Sunrise Wind New York Cable Project

Appendix 4-E

Onshore Ecological Assessment and Field Survey Report

Prepared for:



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Sunrise Wind: Onshore Ecological Assessment and Field Survey Report

Town of Brookhaven, New York

December 2020

Prepared for:

Sunrise Wind LLC

Prepared by:

Stantec Consulting Services Inc.

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Acronyms and Abbreviations

| CEA | Critical Environmental Area |
|-------------------------|--|
| FEMA | Federal Emergency Management Agency |
| FIRM | Flood Insurance Rate Maps |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| HDD | Horizontal Directional Drill |
| he | hectare |
| ICW | Intracoastal Waterway |
| | |
| in | inch |
| in IPaC | inch Information for Planning and Conservation |
| | |
| IPaC | Information for Planning and Conservation |
| IPaC km | Information for Planning and Conservation kilometer |
| IPaC km LIE | Information for Planning and Conservation kilometer Long Island Expressway |
| IPaC km LIE mi | Information for Planning and Conservation kilometer Long Island Expressway mile |



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| NYSDEC | New York State Department of Environmental Conservation |
|--------|---|
| ROW | right-of-way |
| RTE | rare, threatened and endangered |
| SCFWH | Significant Coastal Fish and Wildlife Habitats |
| USFWS | U.S. Fish and Wildlife Service |



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1.0 INTRODUCTION

Sunrise Wind LLC (Sunrise Wind, or the Applicant), a 50/50 joint venture between Orsted North America Inc. and Eversource Investment LLC, proposes to construct, own, and operate the Sunrise Wind Farm Project. The Sunrise Wind Farm Project and its transmission components will be located in federal waters on the Outer Continental Shelf, in state waters of New York, and onshore in the Town of Brookhaven, Suffolk County, New York. Stantec Consulting Services Inc. was retained by Sunrise Wind to evaluate the onshore components (Onshore Facilities) for the potential presence of regulated natural resources, such as rare, threatened and endangered (RTE) species¹, significant natural communities or habitats, wetland and waterbody resources, and invasive plant species. This included an initial desktop assessment, followed by field surveys conducted by Stantec in June and October 2020. Field surveys focused on the delineation of wetlands and other waterbodies, the classification of natural communities, evaluation of potential habitat suitability for RTE species, and evaluation of presence and relative abundance of nonnative, invasive species associated with the Onshore Facilities (Figure 1 of Appendix A). For this report, RTE plant species include those with state and/or federal listing status or inclusion on New York's Rare Plant Status List (Young 2019). Fish and wildlife species include those identified by the U.S. Fish and Wildlife Service (USFWS) or New York State Department of Environmental Conservation (NYSDEC) during consultation. This report has been prepared in support of the Sunrise Wind federal Construction and Operations Plan as well as the Sunrise Wind application for a Certificate of Environmental Compatibility and Public Need under Article VII of the New York State Public Service Law for the portions of the Sunrise Wind Farm Project within New York State (the Sunrise Wind New York Cable Project).

The Onshore Facilities evaluated included the following:

- Landfall Work Area, where the connection of the Sunrise Wind Export Cable and the Onshore Facilities will occur via Horizontal Directional Drill (HDD) at Smith Point County Park on Fire Island. HDD will require temporary use of a Landfall Work Area located onshore within which the transition joint bays will be installed and HDD construction activities will occur, including cable pull in activities. HDD cable duct stringing activities may also occur adjacent to the Landfall Work Area.
- 2. Intracoastal Waterway (ICW) Work Area, which includes the ICW HDD at both Smith Point County Park on Fire Island and Smith Point Marina on Long Island.
- 3. Onshore Transmission Cable from the Landfall Work Area to the Union Avenue Site, where the cable will then interconnect with the existing electrical grid at the existing Holbrook Substation. Two routes have been evaluated for the Onshore Transmission Cable, including a primary route and alternative variations, as described below and shown on Figure 1:

¹ Presence of avian and bat species, marine mammals, marine fisheries, and benthic species are addressed in separate reports.



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- Long Island Expressway (LIE) Service Road Route (the primary route), an approximately 17.5-miles (mi; 28.2-kilometer [km]) route from the Landfall Work Area to the Union Avenue Site.
- Peconic Avenue Route, which initially follows the same route as LIE Service Road Route but diverts off Horseblock Road at Peconic Avenue and continues west along Peconic Avenue to North Ocean Avenue. The Peconic Avenue Route turns north along North Ocean Avenue, west to Long Island Avenue, and continues west along Long Island Avenue to Union Avenue to reach the Onshore Converter Station.
- 4. The Union Avenue Site, including:
 - An approximately 8-acre (3 hectares [ha]) Union Avenue North Site
 - An approximately 8-acre (3 ha) Union Avenue South Site
- 5. Interconnection Cables to the Existing Holbrook Substation

In this report, the term Landfall/ICW Study Area is used to describe an area encompassing the Landfall Work Area (at Smith Point County Park), the adjacent pipe-stringing area, and the ICW Work Area (at Smith Point County Park and at Smith Point Marina), as well as the adjacent lands around these areas to allow for the possibility of future design adjustments. The term 'Landfall/ICW Study Area on Fire Island' is used to specifically describe the assessed areas on Fire Island, while the term 'Landfall/ICW Study Area on the Mainland' is used to specifically describe the assessed areas within Smith Point Marina. The term 'Onshore Transmission Cable Survey Area' is used to specifically describe the assessed area where the potential Onshore Transmission Cable route will travel along existing roads to the Union Avenue Site.²

2.0 METHODOLOGY AND DATA SOURCES

2.1 DESKTOP REVIEW

The desktop review included consultations with natural resource agencies as well as a review of publicly available Geographic Information Systems (GIS) data:

- Aerial imagery
- National Wetlands Inventory data
- National Hydrography Dataset
- Critical Environmental Areas (CEAs) as designated by the NYSDEC and RTE-occupied habitat databases maintained by the New York Natural Heritage Program (NYNHP)
- NYSDEC-regulated tidal and freshwater wetlands as available through the NYSDEC Environmental Resource Mapper (NYSDEC 2020)
- Soil data available from the U.S. Department of Agriculture Natural Resources Conservation Service

² Due to pending survey access permission, only the desktop evaluation was conducted for the Union Avenue Site and Onshore Interconnection Cable. This report will be updated once survey access is obtained and these areas can be surveyed.



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- Flood Insurance Rate Maps from the Federal Emergency Management Agency (FEMA)
- Significant Coastal Fish and Wildlife Habitats (SCFWH) as designated by the NYSDEC
- Significant Natural Communities as designated by the NYSDEC and contained within the NYSDEC Environmental Resource Mapper (NYSDEC 2020)
- A list of RTE species for the Town of Brookhaven as well as Suffolk County, as available through the New York Nature Explorer (Appendix B)
- The results of a USFWS Information for Planning and Conservation (IPaC) query on March 11, 2020 (Appendix C)
- Information on the presence of RTE species proximal to the Onshore Facilities provided in a letter from the NYNHP on March 27, 2020 (Appendix C)
- Details regarding invasive species available from the New York iMapInvasives database and mapping tool
- Published local references, including the *Fire Island National Seashore Draft General Management Plan/Environmental Impact Statement* (NPS 2015), the *Central Pine Barrens Comprehensive Land Use Plan* (Central Pine Barrens Joint Planning and Policy Commission 2012), and the Final Design Report / Environmental Assessment for the bridge replacement/highway reconstruction project of the William Floyd Parkway, Route CR 46 over Narrow Bay (New York State Department of Transportation 2019)

Where available, digital data were compiled into a GIS data viewer along with aerial imagery and Onshore Facilities components to aid in the analyses. The results of the desktop assessment were used to inform the field surveys.

2.2 FIELD SURVEYS

Wetland/Waterbodies Delineation

Stantec wetland scientists conducted wetland and waterbody delineations during the months of June and October 2020. Wetland boundaries potentially regulated by state and/or federal jurisdiction were determined using the technical criteria described in the Corps Wetland Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Regional Supplement (USACE 2012). In addition, boundaries of freshwater wetlands regulated under Article 24 of the New York Environmental Conservation Law were delineated according to methods described in the New York State Freshwater Wetlands Delineation Manual (Browne et al 1995). Data collected for each wetland included the dominant vegetation, hydric soil indicators, and wetland hydrology indicators. Details on each delineated wetland are summarized in Section 3.2.1. Streams and other potential waters of the United States were delineated based on NYSDEC technical criteria and the Clean Water Rule: Definition of "Waters of the United States"; Final Rule (June 29, 2015). Data collected on streams included flow type, channel width (Ordinary High-Water Mark), and channel substrate. Details of each delineated waterbody are described in Section 3.2.2. The approximate Mean High Water mark was delineated along tidal waterbodies based on physical evidence including presence of wrack, drift, shelving, changes in slope, changes in vegetation, and other observable features. Wetland and watercourse/waterbody boundaries were located using a Global Positioning System (GPS) receiver capable of submeter accuracy.



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Principal and secondary functions and values of wetlands were identified during the delineation. The functional assessment largely followed *The Highway Methodology Workbook Supplement: Wetland Function and Value, A Descriptive Approach* (USACE 1999). This method bases function and value determinations on the presence or absence of specific criteria for each of the 13 wetland functions and values: groundwater recharge/discharge; floodflow alteration; fish and shellfish habitat; sediment/toxicant retention; nutrient removal; production export; sediment/shoreline stabilization; wildlife habitat; recreation; educational/scientific value; uniqueness/heritage; visual quality/aesthetics; and endangered species habitat. In addition to the presence or absence of specific functions and values, the probability functional capacity was based on wetland and buffer characteristics (e.g., the presence of associated watercourse or waterbodies, invasive species presence, and adjacent land uses).

Natural Communities and RTE Species Assessment

During the June and October 2020 field visits, Stantec wetland scientists characterized the general natural community types and evaluated their potential to provide habitat potentially suitable for RTE species. Natural communities were classified using Edinger et al. (2014). Any incidental observations of RTE species encountered during field visits were documented.

Invasive Species Assessment

Invasive species are non-native species that can cause harm to the environment, the economy, or human health. Stantec wetland scientists documented the presence of and evaluated the approximate relative density (low, medium, or high) of invasive plant species during the June and October 2020 field visits. Preliminary invasive species surveys were based on the NYSDEC Invasive Species Management Plan Specifications Template provided by NYSDEC on May 5, 2020. General locations and approximate relative relative density were recorded on field datasheets and located with GPS.

3.0 **RESULTS**

3.1 LANDSCAPE OVERVIEW

Long Island Region

Central Long Island's coastal and terrestrial environment varies widely and consists of a diversity of habitats. These range from exposed rocky shores and exposed bedrock, sandy coastal beaches, dunes, freshwater and brackish bays and ponds, and salt marshes fringing the shore of sheltered embayments to intertidal mudflats and sandflats (BOEM 2013). The sandy, coastal beaches along the southeastern coastline of Long Island are characterized by four zones: nearshore bottom (submerged areas below mean low water to 29.5 feet [ft; 9.0 meters {m}]); foreshore (intertidal areas between mean low water to the high tide zone); backshore (exposed sandflats above high tide line to dunes, but occasionally submerged during storms or exceptionally high tides); and dunes (areas of wind-blown sand ridges or mounds above the highest tide line and exposed to wind action) (USFWS 1997). These coastal habitats are constantly changing as a result of wave action and tidal currents that remove, transport, and deposit



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sediment (DOI-MMS 2007). The primary sources of deposited material, which maintain the sand beaches, is from erosional areas along existing beaches and sand shoals on the inner continental shelf (BOEM 2013). In 2012, Hurricane Sandy's wave energy and storm surge produced extensive coastal erosion along the entirety of Fire Island. Beaches and dunes across the island lost an average of 54% of their pre-storm volume with greater than 75% volume loss estimated near the Landfall/ICW Study Area on Fire Island (USGS 2013).

On Fire Island, American beach grass (*Ammophila breviligulata*) is the dominant plant species on foredunes. Beach plum (*Prunus maritima*), northern bayberry (*Morella pensylvanica*), seaside goldenrod (*Solidago sempervirens*), and eastern poison ivy (*Toxicodendron radicans*) commonly occur on the leeward side (NPS 2015). Interdunal swales, found mostly in the Fire Island Wilderness area located west of the Landfall/ICW Study Area on Fire Island, are wetlands that form when blowouts in the dunes intersect the water table and typical wetland plants such as grasses, forbs and woody shrubs become established. Characteristic species of these swale wetlands include purple gerardia (*Agalinis purpurea*), sundews (*Drosera spp.*), large cranberry (*Vaccinium macrocarpon*), highbush blueberry (*Vaccinium corymbosum*), and northern bayberry. Tidal marshes occupy the backside of Fire Island in broad areas where historic storms have overwashed adjacent upland materials. Common species of Fire Island's tidal marshes are saltwater cord grass (*Spartina alterniflora*), salt-meadow cord grass (*Spartina patens*) and coastal salt grass (*Distichlis spicata*) depending on the level of tidal inundation.

On mainland Long Island, residential and industrial development has removed or degraded much of the historical natural communities. One exception is the Central Pine Barrens, a 105,000-acre (42,492-ha) area of unique forested and wetland habitats created by The Long Island Pine Barrens Protection Act in 1993. In addition, the headwaters for the Carmans River, which intersects with the Onshore Transmission Route and is one of the four major rivers on Long Island, is located in the Central Pine Barrens. The river is freshwater where the Onshore Transmission Route crosses along Montauk Highway with brackish conditions beginning approximately 1,600 ft (487.7 m) downstream where a railroad crossing is located. Yaphank Creek begins above the Montauk Highway (where it intersects with the Onshore Transmission Cable route) before flowing through Wertheim National Wildlife Refuge in a southeastern direction before meeting Carmans River. The 2,550-acre (1,032-ha) refuge is bisected by Carmans River and provides habitat for resident wildlife species in addition to numerous migratory songbirds, raptors, and waterfowl.

Onshore Facilities

The Onshore Facilities begin at the Landfall Work Area on Fire Island at Smith Point County Park in Suffolk County. The Landfall Work Area occupies a portion of the parking lot at Smith Point County Park on Fire Island, an approximately 425-acre (172-ha) public beach and recreation area owned and managed by Suffolk County. In addition to these paved and disturbed areas, the Landfall/ICW Study Area on Fire Island includes portions of beach along the Atlantic Ocean to the south of William Floyd Parkway and the vegetated backshore areas along the bay side. Coastal habitats associated with the Landfall/ICW Study Area on Fire Island include foreshore, backshore, dune, and interdunal areas. The Landfall/ICW Study Area here also intersects with Maritime Beach, a significant NYSDEC natural community as discussed further below.



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From the Landfall Work Area, the Onshore Transmission Cable transits approximately 2,900 ft westnorthwest parallel to the Fire Island Beach Road within the paved Smith Point County Park parking lot, crossing under the William Floyd Parkway to a recreational area located to the west of William Floyd Parkway where the ICW Work Area will be located. The Onshore Transmission Cable will then be routed across the ICW via HDD to the ICW Work Area at Smith Point Marina on Long Island's mainland. For the purposes of this analysis, discussion of Great South Bay and Narrow Bay was also included where applicable, as habitats within Great South Bay and Narrow Bay are representative of the hydrologically connected and immediately adjacent ICW. The ICW Work Area largely consists of developed, paved parking lots on both sides of the ICW. Coastal habitats associated with the Landfall/ICW Study Area in the vicinity of the ICW Work Area include beach and dune communities located along the sound side of the mainland and associated interdunal areas.

After reaching the mainland, the Onshore Transmission Cable generally will be confined to established road right-of-way (ROWs) and travel along East Concourse Drive and north along William Floyd Parkway, then west along Mastic Boulevard, north along Ashley Place, then west along Montauk Highway. The Onshore Transmission Cable route travels west to Yaphank Avenue, crossing the Carmans River and Yaphank Creek, before heading northwest within established road ROWs (generally, either the LIE Service Road or Peconic Avenue) before reaching the Union Avenue Site. From the Union Avenue Site, the Onshore Interconnection Cable will connect to the existing Holbrook Substation, via one of the potential Onshore Interconnection Cable routes as depicted on Figure 1, all of which are located along existing roadway and utility ROWs.

Terrestrial habitat adjacent to the Onshore Transmission Cable and Union Avenue Site largely consists of developed residential or industrial land uses, with the exception of forested wetlands and watercourses at the Carmans River and Yaphank Creek crossings. The Union Avenue North Site at the terminus of the Onshore Transmission Cable is primarily undeveloped partly forested site and tree clearing is expected. The Union Avenue South Site is primarily a developed industrial/commercial site with small narrow forested areas along parcel boundaries. The Onshore Interconnection Cable is also located generally within paved portion of existing roadway or utility ROWs.

3.2 WETLAND AND WATERBODY RESOURCES

3.2.1 Wetlands

3.2.1.1 NWI-Mapped Wetlands

The National Wetland Inventory (NWI) provides information on the general characteristics and distribution of different types of wetlands. Descriptions are all adapted from Cowardin et al. (1979) and as described in Federal Geographic Data Committee (2013). Based on a desktop review of NWI data, the Onshore Transmission Cable will cross NWI-mapped wetlands in three locations, as depicted in Appendix A, Figure 2:

• Estuarine wetlands (E1AB3L, E1UBL, and E2U5N) in Narrow Bay along the ICW HDD



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- Palustrine forested (PFO1E) and unconsolidated bottom (PUBHh) wetlands associated with the crossing of the Carmans River
- Palustrine forested (PFO1E) and riverine wetlands (R2UBH) associated with its crossing of Yaphank Creek

Estuarine wetlands are deepwater tidal habitats and adjacent tidal habitats that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff. Palustrine wetlands are nontidal wetlands dominated by trees, shrubs, persistent emergent vegetation, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 parts per thousand. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 ha (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2.5 m (8.2 ft) at low water; and (4) salinity due to ocean-derived salts less than 0.5 parts per thousand (FGDC 2013). Unconsolidated bottom wetlands have at least 25% cover of particles smaller than stones and a vegetative cover less than 30%.

Two small unconsolidated bottom (PUBHx) excavated NWI wetlands are mapped proximal to the Onshore Transmission Cable: one near the intersection of Blue Point Road and Expressway Drive S and a second near the intersection between Horse Block Road and Zorn Boulevard.

There are no wetland resources mapped proximal to the portion of the Peconic Avenue Route that differs from the LIE Service Road Route.

There are no wetlands mapped proximal to the Union Avenue Site.

Additional estuarine wetlands are adjacent to the Landfall Work Area and ICW Work Area but do not intersect with the proposed work area.

Finally, there is one NWI-mapped seasonally flooded, palustrine emergent persistent wetland (PEM1A) located approximately 150 ft (45.7 m) south of the Interconnection Cable Route as it runs parallel to I-495.

3.2.1.2 NYSDEC-Regulated Wetlands

Freshwater wetlands in New York, under Article 24 of the New York Environment Conservation Law (NYECL), must be at least 12.4 acres (5 ha) or provide local importance if smaller in area. An adjacent area of 100 ft (30.5 m) around a mapped NYSDEC freshwater wetland is regulated to provide further protection. Coastal tidal wetlands, under Article 25 of the NYECL, are those areas that border on or lie beneath tidal waters, such as, but not limited to, banks, bogs, salt marsh, swamps, meadows, flats or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters. An adjacent area of up to 300 ft (91.4 m) inland from the tidal wetland boundary are regulated to provide further protection.

The Landfall/ICW Study Area on Fire Island will be located within the 300 ft (91.4 m) adjacent area of tidal wetlands as mapped by the NYSDEC including Littoral Zone and Coastal Shoals, Bars, and Mudflats wetland categories within the ICW. The ICW HDD will be located underneath tidal wetlands as mapped



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by the NYSDEC including Littoral Zone and Coastal Shoals, Bars, and Mudflats wetland categories within the ICW. The Landfall/ICW Study Area on the Mainland will be located within the 300 ft (91.4 m) adjacent area of mapped Littoral Zone, Intertidal Marsh, and High Marsh tidal wetlands to the west of the site.

The Onshore Transmission Cable – LIE Service Road Route and the Onshore Transmission Cable – Peconic Avenue Route will traverse two areas of mapped NYSDEC-regulated freshwater wetlands based on a review of spatial data available from the NYSDEC:

- Wetlands (Class I) associated with the crossing of the Carmans River
- Wetlands (Class I) associated with the crossing of Yaphank Creek

Per 6 CRR-NY 664.5, Class I wetlands have any of the following seven characteristics:

- classic kettlehole bog
- provides resident habitat of an endangered or threatened animal species
- contains an endangered or threatened plant species
- supports an animal species in abundance or diversity unusual for the State
- is a tributary to a body of water which could subject a sustainably developed area to significant damage from flooding or from additional flooding should the wetland be modified, filled or drained
- is adjacent or contiguous to a reservoir or other body of water that is used primarily for public water supply, or it is hydraulically connected to an aquifer which is used for public water supply
- contains four or more of the Class II wetland characteristics

Class II wetlands per 6 CRR-NY 664.5 have any of the following 17 characteristics;

- emergent marsh in which purple loosestrife and/or reed (phragmites) constitutes less than two thirds of the cover type
- contains two or more wetland structural groups
- is contiguous to a tidal wetland
- is associated with permanent open water outside the wetland
- is adjacent or contiguous to streams classified C(t)³ or higher under Article 15 of the NYECL
- is traditional migration habitat of an endangered or threatened animal species
- is resident habitat of an animal species vulnerable in the State
- contains a plant species vulnerable in the State
- supports an animal species in abundance or diversity unusual for the county in which it is found
- has demonstrable archaeological or paleontological significance as a wetland
- contains, is part of, owes its existence to, or is ecologically associated with, an unusual geological feature which is an excellent representation of its type
- is tributary to a body of water which could subject a lightly developed area, an area used for growing crops for harvest, or an area planned for development by a local planning authority, to

³ Under 6 CRR-NY 608.1, the "C" classification is for waters supporting fisheries and a "t" standard is for waters that may support a trout population. A "ts" standard is for waters that may support trout spawning. Waters with a "B" classification have a best usage for swimming and other contact recreation, but not for drinking water. An "A" classification is assigned to waters that can be used as sources for drinking water.



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significant damage from flooding or from additional flooding should the wetland be modified, filled or drained

- is hydraulically connected to an aquifer which has been identified by a government agency as a potentially useful water supply
- acts in a tertiary treatment capacity for a sewage disposal system
- is within an urbanized area
- is one of the three largest wetlands within a city, town, or New York City borough
- is within a publicly owned recreation area

The Carmans River is mapped as a Formerly Connected tidal wetland and will be crossed by the Onshore Transmission Cable via HDD. Formerly Connected wetlands include wetland areas whose connections to tidal waters are restricted by roadways, dikes, and other anthropogenic features. NYSDEC marks Formerly Connected designation at the railroad crossing approximately 1,600 ft (487.7 m) south of the proposed crossing location.

Based on a review of available spatial data, there are no mapped NYSDEC-regulated freshwater wetlands along other areas of the Onshore Transmission Cable – LIE Service Road Route, the Onshore Transmission Cable – Peconic Avenue Route, at the Union Avenue Site, or along the Onshore Interconnection Cable. Appendix A, Figure 2 depicts wetlands resources from desktop review in the vicinity of the Landfall Work Area, ICW Work Area, Onshore Transmission Cable, Union Avenue Site, and Onshore Interconnection Cable.

3.2.2 Waterbodies

The National Hydrogeography Dataset is managed by the U.S. Geological Survey and provides spatial data on the nation's drainage networks and related features, including rivers, streams, canals, lakes, ponds, glaciers, coastlines, dams, and stream gages. Under Article 15 of the NYECL, certain waters of New York State are protected on the basis of their classification. Streams and small water bodies located in the course of a stream that are designated as C(t) or higher (i.e., C(ts), B, or A)³ are collectively referred to as "protected streams". Additionally, small ponds and lakes with a surface area of 10 acres (4 ha) or less, located within the course of a stream protection category of Protection of Waters.

Three waterbodies are intersected by the Onshore Transmission Cable – LIE Service Road Route and Onshore Transmission Cable – Peconic Avenue Route based on a review of available data:

- The ICW between the ICW Work Area at Smith Point County Park and ICW Work Area at Smith Point Marina
- Carmans River
- Yaphank Creek

No other mapped waterbodies are intersected by the Onshore Facilities. An unnamed freshwater pond (PABHx) is located proximal to the Onshore Transmission Cable – LIE Service Road Route but does not extend into the proposed corridor. There are no waterbody resources mapped proximal to the Onshore Transmission Cable – Peconic Avenue Route or the Union Avenue Site.



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Appendix A, Figure 2 depicts waterbody resources from desktop review in the vicinity of the Landfall Work Area, ICW Work Area, Onshore Transmission Cable, Union Avenue Site, and Onshore Interconnection Cable.

3.2.3 Wetland and Waterbodies Delineation

Between June 8–16 and October 19–20, 2020, Stantec wetland scientists conducted a wetland and waterbody delineation of the Onshore Facilities including the Landfall/ICW Study Area on Fire Island, Landfall/ICW Study Area on the Mainland, and the Onshore Transmission Cable Study Area, including both the LIE Service Road Route and Peconic Ave Route. Surveys at the Wertheim National Wildlife Refuge were completed under USFWS Research and Monitoring Special Use Permit #2020-17. Field surveys at the Union Avenue Site and along the Onshore Interconnection Route could not be conducted pending landowner permissions. These areas will be assessed once permissions have been granted. Stantec scientists delineated a total of eight wetlands and three watercourses within the Onshore Facilities. Details for each of these features are organized by project component below and in Appendix A, Figure 3. Photographs and USACE Wetland Determination Forms for each wetland are included in Appendix D. A summary table, Table 2, is provided below in Section 3.2.4.

Landfall Work Area:

- Wetland W-01ASA is characterized as an estuarine, intertidal wetland system (E1SS/EM) dominated by common reed (*Phragmites australis*), rambler rose (*Rosa multiflora*) and Jesuit's-bark (*Iva frutescens*), and is consistent with the NWI classification. Additional species of vegetation include northern bayberry, and eastern poison ivy. This wetland is located along the northeastern edge of the Smith Point County Park on the backslope of Fire Island abutting Great South Bay. The eastern portion of this feature overlaps with the Smith Point County Park SCFWH unit. See Section 3.3 for further discussion of this SCWFH. A wrack line was observed, with the upland edge of the wetland extending toward the parking lot to the south and east. The wetland contains sandy soils with redoximorphic features. At the time of the delineation, evidence of wetland hydrology included a high-water table (approximately 10 inches [in] below the ground surface), and saturation at the soil surface.
- Wetland W-01ASB is characterized as an estuarine, intertidal wetland system (E1SS/EM) dominated by groundsel tree (*Baccharis halimifolia*), common reed, rambler rose, and Jesuit's-bark and is consistent with the NWI classification. Additional species of vegetation include northern bayberry and eastern poison ivy. The wetland is located along the northeastern edge of the Smith Point County Park on the backslope of Fire Island abutting Great South Bay. A wrack line was observed, with the upland edge of the wetland extending toward the parking lot to the east and upland area of Fire Island National Seashore. The wetland contains sandy soils with redoximorphic features. At the time of the delineation, evidence of wetland hydrology included a high-water table (approximately 10 in below the ground surface), and saturation at the soil surface.



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 Wetland W-01CFA is an estuarine, intertidal wetland system (E1SS/EM) dominated by Jesuit'sbark, northern bayberry, and common reed. The wetland is located along the north edge of the Smith Point County Park on the backslope of Fire Island abutting Great South Bay. The wetland contains sandy soils with redoximorphic features. At the time of the delineation, evidence of wetland hydrology included soil saturation at the surface.

ICW Work Area:

- Wetland W-01ASC is a palustrine (freshwater), man-made basin dominated by common reed (PEM). Additional species of vegetation include eastern poison ivy. The wetland is located several hundred ft inland from the northern shore of Great South Bay at the Smith Point Marina on the mainland and consists of two manmade catchment areas surrounded by boat launch parking. The northern and southern basins are bisected by an asphalt travel lane in the parking area that may provide overland surface flow during extreme rain events. This feature occurs within the Town of Brookhaven Coastal Zone Area South CEA unit. See Section 3.3 for further discussion of this CEA. The wetland contains sandy soils with redoximorphic features. At the time of the delineation, evidence of wetland hydrology included soil saturation within 12 in of the surface, geomorphic position, and soil cracks.
- Wetland W-01CFB is a palustrine (freshwater), man-made basin dominated by common reed (PEM). The wetland is located on the southeastern shore of Great South Bay at the Smith Point Marina on the mainland, along the edge of the survey area. This feature occurs within the Town of Brookhaven Coastal Zone Area South CEA unit. The wetland contains sandy soils with redoximorphic features. At the time of the delineation, evidence of wetland hydrology included soil saturation within 12 in of the surface, geomorphic position, and soil cracks. A portion of the wetland located outside the survey limits contained standing water and waterfowl were observed.

Onshore Transmission Cable routes:

- Wetland W-01ASD is characterized as palustrine (freshwater) scrub/shrub wetland (PSS1E) that is within a riparian area adjacent to Yaphank Creek. It is located along Montauk Highway northeast of the intersection with Old South County Road. Dominant vegetation within the wetland includes rambler rose, Chinaroot (*Smilax hispida*), spotted touch-me-not (*Impatiens capensis*), river-bank grape (*Vitis riparia*), and smooth arrow-wood (*Viburnum recognitum*). At the time of the delineation, evidence of wetland hydrology included a high-water table (approximately 8 in below the ground surface) and saturation at the soil surface.
- Wetland W-01ASE is a palustrine (freshwater) scrub/shrub wetland dominated by skunkcabbage (*Symplocarpus foetidus*) and jewelweed located along Montauk Highway south of the intersection with Old South County Road. This feature occurs within the Town of Brookhaven Coastal Zone Area South CEA unit. Other vegetation within the wetland includes rambler rose and Chinaroot. At the time of the delineation, evidence of wetland hydrology included a highwater table (approximately 8 in below the ground surface) and saturation at the soil surface.



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- Wetlands W-01CFC/01JRB and W-01CFD/01JRA are characterized as palustrine (freshwater) forested wetlands (PFO1E) along the banks of Carmans River and have been documented as a high-value Red Maple Blackgum Swamp (a NYNHP Significant Natural Community). Both features are within the Town of Brookhaven Coastal Zone Area South CEA unit and the Carmans River SCFWH. The forested wetlands and Carmans River are part of the USFWS Wertheirm National Wildlife Refuge along Montauk Highway (County Road 80). Dominant vegetation within these wetlands include red maple (*Acer rubrum*), black tupelo (*Nyssa sylvatica*) trees with coastal sweet-pepperbush (*Clethra alnifolia*), northern spicebush (*Lindera benzoin*), and northern arrowwood shrubs and skunk-cabbage, cinnamon fern (*Osmundastrum cinnamomeum*), and sensitive fern (*Onoclea sensibilis*) in the herbaceous layer. Common reed, highbush blueberry, and horsebrier (*Smilax rotundifolia*) are scattered within the wetlands. The forested wetlands contain deep organic soils near the Carmans River impoundment and sandy soils with a stripped matrix along the wetland edges. At the time of the delineation, evidence of wetland hydrology included a shallow water table, saturation at the soil surface, and water-stained leaves.
- Watercourse S-01CF is a freshwater river (Carmans River R2UBH) that crosses the Onshore Transmission Cable Survey Area, is classified as a SCFWH and is within the Town of Brookhaven Coastal Zone Area South CEA unit. The river flows southeast under Montauk Highway along the banks of the forested wetland portions of W-01CFC and W-01CFD. The river adjacent to the highway was flooded up to the forested wetlands on both banks and contained a mucky substrate. At the time of the delineation, approximately 3 to 4 ft of flowing water was observed within the stream channel. Several people were observed kayaking in the river during the delineation.
- Watercourse S-01AS is a small freshwater intermittent stream (Yaphank Creek) where it crosses the Onshore Transmission Cable Survey Area. The stream flows under Montauk Highway through a culvert in a southern direction. The feature was dry in June with an ordinary high-water mark of approximately 3 ft and bank depth of 1 ft.
- Watercourse S-02MA is a small freshwater perennial tributary stream (R2UB3) of the Carmans River and originates from a groundwater seep adjacent to the Montauk Highway. It flows westerly for approximately 100 ft before intersecting the Carmans River. This feature is within the Town of Brookhaven Coastal Zone Area South CEA unit and overlaps with high-value Red-Maple-Blackgum swamp. The banks of the stream were approximately 7 ft wide and the stream had a deep mucky substrate. Approximately 6 to 8 in of water were observed within the channel at the time of the delineation.

Functions and values provided by the wetlands located within the Onshore Facilities include groundwater recharge and discharge, floodflow alteration, and water quality protection (i.e., sediment/toxicant retention and nutrient removal). Those wetlands associated with Great South Bay and Carmans River provide fish and shellfish habitat, wildlife habitat, endangered species habitat, significant social values such as recreation, education/scientific value, uniqueness/heritage, and visual quality/aesthetic values. Although these functions and values are not principal for all the delineated wetlands, it is expected that they provide these functions and values by varying degrees depending on characteristics such as size,



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percent vegetation cover, and landscape position. Larger wetland complexes would have a greater capacity to provide most functions. Similarly, wetlands dominated by dense vegetation would be capable of retaining and slowing surface water flow, thereby reducing potential flooding and protecting water quality by allowing sediment to settle out of the water column. Key functions and values of the delineated features within the Onshore Facilities are summarized in Table 1.



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| Feature ID | Groundwater recharge & discharge | Floodflow alteration | Sediment retention and nutrient removal | Sediment and shoreline stabilization | Fish and shellfish habitat | Wildlife habitat | RTE species habitat | Recreation, educational, scientific value, uniqueness, visual quality, aesthetics |
|---------------|--|-------------------------|--|--|----------------------------------|---------------------|------------------------|---|
| W-01ASA | | × | × | × | | × | | |
| W-01ASB | | × | × | × | | × | | |
| W-01ASC | | × | × | | | × | | |
| W-01ASD | × | × | × | х | | × | × | |
| W-01ASE | × | × | × | х | | × | × | |
| W-01CFA | | × | × | × | | × | | |
| W-01CFB | | × | × | × | | × | | |
| W-01CFC/01JRB | × | × | × | × | | × | × | х |
| W-01CFD/01JRA | × | × | × | × | | × | × | х |
| S-01AS | | | | | х | х | | |
| S-01CF | | × | | | × | × | × | × |
| S-02MA | x | × | | | × | × | × | |

Table 1. Summary of Functions and Values of Delineated Features

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3.2.4 Summary

Table 2 summarizes the wetland and waterbody resources associated with the Onshore Facilities. The location of the wetland and waterbody resources relative to the Onshore Facilities are provided in Appendix A, Figure 3. Field results supported the results of the desktop assessment and allowed for further refinement of wetland and waterbody locations relative to the Onshore Facilities. As expected, these resources were concentrated in several locations: Landfall/ICW Study Area on Fire Island, Carmans River and Yaphank Creek within the Onshore Transmission Cable Route Study Area. No wetland or waterbodies were delineated along the Onshore Transmission Cable route variations.



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Table 2. Summary of Wetland and Waterbody Resources

| Onshore Facility | | Wetland and Waterbody Resources Documented via Desktop Review | Wetland and Waterbody Resources Identified Via Field Survey | | |
|----------------------------------|---|--|---|--|--|
| | | Wetlands | Delineated Wetlands | | |
| | Landfall Work Area | NYSDEC-mapped tidal wetlands (adjacent) NYSDEC-mapped estuarine wetlands (adjacent) | • Estuarine (W-01ASA, W-01ASB, and W-01CFA) | | |
| | | Waterbodies | Delineated Waterbodies | | |
| Landfall/ICW Study Area on | | Atlantic Ocean (adjacent)Great South Bay (adjacent) | None | | |
| Fire Island and Mainland | | Wetlands | Delineated Wetlands | | |
| Mainland | ICW Work Area | NYSDEC-mapped tidal wetlands (adjacent) NYSDEC-mapped estuarine wetlands (adjacent) | Palustrine (W-01ASC and W-01CFB) | | |
| | | Waterbodies | Delineated Waterbodies | | |
| | | Narrow Bay (adjacent) | None | | |
| Onshore Transmission Cable | LIE Service Road Route and Peconic Avenue Route | Wetlands NYSDEC-mapped Formerly Connected tidal wetlands at Carmans River crossing NYSDEC-mapped freshwater wetlands at and adjacent to Carmans River and Yaphank Creek crossing NWI-mapped wetlands at Carmans River and Yaphank Creek crossings | Delineated Wetlands Palustrine (W-01ASD and W-01ASE) near Yaphank Creek Palustrine (W-01CFC/01JRB and W-01CFD/01JRA) near Carmans River | | |
| | | Waterbodies | Delineated Waterbodies | | |
| | | Carmans RiverYaphank Creek | Watercourse S-01AS (Yaphank Creek) Watercourse S-01CF (Carmans River) Watercourse S-02MA (tributary to Carmans River) | | |
| Union Avenue Site | e | None | Pending access permission for field surveys | | |
| Interconnection Route | | NWI-mapped wetland south of route as it parallels I-495 | Pending access permission for field surveys | | |



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3.3 SIGNIFICANT AND CRITICAL NATURAL COMMUNITIES AND HABITATS

3.3.1 Critical Environmental Areas

A portion of the Landfall/ICW Study Area intersects with the Coastal Zone Area South CEA on the Mainland. In addition, the Onshore Transmission Cable traverses the Coastal Zone Area South CEA in an approximately 1-mi (1.6-km) segment along William Floyd Parkway from ICW Work Area to its intersection with Fawn Place as well as an approximately 0.7-mi (1.1 km) segment at the Carmans River crossing. Coastal Zone Area South CEA has been designated by the Town of Brookhaven to protect public health, open space, and wetlands. The Onshore Facilities within this CEA have been largely located within existing developed areas including parking lots and paved roadways. The Onshore Transmission Cable crossing of the Carmans River and associated wetlands will be constructed through use of HDD to avoid and minimize impacts within undeveloped areas.

3.3.2 Significant Coastal Fish and Wildlife Habitats

There are four SCFWHs associated with the Onshore Facilities:

- Great South Bay-East
- Smith Point County Park
- Moriches Bay
- Carmans River

Great South Bay–East

The Great South Bay–East SCFWH is located in the portion of the ICW between Landfall/ICW Study Area on Fire Island and the Landfall/ICW Study Area on Mainland, west of the Smith Point Bridge. The Great South Bay–East SCFWH is identified as the largest protected, shallow, coastal bay in New York State and provides feeding and nesting habitat for several RTE avian species and supports one of the largest concentrations of wintering waterfowl in New York State (NYSDEC 2008a).

The ICW HDD will traverse this SCFWH but will be installed using HDD to avoid and minimize potential impacts to this area.

Smith Point County Park

The Smith Point County Park SCFWH intersects the Landfall/ICW Study Area on Fire Island. The Smith Point County Park SCFWH is identified as one of the largest segments of an undeveloped barrier beach ecosystem on Long Island and provides feeding and nesting habitat for several RTE avian species and supports populations of RTE plant species such as seabeach amaranth (*Amaranthus pumilus*) and seabeach knotweed (*Polygonum glaucum*). The park receives heavy recreational use during the summer months and is subject to disturbance by pedestrian and off-road vehicle traffic. The dunelands also comprise a significant segment of the fall migration corridor for raptors (NYSDEC 2008b).



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The Landfall Work Area on Fire Island overlaps portions of the mapped SCFWH but the Landfall Work Area and ICW Work Area are located in developed parking lots, which will avoid direct impacts. If conducted on the beach, HDD cable duct stringing activities would require laydown of linked conduit sections within this SCFWH prior to installation via HDD. HDD stringing work may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between October and March.

Moriches Bay

The Moriches Bay SCFWH abuts the Landfall/ICW Study Area on Fire Island. It is identified as one of the largest, protected, shallow, coastal bays in New York State and provides feeding and nesting habitat for several RTE avian species and supports significant concentrations of wintering waterfowl in New York State. It is a highly productive bay and supports regionally significant habitat for fish and shellfish, migrating and wintering waterfowl, colonial nesting waterbirds, beach-nesting birds, migratory shorebirds, raptors, and rare plants (NYSDEC 2008c).

The Landfall/ICW Study Area on Fire Island abuts this SCFWH but the Landfall Work Area and ICW Work Area are located in developed parking lots, which will avoid direct impacts.

Carmans River

The Carmans River SCFWH intersects the Onshore Transmission Cable where the cable crosses the Carmans River. The Carmans River SCFWH is identified as one of only four major riverine systems on Long Island and it contains undeveloped lands and is used by rare species including peregrine falcon (*Falcos peregrinus*), eastern tiger salamander (*Ambystoma tigrinum*), eastern box turtle (*Terapene carolina*), osprey (*Pandion haliaetus*), and potentially pied-billed grebe (*Podilymbus podiceps*). The Carmans River SCFWH is also identified as one of the few streams on Long Island that support concentrations of sea-run brown trout (*Salmo trutta*) and wild brook trout (*Salvelinus fontinalis*) (NYSDEC 2008d).

The Onshore Transmission Cable will traverse this SCFWH but will be installed using HDD to avoid and minimize potential impacts to this area.

3.3.3 Significant Natural Communities

There are five significant natural community types associated with the proposed Onshore Facilities as identified by the NYNHP in their March 27, 2020, letter:

- Maritime Beach
- Marine Eelgrass Meadow
- Red Maple Blackgum Swamp
- Brackish Tidal Marsh
- Marine Back-barrier Lagoon



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Maritime Beach

A Maritime Beach is associated with the Landfall/ICW Study Area on Fire Island. It is part of a 32-mi (51.5-km) community partially within the Smith Point County Park SCFWH area on Fire Island. The Maritime Beach is a sparsely vegetated community dominated by beach grass. It occurs on unstable sand, gravel, or cobble shores above the mean high tide line and is continually modified through wave and wind action (NYSDEC 2008b; Edinger at al. 2014).

Locating components within an existing parking lot at the Fire Island landfall location and utilizing HDD construction methods for cable installation will avoid and minimize potential impacts to this natural community.

If conducted on the beach, HDD cable duct stringing activities would require laydown of linked conduit sections within this SCFWH prior to installation via HDD. HDD stringing work may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between October and March.

Maritime Eelgrass Meadow

Areas of extensive Maritime Eelgrass Meadow are located in Narrow Bay between Smith Point County Park and Smith Point Marina. The NYNHP states that the community is in good condition within a fair quality landscape. The community is dominated by eelgrass (*Zostera marina*) along with occurrences of wigeon grass (*Ruppia maritima*). It also supports a diverse array of attached and suspended marine algae. The areas of submerged aquatic vegetation are highly productive and provide spawning and foraging habitat for many species of mollusks, crustaceans, juvenile fish, and diving ducks and they also enhance sediment stability (NYSDEC 2008a; Edinger at al. 2014).

Installation of the Onshore Transmission Cable via HDD under the ICW will avoid and minimize potential impacts to this community type.

Red Maple – Blackgum Swamp

A Red Maple – Blackgum Swamp is located along the eastern shore of the Carmans River at the Onshore Transmission Cable crossing. The community is dominated by red maple, black tupelo, and coastal sweet-pepperbush (NYSDEC 2008d). The NYNHP notes in their March 27, 2020, letter that the swamp is of moderate size with good diversity and some large diameter trees. A second community area is located approximately 300 ft (91.4 m) south of the Onshore Transmission Cable crossing of Yaphank Creek, just east of South Haven School along Montauk Highway.

Installation of the Onshore Transmission Cable via HDD construction under the Carmans River and Yaphank Creek is anticipated to avoid potential impacts to this community type

Brackish Tidal Marsh

The NYNHP identified an occurrence of a Brackish Tidal Marsh approximately 0.4 mi (0.6 km) south of the Onshore Transmission crossing of the Carmans River. The community is approximately 214 acres (87



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ha) and dominated by graminoids including salt marsh bulrush (*Bolboschoenus robustus*), Olney three-square (*Schoenoplectus americanus*), and wild rice (*Zizania aquatica*) (NYSDEC 2008d).

The Onshore Transmission Cable location is approximately 0.4 mi (0.6 km) north of this community and, therefore, no impacts to this community type are anticipated.

Marine Back-barrier Lagoon

In its March 27, 2020, letter, the NYNHP notes an occurrence of a Marine Back-barrier Lagoon associated with Great Bay South and Moriches Bay near the Landfall/ICW Study Area. NYNHP indicates that it is a very large system in good condition within a fair, but mostly developed landscape.

Installation of the Onshore Transmission Cable via HDD construction under the ICW will avoid and minimize potential impacts to this community type.

3.3.4 Central Pine Barrens

The Long Island Pine Barrens Protection Act established an approximately 105,000-acre (42,492-ha) region on Long Island in 1993. The region includes an approximately 52,500-acre (21246-ha) Core Preservation and an approximately 47,500-acre (19,223-ha) Compatible Growth Area. In general, land use of the pine barren region addresses preservation of the pine barren ecosystem and water quality as well as addressing development patterns, land use categories, and agricultural, recreational, and human uses. Development activities within the region are regulated by the Central Pine Barrens Joint Planning and Policy Commission (Central Pine Barrens Joint Planning and Policy Commission 2012). The Onshore Transmission Cable traverses the Central Pine Barrens Core Preservation Area and Compatible Growth Area at and adjacent to the Carmans River crossing (Appendix A, Figure 4). Most of the Core Preservation Area at this location is mapped as forested wetland communities including a rare Red Maple – Blackgum Swamp. The adjacent uplands are dominated by oak (*Quercus* spp.) trees based on a review of available imagery. Installation of the Onshore Transmission Cable via HDD construction under the Carmans River to minimize impacts to sensitive resources within the Core Preservation Area.

Installation of the Onshore Transmission Cable via HDD construction under the Carmans River will minimize potential impacts to this community type.

3.3.5 Field Assessment of Natural Communities

General natural communities were characterized during the wetland delineation efforts. In general, most of the Onshore Facilities are associated with a developed landscape, consisting of existing commercial, industrial, and residential development and associated transportation infrastructure. The Onshore Transmission Cable routes are predominately associated with roadway ROWs and impervious asphalt or paved surfaces. Field efforts focused on characterizations of the Onshore Facilities that intersect or are proximal to significant or high value natural communities identified during the desktop assessment, including the natural communities associated with the Carmans River, Fire Island, and Smith Point Marina.



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Carmans River Crossing

As identified during the desktop assessment and confirmed during the wetland delineations, the forested wetlands associated with the Carmans River support a rare Red Maple – Blackgum Swamp community. The community structure is well developed with a mature canopy of red maple and black tupelo (blackgum) trees. The understory is densely vegetated with shrubs consisting primarily of coastal sweet-pepperbush. Highbush blueberry and clammy azalea (*Rhododendron viscosum*) shrubs and horsebrier vines are scattered within the community. Herbaceous species are rather sparse within the community and include cinnamon fern and skunk-cabbage. The portion of the community closest to the Carmans River is regularly inundated and vegetation is restricted to hummocks interspersed amongst inundated areas. The substrate consists of deep organic muck. Further from the edge of the Carmans River, the microtopography is flatter and dominated by firm, sandy soils. These areas are periodically flooded.

Invasive species are abundant along the edge of the community near Montauk Highway and include a suite of common invasive species such as Norway maple (*Acer platanoides*), Oriental bittersweet (*Celastrus orbiculatus*), Japanese honeysuckle (*Lonicera japonica*), common reed, rambler rose, wineberry (*Rubus phoenicolasius*), common buckthorn (*Rhamnus cathartica*), garlic-mustard (*Alliaria petiolata*), common mugwort (*Artemisia vulgaris*), and Japanese stilt-grass (*Microstegium vimineum*). Although present along the roadway edge, few observations of invasive species were noted in the interior of the wetland.

The upland forests to the east of the Carmans River and west of Smith Road are characterized as a Coastal Oak-Hickory Forest. This upland is dominated by trees of scarlet oak (*Quercus coccinea*) and white oak (*Quercus alba*) with scattered hickories (*Carya* spp.). The understory diversity is low and consists primarily of shrubs such as black huckleberry (*Gaylussacia baccata*) and Blue Ridge blueberry (*Vaccinium pallidum*). Horsebrier vines are scattered within the forest. Herbaceous species are sparse and include Pennsylvania sedge (*Carex pensylvanica*), eastern teaberry (*Gaultheria procumbens*), and bristly dewberry (*Rubus hispidus*).

Landfall/ICW Study Area

Beach, dune, and other undeveloped areas at the Landfall/ICW Study Area were evaluated during the field delineations. The most prominent features of the Landfall/ICW Study Area are the presence of a Maritime Beach and Maritime Dunes along the southern edge of the site landward of the Atlantic Ocean. The Maritime Beach community is dominated by sand and is unvegetated. It is extensively utilized by the public and portions of the beach are open to vehicle traffic. It is a dynamic community and subjected to storm surges and other erosional and depositional events. The landward portion of the Maritime Beach transitions into Maritime Dune community. The frontal dune community is dominated by American beach grass. A small colony of common reed was observed in the eastern end of the survey area. The frontal dune is a dynamic community and migrates based on wind erosion / deposition and storm surges.

The back-dune system is more stabilized and includes small trees and saplings of pitch pine (*Pinus rigida*) as well as American beach grass. At the time of survey, the width of the Maritime Dune system



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varied between approximately 150 and 250 ft. Several established trails traverse the dunes to allow public access.

The northern portion of the Landfall/ICW Study Area on Fire Island includes a Maritime Shrubland community along the ICW. This is a rather densely vegetated shrubland characterized by shrubs of groudseltree, Jesuit's-bark, and northern bayberry. Herbaceous species include slender goldentop (*Euthamia caroliniana*), wand panic grass (*Panicum virgatum*), woolly beachheather (*Hudsonia tomentosa*), alkali grass (*Puccinellia* spp.), little false bluestem (*Schizachyrium scoparium*), rosette-panicgrasses (*Dichanthelium* spp.), pitch pine, and needle beak sedge (*Rhynchospora capillacea*). Common reed becomes progressively denser towards the water edge within the community. The remainder of the Landfall/ICW Study Area consists of impervious surfaces and development including parking lots, roadways, and buildings.

Smith Point Marina

Smith Point Marina and the associated ICW Work Area is largely developed with an existing boat launch and parking area. The wetland communities, as described above, are largely dominated by common reed and are unexceptional. A narrow vegetated buffer is provided between the parking lot and the shoreline along the ICW to the south. This area is similarly dominated by invasive species including common reed and common mugwort. A small dune area is present in the southeastern portion of the ICW Work Area. This is an unexceptional community and has been affected by vehicular and pedestrian activity. Dominant vegetation includes American beach grass, Jesuit's-bark, northern bayberry, seaside goldenrod (*Solidago sempervirens*), wand panic grass, and beach sedge (*Carex silicea*).

