

To: Guilderland Planning Board
From: Guilderland Conservation Advisory Council
Date: July 27, 2012
Re.: Mark Schafer – ___ Western Turnpike, Altamont, NY 12009

APPLICATION

Applicant(s): Mark Schafer, 4928 Western Turnpike, Altamont, NY 12009

Proposed Subdivision: A proposed two lot subdivision of 37 acres.

Location: Near the north west corner of the intersection of Routes 20 and 158, northwest of the Watervliet Reservoir.

Zoning: RA-3.

Site Inspection Summary:

Site Inspection Date: July 21, 2012

Meeting Attendees: (July 26, 2012) Applicant Mark Schafer; GCAC Members Stephen Albert, David Heller, Stuart Reese, Steven Wickham, John Wemple (Chair); and Town Councilman Allen Maikels.

Inspected by: Applicant Mark Schafer and GCAC Members Stephen Albert, David Heller, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple.

Conclusions: In view of the fact that the property borders the Normans Kill, the development of the planned lot should include an appropriate stormwater management plan. Provided this is done and the construction of the septic field meets with County Health Department approval, GCAC does not envision any problem with this proposed two lot subdivision.

While only one building site appears to be planned, which would be on proposed lot #1; there does appear to be more than ample room for another building site to the south of this along Route 158 which would have similar Rhinebeck silty clay loam soil with similar qualities and limitations as the planned lot. Furthermore, if the Applicant does follow through with the plan to possibly have his own residence on the rear (west) area between the two swales, special care will be needed in the location of and construction of a septic field so that it does not flow into either of these two swales or watercourses which lead into the Normans Kill.

There is a question which the Planning Board may have the answer – Was a building permit needed for the construction of the driveway on the property.

One question remains which does not affect this GCAC report but possibly the Planning Board can resolve. According to Applicant, his property also includes a strip 65 feet wide along the Normans Kill along the western boundary line of his neighbor at 4379 Western Turnpike. This does not appear as such on the 2007 Town Tax Map which GCAC used for this report.

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

INSPECTION DETAILS

Applicant(s): Mark Schafer

Address: _____ Western Turnpike
Altamont, NY 12009

Background: According to the Applicant, Mark Schafer, he had been looking to get more land and in turn bought the property this winter from Tralongo. Assessor's file shows owner listed as John Tralongo; assessed at \$72,500; lot size – 36.7 acres. Plan is to subdivide into two lots. Smaller lot (lot 1) at the northeast corner along Route 158 would initially be developed with the possibility that the Applicant may build a residence for himself and family on the rear portion of the acreage. Applicant noted that he has changed the proposed rear boundary line for lot 1 which would now extend a little further back along the northern boundary and the western boundary line would be more parallel to Route 158. He further noted that lot 1 and his own lot would have a shared driveway and that he might have the driveway on his side of the lot line with an easement for lot 1. In developing lot 1, Applicant further spoke of the dwelling consisting of two residences which would be adjoining one another to accommodate the needs of the lot 1 family. Applicant also noted that the foundation of the property would be deeper than normal in order to meet ADA (Americans with Disabilities Act) standards for accessibility.

Topography: According to the Applicant, the main portion of the property is fairly flat with a drop in elevation on the front portion that faces onto the Western Turnpike and a steep drop in elevation on the portion that abuts the Normans Kill. He indicated the drop in elevation on the main part of the property is only about four feet.

A review of the contour lines on US Dept. of Interior. Geological Survey map of Voorheesville Quadrangle (1954 – photorevised 1980) indicates the proposed building lot (lot #1) is on a fairly level portion of the property midway between 310 feet and 300 feet Above Mean Sea Level (AMSL). As to the 37 acre property, the 300 ft. AMSL line zig zags across the mid-section of the acreage dropping off rather abruptly along the western most boundary – dropping from 290 ft. AMSL about 250 ft. west of the Normans Kill to 260 ft. AMSL near the edge of the Creek as Normans Kill flows southward along that portion of the property. At time of site visit, GCAC was surprised at the amount of sudden drop to the Creek at the rear (west) boundary of the property. As the property approaches the Western Turnpike, in the portion that projects southward from the main part of the property, the elevation drops from 300 ft. AMSL to between 280 and 270 ft. AMSL. As observed by GCAC, the overall description of the land along Route 158 is that it is more rolling than flat with a gradual rise from the driveway to the main area of lot 1 and then downward to the north. Similarly the acreage south of lot 1 rises a bit to an area which could provide another available building site similar to lot 1. The rear area also has an area which is slightly higher than its surroundings which may be the site of a residence if the Applicant decides to build there in the future.

