Sunrise Wind Farm Project

Appendix L Onshore Ecological Assessment and Field Survey Report

Prepared for:



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Revision 1 - October 28, 2021

Revision 2 – August 19, 2022



Sunrise Wind: Onshore Ecological Assessment and Field Survey Report

Town of Brookhaven, New York

August 2022

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

ft feet

GIS Geographic Information Systems

GPS Global Positioning System

HDD Horizontal Directional Drill

ha hectare

ICW Intracoastal Waterway

in inch

IPaC Information for Planning and Conservation

km kilometer

LIE Long Island Expressway

m meter

mi mile

NWI National Wetland Inventory



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NYECL New York Environment Conservation Law

NYNHP New York Natural Heritage Program

NYS New York State

NYSDEC New York State Department of Environmental Conservation

OnCS-DC Onshore Converter Station

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. (Stantec) 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) species, 1 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, March, July, and September 2021, and April and May 2022. 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 non-native, invasive species associated with the Onshore Facilities (Appendix A, Figure 1). 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 (NYS; the Sunrise Wind New York Cable Project).

The Onshore Facilities evaluated included:

- 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 construction activities to support HDD 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;

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



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- 4. The Union Avenue Site, an approximately 7-acre (2.8-hectare [ha]) area that includes two parcels south of Union Avenue between Claremont Avenue and Middle Avenue, where the Onshore Converter Station (OnCS-DC) will be located; and
- 5. Onshore Interconnection Cable route from the OnCS-DC to the existing Holbrook Substation.

1.1 STUDY AREA EXTENT AND TERMINOLOGY

Three routes for the Onshore Transmission Cable were surveyed in the field, including a primary route and two alternative routes that are no longer under consideration. These are described below and shown on Appendix A, Figure 1:

- The Long Island Expressway (LIE) Service Road Route, the primary route, is approximately 17.5 miles (mi; 28.2 kilometer [km]) from the Landfall Work Area to the Union Avenue Site. It runs north along William Floyd Parkway and Surrey Circle, west along Mastic Boulevard, north along Francine Place and Revilo Avenue, west along Victory Avenue, crosses the Carmans River, northwest along Horseblock Road, along Manor Road to Long Island Avenue, west along the LIE South Service Road, south along Waverly Avenue, west to Long Island Avenue and west to Union Avenue to reach the OnCS-DC.
- The Montauk Highway Route Alternative initially follows the same route as LIE Service Road Route but continues north along William Floyd Parkway, west along Mastic Boulevard, north along Ashley Place, west along Montauk Highway across Carmans River and Yaphank Creek, onto Yaphank Avenue, and northwest on Horseblock Road where it converges with the LIE Service Road Route. Field surveys were conducted for this route and results are presented in this report; however, this route is no longer under consideration.
- Peconic Avenue Route Alternative, 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, north along North Ocean Avenue, west to Long Island Avenue, and west along Long Island Avenue to Union Avenue to reach the OnCS-DC. Field surveys were conducted for this route and results are presented in this report; however, this route is no longer under consideration.

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 cable duct 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 Study Area' is used to specifically describe the assessed area where the potential Onshore Transmission Cable route will travel along existing roads to the Union



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Avenue Site. As described above, the Onshore Transmission Cable Study Area includes the LIE Service Road Route as well as the Montauk Highway Route Alternative and Peconic Avenue Route Alternative.²

The term 'Onshore Interconnection Cable Study Area' is used to specifically describe the area where the potential Onshore Interconnection Cable route will travel from the Union Avenue Site to the existing Holbrook substation.

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
- 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, and April 19, 2021 (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, and April 15, 2021 (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

² Results indicate where resources intersect or are proximal to the primary LIE Service Road Route or to one of the two Route Alternatives that are no longer under consideration.



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replacement/highway reconstruction project of the William Floyd Parkway, Route CR 46 over Narrow Bay (NYSDOT 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 June and October 2020, March and July 2021, and April and May 2022. 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.

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).



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Natural Communities and RTE Species Assessment

During the 2020, 2021 and 2022 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.

Additionally, in September 2021, a targeted survey for a state-listed RTE plant species was conducted at a proposed work area along the Onshore Transmission Cable associated with Revilo Avenue (Revilo Avenue work area). The survey was prompted based on observations of the existing habitat conditions made by Stantec during previous site investigations in March 2021, which indicated that the area had potential to support certain RTE plant species noted by the NYNHP in their March 27, 2020, and April 15, 2021 letters. Meander surveys were conducted within the undeveloped portions of the Revilo Avenue work area to observe RTE species. Surveys were conducted during the appropriate time of year to observe the RTE plant species potentially present during their identified flowering period. For observed RTE species, data were recorded on population size, condition, vigor, and the associated habitat conditions. RTE plant populations observed were located with a GPS receiver capable of submeter accuracy and photographs were taken of diagnostic features and the associated habitat area.

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, March and July 2021, and April and May 2022 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 density were recorded on field datasheets and located with GPS.



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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 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 Long Island's mainland, 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 LIE Service Road Route as well as the Montauk Highway Route Alternative



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crossings are located. Yaphank Creek begins south of the LIE Service Road Route and flows 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 (approximately 350 ft downstream from the LIE Service Road Route) 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.

From the Landfall Work Area, the Onshore Transmission Cable transits approximately 2,900 ft west-northwest 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. From William Floyd Parkway, the LIE Service Road Route will then turn west onto Surrey Circle, west along Mastic Boulevard, north along Francine Place and Revilo Avenue, and then west along Victory Avenue. The LIE Service Road Route crosses Carmans River, continues west along Victory Avenue, and turns northwest along Horseblock Road. The LIE Service Road Route crosses the Long Island Rail Road at Manor Road to Long Island Avenue, turns west along the LIE South Service Road, continues to Waverly Avenue, then turns south on Waverly Avenue to Long Island Avenue. The LIE Service Road Route turns west to Long Island Avenue and continues west to Union Avenue to reach 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 in Appendix A, Figure 1, all of which are located along existing roadway and utility ROWs.



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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, open waterbodies, and watercourses at the Carmans River crossing. The Union Avenue Site is primarily a developed industrial/commercial site with small narrow forested areas along parcel boundaries. The majority of the Onshore Transmission Cable has been sited within the paved portions of existing roadway ROW. The majority of the Onshore Interconnection Cable has been sited within the existing roadway and utility-owned or controlled property.

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 Study Area intersects NWI-mapped wetlands in the following locations, as depicted in Appendix A, Figure 2a:

- Landfall Work Area and ICW HDD
 - Estuarine wetlands (E1AB3L, E1UBL, and E2U5N) in Narrow Bay
- LIE Service Road Route
 - Inundated deepwater aquatic habitats and aquatic wetlands including riverine wetlands (R2UBHh), lacustrine wetlands (L1UBHh), and palustrine scrub-shrub (PSS3/1Ba) wetlands associated with the crossing of the Carmans River and associated work area in Southaven County Park
- Montauk Highway Route Alternative or Peconic Avenue Route Alternative
 - Palustrine forested (PFO1E) and unconsolidated bottom (PUBHh) wetlands associated with the crossing of the Carmans River and Palustrine forested (PFO1E) and riverine wetlands (R2UBH) associated with 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%.



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Based on a desktop review of NWI data, the Study Area is proximal to NWI-mapped wetlands in several locations, as depicted in Appendix A, Figure 2:

- Two small unconsolidated bottom (PUBHx) excavated NWI wetlands are mapped along the LIE Service Road Route: one west of the intersection of Blue Point Road and Expressway Drive S and a second near the intersection between Horseblock Road and Zorn Boulevard.
- One NWI-mapped seasonally flooded, palustrine emergent persistent wetland (PEM1A) is located approximately 170 ft (52 m) east of the Interconnection Cable Route.

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

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 300 ft (91.4 m) of tidal wetlands mapped by the NYSDEC, including Littoral Zone and Coastal Shoals, Bars, and Mudflats wetland categories. However, since the parking lot at Smith Point County Park has been in existence since prior to August 20, 1977, the adjacent area for the northern edge of the Landfall/ICW Study Area includes the area up to the seaward edge of this parking lot³. The ICW HDD will be located underneath tidal wetlands as mapped by the NYSDEC including Littoral Zone and Coastal Shoals, Bars, and Mudflats wetland categories. 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 (Appendix A, Figure 2b). Adjacent areas are depicted in Appendix A, Figure 3.

³ 6 CRR-NY 66.4(b)(1)(ii): to the seaward edge of the closest lawfully and presently existing (i.e., as of August 20, 1977), functional and substantial fabricated structure (including, but not limited to, paved streets and highways, railroads, bulkheads and sea walls, and rip-rap walls) which lies generally parallel to said most tidal wetland landward boundary and which is a minimum of 100 feet in length as measured generally parallel to such most landward boundary, but not including individual buildings.



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The LIE Service Road Route will traverse one area 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 and HDD area in Southaven County Park

The Montauk Highway Route Alternative and the Peconic Avenue Route Alternative would traverse two areas of mapped NYSDEC-regulated freshwater wetlands based on a review of spatial data available from the NYSDEC:

- Wetlands (Class I), including Formerly Connected tidal wetlands, associated with an alternative crossing of the Carmans River
- Wetlands (Class I) associated with an alternative 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)⁴ 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

⁴ 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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- 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
 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

Based on a review of available spatial data, there are no additional mapped NYSDEC-regulated freshwater wetlands along other areas of the Onshore Transmission Cable, at the Union Avenue Site, or along the Onshore Interconnection Cable. Appendix A, Figures 2a and 2b depict wetland resources from desktop review in the vicinity of the Onshore Facilities.

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 NYS 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)⁴ 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, are considered to be part of a stream and are also subject to regulation under the stream protection category of Protection of Waters.

Three waterbodies are intersected by the LIE Service Road Route, the Montauk Highway Route Alternative, and/or the Peconic Avenue Route Alternative, based on a review of available data:

- Landfall Work Area and ICW HDD
 - The ICW between the ICW Work Area at Smith Point County Park and ICW Work Area at Smith Point Marina
- LIE Service Road Route
 - o Carmans River north of Victory Avenue
- Montauk Highway Route Alternative and Peconic Avenue Route Alternative
 Carmans River north of Montauk Highway and Yaphank Creek on Montauk Highway

No other mapped waterbodies are intersected by the Onshore Facilities. An unnamed freshwater pond (PABHx) is located proximal to the LIE Service Road Route near the intersection of Express Drive South and North Ocean Ave but does not extend into the proposed corridor. There are no waterbody resources mapped proximal to the Union Avenue Site.



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Appendix A, Figures 2a and 2b 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

On June 8–16, 2020, October 19–20, 2020, March 29–30, 2021, July 20, 2021, April 4–6, 2022, and May 5, 2022 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 the LIE Service Road Route, as well as the Montauk Highway Route Alternative and Peconic Avenue Route Alternative; the Union Avenue Site, and accessible portions of the Onshore Interconnection Cable Study Area. Surveys at the Wertheim National Wildlife Refuge associated with the Montauk Highway Route Alternative were completed under USFWS Research and Monitoring Special Use Permit #2020-17.

Stantec scientists delineated a total of 14 wetlands, 5 watercourses, and 2 waterbodies within the Onshore Facilities. Of these, three wetlands occur in the Landfall Study Area, two wetlands occur within the ICW Study Area, and five wetlands, two waterbodies, and two watercourses occur within the LIE Service Road Route. No wetlands, watercourses or waterbodies were delineated in the accessible portion of the Interconnection Cable Study Area. Details for the delineated 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.

3.2.3.1 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'sbark 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



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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.

Wetland W-01CFA is an estuarine, intertidal wetland system (E1SS/EM) dominated by Jesuit's-bark, 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.

3.2.3.2 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 feet 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.

3.2.3.3 Onshore Transmission Cable:

LIE Service Road Route

- Waterbody WB-10MAA is a palustrine (freshwater) unconsolidated bottom (PUB) pond in Southaven County Park. It is an open waterbody. It was unvegetated at the time of the March field survey but likely supports non-persistent submerged and emerged macrophytes. Small, unidentified fish were observed at the time of the delineation.
- Wetland W-10MAB is a palustrine (freshwater) scrub-shrub (PSS1E) wetland in a confined basin located to the south of wetland W-10MAA in Southaven County Park. Dominant and characteristic shrubs include clammy azalea (*Rhododendron viscosum*) and highbush blueberry. Herbaceous plants were sparse at the time of the field visit but included scattered emerging



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individuals of skunk-cabbage (*Symplocarpus foetidus*). Soils were histosols, consisting of over 20 in of mucky organic material. Evidence of hydrology at the time of the delineation included four in of surface water, soil saturation at the surface, and geomorphic position.

- Wetland W-10MAC is a palustrine (freshwater) forested (PFO1E) wetland located to the west of wetland 10MAA in Southaven County Park. It is dominated by trees of black tupelo (*Nyssa sylvatica*) and red maple (*Acer rubrum*) with a shrub stratum dominated by highbush blueberry, clammy azalea, and coastal sweet-pepperbush (*Clethra alnifolia*). Herbaceous plants were sparse at the time of the field survey and included emerging individuals of skunk-cabbage. Soils were sandy and consisted of a stripped matrix. Evidence of hydrology at the time of the delineation included water stained leaves, 4 in of surface water, geomorphic position, and saturation visible on aerial imagery.
- Waterbody WB-01GPA consists of a large impounded lacustrine waterbody with an
 unconsolidated bottom (L2UB2/3) associated with the Carmans River. The southern portion of the
 waterbody within the delineation area consists of generally shallow water habitats, approximately
 less than 10 ft deep. Aquatic vegetation observed at the time of the delineation included
 persistent patches of swamp-loosestrife (Decodon verticillatus).
- Wetland W-01GPA is a small PFO1E portion is located in the southwest portion of waterbody WB-01GPA. This area is dominated by red maple trees and coastal sweet-pepperbush shrubs. The soils were sandy with redoximorphic features. Evidence of hydrology at the time of the delineation included water marks and geomorphological position.
- Wetland W-01GPB is a small floodplain palustrine forested (PFO1E) wetland along the
 southeastern edge of waterbody WB-01GPA. The wetland includes a canopy dominated by red
 maple and American elm (*Ulmus americana*) trees. The understory is sparse and consists of
 small patches of horsebrier (*Smilax rotundifolia*). The soils were sandy with redoximorphic
 features. Evidence of hydrology at the time of the delineation included water marks and
 geomorphological position.
- Wetland W-01GPC is a palustrine forested (PFO1E) wetland located between Victory Avenue and Route 27. Hydrology is provided primarily by surface water runoff from the neighboring roadway surfaces. The wetland includes a canopy dominated by red maple trees. Understory species include smooth arrow-wood (Viburnum recognitum) and maleberry (Lyonia ligustrina). Herbaceous species observed at the time of the delineation include lamp rush (Juncus effusus), cinnamon fern (Osmundastrum cinnamomeum), and tussock sedge (Carex stricta). The soils were sandy with redoximorphic features. Evidence of hydrology included presence of standing water approximately 3 in deep, soil saturation at the surface, and water marks.
- Watercourse S-10MA is a perennial watercourse (R2UB2) flowing to the southeast from wetland W-10MAA into waterbody WB-01GPA in Southaven County Park. It is approximately 10 ft wide with a sandy substrate. It contained approximately 6 to 8 in of water at the time of the delineation and had bank heights of approximately 1.5 ft.



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Watercourse S-01GP is the Carmans River, a perennial freshwater stream (R2UBH). Within the Victory Avenue survey area, the banks of the Carmans River have been channelized as a result of historic roadway construction. The river channel originates at a small dam at the outlet of waterbody 01GPA. The river ranges from approximately 40 to 60 ft wide within the delineation area. A fish ladder is present at the dam location.

