LOCAL IMPACTS AND COSTS

Exhibit IX. A.2.b

The proposed Sterling Forest Resort includes the mixed-use redevelopment of existing seasonal entertainment and ski operations into a year-round tourism destination that incorporates a casino, resort and existing site uses. Potential impacts include those to traffic and noise, watershed impacts from storm water and waste water discharge, and hydrologic impacts to surface waters and wetlands. The design for Sterling Forest Resort has been developed in conjunction with LEED measures to minimize impacts to the greatest extent possible. Where impacts cannot be avoided, RW Orange County LLC has developed a cohesive mitigation strategy as detailed in **Exhibit IX. A.3 Mitigation of Impact to Host Municipality and Nearby Municipalities**.

Traffic and Roadway Infrastructure

To assess and evaluate the impacts of traffic on the transportation system network, two studies will be performed. A Traffic Impact Study (TIS) for the Sterling Forest Resort will be completed as required by the New York State Department of Transportation (NYSDOT) to examine and assess traffic impacts and provide recommendations to mitigate impacts along Route 17A from the New York State Thruway (I-87), through the proposed Sterling Forest Resort site, and west of the site. This defines the study area. This study will focus primarily on local impacts to the transportation and roadway infrastructure. The Sterling Forest Resort Draft TIS prepared by Kimley-Horn, P.C. is included in Support Exhibit IX. A.2.b-1.

The purpose of the Sterling Forest Resort TIS is to determine the current traffic conditions of the impacted roadways, and develop mitigative measures that address the impacts of the proposed Sterling Forest Resort. NYSDOT has been consulted regarding the study parameters of the TIS. Additional input has been provided by both the Orange County Transportation Council (OCTC) and the Town of Tuxedo. As agreed upon with NYSDOT, the study area includes the Route 17A corridor between the Route 17/Route 17A intersection and Benjamin Meadow Road. The TIS did not include a study of the proposed Thruway Interchange 15B, as that will be part of the interchange TIS; however, the traffic analyses for future conditions will include traffic volumes associated with the interchange. It is anticipated that the intersection of Route 17A and Route 210 will be included as well to gain an understanding of the impacts further west of the site.

A second traffic impact study, prepared by Philip Habib and Associates, will address the potential impacts of the proposed interchange along the Thruway (Interchange 15B). The interchange TIS will focus on both local and regional traffic impacts, and will examine current and future traffic conditions along the Thruway. The local roadway network that intersects the proposed interchange and is influenced by the new interchange will be part of the study including Route 17A, Route 17, and CR 106. Conversations with NYSDOT, Federal Highway Administration (FHWA), and the New York State Thruway Authority (NYSTA) regarding these studies have commenced and will continue to establish parameters of the study.

Baseline data has been established which includes an inventory of the current roadway characteristics and operations. Traffic data collection has been captured recently to reflect the most current traffic conditions for the study corridor and intersections including both weekday and weekend. It is important to consider the associated impacts of the seasonal characteristics of the proposed Sterling Forest Resort, including the New York Renaissance Faire, on traffic. Therefore, during the month of August traffic data will be captured when the New York Renaissance Faire is operational to gain an understanding of the traffic impacts to the site during the peak summer period.

The results of the operational analyses will be used to develop mitigative measures or recommendations for improvements to support the proposed Sterling Forest Resort as well as future traffic 10 years after opening. The Sterling Forest Resort TIS and Interchange 15B study will serve as the formal reports that document the baseline conditions, anticipated traffic expected to be generated, future traffic, operational analyses, and mitigative measures with associated costs.

LOCAL IMPACTS AND COSTS

Preliminary Transportation Impacts

To determine the traffic impacts of the proposed Sterling Forest Resort, trip generation will provide an understanding of the anticipated volume of new traffic that will be associated with the resort. Using industry research, available data, and previous studies for casinos, a travel demand forecast was developed for the Grand Hotel. Additional travel demand forecasts have been prepared to account for other developments within the Sterling Forest Resort, such as the New York Renaissance Faire. Future traffic patterns and background growth are also used in projecting traffic.

The OCTC manages and maintains a travel demand model, which can be used to develop future traffic growth rates, distribution patterns, and the impacts associated with a new interchange along the Thruway. In addition to forecasting travel demand specific to the Sterling Forest Resort, the travel demand model will be used to develop the future traffic volume conditions for opening day of the Sterling Forest Resort as well as 10 years after opening day.

A preliminary travel demand forecast for the Sterling Forest Resort has been conducted by Philip Habib & Associates. Estimates for the traffic, transit, and parking needs were developed using 2013 survey data from the Resorts World Casino New York City in Queens, and data from the 2013 Study by AKRF, Economic and Fiscal Impacts Analysis of Six Philadelphia Casino Proposals. The forecast indicates that peak travel demand from the Sterling Forest Resort will occur during the 9-10 p.m. hour on both Friday and Saturday and the 2-3 p.m. hour on Saturday during the summer months. The assessments of traffic conditions focus on these periods as well as the Friday 7:30-8:30 a.m. and 5-6 p.m. peak hours for traffic on the adjacent roadway network.

During peak hours, it is estimated that the Grand Hotel would generate up to 1,371 new vehicle trips per hour on Friday when an estimated 23,000 people would visit the site, and up to 1,590 new vehicle trips per hour on Saturday when an estimated 29,500 people would visit the site. Approximately 97 percent of this vehicle traffic is predicted to approach the site from the east on Route 17A (much of it en route to/from the new Thruway Interchange 15B that would be developed as part of the project), while 3 percent is predicted to travel to/from the west.

The Sterling Forest Resort TIS assumes that vehicles traveling between the parking garage for the proposed project's casino and hotel components and the Route 17/Park Road 106 and Thruway interchanges to the east would utilize the project site's eastern-most vehicular entrance on Route 17A. Vehicles en route to and from the west were expected to utilize an entrance to the west on Route 17A adjacent to the Grand Hotel. Vehicles associated with the New York Renaissance Faire would utilize lots and garages on both the New York Renaissance Faire and Grand Hotel sites.

West of the proposed roundabout, the increased traffic on Route 17A does have the potential to impact several intersecting north-south roadways. Detailed analyses are now being undertaken in a preliminary manner and will continue to be refined as additional OCTC modeling data and data from the summer 2014 New York Renaissance Faire become available. The Sterling Forest Resort Draft TIS and Draft New York State Thruway (I-87) Interchange 15B Traffic Study are included in Support Exhibit IX.A.2.b-1 and Support Exhibit IX.A.2.b-2, respectively.

Site Access Impacts

The Grand Hotel area of the site is proposed to be served by two access points along Route 17A. The first access point is at the east edge of the resort and would involve a new intersection along Route 17A in the form of a roundabout intersection. The second point of access is at an existing unsignalized intersection, east of the Ski Village. This intersection currently provides access to a large surface parking area used during the New York Renaissance Faire. Additional intersections will be developed to the west along Route 17A to serve surface parking lots which will provide parking for the World Fairgrounds and Ski Village areas of the site.

It is anticipated that existing driveways will be consolidated, better defined, and reduced in number with the proposed Sterling Forest Resort. The future traffic volumes for the Route 17A study corridor and

intersections, including those proposed to serve Sterling Forest Resort, will be analyzed to determine the operational impacts.

Parking Impacts

Currently, there are zero marked parking spaces and approximately 1,970 grass surface spaces. The proposed design will include approximately 8,900parking spaces among two surface parking lots and one parking garage, for a net increase of 6,930 spaces. As detailed in the Preliminary Traffic Assessment by Philip Habib & Associates, the parking demand estimates the hourly parking accumulation on both Friday and Saturday. These numbers include the needs for both guest and employee automobiles. The peak demand is expected between 9 and 10 p.m. on both Friday and Saturday, predicting approximately 3,043 spaces and 3,561 spaces respectively. Since the project plans for a parking capacity of 7,500 vehicles, the peak demand can be fully accommodated by on-site parking.

Multimodal Transportation Impacts

Commuter busing and the MetroNorth Port Jervis Line commuter rail are currently available in Tuxedo, New York. Based on data collected at the Resorts World Casino New York City in Queens, New York it is estimated that approximately 10 percent of trips would be made by charter bus, and that a relatively small number of trips (1 percent) would be by taxi or livery car. The project will improve public transportation options using a combination of commuter rail and shuttle services. In order to reach the Grand Hotel via rail, guests would use the Metro-North Railroad Station which is located 5 miles east of the site. Passengers would then utilize the shuttle bus to and from the railway station in order to complete their trip. During peak hours it is predicted that 166 (85 inbound and 81 outbound) person-trips will occur via train on a Friday and 214 (109 inbound and 105 outbound) will occur via train on a Saturday. These peak numbers will depend greatly on the train schedule. Since the arrival and departure times of the train will concentrate the number of guests during the peak times, the actual numbers could be slightly greater than the preliminary forecast predicts. Person trips by charter bus are estimated at 331 (170 inbound and 161 outbound) on Friday, and 429 (219 inbound and 210 outbound) on Saturday.

Further detail on traffic impacts are provided in **Exhibit VIII. C.17.d Necessary Roadway and Traffic Improvements** and the Sterling Forest Resort Preliminary Traffic Assessment (Philip Habib & Associates, 2014).

Secondary Development Assessment

Research has shown that a number of factors need to be in place for development to occur. Three key factors are relative transportation accessibility, land availability, and land use controls. For each of these factors, interchange15B has a low potential to influence land development in the area that would be served by the interchange.

The area is already well-connected to the regional highway system, within 9 to 12 minutes of interstate highways via Thruway interchanges 15A and 16. Interchange 15B reduces travel time to existing interstate access points by two to four minutes. Because of the relatively minor change in accessibility, the Interchange will have a marginal effect on the area's development potential.

Available land for development in the area is very limited due to the extent of State Parkland; of the land in the area that is not parkland, only a relatively small portion is currently undeveloped. Land along the east side of Route 17 is largely further restricted by proximity to the Ramapo River floodplain and the presence of the railroad and utilities. The relative lack of available development parcels limits the development potential of the area.

Tuxedo's Comprehensive Plan Update encourages redevelopment rather than new growth. Tuxedo has a record of controlling growth through comprehensive planning and zoning. The area has limited water and sewer service. Sewer service, in particular, typically has a stronger influence on growth than transportation access. Interchange 15B is consistent with the Plan. Any development spurred by interchange 15B would primarily consists of redevelopment of parcels along Route 17 and 17A.

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Noise Impacts

Considering the equipment and construction activity expected for construction of the project and the distances at which the equipment would be operating, construction noise could reach approximately 72.4 dBA Leq at residences located south of Route 17A near the proposed Grand Hotel. Existing noise levels recorded in the vicinity of the residences indicate that ambient sound pressure levels in the area are between a minimum of 62.6 dBA Leq (recorded between 7:00 p.m. and 8:00 p.m. on a weekday) and 70 dBA Leq (recorded between 1:00 p.m. and 2:00 p.m. on a Saturday).

Given the impact threshold of 6 dBA above ambient, there could be periods when construction noise exceeds impact criteria. Project contractors would be required to monitor construction noise experienced near the residential area across Route 17A from the Grand Hotel. If noise levels exceed ambient levels by more than 6 dBA, mitigation measures would be enacted.

Traffic to and from the facility could generate noise impacts on residences located along Route 17A in the vicinity of Indian Kill Reservoir and residences located south of Route 17A in the vicinity of the Grand Hotel.

Water Demand, Supply, and Infrastructure Capacity

As described in the Orange County Water Master Plan, Orange County receives its water supply from both surface and groundwater sources within 11 county watersheds. The majority of the county's water supply is provided by 160 community water supply systems which draw fresh water from county reservoirs and aquifers.

The project site is currently privately served by United Water New York through a 12-inch water line sourced from the Indian Kill Reservoir. At a master meter located on the site north of Route 17A, the line decreases to an 8-inch main to serve the existing property uses (New York Renaissance Faire and associated uses). Sterling Forest Resort would require a larger, parallel meter main beyond the master meter that will expand the service area to the interior of the project site, and a relocation of the existing 12-inch water main north of Route 17A in concert with the Route 17A roadway realignment.

Water demand for the proposed project is approximately 290,000 average daily flows (ADF). United Water has confirmed sufficient capacity in the Indian Kill Reservoir for the project's needs and has provided a draft willingness to serve letter to RW Orange County LLC committing 300,000 ADF.

A water storage tank will be installed underground that will be used for fire flow water demand equalization, which will use rainwater harvested from rooftops as well as water from the Indian Kill system. Peak demand currently is being assessed, as is the ability of the system to meet current peak demand as well as the peak demand of the proposed project. This would be a prestressed concrete cylinder tank approximately with a preliminary capacity of 1 million gallons. Water supply impacts of this tank are expected to be minimal, as the majority of water will be sourced through rainwater harvesting.

Groundwater Recharge

The Ramapo River Sole Source Aquifer (SSA) is located approximately 2 miles east of the project site. Recharge that would typically fall within the project site ultimate reaches the Aquifer, which also receives its recharge from the Ramapo River. The Ramapo River SSA is a federally designated SSA located within Environmental Protection Agency (EPA) Region 2 established under the Safe Drinking Water Act (SDWA). This signifies specific designation of areas which are dependent upon groundwater supplies and ensures that federal agencies will not commit funds toward projects which may contaminate the SSA's groundwater supplies.

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Groundwater recharge in this area is naturally occurring by seepage from the Ramapo River during flood stages and induced by pumpage or withdrawal of water from wells tapping the aquifer; therefore, surface water contamination can potentially affect public water supply wells reliant on the Ramapo River SSA. Design best practices for storm water management and wastewater treatment will be utilized to ensure that discharge meets or exceeds existing water quality; therefore the Sterling Forest Resort project would have no adverse impact on groundwater on-site or any groundwater recharge for the Ramapo River SSA.

Waste Water Production, Discharge, and Infrastructure Capacity

The existing waste water treatment plant (WWTP) is located north of Route 17A approximately 800 feet east of Benjamin Meadow Road. The existing WWTP is a secondary treatment facility that drains to the adjacent Indian Kill Creek. The WWTP currently treats waste water from the existing ski resort and New York Renaissance Faire; the current peak capacity is approximately 60,000 gallons per day but the plant treats approximately 20,000 to 25,000 peak gallons per day. This WWTP will remain in service to serve the existing property south of Route 17A as it currently does. This WWTP is owned by the New York Renaissance Faire but operated and maintained by United Water New York under a lease agreement.