3.3.6 Summary

Table 3 summarizes the significant and critical natural communities and habitats associated with the Onshore Facilities. The locations of CEAs, SCFWH, NYSHP Significant Natural Communities, and the Central Pine Barrens relative to the Onshore Facilities are provided in Appendix A, Figure 3. Field results support the results of the desktop assessment of the Onshore Facilities.



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| Onshore Facility | | Significant and Critical Natural Communities and Habitat Resources Present | Significant and Critical Natural Communities and Habitat Resources Identified Via Field Survey | | |
|-----------------------|--|---|--|--|--|
| | | Critical Environmental Areas | Critical Environmental Areas | | |
| | | None | None observed | | |
| | | SCFWH | SCFWH | | |
| Landfall/ICW St | udv Area (Fire | Smith Point County Park Moriches Bay (adjacent) Great South Bay-East (adjacent) | Smith Point County ParkMoriches BayGreat South Bay | | |
| Island and Main | | Significant Natural Communities | Significant Natural Communities | | |
| | | Maritime Beach Marine Eelgrass Meadow (adjacent) Marine Back-barrier Lagoon (adjacent) | Maritime BeachGreat South Bay | | |
| | | Central Pine Barrens | Central Pine Barrens | | |
| | | • None | None observed | | |
| | LIE Service Road Route and Peconic Avenue Route | Critical Environmental Areas Coastal Zone Area South at ICW HDD and associated Work Area; Carmans River crossing | Confirmed by field survey | | |
| | | SCFWH | SCFWH | | |
| | | Moriches Bay (adjacent to ICW HDD) Great South Bay-East (ICW HDD) Carmans River crossing | Confirmed by field survey | | |
| Onshore | | Significant Natural Communities | Significant Natural Communities | | |
| Transmission Cable | | Marine Eelgrass Meadow (ICW HDD) Marine Back-barrier Lagoon (ICW HDD) Red Maple – Blackgum Swamp (Carmans River; adjacent to Yaphank Creek crossings) Brackish Tidal Marsh (Carmans River; ~0.4 mi downstream) | • Red Maple – Blackgum Swamp (Carmans River) | | |
| | | Central Pine Barrens | Central Pine Barrens | | |
| | | Carmans River crossing | Confirmed by field survey | | |
| Union Avenue Site | | None | Pending access permission for field surveys | | |
| Interconnection Route | | • None | Pending access permission for field surveys | | |

Table 3. Summary of Significant and Critical Natural Communities and Habitats



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3.4 RARE, THREATENED, AND ENDANGERED SPECIES

3.4.1 Plants

In its March 27, 2020, letter, the NYNHP identified known occurrences of several RTE plant species within the vicinity of the Onshore Facilities. The USFWS IPaC query indicated known occurrences of two species of federally listed plant species proximal to the Onshore Facilities. Table 4 summarizes the known RTE plant occurrences and potential habitat for those species associated with the Onshore Facilities components based on desktop review and field surveys⁴.

⁴ Field surveys for RTE plants evaluated the potential for suitable habitat within the Onshore Facilities and were not targeted surveys to determine potential presence / probable absence of species.



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Table 4. RTE Plant and NYS Watch List Species Documented by NYSDEC or USFWS within the Vicinity of OnshoreFacilities and Occurrence Based on Field Surveys

| Species | State Listing | Federal Listing | Habitat Association | Approximate Location ² | Potential at Onshore Facilities (Desktop) | Field Results ³ | | | | |
|--|------------------|--------------------|---|---|---|--|--|--|--|--|
| Plants | Plants | | | | | | | | | |
| Sandplain Gerardia ¹ <i>Agalinis acuta</i> | Endangered | Endangered | Maritime grassland and shrubland | No location information provided | Landfall/ICW Study Area Onshore Transmission Cable | None observed; potential habitat at Landfall/ICW Study Area | | | | |
| Seabeach Amaranth ¹ <i>Amaranthus</i> <i>pumilus</i> | Threatened | Threatened | Maritime beach | No location information provided | Landfall/ICW Study Area Onshore Transmission Cable | None observed; potential habitat at Landfall/ICW Study Area | | | | |
| Blunt-lobe Grape Fern ² <i>Botrychium</i> oneidense | Threatened | | Floodplain forest, Red Maple – Blackgum Swamp | Southaven County Park, within 0.25 mi (0.4 km) of Onshore Transmission Cable; in wet soil under shrubs and vines in red maple swamp | Onshore Transmission Cable | None observed; potential habitat at Carmans River wetlands | | | | |
| Collins' Sedge ² Carex collinsii | Endangered | | Red Maple – Blackgum Swamp | Southaven County Park, within 0.25 mi (0.4 km) of Onshore Transmission Cable; abandoned fish hatchery (part of Suffolk County Park) in a red maple- tupelo swamp | Onshore Transmission Cable | None observed; potential habitat at Carmans River wetlands | | | | |
| Water Pigmyweed ² <i>Crassula aquatica</i> | Endangered | | Freshwater intertidal mudflat, freshwater intertidal shore, and freshwater tidal marsh | Onshore Transmission Cable: Carmans River, west side immediately south of Montauk Highway; bank of an intertidal section of river at a road embankment | Onshore Transmission Cable | None observed; potential habitat in Carmans River | | | | |
| Sandplain Wild Flax ² | Threatened | | Maritime dunes, maritime grassland, maritime | Within 0.5 mi (0.8 km) of Onshore Transmission Cable: Station Avenue roadside; plants are on a pine barrens roadside | Onshore Transmission Cable | None observed; minimal potential habitat | | | | |



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| Species | State Listing | Federal Listing | Habitat Association | Approximate Location ² | Potential at Onshore Facilities (Desktop) | Field Results ³ |
|---|------------------|--------------------|---|---|---|---|
| Linum intercursum | | | shrubland, and pitch pine-scrub oak barrens | with very sparse vegetation, dominated by grasses and legumes | | |
| Fish and Wildlife | | | | | | |
| Hairy-necked tiger beetle ² Cicindela hirticollis | | | Maritime beach and dunes | Great South Beach at Fire Island | Landfall/ICW Study Area Onshore Transmission Cable | None observed; potential habitat at Landfall/ICW Study Area |
| Eastern pirate perch ² Aphredoderus sayanus sayanus | | | Rivers and streams | Carmans River south of Montauk Highway and north of State Route 27; Yaphank Creek | Onshore Transmission Cable | None observed; potential habitat in Carmans River and Yaphank Creek |
| Atlantic silverside ² <i>Menidia menidia</i> | | | Rivers and streams | Carmans River south of Montauk Highway | Onshore Transmission Cable | None observed; potential habitat in Carmans River |

¹ Source: USFWS Information for Planning and Consultation (IPaC). Accessed March 11, 2020

² Source: New York Natural Heritage Program Letter, March 27, 2020

³ Field surveys for RTE plants evaluated the potential for suitable habitat within the Onshore Facilities and were not targeted surveys to determine potential presence / probable absence of species.

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In addition to the above species, approximately 100 additional RTE plant recently or historically confirmed occurrences are identified within the Town of Brookhaven based on a query of the New York Nature Explorer database (Appendix C). RTE species known from the Town of Brookhaven are associated with a variety of habitats including coastal and freshwater wetlands (including open and forested areas), aquatic habitats, early successional communities, open and disturbed upland areas, pine barrens, edge habitats, upland forests, and coastal dunes and shrublands.

Based on desktop and field review, the Onshore Facilities are largely confined to existing developed and impervious areas including road ROWs and parking lots where RTE plants are unlikely to occur. Furthermore, trenchless crossing installation will be utilized to avoid impacts to wetland areas that may provide habitat for wetland-associated RTE plant species such as blunt-lobe grape-fern (*Botrychium oneidense*), Collins' sedge (*Carex collinsii*), and water pigmyweed (*Crassula aquatica*). During field surveys, blunt-lobed grape fern was not observed in the Red Maple – Blackgum Swamp community at Carmans River; however, populations of this species are often small and consist of a single individual and may be overlooked in the absence of a detailed search. Similarly, the saturated organic soils of the Red Maple – Blackgum Swamp community at the Carmans River crossing provide suitable habitat for Collins' sedge. Potential habitat for water pygmyweed is also present in the shallow aquatic habitats of the Carmans River. This species' location provided by NYSDEC indicated that it has been previously observed in Carmans River at the downstream bridge abutment at the Montauk Highway crossing. This area was investigated from the shore during the field survey, but no specimens were observed. Small waterwort (*Elatine minima*), a common aquatic species that often occurs with water pygmyweed populations was observed in this location.

The Maritime Beach community at the Landfall/ICW Study area provides potentially suitable habitat for seabeach amaranth. However, field surveys noted that this area is used extensively for recreation and the associated impacts from pedestrian and vehicle traffic substantially limits the likelihood of seabeach amaranth occurrences. Potentially suitable habitat for sandplain gerardia is provided in the northern portion of the Landfall/ICW Study Area on Fire Island within the Maritime Shrubland community north of the parking area. This community supports maritime grassland-associated species interspersed within sandy openings amongst patches of shrubs. Potential habitat for sandplain wild flax is also provided in the Maritime Dune community within the Landfall/ICW Study Area, particularly in the stable back dune areas. Potentially suitable habitat is also available in the Maritime Shrubland community in areas noted above for sandplain gerardia.

3.4.2 Inland Fisheries and Non-Avian Wildlife

In its March 27, 2020, letter, the NYNHP identified an occurrence of hairy-necked tiger beetle (*Cincindela hirticollis*), a rare but unlisted species, near the Landfall/ICW Study Area on Fire Island. The species is associated with a sand beach. A review of aerial imagery indicates that the ICW HDD Work Area also contains exposed sandy areas and field surveys noted the Maritime Dune community provides potentially suitable habitat for hairy-necked tiger beetle. In addition, the NYNHP identified two unlisted but rare fish occurrences within the Carmans River near the Onshore Transmission Cable: eastern pirate perch (*Aphredoderus sayanus*) and Atlantic silverside (*Menidia menidia*). Eastern pirate perch was also noted as occurring in Yaphank Creek. Field surveys confirmed that aquatic habitats of Carmans River and



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Yaphank Creek provide potentially suitable habitat for eastern pirate perch and Atlantic silverside as suggested by the NYNHP. The USFWS IPaC database query did not indicate occurrences of federally listed fish or non-avian or bat wildlife species proximal to the Onshore Facilities.

A query of the New York Nature Explorer database indicates that several other species of fish and nonavian wildlife species are known from the Town of Brookhaven (Appendix C). Many of the RTE species are associated with aquatic or wetland habitats, such as odonates (e.g., dragonflies and damselflies), or associated with pitch pine barrens, including species of moths and butterflies.

Trenchless crossing installation will be utilized to avoid sensitive environmental resources at certain crossing locations, which will avoid and minimize impacts to aquatic and wetland habitats that may support sensitive fish or invertebrate species. Similarly, activities at the Landfall Work Area proximal to sand beach habitat on Fire Island will be confined to existing developed areas to avoid and minimize potential impacts to hairy-necked tiger beetle. If conducted on the beach, HDD conduit stringing, however, may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between October and March. Although the Onshore Transmission Cable traverses the Central Pine Barrens Core Habitat, impacts to pine barren communities will be minimized during design, based on HDD installation at the Carmans River crossing. Additional impacts to pine barrens are not anticipated as the majority of the proposed Onshore Transmission Cable components are located within previously disturbed and/or developed areas and do not intersect mapped pine barren communities.

3.4.3 Field Observations of RTE Species

No RTE species were observed within the surveyed portions of the Onshore Facilities during field visits in June and October 2020. While the Union Avenue site and the Interconnection Route were not visited, the presence of RTE species here is unlikely given the industrial and commercial nature of these areas.

Overall, the habitats associated with the Onshore Facility provide limited habitat for RTE species given the prevalence of existing development and presence of invasive species. However, natural communities associated with the Carmans River and Landfall/ICW Study Area exhibited habitat characteristics potentially suitable for several RTE species known from the vicinity.

3.5 INVASIVE SPECIES

Over 100 non-native invasive plant species occurrences have been documented proximal to the Onshore Facilities based on a query of the New York iMapInvasives database (NYNHP 2020). The invasive plant species documented include the following:

- Norway maple (Acer platanoides)
- Tree-of-heaven (Ailanthus altissma)
- Japanese barberry (*Berberis thunbergii*)
- Oriental bittersweet (Celastrus orbiculatus)
- Black swallow-wort (Cynanchum louiseae)
- European privet (*Ligustrum vulgare*)



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- Japanese honeysuckle (Lonicera japonica)
- Purple loosestrife (Lythrum salicaria)
- Chinese silvergrass (*Miscanthus sinensis*)
- Princess tree (*Paulownia tomentosa*)
- Mile-a-minute weed (Persicaria perfoliata)
- Common reed (*Phragmites australis*)
- Japanese knotweed (Fallopia japonica)
- Black locust (*Robinia pseudoacacia*)
- Rambler rose (Rosa multiflora)
- Wineberry (Rubus phoenicolasius)
- Climbing nightshade (Solanum dulcamara)
- Great mullein (Verbascum thapsus)
- Common periwinkle (Vinca minor)

Most of the occurrences are associated with the Wertheim National Wildlife Refuge in the vicinity of the Carmans River and Montauk Highway areas along the Onshore Transmission Cable routes. Additional locations of invasive plants have been documented proximal to the HDD work areas. In addition, the March 2019 Final Design Report / Environmental Assessment for the replacement of the William Floyd Parkway, Route CR 46 over Narrow Bay (New York State Department of Transportation 2019) notes a prevalence of invasive species such as Japanese honeysuckle, common reed, autumn olive (*Elaeagnus umbellata*), oriental bittersweet, and rambler rose near Smith Point Bridge. Widespread occurrences of invasive plant species are likely throughout the proposed Onshore Facilities given the association with developed residential and industrial areas and proliferation of invasive species throughout the greater Long Island region.

Based on the field assessments, invasive species are ubiquitous throughout the Onshore Facilities and results were consistent with species and locations identified in the New York iMapInvasives query (Appendix A, Figure 5). Common mugwort was the most prevalent species observed and commonly occurs along road shoulders throughout the Onshore Facilities. Large concentrations of common reed were observed along the backside of Fire Island and at Smith Point Marina at the Landfall/ICW Study Area. In addition, large concentrations of multiple species were observed along Montauk Highway at the Carmans River crossing and the areas immediately to the west and east. Additional commonly observed invasive species across the Onshore Facilities included Norway maple, rambler rose, oriental bittersweet, autumn olive, Japanese honeysuckle, black locust, garlic mustard (*Alliaria petiolata*), Japanese barberry, and common reed.

3.6 FLOODPLAINS

FEMA is responsible for flood hazard mapping to assess flood risk to infrastructure and guide mitigative actions. Based on FEMA's Flood Insurance Rate Maps (FIRM), the entirety of the Landfall/ICW Study Area on Fire Island and the Landfall/ICW Study Area on the Mainland is located within the 100-year floodplain (Zone AE; the area with a 1% annual chance of flooding; FIRM panel 36103C0951H).



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Beach and dune portions of the Landfall/ICW Study Area on Fire Island located oceanside of the William Floyd Parkway and the portion of the ICW HDD across Narrow Bay are designated as coastal flood zones with velocity (i.e., wave action) hazard (Zone VE; FIRM panel 36103C0951H). Flood elevations for the 100-year flood zones within the Landfall/ICW Study Area on Fire Island and at the Landfall/ICW Study Area on Mainland range from 6 to 17 ft (1.8 to 5.2 m) North American Vertical Datum of 1988.

Approximately 1,800 linear ft (548.6 m) of the Onshore Transmission Cable is located within the 100-year floodplain (Zone AE) along William Floyd Parkway as it exits ICW HDD Work Area at Smith Point Marina (FIRM panel 36103C0951H).

Another approximately 520 linear ft (158.5 m) of the Onshore Transmission Cable is within the 100-year floodplain at the Carmans River crossing, although base flood elevation data does not exist at this location (Zone A; FIRM panel 36103C0717H).All other portions of the Onshore Transmission Cable route, Interconnection Cable route and the Union Avenue Site are in areas of minimal flood hazard.

The Onshore Facilities are not expected to result in changes to the base flood elevation as the Onshore Transmission Cable will be installed via HDD or installed below the existing grade via trenching. The floodplain resources are provided on Figure 6 (Appendix A) and summarized below in Table 5.

| Onshore Facility | | Floodplain Resources |
|----------------------------------|------------------------|--|
| Landfall/ICW Study Area | | • Zone AE, VE |
| Onshore Transmission Cable | LIE Service Road Route | Zone AE (ICW HDD Work Area, William Floyd Parkway) Zone VE (ICW HDD) Zone A (Carmans River crossing) |
| Cable | Peconic Avenue Route | None |
| Union Avenue Site | | None |
| Onshore Interconnection Cable | | • None |

Table 5. Summary of Floodplain Resources

4.0 SUMMARY

The Onshore Facilities intersect a variety of regulated natural resources as discussed above in this report and summarized in Tables 1–5. The highest concentrations of resources are associated with the Landfall/ICW Study Area on Fire Island, the Landfall/ICW Study Area on Mainland, and the Onshore Transmission Cable crossings of the Carmans River and Yaphank Creek. Generally confining activities to existing developed areas including parking lots, roadway and utility ROWs will avoid and minimize impacts to sensitive environmental resources. HDD methods will be used to connect the Sunrise Wind Export Cable to Onshore Facilities and for the crossing of the ICW to avoid impacts to dune and beach communities and mapped habitat. HDD or other trenchless crossing installation will be utilized to avoid sensitive environmental resources, including Carmans River and Yaphank Creek. Work areas along the



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Onshore Transmission Cable route will be established and the required safety measures will be implemented.

Where appropriate, temporary erosion controls will be installed and maintained until the work areas are restored and stabilized. An Emergency Response Plan and Oil Spill Response Plan have been developed for offshore work and a Stormwater Pollution Prevention Plan and a Spill Prevention Control and Countermeasures Plan will be implemented to avoid and minimize impacts to sensitive environmental resources. Invasive plants will be assessed and managed through an Invasive Species Management Plan. Time of year restrictions for certain work activities (e.g., HDD conduit stringing and tree and shrub removal) during the avian nesting and bat roosting periods, and adherence to other protective measures for avian and habitat will be employed to the extent feasible to avoid and minimize direct terrestrial habitat and species impacts during construction of the Landfall and Onshore Facilities. If work is anticipated to occur outside of these time of year restriction periods, Sunrise Wind will work with state and federal agencies to develop appropriate construction monitoring and impact minimization plans.

Where HDD is utilized, an Inadvertent Return Plan will be prepared and implemented to minimize the potential risks associated with the release of drilling fluids. Sunrise Wind will comply with New York State regulations and standards for treatment and disposal of solid and liquid wastes generated during all phases of construction activities



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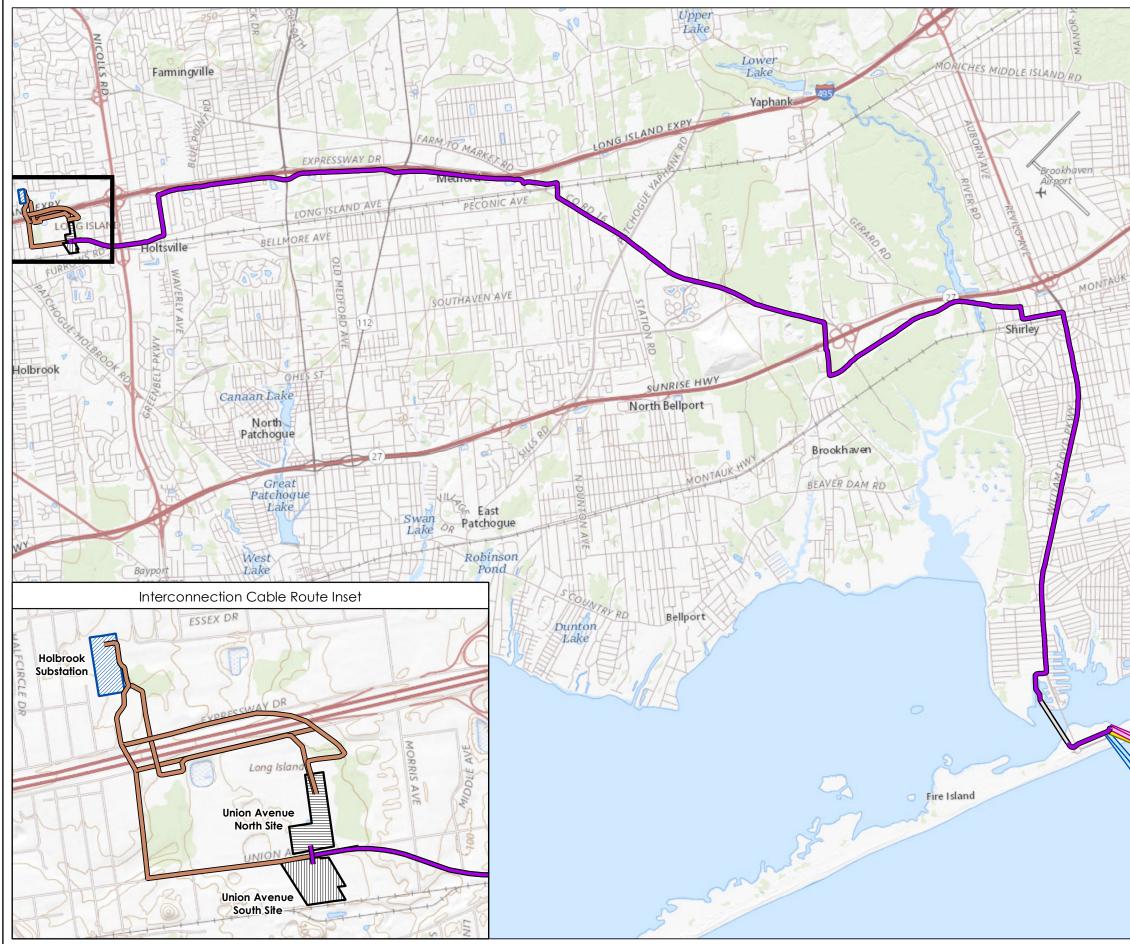
APPENDICES

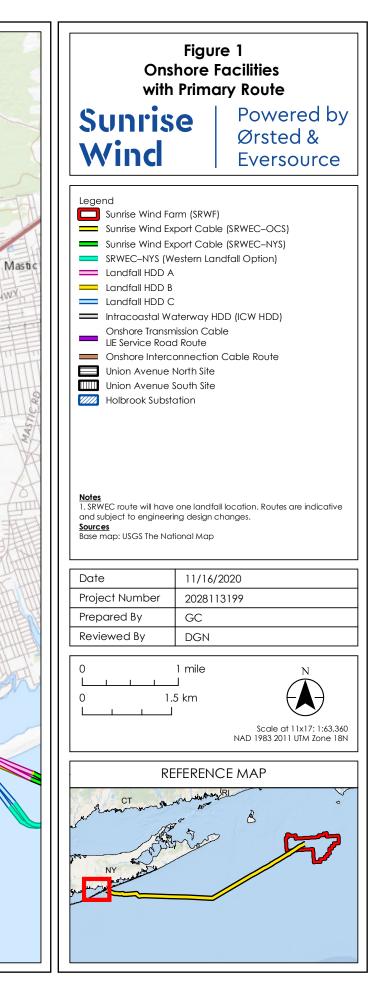


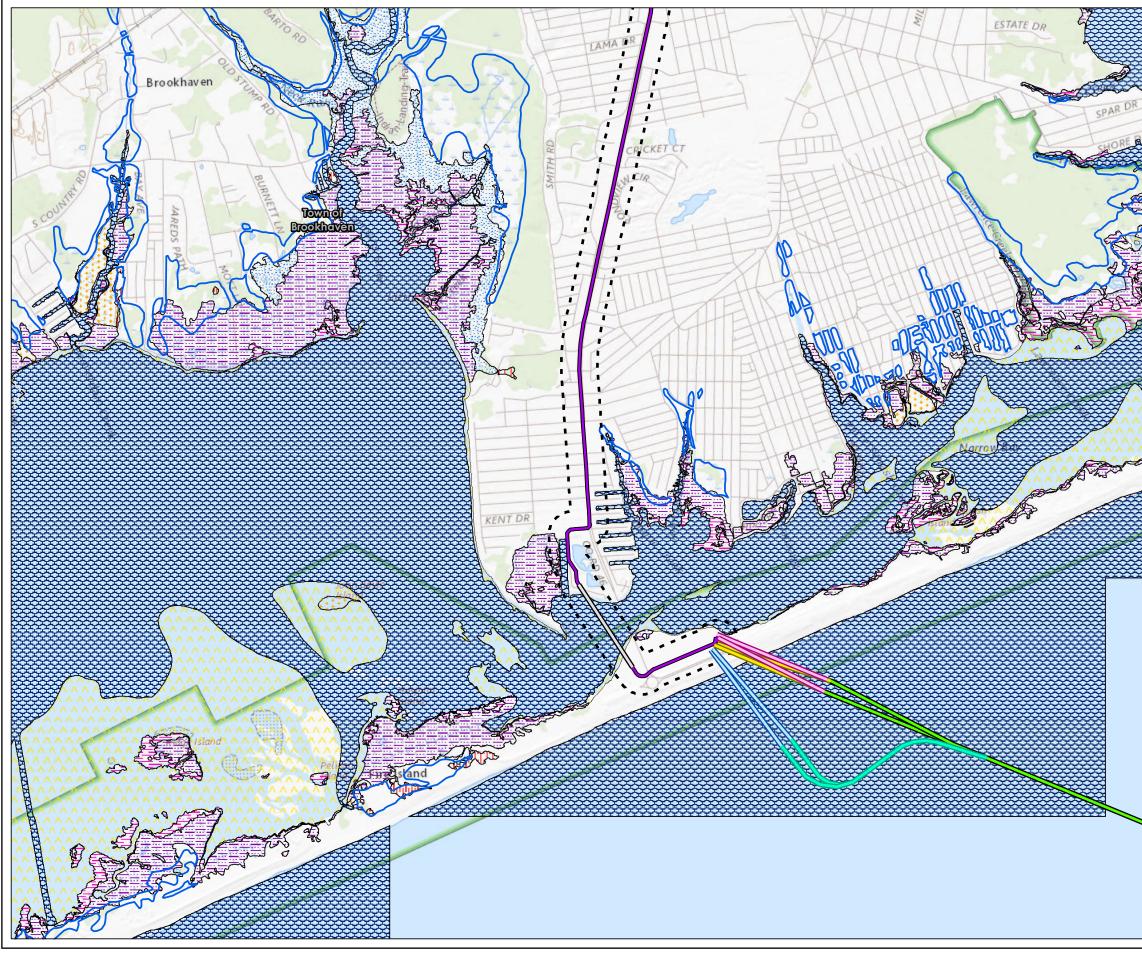
Appendix A FIGURES

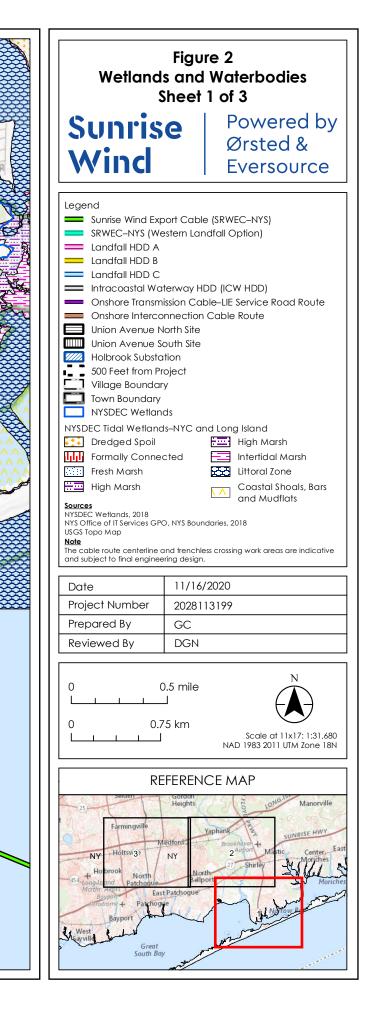
- Figure 1: Onshore Facilities with Primary Route
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- Figure 3: Delineated Wetlands
- Figure 4: Significant and Critical Natural Communities and Habitat
- Figure 5: Invasive Plant Species
- Figure 6: Floodplains

