

Knolls of Dover
Zoning Amendment Application to Dover Town Board
Amended January 2006

SEQR Environmental Assessment Form
Part 3 - Evaluation of The Importance of Impacts

General comments:

The project as proposed in the zoning amendment application covers approximately nine hundred (900) acres which include the former Harlem Valley Psychiatric Center (“HVPC”) campus and the nearby ridge line near the Appalachian Trail and a local farm. The plan proposes in excess of 1,300 residential units along with commercial space and the demolition of a major number of the buildings that are part of the HVPC campus. The campus was constructed in the early 1920s.

The project is large in scope and magnitude for the rural Town of Dover with a population of roughly 8,600 people. As a result, citizen groups have formed to monitor the review of and comment on the application. Based upon meetings held to date, it appears that there are objections to the project as it is currently proposed.

To conduct an adequate environmental review of this project, detailed analyses of the potentially large impacts noted below and alternatives to project components are necessary. The present application is conceptual and no analyses of these impacts accompanied the application. Many facts concerning these impacts still need to be provided.

For each of the impacts described below, a reduction in the scope and magnitude of the project and/or the reallocation of density to portions of the property suitable for development, such as the HVPC campus, could potentially reduce the impact to a small or moderate impact. Possible mitigation measures applicable to specific impacts are also discussed herein. However, based upon the information available, all impacts described herein are deemed to be important and potentially significant and adverse and warrant further environmental review.

Impact on Land:

The applicant estimates that the development of the land will affect approximately three hundred (300) acres. Construction will alter the landscape forever.

Physical change to the project site will occur due to construction on steep slopes such as the Phase II Apartments and town homes (Hillside Village) on the eastern side of the site and the roadway areas leading to the top of the knoll on the western edge of the valley along with related blasting, regrading, land-clearing and construction. Based on the application, it appears that

approximately 55% of the project will occur in areas where the steepness of the slopes will be an issue with some areas having slopes of more than 30%. Structures on these slopes are likely to be highly visible from the nearby hamlet of Wingdale and along State Route 22 and County Route 21. This impact might be minimized by avoiding slopes of 12% or greater and/or reducing the density of the development in this area.

Development as proposed, due to its location, may impact unique geological features such as marble knolls. This would also be considered a loss of vegetation for animal species. The ultimate location and intensity of the development including the proposed development on the Dykeman farm will affect the severity of the impact on this unique geological feature.

The following plans and measures will assist the Town with a thorough SEQR review and may provide some mitigation: Grading plans, architectural design, specific setbacks and height restrictions, plans for any removal of rock and other material from the site, plans for steep slope construction and building techniques, erosion and sediment control measures to be taken and mitigation plans for any related impacts on critical environmental areas and a visual assessment especially for the Hillside Village.

Impact on Water:

Quantity

Drought season flows typically reflect aquifer base flow discharges, suggesting that available aquifer capacity near the former campus is limited because stream flow is estimated to be limited during dry periods. A change in land use which would allow for more water consumption at the former campus may have a significant impact on the flow of the Swamp River between the site and Wingdale during droughts. This may impact Swamp River biology and recreation opportunities and may have implications for performance requirements for a wastewater treatment plant at the site and capacity of adjacent drinking water wells.

Quality

In addition to exposure to wastes at the site as identified in Part 2 of the EAF, water quality may be affected by erosion due to construction on steep slopes and impaired stream-bank stability, stormwater due to increased impervious surfaces, diversion or modification of existing run-off profiles and existing depth to groundwater. The Great Swamp and the Swamp River and its tributaries receive surface water run-off and/or are the discharge point for the local shallow groundwater system. Sediment accumulation in the site's wetlands and the Swamp River is possible without appropriate erosions and sediment controls. There are no erosion and sediment control measures proposed in the application. Pesticide use at golf course has not been identified.

The following plans and measures will assist the Town with a thorough SEQR review and may provide some mitigation:

Identification of depth to groundwater in the valley bottom areas, location of spill and/or waste disposal areas especially as it concerns well-placement siting, sampling protocol to test new wells for constituents related to on-site contamination, existing water capacity to service site and