The proposed action would approve the generation of approximately 290,000 gallons of liquid waste per day (ADF) and 875,000 gallons of liquid waste per day (peak), entirely sanitary waste water. It would not utilize any existing public waste water treatment facilities. The proposed action will approve the construction of a waste water reclamation facility (WRF) to be located on-site, gravity sewer collection system with 8 to 12-inch gravity sewer mains, and a 12-inch force main for the WRF effluent. The treated wastewater discharge would be released downstream in the Indian Kill Creek. The "full capacity" flows of 290,000 gallons per day (gpd) are anticipated to occur primarily on the weekends and holidays with lower flow rates occurring during the weekdays. Assuming a 50 percent reduction during the weekdays, the WRF is expected to operate at approximately 150,000 gpd ADF most of the time. Therefore, the WRF design incorporates dual treatment trains with 150,000 gpd ADF treatment capacity each. Provisions will be provided for operator flexibility to operate one or both treatment trains at any given time. Surge attenuation will be provided to accommodate the daily flow fluctuations.

Existing sewer lines serve the project site, but they are inadequate for the area of the site north of Route 17A. A new wastewater (sewage) treatment district would be formed to serve the project site. RW Orange County LLC would be the Applicant/Sponsor for the new sewer district, with an application anticipated in August 2014. Indian Kill Creek would be the receiving water body for the waste water discharge. The proposed 12-inch force main will be located in the northern 17A right-of-way and will discharge to the Indian Kill where it crosses underneath 17A also in the right-of-way. To support the Town of Tuxedo's desire to create a system of hiking, pedestrian, and biking paths through unincorporated areas (according to the 2011 Town of Tuxedo Comprehensive Plan Update) , the force main will include a meandering multi-use path for pedestrians and cyclists to use and to provide connectivity within the area.

With 100 percent of the irrigation proposed on-site using reclaimed water and not potable water and the proposed 6,665 toilets on site using reclaimed water for toilet flushing, the reclaimed water demand is estimated to be 133,000 gallons per day. Currently, the existing Tuxedo Ridge Ski Center uses surface water and a pump to make snow during the ski season. To better preserve surface water in the watershed, using reclaimed water for snowmaking is being considered, which will result in additional reclaimed water demands.

No waste water production or discharge will occur for the proposed interchange 15B, and as such it will have no waste water production or discharge impacts.

Storm Water Discharge and Management

The proposed action would approve the disturbance of greater than one acre of land and create storm water runoff. Sterling Forest Resort's storm water management systems will seek to exceed New York State Department of Environmental Conservation (NYSDEC) standards for both water quality and

water quantity control. Potential storm water discharge and management impacts include water quality impacts on the Indian Kill watershed resulting from changes in land cover and increased impervious surfaces, new point sources, and discharging wastewater as well as storm water volume and potential flooding impacts.

Watershed Impacts

The majority of the Sterling Forest Resort site is located within the Indian Kill watershed, while a small portion of the southwestern area of the site near the ski slopes is located in the Wanaque and Warwick Brook watersheds. The Indian Kill Creek, which bisects the site, is part of the Ramapo River Basin, thus the Ramapo River Watershed Management Plan is applicable to the Sterling Forest Resort site. **Proposed interchange 15B also is located in the Ramapo River watershed.** New point sources include parking lots, pedestrian facilities, and rooftops. **Exhibit VIII. C.17.e** describes management, cleaning, detention, and discharge measures for both drainage areas.

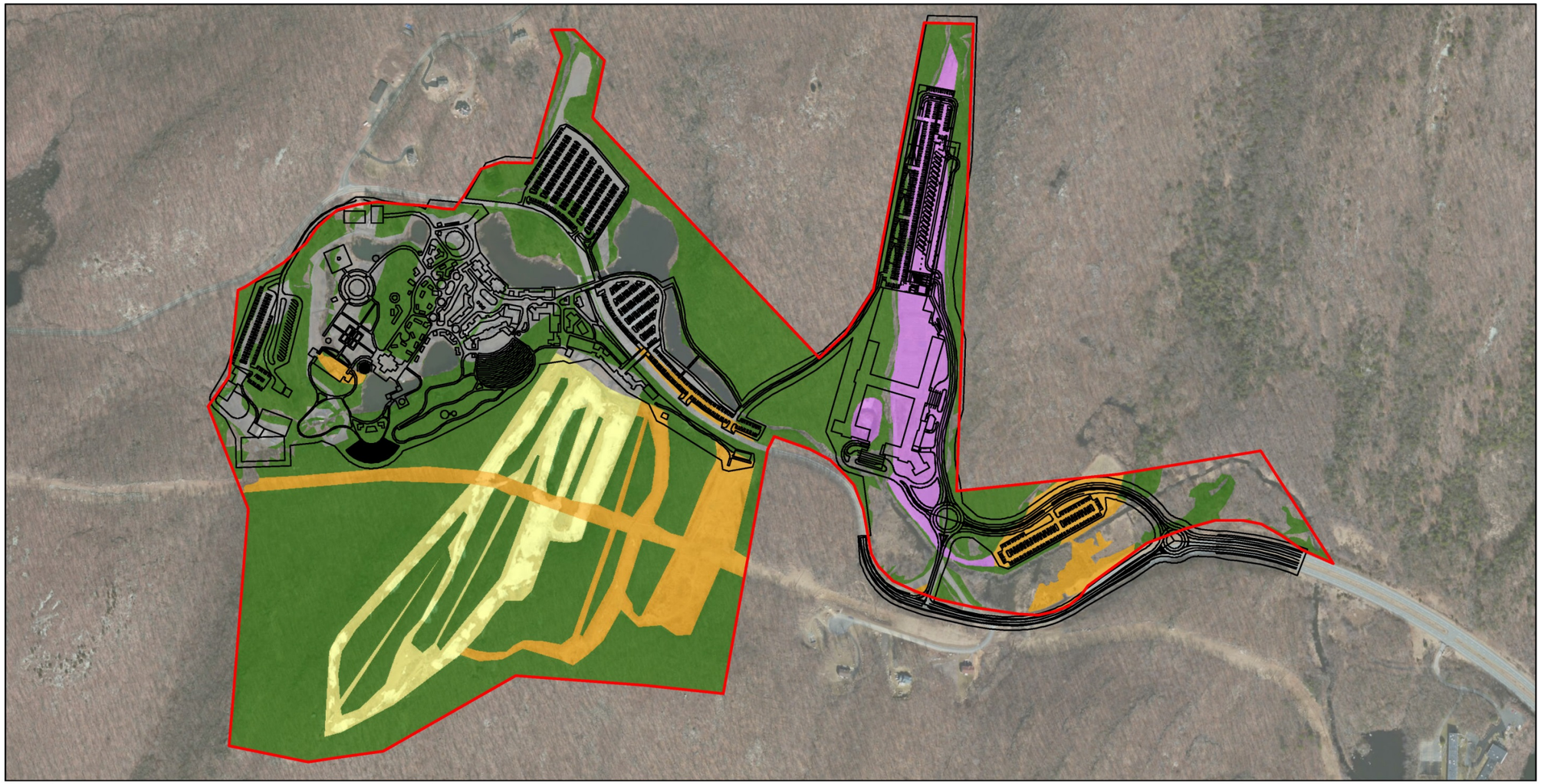
The proposed project site is divided into two major drainage areas. The first is the Grand Hotel area and the second is the World Fairgrounds and adjacent recreation/entertainment uses including the Ski Village and Sterling Forest Gardens. The proposed Sterling Forest Resort site is previously disturbed, with the existing air field (Drainage Area 1) cleared and partially paved, and the New York Renaissance Faire area (Drainage Area 2) currently developed for recreation and entertainment uses. A portion of Drainage Area 2 will be considered redevelopment and will adhere to the New York state guidelines for redevelopment projects as described in Chapter 9 of the *Stormwater Management Design Manual*. A minimal percentage of Drainage Area 2 will be treated as new development due to the proposed footprint beyond the existing New York Renaissance Faire uses.

Several of the areas to be disturbed are areas of prior disturbance; therefore, the incremental amount of land to be disturbed by the proposed development is notably lower. Table 1 Illustrates impacts to Land Cover on the Sterling Forest Resort Site. According to land cover type impact calculations, impervious surfaces on the site will increase by approximately 58 acres as a result of the proposed development. Forested areas on the perimeter of Drainage Area 1 as well as minimal forested area within the Renaissance Faire grounds in Drainage Area 2 will be removed, resulting in a loss of approximately 43 acres of forested area. Table IX. A.2.b-1 and Figure IX. A.2.b-1 illustrates potential impacts on land cover of the proposed Sterling Forest Resort development.

Table IX. A.2.b-1. Land Cover Types on the Project Site

Land Cover Type	Current Acreage	Acres Impacted
Roads, buildings, and other paved or impervious surfaces	25.72	22.09
Forested	131.44	41.74
Meadows, grasslands, or brushlands (nonagricultural, including abandoned agricultural)	22.65	5.58
Non-vegetated	17.34	0.09
Wetlands (freshwater)	11.53	3.96
Surface water features (lakes, ponds, streams, rivers, etc.)	16.86	5.21
Other	14.37	14.31
Total	**239.90**	**92.97**

Figure IX. A.2.b-1. Potential Impacts on Land Cover



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Storm water will be directed into on-site storm water management facility/structures, green infrastructure. and on-site surface waters. After providing the necessary water quality treatment, the runoff will be discharged into an existing stream channel of Indian Kill Creek.

The proposed storm water management system will not impound any water for reuse because of its location in an SSA region.

Given the fact that the in situ soils found at the Grand Hotel site are not capable of providing infiltration and the fact that the entire project lies within the aquifer recharge zone, and that at least 30% of our clean waste water effluent will be reused for irrigation and toilet flushing, Sterling Forest Resort does not plan to reuse storm water. Instead, the proposed development plans to exceed the quality and quantity requirements to ensure that storm water is released in the cleanest condition possible and at the safest rate possible to protect the downstream watershed from pollution and control. Today, all storm water discharges are released into the watershed without any pre-treatment, filtration, or quantity control. The project will significantly improve both of these metrics.

Flooding Impacts

Approximately 7.4 acres of land on the Sterling Forest Resort site is located in the floodway, largely composed of the Indian Kill Creek which crosses Route 17A. Approximately 36.4 acres of the project site lies within the 100 year floodplain, while an additional 5.8 acres lies within the 500 year floodplain. These floodplain lands surround Indian Kill Creek, and nearly encompass the former Grand-Large Barron Air Strip along the western side of Route 17 A.

Sterling Forest Resort is a redevelopment of the existing New York Renaissance Faire/Tuxedo Ridge Ski Center properties with no expansion of the existing footprint into surrounding forests. Runoff from the existing development is currently uncontrolled.

Current storm water volume (pre-development) is estimated at 285,000 cubic feet while the proposed Sterling Forest Resort (post-development) storm water volume will be approximately 475,000 cubic feet, an increase of approximately 190,000 cubic feet; however, no storm water will flow to adjacent properties. Existing ponds in the project area are assumed to provide the storm water quantity controls for the site and will be utilized in the peak flow controls of the proposed project. Storm water detention and discharge will be controlled by the proposed lake and an underground detention system with an outfall control structure to provide peak flow management.

Surface Waters and Wetlands

Surface waters (e.g., streams, ponds) comprise 15.89 acres of the project site, while wetlands comprise 12.52 acres of the project site. Streams and associated pond systems were identified on the project site under the jurisdiction of the U.S. Army Corps of Engineers (USACE) and NYSDEC. These include the Indian Kill Creek, a NYSDEC Class C stream which flows into the Indian Kill Reservoir, a source of municipal drinking water. The classification 'C' is for waters supporting fisheries and suitable for non-contact activities.

Multiple U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) wetland systems under jurisdiction of the USACE as well as a State mapped wetland system under the jurisdiction of the NYSDEC were identified and field verified within the project site and in the general vicinity of the project site. According to the NWI data, an extensive NWI wetland system was identified within the project site. This NWI wetland system is potentially under the jurisdiction of USACE. The wetland system consists of eight NWI classifications: PEM1E, PEM1F, PFO1C, PFOlE, PFOl/EM lE, PUBHh, and PUBHx.

