



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
STATE PLANNING COORDINATION

October 17, 2005

Mr. Bill Stephens
Stephens Environmental Consulting, Inc.
229 Lake Drive
Newark, DE 19702

RE: PLUS review – PLUS 2005-09-02; Broad Creek Seasonal R.V. Campground

Dear Mr. Stephens:

Thank you for meeting with State agency planners on September 28, 2005 to discuss the proposed plans for Broad Creek Campground project to be located south of 78A, .04 mile south of Road 78 and north of Broad Creek.

According to the information received, you are seeking a conditional use to expand the existing campground from 47 campsites to 129 campsites with public water and sewer, play areas, clubhouse, pool, and boat launch area.

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.

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 proposal is for a conditional use for a campground expansion within an Investment Level 1 and 2 area according to the *Strategies for State Policies and Spending*. State policies generally support development activities within Investment Level 1 and 2 areas that are consistent with the character of the surrounding area.

Street Design and Transportation

- Right-of-way dedication will be required along the frontage of Old Sailor Road.
- A paved multi-modal path will be required within a 15-foot-wide permanent easement along the frontage of the site.
- Improvements to the entrance will be required, and improvements to Old Sailor Road may be required.

Natural and Cultural Resources

- Efforts should be taken to protect the riparian area along Broad Creek. More specifically:
 - The portions of the site along Broad Creek are within the Livable Delaware Green Infrastructure area established under Executive Order #61.
 - Wetlands, including a bald cypress wetland community, have been identified along the southern portion of the parcel adjacent to Broad Creek. Because of the sensitivity of these wetlands, a 300-foot buffer is recommended along the wetlands containing bald cypress communities.
 - This area contains land listed on the Delaware Natural Areas Inventory. Natural Areas contain lands of statewide significance identified by the Natural Areas Advisory Council as the highest quality and most important natural lands remaining in Delaware. This area should be protected, and the developer should consider dedicating the Natural Area as a Nature Preserve. Contact Ron Vickers at 739-9235 for more information in this regard.

- A corridor of undeveloped land should be preserved along the creek as a component of the Broad Creek Greenway.
- The site includes the Wellhead Protection Area for the existing public well serving the Broad Creek Campground. If municipal water will serve the site, abandoning the well or having it reclassified would remove this designation. Details are contained under the “Water Resource Protection Areas” section of this letter.

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

Office of State Planning Coordination – Contact: Ann Marie Townshend 739-3090

This proposal is for a conditional use for a campground expansion within an Investment Level 1 and 2 area according to the *Strategies for State Policies and Spending*. State policies generally support development activities within Investment Level 1 and 2 areas that are consistent with the character of the surrounding area.

We note that DNREC comments specify several natural resource concerns on the site, specifically along the riparian wetland area. We ask that as improvements are made to the site, the developer work with DNREC to protect the integrity of these natural resources. Specific suggestions are listed in the DNREC comments.

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

Nothing is known within this parcel. There are three adjacent historic properties, a 19th-c. agricultural complex (S-5971), an early 20th-c. agricultural complex (S-5970), and a late 19th-c. to early 20th-c. dwelling (S-5969). The 1915 Seaford US Geological Survey topographic map shows a building in the north central part of this parcel. There could be a historic archaeological site associated with this. There are also areas of moderate potential for prehistoric archaeological sites in the wooded area.

The plans show that the existing historic buildings will be well screened from this project. The Division of Historic and Cultural Affairs would appreciate the opportunity to look for archaeological sites before construction activities take place.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

- 1) Old Sailor Road is classified as a local road. Local roads in Delaware typically have right-of-way widths ranging from 33 to 50 feet. DelDOT’s policy is to require dedication of sufficient land to provide a minimum right-of-way width of

- 30 feet from the centerline on local roads. Therefore DelDOT will require right-of-way dedication along the frontage to provide any additional width needed from this project.
- 2) DelDOT will also require that a paved multi-modal path, located in a 15-foot wide permanent easement, be provided across the frontage of the site.
 - 3) Improvements to the site entrance will be required. Improvements to Old Sailors Road may also be required of the developer. These improvements, which could include repaving and widening from the site entrance to Woodland Ferry Road (Sussex Road 78), will be addressed through the entrance approval process.
 - 4) The developer's site engineer should contact our Subdivision Manager for Sussex County, Mr. John Fiori, regarding our specific requirements for access. Mr. Fiori may be reached at (302) 760-2260.

