To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: April 27, 2016

Re.: Silvestri – 181 Brandle Rd., Altamont, NY 12009

APPLICATION

Applicant(s): Joseph and Maria Slivestri, 1004 DiBella Drive, Schenectady, NY 12303

Proposed Subdivision: A proposed two lot subdivision of 94 acres.

Location: This acreage is located a little north of the point where the railroad crosses Brandle Road and about ½ mile south of the Altamont Fairgrounds.

Zoning: RA-3.

Site Inspection Summary:

Site Inspection Date: April 16, 2016

Meeting Attendees: (April 11, 2016) Applicants Joseph and Maria Silvestri, Presenter Stephen P. Walrath, L.S.; Town Council Member Lee Carman; GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz and John Wemple, Chair.

Inspected by: Applicant Joseph Silvestri was at the site as we started the site visit but left, Presenter Stephen P. Walrath, L.S.; GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz and John Wemple, Chair.

Conclusions: Since there is no planned development on the property at this time, GCAC does not envision any adverse environmental impact resulting from this subdivision. If a residence is planned for the large undisturbed lot, it could be located to the south of the current residence with a minimal amount of impact. Main concern would be dictated by the nature of the soil. Most of this south area has ScA soil which has some limitations related to slow percolation of septic tank absorption fields which may require enlarging these fields or providing trenches below the distribution lines. The size of the planned small lot needs to be explored to determine if it meets the requirements for being less than three acres. The age of the structure (built in 1829) should be taken into consideration if any modification are planned for it and the Town Historian should be notified since it appears to be of historical significance. GCAC is concerned that the owners are asking to have an exception granted to allow for a smaller lot size than zoning requires. Because of the historic nature of this property, GCAC feels it is a disservice to history, the community and the historic structure itself to allow this to happen. This home is a grand old place, built and lived in by one of the founding families of the area and for those reasons it deserves to be surrounded by a full amount of land that our zoning law requires.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): Joseph and Maria Silvestri, 1004 DiBella Dr., Schenectady, NY 12303

Address: 181 Brandle Road, Altamont, NY 12009

Background: According to Presenter, the former owner's family had the farm for generations and the house is about 125 years old. The Silvestris bought the property in January this year from Antonia Crounse (former owner's name is still on the tax rolls with an address in the Netherlands). The size of the subdivided lot on which the existing house is located is around two acres but the Applicant contends that this smaller size lot of less than three acres is allowed

under a one time only provision of the Town rules. If this is not the case, there is plenty of room for the lot to be made about an acre larger.

Topography: Presenter described acreage as very flat with a 20 ft. elevation to the west road. Initial observation by GCAC indicates both sides of Brandle Road appear to be quite level although there is an increase in elevation on both sides as you go toward the east and west boundaries. The contour map from the County interactive mapping site shows that the elevation near the northeast corner and on most all of the east side of Brandle Road is at or near 380 feet Above Mean Sea Level (AMSL); along Brandle Road the elevation is around 390 ft. AMSL; and midfield on the west side the elevation is 400 ft. AMSL. To the west along the railroad tracks, the elevation is 400 ft. to 410+ ft. AMSL and rises to approximately 440 ft. AMSL on the west border of the property at Route 156.

Vegetation/Trees: According to the Presenter, the acreage is mostly light wooded consisting of locust, oak, maple and a few pine; and at least part of it, some on the west side, and was logged a couple of years ago. While only actually walking a small portion of the acreage, GCAC noted that the wooded area along Brandle Road appears to have primarily medium size deciduous trees with a few pine. A few of the trees are quite large. Even if a future residence is built on the large lot, there is considerable space to the south of the existing residence to accommodate a house without the need of cutting down any of the trees. If, because of zoning rules requiring the small lot be three acres, there is room to the north to do so.

Soil: According to the Presenter, the soil is described as clay. A review of Sheet Number 17 in "Soil Survey of Albany County, New York" -1992 – by James H. Brown as well as the soil survey map on the USDA website indicates there are eleven different soils on the site. On the east side of Brandle Road , at the north corner there is an area of Ma soil which extends about one third across the north boundary and narrows to a point a little beyond half way down the rear portion of the lot. For almost two-thirds of this distance there is a narrow strip of BuA soil along the boundary which continues a little wider at the end of the Ma area and continues to the south east corner. To the east of the Ma area there is a large area of MbB extending across most of the remaining north border and tapers in width to a blunt point before reaching halfway down the lot. To the west of this MbB area is a HnB area which extends about half way down the lot and across the Road halfway along the upper north boundary of the west portion of the acreage. On the east side of Brandle Road, there is a large area of In soil below the mentioned MbB and Ma areas. The In area covers between 1/4 and 1/3 of the east side and extends across more than 2/3 of the south boundary of the east side. At the lower southwest corner of the east side there is a small area of BuA soil. Above this (to the north) is an area of ScA soil which extends a little over one quarter of the way into the east side. This ScA soil crosses Brandle Road and covers an area on the west side of the Road most of the way back to the railroad tracks and to the north to approximately the area of the proposed lot for the existing residence. To the north of this ScA area is an area of VaB soil which extends about I/3 into the east side and crossing Brandle Road

