1.0 EXECUTIVE SUMMARY

The Raleigh and Heiden Properties development is a proposal to develop these two adjoining properties into a seasonal residential development which retains the Raleigh Hotel (the Heiden Hotel was destroyed by fire on May 18, 2008). These properties are located on the east side of Heiden Road (CR 161) in the vicinity of Kiamesha Lake Road (CR 109). This project is in the unincorporated portion of the Town of Fallsburg, Sullivan County, New York. The project will be developed by RALHAL Corporation, owner of the Raleigh Hotel and the lead entity for the application, and Concord Estates Condominiums LLC, the owner of the Heiden Hotel property.

This application proposes the Raleigh Hotel remaining on a 35.6 acre property. The residential component of the project is proposed to be 236 single family and duplex units on 161.3 acres. The total project acreage is 196.9 acres.

No changes to the Raleigh Hotel buildings are planned as part of this application. The Raleigh Hotel access points off Heiden Road would remain as they are currently configured with the main access at the south gate where a gatekeeper controls entry. There will be some reconfiguration of parking.

The residential development has two sections separated by the Sheldrake Stream. On the east side of the stream is a 68 unit development accessed from Park House Road (also variously known as Fred Road and Wildwood Drive). There would be one full service entrance and a second emergency entrance. The majority of development, including, 168 units, are on the west side of the stream. These units are arranged around the rear and north side of the hotel. They would be accessed from Heiden Road via a main full service driveway sharing the hotel entrance, a restricted access driveway just north of the hotel pool, and a full service driveway further north at the approximate location of the original Heiden Hotel driveway access.

The interior roads consist of four single loaded loops with the homes on the inside of the loops. Several connector roads connect the loops to the external road system and to each other. However there is no road connection between the loop east of Sheldrake Stream and the three loops west of Sheldrake Stream. All interior roads are planned to remain private and therefore will not be dedicated to the Town.

Three multipurpose buildings and three pools are strategically located to serve different loops, with one pairing serving the two center loops immediately behind the hotel. In addition three double tennis courts would be situated for use by the future homeowners. Only residents of the Raleigh and Heiden Properties would have access to, and use of, these neighborhood facilities. Limited accessory parking would be developed to serve them.

The Raleigh Hotel would remain a privately owned entity. The land associated with the residential development would be owned by three separate condominium associations. Cross easements between the hotel and condominium associations would allow use of various facilities as necessary, including water and sewer utilities, access and certain stormwater management facilities. All common areas and multipurpose buildings, pools and tennis courts associated with the respective condominium associations would be maintained by them.

The traffic study prepared for the Raleigh and Heiden Properties identifies that traffic generated by the development and traveling regionally would primarily utilize Heiden Road to access Route 17 to the south and South Fallsburg to the north. Additionally Kiamesha Lake Road would be used to access businesses on Route 42 near Exit 105 of Route 17.

A stormwater management system consisting of stormwater basins and swales would be constructed to attenuate the increase in the amount and rate of stormwater runoff that may result from construction of the project. The basins would also provide water quality treatment prior to discharging to the adjoining Sheldrake Stream, and ultimately the Neversink River to which this watercourse is tributary. Post-development stormwater rates would meet "zero net increase in rate of runoff" standards or better.

The common facilities provided on site are largely located within the condominium portion of the project. These will be owned by individual condominium associations with cross easements benefitting one another for use. The southerly access will continue to be located on private property owned by the Raleigh Hotel and will be encumbered with cross easements as well benefitting the condominium associations.

SEQRA Background

The proposed Raleigh and Heiden Properties development is subject to the regulations implementing the New York State Environmental Quality Review Act ("SEQRA"). The Fallsburg Planning Board, acting as Lead Agency for this proposed action, determined that the development may have a significant impact on the environment and issued a Positive Declaration on October 30, 2008, requiring preparation of a draft environmental impact statement ("DEIS").

A draft Scoping Document was prepared to outline the specific impacts and mitigation measures to be considered in this DEIS. The Fallsburg Planning Board, as lead agency, has coordinated the scoping process with the other involved agencies including the Town of Fallsburg Town Board. The draft Scoping Document was the subject of a public scoping meeting on November 13, 2008. The Scoping Document for this DEIS was revised per comments at this meeting and adopted by the Lead Agency on January 8, 2009. However since more than two years had elapsed since the adoption of the original Scoping Document, the applicant requested reconsideration of the document and, after review by the Planning Board, the revised Scoping Document was adopted on March 10, 2011.

This DEIS has been prepared in accordance with the Environmental Conservation Law, and the regulations contained in 6NYCRR, Part 617, implementing same.

Site Location and Description

The project site is located in the unincorporated area of the Town of Fallsburg, Sullivan County, New York. The site is located North of Route 17, south of Route 42, and east of Heiden Road at the intersection with Kiamesha Lake Road. The project site is identified on the Town of Fallsburg tax maps as Section 60, Block 1, and the Town of Thompson tax maps as Section 15, Block 1 (see Figure 2-3) with the following lots:

- 60-1-50
- 60-1-56
- 60-1-62.1
- 60.1-62.4
- 60.1.63
- 60.1.64
- 60.1.65
- 60.1.66
- 15-1-28

The portion of the site occupied by the Raleigh Hotel and ancillary facilities is largely built up. The only site work that may occur in this area would be a reconfiguration of some parking and

signage. It is not anticipated that approvals from the Town of Thompson will be required, However inquiries will be made when and if any improvements are required. The balance of the site behind the hotel is comprised of lawn, meadows and woods. The portion of the site formerly occupied by the Heiden Hotel still has several bungalows, and a large field previously occupied by the hotel and grounds. The easterly and southerly portion of the Heiden property is wooded.

Federally-regulated wetlands under the jurisdiction of the Army Corps of Engineers (ACOE) are located on the project site. The proposed project has been designed to have minimal impact on these wetlands. In the northeastern corner of the Heiden property is a small piece of a larger NYSDEC wetland the bulk of which is located off site. The Sheldrake Stream bisects the property flowing in a north to south direction.

Based on field surveys conducted of the project site, the site hosts a number of ecological habitats. These include: hemlock northern hardwood forest, a deciduous forest type; successional shrub land and successional fields; palustrine scrub-shrub wetlands; palustrine forested wetlands; and emergent wetlands.

A letter was sent to the New York State Department of Environmental Conservation (NYSDEC), Natural Heritage Program (NHP) on April 7, 2008, to request a search of agency databases for "sensitive" species that may be present on the site or in the project vicinity. The correspondence from the NHP indicated that there are no "…known occurrences of rare or State-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity…" of the site.

The project site is served by New York State Electric and Gas (NYSEG) which would provide electricity to the property. According to NYSEG, there is no gas service proximate to the development. Thus, space heating and household equipment would utilize electric service or propane.

Development Proposal

The development proposal for the Raleigh and Heiden Properties consists of an existing hotel, the Raleigh Hotel, and the development of 236 duplex and single family units with public water and sewer. The site plan is a cluster which allows grouping of residences while preserving open space and reducing infrastructure and impervious surfaces.

The cluster plan will require the resubdivision of eight (8) lots in the Town of Fallsburg to create five new lots. The Raleigh Hotel will occupy one lot in Fallsburg and will also include a lot in the Town of Thompson. Three (3) lots will become three separate condominium associations for the residential development. Cross easements as described above will allow access to shared facilities. A separate lot east of Park House Road will be created by establishing a right of way.

The proposed project is planned to be begun in 2012. A full build out date is dependent on market conditions.

The basic elements of the neighborhood design incorporated into the layout of the Raleigh and Heiden Properties development are outlined below:

- Streets within the neighborhoods are laid out in a curvilinear pattern connecting the housing with integral recreation and open space facilities (rather than a formal "grid-like" pattern). This layout compliments the natural topography of the site with open space in the center of

four looped roads providing a large but contained common play area. The curving road systems will also slow traffic for added safety of the residents.

- Existing wooded areas will remain wherever possible to continue the sense of a natural setting for the new homes.
- A community building and active recreation centers are accessible to each neighborhood providing indoor facilities for religious purposes and day care, and outdoor pool and tennis facilities.
- Landscape plantings will provide screening and infill shade trees as necessary.
- The homes and other facilities will be designed to be attractive with architectural elements that will be appealing to a second home investment.

Phasing and Construction Schedule

The project scheduling is largely predicated on the construction of sewer and water facilities, and then development of areas within closest proximity to these facilities. The Raleigh Hotel would be the first phase of the project as it requires only the subdivision of lands associated with its continued operation as a private entity and hook up to the new sewage treatment facility. Construction of the housing cluster on the Heiden property will require hook up to the sewage treatment facility and hookup to the Town water supply system as it is currently in the water district. This cluster will likely be phase two. The two clusters behind the Raleigh Hotel will require the completion of the public water supply system and will likely be the third phase. The final phase will be the cluster on the east side of Sheldrake Stream. This cluster will require extending water and sewer service under the stream for connection.