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

Green Infrastructure

Portions or all of the lands associated with this proposal are within the Livable Delaware Green Infrastructure area established under Governor Minner's Executive Order #61 that represents a network of ecologically important natural resource lands of special state conservation interest.

Green infrastructure is defined as Delaware's natural life support system of parks and preserves, woodlands and wildlife areas, wetlands and waterways, productive agricultural and forest land, greenways, cultural, historic and recreational sites and other natural areas all with conservation value. Preserving Delaware's Green Infrastructure network will support and enhance biodiversity and functional ecosystems, protect native plant and animal species, improve air and water quality, prevent flooding, lessen the disruption to natural landscapes, provide opportunities for profitable farming and forestry enterprises, limit invasive species, and foster ecotourism.

Voluntary stewardship by private landowners is essential to green infrastructure conservation in Delaware, since approximately 80 percent of the State's land base is in private hands. It is in that spirit of stewardship that the Department appeals to the landowner and development team to protect sensitive resources through an appropriate site design.

Soils

According to the Sussex County soil survey Evesboro, Osier, and Tidal Marsh were mapped on subject parcel. Evesboro is an excessively well-drained upland soil that has moderate limitations on account of its rapid permeability. Osier is a poorly-drained wetland associated (hydric) soil that has severe limitations for development. Tidal Marsh is a very poorly-drained wetland associated (hydric) soil that has the severest of limitations for development.

Although most of the soils found on subject parcel are fairly well drained, they have limitations associated with rapidly permeable sandy surface and subsurface horizons. Such soils are conducive to nutrient leaching via groundwater or surface runoff into the surrounding watershed. These impacts are greatly intensified in those soils containing shallow water tables.

Wetlands

Statewide Wetland Mapping Project (SWMP) mapping indicates the presence of tidally-influenced palustrine forested riparian wetlands and riverine emergent wetlands along the southern boundary of subject parcel. Nontidal palustrine forested wetlands were also mapped along the far northeast and southeast portions of subject parcel. PLUS materials indicate that wetlands field delineation was conducted. It is highly recommended that this delineation be verified by the U.S. Army Corps of Engineers through the Jurisdictional Determination process.

SWMP mapping also indicates bald cypress wetland type throughout most of the riparian wetlands adjoining the southern boundary of subject parcel. Discussion at the PLUS meeting indicated that bald cypress have been observed on the site. Bald cypress are considered unique and threatened sensitive wetland plant community types considered to have exceptionally high resource value, and often harboring a number of state and globally rare (some federally threatened) plant associates. In recognition of their high resource value and sensitivity, additional environmental protective efforts are necessary to protect them from the impacts of human encroachment. Research has shown that a buffer width of at least 300 feet is necessary for maintaining the habitat quality of high value sensitive wetlands (Castelle et al. 1994). The Department strongly supports the notion that the buffer width size should reflect the protective efforts necessary to protect and support both habitat and water quality goals. **It is for that reason that DNREC is recommending a 300-foot upland buffer width from all Atlantic white cedar and bald cypress wetland plant community types.** It is strongly recommended that the State's Natural Heritage Program be allowed to assess and inventory the location and

extent of this parcel's plant communities as a means to ensure that the recommended buffering distances are maintained. Impacts to wetlands should be avoided and vegetated buffers of no less than 100 feet should be employed from all wetlands and water bodies, except as noted above. Camping pad sites should not be located in the wetlands nor their associated buffers.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. 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.

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) 739-4691 to schedule a meeting.

