

To: Guilderland Planning Board
From: Guilderland Conservation Advisory Council
Date: May 27, 2011
Re.: Long, 4379 Frederick Rd., Altamont, NY 12009

APPLICATION

Applicant(s): Robert F., Sr. and Mary Long, 4379 Frederick rd., Altamont, NY 12009

Proposed Subdivision: A proposed two lot subdivision of 29.5 acres.

Location: Located in or near the Meadowdale settlement near Walker Road approximately 1.4 miles south of Route 146 and 1.2 miles west south west of the intersection of Depot and Meadowdale Roads.

Zoning: Rural Agriculture – 3.

Site Inspection Summary:

Site Inspection Date: May 19 and 21, 2011

Meeting Attendees: (May 16, 2011) Presenter Steve Walrath; GCAC Members Stephen Albert, David Heller, Herbert Hennings, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple, Chair.

Inspected by: GCAC Members - Stephen Albert and Stuart Reese on May 19, 2011; and David Heller, Herbert Hennings, Gordon McClelland, Steven Wickham and John Wemple on May 21, 2011. Applicant Robert Long showed the group the location of the south east corner of the property along Frederick Road.

Conclusions: Since the Presenter was not able to meet with GCAC Members on Saturday, May 21st, it was our understanding that he would have the Applicant(s) do so. Presenter was also going to email GCAC Chair an aerial photomap of the property which would aid GCAC with the inspection. He also noted that there are pink flags at the corners of the property and orange flags along the property lines. When we arrived at the property on May 21st to inspect it, the Longs were apparently unaware that we would be there. Mary Long said she had never been on the wooded area that we were interested in seeing. Shortly thereafter, Robert Long arrived back home. According to Mr. Long, he no longer goes on the portion on the property from the wetlands eastward due to the ticks. He did show us the south east corner of the property along Frederick Road which was marked with a pink flag. With the vegetation along the front of the Applicant's property being so dense, he also pointed us in the direction just inside the western boundary of the adjacent property which we followed in order to gain access to the Long property.

GCAC's observation is that the existing Lot #1 is fully developed and appears to be an excellent site although it is not known whether or not there is any history of flooding from the stream which acts as its western boundary. Proposed Lot # 2 is a different story. At time of site visits, it was difficult to locate many areas that appear to be large enough and dry enough to be ideal as a building site. While there is an area about 300 to 500 feet north of Frederick Road which might be suitable for development, great care would have to be taken especially if there is a basement.

Building a driveway to the site may also be a problem due to standing water along Frederick Road as well as standing water to the north between this possible site and the highway. Due to the relatively flat terrain along with the wetlands and soils on Lot #2 which are all classified as poorly drained, GCAC has reservations as to approval of this proposed subdivision unless there is a very careful delineation of any proposed building site by the Applicant along with the submission of an appropriate storm water management plan for Lot # 2. Along with these precautions, a careful determination of to what extent such development will necessitate removal of existing trees since a decrease in the number or density of trees and vegetation may add to the problem of waste water management.

Submitted by: _____
John G. Wemple, Jr. - Chair

INSPECTION DETAILS: May 19 & 21, 2011

Applicant(s): Robert F., Sr. and Mary Long
Address: 4379 Frederick Rd., Altamont

Background: According to Presenter Steve Walrath, the Applicants have lived at the Frederick Road site for about 30 to 35 years where they have a residence and a garage. He noted that it was previously farmland but not in 50 to 60 years. Furthermore, he noted that here is a large area of wetlands. Presenter explained that the subdivision plan is for the Fredericks to retain ten acre lot around their house; that they plan on keeping the property for now with the possibility that one of their children would want the other lot in the future. The Applicants also have an adjoining lot of 11 to 12 acres to the east along Hawes Road. They purchased this lot about 20 to 25 years ago according to the Presenter. At time of site visit, GCAC did not spend much time on Lot 1 which is the developed portion of the property which has a long driveway, with nicely mowed lawns, a large residence, large separate garage and swimming pool. There are stands of trees, which along with slight curves in the driveway affords the Longs a high degree of privacy. Much of the time on the site visits was spent scrutinizing the acreage which makes up Lot # 2.

Topography: According to the Presenter, the slope of the property is very gentle with being hardly ten feet difference in elevation from the north east to the south west. Contour lines on the Concept Plan drawing show an elevation of 360 ft. Above Mean Sea Level (AMSL) near the north east corner and of 350 ft. AMSL near the south west corner in the area where the western boundary stream crosses under Frederick Road. Observation at time of site visit was that Lot 2 is indeed relatively flat with a very slight raise toward the rear. It was also noted that there is a drop in elevation from Frederick Road down to the front of Lot # 2 apparently due to a built up road bed for this highway.