Reviews, Permits and Approvals

The following reviews, permits and approvals would be necessary to implement the action:

New York State

New York State Department of Environmental Conservation
- SWPPP, Stormwater and Sewer SPEDES Permits, Water Taking Permit

New York State Department of Health
- Public Water Supply and Distribution Permits
- Realty Subdivision

New York State Office of Parks, Recreation and Historic Preservation
- Review and Approval of Archaeology Study

Sullivan County

Sullivan County Planning Department
- 239-m GML Review

Sullivan County Department of Public Works
- Curb Cut Permit
- Water Main Connection Permit

Municipal

Town of Fallsburg Town Board
- Water District Extension
- Transportation Corporation (for creation of legal entity to maintain public water supply and sewer service facilities)
- Creation of Public Sewer District
- Creation of Public Water Supply District

Town of Fallsburg Planning Board
- Site Plan Approval
- Subdivision Approval

Town of Fallsburg Highway Department
- Town Highway Permit

Town of Fallsburg Architectural Review Board
- Architectural Review

Involved and Interested Agencies

Involved Agencies

Honorable Steve Vegliante, Supervisor, Town of Fallsburg, Station Plaza, South Fallsburg, NY 12779

Honorable Anthony Cellini, Supervisor, Town of Thompson, Route 42, Monticello, NY 12701

Town of Fallsburg Planning Board, Code Enforcement Office, 5250 Main Street, South Fallsburg, NY 12279

Sullivan County Department of Planning and Environmental Management, Sullivan County Government Center, 100 North Street, Monticello, NY 12701

Sullivan County Department of Public Works, 100 North Street Monticello, NY 12701

NYS Dept. of Environmental Conservation, Division of Regulatory Affairs, Region 3, 21 South Putt Corners Road, New Paltz, NY 12561

NYS Department of Health, Monticello District Office, 50 North Street, Suite 2, Monticello, NY 12701

NYS Office of Parks, Recreation and Historic Preservation, Peebles Island, P.O. Box 189, Waterford, New York 12188

NYS Environmental Notice Bulletin – via E-Mail

US Army Corps of Engineers, 26 Federal Plaza, Room 1937, New York, NY 10278-0090

Delaware River Basin Commission, P.O. Box 7360, 25 State Police Drive, West Trenton, NY 08628

The project will require review and approval of project plans and operations; and compliance with the applicable requirements and regulations related to the reviews and permits above.

Potential Impact Issues

This section of the Executive Summary provides a summary of the potential impacts and proposed mitigation measures by the major subject category.

1.1 Geology, Soils and Topography

This chapter of the Raleigh and Heiden Properties DEIS describes existing conditions and anticipated impacts of the development related to the geology and topography of the project site. Mitigation measures for the potential impacts are proposed.

Topography Impacts

Impacts to slopes are directly related to the potential for soil erosion during construction. A plan that shows areas of grading in steep slopes is shown in Figure 3.1-2 Slopes Map. The site disturbance and grading is proposed in generally all sections of the property, corresponding to the four major residential loop roads: north of the existing hotel, directly east of the hotel, and in the eastern portion of the property, east of the Sheldrake Stream, but west of Park House Road.

The access roads and proposed residential sites were designed to match the site's topography, avoiding areas of steep slope or slopes greater than 20 percent. Therefore, impact to topography and slopes has been minimized through the project design. Steeper slopes would be impacted in small areas primarily where roads cross areas of slope. A residential loop road crosses an area of steep slope directly north of the existing hotel. A second area of slope disturbance occurs in the roadway accessing the residences from Park House Road on the east side of the Sheldrake Stream.

Exposing soils on steep slopes during construction increases the potential for erosion in the short term. This potential impact would be offset by adherence to soil erosion and sedimentation control practices described in the site specific Erosion Control Plan and Section 3.1.3 below. Following construction (long term), soil erosion on the property is expected to be minimal since developed areas would be stabilized with lawn and landscaping, and storm water management features would be fully functional.

Soil Impacts

Grading and recontouring of soils is required for the construction of roads, building sites, recreational areas, and the stormwater management facilities. Areas of proposed grade changes for the project development are shown on the attached site Grading Plan. The total area of grading or site disturbance on-site for the proposed project is estimated to be approximately 64.2 acres. Therefore, approximately 132.7 acres of the project site (approximately 67 percent) would remain undisturbed.

The impacts to soils associated with this work are temporary in nature, relating to erosion potential. All areas of disturbed soil not converted to impervious surface would be graded, seeded and landscaped, including the storm water management basins.

The proposed grading, roadway and residential construction occurs on those soil types most prevalent on the property, including: Wellsboro and Wurtsboro soils WIC), Wurtsboro loam (WuB and WuC), and Oquaga very channery silt loam (OeB). The Wellsboro and Wurtsboro soils (WIC), Wurtsboro loam (WuB and WuC) are described as having moderate to severe limitations for construction due to potential wetness and frost action. The Oquaga very channery silt loam (OeB) has limitations due to shallow depth to bedrock. These soil limitations can be addressed through appropriate engineering and construction methods, including the installation of proper roadway and foundation drainage. Shallow bedrock can be addressed through the building design, or by appropriate shallow rock removal.

Grading plans have been completed for the proposed development by the project engineer. The plans indicate proposed cuts and fills at 2 foot contour intervals for the entire development. The grading plans are provided with the Site Plan drawings attached to this DEIS (see "Grading and Drainage" drawings No. 1D & E, 2D & E, 3D & E, and 4D & E). All roadways, and buildings have been sited to conform to existing topography as much as possible to minimize the amount of earthwork required. An analysis of earthwork quantities, including "cuts" and "fills" has been completed by the project engineer. An estimated total of approximately 90,000 cubic yards of material will be cut and 75,600 cubic yards filled as a result of the project. The project wide estimated "cut" volume exceeds the estimated "fill" volume by approximately 15,000 cubic yards. This excess material can be utilized onsite as additional fill on roadsides, residential yards and stormwater basin sideslopes. It is anticipated that no material will need to be exported from the site.

Geology Impacts

The presence of minor bedrock outcrops on portions of the site and the soils types identified on the property indicates that some rock removal will be required for project construction. The majority of the project site lies in areas of Wellsboro and Wurtsboro Loam soils, which exhibit the potential for bedrock at depths of 5 ft. and greater. Two smaller areas of Oquaga-Arnot soils in Clusters 3 and 4 generally exhibit red shale bedrock at depths of between 10 in. and 40 in. below grade. The depth and type of bedrock is further substantiated by the five (5) drilled wells on the project site.

It is estimated that approximately 5,500 cubic yards of rock may require excavation. Approximately 3,100 cubic yards are estimated to be removed during utility trenching with an additional 2,400 yards associated with roadway and community building construction.

Since bedrock in this area generally consists of a friable red shale and/or a gray sandstone, excavation will be performed by mechanical hammers and rippers mounted on hydraulic excavators and/or bulldozers, a common and preferred method currently utilized in Sullivan County. These methods are preferred to avoid the regulatory and safety demands inherent with blasting. In consideration of nearby hotel buildings and homes as well as the proximity to the Pleasure Lake Dam situated within 1,000 ft. of potential rock excavation locations, blasting is not anticipated to be required or used during site development activities.

Mitigation Measures

Soil Erosion and Sediment Control Plan

Erosion and sedimentation would be controlled during the construction period by temporary devices in accordance with the Soil Erosion and Sediment Control Plan developed specifically for the project. The Soil Erosion Control Plan is part of the required Stormwater Pollution Prevention Plan (SWPPP). The plan is required to address erosion control and slope stabilization in accordance with the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activities (Permit No. GP-0-10-001). Both the SWPPP and the Erosion and Sediment Control plan would be implemented during construction to prevent erosion and sedimentation of on and off-site surface waters as well as to make certain that no increases in peak discharge occur from the proposed construction.

The Erosion and Sediment Control Plan are required to include area of disturbance limitations, criteria and specifications for placement and installation of erosion control devices, and a phasing plan. As part of the NYSDEC SPDES permit no more than five acres of the site would remain unstabilized at one time without permission from the NYSDEC. Temporary erosion control devices include the use of a stabilized construction entrance, silt fencing, as well as temporary sediment basins. It is anticipated that the project will include two construction stabilized construction entrances: one on Heiden Road and a second on Park House Road. The construction entrances would minimize the tracking of soil from the project site onto local roads. Dust control would also occur by spraying water onto dry exposed areas of the site. This would minimize the potential transportation of dust onto adjoining properties. Silt fencing would be installed at the base of all disturbed slopes as well as surrounding each of the soil stockpiling areas. Access to the easterly 68 unit cluster would be from Town Road 62. Construction vehicles would not cross Sheldrake Stream.

Permanent stormwater measures would divert stormwater runoff from steep slopes, control/reduce stormwater runoff velocities and volumes, and produce vegetative and structural stabilization. This would be accomplished by converting the temporary sediment basins to the permanent stormwater management ponds, bringing them to their final grade and dimensions, installing the outlet control structures, and stabilizing the basins with vegetation. The primary method of permanent erosion and sediment control would be the establishment of vegetation on-site. Vegetation would control stormwater runoff by preventing soil erosion, reducing runoff volume and velocities, and providing a natural filter medium.

Phasing Plan

A Construction Phasing Plan has been developed as required by the NYSDEC Stormwater Pollution Prevention Plan (SWPPP). The Phasing Plan provides specific construction disturbance areas not exceeding a maximum of 5 acres. In the event future development planning and scheduling necessitates an expanded disturbance area exceeding 5 acres, written authorization from NYSDEC will be obtained prior to exceeding that limit. The SWPPP and Phasing Plan are provided in Appendix B.

