To: Guilderland Planning Board

From: Guilderland Conservation Advisory Council

Date: January 25, 2016

Re.: Fuller Station Road Subdivision

APPLICATION

Applicant(s): JTR Realty LLC, Fuller Station Road Subdivision, 376 Broadway, Schenectady, NY 12305

Proposed Subdivision: A proposed __60____lot subdivision of __100.1____acres.

Location: Property is located near the intersection of West Old State and Fuller Station Roads about 1 ¼ mile east of the Watervliet Reservoir in the northern section of the Town.

Zoning: R-40.

Site Inspection Summary:

Site Inspection Date: January 16, 2016

Meeting Attendees: (January 11, 2016) Presenter Jamie Easton; Town Board Liaison Lee Carman; GCAC Members Martin Gnacik, Martha Harausz, Stuart Reese and John Wemple (Chair).

Inspected by: Presenter Jamie Easton; GCAC Members Stephen Albert, Martin Gnacik, Martha Harausz, Stuart Reese and John Wemple (Chair).

Conclusions: In reviewing the conventional plan, GCAC noted Lots 3 and 4 appeared as being primarily wetlands with little space for a residence but Presenter noted the residence structures could be long with little depth and thus could fit on the buildable area of those lots. He also noted that the buildable area on Lot 8 could be accessed via a bridge which he noted might not be practical but would be possible. The second Lot 33 should be renumbered as Lot 35. Presenter noted the roadway for the development would be a Town Road. Furthermore, the driveway which goes from the existing residence and barn on West Old State Road would be abandoned and that residence would hook into the new subdivision roadway. As the site is developed and this existing driveway to the large barn or storage building is abandoned, provision needs to be made to negate the need for using the new residential roadway for transporting construction equipment which may be stored on Lot 59 at that time. There is an existing easement for egress/ingress for a neighbor who has landlocked property along the north boundary would continue. There will also be a deed restriction related to Lot 60 whereby there would be no further development. If the cluster plan is decided upon, the question arises as to whether or not the undeveloped portion of Lot 60 would be open to the Home Owners Association; and if so, what kind of access would be offered to avoid traveling onto Fuller Station Road. GCAC's main concern for this development is the question of stormwater management primarily due to the high number of lots in the subdivision. GCAC does not object to the proposal provided that a solid stormwater management can be included showing that there will not be any adverse runoff

to neighboring properties nor in the direction of the Watervliet Reservoir. Another concern is the location of the entrance to the development on Fuller Station Road due to limited sight distance. Thus, the Highway Department should be consulted to determine if moving the entrance to the south, as suggested by the Presenter, is a possible solution. Of further concern is whether or not West Old State Road can support the added traffic. The Highway Department should also be consulted for a solution which could provide for widening at least a portion of this highway to provide for safer pedestrian traffic and a possible breakdown lane.

Submitted by: _____

John G. Wemple, Jr. - Chair

INSPECTION DETAILS

Applicant(s): JTR Realty LLC, Fuller Station Road Subdivision

Address: 376 Broadway, Schenectady, NY 12305

Background: According to the Presenter (Jamie Easton), the property consists of two parcels with most of the development being on the larger (80.5 acres) plot. His description of the land is that it used to be farmland for hay and row crops including tomatoes, peppers, etc. until about twenty years ago. It is quite possible that the acreage was all part of a much larger farm since the adjacent parcel along West Old State Road co0ntains a structure built in 1780 and was coded as field crops in the Town Assessor's file. Plan is to combine both two parcels, which are owned by the same person, and develop them into a sixty lot cluster with all lots being approximately 100' by 200' except two lots on which the existing residences are located. These two existing lots would have considerably larger lots and would not be effected much by the proposed development.