proposed project, plans for water and sewer upgrades and SPDES permitting including the complete application for such permit, whether and how fuel will be stored at the site, potable water needs for project, whether dewatering is needed for construction purposes, a stormwater management plan, location of any waste at the site and any releases, construction techniques for the bridge construction such as stream bank stabilization, plans for erosion and sediment control both during and after construction especially for those areas and very steep slopes, possible indirect impacts to wetlands and their buffers at the site along with more than rudimentary mapping of such wetlands and possible indirect impacts to floodplain for the Swamp River, confirmation of compliance with the State Stormwater Technical Standards, consideration of low impact development alternatives, evaluation and documentation of functionality of the site's wetlands, evaluation of new groundwater supply development by using extended aquifer pumping tests (72 hour minimum) with off-site monitoring of existing wells, monitoring of surface water bodies, well drawdown projections for 180 day droughts and water quality sampling as specified by applicant *and* Town consultants, preparation of site water recharge budget to determine whether the site is self-sufficient from a water quantity standpoint and identification of on-site and off-site areas of recharge for existing and proposed wells with a plan for wellhead protection, and clarification as to whether the surface water reservoir will continue to be used to supply water for the site and a review of current water quality and capacity data and structural condition of the reservoir to identify maintenance or quality treatment issues and any related impacts of watershed protection measures that may be imposed on off-site landowners in the contributing watershed of the existing reservoir.

Impact on Air:

The scope and magnitude of the project raise air quality issues associated with traffic generation and fuel consumption. The applicant should provide information concerning proposed fuel resources. As set forth in Part 2 of the EAF, some of the buildings proposed for demolition may contain asbestos and lead paint and such demolition may cause the suspension of asbestos fibers and lead paint dust if not properly mitigated. No mitigation measures have been proposed by the applicant. Vapor intrusion air quality issues must also be assessed for the storehouse building at a minimum due to an apparent, past volatile organic compound (TCA and TCE) spill near this building. Air quality impacts associated with traffic may only be able to be mitigated with project change. Impacts associated with the demolition of the buildings may be able to be mitigated with existing technology and demolition controls. Vapor intrusion mitigation measures are presently being evaluated by both the NYSDEC and EPA for TCA and TCE and should be examined if necessary.

Impacts on Plants and Animals:

Endangered or threatened species

Some species have been identified at the project site. Construction may affect the Bog Turtle habitat unless wetlands setbacks of three hundred (300) feet are respected and issues of inter-

wetland connectivity are identified and addressed in the development plan. The question of the presence of the State-listed Jefferson salamander in one of the vernal pools on the site has been left unanswered due to field conditions during the wildlife study. Additional biodiversity studies may be necessary.

Non-threatened or non-endangered species

Development/construction will adversely impact some species while other species may proliferate due to habitat changes. Construction on the east side of the site may result in the loss of ten (10) acres or more of mature forest. There is presently no evaluation of forest quality that will be lost due to the proposal. This evaluation is necessary to the appropriate environmental evaluation of the project.

Impact on Agricultural Land Resources:

Construction as proposed will remove an existing farm from operation and prime agricultural soils will be converted from agricultural use to residential use permanently without project change.

Impact on Aesthetic Resources:

Project components, especially those outside of the developed portions of the former Harlem Valley Psychiatric Center campus, are in sharp contrast to current surrounding land use patterns and will be visible to users of aesthetic resources such as the Appalachian trail and cause the elimination of a wooded hillside visible in the hamlet of Wingdale, on the HVPC campus and along state Route 22.

The Appalachian Trail is approximately one quarter of a mile from the nearest planned construction for the project. This Trail is part of the National Scenic Trail System and was created to provide users with a means to enjoy and appreciate views of natural places along the Trail. Maps from the applicant indicate that there may be one or more sight lines from the Trail to the development. Other sight lines like Hammersly Ridge to the South may also provide a view to the development. Visibility of a residential and commercial development of the proposed density could represent an adverse aesthetic disruption to the character of this nationally prominent scenic recreational resource.

The full impact of this project on aesthetic issues such as this cannot be determined without additional analyses of Trail views and views to the wooded hillside. Avoiding development within these important viewsheds could mitigate visual impacts. No definitive conclusions concerning the degree of the impacts or the effectiveness of mitigation measures can be drawn without additional study in the form of a Visual Resource Assessment of the project. The process should follow NYSDEC Program Policy "Assessing and Mitigating Visual Impacts" (NYSDEC 2000)(DEC Visual Policy) and SEQR criteria to minimize impacts on resources. The VRA's procedural steps should include the following steps:

- > Define the existing landscape character/visual setting to establish the baseline visual condition from which visual change is evaluated;
- > Conduct a visibility analysis (viewshed mapping and field investigations) to define the geographic area surrounding the proposed facility from which portions of the project might be seen;
- > Identify sensitive aesthetic resources to establish priority places from which further analysis of potential visual impact is conducted;
- > Select key receptors from which detailed impact analysis is conducted;
- > Depict the appearance of the facility upon completion of construction;
- > Evaluate the aesthetic effects of the visual change (qualitative analysis) resulting from project construction, completion and operation;
- > Identify opportunities for effective mitigation; and.
- > Identify lighting for project, amount and kind and its impact on nighttime sky.