According to the NYSDEC Resource Mapper, wetlands under the jurisdiction of NYSDEC are mapped within and in the general vicinity of the project site. Additionally, there are smaller unmapped wetlands adjoining the mapped wetlands that could potentially be under the jurisdiction of the NYSDEC. These wetlands are located to the south and southeast of the former airstrip site. There is also a small wetland

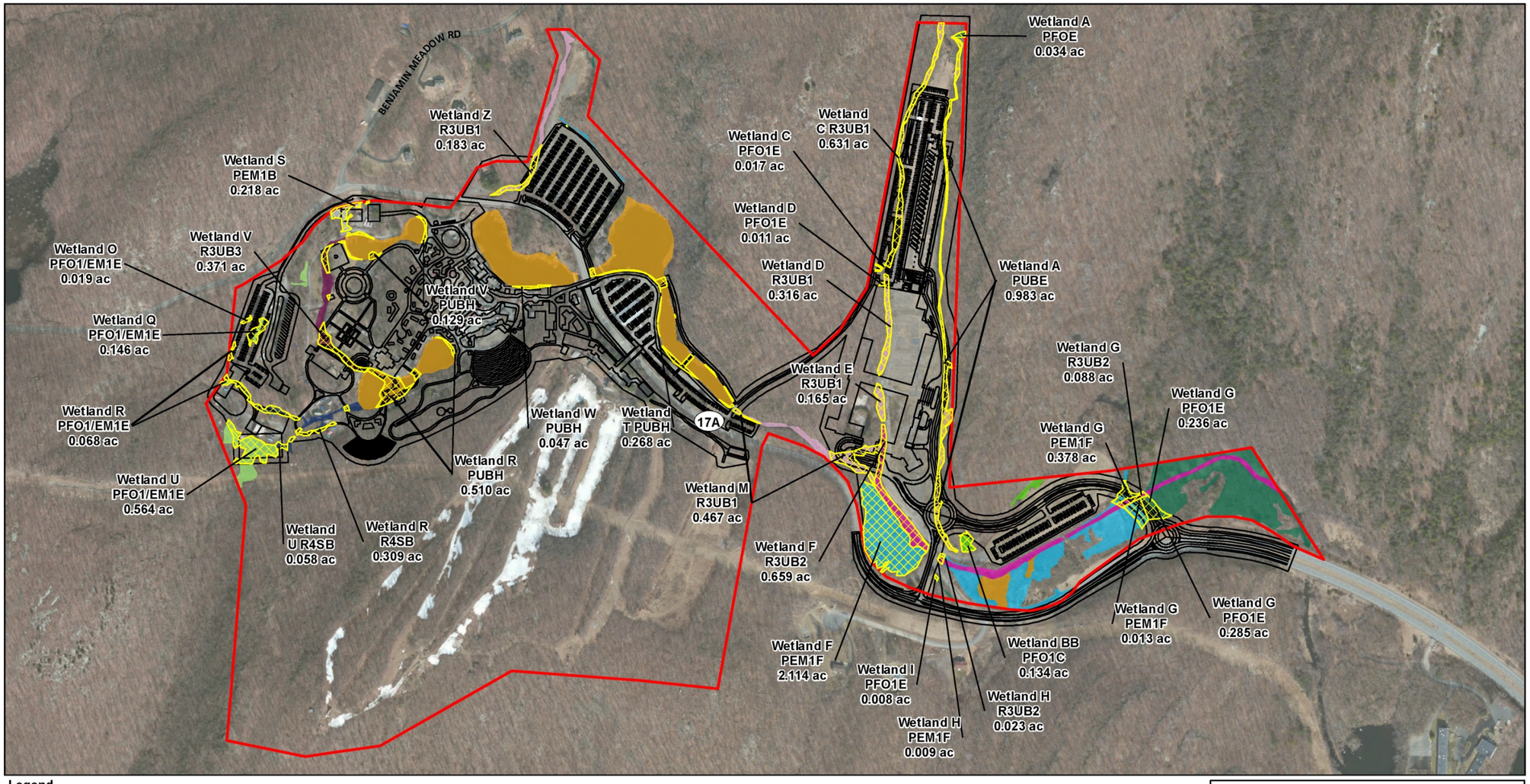
(less than 12.4 acres in size) at the northerly end of the former airstrip site. Further details on wetlands and surface waters are provided in **Exhibit VIII. C.1.c Description of Land**.

The proposed action would result the placement of clean fill and structures in portions of the waterbodies, wetlands, and stream channels on the site. Indian Kill Creek and associated wetlands and a minor tributary as well as NYSDEC wetland SL-2 may be affected by the project. Table IX. A.2.b-2 and Figure IX. A.2.b-2 illustrates potential impacts on surface waters and wetlands of the proposed Sterling Forest Resort development.

Table IX. A.2.b-2. Surface Waters and Wetlands

Surface Water	Acres in Project Area	Acres Impacted
PUBE	0.98	0.98
PUBH	10.12	0.95
R3UB1	2.45	1.76
R3UB2	1.93	0.77
R3UB3	0.74	0.37
R4SB	0.64	0.37
Total Surface Water	**16.86**	**5.21**
Freshwater Wetland	**Acres in Project Area**	**Acres Impacted**
PEM1B	0.22	0.22
PEM1F	5.39	2.50
PFO1/EM1E	1.2	0.80
PFO1C	0.28	0.13
PFO1E	4.44	0.30
Total Wetlands	**11.53**	**3.96**

Figure IX. A.2.b-2. Potential Impacts on Surface Waters and Wetlands



Legend

- Renaissance Faire Property Boundary
- Wetland Impacts
- Proposed Footprint

Wetland Delineation

PEM1B	PUBH
PEM1F	R3UB1
PFO1/EM1E	R3UB2
PFO1C	R3UB3
PFO1E	R4SB
PUBE	

0 500 1,000 Feet

Source: ESRI, BING Map Service, 2014.

PROJECT ORANGE	
Sterling Forest Resort **Wetland Impacts** **Tuxedo Township** **Orange County, New York**	
THE Louis Berger Group, INC.	**Figure**

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Electricity Demand and Infrastructure Capacity

The Sterling Forest Resort property currently is served by Orange and Rockland Utilities (ORU) by a single 13.2 kV circuit. The existing electrical overhead distribution line originates at the Sterling Forest substation located on Long Meadow Road approximately 2 miles south of Route 17A. The existing land uses (Tuxedo Ridge Ski Center and New York Renaissance Faire) are served by the overhead circuit located along the north side of Route 17A. The existing substation does not have sufficient capacity to serve the proposed land uses for Sterling Forest Resort.

The preliminary electrical load has been calculated to be 19 MW. Proposed electrical demands were estimated based on the Sterling Forest Resort master plan and estimated demand factors. A summary of the major electrical needs from the plan are included in Table IX. A.2.b-3 and provided in further detail in **Exhibit VIII. C.17.a**.

Table IX. A.2.b-3. Electric Design Load

Space	Interior Area (Sq Ft)	Total KVA (Connected Load)
Ground Floor	325,380	7,065
Second Floor	217,427	3,678
Tower	551,744	5,869
Hotel Basement	283,441	5,611
Hotel Parking Garage	2,834,170	1,134
Grand Hotel Misc.	n/a	7,979
	Subtotal	*31,336*
Ski and Garden Areas	185,469	5,193
Total Development (KVA)		**36,529**
(KW)		**34,703**
(A @ 480 V)		**43,938**

ORU has provided a willingness to serve letter indicating the ability to provide the electrical service required to meet the loads for Sterling Forest Resort, indicating available supply and therefore minimal impacts on the electric supply network.

Impacts on Protected Habitats and Species

The property has a wide range of wildlife habitat consisting of upland forest, wetland forest and marsh, open water ponds, and streams. These areas will support a variety of species including deer, fox, coyote, bear, beaver, passerine birds and waterfowl, amphibians, and snakes. A large portion of the site includes previously disturbed areas which are not fully vegetated or altered through human activity. These areas either do not provide wildlife habitat or provide only marginal habitat for the wildlife types mentioned. The construction of the project will result in the loss of upland and wetland forest habitat, emergent and open water wetlands, and lower quality cool-season grass meadows. The conversion of habitat to other uses will result in the direct loss of some wildlife. Remaining habitats directly adjacent to the Grand Hotel complex also will have a reduction in value to wildlife due to the combined effects of increased human activity, lighting, and noise. The surrounding landscape has extensive, similar habitat that will remain unaffected by the project and is capable of supporting similar wildlife species.

The USFWS and the New York Natural Heritage Program (NYNHP) were contacted for information regarding the potential presences of species of special concern. The USFWS identified five potential species within Orange County. The NYNHP identified 12 species of rare plants and animals that could occur within

the property. For the majority of these species, suitable habitat within the proposed development areas is absent. Based on site investigations and habitat assessments, several of the listed species are not expected to occur within the Sterling Forest Resort site. For those species with potential habitat, site specific surveys have been initiated in consultation with NYSDEC and the USFWS. Surveys are planned for the Indiana Bat and the Northern Long-Eared Bat to confirm presence/absence of these species. As the State threatened timber rattlesnake is known to occur in the vicinity of the site, surveys are ongoing to determine presence/absence for this species. For those species with potential habitat, site specific surveys have been initiated in consultation with NYSDEC and the USFWS to determine impacts. Correspondence from NYSDEC detailing the Natural Heritage Program State-listed Animals Plants and Significant Natural Communities is provided in Appendix IX.A.2.b-1. Correspondence from the US Fish and Wildlife Service detailing the list of potential threatened and endangered species on the site is provided in Appendix IX.A.2.b-2.

Table IX. A.2.b-4. Summary of Listed Species of Concern Provided by the USFWS and NYNHP

Common Name	Species Name	Status	Potential Habitat Within Property	Potential Habitat Within Construction Limits	Field Surveys
Animals					
Whip-poor-will	Antrostomus vociferus	Special Concern (NY)	Yes	Yes	Ongoing
Northern Cricket Frog	Acris crepitans	Endangered (NY)	Yes	Yes	Ongoing
Timber Rattlesnake	Crotalus horridus	Threatened (NY)	Yes	Yes - Foraging	Ongoing
Eastern Wormsnake	Carphophis amoenus	Special Concern (NY)	Yes	Yes	No
Bog Turtle	Clemmys muhlenbergii	Threatened (USFWS) Endangered (NY)	No	No	No
Dusted Skipper	Atrytonopsis hianna	Unlisted (NY)	Yes	Yes	Ongoing
Dwarf Wedge Mussel	Alasmidonta heterodon	Endangered (USFWS) Endangered (NY)	No	No	No
Indiana Bat	Myotis sodalis	Endangered (USFWS) Endangered (NY)	Yes	Yes	Ongoing
Northern Long-Eared Bat	Myotis septentrionalis	Proposed Endangered (USFWS)	Yes	Yes	Ongoing
Plants					
Small Whorled Pogonia	Isotria medeoloides	Threatened (USFWS) Endangered (NY)	No	No	No
Slender Pinweed	Lechea tenuifolia	Threatened (NY)	No	No	No

Table IX. A.2.b-4. Summary of Listed Species of Concern Provided by the USFWS and NYNHP

Common Name	Species Name	Status	Potential Habitat Within Property	Potential Habitat Within Construction Limits	Field Surveys
Violet Wood-sorrel	Oxalis violacea	Threatened (NY)	No	No	No
Virginia Snakeroot	Endodeca serpentaria	Threatened (NY)	No	No	No
Woodland Agrimony	Agrimonia rostellata	Threatened (NY)	No	No	No
Reflexed Sedge	Carex retroflexa	Threatened (NY)	No	No	No
Black-edge Sedge	Carex nigromarginata	Threatened (NY)	No	No	No

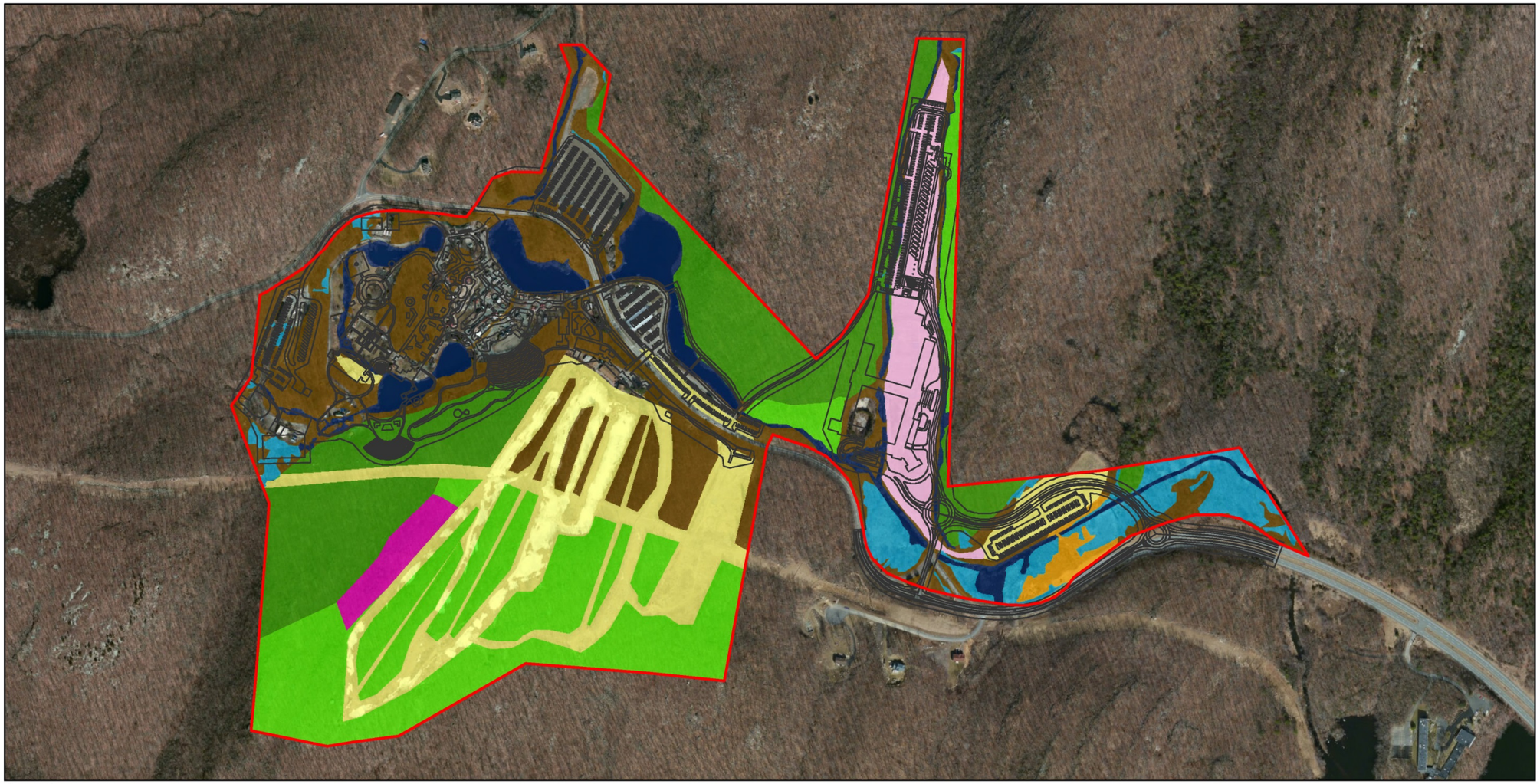
Impacts to potential habitat within the site for rare species will be finalized once surveys are complete. Some rare species, such as the Whip-poor-will and timber rattlesnake, may experience a loss of foraging habitat and decline in quality of remaining habitat due to an increase in human activity and use. The timber rattlesnake may also be subject to secondary impacts due to increased traffic on local roads that could lead to higher instances of vehicle-snake collisions. Traffic studies targeting local roads (Ben Meadow Road) will be performed to determine the potential for increased risk for timber rattlesnake, and appropriate mitigation, if warranted, will be provided.

The NYNHP has mapped three significant natural communities within or immediately adjoining the site as part of the Palisades Interstate Park. These natural communities meet specific criteria for state significance and represent high-quality communities based on size, undisturbed and intact condition, and quality of the surrounding landscape. These natural communities are recognized as providing habitat for a wide range of plants and animals, both rare and common, and provide ecological value and services. Within the site, the mapped natural communities overlap with undisturbed forests and bedrock outcrops. Further details on significant natural communities are provided in **Exhibit VIII. C.1.c Description of Land**. Potential impacts to significant natural communities are provided in Table IX. A.2.b-5 and Figure IX. A.2.b-3.