Topography: The property has open fields and a sizable treed area. The wooded area is mainly to the north and west of most of the planned development with about a third of the lots being in a wooded area at the north west portion

of the property. At the time of the site visit, GCAC noted that overall slope of the property is from the northern portion of the Fuller Station Road parcel downward toward the residence to an area near the south corner where there is a slight elevation and then the slight slope continues downward as we entered the main West Old State Road parcel. A review of the topo map from topoquest.com, which shows USGS Map of Voorheesville Quadrant, indicates the high point on the property is within the treed area slightly south of the west corner of the Fuller Station Road parcel where the elevation is noted as 317 ft. Above Mean Sea Level (AMSL). Across the fields of the large parcel the elevation gradually drops from around 310 feet AMSL to 300 feet AMSL. In general this relatively flat, gradual sloping terrain continues on the area of the planned development. It was further noted that in the area of proposed lots 47 and 48 the field is a little more sloped downward toward the south border. One other feature which GCAC noticed was a long mound which is a short distance from the barn area of the W. Old State Road residence.

Vegetation/Trees: Presenter note that the property is generally rolling to the south and the portion earmarked for development is an open filed. The property has open fields and a sizable treed area of woods that is mainly on the north and west portion of the acreage. It had been originally understood by GCAC that development would be mainly on the open area but at the time of site visit GCAC became aware that about a third of the lots would be in the wooded area at the northwest end of the larger parcel. Due to the heavy growth of bramble bushes and surface water GCAC found it prudent not to attempt to look at the majority of these lots although from what was observed it appeared that the area is fairly heavily wooded with pine trees that are medium in size. While the plan is to avoid cutting down trees, it is inevitable that many trees would need to be cut down in order to develop this portion of the plan. At time of site visit some of the trees identified were silver maples, pine, locust, oak, apple and birch. Of special interest was a huge tree which was possibly a maple which the Presenter estimated to be around 200 or 300 years old. Tree stands along the south side of the property and appears to be actually on the neighboring property on the south side of the stream.

Soil: Presenter described the soil as highly clay with a perched water table. Subsequent to the presentation, the Presenter provided GCAC with soil maps for both the conventional as well as the cluster plans. Along with these maps, GCAC reviewed the soil survey map from the USDA website as well as the soil map on Sheet Number 11 from "Soil Survey of Albany County, New

York" -1992 – James H. Brown which indicates there are fifteen different soils on the property. In reviewing the cluster map, GCAC noted the following on the individual lots. Lot 1 has Sh soil across the front and about ¾ up the south side. The remaining 2/3 of the property has ElA soil. Lots 2 and 3 have Sh soil except for the southeast corner of Lot 3 where there is EnB soil. Lot 4 has Sh soil except for the front south east third of the lot where there is EnB soil. Lot 5 has EnB soil except for the rear northwest corner where there is Sh soil. This rear triangular shaped area is formed by a diagonal line running from the mid point of the west side to a point on the east side near the rear northeast corner. Lots 6 thru 16 have EnB soil with the following exceptions – Lot 6 has a very small triangle of Sh at its northwest rear corner; Lot 11 has a small triangle of St at the rear coiner; Lot 12 has Sr running across the rear third of the lot; Lots 13 and 14 have small triangles of Sh at the rear. Lot 17 has Sh soil on the south and much of the west side and EnB on the northeast side. Lot 18 has primarily RhA soil other than a wedge of ScA at the southwest corner and a small narrow wedge of Sh to the rear of that along the southwest side. Lot 19 has Sh on the north half formed by a line running from a point about ¼ of the way from the southwest corner along the front of the lot to a point on the southeast side near the east corner. The south side of this Sh area has ElA soil except for a small area along the front which has ScB soil. Lot 20 has ElA soil except for a small wedge of Sh at the north corner and a triangular shaped area of ScB at the front which extends about 50 feet back along the southeast side. Lot 21 has ElA soil to the north of a line running from approximately fifty feet along the northwest side to approximately forty feet from the rear along the southeast side. South of this line is ScB soil. Lot 22 has ScB on most of it other than a very small triangle of ElA at the north corner, Sh along the rear and an area of ScA along forward of this Sh section which extends on an angle from about the mid point to approximately 35 feet from the south corner. Lot 23 has ScA soil on most of the area other than a narrow strip of Sh at the rear and a wedge of ScB at the southwest corner and a wedge of Sh at the south corner. Lots 24 and 25 have ScA soil except for an strip about forty feet wide of Sh at the front and a very small wedge of Sh at the rear north corner of Lot 24. Lot 26, similar to 24 and 25, has a strip of Sh soil along the front. The remainder of this lot has ScA other than the northeast corner where there is approximately 80' by 50' wedge of Sh soil. Lot 27 has Sh soil other than the end of a finger of ScA which extends about one third of the way into the lot along the west side from approximately forty feet back from the front to approximately fifty feet from the rear. Lots 28 – 34 have Sh soil. Lot 35 has Sh soil on most of its area with the exception of a large wedge of CoC along much of the northeast portion. This third of the lot has very small wedge of St at the north corner. This lot also has possibly a small wedge of Cs at the southeast corner. Lot 36 has CoC soil in the midsection on an area running between a diagonal line from a point near the northwest corner to a point almost halfway down the east side to the north of which is St soil. The front portion south of the CoC area is a wedge of Cs along much of