Impact on Historic Resources:

The buildings slated for demolition that are part of the former Harlem Valley Psychiatric Center campus have been identified by the NYSOPRHP as historically and architecturally significant as intact examples of Georgian and classically-inspired institutional architecture. The Town has contacted NYSOPRHP to obtain their input on the importance of the permanent destruction of a number of these buildings. As noted herein, these buildings are also culturally significant to the Town. Other than project change, other means to preserve this history and culture for Dover are not clear. As no mitigation measures have been proposed in this regard, it is unclear whether the impacts can or will be controlled.

Impact on Recreation:

The current nine (9) hole golf course built around 1929 is open to the public. The proposed nine (9) hole course is planned to primarily serve the Dover Knolls community. It was always understood that the course would be made into eighteen (18) holes. By building the project as proposed, the land is committed to residential use rather than recreational use. The master plan created for the former HVPC campus pursuant to the Community Reinvestment Act also concluded that the course would permanently allow for public access. See July 1993 HVPC Land Disposition FEIS.

Impact on Critical Environmental Areas:

The project as proposed has the potential to result in sedimentation due to erosion and stormwater that could adversely impact various plant and animal species due to the loss of habitat connectivity. Through project change, the development could potentially enhance the ecological and visual aspects of the critical environmental area (“CEA”). The restoration of wetlands on the site and increased access to the Swamp River are examples of such project change. The visual disturbance of the CEA by the construction proposed on the mountain on the east side of the site is negative and it appears can only be mitigated by project change.

Impact on Transportation:

Based on the sheer number of residential units for the project and the commercial aspect of the plan, the project will result in a large number of additional vehicle trips which may exceed the peak traffic hour estimate provided by the applicant. Additionally, although the east and west side of the project need a well-planned connection across Route 22 to address traffic flow none has been provided. A traffic assessment detailing present and probable traffic-flow patterns, traffic management solutions and levels of service is necessary to address potential congestion and public safety issues.

Impact on Energy:

Due to the size and scope of the project, there is a possibility that existing energy infrastructure cannot meet the demands of the project. The demand may stress the grid’s capacity in this region. The anticipated energy demand associated with the project must be compared to the ability of the present supply and its infrastructure before the project’s impacts can be adequately addressed.

Noise Impact:

The development of the site will require the use of heavy equipment and blasting that can generate a lot of noise. The development scheme may remove some of the natural noise barriers and some construction is proposed for sidewalls in the valley. The latter will have a tendency to allow sound waves to propagate further without dampening so that the noise will be more apparent to Town residents and thru-hikers on the Appalachian Trail. See OGS FEIS, 1993, III-15 that recommended avoidance. Phased construction should mitigate some of these impacts. A noise study appears warranted to model the noise likely to be generated, incorporating all of the construction equipment to be used during a typical construction period, so that the scope of the noise impacts can be identified and addressed. Truck traffic going to and from the site should be included in the study.

Impact on Public Health:

Hazardous and solid waste have been previously identified at the former Harlem Valley Psychiatric Center campus including, but not limited to, VOCs near the Storehouse building, asbestos and lead paint in some of the buildings and various piles of solid waste. Some of the development may be impacted by the disturbance of such waste.

These public health risks need to be further examined to explore possible mitigation measures. Documents from the state and federal governments will assist in identifying the actual risks and should be obtained for that purpose.

Impact on Growth and Character of Community or Neighborhood:

The Town of Dover population is approximately 8,600 and this portion of the Town is largely rural defined by steep, wooded hillsides, the low-lying valley of the Swamp River, open fields, meadows and some active agriculture. The type of residential and commercial plan proposed will cause over 1,300 residential units to be built. This will result in a dramatic population increase and increase in the cost of Town services. A large part of such increase will occur in the population density outside of the core of the former HVPC campus.

The scope of the project includes the use of agricultural land, scenic viewsheds and steep slope and forest and hillside alteration. See OGS HVPC FEIS, 1993, III-5, 19, 20, 38 which notes that hillside and ridge areas north of Hutchinson Avenue have aesthetic and environmental values worthy of conservation. As stated above, this part of the Harlem Valley is known by its residents and visitors because of these natural resources. These are not renewable resources and once they are gone their loss is permanent.

The architecture of the Harlem Valley Psychiatric Center buildings is not only historically significant but culturally significant to the Town. As set forth in the Town's Comprehensive Plan and Zoning Law, the Town's plan for the Harlem Valley Psychiatric Center Campus has always been economic revitalization and reuse of the existing structures rather than massive demolition of existing buildings with super-subdivisions planned for open fields.

The project as proposed is larger than any single development project that has ever been built in Dutchess County. A development of this magnitude will substantially and permanently alter the rural character of the Town and the eastern portion of the County. The loss of the rural nature of the Town will be a significant adverse impact to some residents. We are presently unable to identify mitigation measures other than the downsizing and redesign of the project to mitigate this impact.