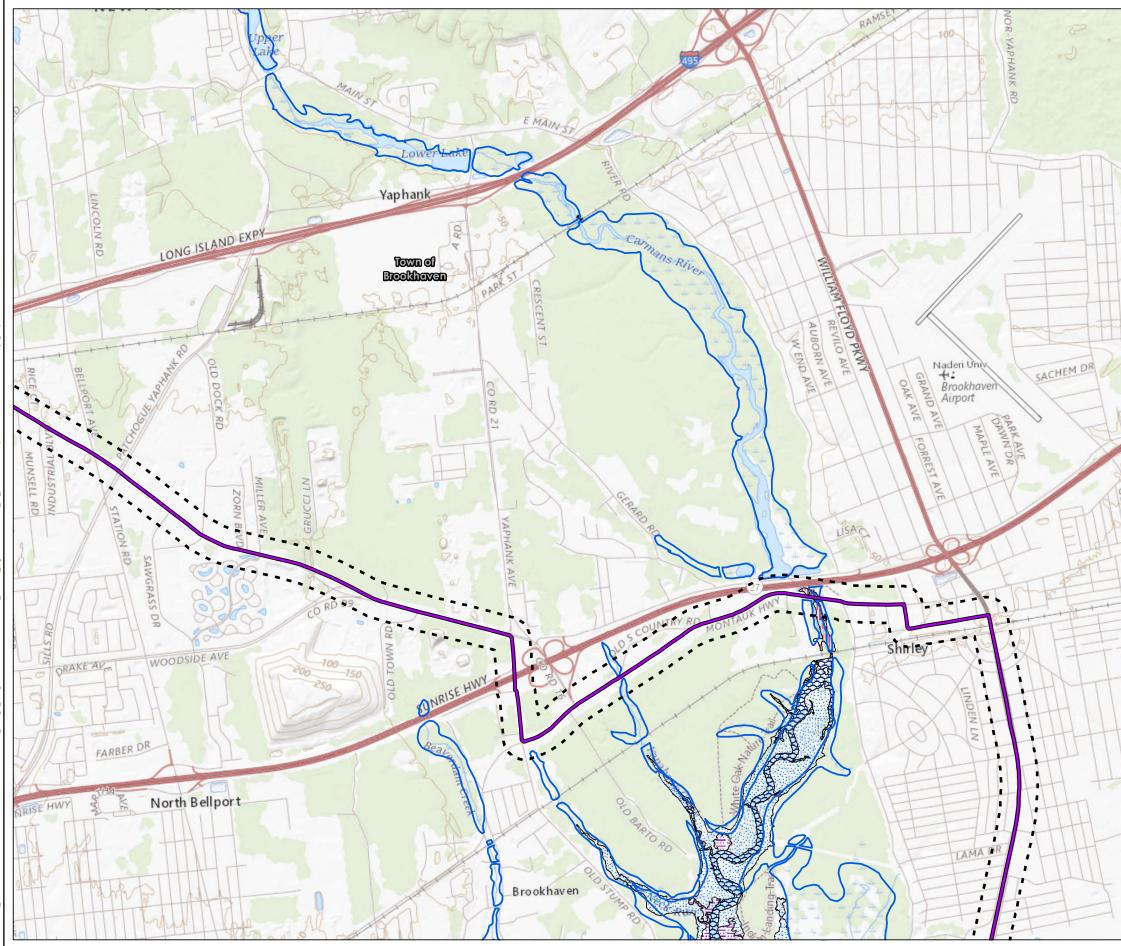


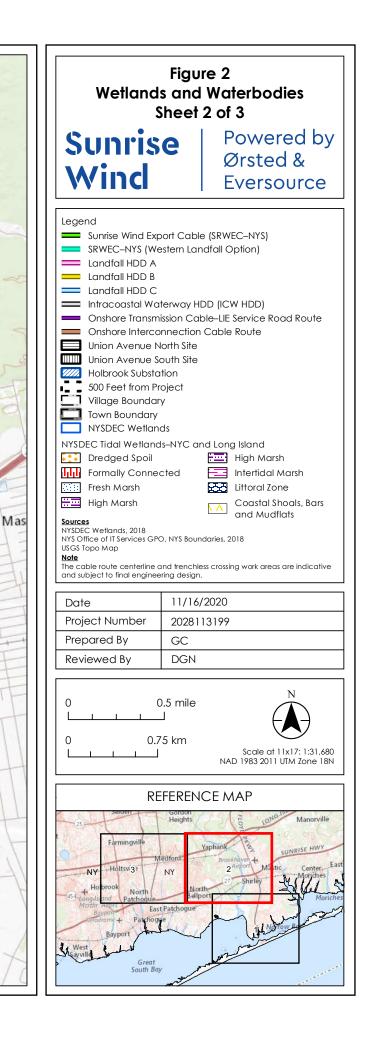


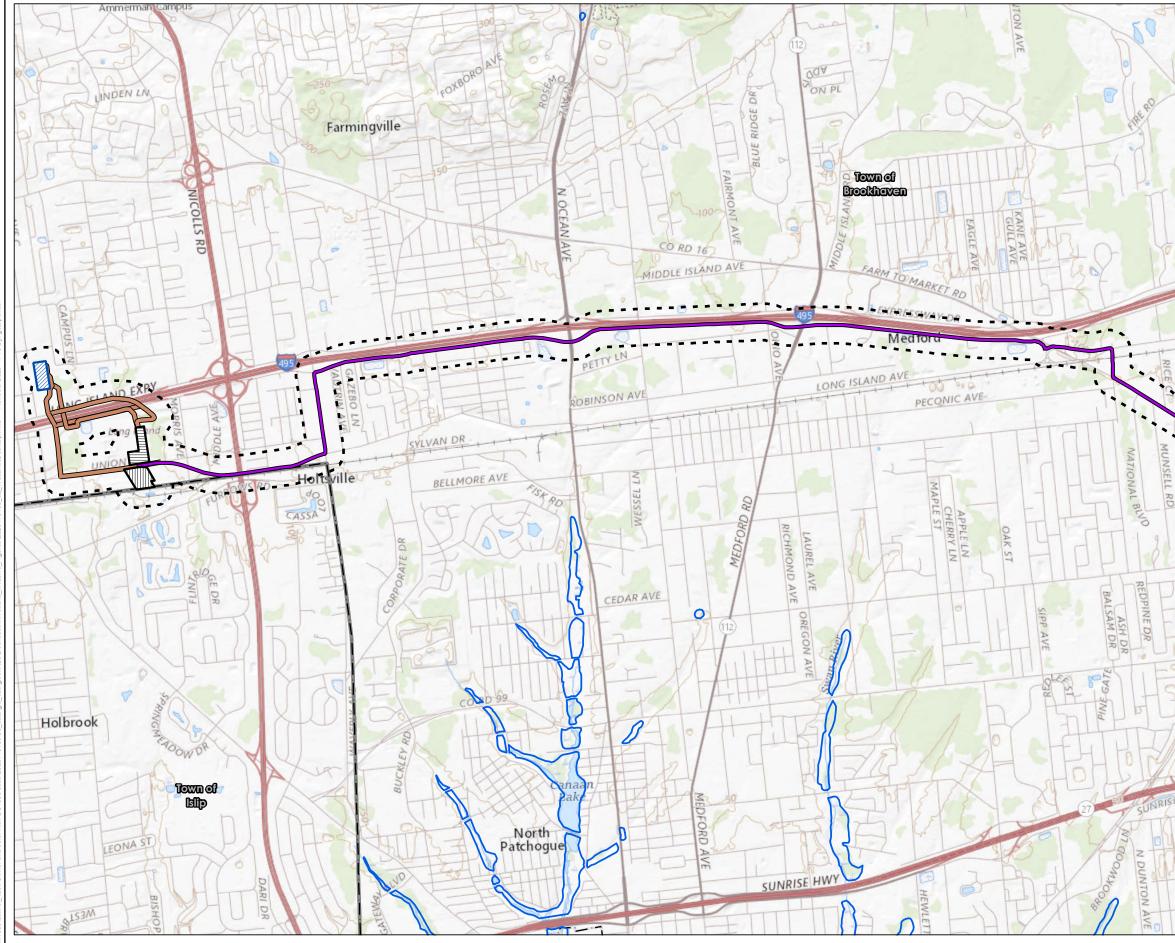


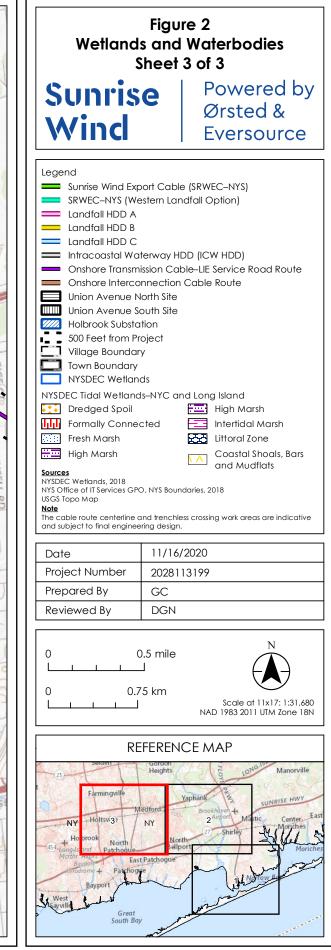




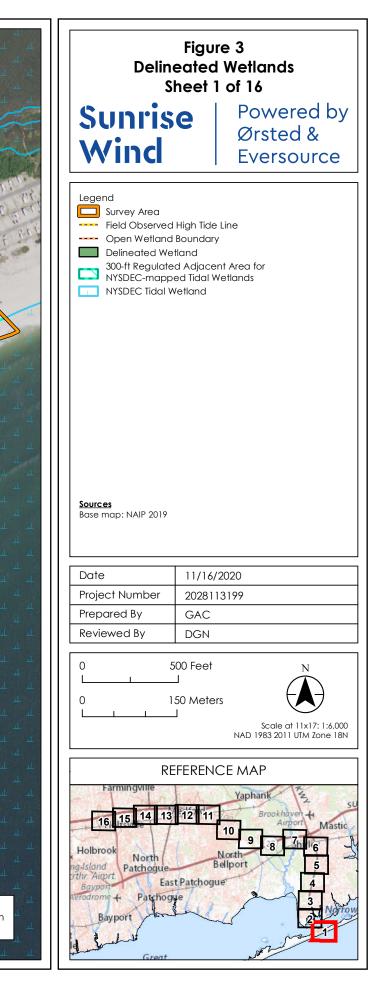


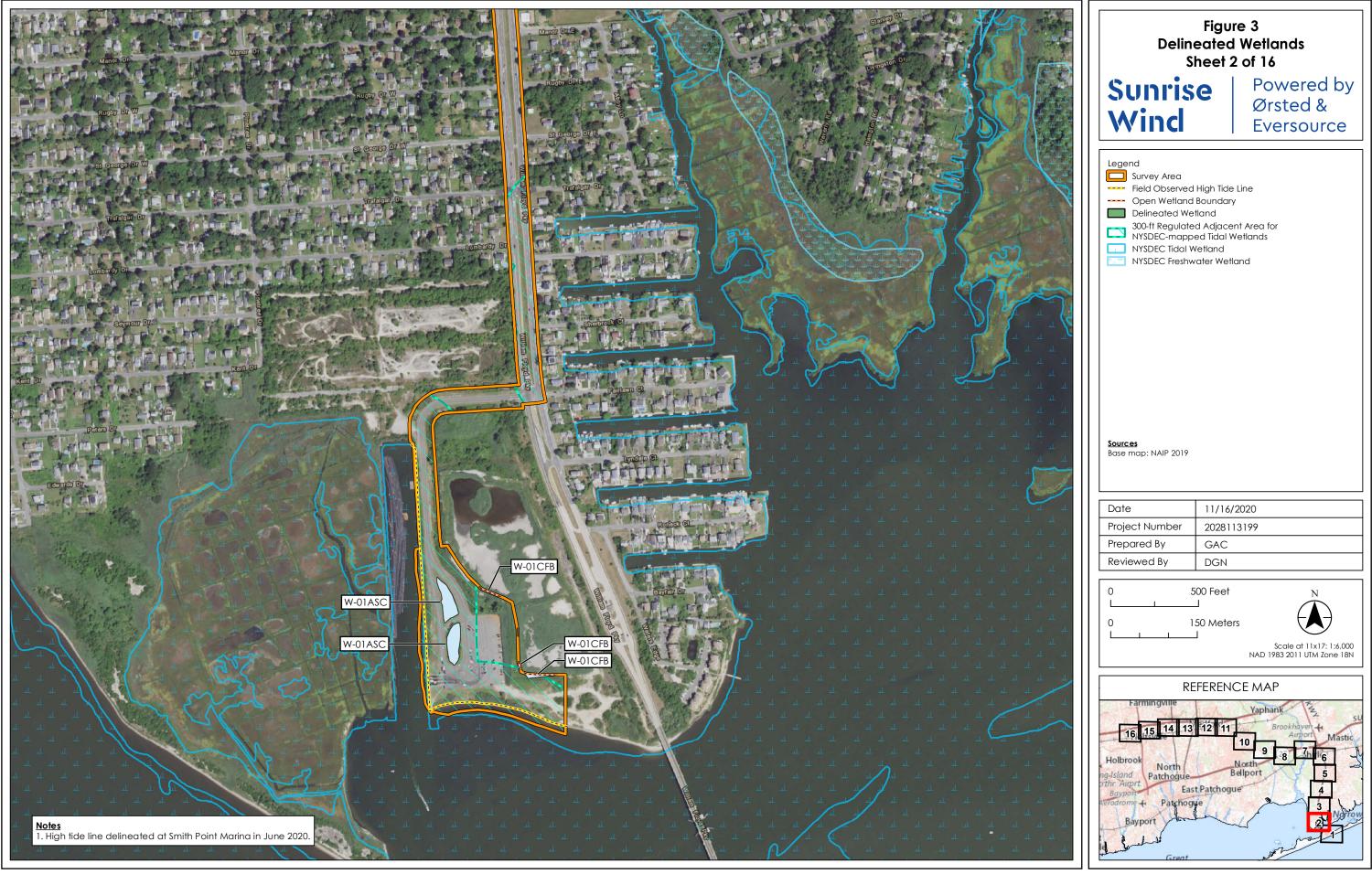


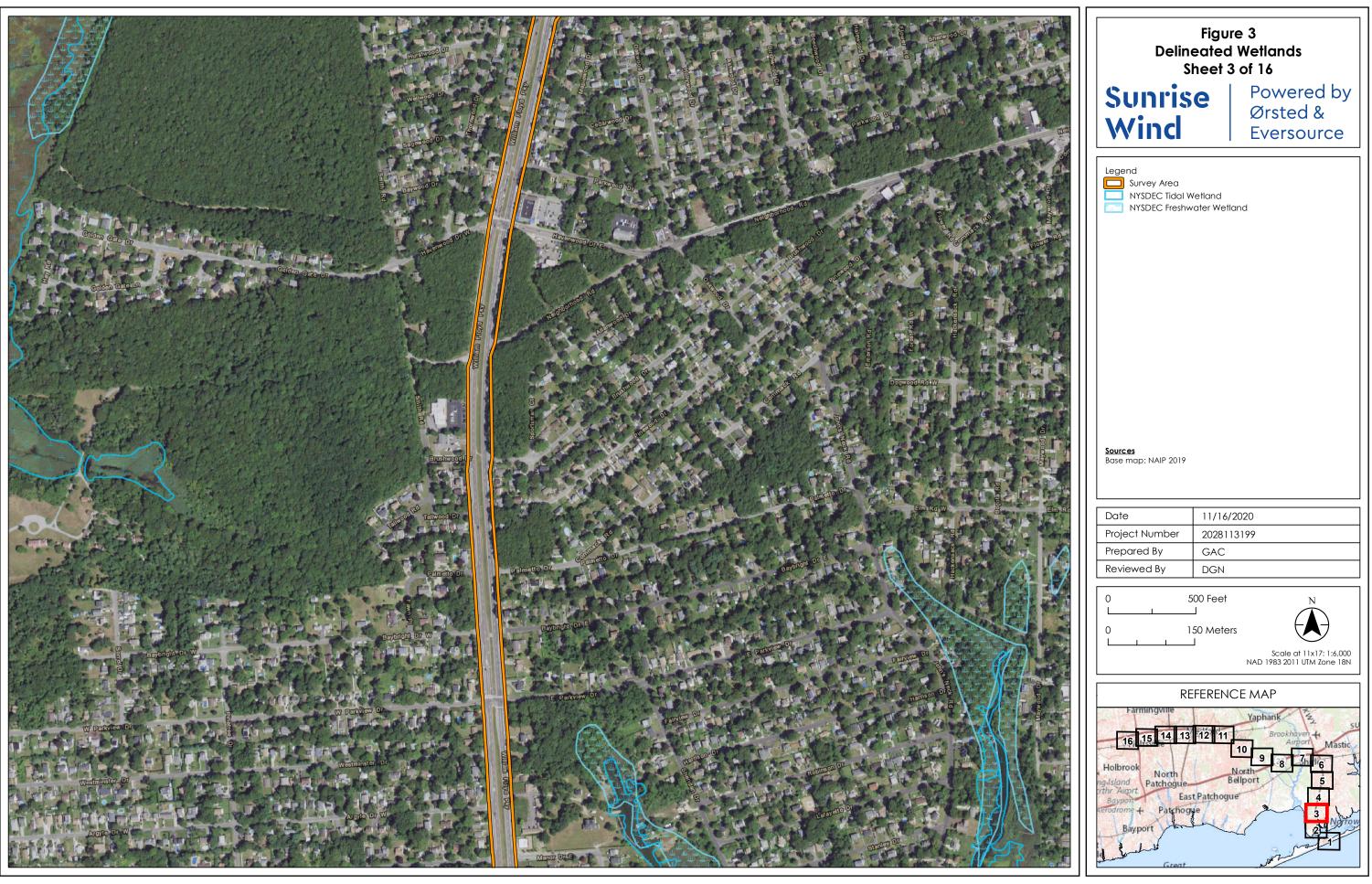


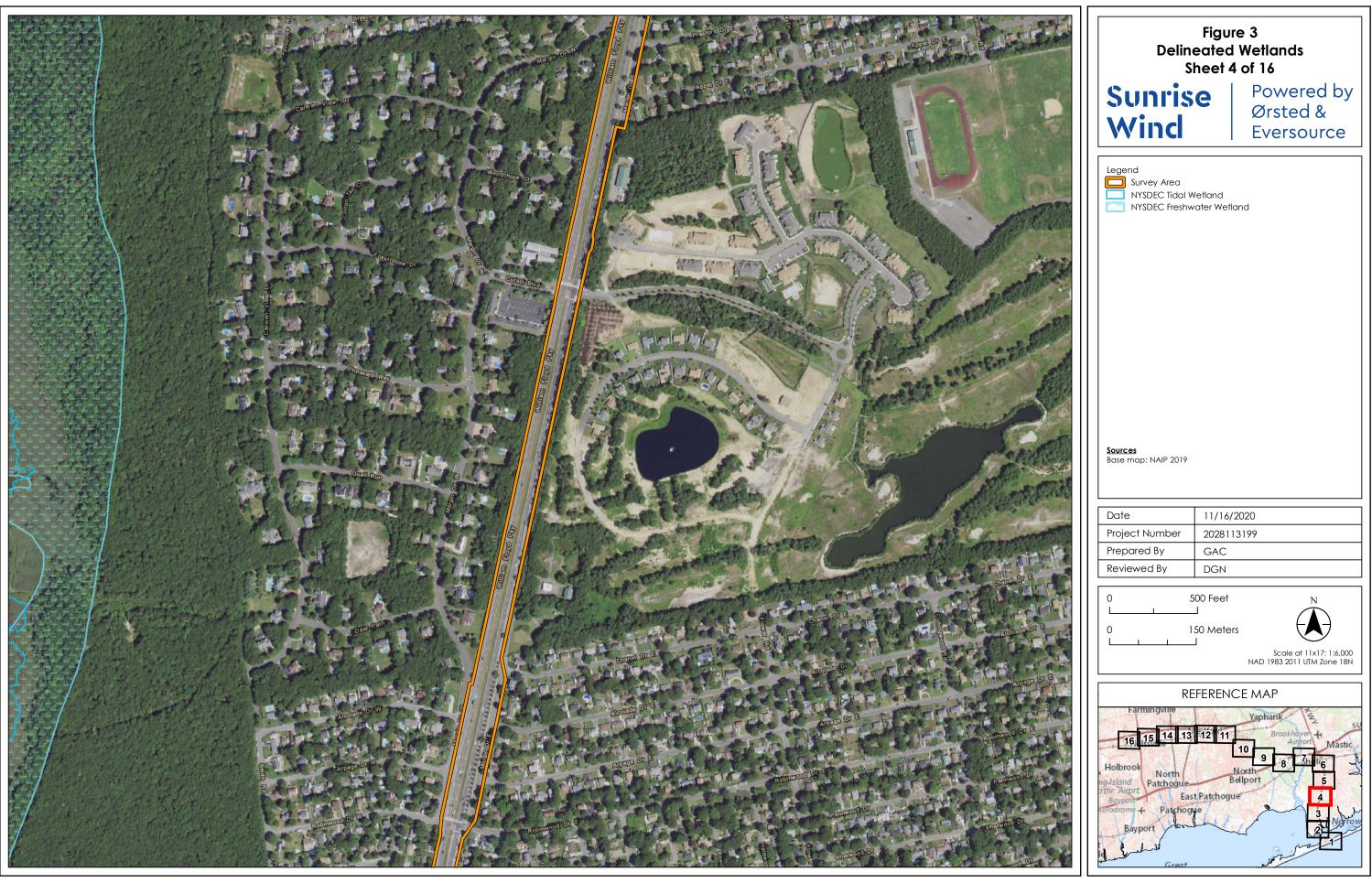










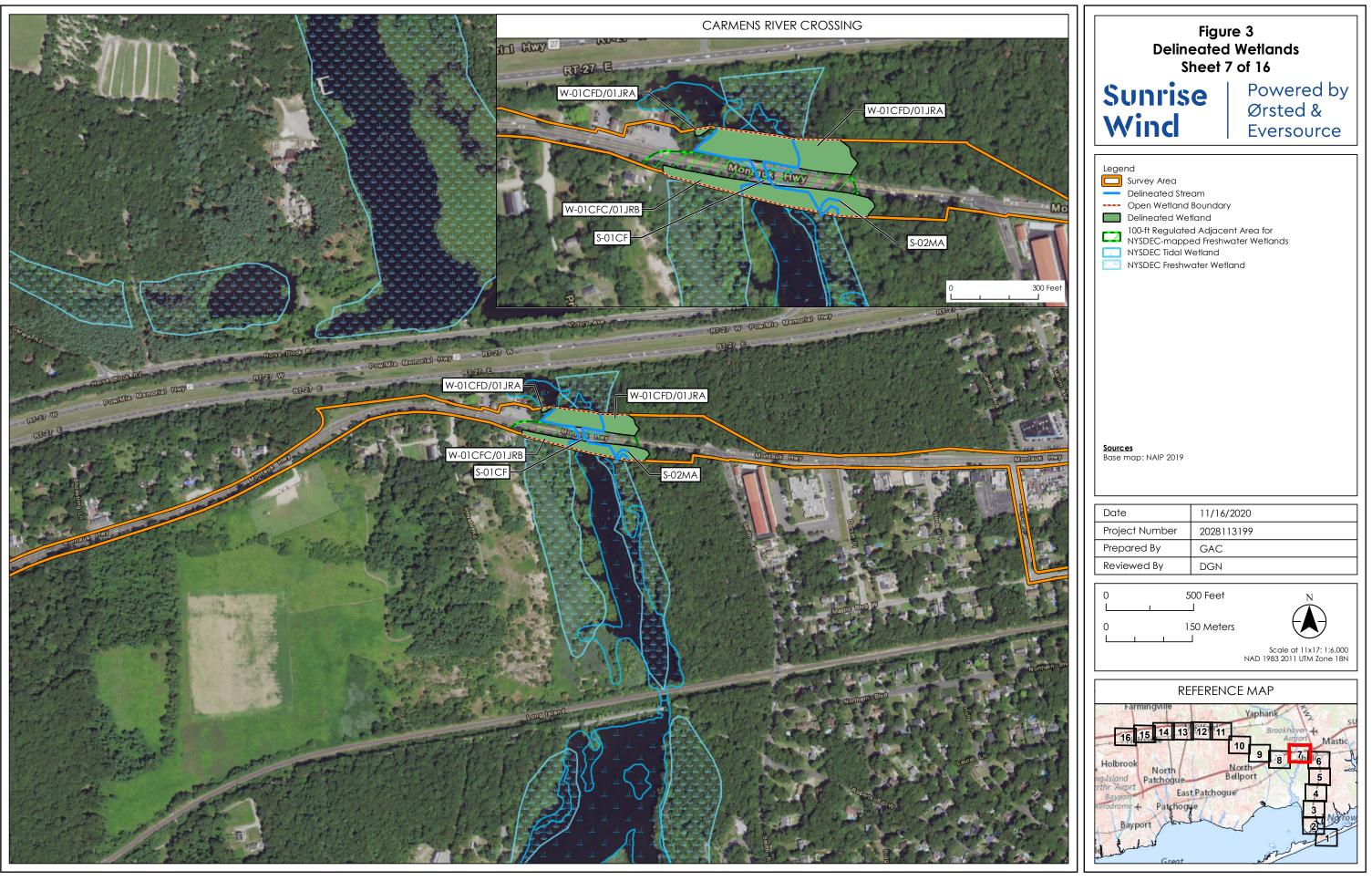


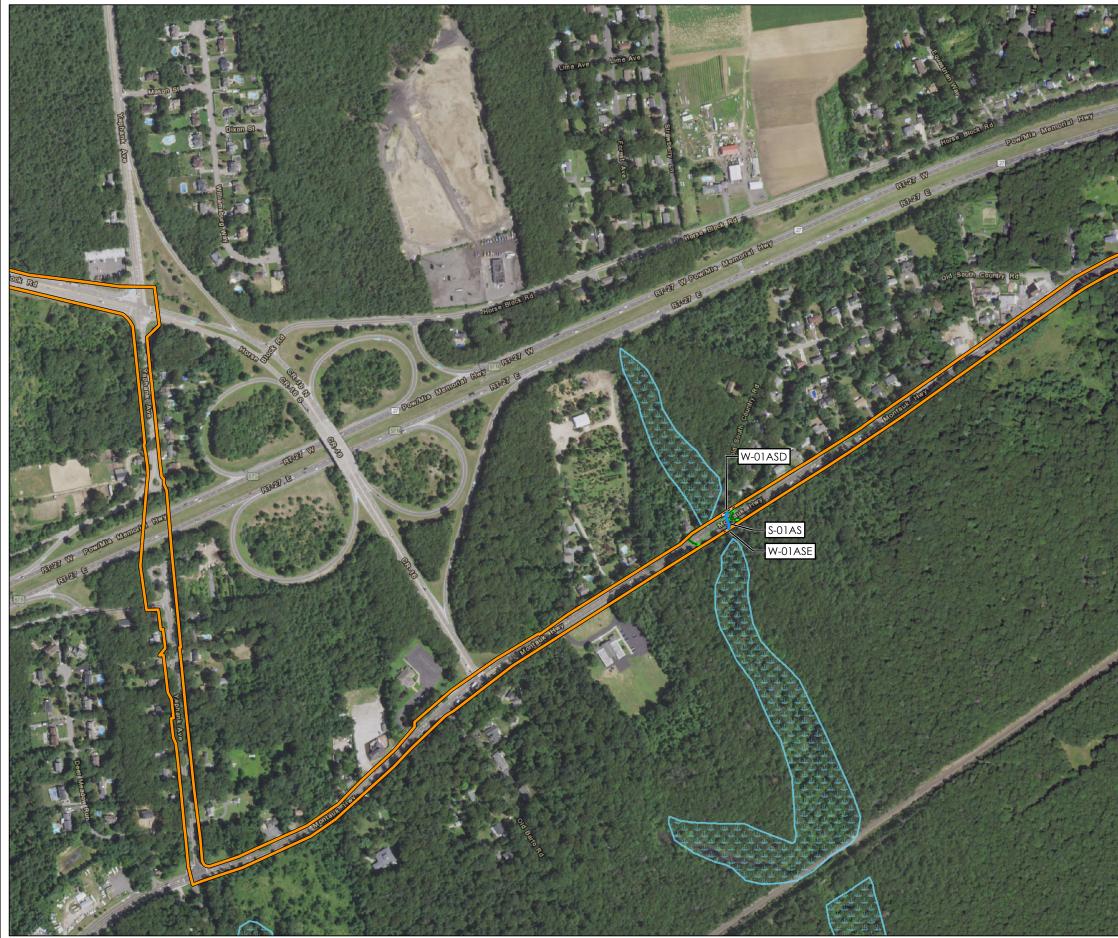


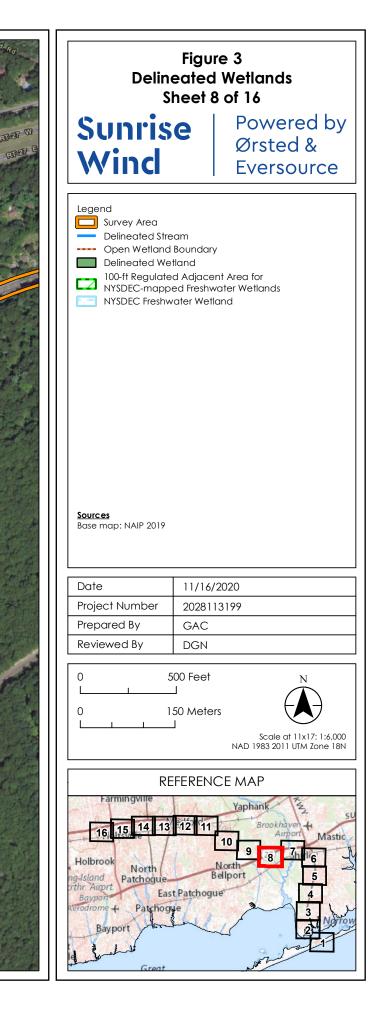
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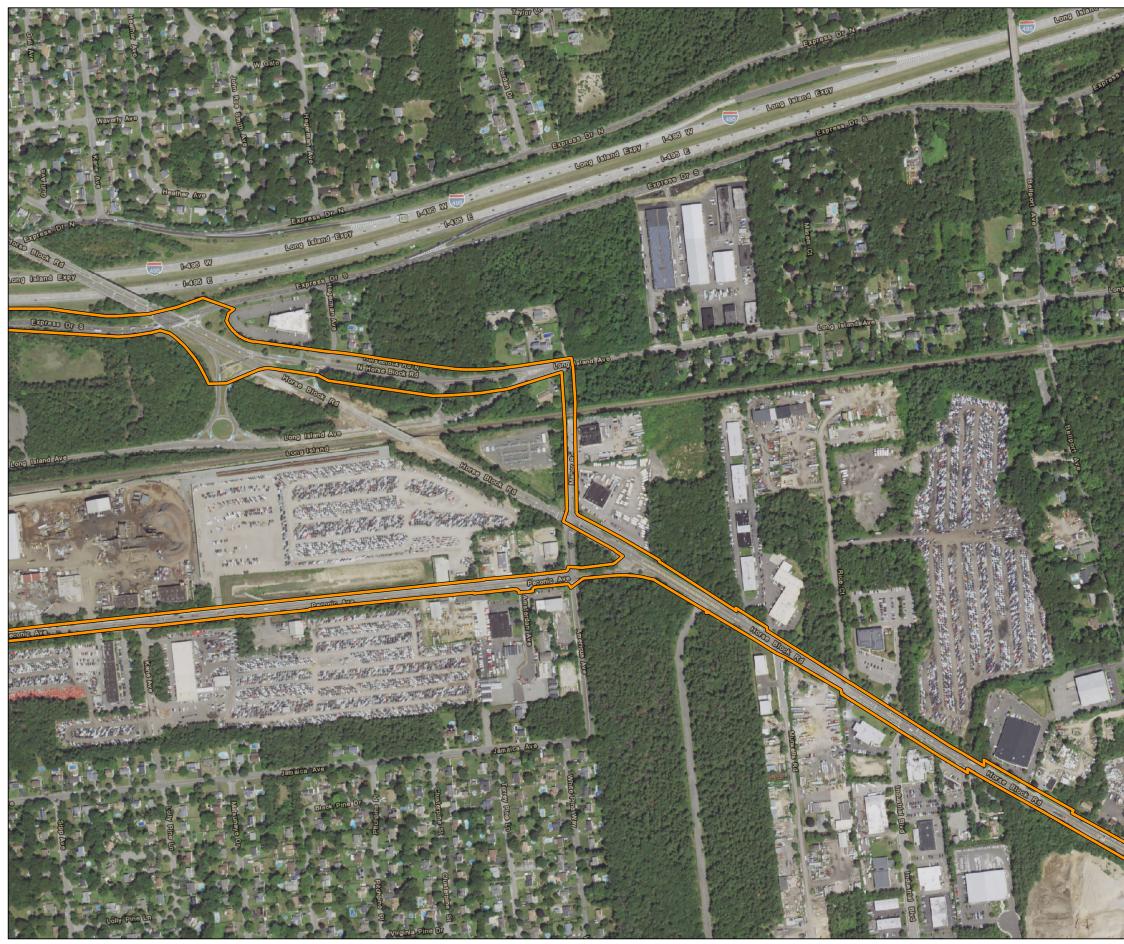




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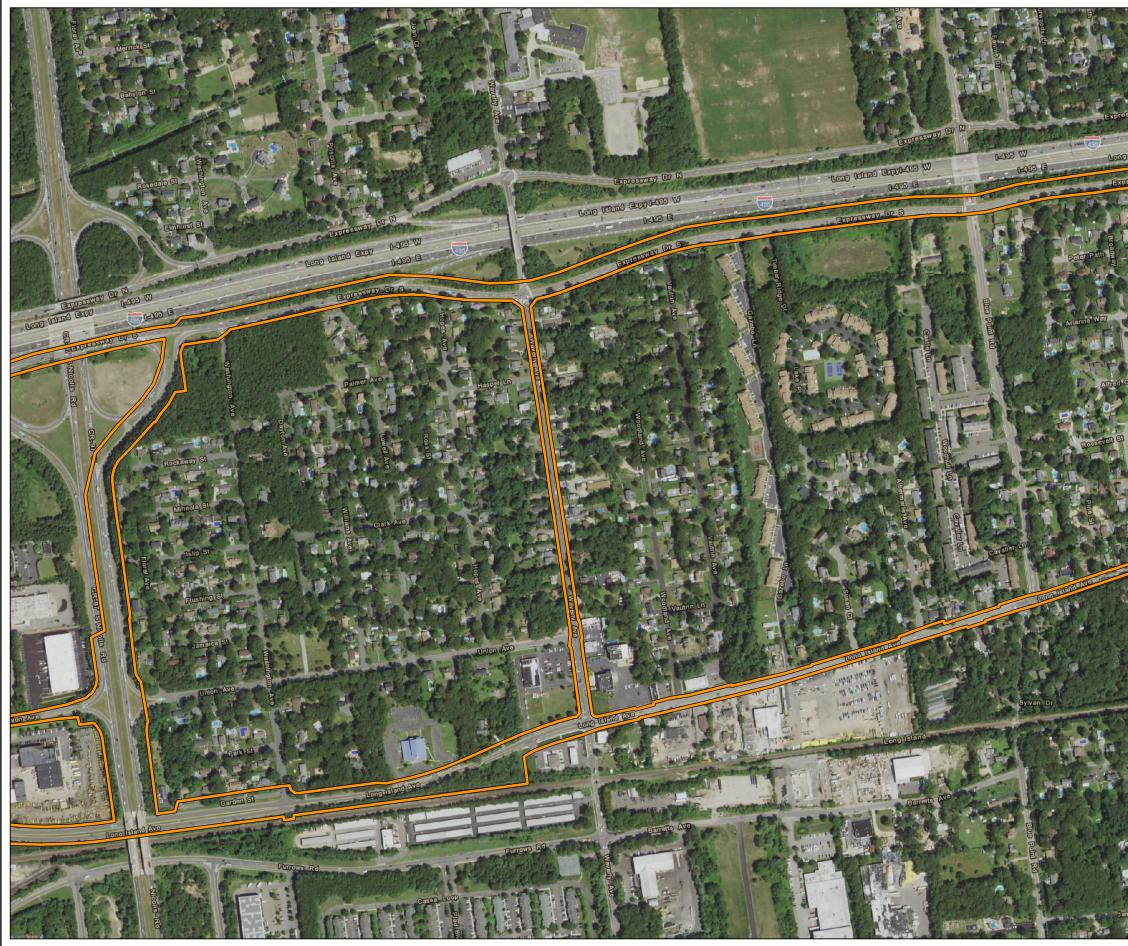
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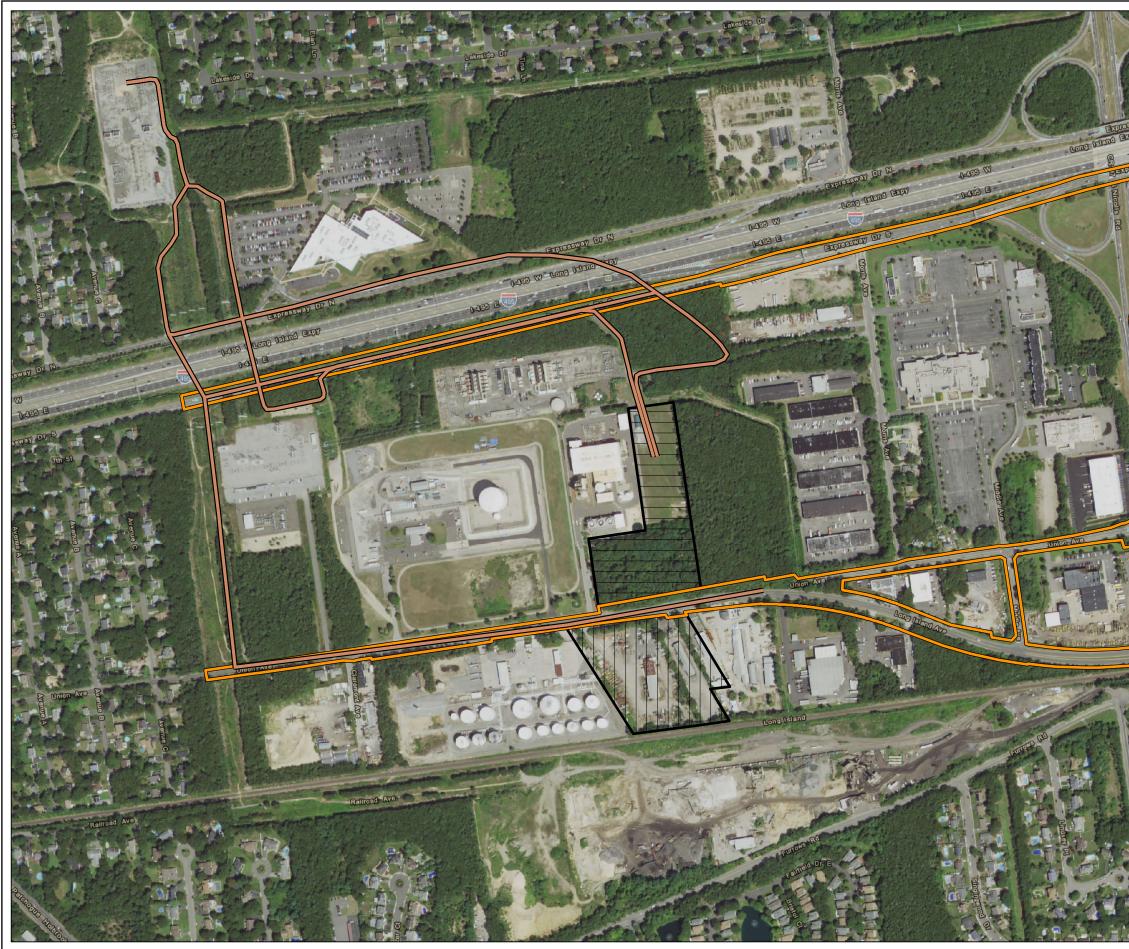
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| and | Prepared By | GAC |
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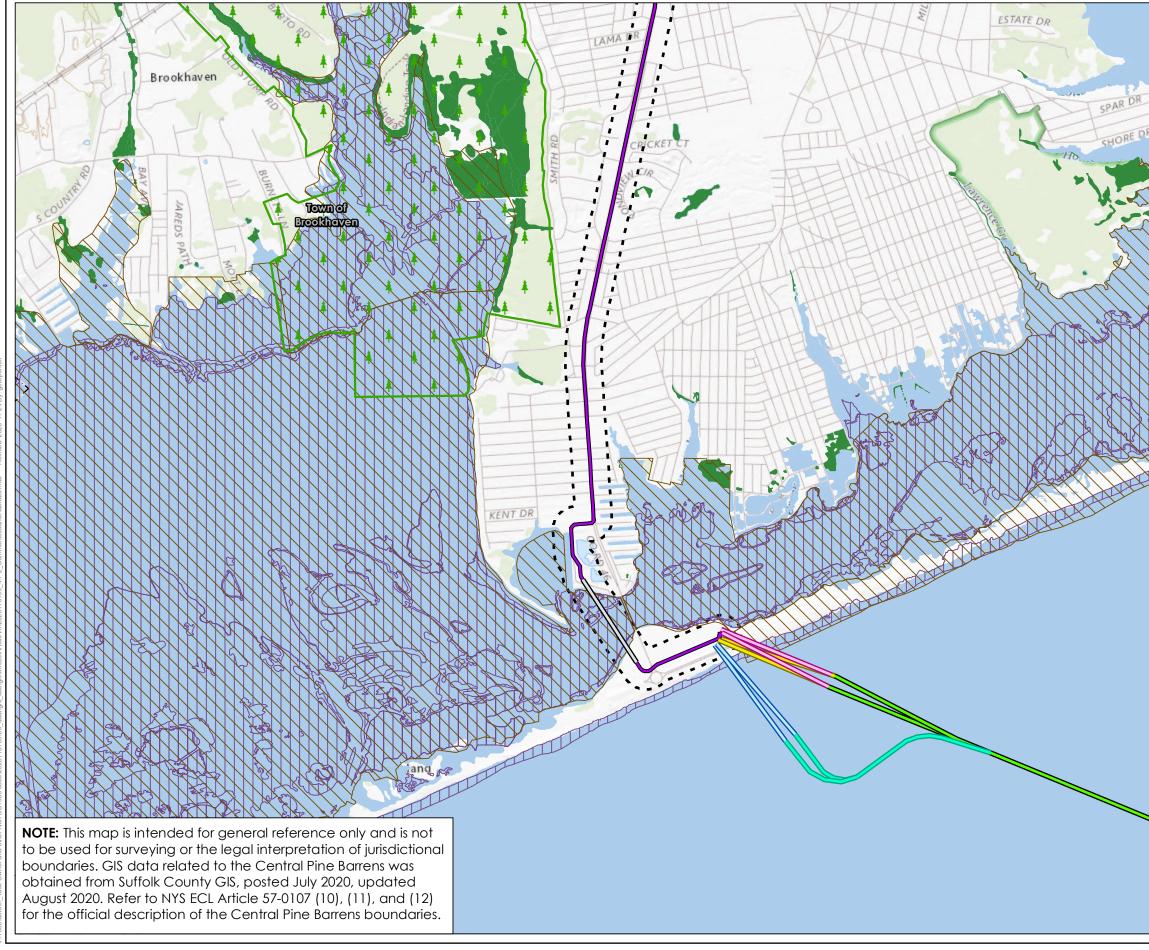
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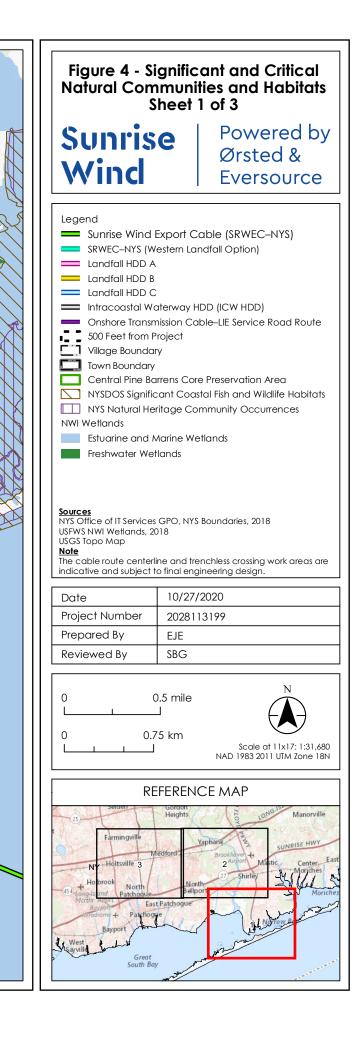


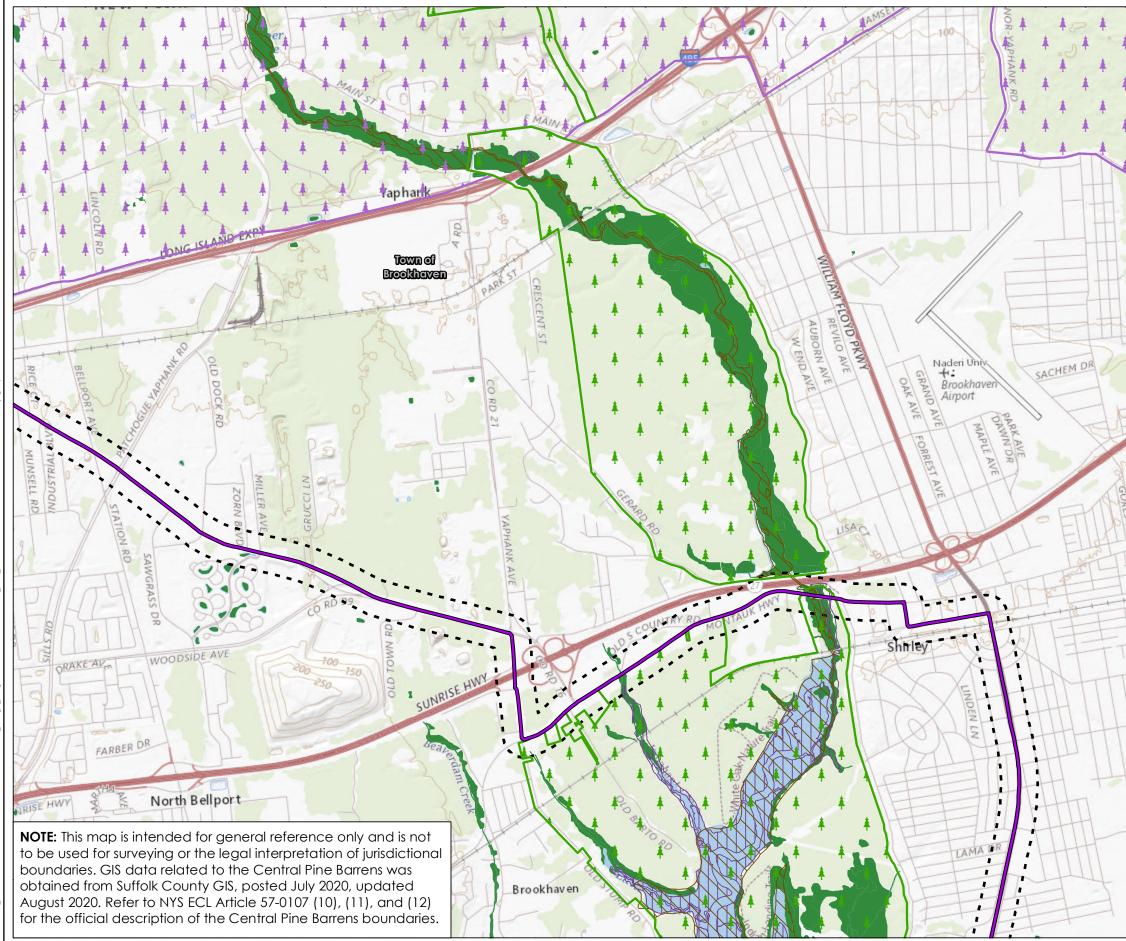
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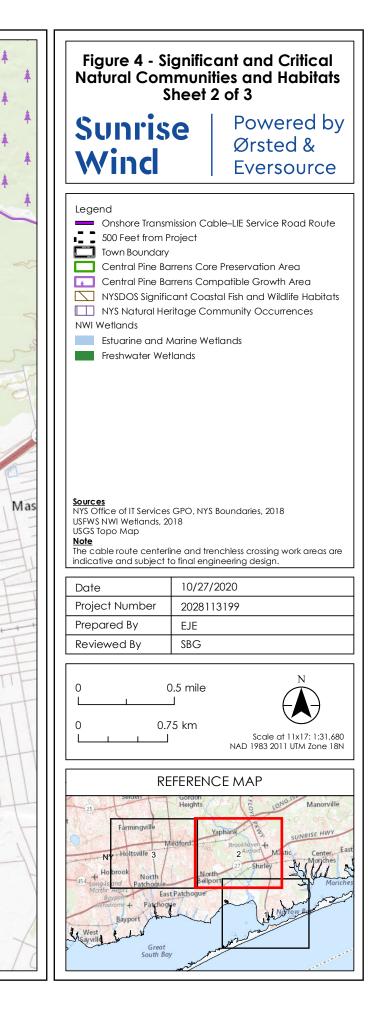


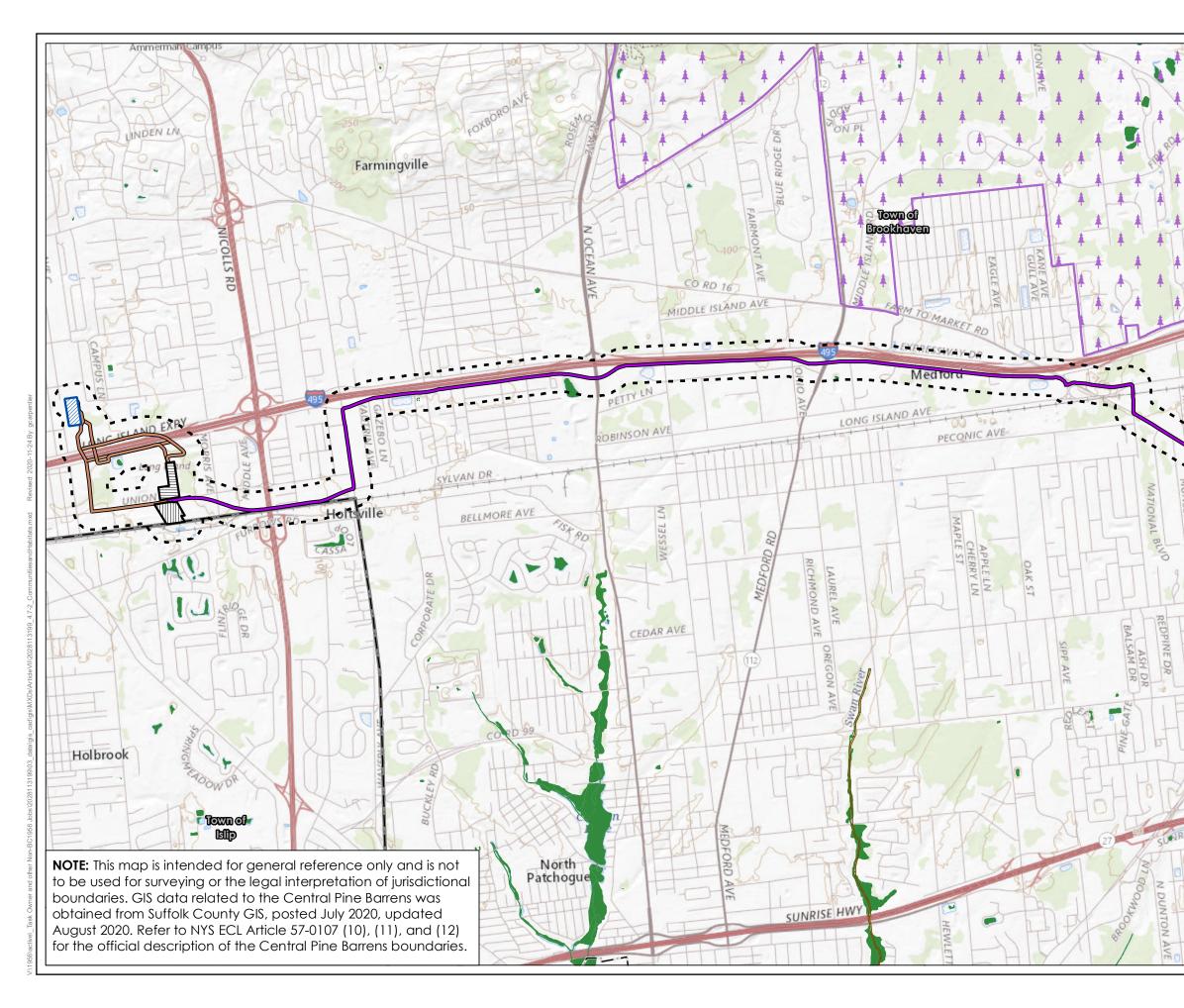
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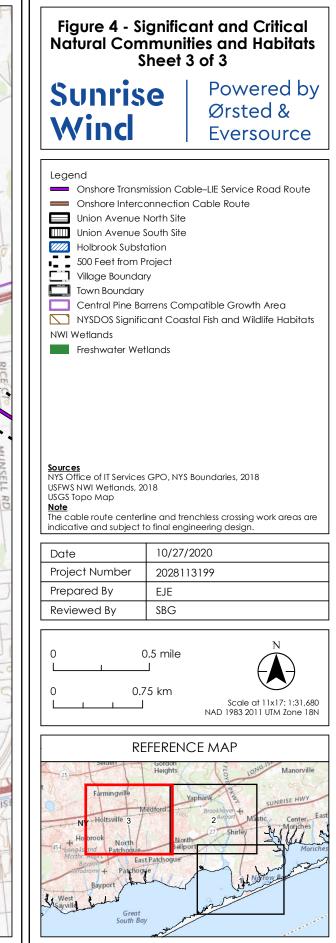














| | Figure 5 Invasive Plant Species Sheet 1 of 16 | | |
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| - | Wind | Eversource | |
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| それで | Legend Phragmites australis (Common Reed Grass) Phragmites australis (Common Reed Grass) Phragmites australis (Common Reed Grass)/ Rosa multiflora (Multiflora Rose) Survey Area | | |
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| | Figure 5 Invasive Plant Species Sheet 2 of 16 | | | |
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| - | Sunrise Powered by | | | |
| 6*] | l Ørsted & | | | |
| | Wind Eversource | | | |
| | Legend Phragmites australis (Common Reed Grass) Robinia pseudoacacia (Black Locust) Elaeagnus umbellata (Autumn Olive) Phragmites australis (Common Reed Grass) Survey Area | | | |
| Ì | | | | |
| | Date 11/16/2020 Project Number 2028113199 | | | |
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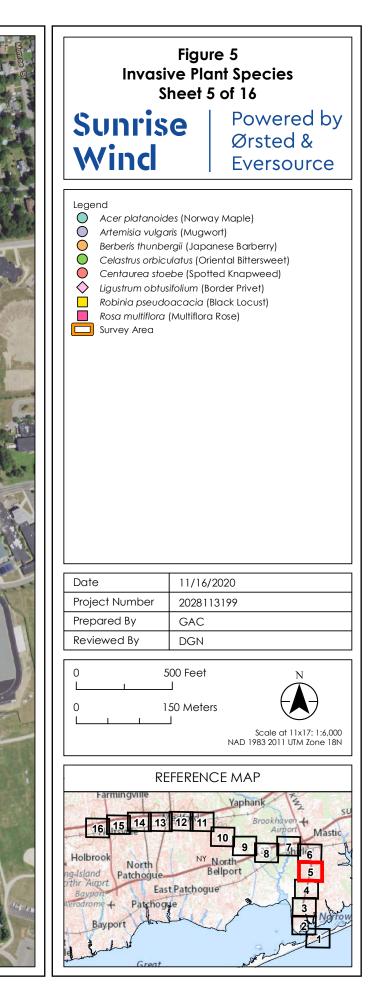


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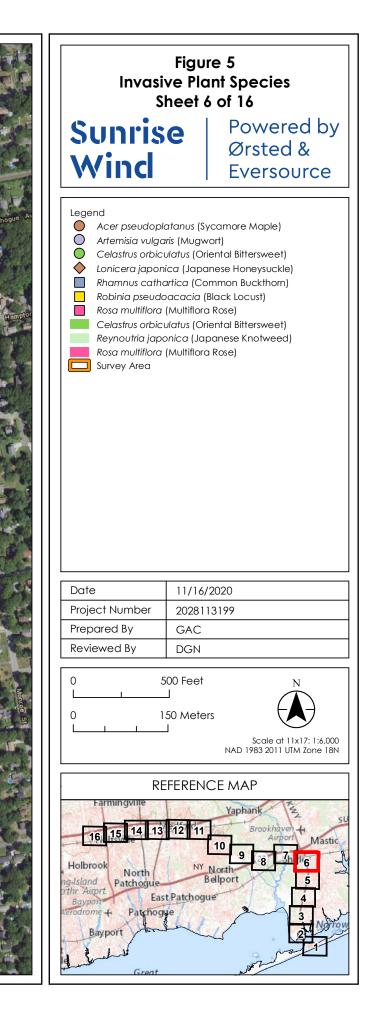


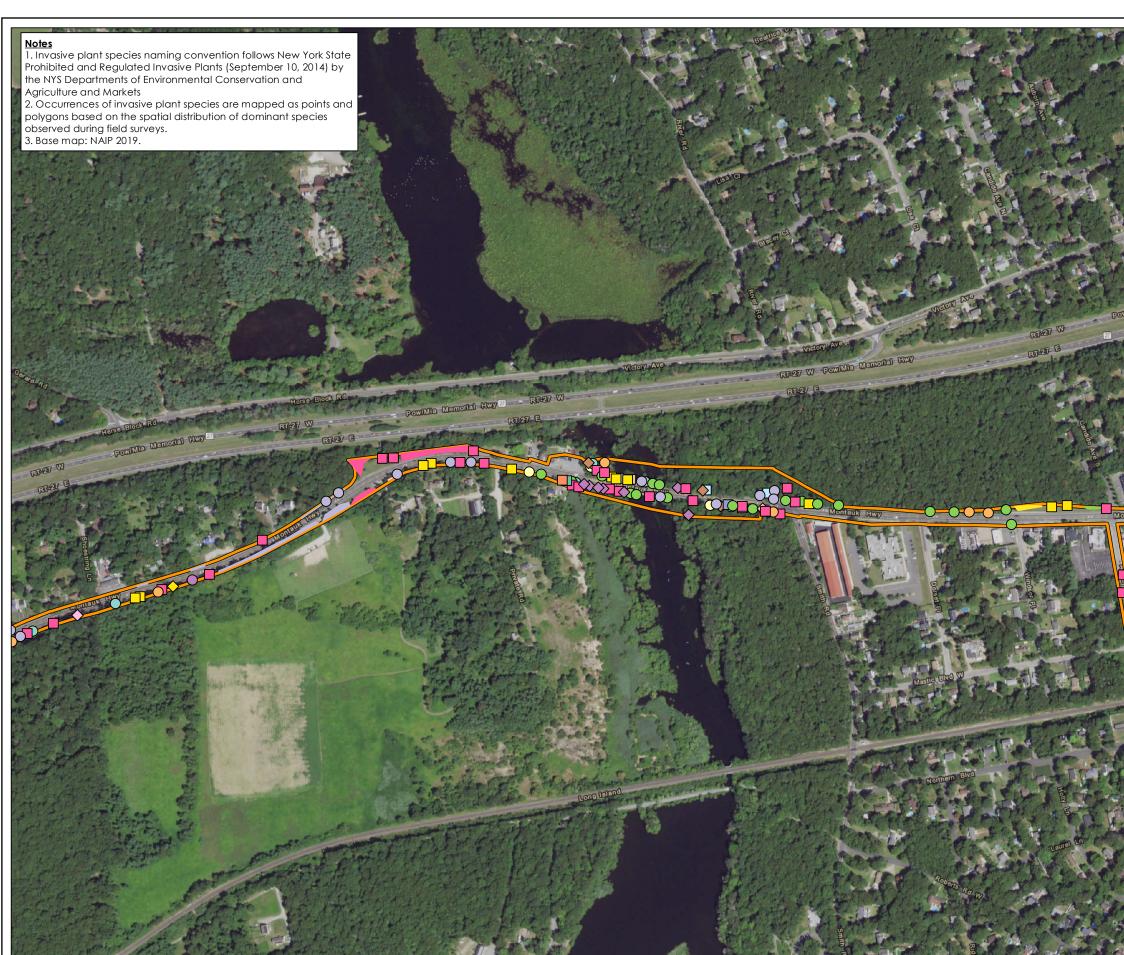
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| | Wind | Eversource | | |
| | | · | | |
| | Legend Alliaria petiolata (Garlic Mustard) Celastrus orbiculatus (Oriental Bittersweet) Phyllostachys aurea (Golden Bamboo) Reynoutria japonica (Japanese Knotweed) Robinia pseudoacacia (Black Locust) Rosa multiflora (Multiflora Rose) Survey Area | | | |
| | | | | |
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| - | Reviewed By | DGN | | |
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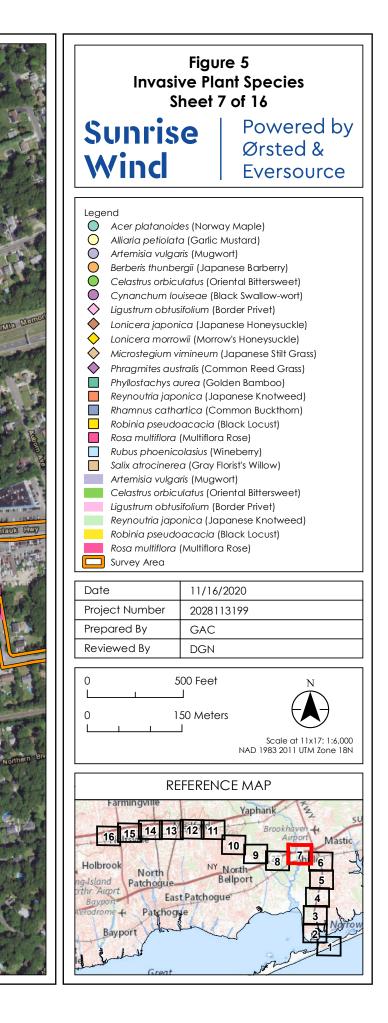