and covers a diagonal area which covers about half of the upper portion of that part of the west side of the acreage. Besides the area of HnB already mentioned on the west side there is also another area of HnB which is wedge shaped pointing downward about halfway down near the upper west part of the lot. Between these HnB areas there is a finger of Ae soil extending almost 1/3 down the lot to the south. A narrow strip of RhA soil runs along the west boarder of the upper west section and extends downward to the south on both sides of rhe railroad tracks and covers about one-half of that area including the railroad tracks. To the south of this is an area of ChA soil. To the west of these RhA and ChA areas is RhB soil which covers most of the remaining area west of the railroad tracks except for a small area of RhA which juts in from the north along the north border of this portion of the lot.
- A brief description of these soils and some of their limitations as noted in the Soil Survey source book is as follows. **Ae - Allis silt loam** – This nearly level soil is moderately deep and poorly drained. The seasonal high water table in this soil is at a depth of less than 1 foot and is perched on the silty clay loam subsoil from November through June. The seasonal high water table limits rooting depth. Bedrock is 20 to 40 inches below the surface. Permeability is slow to very slow. Available water capacity is moderate, and runoff is slow. Most areas of this soil is brushland. The limitations of this soil on sites for dwellings with basements are the seasonal high water table and depth to bedrock. Installing subsurface drains around footings and foundations will lower the water table. Adding fill material to elevate the floor of dwellings without basements above the surrounding ground level and grading to divert surface water will also reduce wetness. 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 will reduce wetness and prevent the road damage that the seasonal high water table causes. Providing a suitable subsurface or base material will improve soil stability and strength. 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 depth to bedrock. Specially designed systems will overcome the moderate depth to bedrock and the seasonal high water table. Drainage around the filter field and diversion of surface water from higher areas

will reduce wetness. The hardness of the local bedrock will influence costs. Other soils that are deeper and better drained in the nearby higher landscape. **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.

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. According to the soil survey reference book sited, a specially designed septic tank absorption field, including drainage around the site, will adequately filter effluent. **ChA - Chenango gravelly silt loam, loamy substratum, 0 to 3 percent slopes.** This nearly level soil is very deep and well drained or somewhat excessively drained. It is on glacial outwash terraces. The seasonal high water table is at a depth of more than 5 feet in most areas. The soil is subject to rare flooding. Depth to bedrock is more than 60 inches. Permeability is moderate or moderately rapid in the subsoil and moderately rapid in the substratum. The available water capacity is moderate, and surface runoff is slow. Rare flooding is the main limitation of this soil on sites for dwellings with basements. Nearby soils that are higher on the landscape and not susceptible to flooding, such as the more sloping areas of Chenango soils, are better suited to this use. The main limitation of this soil for local roads and streets are rare flooding and the frost-action potential. Constructing roads on fill composed of coarse-grained subgrade or base material raised above flood levels will reduce flood damage and frost action. The main limitations affecting the use of this soil as a site for septic tank absorption fields are rare flooding and slow percolation in the subsoil. Nearby soils that are not subject to flooding, such as the more sloping areas of Chenango soils, are better suited to this use.
In – 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.
Ma – Madalin silt loam – This nearly level soil is very deep and poorly and very poorly drained. It is in depressions on plains and near hillsides. Areas of this soil are long and narrow or irregularly shaped and range from 5 to 80 acres

in size. Slopes range from 0 to 3 percent. The seasonal high water table of this Madalin soil is at a depth of less than ½ foot between November

and June. Depth to bedrock is more than 60 inches. Permeability is moderately slow in the surface layer, slow in the subsoil, and very slow in the substratum. The available water capacity is high. This soil is poorly suited to cultivated crops. The seasonal high water table is a limitation. Closely spaced subsurface drains in combination with open ditch drainage lower the water table, Drainage outlets are generally difficult to establish because of the basinlike topography of this soil. A conservation tillage system, cover crops, and tillage at the proper moisture content help maintain soil tilth and organic matter content. This soil is moderately suited to pasture. Rotation grazing, proper stocking rates, and restricted grazing during wet periods help keep the pasture in good condition. The main limitation of this soil 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, the low strength, and the frost-action potential. Constructing roads on raised fill material and installing drainage systems will increase soil strength. Providing grained subgrade or base material to frost depth will 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 and slow percolation. Adjacent soils that are higher on the landscape are better suited to this use. Septic systems on the higher areas of this Madalin soil and on areas of better drained included soils will adequately filter effluent. 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.