Blasting Protocol

As indicated above, grading in those limited areas of shallow bedrock will be accomplished by mechanical means and blasting is not anticipated or proposed. If it is determined that blasting is necessary, it will only be carried out in accordance with a site specific Blasting Protocol

developed for the project. The Blasting Protocol will be based on State and Town of Fallsburg regulations pertaining to the transportation of the blasting material and the noise regulations respectively. The Blasting Plan would be based on site specific blasting requirements. The Blasting Plan will address the potential impacts to Pleasure Lake Dam (State Dam ID# 163-1597), which is located north of the project site. Any potential blasting in the northern portion of the site will require coordination with the Town of Fallsburg Building Department and the owners of the dam, the Fallsburg Fishing and Boating Club. A pre-blasting inspection will be completed, if blasting is required in the northern portion of the site.

1.2 Surface Water Resources

This chapter of the Raleigh and Heiden Properties DEIS describes existing conditions and anticipated impacts of the development related to surface water resources on the property. Mitigation measures for the potential impacts are proposed.

Potential Impacts

The Proposed Action would involve the temporary disturbance of 64.2 acres of the approximately 196.9 acre Raleigh and Heiden Properties site, for the construction of buildings, construction of parking areas, community facilities and stormwater management facilities.

The Proposed Action may result in stormwater related impacts, including: sedimentation during construction, post development increases in pollutant loading in stormwater, post development flooding from increases in the volume of stormwater discharged, and bed and bank erosion in receiving watercourses resulting from increased stormwater discharge velocities.

Post-Development Runoff Quantity and Quality

Following construction, stormwater from the project site would be routed through stormwater management ponds and retention facilities and then ultimately enter the Sheldrake Stream. To offset potential impacts associated with stormwater runoff from the Raleigh and Heiden Properties site, a project specific SWPPP was developed in accordance with all applicable NYSDEC regulations and guidelines, including those in the Manual and the New York State Standards and Specifications for Erosion and Sediment Control. Specific attention has been paid to generally maintaining existing site basin drainage divides, to attenuating post development increases in peak stormwater discharge rates and volumes, and to meet NYSDEC stormwater quality treatment criteria.

Flood Inundation Zone Impacts

The Fallsburg Fishing and Boating Club has evaluated the flood impacts if the Pleasure Lake Dam fails. In addition to the dwellings that would be impacted south of the Raleigh and Heiden Properties site, once the proposed action is developed portions of the southern loop (west of the Sheldrake Steam), the proposed water supply well, Well-3, as well as portions of the eastern residential loop (east of the Sheldrake Stream) will be impacted, as shown in Figure 3.2-2, Pleasure Lake Flood Inundation Area with Proposed Site Plan. Mitigation measures are discussed below.

Sedimentation During Construction

Sedimentation During Construction

Without adequate measures incorporated into the Proposed Action to offset potential impacts, the Project would have the potential to increase the volume and velocity of stormwater runoff from the site. If not controlled, these activities may lead to accelerated erosion and sedimentation during construction. Accordingly, an Erosion and Sediment Control Plan, that includes construction phasing, has been included in the SWPPP.

The purpose of the Erosion and Sediment Control Plan is to minimize the erosion of disturbed soil and to prevent the migration of sediment into surface waters and off-site properties during construction and until the site has received final stabilization. The Erosion and Sediment Control Plan included with the SWPPP accomplishes that purpose through reductions in runoff velocities, limiting the area of disturbed soils at any one time, and rapid stabilization of disturbed soils.

Mitigation

Soil Erosion Control Measures and Construction Phasing Plan

Both temporary and permanent erosion control facilities and activities would be applied over the duration of project related activities on the site. Implementation of the soil erosion control plan would be based on the latest New York State Standards and Specifications for Erosion and Sediment Control.

As specified in the SWPPP, soil erosion and sedimentation measures, such as silt fencing, would be installed following a pre-construction conference with appropriate agency staff, and prior to any construction activities. In addition, the Applicant would engage a Certified Professional in Stormwater Quality/Erosion and Sediment Control, or equally qualified professional, to oversee implementation of the SWPPP, including its site specific Erosion and Sediment Control Plan component. All soil erosion and sedimentation control practices would be installed in accordance with GP-0-10-001.

Monitored, and enforceable erosion and sediment controls specified in the SWPPP, would be utilized during the construction phase as the primary means of controlling erosion and sedimentation. A construction phasing and sequencing plan is included in the project Erosion and Sediment Control Plan and incorporates both structural and nonstructural (i.e. operational) provisions. The goal of the plan is to minimize the potential for soil erosion from areas exposed during construction and prevent sediment from reaching the downgradient receiving waters, including the Sheldrake Stream.

Permanent methods of erosion control would be accomplished by diverting stormwater runoff from steep slopes, controlling or reducing stormwater runoff velocities and volumes, and installing vegetative and structural features which would act to stabilize soil surfaces. All of the permanent facilities would be selected from options which feature low-maintenance requirements and long-term exposure stability. Basin and swale BMP features are manmade and the result of years of engineering research and design as well as actual in-situ case histories. They function as “natural” removal systems which are featured to blend into the other proposed landscaped and natural features of the property.

Maintenance of Temporary and Permanent Stormwater Controls

Details of all temporary and permanent stormwater controls are shown on the project plans. A final construction sequence would also be provided to guide the contractor in the installation and

maintenance of the temporary erosion control measures. NYSDEC SPDES General Permit GP-0-10-001 regulations require proper maintenance of the erosion control practices, and documentation in a Site Log Book to be kept onsite for the duration of the construction activities.

The Applicant would be responsible for ensuring all erosion and sediment control and stormwater management practices are properly installed and maintained. Responsible parties for the implementation and maintenance of each of the erosion control measures and stormwater facilities would be specifically identified and documented prior to construction activity.

Flood Inundation Zone Mitigations

The Fallsburg Fishing and Boating Club has implemented an Emergency Action Plan (EAP) for the Pleasure Lake Dam NYS ID Dam No. 163-1597, included in Appendix C. Operations and/or maintenance of the Dam will be completed by Fallsburg Fishing and Boating Club personnel, who will observe unusual conditions with the dam such as signs of slope movements, depressions, sinkholes, sand boils, cracking or concrete surfaces, discharges, abnormal reservoir levels, or water overtopping the dam. This personal will report to the Dam Safety Official who will analyze the incoming information and will determine if an emergency situation exists.

1.3 Public Water Supply

Potential Impacts

The proposed Raleigh and Heiden Properties development will require potable drinking water for the 236 four bedroom single family homes or duplex units along with the 230 rooms that will remain at the Raleigh Hotel. The 230 rooms at the Raleigh Hotel and 55 of the residential units will be supplied water from the Town of Fallsburg water district and will require 62,000 gpd. The remaining 181 single family homes and duplex units will be supplied water from the proposed on-site community water supply.

A sequential 72-hour pump test was conducted on all five (5) proposed water supply wells to establish a community water supply for the project. The pump test was conducted in compliance with the New York State Department of Health (NYSDOH) and New York State Department of Environmental Conservation guidelines. Prior to the start of the pump test, the pump test protocol was reviewed by the Town of Fallsburg Engineer, Mr. Will Illing, and the NYSDOH. The pump test protocol is attached in the Water Supply Report (see Appendix E).

The community water supply system will need to supply 1.5 times the average daily demand, as requested by the NYSDOH. The average daily demand has been calculated to be 72,000 gpd or 50 gallons per minute (gpm). The required amount of water needed per the New York State Department of Environmental Conservation (NYSDEC) is 1.5 times the average daily demand, which is calculated to be 75 gpm. This water demand needs to be demonstrated through a pump test while removing the best well in the network from the test. The testing needs to demonstrate sufficient water for peak demand and provide back-up supply if a well were to become inoperable.

Pump Test

A pump test was completed on the Raleigh and Heiden Properties Development five (5) wells in the month of September 2009. The full Water Supply Report is provided in Appendix E of this document.

Five (5) wells were completed on the property by Fulton & Son Well Drilling under the supervision of the project developer. The five wells were completed in the bedrock aquifer. The Pump Test protocol indicated that private off-site wells to be monitored, would be agreed upon by the Town of Fallsburg Engineer, Mr. Will Illing. A letter and questionnaire was sent to those agreed upon neighbors, surrounding the Raleigh and Heiden Properties site. Two owners, Mr. Uhl and Mr. Bisnoff, responded positively to having their wells monitored during the pump test.

The pump test was completed as a "stress" test in which the four primary wells (Wells 1, 2, 3 and 4A) were pumped simultaneously for 72-hours. This test was a constant rate test with some adjustments made during the test and the pumping rates were increased. After a suitable recovery period for the primary wells, the secondary test began. The best well, Well-4, was pumped separately for 72-hours. The pumping test results and sustainable yields are shown below in Table 3.3-1. During the pump test onsite wells and the offsite Uhl and Bisnoff wells were monitored for influence.

The pump test proved a sustainable yield of 110 gpm or 75 gpm with the best well taken out of service. The logger placed in the Uhl well, north of the Raleigh and Heiden Properties development, shows that there may be a connection between the Uhl well and the project's wells. As shown in the questionnaire completed by Mr. Uhl, the well is 310 feet deep with a water bearing fracture at approximately 210 gpm. The static water level was measured at 30 feet and the well has a yield of 15 gpm. During a conservative pumping test, the drawdown shown in the Uhl well was approximately 7 feet. Therefore, approximately 270 feet of water column remains available in the well.

