To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: January 7, 2013

Re.: Black Creek Associates, 3483 East Lydius St., Schenectady, NY 12303

#### APPLICATION

Applicant(s): Black Creek Assoc., 14 Avalon Way, Altamont, NY 12009

Proposed Subdivision: A proposed two lot subdivision of 6.9 acres.

Location: In the northeast portion of the Town on the northeast side of East Lydius Street approximately midway between Brookview Drive and Siver Road.

Zoning: R-40.

# **Site Inspection Summary:**

Site Inspection Date: December 29, 2012

Meeting Attendees: Presenter, Paul Sciocchetti; GCAC Members David Heller, Gordon McClelland, Steven Wickham and John Wemple, Chair. (December 17, 2012)

Inspected by: GCAC Members Stephen Albert, David Heller, Gordon McClelland, Stuart Reese, Steven Wickham and John Wemple, Chair. It should be noted that no one presented themself at the time of site visit to represent the owner/applicant.

**Conclusions:** GCAC noted a discrepancy in the size of the lot. Presenter claims that it was discovered at the time of the earlier subdivision that the total acreage was actually larger than what had been originally understood. As a result, Presenter's lot was enlarged to 6.94 acres instead of the 5.4 acres shown on the Town Tax map. Also, five years ago, when GCAC reviewed the property, there was a pond on the front portion of the property between the house and the road. Site drawing now shows this as filled in. Presenter's explanation is that it wasn't really a pond but the result of a dam which has since deteriorated resulting in what appears today. At time of December 29<sup>th</sup> site visit, there was no pond but a stream and a good size area adiacent to it which could accommodate a pond if the stream was again dammed up. As noted under the Topography section, major excavation may be needed to accommodate an area to build the proposed residence on Lot 1. It may be more practical to move the location of both planned dwellings to the east and adjust the lot lines to accommodate this move. If the plan follows through as shown on the drawing, close supervision will be needed at every stage of development to guarantee that proper excavation techniques are used, an appropriate storm water plan is in place, and septic systems for the two lots are appropriately designed to avoid seepage to the stream. As in any major excavation, special considerations will have to be made related to the types of soil on the property and their limitations as noted in the Soil section of this review. Similar to the 2007 GCAC Inspection, it was noticed that there is a very steep drop off at the rear of the lot which is another factor for consideration in the planned excavation.

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GCAC would have little problem in recommending approval of the two lot subdivision if (1) the proposed dividing line for the lots was moved about 4 or 5 feet to the northwest, (2) the existing dwelling on Lot 2 were upgraded and made livable and (3) the existing barn on Lot 1, which the presenter plans to save, were converted into a residence. End result would cause a minimal amount of disturbance to the property, could utilize the existing driveway for both lots and would retain the rural setting of this picturesque homestead. An alternative would be to build the two new proposed houses closer to the Road than shown on the drawing whereby Lot 1 house would be where the existing large barn stands and Lot 2 house would be closer to where the existing house stands. Existing shared driveway would be utilized in both cases to minimize stream disturbance.

As noted in the Topography section of this report, GCAC has concerns related to the possible extensive excavation plan which would be necessary to carve out a large portion of the hill to accommodate the proposed houses especially if the locations of these two dwellings are even further back as noted by the Presenter.

If final decision is to allow the plan to go forward whereby the houses would be built into the hilled area, it would be prudent to require the applicant to provide drawings showing the resulting contour lines of the property and to include a storm water management plan whereby the stream and surrounding area would be protected from runoff and pollution. The path of the stream on the property should likewise be well defined.

Of further note – At time of 12/29/12 inspection, it was observed that one of the sheds contains old gas and oil cans which will need care in disposal thereof to avoid toxic spillage when the site is cleaned up.

Submitted by:	
	John G. Wemple, Jr Chair

### **INSPECTION DETAILS**

Applicant(s): Black Creek Assoc.

Address: 3483 East Lydius Street,
Schenectady, NY 12303

**Background:** According to Presenter, Paul Sciocchetti, plan is to subdivide the property into two lots. One lot would be for the daughter of his partner. Partner is a builder. The present house, which Presenter states is not habitable and has no bath room, would be torn down as well as the other out buildings except for the large barn. At this time, the plan for driveways is undecided since there is possibility of having shared driveways or maybe to use the current driveway for Lot 1 and possibly have a driveway further to the east of where it is shown on the site drawing for Lot 2. Presenter also spoke of the possibility of using a new type semi-circular culvert over the stream which runs along part of the front portion of property. Plan is to have the one house in the \$360G-\$370G price range and the other in the \$430-\$440G price range..

