

DESCRIPTION OF LAND

Exhibit VIII. C.1.c

Sterling Forest Resort is designed to fit largely within the footprint of existing development on the Project Site in order to maintain the variety of natural features and topographical terrains of the Project Site. The bulk of the proposed new development will occur on a strip of land that was once intended for use as an airplane landing strip but has for decades languished as a seasonal parking lot. The Project Site encompasses the northern slopes of Tiger Mountain, which are currently used by the Tuxedo Ridge ski resort for skiing and other seasonal sports. The plan for the proposed resort preserves these uses. The southwestern portion of the Project Site is currently occupied by the New York State Renaissance Faire (the "Renaissance Faire"), which will be integrated as a component of Sterling Forest Resort. That portion of the site will be subject to a minimal amount of additional development in connection with the proposed resort, almost all of which will occur within the footprint of the existing Renaissance Faire.

Below are descriptions, maps, schematics and aerial and surface photographs demonstrating the salient topographic, geographic, and vegetative characteristics of the Project Site, and significant existing facilities, improvements and infrastructure thereon, as well as maps and schematics illustrating the relationship of the Project Site to surrounding development and infrastructure.

Topographic Characteristics

The Project Site is located within a north-south trending narrow glacial valley, approximately 2,500 feet in length and 300 feet wide. The valley is at approximately 720 feet above sea level and is situated between two steep ridges that are at approximately 900-foot elevation. The northern and eastern portions of the site are relatively flat with a number of small streams and ponds. The ski center slopes from Route 17A up Tiger Mountain to its summit which has an elevation of 1,185 feet above mean sea level (MSL). The Renaissance Faire is relatively flat with an elevation of approximately 800 feet MSL whereas the maintenance and campground areas to the west are approximately 30-40 feet higher than the Renaissance Faire. The elevation change between the maintenance area and the Renaissance Faire is sharp while the elevation change to the campground is gradual. Figure VIII. C.1.c-54 behind this exhibit is an aerial photograph depicting the topography of the Project Site, and Figure VIII. C.1.c-55 behind this exhibit depicts five topographical terrains on the Project Site, which are further described below.

Basin

This includes generally the areas of lowest topographic elevation with a ground slope percentage of less than 15%. Generally the lands within this area are considered to be buildable with the exception of the very lowest areas which contain fresh water ponds and wetlands which are denoted in blue in Figure VIII. C.1.c-55. The photographs in Figures VIII. C.1.c-1, 2, 3, 4, and 5 show examples of the basin terrain on the Project Site.

DESCRIPTION OF LAND

Figure VIII. C.1.c-1



Figure VIII. C.1.c-2



DESCRIPTION OF LAND

Figure VIII. C.1.c-3



Figure VIII. C.1.c-4



DESCRIPTION OF LAND

Figure VIII. C.1.c-5



Slopes

The sloped lands depicted are portions of the property where the ground surface slope exceeds 15%. The sloped areas within the Project Site vary from somewhat gentle to rugged/steep terrain (55%). Typically these areas create the greatest challenges with regard to development and even site use. The photographs in Figures VIII. C.1.c-6, 7, 8, and 9 show views of the Tiger Mountain ski slope located on the southern portion of the Project Site.

DESCRIPTION OF LAND

Figure VIII. C.1.c-6



Figure VIII. C.1.c-7



DESCRIPTION OF LAND

Figure VIII.C.1.c-8



Figure VIII. C.1.c-9



DESCRIPTION OF LAND

Peak

Tiger Mountain refers to the highest point within the Project Site, located near the southwest corner of the property. A small area at the highest point of Tiger Mountain has a surface slope of less than 15%. However, this percentage increases dramatically to “slope” conditions for 300 feet or more in all directions. The following photographs in Figures VIII. C.1.c-10 and 11 show views of Tiger Mountain, located on the southern portion of the Project Site, from the landing strip.

Figure VIII. C.1.c-10



Figure VIII. C.1.c-11



DESCRIPTION OF LAND

Ridge Line

In the area just east of Tiger Mountain and along the southerly boundary of the property is a continuous elevated crest of high pointed land which also likely constitutes a division of drainage flow. The following photographs in Figures VIII. C.1.c-12 and 13 show examples of ridge line terrain on the Project Site.

Figure VIII. C.1.c-12



Figure VIII. C.1.c-13



DESCRIPTION OF LAND

Bench

The northeast portion of the site, sometimes referred to as the landing strip, is a long relatively narrow strip of gently inclined land that is bound by distinctly steeper slopes on both sides. The following photographs in Figures VIII. C.1.c-14, 15, 16, and 17 show views from the landing strip facing south generally toward Tiger Mountain.

Figure VIII. C.1.c-14



Figure VIII. C.1.c-15



DESCRIPTION OF LAND

Figure VIII. C.1.c.7-16



Figure VIII. C.1.c-17



DESCRIPTION OF LAND

The following photograph in Figure VIII. C.1.c-18 shows a view from the landing strip facing north.

Figure VIII. C.1.c-18



The following photographs in Figures VIII. C.1.c-19 and 20 show views from the landing strip facing Route 17A.

Figure VIII. C.1.c-19



DESCRIPTION OF LAND

Figure VIII. C.1.c-20



The following photograph in Figure VIII. C.1.c-21 shows a view of the landing strip from Route 17A.

Figure VIII. C.1.c-21



DESCRIPTION OF LAND

Land Use

According to the Town of Tuxedo Comprehensive Plan, the Project Site is considered entirely commercial land use, with adjacent roads, residential and parkland. The conceptual land use figure in the Comprehensive Plan reflects the recommended rezoning of the Renaissance Faire properties, showing the proposed Project Site as “mixed use/tourism related development.” However, existing land uses “on” the Project Site include commercial, forest, and aquatic (streams). “Adjacent” land uses include residential, forest, aquatic (streams) and roads; while vacant, industrial and public service uses are “near” the Project Site along Route 17A.

Land cover on the Project Site consists of majority forest (58%) and roads, buildings or other impervious surfaces (18%), as depicted in Table VIII. C.1.c-1 below and Figure VIII. C.1.c-56 behind this exhibit.

Table VIII. C.1.c-1. Land Cover Types on the Project Site

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

Geographic Characteristics

Geologic Setting

The project area is located within the Hudson Highlands region of Southern New York State. The province is part of a large expanse of ridge and valley system that is characterized by north-northeast trending ridges and lowlands. Bedrock in the area consists of igneous and metamorphic basement rocks. The bedrock within the area has a strong metamorphic fabric. The Ridge and Valley province, and Orange County in general, was greatly affected by the Wisconsinian Glacial Episode (approximately 85,000 to 11,000 years ago). Glacial events left a sequence of unconsolidated till, outwash and lacustrine deposits over much of the region's bedrock. The depth of these deposits range from a few feet to over 300 feet. The thickness of the glacial deposits within the development area is between 27 to greater than 65 feet. Glacial sediments include unconsolidated well-sorted till, coarse granular outwash from glacial streams, and fine-grained sediment likely deposited from temporary shallow lakes or kettles. Glacial-lake sediment is seen between 5 and 10 feet in the center of the valley and between 6 to 20 feet towards the valley walls, where it is more sandy. Site geology is described in further detail in the Geotechnical Investigation Report, provided in Exhibit VIII. C.1.f and submitted electronically.

DESCRIPTION OF LAND

Predominant Soil Types

The predominant soil types found on the site, based on Louis Berger’s Preliminary Geotechnical Investigation and the Unified Soil Classification System are illustrated in Table VIII. C.1.c-2.

Table VIII. C.1.c-2. Soil Types

Soil Type	Percentage of Project Site
Fill Material	10%
Gravel (GW)	25%
Sand (SW sand and SM silty sand)	50%
Silt (ML)	15%

The Wisconsinian Glacial Episode (85,000 to 11,000 years ago) left a complex sequence of unconsolidated till, outwash and lacustrine deposits over much of the region’s bedrock. The shallow subsurface within the geotechnical exploration area is characterized by sandy gravel, sand, locally silt that are probably bank run fill placed during construction of the landing strip.

The geologic interpretation of these site soil types indicates there are four strata with different geotechnical characteristics underlying a 2- to 5-foot layer of pavement and crushed stone aggregate in the geotechnical investigation area. From top to bottom, these strata are as follows:

1. Fill;
2. Glacial-lake sediment;
3. Glacial outwash and till; and
4. Granite-Gneiss bedrock.

These strata are depicted in Figure VIII. C.1.c-57 Engineering Geology Map behind this exhibit and their geotechnical properties are described in detail in the Geotechnical Investigation Report.

Drainage of Project Site Soils

According to the NRCS Hydric Soils Map Figure VIII. C.1.c-58 behind this exhibit, there is one hydric soil identified on the Project Site: Histic Humaquepts (HH), which is described as ponded, located on 0 to 1 percent slopes, very poorly drained, with swamps and marshes as the primary landform. According to the NRCS Hydric Soils Map, this soil type is found only on property lot number 1-1-52.24. Soil types on other property lots are mapped as non-hydric.

Based on Louis Berger’s Preliminary Geotechnical Investigation, coefficients of permeability of the overburden soils were between 10^3 centimeters per second (cm/s) in sands and gravel and 10^5 cm/s in silt and clay. This suggests good to poor drainage characteristics in accordance with the U.S. Bureau of Reclamation Earth Manual (1998).

Depth to Bedrock

A Preliminary Geotechnical Investigation was conducted by Louis Berger in 2014 that included five 4-inch diameter soil borings to a depth of up to 65 feet bgs. The borings were advanced in the flat landing strip area of the site. Geotechnical data collected from the site indicate that the average depth to bedrock varied from 27 to more than 60 feet below the ground surface in the major development footprint. Depth to bedrock across the region ranges from a few feet to over 300 feet.

The bedrock is granitic in composition (i.e., gneiss), hard, sound and of generally “good to excellent” rock quality. Bedrock exposures can be found on steep slopes on the eastern valley side and in fresh road cuts on Route 17A, west and east of the site. These outcroppings comprise less than 5% of the site. Historic aerial photographs and USGS topographic maps of the area indicate that this narrow valley was once occupied by wetlands and was filled for the creation of a small aircraft landing strip.

DESCRIPTION OF LAND

Depth to Water Table

Regional groundwater is expected to flow towards the Ramapo River, located approximately 2 miles east of the Site. Locally, groundwater at the site, as indicated from the groundwater head measurements in the well couplets on May 1, 2014 and May 6, 2014, exhibits an upward groundwater flow gradient suggesting groundwater discharge into the narrow valley fill deposits. The horizontal groundwater gradient or groundwater flow direction in the overburden deposits within the valley is north to south. Shallow and deep groundwater discharges to the streams and wetlands that bound the proposed development site. See the Groundwater Potentiometric Surface Map in Figure VIII. C.1.c-59 behind this exhibit for more information.

Groundwater monitoring data collected from site monitoring wells installed during the geotechnical investigation indicate that the average depth to groundwater is about 1-2 feet bgs in the investigation area, which was conducted in the major development footprint. See Exhibit VIII. C.1.e for further detail on design measures taken in response to shallow groundwater depth.

Slopes

In the valley in which the proposed project is located valley walls are strongly sloping, approximately 20 degrees on the east side and approximately 10 degrees on the west side. Here the sloping soils that underlay an approximately 6-inch layer of decomposed vegetation consist of yellowish brown gravelly silt and sand (locally known as Hollis Group Soils).

Unique Geologic Features

According to the New York State Department of Environmental Conservation EAF Mapper, no unique geologic features are present on the Site. As described in the Preliminary Geotechnical Investigation Report, the site is located within the Highland Zone of the Ridge and Valley physiographic province, part of a large expanse of ridge and valley systems characterized by northwards trending ridges and lowlands.

Sole Source Aquifer

The Ramapo River Aquifer Basin is a federally designated sole source aquifer (SSA) located within EPA Region 2 established under the Safe Drinking Water Act. This signifies specific designation of areas which are dependent upon ground water supplies and ensures that federal agencies will not commit funds toward projects which may contaminate the SSA's groundwater supplies.

The boundary area of the SSA is that specified in the petition submitted by the Township of Mahwah and the Passaic River Coalition to the U.S. Environmental Protection Agency Administrator in 1990, including the bedrock aquifer which underlies the eastern portion of the Ramapo River Basin, east of the Ramapo River in New Jersey and the Mahwah River in New York. This area lies generally within the Ramapo and Mahwah river valleys in New York. It includes the New York Department of Environmental Conservation (NYSDEC)-designated Ramapo Mahwah Primary Aquifer as illustrated in the U.S. Geological Survey Water Resources Investigations Report 874274 Potential Yields in Unconsolidated Aquifers in Upstate New York Lower Hudson Sheet, Scale 1:250,000. The U.S. Geological Survey Open File Report 82114, Geohydrology of the Valley Fill Aquifer in the Ramapo and Mahwah Rivers Area Rockland County, New York, Scale 1:24,000, delineates the aquifer in detail.

The SSA includes the aquifer recharge area defined as the entire Ramapo River Basin, which encompasses all stream flow source areas including the Ramapo River headwaters near Monroe, New York. The Ramapo River drains an area of 161 square miles, of which 112.4 square miles (70%) are in New York State. 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. The 2011 Town of Tuxedo Comprehensive Plan Update recommends that development activities and infrastructure within the Town consider the environmental impacts of the SSA.

DESCRIPTION OF LAND

Surface Waters and Wetlands

Surface waters (e.g., streams, ponds) comprise 16.86 acres of the Project Site, while wetlands comprise 11.53 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 the New York State Department of Environmental Conservation (NYSDEC). These include the Indian Kill, 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 are under the jurisdiction of the USACE. In addition, a NYSDEC mapped wetland system SL-2 was identified and field verified within the Project Site and in the general vicinity of the Project Site; see Figure VIII. C.1.c-60 NYSDEC and Delineated Wetlands. A wetland delineation was performed in accordance with the USACE wetland delineation methodology for the entire site between April and May 2014. The delineation verified the extent of USACE and NYSEC regulated wetland and surface waters within the site. Table 3 illustrates surface waters and wetlands by NWI classification that were delineated on the Project Site. Five wetland types and six surface water types were identified.

The dominant vegetation observed in the wetlands identified on the site include: red maple, black birch, yellow birch, ironwood, and silver maple trees; spicebush, smooth alder, highbush blueberry and red osier dogwood shrubs; and herbaceous groundcovers including: jewelweed, horsetail, tussock sedge, sphagnum moss, common reed, ostrich fern, cinnamon fern, sedges, sensitive fern, forget-me-not, and broadleaf cattail. Dominant or common invasive plant species often found in the upland edges include: multi-flora rose, olive, and shrub honeysuckle. Poison ivy is common on elevated microsites, such as hummocks or tree bases and upland edges.

Surface water and wetlands characteristics are described in further detail in the Wetlands Delineation Report, attached hereto as Appendix VIII. C.1.c-1.

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 landing strip site. There is also a small wetland (< 12.4 acres in size) at the northerly end of the former landing strip site. Surface water and wetlands characteristics are described in further detail in the Geotechnical Investigation Report. Table VIII. C.1.c-3 below and Figure VIII. C.1.c-60 behind this exhibit illustrate surface waters and wetlands on the Project Site.

DESCRIPTION OF LAND

Table VIII. C.1.c-3. Surface Waters and Wetlands

Surface Water	Acres in Project Area
PUBE	0.98
PUBH	10.12
R3UB1	2.45
R3UB2	1.93
R3UB3	0.74
R4SB	0.64
Total Surface Water	16.86
Freshwater Wetland	Acres in Project Area
PEM1B	0.22
PEM1F	5.39
PFO1/EM1E	1.20
PFO1C	0.28
PFO1E	4.44
Total Wetlands	11.53

R = Riverine: 3 –Upper perennial; 4 –Intermittent
 UB = Unconsolidated bottom: 1 –Cobble-gravel; 2 -Sand; 3 –Mud
 SB = Stream bed
 P=Palustrine:
 EM = Emergent wetland: 1 –Persistent vegetation
 FO = Forested wetland: 1 –Broad-leaved deciduous
 UB = Unconsolidated bottom, open water

Hydrologic Modifiers:
 B - Saturated
 C – Seasonally Flooded
 E –Seasonally Flooded/Saturated
 F – Semipermanently Flooded
 H –Permanently Flooded

Site Drainage

Natural overland storm water drainage for the Project Site occurs through numerous streams and tributaries from the higher elevation areas which culminate in the ponds and streams along Route 17A. These surface water bodies flow eastward.

Storm water surface drains and piping are located throughout the Project Site. They assist in collecting and diverting storm water runoff into the surface water bodies.

A drawing of the Water Distribution for the Project Site, dated May 1960, was provided by United Water (presented in Figure VIII. C.1.c-61 behind this exhibit. The drawing indicates three primary sanitary lines: one that services the Renaissance Faire; one that services the ski center; and one that services the office building and restrooms north of Route 17A. These lines terminate at the municipal sewage treatment plant on the north side of Route 17A across from the Renaissance Faire.

Floor drains were not observed in the Renaissance Faire or ski area maintenance buildings. The only building that floor drains were observed in was the Renaissance Faire’s set production building. An apparent trench floor drain and approximately six rectangular floor drains, with dimensions of 1 foot by 2 feet, were present within this building. Six-inch diameter conduits were observed in some of the drains but the discharge point of these drains was not determined. A possible outfall for these drains was observed in the stream approximately 50 feet to the north. No staining was observed in the area of this structure.

DESCRIPTION OF LAND

It is also possible that these drains are connected to the nearby sanitary line but it is not clear on the sanitary system drawing. A small bathroom building is located to the southwest of the production building. The building is connected to the sanitary system.

Vegetative Characteristics

The New York Natural Heritage Program (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.

Each vegetative community is described below according to the Second Edition of the New York Natural Heritage Program's *Ecological Communities of New York State*. Vegetative communities are described below and in more detail in the Wetlands Delineation Report, attached hereto as Appendix VIII. C.1.c-1. Table VIII. C.1.c-4 below and the Vegetative Communities map in Figure VIII. C.1.c-62 behind this exhibit illustrate existing vegetative communities on the Project Site.

Table VIII. C.1.c-4. Significant Natural and Vegetative Communities

Significant Natural Community	Current Acreage
Appalachian Oak Hickory Forest	40.93
Chestnut Oak Forest	41.91
Acidic Talus Slope Woodland	3.22
Total	86.06
Vegetative Community	Current Acreage
Mowed Grassland	37.70
Successional Shrubland	2.23
Oak-tulip Tree Forest	45.70
Urban Vacant Land	13.60
Wetlands (Freshwater)	11.53
Surface Water	16.86
Total	127.62

Chestnut Oak Forest

This community is located on the southern edge of the site at the top of Tiger Mountain, generally above elevation 950 ft. Smaller locations of Chestnut Oak Forest occur on the northern portion of the site, one to the east of the former air strip paralleling the eastern drainage channel, and another to the west of the former air strip on the northern side of Indian Kill Creek. This hardwood forest is associated with well-drained and often rocky sites in glaciated portions of the Appalachians and on the coastal plain. The dominant trees are typically chestnut oak and red oak, with white oak, black oak and red maple common. The understory and shrub layer is predominantly formed by ericaceous shrubs including black huckleberry, mountain laurel, and blueberry. The photograph in Figure VIII. C.1.c-22 below shows an example of the chestnut oak forest vegetative community.