Vegetation/Trees: Applicant noted that front portion of the acreage along Route 158 has been a hay field and the rear a corn field. He noted that the hay is timothy and brome and that on lot 1 there is golden rod. According to him, trees include poplar, white birch, river birch and white pine. He noted that the plan is to move some of the trees from the rear to the berm along Route 158. Many medium size pine trees on the rear (west) portion of the property were observed by GCAC at the time of the July 21st site visit. During the visit, Applicant noted a couple small apple trees in or near the area of lot 1. He also pointed out the medium size spruce trees on the line that marks the boundary between his property and the neighbor to the south along Route 158. There is heavy brush and primarily deciduous trees along the north boundary of lot 1 as well

as along the western boundary line including a large oak. Heavy brush is also along much of the swale which crosses the central portion of the property. Similar heavy brush also covers the small area that extends from the main lot to Route 20. That portion GCAC only walked about half way toward Route 20 due to the heavy brush and since there is no apparent plan to develop this portion of the property.

Soil: At the July 16th meeting the Applicant described the soil in the following way - there is a foot of good top soil under which the soil is clay. Based on a review of the soil information on Sheets 3 and 10 of “Soil Survey of Albany County, New York” -1992 – James H. Brown and a soil map from the USDA Natural Resources Conservation Services website, it appears that there are eight different soils on the property. The soil on the proposed 4.5 acre building lot (lot # 1) at the north east corner is primarily RhB with a small crescent shaped portion of RhA soil along the north side and small wedge of this same soil at the south east corner, both of which appear to extend about 75 feet into the main section of the lot. The remainder of the acreage has RhA soil along the remainder of the eastern side which extends between approximately 200 feet in from the road (Route 158) along the common boundary with lot # 1 and 450 feet in from that road along the boundary line of the neighbor to the south along Route 158. This RhA soil continues on the area adjacent to the neighboring lot along Route 158 for about 300 feet after which the soil is HuC on a section about 60 to 75 feet wide which runs diagonally across in a south east direction on the smaller segment of the lot as it meets the Western Turnpike (Route 20). There is a wedge of Cs soil at the southwest corner of this area which is noted on the soil survey map as being a wet spot. Except for a rounded triangular shaped area of about 300' X 500' to the rear of lot #1 the remainder of the area to the west of the RhA area is mainly RhB soil back (to the west) to a point about 900 to 1000 feet from Route 158. There appears to be possibly a very small wedge of RhA soil along the northeast boundary just west of lot #1 and a small area of Ra about 200 feet west of that followed by a wedge of ScB about 75 feet wide which extends about 75 feet into the property about 50 feet from the north corner of the acreage. To the south of this is a finger (shaped like a thumb) of HuB soil which covers much of the land between the two streams (or swales) on the west portion of the property and extends about 900 feet to the south. West of this HuB area is an area about 100 feet to 300 feet wide of UnC soil which extends to the border of the Normans Kill as it runs in a southern direction. At the southwest section of the acreage there is an area of HuC soil about 200' X 200' along the creek.

A brief description and some of the limitations of the soils as noted in “Soil Survey of Albany County, New York” are 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. RhB – Rhinebeck silty clay loam, 3 to 8 percent slopes. – This gently sloping soil is very deep and somewhat poorly drained. The seasonal high water table in this Rhinebeck soil is at a depth of 6 to 18 inches from January to May. Depth to bedrock is more than 60 inches. The seasonal high water table limits the rooting depth. Permeability is moderately slow in the surface layer and subsurface layer and slow below. The available water capacity is moderate, and runoff is slow. The County survey notes 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, 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 has a low bearing capacity, especially when it is wet. Excavations and cutbacks will cave or slough.