Table IX. A.2.b-5. Impacts to Significant Natural and Vegetative Communities

Significant Natural Community	Current Acreage	Acres Impacted
Appalachian Oak Hickory Forest	40.93	12.17
Chestnut Oak Forest	41.91	2.94
Acidic Talus Slope Woodland	3.22	0.00
Total	86.06	15.11
Vegetative Communities	**Current Acreage**	**Acres Impacted**
Mowed Grassland	37.70	5.37
Successional Shrubland	2.23	0.23
Oak Tulip Tree Forest	45.70	26.85
Urban Vacant Lot	13.60	13.54
Wetlands (Freshwater)	11.53	3.96
Surface Water	16.86	5.21
Total	127.62	55.16

Figure IX. A.2.b-3. Potential Impacts to Vegetative Communities



Legend

- Renaissance Faire Property Boundary
- Proposed Footprint

Vegetative Community

- Appalacian Oak Hickory
- Chestnut Oak Forest
- Acidic Talus Slope Woodland
- Oak-Tulip Tree Forest
- Mowed Grassland
- Successional Shrubland
- Urban Vacant Lot
- Freshwater Wetland
- Surface Water

0 500 1,000 Feet

Source: ESRI, BING Map Service, 2014.
Berger, 2014.

Sterling Forest Resort

Vegetative Communities

Tuxedo Township
Orange County, New York

THE Louis Berger Group, INC. | **Figure**

LOCAL IMPACTS AND COSTS

Light Pollution and Visual Impacts

No significant visual impacts are anticipated to existing aesthetic resources and no regionally significant viewshed changes resulting from this project have been identified. To the extent possible, the proposed Sterling Forest Resort development has been sited within the existing 102 acres of disturbed/developed area. Changes in local area views (which are limited to particular vantage points along Route 17A) will be defined by the change in architectural design style and increase in density of development on the site. There will be clearing for roadways and building sites, including the individual detached buildings set within woodland to remain, but the clearing will be limited by specifications set forth on the construction plans to allow for proper screening from public views. New roadways within the site are proposed to have narrow pavements with vegetated shoulders to retain the rural character of the locale.

The conceptual lighting plan has been designed with a minimum amount of lighting limited to illuminating circulation areas only for safety and security, and incorporates cutoff fixtures to minimize stray light. The use of modern, Night Sky compliant lighting fixtures will minimize the visibility of site lighting from off-site. The anticipated site illumination, overall, will avoid any potential impact on distant aesthetic resources from light pollution.

Roadway improvements will occur at existing grades, largely within existing rights-of-way, and will promote the flow of vehicular movement while enhancing the existing landscape environment.

Exterior site lighting is proposed according to a conceptual lighting plan designed to achieve area lighting for distinct areas of the site plan while avoiding light pollution. The site lighting will be designed based on current best practice such as Dark Sky Society "Guidelines for Good Exterior Lighting Plans." The site lighting will be implemented with a focus on reducing "sky glow" through minimizing excessive lighting, using shielded fixtures with efficient light bulbs while ensuring public safety. Light will be directed downward through the use of full cut-off and/or fully shielded fixtures, along with fully shielded wall packs and flush mounted canopy fixtures. Lighting will be confined to necessary areas and minimized to the extent to meet safety purposes including safe pedestrian passage and property identification. Site lighting will be turned on for active business hours.

All existing light fixtures including pole mounted fixtures along with wall and surface-mounted fixtures will be removed from the site. All proposed luminaires will be either LED or low-pressure sodium vapor exterior lamps with cutoff fixtures, mounted on 18-foot poles or 3-foot-by-4-inch bollards. Light fixtures will use shut-off controls. An ornamental style standard will be selected for use throughout the project for continuity. Locations of light fixtures at buildings have been carefully considered to place lights on the interior sides of the site, opposite Route 17A so as to avoid undue nighttime spillover. All fixtures are full-cut-off, down-light only.

- Street/Area lighting: Full cut-off, 2700K LED, 18foot tall
- Bollard/pathway lighting: Full cut-off, 2700K LED, 40 inches tall
- Decorative Wall Sconces at exterior columns: Full cut-off, 2700K LED, mounted at 6 feet above grade
- Upper Façade Grazing Light: 2700K LED, mounted under roof eaves, height varies

Fixture height will be limited. Pole lamps found in limited numbers within the existing development will be eliminated and a single, cutoff pole lamp is proposed where internal roadways intersect, for safety purposes. In addition, a single, cutoff pole lamp is proposed at each of the new access intersections on Minturn Bridge Road/Route 17A, again for safety. Proposed area lighting is limited to five parking areas in the project: the East Lot, North Lot, Central Lot, West Lot, and Employee Parking. Lamp selection will be made based on "lumen cap" recommendations including the following: commercial properties in non-urban commercial zones = 25,000 lumens per acre. Residential areas = 10,000 lumens per acre. Maximum lumen levels for different fixtures will be based on mounting heights, as described in Table IX. A.2.b-6.

Table IX. A.2.b-6. Lamp Selection

Mounting Height (feet)	Recommended Maximum Lumens
6	500 – 1000 lumens
8	600 – 1,600 lumens
10	1,000 – 2,000 lumens
12	1,600 – 2,400 lumens

Specification of cut-off pole fixtures throughout the project will limit the extent of ground illumination to the localized area immediately around the light poles, and limit the amount of horizontal stray light or reflection upward, thereby minimizing the potential for adverse visual effect on the night sky. Light emanating from within the buildings spilling outward will be minimized with design focusing on interior light cut-off such as blinds and curtains.

The conceptual lighting plan for the site has been designed with a minimum amount of lighting, limited to only that which is needed for safety and security in circulation areas. Site lighting levels will be reduced closer to property lines, where the height of light poles will diminish based on the distance to the property line. Development will largely occur in existing open spaces that have been previously developed. Limited removal of the existing natural barriers will be undertaken, only as required. The development of the Sterling Forest Resort site will include enhancement of the existing perimeter vegetation in the form of additional tree planting and landscaping further establishing the perimeter buffers while limiting light spillover to adjacent properties and rights of way.

Two areas where outdoor lighting also will be installed include the small amphitheaters and the ski slopes. These areas will also implement the use of Dark Sky compliant technologies to provide safety and task lighting for evening use. The Garden Amphitheater and the Fairgrounds Amphitheater will be located within wooded areas of the new World Fairgrounds. The lighting will be designed based on containing light within the premises and basic lighting concepts of pathways, amphitheater seating, and surrounding trees employing LED lighting technology. Design concepts include the use of suspended downlights casting light into patterned projections downward and not outward and the use of cool color temperature lamps to mimic the feel of moonlight. LED lighting strips will be used in the bench seating levels and pattern projectors will be used to establish safety lighting. Full-cutoff LED landscape bollards will illuminate the pathways to parking areas.

Ski slopes at the Ski Village also will be illuminated through the use of Dark Sky compliant technology. The use of low level LED lighting fixtures (300 watt vs. 1000 watt) will provide diffuse light achieved by deflectors that keep the light from focusing on specific areas, creating a glow over the snow. The technology of magnetic induction lighting will achieve a milky glow instead of bright light hot spots, while using one-third of the energy of metal halide fixtures.

By using the best practices of Dark Sky compliant design, the development will avoid light pollution and the lighting will not have a negative impact on the aesthetic and visual resources in the area of development or beyond. Further information on potential impacts to visual and aesthetic resources is provided in the Preliminary Visual and Aesthetic Resources Technical Report in Appendix IX.A.2.b-3.

Impacts on Land and Geological Features

The proposed project would likely require some excavation and grading for the new buildings and parking lots, totaling greater than 1,000 tons of natural material. The construction would likely require 26.5 acres of tree removal. The project would be approximately 175 acres with 30 acres of construction on previously developed land. Some of the buildings and parking areas would be built on impervious surfaces. A net increase of approximately 40 acres in disturbed, non-vegetated lands would be associated with the proposed project. Construction activities on undeveloped lands would result in a greater loss of topsoil than on developed areas, resulting in exposed soil subject to wind and water erosion. The primary development would be constructed on a relatively flat surface. The potential for soil erosion for this project

would be moderate. Mitigation measures will include Best Management Practices (BMPs) to minimize and reduce effects on soil erosion to less-than-significant levels. Adherence to the New York State Pollution Discharge Elimination System General Permit for Storm Water Discharges from Construction Activity, combined with the required storm water pollution prevention plan (SWPPP) and soil protection BMPs to minimize effects, would reduce the potential effect to less than significant.

Impacts on land also could include impacts from potential releases of hazardous materials, which could affect surface water and groundwater. Potential releases could include petroleum products or other hazardous materials used during project construction, or hazardous materials used for maintenance, landscaping, etc. following construction of the proposed project. Another potential impact from hazardous materials could be the Recognized Environmental Conditions (RECs) identified during the Phase I Environmental Site Assessment (ESA) conducted on the site.

Other impacts on land include construction where depth to the water table is less than 3 feet and construction on land where bedrock is exposed or generally within 5 feet of existing ground surface. Blasting will likely be required during project construction. If it is necessary, impact from blasting would be low but permanent. Further detail on potential impacts to geological features is provided in the Preliminary Geotechnical Report, available in Appendix VIII. C.1.e-1 Preliminary Geotechnical Report**.**

APPENDIX IX. A.2.b-1. NYSDEC NHP STATE LISTED SPECIES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Joe Martens
Commissioner

April 17, 2014

Daniel Laue
EcolSciences, Inc.
75 Fleetwood Drive, Suite 250
Rockaway, NJ 07866

Re: EN14-018: Environmental assessment of a forested area that contains minor commercial development near the intersection of Rte 17A and Katrina Court
Town/City: Tuxedo. County: Orange.

Dear Daniel Laue :

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Andrea Chaloux

Andrea Chaloux
Environmental Review Specialist
New York Natural Heritage Program

The following state-listed animals have been documented at your project site, or in its vicinity.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing. The list may also include significant natural communities that can serve as habitat for Endangered or Threatened animals, and/or other rare animals and rare plants found at these habitats.

For information about potential impacts of your project on these populations, how to avoid, minimize, or mitigate any impacts, and any permit considerations, contact the Wildlife Manager or the Fisheries Manager at the NYSDEC Regional Office for the region where the project is located. A listing of Regional Offices is at http://www.dec.ny.gov/about/558.html.

The following species and habitats have been documented at or near the project site, generally within 0.5 mile. Potential onsite and offsite impacts from the project may need to be addressed.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Reptiles				
Timber Rattlesnake *basking/shedding area*	*Crotalus horridus*	Threatened		13613

The following species have been documented within 1.5 mi. Individual animals may travel 1.5 mi from documented locations.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*FEDERAL LISTING*	
Reptiles				
Timber Rattlesnake	*Crotalus horridus*	Threatened		1445
Timber Rattlesnake *hibernaculum*	*Crotalus horridus*	Threatened		8582

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NYSDEC at http://www.dec.ny.gov/animals/7494.html.

Information about many of the rare plants and animals, and natural community types, in New York are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, and from NatureServe Explorer at http://www.natureserve.org/explorer.

The following rare plants, rare animals, and significant natural communities have been documented at your project site, or in its vicinity.

We recommend that potential onsite and offsite impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Birds			
Whip-poor-will	*Antrostomus vociferus*	Special Concern	Vulnerable in NYS
Breeding , :			14062
Reptiles			
Eastern Wormsnake	*Carphophis amoenus*	Special Concern	Imperiled in NYS

Sterling Forest, 2004-05-22: The snakes were found on protected forested land. A powerline right-of-way and road intersect the occurrence boundary. Snakes were found at two locations. One location was on a south-facing slope. The precise location is not know for the other location,but snake(s) were found under stones. 12784

The following significant natural communities are considered significant from a statewide perspective by the NY Natural Heritage Program. They are either occurrences of a community type that is rare in the state, or a high quality example of a more common community type. By meeting specific, documented criteria, the NY Natural Heritage Program considers these community occurrences to have high ecological and conservation value.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Upland/Terrestrial Communities			
Hemlock-Northern Hardwood Forest			High Quality Occurrence

Buchanan Mountain: This is a fairly large and mature hemlock northern hardwood complex with little disturbance, but some invasive wooly adelgid on the hemlocks. 2605

Pitch Pine-Oak-Heath Rocky Summit — High Quality Occurrence of Uncommon Community Type

Sterling Mountain: A community of moderate size in an excellent landscape. The community is well buffered by adjacent forests and protected on state park lands. This section of the state park is currently being managed as a natural area (Doris Duke Wildlife Sanctuary). 9204

Chestnut Oak Forest — High Quality Occurrence

Blue Lake Highlands: This is a large community in an excellent and protected landscape. The core of the community (contains some hiking trails) is approximately 1600 acres in size. A small portion of the community is recovering from recent selective logging. 7728

Appalachian Oak-Hickory Forest — High Quality Occurrence

Sterling Ridge: A very large example of this community in a good landscape setting. Although formerly mined and logged, the community has excellent recovery potential and is part of the large Hudson Highlands State Park system. 9714

The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program, and so are a vulnerable natural resource of conservation concern.

COMMON NAME	*SCIENTIFIC NAME*	*NY STATE LISTING*	*HERITAGE CONSERVATION STATUS*
Vascular Plants			
Slender Pinweed	*Lechea tenuifolia*	Threatened	Imperiled in NYS

Sterling Forest, 1998-07-28: The plants are growing on a steep rocky slope with calcareous rock or soil. Rock samples about a half mile from this site were determined to be semi-metamorphosed dolomite and the rock at this site is probably the same. The slope is dry-xeric in most places with only one obvious intermittent spring on the south-facing slope above Route 17. The plants were on an open, dry red cedar rocky summit between the lower and middle ledges of south-facing slope. 8018

This report only includes records from the NY Natural Heritage databases. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org, from NatureServe Explorer at http://www.natureserve.org/explorer, and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.guides.nynhp.org. For descriptions of all community types, go to http://www.dec.ny.gov/animals/29384.html and click on Draft Ecological Communities of New York State.