This project is located directly adjacent to sensitive headwater or near headwater riparian wetlands associated with the Broad Creek watershed – greatly increasing the probability of harmful impacts to surface and groundwater quality of all waters within the greater Nanticoke River watershed, and making it more difficult for the State to achieve the required TMDL nutrient reductions. Headwater streams and their associated wetlands are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system downstream. In recognition of this concern, the Watershed Assessment Section strongly recommends that the applicant consider preserving as much of the existing natural forested buffer as is humanly possible. **As mentioned previously, a 100-foot upland buffer (between lot parcel/lines and wetlands/water bodies) is considered the minimum recommended buffer width necessary to mitigate some of the expected impacts to water and habitat quality for most wetlands.**

Water Access

A conservation easement or other means of land protection and a single community water access is better for protecting water quality than individual piers and or structures. Any work involving the wetlands, water access, piers or docks will require permits from the State of Delaware and or the Army Corps of Engineers, a State Water Quality

Certification and a Coastal Zone Consistency. These are separate permit actions and the Joint Permit Processing Committee is recommended. Contact the Wetlands and Subaqueous Lands Section at (302) 739-9943 for information and a committee review if needed.

ERES Waters

This project is located adjacent to receiving waters of Chesapeake Bay designated as waters having Exceptional Recreational or Ecological Significance (ERES). ERES waters are recognized as special assets of the State, and shall be protected and/ or restored, to the maximum extent practicable, to their natural condition. Provisions in Section 11.5 of Delaware's "Surface Water Quality Standards" (as amended August 11, 1999), specify that all designated ERES waters and receiving tributaries develop a "pollution control strategy" to reduce non-point sources of nutrient runoff through implementation of Best Management Practices (BMPs). Best Management Practices as defined in subsection 11.5(e) of this section, expressly authorizes the Department to provide standards for controlling the addition of pollutants and reducing them to the greatest degree practicable, or where attainable, a standard requiring no discharge of pollutants.

TMDLs

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Nanticoke River 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. In the Chesapeake Watershed, "target-rate-reductions" of 30 and 50 percent will be required for nitrogen and phosphorus, respectively. We request that a full nutrient budget be calculated to ensure compliance. Please contact Lyle Jones of the Watershed Assessment Section at 739-4590 for the acceptable protocol. The applicant should be made aware that the inclusion of stormwater management, wastewater treatment, buffers and wetlands as metrics for open space calculations - may understate the actual TMDL nutrient loading and, subsequently, the actual nutrient runoff as calculated from the nutrient budget protocol.

Impervious Cover

Since residential development significantly increases the amount of impervious cover - leading to large volumes of contaminant-laden runoff which ultimately drain into streams

or waterways - the applicant is strongly urged to pursue both natural and constructed Best Management Practices (BMPs) to reduce such impacts. Reducing the amount of impervious surfaces by planting more trees and/or the use of pervious paving surfaces (“pavers”) in lieu of asphalt or concrete, are examples of ways to reduce such impacts. Research has consistently shown that once a watershed exceeds a threshold of 10 percent imperviousness, water and habitat quality irreversibly decline.

Water Resource Protection Areas

The DNREC Water Supply Section has determined that it does fall partially within a wellhead protection area for Broad Creek Campground (see following map and attached map). Wellhead protection areas are surface and subsurface areas surrounding a public water supply well where the quantity and quality of groundwater moving toward such wells may be adversely affected by land use activities. The proposed development will change the impervious cover from .03% to .079%.

The public well serves the Broad Creek Campground. This proposed expansion would expand the current campground. The proposed campground will require 9900 gallons per day of water. This figure is from the PLUS application. The development plan proposes to obtain water from a pipeline extension from the Town of Laurel.

If water will be provided by the Town of Laurel, there may be no need to have the current public well onsite. In order to avoid any potential limitations to the land use in the wellhead protection area, the developer should have the public well abandoned by a Delaware Licensed driller. Once the well is abandoned the wellhead protection area can be removed from this area thus removing the impervious cover recommendations. Another option would be to apply to DNREC Water Resources Well reclassified as something other than a public or miscellaneous public well. The water could not be used for public consumption as outlined in the Delaware Regulations Governing the Construction and Use of Wells.

Should the developer not wish to abandon or reclassify the well, the DNREC Water Supply Section recommend that the portion of the new development within the wellhead protection area not exceed 50% impervious cover. Further, some allowance for augmenting ground-water recharge should be considered if the impervious cover exceeds 20% but is less than 50% of that portion of the parcel within this area. 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.