Mitigation Measures

The pump test, completed in September 2009 shows that there could be a connection between the project wells and the Uhl well, located north of the site and on the west side of Pleasure Lake. The Uhl well shows approximately 7 feet of drawdown during the pump test period. The well has sufficient water column in the well (approximately 270 feet) to avoid problems with water supply. If water supply problems are experienced by Mr. Uhl or neighbors on the western side of Pleasure Lake, the applicant will work with the Town of Fallsburg to determine and confirm that the suspected impacts to the private wells were indeed caused by the Raleigh and Heiden Properties Development. If it is determined that the proposed development caused such impacts, the applicant will mitigate the neighbors' drinking water wells by either deepening the well or drilling a new well.

1.4 Public Sewage Treatment

Potential Impacts

Flowrate

As stated above the project proposes 236 single family and duplex units at full buildout. This would require an average daily wastewater flow of approximately 90,000 gpd or 0.090 MGD. As

stated above the Raleigh Hotel currently uses an on-site sand filter wastewater treatment system. This system will be abandoned and the Raleigh Hotel facility will be integrated with the proposed wastewater treatment facility. The Raleigh Hotel will add approximately 38,000 gpd and the related swimming pools and children's camps will generate 3,000 gpd to bring the total flow to approximately 131,000 gpd or 0.131 MGD or 91 gallons per minute (gpm).

The wastewater design flow computations are supplied in Table 3-1, Wastewater Design Flow Computations, located in Appendix H in the Preliminary Wastewater Collection and Treatment System Engineering Report for Raleigh and Heiden Properties Development Project (Preliminary Wastewater Engineering Report). The average design flow has been calculated by the project engineer (Glenn L. Smith, P.E. Consulting Engineer, P.C.) as approximately 131,000 gpd (91 ppm). The peak hourly flowrate has been calculated as approximately 473,000 using a peak flow factor (PFF) of 3.6.

Organic Loading

Half of the homes in the proposed development will utilize a garbage disposal in the kitchen sink along with the hotel kitchen facility generating organic solids to the wastewater flow. As shown in Appendix H Table 3-2, Organic Loadings in Wastewater, the average biological oxygen demand (BOD) concentration of 232 mg/L will utilize 254 lbs/day of BOD loading. The suspended solids (SS) anticipated by the development has been calculated to be 267 mg/L, which will result in an average daily loading of 292 lbs/day.

Mitigation Measures

As required by the NYSDEC any discharge of wastewater from a treatment facility into a stream, river or lake requires a SPDES permit. In addition to the wastewater treatment facility being reviewed by the NYSDEC the Delaware River Basin Commission (DRBC) also performs a review and provides recommendations on all permit applications. This SPDES permit will regulate the flow volume and quality of the effluent into the Sheldrake Stream.

The proposed treatment facility is located in the southeasterly corner of the property, as shown in Figure 3.4-1. The primary treatment process is proposed to be a Sequencing Batch Reactor (SBR) with polishing filters. This will meet tertiary requirements and stream standards set by NYSDEC and DRBC. The effluent flow will be treated with chlorine followed by dechlorination and post-aeration or will be treated with ultraviolet and post aeration. Any sludge generated within the treatment system will be stored onsite in an aerated tank to be periodically removed for off-site disposal.

1.5 Electric and Gas Supply

Potential Impacts

The existing utility services, including electrical, telephone and cable are expected to be capable of servicing the Raleigh and Heiden Properties project site. Two written inquiries have been made to NYSEG regarding the capacity of the existing infrastructure to service the site, or whether changes or upgrades would be required to serve the proposed 236 residential units (see April 26, 2011 letters - Appendix B, Correspondence).

Heating for the development is proposed to be provided by either above ground fuel oil tanks, located within the structures, or propane. Propane is also expected to be used for cooking

unless electric service is more marketable when the proposed development is being built. The above ground fuel oil storage tanks will be installed properly with proper secondary containment or will be placed on concrete slabs to protect the subsurface.

Where possible, joint trenches will be used for underground utility services, such as electric, cable and telephone service. Separation distances for these utilities will be determined by the specific companies providing service to the Raleigh and Heiden Properties project.

Mitigation Measures

The project is utilizing existing utility infrastructure, and no underground fuel oil storage tanks are proposed. It is anticipated that NYSEG has the electrical capacity to service the proposed 236 new residences. All utility lines will be installed underground, as required by the Town of Fallsburg Code. Given the above, no mitigation measures related to utilities are required or proposed.

1.6 Ecology and Wetland Resources

Potential Impacts to Vegetation and Wildlife Habitat

The proposed area of new disturbance (AOD) has been restricted to approximately 62 acres of upland habitat on the 197 acre site, as depicted on Figure 3.6-3. An additional 35 acres of the site is currently developed as part of the Raleigh Hotel site and will not be significantly changed from its current condition. The new developments proposed for these areas would eliminate the existing upland woodlands and meadow on these portions of the site. Areas where development is proposed would retain limited functions as wildlife habitat. The four housing developments are proposed with ring roads, so that central areas within the ring will not be disturbed or cleared. Wooded areas a minimum of 100 feet and up to 300 feet wide will remain following grading and construction between the backs of the housing units. It is expected that animals currently living in the area of proposed disturbance would move to surrounding undeveloped wooded land. There would be maintained elements of connectivity between other open space parcels and the portions of the project site that are not to be developed. These areas would continue to provide contiguous upland habitat and movement corridors for existing wildlife to traverse.

The 62 acre AOD for the project represents 31 percent of the entire 196.9 acre site. Newly created impervious surfaces, including roadways, driveways, parking lots and buildings, would cover portions of the site within the 62 acre AOD. The remaining disturbed area would be revegetated as lawns and landscaped areas. The existing vegetative cover and habitats of the remaining 135 acres, which includes the Raleigh Hotel site, represents 69 percent of the entire site and would not be disturbed by the project.

Potential sources of impacts to aquatic wildlife and vegetation would include sedimentation during construction, post-development increases in pollutant loading in stormwater and bed and bank erosion in receiving watercourses resulting from increased stormwater discharge velocities. Sedimentation of the receiving water bodies would result in decreased light penetration, nutrient enrichment, increased transport of dissolved or adsorbed pollutants, shielding of pathogens from natural disinfection processes, and clogging of gills or filter-feeding apparatus in aquatic organisms.

No rare, unique or unusual vegetative species or communities were observed on the site, and therefore no impact to such species or areas will occur.

Impacts to Wildlife

In general, as a project site is developed, some species would relocate to similar habitats either on- or off-site. Because approximately 62 acres of the roughly 197 acre site would be altered, it is likely that some on-site wildlife would relocate from the developed areas to adjacent undeveloped areas offering similar habitats. The composition of the wildlife population on the project site may be slightly altered immediately adjacent to developed areas, as species able to adapt to a suburban environment (e.g. squirrels, raccoons, opossum, woodchucks, mice and some songbirds) would have a greater ecological advantage in comparison to species that are less tolerant of human activity. Many species of trees and shrubs commonly chosen for landscaping use would provide both food, shelter and nesting sites for small mammals, songbirds and other avian species.

No protected wildlife have been identified or observed on the project site, thus, no impacts to these species are projected. The proposed project would limit future use of the developed portions of the property by many wildlife species, but not by species that are adaptable to such conditions.

Impacts to Wetlands

The current proposed development would not result in the direct disturbance of on-site wetlands and as a result would not impact their identified functions and values. The proposal is designed to avoid wetland impacts entirely, although some activity will occur in close proximity to Wetland H associated with widening and improving the existing roadway (Figure 3.6-4). No activity is proposed within the 100 foot setback to the one DEC wetland on site (Wetland S).

Indirect impacts to wetlands could occur from the changes in runoff characteristics from the adjacent areas. The proposed stormwater pollution prevention plan, as described below, is intended to mitigate these potential impacts.

Mitigation Measures

The applicant proposes to develop relatively small portions of the property outside of the Raleigh Hotel parcel, leaving significant areas of open space on the Heiden Hotel parcel, east half of the Raleigh parcel and more than half of the eastern Raleigh parcel undeveloped. No wetlands or watercourses will be disturbed. Figure 3.6-5 shows those currently undisturbed areas of the site that will remain as open space post development. The mitigation of potential impacts from construction and development activities within the AOD that could affect wildlife as a result of the erosion and sedimentation of soils is described in Section 3.1 (Geology, Soils and Topography), and in Section 3.2 (Surface Water Resources).

While much of the vegetation and wildlife habitat on the property would remain unchanged, other portions would be removed or altered. The majority of existing vegetation within the 62 acre AOD would be removed. Measures could be taken however that would mitigate this loss to some extent and provide continued habitat for some adaptable wildlife species within the AOD. The existing trees and vegetation beyond the identified AOD would be preserved by the installation of stakes and fencing which would clearly identify the limits of disturbance and restrict the movement of construction vehicles and activities from these areas. The small streams on the property would continue to provide a water and food source for local birds and mammals.

