Site: Vivenzio – 6154 Ostrander Rd., Altamont

Date: March 21, 2009

<u>Background</u>: According to Applicant, they have owned this 98 acre piece of property for over two years and that he has 2,000 feet frontage on both sides of Ostrander Road. The south side property is not part of the application. The reason for the proposed subdivision is to make three lots for family members. Intention is to have Lot #1 for niece, Lot #2 for his nephew and Lot # 3 for his son. The Applicants, John and Mitzy Vivenzio, reside in the existing residence to have the remainder of the property, where their house is located.

In the process of doing an overlay of the soil survey map onto the Town Tax map the lines for the three new lots proposed at the north end of the property it became apparent that the angle of the northern property line did not line up with that on the applicant's boundary survey drawing. It is noted on that drawing that the boundary line issue needs to be resolved. A comparison the northeast boundary line which runs adjacent to Town of Guilderland was made. The Town Tax map of 2007 shows this property line is approximately 2,450 + feet compared to the applicant'sdrawing which indicates this line is 2,412.86 feet. If the Town Tax map is correct, and taking into consideration the approximate distance the Tax map shows the north end of that boundary is from Ostrander Road if that boundary line were continued in that direction, the applicant's boundary line should be extended approximately 37 + feet to the north. Likewise there is difference of approximately 10° in the inside angle of the property at its northern most corner. Town Tax map shows an angle of 116° compared to 126° on the applicant's drawing. This in turn would move the northern property line along Ostrander Road approximately 38 feet south of where it is indicated on the applicant's drawing. Since minor discrepancy exists, lines for the proposed new lots were drawn on the soil survey overlay with both configurations taken into consideration in the Soil section of this report. Topography: According to Applicant, the property is fairly level along the Road and has a slight incline down towards the rear in the direction of the Creek. He further indicated that there are drainage ditches on the rear of the property. Town Tax map shows east corner of the property is slightly more than 400 feet from the Normans Kill which heads south east on its course to the Hudson River. A review of US Dept. of the Interior Geological Survey map Voorheesville Quadrangle of 1954 (photorevised 1980) shows that the highest point on the property is at the south boundary line where the elevation is 400 feet Above Mean Sea Level (AMSL). From that point heading north the incline is at a rate of about 10 feet per 100 feet of terrain or about 6% slopes. The contour lines are wavy on much of the large acreage of the lot where the residence is located. There appear to be three major valleys or gullies each of which coincides with ditches or streams indicated on the

Page 2 of 5 - Inspection Continued - Vivenzio - Ostrander Rd. - March 2009

Tax map. One is near the property's east corner where the contour lines are close together indicating a sharper incline. To the west of that is another ditch or stream; and further to the west there is a more gradual slope extending from the south pond which is about 125 feet from the Road and at an elevation of approximately 350 feet AMSL, northward to the north pond where the elevation is 310 feet AMSL. The area of the proposed three smaller lots has less of a slope dropping about 10 feet every 150 feet with Lot #1 being very flat along the road side and Lots # 2 and # 3 having more of a drop near the rear. At March 21st site visit GCAC noted that the three smaller lots are relatively flat on the front portion and slope more rapidly toward the rear. The residence sits on an area which is higher than the ponds to its south. In order to view the pond at the east corner of the three lots, GCAC followed a trail through the back woods which initially rose in elevation apparently following the wavy contour lines as seen on the above map. On this route we viewed a deep ravine which is apparently one of the gullies or ravines noted above. The last part of our walk was on Town park land as we descended in elevation as we approached the back pond.

<u>Vegetation/Trees</u>: Applicant described the property as being wooded along the back portion of the existing large lot and heavily wooded on the area where the proposed three smaller lots would be located. According to Applicant vegetation on the property includes white pine, Douglas fir and maples besides it being brushy. Applicant does not envision tree cutting other than what is necessary. At time of March 21st site visit, GCAC walked the treed area of the three smaller lots and noted that most of the trees were of medium size. The rear area as well as the area to the south east of these lots has relatively heavy brush. The rear area of the large lot is also heavily wooded but was hikeable since there are number of trails in this area. Present owner noted take previous owner had ski trails through this wooded area.

<u>Soil</u>: Applicant states soil varies, that it is sand in the front and clay in the rear with some gravel. This type of soil was observed at the rear of the residence at time of site visit.