For more information refer to the Final Source Water Protection Guidance Manual for the Local Governments of Delaware

http://www.wr.udel.edu/swaphome/phase2/Publications/swapp_manual_final/swapp_guidance_manual_final_2005_05_02.pdf

and

Ground-Water Recharge Design Methodology

http://www.wr.udel.edu/swaphome/phase2/Publications/swapp_manual_final/swapp_guidance_manual_supp_1_2005_05_02.pdf

Broad Creek Campground with affected parcel in light blue and wellhead protection area in dark red.



Water Supply

The information provided indicates that Town of Laurel will provide water to the proposed projects through a central public water system. DNREC files reflect that Town of Laurel does not currently hold a certificate of public convenience and necessity (CPCN) to provide public water in these areas. They will need to file an application for a CPCN with the Public Service Commission, if they have not done so already. Information on CPCN requirements and applications can be obtained by contacting the Public Service Commission at 302-739-4247.

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

Standard Comments:

1. A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. The plan review and approval as well as construction inspection will be coordinated through Sussex Conservation District. Contact Jessica Watson, Program Manager, at (302) 856-7219 for details regarding submittal requirements and fees.
2. It is strongly recommended that you contact Sussex Conservation District to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan. The site topography, soils mapping, pre- and post- development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion.

3. A Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity must be submitted to DNREC Division of Soil and Water Conservation along with the \$195 NOI fee prior to plan approval.
4. Applying practices to mimic the pre-development hydrology on the site, promote recharge, maximize the use of existing natural features on the site, and limit the reliance on structural stormwater components, such as maintaining open spaces, should be considered in the overall design of the project as a stormwater management technique.
5. Each stormwater management facility should have an adequate outlet for release of stormwater. Any drainage conveyed onto this site from neighboring properties must be adequately conveyed through the site to the discharge point without interruption.
6. Clearly address how Stormwater Quality and Quantity Treatment will be provided. If this project is eligible for a Quantity Waiver, please make the request in the stormwater narrative citing the specific regulation. As of April 11, 2005, stormwater best management practices must also consider water quality as well as quantity in impaired water bodies. This action will help achieved the required TMDL reductions for the Inland Bays Watershed.
7. Please indicate on the sediment and stormwater management plan who shall be responsible for maintenance of the stormwater management facilities both during construction and after. During the design of the sediment control and stormwater management plan, considerations should be made for maintenance (i.e. access, easements, etc.) of any structures or facilities.
8. If a stormwater management pond is going to be utilized as a sediment trap/basin during construction it must be designed to accommodate 3600 cubic feet of storage per acre of contributing drainage area until project stabilization is complete.
9. All ponds are required to be constructed per Pond Code 378.
10. Please note that if the stormwater facilities will impact wetlands, a permit must be provided to the District prior to receiving approval. Please address.

Site-Specific Comments:

1. A Certified Construction Reviewer (CCR) is required for this project.
2. The District will require a phased plan and sequence of construction for this project. DNREC regulations require no more than 20 acres to be disturbed at more time. Please address.
3. Under the DNREC Health and Safety Memo of 2000, all wet ponds are required to have an open space depth of 3 feet or more that comprises 50-75 percent of the area of the pond.
4. Please comply with all new regulations and policies including Stormwater Regulations, Erosion and Sediment Control Handbook, and NRCS Rainfall events for the 2, 10, and 100-year storm events.
5. DNREC is requiring that all projects investigate the use of “Green Technology” such as bioretention and bioswales to treat water quality. District recommends scheduling a preliminary submittal meeting to discuss various options in more detail.

Drainage

The Drainage Section requests all existing ditches on the property be checked for function and cleaned if needed prior to the construction of homes. Wetland permits may be required before cleaning ditches.

The Drainage Section requests that all precautions be taken 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 on site storm water.

The Drainage Section strongly recommends any drainage conveyance between two parcels within a subdivision be dedicated as a drainage easement and such easement be designated as passive open space, not owned by individual landowners. The easement should be of sufficient width to allow for future drainage maintenance as described below.