Application of Stormwater Management Plans

A Stormwater Pollution Prevention Plan (SWPPP) and a complete Erosion and Sediment Control plan has been developed as part of the Site Plan documents (Refer to Sections 3.1 and 3.2). The project SWPPP generally includes the following mitigation measures that serve to minimize potential impacts to vegetation and wildlife resulting from the runoff of silt, sediment, excess nutrients and erosive water flows throughout all phases of the development process.

The proposed stormwater detention ponds are designed as "ponds" and therefore are expected to contain a certain amount of water at an elevation similar to the existing streams and wetlands on the site. The designs would provide both flow control and water quality improvements to the stormwater prior to discharge into the off-site drainages. Flows out of the site wetlands contribute to the hydrology and water quality of the Sheldrake Stream and ultimately the Neversink River, and the conservation of existing conditions in the wetlands is expected, as the proposed developments would have no impacts to the many wetlands functions now provided.

Basin vegetation would be established by using specialized commercial planting mixtures appropriate to the intermittently flooded conditions of the basin bottoms and berms. These seed mixes are designed to include herbaceous and grassy plants that offer wildlife foraging benefits.

Landscape Plantings

Noninvasive native plants would be used in the landscape wherever possible. The major landscaping evergreen and deciduous tree proposed to be installed throughout the project site have been identified by species and planting location on the Landscape Plan for this project. This list would be supplemented with other minor landscape shrubs and plants that would cumulatively provide a variety of foraging, nesting and shelter benefits for the wildlife that repopulates the portions of the site within the proposed AOD.

While the existing woodland and meadow vegetation would be replaced by ornamental plants, lawns and gardens within the developed areas, the introduced plantings could still be used as forage by deer and other wildlife and many of the tree and shrub species chosen would provide habitat for songbirds and other avian species. The landscape plants proposed as part of the final development would include berry and seed-bearing trees and shrubs that would offer a food source for birds. Trees that are planted would mature in the long-term and would provide some roosting and nesting opportunities for birds that are adaptable to suburban conditions.

Tree Protection Measures

Activities to protect trees on the site would take several forms. Trees are protected by avoiding damage to their trunks and limbs as well as by avoiding disturbance of the land within the area of their root structure. For trees to be protected during construction activities there should be no disturbance of any kind within the projected root zone of each tree. These limits would be marked through the installation of erosion control fencing or other visual boundary markers. Secondly, trees that are within the AOD and that are identified for preservation would be marked. Finally, where practicable, large trees would be afforded post-construction protection through the use of tree wells in fill areas and retaining walls in cut areas.

1.7 Land Use and Zoning

Land Use

The Town of Fallsburg's diversity is reflected in its businesses, culture, and institutions, giving it a cosmopolitan feel within a rural setting[1]. Early development trends in the Town of Fallsburg focused around various industries (i.e. tanneries, dairy) and were influenced by the methods of transportation available (Neversink River and Railroad). The summer tourism industry flourished within the Town from the late 1800s to the mid 1960s resulting in the rapid development of hotels and resorts, second homes and seasonal dwellings to accommodate the influx of seasonal visitors. With the end of the tourism industry, the Town of Fallsburg, as noted in the Comprehensive Plan, has experienced steady growth of its year-round (permanent) residents from 1960 to 2000. "The 2004 Census estimate shows that the Town's [year round] population has continued to grow since 2000" and although the industry of tourism is no longer present, the Town still experiences a large influx of summer/seasonal visitors each year[2].

Between 1990 and 2000 the Town has seen a 5.2 percent increase in the overall number of housing units. This increase is lower than the overall Sullivan County rate (7.0 percent), but represents a healthy growth rate for the Town[3]. However, the percentage of single family housing within the Town decreased from 52 percent to 51 percent between 1990 and 2000. This decrease is likely a result of the increased development of 2-4 unit multifamily dwellings within the Town.

According to the Plan, the overall number of single family developments has increased, but this rate of growth has been surpassed by the development of 2-4 unit multifamily dwellings. "An even more dramatic increase is seen in the construction of residential buildings with 10 or more dwelling units", which comprise 8.9 percent of building stock, according to the 2000 US Census[4].

The Raleigh and Heiden Properties project is proposed as a clustered development of single family and duplex homes on four loops in three neighborhoods. It will be constructed around a privately owned and managed internal road system that connects to the existing local road network. Each residential neighborhood would include private recreational facilities including a community building, pools and tennis courts. The proposed development would consist of 236 units and is expected to be completed in 2015, depending on market conditions.

The Raleigh and Heiden Properties site is located in an area surrounded by resort and residential land uses. The proposed residential development would be compatible with the existing residential and resort development located in the vicinity of the site. The proposed project would be generally consistent with the development trends of the surrounding area and would result in an overall increase in the seasonal housing opportunities available in the Town of Fallsburg. The development will therefore not adversely affect or conflict with adjacent land uses or the character of the surrounding area.

[1] The Town of Fallsburg, New York Comprehensive Plan, adopted October 10, 2006.
[2] The Town of Fallsburg, New York Comprehensive Plan, adopted October 10, 2006.
[3] The Town of Fallsburg, New York Comprehensive Plan - Population and Housing, adopted October 10, 2006 -
[4] The Town of Fallsburg, New York Comprehensive Plan, adopted October 10, 2006 and the 2000 US Census.

Mitigation

The proposed development has been designed at a density that is generally compatible with the surrounding area while preserving substantial portions of the project site in existing vegetative cover. The proposed housing and roads have been laid out in smaller neighborhood clusters with integral recreational facilities and largely surrounded by open space. This project has been designed to minimize disturbance to the existing wetlands and steep slopes located on the site and preserve significant wooded buffers around the perimeter of the developed areas. The proposed plan has been designed to complement the surrounding development.

As there are no significant adverse impacts to land use identified that would result from implementation of the proposed development, therefore no mitigation measures are needed or proposed.

1.8 Traffic and Transportation

The traffic study for the Raleigh and Heiden properties project identified several existing maintenance conditions that should be addressed regardless of the project to improve traffic flow and safety in the study area. These maintenance issues are not related to project impacts and therefore are not identified for mitigation by the applicant. The conditions include:

Local sign maintenance
Guardrail maintenance
Road condition maintenance
Resolving street name and street signage issues

NYS Route 42 has some specific issues relating to existing conditions and exacerbated by growing network traffic. Potential remedies include:

A) No NYS Route 42 north bound right-turn--on-red onto Kiamesha Lake Road (CR 109),

B) Moving the 55 mile per hour NYS Route 42 speed zone to the west side of Heiden Road (CR 161) intersection

Potential Impacts

The Town of Fallsburg has a significant seasonal (Summer) population. The Friday and Sunday peak hour counts were specifically taken during Friday p.m. and Sunday afternoon peak traffic during the busiest summer months. These periods represent a maximum impact scenario for traffic.

Project Trip Generation and Distribution

The proposed Raleigh and Heiden Properties project is anticipated to generate 234 trips during the Friday Summer p.m. peak hour and 226 trips during the Summer Sunday peak hour.

The traffic analysis considered the distribution of the project generated traffic onto the local roadway network. The trip distribution considers existing traffic flows, and access to NYS Route 17, NYS Route 42, and the road network for each cluster of residential units based on its position in the network. The Raleigh and Heiden Properties project would have three entrances on Heiden Road and one entrance on Park House Road for the eastern section of the project.

Level of Service

The study intersections were evaluated for level of service. Level of service criteria relates drivers perceptions of operations into grades ranging from level of service A to F with F being the worst condition. See Appendix F for level of service criteria.

The results of the level of service analyses for these intersections are summarized in Table 3.8-6. Capacity analysis calculations for Existing, No-Build (future without project), and Build Conditions (future with project) are provided in Appendix F.

Under current conditions, all of the studied lane groups operate with additional available capacity and operate at efficient levels of service A to C during the seasonal peak hour periods with one exception. The intersection of NYS Route 42 with Heiden Road is projected at level of service F on Heiden Road (CR 161) during the Friday and Sunday seasonal peak hour periods.

No Build Level of Service

Under the "No-Build" Condition, all of the studied lane groups operate with additional available capacity and operate at efficient levels of service A to C during the seasonal peak hour periods with two exceptions: 1) La Vista Drive at NYS Route 42 and 2) Heiden Road at NYS Route 42. The Friday peak hour of La Vista Drive is anticipated to drop to level of service E, under the No Build Condition. The intersection of Heiden Road with NYS Route 42 continues at level of service F with delays doubling during the Friday and Sunday seasonal peak hour periods.

Build Condition Level of Service

The No Build and Build Condition levels of service comparison provided in the Transportation section, indicates the "impact" of the project. The traffic capacity "impacts" are defined as the difference between future traffic conditions before and after the project (No Build and Build Conditions) based on criteria established in the 2000 Highway Capacity Manual[5].

Level of service at all intersection and times would remain C or better except for the two locations noted in the No Build Condition: 1) La Vista Drive at NYS Route 42 and 2) Heiden Road at NYS Route 42. The La Vista approach delay in the a.m. peak hour would increase less than two seconds per vehicle. The level of service F at the Heiden Road (CR 161) approach to NYS Route 42 would continue under the Build Condition. However, the project generated traffic would increase the traffic at this intersection by under 20 vehicles.