Montauk Highway Route Alternative or Peconic Avenue Route Alternative

- **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. 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 skunk-cabbage and jewelweed (*Impatiens capensis*) 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.
- 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 includes red maple, black tupelo trees with coastal sweet-pepperbush, northern spicebush (*Lindera benzoin*), and northern arrow-wood shrubs and skunk-cabbage, cinnamon fern, and sensitive fern (*Onoclea sensibilis*) in the herbaceous layer. Common reed, highbush blueberry, and horsebrier 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



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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, 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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Table 1. Summary of Functions and Values of Delineated Features

Nearest Project Location	Feature ID	Groundwater Recharge and 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
Landfall/IC	W-01ASA		×	×	×		×		
W Work Area	W-01ASB		×	×	×		×		
	W-01CFA		×	×	×		×		
LIE Service	WB-10MAA	×	×	×	×	×	×	×	×
Road Route	W-10MAB			×		×			
	W-10MAC	×	×	×	×	×	×	×	×
	WB-01GPA	×	×	×	×	×	×	×	×
	W-01GPA	×	×	×	×	×	×	×	×
	W-01GPB		×	×	×		×		
	W-01GBC		×	×					
	S-10MA	×	×		×	×	×		×
	S-01GP	×	×	×	×	×	×	×	×
Montauk	W-01ASC		×	×			×		
Highway Route	W-01CFB		×	×	×		×		
Alternative	W-01CFC/01JRB	×	×	×	×		×	×	×
	W-01CFD/01JRA	×	×	×	×		×	×	×
	S-01CF		×			×	×	×	×
	S-02MA	×	×			×	×	×	
Peconic	W-01ASD	×	×	×	×		×	×	
Avenue Route	W-01ASE	×	×	×	×		×	×	
Alternative	S-01AS					×	×		



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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 two locations: Landfall/ICW Study Area on Fire Island (Appendix A, Figure 3, Sheets 1–2) as well as the Onshore Transmission Cable, near where the LIE Service Road Route crosses the Carmans River near Victory Avenue (Appendix A, Figure 3, Sheet 8). Additional wetlands were delineated in locations associated with the Montauk or Peconic Route Alternatives, including where the route crosses Carmans River near Montauk Highway (Appendix A, Figure 3, Sheet 8) and Yaphank Creek (Appendix A, Figure 3, Sheet 9). No wetland or waterbodies were delineated along other areas of the Onshore Transmission Cable Study Area, the Union Avenue Site, or the Interconnection Cable Study Area.



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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		
	Landfall Work Area	Wetlands NYSDEC-mapped tidal wetlands (adjacent) NYSDEC-mapped estuarine wetlands (adjacent)	Delineated Wetlands • Estuarine (W-01ASA, W-01ASB, and W-01CFA)		
Landfall/ICW Study Area		Waterbodies • Atlantic Ocean (adjacent) • Great South Bay (adjacent)	Delineated Waterbodies • None		
on Fire Island and Mainland	ICW Work Area	Wetlands NYSDEC-mapped tidal wetlands (adjacent) NYSDEC-mapped estuarine wetlands (adjacent) Waterbodies Narrow Bay (adjacent)	Delineated Wetlands • Palustrine (W-01ASC and W-01CFB) Delineated Waterbodies • None		
Onshore Transmission Cable	Wetlands NYSDEC-mapped freshwater wetlands at and adjacent to Carmans River in Southaven County Park NWI-mapped wetlands at Carmans River Crossing Waterbodies Carmans River		Delineated Waterbodies Watercourse S-10MA Watercourse S-01GP (Carmans River) Waterbody WB-10MAA and WB-01GPA in Southaven County Park Delineated Wetlands Palustrine (W-10MAB, W-10MAC, W-01GPB) near Carmans River in Southaven County Park Palustrine (W-01GPC) near Carmans River		
	Montauk Highway Route Alternative or Peconic Avenue Route Alternative	Waterbodies Carmans River Yaphank Creek Wetlands NYSDEC-mapped Formerly Connected tidal wetlands Tarmans River alternative crossing NYSDEC-mapped freshwater wetlands at and adjacent to Carmans River and Yaphank Creek alternative crossing s NWI-mapped wetlands at Carmans River and Yaphank Creek alternative crossings	Delineated Waterbodies Watercourse S-01AS (Yaphank Creek) Watercourse S-01CF (Carmans River) Watercourse S-02MA (tributary to Carmans River) Delineated Wetlands Palustrine (W-01ASD and W-01ASE) near Yaphank Creek alternative crossing Palustrine (W-01CFC/01JRB and W-01CFD/01JRA) near Carmans River alternative crossing		
Union Avenue		• None	None		
Onshore Interconnection Cable Route		NWI-mapped wetland east of route	• None		



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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 (Appendix A, Figure 4). 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 NYS and provides feeding and nesting habitat for several RTE avian species and supports one of the largest concentrations of wintering waterfowl in NYS (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. No grading will occur to complete the pipe stringing activity. HDD cable duct stringing work may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between December and March. The beach area where the HDD conduit stringing is proposed consists of an unvegetated sand beach that is well-used by pedestrians and portions are open to vehicular traffic. Vegetated sand dunes will not be affected by the HDD conduit stringing activities. When the pipe is pulled into the water, rollers will be used as appropriate.

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 NYS and provides feeding and nesting habitat for several RTE avian species and supports significant concentrations of wintering waterfowl in NYS. 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.

Some equipment and materials required for the Landfall HDD and ICW HDD will be transported via barge from the Smith Point Marina to Smith Point County Park due to existing weight limit restrictions on the Smith Point Bridge. A temporary landing structure will be installed at Smith Point County Park to aid in the offloading of equipment/materials. The area of the temporary landing structure would be up to approximately 4,800 sq ft (650 sq m) and may consist of a floating module(s), bridge sections and/or a ramp or transition pad connecting the landing structure to shore. The temporary nature of the pier will further minimize potential impacts to the natural resources of Moriches Bay SCFWH.

Carmans River

The Carmans River SCFWH intersects a small section (approximately 70 ft [21 m]) of the LIE Service Road Route where the cable crosses the Carmans River. The Carmans River SCFWH also intersects the alternative crossing for the Carmans River associated with the Montauk Highway Route Alternative (480 ft [146 m]). 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).

Installation of the Onshore Transmission Cable via HDD under the Carmans River will avoid and minimize potential impacts to this area.



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3.3.3 Significant Natural Communities

There are five significant natural community types associated with the proposed Onshore Facilities (Figure 4) as identified by the NYNHP in their March 27, 2020, and April 15, 2021, letters:

- Maritime Beach and Maritime Intertidal Gravel/Sand Beach
- Marine Eelgrass Meadow
- Marine Back-barrier Lagoon
- Red Maple Blackgum Swamp
- Brackish Tidal Marsh

Maritime Beach and Maritime Intertidal Gravel/Sand Beach

A Maritime Beach and Maritime Intertidal Gravel/Sand 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 cable duct stringing work may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between December and March.

Marine Eelgrass Meadow

Areas of extensive Marine 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). Additional information about submerged aquatic vegetation in the vicinity of the Landfall/ICW Study Area is included in the separate Benthic Resources Characterization Report – New York State Waters (INSPIRE 2020).

Installation of the Onshore Transmission Cable via HDD under the ICW will avoid and minimize potential impacts to this community type. Some equipment and materials required for the Landfall HDD and ICW HDD will be transported via barge from the Smith Point Marina to Smith Point County Park due to existing weight limit restrictions on the Smith Point Bridge. A temporary landing structure will be installed at Smith Point County Park to aid in the offloading of equipment/materials. The area of the temporary landing



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structure would be up to approximately 7,000 sq ft (650 sq m) and may consist of a floating module(s), bridge sections and/or a ramp or transition pad connecting the landing structure to shore. Submerged aquatic vegetation surveys will be conducted prior to construction (anticipated in summer 2022) and the pier will be positioned to avoid and minimize impacts to this community type.

Marine Back-barrier Lagoon

In its March 27, 2020, and April 15, 2021, letters, the NYNHP notes an occurrence of a Marine Back-barrier Lagoon associated with Great South Bay 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.

Red Maple - Blackgum Swamp

A Red Maple – Blackgum Swamp is located along the eastern shore of the Carmans River, immediately adjacent to the alternative crossing for the Carmans River associated with the Montauk Highway Route Alternative. The community is dominated by red maple, black tupelo, and coastal sweet-pepperbush (NYSDEC 2008d). The NYNHP notes in their March 27, 2020, and April 15, 2021, letters 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 alternative crossing of Yaphank Creek associated with the Montauk Route Alternative, just east of South Haven School along Montauk Highway.

The LIE Service Road Route is approximately 300 ft (91 m) north of this natural community type associated with Wetland W-10MAC. Therefore, no impacts to this community type are anticipated.

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 alternative crossing of the Carmans River associated with the Montauk Highway Route Alternative in their March 27, 2020, letter. The community is approximately 214 acres (87 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 0.5 mi (0.8 km) north of this community and, therefore, no impacts to this community type are anticipated.

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



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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 will not include any in-water activities at the Carmans River crossing and will avoid and/or minimize impacts to sensitive resources within the Core Preservation Area.

The Compatible Growth Area on either side of the Carmans River crossing is located in a developed landscape that consists of residential, commercial, and industrial development and associated transportation infrastructure with interspersed small remnant pine barren communities. The Onshore Transmission Cable has been located to the greatest extent practicable within existing road ROWs within the Compatible Growth Area, with the exception of two areas. The first is the crossing of Sunrise Highway located west of William Floyd Parkway. Adjacent to and south of William Floyd Parkway, the Onshore Transmission Cable and Revilo Avenue work area intersects a small remnant pitch pine community further discussed in Section 3.4.1. The second overland crossing of the Compatible Growth Area is from Surrey Circle to Mastic Boulevard where the Onshore Transmission Cable Route crosses the LIRR (Appendix, Figure 4). Installation of the Onshore Transmission Cable within existing road ROWs to the greatest extent practicable will minimize potential impacts within the Compatible Growth Area.

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 Landfall/ICW Study Area (including Smith Point County Park and Smith Point Marina) and the Onshore Transmission Cable Study Area (including the proposed and alternative crossings of Carmans River as well as Southaven County Park).

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



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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 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 groundsel tree, 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, buildings, and a pier.

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 (*Artemisia vulgaris*). 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, wand panic grass, and beach sedge (*Carex silicea*).

Carmans River Crossing

LIE Service Road Route

The LIE Service Road Route is associated with a large lacustrine impoundment associated with the Carmans River and other wetlands associated with the Southaven County Park. Wetland W-10MAC exhibits characteristics of a rare Red Maple – Blackgum Swamp as it is dominated by red maple and blackgum trees and exhibit characteristics consistent with the mapped community to the south along the Carmans River near the Montauk Highway crossing.

The upland forests of Southaven County Park along Victory Avenue consist of a small grove of mature eastern white pine (*Pinus strobus*), sugar maple (*Acer saccharum*), and sweet-gum (*Liquidambar styraciflua*) trees. The understory is open and sparsely vegetated and includes species such as horsebrier and Pennsylvania sedge (*Carex pensylvanica*). Walking and hiking trails associated with the park are present within the upland areas.



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Invasive species are abundant along the edge of roadway and along the forested edges. Commonly observed species include Japanese honeysuckle (*Lonicera japonica*), oriental bittersweet (*Celastrus orbiculatus*), rambler rose, common mugwort, and Norway maple (*Acer platanoides*).

Montauk Highway Route Alternative or Peconic Avenue Route Alternative

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 trees. The understory is densely vegetated with shrubs consisting primarily of coastal sweet-pepperbush. Highbush blueberry and clammy azalea 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, oriental bittersweet, Japanese honeysuckle, common reed, rambler rose, wineberry (*Rubus phoenicolasius*), common buckthorn (*Rhamnus cathartica*), garlic mustard (*Alliaria petiolata*), common mugwort, 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, eastern teaberry (*Gaultheria procumbens*), and bristly dewberry (*Rubus hispidus*).

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 4. Field results support the results of the desktop assessment of the Onshore Facilities.



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

Onshore Facility		Significant and Critical Natural Communities and Habitat Resources Present	Significant and Critical Natural Communities and Habitat Resources Identified Via Field Survey		
Landfall/ICW Study Area (Fire Island and Mainland)		Critical Environmental Areas None	Critical Environmental Areas None observed		
		SCFWH Smith Point County Park Moriches Bay (adjacent) Great South Bay-East (adjacent) Significant Natural Communities Maritime Beach and Maritime Intertidal Gravel/Sand Beach Marine Eelgrass Meadow (adjacent) Marine Back-barrier Lagoon (adjacent) Central Pine Barrens None	SCFWH Smith Point County Park Moriches Bay Great South Bay Significant Natural Communities Maritime Beach and Maritime Intertidal Gravel/Sand Beach Great South Bay Central Pine Barrens None observed		
		Critical Environmental Areas Coastal Zone Area South at ICW HDD and associated Work Area; Carmans River crossing SCFWH Moriches Bay (adjacent to ICW HDD) Great South Bay-East (ICW HDD) Carmans River crossing	Confirmed by field survey SCFWH Confirmed by field survey		
Onshore Transmission Cable	LIE Service Road Route	Significant Natural Communities Marine Eelgrass Meadow (ICW HDD) Marine Back-barrier Lagoon (ICW HDD) Red Maple – Blackgum Swamp (Carmans River 300 ft downstream)) Brackish Tidal Marsh (Carmans River; ~0.54 mi downstream) Central Pine Barrens	Significant Natural Communities Red Maple – Blackgum Swamp (Carmans River) Central Pine Barrens Confirmed by field survey		
	Montauk Highway Route Alternative or Peconic Avenue Route Alternative	Carmans River crossing Red Maple – Blackgum Swamp (at and adjacent to Carmans River and Yaphank Creek alternative crossings) Brackish Tidal Marsh (Carmans River; ~0.4 mi downstream)	Confirmed by field survey Significant Natural Communities Red Maple – Blackgum Swamp (Carmans River)		
Union Avenue		None	Confirmed by field survey		
Onshore Interconnection Cable Route		None	None		



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3.4 RARE, THREATENED, AND ENDANGERED SPECIES

3.4.1 Plants

In its March 27, 2020, and April 15, 2021, letters, 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 surveys.

During field surveys of the Onshore Transmission Cable area in March 2021, Stantec observed a small remnant pitch pine - scrub oak barren community within the Revilo Avenue work area located to the south of the Sunrise Highway exit ramp and east of Revilo Avenue. This area had potential habitat to support sandplain wild flax (Linum intercursum), a species listed as Threatened by NYSDEC and noted to occur proximal to the Onshore Transmission Cable based on the NYNHP March 27, 2020, and April 15, 2021, letters (Table 4). The site consists of an open sandy basin that receives periodic stormwater runoff surrounded by a fringe of pitch pine – scrub oak forest. Targeted field surveys were subsequently conducted on September 8, 2021, during the anticipated flowering and fruiting period of sandplain wild flax within areas containing suitable habitat proximal to the proposed Revilo Avenue work area (Rare Plant Survey Area; Figure 4). Surveys were conducted by a Certified Ecologist and professional botanist with extensive previous survey experience throughout the northeastern United States (resume provided in Appendix E). Field surveys targeted habitats potentially suitable for sandplain wild flax associated with the Revilo Avenue work area including open, sandy soils. No sandplain wild flax populations were observed. However, incidental observations were made of two state-listed species and one rare species which are discussed and summarized in Appendix E: Little ladies' tresses (Spiranthes tuberosa, State-Threatened), Stuve's bush-clover (Lespedeza stuevei, State-Threatened) and Sickle-leaved golden aster (Pityopsis falcata, Rare, Watch List).