- Along an open ditch or swale, the Drainage Section recommends a maintenance equipment zone of 25 feet measured from the top of bank on the maintenance side, and a 10-foot setback zone measured from top of bank on the non-

maintenance side. These zones should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species, selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be native species spaced to allow for drainage maintenance at maturity. Trees should not be planted within 5 feet of the top of ditch to avoid future blockages from roots.

- Along a stormwater pipe the Drainage Section recommends a maintenance equipment zone of 15 feet on each side of the pipe as measured from the pipe centerline. This zone should be maintained as buffers to aid in the reduction of sediment and nutrients entering into the drainage conveyance. Grasses, forbs and sedges planted within these zones should be native species selected for their height, ease of maintenance, erosion control, and nutrient uptake capabilities. Trees and shrubs planted within the maintenance zone should be spaced to allow for drainage maintenance at maturity.

The Drainage Section recommends any drainage/utility easement owned by an individual landowner should not have structures, decks, buildings, sheds, kennels, fences or trees within the drainage easement to allow for future drainage maintenance.

Rare Species

DNREC has not surveyed these parcels; therefore, it is unknown if there are state-rare or federally listed plants, animals or natural communities at this project site. However, they do have records of rare species within Broad Creek and in the vicinity of this project that could be affected by run-off from construction activities if adequate buffers are not maintained along the creek. They have records of the following species or communities:

Scientific Name	Common Name	Taxon	State Rank	State Status	Global Rank	Federal Status
<i>Chordeiles minor</i>	Common Nighthawk	Bird	S2B		G5	
<i>Elliptio fisheriana</i>	Northern Lance	Mussel	S2		G4	
<i>Anodonta implicata</i>	Alewite floater	Mussel				
<i>Enneacanthus chaetodon</i>	Blackbanded sunfish	Fish	S2		G4	
<i>Moxostoma macrolepidotum</i>	Shorthead redhorse	Fish	S2		G5	
<i>Taxodium distichum-Acer Rubrum</i>	Bald Cypress-Red Maple	Community	S2		G?	

State Rank: S1- extremely rare within the state (typically 5 or fewer occurrences); S2- very rare within the state (6 to 20 occurrences); B - Breeding; N - Nonbreeding; SX-Extirpated or presumed extirpated from the state. All historical locations and/or

potential habitat have been surveyed; SH- Historically known, but not verified for an extended period (usually 15+ years); there are expectations that the species may be rediscovered; SE-Non-native in the state (introduced through human influence); not a part of the native flora or fauna.

State Status: E – endangered, i.e. designated by the Delaware Division of Fish and Wildlife as seriously threatened with extinction in the state;

Global Rank: G1 - imperiled globally because of extreme rarity (5 or fewer occurrences worldwide); G2 - imperiled globally because of great rarity (6 to 20 occurrences); G3 - either very rare and local throughout its range (21 to 100 occurrences) or found only locally in a restricted range; G4 - apparently secure globally but uncommon in parts of its range; G5 - secure on a global basis but may be uncommon locally; T₋ - variety or subspecies rank; Q – questionable taxonomy;

Federal Status: LE – endangered, i.e. designated by the U.S. Fish and Wildlife Service as being in danger of extinction throughout its range; LT – threatened, i.e. designated by USFWS as being likely to become endangered in the foreseeable future throughout all or a significant portion of its range; Candidate – Taxa for which the U.S. Fish and Wildlife Service has on file enough substantial information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species.

Common Nighthawks are ground nesting birds that nest in dunes or open wooded areas from May to July. To minimize potential impacts to this species, we recommend that impacts to the wooded area not occur during this time.

Northern lance and alewife floater are freshwater mussels that are of conservation concern in Delaware. The Nanticoke River watershed is the most diverse in the State with regard to freshwater mussels. Because freshwater mussels are filter feeders, and have a long lifespan and complex life cycle, they are susceptible to poor water quality. Blackbanded sunfish and shorthead redhorse are fish species that spawn in the shallow areas of the creek, often in areas with vegetation. The bald cypress-red maple community both on the side and just downstream from the project site could also be impacted by sedimentation and other changes to water quality.

