To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: March 22, 2016

Re.: Davis – Millard Lane Schenectady, NY 12303 (Owner – Eileen Edwards)] [1321 Kings Road,

APPLICATION

Applicant(s): Brendon P. Davis, 15 Norwood Ave., Albany, NY 12208 (grandson of owner)

Proposed Subdivision: A proposed two lot subdivision of 48.8 acres.

Location: Property is located near the northeast boundary line of the Town adjacent to Colonie near the intersection of Kings Road and Curry Road Extension.

Zoning: R40 (Noted as R-15 on Application)

Site Inspection Summary:

Site Inspection Date: March 19, 2016

Meeting Attendees: Applicant Brendon Davis and his wife Lauren ; Board Member Lee Carman; and GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz and John Wemple (Chair).

Inspected by: Applicant Brendon Davis and his wife Lauren and Applicant's brother Austin and GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz, Stuart Reese and John Wemple (Chair).

<u>Conclusions</u>: Having listened to the Applicant's presentation of his plan for a small lot on the acreage along with the site visit of March 19th, GCAC concludes that there does not appear to be any significant environmental impact expected when this relatively small 200' X 250' lot is developed. This is provided appropriate steps are taken in placement of the well and septic system as well as providing for an appropriate stormwater management plan in relation to excavation on Lot 2 especially related to the ridge on that lot. Prior to finalizing the plan for excavation, consideration should be given to the advantage of retaining as much as possible of the ridge or dune. The ridges on the property can act as buffers against wind storms which can easily rip up such trees as locust. The ridges can also slow stormwater runoff. GCAC observed some evidence of troughs which appeared to have been dug by runoff on the Lot 2 side of the dune.

Even though the temperature was close to freezing at the time of March 19th site visit, ticks were evident. Since the property is so heavily wooded, ticks may be of concern for the Applicant.

Submitted by:

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): Brendon Davis, grandson of Owner Eileen Edwards of 1321 Kings Road

Address: B. Davis of 15 Norwood Ave., Albany, NY 12208

<u>Background:</u> According to Applicant, family has owned the property since about 1950, Property has already been subdivided to accommodate separate small lots for his father, and uncle and aunt. His grandmother, who owns the property to be subdivided, lives along Kings Road. Applicant plans to have a lot 250' X 200' (referred to as Lot 2) next to the existing lots on private road, Millard Lane which is off Kings Road near the intersection of Curry Road

Extension. Plan is to build a home on the lot possibly be the end of summer. Home would be approximately 1,800 sq. ft. plus a garage and would located to the southwest of center on the lot using a ridge which runs along the north east portion as a privacy barrier. For this report, the large remaining acreage will be referred to as Lot 1.

<u>Topography:</u> The lot is relatively flat according to the Applicant. As could be noticed when GCAC walked and observed the site, it is flat in certain large areas but the terrain can be described as rolling as is noted in the type soil which covers most of the acreage, mainly CoC (Colonie loamy fine sand, rolling with slopes ranging from 8 to 15 percent). At the northeast portion of the new small lot (Lot 2) there is a ridge which has an elevation about 25 to 30 feet higher than the existing house to its northeast. The slope from this ridge gradually slopes downward to the southeast to a relatively flat area making up the remainder of Lot 2. Walking to the southeast from Lot 2, the terrain gradually rises to another elevated area. To the southeast of Lot 2, there is a considerable amount of flat area which could be considered as a location for future building lots. In the development of Lot 2, there is a possibility that some of the ridge may be excavated to make the Lot more level but this will need to be explored more fully when the Applicant has more topographical information.

<u>Vegetation/Trees:</u> According to Applicant, the open space on the large lot is wooded and contains mainly locust trees as well as cherry. He feels that development of the small lot will have minimal impact on the vegetation. When Lot 2 is developed it will be necessary to remove a goodly amount of the locust trees for the house and garage as well as for a suitable driveway. It should be noted that most of the trees observed by GCAC at time of site visit were locusttrees and that the diameter of many of the trees was about seven to eight inches.