Ra - Raynham very fine sandy loam - The seasonal high water table is at a depth of ½ foot to 2 feet from November to May. Depth to bedrock is more than 60 inches. Main limitation on sites for dwellings with basements is the seasonal high water table. Foundation drains and interceptor drains upslope from construction sites divert runoff and help prevent the damage that the seasonal high water table causes. Soil is better suited for dwellings without basements. Main limitations affecting local roads and streets are the seasonal high water table and frost action potential. Constructing roads on coarse textured fill material will reduce the frost action potential. Raising the level of the fill 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.

ScB - Scio silt loam, 3 to 8 percent slopes. This gently sloping soil is very deep and moderately well drained. The seasonal high water table is at a depth of 1 ½ to 2 feet from March to May. Depth to bedrock is more than 60 inches. Permeability is moderate in the surface layer and subsoil. The available water capacity is very high, and runoff is medium. Main limitation for dwellings with basements is the seasonal high water table. Installing foundation drains with adequate outlets will lower the water table. Erosion is a hazard during construction. Excavations and cutbacks cave or slough easily. Main limitation for local roads and streets is the frost-action potential. Constructing roads with coarse textured fill material and installing surface and subsurface drainage reduces the frost-action potential. Erosion is a hazard during construction. Cutbacks cave or slough. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the seasonal high water table. Installing drainage around the field and intercepting runoff from the higher areas will reduce wetness.

HuB – Hudson silt loam, 3 to 8 percent slopes – This gently sloping soil is very deep and moderately well drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 1 ½ 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 or very slow below. The available water capacity is high. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Landscaping around the building and using diversion ditches above it help remove excess surface water. Foundation

drains and protective coatings on basement walls help prevent wet basements. The main limitations of this soil for local roads and streets are the frost-action potential and low strength. Providing a coarse textured subgrade or base material to the frost depth and adequate drainage in areas of the wetter included soils reduce frost action and improve soil strength. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the season high water table and slow percolation. A drainage system around the filter field and interceptor drains to divert water from higher areas will lower the water table. Enlarging the trench below the distribution lines will improve the percolation of effluent.

HuC – Hudson silt loam, 8 to 15 percent slopes – This strongly slopping soil is very deep and moderately well drained. The seasonal high water table in this soil is perched above the clayey subsoil at a depth of 1 ½ 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 or very slow below. The available water capacity is high. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Landscaping around the building and using diversion ditches above it help remove excess surface water. Foundation drains and protective coatings on basement walls help prevent wet basements. Erosion is a hazard during construction. Maintaining vegetative cover adjacent to the construction site and diverting runoff help control erosion during construction. The main limitations of this soil for local roads and streets are the frost-action potential and low strength. Coarse textured subgrade or base material to frost depth and adequate drainage in areas of the wetter included soils reduce frost action and increase soil strength. Mulching and seeding of graded roadbanks help control erosion. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the season high water table and slow percolation. A drainage system around the filter field and diversions to intercept runoff from higher areas will lower the water table. Enlarging the trench below the distribution lines will improve the percolation of effluent.

UnC - Unadilla Silt loam, 8 to 15 % slopes. This strongly sloping soil is very deep and well drained. The seasonal high water table in this soil is at a depth of more than 6 feet. Depth to bedrock is more than 60 inches. Permeability is moderate. The available water capacity is high, and runoff is slow. The main limitation of this soil on sites for dwellings with basements is the slope. Constructing dwellings to conform to the natural lay of the land or grading helps overcome the slope limitation. Erosion is a hazard during construction. Maintaining the vegetative cover adjacent to the site, diverting runoff from the higher areas, and timely revegetating following construction help control erosion. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on raised fill composed of coarse textured base material will reduce the frost-action potential. The mail limitation affecting the use of this soil as a site for septic tank absorption fields is the slope. Laying out distribution lines on the contour and using distribution boxes or other structures will ensure even distribution of effluent and enable the system to function more effectively.