APPENDIX IX. A.2.b-2. USFWS LIST OF THREATENED AND ENDANGERED SPECIES

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
PHONE: (607)753-9334 FAX: (607)753-9699
URL: www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Tracking Number: 05E1NY00-2014-SLI-0688 May 08, 2014
Project Name: Project Orange

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: http://www.fws.gov/northeast/nyfo/es/section7.htm

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects

should follow the Services wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment

United States Department of Interior
Fish and Wildlife Service

Project name: Project Orange

Official Species List

Provided by:

New York Ecological Services Field Office
3817 LUKER ROAD
CORTLAND, NY 13045
(607) 753-9334
http://www.fws.gov/northeast/nyfo/es/section7.htm

Consultation Tracking Number: 05E1NY00-2014-SLI-0688
Project Type: Development
Project Description: Future site development

Project Location Map:

Project Coordinates: MULTIPOLYGON (((-74.2209871 41.2534497, -74.2190988 41.253482, -74.2196996 41.2471257, -74.2142494 41.2470934, -74.210859 41.244867, -74.2115428 41.2442934, -74.2139675 41.2451631, -74.2154213 41.2451873, -74.2168063 41.2449186, -74.217817 41.2443386, -74.2187984 41.2440925, -74.2202146 41.2443184, -74.2216737 41.2447702, -74.2220192 41.2452865, -74.2221887 41.2458995, -74.2221887 41.2463513, -74.2226178 41.2466417, -74.2232616 41.2467708, -74.2236049 41.2467385, -74.2253215 41.2430599, -74.2287977 41.2433826, -74.2304284 41.2422532, -74.2322738 41.2417369, -74.2336042 41.2419305, -74.2346363 41.2432536, -74.2354088 41.2474161, -74.234853 41.2488358, -74.2346384 41.2495779, -74.2339518 41.2499651, -74.2330935 41.25032, -74.232836 41.2506427, -74.2318918 41.2511912, -74.2307331 41.2511912, -74.2294028 41.2510621, -74.2291882 41.2515138, -74.228287 41.2515138, -74.2279866 41.2533529, -74.2283256 41.2538369, -74.2279866 41.2547402, -74.2272141 41.254224, -74.2267849 41.2521903, -74.2269137 41.2516096, -74.2263129 41.2510611, -74.2223646 41.248254, -74.2209871 41.2534497)))

Project Counties: Orange, NY

Endangered Species Act Species List

There are a total of 5 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Bog Turtle *(Clemmys muhlenbergii)*

Population: northern

Listing Status: Threatened

Dwarf wedgemussel *(Alasmidonta heterodon)*

Population: Entire

Listing Status: Endangered

Indiana bat *(Myotis sodalis)*

Population: Entire

Listing Status: Endangered

northern long-eared Bat *(Myotis septentrionalis)*

Listing Status: Proposed Endangered

Small Whorled pogonia *(Isotria medeoloides)*

Listing Status: Threatened

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX IX. A.2.b-3. PRELIMINARY VISUAL AND AESTHETIC RESOURCES TECHNICAL REPORT

Prepared for

RW ORANGE COUNTY, LLC
110-00 Rockaway Boulevard
Jamaica, New York, 11420

AESTHETIC RESOURCE AND VISUAL IMPACT ASSESSMENT REPORT FOR THE STERLING FOREST RESORT, TOWN OF TUXEDO, ORANGE COUNTY, NEW YORK

Prepared by
Louis Berger Group, Inc.
48 Wall Street, 16th Floor
New York, NY 10005

June 2014

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1.0 EXECUTIVE SUMMARY

This technical memorandum presents the results of an Aesthetic and Visual Impact Assessment for the proposed project, including the implementation and operation of the facility and light generated by site and building lighting fixtures emanating from the Sterling Forest Resort.

The purpose of the visual impact analysis is to evaluate potential community visual impacts associated with the construction and operation of the project. Visual impacts will be generated in the area of the proposed Sterling Forest Resort by operation of the resort.

Visual impacts to a limited number of residences are anticipated due to construction and operation of the project in the vicinity of the Resorts World Grand Hotel. These impacts would be mitigated and would occur when that portion of the Resorts World Grand Hotel nearest NY 17A is operating.

2.0 AESTHETIC RESOURCES AND VISUAL IMPACT ASSESSMENT

2.1 Introduction

The purpose of this aesthetic resources and visual impact assessment is to evaluate the impacts generated from the proposed facilities related to development of the Sterling Forest Resort, in response to the New York State Environmental Quality Review Act (SEQR) with respect to environmental aesthetics. The proposed project is located in Orange County, near the Town of Tuxedo, New York. Access to the project area is provided via New York State Thruway/Interstate 87 and Route 17A west as shown in Figures VIII.C.(1)(2)(3)(11) Site Location Map and Figures VIII.C.(11) Proposed Interchange 15B. This report presents the findings of the Aesthetic and Visual Impact Assessment for the Sterling Forest Resort proposal.

2.2 Project Description

Sterling Forest Resort contains a mix of resort land uses that include recreation, lodging, lodging-related commercial, casino, parking, and utility. Development proposed for Sterling Forest Resort includes the Resorts World Grand Hotel building with 984 rooms, gaming facility (casino) and ancillary hotel uses (dining and lodging-related commercial). Recreational development includes world fairgrounds and seasonal fairgrounds in the current location of the NY Renaissance Faire, a Ski Village in the current location of the Tuxedo Ridge Ski Center and the rebirth of the Sterling Forest Gardens, as well as stables, an arboretum, amphitheater, mountain biking and hiking trails, a funicular incline railway, zip lines, toboggan run, snowboard pipes and rails, and a riverfront walk along the Indian Kill Creek.

2.3 Regional Landscape and Land Use

The community and properties in the vicinity of the Site are primarily forest and residential. The rural development in the site vicinity consists primarily of single-family homes that are occupied both on a year-round basis and seasonally as second-homes. The boundary of the village of Tuxedo Park is approximately 2.0 miles south of the Site and the Town of Southfields, now part of the Town of Tuxedo, is located approximately 2.4 miles southeast of the site. The Village of Greenwood Lake is located approximately 4.3 miles to the southwest of the Site. The National Historical Register includes five historic properties within the five mile vicinity of the Site.

Tuxedo Park is listed on the National Historic Register as the Tuxedo Park Historic District (located to the south). Clove Furnace Ruin (located in Arden approximately 4.5 miles to the northeast), The Boulders (located on Greenwood Lake approximately 6.5 miles to the southwest), Sterling Mountain Fire Observation Tower and Observer's Cabin (located approximately 4.5 miles to the southwest), and the Tuxedo Park Railroad Station (located approximately 4.2 miles to the southeast) are also on the National Register of Historic Places listings in Orange County, New York.

A Phase IA Cultural Resource Survey was undertaken for architectural resources found within the one mile vicinity of the project area, and four resources were identified including the Tuxedo Ridge Ski Area, Sterling Forest Gardens, International Pavilion, and the Commercial Buildings and Pedestrian Bridge. These architectural properties were deemed not eligible for listing in the NRHP due to lack of architectural/historical distinction, loss of integrity, and/or were recently constructed.

The Site is located approximately 2.5 miles west of US Interstate 87 as it crosses Route 106. Route 17A bisects the Site running east to west. Benjamin Meadow Road borders the Site on the northwest side. Woodland cover exists along much of the land adjacent to Route 17A, and affords limited views into the Site.

2.4 Environmental Setting

The Site's topography is dominated by hilly terrain created by a series of ridges, faults and folds forming a natural bowl. The western portion of the Site is home to the New York Renaissance Faire complex and sits within the natural bowl formed by a series of ridges in the Sterling Forest. Cedar Mountain at an elevation of 375 feet above the Site to the southwest, Tiger Mountain at an elevation of 400 feet to the south, a smaller mountain at a peak elevation of 400 feet to the west, and another unnamed peak of 200 feet to the north form the natural topography of the Site. Other than the portion of the Site located on Tiger Mountain, the Site is characterized as generally flat and wooded. Tiger Mountain is home to a north facing ski slope known as Tuxedo Ridge Ski Center at Sterling Forest.

2.5 Existing Visual Character

The Site is characterized primarily by forested land and small surface water bodies, with areas of clearing in the development area associated with the New York Renaissance Faire at the western end of the property and the abandoned runway at the northeast end of the Site. The greater area of the property within the Sterling Forest is characterized by forested land and numerous woodland ponds. To the south, the land is characterized as generally wooded with cleared areas serving as a ski slopes. The land north of Route 17A is characterized by forested land and includes an open area, the abandoned Grand-Large Barron Runway.

The Site itself is an aging resort landscape. There are currently (2014) over seventy-five structures on the site, built as a fairgrounds set for the New York Renaissance Faire and also support structures for the Tuxedo Ridge Ski Center operations. The aesthetic quality is low for the existing structures. Several of the buildings, including the Renaissance Faire buildings are sited adjacent to the shores of the ponds and are only partially visible from Route 17A, due to the limited view across one of the ponds. The existing development area (approximately 102 acres of land) is characterized by a mix of wood and metal buildings, parking lots, and narrow roads set within the setting of forested land, open meadows, ponds and the formerly planned runway site. Most of these development features are virtually hidden from view from off-site locations due to the topography and the extensive forest canopy.

The Site contains a total of approximately 240.6 acres of predominately forested and existing open areas. Impervious surface (buildings, roadways, parking lots) represent a limited portion of the site acreage. Predominately, the developed areas such as the parking areas are not illuminated. Existing lighting generally consists of localized building-mounted light fixtures. General site lighting and street lighting does not exist within the project area. Limited pathway lighting exists within and around the New York Renaissance Faire portion of the project site. There are several miles of dirt and gravel service access roads serving the ski slope portions of the site. The ski slopes are separated from each other by a heavily forested landscape – these service access roads are generally not open to the public. In addition, the Site contains the planned Grand-Large Barron Runway, previously cleared and leveled. The planned runway area extends from approximately 400 feet north of Route 17A to an extended distance to the north. The previously cleared area runs due north with the dimensions of 300 feet by 2500 feet.

Aerial images of the existing structures and development on the project site are shown in Figure III.J.1 Aerial Photo of Sterling Forest Resort Project Site and Vicinity as well as in recent photographs. The condition of the existing development from an aesthetic perspective can be described as below average visual or aesthetic character. A series of photos is presented below that shows the early springtime visual character of the Route 17A corridor in the immediate vicinity of the Site, which provides the only public vantage points for views into the development area of the project site.

2.5.1 Methodology

The purpose of the aesthetic and visual impact assessment is to evaluate and assess the impacts of the proposed project, both positive and negative, on the visual resources of the project area. This impact assessment has been conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC) policy and guidance memorandum[1] relating to assessing and mitigating visual impacts of facilities that are regulated by NYSDEC and located in visual proximity to sensitive land uses. The guidance includes definitions of various visual impact assessment terms, describes an analytical technique for assessing visual impact, and defines various mitigation measures available to eliminate or reduce an adverse impact. The methodology of this visual assessment consists of the following:

- Investigation - Perform a preliminary investigation of the project site to determine the physical/visual limits of the affected environment.
- Viewshed Analysis - Prepare an inventory of aesthetic resources located within five miles of the proposed project site and significant resources located outside five miles. Analyze the extent of the viewshed of affected areas through the use of a GIS based digital viewshed analysis.
- Visual Character - Define the visual character of the project site and surroundings.
- Aesthetic Resources - Identify significant resources within the analyzed viewshed and beyond. Aesthetic resources of statewide significance are derived from the list of categories identified in the DEC Policy Program document.

1 NYSDEC, "Assessing and Mitigating Visual Impacts", Program Policy DEP-00-2, NYSDEC Division of

Environmental Permits, July 2000.

- Viewer Groups - Identify the major viewer groups associated with the project area to determine the potential view exposure and general viewer sensitivity within the limits of the existing composite viewshed.
- Visual Resources - Determine the existing visual resources and their qualities within the project area.
- Critical Views - Identify and photograph key viewpoints which best represent critical views of the visual environment.
- Impacts - Determine the visual and aesthetic impacts found within the viewshed area. Assess the visual impacts of the proposed project. Identify and discuss positive and negative impacts. Prepare photographic simulations of the proposed project elements from the key viewpoints to illustrate changes to the visual resources of the project area. Determine and summarize probable viewer response to those changes.
- Significance - Determine the potential significance of each impact identified based on the qualities of the resource and the juxtaposition of the proposed project to the resource.
- Mitigation – Determine and define what mitigation measures, if any, can be employed to eliminate or lessen adverse impacts and enhance positive impacts to the visual resources of the project area.

Viewshed

The Viewshed is defined as the geographic area from which a facility may be seen. An aesthetic resource is a formally designated place visited by the public for the purpose of enjoying its beauty. For the purposes of this assessment, that resource may be designated by a local jurisdiction, a State agency, or a Federal agency. Additionally, other scenic and cultural resources may be considered significant aesthetic resources for the purposes of the visual assessment based on their unique characteristics. In this study, places that are designated or otherwise identified for their scenic quality within the potential viewshed of the proposed project are considered aesthetic resources and are evaluated.

This assessment incorporates the use of geographical information system (GIS) computer technology (3D Analyst) to analyze and define the potential viewshed and demonstrate potential visibility of the proposed facility from particular vantage points located within the viewshed. A line-of-sight profile is a graphic technique that depicts the topography to scale taken along a straight path between two selected locations, with a straight line depicting the line of view between those two locations. This evaluation is verified through in-field reconnaissance.

Study Area

The study area for this visual assessment is focused on the proposed development area, which covers approximately 102.24 acres of a larger project site of 240.612 acres in the vicinity of the Town of Tuxedo, including the land that is already developed or cleared including the New York Renaissance Faire and the Tuxedo Ridge Ski Center.

Due to its location and orientation in the regional landscape with varied topographic relief, the Project Site's viewshed is limited to cleared areas within the project site. The potential viewshed is limited to approximately one mile north, one-half mile east and west, and 1.3 miles

south of the existing Tuxedo Ridge Ski Center. The boundary of the viewshed was determined by studying the topography on USGS mapping, vegetative cover on aerial photography as well as a site visit in May 2014. Cross section / profiles were also prepared to assist the analyst in identifying and defining the critical views. The viewshed can be seen in Figure III.J.2.