**Topography:** Presenter sees possibility of having excavation work done to level off the front portion of the property and some of the hill although he realizes that the hill is needed as a buffer from the noise of the Thruway which runs along the rear of the original parcel. Using the contour lines on the current site drawing as well as the contour lines in the 2007 subdivision map, the front portion of the property is relatively flat with present buildings situated between 310 and 320 ft. Above Mean Sea Level (AMSL). Toward the road and in a south direction the property slopes downward toward the stream and then upward where it is 320 ft. AMSL at its south corner near the E. Lydius Street. Plan drawing shows the location of the new house on Lot 2 about fifty feet to the rear of the old house. This would be in an open area at about the same elevation as the old house, although this house as well as the one on Lot 1 may end up being built further back into the hill area. From the area shown on the drawing where house on Lot 2 is proposed the terrain rises rather rapidly going from approximately 320 ft. AMSL to the top of the hill where elevation is 370 ft. AMSL in a matter of just 200 feet thus equating this to a slope of 25 percent and an angel of repose of 14+°. From the top of this hill, which is about 450 feet northeast of the Road, the terrain slopes downward in a southern direction to the road and toward the east and northeast. Most of the hill is actually on Lot 1 with Lot 2 having the lower portion of the southeast side of the hill. At the time of the December 29<sup>th</sup> site visit, it was observed that at the very front of the property, there is a sizable stream bed which flows to the west. North of the stream, there is an area which is relatively flat with a slope to the south. Beyond the house and out buildings, the land also has small slope to the south but the percent of upward slope quickly increases especially to the rear of the big barn which has a large retaining wall near it. This wall was apparently needed as a precaution against possible erosion. To accomplish the proposed plan for the two lots and there respective dwellings, GCAC feels there would be a need for major excavation which would result in much of the hilled area to the rear of the barn being taken down. The result of this would likely cause unwanted slippage of what remains of the hill as well as pollution to the stream. Since the rear portion of the hill may have already endured some major excavation resulting in a severe drop in elevation, extensive excavation to the front of the hill may cause an unnecessary and unwanted test of the it's integrity. Along with such excavation, removal of a large number of trees on Lot 1 would result in increased stormwater runoff

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<u>Vegetation/Trees:</u> While the front portion of the lot where the current house, barns and out buildings are located has a limited number of trees, there is much brush along the stream which meanders along this low area along East Lydius Street before going under the road to the southeast side of the road. Beyond the existing house, there is a large area on the hill which appears to have already been cleared possibly in preparation of future development. To the west and north of this cleared area, there is a wooded area leading up to the top of the hill.

**Soil:** According to the Presenter, he thinks the soil is sandy.

A review of soil data from Sheet Number 11 from "Soil Survey of Albany County, New York" - 1992 - by James H. Brown shows that there appears to be four different soils on the property. Front portion of Lot 1 has HuE soil. This extends back about 50 feet from the Road at the west corner and about 125+ ft. along the south corner. Beyond that area most of Lot 1 has CoD soil except for possibly a small wedge of St soil at its north corner and a narrow strip of St soil along its northeast border with Lot 2. Besides a small area of this St soil at the rear of the lot, most of Lot 2 is covered with CoD soil although the front portion has a strip of St soil about 75 ft. to 100 ft. wide through which the stream appears to flow and to the south of that a strip of CoC soil about 50 to 100 feet wide. These two strips of St and CoC soil abut an area of HuE soil to the west which is about 50 feet wide along this portion of the lower northwest boundary of Lot 2. A brief description of these soils and some of their limitations follows.

HuE - Hudson silt loam, 25 to 45 percent slopes (HuE). 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 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 to very slow below. The available water capacity is high. In many areas along large streams, the soil is susceptible to landslides and slumps. 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. The author notes the included soils in this unit and nearby soils that are less sloping are better suited to this use. 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.