Soil: Applicant said soil is relatively sandy. A review of soil map number 12 from "Soil Survey of Albany County, New York" -1992 – James H. Brown as well as the soil map from the USDA website indicates there are four different soils on the site – CoA, CoC, CoD and EnA. Most of the acreage, including the new small lot on Millard Land, is covered with CoC soil with the following exceptions. The north corner of the new lot on Millard Land has a small area of EnA soil as does most of the roadway in front of the Millard Lane residences. A strip of EnA soil runs across an area near the north corner of the acreage. There are also fingers of EnA which extend into the area along the south east border. Likewise there is another EnA area, about 250 ft. wide that juts about 100+ ft. into the acreage along the north west side near the rear of the acreage. There is an area of CoD soil along Kings Road that extends about 250 ft. into the property. An area about 200' X 300+' of CoA soil extends diagonally across and near the rear south corner. A brief description and some of the limitations of these soils, as noted in the Soil Survey text are as follows. CoA - Colonie loamy fine sand, 0 to 3

percent slopes. This nearly level soil is very deep and well drained to somewhat excessively drained. The seasonal high water table in this Colonie soil is at a depth of more than 6 feet, but it can fluctuate to a depth of 3 ¹/₂ feet for very brief periods

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in early spring. Depth to bedrock is more than 60 inches. Permeability is moderately rapid to rapid. The available water capacity is low, and surface runoff is slow. This soil is well suited to cultivated crops. It is among the best suited in the County for food and fiber production. This soil is also well suited to pasture. The author notes that this soil has no limitations on sites for dwellings and for roads and streets. He further notes that droughtiness is a problem for establishing and maintaining lawns and shrubs. The main limitation affecting the use of this soil as a site for septic tank absorption fields is a poor filtering capacity. Permeability in this is moderately rapid or rapid, so the soil is a poor filter of effluent from septic tank absorption fields. Consequently, ground-water contamination is a hazard. A specially designed septic tank absorption field or an alternative system will properly filter effluent. Other soils that have a moderate permeability rate are better suited to this use.

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. 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 foe septic tank absorption fields is the slope. This soil is moderately rapidly or rapidly permeable and is a poor 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. EnA - Elnora loamy fine sand, 0 to 3 percent slopes This nearly level soil is very deep and moderately well drained. Seasonal high water table is at a depth of 1 ½ to 2 feet from February to May. Depth to bedrock is more than 60 inches. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Installing foundation drains, applying protective coatings to basement walls, and diverting surface water away from dwellings help prevent wet basements. Main limitations for local roads and streets are moderate frost action potential and seasonal high water table. Adequate drainage of surface water and constructing the

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road on a course textured subgrade or base material help overcome these limitations. The main limitations of this soil on sites for septic tank absorption fields are the seasonal high water table and a poor filtering capacity. This soil is rapidly permeable and is a poor filter for effluent. Consequently, ground-water contamination is a hazard. The author notes that a specially designed septic tank absorption field or an alternative system will adequately filter the effluent. Other less sandy soils in the higher landscape positions are better suited to this use.

<u>Drainage/Wetlands</u>: Applicant states there are no ponds nor wetlands and that drainage is good. On Lot 2 the drainage appears to be toward the southwest which is down the ridge in that direction. At time of March 19th site visit, there was no standing water, wetlands or ponds observed by GCAC. There were a couple possible small drainage ditches down the slope on Lot 2 but these could also have been just the end result of possible vehicle tracks. From what GCAC observed, the area for development and the immediate area around it appeared to be quite dry at time of site visit. Only damp area observed was on the roadway leading toward Lot 2 which was a little bit muddy.

<u>Septic/Wells:</u> Plan is to have well and septic system. According to the Applicant, there has been no problem on the property related to septic system nor water. This is on the basis of the experience relatives living in close proximity of Applicant's planned lot with actual testing yet to be done. Reportedly it has only been necessary to go down about fifteen feet to hit water. County Health Department should be consulted by the Applicant or developer when planning for well and septic system to have assurance that water and septic system are done according to required specifications.

<u>Visual Impact:</u> Minimal visual impact due to the rider which runs along the northeast portion of the new lot. From GCAC's observation, at time of site visit, the impact of developing Lot 2 should have minimal visual impact, if any, on the neighbors. The thickness of the forest, especially when filled with foliage, along with the proposed location of the residence on Lot 2, should minimize neighbors seeing much if any of the structures.

Endangered Species: No Indiana bats or Karner blue to Applicant's knowledge. No endangered species observed by GCAC at time of March 18th site visit.

<u>Historical Considerations</u>: No old cemetery or Indian artifacts on the property as far as Applicant knows. Nothing of historical significance observed by GCAC at time of site visit. It could be of value if there are any known historical surveys pertaining to the Kings Highway that include any details related to the Millard Lane property.

Submitted by:

John G. Wemple, Jr. - Chair