the front and a small wedge of Sh near the southwest corner. Lots 37, 38 and 29 have Cs soil with possibly a small sliver of Fx along much of the south boundary on Lot 37. Lot 40 has Cs on its east half and Sh on the west side. Lots 41 and 42 have Sh soil. Lot 43 has Sh soil on all the lot except a triangular area of Fx at its southwest corner which runs along about ¾ of the rear to a point about sixty feet along the west side. Lots 44 and 45 have Sh soil along most of the lots with lot 44 having an area of Fx across the rear extending between forty and fifty feet inward from the rear; and a similar area of Fx across the rear forming a triangular area extending about forty feet back from the rear on the east side and about fifteen feet back from the rear on the west side. Lot 46 has primarily Sh soil with a small wedge of Fx at the rear south corner and a finger of HuB soil along the west side extending to a point near the center of the lot from a point about thirty feet from the front to about 100 feet further back. Lots 47 and 48 have HuB soil on most of the lots with 25 feet wide strips of Sh along the front of the lots and lot 47 having a triangular shaped area of Sh at the rear south corner which extends about 75 feet from the southwest corner to about sixty feet north of the south corner. Lot 49 also has HuB soil on most of the lot with a large

upside-down L shaped area running along the front north and west sides which has Sh soil. Lot 50 has Sh soil on about 60% of the lot with a rounded wedge of HuB covering the southwest area of the lot. Lot 51 has Sh soil on the front 40% of the lot and the remainder having HuB soil. Lot 52 has Sh on most of the front half and HuB on the rear half with a right triangle wedge of ScA near the mid point of the west boundary and extending about twenty-five feet into the lot. Lot 53 has primarily ScA soil with a wedge shaped area of ScA at its north corner; Sh at its northeast corner and HuB at its south corner. Lots 54 – 56 have ScB soil with lot 54 having about 30% covered by ScA soil at its south corner; and lot 56 a very small area of Sh at its west corner. Lot 57 has Sh soil on the southeast two-thirds of the lot and ScA on the one-third northeast portion of the lot. Lot 58 has ScA on all the lot except for possibly a very small area of RhA soil at the west corner. Lot 59 on which is the West Old State Road residence stands is primarily on Sh soil with a small area of St at the north corner; a finger of ElA soil about 125 feet wide and extends about 140 feet into the lot in the direction from the west; and a small area of ScA along the southwest boundary of the lot. This lot also contains an open area between Lot 22 and 23 on which there is ScA and ScB soils. Lot 60 is the lot on which the Fuller Station Road residence stands and has CoB soil where the house is located. To the north is a large area of St soil with a relatively large area of EnB extending in about 600± feet from the north boundary. To the east of that area and extending across the power line right of way area is EnA soil. To the south of this is the end of a finger of CoB soil to the east of the CoB area on which the house sits is an area of CoC; and to the south along most of the southwest boundary of this lot is a continuation of St soil with the south corner having a small area of EnA soil. A brief description of these soils and some of their limitations as noted in the noted soil survey source book are as follows.