Public views into the project site are largely obscured by topography and existing tree cover. Given the characteristics described above, aesthetic resources from which changes in views toward the
site may have an effect are limited. For purposes of the initial assessment, an analysis was performed to define the potential viewshed for a radius of five miles from the study area using GPS mapping software (3D Analyst). The result of this analysis produces a map showing yellow shaded areas, depicting viewing locations that are contained within the viewshed. Green colored shaded areas are also depicted as potentially within the viewshed, from which there is potential view to the study area based on USGS topographic mapping alone without consideration of the tree cover. The potential view areas, indicated with green shading represent a viewing height located at treetop height, established at 65 feet above existing grade. In fact, the actual viewshed is notably more limited, as determined by a manual analysis of the local topography, aerial photography and in-field reconnaissance, and is further described below. The yellow shaded areas indicate views of the development of the project site, and views predominately fall within the project site boundaries in cleared areas. Images of the viewshed plans are shown in Figures III.J.2&3.

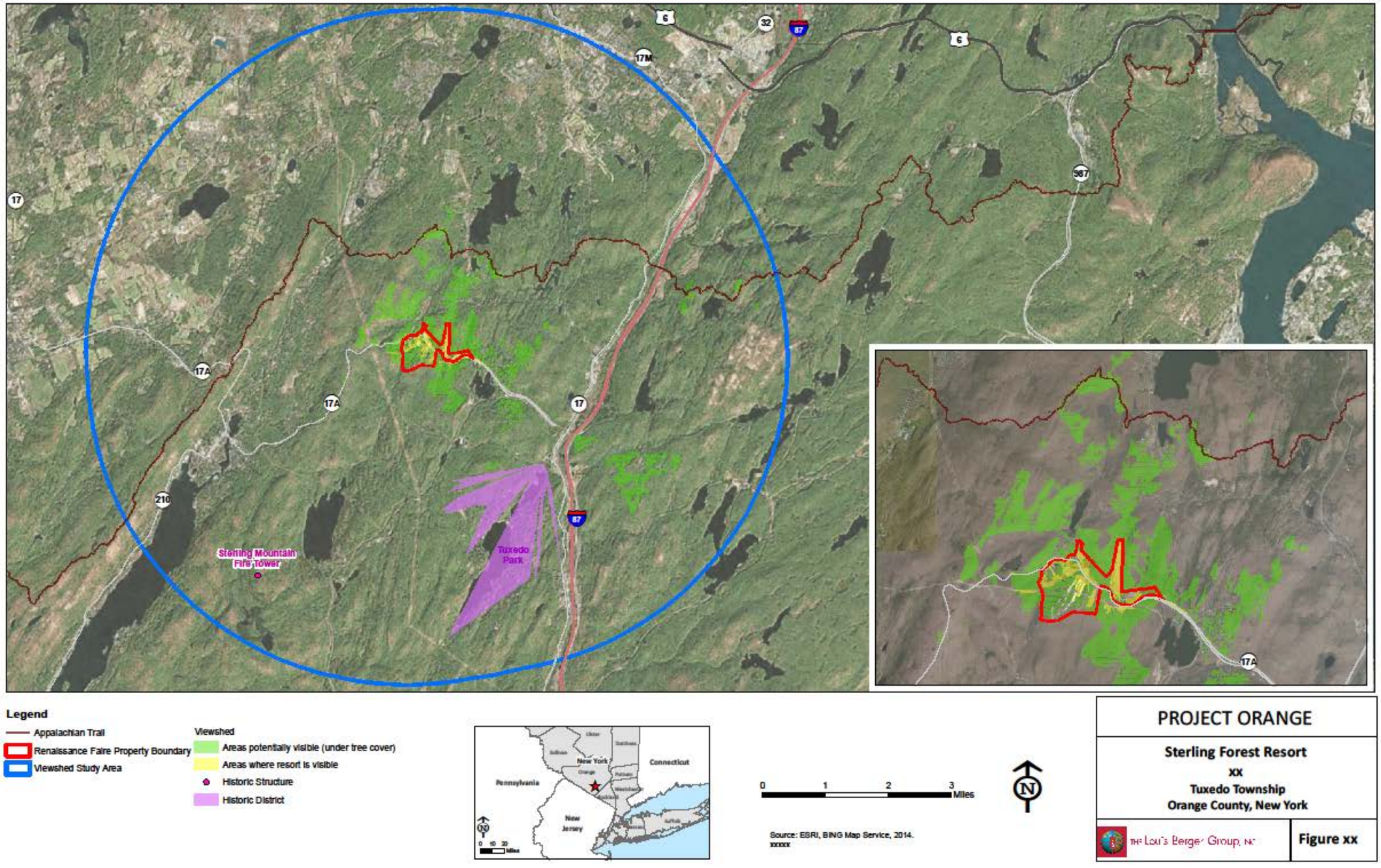

Figure III.J.2 Sterling Forest Resort Viewshed Plan

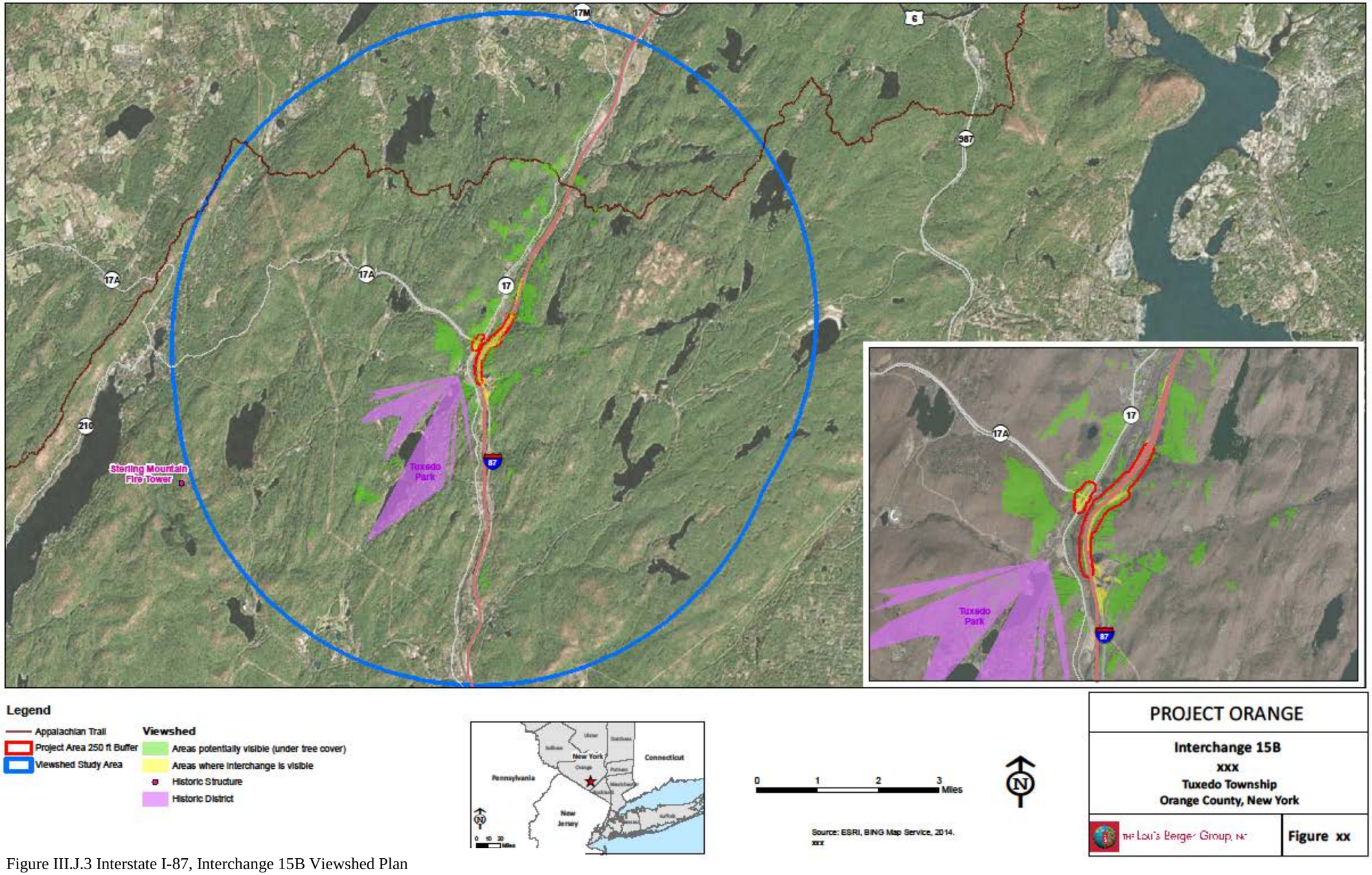

Figure III.J.3 Interstate I-87, Interchange 15B Viewshed Plan

The following public aesthetic resources in the regional landscape were identified for study: "Long Views from Route 17A from Sterling Forest to Warwick," Appalachian Trail, Katrina Court Home Sites, and Sterling Forest Park. These features are shown on the 5-mile viewshed maps (Figures III.J.2&3) and publicly-accessible vantage points at these important resources from which the study area may be visible are discussed further in the Impacts section.

The Viewshed Map (Figures III.J.2&3) shows the outlines of the potential viewshed of the study area based on an analysis of topographic mapping. The viewshed first identifies areas viewpoints with visible access to the project development without regard to tree canopy (yellow shaded areas). The viewshed map then identifies areas that could potentially afford views of the project development that are obscured by existing woodland vegetation that visually dominates the site and surrounding areas (green shaded areas).

Views from local roads into the study area are limited to portions of Route 17A due to topography and heavy forest conditions extending to the edge of the roadway rights-of-way. The alignment of the public road, Route 17A, provides limited views into the project site in the vicinity of the existing ski area along with the area used for the New York Renaissance Faire over the ponds adjacent to the roadway. The Grand-Large Barron Runway portion of the site is partially visible from Route 17A as the site is approached from the east. Once within the project site on Route 17A, the topography generally becomes level and limited views are afforded into the site where forested areas open up slightly.

Existing single family home sites occur along the south side of the road in the area to the east of the existing ski slopes. While the existing homes are visible from the roadway, their views into the project site across Route 17A are obscured by wooded areas on both sides of the road. Travelling from the west along Route 17A descending to the project site, the views are blocked due to the extent of the forest vegetation. There are no other views into the proposed development area from other public roadways.

Viewer Groups

Viewers respond to changes in the visual environment in different ways based on their particular interests and concerns. Different viewers can be generally categorized by these interests and concerns, and fall into groups of similar focus. It is important to identify the viewer groups who will be experiencing the changes based on the implementation of the project. This enables a prediction of their response to the changes in the visual environment. Four factors tend to be important in assessing the interests and concerns of each viewer group including viewer exposure, viewer sensitivity, viewer activity, and viewer awareness. These factors help to determine the each group's response to changes in the visual environment.

To determine the potential responses regarding the Sterling Forest Resort project, viewers can be categorized into four groups: Motorists, Outdoor Users, Existing Site Day Users, and Residents.

Motorists

The motorist viewer group consists of traversing motorists, new motorists, and repeat motorists. Traversing (Interstate) motorists experience the project tangentially, passing the I-87 Interchange heading in a North/South pathway. This viewer group observes the roadway improvements including the on and off ramps to Route 17A and Route 106. Traversing travelers will only be able to view changes due to the roadway improvements and are unable to view the project site from the I-87 corridor. The traversing motorists view the project from the road, and typically in a more dynamic mode (i.e., continual movement, higher traveling speeds, and short duration). New motorists include destination travelers arriving to the Sterling Forest and the Sterling Forest Resort predominately from the I-87 corridor, arriving from the east. New motorists will also be arriving to a lesser degree from the west along Route 106. These viewers will experience the changes to the visual environment within the vicinity of the Sterling Forest Resort, in addition to the roadway improvements located to the east within the I-87 corridor. Repeat motorists travel within or through the I-87/Route 17/Route 106 corridor daily or more frequently for goods and services as well as employment opportunities. This viewer group experiences a prolonged duration of view of their surroundings over time, as they use the route for quick access to and from the trip origin and destination. Repeat motorists are more likely to respond to changes in the viewshed as visual features are used as reference and landmarks for orientation and navigation. Speed on this corridor is both high for the I-87 travelers, and low on the adjacent access roads, Route 17/17A and Route 106. Repeat motorists tend to be destination oriented and focused on traffic patterns. Viewer exposure for this group is high due to the number of highway travelers and trips and sensitivity can be high due to increased view duration.

Outdoor Users

Recreational use of the Sterling Forest Park includes hikers, bicyclists, cross country skiers and campers. Access to the main areas of the Park is located to the south of Route 17A by way of Long Meadow Road/Route 84. Travelers also arrive from the south from Sloatsburg, along Route 72 west and Route 84 north. Park users access park lands from the intersection of Routes 17 and 17A serving the Wildcat Mountain Trailhead parking area. Viewer sensitivity and visual awareness of this group is high, however, activities of the group are located outside of the viewshed of the project site.

Existing Site Users

Included in this group of viewers are the visitors to the New York Renaissance Faire and the Tuxedo Ridge Ski Center. These two activities will be found on the project site in the future, and these visitors will experience changes in the visual environment. Existing Site Users have a shorter exposure time to the project area making their viewer exposure and sensitivity minimal.

Residents

Residents comprise a small but important viewer group within the project area. Residents are made up of home-owners and renters. Homeowners in and around the project area have a more static, prolonged, detail-focused view of the road and local surroundings; therefore, viewer exposure and viewer sensitivity is high. Renters also have a more static, prolonged, detail-focused view of the road and local surroundings, but their exposure to the project area is lessened by the fact that they are temporary residents making the viewer sensitivity less.

Local Business Employees/Hotel Guests
Employees of the local businesses, as well as hotel guest who can view the project area from their place of work or stay comprise this viewer group. Like the residents, they have a more static, prolonged detail focus of the project area and visual environment. However, they are likely to feel less ownership than residents. Their viewer exposure and sensitivity is moderate to low compared to residents.

2.5.2 Impacts

The project plan includes new development within areas that presently are open or previously developed, with tree removal and new construction limited to discrete areas within this same area of the site to the extent that grading is necessary for narrow roads, building pads and ancillary facilities. Elsewhere on the site, and in particular at the higher elevations, existing tree cover is proposed to remain to retain the wooded character of the project area.

The proposed development is designed to retain the aesthetic appeal of the landscape, maintain the existing rural character of the site environs, and mitigate public views of the site and building development from Route 17A with a style of architecture reflecting the regional architectural heritage. The development incorporates site landscaping with native vegetation.