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

Project Component	Species	State Listing	Federal Listing	Habitat Association	Approximate Location ²	Field Results
	Sandplain Gerardia ¹ <i>Agalinis acuta</i>	Endangered	Endangered	Maritime grassland and shrubland	No location information provided	None observed ³ ; potential habitat at Landfall/ICW Study Area but outside of Landfall Work Area and ICW Work Area
	Seabeach Amaranth ¹ <i>Amaranthus pumilus</i>	Threatened	Threatened	Maritime beach	No location information provided	None observed ³ ; potential habitat at Landfall/ICW Study Area but outside of Landfall Work Area and ICW Work Area
	Blunt-lobed Grape Fern ² Botrychium oneidense	Threatened		Floodplain forest, Red Maple – Blackgum Swamp	Southaven County Park, within 0.2 mi (0.3 km) of Onshore Transmission Cable; in wet soil under shrubs and vines in red maple swamp	None observed ³ ; potential habitat in wetlands within Onshore Transmission Cable Study Area associated with Carmans River and Southaven County Park but outside of proposed work areas
	Collins' Sedge ² Carex collinsii	Endangered		Red Maple – Blackgum Swamp	Southaven County Park, within 0.2 mi (0.3 km) of Onshore Transmission Cable; abandoned fish hatchery (part of Suffolk County Park) in a red maple-tupelo swamp	None observed ³ ; potential habitat in wetlands within Onshore Transmission Cable Study Area associated with Carmans River and Southaven County Park but outside of proposed work areas
	Water Pigmyweed ² Crassula aquatica	Endangered		Freshwater intertidal mudflat, freshwater intertidal shore, and freshwater tidal marsh	Within 0.2 mi (0.3 km) of Onshore Transmission Cable; Carmans River, west side immediately south of Montauk Highway; bank of an intertidal section of river at a road embankment	None observed ³ ; potential habitat in Carmans River but outside of proposed work areas
	Sandplain Wild Flax ² Linum intercursum	Threatened		Maritime dunes, maritime grassland, maritime shrubland, and pitch pine-scrub oak barrens	Within 0.6 mi (1.0 km) of Onshore Transmission Cable: Station Avenue roadside; plants are on a pine barrens roadside with very sparse vegetation, dominated by grasses and legumes	None observed; minimal potential habitat; potentially suitable habitat associated with Revilo Avenue work area was surveyed by no sandplain wild flax specimens were observed
	Little Ladies' Tresses ⁵ Spiranthes tuberosa	Threatened		Pitch Pine – Scrub Oak Barren	No location information provided	See Appendix E Table 1
	Stuve's Bush-clover ⁵ Lespedeza stuevei	Threatened		Pitch Pine – Scrub Oak Barren	No location information provided	See Appendix E Table 1
	Sickle-leaved Golden Aster ⁵ Pityopsis falcata	Rare (Watch List)		Pitch Pine – Scrub Oak Barren	No location information provided	See Appendix E Table 1



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In addition to the species in Table 4, 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-lobed grape fern (Botrychium oneidense), Collins' sedge (Carex collinsii), and water pigmyweed (Crassula aquatica). During field surveys in October 2020 and March 2021, blunt-lobed grape fern was not observed in the Red Maple -Blackgum Swamp community at Carmans River associated with the Montauk Highway Route Alternative or in wetlands in associated with Southaven County Park along the LIE Service Road Route. The saturated organic soils of the Red Maple - Blackgum Swamp community at the Carmans River alternative crossing associated with Montauk Highway Route Alternative and the wetlands associated with Southaven County Park along the LIE Service Road Route provide suitable habitat for Collins' sedge. Potential habitat for water pygmyweed is also present in the shallow aquatic habitats of the Carmans River and associated impoundment associated with both the LIE Service Road Route and Montauk Highway Route Alternative. 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, and April 15, 2021, letters, 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



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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 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 non-avian 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 cable duct stringing, however, may result in the short-term disturbance to vegetation for approximately 2 to 3 weeks per duct between October and March. The Onshore Transmission Cable traverses the Central Pine Barrens proximate to Victory Avenue. The Onshore Transmission Cable will be located within the developed ROW of the highway, except where the corridor crosses the Carmans River, where it will be located within the Core Preservation Area. HDD will be employed along the north side of Victory Avenue to protect the waterbody and its adjoining wetlands that are proximate to the Central Pine Barrens, and to reduce the need for clearing and additional disturbances to pine barren communities.

3.5 INVASIVE SPECIES

Over 100 non-native invasive plant species occurrences have been documented proximal to the Onshore Facilities based on an initial 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)
- Garlic Mustard (Alliaria petiolata)
- Japanese barberry (Berberis thunbergii)
- Oriental bittersweet (Celastrus orbiculatus)
- Black swallow-wort (*Cynanchum louiseae*)
- Winged burning bush (Euonymus alatus)
- Chinese lespedeza (Lespedeza cuneata)
- European privet (*Ligustrum vulgare*)
- Japanese honeysuckle (Lonicera japonica)
- Purple loosestrife (Lythrum salicaria)
- Chinese silvergrass (*Miscanthus sinensis*)
- Princess tree (Paulownia tomentosa)



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- Mile-a-minute weed (Persicaria perfoliata)
- Common reed (Phragmites australis)
- Japanese knotweed (Fallopia japonica)
- Common buckthorn (Rhamnus cathartica)
- Black locust (Robinia pseudoacacia)
- Rambler rose (Rosa multiflora)
- Wineberry (Rubus phoenicolasius)
- Climbing nightshade (Solanum dulcamara)
- Great mullein (Verbascum thapsus)
- Common periwinkle (Vinca minor)
- Chinese wisteria (Wisteria sinensis)

Most of the occurrences are associated with Southaven County Park along the LIE Service Road Route, the accessible Onshore Interconnection Cable Route, and the Wertheim National Wildlife Refuge in the vicinity of the alternative crossing of the Carmans River associated with the Montauk Highway Route Alternative. 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 (NYSDOT 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 the Montauk Highway Route Alternative and LIE Service Road Route 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, 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).

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



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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).

Approximately 1,900 linear ft (745 m) of the LIE Service Road Route, as well as 520 linear ft (158.5 m) of the Montauk Highway Route Alternative are 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 in Appendix A, Figure 6, and summarized in Table 5.

Table 5. Summary of Floodplain Resources

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

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 LIE Service Road Route crossing of the Carmans River, as well as the crossings of the Carmans River and Yaphank Creek associated with the Montauk Highway Route Alternative or Peconic Avenue Route Alternative. 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



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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. Work areas along the 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 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.

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 NYS regulations and standards for treatment and disposal of solid and liquid wastes generated during all phases of construction activities.



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August 2022

APPENDICES



August 2022

Appendix A FIGURES

Figure 1: Onshore Transmission Cable Routes

Figure 2: Wetlands and Waterbodies

Figure 3: Delineated Wetlands

Figure 4: Significant and Critical Natural Communities and Habitat

Figure 5: Invasive Plant Species

Figure 6: Floodplains



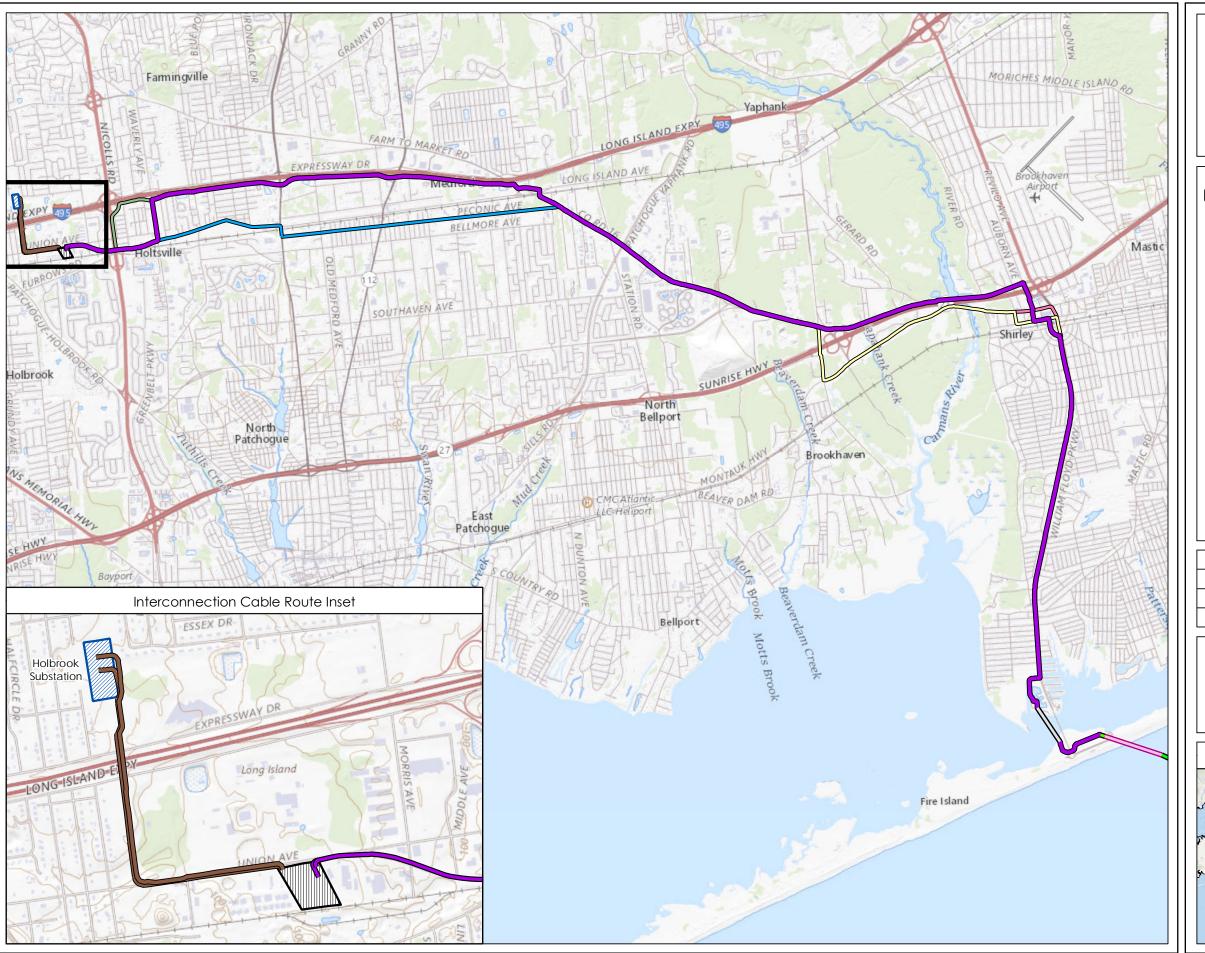


Figure 1 Onshore Transmission Cable Routes

Sunrise Wind

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Peconic Avenue Route

Montauk Highway Route
William Floyd Parkway to

Montauk Highway Variation

Nicolls Avenue VariationOnshore Interconnection Cable Route

Union Avenue Site
Holbrook Substation

Notes

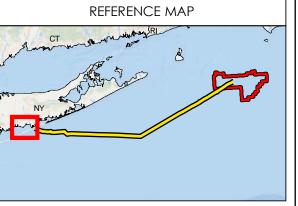
1. Routes are indicative and subject to engineering design changes.

Sources

Sources
Base map: USGS The National Map

Date	07/11/2022
Project Number	2028113199
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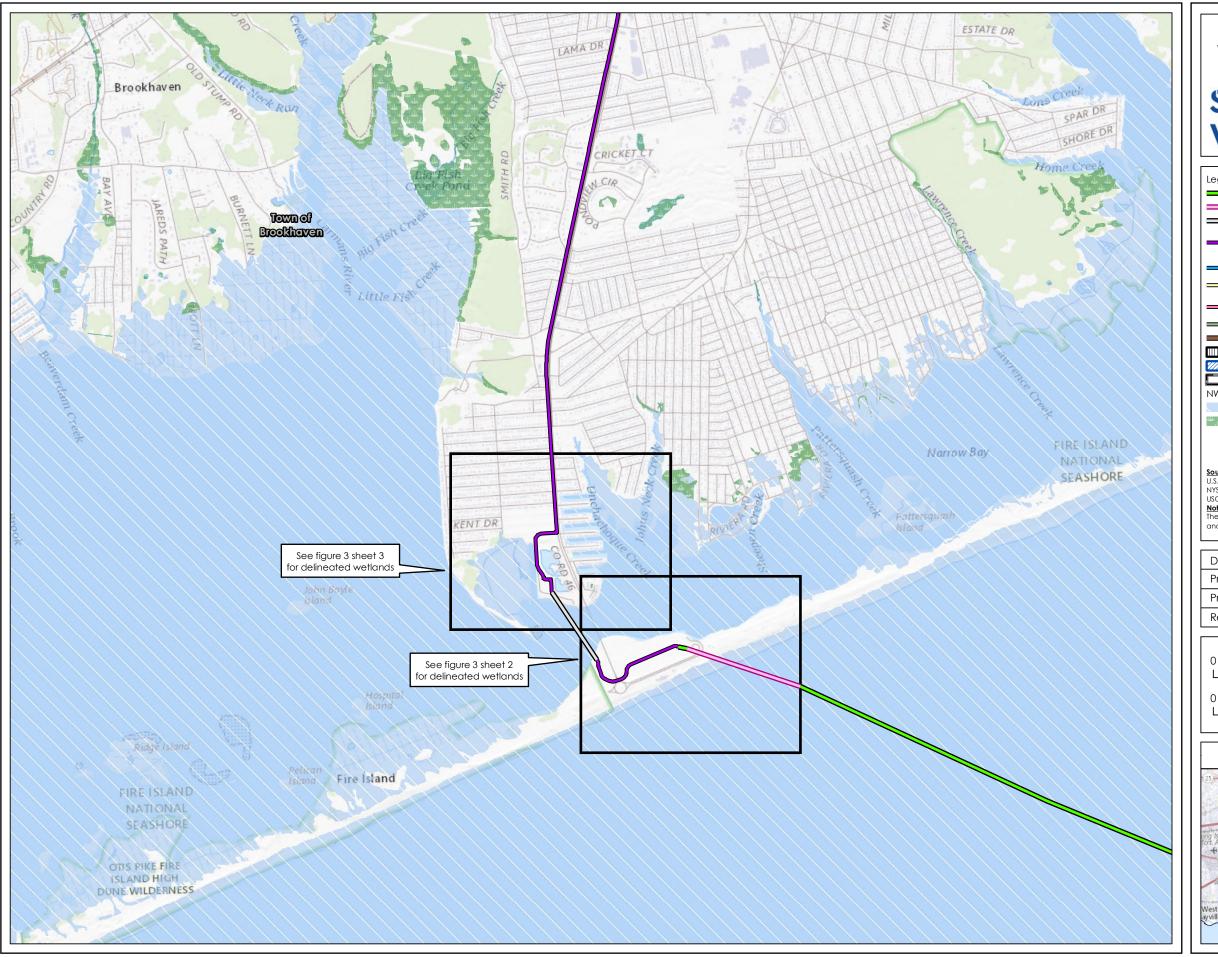


Figure 2a Wetlands and Waterbodies – NWI Sheet 1 of 3

Sunrise Wind

Powered by Ørsted & Eversource

Sunrise Wind Export Cable (SRWEC-NYS)

Landfall HDD A

Intracoastal Waterway HDD (ICW HDD)

Onshore Transmission Cable LIE Service Road Route

Onshore Transmission Cable

Peconic Avenue Route Montauk Highway Route

William Floyd Parkway to Montauk Highway Variation

Nicolls Avenue Variation

Onshore Interconnection Cable Route

Union Avenue Site

Holbrook Substation
Town Boundary

NWI Wetlands

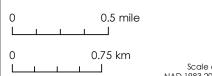
Estuarine and Marine Wetlands

Freshwater Wetlands

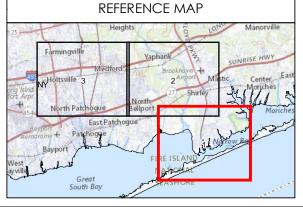
Sources
U.S. Fish and Wildlife Service, 2021
NYS Office of IT Services GPO, NYS Boundaries, 2018 USGS Topo Map

Note
The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

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Scale at 11x17: 1:31,680 NAD 1983 2011 UTM Zone 18N