Impacts to these species can be minimized by taking measures to decrease sedimentation during construction activities and to maintain at least a 300-foot buffer along the creek. It is unclear from the application how much of a buffer is going to remain along the creek, but buffers of less than 300 feet are inadequate for protecting water quality. There should not be any infrastructure or camping sites within this buffer zone and it should be placed in permanent conservation so that future clearing is less likely to occur.

Forest Preservation

An estimated 5,000 acres of forest have been lost in Delaware since 1990 and the cumulative loss has led to a corresponding loss of forest-dependent species (Environmental Law Institute. 1999. Protecting Delaware's Natural Heritage: Tools for Biodiversity Conservation. ISBN#1-58576-000-5). Therefore, the site should be developed in an environmentally sensitive way as wildlife that utilize the forest will be displaced into surrounding areas. This often results in human/animal conflicts and greater interactions on the highways.

First of all, greater clearing will be necessary for amenities such as the swimming pool, activity center, park store, and volleyball field than for camp sites. These features should be placed in the area of the parcel that is already cleared. If some of the play areas and shower houses can be placed in the already cleared section this would minimize tree removal as well.

Secondly, trees should not be removed for stormwater management ponds considering the benefit of trees in flood abatement and erosion control. The ponds should be placed in the area of the parcel that is already cleared or an alternative method of stormwater management should be implemented.

Lastly, to reduce impacts to nesting birds and other wildlife species that utilize forests, DNREC recommends that clearing not occur April 1st to July 31st.

Natural Areas

This project contains land currently listed on Delaware's Natural Areas Inventory. Natural Areas contain lands of statewide significance identified by the Natural Area Advisory Council as the highest quality and most important natural lands remaining in Delaware. Consideration should be given to protecting these resources during design and construction of this project. The developer should investigate dedicating the Natural Area as a Nature Preserve through a conservation easement or donation of land. For more information, please contact Ron Vickers, Office of Nature Preserves, at 739-9235.

Recreation

Over the past decade, the Town of Laurel has preserved parcels from Records Pond to Laurel River Park that are part of the Broad Creek greenway. Other lands along Broad Creek, Managed by the State Division of Fish and Wildlife, are part of the greenway corridor. The Division of Parks and Recreation recommends that the owner/developer preserve a corridor of undeveloped land within this parcel along Broad Creek. This parcel is a key component to the Broad Creek greenway.

If a trail system is planned, the Division of Parks and Recreation recommends that a series of stacking trail loops be designed with several access points and connections to adjacent parcels. For trail design/construction specifications, contact Susan Moerschel at (302) 739-9235.

Underground Storage Tanks

There are two inactive LUST site(s) located near the proposed project:

Richard Hitchens Residence, Facility # 5-000241, Project # S9407151
P.L. Dunbar Elementary School, Facility # 5-000612, Project # S9710151

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

State Fire Marshal's Office – Contact: Duane Fox 302-856-5298

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 Old Sailor's Path 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.
- NFPA 1194 Standard for Recreational Vehicle Parks and Campgrounds should be consulted for park and lot layouts.

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
- 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: Milton Melendez 698-4500

Neither the Delaware Department of Agriculture nor the Delaware Forest Service has any objections to the Broad Creek Seasonal R.V. Campground application. The site is located on a designated development area. The *Strategies for State Policies and Spending* encourages responsible development in areas within a Investment Level 2 area.

In addition, the majority of this site is a part of a “good recharge” area. DNREC has mapped all ground water potential recharge areas. A “good” rating is the second highest rating and designates an area as having important groundwater recharge qualities. Maintaining pervious cover in “Excellent” and “Good” recharge areas is crucial for the overall environmental health of our state and extremely important to efforts which ensure a safe drinking water supply for future generations. Retention of pervious cover to ensure an adequate future water supply is also important for the future viability of agriculture in the First State. The loss of every acre of land designated as “excellent” and “good” recharge areas adversely impacts the future prospects for agriculture in Delaware.