DESCRIPTION OF LAND

Figure VIII. C.1.c-22. Chestnut Oak Forest



Appalachian Oak-Hickory Forest

This community type is characterized by a hardwood forest on well-drained sites, usually on ridgetops, upper slopes, or south- and west-facing slopes. Soils consist of loams or sandy loams. Several variants to this forest community exist and are typically dominated by oaks. This forest invariably has a mixture of oaks (red, white, black and chestnut) and hickories (pignut, shagbark). Also, maple-leaf viburnum, early lowbush blueberry, flowering dogwood and witch-hazel are commonly found in the understory. Known examples of this community occur at a wide range of elevation, from 200 feet and 2280 feet above MSL.

Acidic Talus Slope Woodland

This community is located at one location on the northern facing slope of Tiger Mountain, between communities of Appalachian Oak Hickory Forest and Chestnut Oak Forest. Talus, or scree, is a steep, rocky slope usually found at the base of a mountain. The block size of the talus is strongly influenced by the type of rock forming the cliff face and rate of erosion. On the site, granitic bedrock, such as hard dolostone caprock, produces stable, very large talus that provides habitat for larger organisms.

DESCRIPTION OF LAND

Oak-tulip Tree Forest

This community is generally associated with the remaining forest cover that blends into the adjoining classifications. The mesophytic hardwood forest occurs on moist, well-drained sites in southeastern New York. The dominant trees include a mixture of five or more tree species including red oak, tulip, poplar, American beech, black birch, red maple, scarlet oak, black oak, and white oak. The subcanopy contains trees and tall shrubs that can include flowering dogwood, witchhazel, sassafras, red maple, and black cherry. Common low shrubs include maple-leaf viburnum, northern blackberry (*Rubus allegheniensis*), and blueberries (*Vaccinium angustifolium*, *V. pallidum*). Characteristic groundlayer herbs are white wood aster, New York fern, Virginia creeper, jack-in-the-pulpit, wild geranium, Solomon's-seal, and false Solomon's-seal.

Successional Shrubland

This community type is characterized by at least 50% cover of shrubs on sites that have been cleared (for farming, logging, development, etc.) or otherwise disturbed. This community has shrubs including morrow honeysuckle, multiflora rose, raspberries and gray dogwood.

Mowed Grassland

This community type is characterized by a dominance of cool season non-native grasses that are regularly disturbed through mowing or recreational use (athletic fields, parking). Grasses may include fescues, bluegrass, orchard grass, and a few common herbs such as dandelions and plantains. This community is associated with the overflow parking area on the eastern end of the site, and in smaller patches around existing buildings.

Urban Vacant Land

This cover type is associated with the large, open field associated with the former landing strip. It contains only a few patches of mostly non-native vegetation and is mostly un-vegetated.

Facilities, Improvements and Infrastructure

As described in Exhibit VIII. C.1.d, the Project Site is composed of four general areas: a North-Central Site Area consisting of office buildings, support facilities, parking areas, ponds, and streams; Tuxedo Ridge Ski Center with building support facilities; the Renaissance Faire with support facilities and a campground; and an Eastern Site Area comprised primarily of two open fields. Improvements in each area are described below and described in detail in the Phase I Environmental Site Assessment Report, provided as Exhibit VIII.C.1.f and submitted electronically.

As depicted in the survey in Figure VIII. C.1.c-63 behind this exhibit, permanent buildings are predominantly located in the northwest and northern areas of the property, as depicted in greater detail in Figure VIII. C.1.c-64 behind this exhibit.

As depicted in Figure VIII. C.1.c-64, there are sanitary sewer manholes, drainage manholes, catch basins and drainage culverts. These structures are most concentrated near the permanent buildings as mentioned above. The photographs in Figures VIII. C.1.c-23, 24, 25, 26, 27, and 28 depict examples of these and other structures.

DESCRIPTION OF LAND

Figure VIII. C.1.c-23. Photograph of Drainage Manhole



Figure VIII. C.1.c-24. Photograph of Drainage Culvert



DESCRIPTION OF LAND

Figure VIII. C.1.c-25. Photograph of Bandshell



The photographs in Figures VIII. C.1.c-26, 27, and 28 depict three bridges on the Project Site.

Figure VIII. C.1.c-26



DESCRIPTION OF LAND

Figure VIII. C.1.c-27



Figure VIII. C.1.c-28



DESCRIPTION OF LAND

The permanent buildings are serviced by underground water lines, shown in areas where water line paint marks indicate the location or based on utility company records. One such line runs from north of the fair ponds to the amphitheater. There is a water line within a 30' wide easement running for approximately 3800 feet on lands northerly of NYS Highway 210 and Route 17A. Figure VIII. C.1.c-64 behind this exhibit also depicts the existing utility (electric/telephone) poles. Three Orange & Rockland Utilities, Inc. easements exist on the lands southerly of NYS Highway 210 and Route 17A (one on the west end, two on the east side). In addition, a New York Telephone Company easement exists on the northerly side of NYS Highway 210 and Route 17A near the large culvert connecting ponds on each side of the road. The Project Site has a gas line with easement that runs easterly-westerly approximately through the middle of the lands southerly of NYS Highway 210 and Route 17A which is indicated on site by gas markers. No evidence was found that this line services any buildings on site.

Eastern Site Area

The eastern site area is comprised primarily of two open fields. The larger of these fields is a narrow field that trends north-south. This surface of this field is currently asphalt pavement and grass. This area was historically used as a landing strip. One building is located in the northern portion of this field. It has two roll-up doors on both the north and south sides of the building. The building was apparently used for storage and vehicle maintenance. The building reportedly was also used for the storage of a tram associated with Sterling Forest Gardens, when it existed in the Renaissance Faire area. No floor drains were observed in the building. A small pit is located west of the southern portion of this field. A stream is present along the western boundary of the east parking field and a drainage ditch is present along the eastern boundary.

North-Central Site Area

This area consists of office building, support facilities and parking areas. The largest building in this area is currently used for amusement purposes as the Forest of Fear Haunted House. This building was formerly the management building for the Project Site. An electrical control box is located on the east side of the building along with a locked storage container. The storage container is reportedly used for trash. Sanitary and storm water system drainage covers and drains are located within the asphalt in the area. The facility's current office building is located northwest of the amusement building, along with a few residences. The facilities are powered by electricity from Orange and Rockland. The sanitary system is connected to a municipal wastewater treatment plant located beyond the site boundary to the northwest of the Project Site within an area leased to South County Services Company on the northerly side of NYS Highway 210 and Route 17A. An asphalt-paved parking area is present to the northwest of the buildings area. The photographs in Figures VIII. C.1.c-29 and 30 show views of the waste water treatment plant located on the northwestern portion of the Project Site.

DESCRIPTION OF LAND

Figure VIII. C.1.c-29



Figure VIII. C.1.c-30



DESCRIPTION OF LAND

Sterling Forest Ski Center

The ski center buildings on the Project Site south of Route 17A consist of a ski lodge/pub building to the west, a central ski warming hut building, and an eastern information building. Further to the west is a small ski lift maintenance building. All snow making equipment is currently electrically powered.

The photographs in Figures VIII. C.1.c-31, 32, 33, and 34 show exterior and interior views of the ski lodge/pub building.

Figure VIII. C.1.c-31



DESCRIPTION OF LAND

Figure VIII. C.1.c-32



Figure VIII. C.1.c-33



DESCRIPTION OF LAND

Figure VIII. C.1.c-34



The photographs in Figures VIII. C.1.c-35 and 36 show views of the central warming hut building.

Figure VIII. C.1.c-35



DESCRIPTION OF LAND

Figure VIII. C.1.c-36



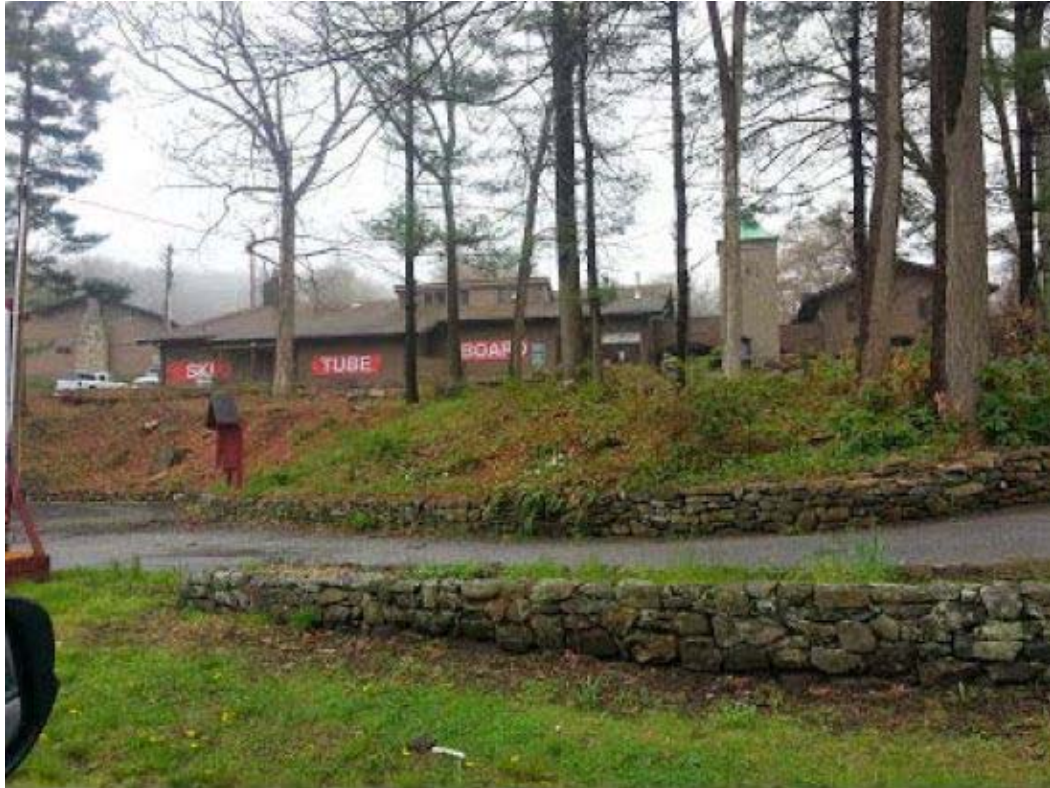
The photographs in Figures VIII. C.1.c-37 and 38 show views of the information building.

Figure VIII. C.1.c-37



DESCRIPTION OF LAND

Figure VIII. C.1.c-38



The Renaissance Faire

This area contains mainly one to two-story shops and mock renaissance-period buildings, gardens, booths, sculptures, and arenas, among other features. Ponds are present along the northern and southern areas of the Renaissance Faire. A maintenance area is located on the western border of the Renaissance Faire area. This area consists of a maintenance building, maintenance equipment shed and staging area, and a vehicle fueling area.

The northern portion of the maintenance building is used for offices. The eastern portion of the building appears to be primarily used as a woodworking shop. The rear, western portion, of the building is used for vehicle maintenance and repair purposes. One aboveground electrical-powered hydraulic lift unit is present in this portion of the building. It is noted that no floor drains were observed to be present in this building and the building is connected to the municipal sanitary treatment system that is located north of the Project Site and services the Project Site. A temporary aboveground 550-gallon waste oil tank was observed outside of the southern side of the building with aboveground piping that enters through the building wall.

The northeastern area of the Renaissance Faire is comprised of a campground and set production building. Small streams flow generally northeastward through the southern portion of the campground. The campground is used seasonally by the Renaissance Faire production staff. Electricity to this area is provided by overhead lines. The set production building is primarily constructed of a concrete floor and an arched roof, generally with open sides. The western area of the building appears to have been used for as a small theater. The remaining portion of the building is used for set productions and storage. The building area is comprised of approximately a half- dozen rooms, divided by plywood walls. An apparent trench floor drain and approximately six rectangular floor drains, with dimensions of 1 foot by 2 feet, were present in the building. Six-inch diameter conduits were observed in some of the drains but the discharge point of these drains was not determined. A possible outfall for these drains was observed in the stream

DESCRIPTION OF LAND

approximately 50 feet to the north. It is also possible that these drains are connected to the nearby sanitary system. A small bathroom building is located to the southwest of the production building. The building is connected to the sanitary system.

The photographs in Figures VIII. C.1.c-39 and 40 show views of the exterior of the Renaissance Faire buildings from Route 17A.

Figure VIII. C.1.c-39



Figure VIII. C.1.c-40



DESCRIPTION OF LAND

The photographs in Figures VIII. C.1.c-41, 42, 43, and 44 show closer views of the exterior of the Renaissance Faire buildings from inside the Project Site.

Figure VIII. C.1.c-41



Figure VIII. C.1.c-42



DESCRIPTION OF LAND

Figure VIII. C.1.c-43



Figure VIII. C.1.c-44



DESCRIPTION OF LAND

The photographs in Figures VIII. C.1.c-45, 46, 47, 48 and 49 show views of the interior of the Renaissance Faire buildings on the Project Site.

Figure VIII. C.1.c-45



Figure VIII. C.1.c-46



DESCRIPTION OF LAND

Figure VIII. C.1.c-47



Figure VIII. C.1.c-48



DESCRIPTION OF LAND

Figure VIII. C.1.c-49



The photographs in Figures VIII. C.1.c-50, 51, 52 and 53 show views of the Renaissance Faire administrative offices located on the Project Site north of Route 17A.

Figure VIII. C.1.c-50



DESCRIPTION OF LAND

Figure VIII. C.1.c-51



Figure VIII. C.1.c-52



DESCRIPTION OF LAND

Figure VIII. C.1.c-53



Relationship to Surrounding Development and Infrastructure

Largely surrounded by preserved open space which buffers the site from the Town of Tuxedo and Village of Tuxedo Park, the adjoining properties of the Project Site include Sterling Forest State Park and approximately eight residential properties on Katrina Court and Benjamin Meadow Road. Figure VIII. C.1.c-65 Adjacent Land Uses behind this exhibit depicts the various types of land cover and uses in the half mile radius surrounding the Project Site.

Benjamin Meadows is a four-lot subdivision adjoining the northwest side of the Project Site, along Benjamin Meadows Road and NYS Highway 210 and Route 17A. Each house has a well and sewage disposal area. Ski Side Villa has five buildable lots, includes design location for wells and sewage disposal systems, includes the road Katrina Court, and adjoins the Project Site along the easterly boundary of the parcel southerly of NYS Highway 210 and Route 17A. The terrain within both subdivisions is similar to that of the Project Site, and contained enough areas of ground slope lower than 15-20% to make engineering design of sewage disposal systems possible. The surveys in Figures VIII. C.1.c-66 and 67 behind this exhibit depict Benjamin Meadows and Ski Side Villa.

The Project Site is currently privately served by United Water New York through an 8-inch water line sourced from the Indian Kill Reservoir.

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 ski resort and Renaissance Faire, and current total peak capacity is approximately 60,000 gallons per day.

Orange and Rockland Utilities, Inc. provides energy delivery services for the project area. Electric power transmission infrastructure is in place along Route 17A, serving the existing residences and businesses via overhead power lines.

Transportation infrastructure includes Route 17A, which bisects the Project Site. The site is located approximately two miles from the New York State Thruway (Interstate 87), but approximately 9.4 miles from the nearest Thruway Interchange at Harriman (Interchange 16). Traffic currently builds during special events, with parking along Route 17A and frequent pedestrian crossings. There are currently no

DESCRIPTION OF LAND

accommodations for pedestrian or bicycle access to the site. Once a day bus service is available by Coach USA to the Renaissance Faire from the Port Authority Bus Terminal in Manhattan, round-trip, on any day on which the Renaissance Faire is operating.

See Figure VIII. C.1.c-68 behind this exhibit for a map that illustrates the location of the Project Site in relation to Orange County and Figure VIII. C.1.c-69 behind this exhibit for a map that illustrates the location of the Project Site in relation to the Town of Tuxedo and local thoroughfares.

Description of Land (Interchange 15b)

A key component of traffic mitigation for Sterling Forest Resort is the construction of a proposed Interchange 15B on the New York State Thruway. The proposed project is located in Tuxedo, Orange County, New York. The project involves a new interchange off the NY State Thruway (I-87) just north of the town of Tuxedo. The proposed interchange (numbered 15B) would provide a direct connection to Route 17, Route 17A and Route 106. The proposed project also involves improvements to the intersection of Route 17 and Route 17A which is located just west of the proposed interchange. Figure VIII. C.1.c-70 behind this exhibit illustrates the location of the proposed Interchange 15B in relation to the Sterling Forest Resort Project Site.

Topographical Characteristics

The elevation of the site varies between approximately 500 and 560 feet mean sea level. The topography of the project site generally ranges from fairly level near the Ramapo River to slightly hilly with gradual upward slopes to the east and west.

Geographical Characteristics

Predominant Soil Types

Predominant soil types within the study area are detailed in Table VIII. C.1.c-5 below:

Table VIII. C.1.c-5. Predominant Soil Types

Symbol	Soil Name	Acres in study area	Percent in study area	Slope
ChB	Charlton fine sandy loam	17.6	14.6%	3-8%
ChC	Charlton fine sandy loam	28.9	23.9%	8-15%
Wd	Wayland soils complex	25.0	20.7%	0-3%

Drainage of Project Site Soils

Of the three predominant soil types on the site, ChB and ChC are well drained and account for 38.5% of the site. The third soil Wd, is poorly drained and accounts for 20% of the site. This will be confirmed upon the completion of geotechnical studies.

Depth to Bedrock

Two of the soils on the site are >200 cm depth to bedrock and one of the soil types is 0 cm. Therefore it is assumed that the average depth to bedrock on the site is greater than 200 cm or 6.5 feet.

Depth to Water Table

Two of the soils on the site are >200 cm depth to water table and one of the soil types is 0 cm. Therefore it is assumed that the average depth to water table on the site is great than 200 cm or 6.5 feet. This will be confirmed upon the completion of geotechnical studies.

DESCRIPTION OF LAND

Slopes

There are many soil types present within the study area each with various types of slopes. Based on the three predominant soil types, 35.5% of the project area has slopes between 0-10%. This percentage includes both the Wayland soils and the Charlton ChB soils.

The Charlton ChC soils are between 8 to 15% slopes, and were placed in the 10-15% category as an estimate, totaling 23.9% of the project area.

Unique Geologic Features

According to the New York State Department of Environmental Conservation (NYSDEC) EAF Mapper, Route 17A in Tuxedo is considered a unique geologic feature. The NYSDEC Environmental Resource Mapper was consulted to obtain more information. Located roughly 0.3 miles west of the roundabout portion of the proposed interchange site, the Environmental Resource Mapper describes this unique roadside geologic feature as: Sheared quartzofeldspathic gneiss; Mylonite that is well foliated and lineated; Pegmatite dikes; Dike of granite with large crystals hornblende.

Sole Source Aquifer

The Ramapo River Aquifer Basin is a federally designated sole source aquifer (SSA) located within EPA Region 2 established under the Safe Drinking Water Act (SDWA). This signifies specific designation of areas which are dependent upon ground water supplies and ensures that federal agencies will not commit funds toward projects which may contaminate the SSA's groundwater supplies.