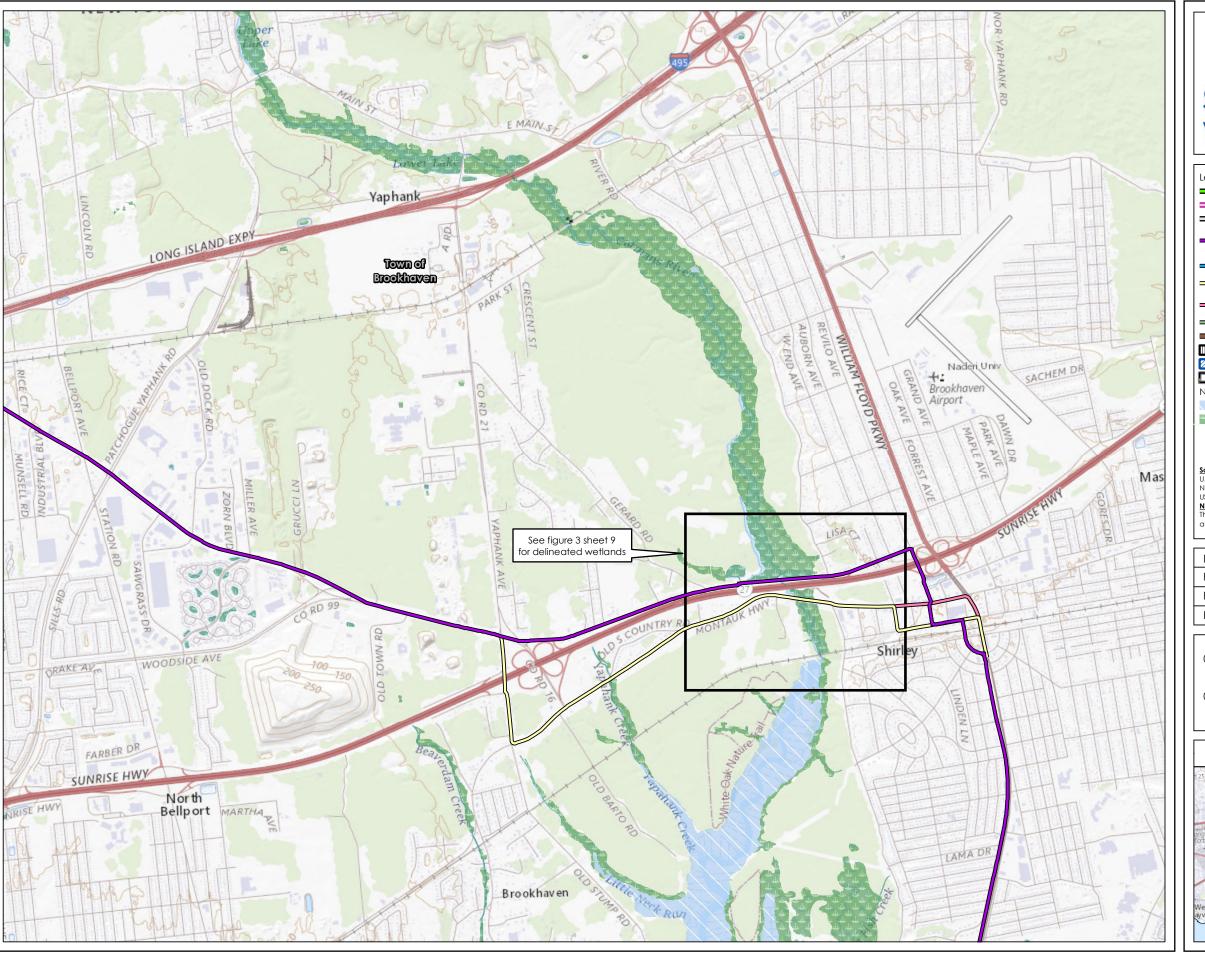


Figure 2a Wetlands and Waterbodies – NWI Sheet 2 of 3

Sunrise Wind

Powered by Ørsted & Eversource

- Sunrise Wind Export Cable (SRWEC-NYS)
- Landfall HDD A
- Intracoastal Waterway HDD (ICW HDD)
- Onshore Transmission Cable LIE Service Road Route
 - Onshore Transmission Cable
- Peconic Avenue Route Montauk Highway Route
 - William Floyd Parkway to
- Montauk Highway Variation
- Nicolls Avenue Variation
- Onshore Interconnection Cable Route
- Union Avenue Site
- Holbrook Substation
 Town Boundary
- NWI Wetlands
- Estuarine and Marine Wetlands
- Freshwater Wetlands

Sources
U.S. Fish and Wildlife Service, 2021
NYS Office of IT Services GPO, NYS Boundaries, 2018
USGS Topo Map

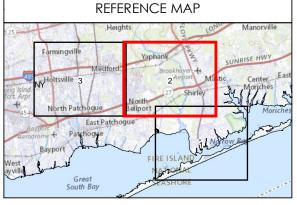
Note
The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

Date	07/11/2022
Project Number	2028113199
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0.5 mile 0.75 km



Scale at 11x17: 1:31,680



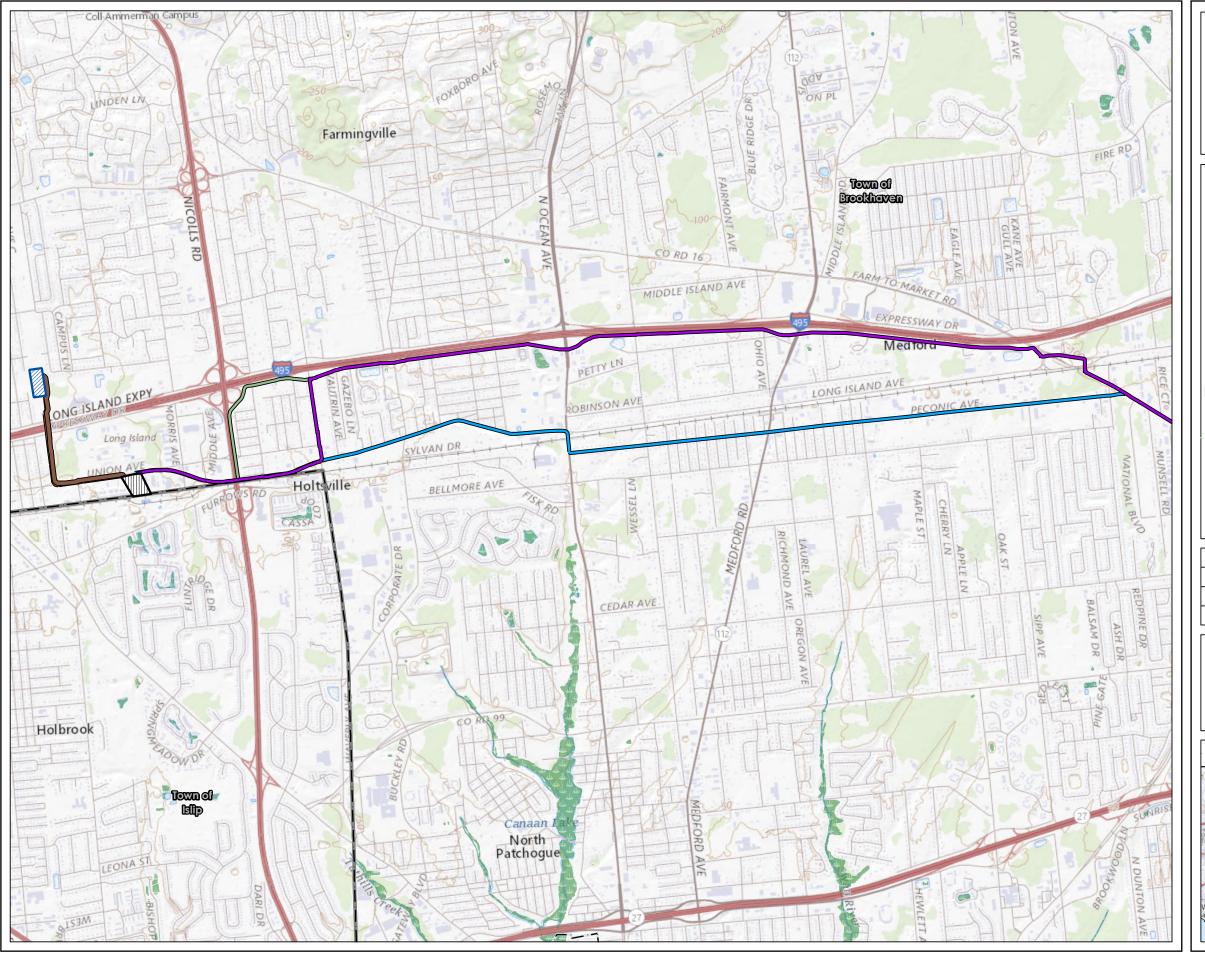


Figure 2a Wetlands and Waterbodies – NWI Sheet 3 of 3

Sunrise Wind

Powered by Ørsted & Eversource

- Sunrise Wind Export Cable (SRWEC-NYS)
- Landfall HDD A
- Intracoastal Waterway HDD (ICW HDD)
- Onshore Transmission Cable
 LIE Service Road Route
- Onshore Transmission Cable Peconic Avenue Route
- Montauk Highway Route
 - William Floyd Parkway to
- Montauk Highway Variation
- Nicolls Avenue Variation
- Onshore Interconnection Cable Route

- Union Avenue Site
 Holbrook Substation
 Village Boundary
 Town Boundary
- NWI Wetlands
- Estuarine and Marine Wetlands
- Freshwater Wetlands

Sources
U.S. Fish and Wildlife Service, 2021
NYS Office of IT Services GPO, NYS Boundaries, 2018

USGS Topo Map

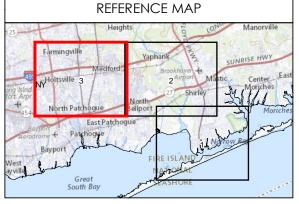
Note
The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

Date	07/11/2022
Project Number	2028113199
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Scale at 11x17: 1:31,680



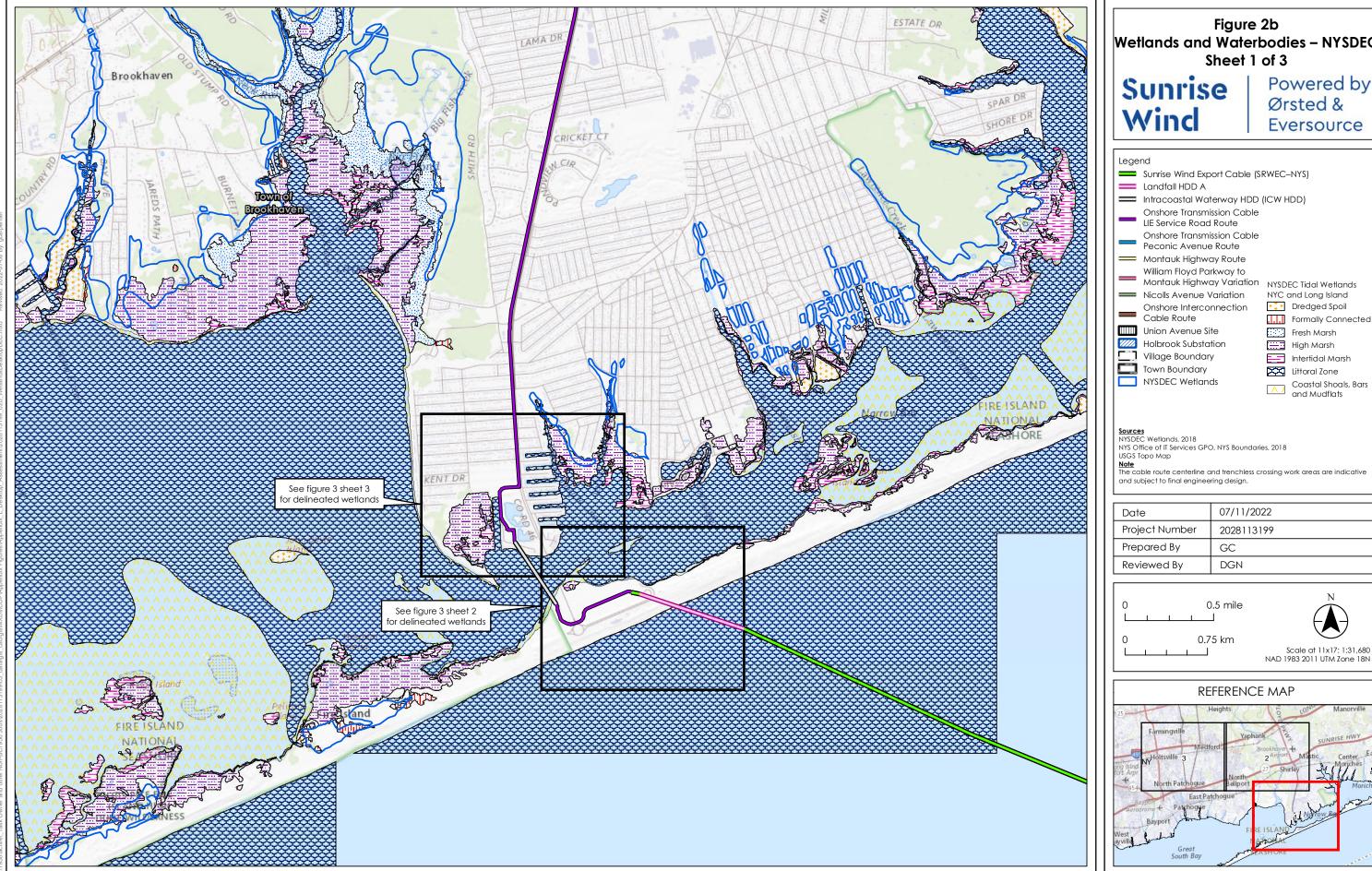
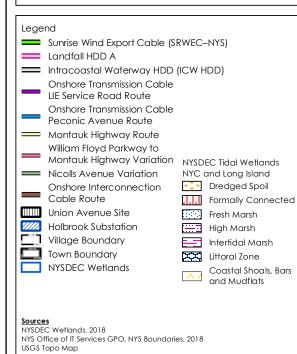


Figure 2b Wetlands and Waterbodies – NYSDEC Sheet 1 of 3

Sunrise Wind

Powered by Ørsted & Eversource

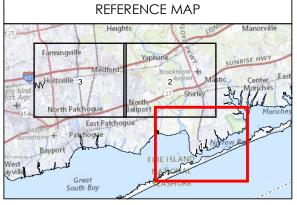


Date	07/11/2022
Project Number	2028113199
Prepared By	GC
Reviewed By	DGN

0.5 mile 0.75 km



Scale at 11x17: 1:31,680 NAD 1983 2011 UTM Zone 18N



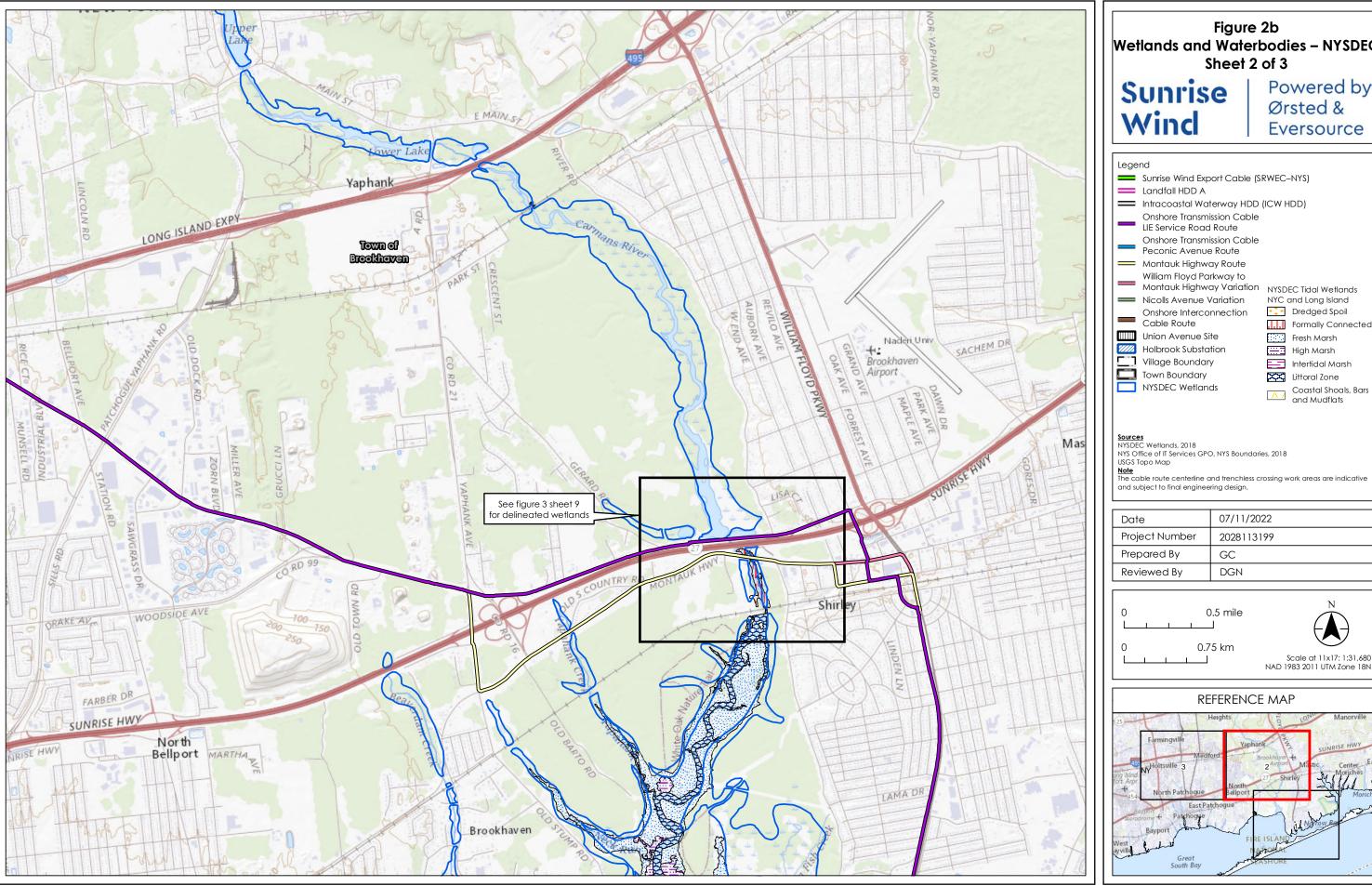
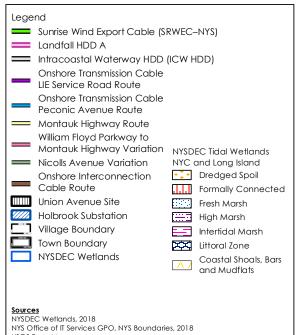