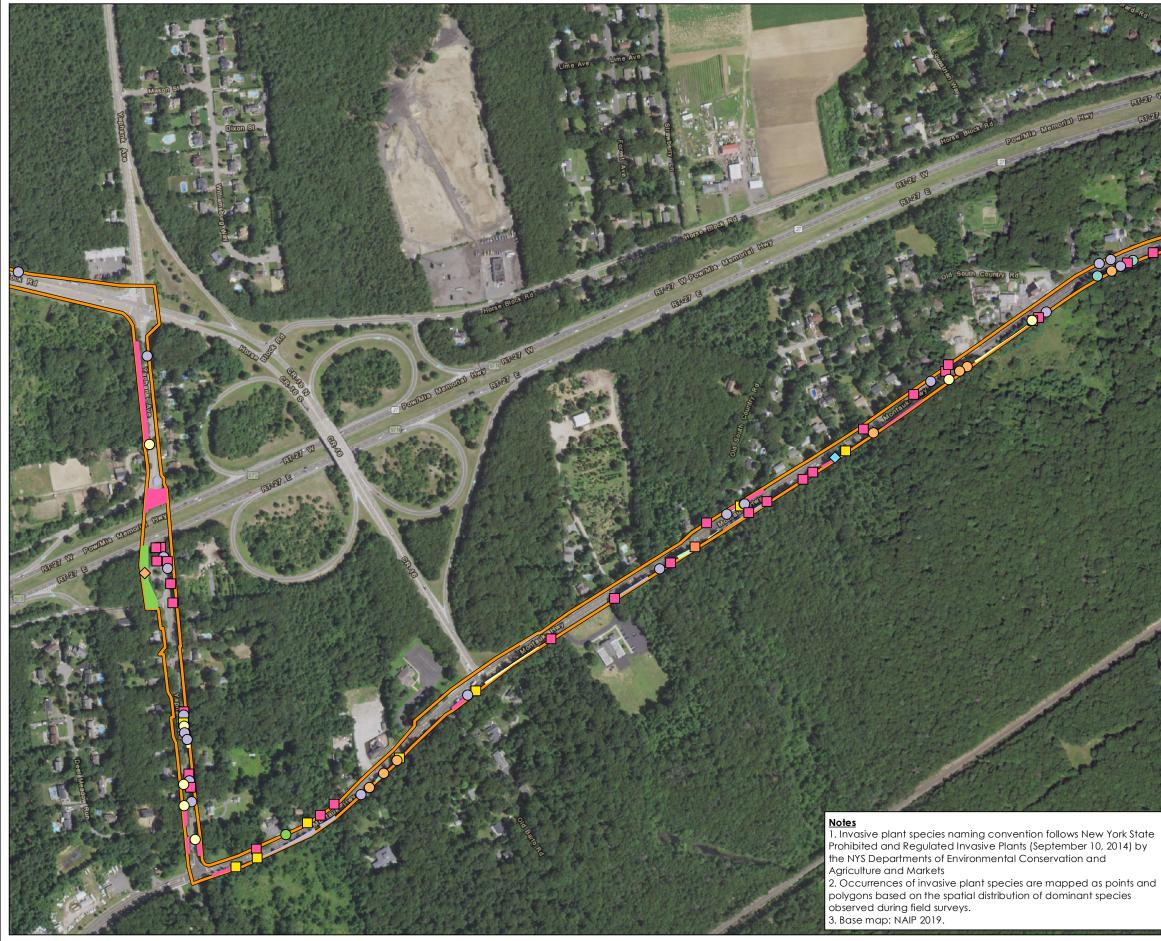


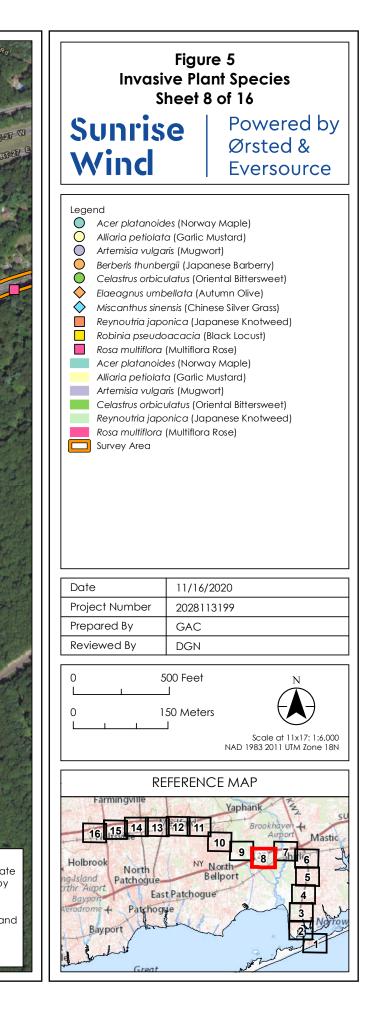




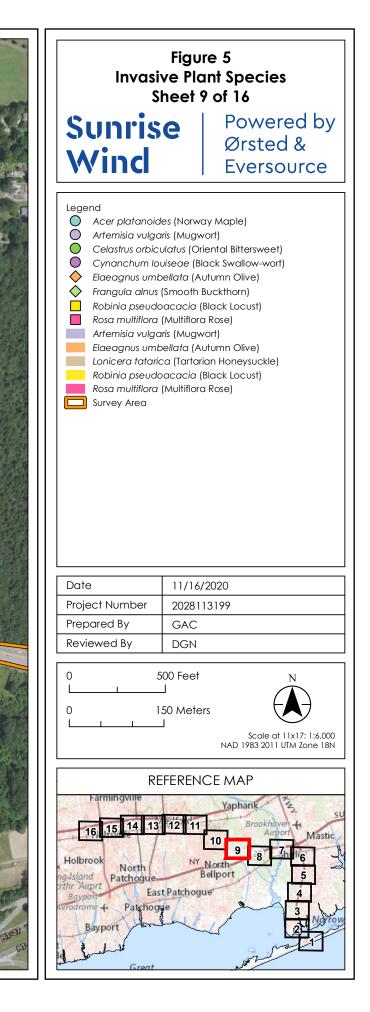


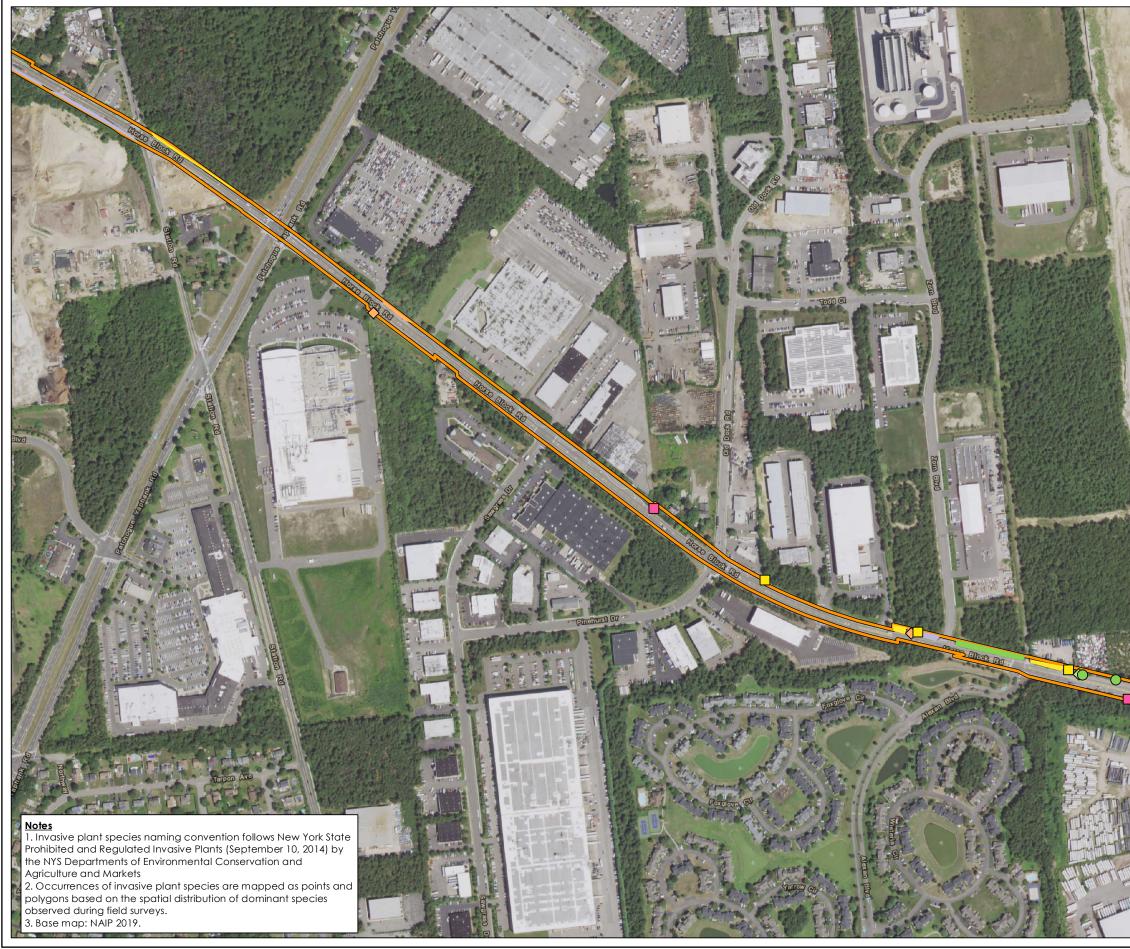


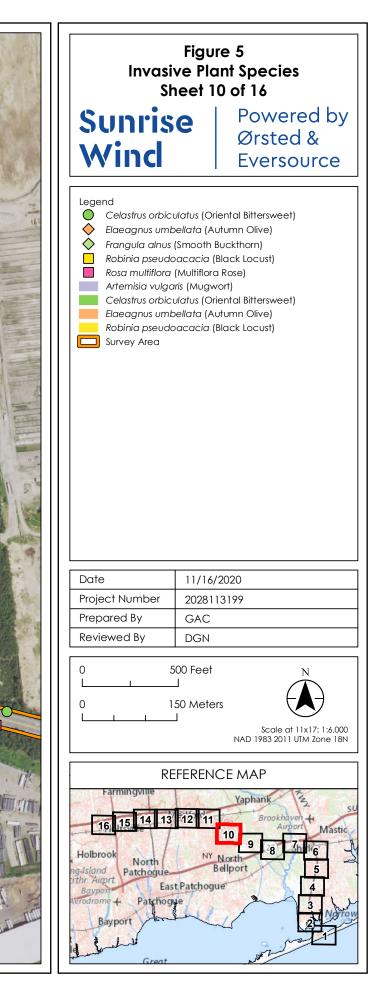


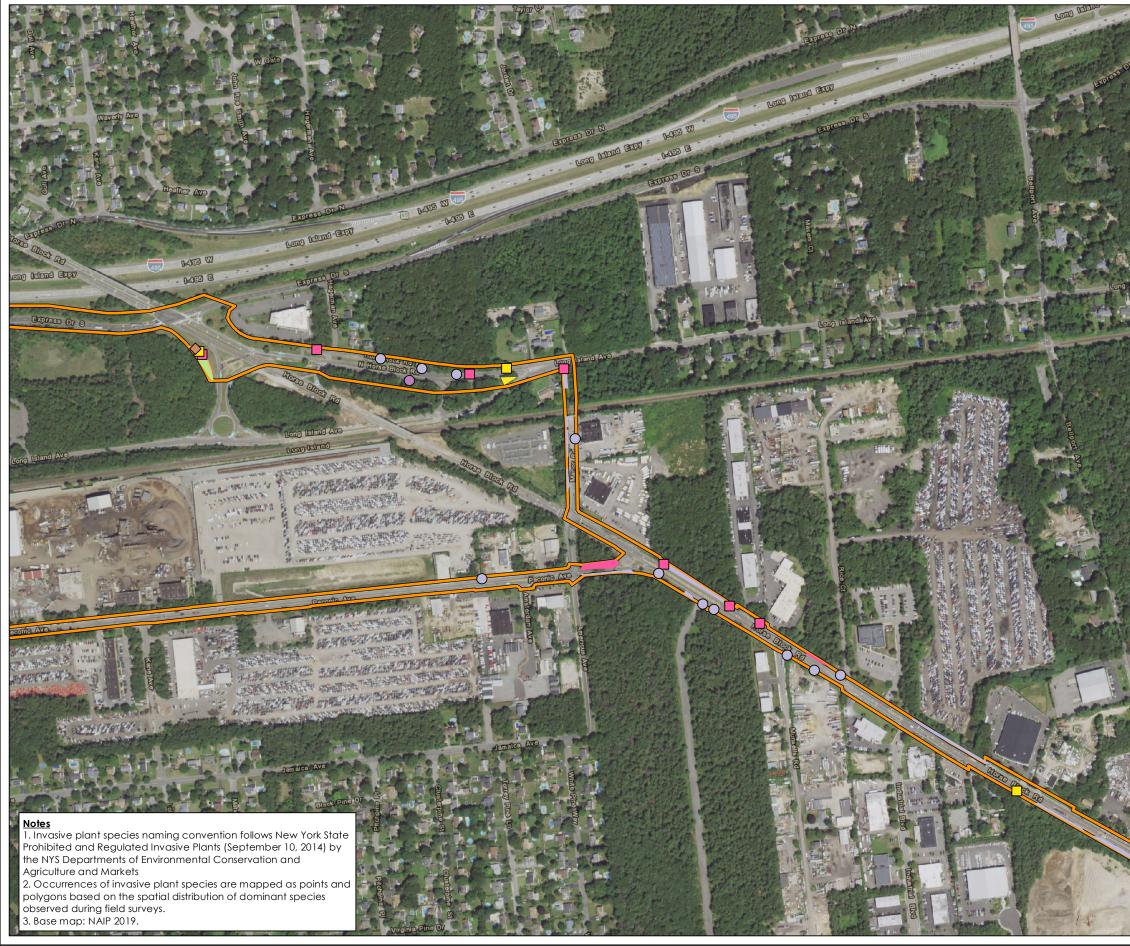


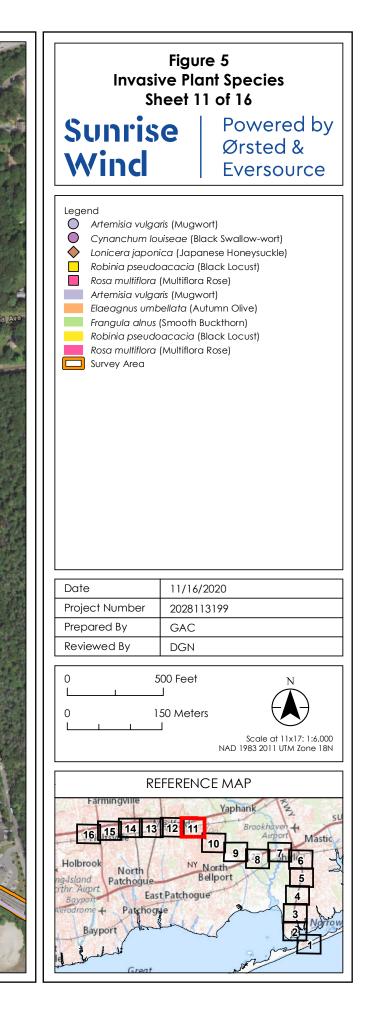


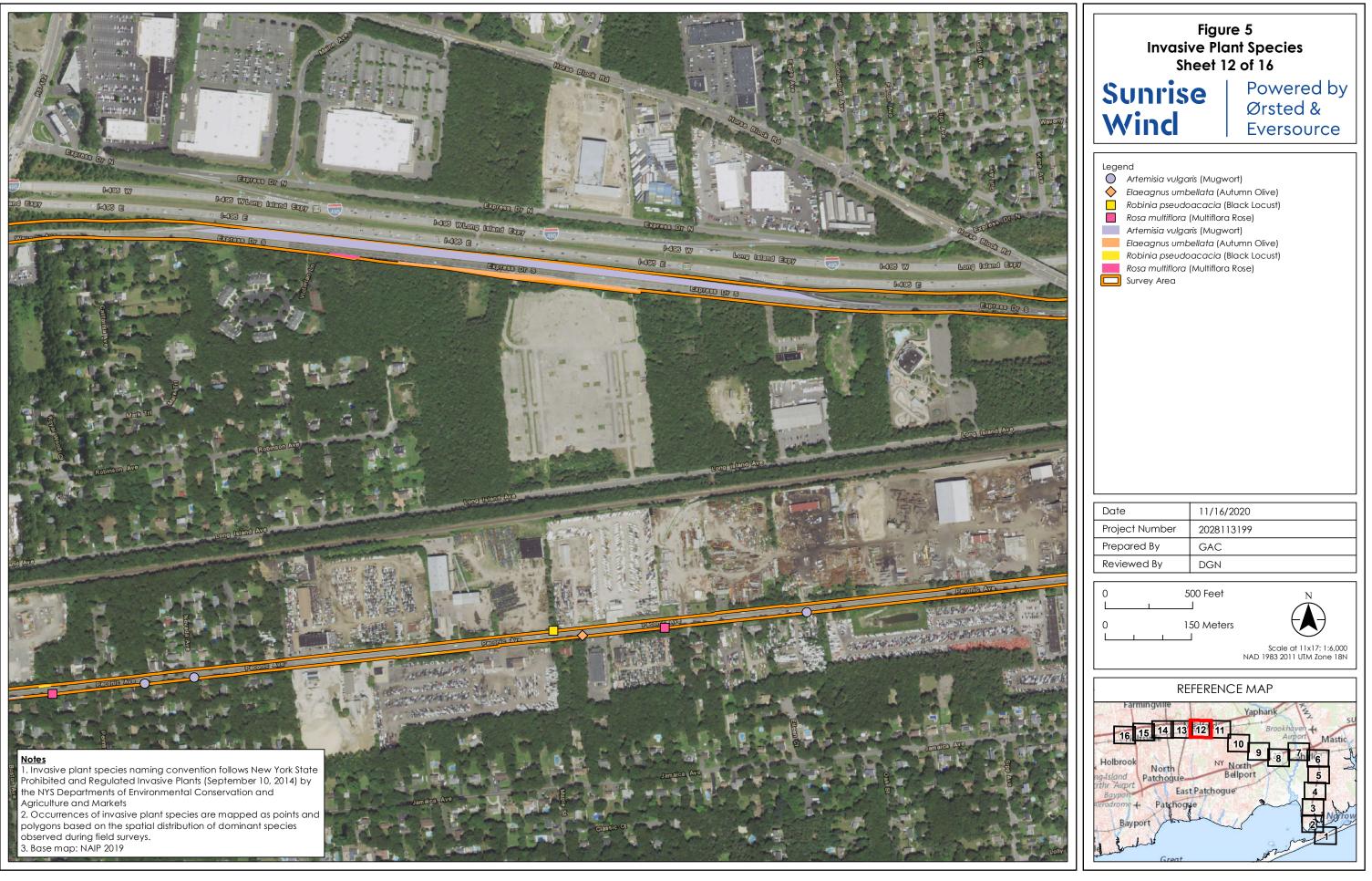






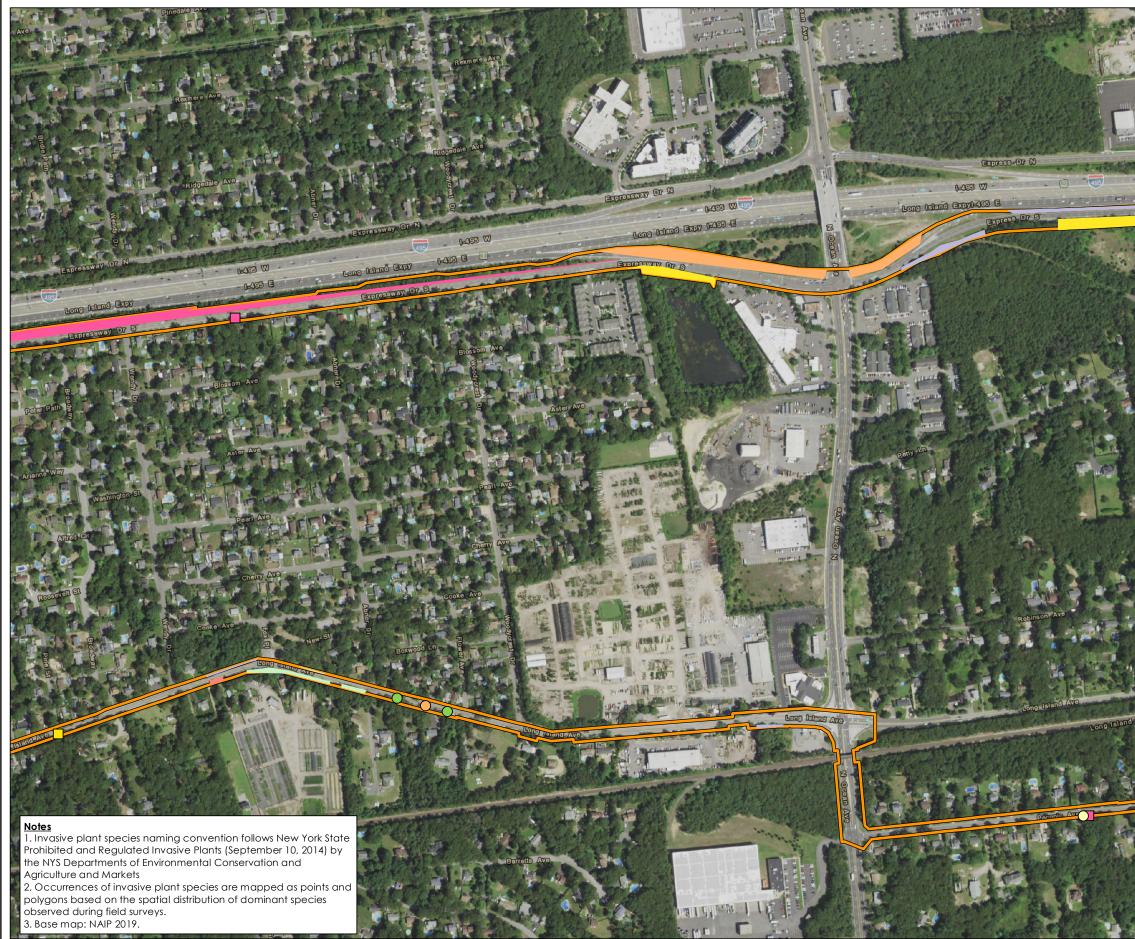


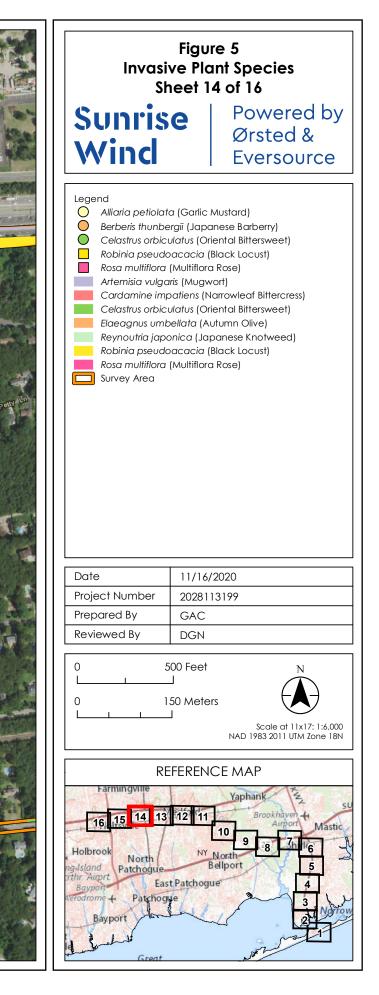


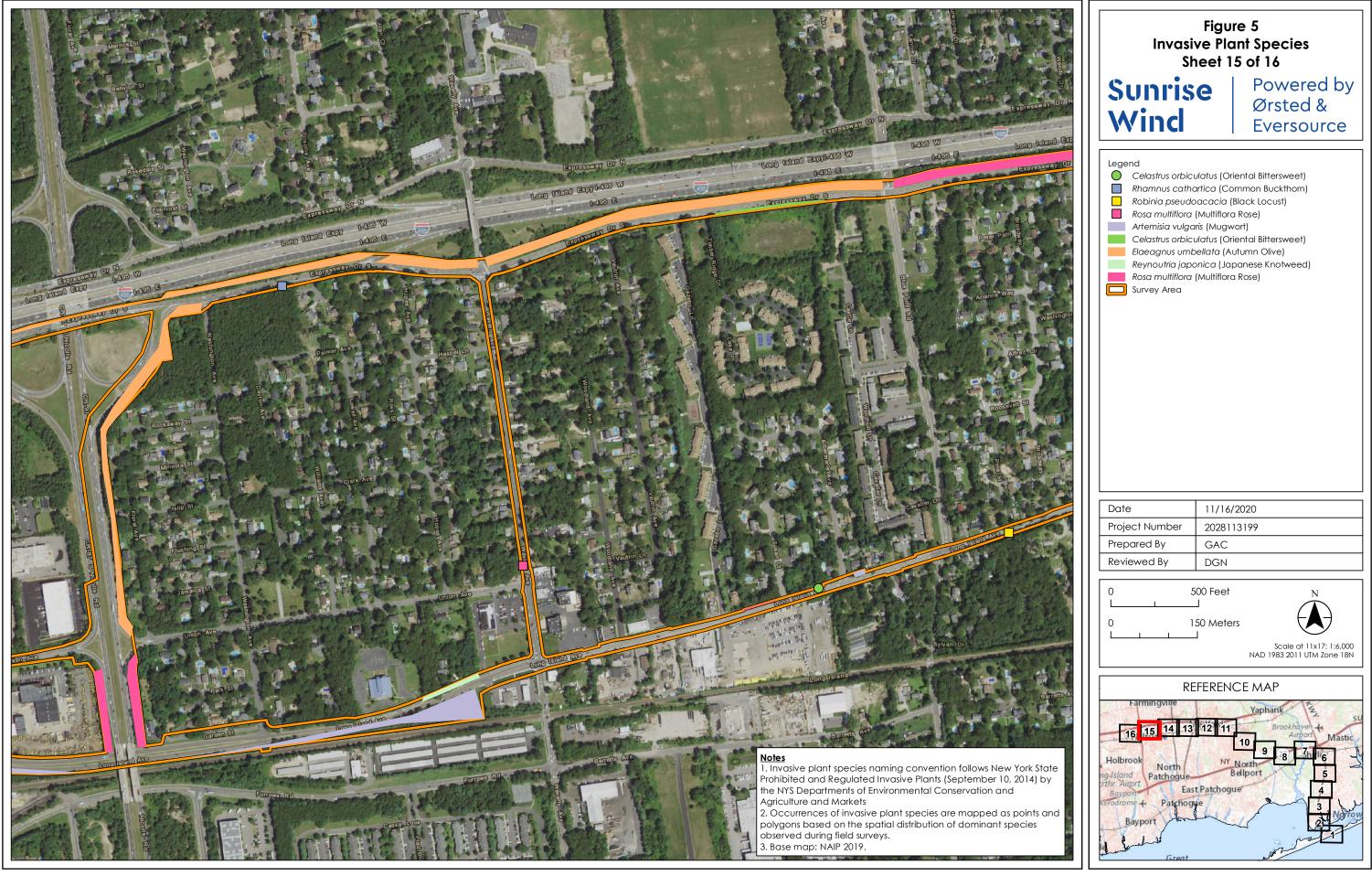


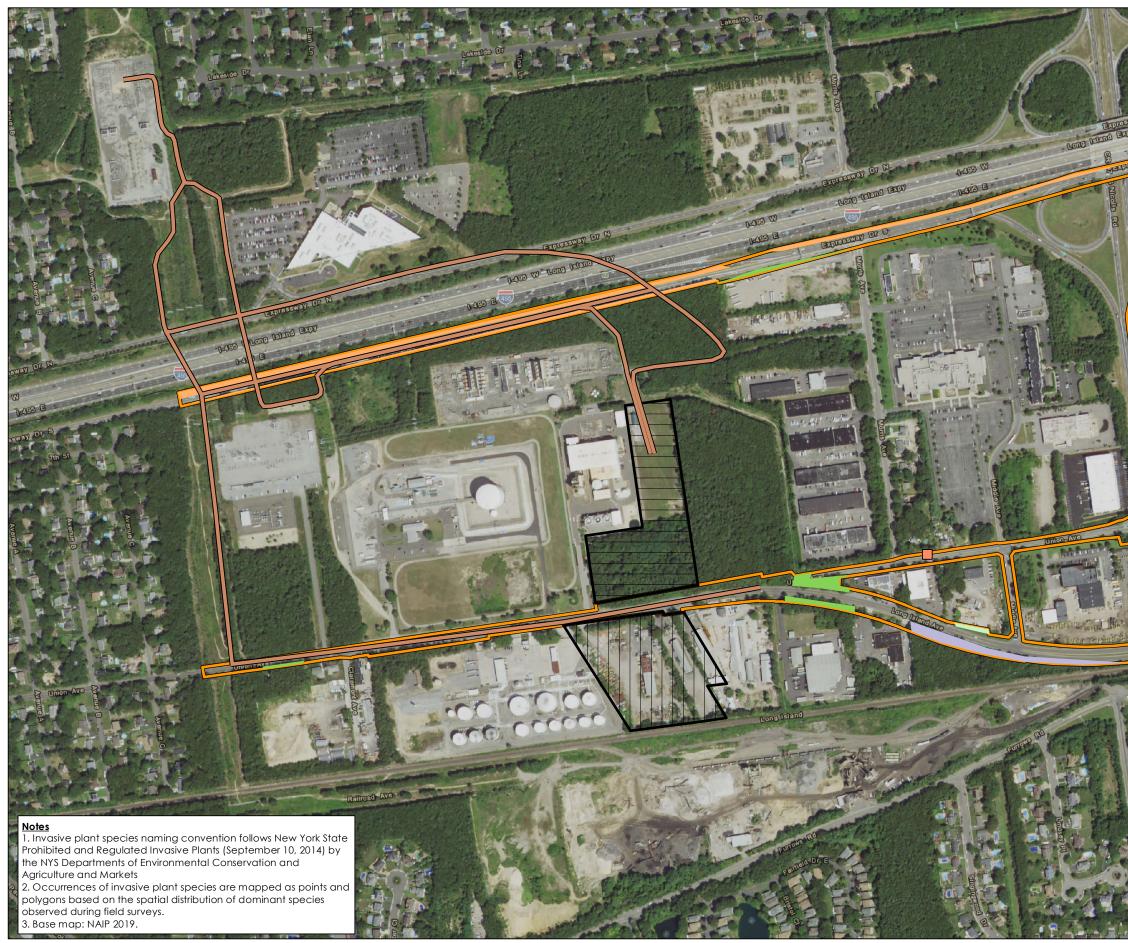


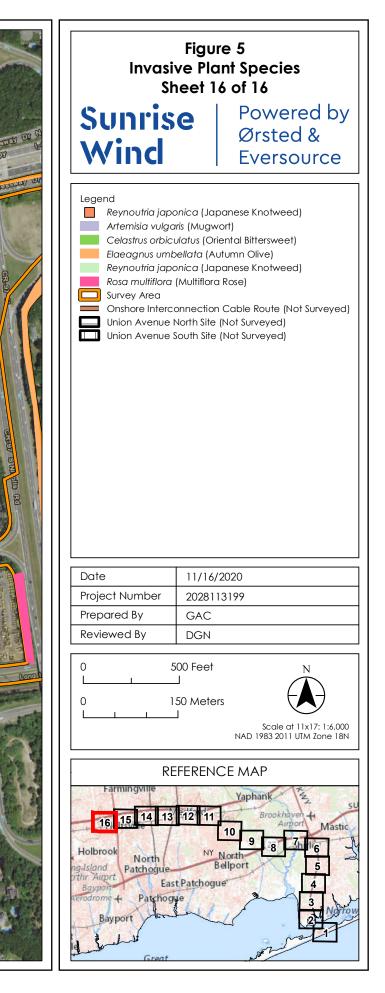


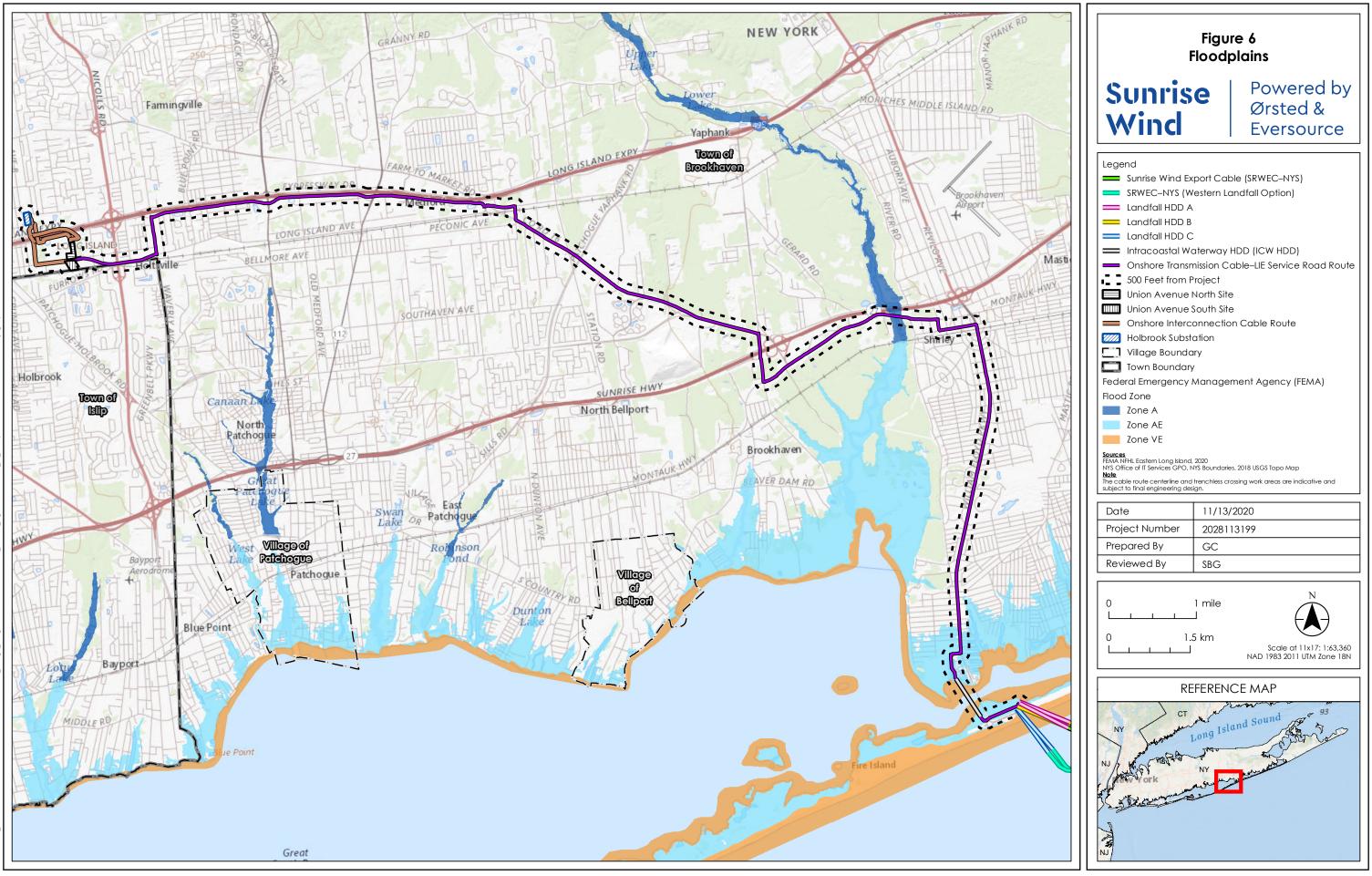








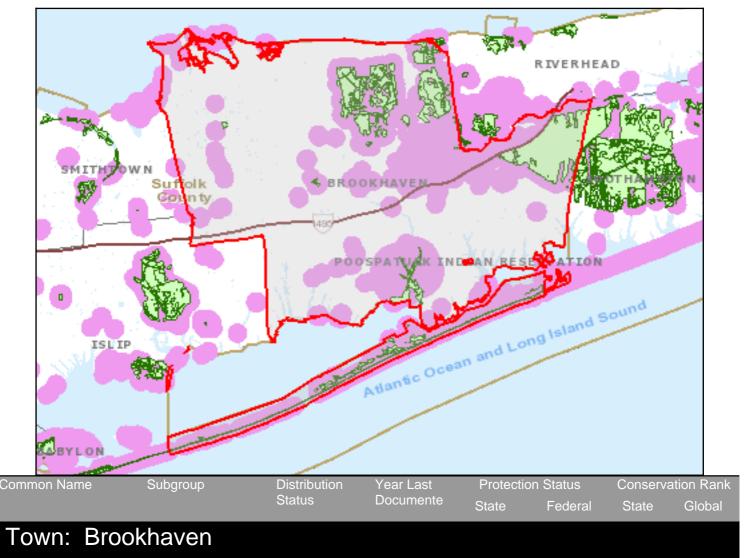




Appendix B NEW YORK NATURE EXPLORER

New York Nature Explorer Rare Species within Town of Brookhaven

Criteria: Town: Brookhaven



Animal: Birds

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| Barn Owl | Owls | Recently Confirmed | 2003 | Protected Bird | S1S2 | G5 |
|----------------------|---------------------------------------|-----------------------|------|-----------------|------|----|
| Tyto alba | | | | | | |
| Black Skimmer | Gulls, Terns, Plovers, Shorebirds | Recently Confirmed | 2007 | Special Concern | S2 | G5 |
| Rynchops niger | | | | | | |
| Glossy Ibis | Herons, Bitterns, Egrets, Pelicans | Recently Confirmed | 2007 | Protected Bird | S2 | G5 |
| Plegadis falcinellus | | | | | | |

| Common Name | Subgroup | Distribution | Year Last | Protection Status | Conservation Rank | |
|----------------------|---------------------------------------|-----------------------|-----------|-------------------|-------------------|--------|
| | | Status | Documente | State Federal | State | Global |
| Kentucky Warbler | Wood-Warblers | Recently Confirmed | 2012 | Protected Bird | S2B | G5 |
| Geothlypis formosa | | | | | | |
| Little Blue Heron | Herons, Bitterns, Egrets, Pelicans | Recently Confirmed | 2007 | Protected Bird | S2 | G5 |
| Egretta caerulea | | | | | | |
| Seaside Sparrow | Sparrows and Towhees | Recently Confirmed | 2002 | Special Concern | S2S3B | G4 |
| Ammodramus maritimus | | | | | | |
| Snowy Egret | Herons, Bitterns, Egrets, Pelicans | Recently Confirmed | 2007 | Protected Bird | S2S3 | G5 |
| Egretta thula | | | | | | |
| Tricolored Heron | Herons, Bitterns, Egrets, Pelicans | Recently Confirmed | 2004 | Protected Bird | S2 | G5 |
| Egretta tricolor | | | | | | |
| Yellow-breasted Chat | Wood-Warblers | Recently Confirmed | 2007 | Special Concern | S2?B | G5 |
| Icteria virens | | | | | | |

Animal: Reptiles

| Eastern Wormsnake | Snakes | Recently Confirmed | 2015 | Special Concern | S2 | G5 | |
|--------------------|--------|-----------------------|------|-----------------|----|----|--|
| Carphophis amoenus | | | | | | | |

Animal: Amphibians

| Eastern Spadefoot | Frogs and Toads | Recently Confirmed | 2008 | Special Concern | S2S3 | G5 |
|-----------------------|-----------------|-----------------------|------|-----------------|------|----|
| Scaphiopus holbrookii | | | | | | |
| Animal: Fish | | | | | | |

Recently S2S3 G5 Atlantic Needlefish Needlefishes 1990 Confirmed Strongylura marina Recently Atlantic Silverside Silversides 1990 S2S3 G5 Confirmed Menidia menidia Recently Eastern Pirate Perch Perches 2016 S1S2 G5T5 Confirmed Aphredoderus sayanus sayanus

Animal: Butterflies and Moths

| A Geometrid Moth | Moths | Recently Confirmed | 2017 | S1 | G4 |
|---------------------|-------|-----------------------|------|------|------|
| Euchlaena madusaria | | | | | |
| Barrens Itame | Moths | Recently Confirmed | 2017 | S1S3 | G3G4 |
| Speranza exonerata | | | | | |

| Common Name | Subaroup | Distribution | Year Last | Protection | | Concer | vation Dank |
|---|--------------------------|---------------------------|------------------------|---------------------|---------|--------|-----------------------|
| Common Name | Subgroup | Status | Pear Last Documente | Protection State | Federal | State | vation Rank Global |
| Black-bordered Lemon Moth | Moths | Recently Confirmed | 2017 | | | S1 | G5 |
| Marimatha nigrofimbria | | | | | | | |
| Chain Fern Borer Moth | Moths | Historically Confirmed | 1987 | | | S1? | G4 |
| Papaipema stenocelis | | | | | | | |
| Chocolate Renia | Moths | Recently Confirmed | 2017 | | | SU | G4 |
| Renia nemoralis | | | | | | | |
| Coastal Barrens Buckmoth | Moths | Recently Confirmed | 2016 | Special Concern | | S2 | G5T3 |
| Hemileuca maia ssp. 5 | | | | | | | |
| Dune Sympistis | Moths | Recently Confirmed | 2013 | | | SU | G4 |
| Sympistis riparia | | | | | | | |
| Edwards' Hairstreak | Butterflies and Skippers | Recently Confirmed | 2003 | | | S3S4 | G5 |
| Satyrium edwardsii | | | | | | | |
| Golden Aster Flower Moth | Moths | Historically Confirmed | 1947 | | | S2 | G4 |
| Schinia tuberculum | | | | | | | |
| Herodias or Pine Barrens Underwing Catocala herodias gerhardi | Moths | Recently Confirmed | 2017 | Special Concern | | S1S2 | G3T3 |
| Jersey Jair Underwing | Moths | Recently Confirmed | 2017 | Special Concern | | S1S2 | G4?T4? |
| Catocala jair ssp. 2 | | | | | | | |
| Mottled Duskywing | Butterflies and Skippers | Historically Confirmed | 1966 | Special Concern | | S1 | G3 |
| Erynnis martialis | | | | | | | |
| Orange Holomelina | Moths | Recently Confirmed | 2017 | | | SU | G5 |
| Virbia aurantiaca | | | | | | | |
| Orange-striped Oakworm Moth | ¹ Moths | Recently Confirmed | 2013 | | | SU | G5 |
| Anisota senatoria | | | | | | | |
| Packard's Lichen Moth | Moths | Recently Confirmed | 2013 | | | SU | G5 |
| Cisthene packardii | | | | | | | |
| Pine Barrens Zanclognatha | Moths | Recently Confirmed | 2013 | | | S1S2 | G4 |
| Zanclognatha martha | | | | | | | |
| Pine Tussock Moth | Moths | Recently Confirmed | 2017 | | | SU | G4 |
| Dasychira pinicola | | | | | | | |
| Umber Moth | Moths | Recently Confirmed | 2017 | | | SU | G4 |
| Hypomecis umbrosaria | | | | | | | |
| | | | | | | | |

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| Common Name | Subgroup | Distribution | Year Last | Protection Status | | Conservation Rank | |
|---------------------------|--------------------------|-----------------------|-----------|-------------------|---------|-------------------|--------|
| | | Status | Documente | State | Federal | State | Global |
| Violet Dart | Moths | Recently Confirmed | 2017 | | | SU | G4 |
| Euxoa violaris | | | | | | | |
| White-m Hairstreak | Butterflies and Skippers | Recently Confirmed | 2000 | | | SU | G5 |
| Parrhasius m-album | | | | | | | |
| Yellow-spotted Graylet | Moths | Recently Confirmed | 2017 | | | SU | G4 |
| Hyperstrotia flaviguttata | | | | | | | |

Animal: Dragonflies and Damselflies

| Damselflies | Recently Confirmed | 2009 | | S1S2 | G5 |
|-------------|---|--|--|---|--|
| | | | | | |
| Dragonflies | Recently Confirmed | 2006 | | S2S3 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2009 | | S2S3 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2006 | Special Concern | S1 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2009 | | S1 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2006 | | S1S2 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2009 | | S2 | G4 |
| | | | | | |
| Damselflies | Recently Confirmed | 2004 | | S2S3 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2004 | | S2 | G5 |
| | | | | | |
| Damselflies | Recently Confirmed | 2005 | | S2S3 | G5 |
| | | | | | |
| Dragonflies | Recently Confirmed | 2005 | | S2 | G4 |
| | | | | | |
| Dragonflies | Historically Confirmed | 1926 | | S1 | G5 |
| | | | | | |
| | Dragonflies Dragonflies | DamselfliesConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDamselfliesRecently ConfirmedDamselfliesRecently ConfirmedDamselfliesRecently ConfirmedDamselfliesRecently ConfirmedDamselfliesRecently ConfirmedDragonfliesRecently ConfirmedDamselfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently ConfirmedDragonfliesRecently Confirmed | DamselfilesConfirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2006DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DragonfliesRecently Confirmed2009DamselfliesRecently Confirmed2004DragonfliesRecently Confirmed2004DragonfliesRecently Confirmed2005DragonfliesRecently Confirmed2005DragonfliesRecently Confirmed2005DragonfliesRecently Confirmed2005DragonfliesRecently Confirmed2005DragonfliesRecently Confirmed2005 | Darissellities Confirmed 2009 Dragonflies Recently Confirmed 2006 Dragonflies Recently Confirmed 2009 Dragonflies Recently Confirmed 2006 Dragonflies Recently Confirmed 2009 Damselflies Recently Confirmed 2004 Dragonflies Recently Confirmed 2004 Dragonflies Recently Confirmed 2005 Dragonflies Recently Confirmed 2005 Dragonflies Recently Confirmed 2005 | DamselfliesRecently Confirmed2009S1S2DragonfliesRecently Confirmed2006Special ConcernS1DragonfliesRecently Confirmed2006Special ConcernS1DragonfliesRecently Confirmed2009Special ConcernS1DragonfliesRecently Confirmed2009S1S1DragonfliesRecently Confirmed2009S1DragonfliesRecently Confirmed2009S1DragonfliesRecently Confirmed2009S2DragonfliesRecently Confirmed2009S2DamselfliesRecently Confirmed2004S2S3DragonfliesRecently Confirmed2004S2DamselfliesRecently Confirmed2005S2S3DragonfliesRecently Confirmed2005S2DamselfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2DragonfliesRecently Confirmed2005S2Dragonfli |

Animal: Beetles

| Common Name | Subgroup | Distribution Status | Year Last | Protec | tion Status | Conservation Rank | |
|-------------------------------------|-----------------|---------------------------|-----------|------------|-------------|-------------------|--------|
| | | Status | Documente | State | Federal | State | Global |
| American Burying Beetle | Carrion Beetles | Historically Confirmed | 1934 | Endangered | Endangered | SH | G2G3 |
| Nicrophorus americanus | | | | | | | |
| Eastern Pinebarrens Tiger Beetle | Tiger Beetles | Historically Confirmed | 1913 | | | SH | G3G4 |
| Cicindela abdominalis | | | | | | | |
| Hairy-necked Tiger Beetle | Tiger Beetles | Recently Confirmed | 2017 | | | S1S2 | G5 |
| Cicindela hirticollis | | | | | | | |
| Northeastern Beach Tiger Beetle | Tiger Beetles | Extirpated | 1939 | Threatened | Threatened | SX | G3G4T2 |
| Cicindela dorsalis dorsalis | | | | | | | |

Animal: Animal Assemblages

| Gull Colony | Animal Assemblages | Recently Confirmed | 2004 | SNRB | GNR |
|-------------|--------------------|-----------------------|------|------|-----|
| Gull Colony | | | | | |

Plant: Flowering Plants

| American Ipecac | Other Flowering Plants | Historically Confirmed | 1928 | Endangered | S1 | G5 |
|--|--------------------------------|---------------------------|------|------------|------|---------|
| Euphorbia ipecacuanhae | | | | | | |
| Annual Saltmarsh Aster | Asters, Goldenrods and Daisies | Recently Confirmed | 2011 | Threatened | S2S3 | G5 |
| Symphyotrichum subulatum var. subulatum | | | | | | |
| Autumnal Water-starwort | Other Flowering Plants | Historically Confirmed | 1927 | Endangered | S1 | G5 |
| Callitriche hermaphroditica | | | | | | |
| Black-edge Sedge | Sedges | Recently Confirmed | 2008 | Threatened | S3 | G5 |
| Carex nigromarginata | | | | | | |
| Brown Bog Sedge | Sedges | Historically Confirmed | 1986 | Threatened | S2 | G5 |
| Carex buxbaumii | | | | | | |
| Button Sedge | Sedges | Recently Confirmed | 2001 | Endangered | S1 | G5 |
| Carex bullata | | | | | | |
| Carey's Smartweed | Other Flowering Plants | Recently Confirmed | 2000 | Endangered | S1S2 | G4 |
| Persicaria careyi | | | | | | |
| Carolina Redroot | Other Flowering Plants | Historically Confirmed | 1925 | Endangered | S1 | G4 |
| Lachnanthes caroliniana | | | | | | |
| Catfoot | Asters, Goldenrods and Daisies | Historically Confirmed | 1929 | Endangered | SH | G4G5T3? |
| Pseudognaphalium micradenium | | | | | | |

| Common Name | Subgroup | Distribution | Year Last | Protection Status | Consei | Conservation Rank | |
|--|--------------------------------|-------------------------------|-----------|-------------------|--------|-------------------|--|
| | | Status | Documente | State Federal | State | Global | |
| Clustered Bluets | Other Flowering Plants | Recently Confirmed | 2008 | Endangered | S1 | G5 | |
| Oldenlandia uniflora | | | | | | | |
| Clustered Sedge | Sedges | Possible but not Confirmed | 1967 | Threatened | S2S3 | G4? | |
| Carex cumulata | | | | | | | |
| Coastal Goldenrod | Asters, Goldenrods and Daisies | Historically Confirmed | 1929 | Endangered | S1 | G5 | |
| Solidago latissimifolia | | | | | | | |
| Coastal Silverweed | Other Flowering Plants | Recently Confirmed | 2008 | Threatened | S2 | G5TNR | |
| Potentilla anserina ssp. pacifica | | | | | | | |
| Collins' Sedge | Sedges | Historically Confirmed | 1987 | Endangered | S1 | G4 | |
| Carex collinsii | | | | | | | |
| Comb-leaved Mermaid Weed | Other Flowering Plants | Recently Confirmed | 2016 | Threatened | S2 | G5 | |
| Proserpinaca pectinata | | | | | | | |
| Coppery St. John's Wort | Other Flowering Plants | Historically Confirmed | 1923 | Endangered | S1 | G5 | |
| Hypericum denticulatum | | | | | | | |
| Cut-leaved Evening Primrose | Other Flowering Plants | Recently Confirmed | 1990 | Endangered | S1 | G5 | |
| Oenothera laciniata | | | | | | | |
| Dark-green Sedge | Sedges | Recently Confirmed | 1999 | Endangered | S1 | G4 | |
| Carex venusta | | | | | | | |
| Downy Lettuce | Asters, Goldenrods and Daisies | Historically Confirmed | 1936 | Endangered | S1 | G5? | |
| Lactuca hirsuta | | | | | | | |
| Dwarf Bulrush | Sedges | Recently Confirmed | 2005 | Endangered | S1 | G5 | |
| Cyperus subsquarrosus | | | | | | | |
| Dwarf Hawthorn | Other Flowering Plants | Historically Confirmed | 1916 | Endangered | SH | G5 | |
| Crataegus uniflora | | | | | | | |
| Early Frostweed | Other Flowering Plants | Recently Confirmed | 2007 | Threatened | S2 | G4 | |
| Crocanthemum propinquum | | | | | | | |
| Eastern Grasswort | Other Flowering Plants | Recently Confirmed | 2007 | Threatened | S2 | G5 | |
| Lilaeopsis chinensis | | | | | | | |
| Eastern Silvery Aster | Asters, Goldenrods and Daisies | Historically Confirmed | 1934 | Endangered | SH | G5T5 | |
| Symphyotrichum concolor var. concolor | | | | | | | |
| Engelmann's Spike Rush | Sedges | Historically Confirmed | 1919 | Endangered | S1 | G4G5 | |
| Eleocharis engelmannii | | | | | | | |

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|--|--------------------------------|---------------------------|------------------------|------------------------------------|-----------------|-----------------------|
| Common Name | Subgroup | Distribution Status | Year Last Documente | Protection Status State Federal | Conser State | vation Rank Global |
| Featherfoil | Other Flowering Plants | Recently Confirmed | 1995 | Threatened | S2 | G4 |
| Hottonia inflata | | | | | | |
| Few-flowered Nut Sedge | Sedges | Historically Confirmed | 1985 | Endangered | S1 | G5 |
| Scleria pauciflora | | | | | | |
| Fibrous Bladderwort | Other Flowering Plants | Recently Confirmed | 2005 | Threatened | S2 | G4G5 |
| Utricularia striata | | | | | | |
| Field Beadgrass | Grasses | Recently Confirmed | 2003 | Endangered | S2 | G4G5 |
| Paspalum laeve | | | | | | |
| Flax-leaf Whitetop | Asters, Goldenrods and Daisies | Recently Confirmed | 1991 | Threatened | S2 | G5 |
| Sericocarpus linifolius | | | | | | |
| Globe-fruited Ludwigia | Other Flowering Plants | Recently Confirmed | 1995 | Threatened | S2 | G5 |
| Ludwigia sphaerocarpa | | | | | | |
| Golden Dock | Other Flowering Plants | Historically Confirmed | 1984 | Endangered | S1 | G5 |
| Rumex fueginus | | | | | | |
| Great Plains Flatsedge Cyperus lupulinus ssp. | Sedges | Historically Confirmed | 1966 | Threatened | S1S2 | G5T5? |
| lupulinus | | Historically | | | | |
| Large Yellow-eyed Grass | Other Flowering Plants | Confirmed | 1985 | Threatened | S2 | G5 |
| Xyris smalliana | | D | | | | |
| Little-leaf Tick Trefoil | Other Flowering Plants | Recently Confirmed | 2007 | Threatened | S2S3 | G5 |
| Desmodium ciliare | | | | | | |
| Long-beaked Beak Sedge | Sedges | Recently Confirmed | 2008 | Rare | S2 | G4 |
| Rhynchospora scirpoides | | | | | | |
| Loose-headed Beak Sedge Rhynchospora chalarocephala | Sedges | Extirpated | 1932 | | SX | G5 |
| Marsh Straw Sedge | Sedges | Historically Confirmed | 1985 | Threatened | S2S3 | G4G5 |
| Carex hormathodes | | | | | | |
| Minute Duckweed | Other Flowering Plants | Historically Confirmed | 1944 | Endangered | S1 | G5 |
| Lemna perpusilla | | | | | | |
| Narrow-leaf Sea Blite | Other Flowering Plants | Historically Confirmed | 1968 | Endangered | S1S2 | G5 |
| Suaeda linearis | | | | | | |
| Narrow-leaved Bush Clover | Other Flowering Plants | Historically Confirmed | 1986 | Threatened | S2 | G5 |
| Lespedeza angustifolia | | | | | | |
| | | | | | | |

| Common Name | Subgroup | Distribution Status | Year Last Documente | Protection Status State Federal | Conse State | rvation Rank Global |
|---|--------------------------------|-------------------------------|------------------------|------------------------------------|----------------|------------------------|
| Northern Blazing Star | Asters, Goldenrods and Daisies | Recently Confirmed | 1992 | Threatened | S2 | G5?T3 |
| Liatris scariosa var. novae- angliae | | | | | | |
| Northern Dwarf Huckleberry | Other Flowering Plants | Historically Confirmed | 1927 | Endangered | S1S2 | G5T4T5 |
| Gaylussacia bigeloviana | | | | | | |
| Northern Gama Grass | Grasses | Recently Confirmed | 2007 | Threatened | S2 | G5TNR |
| Tripsacum dactyloides var. dactyloides | | | | | | |
| Oakes' Evening Primrose | Other Flowering Plants | Recently Confirmed | 2006 | Threatened | S2 | G4G5Q |
| Oenothera oakesiana | | | | | | |
| Ovate Spike Rush | Sedges | Recently Confirmed | 2008 | Endangered | S1S2 | G5 |
| Eleocharis ovata | | | | | | |
| Pale Duckweed | Other Flowering Plants | Historically Confirmed | 1974 | Endangered | S1 | G5 |
| Lemna valdiviana | | | | | | |
| Pencil Flower | Other Flowering Plants | Historically Confirmed | 1914 | | SX | G5 |
| Stylosanthes biflora | | | | | | |
| Persimmon | Other Flowering Plants | Recently Confirmed | 2001 | Threatened | S2 | G5 |
| Diospyros virginiana | | | | | | |
| Pine Barren Bellwort | Other Flowering Plants | Historically Confirmed | 1928 | Endangered | S1 | G5 |
| Uvularia puberula | | | | | | |
| Pinebarren Death Camas | Other Flowering Plants | Historically Confirmed | 1887 | | S1 | G4Q |
| Stenanthium leimanthoides | | | | | | |
| Primrose-leaved Violet | Other Flowering Plants | Historically Confirmed | 1927 | Threatened | S2 | G5TNR |
| Viola primulifolia var. primulifolia | | Committee | | | | |
| Quill-leaved Arrowhead | Other Flowering Plants | Recently Confirmed | 2005 | Endangered | S1 | G3 |
| Sagittaria teres | | | | | | |
| Retrorse Flatsedge | Sedges | Possible but not Confirmed | 1976 | Endangered | S1 | G5 |
| Cyperus retrorsus | | | | | | |
| Reznicek's Sedge | Sedges | Recently Confirmed | 2008 | Endangered | S1S2 | G5 |
| Carex reznicekii | | | | | | |
| Rose Coreopsis | Asters, Goldenrods and Daisies | Recently Confirmed | 2014 | Rare | S3 | G3 |
| Coreopsis rosea | | | | | | |
| Rough Hedge Nettle | Other Flowering Plants | Recently Confirmed | 2004 | Threatened | S2 | G5T4T5 |
| Stachys hyssopifolia var. hyssopifolia | | | | | | |