The boundary area of the SSA is that specified in the petition submitted by the Township of Mahwah and the Passaic River Coalition to the U.S. Environmental Protection Agency (EPA) Administrator in 1990, including the bedrock aquifer which underlies the eastern portion of the Ramapo River Basin, east of the Ramapo River in New Jersey and the Mahwah River in New York. This area lies generally within the Ramapo and Mahwah river valleys in New York. It includes the New York Department of Environmental Conservation (NYSDEC)-designated Ramapo Mahwah Primary Aquifer as illustrated in the U.S. Geological Survey Water Resources Investigations Report 874274 Potential Yields in Unconsolidated Aquifers in Upstate New York Lower Hudson Sheet, Scale 1:250,000. The U.S. Geological Survey Open File Report 82114, Geohydrology of the Valley Fill Aquifer in the Ramapo and Mahwah Rivers Area Rockland County, New York, Scale 1:24,000, delineates the aquifer in detail.

The SSA includes the aquifer recharge areas defined as the entire Ramapo River Basin, which encompasses all stream flow source areas including the Ramapo River headwaters near Monroe, New York. The Ramapo River drains an area of 161 square miles, of which 112.4 square miles (70%) are in New York State. 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. The 2011 Town of Tuxedo Comprehensive Plan Update recommends that development activities and infrastructure within the Town consider the environmental impacts of the SSA.

Surface Water and Wetlands

Surface water features in the project study area include the Ramapo River and palustrine emergent/forested wetlands regulated by NYSDEC. The Interchange design does not directly impact the Ramapo River. A calculation of acreage of wetlands within the project area is pending a refinement of wetland delineation.

Vegetative Characteristics

Appalachian Oak-Hickory Forest

This community type is characterized by a hardwood forest on well-drained sites, usually on ridgetops, upper slopes, or south- and west-facing slopes. Soils consist of loams or sandy loams. Several

DESCRIPTION OF LAND

variants to this forest community exist and are typically dominated by oaks. This forest invariably has a mixture of oaks (red, white, black and chestnut) and hickories (pignut, shagbark). Also, maple-leaf viburnum, early lowbush blueberry, flowering dogwood and witch-hazel are commonly found in the understory. Known examples of this community occur at a wide range of elevation, from 200 feet and 2280 feet above MSL.

Chestnut Oak Forest

This community is located on the southern edge of the site at the top of Tiger Mountain, generally above elevation 950 ft. This hardwood forest is associated with well-drained and often rocky sites in glaciated portions of the Appalachians and on the coastal plain. The dominant trees are typically chestnut oak and red oak, with white oak, black oak and red maple common. The understory and shrub layer is predominantly formed by ericaceous shrubs including black huckleberry, mountain laurel, and blueberry.

Facilities, Improvements and Infrastructure

The Project Site is described as the intersection of Routes 17, Route 17A, and Route 106. Currently, Route 106 travels under the New York State Thruway. The project proposes an interchange at this location to allow for traffic to access Route 17A at the proposed Interchange 15B. Improvements to the intersection of Routes 17 and 17A are also proposed, in the form of a roundabout.

Relationship to Surrounding Development and Infrastructure

Within a one-mile radius of the proposed Interchange 15B, 86% of the land use is classified as parkland. Parkland is that of Harriman State Park, administered by the Palisades Interstate Park Commission (NY-NJ). The remaining 14% of land in the one mile radius to the southwest of the proposed interchange is classified as vacant, residential, agricultural and public service. The majority of the public service use is the Port Jervis Line of the Metro North Railroad right of way which runs between Route 17 and the Raritan River. The closest non-parkland parcel is in agricultural use as the Hickory Hollow Nursery and Garden Center located at 713 New York 17. The remaining parcels of land within a one-mile radius of the project location are privately owned and are undeveloped tracts of land of varying size and accessibility due to their location to the west of Route 17 and adjacency to the Metro-North railroad, Ramapo River and utility right of way.

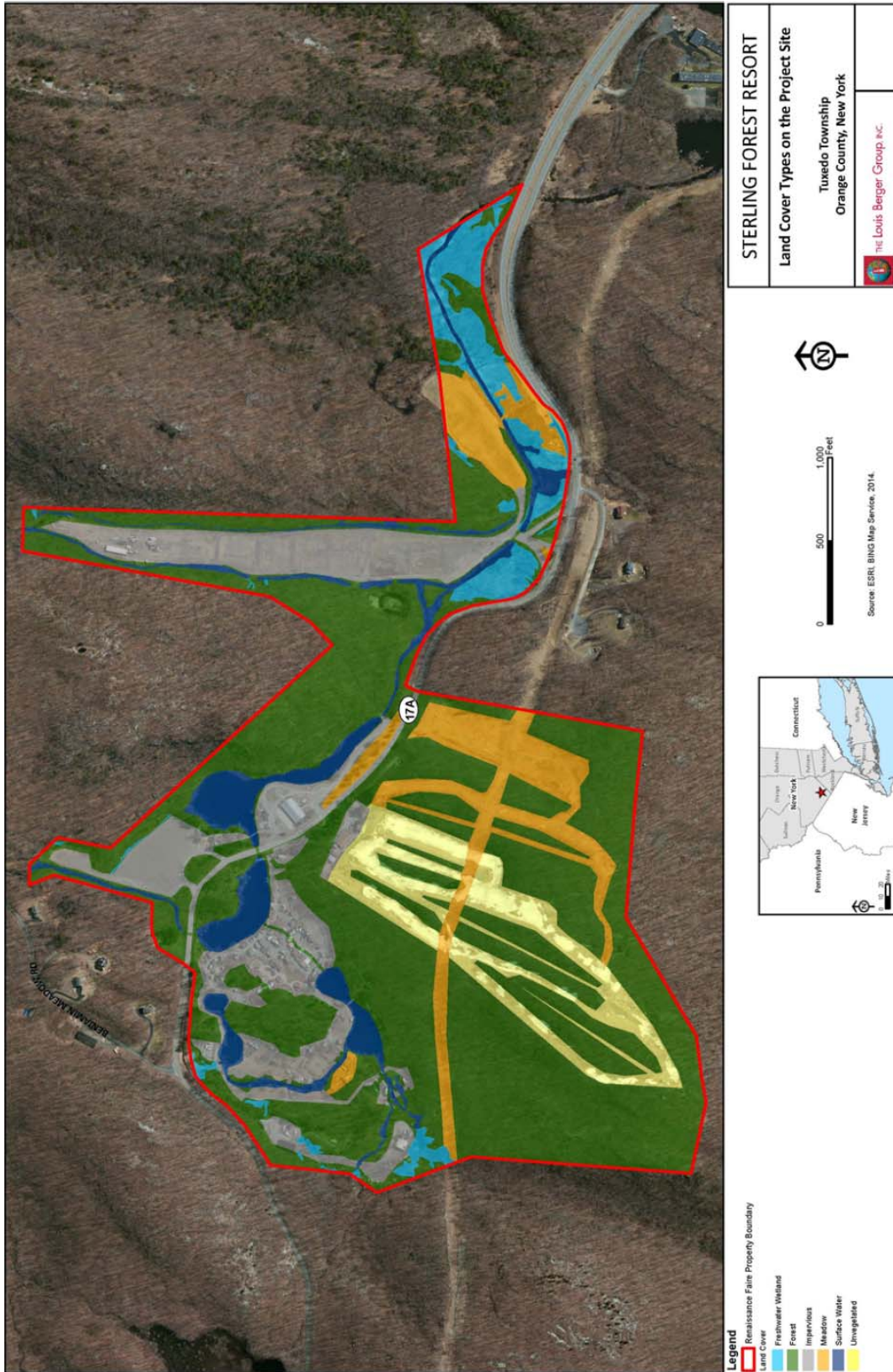
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Figure VIII. C.1.c-54. Aerial Photograph of Topography



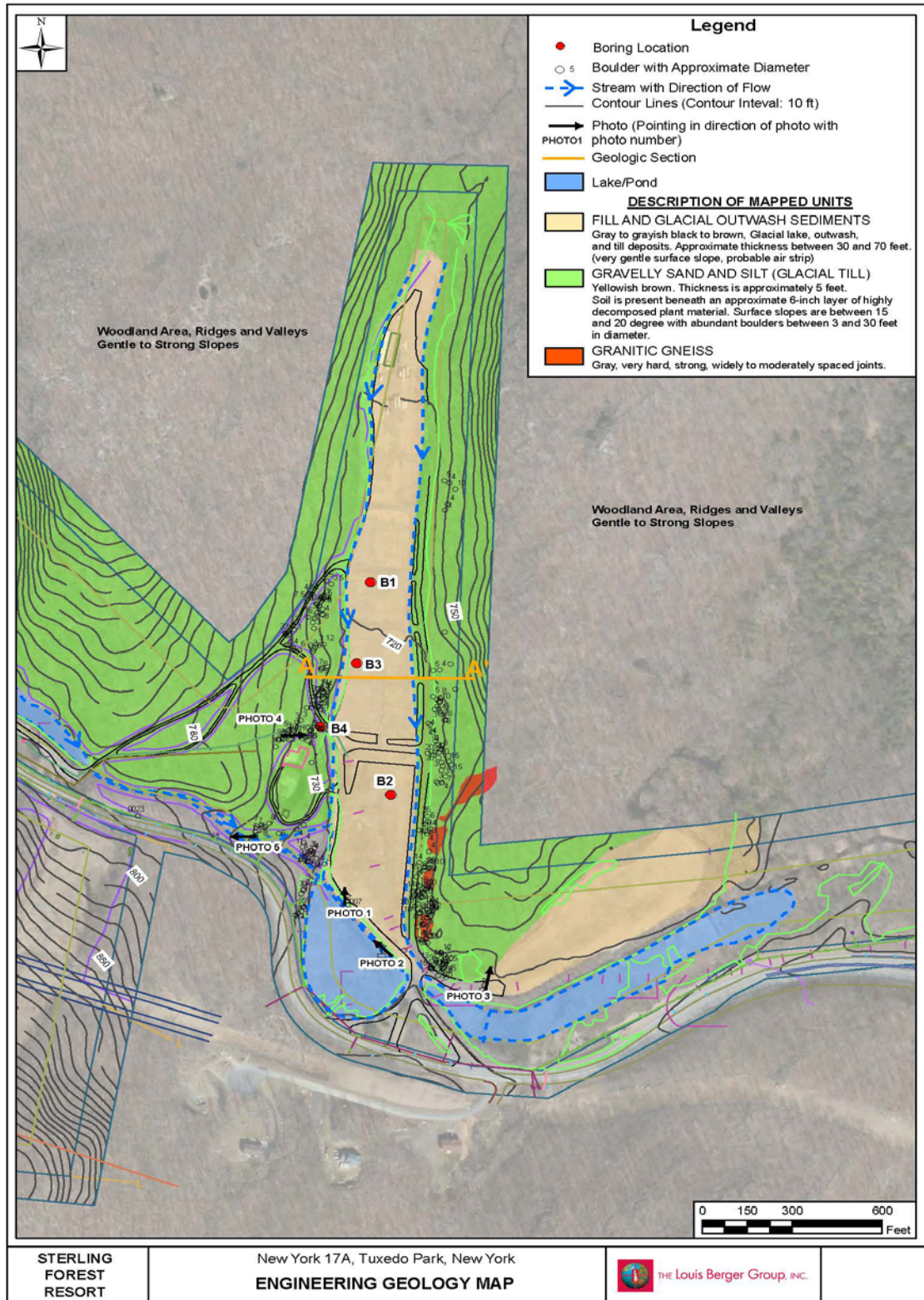
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Figure VIII. C.1.c-56. Land Cover Types on the Project Site



