To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: June 27, 2014

Re.: Michael Ricard, 2901 Furbeck Road, Altamont, NY 12009

## APPLICATION

Applicant(s): Michael Ricard, 2881 Furbeck Rd., Altamont, NY 12009

Proposed Subdivision: A proposed lot three subdivision of 19.3 acres.

Location: This property is located along the northern boundary of Albany County to the west of Settles Hill Road and roughly northwest of the village of Altamont.

Zoning: RA-5.

Site Inspection Summary:

Site Inspection Date: June 21, 2014

Meeting Attendees: (June 16, 2014) Applicant Michael Ricard; GCAC Members – Kevin Connolly, Jacob Crawford, Gordon McClelland, Stuart Reese, Steve Wacksman and John Wemple, Chair.

Inspected by: Applicant Michael Ricard; GCAC Members – Kevin Connolly, Jacob Crawford, Stuart Reese, Steve Wacksman and John Wemple, Chair.

Conclusions: As noted in the Inspection Details of this report, the soil on the property is damp and thus development of the property will necessitate care not only in the construction of dwellings and roadways but also in the construction of septic tank absorption fields. In the soil survey of Albany County reference book, in regard to the Nunda silt loam which covers most of the acreage on Lots 1, 2 and 3, it is especially noted that erosion is a hazard during construction and it notes that maintaining the vegetative cover adjacent to the site and diverting runoff from the higher areas help control erosion. It further notes on the steeper NuD area that mulching help control runoff. Along much of the rear end of the property there is a strip of Wayland silt loam which calls for added care in the construction of roadway leading down the hill to the Schenectady property. Provided care is taken in the construction of the dwellings and roadways on the proposed lots, that tree cutting is kept to a minimum and appropriate plans for septic and systems as well as an acceptable stormwater management plan is included in the final subdivision plan, GCAC does not oppose the Applicant's proposed subdivision.

Submitted by: \_\_\_\_\_

John G. Wemple, Jr. - Chair

## **INSPECTION DETAILS**

## Applicant(s): Michael Ricard, 2881 Furbeck Road, Altamont, NY 12009

## Address: 2901 Furbeck Rd., Altamont, NY 12009

<u>Background:</u> According to the Applicant, initial property was purchased in 1997 and subsequently he purchased additional acreage including adjoining 100 acres in Schenectady County which is to the rear. Applicant went on to state that on the property to be subdivided there is nothing of value and no hardwoods. He further noted that the property used to be a dairy farm. Applicant's plan is to most likely pave the road to the east of his residence all the back to the adjoining Schenectady property. While in the statement accompanying the application it is noted that two 20 feet wide strips from each keyhole will be provided as required, the road to the rear will not be that wide. He would own this road and would deed an easement to the future owners of Lots 2 and 3. Applicant further noted that there is a stone wall at rear of his residence and also on the east side. Plan is to sell Lot 2 to a friend of Applicant's son and to keep the rear Lot 3 for his son.

Topography: Applicant described the property as rather steep from front to back with an increase in elevation in steps with plateaus to accommodate planned residences on the three planned lots. Based on the contour lines on the concept plan submitted by the Applicant, the elevation of the property is around 880 feet Above Mean Sea Level (AMSL) near the front of the property and rises at the rate of twenty feet in fairly equal segments as it goes to the north to a point about 100 feet north of the center of the south boundary of Lot 2 where the elevation is 940 Ft. AMSL. Beyond that point, the elevation rises to an area of 960 ft. AMSL on the northeast portion of Lot 2. The way the contour lines are drawn, it appears that the elevation at the northeast corner pf the property is approximately 970 ft. AMSL. On Lot 3 the elevation at much of the northwest corner is 940 ft. AMSL. At the time of 6/21/14 site visit, GCAC walked across a fairly open relatively flat area on Lot 1 within the building envelope. Much of this Lot has an abundance of trees and brush. Before reaching the east boundary line, GCAC proceeded upward on a cleared a route and passed the area of heavily wooded trees which apparently were at the southeast corner of Lot 2. Along with the treed area was more brush. Toward the rear of Lot 2, there is an open, relatively flat possible building site cut into an area containing a mix of deciduous and pine trees. From there, GCAC proceeded west, crossing the stone wall along the west boundary on that lot to the area where the Applicant's road extends to the north toward his Schenectady property. We proceeded down the slope at the rear of the property to a wet area on the Schenectady side where the Applicant showed us where the seasonal watercourse runs toward the northwest corner of Lot 1. There was very little water in the stream at that time. GCAC observed that much of Lot 1 is relatively flat and open with a few small trees. At the rear of Lot 1 there is a heavier coverage of trees. Trees were a mix of pine and deciduous. Applicant noted that Lot 1 slopes downward at the northwest corner to the stream area and further noted that setback would be allowed in plan for that lot. Going forward from Lot 1 toward the south, GCAC walked the roadway down to the Applicant's residence and noted that the road is fairly steep in places.