Figure 2b Wetlands and Waterbodies – NYSDEC Sheet 2 of 3

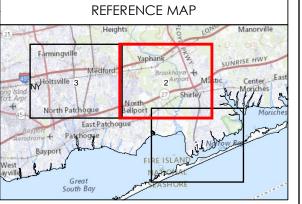
Sunrise Wind

Powered by Ørsted & Eversource



Date	07/11/2022
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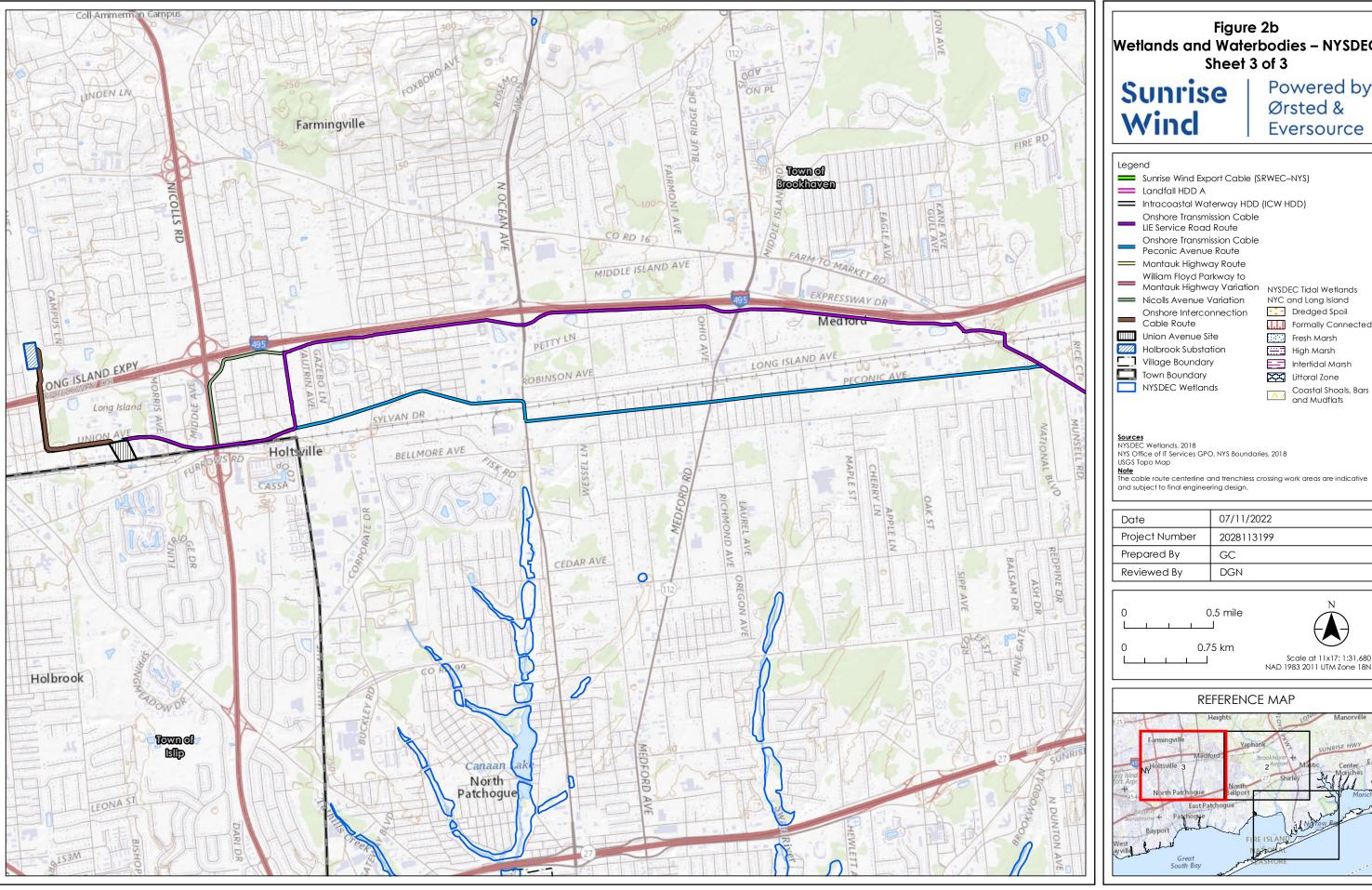


Figure 2b Wetlands and Waterbodies – NYSDEC Sheet 3 of 3

Sunrise Wind

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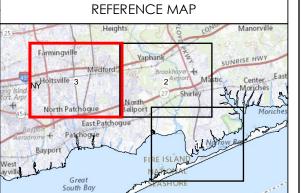




Figure 3
Delineated Wetlands
Sheet 1 of 18

Sunrise Wind

Legend

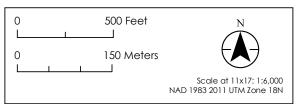
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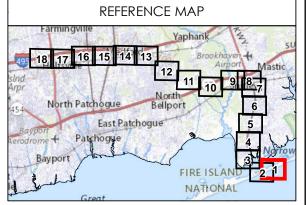
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Mean High Water Line (2.18-feet)
Delineated Wetland
300-ft Regulated Adjacent Area for NYSDEC-mapped Tidal Wetlands
NYSDEC Tidal Wetland
NYSDEC Statewide Seagrass
Landfall Work Area
Pipe Sea Access

Sources Base map: NAIP 2019

Pipe Stringing Area

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





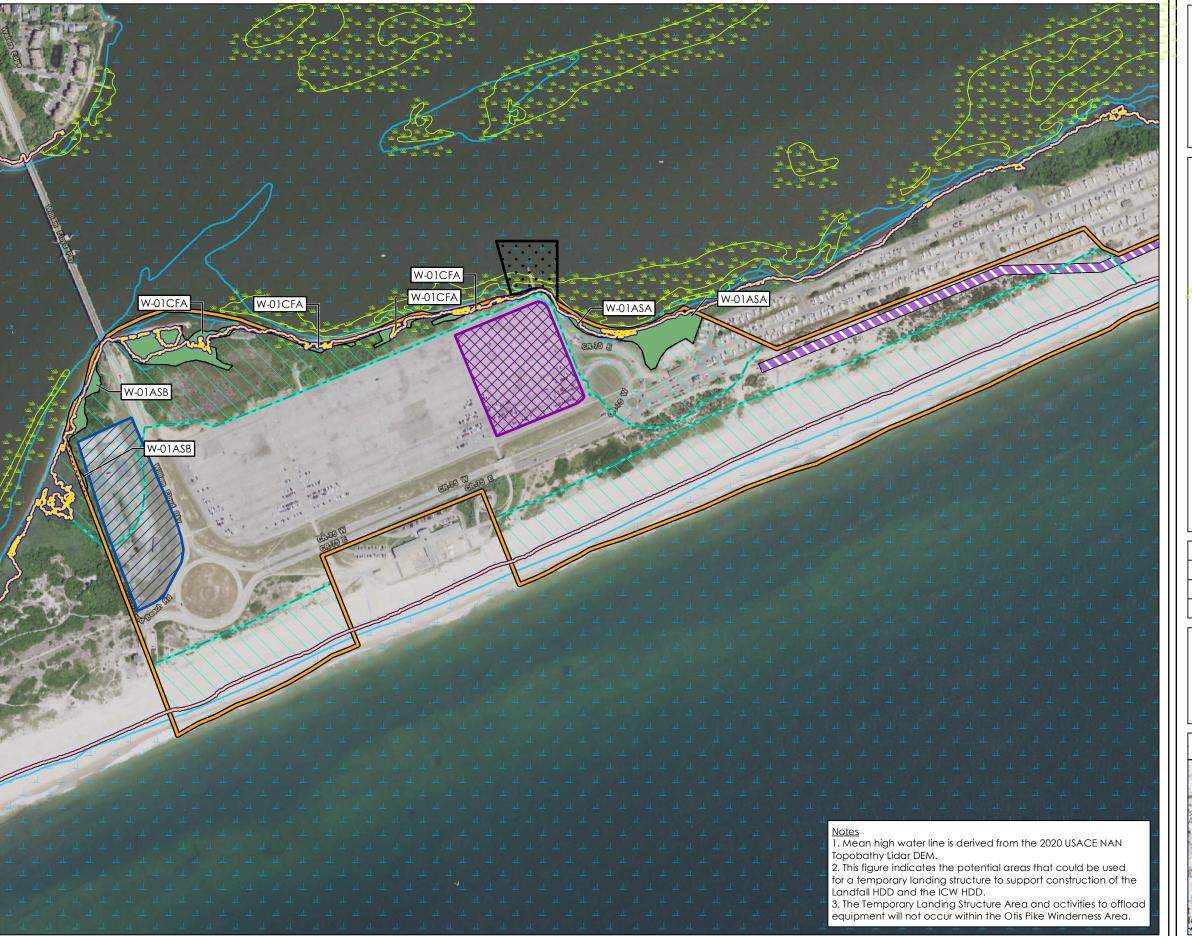


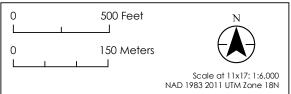
Figure 3
Delineated Wetlands
Sheet 2 of 18

Sunrise Wind

Powered by Ørsted & Eversource



Date	07/11/2022
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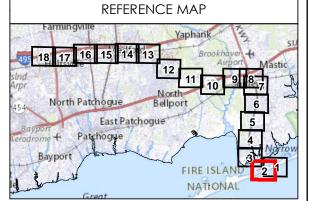
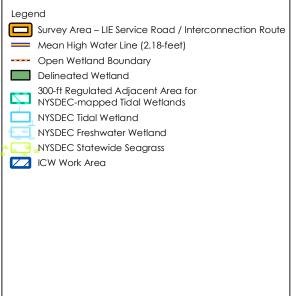




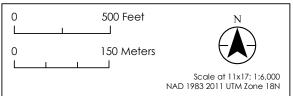
Figure 3
Delineated Wetlands
Sheet 3 of 18

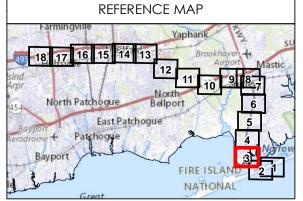
Sunrise Wind

Sources Base map: NAIP 2019 Powered by Ørsted & Eversource



Date	07/11/2022
Project Number	2028113199
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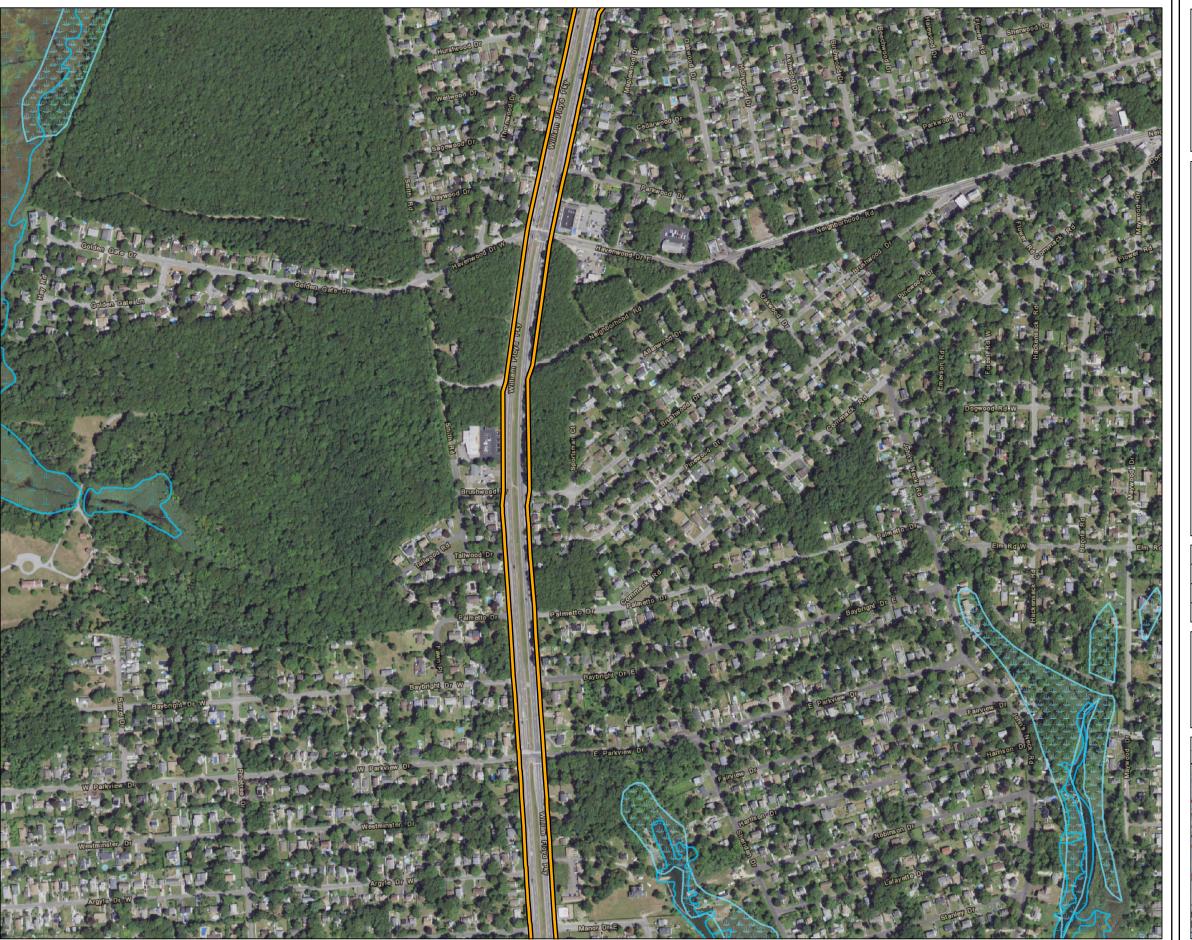