A review of the soil map on Sheet Number 18 in the "Soil Survey of Albany County, New York" by James H, Brown (1992) indicates that this property has four different types of soil. On Lot # 1, the front third has BuB soil and to the rear of that is primarily NuC with a small area of NuB at the north corner which extends most of the way across the rear on the Tax map and only across a much small area at that corner on the Appliants drawing. On Lot # 2, using the Tax map, Approximately 30% of the front is BuB and the remainder is NuC other than a small area of NuB at the rear east corner. On the Applicant's drawing the front BuB soil goes back for about 150 to 200 feet, the midsection is NuC and the rear $30\pm$ % is NuB. Soil Survey map shows a wet spot near the rear boundary line. Lot #3 has BuB soil on the front Page 3 of 5 - Inspection (Continued) - Vivenzio - Ostrander Rd. - March 2009

 $40\pm\%$ of the lot with a wedge of NuC running along 350 feet on the north west side starting at a point about 200 feet from the Road. This triangular segment extends about 125 feet into the lot beyond which to the rear the soil is NuB with a wet spot near the rear property boundary line. On the Applicant's drawing, the front and rear halfs are primarily BuB and NuB respectively with a small wedge of NuC near the midpoint of the north west boundary line and a small area of BuB at the rear which also includes the north pond part of which is on the adjacent Town of Guilderland property.

On the large lot, the east corner has a large area of HuE soil which extends about 800 feet into the property. Along the south east boundary there is a small wedge of NuC which is about 300 feet along that line and extends about 125 feet into the property. Below this along the same boundary line is an area of NuB which also continues adjacent to the mentioned HuE area. This NuB area is about 300 to 600 feet wide. To the west of this as a triangular area extending about 800 feet in from the Road of NuC soil and likewise similar soil on a small wedge extending about 200 feet in from the north east boundary line. To the west, is a strip of BuB soil on an area about 250 to 450 feet wide

which includes the two south ponds. To the west of this area is a strip about 250 to 450 feet wide of NuB soil. It is on this area that the residence is located.

A brief description of the soils and some of their limitations follows:

BuB – Burdett silt loam, 3 to 8 percent slopes - This gently sloping soil is very deep and somewhat poorly drained. The seasonal high water table in this Burdett soil is perched on the clayey subsoil at a depth of 1/2 foot to 1 1/2 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. Surface runoff is medium. 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. Land grading and properly placed diversions will remove surface water. The main limitations for local roads and streets on this soil are the seasonal high water table and frost-action potential. This soil is soft when wet and causes the pavement to crack under heavy traffic. Constructing roads 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 providing 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 field to lower the water table, diversion ditches to intercept water from the higher areas, and an enlarged trench below the distribution line to improve percolation

Page 4 of 5 - Inspection (Continued) - Vivenzio - Ostrander Rd. - March 2009

<u>HuE</u> - <u>Hudson silt loam, 25 to 45 percent slopes</u> - This steep soil is very deep and moderately well drained. The seasonal high water table is perched above the clayey subsoil at a depth of $1\frac{1}{2}$ to 2 feet between November and April. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately slow in the surface and subsurface layers and slow to very slow below. The main limitations on sites for dwellings with basements are the seasonal high water table and the slope. In many places the soil is also susceptible to landslides and slumps. Main limitations for local roads and streets are the frost-action potential, low strength, and the slope. Roads should be planned, where possible, to avoid this soil. 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. Also, effluent moving into the soil from distribution lines can make the hillside more unstable and cause landslipping. Other less sloping soils are better suited to this use.

<u>slopes</u> - 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.

NuB – Nunda silt loam, 3 to 8 percent– 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. Installing a drainage system around the absorption field and diversions to intercept runoff from the higher areas

Page 5 of 5 - Inspection (Continued) - Vivenzio - Ostrander Rd. - March 2009

will reduce wetness. Enlarging the absorption field or the trench below the distribution lines will improve percolation.

NuC – Nuna silt loam, 8 to 15 percent slopes - This strongly sloping soil is very deep and moderately well drained. The seasonal high water table in this Nunda soil 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 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 roadways. 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.

Drainage/Wetlands: Applicant claims property has no wetlands but a pond which he said is partly on the adjacent Town property. Application for Subdivision notes that the pond is not part of the 3 lot subdivision. Applicant claims the ponds are not connected although the Soil Survey map shows a watercourse between the north pond the pond along Ostrander Road furtherest east of the residence. Geological Survey map shows a ditch or stream connecting these two ponds and then continuing toward the Creek. Same map also shows two watercourses in the area of the east corner as well as the east portion of the midsection of the property, all of which appear to run in south to north direction toward the Creek. Applicant noted that there is spring drainage in the wooded area where the three new lots are proposed. At time of site visit, GCAC noted the drainage ditch which initially enters the front area of Lot #1 via a culvert from the west side of Ostrander Road. This water course was about four feet wide about 6 inches deep and followed in a northeast direction and then toward the rear of Lot #2 or #3 where it entered a swampy area about 100 feet square near the rear boundary line with dead or dying trees. Wooded area of the three new lots takes up much of the acreage of each of these lots and affords sufficient space for building lots on relatively dry land. At time of site visit, the water level of the two ponds was high enough that they were connected together. Large drainage pipe is connected to the southernmost pond for drainage to the north. Due to the vegetation and rough terrain, it was not determined where this watercourse lead to, but if the contour lines on the above map are correct it would head toward the rear pond area.