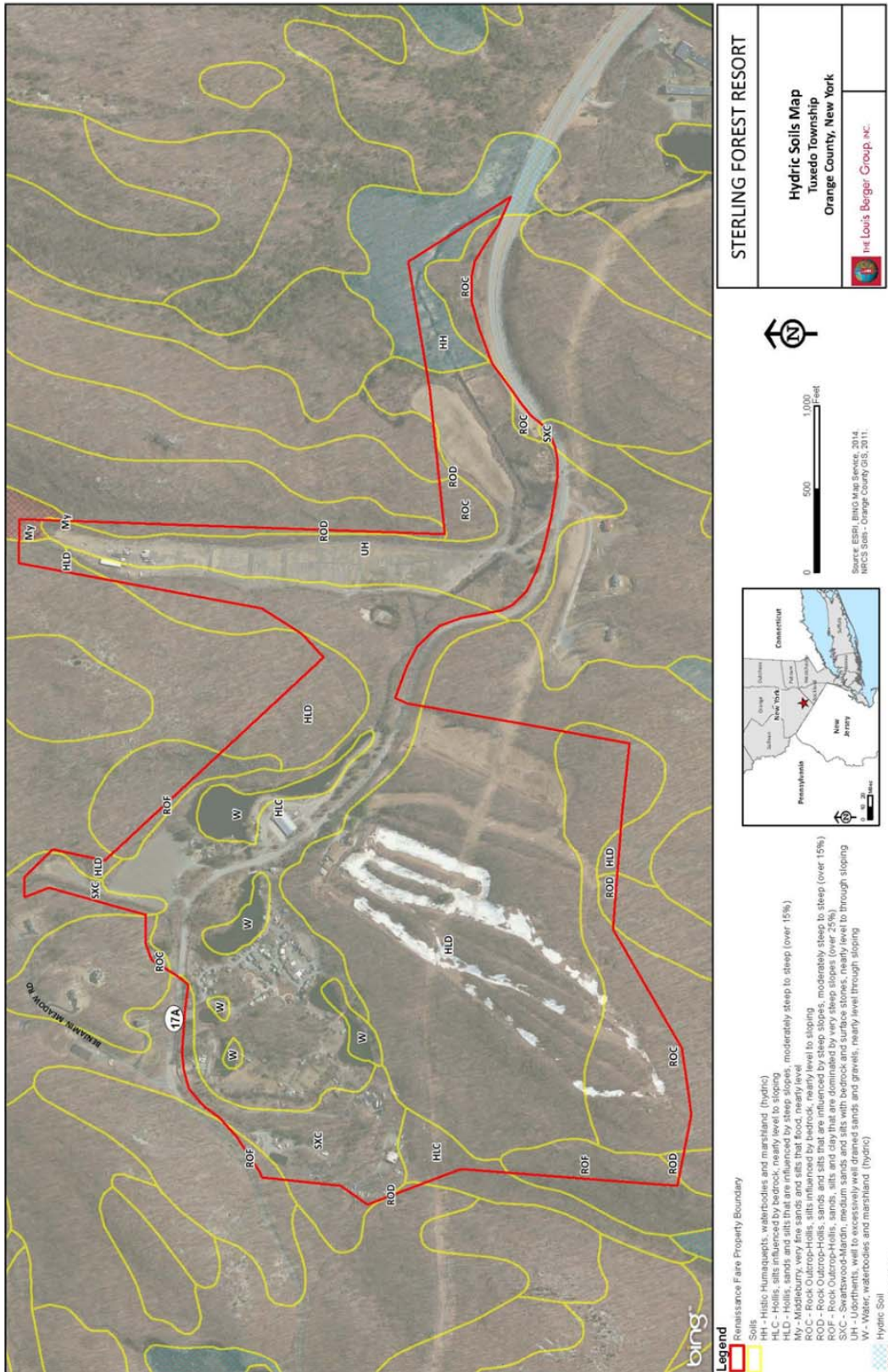
DESCRIPTION OF LAND

Figure VIII. C.1.c-57. Engineering Geology Map



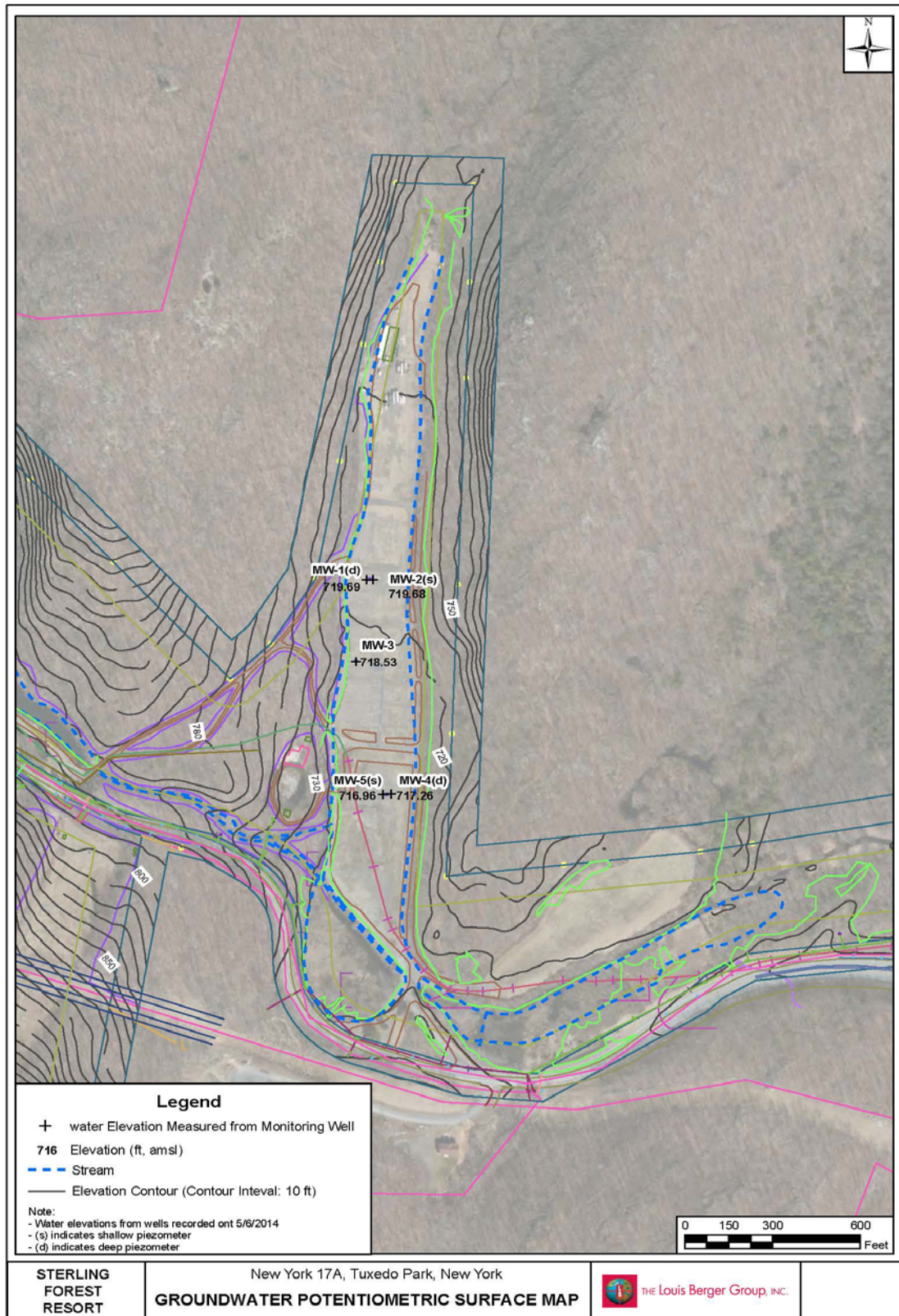
DESCRIPTION OF LAND

Figure VIII. C.1.c-58. NRCS Hydric Soils Map



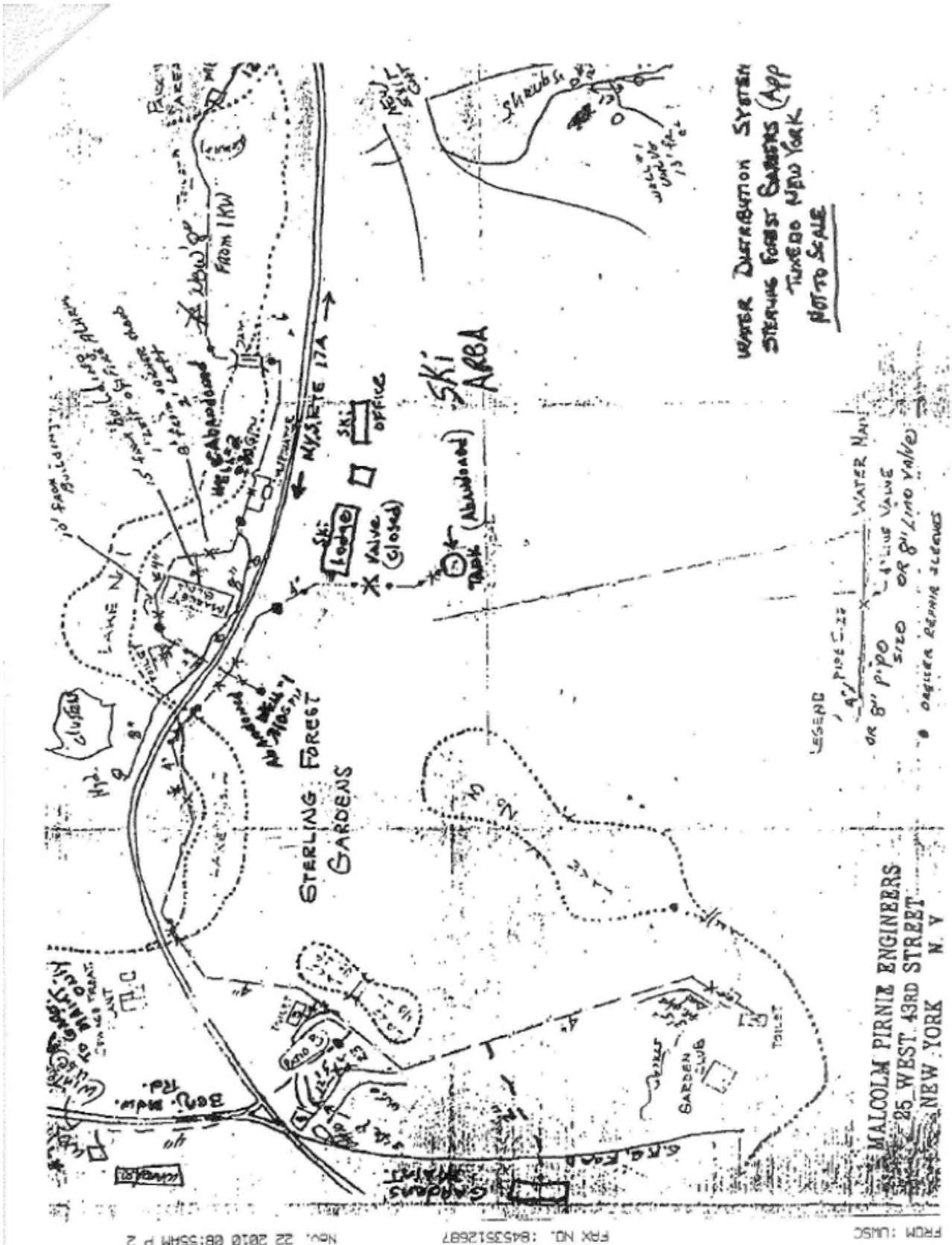
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Figure VIII. C.1.c-59. Groundwater Potentiometric Surface Map.



DESCRIPTION OF LAND

Figure VIII. C.1.c-61. Water Distribution Drawing



DESCRIPTION OF LAND

Figure VIII. C.1.c-62. Vegetative Communities of the Project Site

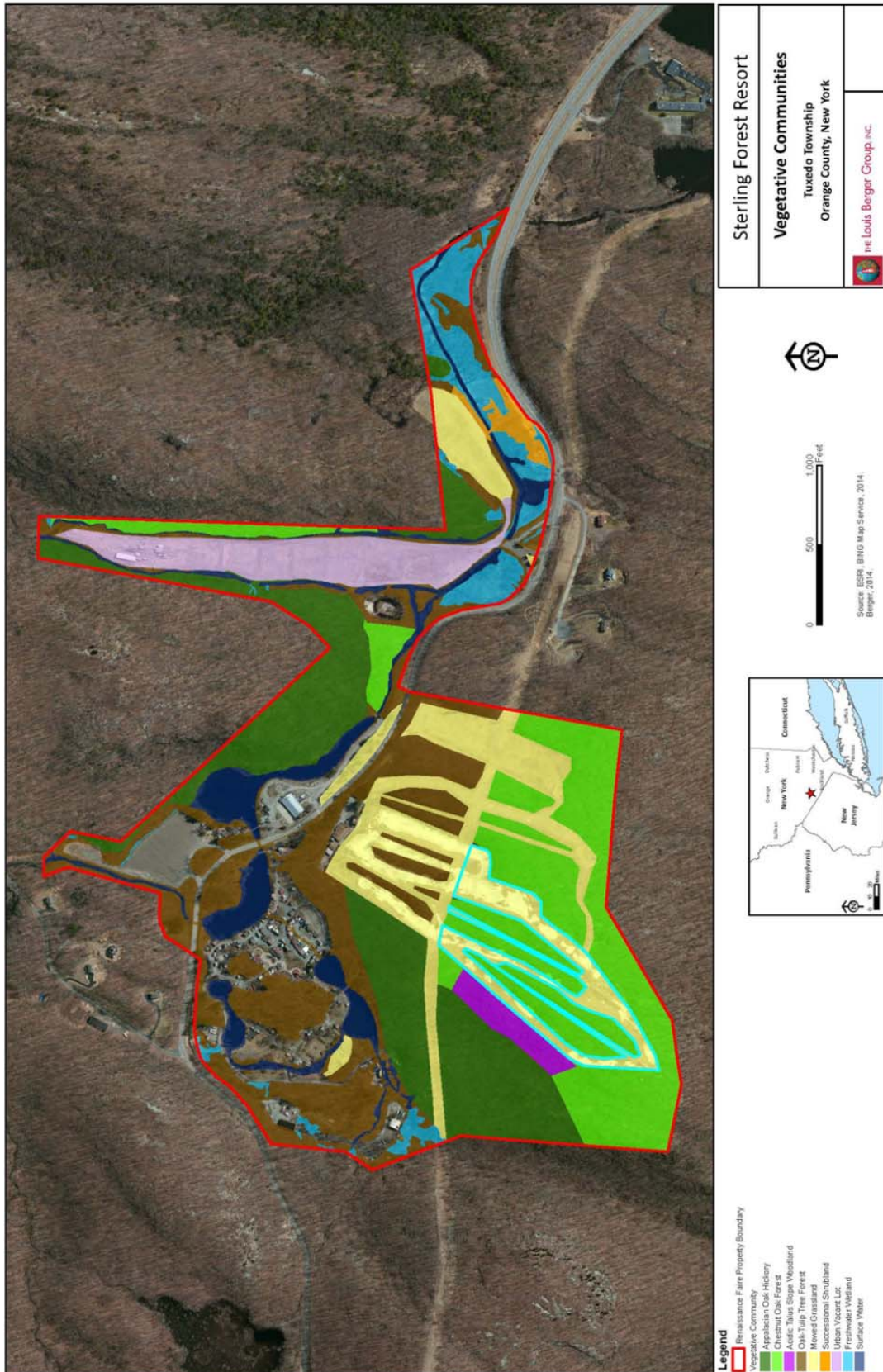


Figure VIII. C.1.c-63. Survey of the Project Site

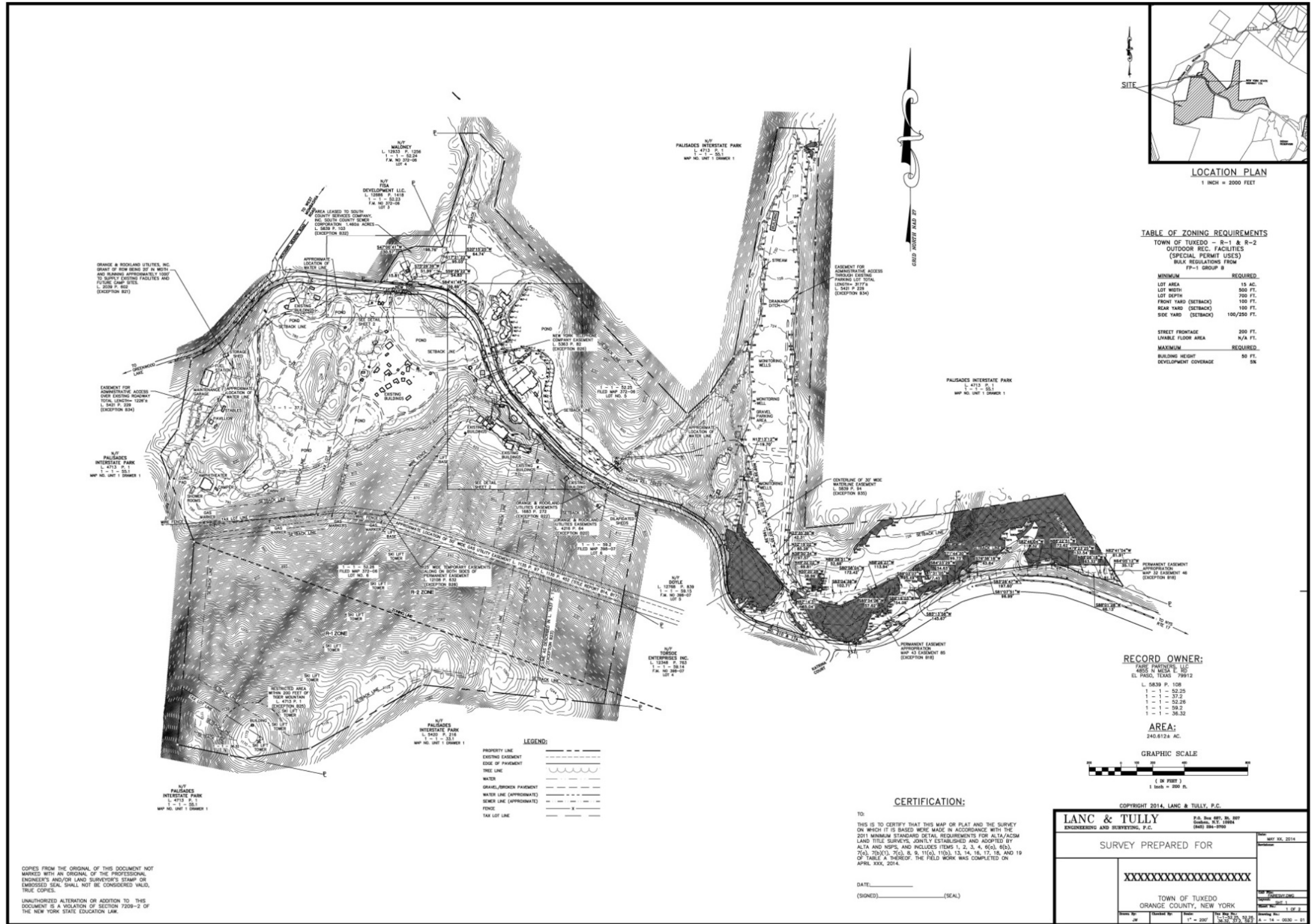
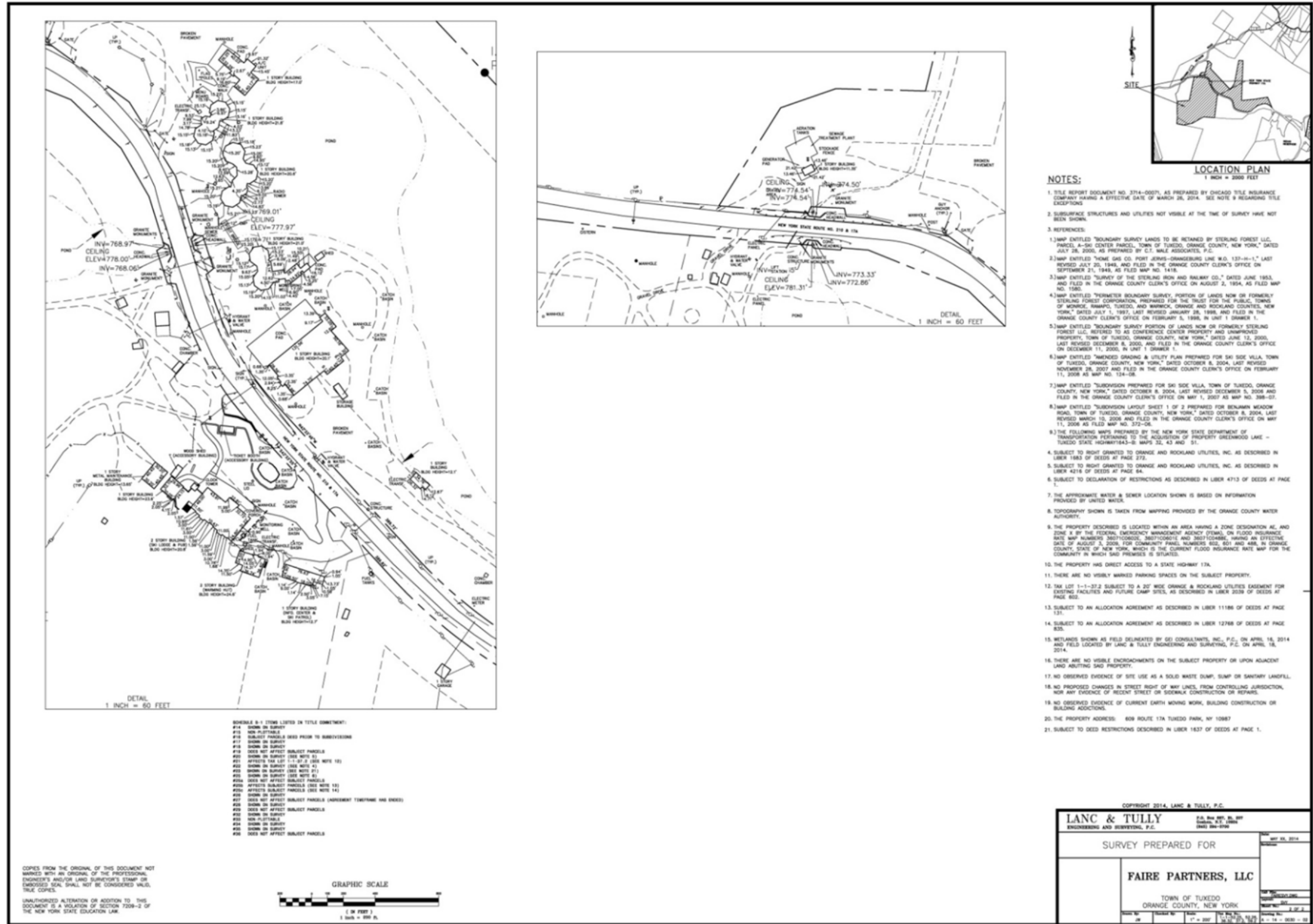


Figure VIII. C.1.c-64. Inset Survey of the Project Site



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Figure VIII. C.1.c-65. Adjacent Land Uses