Figure 3
Delineated Wetlands
Sheet 4 of 18

Sunrise Wind

Powered by Ørsted & Eversource



Survey Area – LIE Service Road / Interconnection Route

NYSDEC Tidal Wetland

NYSDEC Freshwater Wetland

Sources Base map: NAIP 2019

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN

0 500 Feet N
0 150 Meters
Scale at 11x17: 1:6,000
NAD 1983 2011 UTM Zone 18N

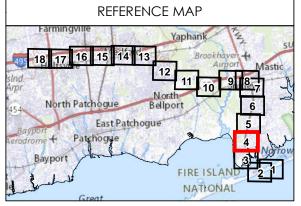




Figure 3
Delineated Wetlands
Sheet 5 of 18

Sunrise Wind

Powered by Ørsted & Eversource

gend

Survey Area – LIE Service Road / Interconnection Route

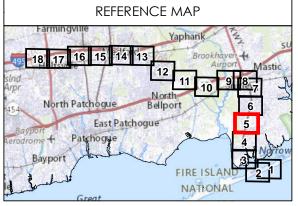
NYSDEC Tidal Wetland

NYSDEC Freshwater Wetland

Sources Base map: NAIP 2019

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN

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0 150 Meters Scale at 11x17: 1:6,000 NAD 1983 2011 UTM Zone 18N



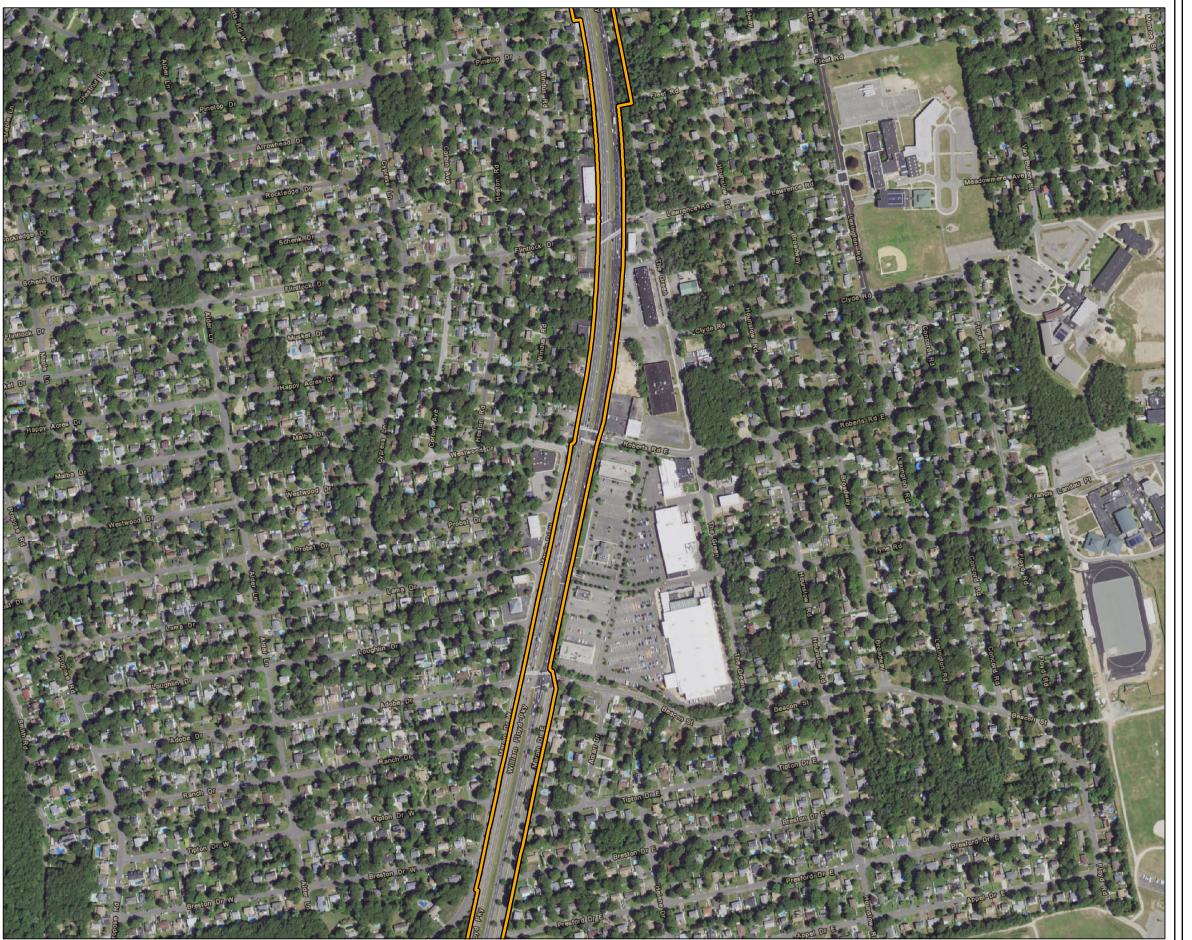


Figure 3 Delineated Wetlands Sheet 6 of 18

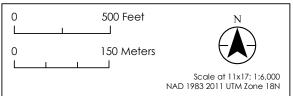
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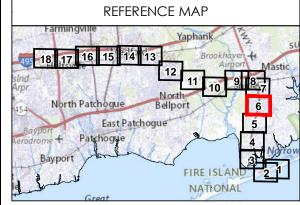
Powered by Ørsted & Eversource

Legend

Survey Area – LIE Service Road / Interconnection Route

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





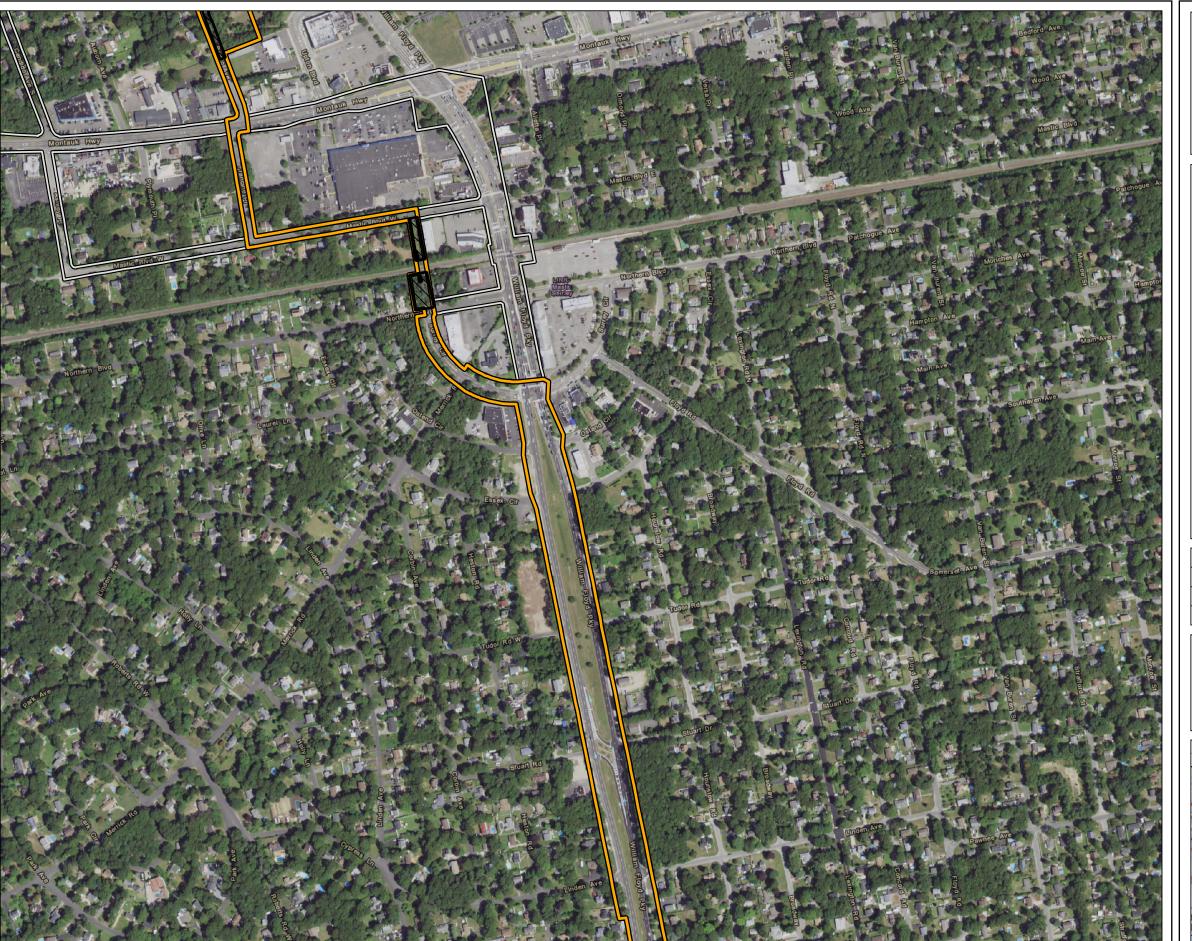


Figure 3 Delineated Wetlands Sheet 7 of 18

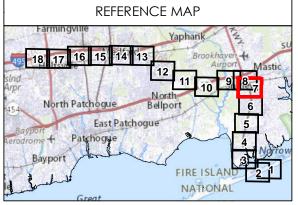
Sunrise Wind

Powered by Ørsted & Eversource

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes
Trenchless Crossing Work Area

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





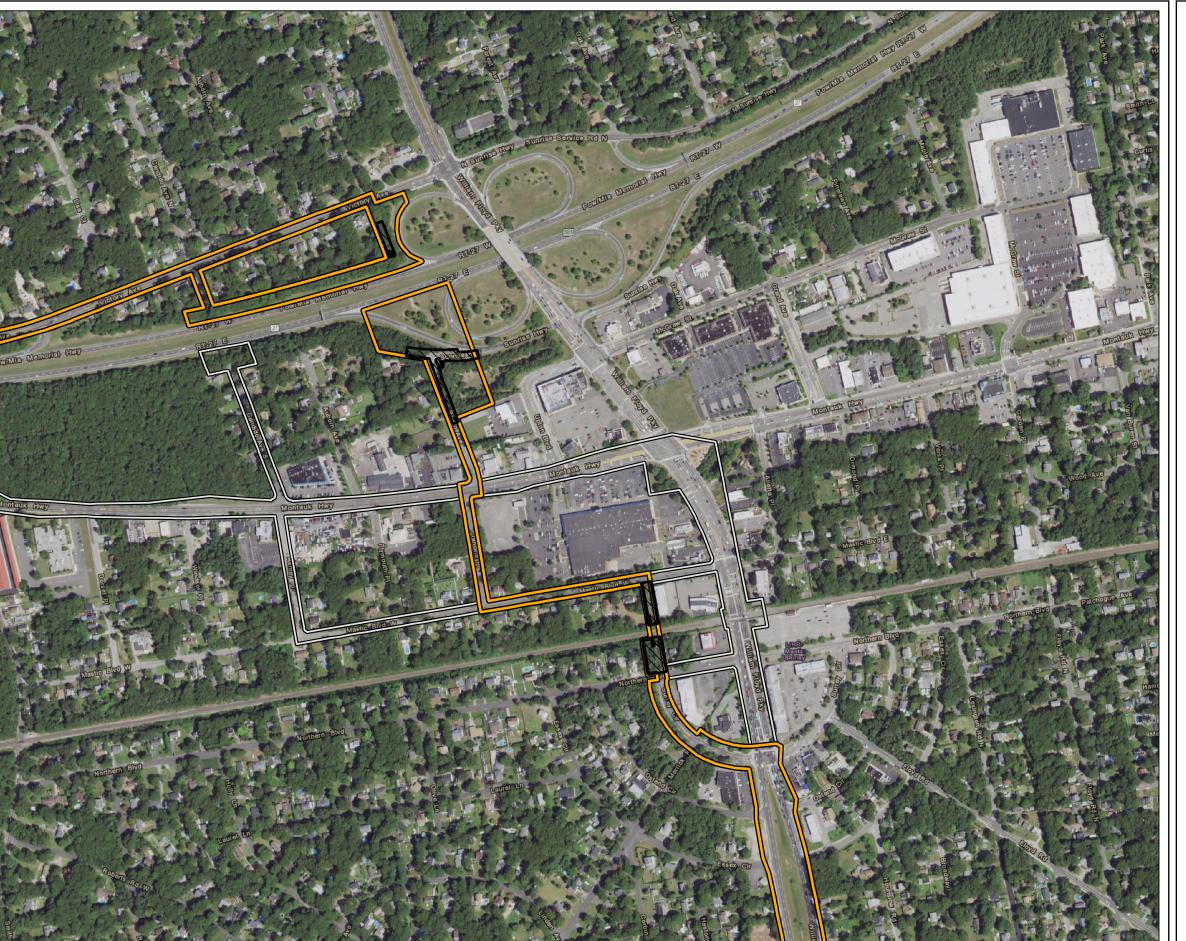


Figure 3 Delineated Wetlands Sheet 8 of 18

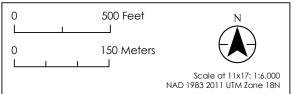
Sunrise Wind

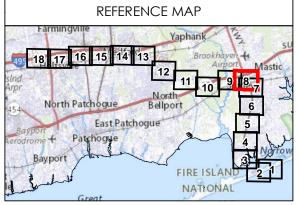
Powered by Ørsted & Eversource

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Trenchless Crossing Work Area

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





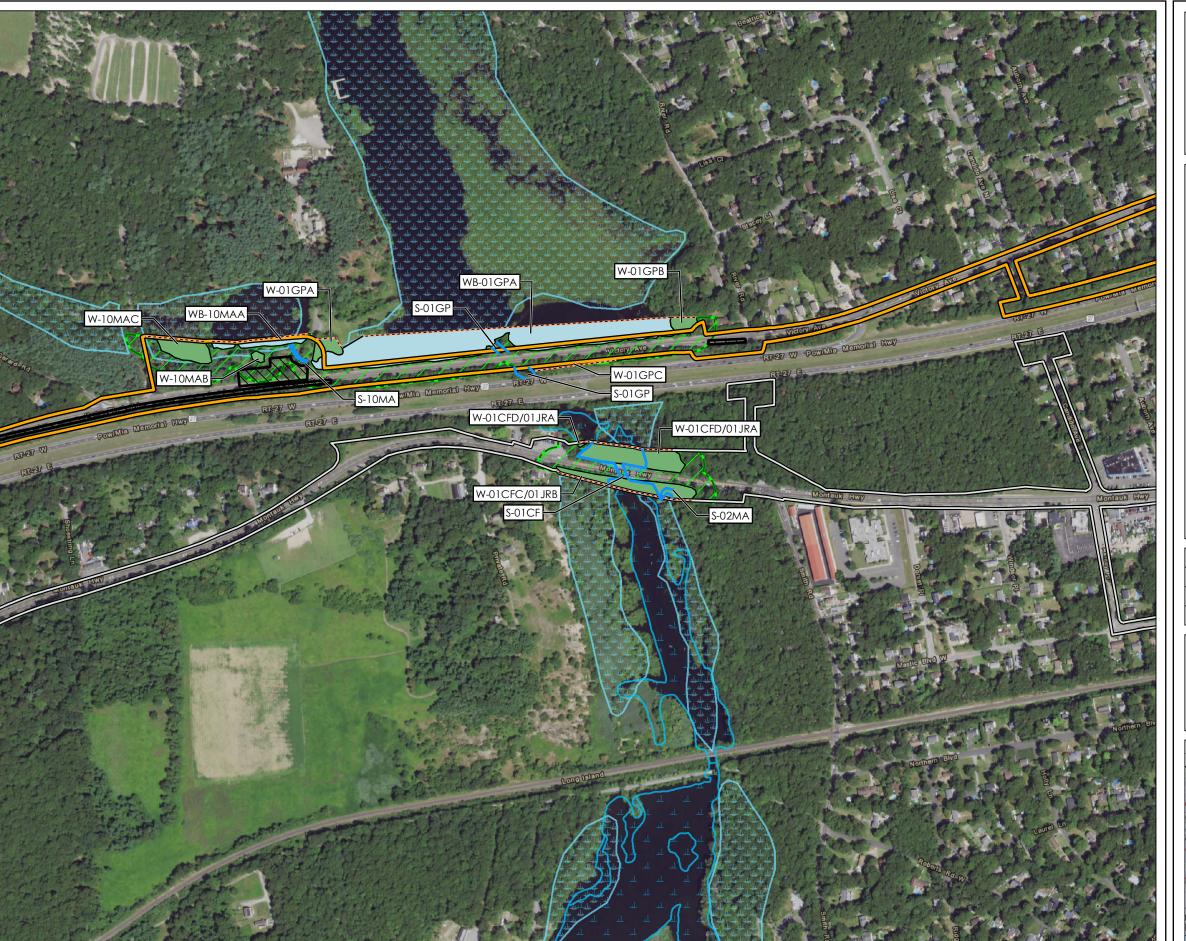
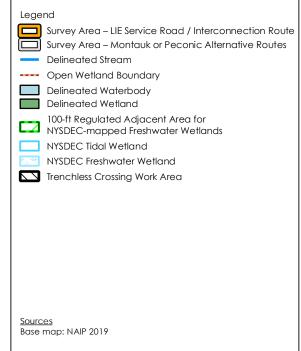