It should be noted that the majority of traffic passing through this key intersection (Heiden Road (CR 161) and NYS Route 42), is traffic traveling between South Fallsburgh and commercial development along NYS Route 42 and Heiden Road (CR161) to access NYS Route 17. The majority of project generated traffic traveling to or from Route 17 and NYS Route 42 in the Town of Thompson can avoid this key intersection.

[5] Transportation Research Board, National Research Council, Highway Capacity Manual, Washington, D.C. 2000.

Applicant Proposed Mitigation Measures

The Raleigh and Heiden Properties project is expected to generate 234 vehicular trips in the summer Friday peak hour and 226 trips in the summer Sunday peak hour. This traffic would be dispersed to the local road network at four points (project entrances).

Right-of-way lines along frontage roads will be adjusted as required to meet jurisdictional functional classification right-of-way requirements.

Sight line distances for northbound vehicles turning left from Heiden Road (CR 161) onto Kiamesha Lake Road (CR 109) were field measured at 505 ft vs. a recommended minimum distance of 365 ft for the posed 45 MPH speed limit in that area (AASHTO-2004). Although satisfactory, this distance could be improved by removing and relocating an 80'-100' long section of 6' high chain link fence intertwined with vines and bushes that currently exists along the Raleigh Hotel swimming pool frontage directly opposite Kiamesha Lake Road. Shifting that fence approximately 6 ft further back from its current location would increase the northbound vehicle sight distance at the intersection to at least 690 ft, which is strongly recommended.

1.9 Visual Resources

A visual resources assessment was conducted to determine whether the proposed facility is potentially within the viewshed of a designated aesthetic resource and whether there are potential significant impacts that require measures to eliminate, mitigate or compensate for an adverse aesthetic effect. This impact assessment has been conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) policy and guidance memorandum[6] relating to assessing and mitigating visual impacts of facilities that are located in visual proximity to sensitive land uses.

Heiden Road at the northwest corner of the property (looking southeast)

The project plan calls for removal of several existing buildings on the Heiden Hotel parcel and development of a loop road surrounding a cluster of duplex buildings, including the removal of trees in downslope areas of the parcel. With the layout as proposed, and since the existing topography drops over 40 feet in elevation from Heiden Road toward the rear of the parcel, the row of westerly buildings will be visible from the road but will largely obscure view of the downhill buildings. A sight line looking to the east from the high point of Heiden Road (which was identified by the Planning Board for assessment) is illustrated in a post-development profile view. A minimum building setback of some 100 feet from Heiden Road will provide a landscape buffer from the public roadway.

Heiden Road at the southwest corner of the property (looking northeast)

The primary access to the new development east of (behind) the Raleigh Hotel is proposed from Heiden Road at the southwest corner of the property utilizing the existing hotel access drive. With the new development set more than 800 feet from the public road, visibility of the new

[6] NYSDEC, "Assessing and Mitigating Visual Impacts", Program Policy DEP-00-2, NYSDEC Division of Environmental Permits, July 2000. The guidance includes definitions of various visual impact assessment terms, describes an analytical technique for assessing visual impact, and defines various mitigative measures available to eliminate or reduce an adverse impact.

buildings due to the topography and the existing woods to remain will not be possible from Heiden Road in any season of the year. Therefore there will be no visual impact of this project from this section of Heiden Road.

Park House Road near the northeast corner of the property (looking west)

On the eastern-most portion of the project, access from Park House Road to the proposed development area will necessitate tree clearing for a narrow, curvilinear access drive. The drive will enter the property in the southeast corner and wind down the hill and through the woods some 125 feet from the public road before entering the proposed building area. The new development (buildings and loop road) will be set a minimum of 160 feet from the public road. Given the change in topography and the proposed preservation of existing tree cover on much of this parcel, visibility of the new buildings through the remaining woods will be largely obscured. The visual impact of the project from Park House Road and its environs (including neighboring residential properties) will be limited to the new entrance drive immediately at the public road, and when leaves are off the trees, seasonal visibility of portions of new buildings filtered by the intervening woodland cover that will remain.

Lighting Effects

No street lighting or broad area lighting is proposed in this development. Outside lighting will be limited to low illumination, wall-mounted lights on the residential buildings located at the entry doors and similar wall-mounted lights for safety of pedestrians on the community buildings. While interior and exterior light from the buildings may be visible from the nearby roads, illumination of the site will be well below any level that would cause an impact on the night sky.

Mitigation Measures

Site Design

The proposed site design is intended to minimize potential visual impacts of the project. The design lays out the development using curvilinear streets and building clusters that work with the existing land forms and allow for a smooth variation in the appearance of any cluster of buildings as may be seen from any particular vantage point off the site. Further, the natural topography of the project site will allow the buildings and internal roads to descend from the elevation at the public roadway toward the back of the site, thereby minimizing the apparent size of the development. Buildings closer to the public roads will obscure views of homes behind them. Activity areas for residents are concentrated within the building clusters thereby allowing preservation of existing vegetative cover around the perimeter of the developed areas for buffering. These mitigation measures, which are integral to the project design, will result in a development that is harmonious and fitting with the topography and landscape setting.

The project design is anticipated to fit with the moderately developed character of the public roadway corridors from which limited portions of the project may be seen. Preservation of woodland trees on the property in addition to modest landscape treatment of disturbed areas will provide buffers for views from outside the site.

Architecture

Proposed building architecture will consist of modest, low profile residence buildings of a style, materials and colors selected to be harmonious with the existing development in the local area. The project sponsor will work with the Town's Architectural Review Board to design an architectural style for the buildings in the project that will fit with the community.

Any exterior lighting proposed will be appropriately shielded to minimize impact on the night sky.

1.10 Historic and Archeological Resources

The Phase IA cultural resource investigation was conducted at the project site by City/Scape: Cultural Resource Consultants. The goal of this component of the cultural resource survey was to collect available information regarding the use of the site in the past, to document any visible cultural resources on or within view of the project site, to assess the general potential for subsurface cultural remains to be present, and to determine to what degree, if any, this potential has been reduced or eliminated by previous disturbance or environmental factors.

The majority of recorded prehistoric sites in Sullivan County are along the Delaware, Mongaup and Neversink Rivers, as well as along Basher and Shawangunk Kills. Until recently, few professional archaeological surveys have been completed in Sullivan County, which includes the Raleigh and Heiden Properties site. Although no prehistoric sites are located within a mile of the subject property, there are environmental factors that would suggest that the site may be sensitive for prehistoric cultural resources.

Given site specific environmental factors, it was determined that there would be a moderate potential for prehistoric remains to exist on the more level and well-drained portions of the project area. A Phase IB investigation was conducted on the project parcel based on the recommendation of the Phase IA to document the presence or absence of sensitive cultural resources. The summary of the completed Phase IB study is summarized below and can be reviewed in Appendix G.

Phase IB Investigation

In June 2009, City/Scape: Cultural Resource Consultants completed a Phase IB field reconnaissance, a summary of this investigation is attached in Appendix G. Areas selected for subsurface testing were identified during a site walk of the Property and were divided into six areas, due to the size of the "Area of Potential Effect" (APE) on the site. There are several stages of Phase IB investigation. These stages are as follows:

- A site walk and visual inspection to assess potential sensitivity areas for prehistoric and/or historic cultural remains;
- The excavation of a control shovel test to establish baseline stratigraphy of the site and determine the depth and composition of the onsite glacially deposited sub-soils;
- Visual inspection of the land surface and topography to determine locations of rock faces and overhangs (the potential for rock shelters) as well as formations of cryptocrystalline rock, which could indicate prehistoric mining;
- Subsurface testing in the selected areas within the APE zone having sensitivity for prehistoric remains, and to identify historic cultural material (if present);

- Close interval shovel testing around the perimeters of foundations identified on the site;
- Photographic documentation of the overall site.

Subsurface testing included shovel tests and soil screening at the six selected areas in the APE identified as having sensitivity for prehistoric remains. A total of 1,472 shovel tests pits were completed by City/Scape: Cultural Resource Consultants. No cultural material was recovered in Areas 1 through 5.

Area 6 is located on the eastern portion of the project area, east of the Sheldrake Creek and west of Park House Road (also known as Fred Road). A foundation was observed in this area, large enough to determine that it was something other than a residence. Two cisterns were also identified in this area. A total of four hundred and fifty-eight (458) shovel tests were completed in this area, forty-eight of which were completed around the foundation found on the property. Cultural material recovered consisted of mid to late 20th century bottle glass, nails and graniteware.

Rock Shelters and Mines

The site was inspected for any rock shelters and rock formations that could have potentially yielded lithic raw materials. There were bedrock outcrops observed on the site but none of the outcrops provided height or breadth to provide a rock shelter. All of the outcrops were inspected for the presence of quartz or cryptocrystalline rock, none was identified.

Mitigation Measures

Historic Resources

A total of one thousand four hundred and twenty-four (1,424) shovel tests were completed for the Phase 1B study. An additional forty-eight (48) shovel tests were completed around the foundation observed on the eastern section of the property (east of the Sheldrake Creek). The cultural material recovered from the foundation shovel tests does not warrant further investigation of the property. No prehistoric artifacts of any kind were recovered from the APE zone. Based on these results no impacts to historic or cultural resources are anticipated on the site and therefore no avoidance mitigation measures are proposed for archaeological resources.

1.11 Community Facilities and Services

Demography

In order to assess the demand that the Raleigh and Heiden Properties development would place on community services and facilities, the anticipated population, including school-age children, must be estimated.

