that this site has both existing wetlands and stream, with the land use cover (row crops) that presently exists indicates that the wetlands, forest and streams on site are serving as a water treatment practices prior to the runoff draining through this site.

With the introduction of single family lots, permanently vegetated landscape, abundant of open areas, and additional pond, the amount of pollutants leaving the site will decrease, thus runoff will be significantly reduced prior to entering the existing aquatic resource areas.

During the design of the stormwater practices the designers and the developer will work with the Sussex Conservation District (SCD) to achieve the best management practice for this development.

If the existing stream and wetlands are to be used for stormwater discharge the designers will obtain all County, State and Federal permits prior to construction.

No specific plan change recommendations regarding Erosion Control and Stormwater Management. As part of our preparation of site stormwater and grading plans for approvals by Sussex County Engineering (SCE) and the Conservation District (SCED), all comment requirements will be addressed.

Forests

Refer to previous comments regarding existing woods. In keeping with DNREC suggestions and as part of our preparation of final site subdivision plans, areas to be set aside for conservation easements may be considered.

Open Space

Refer to previous comments regarding existing and proposed woods.

Open space can mean many different things to different people. A more common definition of Open Space is an area of land or water set aside, or reserved for use by residents of the development. However, the words also illicit a similar overall sentiment from everyone—an area that provides some type of refuge from the developed landscape. At its core, "open space" is a place to relax, to reconnect with the environment, and to recreate.

A broad variety of uses can provide open space benefits to communities. Open meadows, irrigated hay pastures, forested land, wetlands, and stormwater management areas are examples of open space. Open space provides many resources. Some areas are available for passive recreational pursuits, while other open space areas will be more limited in their use—primarily providing a green and "open" landscape view. While open space is often viewed as a pristine landscape, there is also a necessity for smaller open areas in developments. These can be in the form of ponds, parks or greenways that provide a visual relief from the developed landscape.

Open Space is viewed as an interconnected network of various types of lands and waters to be used for leisure, athletics, environmental protection, education, study, socialization, and solitude.

Possible examples of open space are street rights-of-way, active and passive recreational areas, wetlands, woodlands, and stormwater management areas,

All areas not planned as landscape beds, shrubs and/or groundcover will be improved and maintained to provide open space and useable lawn area for passive recreation uses. Stormwater management ponds will be included in the passive/active recreation space due to the fact that these features act as an attractive landscape element that significantly enhances the park-like setting of the open space and the overall passive recreational experience for its users.

Use of native plant species especially in the vicinity of the stormwater ponds and the wastewater treatment fields will attract and support native wildlife by providing cover and water. This greatly increases the diversity of experiences to the casual user.

It should be noted that streets are not included in active recreational space despite the fact that they are highly valued by bike riders and in-line skaters. This is especially true for local and collector streets laid out on an adapted grid pattern, where vehicular traffic is less concentrated and threatening than with a branched street pattern.

A combination of multiple open space protection objectives will be achieved by promoting a system of linear greenways utilizing natural corridors. Water resource protection will be achieved by the placement of active and passive recreational areas adjacent to stormwater management ponds and wastewater disposal areas. Required stormwater detention basins for quantity and quality control will be designed, landscaped, and positioned to aesthetically enhance these greenways.

The State and County will need to recognize that recreation facilities are provided either outdoors within passive and active open space; or indoors such as within recreation buildings or in designated areas within developments. The recreation facilities that are provided both indoors and outdoors will include facilities for popular recreation activities which are termed as 'core activities'. 'Core activities' are those recreation activities for which facilities are provided within each development. The purpose is to ensure a balanced provision of recreation facilities that enables a variety of recreational pursuits for all age groups. These facilities are intended to cater for both beginners and occasional players, and for those who wish to develop their skills in a more competitive environment of organized sports. A list of the 'core activities' is badminton, table tennis, fitness/dance, swimming, tennis, basketball, volleyball, roller skating, jogging, children playgrounds, etc.

The use of a developments trail network consisting of a series of well-connected pedestrian paths, bikeways and street sidewalks can and will potentially link various neighborhoods. The trail network will combine active and passive recreational opportunities and significantly expand The States and Counties existing recreation path network.

Passive and active open spaces as described above creates 10-50% less impervious cover and reduces clearing and grading of 35-60% of any given site. The end result being that open space areas can be used for neighborhood recreation, stormwater management facilities, wastewater treatment facilities, and conservation purposes. The open space that is left in natural condition needs little or no maintenance and will passively act to reduce and sometimes treat stormwater runoff from the development.