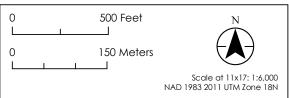
Figure 3
Delineated Wetlands
Sheet 9 of 18

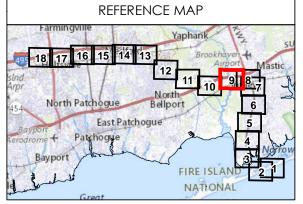
Sunrise Wind

Powered by Ørsted & Eversource



Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





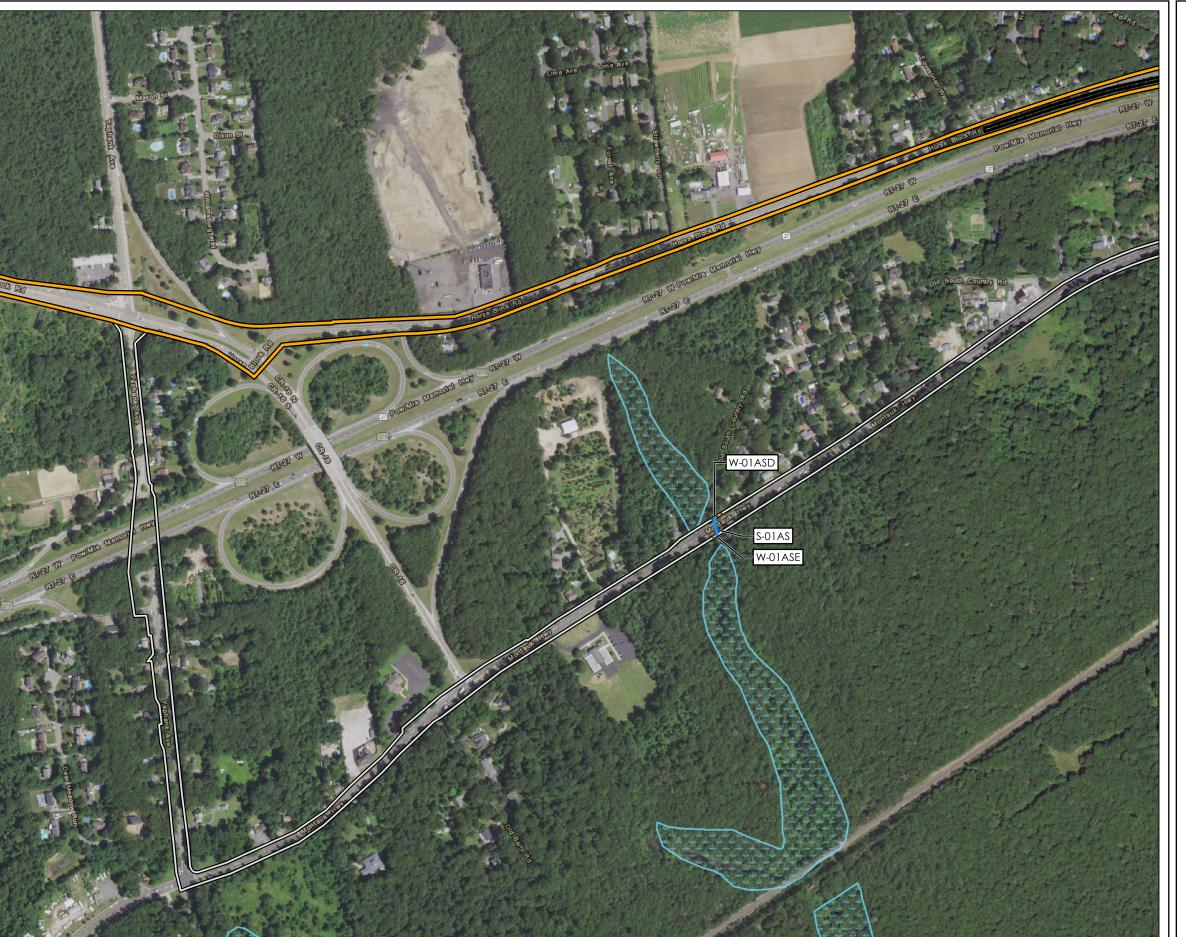


Figure 3
Delineated Wetlands
Sheet 10 of 18

Sunrise Wind

Powered by Ørsted & Eversource

Legend

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Delineated Stream

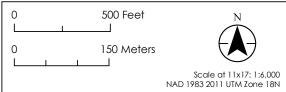
--- Open Wetland Boundary

Delineated Wetland

NYSDEC Freshwater Wetland

Trenchless Crossing Work Area

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



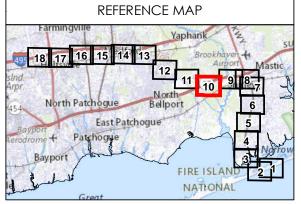




Figure 3
Delineated Wetlands
Sheet 11 of 18

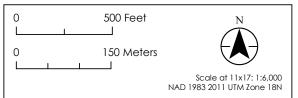
Sunrise Wind

Powered by Ørsted & Eversource

Legend

Survey Area – LIE Service Road / Interconnection Route

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



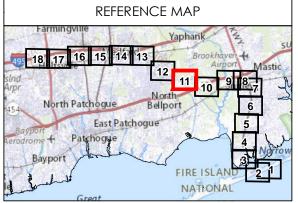




Figure 3
Delineated Wetlands
Sheet 12 of 18

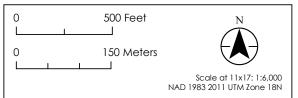
Sunrise Wind

Powered by Ørsted & Eversource

Legen

Survey Area – LIE Service Road / Interconnection Route

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



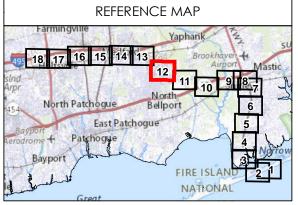




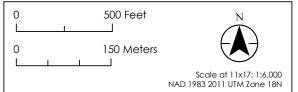
Figure 3 Delineated Wetlands Sheet 13 of 18

Sunrise Wind

Powered by Ørsted & Eversource

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes
Trenchless Crossing Work Area