Changes in views from Route 17A will occur in the immediate vicinity of the study area. At the eastern site access, the sense of arrival expressed through landscape improvements will be developed leading into the project site. Arriving at the project site will afford views of the development from Route 17B while approaching from the east at approximately 1100 feet from the main entrance to the Sterling Forest Resort Grand Hotel. At this location on Route 17A, the wooded areas recede from the highway allowing views of forested areas beyond adjacent to the Grand Hotel site. Between the viewer and the Grand Hotel, the project will include the East Lot Surface Parking lot designed with “Grasspave” surfaces. The green parking area will be screened from Route 17A by tree plantings. A stream and wetlands separate the area between the roadway and East Lot Surface Parking area and will be enhanced in the development of the project.

As the forested areas bound Route 17A on both sides of the roadway, the viewshed analysis identifies views from open areas, which exist once on the project site. Headed in a westerly direction, Route 17A travels through a series of curves. As the viewer passes the East Lot Surface Parking area, the main portion of the development is found next in the form of the Sterling Forest Resort Grand Hotel to the north of 17A. The Grand Hotel is set back from the roadway with a lake in the foreground creating and establishing a sense of entry to the resort. The entrance roadways are tree lined with deciduous trees following the dual carriageway to the Grand Hotel entrance. The lake serves as a resort amenity with waterways interconnecting the Sterling Forest Resort. For the Resorts World Grand Hotel, a turn-of-the-century architectural style will be recognized reflecting the long history of the area serving as a destination resort location. Roof forms and building materials will be chosen that will evoke the character of the resort architecture nearby as reflected at Tuxedo Lake.

Areas directly south of the new lake and Grand Hotel contain vantage points for the owners of

the existing residential homes located at an elevation higher than the roadway Route 17A. Views from this location are through the existing trees. In this area, south of Route 17A, most of the large trees in view will be preserved on the project site. Additional tree planting is designed for this area, south of the Grand Hotel entrance creating an arrival setting for the Sterling Forest Resort. Landscape planting will be placed to screen views into the new parking areas and enhance the Grand Hotel entrance.

Travelling west along Route 17A, portions of new buildings at Sterling Forest Resort will be visible through wooded areas. Views of the upper portions of the new buildings will be partially visible from existing open areas within the project site. While on 17A within the project site, both east and west traveling vehicles will be afforded views of the development. The roadway is curving through this portion of the site and the development provides views of the interconnected lake and waterway system. The Central Lot Parking area and the West Lot Parking area are found on the north side of the roadway. These parking areas slow are paved with "Grassspave" with new trees planted to screen vehicles. In addition to the green surface, trees are provided within the parking areas creating a parking grove.

To the south of Route 17A, the existing ski support buildings will be demolished and the site area redeveloped providing a new Ski Village and Spa Hotel. Grade change between the roadway surface and the Ski Village and Spa Hotel is approximately 20 feet and will limit visibility of the new development. In addition, extensive planting will include new trees and landscaping. At this location, a pedestrian bridge connecting the lower parking areas up to the ski facilities will cross over the existing Route 17A roadway. The pedestrian bridge is planned to be a low profile, wood and steel structure approximately 220 feet long with its foundations faced in a native stone material in keeping with the rural nature of the area as pictured below.

Just further west on 17A, a second pedestrian bridge, approximately 100 feet long, will serve the World and Seasonal Fairgrounds and the new Fairgrounds Amphitheater providing completely safe passage across Route 17A. These pedestrian bridges will continue the architectural design theme of the resort development and will reinforce the sense of arrival and sense of place for the Sterling Forest Resort.

Following westward along 17A, the project site is screened with additional tree planting supplementing the existing forest conditions. The existing trees frame the roadway ROW and limit views of the upper levels of the new buildings. The buildings contained within the western portion of the project development are smaller scale buildings with heights reaching a maximum of 25 to 30 feet. Glimpses into the project site in this location will afford limited views of the World and Seasonal Fairgrounds and the Sterling Forest Gardens. Near the intersection of route 17A and Benjamin Meadows Road, a service entrance and service facilities will be screened from view from the roadway.

Further west along 17A, views into the site are obstructed by the existing forested areas. Enhanced tree planting will be found screening the areas of the development. Activities found in this location of the project site include stables and riding and hiking trails. Employee, Recreational Vehicle, and Trailhead parking is provided in the locations of existing clearing and will be screened from views from Route 17A. These areas are also paved with "Grasspave"

materials minimizing the extent of impervious surfaces.

West of the project site along Route 17A, views of the development are not visible due to roadway alignment and existing forested areas. At higher elevations arriving from the west, no views have been identified due to the same conditions found near the project site.

From the surrounding Sterling Forest, views are not identified as available due the extensive tree cover and topography. These areas, however, could potentially allow views of the development in the wintertime, and are indicated in the Viewshed Plan, Figure III.J.2. Approximately 1.5 miles to the north, the Appalachian Trail traverses as series of ridges that form the bowl of the valley area. Along the Appalachian Trail no cleared areas exist based on the review of aerial photography, where a view would be afforded of the project site and proposed development. Areas along the Appalachian Trail, however, could potentially allow views of the development in the wintertime, and are also indicated in the Viewshed Plan.

Travelling southward toward the project site, along Bramertown Road and onto Benjamin Meadows Road passengers do not experience views of the site due to the extensive forest cover and existing topography. There are portions of the roadways that could potentially provide views during times when the canopy has no foliage. These areas are shown on the Viewshed Plan and are highlighted in green.

Portions of existing house sites on the north facing slope will be visible in wintertime through trees proposed to remain along Route 17A. Site development will be visible from the existing home sites that exist along Route 17A immediately to the south of the Sterling Forest Resort Grand Hotel in any season due to the existing open space between the home sites and the hotel.

Overall, the applicant believes the visual aesthetic of the Site will improve with removal of the old buildings for new construction. Dilapidated buildings with outdated architecture and infrastructure will be replaced with new structures employing the latest in sustainable design and infrastructure. Buildings will use natural materials and will conform to a uniform color palette. The Grand Hotel is sited approximately 250 feet from Route 17A, providing opportunity for landscape treatment to soften its visibility from Route 17A.

Figure III.J.6 Proposed Sterling Forest Resort Grand Hotel

Figure III.J.7 Proposed Grand Hotel Entrance

Figure III.J.8 Proposed Grand Hotel as viewed from Route 17A

2.5.3 Roadway Improvement Impacts

Roadway improvements are designed for Route 17A allowing free flowing vehicular movement while providing access onto and off the project site. Arriving from the east on Route 17 a roundabout is provided allowing through movement to flow unimpeded while accommodating turns into, and from the Grand Hotel site. The roundabout will occur approximately 1500 feet away from the front entrance to the Hotel portion of the site, and will serve as the main and ceremonial entrance.

Route 17A will remain in its current alignment through the site following the existing curves. A secondary entrance will serve the Grand Resort Hotel bordering a new lake found immediately to the south of the Hotel. An onsite roundabout will direct visitors to the East Lot Surface Parking, main Grand Hotel entrance and the Parking Garage located to the north of the Resorts World Grand Hotel. The entrance will border the east side of the lake and is located at the existing entrance to the abandoned runway.

Traveling west, access points to the parking areas will be provided along Route 17A serving the Central and Western Parking Lots. The first parking entrance will serve the Central Lot and provide service access to the west side of the Grand Hotel. Service access to the Fairgrounds site and the existing water treatment site will be located to the west of the parking access for the West Lot. Access to the Employee and Stables Parking Lot will be provided from the service entrance near the intersection of Route 17A and Benjamin Meadows Road. The roadway

improvements will occur at predominately existing grades, reducing the need for extensive cut and fill conditions and will blend in with the existing landscape. The edges of the roadway right-of-way will be significantly planted with trees,
And will enhance the overall appeal of the landscape through the project site resulting in a beneficial visual impact due to the new development.

Intersection 15B will also receive roadway improvements that will serve both the new development along with enhancing the operation of the existing interchange system. The interchange will be modified to include a new exit and entrance ramp for the northbound and southbound I-87 movements. This improvement will include the construction of an off ramp that passes over the existing Route 106 at the same height of the current northbound and southbound overpasses. The exit ramp will be constructed as a separate bridge at the same level and will extend northward to a point where the ramp will meet existing grades along Route 106. As the northbound I-87 rounds the curve immediately to the south of the intersection, the grades to the right of the roadway fall toward the existing roadway. The new deceleration lane / ramp will require tree clearing and re-grading of the area immediately to the east allowing the addition of the ramp. A modest visual change will result in new vegetated slopes and possibly some exposed rock outcropping.

An entrance ramp to I-87 North will be provided along the same alignment to the north and will extend approximately 2000 feet or as required per survey/design and the required taper. The exit ramp and will start from the same location on Route 106 as the end of the exit ramp. The widths of the exit and entrance ramps are designed to be single lanes. Modifications to Route 106 to the east of the I-87 overpass will include a proposed shoulder widening for a bikeway on both east and west bound movement. Route 106 grades moving beneath the I-87 overpass will be lowered to provide 14.5 feet of clearance minimum to the existing bridge structure. Improvements to the I-87 southbound movement will also include an exit and entrance ramp. Currently, a southbound exit ramp exists for service access. This ramp location will be improved to provide a single lane for exit that expands into a two lane exit as it nears the intersection of Route 106, providing turn lanes to both east and west Route 106. A proposed actuated traffic signal is designed to be located at this intersection. An entrance ramp is also proposed to southbound I-87 that extends approximately 2000 feet or as required due to survey/design information plus the required roadway taper.

As the roadway improvements to Interstate 87 and Route 106 are designed to be at the same level of the existing roadway surfaces, visual impact will be limited to a small area of tree clearing between Route 106 and I-87 for a short distance, and along the entrance and exit ramps to I-87. In this location, tree cover is not as extensive or as dense as is the cover to the west of Route 106. The southbound exit ramp from I-87 will require limited removal of trees to the west that could potentially impact the visual resource of the Ramapo River, and its recreational value in the form of fishing. Between I-87 and Route 17, the Ramapo River provides recreational fishing accessed from Route 106 via a rail service access point. This existing tree canopy between the Ramapo River and the exit ramp from I-87 may require additional tree planting along with undergrowth planting to provide effective visual screening of the exit ramp from the Ramapo River.

Roadway improvements will be made to the intersection of Route 17 and Route 17A. These improvements include the proposed roundabout, a reconstructed southbound exit ramp from Route 17, expansion of the existing Park and Ride/Trail Access Lot, and the reconstruction of the southbound Route 17 entrance ramp. The two ramps will generally follow the current roadway alignment; however, the existing parking area for the Wildcat Mountain Trailhead will be reconfigured. The roundabout will shift the location of the intersection to the west approximately 30 feet and the reconstruction of the Park and Ride will accommodate this shift in its present location. To accommodate this slight shift in alignment, limited tree clearing will be required to the northwest of the intersection. To the south and existing cleared area will accommodate the shift. The lane change for two lanes to four lanes will remain in its current alignment and configuration along Route 17A at approximately 400 feet to the west of the intersection. These roadway improvements will occur at existing grades.

The planned treatment of the intersection, to be restored in native landscape plantings combined with minor directional signage, will be designed to avoid any adverse change in visual character of this rural road. Although visually there will be new manmade elements in the public road corridor, the added elements will not be out of character with other such landscape features elsewhere in the community nor will they appear in stark contrast to roadway corridor with existing development nearby. The roundabout will enhance the flow of vehicular movement, provide easier access on and off Route 17, provide a new parking facility for Park and Ride and Wildcat Mountain Trail use, and enhance the landscape environment of the Route 17/Route 17A intersection.

2.5.4 Light Pollution Impacts

Exterior site lighting is proposed according to a conceptual lighting plan designed to achieve area lighting for distinct areas of the site plan while avoiding light pollution. The site lighting will be designed based on current best practice such as Dark Sky Society “Guidelines for Good Exterior Lighting Plans.” The site lighting will be implemented with a focus on reducing “sky glow” through minimizing excessive lighting, using shielded fixtures with efficient light bulbs while ensuring public safety. Light will be directed downward through the use of full cut-off and/or fully shielded fixtures, along with fully shielded wall packs and flush mounted canopy fixtures. Lighting will be confined to necessary areas and minimized to the extent possible while meeting safety purposes including safe pedestrian passage and property identification. Site lighting will be turned on for active business hours.

All existing light fixtures including pole mounted fixtures along with wall and surface-mounted fixtures will be removed from the site. All proposed luminaires will be either LED or low-pressure sodium vapor exterior lamps with cutoff fixtures, mounted on 18-foot poles or 3’-4” bollards. Light fixtures will use shut-off controls. An ornamental style standard will be selected for use throughout the project for continuity. Locations of light fixtures at buildings have been carefully considered to place lights on the interior sides of the site, opposite Route 17A so as to avoid undue nighttime spillover. All fixtures are full-cut-off, down-light only.

Street/Area lighting:

- Full cut-off, 2700K LED, 18' tall
- Bollard/pathway lighting:
- Full cut-off, 2700K LED, 3'-4" tall
- Decorative Wall Sconces @ exterior columns:
- Full cut-off, 2700K LED, mounted @ 6' above grade
- Upper Façade Grazing Light:
- 2700K LED, mounted under roof eaves, height varies.

Fixture height will be limited. Pole lamps found in limited numbers within the existing development will be eliminated and a single, cutoff pole lamp is proposed where internal roadways intersect, for safety purposes. In addition, a single, cutoff pole lamp is proposed at each of the new access intersections on Route 17A, again for safety. Proposed area lighting is limited to five parking areas in the project: the East Lot, North Lot, Central lot, West Lot, and Employee Parking. Lamp selection will be made based on "lumen cap" recommendations including the following: commercial properties in non-urban commercial zones = 25,000 lumens per acre. Residential areas = 10,000 lumens per acre. Maximum lumen levels for different fixtures will be based on mounting heights:

Mounting Height (feet)	Recommended Maximum Lumens
6	500 – 1000 lumens
8	600 – 1,600 lumens
10	1,000 – 2,000 lumens
12	1,600 – 2,400 lumens

Specification of cutoff pole fixtures throughout the project will limit the extent of ground illumination to the localized area immediately around the light poles, and limit the amount of horizontal stray light or reflection upward, thereby minimizing the potential for adverse visual effect on the night sky. Light emanating from within the buildings spilling outward will be minimized with design focusing on interior light cutoff such as blinds and curtains.