Potential Impacts

The Raleigh and Heiden Properties development proposes construction of 236 residential dwellings. These units would be four bedroom single family homes. Per the NYS Building code, these units would be constructed for year round residential use. However, they are being designed to address the specific needs of a seasonal population including recreational

amenities such as swimming pools, tennis courts and a multipurpose building in each of the four neighborhoods.

In order to determine the number of persons and school-age children that would be generated by the subject development, recently published multipliers published by the Rutgers University, Center for Urban Policy Research, (CUPR), were used.

A household multiplier of 3.89 and a school age children multiplier of 1.54 are published by the CUPR for four bedroom single family dwellings. Based upon these multipliers, the proposed 236 units would be projected to add 918 seasonal persons to the Town of Fallsburg population, including approximately 363 school-age children.

According to 2009 Census data, there were 2,407 students in grades K-12, and a total of 4,003 households. Thus, the average number of students per household is 0.60 students. Applied to the project, this would result in 142 school age children. As recommended in the Scope of Study for this DEIS, the projection of 142 students based upon the local housing statistics is more applicable than CUPR estimates. The students will be disbursed between the Monticello and the Fallsburgh Central School Districts depending upon location within the development.

Based on the 2009 U.S. Census population projections, the population for the Town of Fallsburg is 13,164 persons; the addition of 918 persons to the Town of Fallsburg 2009 population estimate represents an increase of approximately 7 percent. This is consistent with growth experienced over the past 9 years. According to the US Census 32.9 percent of housing in the Town is occupied by seasonal residents. In consideration of the types of amenities proposed, it could be projected that at a minimum 32.9 percent of the population will be seasonal.

Mitigation Measures

The implication of increasing the Town of Fallsburg's population by 918 is that the population would result in an increased demand for community services and facilities. To the extent that impacts to any of these services are identified, mitigation measures are described below according to respective community service provider.

Police Protection

Potential Impacts

The Town of Fallsburg would receive $654,237 annually in property tax revenues from the project. These revenues could be used to offset any increase in police protection necessitated by the increased demand placed on police protection services by the Raleigh and Heiden Properties residential development.

Mitigation Measures

No mitigation measures are proposed.

Fire Protection

Potential Impacts

The proposed development project would result in the construction of 236 residential dwellings and recreational amenities as shown on the proposed plan. The development consists of 4 clusters of residential development and surrounding the existing Raleigh Hotel on Heiden Road.

Based on planning standards contained in the Urban Land Institute's Development Impact Handbook, it is estimated that 1.65 fire personnel per 1,000 population is required to serve a new population. The anticipated increase in population of 918 persons would generate a demand for approximately 1.5 additional fire personnel. The District's current personnel level of 30 active fire personnel exceeds the ULI standards by 7 fire personnel, even after the proposed population increase. This is a conservative value, as the ULI multipliers assume no existing services, thus the actual demand for personnel is expected to be somewhat lower. The project would generate property tax revenues to the Fallsburg Fire District of approximately $86,451 annually. This additional revenue can be used to augment the District's capabilities as necessary.

If mutual aid is needed, the Fire District would be assisted by fire fighters from adjoining districts.

Mitigation Measures

The proposed internal roads are designed to accommodate fire engines and truck traffic. All proposed roads for the Raleigh and Heiden Properties development would meet the required road standards as per Town of Fallsburg standards set forth in the "Resolution Fixing the Requirements and Establishing Minimum Specifications for Proposed Highways to be Dedicated to the Town of Fallsburg", as amended September 24, 1975. There are four points of access providing alternate routes in the event of an emergency.

Road maintenance will be the responsibility of the Homeowners Association, (HOA). The HOA would be responsible for keeping the private roads clear of vehicles and snow for purposes of ensuring adequate emergency access during all times of the year.

The buildings would be required to meet applicable standards of the New York State Uniform Fire Prevention and Building Code, and would also adhere to applicable regulations of Chapter, 107, Fire Prevention, of the Code of the Town of Fallsburg. The approved project plans would include installation of fire hydrants for fire protection.

The Raleigh Hotel and the residential neighborhood to the north will be served by municipal water. The remainder of the project will be served by a system of on-site wells. The water mains and fire hydrants on the property would be maintained and serviced regularly in accordance with standards set forth by the Fallsburg Fire Inspector. Hydrants would be required to be kept in good condition, and the homeowners association would keep a record of inspection and repairs to be made available to the Fire Inspector upon request. The proposed locations of hydrants are shown on the full scale site plans accompanying this DEIS.

As the site plan progresses, the applicant would meet with the Fire Chief and the Board of Commissioners to address any concerns they have raised to ensure adequate emergency service measures are considered in the design of the project.

No additional mitigation measures are proposed.

Emergency Medical Services

Potential Impacts

The standard for Emergency Medical Services, according to the Urban Land Institute's Development Impact Handbook, is 4.1 full-time personnel and 1 vehicle per population of 30,000. The introduction of 918 persons in the Town of Fallsburg results in potential added demand for 0.13 health care personnel and 0.03 vehicles. The proposed project would not have a measurable impact on emergency services such as ambulance or hospital care.

Mitigation Measures

No adverse impacts to ambulance services or hospital facilities are anticipated as a result of the proposed Raleigh and Heiden Properties development. Therefore, no mitigation measures are proposed.

Schools

Potential Impacts

It is anticipated that the Raleigh Heiden residential community would be inhabited by a religious seasonal population similar to several of the existing communities in the Town of Fallsburg. The dwelling units in the Raleigh and Heiden Properties development will conform to NYS Building codes and be constructed for year round use. However based upon the seasonal amenities provided, i.e. swimming pools and tennis courts, it is anticipated the dwellings will be used primarily for seasonal use. Based strictly on the proposed number of residential units, a total of 142 school-age children would be projected to reside within the development. Due to the anticipated seasonal use of the proposed development, the proposed project is not expected to result in an increase to public school enrollment, thus any tax revenue derived from the proposed project will result in a net benefit to the local school districts.

Fallsburg School District

Of the potential 142 total students, 74 students would reside in the Fallsburg School District. If this were not expected to be a seasonal religious community, this would equate to approximately a 5.5 percent increase in the student population for the District in the 2009/2010 school year.

According to the Fallsburg School District Business Administrator[7], the School District's budget for the 2010-2011 school year totaled $35,579,068, with approximately $17,789,534 being raised by the tax levy of which approximately 72 percent is related directly to programming costs. The School District's enrollment for the 2009-2010 school year was 1,350 students. This results in a per student direct cost for programming derived from the tax levy of approximately $9,488 per student. Given the seasonal nature of a minimum of 32.9 percent of the population, and based on the per student cost, the development, when fully occupied, could introduce up to

[7]Phone conversation with Gladys Baxter on April 7, 2011.

$474,400 in annual costs to the Fallsburgh School District. However, as discussed earlier, in light of the anticipated seasonal use of all residential dwellings, costs to the district are expected to be negligible.

As described in the Fiscal Analysis, (DEIS Section 3.12), the tax revenue to the Fallsburg School District as a result of this project is projected to be $615,362. The effect on the school districts budget is expected to be a net benefit.

Monticello School District

Of the potential 142 total students, 68 students would reside in the Monticello School District. If this were not expected to be a seasonal religious community, this would equate to approximately a 2 percent increase in the student population for the District in the 2009/2010 school year.

According to the Monticello School District Business Administrator[8], the School District's budget for the 2010-2011 school year totaled $75,985,992, with approximately $41,178,673 being raised by the tax levy of which approximately 72 percent is related directly to programming costs. The School District's enrollment for the 2009-2010 school year was 3,226 students. This results in a per student direct cost for programming derived from the tax levy of approximately $9,191 per student. Given the seasonal nature of a minimum of 32.9 percent of the population, and based on the per student cost, the development, when fully occupied, could introduce up to $422,786 in annual costs to the Monticello School District. However, as discussed earlier, in light of the anticipated seasonal use of all residential dwellings, costs to the district are expected to be negligible.

As described in the Fiscal Analysis, (DEIS Section 3.12), the tax revenue to the Monticello School District as a result of this project is projected to be $473,319. The effect on the school districts budget is expected to be a net benefit.

Mitigation Measures

Due to the anticipated seasonal use of the proposed development, the proposed project is not expected to result in an increase to public school enrollment. As any tax revenue derived from the proposed project will result in a net benefit to both the Fallsburgh and the Monticello school districts, no mitigation is proposed.

The proposed internal roads in the project have been designed to allow for easy maneuvering of buses and emergency vehicles. If necessary, school bus stops could be located along the internal roads in proximity to each neighborhood area.

Pleasure Lake Dam

Potential Impacts

Construction of the Raleigh and Heiden Properties residential project will result in grading and excavation which are not anticipated to have an impact on the Pleasure Lake Dam.

[8]Phone conversation with Daniel Grecco, Business Official on April 7, 2011.

The presence of bedrock outcrops on the site and the type of soils on the property indicate that rock removal in limited areas may be required for project construction. Based upon the grading plan, depth to bedrock and bedrock type blasting is not anticipated to be necessary nor is it proposed. Based upon local construction practices, bedrock will be removed by mechanical means (i.e. ripping, chipping) in lieu of blasting.