MbB – Manlius channery silt loam, 3 to 8 percent slopes - This gently sloping soil is moderately deep and well drained to somewhat excessively drained. Depth to bedrock is 20 to 40 inches. It limits routing depth to 20 to 24 inches. Permeability is moderate. The main limitation of this soil on sites for dwellings with basements is the depth to bedrock. The areas of included soils and nearby soils that are deeper to bedrock are better suited to this use. On this Manlius soil, placing the building on the bedrock and adding fill to landscape around it or ripping the weathered shale are suitable management practices. The main limitations of this soil for local roads and streets are the moderate depth to bedrock and a moderate frost-action potential. Carefully planning roads will avoid cutting grades into bedrock. However, the bedrock is generally highly weathered and easy to rip with typical construction equipment. Providing coarse textured subgrade or base material to frost depth will reduce the frost action. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the depth to bedrock. Adding soil material suitable for an absorption field is needed. Septic tank absorption fields in areas of included soils that are deeper to bedrock will properly filter effluent. **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. **ScA Scio silt loam, 0 to 3 percent slopes**. - This nearly level soil is very deep and moderately well drained. Seasonal high water level 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 slow. 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. 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.

VaB – Valois gravelly loam, 3 to 8 percent slopes – This gently slopping soil is very deep and well drained. It is on low-lying, gently rolling till plains. 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 in the surface layer and subsoil and moderate to moderately rapid in the substratum. The available water capacity is moderate, and runoff is medium. This soil is well suited to cultivated crops. It is among the best suited soils in the county for food and fiber production. Rock fragments are a slight limitation to cultivation. Erosion is a slight hazard. This soil has no limitations on sites for dwellings with basements. The main limitation of this soil for local roads and streets is the frost-action potential. Constructing roads on coarse textured, raised fill material will reduce the frost-action potential. The main limitation affecting the use of this soil as a site for septic tank absorption fields is slow percolation. Enlarging the absorption field or the trenches below the distribution lines will improve percolation.

Drainage/Wetlands: Presenter noted the drainage is from west to east and south. The contour lines as used in describing the above topography are indicative that the natural drainage would mainly be toward the east with some drainage coming in a southwest direction along the eastern boundary toward the area where there is a considerably large area of wetlands which covers most of the east half of the acreage on the east side of Brandle Road as shown on the U.S. Fish and Wildlife Service National Wetlands Inventory map. County Interactive Mapping shows flood

plain zone covering an even larger area comprising of approximately half of the total area on that side of the Road and extending as far west as the rear portion of the lands of Jones. Presenter also made note that there are one or more watercourses on the property. The wetlands inventory map show a watercourse or stream running adjacent to the railroad tracks at varying distances which appears to flow southeastward and feeds into the Black Creek which runs parallel to and a short distance south of the southern border of the property.

Septic/Wells: According to Presenter, the existing residence has septic system and well water. He further noted that there is a water line along Brandle Road.

Visual Impact: None according to Presenter. If another residence was to be developed along Brandle Road, GCAC feels it would have minimal visual impact on the community due to the amount of woodlands and the comparatively level terrain on which it most likely would be built. It may be advisable to have the color of the structure and the color of the roof of a color which blends in with the environment in an effort to minimize the visual impact when looking down at the site from the Helderberg Escarpment.

Endangered Species: Since there is no planned development at this time, Presenter feels there would be no impact on endangered species. None observed by GCAC at time of the site visit.

Historical Considerations: According to Applicant, there is a family grave site to the north of the residence across the road from the Jones. Allen Jones, who was working in the Applicants' garden at the time of the site visit, pointed GCAC in the direction of the cemetery north of the residence. GCAC walked a short distance through the woods and observed a small burial site amongst the trees in the woodland. It had been noted at the time of the April 11th presentation that the existing house is about 125 years old which may make it of some historic significance. A review of the 2008 Residential Inventory obtained from the former Town Assessor shows that the structure is one of the older buildings in the Town having been built in 1829. This should be taken into consideration and the Town Historian be so notified if any modifications are planned for this structure.

Submitted by: _____

John G. Wemple, Jr. - Chair GCAC