<u>Vegetation/Trees:</u> Applicant noted that there is an area of pine trees at the south west corner of Lot 2 which he plans to leave and would provide privacy for that lot. Satellite view of the mapped area of Applicant's property indicates much vegetation covering lots 1 and 2 while lot 3 is very open. At time of 6/21 site visit, GCAC noted that much of the acreage is heavily treed on Lots 1 and 2, but there is sufficient open area on Lot 2 for a building site. Likewise Lot 3 is very open with more than sufficient area to build without the need to cut down trees. On Lot 1, there may be a need to cut some of the trees to accommodate a residence and septic system as well as a driveway from Furbeck Road.

Soil: Applicant referred to the soil as clay. At time of 6/21 site visit, GCAC made note of the ground being very damp throughout the acreage especially where it was exposed. On the exposed areas where there was no ground cover, the were puddles of water and the ground was muddy. While this condition existed, GCAC would not label those areas as wetlands. According to review of online soil map on USDA Natural Resources Conservation Service website, it appears that there are five soils on the property to be subdivided. They are KeB, LoD, Wo, NuC and NuD. NuC soil runs across the front (south) two/thirds of Lot 1, to the rear of which is NuD soil which starts a bit beyond the mid point of the west boundary line and continues across the lot to a point about 70 to  $80 \pm$  feet south of the northern boundary along the east side. Lot 2 has this NuD soil on its southern portion. This strip of NuD soil is about  $40 \pm \text{feet}$ wide on the west which runs across it to a point about  $125 \pm$  feet north of its southern boundary on the east side. Beyond this area of NuD soil, most of the soil on Lot 2 is NuC except for a relatively small strip of NuD and Wo soils which run along much of the area of the rear (north) boundary at the Schenectady County line. Most of Lot 3 has NuC soil with the exception of Wo soil which is about 60 to 100 feet wide along most of its north border. At the north west corner there is an are of LoD and KeB soils 90 to 125 feet inward with KeB soil, which makes up about  $30 \pm \%$  of this area, at the rear and LoD to the south. GCAC used "Soil Survey of Albany" County, New York" by James Brown as the basis of the following brief description of these soils and some of their limitations.

**KeB – Kearsarge silt loam, 0 to 8 percent slopes. -** This nearly level and gently sloping soil is shallow to bedrock and somewhat excessively drained. The seasonal high water table in this soil is at a depth of more than 6 feet. Depth to bedrock is 10 to 20 inches. It restricts rooting depth. Permeability is moderate. The available water capacity is low or very low. The main limitation of this soil on sites for dwellings is the shallow depth to bedrock. This soil is better suited to use as sites for dwellings without basements. Constructing dwellings without basements above bedrock and landscaping around the dwelling with additional fill help overcome the shallow depth to bedrock. The main limitation of this soil for local roads and streets is the shallow depth to bedrock. Careful planning of road grades and locations helps avoid bedrock removal. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the shallow depth to bedrock.

**LoD - Lordstown channery silt loam, 15 to 25 percent slopes -** This moderately steep soil is moderately deep and well drained. It is on bedrock controlled hillsides. Depth to bedrock in this soil is 20 to 40 inches. The rooting depth is mainly 20 to 30 inches. Permeability is moderate. The available water capacity is moderate. Runoff is rapid. Northern red oak, sugar maple, white ash, beech, and hemlock are common on this soil. The main limitations of this soil on sites for dwellings with basements are the depth to bedrock and the slope. The main limitation of this soil for local roads and streets is the slope. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the depth to bedrock and the slope. This nearly level soil is very deep and somewhat poorly drained. Seasonal high water table is ½ foot to 1 ½ feet below the surface from January to May. Depth to bedrock is more than 60 inches. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. For local roads and streets limitation is the seasonal high water table.

**NuC – Nunda silt loam, 8 to 15 percent slopes** – This strongly 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 or very slow below. The available water capacity is high, and runoff is medium or rapid. 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 reduce wetness. Erosion is a hazard during construction. Maintaining the vegetative cover adjacent to the site and diverting runoff

from the higher areas help control erosion. 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. Erosion is a hazard if these sloping soils are left unprotected. 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 and substratum. 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.