Vegetation/Trees: The Presenter noted wooded areas of spruce which are 20 to 30 years old and are 25 to 35 feet high. Area around the hose is mowed. According to the Presenter trees on the property are primarily birch, beach and maple as well as hickory, locust and oak. Besides there being mainly deciduous trees on Lot 2, it was also noted at time of May 21st site visit that there were some pine trees along the boarder of the property. Siler maples and birch were also noted on the May 19th visit. The front portion of Lot 2 also has very heavy brush, which along with the amount of ground water, made it difficult to gain access into this lot from Frederick Road. About 100 ± feet back from the highway, GCAC did gain access from the adjacent neighbor's lot. We found underbrush of varying density with some areas being too dense to attempt to go through and other areas being negligible making it possible to view those particular areas with little difficulty. At time of the May 19th visit, GCAC noted standing water in many places and wetland plants in many others, with the land being heavily overgrown.

Soil: According to the Presenter soil is fairly heavy clay content. A review of Sheet Number 17 in the publication "Soil Survey of Albany County, New York" by James H. Brown (1992) as well as shows that there are five types of soil on this property (RhA, BuA, HnA, HnB and NuB). Based on this soil survey map soil on Lot # 1 is primarily BuA with the exception of a small wedge of NuB at the south west corner and a larger wedge of HnA soil on the north east corner of that lot. The top side of the wedge runs along the top portion of Lot # 1 and angles down in a south east direction to a point approximately three-quarters of the way down the eastern boundary line of Lot # 1. Lot # 2 has RhA soil on the rear (northern) third. Below this, along its eastern boundary is an area of BuA which is almost circular and extend about 245 ± ft. into Lot # 2. To the south of these two areas is HnA soil except for a very small area of BuA soil at its

south west corner and a wide finger of HnB soil which runs along about 64% of the midsection of the southern border of Lot # 2 and extends about 309 feet northward into that lot.

A description of these soils and some of their limitations is as follows:

RhA – Rhinebeck silty clay loam, 0 to 3 percent slopes. -This nearly level soil is very deep and somewhat poorly drained. The seasonal high water table in this Rhinebeck soil is at a depth of ½ foot to 1 ½ feet. Depth to bedrock is more than 60 inches. Permeability is moderately slow in the surface and subsurface layers and slow below. The available water capacity is moderate, and runoff is slow. The county soil survey noted that most of the acreage is used as cropland, hayland, or pasture. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Foundation drains and interceptor drains upslope from construction sites will divert runoff and help prevent wet basements. The main limitations of this soil for local roads and streets are the seasonal high water table, the low strength, and the frost-action potential. Constructing roads on raised, coarse textured fill material will reduce the frost-action potential and improve soil strength. Raising the level of fill material will reduce wetness. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and slow percolation. Installing a drainage system around the absorption field and intercepting runoff from the higher areas will reduce wetness. Enlarging the absorption field or the trenches below the distribution lines will improve percolation. This soil, especially when wet, has low bearing capacity. Excavations and cutbacks will cave or slough.

BuA - Burdett silt loam, 0 to 3 percent slopes - This very deep soil is nearly level and somewhat poorly drained. The seasonal high water table in the Burdett soil is perched on the clayey subsoil at a depth of ½ foot to 1 ½ feet from December to May in most years. Permeability is moderate in the surface and subsurface layers and slow in the subsoil and substratum. Available water capacity is high, and surface runoff is slow. County soil survey notes that most of the acreage of this soil is used as hayland, pasture, or woodland. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Installing foundation drains and applying protective coatings to basement walls help prevent wet basements. Grading the land surface to divert runoff from the higher areas also helps reduce wetness. The main limitations for local roads and streets on this soil are the seasonal high water table and the frost-action potential. When wet this soil is soft and causes the pavement to crack under heavy traffic. Constructing the road on raised fill material will reduce wetness and prevent the road damage that the seasonal high water table causes. Providing a coarse textured subgrade or base material and installing surface or subsurface drainage will reduce the frost-action potential and enhance soil strength. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and the slow percolation in the subsoil. A specially designed septic tank absorption field or an alternative system will properly filter effluent. An alternate system will include a drainage system around the filter to lower the water table, diversion ditches to intercept water from the higher areas, and an enlarged trench below the distribution lines to improve percolation.

HnA – Hornell silt loam, 0 to 3 percent slopes. This nearly level soil is moderately deep and somewhat poorly drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 6 to 18 inches from May to December. Depth to bedrock is 20 to 40 inches. It restricts rooting depth. Permeability is moderate in the surface layer and slow or very slow in the subsoil. The available water capacity is moderate. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Diversions placed above the building site, foundation drains, and a protective coating on basement walls help prevent wet basements. The main limitations of this soil for local roads and streets are the seasonal high water table and low strength. Constructing roads on raised fill material and installing drainage reduce wetness.