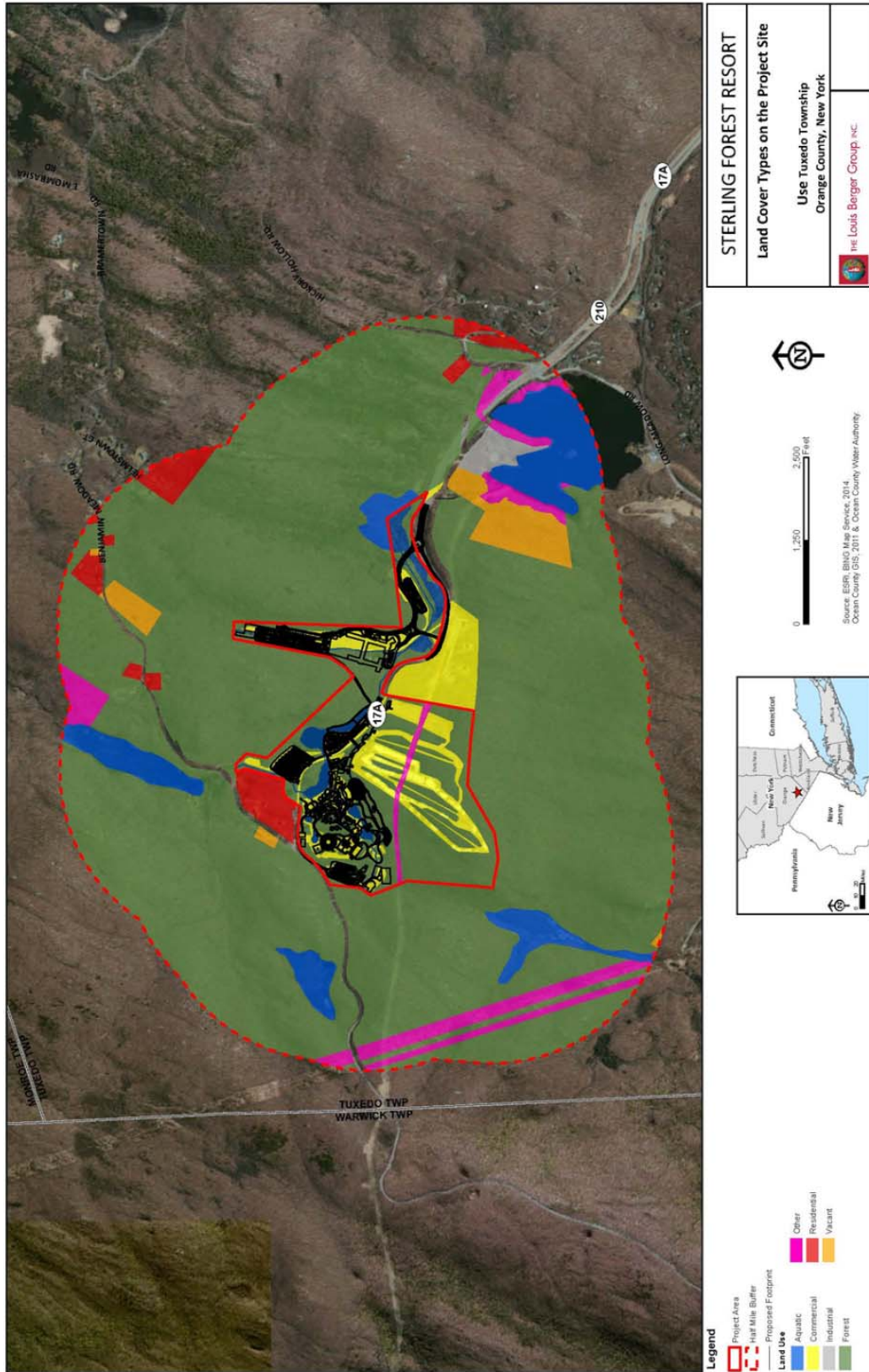


Figure VIII. C.1.c-66. Survey of Benjamin Meadows

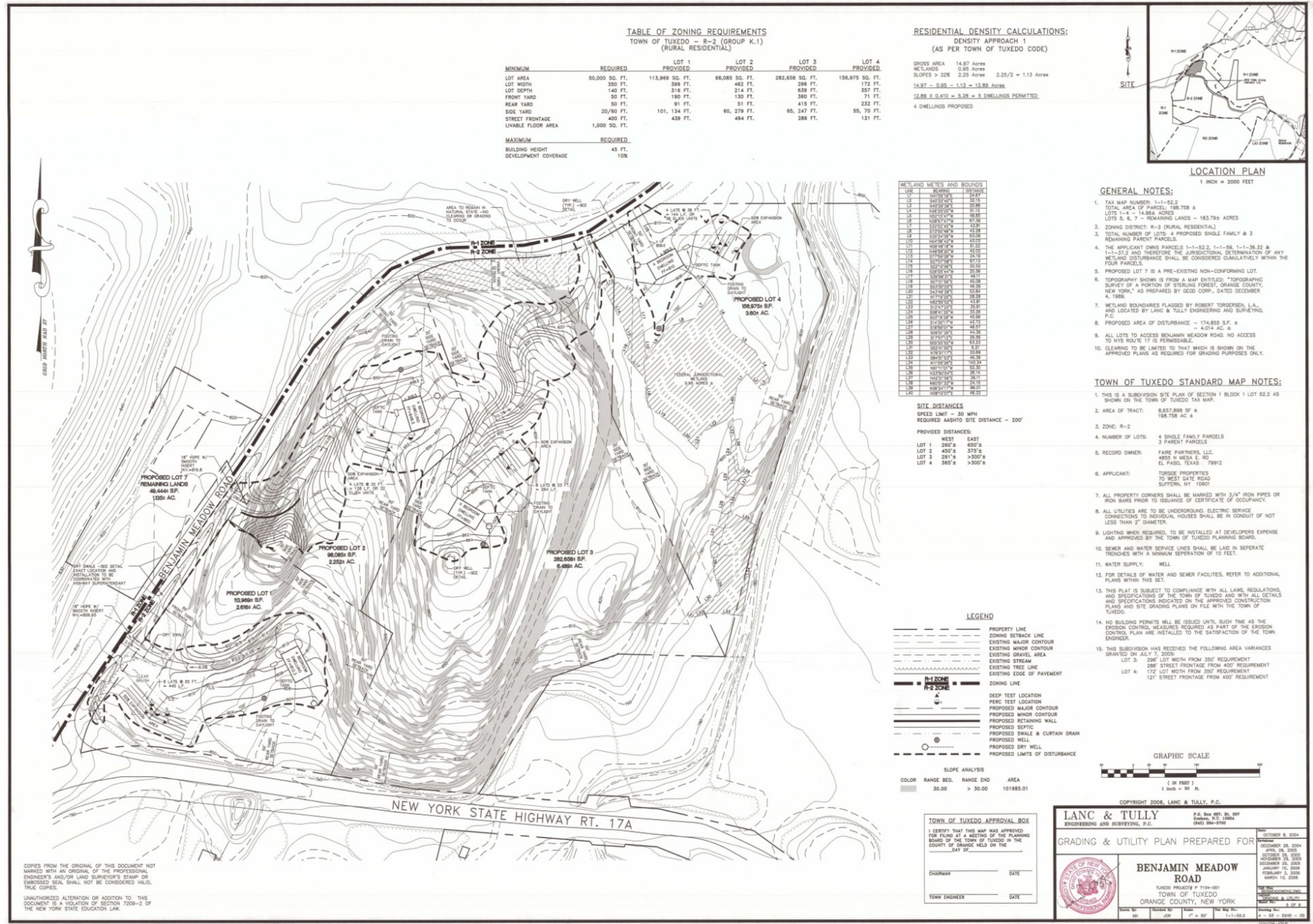
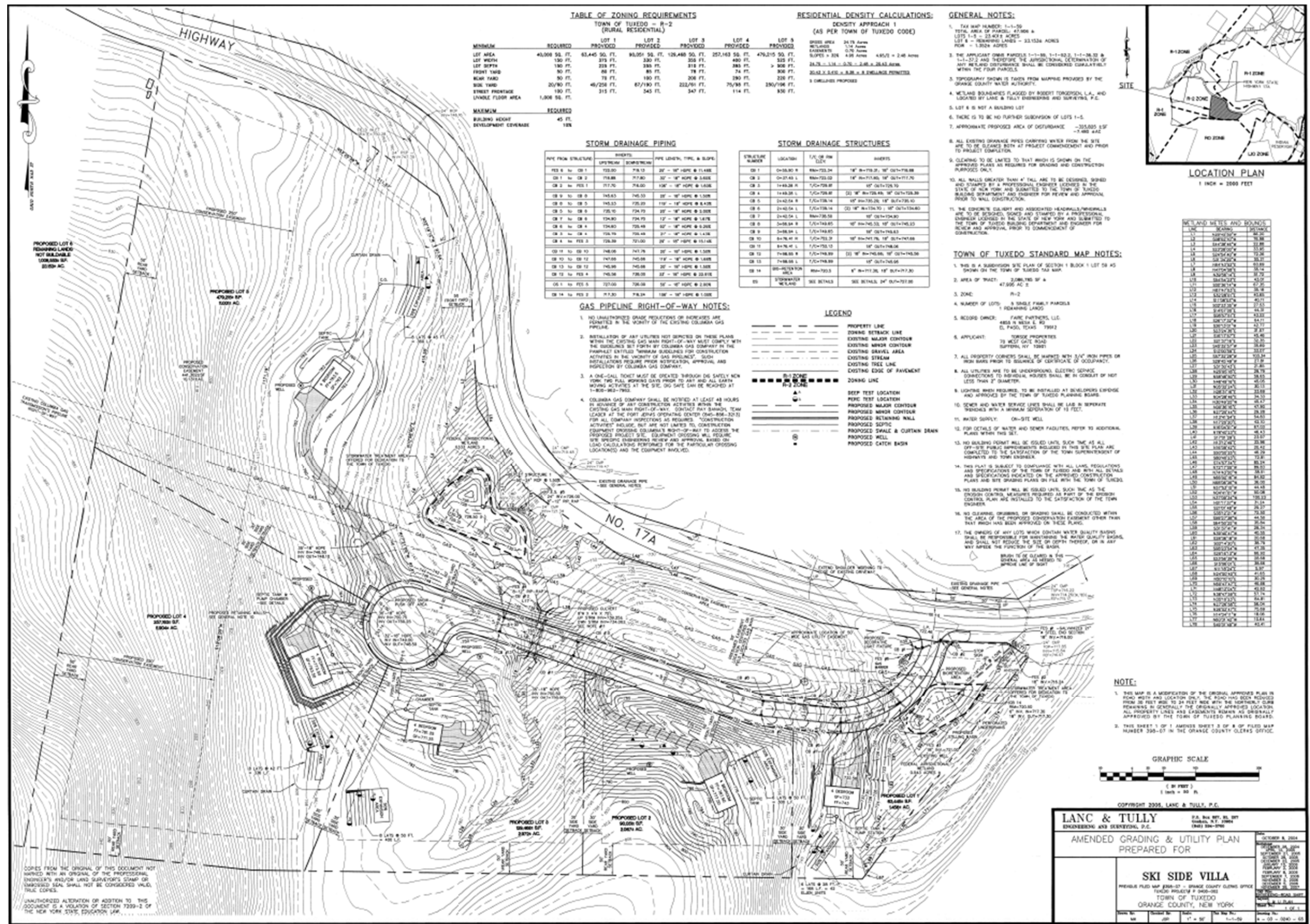
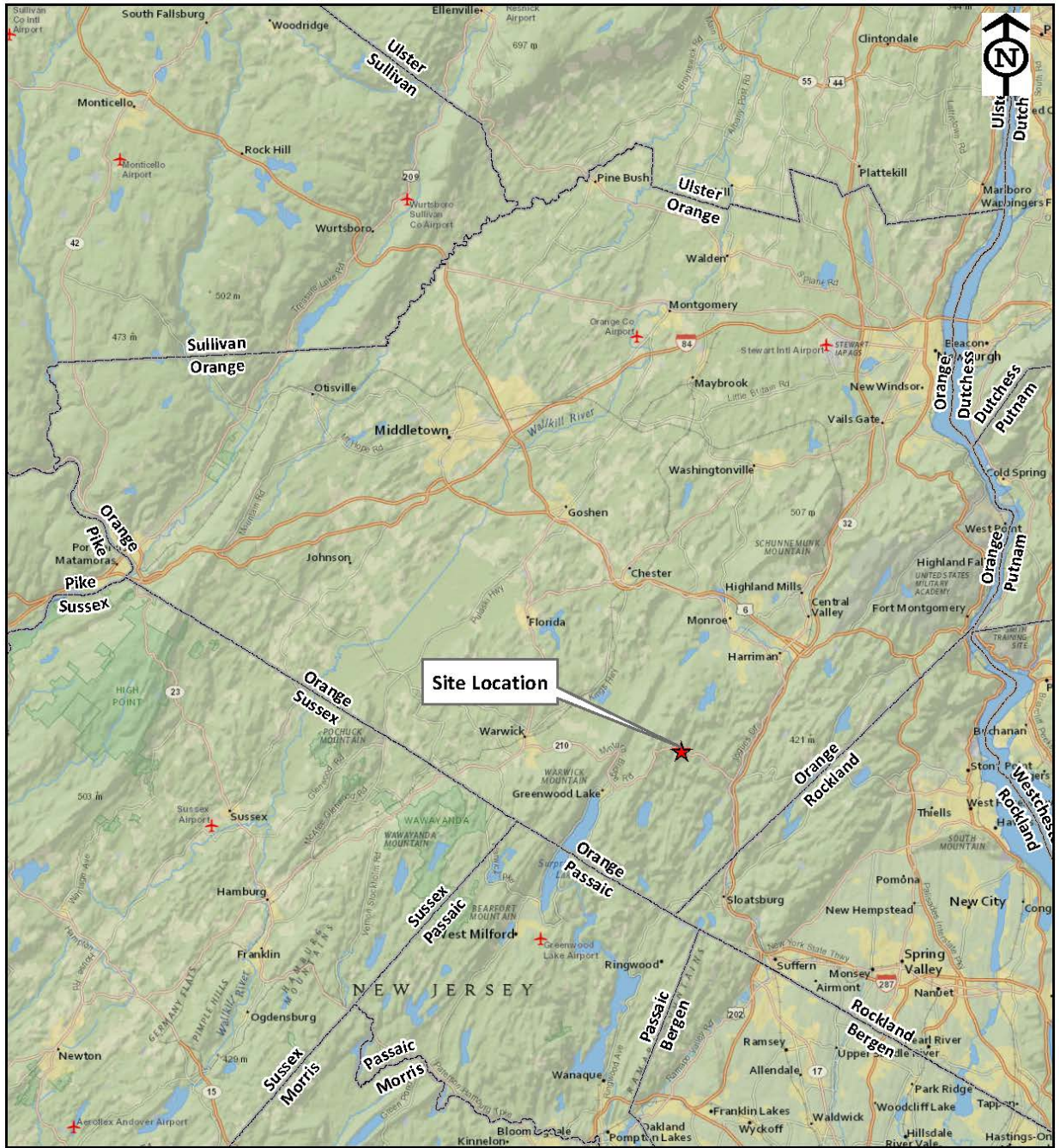


Figure VIII. C.1.c-67. Survey of Ski Side Villa



DESCRIPTION OF LAND

Figure VIII. C.1.c-68. Project Site and Orange County

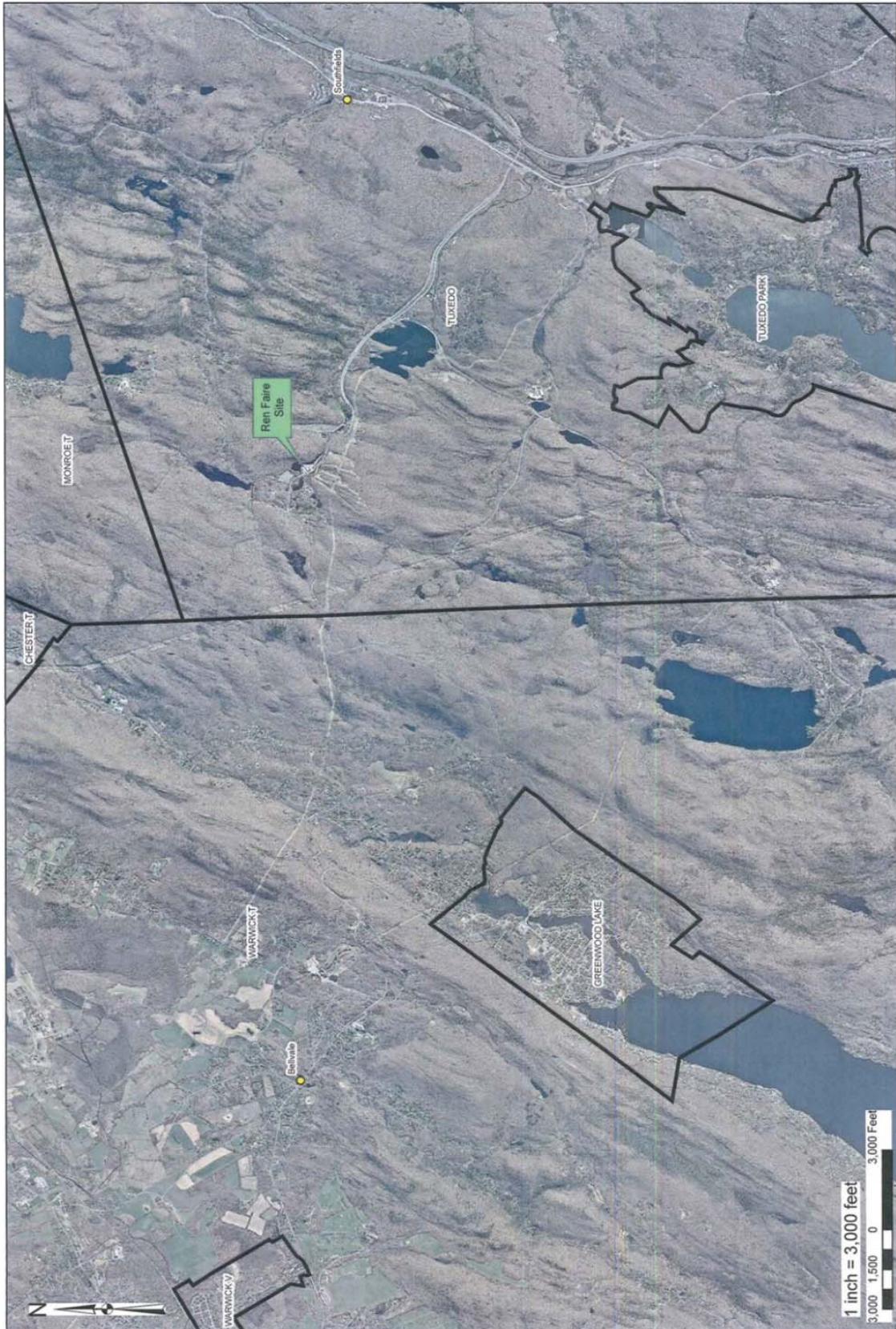


Source: ESRI, National Geographic Map Service, 2014.

STERLING FOREST RESORT	
Site Location Orange County Tuxedo Township Orange County, New York	
 THE Louis Berger Group, Inc.	

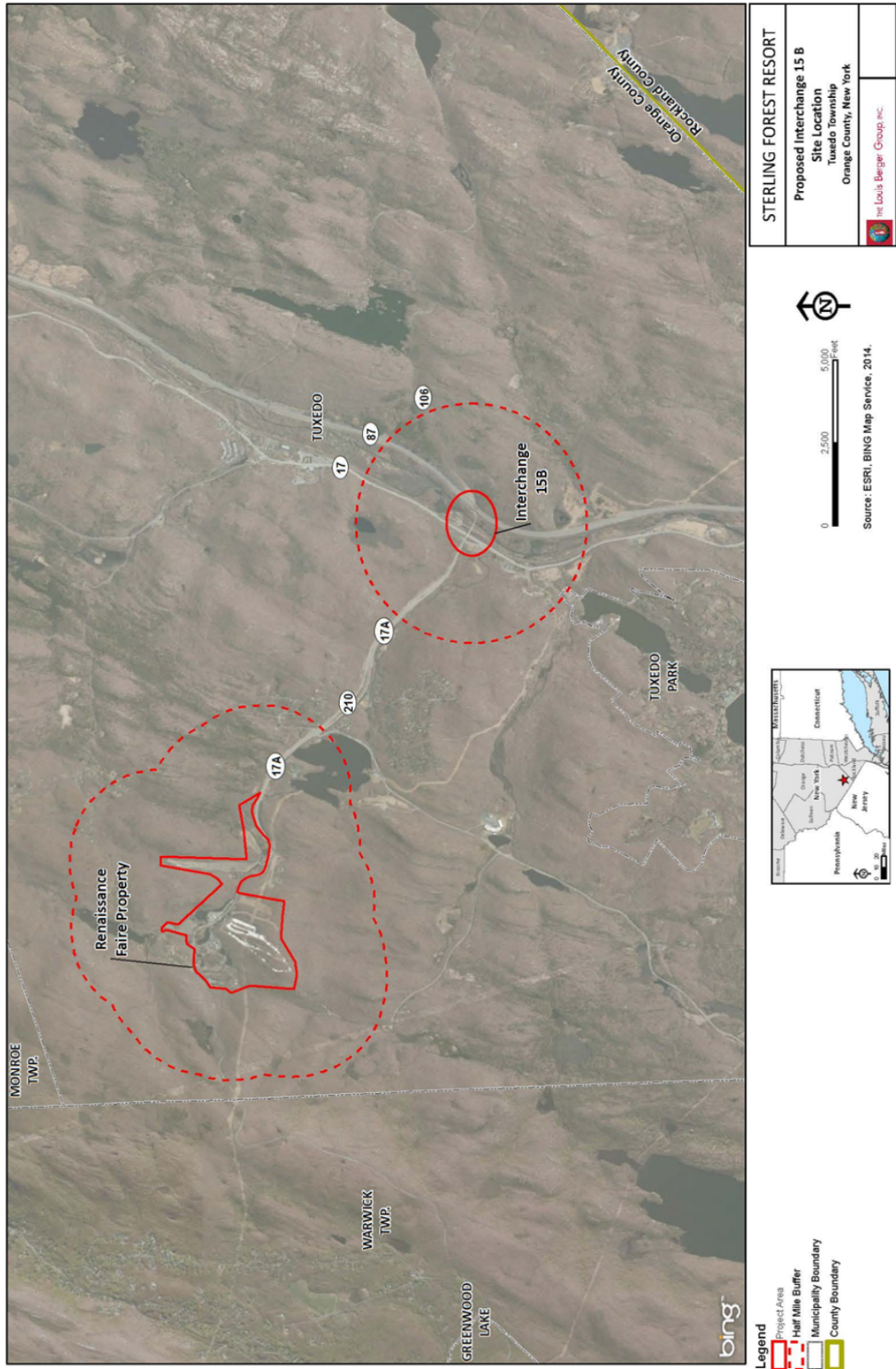
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Figure VIII. C.1.c-69. Project Site and Tuxedo



DESCRIPTION OF LAND

Figure VIII. C.1.c-70. Map of Interchange 15B



DESCRIPTION OF LAND

APPENDIX VIII. C.1.c-1. GEI WETLANDS DELINEATION REPORT

Appendix B:

Wetland Delineation Report

GEI Consultants, Inc., P.C.