Cs – Cosad loamy fine sand – This nearly level soil is very deep and somewhat poorly drained. It is in slightly depressional areas and on low-lying plains. Areas of this soil are broad and irregularly shaped and range from 3 to 60 acres. Slope range from 0 to 3 percent. The seasonal high water table in this Cosad soil is perched above the clayey substratum, at a depth of ½ foot to 1 ½ feet between November and May. Depth to bedrock is 60 inches or more. Permeability is rapid in the surface layer and subsoil and slow or very slow in the substratum. The available water capacity is moderate. This soil is moderately suited to cultivated crops and moderately well suited to pasture. The water table creates a soft soil surface under such heavy loads as planting and harvesting machines and causes a moderate equipment limitation. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table.

Open ditches, foundation drains, and protective coatings on basement walls help overcome this limitation. The main limitation of this soil for local roads and streets is the seasonal high water table. Constructing roads on raised fill material and installing drainage will reduce wetness and increase 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 slow percolation. According to the source book, a specially designed septic tank absorption field with drainage around the site will properly filter effluent. Better drained soils are better suited to this use.

Drainage/Wetlands: The Town Tax map shows two water courses running northeast to southwest. One is at a distance of approximately 400 feet and parallel to the northwest boundary line and the second is very near this northwest boundary line. Both appear to be tributaries to the Normans Kill on its way to the Watervliet Reservoir. At the July 16th Meeting, Applicant described the first one as a swale. Source of this swale or watercourse may be the pond on the neighbor's property to the north. Applicant further noted that the drainage on the area between these two watercourses or swales is toward these two swales; and that the drainage to the rear of lot 1 is initially toward the north and then toward the swale that appears to lead from the adjacent pond. Based on the contour lines on the topographical map noted above, natural drainage is to the south and southwest toward the Normans Kill. The Reservoir is approximately 700 feet south of the property. As noted in the Soil section, the front portion of the acreage that borders the Western Turnpike has the symbol for “wet spot”. Google map shows a pond, on adjoining property, about 150 to 200 feet north of the stream which cuts across the midsection of the acreage, which may be the source of that stream. Applicant noted that there is no stormwater management plan yet. At time of July 21st site visit it was observed that the excavation has made a drainage ditch along the northern portion of lot 1 next to the treeline which creates a noticeable drop of about 4 to 6 feet from the treed portion, which the Applicant noted extends about 60 feet north, to the bottom of the ditch. Apparently due to the extended dry period that Guilderland has been experiencing, GCAC did not find any sign of water in the two drainage swales which cross the mid and rear parts of the property other than the soil at the base of the rear swale appearing a little damp. It was observed that there is a marked deep cut in the terrain at the point where the mid swale meets the Creek.

Septic/Wells: Plan is to hook up to Town water and to have a septic system. Applicant has changed proposed location of the septic field from north of the proposed residence to east of it. He noted that he has to meet with the Albany County Health Department for perc test. From what Applicant said, it appears that it will be necessary to have water line extended from the east side of Route 158 under the road to the Applicant's side of Route 158.

Visual Impact: Applicant apparently does not envision any adverse visual impact from this development of lot 1 since there is already vegetation on other side of Route 158 to protect neighbors on that side of road from possible headlights from Applicant's property and Applicant also plans to transplant trees to the berm along the roadside of lot 1. GCAC does not anticipate any significant visual impact from this two lot subdivision especially if the Applicant follows through with the planned transplanting of pine trees from the rear of the property to the berm along the Route 158 side of lot 1.

Endangered Species: According to Applicant he does not know of any Indiana Bats or Karner Blue on his property. No endangered species observed by GCAC at time of July 21st site visit.

Historical Considerations: According to Applicant there are no Indian or Revolutionary War remains or cemetery on his property. Nothing of historical significance observed by GCAC at time of July 21st site visit.

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