The conceptual lighting plan for the site has been designed with a minimum amount of lighting, limited to only that which is needed for safety and security in circulation areas. Site lighting levels will be reduced closer to property lines, where the height of light poles will diminish based on the distance to the property line. Development will largely occur in existing open spaces that have been previously developed. Limited removal of the existing natural barriers will be undertaken, only as required. The development of the site will include enhancement of the existing perimeter vegetation in the form of additional tree planting and landscaping further establishing the perimeter buffers while limiting light spillover to adjacent properties and rights of way.

Two areas where outdoor lighting will also be installed include the small amphitheaters and the ski slopes. These areas will also implement the use of Dark Sky compliant technologies to provide safety and task lighting for evening use. The Garden Amphitheater and the Fairgrounds Amphitheater will be located within wooded areas of the new World Fairgrounds. The lighting will be designed based on containing light within the premises and basic lighting concepts of pathways, amphitheater seating, and surrounding trees employing LED lighting technology.

Design concepts include the use of suspended downlights casting light into patterned projections downward and not outward and the use of cool color temperature lamps to mimic the feel of moonlight. LED lighting strips will be used in the bench seating levels and pattern projectors will be used to establish safety lighting. Full-cutoff LED landscape bollards will illuminate the pathways to parking areas.

Ski slopes will also be illuminated through the use of Dark Sky compliant technology. The use of low level LED lighting fixtures (300 watt vs. 1000 watt) will provide a glow over snow based on providing diffuse light achieved by deflectors that keep the light from focusing on specific areas, but rather create a glow over the snow. The technology of magnetic induction lighting will achieve a milky glow instead of bright light hot spots, while using 1/3 of the energy of metal halide fixtures.

By using the best practices of Dark Sky compliant design, the development will avoid light pollution and the lighting will not have a negative impact on the aesthetic and visual resources in the area of development or beyond.

2.5.5 Above Grade Utilities Impact

Existing above ground utilities (e.g. electric wires and utility poles) and new utilities will be buried below ground to improve the visual aesthetic within the site. The existing wastewater treatment facility will be renovated and screened from view with vegetation and fencing reflecting the materials used throughout the development. The facility is contained within a building in a forested, northwest corner of the property and screened from view from Route 17A by additional landscape screening along the public road. The proposed water storage tank will be completely buried with no portion of the structure above grade. A new water treatment facility will be built to the north of the Grand Hotel Parking Garage in the previously cleared runway site. This location is screened by the parking garage and the extensive forested area. Given the unobtrusive nature and siting of these existing and new facilities, neither one is anticipated to result in any significant change in the visual character of the site or site area.

2.6 Visual Impacts

Potential visual impacts from the public aesthetic resources off site that were identified in the region for study are described below.

2.6.1 "Long Views from Route 17A from Sterling Forest to Warwick"

The Orange County, New York Legislature adopted "Preserving Scenic Qualities in Orange County" as an amendment to the County Comprehensive Development Plan in August 1988. Eleven (11) Special Scenic Areas, visible from public sites and rights-of-way, were identified as deserving protection. They included the section of roadway from Sterling Forest to Warwick. Points of interest, as identified in the Orange County, New York GIS along this section of special scenic area are limited to the Tuxedo Ridge Ski Resort and the New York Renaissance Faire, both contained within the project site. Two points of interest have been identified west of the project site, as indicated in the Orange County GIS database and are located approximately 5.8 miles west to Continental Road on top of Mount Peter. Continuing to the west, another point of interest is identified at the slopes of Warwick Mountain along Route 17A. These views are not contained within the GIS analyzed viewshed due to the topography between those locations and the project site, and do not represent any significant visual impacts due to the proposed project.

2.6.2 Appalachian Trail

The Appalachian Trail traverses Bellvale Mountain to the west of the project site before dropping into the valley where Greenwood Lake lies to the south. The Trail crosses the valley below Lilly Pond and moves eastward to below Mombasa Lake. The Trail crosses Bramertown Road and begins to climb Bucannan Mountain. Buchanan Mountain peaks at 347 meters, compared to Tiger and Cedar Mountains with peaks measured at 355 meters. These peaks are located adjacent to, and partially within, the project site. The Appalachian Trail descends Buchanan Mountain and travels east to Dam Lake before heading northeast over an unnamed 300 m ridge line before crossing Route 17 and NYS Thruway I-87.

The Appalachian Trail traverses this area through heavily forested tree cover. This condition affords little in the way of extended views, and views are not represented in the GIS viewshed analysis. However, these elevated areas have the potential to have views of the project site development if tree canopy was not considered. Given the long distance of any potential view and the limited size of the proposed development, development at the project site is not expected to be discernable nor will the changes create a significant visual impact.

2.6.3 Katrina Court Home Sites

The Katrina Court home sites are located immediately to the south of Route 17A adjacent to the eastern side of the project site and the Tuxedo Ridge Ski Center. The five home sites adjoin the Sterling Forest State Park immediately to the south and Route 17A immediately to the north. The Katrina Court home sites are located within partially cleared areas at approximately 790 feet in elevation. The two existing homes are found across the roadway from the siting of the Sterling Forest Resort Hotel, which will have a ground floor elevation established at the 740 foot

elevation. The hotel roof peak as designed extends upward at a height of 118'-3" to the elevation 858 feet, approximately 78 feet above the ground level of the two existing homes. Route 17A follows the floor of the valley at elevation 720 feet and separates the Katrina Court parcels from the project property. The proximity of the home sites along Katrina Court to the proposed area of development currently allows a line of sight view between the existing homes and the development area. While the existing trees obscure views, the potential for adverse visual impact exists and will need to be mitigated by vegetative screening at the edge of the development area, in conjunction with any restoration of the existing landscape between the two areas.

The Route 17A roadway alignment follows the natural topography and lies south of existing wetland areas. The proposed design of the project site in the vicinity of the Grand Hotel entrances will include a landscape amenity. To the north of Route 17A, the lowland areas with the existing waterway will be enhanced and expanded to form a lake.

2.6.4 Sterling Forest State Park

The Sterling Forest Resort project site is located adjacent to the Sterling Forest State Park and is accessed by Route 17A which runs through eastern and western portions of the Park and also runs through the project site. The Park is extensively forested with large growth trees covering significant topography. A trail network exists with individual trails traversing the land within the Park. Two trails are present at an approximate distance of 1 mile from the project site.

The Sterling Valley Loop Trail's northern most section is found at the end of Ironwood Drive, an access road located within the Park off Route 84. At this location within the Park, the trail exists at the general elevation of 840 feet. To the north of the Sterling Valley Loop Trail, multiple peaks exist one at the top elevation of 1166 feet, and Tiger Mountain at 1172 feet. Tiger Mountain is the home to the Sterling Forest Ski Center located only on the northern exposure. Ski operations facilities exist on Tiger Mountain including the existing gondola operating structure and limited service facilities.

The Sterling Valley Trail traverses this area through heavily forested tree cover. This condition affords little in the way of extended views, and views are not represented in the GIS viewshed analysis. The trail located at these lower elevation areas do not represent the potential to have views of the project site development and are blocked by Bare Mountain and Tiger Mountain to the north. Tiger Mountain is only slightly visible from the trail due to Bare Mountain obstructing the view. Due to the distance from the Sterling Valley Loop Trail to the top of Tiger Mountain, it is unlikely that views of the ski operations equipment would be seen. However, replacement of equipment for the continued use of the ski operations could require mitigation but do not represent a significant visual impact. Given the long distance of any potential view and the limited size of the proposed redevelopment of the gondola equipment structure, it is not expected to be discernable nor will the changes create a significant visual impact.

The Allis Trail within the Sterling Forest State Park runs generally north-northeast from the crossing of Route 17A southwest of the project site northward to the Appalachian Trail. The trail runs along the ridgeline formed by an escarpment. While the Allis Trail is found at

elevations higher than the project site, the trees cover and existing vegetation screen potential views of the development. The areas the Trail traverses do not fall into the GIS viewshed analysis. However, these elevated areas have the potential to have views of the project site development if tree canopy was not considered. Given the long distance of any potential view and the limited size of the proposed development, development at the project site is not expected to be discernable nor will the changes create a significant visual impact.

Additional trails are located within the Park at greater distances from the project site. To the north of Route 17A, trails within the Sterling Forest Park include the Townsend Trail, Long Meadow Extension, and Wildcat Mountain Trail. These trails are found at general elevations of 900 feet running between ridges heading north / south. The Wildcat Mountain Trail climbs from the parking area found along the west side of Route 17. As shown in Figure III.J.2 representing the 5-mile viewshed, the regional topography combined with the extensive tree cover effectively blocks potential view of the Site from this recreational resource. However, the GIS viewshed analysis indicates potential views from the Long Meadow Trail could be present if existing tree cover was not present and thus the project will have no visual impact on this resource. The GIS viewshed analysis indicates that no views exist to the project site from the Wildcat Mountain Trail and the Townsend Trail.

Further to the north of Route 17A, two trails are found within the Park including the Indian Hill and Furnace Loop trails. These trails are found generally at elevation 900 feet and lie north of Route 19 traveling from Southfields northwest. The elevation of the Trails combined with the topographical features between the Trails and the project site, and the GIS viewshed analysis confirm the absence of views.

2.6.5 Harriman State Park

Interchange 15B lies within the Harriman State Park on its western edge. The Harriman State Park is located to the east of the Sterling Forest Park and is accessed by Route 106 which enters the Park from the west and extends to the center of the Park linking with Seven Lakes Drive and Kanawauke Road. The Park is extensively forested with large growth trees covering significant topography. A trail network exists with individual trails traversing the land within the Park. Five trails are present at an approximate distance of 2.5 miles from the Interchange. Harriman Highlands Trail, Harriman Lakes and Mountains Loop Trail, Island Pond Loop Trail, Harriman Seven Hills Loop and the Appalachian Trail located crossing I-87 to the north of Intersection 15B are the trails that are found in the central and western portions of the Park. These trails are generally found at elevations of 1000 feet or less. The elevation of the Trails combined with the topographical features between the Trails, project site and Interchange 15B, and the GIS viewshed analysis confirm the absence of views.

3.0 SUMMARY OF VISUAL ASSESSMENT

To the extent possible, the proposed development has been sited within the existing 102 acres of disturbed/developed area. Changes in local area views (which are limited to particular vantage points along Route 17A) will be defined by the change in architectural design style and increase in density of development on the Site. There will be clearing for roadways and building sites, including the individual detached buildings set within woodland to remain, but the clearing will be limited by specifications set forth on the construction plans to allow for proper screening from public views. New roadways within the site are proposed to have narrow pavements with vegetated shoulders to retain the rural character of the locale.

The conceptual lighting plan has been designed with a minimum amount of lighting limited to illuminating circulation areas only for safety and security, and incorporates cutoff fixtures to minimize stray light. The use of modern, Night Sky compliant lighting fixtures will minimize the visibility of site lighting from off site. The anticipated site illumination, overall, will avoid any potential impact on distant aesthetic resources from light pollution.

Roadway improvements will occur at existing grades, largely within existing rights-of-way and will promote the flow of vehicular movement while enhancing the existing landscape environment.

No significant visual impacts are anticipated to existing aesthetic resources and no regionally significant viewshed changes resulting from this project have been identified.

4.0 MITIGATION

No significant impacts have been identified in relation to aesthetic and visual resources; it is anticipated that the proposed development will enhance the visual character of the Site by removal of the old, deteriorating buildings, removal of all existing site lighting, and the introduction of a modern, sustainable development scheme with LEED designed buildings, re-vegetation of graded areas and added landscape plantings in keeping with the existing rural character of the area. Areas outside of the limits of disturbance specified on the project construction plans will be protected and preserved in existing vegetative cover.

Nonetheless, the proposed project plans will incorporate the following mitigation measures to minimize or avoid adverse visual impacts.

i. Design standards are proposed (use of natural materials, selection from limited color palette) that ensure buildings blend with natural landscape
ii. Siting of buildings, roads and trails along existing contours and within areas of existing development, to the extent practicable
iii. Landscaping of the development areas with native or naturalizing vegetation, particularly where open to public views of the Site, will be part of the overall site landscape design. Particular attention will be paid to plantings needed for screening of vehicular areas (roadways and parking areas) from offsite views by the public, including vehicle lights at nighttime. New buildings and pavement areas potentially visible from nearby off site vantage points will receive screen planting to buffer the view.
iv. Treatment of the Main Entrance area on Route 17A following excavation for the Grand Hotel and access roads will entail minor sculpting of any exposed rock to create a natural looking rock face. Rock encountered by these excavations will be utilized as stabilized side slopes thereby reducing the extent of earth cut and land disturbance needed for the road construction, while providing a visual amenity. Existing trees will be supplemented by new plantings along roadways and buffered areas.
v. Lighting plan to limit exterior lighting to safety and comfort, reduce light power densities and minimize light trespass, including the following specific measures:
    - Night Sky compliant lighting fixtures to minimize “sky glow”
    - down-lighting to direct light where specifically needed, thereby necessitating lower light intensity lamps
    - cutoff fixtures to minimize stray light
    - street lighting is limited to road intersections and parking areas
    - bollard lighting is used around buildings All existing lighting will be removed (including the street lights along Route 17A and all building mounted flood lights).
vi. The Project will develop architectural guidelines and will use a limited “palette” of exterior building materials, colors and styles, incorporating elements from local

architecture, to create a unified overall development style for the Project.

vii. The Project will develop standards of design regarding earth grading, soil conservation and erosion controls to limit changes in the landform, minimize adverse effects on soil and water resources, and ensure sustainable development.

viii. The Project will develop management guidelines for the resort regarding exterior lighting to minimize light pollution.

ix. The Project will develop landscaping guidelines for the resort regarding tree removals and new planting to preserve the natural landscape character.

x. The Project will incorporate minimal directional signage at the main entrance and secondary access points. There will be no entrance features located on the public road, such as stone pillars, project signs, and the like. The proposed Main Entry facility is located internal to the Site.

5.0 RESOURCES

NYSDEC, "Assessing and Mitigating Visual Impacts", Program Policy DEP-00-2, NYSDEC Division of Environmental Permits, July 2000.

National Park Service, U.S. Department of the Interior, National Register of Historic Places