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| Common Name | Subgroup | Distribution Status | Year Last Documente | | ion Status Federal | Conser State | vation Rank Global |
|--|--------------------------------|-------------------------------|------------------------|------------|-----------------------|-----------------|-----------------------|
| Round-leaf Boneset | Asters, Goldenrods and Daisies | Historically Confirmed | 1929 | Endangered | | SH | G5T5 |
| Eupatorium rotundifolium | | | | | | | |
| Rush Bladderwort | Other Flowering Plants | Recently Confirmed | 1991 | Endangered | | S1 | G5 |
| Utricularia juncea | | | | | | | |
| Saltmarsh Bulrush | Sedges | Recently Confirmed | 2007 | Endangered | | S1 | G5 |
| Bolboschoenus novae-angliae | | | | | | | |
| Sand Blackberry | Other Flowering Plants | Possible but not Confirmed | 1962 | Endangered | | SH | G5 |
| Rubus cuneifolius | | | | | | | |
| Sandplain Agalinis | Other Flowering Plants | Historically Confirmed | 2007 | Endangered | Endangered | S1 | G3G4 |
| Agalinis decemloba | | | | | | | |
| Sandplain Wild Flax | Other Flowering Plants | Recently Confirmed | 1996 | Threatened | | S2 | G4 |
| Linum intercursum | | | | | | | |
| Screw-stem | Other Flowering Plants | Recently Confirmed | 1997 | Endangered | | S1 | G5T5 |
| Bartonia paniculata ssp. paniculata | | | | | | | |
| Sea Purslane | Other Flowering Plants | Historically Confirmed | 1873 | Endangered | | S1 | G5 |
| Sesuvium maritimum | | | | | | | |
| Seabeach Amaranth | Other Flowering Plants | Recently Confirmed | 2018 | Threatened | Threatened | S2 | G2 |
| Amaranthus pumilus | | | | | | | |
| Seabeach Knotweed | Other Flowering Plants | Recently Confirmed | 2003 | Rare | | S3 | G3 |
| Polygonum glaucum | | | | | | | |
| Seaside Agalinis | Other Flowering Plants | Recently Confirmed | 2007 | Threatened | | S2S3 | G5T5 |
| Agalinis maritima var. maritima | | | | | | | |
| Seaside Plantain | Other Flowering Plants | Recently Confirmed | 2007 | Threatened | | S2S3 | G5T5 |
| Plantago maritima var. juncoides | | | | | | | |
| Sedge Rush | Rushes | Possible but not Confirmed | 1928 | Endangered | | S1 | G5TNR |
| Juncus scirpoides var. scirpoides | | Committee | | | | | |
| Short-beaked Beak Sedge | Sedges | Recently Confirmed | 2005 | Threatened | | S2 | G4? |
| Rhynchospora nitens | | | | | | | |
| Showy Aster | Asters, Goldenrods and Daisies | Recently Confirmed | 2004 | Threatened | | S2 | G5 |
| Eurybia spectabilis | | | | | | | |
| Slender Blue Flag | Other Flowering Plants | Recently Confirmed | 2005 | Threatened | | S2 | G4G5 |
| Iris prismatica | | | | | | | |

| Common Name | Subgroup | Distribution | Year Last | Protection Status | Conse | rvation Rank |
|---|-----------------------------------|-------------------------------|-----------|-------------------|---------|--------------|
| | | Status | Documente | State Federa | l State | Global |
| Slender Crab Grass | Grasses | Historically Confirmed | 1955 | Endangered | S1 | G5TNR |
| Digitaria filiformis var. filiformis | | | | | | |
| Slender Marsh Pink | Other Flowering Plants | Recently Confirmed | 2006 | Endangered | S1 | G5 |
| Sabatia campanulata | | | | | | |
| Slender Pinweed | Other Flowering Plants | Recently Confirmed | 2000 | Threatened | S2 | G5 |
| Lechea tenuifolia | | | | | | |
| Slender Spike Rush | Sedges | Possible but not Confirmed | 1962 | Endangered | S1 | G5T5? |
| Eleocharis tenuis var. pseudoptera | | | | | | |
| Small Floating Bladderwort | Other Flowering Plants | Recently Confirmed | 2000 | Threatened | S2 | G4 |
| Utricularia radiata | | | | | | |
| Small White Snakeroot | Asters, Goldenrods and Daisies | Historically Confirmed | 1883 | Endangered | S1 | G5 |
| Ageratina aromatica | | | | | | |
| Smooth Tick Trefoil | Other Flowering Plants | Historically Confirmed | 1914 | Endangered | SH | G5 |
| Desmodium laevigatum | | | | | | |
| Southern Snailseed Pondwee | d Other Flowering Plants | Historically Confirmed | 1938 | Endangered | S1 | G5 |
| Potamogeton diversifolius | | | | | | |
| Southern Yellow Flax | Other Flowering Plants | Historically Confirmed | 1925 | Threatened | S2 | G5T5 |
| Linum medium var. texanum | | | | | | |
| Spotted Pondweed | Other Flowering Plants | Historically Confirmed | 1878 | Threatened | S2 | G5 |
| Potamogeton pulcher | | | | | | |
| Stargrass | Other Flowering Plants | Recently Confirmed | 2004 | Threatened | S2 | G5 |
| Aletris farinosa | | | | | | |
| Stiff Tick Trefoil | Other Flowering Plants | Recently Confirmed | 2007 | Endangered | S1 | G4G5 |
| Desmodium obtusum | | | | | | |
| Swamp Oats | Grasses | Historically Confirmed | 1874 | Endangered | S1 | G4 |
| Sphenopholis pensylvanica | | | | | | |
| Swamp Sunflower | Asters, Goldenrods and Daisies | Recently Confirmed | 2006 | Threatened | S2 | G5 |
| Helianthus angustifolius | | | | | | |
| Thickleaf Orach | Other Flowering Plants | Historically Confirmed | 1920 | Endangered | S1 | G5 |
| Atriplex dioica | | | | | | |
| Three-ribbed Spike Rush | Sedges | Recently Confirmed | 2005 | Endangered | S1 | G4 |
| Eleocharis tricostata | | | | | | |

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| Tooth Cup Rotala ramosiorOther Flowering PlantsRecently Confirmed2005ThreatenedS2G5Rotala ramosiorOther Flowering PlantsHistorically Confirmed1924EndangeredS1G5T5Sagina decumbers ssp. decumbersAsters, Goldenrods and DaisiesRecently Confirmed2004ThreatenedS223G5T4Expatorium subvenosumAsters, Goldenrods and DaisiesRecently Confirmed2004ThreatenedS22G47Velvety Bush CloverOther Flowering PlantsRecontly Confirmed2007ThreatenedS2G47Verygnia Ground Cherry Physalis virginiana var. virginianaOther Flowering PlantsHistorically Confirmed1929EndangeredSHG5T5Water Pignyweed Juncus debilisOther Flowering PlantsHistorically Confirmed1988EndangeredS1G5Virginia Ground Cherry VirginianaRushesConfirmed1988EndangeredS1G5Virginia Ground Cherry VirginianaRushesConfirmed1986EndangeredS1G5Virginia Ground Cherry VirginianaMushesConfirmed1986EndangeredS1G5Virginia Ground Cherry VirginianaWing Nut SedgeSedgesRecently Confirmed1991EndangeredS1G5Juncus debilisVirginia Gross ConfirmedGrassesMistorically Confirmed1878EndangeredS1G5Virginia StrategataGrassesGras | | | | | • | | |
|--|-------------------------|------------------------|-----------------------|------|------------|--------|------------------------|
| Notifie Cup Other Flowering Plants Confirmed Confirmed 2003 Intreatened 32 G3 Rotala ramosior Trailing Pearlwort Other Flowering Plants Historically Confirmed 1924 Endangered S1 G5T5 Sigina decambers ssp. decambers decambers Asters, Goldenrods and Daisies Recently Confirmed 2004 Threatened S22 G4? Expatorium subvenosum Velvety Bush Clover Other Flowering Plants Recently Confirmed 2007 Threatened S2 G4? Velvety Bush Clover Other Flowering Plants Recently Confirmed 2007 Threatened S1 G5T5 Virginia Ground Cherry Physalts virginiana var. virginiana Other Flowering Plants Historically Confirmed 1929 Endangered S1 G5 Varginiana Water Pigmyweed Other Flowering Plants Historically Confirmed 1988 Endangered S1 G5 Juncus debilis Water Pigmyweed Other Flowering Plants Historically Confirmed 1936 Endangered S1 G5 Juncus debilis Wing Nut Sedge Sedges Recently Confirmed 1878 Endangered <th>Common Name</th> <th>Subgroup</th> <th></th> <th></th> <th></th> <th></th> <th>rvation Rank Global</th> | Common Name | Subgroup | | | | | rvation Rank Global |
| Trailing Pearlwort Sagina decumbers ssp. decumbers subvenosumOther Flowering Plants Recently Confirmed2004 ConfirmedThreatenedS1G5T5Velvety Bush Clover Uriginia Ground Cherry Physelis virginiana var. virginiana var. virginiana var. virginiana var.Other Flowering Plants ConfirmedRecently Confirmed1929EndangeredS1G5Crassula aquaticaUther Flowering Plants ConfirmedHistorically Confirmed1988EndangeredS1G5Uwa Rush Mus Nut Sedge SedgesSedgesRecently Confirmed1936EndangeredS1G5Virgin Kara Virginiana var.Vietoring Plants Confirmed1936EndangeredS1G5Umcus debilisVietoring Plants Confirmed1936EndangeredS1G5Virgin Kara | Tooth Cup | Other Flowering Plants | Recently Confirmed | 2005 | Threatened | S2 | G5 |
| Training PearwortOther Plowering PlantsConfirmed1924EndangeredS1G51sSagina decumbers syn. decumbers syn. decumbers syn. decumbers syn. | Rotala ramosior | | | | | | |
| decumbensTrinerved White Boneset DaisiesAsters, Goldenrods and DaisiesRecently Confirmed2004Threatened\$2\$3G5T4Expactorium subvenosumVelvety Bush CloverOther Flowering PlantsRecently Confirmed2007Threatened\$2G4?Lespedeza stueveiVirginia Ground Cherry Virginiana var. virginianaOther Flowering PlantsRecently Confirmed1929Endangered\$HG5T5Water PigmyweedOther Flowering PlantsHistorically Confirmed1988Endangered\$1G5Crassula aquaticaHistorically Confirmed1936Endangered\$1G5Juncus debitisSedgesRecently Confirmed1936Endangered\$1G5Whip Nut SedgeSedgesRecently Confirmed1991Endangered\$1G5Scleria trigtomerataWright's Panic Grass Dicharthelium wrightianumGrassesHistorically Confirmed1878Endangered\$1G5Yellow FlatsedgeSedgesPossible but not Confirmed1925Endangered\$152G4 | Trailing Pearlwort | Other Flowering Plants | | 1924 | Endangered | S1 | G5T5 |
| Innerved while Boneset Daisies Confirmed 2004 Innealened S23 G614 Eupatorium subvenosum Velvety Bush Clover Other Flowering Plants Cecently Confirmed 2007 Threatened S2 G4? Lespedeza stuevei Virginia Ground Cherry Other Flowering Plants Physialis virginiana var. virgini | | | | | | | |
| Velvety Bush Clover Other Flowering Plants Recently Confirmed 2007 Threatened S2 G4? Lespedeza stuevei Virginia Ground Cherry Other Flowering Plants Historically Confirmed 1929 Endangered SH G5T5 Physalis virginiana var. virginiana Virginiana var. virginiana Historically Confirmed 1988 Endangered S1 G5 Water Pigmyweed Other Flowering Plants Historically Confirmed 1988 Endangered S1 G5 Crassula aquatica Historically Confirmed 1936 Endangered S1 G5 Juncus debilis Winp Nut Sedge Sedges Recently Confirmed 1991 Endangered S1 G5 Scleria triglomerata White Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Wright's Panic Grass Grasses Historically Confirmed 1925 Endangered S1S2 G4 Wright Platsedge Sedges Possible but not Confirmed Endangered S1 G5 | Trinerved White Boneset | | | 2004 | Threatened | S2S3 | G5T4 |
| Ververy Busin Clovel Other Flowering Plants Confirmed 2007 Initiatened S2 G47 Lespedeza stuevei Virginia Ground Cherry Other Flowering Plants Historically Confirmed 1929 Endangered SH G5T5 Physalis virginiana var. virginiana Virginiana var. Virginiana SI G5 Water Pigmyweed Other Flowering Plants Historically Confirmed 1988 Endangered S1 G5 Weak Rush Rushes Historically Confirmed 1936 Endangered S1 G5 Juncus debilis Virglomerata Volver Flowering Plants Recently Confirmed 1991 Endangered S1 G5 Scleria triglomerata Virglomerata Vistorically Confirmed 1991 Endangered S1 G5 White Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Asclepias variegata Vistorically Confirmed 1925 Endangered S1S2 G4 Viellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Eupatorium subvenosum | | | | | | |
| Virginia Ground Cherry Physalis virginiana virginianaOther Flowering PlantsHistorically Confirmed1929EndangeredSHG5T5Water Pigmyweed Crassula aquaticaOther Flowering PlantsHistorically Confirmed1988EndangeredS1G5Crassula aquaticaWeak RushRushesHistorically Confirmed1936EndangeredS1G5Juncus debilisWhip Nut SedgeSedgesRecently Confirmed1991EndangeredS1G5Scleria triglomerataWhite MilkweedOther Flowering PlantsConfirmed Confirmed1878EndangeredS1G5Wright's Panic Grass Dichanthelium wrightianumGrassesHistorically Confirmed1925EndangeredS1S2G4Yellow FlatsedgeSedgesPossible but not ConfirmedEndangeredS1G5 | Velvety Bush Clover | Other Flowering Plants | | 2007 | Threatened | S2 | G4? |
| Virginia Ground Cherry Other Flowering Plants Confirmed 1929 Endangered SH GS15 Physalis virginiana var. Virginiana Mater Pigmyweed Other Flowering Plants Historically Confirmed 1988 Endangered S1 G5 <i>Crassula aquatica</i> Virginiana Rushes Historically Confirmed 1936 Endangered S1 G5 <i>Juncus debilis</i> Virgin/ed Virgin/med 1936 Endangered S1 G5 Scleria trigtomerata Virgin/ed Sedges Recently Confirmed 1991 Endangered S1 G5 White Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Asclepias variegata Virght's Panic Grass Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Lespedeza stuevei | | | | | | |
| Physalis virginiana var. Physalis virginiana var. Virginiana Other Flowering Plants Historically Confirmed 1988 Endangered S1 G5 Crassula aquatica Historically Confirmed 1936 Endangered S1 G5 Weak Rush Rushes Historically Confirmed 1936 Endangered S1 G5 Juncus debilis Kecently Confirmed 1991 Endangered S1 G5 Scleria triglomerata Vinte Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Wright's Panic Grass Grasses Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Virginia Ground Cherry | Other Flowering Plants | | 1929 | Endangered | SH | G5T5 |
| Water Pightyweed Other Flowering Plants Confirmed 1988 Endangered S1 G5 Crassula aquatica Weak Rush Rushes Historically Confirmed 1936 Endangered S1 G5 Juncus debilis Whip Nut Sedge Sedges Recently Confirmed 1991 Endangered S1 G5 Scleria triglomerata Viter Flowering Plants Historically Confirmed 1878 Endangered S1 G5 White Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Wright's Panic Grass Dichanthelium wrightianum Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | | | | | | | |
| Weak Rush Juncus debilisRushesHistorically Confirmed1936EndangeredS1G5Whip Nut Sedge Scleria triglomerataSedgesRecently Confirmed1991EndangeredS1G5White Milkweed Asclepias variegataOther Flowering PlantsHistorically Confirmed1878EndangeredS1G5Wright's Panic Grass Dichanthelium wrightianumGrassesHistorically Confirmed1925EndangeredS1S2G4Yellow FlatsedgeSedgesPossible but not ConfirmedEndangeredS1G5 | Water Pigmyweed | Other Flowering Plants | | 1988 | Endangered | S1 | G5 |
| Weak Rush Rushes Confirmed 1956 Endangered S1 G5 Juncus debilis Mip Nut Sedge Sedges Recently Confirmed 1991 Endangered S1 G5 Scleria triglomerata Mite Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Wright's Panic Grass Dichanthelium wrightianum Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Crassula aquatica | | | | | | |
| Whip Nut Sedge Scleria triglomerataSedgesRecently Confirmed1991EndangeredS1G5Scleria triglomerataOther Flowering PlantsHistorically Confirmed1878EndangeredS1G5Asclepias variegataViright's Panic Grass Dichanthelium wrightianumGrassesHistorically Confirmed1925EndangeredS1S2G4Yellow FlatsedgeSedgesPossible but not ConfirmedEndangeredS1G5 | Weak Rush | Rushes | | 1936 | Endangered | S1 | G5 |
| While Null Sedge Sedges Confirmed 1991 Endangered S1 G5 Scleria triglomerata S1 Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Asclepias variegata Vright's Panic Grass Dichanthelium wrightianum Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Juncus debilis | | | | | | |
| White Milkweed Other Flowering Plants Historically Confirmed 1878 Endangered S1 G5 Asclepias variegata | Whip Nut Sedge | Sedges | | 1991 | Endangered | S1 | G5 |
| White Milkweed Other Flowering Plants Confirmed 1878 Endangered S1 G5 Asclepias variegata Historically Confirmed 1925 Endangered S1S2 G4 Wright's Panic Grass Dichanthelium wrightianum Grasses Historically Confirmed 1925 Endangered S1S2 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Scleria triglomerata | | | | | | |
| Wright's Panic Grass Grasses Historically Confirmed 1925 Endangered S1S2 G4 Vielow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | White Milkweed | Other Flowering Plants | | 1878 | Endangered | S1 | G5 |
| Dichanthelium wrightianum Possible but not Confirmed Endangered S132 G4 Yellow Flatsedge Sedges Possible but not Confirmed Endangered S1 G5 | Asclepias variegata | | | | | | |
| Yellow Flatsedge Sedges Confirmed Endangered S1 G5 | - | Grasses | | 1925 | Endangered | \$1\$2 | G4 |
| | Yellow Flatsedge | Sedges | | | Endangered | S1 | G5 |
| Cyper as fractiseens | Cyperus flavescens | | | | | | |

| Atlantic White Cedar | Conifers | Historically Confirmed | 1923 | Threatened | S2 | G4 |
|------------------------|----------|-------------------------------|------|------------|----|----|
| Chamaecyparis thyoides | | | | | | |
| Virginia Pine | Conifers | Possible but not Confirmed | 1878 | Endangered | S1 | G5 |
| Pinus virginiana | | | | | | |

Natural Community: Uplands

| Coastal Oak-Heath Forest | Forested Uplands | Recently Confirmed | 2007 | S3 | G4 |
|--------------------------|------------------|-----------------------|------|----|----|
| Coastal oak-heath forest | | | | | |

| Common Name | Subgroup | Distribution | Year Last | Protectio | n Status | Conse | rvation Rank |
|--------------------------------------|-----------------------|-----------------------|-----------|-----------|----------|-------|--------------|
| | | Status | Documente | State | Federal | State | Global |
| Maritime Beach | Open Uplands | Recently Confirmed | 2001 | | | S3S4 | G5 |
| Maritime beach | | | | | | | |
| Maritime Dunes | Open Uplands | Recently Confirmed | 2007 | | | S3 | G4 |
| Maritime dunes | | | | | | | |
| Maritime Holly Forest | Forested Uplands | Recently Confirmed | 2000 | | | S1 | G1G2 |
| Maritime holly forest | | | | | | | |
| Maritime Pitch Pine Dune Woodland | Barrens and Woodlands | Recently Confirmed | 1998 | | | S1 | G2G3 |
| Maritime pitch pine dune woodland | | | | | | | |
| Pitch Pine-Oak Forest | Forested Uplands | Recently Confirmed | 2013 | | | S2S3 | G4G5 |
| Pitch pine-oak forest | | | | | | | |
| Pitch Pine-Oak-Heath Woodland | Barrens and Woodlands | Recently Confirmed | 2013 | | | S2S3 | G3G4 |
| Pitch pine-oak-heath woodle | ina | | | | | | |

Natural Community: Freshwater Nontidal Wetlands

| Coastal Plain Pond Shore | Open Mineral Soil Wetlands | Recently Confirmed | 2005 | S2 | G3G4 |
|--|-----------------------------------|-----------------------|------|-----|------|
| Coastal plain pond shore | | | | | |
| Maritime Freshwater Interduna Swales Maritime freshwater | al Open Mineral Soil Wetlands | Recently Confirmed | 2006 | \$2 | G3G4 |
| interdunal swales | | | | | |
| Pine Barrens Shrub Swamp | Open Mineral Soil Wetlands | Recently Confirmed | 1998 | S3 | G5 |
| Pine barrens shrub swamp | | | | | |
| Red Maple-Blackgum Swamp | Forested Mineral Soil Wetlands | Recently Confirmed | 1998 | S2 | G3G4 |
| Red maple-blackgum swamp | | | | | |

Natural Community: Lakes and Ponds

| Coastal Plain Pond | Natural Lakes and Ponds | Historically Confirmed | 1985 | S2 | G3G4 |
|--------------------|-------------------------|---------------------------|------|----|------|
| Coastal plain pond | | | | | |

Natural Community: Tidal Wetlands

| Brackish Tidal Marsh | Intertidal Wetlands | Recently Confirmed | 1998 | : | S3S4 | G4 |
|----------------------|---------------------|-----------------------|------|---|------|------|
| Brackish tidal marsh | | | | | | |
| High Salt Marsh | Intertidal Wetlands | Recently Confirmed | 2016 | | S3S4 | G4 |
| High salt marsh | | | | | | |
| Salt Panne | Intertidal Wetlands | Recently Confirmed | 1998 | | S3 | G3G4 |
| Salt panne | | | | | | |

New York State Department of Environmental Conservation

| Common Name | Subgroup | Distribution | | | Protection Status | | Conservation Rank | |
|--|---------------------|-----------------------|-----------|-------|-------------------|-------|-------------------|--|
| | | Status | Documente | State | Federal | State | Global | |
| Salt Shrub | Intertidal Wetlands | Recently Confirmed | 1998 | | | S1 | G5 | |
| Salt shrub | | | | | | | | |
| Natural Commu | nity: Marine | | | | | | | |
| | ity. Marine | | | | | | | |
| Marine Back-barrier Lagoon Marine back-barrier lagoon | Marine Subtidal | Recently Confirmed | 2016 | | | S2 | G5 | |

| Marine Eelgrass Meadow | Marine Subtidal | Confirmed | 2004 | S1S2 G5 |
|-------------------------|-------------------|-----------------------|------|---------|
| Marine eelgrass meadow | | | | |
| Marine Rocky Intertidal | Marine Intertidal | Recently Confirmed | 2004 | S1? G5 |
| Marine rocky intertidal | | | | |
| | | | | |

Note: Restricted plants and animals may also have also been documented in one or more of these Towns or Cities, but are not listed in these results. This application does not provide information at the level of Town or City on state-listed animals and on other sensitive animals and plants. A list of the restricted animals and plants documented in the corresponding county (or counties) can be obtained via the County link(s) on the original Town Search Results page. Any individual plant or animal on this county's restricted list may or may not occur in this particular Town or City.

This list only includes records of rare species and significant natural communities from the databases of the NY Natural Heritage Program. This list is not a definitive statement about the presence or absence of all plants and animals, including rare or state-listed species, or of all significant natural communities. For most areas, comprehensive field surveys have not been conducted, and this list should not be considered a substitute for on-site surveys.

Appendix C AGENCY COMMUNICATIONS



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program 625 Broadway, Fifth Floor, Albany, NY 12233-4757 P: (518) 402-8935 I F: (518) 402-8925 www.dec.ny.gov

March 27, 2020

Sarah Boucher Gravel Stantec 30 Park Drive Topsham, ME 04086

Re: Sunrise Offshore Wind Farm County: Suffolk Town/City: Brookhaven

Dear Ms. Boucher Gravel:

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 that our database indicates occur along the proposed cable routes and landfall locations or in their vicinity. Note there are state-listed animal species documented from the proposed routes.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. 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.

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 NYS DEC Region 1 Office, Division of Environmental Permits, at dep.r1@dec.ny.gov, (631) 444-0365.

Sincerely,

Nich Como

Nicholas Conrad Information Resources Coordinator New York Natural Heritage Program



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The following state-listed animals have been documented along the proposed cable routes and landfall locations or in their vicinity.

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed.

For information about any permit considerations for the project, contact the NYSDEC Region x Office, Division of Environmental Permits, at dep.r1@dec.ny.gov, (631) 444-0365.

The following species have been documented on or very near the proposed cable routes and landfall locations at Fire Island and Smith Point County Park.

| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | FEDERAL LISTING |
|---------------------------|---------------------|------------------|-----------------|
| Piping Plover Breeding | Charadrius melodus | Endangered | Threatened |
| Least Tern Breeding | Sternula antillarum | Threatened | |
| Common Tern Breeding | Sterna hirundo | Threatened | |

The following species have been documented in the offshore waters crossed by the proposed offshore cable route.

| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | FEDERAL LISTING |
|-------------------------------|------------------------|------------------|-----------------|
| Humpback Whale Nonbreeding | Megaptera novaeangliae | Endangered | Endangered |
| Fin Whale | Balaenoptera physalus | Endangered | Endangered |

The following species has been documented at several locations within .5 mile of much of the onshore cable routes, and several more locations are within 1.5 miles. Individual animals may travel 1.5 miles or more from documented locations.

The main impact of concern for bats is the removal of potential roost trees.

| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | FEDERAL LISTING |
|---|------------------------|------------------|-----------------|
| Northern Long-eared Bat Maternity roosts and other summer locations | Myotis septentrionalis | Threatened | Threatened |

This report only includes records from the NY Natural Heritage 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 www.dec.ny.gov/animals/7494.html.



The following rare plants, rare animals, and significant natural communities along the proposed cable routes and landfall locations or in their vicinity.

We recommend that potential 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. Field surveys of the project site may be necessary to determine whether a species currently occurs 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 animals listed in this report, while not listed by New York State as Endangered or Threatened, are rare in New York and are of conservation concern.

The plants listed in this report are listed as Endangered or Threatened by New York State, and/or are rare in New York State, and so are a vulnerable natural resource of conservation concern.

The natural communities listed in this report are considered significant from a statewide perspective by the NY Natural Heritage Program. Each community is either an example 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.

The following species and communities have been documented at the proposed cable route and landfall on Fire Island.

| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS |
|------------------------------|-----------------------|------------------|------------------------------|
| Hairy-necked Tiger Beetle | Cicindela hirticollis | Unlisted | Critically Imperiled in NYS |
| Fire Island Great South Beac | h, 2017: Sand beach. | | |

Maritime Beach

High Quality Occurrence of Uncommon Community Type

Fire Island: A 32 mile long maritime beach along the south shore of Fire Island, 7 miles of which is designated as Federal Wilderness Area where driving is not allowed for most of the year. Natural processes are affected by stablization and nourishment in some areas.

The following species has been documented within .5 mile of the proposed cable route.

| Sandplain Wild Flax | Linum intercursum | Threatened | Imperiled in NYS |
|---------------------|-------------------|------------------|------------------------------|
| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS |

Station Avenue roadside, 1996-08-08: The plants are on a pine barrens roadside with very sparse vegetation, dominated by grasses and legumes.

The following significant community is crossed by the proposed cable route at Carmans River, and also extends along Yaphank Creek to within 100 yards of the proposed cable route.

Carmans River Wetlands, extending north and south of Montauk Highway: The swamp is of moderate size with good

HERITAGE CONSERVATION STATUS

High Quality Occurrence of Rare Community Type

COMMON NAME

Red Maple-Blackgum Swamp

| diversity and some large diameter trees. The swamp is minimally buffered and located at the edge of a locally intact landscape block. | | | | |
|---|---|-------------------------------------|---|--|
| The following species and comr Carmans River in Wertheim Nati | | I south of the proposed | cable route in or along the | |
| COMMON NAME | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS | |
| Water Pigmyweed | Crassula aquatica | Endangered | Critically Imperiled in NYS | |
| Carmans River, west side in road embankment. | nmediately south of Montauk Highw | /ay, 1988-08-31: Bank of an | n intertidal section of river at a | |
| Eastern Pirate Perch | Aphredoderus sayanus sayanus | Unlisted | Critically Imperiled in NYS | |
| Carmans River within .3 mil | e south of Montauk Highway, also | Yaphank Creek, 1990-11-18 | 5. | |
| Atlantic Silverside | Menidia menidia | Unlisted | Imperiled in NYS | |
| Carmans River within .4 mil | e south of Montauk Highway, 1990 | -11-14. | | |
| Brackish Tidal Marsh | | High Quality Occu | rrence of Uncommon Community Type | |
| Carmans River Wetlands, w landscape that is mostly pro | vithin .4 mile south of Montauk High otected. | way: This is a large marsh i | in good to fair condition, in a good | |
| The following species have beer | n documented north of the pro | posed cable route in Sc | outhaven County Park. | |
| COMMON NAME | | | | |
| | SCIENTIFIC NAME | NY STATE LISTING | HERITAGE CONSERVATION STATUS | |
| Eastern Pirate Perch | <i>SCIENTIFIC NAME</i> Aphredoderus sayanus sayanus | <i>NY STATE LISTING</i> Unlisted | HERITAGE CONSERVATION STATUS Critically Imperiled in NYS | |
| | Aphredoderus sayanus | | | |
| | Aphredoderus sayanus sayanus | | | |
| Carmans River just north of Collins' Sedge | Aphredoderus sayanus sayanus NYS Route 27, 2015-08-04. Carex collinsii ithin .25 mile of proposed cable rou | Unlisted Endangered | Critically Imperiled in NYS Critically Imperiled in NYS | |

Southaven County Park, within .25 mile of proposed cable route, 1986-11-04: In wet soil under shrubs and vines in red maple swamp.

The following communities are crossed by the proposed cable route in the waters between Fire Island and the mainland (Smith Point County Park).

COMMON NAME

Marine Eelgrass Meadow

HERITAGE CONSERVATION STATUS

High Quality Occurrence of Rare Community Type

Great South Bay and Moriches Bay: This is an expansive patch of eelgrass in good condition within a fair quality landscape.

Marine Back-barrier Lagoon

High Quality Occurrence of Rare Community Type

Great South Bay and Moriches Bay: This is a very large marine back-barrier lagoon that is in good condition within a fair quality, but mostly developed landscape.

This report only includes records from the NY Natural Heritage database. 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 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 www.dec.ny.gov/animals/29384.html for Ecological Communities of New York State.



United States Department of the Interior

FISH AND WILDLIFE SERVICE Long Island Ecological Services Field Office 340 Smith Road Shirley, NY 11967-2258 Phone: (631) 286-0485 Fax: (631) 286-4003



In Reply Refer To: Consultation Code: 05E1LI00-2020-SLI-0367 Event Code: 05E1LI00-2020-E-00839 Project Name: Confidential Project March 11, 2020

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 (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

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 Act, 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 website 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.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

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 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/correntBirdIssues/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 Act. 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(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Long Island Ecological Services Field Office

340 Smith Road Shirley, NY 11967-2258 (631) 286-0485

Project Summary

| Consultation Code: | 05E1LI00-2020-SLI-0367 |
|--------------------|------------------------|
| Event Code: | 05E1LI00-2020-E-00839 |
| Project Name: | Confidential Project |
| Project Type: | POWER GENERATION |
| | |

Project Description: Proposed wind energy project

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/40.81649280425459N72.91040200081957W</u>



Counties: Suffolk, NY

Endangered Species Act Species

There is a total of 6 threatened, endangered, or candidate species on this 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.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

| NAME | STATUS |
|--|------------|
| Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u> | Threatened |
| Birds | |
| NAME | STATUS |
| Piping Plover Charadrius melodus Population: [Atlantic Coast and Northern Great Plains populations] - Wherever found, except those areas where listed as endangered. There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/6039</u> | Threatened |
| Red Knot <i>Calidris canutus rufa</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/1864</u> | Threatened |
| Roseate Tern Sterna dougallii dougallii Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/2083</u> | Endangered |

Flowering Plants

| NAME | STATUS |
|--|------------|
| Sandplain Gerardia <i>Agalinis acuta</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/8128</u> | Endangered |
| Seabeach Amaranth Amaranthus pumilus No critical habitat has been designated for this species. | Threatened |

Critical habitats

Species profile: <u>https://ecos.fws.gov/ecp/species/8549</u>

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

Appendix D USACE WETLAND DELINEATION FORMS AND SITE PHOTOGRAPHS



| Project/Site: | Sunrise Wind | d/ Fire Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 06/09/20 |
|---|--|---|---|--|--|---|---|---|--|--|---|
| Applicant: | Sunrise Wind | 1 LLC | | | | | | | | County: | Suffolk |
| Investigator #1: | Andv Smith | | | Investi | gator #2: | | | | | State: | New York |
| Soil Unit: | | | | | J | NW | /I/WWI Classification: | | | Wetland ID: | W01ASA |
| Landform: | Rise | | | Loc | al Relief: | | | | | Sample Point: | Upland |
| | 0-1% | Latituda | | | | CONVEX | | Datum: | | | • |
| Slope (%): | | Latitude: | | | ongitude: | | | | NI- | Community ID: | Upland |
| | | ditions on the site typ | | | | o, explain in | | | No | | |
| | | or Hydrology 🛛 sign | | | | | Are normal circumsta | | :? | | |
| Are Vegetation | 🗆 , Soil 🔍 , | or Hydrology 🗌 natu | irally proble | ematic? | | | Yes | □ No | | | |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Veg | petation Pres | sent? | | V Yes | 🗌 No | | | Hydric Soils | Present? | | 🗌 Yes 🗹 No |
| Wetland Hydrol | | | | □ Yes | | | | | | Vithin A Wetland | |
| Remarks: | ogy i reserie | • | | | - 110 | | | 15 mis Camp | oning i onine v | vianii / vocian | |
| Remarks. | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here if | indicators : | are not r | resent |)□ | | | | | |
| Primary: | | | maioators | are not p | i coon | | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | eaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | Н | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturati | | | П | B15 - Mar | | | | | B16 - Moss Trim L | |
| | | | | | C1 - Hydro | | de Odor | | | C2 - Dry-Season V | |
| | B2 - Sedimer | nt Deposits | | | | | spheres on Living Roots | | | C8 - Crayfish Burn | |
| | B3 - Drift De | posits | | | | | duced Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | | C6 - Rece | nt Iron Re | duction in Tilled Soils | | | D1 - Stunted or St | ressed Plants |
| | B5 - Iron Dep | posits | | | C7 - Thin | Muck Surf | ace | | | D2 - Geomorphic I | Position |
| | | ion Visible on Aerial Imag | | | Other (Exp | olain in Re | marks) | | | D3 - Shallow Aquit | |
| | B8 - Sparsel | y Vegetated Concave Si | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | Present? | 🗆 Yes 🗵 No | Dopth | | (in.) | | | | | | |
| | | | Depth: | | . , | | | Wetland Hyd | drology Pro | esent? | Yes 🗹 No |
| Water Table Pre | | 🗌 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Saturation Pres | ent? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Describe Record | ed Data (str | eam gauge, monitorin | a well aeria | al photos | provious | inenectio | ns) if available: | | N/A | | |
| | (| | | | | | | | | | |
| Pomarke | | | <u></u> , acric | | previous | Inspectio | | | | | |
| Remarks: | | 5 5 / | <u>, aone</u> | | previous | Inspection | | | | | |
| | | 3 3 7 | <u>, aone</u> | | previous | inspection | | | | | |
| SOILS | | | <u> , «ente</u> | | previous | | | | | | |
| SOILS Map Unit Name | | | | | previous | | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | | S | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | | S | eries Drainage Class: | | | ining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | group): tion (Describe to | | cator or confirm the al | bsence of indica | | S | | ered/Coated Sand Grains; | | ining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | group): tion (Describe to Bottom | the depth needed to document the indic | cator or confirm the at | ubsence of indica Matrix | tors.) (Type: C=C | S | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov | ered/Coated Sand Grains; Mottles | Location: PL=Pore L | 1 | - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indicement the indicement of the | cator or confirm the at | bsence of indica Matrix Voist) | tors.) (Type: C=C | Soncentration, D= | eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 2 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Voist) 2/2 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indicement the indicement of the | cator or confirm the at | bsence of indica Matrix Voist) | tors.) (Type: C=C | Soncentration, D= | eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 2 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Voist) 2/2 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Bottom Depth 2 18 | the depth needed to document the india Horizon 1 2 | cator or confirm the at Color (N 10YR 10YR | bsence of indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | Concentration, D- | eries Drainage Class: Deplation, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Bottom Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the at Color (N 10YR 10YR | bsence of Indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | Soncentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Bottom Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the as Color (N 10YR 10YR | bsence of indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the ab Color (N 10YR 10YR | bsence of indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Bottom Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the as Color (N 10YR 10YR | bsence of indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the ab Color (N 10YR 10YR | bsence of indica Matrix Moist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 | group): tion (Describe to Depth 2 18 | the depth needed to document the indi Horizon 1 2 | cator or confirm the at Color (N 10YR 10YR | bsence of indica Matrix Voist) 2/2 5/3 | tors.) (Type: C=C % 100 100 | S concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir | the depth needed to document the indi Horizon 1 2 | cator or confirm the at Color (N 10YR 10YR | beence of indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen | S concentration, D: t | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location matic Soils ¹ | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 | the depth needed to document the indicators (check her | cator or confirm the at Color (N 10YR 10YR | beence of indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv | S ioncentration, D: - | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles <u>Indicator</u> | Location: PL=Pore L Type s for Proble A10 - 2 cm l | Location matic Solls ¹ Vluck (LRR K, L, MLRA 14 | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon | cator or confirm the at Color (N 10YR 10YR | bsence of indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I | S concentration, D- t L D- talue Beloo Dark Surfa | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles <u>Indicator</u> | Location: PL=Pore L Type - | Location matic Soils ¹ | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic | cator or confirm the at Color (N 10YR 10YR | beence of Indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I | S concentration, D: t) alue Beloro Dark Surfa y Mucky N | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type s for Proble A10 - 2 cm If A16 - Coast S3 - 5cm Mu | Location matic Soils ¹ Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E[A3 - Black H | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide | cator or confirm the at Color (N 10YR 10YR | beence of indications in the second s | tors.) (Type: C=C % 100 100 ot presen S8 - Polyy S9 - Thin I | S concentration, Dr t □ - | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) Matrix | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide | cator or confirm the at Color (N 10YR 10YR | bsence of indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 s8 - Pohy S9 - Thin I F1 - Loam F2 - Loam | S incentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S3 - Polyval | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface | cator or confirm the at Color (N 10YR 10YR | bsence of Indica Matrix Voist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 s8 - Polyv S9 - Thin I F1 - Loam F3 - Deple F2 - Loam | S incentration, D: t), alue Beloo Dark Surfa y Mucky M y Gleyed I ted Matrix x Dark Su | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) NCC (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix Kr | ered/Coated Sand Grains; Mottles Indicator | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 s8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I | the depth needed to document the indic Horizon 1 2 | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Lacation: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A1 - Deplet A1 - Deplet S1 - Sandy N S4 - Sandy C | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Dark Surface | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type s for Proble A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I S3 - Scm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M T46 - Mesic | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox i Matrix | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox i Matrix | cator or confirm the at Color (N 10YR 10YR | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A1 - Hydroge S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR 10YR re if indicato | beence of indica Matrix Voist) 2/2 5/3 - | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR 10YR re if indicato | bisence of indications (Matrix Moist) 2/2 5/3 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A1 - Hydroge S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indic Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR 10YR re if indicato | beence of indica Matrix Voist) 2/2 5/3 - | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Red0 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam - |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01ASA Sample Point Uplane |
|-------------------|--|------------------|----------|------------|--|
| VECETATION | | | | | |
| VEGETATION | (Species identified in all uppercase are non-native ot size: 10 meter radius) | e species.) | | | |
| | Species Name | % Cover D | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp |
| 1 | Total Cover = | 0 | | | FACW spp. 0 x 2 = 0 |
| | | | | | FAC spp. 105 x 3 = 315 |
| Sapling/Shrub Str | ratum (Plot size: 5 meter radius) | | | | FACU spp x 4 = 0 |
| 1. | Morella pensylvanica | 50 | Y | FAC | UPL spp. <u>15</u> x 5 = <u>75</u> |
| 2. | Toxicodendron radicans | 30 | Y | FAC | |
| 3. | | | | | Total <u>120</u> (A) <u>390</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = <u>3.250</u> |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes I No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| 1 | Total Cover = | 80 | | | □ Yes \square No Prevalence Index is $\leq 3.0^{*}$ |
| | | | | | □ Yes □ No Morphological Adaptations (Explain) * |
| | ot size: 2 meter radius) | 25 | V | FAC | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. 2. | Toxicodendron radicans | 25 15 | Y Y | FAC UPL | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Artemisia vulgaris | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | Deminions of Vegetation Strata. |
| 5. 6 | | | | | Tree - Westerland of (70mm) and a firm that the |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 40 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. 2. | | | | | |
| | | | | | |
| <u>3.</u> 4. | | | | | Hydrophytic Vegetation Present 🧹 Yes 🗌 No |
| 4. 5. | | | | | |
| J. | Total Cover = | | | | |
| Remarks: | Prevelance index is > than 3.0, and no ind | 0 licators of | hydric c | oil or wet | and hydrology present |
| Nomains. | | 1001015 01 | nyune S | on or well | and hydrology present. |
| | | | | | |



Project/Site: Sunrise Wind/ Fire Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASA Landform: Floodplain Local Relief: Concave Sample Point: Wetland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: E2SS/EM 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ✓ Yes✓ Yes Hydric Soils Present? Hydrophytic Vegetation Present? Yes □ No □ No No 🗹 Yes 🗌 No 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks 1 A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits \checkmark C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows 1 B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? ✓ Yes □ No Depth: 10 (in.) Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A A wrack line was observed within the wetland Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 2/2 100 sandy loam 0 2 2 16 2 10YR 5/2 85 7.5YR 5/6 3 С Μ sandy loam --___ ___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:

Page 1 of 2



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01ASA Sample Point Wetland |
|--------------------|---|-------------|----------|------------|---|
| VEGETATION | | | | | |
| VEGETATION | (Species identified in all uppercase are non-nativ ot size: 10 meter radius) | e species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:3(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | Dravalance Index Werksheet |
| 8. 9. | | | | | Prevalence Index Worksheet |
| <u> </u> | | | | | Total % Cover of: Multiply by: OBL spp. 20 x 1 = 20 |
| 10. | Total Cover = | | | | FACW spp. 30 x 2 = 60 |
| | | Ŭ | | | FAC spp. 0 $x 3 = 0$ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. $0 \times 4 = 0$ |
| 1. | Rosa palustris | 20 | Y | OBL | UPL spp. 0 $x 5 = 0$ |
| 2. | Iva frutescens | 10 | Y | FACW | |
| 3. | | | | | Total <u>50</u> (A) <u>80</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = <u>1.600</u> |
| 6. | | | | | |
| 7. | | | | | |
| <u>8.</u> 9. | | | | | Hydrophytic Vegetation Indicators: |
| <u> </u> | | | | | Yes |
| 10. | Total Cover = | | | | ✓ res \Box No Dominance results > 50% |
| | | 50 | | | ✓ res ☐ No Prevalence intex is 3 5.0 ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | Yes ✓ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Phragmites australis | 20 | Y | FACW | |
| 2. | | | | | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | present, uniess distance of problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | height (DDH), regardless of height. |
| 8. | - | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. 10. | | | | | tall. |
| 11. | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 20 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. | - | | | | |
| 2. | | | | | |
| <u> </u> | | | | | Hydrophytic Vegetation Present Yes No |
| 5. | | | | | |
| <u> </u> | Total Cover = | | | | |
| Remarks: | | U | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Sunrise Wind | d/ Fire Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 06/09/20 |
|--|---|---|---|--|--|---|---|---|---|---|---|
| Applicant: | Sunrise Wind | 1 LLC | | | | | | | | County: | Suffolk |
| Investigator #1: | Andy Smith | | | Investi | gator #2: | | | | | State: | New York |
| Soil Unit: | | | | | J | NW | /I/WWI Classification: | | | Wetland ID: | W01ASB |
| Landform: | Rise | | | Loc | al Relief: | | | | | Sample Point: | Upland |
| | 0-1% | Latituda | | | | CONVEX | | Datum: | | | • |
| Slope (%): | | Latitude: | | | ongitude: | | | | NI- | Community ID: | Upland |
| | | ditions on the site typ | | | | o, explain in | | | No | | |
| | | or Hydrology 🛛 sign | | | | | Are normal circumsta | | :? | | |
| Are Vegetation | 🗆 , Soil 🗋 , | or Hydrology D natu | irally proble | matic? | | | Yes | 🗆 No | | | |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Veg | petation Pres | sent? | | Yes | 🗵 No | | | Hydric Soils | Present? | | 🗌 Yes 🗹 No |
| Wetland Hydrol | | | | □ Yes | | | | | | Vithin A Wetlan | |
| Remarks: | ogy i reserie | • | | | - 110 | | | is mis damp | oning i onine v | | |
| Remarks. | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here if | indicators : | are not n | resent |)□ | | | | | |
| Primary: | | | maioators | are not p | / coon |) _ | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | eaves | | | B6 - Surface Soil | Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturati | | | Π | B15 - Mar | | | | | B16 - Moss Trim I | |
| | | | | | C1 - Hydro | | de Odor | | | C2 - Dry-Season | |
| | B2 - Sedimer | nt Deposits | | | | | spheres on Living Roots | | | C8 - Crayfish Burr | |
| | B3 - Drift De | posits | | | | | duced Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | | C6 - Rece | nt Iron Re | duction in Tilled Soils | | | D1 - Stunted or St | ressed Plants |
| | B5 - Iron Dep | posits | | | C7 - Thin I | Muck Surf | ace | | | D2 - Geomorphic | Position |
| | | ion Visible on Aerial Imag | | | Other (Exp | olain in Re | marks) | | | D3 - Shallow Aqui | |
| | B8 - Sparsel | y Vegetated Concave Su | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | | 🗆 Yes 🗵 No | Dopth | | (in.) | | | | | | |
| | | | Depth: | | • • | | | Wetland Hyd | drology Pro | esent? | Yes 🗹 No |
| Water Table Pre | | 🗌 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Saturation Pres | ent? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Describe Record | ed Data (str | eam gauge, monitorin | a well aeris | nhotos | provious | inonoctio | ns) if available: | | N/A | | |
| | | | | | | | | | | | |
| Pemarke: | | oun gaago, montoni | ig weil, dent | ai priotos, | previous | Inspection | | | 1.073 | | |
| Remarks: | · · | | ig wen, dene | ai priotos, | previous | Inspection | is), il avallable. | | | | |
| | · · · · | | | ar priotos, | previous | Inspection | | | | | |
| SOILS | | | | ai priotos, | previous | | | | | | |
| SOILS Map Unit Name | | | | | previous | | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | | S | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | | S | eries Drainage Class: | | | ining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | group): | | cator or confirm the al | | | S | | | | ining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | group): tion (Describe to Bottom | the depth needed to document the indic | cator or confirm the at | bsence of indica Matrix | itors.) (Type: C=C | S | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov | ered/Coated Sand Grains; Mottles | Location: PL=Pore L | 1 | - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indicement the indicement of the | cator or confirm the at | bsence of indica Matrix Moist) | itors.) (Type: C=C | Soncentration, D= | eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indicement the indicement of the | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | itors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Deplation, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indicement the indicement of the | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | itors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Deplation, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | Soncentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the as Color (N 10YR | bsence of indicat Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indicar Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Depth 0 | group): tion (Describe to Bottom Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the ab Color (N 10YR | bsence of indicat Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | S concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/4 | tors.) (Type: C=C % 100 | S concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 | the depth needed to document the indi Horizon 1 | cator or confirm the at Color (N 10YR | beence of indica Matrix Moist) 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D: t | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir | the depth needed to document the indicators (check her | cator or confirm the at Color (N 10YR | beence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S ioncentration, D: - | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles <u>Indicator</u> | Location: PL=Pore L Type s for Proble A10 - 2 cm I | Location matic Soils ¹ | (e.g. clay, sand, loam) sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic | cator or confirm the at Color (N 10YR | beence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 ot presen S8 - Polyy S9 - Thin I F1 - Loam | S concentration, D: t) alue Beloro Dark Surfa y Mucky N | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type s for Proble A10 - 2 cm If A16 - Coast S3 - 5cm Mu | Location matic Soils ¹ Vluck (LR K, L, MRA 1- Prairie Redox (JRR // LP at (JR Pat (JR - 1))) | (e.g. clay, sand, loam) sand 498) K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E] A3 - Black H A4 - Hydroge | the depth needed to document the indic Horizon 1 | cator or confirm the at Color (N 10YR | beence of indicat Matrix Moist) 4/4 ors are n | tors.) (Type: C=C % 100 S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam | S concentration, Dr t □ alue Belon Dark Surfa y Mucky N y Mucky N | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) Matrix | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand 49B) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers | cator or confirm the at Color (N 10YR | beence of indicat Matrix Moist) 4/4 ors are n | tors.) (Type: C=C % 100 | S incentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | ered/Coated Sand Grains; Mottles Indicator | Location: PL=Pore L Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mt S3 - Polyval | Location | (e.g. clay, sand, loam) sand 498) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface | cator or confirm the at Color (N 10YR | beence of Indicat Matrix Moist) 4/4 ors are n | tors.) (Type: C=C % 100 | S incentration, D: t), alue Beloo Dark Surfa y Mucky M y Gleyed I ted Matrix x Dark Su | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) NCC (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix Kr | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type - | Location matic Soils 1 Vluck (LRR K, L, MLRA 1- Prairie Redox (LRR LGR K, L, M) Laface (LRR K, L, M) urface (LRR K, L, M) | (e.g. clay, sand, loam) sand 498) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E[A3 - Black H A4 - Hydroge A5 - Stratifie A12 - Thick I | the depth needed to document the indi Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M | the depth needed to document the indic Horizon 1 | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Lacation: PL=Pore L Type - | Location | (e.g. clay, sand, loam) (e.g. clay, sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick C S1 - Sandy M S4 - Sandy O | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Dark Surface | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles Indicator Indicator | Location: PL=Pore L Type s for Proble A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I S3 - Scm Mü S7 - Dark SI S8 - Polyval S9 - Thin Da F12 - Iron-M T46 - Mesic | Location | (e.g. clay, sand, loam) (e.g. clay, sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy F | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand 498) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A1 - Deplet A1 - Deplet A1 - Sandy N S4 - Sandy F S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox i Matrix | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sand 498) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A1 - Deplet A1 - Deplet A1 - Sandy N S4 - Sandy F S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A1 - Deplet A1 - Deplet A1 - Sandy N S4 - Sandy F S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox i Matrix | cator or confirm the at Color (N 10YR | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR re if indicato | baence of indica Matrix 4/4 | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator Indicator 0 0 0 0 0 0 0 0 0 0 0 0 0 | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratified A1 - Deplet A1 - Deplet A1 - Sandy N S4 - Sandy F S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR re if indicato | bsence of indicat Matrix 4/4 ors are n | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 16 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indic Horizon 1 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR re if indicato | baence of indica Matrix 4/4 | tors.) (Type: C=C % 100 | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | ered/Coated Sand Grains; Mottles % Indicator Indicator 0 0 0 0 0 0 0 0 0 0 0 0 0 | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sand - |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01ASB Sample Point Upland |
|--------------------------------|--|-------------|---------|------------|--|
| VEOFTATION | | | | | |
| VEGETATION Tree Stratum (Pl | (Species identified in all uppercase are non-native ot size: 10 meter radius) | e species.) | | | |
| | Species Name | % Cover Do | ominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 2 (B) |
| 5. | | | | | |
| 6. 7. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 \times 1 = 0 |
| | Total Cover = | 0 | | | FACW spp. 0 $x 2 = 0$ |
| | | | | | FAC spp. 0 $x 3 = 0$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp50 x 4 =200 |
| 1. | Rosa multiflora | 30 | Y | FACU | UPL spp. <u>0 </u> |
| 2. | Prunus serotina | 20 | Y | FACU | |
| 3. | | | | | Total <u>50</u> (A) <u>200</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 4.000 |
| 6. 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes Von Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover = | 50 | | | \square Yes \square No Prevalence Index is $\leq 3.0^*$ |
| | | | | | Yes INO Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 2. | | | | | present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. 6 | | | | | Troo |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | 5 (), 5 5 |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 0 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present Ves No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