The advantages of this type of development include:

- reduced impervious cover in a development
- reduced pollutant loads to streams and other water sources
- reduced soil erosion potential by reducing the amount of clearing and grading on the site
- preservation of green space
- preservation open space for recreation
- creation of urban wildlife habitat
- a wider range of feasible sites to locate stormwater bmp's

Rare/Threatened/Endangered Species

In maximizing the existing buffering capacity and wildlife habitat on-site, lot lines and other infrastructure (such as stormwater management ponds) will be removed from the forested wetland area. Forested buffers of no less than 100 feet will be employed from the edge of the wetland habitat.

Revegetation/Landscaping

Per DNREC preferences, landscape architectural specification of plant species for revegetation of disturbed area will be fashioned after Delaware natives or sturdier varieties of native plants. Per DNREC recommendations and as part of our preparation of landscape architectural plans for this project, appropriate street tree and planting materials will be specified for this project.

Stormwater Ponds, Buffer and Nuisance Species

Per DNREC recommendations and as part of our preparation of landscape architectural plans for the site, native plantings and other edge treatments will be specified around proposed stormwater management pond to deter nuisance waterfowl. Furthermore, recreational paths around the edge of ponds will encourage canine owners to walk their dogs in these areas, providing additional passive strategy towards dissuading nuisance waterfowl habitation of the pond areas.

State Resource Areas/ Natural Areas Inventory

No specific plan change recommendations regarding State Resource Areas. The preservation of existing wetlands and significant reduction of tree removal will adequately protect these outlying natural areas.

Recreation

Refer to previous comments regarding Open Space.

Air Quality

No specific plan change recommendations regarding air quality. Refer to reply comments to OSPC regarding existing trees.

State Fire Marshal's Office (DSFMO)

No specific plan change recommendations by DSFMO. Per DSFMO comments, detailed plans will be submitted in accordance with Delaware State Fire Prevention Regulation (DSFPR) for Fire Marshal approval.

Department of Agriculture (DDA)

Most environmentally sensitive issues have been thoroughly addressed and incorporated into our revised site plan. Refer to above comments.

Due to the presence of an Agricultural Preservation District within 300 feet from the subject property, DDA suggests a modified agricultural notice be included in each new deed generated by the proposed subdivision.

To fulfill DDA's request and meet County requirements, the following hybrid notice will be used

"This property is located in the vicinity of an established Agricultural Preservation District and 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 or inconvenience which may result from such normal agricultural uses and activities."

Per Delaware Forest Service (DFS) recommendations and as part of our preparation of landscape architectural plans for this project, appropriate street tree and planting materials will be specified for this project and will be biased towards Delaware natives or sturdier varieties of native trees and shrubs.

Public Service Commission (PSC)

No specific plan change recommendations by PSC. The Developer has entered into an agreement with Tidewater Utilities, Inc. and a CPCN is being initiated to serve this project for both water and wastewater.

Delaware State Housing Authority (DSHA)

Refer to reply comments made to OSPC

Department of Education (DOE)

Per DOE recommendations, street design for this subdivision will be in accordance with Sussex County Engineering (SCE) requirements, which have adequate provision for school bus access.

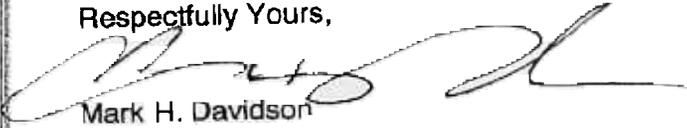
Sussex County (SC)

Per SC recommendations and as part of our overall submittal to the County for approval, stub road accesses to adjacent properties are provided in the revised site plan. Plan for the open space management can be found in our revised site plan. However, the County should recognize that the streets in this subdivision are private and are maintained and paid for by the lot owners (HOA) within this subdivision. If additional traffic is created through the use of inter-connection, the HOA for the subdivision could ultimately have a maintenance complaint that could result in the County having to intervene with staff and financial contribution. The County will also have to address this issue as it pertains to Section 13, Chapter 99 of the Sussex County Subdivision Code.

This project will be developed according to the approved AR-1 Zoning Cluster Development Option. The overall design concept provides approximately 35% of open space as compared to 30% open space required under the Counties Cluster Ordinance. Conservatively, this increased open space provides more opportunity to preserve and protect more natural and historic resources on-site.

If there are any questions regarding this letter or about the revised plan, please do not hesitate to contact us at (302) 684-8030.

Respectfully Yours,



Mark H. Davidson
Owner
Design Consultants Group, L.L.C.

John Dickson, PhD
Environmental Scientist