To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: October 5, 2015

Re.: Kernozek, 20 Stone Road, Voorheesville, NY 12186

APPLICATION

Applicant(s): Eileen A. Kernozek. 20 Stone Road, Voorheesville. NY 12186

Proposed Subdivision: A proposed _two_lot subdivision of _16.7_acres (Town Assessor's website has it listed as 16.2 acres)..

Location: Property is southeast of the Northeast Industrial Park, approximately one mile north of the Guilderland/New Scotland town boundary line, on the northeast corner of the intersection of Stone and Ostrander Roads. The west portion of the property is in the Altamont ZIP code (12009) and the east portion is in the Voorheesville ZIP code (12186).

Zoning: RA 3

Site Inspection Summary:

Site Inspection Date: September 26, 2015

Meeting Attendees: September 21, 2015 Presenter Mark Blackstone; GCAC Members Stuart Reese, Kevin Connolly, Steve Wacksman, David Bosworth, Gustavo Santos and John Wemple (Chair).

Inspected by: Applicant's son Andy Kernozek; GCAC Members Stuart Reese, Kevin Connolly, Steve Wacksman, Gustavo Santos and John Wemple (Chair).

Conclusions: Having listened to the Presenter's description of the property and having walked the property, GCAC has no objections to this proposed two lot subdivision provided appropriate steps are taken in the future development of the new lot with special care taken in the placement of the septic system, the construction of the long driveway and that an approved storm water management plan be incorporated in any final plan for development. As noted in the Soil section of this report which spells out some of the limitations of the soils, care needs to be taken to avoid the hazard of erosion during construction as well as the need to protect these areas after construction. Because of the long driveway, the local fire district will need to be contacted as the final plan is developed. Also of concern to GCAC is the need to determine the appropriate spot best suited for the driveway entrance in order to make sure the line of sight is within safe guidelines.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): Eileen A. Kernozek

Address: 20 Stone Rd., Altamont, NY 12009

Background: According to Presenter Mark Blackstone, the property has been in the family for many years, a minimum of possibly fifty years. This was clarified by Applicant's son, Andy, who accompanied GCAC on September 26th site visit. According to Andy, his grand parents got the property in the mid 1930's and his parents moved there about thirty years ago. County Clerk's website indicates property was conveyed to his parents in 1987.

Applicant, Eileen Kernozek, lost her husband in January, and according to Presenter is selling the house and will be moving out. At time of site visit, GCAC noticed that house looked like it might already be vacant; and this was clarified by her son Andy who said she had moved out. Plan is to divide property into two lots; one being 3 + acres and other 13 + acres. The smaller lot is the one with the existing residence. The structures and grounds on this smaller lot appear to be well maintained.

Topography: Presenter described the property as indicated on the site plan drawing which shows the contour lines and indicates an elevation of 370 feet AMSL on the area at the north east corner of the property. Heading westward the acreage slopes downward 10 feet at fairly regular intervals of about 70 to 140 feet. On the new proposed lot the north east corner is at about 370 ft. AMSL and the southwest corner is less than 340 ft. AMSL. Presenter made special note of the bottom of the hill which is at 340 ft. AMSL. From that point westward the terrain is flat other than a small area in the south west portion where there is a slight rise and apparently forms a small island-like area when the low area is wet and the seasonal watercourse(s) flow in a south direction across the lowland. Topoquest – USGC map (Voorheesville quadrant) indicates 337 ft. AMSL at a point south of the triangle at Ostrander and Stone Roads. The slope of the upper portion of the larger lot, between 370 ft. AMSL and 340 ft. AMSL, on which a residence might be built in the future, is 5.71º or 10%. Because of the slope of the hill, the Presenter noted that the long driveway, which may be around 700+ feet, may have to be constructed in a zig-zag fashion.

Vegetation/Trees: Presenter noted that there are trees and hedge rows along the borders. At time of site visit, GCAC noted that there were deciduous trees along the north boundary as well as along the upper half of the Ostrander border and near the lower south west corner. Trees included nut trees, maple, wild cherry, and oak. Worthy of note was a very large oak containing five shoots from the trunk along the north border. Cattails were noted near the north border on the lowlands as well as on an area at the southeast corner of the property where there was other low vegetation. On the island-like area noted under the above Topo section it was noted that there was fern as well as another type of tall vegetation which was noted as being similar as that which is growing along the pond area which is on the smaller lot.