Project/Site: Sunrise Wind/ Fire Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASB Landform: Floodplain Local Relief: Concave Sample Point: Wetland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: E2SS/EM 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ✓ Yes✓ Yes Hydrophytic Vegetation Present? Yes □ No □ No No Hydric Soils Present? 🗹 Yes 🗌 No 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks 1 A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits \checkmark C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows 1 B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? ✓ Yes □ No Depth: 10 (in.) Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A A wrack line was observed within the wetland Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 2/2 100 sandy loam 0 2 2 9 2 10YR 4/1 100 7.5YR 5/6 3 С Μ sand --___ ___ ---------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:

Page 1 of 2



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01ASB Sample Point Wetland |
|-------------------|--|------------|----------|------------|--|
| VEGETATION | (Species identified in all uppercase are non-native | | | | |
| | (Species identified in all uppercase are non-nativity ot size: 10 meter radius) | e species. |) | | |
| · · · · · · | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: <u>3</u> (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:4(B) |
| 5. 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B) |
| 7. | | | | | Percent of Dominant Species That Are OBL, FACW, of FAC. 73.0% (AVB) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | $OBL spp. \qquad 0 \qquad x \ 1 = 0$ |
| | Total Cover = | 0 | | | FACW spp. 50 x 2 = 100 |
| | | | | | FAC spp. 20 x $3 = 60$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp x 4 = |
| 1. | Baccharis halimifolia | 30 | Y | FACW | UPL spp. 10 $x 5 = 50$ |
| 2. | Morella pensylvanica | 20 | Y | FAC | |
| 3. | | | | | Total <u>80</u> (A) <u>210</u> (B) |
| 4. 5. | | | | | |
| 5. 6. | | | | | Prevalence Index = B/A = 2.625 |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover = | 50 | | | ✓ Yes |
| | | | | | Yes I No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Phragmites australis | 20 | Y | FACW | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Atropa beladonna | 10 | Y | UPL | present, unless disturbed or problematic. |
| 3. | | | | | Definitions of Venetation Strates |
| 4. 5. | | | | | Definitions of Vegetation Strata: |
| 6 | | | | | Tree - Westerlands Oline (7.0 mm) and an in the state of here st |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | woody prarits less than 5.20 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 30 | | | |
| Woody Vino Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | um (Plot size: 10 meter radius) | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASC Landform: Side slope Local Relief: Convex Sample Point: Upland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: Upland 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation , Soil , or Hydrology significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes ⊡ No SUMMARY OF FINDINGS ☑ No☑ No Hydrophytic Vegetation Present? Yes Hydric Soils Present? 🗌 Yes 🗹 No □ Yes Is This Sampling Point Within A Wetland? 🗏 Yes 🗹 No Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗌 Yes 🗹 No Water Table Present? □ Yes ☑ No (in.) Depth: Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Color (Moist) Depth Depth Horizon % Color (Moist) % Туре Location 7.5YR 3/3 100 sandy loam 0 6 ---6 16 2 7.5YR 4/3 100 -----sandy loam --___ ---------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗌 Yes 🗹 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| VEGETATION (Select Extend Exten Extend Extend Extend Extend Extend Extend Extend Exten | Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASC Sample Point Upland | |
|--|---|----------------------------------|---------------|----------|------------|---|----------------------------|
| These Statume (Periods: Allower actual) Success Dama Multiple of the status of t | VECETATION | | | | | | |
| Secrets Joins Secrets Dominance Test Worksheet 1. | | | ive species.) | | | | |
| 1. - | | | % Cover | Dominant | Ind.Status | Dominance Test Worksheet | |
| 3. - | 1. | | | | | | |
| 4 - | 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:0 (A) | |
| 5 Percent of Dominant Species That Are ORL, FACW, or FAC. 0.0% (AB) 7 <td>3.</td> <td></td> <td></td> <td></td> <td></td> <td></td> | 3. | | | | | | |
| 6 | | | | | | Total Number of Dominant Species Across All Strata:1(B) | |
| 7. - | | | | | | | |
| 8 | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) | |
| 9 - - <th -<="" <="" td=""><td></td><td></td><td></td><td></td><td></td><td>Developer to dev Wederloot</td></th> | <td></td> <td></td> <td></td> <td></td> <td></td> <td>Developer to dev Wederloot</td> | | | | | | Developer to dev Wederloot |
| 10 | - | | | | | | |
| Total Cover = 0 Saping/Shrub. Stratum (Plot size: 5 meter radius) | | | | | | | |
| Saping Shrub Stratum (Plot size: 5 meter radius) FAC type, 0 x 3 = 0 1. 0 2. 0 x 5 = 0 3. 0 x 5 = 0 4. 0 x 5 = 0 6. <td>10.</td> <td></td> <td></td> <td></td> <td></td> <td>$\frac{OBL \text{spp.}}{EACW(\text{spp.})} = \frac{0}{100} \text{ x} 2 = 0$</td> | 10. | | | | | $\frac{OBL \text{spp.}}{EACW(\text{spp.})} = \frac{0}{100} \text{ x} 2 = 0$ | |
| Saping/Shub Stratum (Plot size: 5 meter radius) - | | | - 0 | | | | |
| 1. <t< td=""><td>Sapling/Shrub Str</td><td>atum (Plot size: 5 meter radius)</td><td></td><td></td><td></td><td>FACU spp. 0 $x 4 = 0$</td></t<> | Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp. 0 $x 4 = 0$ | |
| 2 | | | | | | $UPL spp. \qquad 0 \qquad x \ 5 = 0$ | |
| 4 - <td>2.</td> <td></td> <td></td> <td></td> <td></td> <td></td> | 2. | | | | | | |
| 5 Prevalence index = B/A =A 6 7 8 9 10 | 3. | | | | | Total (A) (B) | |
| 6. 7. 8. 9. 10. 10. 10. 10. 10. 10. 10. 10. 2. 3. 4. 5. 6. 11. 12. 13. 14. 15. | | | | | | | |
| 7. 8. 10. Total Cover = Heb Stratum (Plot size: 2 meter radius) 1. Panicum dichotom/florum 60 Y Yes No Morpholytic Vegetation (Explain)* 4. 6. 7. 6. Tere - Woody plants Sin (7.6m) or more in diameter at breast height (DBH), regardless of height. 8. Tere - Woody plants Sin (7.6m) or more in diameter at breast height (DBH), regardless of aize, and woody plants less than 3 in. DBH and greater than 3.28 ft. tuil. 10. | | | | | | Prevalence Index = B/A = <u>NA</u> | |
| 8 9 9 10 Total Cover = 0 Herb Stratum (Plot size: 2 meter radius) 1. Paricum dichotomifforum 60 Y 3 4 6 7 9 10 11 12 13 14 15 15 < | - | | | | | | |
| 9 | | | | | | | |
| 10 Total Cover = 0 Yes No Dominance Test is >50% Herb Stratum (Plot size: 2 meter radius) - - - 1. Panicum dichotomillorum 60 Y 3. - - - - 4. - - - - 5. - - - - 6. - - - - 7. - - - - 8. - - - - 9. - - - - 11. - - - - 12. - - - - 13. - - - - 14. - - - - 15. - - - - 15. - - - - 15. - - - - 16. - - - | - | | | | | | |
| Total Cover = 0 Herb Stratum (Plot size: 2 meter radius) | - | | | | | | |
| Herb Stratum (Plot size: 10 meter radius) | 10. | | | | | | |
| Herb Stratum (Plot size: 2 meter radius) □ Problem Hydrophytic Vegetation (Explain)* 1. Panicum dichotomifforum 60 Y 3. 4. 4. 6 6 7. 9. 10. 11. 13. 14. 15. 16. 17. 18. 19. 11. 14. 15. 2. < | | Total Cover | - 0 | | | | |
| 1. Panicum dichotomiflorum 60 Y 2. | Herb Stratum (Plo | size: 2 meter radius) | | | | | |
| 2. <t< td=""><td></td><td></td><td>60</td><td>Y</td><td></td><td></td></t<> | | | 60 | Y | | | |
| 3. Definitions of Vegetation Strata: 4. | | | | | | | |
| 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 14. 15. 16. 1. 1. 2. 3. 3. | 3. | | | | | present, unless disturbed of problematic. | |
| 6 7. 8. 9. 10. 11. 12. 13. 14. 15. Total Cover = 60 Woody Vines Stratum (Plot size: 10 meter radius) 1. 2. 3. 3. 3. 3. 4. 5. | 4. | | | | | Definitions of Vegetation Strata: | |
| 7. height (DBH), regardless of height. 8. height (DBH), regardless of height. 9. height (DBH), regardless of height. 10. height (DBH), regardless of height. 11. height (DBH), regardless of height. 12. <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> | 5. | | | | | | |
| 1. - 10. - - - - - - - - - - 11. - - - - - - 11. - - - - - - 11. - - - - - - - - 11. - < | - | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast | |
| 9. 10. 11. 11. 11. 11. 11. 11. 11. 11. 11. 11. 11. 1. 1. 1. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>height (DBH), regardless of height.</td> | | | | | | height (DBH), regardless of height. | |
| 10. < | | | | | | | |
| 10. 11. 12. 13. 14. 15. 15. 16. 17. 17. 1. 2. 3. 3. 3. 3. 3. 4. 5. 5. 5. 5. 5. | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. | |
| 12. 10 < | | | | | | | |
| 13. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) | | | | | | Hank All harbanavia (non woodi)) planta ragardiasa ofaita and | |
| 14. < | | | | | | | |
| 15. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vine Stratum (Plot size: 10 meter radius) <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<> | | | | | | | |
| Total Cover = 60 Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. 4. 5. Total Cover = 0 | | | | | | Woody Vines - All woody vines areater than 3.28 ft. in height. | |
| Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. 4. 5. Total Cover = 0 | 10. | | | | | 1100uy 11105 - , 5 | |
| 1. 2. 3. 4. 5. Total Cover = 0 | | | 00 | | | | |
| 1. 2. 3. 4. 5. Total Cover = 0 | Woody Vine Strat | um (Plot size: 10 meter radius) | | | | | |
| 3. 4. 5. Total Cover = 0 | | | | | | | |
| 4 5 Total Cover = 0 | 2. | | | | | | |
| 5 Total Cover = 0 | 3. | | | | | Hydrophytic Vegetation Present Ves No | |
| Total Cover = 0 | | | | | | | |
| | 5. | | | | | | |
| Remarks: Located on slope of earthen berm | | | = 0 | | | | |
| | Remarks: | Located on slope of earthen berm | | | | | |
| | | | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASC Landform: Depression Local Relief: Concave Sample Point: Wetland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: PEM 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation , Soil , or Hydrology significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes ⊡ No SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes □ No □ No No Hydric Soils Present? 🗹 Yes 🗌 No ✓ Yes 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: Wetland is contained in a man-made basin HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) <u>...</u> B6 - Surface Soil Cracks B10 - Draines - □ Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines \checkmark A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? □ Yes ☑ No Depth: (in.) Saturation Present? 🗹 Yes 🗌 No 0 Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: 0 Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 4/6 7.5YR 100 sand 0 2 2 16 2 7.5YR 5/1 95 7.5YR 5/6 3 С Μ sand ---___ ___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASC Sample Point Wetland |
|--------------------|--|------------------|----------|------------|---|
| VEGETATION | | | | | |
| VEGETATION | (Species identified in all uppercase are non-root size: 10 meter radius) | native species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 2 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 2 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | $OBL spp. \qquad 0 \qquad x \ 1 = 0$ |
| 10. | Total Cov | | | | FACW spp. 90 $x = 180$ |
| | | | | | FAC spp. 10 $\times 3 = 30$ |
| Sapling/Shrub Stra | atum (Plot size: 5 meter radius) | | | | FACU spp. $0 \times 4 = 0$ |
| 1. | Iva frutescens | 10 | Y | FACW | UPL spp. 0 x 5 = 0 |
| 2. | | | | | |
| 3. | | | | | Total <u>100</u> (A) <u>210</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = |
| 6. | | | | | |
| 7. 8. | | | | | Iludua uku tia Vanatatian Indiaata ya |
| 8. 9. | | | | | Hydrophytic Vegetation Indicators: |
| 9. 10. | | | | | \checkmark Yes \square No Dominance Test is > 50% |
| 10. | Total Cov | | | | ✓ Tes \square No Dominance Test is 2.0% |
| | 10121 000 | | | | Yes |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | Yes |
| 1. | Phragmites australis | 80 | Y | FACW | |
| 2. | Toxicodendron radicans | 10 | Ν | FAC | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | present, uness disturbed of problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | Or a Herrority of Character Manda land than 2 in DPH and greater than 2 39 ft |
| 9. 10. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cov | | | | |
| | | | | | |
| Woody Vine Strate | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | 1 | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| Remarks: | Total Cov | er = 0 | | | |
| Nemarks. | | | | | |
| I | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/11/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASD Landform: Side slope Local Relief: Convex Sample Point: Upland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: Upland 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ☑ No☑ No Hydric Soils Present? Hydrophytic Vegetation Present? Yes 🗌 Yes 🗹 No □ Yes Is This Sampling Point Within A Wetland? 🗏 Yes 🗹 No Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗌 Yes 🗹 No Water Table Present? □ Yes ☑ No (in.) Depth: Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 4/2 100 --gravelly road fill 0 6 ---6 15 2 10YR 4/3 100 -----sandy loam ---___ ------------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗌 Yes 🗹 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASD Sample Point Upland |
|-------------------|--|----------------|----------|------------|--|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-na ot size: 10 meter radius) | tive species.) | | | |
| Tree Stratum (Pic | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Juglans nigra | 15 | Y | FACU | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 0 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 2 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0.0%</u> (A/B) |
| 7. | | | | | • • • • • • • • • |
| 8. | | | | | Prevalence Index Worksheet |
| 9. 10. | | | | | $\frac{\text{Total \% Cover of:}}{\text{OBL spp.}} 0 \text{x 1} = 0$ |
| 10. | Total Cover | | | | $\begin{array}{ccc} OBL \text{ spp.} & 0 & x 1 = & 0 \\ FACW \text{ spp.} & 0 & x 2 = & 0 \end{array}$ |
| | Total Cover | - 10 | | | FACW spp. $0 	 x 2 - 0$ FAC spp. $0 	 x 3 = 0$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp 15 x 4 = 60 |
| 1. | | | | | UPL spp. $60 \times 5 = 300$ |
| 2. | | | | | |
| 3. | | | | | Total 75 (A) 360 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 4.800 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | Total Cover | | | | Yes |
| | Total Cover | - 0 | | | Yes No Prevalence Index is ≤ 3.0 * Yes No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | Yes |
| 1. | Artemisia vulgaris | 60 | Y | UPL | |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | • It (et al. We shall set here there 0 in DDU and we show there 0.00 ft |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. 11. | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| - | Total Cover | = 60 | | | - |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | 1 | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗹 No |
| 4. | | | | | |
| 5. | Tetel Cover | | | | |
| Remarks: | Total Cover | = 0 | | | |
| Remarks. | | | | | |
| | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/11/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASD Landform: Floodplain Local Relief: Concave Sample Point: Wetland 0-3% Latitude: Datum: Slope (%): Longitude: Community ID: PSS 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ✓ Yes✓ Yes Hydric Soils Present? Hydrophytic Vegetation Present? Yes □ No □ No No 🗹 Yes 🗌 No 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks 1 A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines \checkmark A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? ✓ Yes □ No 8 (in.) Depth: Saturation Present? 🗹 Yes 🗌 No Depth: 0 (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: 0 Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 2/1 100 sandy loam 0 10 10 20 2 10YR 3/1 95 10YR 4/6 5 С Μ sand ---___ ___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASD Sample Point Wetland |
|---------------------------------|---|---------------|----------|------------|--|
| VECETATION | | | | | |
| VEGETATION Tree Stratum (Plo | (Species identified in all uppercase are non-nat ot size: 10 meter radius) | ive species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:5(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 80.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 x 1 = 0 |
| | Total Cover | = 0 | | | FACW spp. 50 x $2 = 100$ |
| | | | | | FAC spp. 50 x 3 = 150 |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp. 20 x 4 = 80 |
| 1. | Rosa multiflora | 20 | Y | FACU | UPL spp. 0 x 5 = 0 |
| 2. | Viburnum recognitum | 10 | Y | FAC | |
| 3. | | | | | Total <u>120</u> (A) <u>330</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.750 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | □ Yes □ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover | = 30 | | | Yes Vo Prevalence Index is ≤ 3.0 * |
| | | | | | □ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) Impatiens capensis | 50 | Y | FACW | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | Sommone of Vogotation official |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover | = 50 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | Vitis riparia | 20 | Y | FAC | |
| 2. | Smilax hispida | 20 | Y | FAC | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover | = 40 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Sunrise Wind | d/ Long Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 06/11/20 |
|---|--|---|--|--|---|--|---|--|---|---|--|
| Applicant: | Sunrise Wind | d LLC | | | | | | | | County: | Suffolk |
| Investigator #1: | Andv Smith | | | Investi | gator #2: | | | | | State: | New York |
| Soil Unit: | | | | | 0 | NW | /I/WWI Classification: | | | Wetland ID: | W01ASE |
| Landform: | Floodplain | | | Loc | al Relief: | | | | | Sample Point: | Upland |
| Slope (%): | 0-3% | Latitude: | | | | Concav | 6 | Datum: | | | • |
| | | | · | | ongitude: | | | | | Community ID: | Upland |
| | | ditions on the site typ | | | year? (If no | o, explain in | | | No | | |
| | | or Hydrology 🛛 sigr | | | | | Are normal circumsta | | ť? | | |
| Are Vegetation | □, Soil □, | or Hydrology 🗌 natu | arally proble | ematic? | | | Yes | □ No | | | |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Veg | netation Pre | sent? | | Yes | ⊡ No | | | Hydric Soils | Present? | | 🗌 Yes 🗹 No |
| Wetland Hydrol | | | | ☐ Yes | | | | | | Vithin A Wetland | |
| Remarks: | ogy i resent | • | | | - 110 | | | 15 THIS Oalling | oning i onine v | vianii / vocian | |
| Remarks. | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indic: | ators (Check here if | indicators | are not n | resent |)[] | | | | | |
| Primary: | | | maioatoro | | looont | / | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturati | | | Π | B15 - Mar | | - | | | B16 - Moss Trim L | |
| | B1 - Water M | | | | C1 - Hydro | | de Odor | | | C2 - Dry-Season V | |
| | B2 - Sedime | nt Deposits | | | | | spheres on Living Roots | | | C8 - Crayfish Burn | |
| | B3 - Drift De | posits | | | C4 - Prese | ence of Re | educed Iron | | | C9 - Saturation Vis | sible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | | C6 - Rece | nt Iron Re | duction in Tilled Soils | | | D1 - Stunted or St | ressed Plants |
| | | posits | | | C7 - Thin | Muck Surf | ace | | | D2 - Geomorphic I | |
| | | on Visible on Aerial Ima | | | Other (Exp | plain in Re | marks) | | | D3 - Shallow Aquit | |
| | B8 - Sparsel | y Vegetated Concave S | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | Present? | 🗆 Yes 🗵 No | Depth: | | (in.) | | | | | | |
| Water Table Pre | | ⊡ Yes □ No | | | . , | | | Wetland Hy | drology Pro | esent? | Yes 🗹 No |
| | | | Depth: | | (in.) | | | | | | |
| Saturation Pres | ent? | 🗹 Yes 🔲 No | Depth: | | (in.) | | | | | | |
| Describe Record | ed Data (str | eam gauge, monitorin | a well aeria | al nhotos | provious | incroctio | ac) if available: | | N/A | | |
| | | | | ii priotos, | previous | inspectio | is), il avaliable. | | 19/73 | | |
| Remarks: | | | ig won, done | a priotos, | previous | Inspection | is), il avallable. | | | | |
| Remarks: | | | g won, done | ai priotos, | previous | Inspection | is), il avallable. | | | | |
| | · · · | | g won, done | ai priotos, | previous | Inspection | 15), II avaliadic. | | N/A | | |
| SOILS | | | g won, done | in priotos, | previous | | | | | | |
| SOILS Map Unit Name | | | | a protos, | previous | | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | | S | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | group): | | - | bsence of indica | | S | | ered/Coated Sand Grains; | | ining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | _ | | | S | eries Drainage Class: | ered/Coated Sand Grains; Mottles | | ining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | group): tion (Describe to Bottom | | cator or confirm the a | bsence of indica Matrix | | S | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov | | Location: PL=Pore L | ining, M=Matrix) | Texture (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indi | cator or confirm the a | bsence of indica Matrix Moist) | tors.) (Type: C=C | S | eries Drainage Class: | Mottles | | 1 | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 4 | the depth needed to document the indi- Horizon | cator or confirm the a Color (1 10YR | bsence of indica Matrix Moist) 4/2 | tors.) (Type: C=C % 100 | Concentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) gravelly road fill |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indi | cator or confirm the a | bsence of indica Matrix Moist) | tors.) (Type: C=C | Concentration, D- | Pepietion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | group): tion (Describe to Bottom Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (f 10YR 10YR | bsence of indica Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | Concentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 4 | the depth needed to document the indi- Horizon | cator or confirm the a Color (1 10YR | bsence of indica Matrix Moist) 4/2 | tors.) (Type: C=C % 100 | Concentration, D- | Pepietion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | group): tion (Describe to Bottom Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (f 10YR 10YR | bsence of indica Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | Concentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | group): tion (Describe to Bottom Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (f 10YR 10YR | bsence of Indica Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | S Concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | group): tion (Describe to Bottom Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (f 10YR 10YR | bsence of indice Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | S Concentration, D- | Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 | group): tion (Describe to Bottom Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (f 10YR 10YR | bsence of indice Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | S Concentration, D- | Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Depth 0 4 | group): tion (Describe to Depth 4 14 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | bsence of indica Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 | S Concentration, D: | Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | bsence of indica Matrix Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen | Soncentration, D- | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type - | Location matic Soils ¹ | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | beence of indica Matrix Moist) 4/2 3/2 - | tors.) (Type: C=C % 100 100 S8 - Polyv | S ioncentration, D- | Pepteton, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm I | Location matic Solls ¹ Vluck (LRR K, L, MLRA 14 | (e.g. clay, sand, loam) gravelly road fill fine sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E | the depth needed to document the indi Horizon 1 2 ndicators (check hell pipedon | cator or confirm the a Color (I 10YR 10YR | beence of Indica Matrix 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I | Soncentration, D- | Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) W Surface (LRR R, MLRA 1498) CP (LRR R, MLRA 1498) | Mottles % | Location: PL=Pore L Type - | Location matic Soils 1 Vluck (LRR L, LMLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic | cator or confirm the a Color (I 10YR 10YR | bsence of indications Matrix 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyy S9 - Thin I F1 - Loam | S Concentration, D: - | Pepletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) fineral (LRR K, L) | Mottles % <u></u> <u>Indicator</u> | Location: PL=Pore L Type s for Proble A10 - 2 cm Hu A16 - Coast S3 - 5 cm Mu | Location matic Soils ¹ Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR cky Peat of Peat (L | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide | cator or confirm the a Color (I 10YR 10YR | beence of indica Matrix Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 s8 - Pohy S9 - Pohy S9 - Pohy S9 - Pohy F1 - Loam F2 - Loam | S Concentration, D- t T arlue Beloo Dark Surfa y Mucky N y Gleyed | Pepieton, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % | Location: PL=Pore L Type rs for Proble A10 - 2 cm I A10 - Coast S3 - 5 cm Mt S3 - 5 cm Mt | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers | cator or confirm the a Color (I 10YR 10YR | beence of indica Matrix Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 S8 - Polyv S9 - Thin I F1 - Loam F3 - Deple F2 - Loam | S ioncentration, D- tt pralue Belov Dark Surfa py Mucky M y Gleyed Matrix | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Africa (LRR K, L) Matrix (| Mottles % <u></u> <u>Indicator</u> | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A11 - Deplet | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface | cator or confirm the a Color (I 10YR 10YR | baance of indica Matrix 4/2 3/2 - | tors.) (Type: C=C % 100 100 | Soncentration, D: | Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K | Mottles % | Location: PL=Pore L Type - | Location matic Soils 1 Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR LGky Peat of Peat (L Jrface (LRR K, L, M) urface (LRR K, L, M) urface (LRR K, L) | (e.g. clay, sand, loam) gravelly road fill fine sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic an Sulfide d Layers ed Below Dark Surface Dark Surface | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral | cator or confirm the a Color (I 10YR 10YR | baance of indica Matrix 4/2 3/2 - | tors.) (Type: C=C % 100 100 S8 - Polyu S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C | the depth needed to document the indi Horizon 1 2 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Dark Surface | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % <u>Indicator</u> | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy F | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) ace |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) ace |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 10YR | bsence of indications (Moist) 4/2 3/2 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) ace |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4 NRCS Hydric S | group): tion (Describe to Depth 4 14 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy C S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indi Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 10YR | baence of indice Matrix Moist) 4/2 3/2 | tors.) (Type: C=C % 100 100 ot presen S8 - Polyu S9 - Thin I F1 - Loam F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple F3 - Deple | S Concentration, D: - | Pepleton, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ATP (LRR R, L) Matrix (rface Surface | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) gravelly road fill fine sandy loam 498) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 1498) 45, 1498) acce nust be present, unless |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASE Sample Point Upland |
|------------------|--|---------------|----------|------------|--|
| VEGETATION | (Species identified in all uppercase are non-nat | ivo oposios) | | | |
| | (Species identified in all uppercase are non-natility) lot size: 10 meter radius) | ive species. | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. 4. | | | | | Total Number of Deminant Creation Across All Strates 2 (D) |
| 4. 5. | | | | | Total Number of Dominant Species Across All Strata: <u>3</u> (B) |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 x 1 = 0 |
| | Total Cover | = 0 | | | FACW spp. 0 $x 2 = 0$ |
| | | | | | FAC spp. 75 x 3 = 225 |
| | ratum (Plot size: 5 meter radius) | 40 | X | FAOL | FACU spp. 70 x 4 = 280 |
| <u> </u> | Rosa multiflora | 10 | Y | FACU | UPL spp. 0 x 5 = 0 |
| 3. | | | | | Total 145 (A) 505 (B) |
| 4. | | | | | Total <u>145</u> (A) <u>505</u> (B) |
| 5. | | | | | Prevalence Index = B/A = 3.483 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes I No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ☑ Yes □ No Dominance Test is > 50% |
| | Total Cover | = 10 | | | \bigcirc Yes \Box No Prevalence Index is ≤ 3.0 * |
| | | | | | Yes I No Morphological Adaptations (Explain) * |
| | ot size: 2 meter radius) | 00 | V | FACU | ☐ Yes |
| <u> </u> | Artemisia vulgaris | 60 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | tan. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 13. | Total Cover | = 60 | | | TOOLY TINGS |
| | | - 00 | | | |
| Woody Vine Strat | tum (Plot size: 10 meter radius) | | | | |
| 1. | Smilax hispida | 75 | Y | FAC | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗹 No |
| 4. | | | | | |
| 5. | | | | | |
| Demendent | Total Cover | = 75 | | | |
| Remarks: | | | | | |
| | | | | | |
| Additional Re | marke | | | | |

Road side, road fill



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/11/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Andy Smith Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01ASE Landform: Floodplain Local Relief: Concave Sample Point: Wetland 0-3% Latitude: Datum: Slope (%): Longitude: Community ID: PSS 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ✓ Yes✓ Yes Hydric Soils Present? Hydrophytic Vegetation Present? Yes □ No □ No No 🗹 Yes 🗌 No 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks 1 A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B16 - Moss Trim Lines \checkmark A3 - Saturation B15 - Marl Deposits B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? ✓ Yes □ No 8 (in.) Depth: Saturation Present? 🗹 Yes 🗌 No Depth: 0 (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 2/1 100 fine sandy loam 0 2 2 8 2 10YR 3/2 95 10YR 4/6 5 С Μ fine sandy loam 8 18 3 10YR 5/1 100 sand ---___ ___ ___ ---------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01ASE Sample Point Wetland |
|-------------------|---|------------|----------|------------|---|
| VEGETATION | | | | | |
| VEGETATION | (Species identified in all uppercase are non-nativ ot size: 10 meter radius) | e species. |) | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>75.0%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: <u>Multiply by:</u> |
| 10. | Total Cause - | | | | OBL spp. 80 x 1 = 80 |
| | Total Cover = | = 0 | | | FACW spp. 30 X 2 = 60 FAC spp. 75 X 3 = 225 |
| Sopling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FAC spp. 75 x 3 = 225 FACU spp. 10 x 4 = 40 |
| 1. | Rosa multiflora | 10 | Y | FACU | UPL spp. 0 $x = 0$ |
| 2. | | | | | |
| 3. | | | | | Total 195 (A) 405 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.077 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover = | = 10 | | | |
| | | | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| | t size: 2 meter radius) | | | | ☐ Yes |
| 1. | Symplocarpus foetidus | 80 | Y | OBL | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Impatiens capensis | 30 | Y | FACW | present, unless disturbed or problematic. |
| 3. 4. | | | | | Definitions of Vegetation Strata: |
| <u>4.</u> 5. | | | | | Deminions of vegetation Strata. |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 110 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | 75 | Y | EAC | |
| 1. 2. | Smilax hispida | 75 | Y | FAC | |
| <u> </u> | | | | | Hydrophytic Vegetation Present Ves No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



| Project/Site: | Sunrise Wind | d/ Fire Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 06/09/20 |
|--|---|---|---|---|---|---|---|--|--|--|--|
| Applicant: | Sunrise Wind | 1 LLC | | | | | | | | County: | Suffolk |
| Investigator #1: | Charles Ferri | is | | Investi | gator #2: | | | | | State: | New York |
| Soil Unit: | | <u></u> | | | J | NW | /I/WWI Classification: | | | Wetland ID: | W01CFA |
| Landform: | Rise | | | Loc | al Relief: | | | | | Sample Point: | Upland |
| | 0-1% | Latituda | | | | CONVEX | | Datum: | | | • |
| Slope (%): | | Latitude: | · | | ongitude: | | | | | Community ID: | Upland |
| | | ditions on the site typ | | | year? (If no | o, explain in | | | No | | |
| | | or Hydrology 🛛 sign | | | | | Are normal circumsta | | ť? | | |
| Are Vegetation | 🗆 , Soil 🔍 , | or Hydrology 🛛 natu | irally proble | matic? | | | Yes | □ No | | | |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Veg | petation Pres | sent? | | V Yes | 🗆 No | | | Hydric Soils | Present? | | 🗌 Yes 🗹 No |
| Wetland Hydrol | | | | ☐ Yes | | | | | | Vithin A Wetland | |
| Remarks: | ogy i reserie | • | | | - 110 | | | 15 mis oump | oning i onine v | vitanii / vootano | |
| Remarks. | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydro | ology Indica | ators (Check here if | indicators : | are not n | resent |)□ | | | | | |
| Primary: | | | maloators | are not p | lesent | | | | Secondary: | | |
| | A1 - Surface | Water | | | B9 - Wate | r-Stained | eaves | | | B6 - Surface Soil (| Cracks |
| | | | | H | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturati | | | П | B15 - Mar | | | | | B16 - Moss Trim L | |
| | | | | | C1 - Hydro | | de Odor | | | C2 - Dry-Season V | |
| | B2 - Sedimer | nt Deposits | | | | | spheres on Living Roots | | | C8 - Crayfish Burn | |
| | B3 - Drift De | posits | | | | | duced Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | at or Crust | | | C6 - Rece | nt Iron Re | duction in Tilled Soils | | | D1 - Stunted or St | ressed Plants |
| | B5 - Iron Dep | posits | | | C7 - Thin I | Muck Surf | ace | | | D2 - Geomorphic I | Position |
| | | ion Visible on Aerial Imag | | | Other (Exp | olain in Re | marks) | | | D3 - Shallow Aquit | tard |
| | B8 - Sparsel | y Vegetated Concave Su | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | | 🗆 Yes 🖂 No | Denth | | (in) | | | | | | |
| | | | Depth: | | (in.) | | | Wetland Hyd | drology Pro | esent? | Yes 🗵 No |
| Water Table Pre | | 🗌 Yes 🗹 No | Depth: | | (in.) | | | • | ••• | | |
| Saturation Pres | ent? | 🗌 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Doscribo Rocord | od Data (str | eam gauge, monitorin | a woll poric | l photos | provious | incroctio | as) if available: | | N/A | | |
| | eu Data (Sili | | | | | | | | | | |
| | | 30030, 1101110111 | 3 , aone | a priotos, | previous | Inspection | | | 19/73 | | |
| Remarks: | | | 3 1101, 40110 | i priotos, | previous | Inspection | | | | | |
| | | 34439, 110110111 | g tron, done | a priotos, | previous | inspection | | | | | |
| SOILS | | | | a protos, | previous | inspection | | | | | |
| | : | | | | previous | | eries Drainage Class: | | | | |
| SOILS | | | | | previous | | | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | - | | - | S | eries Drainage Class: | | | ining M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | group): tion (Describe to | | cator or confirm the at | bsence of indica | - | S | | vered/Coated Sand Grains; | | ning, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | group): tion (Describe to Bottom | the depth needed to document the indic | cator or confirm the at | bsence of indica | tors.) (Type: C=C | S | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov | vered/Coated Sand Grains; Mottles | Location: PL=Pore L | | Texture |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indic | cator or confirm the at | bsence of indica Matrix Moist) | tors.) (Type: C=C | Soncentration, D= | eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) | rered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 2 | the depth needed to document the indic Horizon | cator or confirm the at | bsence of indica Matrix Moist) 4/2 | tors.) (Type: C=C | S | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov | vered/Coated Sand Grains; Mottles | Location: PL=Pore L | | - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth | group): tion (Describe to Bottom Depth | the depth needed to document the indic | cator or confirm the at | bsence of indica Matrix Moist) | tors.) (Type: C=C | Soncentration, D= | eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) | rered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 2 | the depth needed to document the indic Horizon | cator or confirm the at Color (N 10YR | bsence of indica Matrix Moist) 4/2 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Bottom Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | Soncentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Bottom Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | Soncentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Bottom Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Bottom Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | Soncentration, D= | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Bottom Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Depth 2 5 20 | the depth needed to document the indic Horizon 1 2 3 | cator or confirm the at Color (N 10YR 2.5Y 2.5Y | bsence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | S ioncentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 | group): tion (Describe to Depth 2 5 20 | the depth needed to document the india Horizon 1 2 3 | Color (N 10YR 2.5Y | beence of indica Matrix Moist) 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 | S concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Wottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir | the depth needed to document the indic Horizon 1 2 3 | Color (N 10YR 2.5Y | beence of indica Matrix Moist) 4/2 4/3 5/4 pors are n | tors.) (Type: C=C % 100 100 100 <t< td=""><td>S concentration, D: t</td><td>eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) </td><td>Mottles % </td><td>Location: PL=Pore L Type -</td><td>Location matic Soils ¹</td><td>(e.g. clay, sand, loam) sandy loam sand </td></t<> | S concentration, D: t | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type - | Location matic Soils ¹ | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol | the depth needed to document the indic Horizon 1 2 3 ndicators (check her | Color (N 10YR 2.5Y | beence of indica Matrix 4/2 4/3 5/4 Drs are n | tors.) (Type: C=C % 100 100 100 | S ioncentration, D: - | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type - | Location - | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic E | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon | Color (N 10YR 2.5Y | beence of indica Matrix 4/2 4/3 5/4 ors are n | with the second secon | S concentration, D- t L D- talue Beloo Dark Surfa | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) | Mottles Mottles | Location: PL=Pore L Type - | Location matic Soils ¹ Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E[A3 - Black H | the depth needed to document the india Horizon 1 2 3 ndicators (check her pipedon istic | Color (N 10YR 2.5Y | beence of indicators Matrix 4/2 4/3 5/4 pors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam | S concentration, D: t) alue Beloro Dark Surfa y Mucky N | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) | Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm If A16 - Coast S3 - 5cm Mu | Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR) Loky Peat of Peat (L | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E] A3 - Black H A4 - Hydroge | the depth needed to document the indi Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide | Color (N 10YR 2.5Y | beence of indica Matrix 4/2 4/3 5/4 pors are n | tors.) (Type: C=C % 100 100 | S concentration, Dr t □ - | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) ICP (LRR R, MLRA 149B) Matrix | Mottles Mottles | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers | Color (N 10YR 2.5Y | beence of indica Matrix 4/2 4/3 5/4 Drs are n | tors.) (Type: C=C % 100 100 100 s8 - Polyv S9 - Thin I F1 - Loam F3 - Deple F3 - Deple | S incentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles Mottles Mottles | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A11 - Deplet | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface | Color (N 10YR 2.5Y | beance of indica Matrix 4/2 4/3 5/4 | tors.) (Type: C=C % 100 100 100 100 100 1100 1100 1100 1100 1100 1100 1100 1100 | S incentration, D: t), alue Beloo Dark Surfa y Mucky M y Gleyed I ted Matrix x Dark Su | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) NCC (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix Kr | Mottles Mottles | Location: PL=Pore L Type - | Location matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Inface (LRR K, L, M) Les Below Surface ((LRR K, L) | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I | the depth needed to document the india Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 100 s8 - Polyv S9 - Thin I F1 - Loam F3 - Deple F3 - Deple | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Mottles Mottles | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic EI A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M | the depth needed to document the indi Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Inface (LRR K, L, M) Les Below Surface ((LRR K, L) | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy O | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Dark Surface | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Mottles Mottles Mottles | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A1 - Deplet A1 - Deplet A1 - Sandy N S1 - Sandy N S4 - Sandy C | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Mottles Mottles Mottles Mottles Mottles | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the india Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox d Matrix | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Mottles Mottles Mottles N | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Pered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the india Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox d Matrix | Color (N 10YR 2.5Y | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Pered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type <t< td=""><td>Location</td><td>(e.g. clay, sand, loam) sandy loam sand -</td></t<> | Location | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Strippec | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR 2.5Y 2.5Y re if indicato | beence of indicat Matrix 4/2 4/3 5/4 ors are n | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | Pered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Lo | (e.g. clay, sand, loam) sandy loam sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric S | group): tion (Describe to Depth 2 5 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A1 - Hydroge S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indic Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the at Color (N 10YR 2.5Y 2.5Y re if indicato | beence of indica Matrix 4/2 4/3 5/4 - | tors.) (Type: C=C % 100 100 ot presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo | S concentration, D- | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) v Surface (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ide (LRR R, MLRA 149B) Ideral (LRR K, L) Matrix frace Surface | | Location: PL=Pore L Type - | Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Location Loc | (e.g. clay, sand, loam) sandy loam sand - |



Northeast and Northcentral Region

| Cell FATUN (Species identified in all approaces are non-value species) Test Bitmann (Theta data: 10 main marks and the species is that and OBL_FACW, or FAC: | Project/Site: | Sunrise Wind/ Fire Island, | NY | | | | Wetland ID: W01CFA Sample Point Uplan |
|--|------------------|----------------------------------|--------------------|----------|------------|-------------|--|
| Total Cover = 0 Suggetty During (Plat size: 10 meter radius) Deminance Test Worksheet 1. | | | | | | | |
| Secrets Jume % com Derivation for the section of the sectin of the section of the sectin of the section of the se | VEGETATION | | ase are non-native | species. |) | | |
| 1. | Tree Stratum (P | | | 0/ 0 | Deminent | la d Otata | Dominance Test Worksheet |
| 2 | 1 | | | | | | Dominance rest worksneet |
| 3. - | | | | | | | Number of Deminent Species that are ODL $FACW$ or FAC (A) |
| 4. - | | | | | | | Number of Dominant Species that are OBL, FACW, of FAC(A) |
| 5 - - - - 6. - - - - 7. - - - - 8. - - - - - 10. - - - - - - - 10. - | | | | | | | |
| 6. - | | | | | | | I otal Number of Dominant Species Across All Strata: |
| 7. <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | |
| 8. → Prevalence Index Worksheet 9. → OBL spp. 0 x 1 = 0 10. → DBL spp. 0 x 1 = 0 10. → FACW spp. 0 x 2 = 0 1. Morella pensylvarica 75 Y FAC FAC FACW spp. 0 x 2 = 0 2. Toulcodendron radicars 30 Y FAC | | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>00.0%</u> (A/B) |
| 9 Multiple br 10. OBI spp. 0 x 1 = 0 saging/Shrub Stratum (Ptot size: 5 meter radius) OBI spp. 0 x 2 = 0 3. Provise matrixma 5 N N N <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Drevelance Index Workshoet</td> | | | | | | | Drevelance Index Workshoet |
| 10 | | | | | | | |
| Total Cover = 0 iapping/Shrub Stratum (Plot size: 5 matter radius) - 1. Morella persylvanica 75 Y FAC 2. 70xicodendrom radicans 30 Y FAC 3. Prunus maritima 5 N NI 4. - - - - 5. - - - - 6. - - - - 7. - - - - 9. - - - - 10. - - - - 11. Avena sativa 25 Y UPL 11. Avena sativa 25 Y UPL 2. Toxicodendrom radicans 15 Y UPL 3. Artemisja vulgaris 15 Y UPL 4. Artemisja vulgaris 15 Y UPL 3. - - - - 7. - - - - 1. | | | | | | | |
| gaing/Structur (Plot size: 5 metter radius) | 10. | | T 1 1 0 | | | | |
| signing/Shrub: Stratum (Plot size: 5 meter radius) | | | Total Cover = | 0 | | | |
| 1. Morella pensylvanica 75 Y FAC 2. Toxicocdendron radicans 30 Y FAC 3. Prunus maritima 5 N NI 4. 6. 7. 8. 10. 10. 10. 10. 10. Total Cover = 10 2. Toxicodendron radicans 15 Y UPL 3. Artemisa vulgaris 15 Y UPL 4. Artemisa vulgaris 15 Y UPL 5. 7. 10. | | | | | | | FAC spp. 120 X 3 = 360 |
| 2. Toxicodendrion radicans 30 Y FAC 3. Prunues mantima 5 N N 4. - - - 5. - - - 6. - - - 7. - - - 9. - - - 10. - - - 10. - - - 7. Toxicodendron radicans 15 Y UPL 1 Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y UPL 4. Artemisia vulgaris 15 Y UPL 5. - - - - 6. - - - - 7. - - - - - 6. - - - - - 7. - - - < | | | | | | | FACU spp X $4 = 0$ |
| 3. Prunus mantima 5 N NI 4. 5. 6. 7. 8. 9. 10. 110. 110. 111. Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y EVA 3. Artemisia vulgaris 15 Y UPL 4. 7. 10. 11. 12. < | | | | | | | UPL spp52 X 5 =260 |
| 4. Prevalence Index = B/A = | | | | | | | |
| 5 Prevalence Index = B/A = | | | | | | | Total <u>172</u> (A) <u>620</u> (B) |
| 6. 7. 8. 9. 10. Total Cover = 110 10. 10. 10. 10. 10. 11. Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y VPL 4. Arnensia vuigaris 15 Y VPL 5. 6 7. 9. 10. 12. </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | | | | | | | |
| 7. 8. 9. 10. Total Cover = 10 10. Total Cover = 10 10. Total Cover = 10 10. 11. Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y EVEN 3. Artemisia vulgaris 15 Y UPL 5. 6 9. 10. 11. 12. 12. <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Prevalence Index = B/A = <u>3.605</u></td></td<> | | | | | | | Prevalence Index = B/A = <u>3.605</u> |
| 8 9 9 10 Total Cover = 110 Image: statum (Plot size: 2 meter radius) 1. Avera sativa 25 Y UPL 2. Toxicodendorn radicans 15 Y FAC 3. Artemisia vulgaris 15 Y UPL 4. Armophila brevilgulata 7 N UPL 6 7 9 10 11 12 13 14 15 | | | | | | | |
| 9 10 Total Cover = 10 Total Cover = 1. Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y FAC 3. Artemisia vulgaris 15 Y UPL 4. Ammophila breviligulata 7 N UPL 6 7 8 9 11 8 9 11 12 13 14 15 | | | | | | | |
| 10 Total Cover = 110 10. Avera sativa 25 Y UPL 11. Avera sativa 25 Y UPL 2. Toxicodendron radicans 15 Y UPL 4. Artemisia vulgaris 15 Y UPL 5 6 7 8 9 11 12 13 14 15 14 15 14 15 14 | 8. | | | | | | Hydrophytic Vegetation Indicators: |
| Total Cover = 110 Interview Interview Interview Interview 1. Avena sativa 2. Toxicodendron radicans 1. Artemisia vulgaris 1. Artemisia vulgaris 3. Artemisia vulgaris 6. 7. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 10. 11. 12. <td>9.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Yes I No Rapid Test for Hydrophytic Vegetation</td> | 9. | | | | | | Yes I No Rapid Test for Hydrophytic Vegetation |
| in Avena sativa 25 Y UPL in Avena sativa 15 Y FAC in Aremisia vulgaris 15 Y UPL in Ammophila breviligulata 7 N UPL in Ammophila breviligulata 7 N UPL in | 10. | | | | | | Yes Dominance Test is > 50% |
| terb Stratum (Plot size: 2 meter radius) | | | Total Cover = | 110 | | | ☐ Yes |
| 1. Avena sativa 25 Y UPL 2. Toxicodendron radicans 15 Y FAC 3. Artemisia vulgaris 15 Y UPL 4. Armophila breviligulata 7 N UPL 5. 6 6 7. 8. 9. 10. 11. 12. 13. 15. 15. 14. 15. <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>Yes I No Morphological Adaptations (Explain) *</td></td<> | | | | | | | Yes I No Morphological Adaptations (Explain) * |
| 2. Toxicodendron radicans 15 Y FAC 3. Artemisia vulgaris 15 Y UPL 4. Ammophila breviligulata 7 N UPL 5. 6 7. 8. 10. 11. 12. 13. 15. 14. 15. 16. 15. 16. 17. < | Herb Stratum (Pl | ot size: 2 meter radius) | | | | | Yes I No Problem Hydrophytic Vegetation (Explain) * |
| 2. Noteobernion Pacificans 15 Y UPL 3. Artemisia vulgaris 15 Y UPL 4. Ammophila breviligulata 7 N UPL 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. 15. 16 15. 16. 16. 17. 18. | 1. | Avena sativa | | 25 | Y | UPL | t Indicators of hydric soil and watland hydrology must be |
| 3. Artemisia vulgaris 15 Y UPL 4. Ammophila breviligulata 7 N UPL 5. 6 7. 8. 9. 10. 11. 12. 13. 14. 15. Total Cover = 62 Voody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. 3. | 2. | Toxicodendron radicans | | 15 | Y | FAC | |
| 5. <t< td=""><td>3.</td><td>Artemisia vulgaris</td><td></td><td>15</td><td>Y</td><td>UPL</td><td></td></t<> | 3. | Artemisia vulgaris | | 15 | Y | UPL | |
| 6 7. 8. 9. 10. 11. 12. 13. 14. 15. Total Cover = 62 Voody Vines Stratum (Plot size: 10 meter radius) 1. 3. 3. 3. 3. 3. 5. 5. <tr< td=""><td>4.</td><td>Ammophila breviligulata</td><td></td><td>7</td><td>N</td><td>UPL</td><td>Definitions of Vegetation Strata:</td></tr<> | 4. | Ammophila breviligulata | | 7 | N | UPL | Definitions of Vegetation Strata: |
| 7. height (DBH), regardless of height. 8. 9. 10. tall. 11. tall. tall. </td <td>5.</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> | 5. | | | | | | |
| 7. height (DBH), regardless of height. 8. 9. 10. tall. 11. tall. tall. </td <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast</td> | 6 | | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 9. 10. 11. 11. 11. 11. 11. | 7. | | | | | | height (DBH), regardless of height. |
| 10. 11. 12. 12. 13. 13. 14. 14. 15. | 8. | | | | | | |
| 10. 11. 12. 13. 14. 15. 15. 15. 16. 17. 10. 10. 10. 1. 2. 3. 4. 5. 5. < | 9. | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 12. 13. 14. 14. 15. | 10. | | | | | | i tali. |
| 13. < | 11. | | | | | | |
| 13131415Total Cover =62Woody Vines Stratum (Plot size: 10 meter radius)12345Total Cover =0 | 12. | | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 14. Woody Vines - All woody vines greater than 3.28 ft. in height. 15. | 13. | | | | | | woody plants less than 3.28 ft. tall. |
| 15. Woody Vines - All woody vines greater than 3.28 ft. in height. Woody Vines Stratum (Plot size: 10 meter radius) 1. 2. 3. 4. 5. Total Cover = 0 | | | | | | | |
| Total Cover = 62 Voody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. 4. 5. Total Cover = 0 | | | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| Woody Vine Stratum (Plot size: 10 meter radius) 1. 2. 3. 4. 5. Total Cover = 0 | | | Total Cover = | 62 | | | |
| 1. 2. 3. 4. 5. Total Cover = | | | | <u> </u> | | | |
| 1. 2. 3. 4. 5. Total Cover = | Woody Vine Stra | tum (Plot size: 10 meter radius) | | | | | |
| 2. 3. 4. 5. Total Cover = 0 | | | | | | | |
| 3. 4. 5. Total Cover = 0 | | | | | | | |
| 4 5 Total Cover = 0 | | | | | | | Hydrophytic Vegetation Present Ves No |
| 5 Total Cover = 0 | | | | | | | |
| Total Cover = 0 | | | | | | | |
| | 5. | | Total Cover - | | | | |
| | Remarks: | Prevelance index is > than | | | f hydric e | soil or wet | tland hydrology present |
| | Komarka. | | 5.0, and no mu | 1001013 | a riyuno s | | aana nyarology prosent. |
| | | | | | | | |



Project/Site: Sunrise Wind/ Fire Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Charles Ferris Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01CFA Landform: Floodplain Local Relief: Concave Sample Point: Wetland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: E2SS/EM 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ✓ Yes✓ Yes Hydric Soils Present? Hydrophytic Vegetation Present? Yes □ No □ No No 🗹 Yes 🗌 No 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks 1 A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines \checkmark A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows 1 B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? ✓ Yes □ No 8 Depth: (in.) Saturation Present? ☑ Yes □ No 0 Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A A wrack line was observed within the wetland Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 2/2 100 sandy loam 0 2 2 9 2 2.5Y 5/2 85 7.5YR 5/6 3 С Μ sandy loam 9 20 3 2.5Y 5/1 85 7.5YR 5/6 5 Μ С sandy loam --___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:

Page 1 of 2



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01CFA Sample Point Wetland |
|-------------------------|---|--------------------|----------|------------|---|
| VEOETATION | | | | | |
| VEGETATION | (Species identified in all uppercase are nor ot size: 10 meter radius) | n-native species.) | | | |
| | <u>Species Name</u> | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 3 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:3(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. 10. | | | | | $\frac{\text{Total \% Cover of:}}{\text{OBL spp.}} 0 \text{x 1} = 0$ |
| 10. | Total Co | | | | |
| | Total CC | | | | FACW spp. 115 x $2 =$ 230 FAC spp. 15 x $3 =$ 45 |
| Sanling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp X $d = A d =A d $ |
| 1. | Iva frutescens | 40 | Y | FACW | $\begin{array}{c c} \hline & & & \\ \hline & & & \\ \hline \\ \hline$ |
| 2. | Morella pensylvanica | 15 | Ý | FAC | |
| 3. | | | | | Total 130 (A) 275 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 2.115 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes I No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Co | over = 55 | | | $rightarrow$ Yes \Box No Prevalence Index is ≤ 3.0 * |
| | | | | | □ Yes □ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo 1. | ot size: 2 meter radius) Phragmites australis | 75 | Y | FACW | Yes I No Problem Hydrophytic Vegetation (Explain) * |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | uan. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | Total Ca | 75 | | | WOOUS VILLES - / W WOOUS VILLES GREATER WAT 5.20 FL IT HEIGHT. |
| | Total Co | over = 75 | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Co | over = 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



Northeast and Northcentral Region

| Project/Site: | | I/ Long Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 06/09/20 |
|--|---|---|--|--|--|---|--|--|---|---|---|
| Applicant: Investigator #1: | Sunrise Wind | | | Invecti | gator #2: | | | | | County: State: | Suffolk New York |
| Soil Unit: | Charles Ferri | 5 | | IIIVESU | yator #2. | | /I/WWI Classification: | | | Wetland ID: | W01CFB |
| Landform: | Side slope | | | Loc | al Relief: | | | | | Sample Point: | Upland |
| Slope (%): | 3-5% | Latitude: | | | ongitude: | | | Datum: | | Community ID: | Upland |
| | | litions on the site typ | vical for this | | | | romorka) | ⊻ Yes | No | Community ID. | Opialiu |
| | | or Hydrology 🖾 sign | | | | o, explain in | Are normal circumst | | | | |
| Are Vegetation | \Box , Soil \Box , \bullet | or Hydrology 🗆 sign | urally proble | ematic? | | | | ⊠ No | .: | | |
| SUMMARY OF | FINDINGS | | | | | | | | | | |
| Hydrophytic Ve | getation Pres | sent? | | Yes | 🗌 No | | | Hydric Soils | Present? | | 🗌 Yes 🗹 No |
| Wetland Hydrol | ogy Present | ? | | Yes | 🗹 No | | | Is This Samp | ling Point V | Vithin A Wetland | d? 📃 Yes 🗹 No |
| Remarks: | Upland plot | t located on the slop | e of a man | -made ea | arthen be | rm conta | ining W01CFB. | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | | ators (Check here if | indicators | are not p | oresent |)□ | | | Q | | |
| Primary | A1 - Surface | Water | | | B9 - Wate | ar-Stained | | | Secondary: | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | H | B13 - Aqu | | | | | B10 - Drainage Pa | |
| | A3 - Saturatio | on | | | B15 - Mar | I Deposits | | | | B16 - Moss Trim L | lines |
| | B1 - Water N | | | | C1 - Hydr | | | | | C2 - Dry-Season \ | |
| | B2 - Sedimer | | | | | | spheres on Living Roots | | | C8 - Crayfish Burr | |
| | B3 - Drift Dep B4 - Algal Ma | | | | | | educed Iron eduction in Tilled Soils | | | C9 - Saturation Vi D1 - Stunted or St | sible on Aerial Imagery |
| | B5 - Iron Dec | | | H | C0 - Rece C7 - Thin | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | gery | ū | Other (Ex | | | | | D3 - Shallow Aquit | |
| | B8 - Sparsely | Vegetated Concave S | urface | | | | , | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water | Present? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | Watland Uv | | | Yes 🗹 No |
| Water Table Pr | esent? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | Wetland Hyd | arology Pr | esent? | res 🗹 No |
| Saturation Pres | ent? | 🗌 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Describe Record | od Data (atr | eam gauge, monitorin | | al photos | proviouo | inonoctio | na) if available: | | N/A | | |
| Describe Record | eu Dala (Sir | zani yauye, monitorin | וע שכוו, מכוומ | | | | | | | | |
| Demendent | | 8 8 9 | 0 , | | protiouo | пэресио | ns), il avaliable. | | | | |
| Remarks: | | | <u> </u> | <u> </u> | protiouo | inspectio | ns), il avaliable. | | | | |
| | | | | <u> </u> | promouo | паресно | 115), il avaliadie. | | 107 | | |
| SOILS | | | | | protiouo | • | , | | | | |
| SOILS Map Unit Name | | | | <u> </u> | providue | • | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub | group): | | | | | S | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip | group): tion (Describe to | | | bsence of indica | | S | , | vered/Coated Sand Grains; | | ining, M=Matrix) | Tautura |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top | ogroup): otion (Describe to Bottom | the depth needed to document the indi | cator or confirm the a | ubsence of indica Matrix | itors.) (Type: C=C | S | Series Drainage Class: | ered/Coated Sand Grains; Mottles | Location: PL=Pore L | I | Texture |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth | pgroup): tion (Describe to Bottom Depth | the depth needed to document the india Horizon | cator or confirm the a | bsence of indica Matrix Vioist) | itors.) (Type: C=C | Concentration, D | Series Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | rered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | bgroup): tion (Describe to Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Moist) 4/3 | itors.) (Type: C=C % 100 | Concentration, D | Series Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | pgroup): tion (Describe to Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Moist) 4/3 | tors.) (Type: C=C % 100 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | pgroup): tion (Describe to Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Voist) 4/3 | ttors.) (Type: C=C % 100 | Concentration, D | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | rered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | group): tion (Describe to 1) Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bisence of indica Matrix Moist) 4/3 | .tors.) (Type: C=C % 100 | Concentration, D | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indications indications in the second sec | tors.) (Type: C=C % 100 | Concentration, D | Everies Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | proup): tion (Describe to: Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Moist) 4/3 | .tors.) (Type: C=C % 100 | Concentration, D | Everies Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | group): tion (Describe to Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indications indications in the second sec | tors.) (Type: C=C % 100 | Concentration, D | Everies Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 | proup): tion (Describe to: Bottom Depth 20 | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Moist) 4/3 | tors.) (Type: C=C % 100 | Concentration, D | Everies Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to: Depth 20 Soil Field In | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | bsence of indica Matrix Moist) 4/3 ors are n | - ttors.) (Type: C=C % 100 | Soncentration, D | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % | Location: PL=Pore L Type - | Location matic Soils ¹ | (e.g. clay, sand, loam) loamy sand |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): btion (Describe to: Depth 20 Soil Field In A1- Histosol | the depth needed to document the india Horizon 1 dicators (check her | cator or confirm the a Color (I 2.5Y | beence of indica Matrix Moist) 4/3 ors are n | | Soncentration, D | Series Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) - | Mottles Mottles | Location: PL=Pore L Type s for Proble A10 - 2 cm l | Location | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep | the depth needed to document the india Horizon 1 idicators (check here bipedon | cator or confirm the a Color (I 2.5Y | bisence of Indica Matrix Moist) 4/3 ors are n | - tors.) (Type: C=C % 100 | S Concentration, D tt Dark Surf: | Series Drainage Class: =Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) | Mottles Mottles | Location: PL=Pore L Type s for Proble A10 - 2 cm A16 - Coast | Location matic Soils ¹ Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | the depth needed to document the india Horizon 1 dicators (check her bipedon stic | cator or confirm the a Color (I 2.5Y | bisence of indica Matrix Moist) 4/3 ors are n | | Concentration, D | Series Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) W Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) | Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm Mi A16 - Coast S3 - 5cm Mi | Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR , Loky Peat of Peat (L | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): btion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ef A3 - Black Hi | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | beence of Indica Matrix Moist) 4/3 ors are n | | Concentration, D | Color (Moist) Co | Mottles Mottles | Location: PL=Pore L Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S3 - 5 cm Mt | Location Muck (LRR K, L, MLRA 1/2 Prairie Redox (LRR Prairie Redox (LRR L) (Juck (LRR K, L, MLRA 1/2 | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | group): btion (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ej A3 - Black HI | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | beence of Indica Matrix Moist) 4/3 ors are n | | Concentration, D | Enciperation RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1496) AGE (LRR R, MLRA 1496) Mineral (LRR K, L) Matrix (| Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S3 - Polyval | Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR , Loky Peat of Peat (L | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ef A3 - Black Hi A4 - Hydroge A5 - Stratifice A12 - Thick IC | the depth needed to document the india Horizon 1 dicators (check her bipedon stic en Sulfide 1 Layers ed Below Dark Surface Dark Surface | cator or confirm the a Color (I 2.5Y | beence of Indica Matrix Moist) 4/3 ors are n | tors.) (Type: C=C % 100 S8 - Polyv S9 - Thin F1 - Loarr F3 - Deple F2 - Loarr | Concentration, D - | Series Drainage Class: =Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix C rface | Mottles Mottles | Location: PL=Pore L Type - | Location matic Soils ¹ Vluck (LRR K, L, MLRA 1/ Prairie Redox (LRR Jcky Peat of Peat (II Tface (LRR K, L, M) ue Below Surface (I | (e.g. clay, sand, loam) loamy sand 498) K, L, R) LRR K, L, R) |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | group): btion (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ef A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M | the depth needed to document the india Horizon 1 | cator or confirm the a Color (I 2.5Y | beence of Indica Matrix Moist) 4/3 ors are n | | Concentration, D - | Color (Moist) C | Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ef A3 - Black HI A4 - Hydroge A5 - Stratifier A1 - Deplett A1 - Deplett A1 - Deplett A1 - Sandy M S4 - Sandy G | the depth needed to document the india Horizon 1 | cator or confirm the a | bisence of indications in the second | | Concentration, D - | Color (Moist) C | Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I S3 - 5cm M S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M T46 - Mesic | Location | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R | the depth needed to document the india Horizon 1 | cator or confirm the a | bisence of indications in the second | | Concentration, D - | Color (Moist) C | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplet A12 - Thick ID S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | the depth needed to document the india Horizon 1 | cator or confirm the a | bisence of indications in the second | | Concentration, D - | Color (Moist) C | Mottles Mottles Mottles Note: State Sta | Location: PL=Pore L Type s for Proble A10 - 2 cm 1 A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da S9 | Location | (e.g. clay, sand, loam) loamy sand - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplet A12 - Thick ID S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | the depth needed to document the india Horizon 1 | cator or confirm the a | bisence of indications in the second | | Concentration, D - | Color (Moist) C | Pered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm I A16 - Coast S3 - Scm Mu S7 - Dark Si S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F19 - Piedm F12 - Very Other (Expla | Location | (e.g. clay, sand, loam) loamy sand 49B) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplett A12 - Thick ID S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su | the depth needed to document the india Horizon 1 | cator or confirm the a | beence of Indica Matrix Moist) 4/3 | | Concentration, D - | Color (Moist) C | | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) loamy sand 498) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) acce |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric | group): tion (Describe to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplet A12 - Thick ID S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | the depth needed to document the india Horizon 1 | cator or confirm the a | bisence of indications in the second | | Concentration, D - | Color (Moist) C | Pered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type - | Location | (e.g. clay, sand, loam) loamy sand 49B) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01CFB Sample Point Upland |
|-------------------|--|-------------|----------|------------|---|
| VEGETATION | (Provide identified in all unperseed are non rati | | | | |
| | (Species identified in all uppercase are non-nati ot size: 10 meter radius) | ve species. |) | | |
| | <u>Species Name</u> | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:1 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp. 0 $x 1 = 0$ |
| | Total Cover | = 0 | | | FACW spp. 90 x $2 = 180$ |
| | | | | | FAC spp. 5 x 3 = 15 |
| | atum (Plot size: 5 meter radius) | | | | FACU spp $x = 0$ |
| 1. | | | | | UPL spp. <u>3</u> X 5 = <u>15</u> |
| 2. | | | | | T () 00 (A) 010 (C) |
| 3. | | | | | Total <u>98</u> (A) <u>210</u> (B) |
| 4. 5. | | | | | |
| - | | | | | Prevalence Index = B/A = 2.143 |
| 6. 7. | | | | | |
| 8. | | | | | Hudronbutic Vagatation Indicators |
| <u> </u> | | | | | Hydrophytic Vegetation Indicators: |
| <u> </u> | | | | | Yes |
| 10. | Total Cover | | | | yes □ No Dominance Test is > 50% vec □ No □ Drevelance Index is < 2.0.* |
| | Total Cover | - 0 | | | \bigcirc Yes \square No Prevalence Index is ≤ 3.0 * |
| Harb Stratum (Dia | t aiza. 2 mater radiua) | | | | ☐ Yes ☑ No ☑ Morphological Adaptations (Explain) * ☑ Yes ☑ No ☑ Problem Hydrophytic Vegetation (Explain) * |
| | t size: 2 meter radius) Phragmites australis | 90 | Y | FACW | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 2. | Solidago rugosa | 5 | N | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 3. | Artemisia vulgaris | 3 | N | UPL | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover | = 98 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. | - | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present Ves No |
| 4. | | | | | |
| 5. | Total Cover | | | | |
| Remarks: | Total Cover | = 0 | | | |
| ixemarks. | Located on slope of earthern berni | | | | |
| | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/09/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Charles Ferris Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01CFB Landform: Depression Local Relief: Concave Sample Point: Wetland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: PEM 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation , Soil , or Hydrology significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes ⊡ No SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes □ No □ No No Hydric Soils Present? 🗹 Yes 🗌 No ✓ Yes 🗹 Yes 🗏 No Is This Sampling Point Within A Wetland? Wetland Hydrology Present? Remarks: Wetland is contained in a man-made basin HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) <u>...</u> B6 - Surface Soil Cracks B10 - Draines - □ Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves A2 - High Water Table B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines \checkmark A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗹 Yes 🗌 No Water Table Present? □ Yes ☑ No Depth: (in.) Saturation Present? 🗹 Yes 🗌 No 8 Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: 0 Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Matrix Mottles Texture Top (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 1 2.5Y 4/2 90 7.5YR 5/6 10 Μ fine sandy loam 0 20 С ---___ ---------------------------------------___ ------------------___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗹 Yes 🗌 No Type: (If Observed) Remarks:

Page 1 of 2



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01CFB Sample Point Wetland |
|-------------------|---|----------------|----------|------------|---|
| | | | | | |
| VEGETATION | (Species identified in all uppercase are non-nat ot size: 10 meter radius) | tive species.) | | | |
| | <u>Species Name</u> | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | | | | | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 1 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:1(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | - | | | | Dravalance Index Markeheet |
| 8. 9. | | | | | Prevalence Index Worksheet |
| <u> </u> | | | | | Total % Cover of: Multiply by: OBL spp. 0 x 1 = 0 |
| 10. | Total Cover | | | | FACW spp. 100 x 2 = 200 |
| | | Ŭ | | | FAC spp. 0 $x 3 = 0$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | FACU spp x 4 = |
| 1. | | | | | UPL spp. 0 x 5 = 0 |
| 2. | - | | | | |
| 3. | | | | | Total <u>100</u> (A) <u>200</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = |
| 6. 7. | | | | | |
| 7. 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | \checkmark Yes \square No Dominance Test is > 50% |
| 10. | Total Cover | | | | ✓ Yes \Box No Prevalence Index is ≤ 3.0 * |
| | | Č. | | | ☐ Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | t size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Phragmites australis | 100 | Y | FACW | |
| 2. | | | | | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. 6 | | | | | Tree |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | - | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover | = 100 | | | |
| | | | | | |
| | um (Plot size: 10 meter radius) | | | | |
| 1. 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover | -= 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/11/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Charles Ferris Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01CFC Landform: Side slope Local Relief: Convex Sample Point: Upland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: Upland 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ☑ No☑ No Hydrophytic Vegetation Present? Yes Hydric Soils Present? 🗌 Yes 🗹 No □ Yes Is This Sampling Point Within A Wetland? 🗏 Yes 🗹 No Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗌 Yes 🗹 No Water Table Present? □ Yes ☑ No (in.) Depth: Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 3/1 100 sandy loam 0 2 ---2 10 2 10YR 4/3 80 -----sand 10 20 3 10YR 5/3 85 sand ---___ ___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗌 Yes 🗹 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| | (Species identified in all uppercase are n t size: 10 meter radius) <u>Species Name</u> | on-native specie | s.) | | |
|--------------------------------|---|------------------|-------------|--------------|--|
| Tree Stratum (Plot 1. 2. | t size: 10 meter radius) | | | | |
| 2. | Species Name | | | | |
| 2. | | <u>% Cov</u> | er Dominant | Ind.Status | Dominance Test Worksheet |
| | Quercus velutina | 80 | Y | UPL | |
| 3. | Nyssa sylvatica | 30 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:3(A) |
| | Acer rubrum | 25 | Y | FAC | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:5(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: <u>Multiply by:</u> |
| 10. | | | | | OBL spp 0 x 1 = 0 |
| | Total C | Cover = 135 | | | FACW spp. 0 $x 2 = 0$ |
| | | | | | FAC spp. 133 x 3 = 399 |
| Sapling/Shrub Stra | tum (Plot size: 5 meter radius) | | | | FACU spp26 x 4 =104 |
| 1. | Clethra alnifolia | 65 | Y | FAC | UPL spp. $\frac{1}{80}$ x 5 = $\frac{1}{400}$ |
| | Nyssa sylvatica | 10 | N | FAC | |
| | Acer rubrum | 3 | N | FAC | Total 239 (A) 903 (B) |
| | | | | | |
| 5. | | | | | Prevalence Index = B/A = 3.778 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | |
| <u> </u> | | | | | |
| 10. | | | | | yes □ No Dominance Test is > 50% vec □ No □ Dominance Index is < 2.0.4 |
| | Total C | Cover = 78 | | | □ Yes \square No Prevalence Index is $\leq 3.0^{*}$ |
| | | | | | □ Yes □ No Morphological Adaptations (Explain) * |
| | size: 2 meter radius) | 20 | V | FACU | ☐ Yes |
| 1. | Celastrus scandens | 20 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Maianthemum canadense | 3 | N | FACU | present, unless disturbed or problematic. |
| 3. | Maianthemum racemosum | 3 | N | FACU | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | kun. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total 0 | Cover = 26 | | | |
| | | | | | |
| | m (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗹 No |
| 4. | | | | | |
| 5. | | | | | |
| | | Cover = 0 | | | |
| Remarks: | Prevelance index is > than 3.00, and | nd no indicato | s of hydric | c soil or we | etland hydrology present. |



Northeast and Northcentral Region

| Drain at/Cita | 0 : 147 | | | | | | Ctantas Dusiast # | 2020442400 | | Deter | 00/44/00 |
|--|--|--|--|---|---|--|--|---|--|--|--|
| Project/Site: Applicant: | Sunrise Wind | d/ Long Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: County: | 06/11/20 Suffolk |
| Investigator #1: | | | | Invest | igator #2: | | | | | State: | New York |
| Soil Unit: | | | | | .j | | /I/WWI Classification: | PFO | | Wetland ID: | W01CFC |
| Landform: | Floodplain | | | Loc | al Relief: | Concav | e | | | Sample Point: | Wetland |
| Slope (%): | 0-1% | Latitude: | | | ongitude: | | | Datum: | | Community ID: | PFO |
| | | ditions on the site typ | | | | o, explain in | | | No | | |
| | | or Hydrology | | | | | Are normal circumsta | | ? | | |
| | | or Hydrology 🛛 nati | urally proble | ematic? | | | Ľ⊐ Yes | No | | | |
| SUMMARY OF Hydrophytic Ve | | aant? | | Vee | | | | Hydric Soils | Dreeent? | | 🗹 Yes 🗌 No |
| Wetland Hydro | | | | | ; □ No ; □ No | | | | | Within A Wetland | |
| Remarks: | logy i losent | | | - 103 | | | | 13 This Oamp | ing rome v | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hydr | oloav Indic | ators (Check here if | indicators | are not r | present |)[] | | | | | |
| Primary | | | maioatoro | | nooont | , | | | Secondary: | | |
| | A1 - Surface | | | ~ | B9 - Wate | | | | | B6 - Surface Soil (| |
| ✓ ✓ | A2 - High Wa A3 - Saturati | | | | | | 1 | | | B10 - Drainage Pa B16 - Moss Trim L | |
| | B1 - Water M | | | | | | de Odor | | | C2 - Dry-Season V | |
| | | | | | | | spheres on Living Roots | | | C8 - Crayfish Burr | |
| | B3 - Drift De B4 - Algal Ma | | | | | | educed Iron duction in Tilled Soils | | | C9 - Saturation Vis D1 - Stunted or St | sible on Aerial Imagery |
| | B5 - Iron Dep | | | | | Muck Sur | | | | D2 - Geomorphic I | |
| | | on Visible on Aerial Ima | | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aquit | |
| | B8 - Sparsel | y Vegetated Concave S | urface | | | | | | | D4 - Microtopogra D5 - FAC-Neutral | |
| Field Observat | tione | | | | | | | | | Bo - I AO-Neulia | 1031 |
| Surface Water | | 🗆 Yes 🗹 No | Donthi | | (in.) | | | | | | |
| Water Table Pr | | ⊡ Yes □ No | Depth: Depth: | | (in.) (in.) | | | Wetland Hyd | drology Pr | esent? | Yes 🗌 No |
| Saturation Pres | | ⊻ Yes □ No | Depth: | | (in.) | | | | | | |
| | | | | | . , | | . | | N1/A | | |
| Describe Record | Jeu Dala (Sli | | | | | | | | | | |
| Bomarka: | | cam gauge, monitorii | iy well, aelia | ai priotos | , previous | inspectio | ns), if available: | | N/A | | |
| Remarks: | | cam gauge, monitori | ig well, aelia | | , previous | inspectio | ns), if available: | | N/A | | |
| | | can gauge, monitori | iy well, aelia | ar priotos, | , previous | Inspectio | ns), if available: | | N/A | | |
| SOILS | 2: | 0 | | ar priotos, | , previous | | | | N/A | | |
| | | | | ar priotos, | , previous | | ns), if available: veries Drainage Class: | | N/A | | |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip | bgroup): | 0 | | • • • | | S | eries Drainage Class: | | | ining, M=Matrix) | |
| SOILS Map Unit Name Taxonomy (Sub | bgroup): | 0 | | • • • | | S | | | | ining, M=Matrix) | Texture |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth | bgroup): ption (Describe to Bottom Depth | 0 the depth needed to document the ind Horizon | icator or confirm the a | absence of indica Matrix Moist) | ators.) (Type: C=0 | Concentration, D | eries Drainage Class: | ered/Coated Sand Grains; Mottles % | | uning, M=Matrix) | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | bgroup): ption (Describe to Bottom Depth 10 | 0 The depth needed to document the ind Horizon 1 | cator or confirm the a | absence of indica Matrix Moist) 3/1 | ators.) (Type: C=0 % 100 | Concentration, D | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the ind Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/2 | ators.) (Type: C=(% 100 95 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Matrix Moist) 3/1 4/2 | ators.) (Type: C=0 % 100 95 | Concentration, D | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/2 | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of Indica Matrix Moist) 3/1 4/2 | ntors.) (Type: C=0 % 100 95 | Concentration, D | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/2 | ators.) (Type: C=0 % 100 95 | Concentration, D | Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Describe to Bottom Depth 10 20 | 0 the depth needed to document the ind Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of Indica Matrix Moist) 3/1 4/2 | ators.) (Type: C=0 % 100 95 | Concentration, D | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 | bgroup): ption (Cescribe to Bottom Depth 10 20 | 0 the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR | absence of Indica Matrix Moist) 3/1 4/2 | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | bogroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosoi | 0 the depth needed to document the ind Horizon 1 2 | cator or confirm the a Color (I 10YR | Absence of Indica Matrix Moist) 3/1 4/2 ors are r | ators) (Type: C=0 % 100 95 S8 - PolyN | Concentration, D 7.5YR - | Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) | Mottles % 5 <u>Indicator</u> | Location: PL=Pore L Type C s for Proble A10 - 2 cm l | Location M matic Soils ¹ Muck (LRR K, L, MLRA 12 | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | bgroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon | cator or confirm the a Color (I 10YR | Absence of Indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C= % 100 95 S8 - Polyn S9 - Thin | Concentration, D 7.5YR - | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) CC (LRR R, MLRA 149B) | Mottles % 5 Indicator | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A16 - Coast | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR 1 | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | percup): ption (Describe to Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic El A3 - Black H | 0 the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic | cator or confirm the a Color (I 10YR | Absence of Indication Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 S8 - Polyn S9 - Thin S9 - Thin F1 - Loan | Concentration, D 7.5YR - | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) filneral (LRR K, L) | Mottles % 5 5 Indicator | Location: PL=Pore L Type C s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR 14 Prairie Redox (LRR 14) | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3- Black H A4 - Hydroge A5 - Stratifie | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide | cator or confirm the a Color (I 10YR | Absence of Indica Matrix Moist) 3/1 4/2 ors are r | ators) (Type: C= % 100 95 - | Concentration, D | Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) filteral (LRR K, L) Matrix C | Mottles % 5 Indicator | Lacation: PL=Pore L Type C | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR 1 | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | by comparison of the second se | 0 the depth needed to document the ind Horizon 1 2 | cator or confirm the a | absence of indica Matrix Moist) 3/1 4/2 ors are r | tors) (Type: C= % 100 95 S8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redo | Concentration, D 7.5YR - | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c rface | Mottles % 5 Indicator | Location: PL=Pore L Type C | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Lucky Peat of Peat (L urface (LRR K, L, M) ue Below Surface (LR K, L, M) arK Surface (LRR K, L, M) | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A10 - Deplet A12 - Thick I | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si S8 - Polyval S9 - Thin Da S9 - Thin Da | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | borroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick [S1 - Sandy M | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Jack Mineral | cator or confirm the a | absence of indica Matrix Moist) 3/1 4/2 ors are r | tors) (Type: C= % 100 95 S8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redo | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Lacation: PL=Pore L Type - | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Cescribe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy C S5 - Sandy F | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A12 - Thick I S1 - Sandy N S4 - Sandy N S4 - Sandy P S5 - Sandy F S6 - Stripped | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox d Matrix | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 | Location: PL=Pore L Type C - | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A12 - Thick I S1 - Sandy N S4 - Sandy N S4 - Sandy P S5 - Sandy F S6 - Stripped | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I A10 - 2 cm I S3 - 5 cm Mt S3 - 5 cm Mt S7 - Dark SI S8 - Polyval S9 - Thin Da F12 - Iron-M F12 - Iron-M F12 - Very Other (Expla | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A12 - Thick I S1 - Sandy N S4 - Sandy N S4 - Sandy P S5 - Sandy F S6 - Stripped | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox d Matrix | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Location: PL=Pore L Type C | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifie A12 - Thick I S1 - Sandy N S4 - Sandy N S4 - Sandy P S5 - Sandy F S6 - Stripped | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the a | Absence of indica Matrix Moist) 3/1 4/2 ors are r | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 | Location: PL=Pore L Type C | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 10 NRCS Hydric | byroup): ption (Describe to Bottom Depth 10 20 Soil Field Ir A1- Histosol A2 - Histic E A3- Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy C S5 - Sandy F S6 - Strippec S7 - Dark Su | 0 the depth needed to document the ind Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Auck Mineral Sleyed Matrix Redox J Matrix Irface (LRR R, MLRA 149B) | cator or confirm the a | absence of indica Matrix Moist) 3/1 4/2 ors are r - | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Location: PL=Pore L Type C | Location | (e.g. clay, sand, loam) sandy loam - |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, N | IY | | | | Wetland ID: W01CFC Sample Point Wetland |
|-------------------------------|---|------------------|----------|----------|------------|---|
| VECETATION | | (· | . , | | | |
| VEGETATION Tree Stratum (P | (Species identified in all uppercase ot size: 10 meter radius) | e are non-native | species. |) | | |
| | <u>Species Name</u> | | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | | 60 | Y | FAC | |
| 2. | Nyssa sylvatica | | 30 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | | |
| 4. | | | | | | Total Number of Dominant Species Across All Strata: <u>5</u> (B) |
| 5. | | | | | | |
| 6. 7. | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 8. | | | | | | Prevalence Index Worksheet |
| 9. | | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | | $\frac{1}{\text{OBL spp.}} \frac{1}{40} \text{x } 1 = 40$ |
| | | otal Cover = | 90 | | | FACW spp. 35 x 2 = 70 |
| | | | | | | FAC spp. 150 $\times 3 = 450$ |
| Sapling/Shrub Str | atum (Plot size: 5 meter radius) | | | | | FACU spp. 25 x 4 = 100 |
| 1. | Clethra alnifolia | | 60 | Y | FAC | UPL spp. 0 x 5 = 0 |
| 2. | Lindera benzoin | | 25 | Y | FACW | |
| 3. | Rosa multiflora | | 10 | N | FACU | Total <u>250</u> (A) <u>660</u> (B) |
| 4. | | | | | | |
| 5. | | | | | | Prevalence Index = B/A = |
| 6. | | | | | | |
| 7. 8. | | | | | | Hydrophytic Vegetation Indicators: |
| <u> </u> | | | | | | Yes No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | | \checkmark Yes \square No Dominance Test is > 50% |
| 10. | | otal Cover = | 95 | | | ✓ Yes \square No Prevalence Index is ≤ 3.0 * |
| | | | | | | Yes ☑ No Morphological Adaptations (Explain) * |
| Herb Stratum (Pl | ot size: 2 meter radius) | | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Symplocarpus foetidus | | 40 | Y | OBL | |
| 2. | Onoclea sensibilis | | 10 | N | FACW | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | Celastrus scandens | | 10 | N | FACU | |
| 4. | Maianthemum canadense | | 5 | N | FACU | Definitions of Vegetation Strata: |
| 5. | | | | | | |
| 6 | | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | | |
| <u>8.</u> 9. | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| <u> </u> | | | | | | |
| 11. | | | | | | |
| 12. | | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | | |
| 15. | | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | T | otal Cover = | 65 | | | |
| | | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | | |
| 1. 2. | | | | | | |
| 3. | | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗌 No |
| 4. | | | | | | |
| 5. | | | | | | |
| | Т | otal Cover = | 0 | | | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |



Project/Site: Sunrise Wind/ Long Island, NY Stantec Project #: 2028113199 Date: 06/11/20 Applicant: County: Sunrise Wind LLC Suffolk Investigator #1: Charles Ferris Investigator #2: State: New York NWI/WWI Classification: Soil Unit: Wetland ID: W01CFD Landform: Side slope Local Relief: Convex Sample Point: Upland 0-1% Latitude: Datum: Slope (%): Longitude: Community ID: Upland 🗹 Yes 🗌 No Are climatic/hydrologic conditions on the site typical for this time of year? (If no, explain in remarks) Are Vegetation \Box , Soil \Box , or Hydrology \Box significantly disturbed? Are normal circumstances present? Are Vegetation \Box , Soil \Box , or Hydrology \Box naturally problematic? Yes □ No SUMMARY OF FINDINGS ☑ Yes☑ Yes Hydric Soils Present? Hydrophytic Vegetation Present? □ No ☑ No No 🗌 Yes 🗹 No Is This Sampling Point Within A Wetland? 🗏 Yes 🗹 No Wetland Hydrology Present? Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present) Secondary: Primary: A1 - Surface Water B9 - Water-Stained Leaves B6 - Surface Soil Cracks A2 - High Water Table B10 - Drainage Patterns B13 - Aquatic Fauna B15 - Marl Deposits B16 - Moss Trim Lines A3 - Saturation B1 - Water Marks C1 - Hydrogen Sulfide Odor C2 - Dry-Season Water Table B2 - Sediment Deposits C3 - Oxidized Rhizospheres on Living Roots C8 - Crayfish Burrows B3 - Drift Deposits C4 - Presence of Reduced Iron C9 - Saturation Visible on Aerial Imagery B4 - Algal Mat or Crust C6 - Recent Iron Reduction in Tilled Soils D1 - Stunted or Stressed Plants B5 - Iron Deposits C7 - Thin Muck Surface D2 - Geomorphic Position B7 - Inundation Visible on Aerial Imagery Other (Explain in Remarks) D3 - Shallow Aquitard B8 - Sparsely Vegetated Concave Surface D4 - Microtopographic Relief D5 - FAC-Neutral Test Field Observations: Surface Water Present? 🗆 Yes 🗵 No Depth: (in.) Wetland Hydrology Present? 🗌 Yes 🗹 No Water Table Present? □ Yes ☑ No (in.) Depth: Saturation Present? 🗆 Yes 🗹 No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered/Coated Sand Grains; Location: PL=Pore Lining, M=Matrix) Bottom Mottles Texture Top Matrix (e.g. clay, sand, loam) Depth Depth Horizon Color (Moist) % Color (Moist) % Туре Location 10YR 3/1 100 sandy loam 0 10 ---10 16 2 10YR 5/3 100 -----sandy loam 16 20 3 10YR 4/4 100 sandy loam ---___ ___ ------------___ ___ ------------NRCS Hydric Soil Field Indicators (check here if indicators are not present \square Indicators for Problematic Soils ¹ S8 - Polyvalue Below Surface (LRR R, MLRA 149B) A1- Histosol A10 - 2 cm Muck (LRR K, L, MLRA 149B) S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A2 - Histic Epipedon F1 - Loamy Mucky Mineral (LRR K. L) S3 - 5cm Mucky Peat of Peat (LRR K. L. R) A3 - Black Histic A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surface (LRR к, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR к, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR к, L, R) F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S1 - Sandy Muck Mineral S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks) ¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problemation Restrictive Layer Depth: Hydric Soil Present? 🗌 Yes 🗹 No Type: (If Observed) Remarks:



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, NY | | | | Wetland ID: W01CFD Sample Point Upland |
|--------------------------------|---|-----------|----------|------------|--|
| VECETATION | | • 、 | | | |
| VEGETATION Tree Stratum (Pl | (Species identified in all uppercase are non-native ot size: 10 meter radius) | species.) | | | |
| | <u>Species Name</u> | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | 75 | Υ | FAC | |
| 2. | Nyssa sylvatica | 25 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: <u>5</u> (B) |
| 5. | | | | | |
| 6. 7. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>60.0%</u> (A/B) |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | $OBL spp. _ 0 x 1 = _ 0$ |
| | Total Cover = | 100 | | | FACW spp. 10 x 2 = 20 |
| | | | | | FAC spp. 180 x $3 = 540$ |
| Sapling/Shrub Str | ratum (Plot size: 5 meter radius) | | | | FACU spp. <u>17</u> x 4 = <u>68</u> |
| 1. | Clethra alnifolia | 80 | Y | FAC | UPL spp x 5 = |
| 2. | Lindera benzoin | 10 | N | FACW | |
| 3. | | | | | Total <u>207</u> (A) <u>628</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = <u>3.034</u> |
| 6. 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | Yes Vo Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | \checkmark Yes \square No Dominance Test is > 50% |
| | Total Cover = | 90 | | | \square Yes \square No Prevalence Index is $\leq 3.0^*$ |
| | | | | | Yes I No Morphological Adaptations (Explain) * |
| Herb Stratum (Ple | ot size: 2 meter radius) | | | | □ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Maianthemum canadense | 10 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Parthenocissus quinquefolia | 7 | Y | FACU | present, unless disturbed or problematic. |
| 3. | | | | | Definitions of Manufation Official |
| 4. | | | | | Definitions of Vegetation Strata: |
| 6 | | | | | |
| 7. | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | woody praitits less than 3.20 ft. tall. |
| 14. | | | | | · · · · · · · · · · · · · · · · · · · |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 17 | | | |
| Woody Vine Strat | tum (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present Yes No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | | | | | |
| | | | | | |
| | | | | | |



Northeast and Northcentral Region

| Project/Site: | Oursein - Miles | | | | | | Stantas Draiget #: | 2020112100 | | Date: | 00/44/00 |
|---|--|--|--|--|--|---|--|--|---|---|--|
| Applicant: | Sunrise Wind | l/ Long Island, NY | | | | | Stantec Project #: | 2020113199 | | County: | 06/11/20 Suffolk |
| Investigator #1: | | | | Invest | igator #2: | | | | | State: | New York |
| Soil Unit: | Change Fern | | | | igator //2. | | /I/WWI Classification: | PFO | | Wetland ID: | W01CFD |
| Landform: | Floodplain | | | Loc | al Relief: | | | | | Sample Point: | Wetland |
| Slope (%): | 0-1% | Latitude: | | | ongitude: | | • | Datum: | | Community ID: | PFO |
| | | litions on the site typ | | | | | remarks) | | No | | |
| - | | or Hydrology | | | <u> </u> | | Are normal circumsta | ances present | ? | | |
| | | or Hydrology 🗌 nati | | | | | | □No | | | |
| SUMMARY OF | | er rijarelegij — naa | andiny propri | onnauor | | | | | | | |
| Hydrophytic Ve | | sent? | | . ✓ Yes | No | | | Hydric Soils I | Present? | | 🗹 Yes 🗌 No |
| Wetland Hydrol | | | | | | | | | | Nithin A Wetland | |
| Remarks: | legy i leeelik | • | | | | | | | ing i oniti | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | | ators (Check here if | indicatore | are not r | present |)[] | | | | | |
| Primary | | ators (Check here h | Indicators | are not p | Jeseni |) | | | Secondary: | | |
| | A1 - Surface | Water | | ~ | B9 - Wate | er-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| 1 | A2 - High Wa | | | | B13 - Aqu | | 1 | | | B10 - Drainage Pa | |
| | A3 - Saturati | | | | | | | | | | |
| | B1 - Water M B2 - Sedimer | | | | - , | | spheres on Living Roots | | | C2 - Dry-Season V C8 - Crayfish Burn | |
| | B2 - Sedimer B3 - Drift De | | | | | | educed Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | | | | | | duction in Tilled Soils | | | D1 - Stunted or St | |
| | B5 - Iron Dep | | | | | | | | | D2 - Geomorphic I | |
| | | on Visible on Aerial Ima v Vegetated Concave S | | | Other (Ex | plain in Re | marks) | | | D3 - Shallow Aquit D4 - Microtopogra | |
| | Do - Oparser | y vegetated concave o | unacc | | | | | | | D5 - FAC-Neutral | |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | | 🗆 Yes 🖂 No | Depth: | | (in.) | | | | | | |
| Water Table Pr | | ✓ Yes □ No | Depth: | | (in.) | | | Wetland Hyd | drology Pr | esent? | Yes 🗌 No |
| Saturation Pres | | I Yes □ No | Depth: | | (in.) | | | | | | |
| | | | • | | () | | | | N/A | | |
| Describe Record | ied Data (str | eam daude monitorin | na well aeria | | | | | | | | |
| | | eam gaage, mernem | ig won, done | ai priotos | , previous | Inspectio | ns), if available: | | IN/A | | |
| Remarks: | | ani gaage, mennen | ig won, done | ai priotos, | , previous | Inspectio | ns), if available: | | N/A | | |
| | | oan gaage, nomen | ig won, done | ar priotos, | , previous | Inspection | ns), it available: | | N/A | | |
| SOILS | | an gaage, no no no n | | | , previous | | | | N/A | | |
| SOILS Map Unit Name | | an gaage, no no n | | | , previous | | eries Drainage Class: | | N/A | | |
| SOILS Map Unit Name Taxonomy (Sub | ogroup): | | | | · · | S | eries Drainage Class: | | | | |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip | ogroup): otion (Describe to | | | absence of indica | · · | S | | ered/Coated Sand Grains; | | _ining, M=Matrix) | Taytura |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top | ogroup): otion (Describe to Bottom | the depth needed to document the indi | cator or confirm the a | absence of indica Matrix | ators.) (Type: C=0 | S | Peries Drainage Class: | ered/Coated Sand Grains; Mottles | Location: PL=Pore L | | Texture |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth | ogroup): otion (Describe to Bottom Depth | the depth needed to document the indi Horizon | cator or confirm the a | absence of indica Matrix Moist) | ators.) (Type: C=0 | Concentration, D | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 | bgroup): otion (Describe to Bottom Depth 6 | the depth needed to document the indi Horizon | cator or confirm the a Color (1 10YR | absence of indica Matrix Moist) 3/1 | ators.) (Type: C=0 % 100 | Concentration, D- | Pepietion, RM=Reduced Matrix, CS=Cow Color (Moist) | ered/Coated Sand Grains; Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | bgroup): btion (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (1 10YR 10YR | absence of indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=0 % 100 95 | Concentration, D: | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | bgroup): btion (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Matrix Moist) 3/1 4/1 | ators.) (Type: C=0 % 100 95 | Concentration, D | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 | Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | pgroup): ption (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | by the second se | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of Indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=C % 100 95 | Concentration, D | Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | pgroup): Difon (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of Indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=0 % 100 95 | Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | by the second se | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of Indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=C % 100 95 | Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 | pgroup): ption (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of Indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains; Mottles % 5 | Location: PL=Pore L Type C | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | pgroup): ption (Describe to Bottom Depth 6 20 | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of Indica Matrix Moist) 3/1 4/1 | ators.) (Type: C=0 % 100 95 | Soncentration, D 7.5YR nt | Eeries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 | ered/Coated Sand Grains: Mottles % 5 | Location: PL=Pore L Type C s for Proble | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | pgroup): ption (Describe to Depth 6 20 Soil Field In A1- Histosol A2 - Histic El | the depth needed to document the indi Horizon 1 2 idicators (check he pipedon | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r □ | ators.) (Type: C= % 100 95 S8 - Polyn S9 - Thin | S Concentration, D 7.5YR alue Belor Dark Surfa | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) CC (LRR R, MLRA 149B) | ered/Coated Sand Grains; Mottles % 5 Indicator | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR 1 | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | by constant of the second seco | the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic | cator or confirm the a Color (I 10YR 10YR | Absence of Indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 ot preser S8 - Poly S9 - Thin F1 - Loarr | S Concentration, D 7.5YR t]⊐ alue Belor Dark Surfa | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) filineral (LRR K, L) | ered/Coated Sand Grains; Mottles % 5 Indicator | Location: PL=Pore L Type C s for Proble A10 - 2 cm M A16 - Coast S3 - 5cm M | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | by comparison of the second se | the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic an Sulfide | cator or confirm the a Color (I 10YR 10YR | absence of Indica Matrix Moist) 3/1 4/1 ors are r | ************************************** | Concentration, D 7.5YR nt Dark Surfa vy Mucky N y Gleyed | eries Drainage Class: Depleton, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) Alineral (LRR K, L) Matrix | Mottles % 5 Indicator | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm MI S3 - 5 cm MS | Location M | (e.g. clay, sand, loam) sandy loam |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of Indica Matrix Moist) 3/1 4/1 ors are r | ators) (Type: C=C % 100 95 s8 - Polyo S9 - Thin F1 - Loarr F2 - Loarr F3 - Deple | Concentration, D 7.5YR - | Peries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | Mottles % 5 Indicator | Location: PL=Pore I Type C s for Proble A10 - 2 cm A10 - 2 cm A10 - 2 cm S3 - 5 cm M S3 - 5 cm K S8 - Polyval | Location M matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Ucky Peat of Peat (LURFACE(LRR K, L, M)) ue Below Surface (I | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3- Black H A4 - Hydroge A5- Stratifier A11 - Deplet | the depth needed to document the indi Horizon 1 2 idicators (check he pipedon istic on Sulfide d Layers ed Below Dark Surface | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/1 ors are r | ************************************** | Concentration, D Concentration, D Concentrati | Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix c rface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da | Location M | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydrogg A5 - Stratifier A1- Deplet A1 - Deplet S1 - Sandy M | the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic an Sulfide d Layers ed Below Dark Surface Dark Surface fuck Mineral | cator or confirm the a Color (I 10YR 10YR | absence of indica Matrix Moist) 3/1 4/1 ors are r 0 s are r | tors) (Type: C=C % 100 95 S8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redo | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A10 - 2 cm I A10 - 2 cm S S3 - 5 cm MI S3 - 5 cm MI S3 - 5 cm MI S4 - Coast S8 - Polyval S9 - Thin Da S8 - Polyval S9 - Thin D4 F12 - Iron-M F19 - Piedm | Location M matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I, L, MLRA 14 Unday Peat of Peat (u urface (LRR K, L, M) Ue Below Surface (tark K, L) anganese Masses ont Floodplain Soils | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A11 - Deplet A12 - Thick Cl S1 - Sandy N S4 - Sandy C | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | Mottles % 5 Indicator | Location: PL=Pore I Type C s for Proble A10 - 2 cm A10 - 2 cm A10 - 2 cm A10 - 2 cm S3 - 5 cm M S3 - 5 cm M S9 - Thin Da S9 - Thin Da S9 - Thin Da F12 - Iron-M T46 - Mesic | Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): Difon (Describe to Depth 6 20 Soil Field In A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A12 - Thick I S1 - Sandy M S4 - Sandy C S5 - Sandy F | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm TA6 - Mesic TF2 - Red F | Location M matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR ucky Peat of Peat (L urface (LRR K, L, M) ue Below Surface (I ark Surface (LRR K, L, M) tanganese Masses ont Floodplain Soils Spodic (MLRA 144A, 14 arent Material | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A12 - Thick I S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy P S5 - Sandy F S6 - Stripped | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore L Type C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red F TF12 - Very | Location M - | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A12 - Thick I S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy P S5 - Sandy F S6 - Stripped | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - Scm Mi S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F12 - Very Other (Expla | Location M matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR ucky Peat of Peat (L urface (LRR K, L, M) ue Below Surface (I ark Surface (LRR K, L, M) tanganese Masses ont Floodplain Soils Spodic (MLRA 144A, 14 arent Material | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3- Black H A4 - Hydroge A5 - Stratifier A1- Deplet A1 - Deplet A1 - Deplet A1 - Deplet A5 - Stratifier S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indice Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - Scm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F19 - Piedm F12 - Very Other (Expla | Location Location Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3 - Black H A4 - Hydroge A5 - Stratifiet A12 - Thick I S1 - Sandy M S4 - Sandy M S4 - Sandy M S4 - Sandy P S5 - Sandy F S6 - Stripped | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | Absence of indica Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - Scm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F19 - Piedm F12 - Very Other (Expla | Location Location Location | (e.g. clay, sand, loam) sandy loam - |
| SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 6 NRCS Hydric | group): ption (Describe to Depth 6 20 Soil Field Ir A1- Histosol A2 - Histic El A3- Black H A4 - Hydroge A5 - Stratifier A1- Deplet A1 - Deplet A1 - Deplet A1 - Deplet A5 - Stratifier S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indi Horizon 1 2 | cator or confirm the a Color (I 10YR 10YR | absence of indice Matrix Moist) 3/1 4/1 ors are r | ators.) (Type: C=C % 100 95 | S Concentration, D 7.5YR | eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) ACP (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface | | Location: PL=Pore I Type C s for Proble A10 - 2 cm A16 - Coast S3 - Scm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm F19 - Piedm F19 - Piedm F12 - Very Other (Expla | Location Location Location | (e.g. clay, sand, loam) sandy loam - |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Long Island, | NY | | | | Wetland ID: W01CFD Sample Point Wetland |
|-------------------|---|--------------------|----------|----------|------------|--|
| VEOFTATION | | | | | | |
| VEGETATION | (Species identified in all upperca ot size: 10 meter radius) | ase are non-native | species. |) | | |
| | Species Name | | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Nyssa sylvatica | - | 50 | Y | FAC | |
| 2. | Acer rubrum | | 40 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC: 5 (A) |
| 3. | | | | | | |
| 4. | | | | | | Total Number of Dominant Species Across All Strata: 6 (B) |
| 5. | | | | | | |
| 6. | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 83.3% (A/B) |
| 7. | | | | | | |
| 8. | | | | | | Prevalence Index Worksheet |
| 9. | | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | | OBL spp. 60 x 1 = 60 |
| | | Total Cover = | 90 | | | FACW spp. 5 x $2 = 10$ |
| | | | | | | FAC spp. 175 x $3 = 525$ |
| | ratum (Plot size: 5 meter radius) | | | | | FACU spp. <u>8</u> x 4 = <u>32</u> |
| 1. | Clethra alnifolia | | 60 | Y | FAC | UPL spp $x 5 = 0$ |
| 2. | Lindera benzoin | | 5 | N | FACW | |
| 3. | Sassafras albidum | | 3 | N | FACU | Total <u>248</u> (A) <u>627</u> (B) |
| 4. | | | | | | |
| 5. | | | | | | Prevalence Index = B/A = 2.528 |
| 6. | | | | | | |
| 7. | | | | | | |
| 8. | | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | | □ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | T () O | | | | ✓ Yes □ No Dominance Test is > 50% |
| | | Total Cover = | 68 | | | ✓ Yes |
| | | | | | | □ Yes □ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) Symplocarpus foetidus | | 60 | Y | OBL | Yes Yes No Problem Hydrophytic Vegetation (Explain) * |
| 2. | Maianthemum canadense | | 5 | Y | FACU | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | | present, unless disturbed or problematic. |
| 4. | | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | | |
| 6 | | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | | height (DBH), regardless of height. |
| 8. | | | | | | |
| 9. | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | | tall. |
| 11. | | | | | | |
| 12. | | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | | |
| 15. | | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | | Total Cover = | 65 | | | |
| | | | | | | |
| Woody Vine Strat | tum (Plot size: 10 meter radius) | | | | | |
| 1. | Smilax hispida | | 25 | Y | FAC | |
| 2. | | | | | | |
| 3. | | | | | | Hydrophytic Vegetation Present - Yes 🗌 No |
| 4. | | | | | | |
| 5. | | | | | | |
| | | Total Cover = | 25 | | | |
| Remarks: | | | | | | |
| | | | | | | |
| | | | | | | |