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 intercepter 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. **ElB - Elmridge fine sandy loam, 3 to 8 percent slopes** - This gently sloping soil is very deep and moderately well drained. The substratum extends to a depth of 60 inches or more. The seasonal high water table is at a depth of 1 2/3 to 3 feet perched above the clayey substratum between November and May. Depth to bedrock is more than 60 inches. The main limitation on sites for dwellings with basements is the seasonal high water table. Foundation drains installed above the slowly permeable substratum will lower the seasonal high water table. Protective coatings on basement walls will prevent wet basements. The main limitations of this soil for local roads and streets are low strength and frost-action potential. **ElA- Elmridge fine sandy loam, 0 to 3 percent slopes** –- This nearly level soil is very deep and moderately well drained. Typically, the surface layer is dark brown fine sandy loam about 9 inches thick. The subsoil is 19 inches thick. The upper part is yellowish brown fine sandy loam; the middle part is yellowish brown loamy fine sand; and the lower part is mottled, dark yellowish brown light olive brown clay loam. The substratum extends to a depth of 60 inches or more. It is mottled reddish brown, brown, and pinkish gray silty clay or clay that has varves of grayish brown fine sand. The seasonal high water table in this soil is at a depth of 1 ½ to 3 feet, perched above the clayey substratum between November and May. Depth to bedrock is more than 60 inches. Permeability is moderately rapid in the loamy material and slow or very slow in the clayey material. The available water capacity is high, and surface runoff is slow. This soil is well suited to cultivated