Geotechnical
Environmental
Water Resources
Ecological

May 20, 2014
Project 1404080

Mr. Ben Leffler
Cleary Gottlieb Steen & Hamilton LLP
One Liberty Plaza
New York, New York 10006

**RE: Wetland Delineation Report
Ren Faire Site, 600 Route 17A, Tuxedo, New York**

Dear Mr. Leffler:

GEI Consultants, Inc., P. C. has prepared this wetland delineation letter report for the Ren Faire Site located at 600 Route 17A, Tuxedo, Orange County, New York (**Figure 1**). This report describes the wetlands and waterbodies located within the project area and in the general vicinity of the project site.

Multiple U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) wetland systems were identified and field verified within the project area and in the general vicinity of the project site. These NWI systems are under the jurisdiction of the U. S. Army Corps of Engineers (USACE).

Also, a State mapped wetland system was identified and field verified within the project area that is under the jurisdiction of the New York State Department of Environmental Conservation (NYSDEC).

Several streams and associated pond systems were identified on the project site, characterized as NYSDEC Class C streams (**Figure 2**). These streams are considered to be under the jurisdiction of NYSDEC and USACE. One of the streams is Indian Kill, which feeds into the Indian Kill Reservoir, a source of municipal drinking water.

Multiple streams and wetlands that transect the project site are connected to the adjacent drainage systems associated with the Sterling Forest State Park.

GEI recommends that NYSDEC and USACE be contacted early in the site planning process to verify which proposed project activities would be exempt from agency jurisdiction and which would require agency permit review and approval.

Wetlands & Waterbodies – Definitions and Regulatory Jurisdictions

Wetlands

Wetlands are defined by the USACE and the Environmental Protection Agency (EPA) as “an area that is inundated or saturated by surface or groundwater at a frequency and duration to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation”. Wetland is a collective term for swamps, bogs, marshes, wet meadows, and similar transition areas between open water and upland habitats.

- State Jurisdiction – NYSDEC is the state agency that regulates activities within wetlands and waterbodies. The Freshwater Wetlands Act requires NYSDEC to map all protected wetlands, with the exception of the Adirondack Park (Article 24, Environmental Conservation Law; Implementing Regulations: 6 New York Codes, Rules and Regulations [NYCRR] Part 663, Part 664, and Part 665). Mapping is done in order to identify those wetlands that meet the limits set forth in the law, and to provide a way to notify affected landowners that a particular wetland is protected. The law includes provisions for amending the maps to reflect changes; however, any changes are subject to the due process of law and require public hearing after proper notification to all affected landowners. To be protected under the State Freshwater Wetlands Act, a wetland must be 12.4 acres or larger in size. Smaller wetlands may be protected if they are considered of unusual local importance. NYSDEC regulates activities within mapped wetlands, as well as activities within a 100-foot adjacent area.
- Federal Jurisdiction – USACE claims jurisdiction over all defined “waters of the United States.” Certain activities within these waters are regulated by the USACE under Section 404 of the Clean Water Act (33 U.S.C. 1344) or Section 10 of the Rivers and Harbors Act of 1899 (22 U.S.C. 403). Federal jurisdictional wetlands must have positive wetland indicators for all three environmental parameters: hydrology, soil, and vegetation. USACE authorizes/issues preliminary jurisdictional determinations, comprehensive jurisdictional determinations, nationwide permits, and individual permits.

Waterbodies:

The definition for waterbodies is wide ranging, including still or standing open water habitats to waterways characterized by surface flows. Waterbodies characteristically show evidence of an ordinary high water mark. USACE defines the ordinary high water mark as a “line of the shore coincident with the elevation contour that represents the approximate location of the line of shore established by fluctuations of water, and indicated by physical characteristics such as shelving, destruction of terrestrial vegetation, presence of litter or debris, or changes in the character of soil”. Examples of ‘waterbodies’ include streams, rivers, lakes, ponds, bays, wetlands, and conduits such as canals or ditches.

- State Jurisdiction – Lakes, rivers, streams, and ponds are protected under the NYSDEC Protection of Waters Program (Article 15, Environmental Conservation Law; Implementing Regulations: 6NYCRR Part 608). All waterbodies of the state are provided a class and standard designation based on existing or expected best usage of

each water or waterway segment. Streams and small waterbodies located in the course of a stream classified as 'AA', 'A', or 'B'; or classified as 'C' streams coupled with a standard of (T) or (TS) are collectively referred to as "protected streams" by NYSDEC. Protected streams are subject to the provisions of the Protection of Waters regulations. Class 'C' streams not sustaining trout populations may or may not be regulated by NYSDEC and require agency coordination to confirm jurisdiction.

- Federal Jurisdiction – USACE claims jurisdiction over all defined “waters of the United States.” A waterbody is a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (33 CFR 328.3(b)). If a jurisdictional wetland is adjacent (meaning bordering, contiguous, or neighboring) to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (33 CFR 328.4(c) (2)). Exclusions from this rule may include areas such as isolated wetlands or man-made ditches/depressions that do not connect to navigable waters or wetlands. Federal regulations identified under wetlands also apply to waterbodies, including discharges of dredge or fill material into waters of the U.S.

Methodology

The project site was evaluated for the presence of mapped and unmapped State and Federal wetlands and waterbodies. The following agency resources were reviewed to obtain information prior to conducting field investigations:

- USGS Topographic Quadrangle Maps (Sloatsburg and Monroe Quadrangles)
- NYSDEC Resource Mapper (Freshwater Wetlands)
- NYSDEC Streams and Waterbodies GIS Map
- USFWS NWI Map
- Natural Resources Conservation Service (NRCS) Soils Maps
- Orange County GIS Maps
- Orthoimagery

The preliminary review of background information conducted prior to the field survey indicated a high probability for State- and Federally-regulated wetlands and State- and Federally-regulated streams located on the project site. A field investigation was conducted on site to confirm these preliminary findings.

Wetlands found within the project site were delineated using guidelines established in the NYSDEC Freshwater Wetlands Delineation Manual (1995) and methods set forth in the 1987 Corps of Engineers Wetland Delineation manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), dated January 2012. These reference manuals prescribe the three-parameter methodology for

delineating wetlands, based on field confirmation of positive indicators for hydrophytic vegetation, hydric soils, and wetland hydrology.

The USACE National Wetland Plant List (NWPL) (2013) and State of New York 2014 Wetland Plant List (USACE) were utilized as guides to identify hydrophytic vegetation. The NWPL is a list of wetland plants and their assigned indicator status. An indicator status reflects the likelihood that a particular plant occurs in a wetland or upland. The five indicator statuses include:

- Obligate (OBL) plants that always occur in standing water or in saturated soils;
- Facultative Wet (FACW) plants that nearly always occur in areas of prolonged flooding or require standing water or saturated soils but may, on rare occasions, occur in non-wetlands;
- Facultative (FAC) plants that occur in a variety of habitats, including wetland and mesic to xeric non-wetland habitats, but commonly occur in standing water or saturated soils;
- Facultative Upland (FACU) plants that typically occur in xeric or mesic non-wetland habitats, but may frequently occur in standing water or saturated soils; and
- Upland (UPL) plants that rarely occur in water or saturated soils.

All wetlands are periodically “wet” or have saturated soils for a sufficient period of time to support hydrophytic vegetation. Existing soils data, including soil surveys and hydric soil lists, were used to identify hydric soils. Hydrologic status was determined from visual observation of inundation, saturation, and hydrologic indicators, such as, but not limited to drainage patterns.

A request for wetland determination to assess the potential for State jurisdictional wetlands, based on a file review, was delivered to the Regional Permit Administrator at NYSDEC Region 3 on April 4, 2014. A NYSDEC response letter had not been received prior to completion of this letter report.

Findings

Desktop Analysis

According to NRCS, hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. According to the NRCS Hydric Soils Map (**Figure 3**), there is one hydric soil identified on the project site: Histic Humaquepts (HH), which is described as ponded, located on 0 to 1 percent slopes, very poorly drained, with swamps and marshes as the primary landform. According to the NRCS Hydric Soils Map, this soil type is found only on property lot number 1-1-52.24. Soil types on other property lots are mapped as non-hydric.

According to the NWI data, an extensive NWI wetland system was identified within the project site (**Figures 4A, 4B, and 4C**). This NWI wetland system is potentially under the jurisdiction of USACE. The wetland system consists of eight NWI classifications: PEM1E, PEM1F, PFO1C, PFO1E, PFO1/EM1E, PUBHh, and PUBHx, which are described as follows:

- PEM1E – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Emergent (EM) Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
 - The Subclass ‘1’ refers to Persistent – a condition that is dominated by species that normally remain standing at least until the beginning of the next growing season.
 - The ‘E’ Modifier refers to a water regime that is Seasonally Flooded/Saturated: where surface water is present for extended periods, especially early in the growing season and when surface water is absent, substrate remains saturated near the surface for much of the growing season.
- PEM1F – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Emergent (EM) Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
 - The Subclass ‘1’ refers to Persistent – a condition that is dominated by species that normally remain standing at least until the beginning of the next growing season.
 - The ‘F’ Modifier refers to a water regime that is Semi-permanently Flooded: where surface water persists throughout the growing season in most years. When surface water is absent, the water table is usually at or very near the land's surface.
- PFO1C – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Forested (FO) Class is characterized by woody vegetation that is 6 meters tall or taller.
 - The Subclass ‘1’ refers to Broad-leaved Deciduous – a habitat that is characterized by woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (*Fraxinus nigra*).
 - The ‘C’ Modifier refers to a water regime that is Seasonally Flooded: where surface water is present for extended periods, especially early in the growing season, but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
- PFO1E – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Forested (FO) Class is characterized by woody vegetation that is 6 meters tall or taller.

- The Subclass '1' refers to Broad-leaved Deciduous – a habitat that is characterized by woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (*Fraxinus nigra*).
- The 'E' Modifier refers to a water regime that is Seasonally Flooded/Saturated: where surface water is present for extended periods, especially early in the growing season and when surface water is absent, substrate remains saturated near the surface for much of the growing season.
- PFO1/EM1E – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Forested (FO) Class is characterized by woody vegetation that is 6 meters tall or taller.
 - The Subclass '1' refers to Broad-leaved Deciduous – a habitat that is characterized by woody angiosperms (trees or shrubs) with relatively wide, flat leaves that are shed during the cold or dry season; e.g., black ash (*Fraxinus nigra*).
 - The Emergent (EM) Class is characterized by erect, rooted, herbaceous hydrophytes, excluding mosses and lichens. This vegetation is present for most of the growing season in most years. These wetlands are usually dominated by perennial plants.
 - The Subclass '1' refers to Persistent – a condition that is dominated by species that normally remain standing at least until the beginning of the next growing season.
 - The 'E' Modifier refers to a water regime that is Seasonally Flooded/Saturated; where surface water is present for extended periods especially early in the growing season and when surface water is absent, substrate remains saturated near the surface for much of the growing season.
- PUBHh – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Unconsolidated Bottom (UB) Class includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 centimeters [cm]), and a vegetative cover less than 30%.
 - The 'H' Modifier refers to a water regime that is Permanently Flooded; where water covers the land surface throughout the year in all years.
 - The 'h' Special Modifier refers to a water regime that is Diked/Impounded: where these wetlands have been created or modified by a man-made barrier or dam which obstructs the inflow or outflow of water. The descriptors 'diked' and 'impounded' have been combined into a single modifier since the observed effect on wetlands is similar. They have been combined here due to image interpretation limitations.
- PUBHx – This Palustrine System (P) includes all non-tidal wetlands dominated by trees, shrubs, emergents, mosses or lichens.
 - The Unconsolidated Bottom (UB) Class includes all wetlands and deepwater habitats with at least 25% cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30%.

- The 'H' Modifier refers to a water regime that is Permanently Flooded; where water covers the land surface throughout the year in all years.
- The 'x' Special Modifier refers to a water regime that is excavated, or lies within a basin or channel that has been dug, gouged, blasted or suctioned through artificial means.

According to the NYSDEC Resource Mapper, wetlands under the jurisdiction of NYSDEC are mapped within and in the general vicinity of the project site (**Figure 5**). 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 (< 12.4 acres in size) at the northerly end of the former airstrip site. GEI's field investigations and wetland boundary delineations conducted in April and May 2014 verified the occurrence of these wetlands.

Several Class 'C' streams were identified within the project site (**Figure 2**). One of the streams is Indian Kill, which drains into the Indian Kill Reservoir, a source of municipal drinking water, and eventually flows into the Ramapo River. Much of the source of water for these streams originates on state land (e.g., Sterling Forest State Park). The classification 'C' is for waters supporting fisheries and suitable for non-contact activities. These streams fall under the jurisdiction of NYSDEC and USACE. GEI recommends Agency coordination to determine whether NYSDEC claims jurisdiction of these Class 'C' streams due to the surrounding sensitive environs (e.g., state lands).

Field Delineation

In April and May 2014, GEI wetland ecologists Laura Schwanof, Bill Jacobs, Jerry Peake, Erin Brosnan, and Mary Beth Billerman delineated stream corridors and wetlands on the project site. Wetland and stream boundaries were marked in the field with wetland delineation flagging tape and pin flags. Photographs of the delineated areas are included as **Attachment 1**.

Wetlands verified and flagged on site by GEI generally conform to the NWI classifications described above (i.e., PEM1E, PEM1F, PFO1C, PFO1E, PFO1/EM1E, PUBHh, and PUBHx). The dominant vegetation observed on site included: red maple (*Acer rubrum*), black birch (*Betula lenta*), yellow birch (*Betula alleghaniensis*), ironwood (*Carpinus caroliniana*), and silver maple (*Acer saccharinum*) trees; spicebush (*Cephalanthus occidentalis*), smooth alder (*Alnus serrulata*), highbush blueberry (*Vaccinium corymbosum*) and red osier dogwood (*Cornus sericea*) shrubs; and herbaceous groundcovers including: jewelweed (*Impatiens* spp.), horsetail (*Equisetum* spp.), tussock sedge (*Carex stricta*), sphagnum moss (*Sphagnum* spp.), common reed (*Phragmites australis*), ostrich fern (*Matteuccia struthiopteris*), cinnamon fern (*Osmunda cinnamomea*), sedges (*Carex* spp.), sensitive fern (*Onoclea sensibilis*), forget-me-not (*Myosotis scorpioides*), and broadleaf cattail (*Typha latifolia*). Dominant or common invasive plant species often found in the upland edges included: multi-flora rose (*Rosa multiflora*), olive (*Elaeagnus* spp.), and shrub honeysuckle (*Lonicera* spp.). Poison ivy (*Toxicodendron radicans*) was common on elevated microsites, such as hummocks or tree bases and upland edges.

GEI found several discrepancies between the mapped wetlands and waterbodies in the project area and our field observations:

- A NYSDEC stream flowing north to south on parcel 1-1-52.25 was primarily diverted to the west, with an additional drainage ditch to the east, sometime prior to 1974, based on a historical aerial review;
- Multiple small unmapped wetland pockets were delineated on parcel 1-1-52.25;
- Unmapped stream sections and associated wetlands were delineated on the west side of parcel 1-1-37.2; and
- Several stream sections were piped under access paths and roadways.

Additionally, a dam measuring approximately 25 feet long, 20 feet wide, and 10 to 15 feet high was observed between a pond impoundment and the Indian Kill stream on parcel 1-1-52.25. A gravel road crosses the dam.

GEI wetland ecologists flagged the streams, drainage ditches, ponds, and wetlands located throughout the project site. Several local areas of disturbance were also observed, including past filling and dumping.

Some of the wetland delineation flags were surveyed by Lanc & Tully Engineering and Surveying, P.C., while others were mapped by The Louis Berger Group, Inc. using GPS.

Ecological Communities

GEI identified three predominant terrestrial ecological communities on the project site (**Figure 2**). The dominant terrestrial ecological community was Chestnut Oak Forest, followed by smaller areas of Appalachian Oak-Hickory Forest and Acidic Talus Slope Woodland (possibly a variant or gradient). Ecological communities were classified using the New York Natural Heritage Program (NYNHP) classifications provided in *Draft Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State* (Edinger et al. 2002).

NYNHP describes Chestnut Oak Forest as a hardwood forest that occurs on well-drained sites in glaciated portions of the Appalachians and on the coastal plain. Dominant trees are typically chestnut oak (*Quercus montana*) and red oak (*Q. rubra*). Common associates are white oak (*Q. alba*), black oak (*Q. velutina*), and red maple (*Acer rubrum*). Characteristic shrubs are black huckleberry (*Gaylussacia baccata*), mountain laurel (*Kalmia latifolia*), and blueberry (*Vaccinium pallidum*). Common groundlayer plants are Pennsylvania sedge (*Carex pensylvanica*), wild sarsaparilla (*Aralia nudicaulis*), wintergreen (*Gaultheria procumbens*), and cushions of the moss *Leucobryum glaucum*. The dominant tree species that GEI observed on site were chestnut oak, red or black oak, red maple, and black birch. Other tree species observed included yellow birch (*Betula alleghaniensis*), white oak, and American beech (*Fagus grandifolia*). Dominant shrub species observed on site were mountain laurel and low bush blueberry or huckleberry. Witch hazel (*Hamamelis virginiana*) was a common associate. Groundlayer plants included Pennsylvania sedge, wintergreen, moss, and striped pipsissewa (*Chimaphila maculata*).