The inundation map shown in Figure 3.11-2 indicates that the inundation area would be contained within the downstream flood plain of the Sheldrake Stream which is predominantly undeveloped wooded area thus minimizing the potential for damage to persons or property. There is a deep ravine in the vicinity of Route 42 in Thompsonville which could effectively contain flood waters, under moderate conditions, thus protecting the roadway.

In the event of a catastrophic dam failure, or other emergency event, a full Emergency Action Plan (EAP) has been developed for the Pleasure Lake Dam NYS ID NO. 163-1597. As owner of the dam, the Fallsburg Fishing and Boating Club, would establish a command center onsite and assign a team of maintenance and engineering personnel who would be responsible for coordinating emergency action procedures, provide assistance to emergency management agencies, and implement dam hazard reduction procedures to the extent possible. The EAP outlines the specific circumstances under which emergency evacuation and road closure procedures should be implemented. The Plan provides a chain of command and a notification list of emergency responders including contact information. As set forth in the EAP, the notification list is updated annually.

Mitigation Measures

As indicated above, blasting for site development is not anticipated or proposed. In the event that blasting is found to be necessary, any blasting would be carried out in accordance with a Blasting Protocol to be developed specifically for this project and a Blasting Contract developed with the Blasting Contractor. The Blasting Protocol is based on State and Local regulations. The contractor's Blasting Contract would be based on site specific blasting requirements designed to reduce impacts in proximity to the proposed project and will specifically take into account the distance between any proposed blasting sites and the recently improved Pleasure Lake Dam.

1.12 Fiscal Resources

For purposes of the analysis of fiscal impacts, projected annual property tax revenues were calculated by estimating the future assessed value of the proposed development applicable to each taxing jurisdiction and multiplying same by the tax rate applicable to each taxing jurisdiction.

The Raleigh Heiden development would result in the conversion of vacant and partially developed land to residential development. The increased market value of the fully developed project site, with these improvements, would result in an increase in property tax revenues. The market value of the project site, with these improvements, would result in an increase in property tax revenues when compared to the revenues generated presently by the project site.

Projected Assessed Value

The dwellings would have a market value of approximately $225,000 for both the four-bedroom single family dwellings and the four bedroom duplex units. The assessed value of each dwelling was determined by multiplying the market value by the Town equalization rate. The total

assessed value for the development is $29,409,912. The projected assessed value is described in Section 3.12.2 and summarized in Table 3.12-3.

Projected Property Tax Revenues

The projected tax revenues generated for the Raleigh Heiden residential project are described in Section 3.12.2 and summarized in Table 3.12-4. The overall tax revenue to be generated as a result of the proposed project equates to more than a ten fold increase in tax revenue to the various jurisdictions.

Sullivan County

Sullivan County would receive $355,636 annually in property tax revenues.

Town of Fallsburg

The annual property tax projected to be generated by the proposed Raleigh Heiden residential development to the Town would be $654,237 annually. The Town of Fallsburg General Fund would receive $183,465 annually. The Fallsburg Highway Department is anticipated to receive an estimated $215,596 in taxes from the proposed development. An additional $63,779 would be generated to the “Highway Outside Town” budget.

Costs Associated with the Proposed Project

Town of Fallsburg

An approximate estimate of costs to the Town of Fallsburg associated with the proposed Raleigh Heiden residential development may be determined by obtaining a reasonable composite of current costs on a per capita basis and multiplying this amount by the anticipated population of the proposed project.

Through a review of the Town's operating budget, the amount of expenditures can be derived and, by dividing the population into the amount of expenditures, the per capita cost can be determined. Dividing the budget to be raised by taxes by the 2009 population results in a per capita municipal cost of $758 per person for municipal services. This represents a "worst-case" estimate of per capita costs, as the commercial and other land uses in the Town also place demand on the various Town and other governmental services which are not considered in deriving the per capita cost.

The proposed project would generate a total of 918 persons including 142 school age children, all of which are anticipated to be seasonal residents. However, In order to present a worse case scenario, for the purpose of this analysis, consistent with local housing trends, a minimum of at least 32.9 percent (302 persons) could be expected to be seasonal. Based on a per capita cost of $758, the additional costs to the Town of Fallsburg are projected to be approximately $466,928.

As presented in Table 3.12-5, the revenues to the Town from the proposed Raleigh and Heiden Properties residential development would amount to a total of $654,237, compared to a cost of

$466,928. Thus, the impact to the Town of Fallsburg municipal budget is anticipated to be positive.

School Districts

The fiscal impacts of the project to the Monticello School District and the Fallsburg School District are described above, in the summary of Community Services.

Mitigation Measures

The proposed project is anticipated to result in an annual fiscal net benefit for the Town of Fallsburg. In addition, due to the anticipated seasonal use of the proposed development, the proposed project is not expected to result in an increase to public school enrollment. Any tax revenue derived from the proposed project will result in an annual net benefit to both the Monticello and the Fallsburg school districts, thus no mitigation is proposed.

1.13 Construction Related Effects – Noise and Air Resources

Potential Impacts - Noise

Ambient daytime noise levels would increase in the immediate vicinity of the site during project construction. The level of impacts of these noise sources depends on the type and number of pieces of construction equipment being operated, as well as the distance from the construction site. The noisiest period of construction would occur during site clearing and grading activities when the site is prepared for parking areas, utilities and building pads.

Noise levels due to construction activities would vary widely, depending on the phase of construction activities. Occasional noise levels at the site property line are projected to range between 65 dBA and 90 dBA, depending on the actual location of construction equipment at any given time. These periods of elevated noise would occur during daytime hours and are typically sporadic during the construction period. Noise levels actually experienced on a nearby property would be expected to be lower, accounting for distance from the noise source and other attenuating factors.

It is anticipated that nearby residences on surrounding local roads would experience temporary elevated noise levels at occasional periods during the construction of the proposed subdivision. The heaviest volume of construction traffic is expected to occur at the beginning of the construction as grading and tree clearing occur. Other equipment, once on-site, is likely to be kept there during the earthmoving phase of the project.

Mitigation Measures - Noise

Construction activity would be limited to the hours between 7:00 AM and 9:00 PM, Monday through Friday, and 8:00 AM and 5:00 PM, Saturday and Sunday, as required by the Town Zoning Code 310-5.15. All construction vehicles and equipment would be well maintained and operated in an efficient manner.

As the build condition is not anticipated to result in any long-term significant adverse noise impacts, the proposed activity is residential and consistent with the current land use in the area, no additional mitigation measures are proposed.

Potential Impacts - Air Quality

Air quality impacts associated with the proposed development were assessed to determine whether this proposal would have an adverse impact on the surrounding general population. Air quality impacts from construction activities were assessed.

Construction Impacts

Fugitive and Airborne Dust

Construction activities with the proposed action would have a potential impact on the local air quality through generation of fugitive or airborne dust. For this project, fugitive dust would be generated during ground clearing and excavation activities as earthmoving equipment modifies grades to their final elevations. Throughout the construction period, earth moving and the passage of vehicles over temporary dirt roads and other exposed soil surfaces may also generate fugitive dust, particularly during dry and windy conditions. On-site mitigation measures are proposed as part of the project during construction to limit the dispersal of fugitive dust. Existing residences along Heiden Road, closest to the proposed areas of grading, would have the greatest potential to be impacted by dust.

Equipment and Vehicle Emissions

Construction-related air emissions would result from the use of diesel fuel by construction vehicles and equipment. Well maintained diesel engines are more fuel efficient than gasoline engines, however, they are a source of some air pollutants. Construction equipment emissions are generally insignificant compared to vehicular emissions from adjacent roadways and businesses if the equipment is properly maintained and the engines tuned.

Mitigation Measures - Air Quality

Dust Control Measures during Construction Activities

Several methods can be used to control dust during construction. A primary method is to minimizing the area of the site which is subject to disturbance at any one time. Mulch or other temporary covers will be used on exposed soil areas. Limiting the movement of trucks and construction equipment over exposed soil surfaces and covering haul trucks, will also control dust. During dry weather conditions, water will be sprayed on unpaved areas subject to heavy construction vehicle traffic. Paved areas will also be kept clear of loose dirt that can generate dust. The use of stone tracking pads or tire washing stations at access points to the site will greatly lessen the tracking of soil onto adjacent roadways. Haul vehicles will be covered to prevent dust emissions while in transit to the disposal site.

Upon project completion, the project site would be stabilized and areas of exposed soil would be covered with landscaping, turf, buildings and pavement, thereby reducing the potential for dust generation from the project area long-term.

Although exhaust emissions from construction equipment is less intrusive than fugitive dust generation, particulates from diesel exhaust emission should also be controlled through proper

tuning of the vehicles engine and maintenance of the air pollution controls. This would minimize additional contribution to site generated particulate emissions during construction.

1.4 Alternatives

Section 617.9(b)(5) of the regulations implementing SEQRA requires that a draft environmental impact statement include a description and evaluation of the range of reasonable alternatives to the proposed action which are feasible, considering the objectives and capabilities of the project sponsor. The range of alternatives must include the “No Action” alternative.

In addition to the No Action alternative, the Scoping Document for this DEIS specifies an evaluation of one additional alternative: a Conventional Subdivision. A summary matrix of the varying impacts associated with each alternative is provided as Table 5-1 at the end of Section 5.0.