CoD - Colonie loamy fine sand, hilly This soil is very deep and well drained to somewhat excessively drained. Slopes range from 15 to 25 percent. Typically the surface layer is dark brown loamy fine sand about 7 inches thick. The subsoil is 61 inches thick. The substratum is brown loamy fine sand to a depth of 80 inches or more. The seasonal high water table in this Colonie soil is at a depth of more than six feet, but it may fluctuate to a depth of forty inches for very brief periods in early spring. Depth to bedrock is more than sixty inches. Permeability is moderate rapid to rapid. The available water capacity is low and surface runoff is rapid. The main limitation of this soil on sites for dwellings with basements is the slope. The main limitation for local roads and streets is also the slope. The slope increases the cost of grading and excavating. Constructing roads on the contour whenever possible or land shaping and grading help overcome the slope limitation. In some areas, if the vegetative cover has been removed, wind erosion is a hazard. The main limitation affecting the use of this soil as a site for septic tank absorption fields is the slope. This soil is moderately rapidly or rapidly permeable and is a poor

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filter for effluent. Consequently, ground-water contamination is a hazard. A specially designed septic tank absorption field or an alternative system will properly filter the effluent. In most areas land shaping is needed to install the distribution lines on the contour. Other soils are less sloping and are moderately permeable and are better suited to this use.

St - Stafford loamy fine sand -This nearly level soil is very deep and somewhat poorly drained. Seasonal high water table is ½ ft. to 1 ½ ft. below the surface from January to May. Depth to bedrock is more than 60 inches. This soil is moderately suited to cultivated crops. The seasonal high water table can cause delays in farming operations and is the main management concern. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Foundation and footing drains reduce wetness. Adequately sealing foundations and grading the land so that runoff is diverted from the site also reduce wetness. The soil is better suited to dwellings without basements. For local roads and streets the limitation is also the seasonal high water table. The main limitation of this soil for local roads and streets is the seasonal high water table. Constructing roads on raised fill of coarse textured material will reduce wetness. Excavations and cutbacks in this soil are subject to sloughing and caving. The main limitations affecting the use of this soil as a site for septic tank absorption fields are the seasonal high water table and a poor filtering capacity. The soil is a poor filter of effluent. Consequently, ground-water contamination is a hazard. A specially designed septic tank absorption field or an alternative system will properly filter the effluent.

CoC – Colonie loamy fine sand, rolling – This rolling soil which is very deep and well drained to somewhat excessively drained. Slopes range from 8 to 15 percent. The seasonal high water table in this Colonie soil is at a depth of more than six feet, but it may fluctuate to within 3 ½ feet of the surface for very brief periods in early spring. Depth to bedrock is more than 60 inches. Permeability is moderately rapid or rapid. The available water capacity is low, and surface runoff is medium. The main limitation of this soil on sites for dwellings with basements is the excessive slope on rolling topography. Designing dwellings to conform to the natural slope or landscaping helps overcome this limitation. The main limitation of this soil for local roads and streets is the slope. Grading and excavation costs are higher than in lesser areas of Colonie soils. Constructing roads on the contour wherever possible or landscaping and grading help overcome the slope limitation. The main limitation affecting the use of this soil as a site for septic tank absorption fields is a poor filtering capacity. The soil has moderately rapid or rapid permeability and so is a poor filter of effluent. Consequently, ground-water contamination is a hazard. A specially designed septic tank absorption field or an alternative system will properly filter the effluent. Other soils that have a moderate permeability rate are better suited to this use.

<u>Drainage/Wetlands:</u> According to the Presenter, drainage is more to the south than to the southwest. As indicated above, contour lines show this to be the natural direction for the drainage. Although on the 10/29/12 Application for Subdivision form, no wetlands is indicated; due to the amount of snow on the ground at the time of the December 29<sup>th</sup> site visit, it was difficult to determine to what degree wetlands may exist adjacent to the stream.

<u>Septic/Wells:</u> Plan is to connect to Town water from the west. Presenter doesn't appear to envision any problem in having septic tanks since he claims there are great perculations on the property.

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<u>Visual Impact:</u> Due to the trees on the adjacent property, visual impact of the development should be minimal. It is unfortunate that the plan does not include rehabilitating the existing buildings and connecting modern sanitary facilities. As an alternative, the replacement of the house and out buildings with new dwellings may add to the update appearance of the neighborhood. If the development of this property results in removal of much of the hill, adverse appearance of the resulting landscape may have an adverse effect on the neighborhood.

**Endangered Species:** Presenter claims no Karner blue butterflies and is not looking to disturb the rear part of the property where they may be. Also no Indiana bats claimed. With the amount of snow on the ground, GCAC did not see any endangered species.

<u>Historical Considerations:</u> Presenter claims no cemeteries or Revolutionary War relics on the property. GCAC did not see anything of historical significance other than possibly the old barn at the time of the December 29<sup>th</sup> site visit.

Submitted by:	
	John G. Wemple, Jr Chair