NYNHP describes Appalachian Oak-Hickory Forest as a hardwood forest that occurs on well-drained sites, usually on ridgetops, upper slopes, or south- and west-facing slopes. The soils are usually loams or sandy loams. The dominant trees include one or more of the following oaks:

red oak, white oak, and black oak. Mixed with the oaks, usually at lower densities, are one or more of the following hickories: pignut (*Carya glabra*), shagbark (*C. ovata*), and sweet pignut (*C. ovalis*). Common associates are white ash (*Fraxinus americana*), red maple (*Acer rubrum*), and eastern hop hornbeam (*Ostrya virginiana*). There is typically a subcanopy stratum of small trees and tall shrubs including: flowering dogwood (*Cornus florida*), witch hazel, shadbush (*Amelanchier arborea*), and choke cherry (*Prunus virginiana*). Common low shrubs include maple-leaf viburnum (*Viburnum acerifolium*), blueberries (*Vaccinium angustifolium*, *V. pallidum*), red raspberry (*Rubus idaeus*), gray dogwood (*Cornus foemina* ssp. *racemosa*), and beaked hazelnut (*Corylus cornuta*). The shrublayer and groundlayer flora may be diverse. Characteristic groundlayer herbs are wild sarsaparilla (*Aralia nudicaulis*), false Solomon's seal (*Smilacina racemosa*), Pennsylvania sedge (*Carex pensylvanica*), tick-trefoil (*Desmodium glutinosum*, *D. paniculatum*), black cohosh (*Cimicifuga racemosa*), rattlesnake root (*Prenanthes alba*), white goldenrod (*Solidago bicolor*), and hepatica (*Hepatica americana*). Characteristic animals include: red-bellied woodpecker (*Melanerpes carolinus*), whip-poor-will (*Caprimulgus vociferus*), and wild turkey (*Meleagris gallopavo*). The dominant tree species that GEI observed on site were red oak, white oak, and hickory. Common associates were red maple and eastern hop hornbeam. Shrubs observed included witch hazel and blueberries.

NYNHP describes Acidic Talus Slope Woodland as an open to closed canopy woodland that occurs on talus slopes composed of non-calcareous bedrock such as granite, quartzite, or schist. Characteristic trees include: chestnut oak, red oak, white oak, white pine (*Pinus strobus*), red pine (*P. resinosa*), paper birch (*Betula papyrifera*), black birch, and mountain paper birch (*B. cordifolia*); striped maple (*Acer pensylvanicum*) and mountain maple (*A. spicatum*) are common subcanopy trees. Characteristic groundlayer species include many ferns: rock polypody (*Polypodium virginianum*), Christmas fern (*Polystichum acrostichoides*), marginal wood fern (*Dryopteris marginalis*), and rusty woodsia (*Woodsia ilvensis*). Another common herb includes wild sarsaparilla. Crustose lichens are abundant on the talus. Rare snakes of some acidic talus slope woodlands include copperhead (*Agkistrodon contortrix*) and timber rattlesnake (*Crotalus horridus*). Dominant tree species observed on site were black birch and chestnut oak. Common associates included paper birch. This community observed on site may be a variant or gradient between communities.

Summary

Based on the April and May 2014 GEI field delineations, the following wetlands and waterbodies were located within the project site:

- Mapped NWI wetland systems under the jurisdiction of USACE;
- A mapped freshwater wetland under the jurisdictions of NYSDEC and USACE;
- Unmapped streams and wetlands; and,
- Class 'C' streams and associated ponds under the jurisdictions of NYSDEC and USACE.

Agency coordination with USACE and NYSDEC would be necessary to determine and obtain the required permit approvals prior to the commencement of work within the vicinity of these wetlands and stream corridors.

If you have any questions or require additional information, please contact me at (631) 921-4221 or bjacobs@geiconsultants.com.

Sincerely,

GEI CONSULTANTS, INC., P. C.



Bill Jacobs
Senior Ecologist

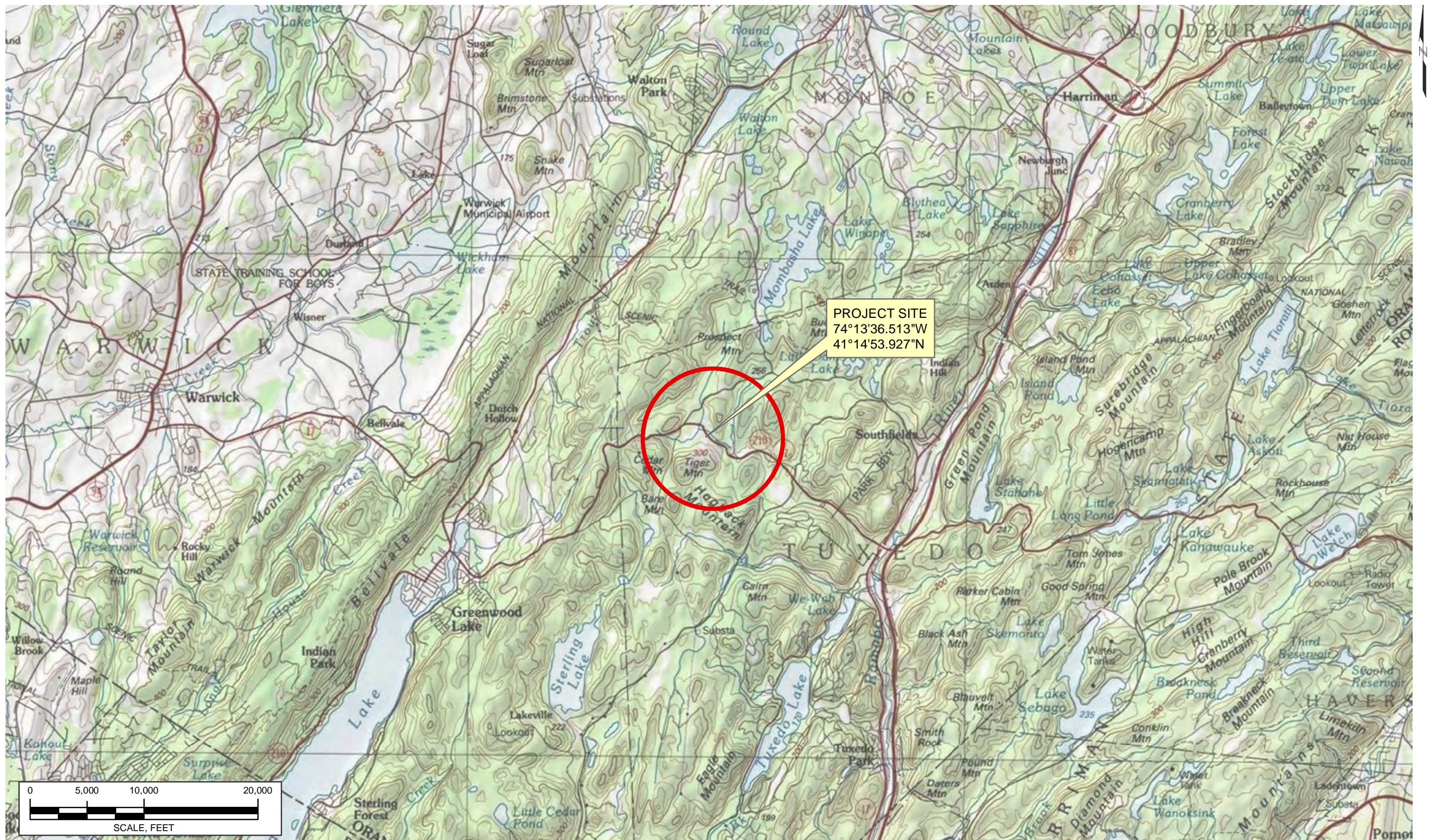


Laura Schwanof, RLA
Landscape Architect/Ecological Practice Leader

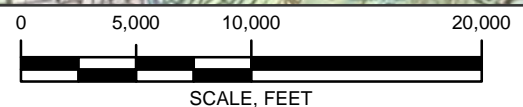
BJ:gd

Attachments

c. G. Rozmus, GEI; E. Samanns, LB



PROJECT SITE
 74°13'36.513\"/>



ROUTE 17A
 TUXEDO PARK, ORANGE COUNTY, NY

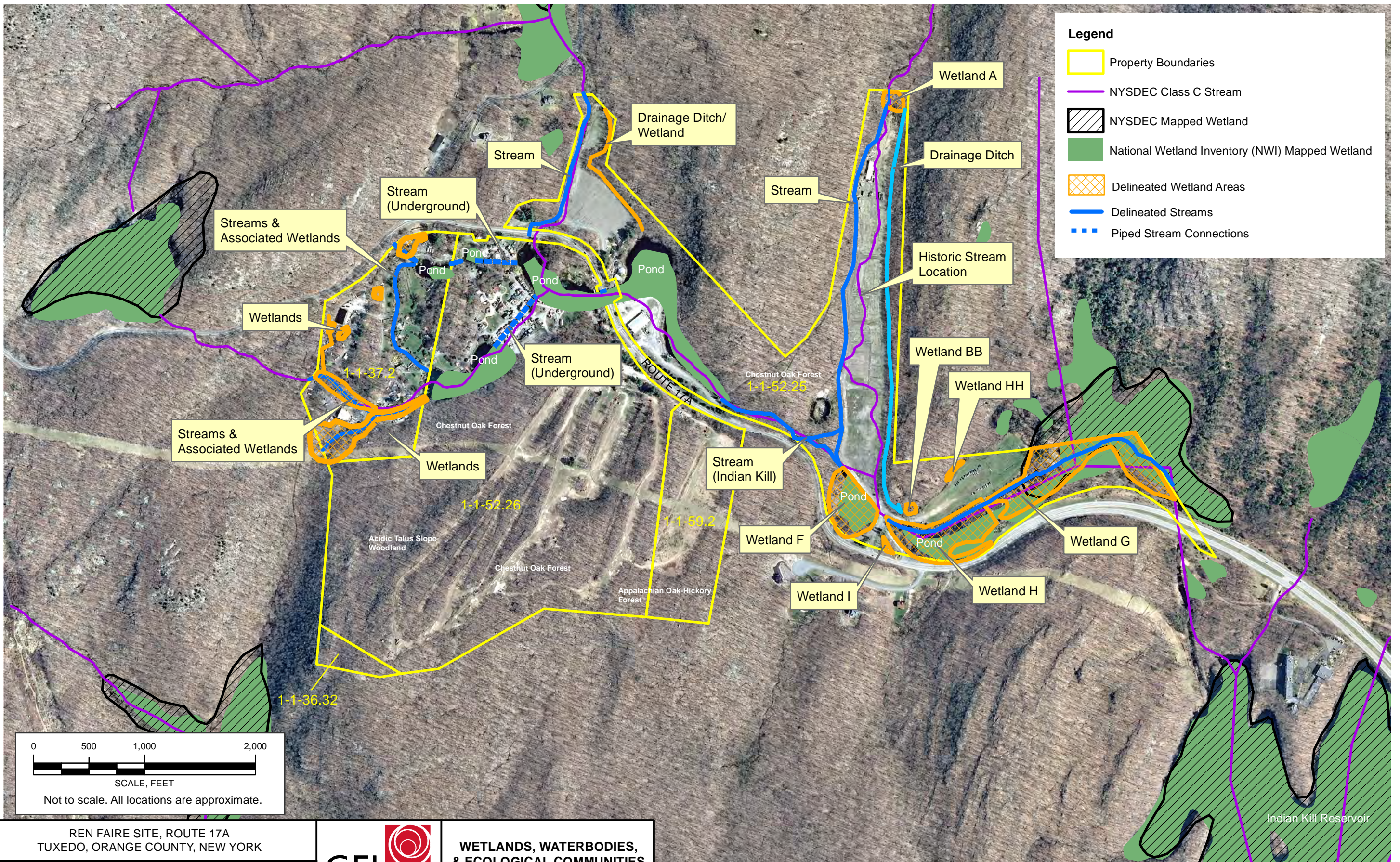
SOURCE:
 SLOATSBURG AND MONROE USGS QUADRANGLES



LOCATION MAP

PROJECT TBD MARCH 2014 FIGURE 1

Copyright: © 2013 National Geographic Society



Legend

- Property Boundaries
- NYSDEC Class C Stream
- NYSDEC Mapped Wetland
- National Wetland Inventory (NWI) Mapped Wetland
- Delineated Wetland Areas
- Delineated Streams
- Piped Stream Connections

0 500 1,000 2,000
 SCALE, FEET
 Not to scale. All locations are approximate.

REN FAIRE SITE, ROUTE 17A
 TUXEDO, ORANGE COUNTY, NEW YORK

Cleary Gottlieb Steen & Hamilton LLP
 One Liberty Plaza
 New York, NY 10006

GEI Consultants

PROJECT 1404080

**WETLANDS, WATERBODIES,
 & ECOLOGICAL COMMUNITIES**

APRIL 2014

FIGURE 2

SLOATSBURG AND MONROE
 USGS QUADRANGLES
 SOURCES: NYS GIS CLEARINGHOUSE

Figure 3
Hydric Rating by Map Unit—Orange County, New York

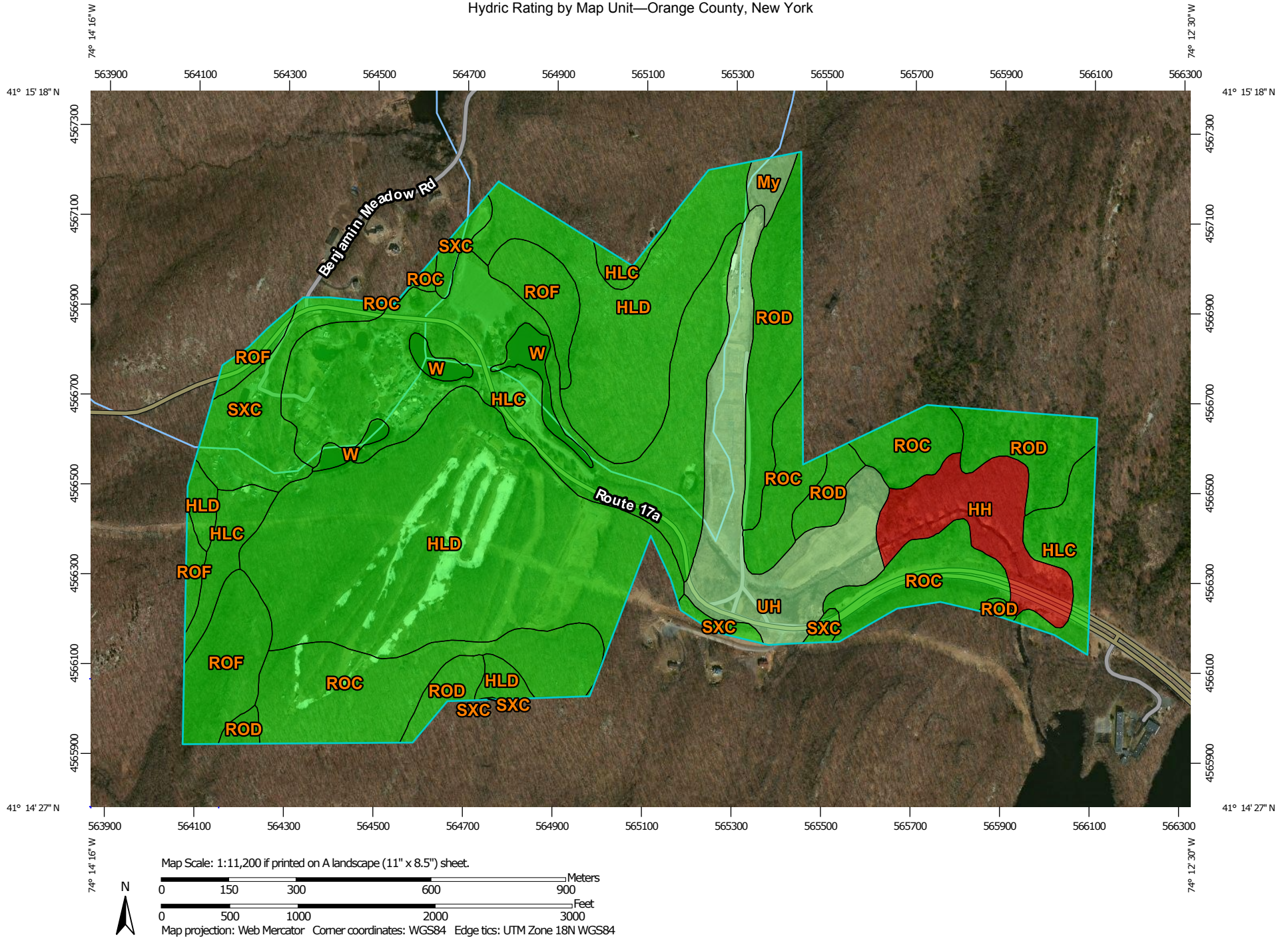



Figure 3 (continued)
Hydric Rating by Map Unit—Orange County, New York







MAP LEGEND

Area of Interest (AOI)







 Area of Interest (AOI)

Soils


Soil Rating Polygons






-  Hydric (100%)
-  Predominantly Hydric (66 to 99%)
-  Partially hydric (33 to 65%)
-  Predominantly nonhydric (1 to 32%)
-  Nonhydric (0%)
-  Not rated or not available

Soil Rating Lines


-  Hydric (100%)
-  Predominantly Hydric (66 to 99%)
-  Partially hydric (33 to 65%)
-  Predominantly nonhydric (1 to 32%)
-  Nonhydric (0%)
-  Not rated or not available

Soil Rating Points

-  Hydric (100%)

-  Predominantly Hydric (66 to 99%)
-  Partially hydric (33 to 65%)
-  Predominantly nonhydric (1 to 32%)
-  Nonhydric (0%)
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County, New York
Survey Area Data: Version 14, Dec 15, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 20, 2011—Apr 16, 2012

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Figure 3 (continued)

Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Orange County, New York (NY071)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HH	Histic Humaquepts, ponded	100	17.7	4.4%
HLC	Hollis soils, sloping	0	78.8	19.5%
HLD	Hollis soils, moderately steep	0	128.5	31.9%
My	Middlebury silt loam	5	2.6	0.6%
ROC	Rock outcrop-Hollis complex, sloping	0	56.2	13.9%
ROD	Rock outcrop-Hollis complex, moderately steep	0	36.0	8.9%
ROF	Rock outcrop-Hollis complex, very steep	0	23.9	5.9%
SXC	Swartswood and Mardin very stony soils, sloping	0	20.1	5.0%
UH	Udorthents, smoothed	5	33.5	8.3%
W	Water	0	6.4	1.6%
Totals for Area of Interest			403.6	100.0%

Figure 3 (continued)

Description

This rating indicates the proportion of map units that meets the criteria for hydric soils. Map units are composed of one or more map unit components or soil types, each of which is rated as hydric soil or not hydric. Map units that are made up dominantly of hydric soils may have small areas of minor nonhydric components in the higher positions on the landform, and map units that are made up dominantly of nonhydric soils may have small areas of minor hydric components in the lower positions on the landform. Each map unit is designated as "hydric," "predominantly hydric," "partially hydric," "predominantly nonhydric," or "nonhydric" depending on the rating of its respective components and the percentage of each component within the map unit.

"Hydric" means that all components listed for a given map unit are rated as being hydric. "Predominantly hydric" means components that comprise 66 to 99 percent of the map unit are rated as hydric. "Partially hydric" means components that comprise 33 to 66 percent of the map unit are rated as hydric. "Predominantly nonhydric" means components that comprise up to 33 percent of the map unit are rated as hydric. "Nonhydric" means that none of the components are rated as hydric. The assumption here is that all components of the map unit are rated as hydric or nonhydric in the underlying database. A "Not rated or not available" map unit rating is displayed when none of the components within a map unit have been rated.