Soil: A review of the soil map on the USDA Natural Resources Conservation Services website as well as Sheet 18 soil map in the publication "Soil Survey of Albany County, New York" -1992 – James H. Brown indicates that there are six different soils on this Stone Road property. On the smaller proposed lot where the existing residence is, the main portion, covering about 80 % of the area east of a line extending diagonally from the north west corner of the lot to a point along its south boundary about 90 ± feet east of the west boundary line the soil is identified as NuB. West of this diagonal line is a wedge shaped area of NuC soil extending southward to a smaller area which covers the front area extending back about 40± to 60± ft. from the Road which has BuA soil. The larger proposed lot has In soil along the boundary of Ostrander Road

as well as the detached small triangle on west of the intersection of Ostrander and Stone Roads. East of the In area is a large area of BuA soil which extends to the east to just inside the proposed building envelope of this large 13+ acre lot. At the north corner, there is an area of BuB soil adjoining a smaller wedge of NuD to its east. To the east of the BuA area is a large finger of NuC soil which extends to the south covering most of the western portion of the proposed building envelope for the new lot. To the east is NuB soil which extends about 85 to 220 ft. inward from the property's east boundary line. It should be noted that in the Soil Survey book, GCAC noted that on page 187, Table 5 lists BuA, the soil on most of the lowland area, as prime farmland provided it is drained. A brief description of the above soils and some of their limitations is as 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 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. 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.

BuA – Burdett silt loam, 0 to 3 percent slopes - This very deep soil is nearly level and somewhat poorly drained. Included in this soil in mapping are areas of the moderately well drained Nunda soils on hilltops. Also included are areas of the poorly drained and very poorly drained Ilion and Madalin soils in depressions and along drainageways. 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 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 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. **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 ½ 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. **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.

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 will reduce wetness. Enlarging the

absorption field or the trench below the distribution lines will improve percolation. I**n – Ilion silt loam** - This nearly level soil is very deep and poorly drained. The seasonal high

water table in this Ilion soil is perched at a depth of less than 1 foot from November to May. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately slow in the surface layer and is slow or very slow in the subsoil. Available water capacity is high. Surface runoff is very slow. County soil survey notes that most of the acreage is used as woodland or brushland. The seasonal high water table or ponding is the main limitation of this soil on sites for dwellings with basements. Foundation drains, subsurface drainage systems, and protective coatings for basement walls help overcome these limitations. Grading to move surface water away from dwellings and diverting runoff from the higher areas also reduce wetness. The main limitations of this soil for local roads and streets are the seasonal high water table, ponding, and the frost-action potential. Wetness softens this soil most of the year and causes the pavement to crack under heavy traffic. A coarse textured subgrade or base material and surface or subsurface drainage away from the road site lower the water and reduce frost action. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table, ponding, and slow percolation in the subsoil. Other nearby soils are better suited to this use. A specially designed septic tank absorption field or an alternative system will properly filter effluent. A drainage system around the filter field and diversions to intercept water from the nearby higher areas will reduce wetness.

Drainage/Wetlands: The Subdivision Application indicates there is a pond and also NYSDEC wetlands south of Stone Road and federal ESACOE on north side. The pond is to the rear of the residence and was dug by his father, according to Andy. Although the Town tax map as well as the County soil survey map show watercourses or streams crossing the property in a north/south direction, the Presenter indicated that the watercourse is seasonal and is actually one course which splits into two as it goes around the small slightly higher area,as described as a small island-like area in the above Topo section. At time of site visit, there was no noticeable stream or watercourse. Presenter did state that the lowland area is wet in the spring, the time when there is a watercourse. Because of this area of the property being so wet, and unusable according to the presenter, it appears that its primary use is for hay which two or three cuttings a year depending on the amount of wetness. Natural drainage is to the southwest and then to the south. There is a culvert which goes under Stone Road near the south west corner of the property. Adding to the runoff from the higher portion of the property is run off which undoubtedly occurs from Stone Road which is 5+ feet higher than the south boundary along that road especially in the area of the culvert. This difference in the elevation of the road above the Applicants property decreases as it goes eastward where it is level at the existing residence area. Presenter stated it is real wet to the south of Applicant's property. Town tax map shows the watercourse from the Applicant's property continuing south to a pond approximately 1,000 feet south near the Conrail line. From that point, an adjoining watercourse appears to flow through Voorheesville to the Vly Creek to the Normanskill. In reviewing maps of the site area, it was noted that Black Creek is about 1600 feet to the south west of the Applicant's property.

Septic/Wells: Plan is to hook up to existing Town water and to use a septic system. Septic system's leech field for the existing residence is to the west of the house on top of the hill. Although there is no definite plan for a residence on the large lot, Presenter indicated the septic system for that lot could possibly sit on or near the top of the hill.

Visual Impact: Presenter indicated he felt there would not be any visual impact. GCAC feels that due to the natural barrier of the trees along much of the border of the property as well as the the distance from the road, any negative visual impact should be small if any. Applicant's son, Andy, expressed his feelings toward the negative visual impact caused by the commercial business across Ostrander Road.

Endangered Species: Presenter stated there were none since the property has been farmed for years. GCAC did not note any endangered species at time of site visit.

Historical Considerations: According to Presenter, there is no old cemetery; only thing is the old house. A review of the Assessor's list of old buildings in the Town indicates that 20 Stone Road rural residence was built in 1880.

Submitted by: _____

John G. Wemple, Jr. - Chair