Coarse textured subgrade or base material helps improve soil strength. The main limitations affecting use of this soil as a site for septic tank absorption fields are the seasonal high water table, the depth to bedrock, and the slow percolation. A specially designed septic tank absorption field, including drainage around the site, will properly filter effluent.

HnB – Hornell silt loam, 3 to 8 percent slopes. -This gently sloping soil is moderately deep and somewhat poorly drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 6 to 18 inches from December to May. Depth to bedrock is 20 to 40 inches. It restricts rooting depth. Permeability is moderate in the surface layer and slow or very slow in the subsoil. The available water capacity is moderate. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Diversions placed above the building site, foundation drains, and a protective coating on basement walls help prevent wet basements. The main limitations of this soil for local roads and streets are the seasonal high water table and low strength. Constructing roads on raised fill material and installing drainage reduce wetness. Coarse textured subgrade or base material helps improve soil strength. The main limitations affecting use of this soil as a site for septic tank absorption fields are the seasonal high water table, the depth to bedrock, and the slow percolation. A specially designed septic tank absorption field, including drainage around the site, will adequately filter effluent.

NuB – This gently sloping soil is very deep and moderately well drained. The seasonal high water table is at a depth of 18 to 24 inches from March to May. Depth to bedrock is more than 60 inches. Permeability is moderate in the surface layer and in the upper part of the subsoil and slow to very slow below. The available water capacity is high, and runoff is medium. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Foundation drains and interceptor drains upslope from construction sites divert runoff and lower the water table. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on coarse textured fill material provides drainage away from the roadway. The main limitation affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and the slow percolation in the subsoil and substratum. Installing a drainage system around the absorption field and diversions to intercept runoff from the higher areas will reduce wetness. Enlarging the absorption field or the trench below the distribution lines will improve percolation.

Drainage/Wetlands: As shown on the Concept Plan drawing, there is a considerable amount of wetlands which run through the center portion of the property. Drawing also shows a stream the center of which is the western boundary of the property. Presenter noted this is a small tributary to the Black Creek. At time of the May 19th site visit, it was noted that there is a culvert on Frederick Road which drains onto the Long property from the field across that road. While this was not seen on May 21st, several long narrow areas of standing water were noted which run across portions of Lot #2. Without the assistance of the Presenter or someone familiar with the property, it was difficult to determine just how far back into Lot #2, GCAC hiked but an approximation would be between 750 and 900 feet. This is also based on use of handheld GPS aerial map. We did not proceed any further to the north due to standing water which, along with muddy soil was wide enough to deter our attempting to cross it to explore the rear portion of Lot #2. On the portion of Lot #2 which we walked, there were at least five areas with strips of standing water. There did not appear to be much if any movement of the water to determine which direction they might be flowing toward. These strips where there is water may very well be the remnants of land indentations or ditches caused when the land was cultivated for farming many years ago. On our route back toward Frederick Road, an area was so wet that our route was diverted to the east, back to the adjacent property to our starting point.

Septic/Wells: Plan is to have septic and wells for the proposed new lot. At this stage of the plan, he noted that the Lot (#2) has not been percolated as far as he knows and said this is a spotty area for looking for water. Nevertheless, he noted that the Longs have water at over 20 gallons per minute. Due to the amount of standing water, which would be an indicator of slow drainage, and the required setback from the wetlands, care must be taken in the location of absorption fields for a septic system. The location of this will need the assistance and approval of the County Department of Health (DOH). Likewise, based on the Presenter's input, locating a good source of palatable water may prove difficult and will need supervision by DOH.

Visual Impact: Presenter sees no negative visual impact and says there is a nice view of the escarpment. GCAC pointed out that color of buildings on the development could minimize negative visual impact on the escarpment if their color is something other than white. Thus, if roofs and siding of buildings are of a color that blends in with the vegetation, likelihood of these structures standing out would be minimized. Due to the thickness of the trees and vegetation, GCAC feels that any negative visual impact resulting from development of Lot #2 would be minimal.

Endangered Species: Not known by the Presenter. He also noted that there is no evidence of beaver activity. At time of site visits, no evidence of any endangered species was noted by GCAC.

Historical Considerations: Nothing that the Presenter is aware of; and he noted that there are no historic structures or the remains thereof nor of any cemeteries. Nothing of historical significance was noted by GCAC at time of site visits.

Submitted by: _____
John G. Wemple, Jr. - Chair