<u>Septic/Wells</u>: Existing residence has well water but Applicant noted the volume is poor. He said there are no problems with the septic. Regarding water for the proposed lots, he has applied for a water district extension. New lots would have septic systems. Note under the Soil section the limitations of the soils related to septic systems. As to the issue of water, Applicant stated that if the request for water district extension is not approved, he will not pursue the subdivision since it would undoubtedly be too costly to drill for water. County Health Department will need to be consulted regarding placement of the septic systems especially due to the natural drainage toward the Normans Kill.

<u>Visual Impact</u>: Applicant does not see any negative visual impact resulting from the proposed subdivision and noted that he and his family all like privacy. Due to the denseness of the wooded area if the lots are developed far enough back from the road, there would be minimal adverse visual impact.

<u>Endangered species</u>: None known to Applicant but there are a lot of deer and turkeys. GCAC did not observe any endangered species at time of site visit.

<u>Historical Considerations</u>: Applicant states the residence was built in 1860. Town Assessors website notes it was built in 1840. Thus, the house is around 150 to 170 years old. Applicant claims no old burial plots that he knows of. GCAC did not observe any thing of historical significance, other than the old house, which appears to be in very good condition, at time of site visit.

Submitted By:_

John G. Wemple, Jr. - Chairperson

To: Guilderland Planning Board
From: Guilderland Conservation Advisory Council
Date: March 31, 2009
Re.: Subdivision of Vivenzio, 6154 Ostrander Rd., Altamont, NY 12009

APPLICATION

Applicants: John and Bettyann (Mitzy) Vivenzio, 6154 Ostrander Road, Altamont, NY 12009

Proposed Subdivision: A four-lot subdivision of 98 acres. Town Tax map indicates 96.5 acres (c).

Location: About 600 feet south east of the intersection of Route 146 and Ostrander Road; about 0.4 mile from the bridge over the railroad tracks leading into Guilderland Center.

Zoning: RA-3

SITE INSPECTION SUMMARY

Site Inspection Date: March 21, 2009

Meeting Attendees: (March 16, 2009) Applicants John and Mitzy Vivenzio and Tony Scarcella (in-law); GCAC Members Stephen Albert. David Heller, Herbert Hennings, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple (Chair).

Inspected by: Applicant John Vivenzio; GCAC Members Stephen Albert. David Heller, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple (Chair).

<u>Conclusions</u>: Related to the subdivision, the Applicant states that he doesn't anticipate removing many trees. As noted above, it is doubtful that he will go ahead with the subdivision if his request for water district extension is not approved due to the anticipated high cost of drilling for water. While there are a number of drainage courses across the property, it does not appear at this time that they would poise any large problem to the proposed smaller lots provided appropriate stormwater management guidelines are followed in developing these lots. Special care will also need to be taken in placement of the septic systems. Highway Department needs to be consulted related to the location of the access driveways to the new lots in order to minimize danger along Ostrander Road. As the property is developed, drainage along the front area of the new lots should be evaluated in order to better drain that Page 2 of 2 - Conclusions (Continued) - Vivenzio - Ostrander Rd. - March 2009

area so that the wet area does not grow larger resulting in loss of more trees on this section of the property.

A concern that GCAC does have is the reason for the previous owner planting 100,000 trees, especially along Ostrander Road on the area where the three new lots are proposed. If it was for the purpose of stabilizing that area and to cut down on erosion, the removal of many of these trees could set up that area for erosion and possible resulting damage to the Park and pond below. On the same subject, the nature of soils on the area where the Applicant's residence and south ponds are located is similar to the soils of the nine acre area. The Applicant himself had related to GCAC the story about the pond by the house not being able to hold water, and how the side of it collapsed on him when he tried to reinforce it, thus showing how unstable the soil is in that area. It was further noted by GCAC that where trees were absent there was a significant amount of erosion. While the Applicant may have good intentions of keeping tree removal to a minimum, GCAC is concerned that the development of three new homes with driveways will require a significant removal of trees within the nine acres. Thus, it may be a mistake to allow this development if those trees were planted there for the reason of stabilization rather than for aesthetics. If this issue is clarified satisfactorily that the tree removal will not have an adverse effect to the terrain and a plan is included to deter erosion while stabilizing the lots along with appropriate storm water management, GCAC does not see any major adverse effect to the environment of this proposed subdivision provided proper measures are taken to follow guidelines of the Health Department related to the septic systems.

Submitted by:_

John G. Wemple, Jr. - Chairperson