crops. It is among the best suited soils in the County for food and fiber production. The main limitation of this soil on sites for dwellings with basements is the seasonal high water table. Foundation drains installed above the slowly permeable substratum lower the water table. Protective coatings on basement walls prevent wet basements. The main limitations of this soil for local roads and streets are low strength and the frost-action potential. Constructing roads on raised fill composed of coarse textured base material will improve soil strength 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 and slow percolation in the substratum. A specially designed septic tank absorption field or an alternative system will adequately filter effluent. Installing drainage around the filter field and diversions to intercept water from the higher areas will reduce wetness. Enlarging the trench below the distribution lines will improve percolation. **Sh – Shakerfine sandy loam** - This nearly level soil is very deep and somewhat poorly drained to poorly drained. The seasonal high water table is at a depth of less than 1 ½ feet from November to May. Depth to bedrock is more than 60 inches. Permeability is moderately rapid in the surface layer and subsoil and slow or very slow in the substratum. The available water capacity is high, and runoff is slow. The main limitation of this soil for dwellings with basements is the seasonal high water table. Properly designed and installed foundation drains with adequate outlets will lower the water table. The soil is best suited to dwellings without basements. In many areas of this soil suitable outlets for drainage systems are not available. The main limitations for local roads and streets are the seasonal high water table, the frost-action potential, and the low strength of the soil. Constructing roads on raised fill of course textured material will overcome these limitations. 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 drainage around the field and intercepting runoff from the higher areas will reduce wetness. Enlarging the field or the trenches below the distribution lines will improve percolation. **EnB - Elnora loamy fine sand, 3 to 8 percent slopes** - This gently sloping soil is very deep and moderately well drained.– 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 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. The soil is rapidly permeable 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. **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. **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. **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 raced 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. **ScB Scio silt loam, 3 to 8 percent slopes -** This gently sloping soil is very deep and moderately will 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. **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. **CoB – Colonie loamy fine sand, 3 to 8 percent slope -** This gently sloping soil is very deep and well drained to somewhat excessively drained. Typically, the surface layer is dark brown loamy fine sand about 7 inches thick. The subsoil is 61 inches thick. The seasonal high water table in this Colonie soil is at a depth of more than 6 feet, but in some years it fluctuates to a depth of 3 ½ feet 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. This soil has no limitations on sites for dwellings and for local roads and streets. Droughtiness is a problem in establishing and maintaining lawns and scrubs. 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 soil is moderately rapid or rapid, and 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. Other soils that have a moderate permeability rate are better suited to this use. **HuB – Hudson silt loam, 3 to 8 percent slopes** – This gently 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. 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. **Fx – Fluvaquents** - Udifluvents complex, frequently flooded This soil unit consists of very deep, nearly level, very poorly drained to moderately well drained loamy soils formed in recent alluvial deposits on flood plains. These soils are subject to frequent flooding and are commonly wet. Bedrock is generally at a depth of more than 5 feet. Permeability, the available water capacity, organic matter content, and soil reaction vary with the composition of alluvium. County soil survey notes that most of the acreage is used as woodland or pasture or is idle. These soils are not suited to urban uses because of periodic flooding and prolonged wetness. **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 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. **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. 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: According to Presenter, wetlands have been flagged by DEC and Army Corps of Engineers and that there is a 100 foot stream setback along the southern corner of the property. He further stated that the wetlands are considered as isolated and apparently are not of much concern to the corps. He further noted that there is no requirement for a setback buffer for the federal wetlands. Nevertheless plan is follow setbacks suggested by Town Planner and to minimize wetland disturbance. Presenter went on to indicate that the wetland disturbance would be less than ½ acre (estimated as 0.3 acre on soil map provided by the Presenter) on the cluster plan; and about one acre on the conventional plan (estimated as 1.5 + acres of wetland disturbance on soil map provided by Presenter). At start of the site visit, the wet area near the far north end of the property was observed and an area of accumulated water just beyond the improved area of that lot with water running into a culvert which appeared to flow in a south direction to an unknown point, possibly an underground basin. Toward the end of the site visit, GCAC observed the pond, to the south of the W. Old State Rd. residence, which at the time was iced over. A review of the contour lines on topoquest map indicates natural drainage is to the south and west in the direction of the Watervliet Reservoir. A stream runs along the south corner and then just south of the south boundary of the property and appears to flow west-south-west to the Reservoir. Likewise, another stream to the west of the property flows southwest to the Reservoir. Presenter noted that as part of the stormwater management plan, each house will have a sump pump which would direct stormwater to the stormwater management system and then back to mother nature. The plan show that there are two stormwater basins or areas noted along the west side and south west corner of the property. At time of site visit, GCAC noted that the drainage on the open field area was toward the south and south-west-south. Site visit was shortly after a rainy morning and it was easy to see areas of accumulated surface water and run off which was occurring while GCAC was conducting the site inspection. At the west end of the property, there was much standing water and it was especially noted along West Old State Road at or near the area where one of the entrances to the development is planned. With the roadway being raised above the adjacent properties additional planning will be needed in order to drain off these areas if they are to be used in the development of the property. Due to the high number of lots, care will need to

be taken to avoid dumping stormwater onto adjacent properties. It may also be wise to determine if much of the stormwater coming onto and across the property originates from existing developments to the north and east of the proposed subdivision.

Septic/Wells: Plan is to hook up to Town water and sewer. Plan is to possibly hook up to water via the east side of Fuller Station Road. Plan may involve having sewage from the development flow to a pump station near the southwest corner of the project and then be pumped back up to a sewage connection on the neighboring subdivision on the east side of Fuller Station Road.

Visual Impact: Presenter feel that the proposed development fits the zoning and character of the area and that the woods will act as a buffer. He also noted that the lot closes to Fuller Station Road is 100 feet from the road due to the power company easement. GCAC does not envision any real negative visual impact to the area since there are few nearby neighbors.

Endangered Species: None known to the Presenter and he indicated no Indiana bats or Karner blue. GCAC did not observe any endangered species at time of January 16th site visit.

Historical Considerations: Presenter noted that according to NY parks and recreation there is nothing of historic significance on the property and there is no grave yard on the property. GCAC did not observe anything of historical significance on the property.

Submitted by: _____

John G. Wemple, Jr. - Chair