In Web Soil Survey, the Summary by Map Unit table that is displayed below the map pane contains a column named 'Rating'. In this column the percentage of each map unit that is classified as being hydric is displayed.

Hydric soils are defined by the National Technical Committee for Hydric Soils (NTCHS) as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (Federal Register, 1994). Under natural conditions, these soils are either saturated or inundated long enough during the growing season to support the growth and reproduction of hydrophytic vegetation.

The NTCHS definition identifies general soil properties that are associated with wetness. In order to determine whether a specific soil is a hydric soil or nonhydric soil, however, more specific information, such as information about the depth and duration of the water table, is needed. Thus, criteria that identify those estimated soil properties unique to hydric soils have been established (Federal Register, 2002). These criteria are used to identify map unit components that normally are associated with wetlands. The criteria used are selected estimated soil properties that are described in "Soil Taxonomy" (Soil Survey Staff, 1999) and "Keys to Soil Taxonomy" (Soil Survey Staff, 2006) and in the "Soil Survey Manual" (Soil Survey Division Staff, 1993).

If soils are wet enough for a long enough period of time to be considered hydric, they should exhibit certain properties that can be easily observed in the field. These visible properties are indicators of hydric soils. The indicators used to make onsite determinations of hydric soils are specified in "Field Indicators of Hydric Soils in the United States" (Hurt and Vasilas, 2006).

Figure 3 (continued)

References:

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18.

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service. U.S. Department of Agriculture Handbook 436.

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service.

Rating Options

Aggregation Method: Percent Present

Component Percent Cutoff: None Specified

Tie-break Rule: Lower

Figure 4A

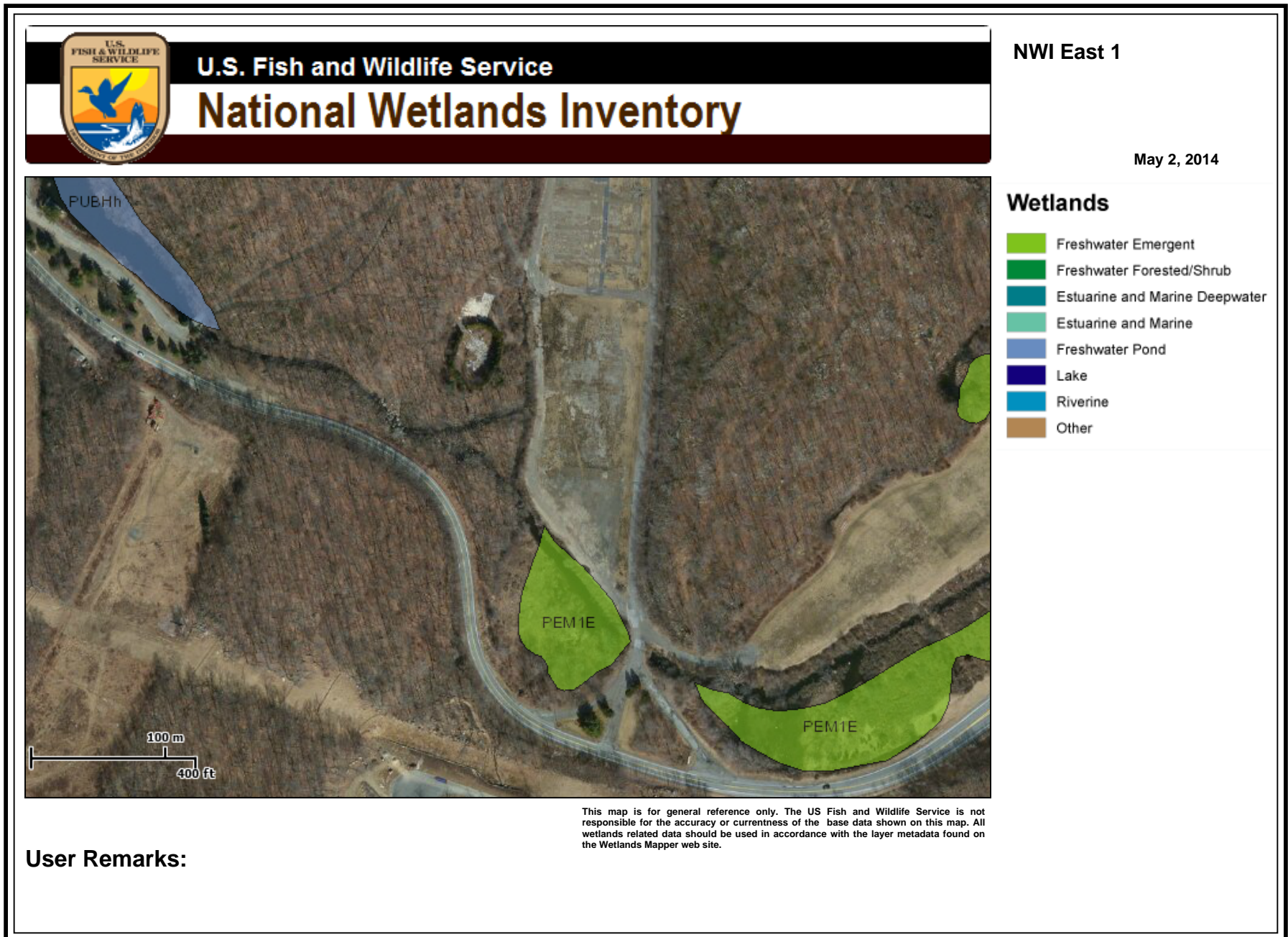


Figure 4B

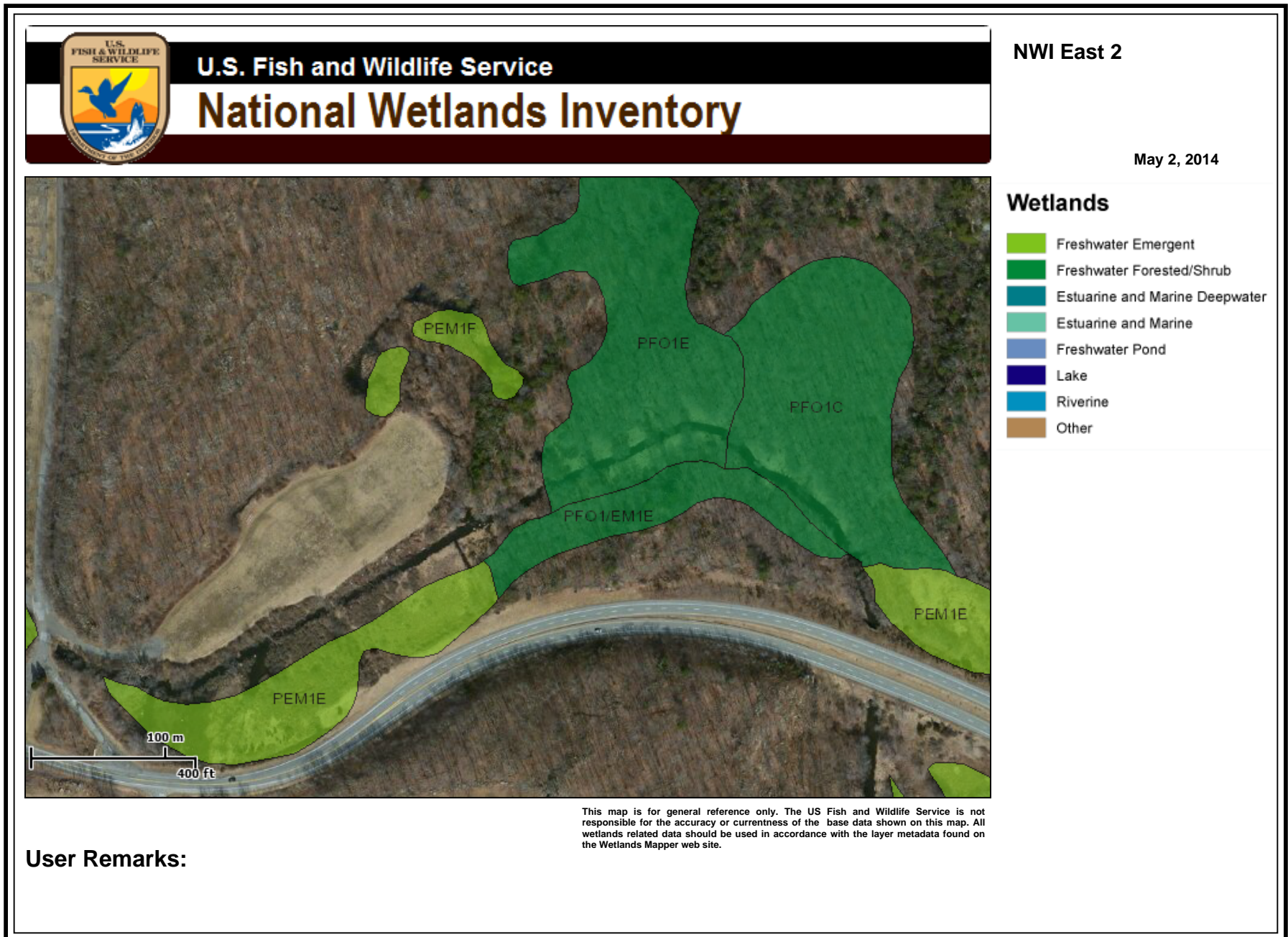


Figure 4C

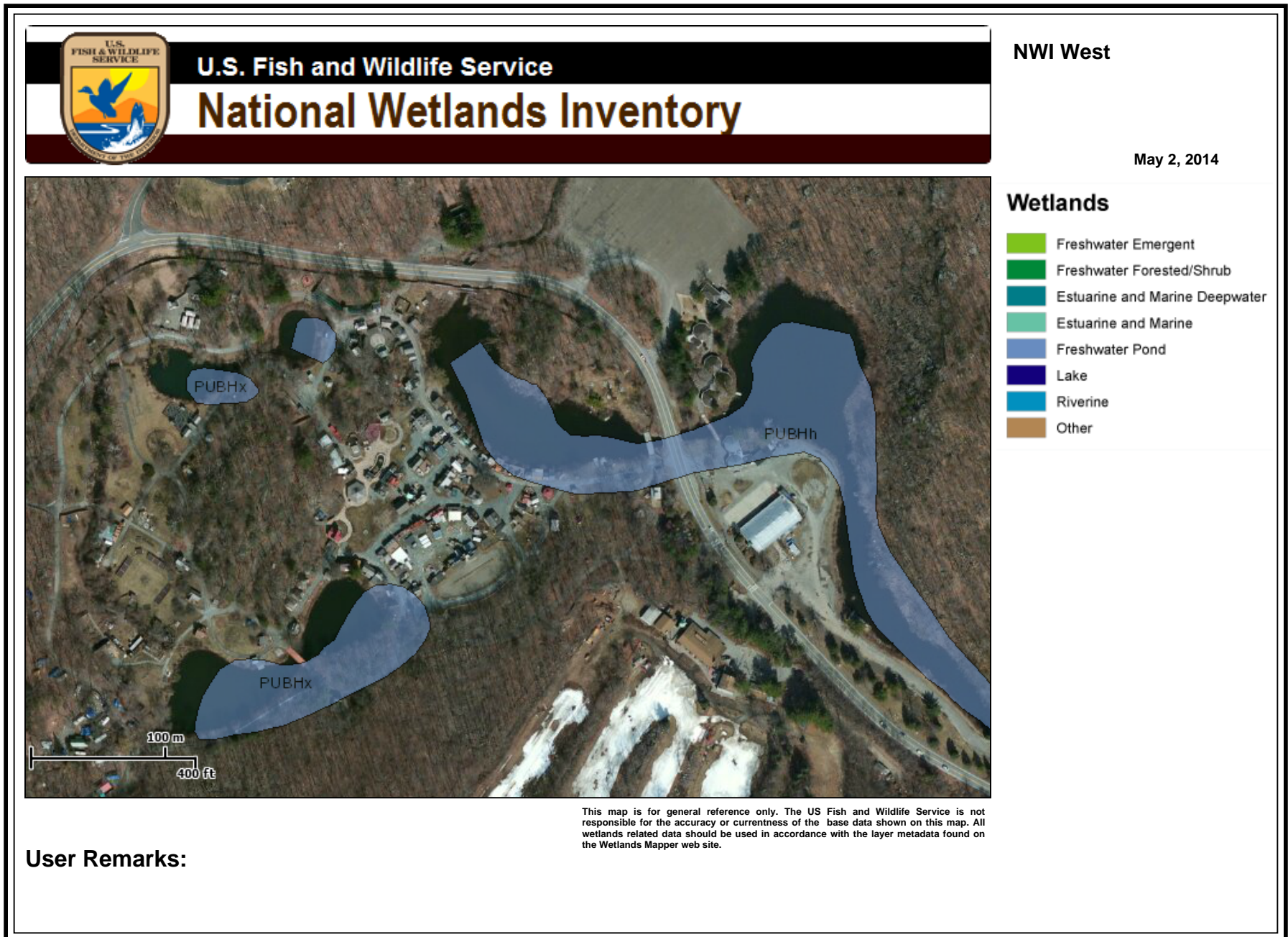
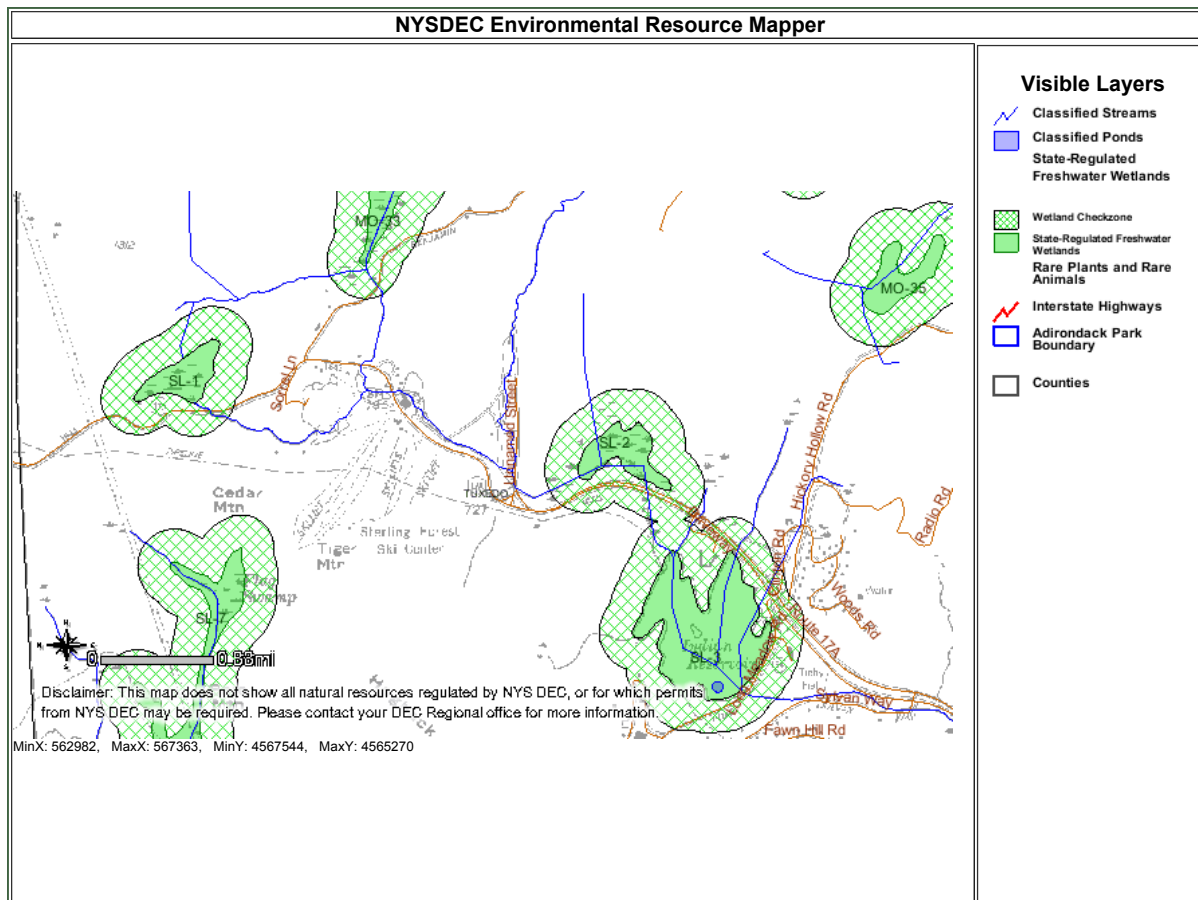


Figure 5

[print page] [close window]

Please set your printer orientation to "Landscape".



Disclaimer: This map was prepared by the New York State Department of Environmental Conservation using the most current data available. It is deemed accurate but is not guaranteed. NYS DEC is not responsible for any inaccuracies in the data and does not necessarily endorse any interpretations or products derived from the data.

Figure 5 (continued)

[print page] [close window]

The Coordinates of the point you clicked on are:

NYTM	E : 564369	Longitude/Latitude	W : 74.231
	N : 4566550		N : 41.247

Classified Streams

Regulation	Standard	Classification
860-65	C	C

Rare Plants and Rare Animals

This location is in the vicinity of one or more :
Rare Animals and/or Rare Plants

Natural Communities Near This Location:

Natural Community Name	Location	Ecological System
Chestnut oak forest	Blue Lake Highlands	Uplands
Appalachian oak-hickory forest	Greenwood Lake	Uplands

USGS Quadrangle

If your project or action is within or near an area with a rare animal, a permit may be required if the species is listed as endangered or threatened and the department determines the action may be harmful to the species or its habitat.

If your project or action is within or near an area with rare plants and/or significant natural communities, the environmental impacts may need to be addressed.

The presence of a unique geological feature or landform near a project, unto itself, does not trigger a requirement for a NYS DEC permit. Readers are advised, however, that there is the chance that a unique feature may also show in another data layer (ie. a wetland) and thus be subject to permit jurisdiction.

Please refer to the "Need a Permit?" tab for permit information or other authorizations regarding these natural resources.

Disclaimer: If you are considering a project or action in, or near, a wetland or a stream, a NYS DEC permit may be required. The Environmental Resources Mapper does not show all natural resources which are regulated by NYS DEC, and for which permits from NYS DEC are required. For example, Regulated Tidal Wetlands, and Wild, Scenic, and Recreational Rivers, are currently not included on the maps.

Attachment 1 – Ren Faire Site Photographic Log



Photo 1. Wetland A, located to the north of the old airstrip, looking south



Photo 2. Stream on the west side of the old airstrip, looking south



Photo 3. South end of the drainage ditch on the east side of the old airstrip, looking south



Photo 4. Wetland area on the west side of project site, parcel 1-1-37.2

Attachment 1 – Ren Faire Site Photographic Log



Photo 5. Looking east from the dam at Indian Kill stream



Photo 6. Wetland G at the southeast area of the project site, looking west



Photo 7. Pond and wetland H at the southeast area of the project site, looking south



Photo 8. Pond at the Ren Faire site, parcel 1-1-52.26, looking south