| Are Vegetation | Sunrise Wind Matt Arsenau Terrace 0-1% drologic cond 0, Soil 0, (5, Soil 0, (FINDINGS getation Pres | tt Latitude: itions on the site typ or Hydrology □ sigr or Hydrology □ natu sent? | ificantly dis | Loc L time of sturbed? | s 🗌 No | N\ Linear -72.8825 | WI/WWI Classification: | : UPL Datum: ☑ Yes □ ances present □ No Hydric Soils | No t? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: Within A Wetland | 10/19/20 Suffolk New York W01JRA Upland Upland Upland Yes ⊻ No |
|--|---|---|---|---------------------------------|---|---|---|---|--|---|---|
| | A1 - Surface A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely | ter Table on arks t Deposits posits t or Crust | gery | are not ; | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece C7 - Thin | atic Faun I Deposits ogen Sulf zed Rhizo ence of R ent Iron Ro Muck Sur | a s ide Odor ospheres on Living Roots ieduced Iron eduction in Tilled Soils fface | | | B6 - Surface Soil (B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vis D1 - Stunted or St D2 - Geomorphic I D3 - Shallow Aquit D4 - Microtopogra D5 - FAC-Neutral | atterns .ines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief |
| Field Observat Surface Water Water Table Pr Saturation Pres Describe Record Remarks: | Present? resent? sent? | ☐ Yes ☑ No ☐ Yes ☑ No ☐ Yes ☑ No eam gauge, monitorin | Depth: Depth: Depth: g well, aeria | | (in.) (in.) (in.) | inspectio | ons), if available: | Wetland Hy | drology Pr | esent? 🗆 | Yes 🗹 No |
| SOILS | | | | | | | | | | | |
| Top | Bottom | he depth needed to document the indi | cator or confirm the a | | ators.) (Type: C=C | Concentration, [| D=Depletion, RM=Reduced Matrix, CS=Cov | vered/Coated Sand Grains; Mottles | Location: PL=Pore L | ining, M=Matrix) | Texture |
| Depth | Depth | Horizon | Color (I | Matrix | % | | Color (Moist) | % | Туре | Location | (e.g. clay, sand, loam) |
| | 3 | 1 | 2.5Y | 3/1 | 100 | | | | | | peat |
| 3 | 8 | 2 | 10YR | 5/3 | 100 | | | | | | sand |
| 8 | 16 | 3 | 7.5YR | 4/4 | 100 | | | | | | sand |
| 16 | 20 | 4 | 7.5YR | 4/3 | 100 | | | | | | sand |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| NRCS Hydric Soil Field Indicators (check here if indicators are not present >>>>>>>>>>>>>>>>>>>>>>>>>>>>>> | | | | | | | bw Surface (LRR R, MLRA 149B) face (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | | A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark Si | matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR / Jcky Peat of Peat (L Jrface (LRR K, L, M) ue Below Surface (I | K, L, R) .RR K, L, R) |
| | A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | I Layers ed Below Dark Surface lark Surface luck Mineral leyed Matrix edox Matrix | | | F6 - Redo F7 - Deple | eted Dark | urface Surface | | F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla | ark Surface (LRR K, L) langanese Masses iont Floodplain Soils Spodic (MLRA 144A, 14 arent Material Shallow Dark Surfa ain in Remarks) tion and wetland hydrology m | (LRR K, L, R) S (MLRA 149B) 15, 149B) 3CCE |
| | A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su | I Layers ed Below Dark Surface lark Surface luck Mineral leyed Matrix edox Matrix | | | F6 - Redo F7 - Deple | eted Dark | urface Surface | Indicators of disturbed or | F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla of hydrophytic vegeta or problematic. | langanese Masses ont Floodplain Soils Spodic (MLRA 144A, 14 Parent Material Shallow Dark Surfa in in Remarks) ition and wetland hydrology m | (LRR K, L, R) S (MLRA 149B) 15, 149B) aCC ust be present, unless |
| | A5 - Stratified A11 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | I Layers ed Below Dark Surface lark Surface luck Mineral leyed Matrix edox Matrix | | | F6 - Redo F7 - Deple | eted Dark | urface Surface | | F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla of hydrophytic vegeta or problematic. | langanese Masses ont Floodplain Soils Spodic (MLRA 144A, 14 Parent Material Shallow Dark Surfa in in Remarks) ition and wetland hydrology m | (LRR K, L, R) S (MLRA 149B) 15, 149B) 3CCE |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01JRA Sample Point Upland |
|--------------------------------|--|-------------|----------|-------------|--|
| VECETATION | | . 、 | | | |
| VEGETATION Tree Stratum (Pl | (Species identified in all uppercase are non-native ot size: 10 meter radius) | e species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | 55 | Y | FAC | |
| 2. | | | | | Number of Dominant Species that are OBL, FACW, or FAC: 4 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp |
| | Total Cover = | 55 | | | FACW spp. $0 	 x 2 = 0$ |
| | | | | | FAC spp. 150 $x 3 = 450$ |
| | atum (Plot size: 5 meter radius) | | | | FACU spp $x 4 = 0$ |
| 1. | Clethra alnifolia | 85 | Y | FAC | UPL spp. 0 x 5 = 0 |
| 2. | | | | | |
| 3. | | | | | Total <u>150</u> (A) <u>450</u> (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = <u>3.000</u> |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | □ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover = | 85 | | | ✓ Yes □ No Prevalence Index is ≤ 3.0 * |
| | | | | | □ Yes □ No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo 1. | ot size: 2 meter radius) Clethra alnifolia | 5 | Y | FAC | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 5 | | | |
| | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) Smilax rotundifolia | 5 | Y | FAC | |
| 2. | | | | FAC | |
| 3. | | | | | Hydrophytic Vegetation Present 🛛 Yes 🗌 No |
| <u> </u> | | | | | |
| <u>4.</u> 5. | | | | | |
| ວ. | Total Cover = | 5 | | | |
| Remarks: | Prevelance index is > than 3.0, and no ind | | hvdric s | soil or wet | land hydrology present |
| Komarka. | | 1001013 01 | inyuno s | | iana nyarology prosent. |
| | | | | | |



| Are Vegetation Are Vegetation SUMMARY OF Hydrophytic Veg Wetland Hydrol | Sunrise Wind Matt Arsenau Floodplain 0-1% Irologic cond 0, Soil 0, 0 FINDINGS getation Pres | Latitude: Latitude: litions on the site typ or Hydrology □ sigr or Hydrology □ natu sent? | ificantly dis | Loc s time of sturbed? ematic? Ves | | NV Linear -72.8829 p, explain in | VI/WWI Classification: I I I I I Are normal circumsta I Yes | PFO Datum: ✓ Yes □ ances present ○ No Hydric Soils | No ?? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: Within A Wetland | 10/19/20 Suffolk New York W01JRA Wetland PFO ✓ Yes □ No |
|---|--|---|----------------------------|--|---|---|---|---|--|---|---|
| Remarks: | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Primary: | A1 - Surface A2 - High Wa A3 - Saturatii B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatii | ater Table on larks nt Deposits posits at or Crust | gery | | B9 - Wate B13 - Aqu B15 - Mar C1 - Hydro C3 - Oxidi C4 - Prese C6 - Rece C7 - Thin | atic Faun I Deposits ogen Sulfi ized Rhizc ence of R ent Iron Re Muck Sur | a s ide Odor ospheres on Living Roots educed Iron eduction in Tilled Soils face | | | B6 - Surface Soil B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Seasor C3 - Crayfish Burr C9 - Saturation Vii D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aquii D4 - Microtopogra D5 - FAC-Neutral | atterns .ines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief |
| Field Observat Surface Water Water Table Pro Saturation Pres | Present? esent? ent? | ✓ Yes ◯ No ✓ Yes ◯ No ✓ Yes ◯ No | Depth: Depth: Depth: | 0 0 | (in.) (in.) (in.) | | | Wetland Hy | | esent? ☑ | Yes 🗆 No |
| Remarks: | ed Data (stre | eam gauge, monitorin | g well, aeria | ai pnotos | , previous | Inspectio | ns), if available: | | N/A | | |
| | tion (Describe to) | the depth needed to document the indi | ator or confirm the a | absence of indic | ators.) (Type: C=C | Concentration, D | =Depletion, RM=Reduced Matrix, CS=Cove | ered/Coated Sand Grains; | Location: PL=Pore L | ining, M=Matrix) | |
| Тор | Bottom | | | Matrix | | | | Mottles | 1 | | Texture |
| Depth | Depth | Horizon | Color (| 1 / | % | | Color (Moist) | % | Туре | Location | (e.g. clay, sand, loam) |
| 0 | 30 | 1 | 2.5Y | 2.5/1 | 100 | | | | | | muck |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | A1- Histosol A2 - Histic Er A3 - Black H A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped | stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral Gleyed Matrix tedox | e if indicat | | S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple | value Belo Dark Surf ny Mucky I ny Gleyed eted Matri ox Dark Su eted Dark | x urface Surface | | A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark S0 S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla | matic Soils 1 Vluck (LRR K, L, MLRA 11 Prairie Redox (LRR Jacky Peat of Peat (I Urface (LRR K, L, M) ue Below Surface (I ark Surface (LRR K, L) langanese Masses sont Floodplain Soil: Spodic (MLRA 14A, 14 tarent Material Shallow Dark Surf; ain in Remarks) tion and wetlan hydrogy n | K, L, R) .RR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) |
| Restrictive Layer | Type: | | | Depth: | | | | Hydric Soil | r problematic. | | Yes No |
| (If Observed) | , | | | | | | | , | | | |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, N | IY | | | | Wetland ID: W01JRA Sample Point Netland |
|------------------|--------------------------------------|-------------------|----------|----------|------------|--|
| VEGETATION | (Species identified in all uppercase | se are non native | species | \ | | |
| | ot size: 10 meter radius) | se are non-native | species. |) | | |
| | Species Name | _ | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | | 45 | Y | FAC | |
| 2. | Nyssa sylvatica | | 25 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:4 (A) |
| 3. | | | | | | |
| 4. | | | | | | Total Number of Dominant Species Across All Strata:4(B) |
| 5. | | | | | | |
| 6. | | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | | |
| 8. | | | | | | Prevalence Index Worksheet |
| 9. | | | | | | Total % Cover of: <u>Multiply by:</u> |
| 10. | | | | | | OBL spp. 10 $x = 10$ |
| | | Total Cover = | 70 | | | FACW spp. 3 $x 2 = 6$ |
| | | | | | | FAC spp. 175 x 3 = 525 |
| | atum (Plot size: 5 meter radius) | | | | | FACU spp 2 x $4 = $ 8 |
| 1. | Clethra alnifolia | | 75 | Y | FAC | UPL spp |
| 2. | Viburnum recognitum | | 10 | N | FAC | |
| 3. | | | | | | Total <u>190</u> (A) <u>549</u> (B) |
| 4. | | | | | | |
| 5. | | | | | | Prevalence Index = B/A = |
| 6. | | | | | | |
| 7. | | | | | | |
| 8. | | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | | Yes No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | | Total Cover = | 85 | | | $rightarrow$ Yes \Box No Prevalence Index is ≤ 3.0 * |
| | | | | | | Yes I No Morphological Adaptations (Explain) * |
| | t size: 2 meter radius) | | 00 | V | 540 | □ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Clethra alnifolia | | 20 | Y | FAC | * Indicators of hydric soil and wetland hydrology must be |
| 2. | Carex trisperma | | 5 | N | OBL | present, unless disturbed or problematic. |
| 3. | Glyceria striata | | 5 | N | OBL | Definitions of Venetation Otestas |
| 4. | Pilea pumila | | 1 | N | FACW | Definitions of Vegetation Strata: |
| 5. | Thalictrum pubescens | | 2 | N | FACW | Tour |
| 6 | Rosa multiflora | | 2 | Ν | FACU | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. |
| 7. | | | | | | noight (BBH), regardlood of hoight |
| 8. | | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 9. | | | | | | tall. |
| 10. | | | | | | |
| 11. | | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | | woody plants less than 3.28 ft. tall. |
| 13. | | | | | | |
| 14. | | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | | Tatal Course | | | | woody vines - An woody vines greater than 0.20 fc in height. |
| | | Total Cover = | 35 | | | |
| | | | | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | | |
| 2. | | | | | | |
| 3. | | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| <u> </u> | | | | | | nyurophytic vegetation Present 🗠 res 🗆 No |
| 4. 5. | | | | | | |
| э. | | Total Cover = | 0 | | | |
| Remarks: | | | U | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |



| Project/Site: | | / Fire Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 10/19/20 |
|---|---|--|---|---|---|------------------|--|---|---|---|---|
| Applicant: | Sunrise Wind | | | 1 | | | | | | County: | Suffolk |
| Investigator #1: Soil Unit: | Matt Arsenau | llt | | Invest | igator #2: | | y VI/WWI Classification: | DEO | | State: Wetland ID: | New York W01JRA |
| Landform: | Floodplain | | | | al Relief: | | WI/WWWI Classification. | PFU | | Sample Point: | Wetland |
| Slope (%): | 0-1% | Latitude: | 40.801275 | | ongitude: | | 56 | Datum: | | Community ID: | PFO |
| | - | litions on the site typ | | | | | | | No | | FFU |
| | | or Hydrology Sign | | | | | Are normal circumsta | | | | |
| | | or Hydrology 🗆 natu | | | | | ⊻ Yes | | | | |
| SUMMARY OF | | | | | | 1 | | | | | |
| Hydrophytic Ve | | sent? | | 🗹 Yes | s 🗌 No | | | Hydric Soils | Present? | | 🗹 Yes 🗌 No |
| Wetland Hydrol | | | | 🗹 Yes | s 🗆 No | | | | | Vithin A Wetland | |
| Remarks: | | | | | | | | | | | |
| | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| Wetland Hvdr | oloav Indica | ators (Check here if | indicators | are not r | oresent |)[] | | | | | |
| Primary | | | | | |) | | | Secondary: | | |
| | A1 - Surface | | | | B9 - Wate | | | | | B6 - Surface Soil (| |
| | A2 - High Wa A3 - Saturati | | | | | | | | | B10 - Drainage Pa B16 - Moss Trim L | |
| | B1 - Water M | | | | | | | | | C2 - Dry-Season V | |
| | B2 - Sedimer | | | | | | ospheres on Living Roots | | | C8 - Crayfish Burr | |
| | B3 - Drift De | | | | | | educed Iron | | | | sible on Aerial Imagery |
| | B4 - Algal Ma | | | | | | eduction in Tilled Soils | | | D1 - Stunted or St | |
| | B5 - Iron Dep B7 - Inundati | osits on Visible on Aerial Ima | aerv | | | | | | | D2 - Geomorphic I D3 - Shallow Aquit | |
| | | Vegetated Concave S | | 닌 | | plainin | emarkay | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | tions: | | | | | | | | | | |
| Surface Water | Present? | 🗆 Yes 🗵 No | Depth: | | (in.) | | | | | | |
| Water Table Pr | esent? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | Wetland Hy | arology Pr | esent? | Yes 🗌 No |
| Saturation Pres | ent? | Yes Vo | Depth: | | • • | | | | | | |
| | | i res i ino | Depui. | | (in.) | | | | | | |
| Describe Record | | | | | () | inspectic | ons) if available: | | N/A | | |
| | led Data (str | eam gauge, monitorin | | | () | inspectic | ons), if available: | | N/A | | |
| Describe Record Remarks: | led Data (str | | | | () | inspectio | ons), if available: | | N/A | | |
| Remarks: | led Data (str | eam gauge, monitorin | | | () | inspectic | ons), if available: | | N/A | | |
| Remarks: SOILS | led Data (stro Subtle indio | eam gauge, monitorin cators of hydrology | ng well, aeria | al photos | , previous | | | ered/Crated Sand Grains: | | ining M=Matrix) | |
| Remarks: SOILS Profile Descrip | led Data (stru Subtle india | eam gauge, monitorin cators of hydrology | ng well, aeria | al photos | , previous | | Dependence of the second secon | | | ining, M=Matrix) | Texture |
| Remarks: SOILS Profile Descrip Top | led Data (stro Subtle indio Dition (Describe to Bottom | eam gauge, monitorin cators of hydrology | ng well, aeria | al photos absence of indic Matrix | , previous | | Depletion, RM=Reduced Matrix, CS=Cow | Mottles | Location: PL=Pore L | I | Texture (e.g. clay, sand, loam) |
| Remarks: SOILS Profile Descrip Top Depth | led Data (stra Subtle india Detion (Describe to Bottom Depth | eam gauge, monitorin cators of hydrology | ag well, aeria | al photos absence of indic Matrix Moist) | , previous ators.) (Type: C=C % | | | | | ining, M=Matrix) | (e.g. clay, sand, loam) |
| Remarks: SOILS Profile Descrip Top Depth 0 | btion (Describe to Bottom Depth 3 | eam gauge, monitorin cators of hydrology the depth needed to document the indi- Horizon 1 | cator or confirm the a | al photos absence of indic Matrix Moist) 3/1 | , previous ators.) (Type: C=C % 100 | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cov | Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) peat |
| Remarks: SOILS Profile Descrip Top Depth | led Data (stra Subtle india Detion (Describe to Bottom Depth | eam gauge, monitorin cators of hydrology the depth needed to document the indi- Horizon | ag well, aeria | al photos absence of indic Matrix Moist) | , previous ators.) (Type: C=C % | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) | Mottles % | Location: PL=Pore L | Location | (e.g. clay, sand, loam) |
| Remarks: SOILS Profile Descrip Top Depth 0 3 | bition (Describe to Bottom Depth 3 9 | the depth needed to document the indi Horizon | cator or confirm the a | al photos absence of indic Matrix Moist) 3/1 5/1 | , previous ators.) (Type: C=C % 100 100 | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) peat sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 | ted Data (str Subtle indice tion (Describe to Bottom Depth 3 9 12 | the depth needed to document the indi Horizon | cator or confirm the a | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 | , previous ators.) (Type: C=C % 100 100 100 | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) peat sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 | bition (Describe to Bottom Depth 3 9 12 18 | the depth needed to document the indi Horizon 1 2 3 4 | cator or confirm the a Color (1 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ | , previous ators.) (Type: C=C % 100 100 100 100 | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) peat sand sand sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 | ted Data (str Subtle indice bition (Describe to Bottom Depth 3 9 12 18 | the depth needed to document the indi Horizon 1 2 3 4 | cator or confirm the a Color (1 10YR 2.5Y 2.5Y 7.5YR | al photos absence of Indic Matrix Moist) 3/1 5/1 5/3 4/4/ | , previous ators.) (Type: C=C % 100 100 100 100 | Concentration, D | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) peat sand sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 | tion (Describe to Bottom Depth 3 9 12 18 | the depth needed to document the indi Horizon 1 2 3 4 | cator or confirm the a Color (10YR 2.5Y 2.5Y 7.5YR | al photos absence of Indic Matrix Moist) 3/1 5/1 5/3 4/4/ | , previous ators.) (Type: C=C % 100 100 100 100 | Concentration, D | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) | Mottles % | Location: PL=Pore L Type | Location | (e.g. clay, sand, loam) peat sand sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 | bition (Describe to Bottom Depth 3 9 12 18 | the depth needed to document the indi Horizon 1 2 3 4 | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos basence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ | (Type: C=C 9% 100 100 100 100 | Concentration, E | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) - | Mottles % | Location: PL=Pore I Type | Location | (e.g. clay, sand, loam) peat sand sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | bion (Describe to Bottom (Describe to Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosol | the depth needed to document the indi- Horizon 1 2 3 4 dicators (check here | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/3 4/4/ ors are r | ators.) (Type: C=C % 100 100 100 100 S8 - Polyw | Concentration, D | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % <u>Indicator</u> | Location: PL=Pore L Type s for Proble A10 - 2 cm | Location matic Soils ¹ Muck (LRR K, L, MLRA 12 | (e.g. clay, sand, loam) peat sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | ted Data (str Subtle indice Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosol A2 - Histic E | the depth needed to document the indi Horizon 1 2 3 4 indicators (check here pipedon | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r □ | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) - | Mottles % | Location: PL=Pore L Type s for Proble A10 - 2 cm A16 - Coast | Location matic Soils ¹ Vluck (LRR K, L, MLRA 14 Prairie Redox (LRR | (e.g. clay, sand, loam) peat sand sand see see |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | ted Data (str Subtle indice bottom Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic El A3 - Black H | the depth needed to document the indi Horizon 1 2 3 4 endicators (check here pipedon istic | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) | Mottles % <u></u> <u></u> <u></u> | Location: PL=Pore L Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M | Location | (e.g. clay, sand, loam) peat sand sand see see |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | tied Data (str Subtle indice Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosoi A2 - Histic El A3- Black H A4 - Hydroge | the depth needed to document the indi Horizon 1 2 3 4 indicators (check here pipedon istic on Sulfide | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos basence of indic Matrix Moist) 3/1 5/3 4/4/ ors are r | ators.) (Type: C=C % 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam | Concentration, D | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) - | Mottles % <u></u> <u>Indicator</u> | Location: PL=Pore I Type - | Location | (e.g. clay, sand, loam) peat sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | Ided Data (str Subtle indice Data (str Subtle indice Depth 3 9 12 18 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifier | the depth needed to document the indi Horizon 1 2 3 4 indicators (check here pipedon istic on Sulfide | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of Indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r | ators.) (Type: C=C % 100 100 100 100 | Concentration, D | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X | Mottles % <u></u> <u></u> <u></u> <u>Indicator</u> | Location: PL=Pore L Type s for Proble A10 - 2 cm A10 - 2 cm A10 - Coast S3 - 5cm M S7 - Dark S S8 - Polyval | Location | (e.g. clay, sand, loam) peat sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 0 12 NRCS Hydric | tion (Describe to Bottom Depth 3 9 12 18 Soil Field In A1- Histosol A2- Histic EI A3- Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I | the depth needed to document the indi- Horizon 1 2 3 4 ndicators (check here pipedon istic pipedon istic d Layers ed Below Dark Surface Dark Surface | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore I Sold Sold Sold <td>Location</td> <td>(e.g. clay, sand, loam) peat sand sand -</td> | Location | (e.g. clay, sand, loam) peat sand sand - |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | tied Data (str Subtle indice Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosol A2 - Histo EI A3 - Black H A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M | the depth needed to document the indi Horizon 1 2 3 4 indicators (check here pipedon istic on Sulfide d Layers ed Below Dark Surface Dark Surface fuck Mineral | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore I Type S10 S2 S5 S10 S10 S2 S2 S3 S3 S4 S4 S10 <tr< td=""><td>Location</td><td>(e.g. clay, sand, loam) peat sand sand -</td></tr<> | Location | (e.g. clay, sand, loam) peat sand sand - |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | ted Data (strr Subtle indicession of the second sec | the depth needed to document the indicators of hydrology the depth needed to document the indicators Horizon 1 2 3 4 Indicators (check here pipedon istic n Sulfide Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Beloyed Matrix | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore I Type s for Proble A10 - 2 cm A10 - 2 cm A10 - 2 cm A10 - 2 cm S3 - 5cm M S7 - Dark S S8 - Polyval S9 - Thin D2 F12 - Iron-N F19 - Piedm TA6 - Mesic | Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I Loky Peat of Peat (LI Urface (LRR K, L, M) ue Below Surface (L Irface (LRR K, L) anganese Masses ont Floodplain Soil: Spodic (MLRA 1444, 4C) | (e.g. clay, sand, loam) peat sand sand - |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric | ted Data (str Subtle indice Bottom Depth 3 9 12 18 5 Soil Field Ir A1- Histosol A2 - Histic El A3- Black H A4- Hydroge A5- Stratifier A12 - Thick I S1 - Sandy M S4 - Sandy M S4 - Sandy M | the depth needed to document the indicators of hydrology the depth needed to document the indi Horizon 1 2 3 4 ndicators (check hele pipedon istic on Sulfide d Layers ed Below Dark Surface Dark Surface Nuck Mineral Sleyed Matrix tedox | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore L Type - | Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR JCKy Peat of Peat (L urface (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L, M) tanganese Masses ont Floodplain Soils Spodic (MLRA 144, 14 tarent Material | (e.g. clay, sand, loam) peat sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric NRCS Hydric | tion (Describe to Bottom Depth 3 9 12 18 Soil Field In A1- Histosol A2- Histic EI A3- Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick II S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | the depth needed to document the indicators of hydrology the depth needed to document the indi Horizon 1 2 3 4 ndicators (check hele pipedon istic on Sulfide d Layers ed Below Dark Surface Dark Surface Nuck Mineral Sleyed Matrix tedox | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore I Type - | Location | (e.g. clay, sand, loam) peat sand sand - |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric NRCS Hydric | tion (Describe to Bottom Depth 3 9 12 18 Soil Field In A1- Histosol A2- Histic EI A3- Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick II S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | the depth needed to document the indi Horizon 1 2 3 4 adicators (check here pipedon istic istic ad Layers ed Below Dark Surface Dark Surface Auck Mineral Beleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore I S9 - Thin Da F12 - Iron-M F12 - Ned F TF12 - Very Other (Expla) Mydrophytic veget | Location | (e.g. clay, sand, loam) peat sand sand - |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric NRCS Hydric | ted Data (str Subtle indice Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosol A2 - Histic El A3- Black H A4 - Hydroge A5 - Stratifier A11 - Deplet A5 - Stratifier A11 - Deplet A5 - Stratifier S1 - Sandy M S4 - Sandy G S5 - Sandy F S6 - Strippec S7 - Dark Su | the depth needed to document the indi Horizon 1 2 3 4 adicators (check here pipedon istic istic ad Layers ed Below Dark Surface Dark Surface Auck Mineral Beleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore L Type - | Location matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Jucky Peat of Peat (L Urface (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soils Spodic (MLRA 144, 14 Parent Material Shallow Dark Surfa in in Remarks) tion and wetland hydrology m | (e.g. clay, sand, loam) peat sand sand sand |
| Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 0 0 0 0 0 0 0 0 0 0 0 0 0 | ted Data (str Subtle indic Bottom Depth 3 9 12 18 Soil Field Ir A1- Histosol A2- Histic E A3- Black H A4 - Hydroge A5 - Stratifie A11 - Deplet A12 - Thick I S1 - Sandy N S4 - Sandy C S5 - Sandy F S6 - Stripped | the depth needed to document the indi Horizon 1 2 3 4 adicators (check here pipedon istic istic ad Layers ed Below Dark Surface Dark Surface Auck Mineral Beleyed Matrix Redox I Matrix | cator or confirm the a Color (I 10YR 2.5Y 2.5Y 7.5YR | al photos absence of indic Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 | with the second secon | Concentration, C | D=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X Jrface Surface | Mottles % | Location: PL=Pore L Type - | Location matic Soils 1 Muck (LRR K, L, MLRA 14 Prairie Redox (LRR Jucky Peat of Peat (L Urface (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soils Spodic (MLRA 144, 14 Parent Material Shallow Dark Surfa in in Remarks) tion and wetland hydrology m | (e.g. clay, sand, loam) peat sand sand - |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01JRA Sample Point Netla |
|------------------|--|-------------|----------|-------------|---|
| VEGETATION | (Species identified in all uppercase are non-nativ | ve species |) | | |
| | ot size: 10 meter radius) | ve species. |) | | |
| • | <u>Species Name</u> | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | 60 | Y | FAC | |
| 2. | Nyssa sylvatica | 20 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:4 (A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:4 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: <u>Multiply by:</u> |
| 10. | | | | | OBL spp. 0 x 1 = 0 |
| | Total Cover | = 80 | | | FACW spp. 0 $x 2 = 0$ |
| | | | | | FAC spp. 186 X 3 = 558 |
| | atum (Plot size: 5 meter radius) | 00 | X | 540 | FACU spp. 0 x 4 = 0 UPL spp. 0 x 5 = 0 |
| 1. | Clethra alnifolia | 80 | Y | FAC | UPL spp x 5 =0 |
| 2. | Nyssa sylvatica | 20 | N | FAC | |
| <u>3.</u> 4. | | | | | Total <u>186</u> (A) <u>558</u> (B) |
| 4. 5. | | | | | Dravelance index = $D/h = -0.000$ |
| 5. 6. | | | | | Prevalence Index = B/A = <u>3.000</u> |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vogotation Indicators: |
| 0. 9. | | | | | Hydrophytic Vegetation Indicators: |
| 9. 10. | | | | | Yes No Rapid Test for Hydrophytic Vegetation ∀ Yes No Dominance Test is > 50% |
| 10. | Total Cover | | | | ✓ Yes No Dominance Test is > 50% ✓ Yes No Prevalence Index is ≤ 3.0 * |
| | | - 100 | | | _ |
| Horb Stratum (Dk | ot size: 2 meter radius) | | | | ✓ Yes ↓ No Morphological Adaptations (Explain) * ↓ Yes ✓ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Clethra alnifolia | 5 | Y | FAC | |
| 2. | | | | | * Indicators of hydric soil and wetland hydrology must be |
| 3. | | | | | present, unless disturbed or problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. |
| 10. | | | | | tall. |
| 11. | | | | | |
| 12. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 13. | | | | | woody plants less than 3.28 ft. tall. |
| 14. | | | | | |
| 15. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover | = 5 | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | Smilax rotundifolia | 1 | N | FAC | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| 0. | Total Cover | | | | |
| | | | | l shallow r | |



| Project/Site: | | I/ Fire Island, NY | | | | | Stantec Project #: | 2028113199 | | Date: | 10/20/20 |
|--|--|--|------------------------|-------------------|--|---|--|--|---|--|---|
| Applicant: | Sunrise Wind | | | lavent | | | | | | County: | Suffolk |
| Investigator #1: Soil Unit: | Matt Arsenau | llt | | Invest | igator #2: | | y VI/WWI Classification: | | | State: Wetland ID: | New York W01JRB |
| Landform: | Terrace | | | | al Relief: | | vi/vvvvi Classification. | UPL | | | |
| Slope (%): | 0-1% | Latituda: | 40.800517 | | | | ICE | Datum: | | Sample Point: | Upland |
| | - | litions on the site typ | | | ongitude: | | | | No | Community ID: | Upland |
| | | | | | | o, explain in I | Are normal circumsta | | | | |
| | | or Hydrology □sigr or Hydrology □natu | | | | | Are normal circumsta | □ No | . (| | |
| | | or ⊓yurology ⊡nau | arally proble | ematic? | | | | | | | |
| SUMMARY OF | | | | | | | | Libuditi e O e ile | Due e e u 40 | | |
| Hydrophytic Veg Wetland Hydrol | | | | ☑ Yes | | | | Hydric Soils | | | □ Yes ☑ No d? ■ Yes ☑ No |
| | ogy Present | <i>!</i> | | | i 🗅 NO | | | is this Samp | biing Point v | Vithin A Wetland | a? ∎ res ¤ no |
| Remarks: | | | | | | | | | | | |
| HYDROLOGY | | | | | | | | | | | |
| | alagu India | tere (Chaok hara if | indiactora | oro not r | rocont | | | | | | |
| Primary: | | ators (Check here if | indicators | are not p | bresent |)⊡ | | | Secondary: | | |
| <u>r ninary</u> . | | Water | | | B9 - Wate | r-Stained | Leaves | | | B6 - Surface Soil (| Cracks |
| | A2 - High Wa | | | | | | | | | B10 - Drainage Pa | |
| | A3 - Saturatio | on | | | B15 - Mar | | | | | B16 - Moss Trim L | |
| | B1 - Water N | | | | - , | | | | | C2 - Dry-Season \ | |
| | B2 - Sedimer B3 - Drift Der | | | | | | spheres on Living Roots | | | C8 - Crayfish Burr | |
| | B4 - Algal Ma | | | | | | educed Iron eduction in Tilled Soils | | | D1 - Stunted or St | sible on Aerial Imagery |
| | B5 - Iron Dep | | | | | | | | | D2 - Geomorphic | |
| | | on Visible on Aerial Ima | gery | | Other (Ex | plain in Re | emarks) | | | D3 - Shallow Aquit | |
| | B8 - Sparsely | y Vegetated Concave S | urface | | | | | | | D4 - Microtopogra | |
| | | | | | | | | | | D5 - FAC-Neutral | Test |
| Field Observat | ions: | | | | | | | | | | |
| Surface Water I | Present? | 🗆 Yes 🗵 No | Depth: | | (in.) | | | Wetland Hy | | sont? | Yes 🗵 No |
| Water Table Pre | esent? | 🗆 Yes 🗹 No | Depth: | | (in.) | | | Wettand Hy | arology i h | | |
| Saturation Pres | ent? | 🗌 Yes 🗹 No | Depth: | | (in.) | | | | | | |
| Describe Record | ed Data (str | eam gauge, monitorin | n well aeria | al nhotos | nrevious | inspectio | ns) if available: | | N/A | | |
| Remarks: | | oam gaago, monitorii | ig won, done | | , proviouo | nopoolie | | | | | |
| Remarks. | | | | | | | | | | | |
| SOILS | | | | | | | | | | | |
| | tion | | | | | | =Depletion, RM=Reduced Matrix, CS=Cove | | | | |
| Тор | Bottom | ine depin needed to document the indi | cator or confirm the a | Matrix | ators.) (Type: C=C | oncentration, L | =Depletion, RM=Reduced Matrix, CS=Cov | Mottles | Location: PL=Pore L | ning, m=mainx) | Texture |
| | | Harizon | Color /I | | % | | Color (Maint) | % | Turne | Location | (e.g. clay, sand, loam) |
| Depth 0 | Depth | Horizon 1 | Color (I | | 100 | | Color (Moist) | 70 | Туре | Location | , , , |
| | 3 | | 10YR | 3/3 | | | | | | | peat |
| 3 | 4 | 2 | 10YR | 3/1 | 100 | | | | | | sand |
| 4 | 8 | 3 | 10YR | 5/3 | 100 | | | | | | sand |
| 8 | 16 | 4 | 7.5YR | 4/6 | 100 | | | | | | sand |
| 16 | 20 | 5 | 7.5YR | 5/6 | 100 | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | ors are r | not preser | nt)⊠ | | | | | |
| NRCS Hydric | Soil Field In A1- Histosol | ndicators (check he | | ors are r | not preser S8 - Polyv | it)☑ ralue Belo | W Surface (LRR R, MLRA 149B) | Indicator | s for Proble A10 - 2 cm l | matic Soils ¹ Muck (lrr k, l, mlra 14 | |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep | ndicators (check he pipedon | | ors are r | not preser S8 - Polyv S9 - Thin | nt)⊡ value Belo Dark Surf | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) | Indicator | A10 - 2 cm I A16 - Coast | matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR | 19B) K, L, R) |
| NRCS Hydric : | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | idicators (check he pipedon istic | | ors are r | not preser S8 - Polyv S9 - Thin F1 - Loar | value Belo Dark Surf ny Mucky | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) | Indicator | rs for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu | <u></u> Muck (LRR K, L, MLRA 14 Prairie Redox (LRR JCky Peat of Peat (J | 19B) K, L, R) |
| NRCS Hydric | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi | Idicators (check he pipedon istic n Sulfide | | ors are r | not preser S8 - Polyv S9 - Thin | ralue Belo Dark Surf ny Mucky ny Gleyed | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix | Indicator | A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark St | matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR | 19B) K, L, R) .RR K, L, R) |
| NRCS Hydric IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | Soil Field In A1- Histosol A2 - Histic E _I A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete | Idicators (check he pipedon istic n Sulfide | | ors are r | not preser S8 - Polyv S9 - Thin F1 - Loarr F2 - Loarr | t)⊐ ralue Belo Dark Surf ny Mucky ny Gleyed ated Matri | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x | Indicator | <u>s for Proble</u> A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark Si S8 - Polyvali S9 - Thin Da | | II9B) K, L, R) .RR K, L, R) LRR K, L) |
| NRCS Hydric : | Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick I | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M | | 198) K, L, R) LRR K, L, R) (LRR K, L, R) |
| NRCS Hydric : | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick I S1 - Sandy M | idicators (check he pipedon istic an Sulfide d Layers ed Below Dark Surface Dark Surface fuck Mineral | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | S for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark St S8 - Polyvall S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm | | 198) K, L, R) LRR K, L, R) LLRR K, L, R) (LRR K, L, R) S (MLRA 149B) |
| NRCS Hydric : | Soil Field In A1- Histosol A2 - Histic E _I A3 - Black Hi A4 - Hydrogg A5 - Stratifier A11 - Deplet A12 - Thick D S1 - Sandy M S4 - Sandy G | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark SI S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic | | 198) K, L, R) LRR K, L, R) LLRR K, L, R) (LRR K, L, R) S (MLRA 149B) |
| NRCS Hydric : | Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplett A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - Scm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P | | I9B) K, L, R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) |
| NRCS Hydric: | Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick I S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | Indicator | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm T46 - Mesic TF2 - Red P TF12 - Very | | I9B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 15, 149B) |
| NRCS Hydric: | Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick I S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - Scm Mu S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Veryl Other (Expla | | I9B) K, L, R) .RR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) 3CE |
| NRCS Hydric: | Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy G S6 - Stripped S7 - Dark Su | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla) thydrophytic wegetar problematic. | | I9B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 15, 149B) 3CCE |
| NRCS Hydric: | Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplett A12 - Thick I S1 - Sandy M S4 - Sandy R S5 - Sandy R S6 - Stripped | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla) thydrophytic wegetar problematic. | | ISB) K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) 3CE |
| NRCS Hydric: | Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy M S4 - Sandy G S5 - Sandy G S6 - Stripped S7 - Dark Su | | | ors are r | sot preser S8 - Polyo S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple | t ralue Belo Dark Surf ny Mucky ny Gleyed ted Matri x Dark Su ted Dark | w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix x urface Surface | | s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm Mi S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red P TF12 - Very Other (Expla) thydrophytic wegetar problematic. | | |



Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01JRB Sample Point Upland |
|------------------|---|-----------|----------|-------------|---|
| VEGETATION | (Species identified in all uppercase are non-native | species) | | | |
| | lot size: 10 meter radius) | species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | 55 | Y | FAC | |
| 2. | Nyssa sylvatica | 20 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | Quercus rubra | 10 | N | FACU | |
| 4. | | | | | Total Number of Dominant Species Across All Strata: 5 (B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: Multiply by: |
| 10. | | | | | OBL spp x 1 = 0 |
| | Total Cover = | 85 | | | FACW spp. 10 \times 2 = 20 |
| 0 1 /01 1 0/ | | | | | FAC spp. 120 X $3 = 360$ |
| | ratum (Plot size: 5 meter radius) | 35 | Y | FAC | FACU spp. 10 X 4 = 40 UPL spp. 0 X 5 = 0 |
| <u> </u> | Clethra alnifolia Vaccinium corymbosum | | Y | FAC FACW | UPL spp $x 5 = 0$ |
| 3. | | | T | FACVV | Total 140 (A) 420 (B) |
| 4. | | | | | 10tal 140 (A) 420 (B) |
| 5. | | | | | Prevalence Index = B/A = 3.000 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | \checkmark Yes \square No Dominance Test is > 50% |
| | Total Cover = | 45 | | | \checkmark Yes \square No Prevalence Index is $\leq 3.0^*$ |
| | | | | | ☑ Yes □ No Morphological Adaptations (Explain) * |
| Herb Stratum (Pl | ot size: 2 meter radius) | | | | ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) * |
| 1. | Clethra alnifolia | 10 | Y | FAC | |
| 2. | | | | | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | present, aniess distarbed of problematic. |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | kan. |
| 11. | | | | | |
| 12. | - | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. |
| 13. | | | | | |
| 14. | | | | | |
| 15. | - | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| | Total Cover = | 10 | | | |
| Woody Vine Stra | tum (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| | Total Cover = | 0 | | | |
| Remarks: | Buttressing on Acer rubrum and Nyssa sylv | vatica | | | |
| | | | | | |
| | | | | | |



| Are Vegetation | Sunrise Wind Matt Arsenau Floodplain 0-1% drologic cond 0, Soil 0, c FINDINGS getation Pres | Latitude: Latitude: litions on the site typ or Hydrology □ sigr or Hydrology □ natu sent? | ificantly dis | Loc <u>time of</u> sturbed? ematic? Yes | | NV Linear -72.8824 o, explain in | VI/WWI Classification: | PFO Datum: ⊻ Yes □ ances present □ No Hydric Soils | No t? Present? | Date: County: State: Wetland ID: Sample Point: Community ID: | 10/20/20 Suffolk New York W01JRB Wetland PFO ✓ Yes □ No d? ☑ Yes ■ No |
|---|---|---|---|---|--|--|--|---|---|---|---|
| | A1 - Surface A2 - High Wa A3 - Saturatic B1 - Water M B2 - Sedimer B3 - Drift Dep B4 - Algal Ma B5 - Iron Dep B7 - Inundatic B8 - Sparsely | ater Table on larks nt Deposits posits at or Crust | gery | | B9 - Wate B13 - Aqu B15 - Mai C1 - Hydr C3 - Oxid C4 - Pres C6 - Rece C7 - Thin | atic Fauna I Deposits ogen Sulfi ized Rhizc ence of Ro ent Iron Re Muck Suri | a de Odor spheres on Living Roots educed Iron sduction in Tilled Soils face | | | B6 - Surface Soil (B10 - Drainage Pa B16 - Moss Trim L C2 - Dry-Season V C8 - Crayfish Burr C9 - Saturation Vi: D1 - Stunted or St D2 - Geomorphic D3 - Shallow Aqui D4 - Microtopogra D5 - FAC-Neutral | atterns .ines Water Table ows sible on Aerial Imagery ressed Plants Position tard phic Relief |
| Field Observat Surface Water Water Table Pr Saturation Pres Describe Record Remarks: | Present? esent? eent? | ✓ Yes ✓ Yes ✓ No ✓ Yes ✓ No ✓ eam gauge, monitorin | Depth: Depth: Depth: g well, aeria | 0 0 | (in.) (in.) (in.) , previous | inspectio | ns), if available: | Wetland Hy | drology Pr N/A | esent? ☑ | Yes 🗆 No |
| SOILS | | | | | | | | | | | |
| Top | Bottom (Describe to t | he depth needed to document the indi | ator or confirm the a | Matrix | ators.) (Type: C= | Concentration, D | =Depletion, RM=Reduced Matrix, CS=Cov | Mottles | Location: PL=Pore L | ining, M=Matrix) | Texture |
| Depth | Depth | Horizon | Color (I | | % | | Color (Moist) | % | Туре | Location | (e.g. clay, sand, loam) |
| 0 | 3 | 1 | 10YR | 3/2 | 100 | | | | | | peaty muck |
| 3 | 4 | 2 | 10YR | 2/1 | 100 | | | | | | sand |
| 4 | 5 | 3 | 10YR | 5/2 | 97 | 7.5YR | 4/4 | 3 | С | М | sand |
| 5 | 10 | 4 | 7.5YR | 5/2 | 95 | 7.5YR | 4/4 | 5 | С | М | sand |
| 10 | 16 | 5 | 10YR | 4/3 | 95 | 7.5YR | 4/4 | 5 | С | М | sand |
| 16 | 20 | 6 | 10YR | 4/5 | 97 | 7.5YR | 4/4 | 3 | С | М | sand |
| | | | | | | | | | | | |
| Image: constraint of the second straint of the se | | | | | | | Mineral (LRR K, L) Matrix x Irface Surface | | A10 - 2 cm A16 - Coast S3 - 5cm Mi S7 - Dark S S8 - Polyval S9 - Thin Dz F12 - Iron-N F19 - Piedm TA6 - Mesic TF2 - Red F TF12 - Very Other (Expla | matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (ark Surface (LRR K, L) langanese Masses Spodic (MLRA 144A, 10 Parent Material Shallow Dark Surfa ain in Remarks) ation and wetland hydrology n | K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 15, 149B) |
| Restrictive Layer | | | | Deet | | | | | | | |
| (If Observed) | Type: | | | Depth: | | | | Hydric Soil | Present? | | Yes 🗌 No |
| Remarks: | | | | | | | | | | | |

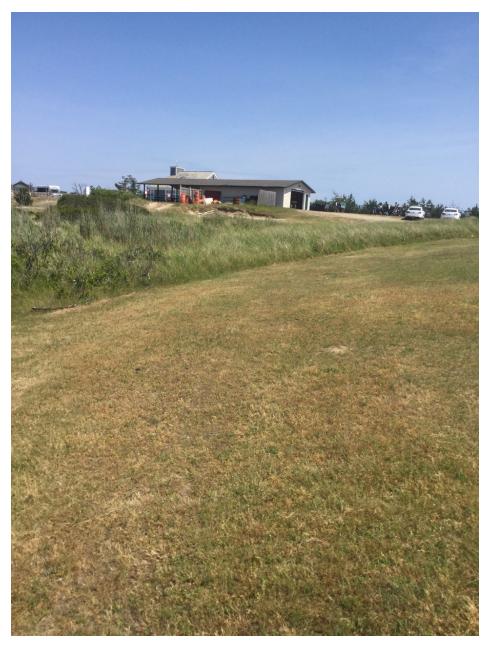


Northeast and Northcentral Region

| Project/Site: | Sunrise Wind/ Fire Island, NY | | | | Wetland ID: W01JRB Sample Point Netland |
|-------------------------|---|-----------|----------|------------|---|
| VEGETATION | (Species identified in all uppercase are non-native | species) | | | |
| | ot size: 10 meter radius) | species.) | | | |
| | Species Name | % Cover | Dominant | Ind.Status | Dominance Test Worksheet |
| 1. | Acer rubrum | 65 | Y | FAC | |
| 2. | Nyssa sylvatica | 35 | Y | FAC | Number of Dominant Species that are OBL, FACW, or FAC:(A) |
| 3. | | | | | |
| 4. | | | | | Total Number of Dominant Species Across All Strata:4(B) |
| 5. | | | | | |
| 6. | | | | | Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B) |
| 7. | | | | | |
| 8. | | | | | Prevalence Index Worksheet |
| 9. | | | | | Total % Cover of: <u>Multiply by:</u> |
| 10. | | | | | OBL spp 0 X 1 = 0 |
| | Total Cover = | 100 | | | FACW spp. 0 x $2 = 0$ |
| | | | | | FAC spp. 195 $x 3 = 585$ |
| Sapling/Shrub Str 1. | atum (Plot size: 5 meter radius) Clethra alnifolia | 80 | Y | FAC | FACU spp. 0 x 4 = 0 UPL spp. 0 x 5 = 0 |
| 1. 2. | | | Y | FAC | 0PL spp. <u>0</u> X 0 - <u>0</u> |
| 3. | | | | | Total 195 (A) 585 (B) |
| 4. | | | | | |
| 5. | | | | | Prevalence Index = B/A = 3.000 |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | Hydrophytic Vegetation Indicators: |
| 9. | | | | | ☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation |
| 10. | | | | | ✓ Yes □ No Dominance Test is > 50% |
| | Total Cover = | 80 | | | ✓ Yes \square No Prevalence Index is $\leq 3.0^{*}$ |
| | | | | | Yes No Morphological Adaptations (Explain) * |
| Herb Stratum (Plo | ot size: 2 meter radius) | | | | ☐ Yes |
| 1. | Clethra alnifolia | 15 | Y | FAC | |
| 2. | | | | | Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. |
| 3. | | | | | |
| 4. | | | | | Definitions of Vegetation Strata: |
| 5. | | | | | |
| 6 | | | | | Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast |
| 7. | | | | | height (DBH), regardless of height. |
| 8. | | | | | |
| 9. | | | | | Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall. |
| 10. | | | | | |
| 11. | | | | | Herb - All herbaceous (non-woody) plants, regardless of size, and |
| 12. | | | | | woody plants less than 3.28 ft. tall. |
| 13. 14. | | | | | |
| 14. | | | | | Woody Vines - All woody vines greater than 3.28 ft. in height. |
| 15. | Total Cover = | 15 | | | WOOUY VIIIes |
| | Total Cover = | 10 | | | |
| Woody Vine Strat | um (Plot size: 10 meter radius) | | | | |
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | Hydrophytic Vegetation Present 🧧 Yes 🗌 No |
| 4. | | | | | |
| 5. | | | | | |
| - | Total Cover = | 0 | | | |
| Remarks: | Acer rubrum and Nyssa sylvatica with buttr | ressing a | nd expo | sed roots | |
| | | | | | |
| | | | | | |



Photograph 1. Wetland 01ASA – Wetland View looking east. Stantec. June 2020.



Photograph 2. Wetland 01ASA – Upland View looking south. Stantec. June 2020.



Photograph 3. Wetland 01CFA – Wetland View looking northeast. Stantec. June 2020.



Photograph 4. Wetland 01CFA – Upland View looking southwest. Stantec. June 2020.



Photograph 5. Wetland 01ASB – Wetland View looking west. Stantec. June 2020.



Photograph 6. Wetland 01ASB – Upland View looking south. Stantec. June 2020.



Photograph 7. Wetland 01ASC – Wetland View looking north. Stantec. June 2020.



Photograph 8. Wetland 01ASC – Upland View looking north. Stantec. June 2020.



Photograph 9. Wetland 01CFB – Upland and Wetland View looking west. Stantec. June 2020.



Photograph 10. Wetland 01CFC/01JRB – Wetland View looking west across Carmans River from public right-of-way. Stantec. June 2020.



Photograph 11. Wetland 01CFC/01JRB – Upland View looking east across Carmans River from public right-of-way. Stantec. June 2020.



Photograph 12. Wetland 01CFD/01JRA – Wetland View looking north. Stantec. October 2020.



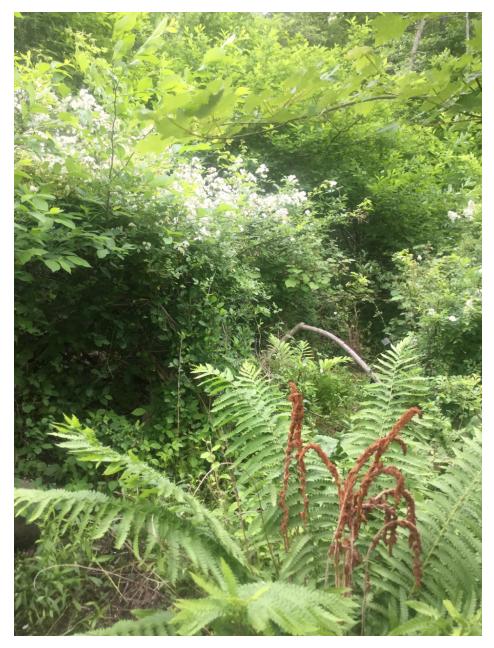
Photograph 13. Wetland 01CFD/01JRA – Upland View looking east. Stantec. October 2020.



Photograph 14. Wetland 01ASD – Wetland View looking south towards Montauk Highway. Stantec. June 2020.



Photograph 15. Wetland 01ASD – Upland View looking west across Montauk Highway from public right-of-way. Yaphank Creek runs south through culvert in image. Stantec. June 2020.



Photograph 16. Wetland 01ASE – Wetland View looking south from public right-of-way. Stantec. June 2020.



Photograph 17. Wetland 01ASE – Upland View looking east across Montauk Highway from public right-of-way. Stantec. June 2020.



Photograph 18. Watercourse S-01CF – Carmans River looking south from public right-of-way. Stantec. June 2020.



Photograph 19. Watercourse S-02MA – Tributary to Carmans River looking east. Stantec. October 2020.



Photograph 20. Watercourse S-01AS – Yaphank Creek looking south towards Montauk Highway from public right-of-way. Stantec. June 2020.