NuD - Nunda silt loam, 15 to 25 percent slopes. - This moderately steep soil is very deep and moderately well drained. The seasonal high water table in this Nunda soil is at a depth of  $1\frac{1}{2}$  to 2 feet 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 or very slow below. The available water capacity is high, and runoff is rapid. The main limitations of this soil on sites for dwellings with basements are the seasonal high water table and slope. Foundation drains and interceptor drains upslope from construction sites divert runoff and reduce wetness. Cutting and filling in construction benches and grading help overcome the slope limitation. Erosion is a severe hazard during construction. Maintaining the vegetative cover adjacent to the site, diverting runoff from the higher areas, and mulching help control erosion. The main limitations of this soil for local roads and streets are the slope and the frost-action potential. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table, the slow percolation, and the slope. Installing a drainage system around the absorption fields 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. Installing distribution lines on the contour with drop boxes or other structures will ensure even distribution of effluent. Wo soil - Wayland silt loam - This nearly level soil is very deep and poorly drained. It is in depressions on flood plains along major streams. Slopes range from 0 to 3 percent. The seasonal high water table in this soil is at a depth of less than 1/2 foot from November to June. The soil is subject to frequent flooding for brief periods from November to June. Depth to bedrock is more than 60 inches. The available water capacity is high, and runoff is very slow or ponded. The main limitations of this soil on sites for dwellings with basements are flooding and the seasonal high water table. Alternate sites on the nearby higher soils will avoid the risk of water damage and are better suited to this use. The main limitations for local roads and streets are flooding, low strength, and seasonal high water table. Constructing roads on course textured fill material helps to prevent road damage. Building roads around the flood plain will reduce construction costs. The main limitations affecting the use of this soil as a site for septic tank absorption fields are flooding, slow permeability, and the seasonal high water table. In some areas flooding from adjacent streams will gouge out the distribution lines. Flooding and the seasonal high water table will cause most systems on this soil to malfunction. Alternate sites on soils that are higher on the landscape and that are not subject to flooding are better suited to this use.

Drainage/Wetlands: No wetlands claimed on the Application for Subdivision. On the Town tax map, there is indication of a watercourse running across the northwest corner of Lot 3. Google map also shows a watercourse which appears to originate northwest of Altamont Vineyard Winery and heads southwest across the corner of the Applicant's property on is way to the Bozenkill which is a tributary of the Watervliet Reservoir. This is similar to the watercourse shown on TopoQuest map which shows the area of origin for this watercourse or stream to be a wet area or marshland to the northeast in Schenectady County. An older topo map of the Berne quadrant dated 1903 does not show any watercourse in the area of what is now the northwest corner of the property. Applicant referred to the watercourse as a seasonal creek. He further noted that there are no wetlands except in that area at the northwest corner of Lot 3.

Based on the contour lines on the Concept Plan drawing, the natural drainage is toward the center of the Applicants property and then to the south. As noted in Topography and soil sections of this report, much of the soil was damp at the time of the 6/21 site visit, with standing water where there were depressions from vehicle use. Plan should include a stormwater management plan for control on storm water especially since the development of Lots 2 and 3 could poise a possible problem for Lot 1 and the Applicant's residence if appropriate safeguards are not incorporated in the final plan.

<u>Septic/Wells:</u> Plan is to have well water and a septic system as indicated on the concept plan drawing. Applicant noted that his water is good. He said most wells in the area are 100 to 125 feet deep. Since there is a stream at the north west corner of Lot 3, plan includes a 100 foot set back for septic location for Lot 3. Concept plan drawing shows an even more generous setback of about 300 feet from the watercourse. Proposed wells are all uphill from the proposed septic locations with a distance between the proposed wells and septic systems of between  $168 \pm \text{ft}$ . and  $225 \pm \text{ft}$ . GCAC notes that care needs to be taken so that the placement of septic systems for Lots 2 and 3 do not adversely effect the lots to the south which are at a much lower elevation.

<u>Visual Impact:</u> Because of the contour of the property as well as the vegetation, Applicant feels that with the possible exception of one of the planned residence, the houses would not be seen. Due to the abundance of trees, especially along the borders of the property, GCAC does not envision an adverse visual impact that this development would have on the neighbors. It was noted that through the trees near the southwest corner of Lot 3, a rather tiny bit of the neighbor's house could be seen, but due the trees, impact is hoped to be minimal if a house is built on Lot 3. Depending on the type of trees along that border, the visual barrier may be decreased during the winter season.

<u>Endangered Species</u>: None that Applicant knows of; but there were bats in his residence which had stood vacant for two years. Applicant noted that the number of bats on his property have become less and less. If there are Indiana bats, it is assumed that they would be in the wooded area which is planned not to disturb. No endangered species were observed by GCAC at time of 6/21 site visit.

<u>Historical Considerations</u>: According to Applicant, there are no Indian relics nor things from the Revolutionary war. He did note that there is reportedly a possible cemetery, which he has not found, to the rear of his residence; but if one exists it would not be on the acreage to be subdivided. Likewise the old farm house, which Applicant states was built in 1900, is at 2881 Furbeck Road and is not a part of the acreage to be subdivided. GCAC did not note anything of historical significance on the property at time of 6/21 site visit.

Submitted by: \_\_\_\_\_

John G. Wemple, Jr. - Chair