The Delaware Department of Agriculture and the Delaware Forest Service supports sensible growth in these areas, and encourages the applicant to contact the Department if they can be of service.

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.

Public Service Commission - Contact: Andrea Maucher 739-4247

The project is not in municipal boundaries or in the Town’s certificated water service territory. The town may need to apply for the CPCN if it will offer service prior to annexation.

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".

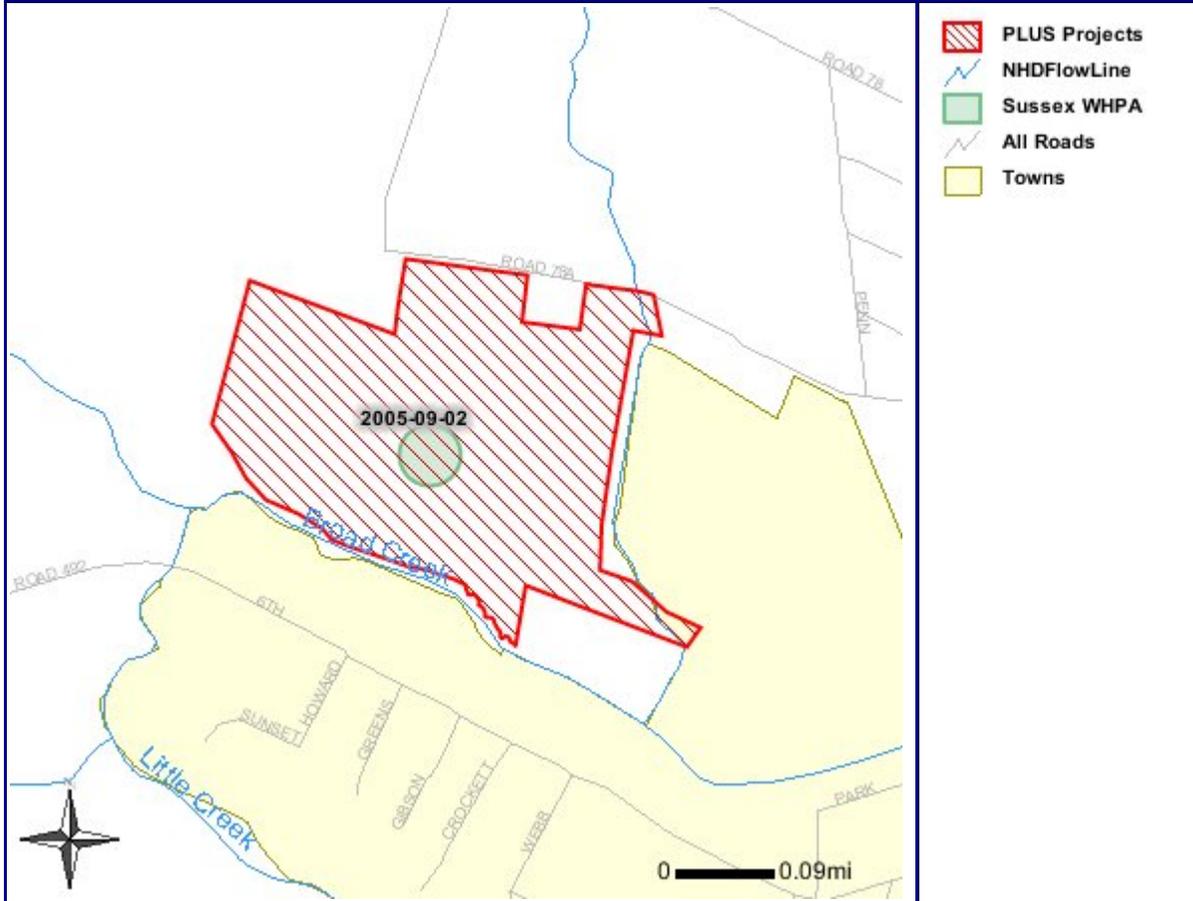
Constance C. Holland, AICP
Director

CC: Town of Laurel
Sussex County



Broad Creek Campground

2005-09-02



This map was produced by the Delaware Department of Natural Resources and Environmental Control.