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



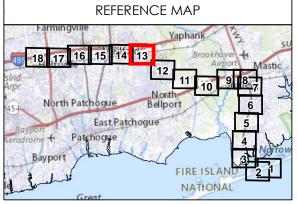




Figure 3 Delineated Wetlands Sheet 14 of 18

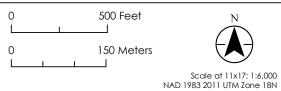
Sunrise Wind

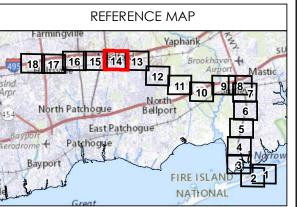
Powered by Ørsted & Eversource



Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





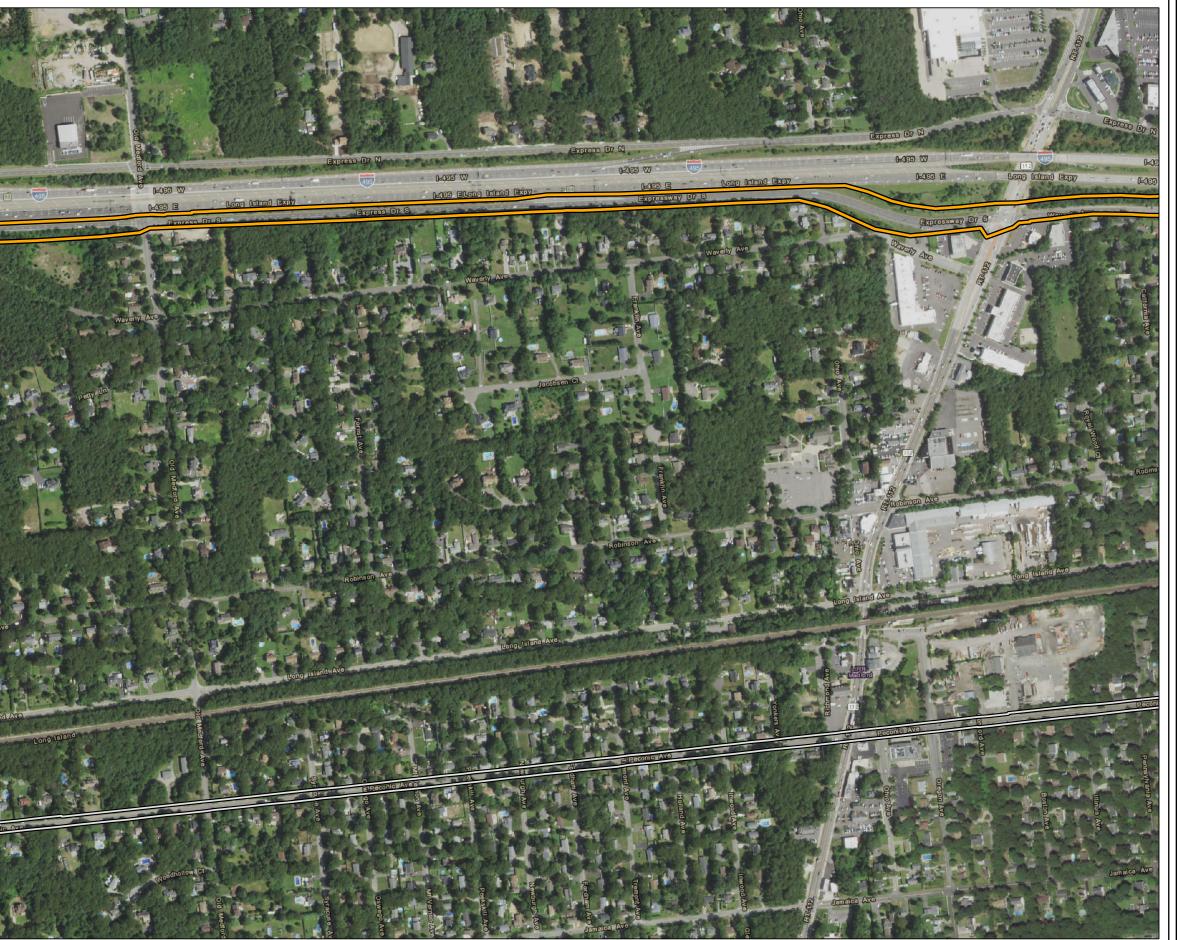


Figure 3 Delineated Wetlands Sheet 15 of 18

Sunrise Wind

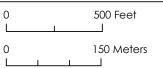
Powered by Ørsted & Eversource



Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Sources Base map: NAIP 2019

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





Scale at 11x17: 1:6,000 NAD 1983 2011 UTM Zone 18N

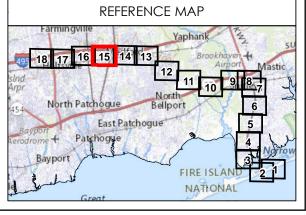




Figure 3 Delineated Wetlands Sheet 16 of 18

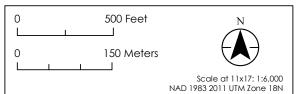
Sunrise Wind

Powered by Ørsted & Eversource



Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



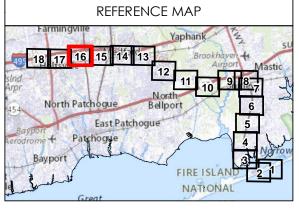




Figure 3 Delineated Wetlands Sheet 17 of 18

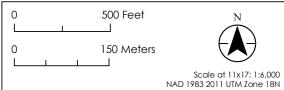
Sunrise Wind

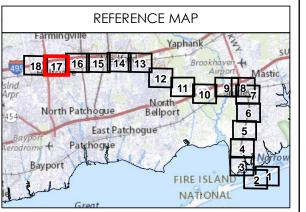
Powered by Ørsted & Eversource



Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





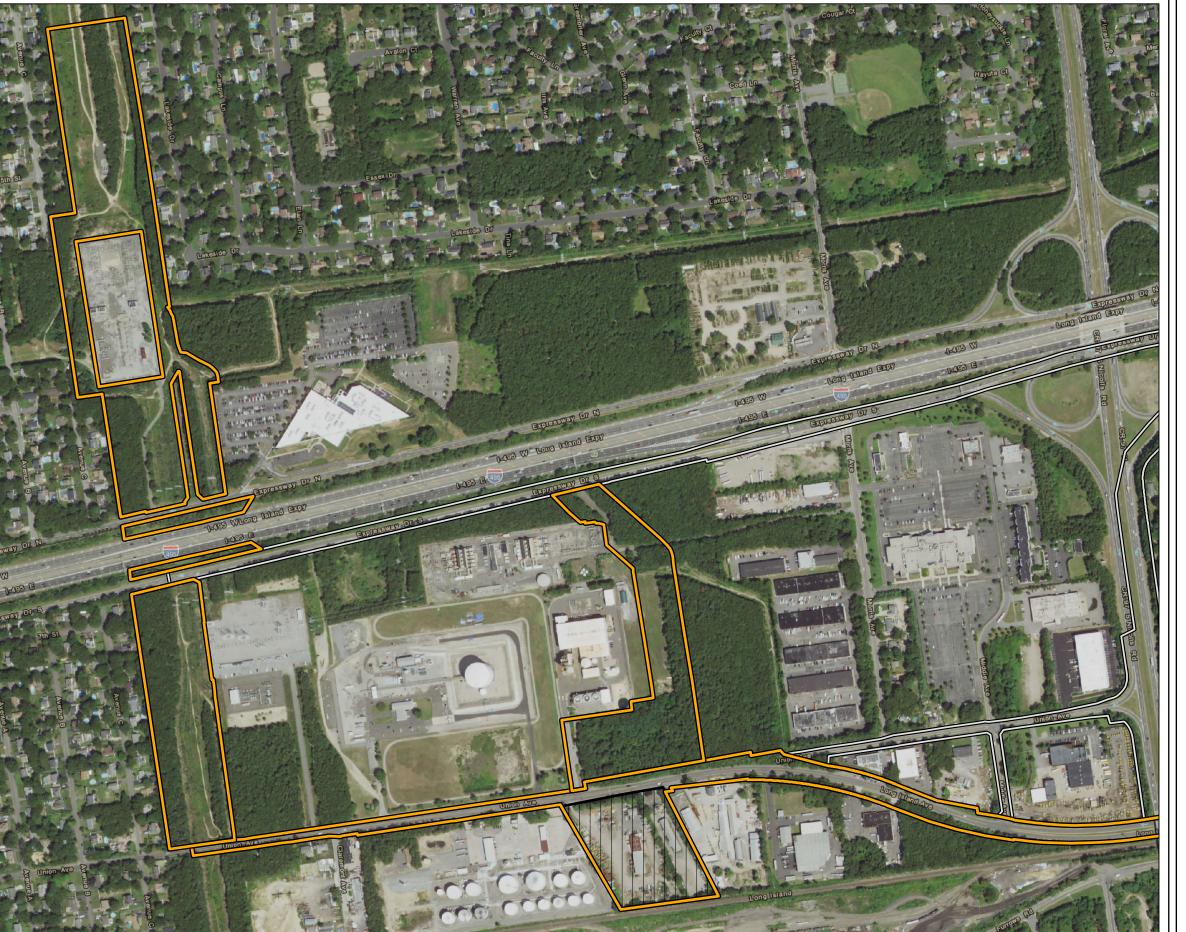


Figure 3 Delineated Wetlands Sheet 18 of 18

Sunrise Wind

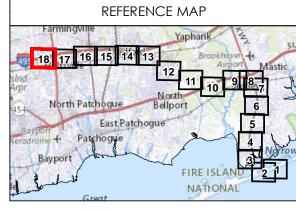
Powered by Ørsted & Eversource

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes
Union Avenue Site

Sources Base map: NAIP 2019

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN

500 Feet 150 Meters Scale at 11x17: 1:6,000 NAD 1983 2011 UTM Zone 18N



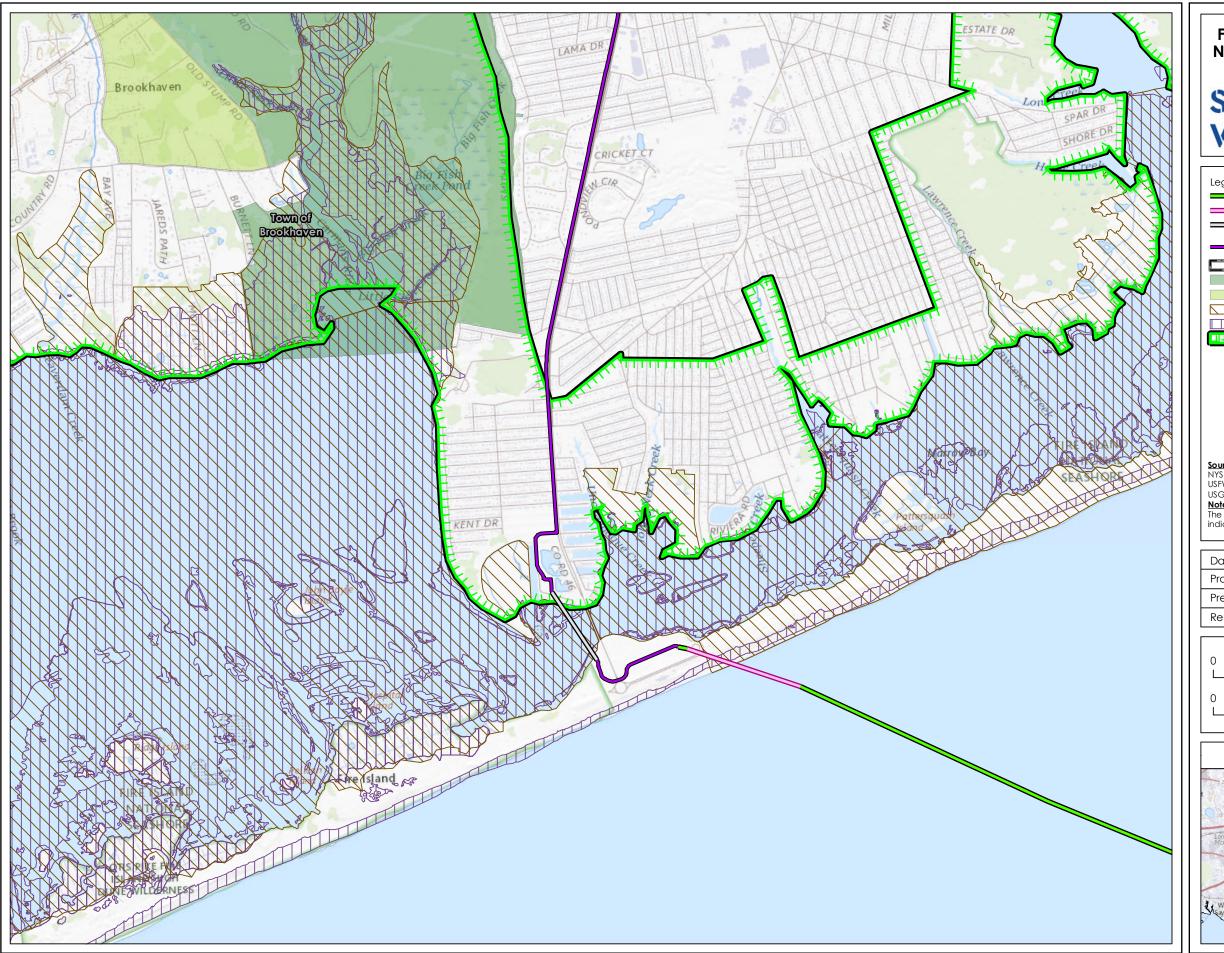


Figure 4 – Significant and Critical Natural Communities and Habitats Sheet 1 of 3



Powered by Ørsted & Eversource



Intracoastal Waterway HDD (ICW HDD)

Onshore Transmission Cable LIE Service Road Route

Town Boundary

Central Pine Barrens Core Preservation Area

Central Pine Barrens Compatible Growth Area

NYSDOS Significant Coastal Fish and Wildlife Habitats

NYS Natural Heritage Community Occurrences

NYSDEC Critical Environmental Area

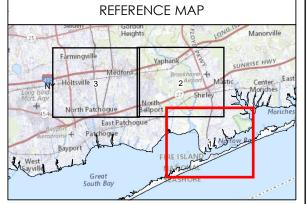
Sources NYS Office of IT Services GPO, NYS Boundaries, 2018 USFWS NWI Wetlands, 2018

USGS Topo Map

Note
The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

Date	07/11/2022
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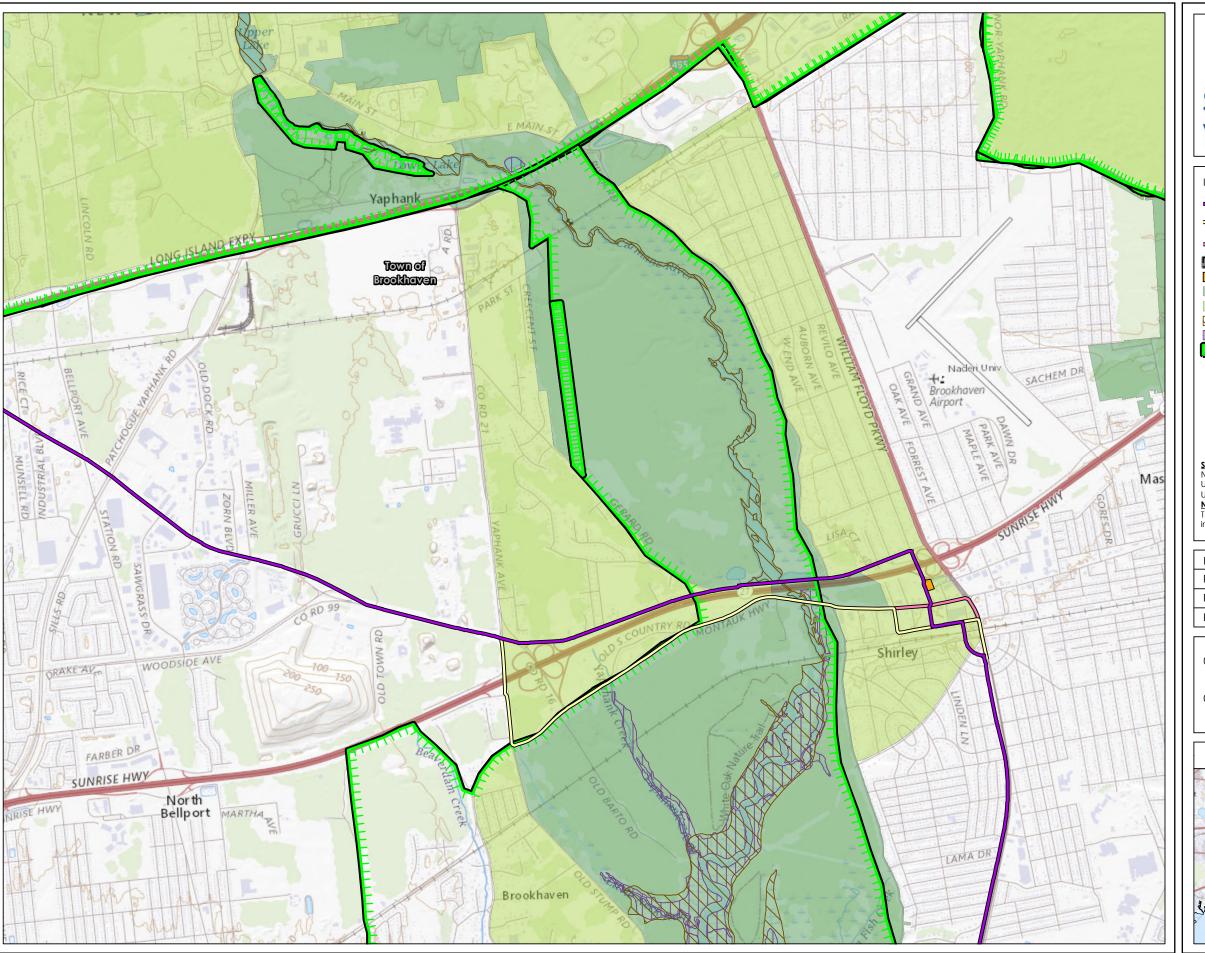
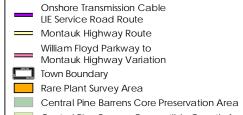


Figure 4 – Significant and Critical Natural Communities and Habitats Sheet 2 of 3

Sunrise Wind

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Central Pine Barrens Compatible Growth Area NYSDOS Significant Coastal Fish and Wildlife Habitats

NYS Natural Heritage Community Occurrences

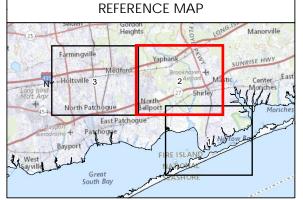
NYSDEC Critical Environmental Area

Sources NYS Office of IT Services GPO, NYS Boundaries, 2018 USFWS NWI Wetlands, 2018 USGS Topo Map

Note
The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

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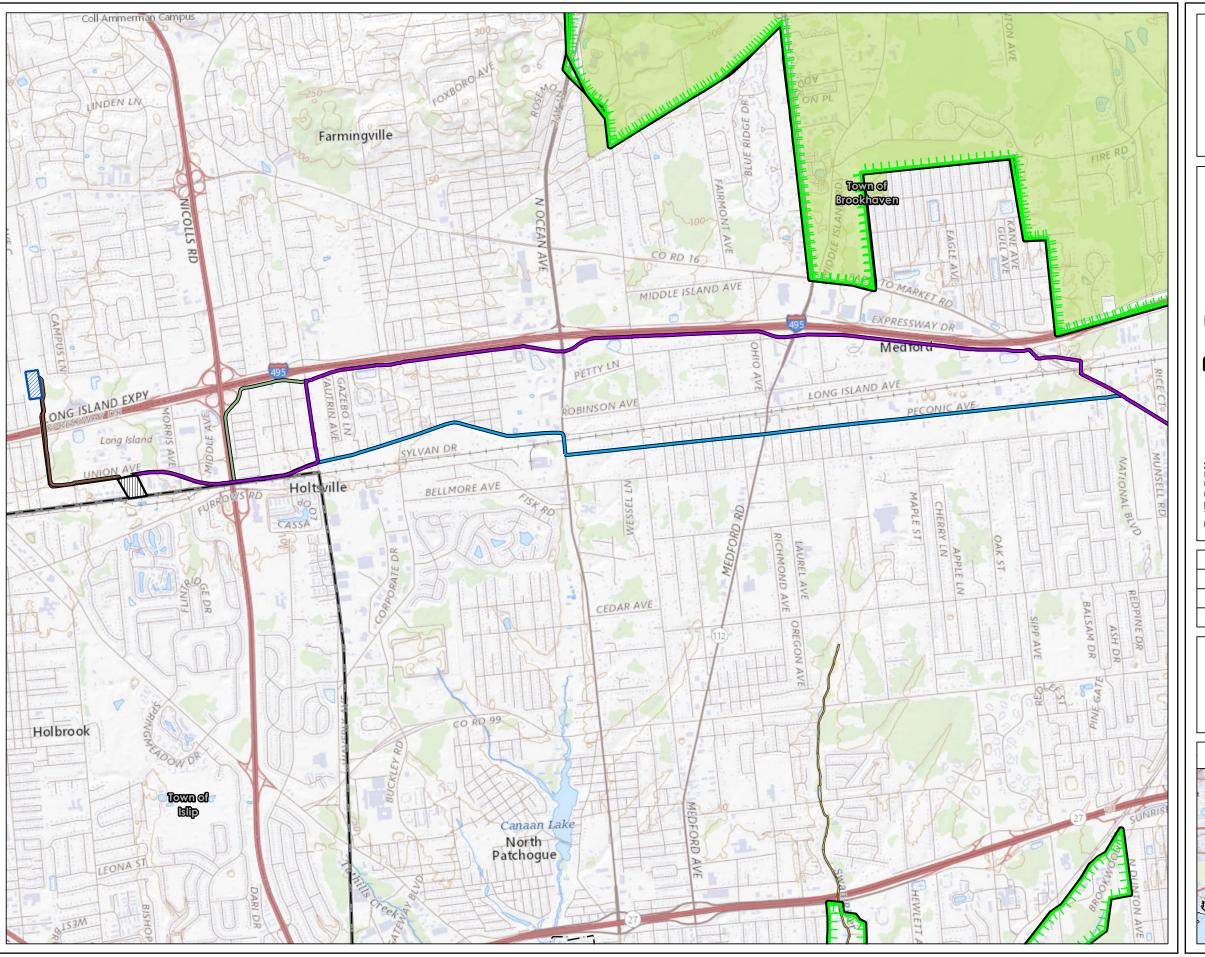


Figure 4 – Significant and Critical Natural Communities and Habitats Sheet 3 of 3

Sunrise Wind

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Onshore Transmission Cable Peconic Avenue Route

Nicolls Avenue Variation

Onshore Interconnection Cable Route

Union Avenue Site

Holbrook Substation
Village Boundary

Town Boundary

Central Pine Barrens Compatible Growth Area NYSDOS Significant Coastal Fish and Wildlife Habitats

NYSDEC Critical Environmental Area

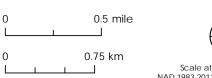
Sources NYS Office of IT Services GPO, NYS Boundaries, 2018 USFWS NWI Wetlands, 2018

USGS Topo Map

Note

The cable route centerline and trenchless crossing work areas are indicative and subject to final engineering design.

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Scale at 11x17: 1:31,680

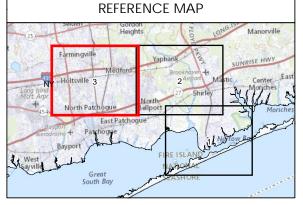




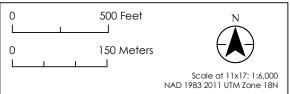
Figure 5 Invasive Plant Species Sheet 1 of 18

Sunrise Wind

Powered by Ørsted & Eversource

Legend
Survey Area – LIE Service Road / Interconnection Route
Phragmites australis (Common Reed Grass)
Phragmites australis (Common Reed Grass)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



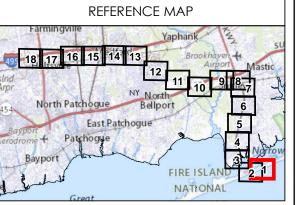




Figure 5 Invasive Plant Species Sheet 2 of 18

Sunrise Wind

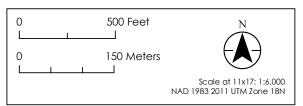
Powered by Ørsted & Eversource

Legend
Survey Area – LIE Service Road / Interconnection Route
Phragmites australis (Common Reed Grass)

Phragmites australis (Common Reed Grass)

Phragmites australis (Common Reed Grass)/
Rosa multiflora (Multiflora Rose)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



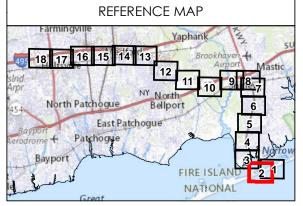




Figure 5 Invasive Plant Species Sheet 3 of 18

Sunrise Wind

Powered by Ørsted & Eversource

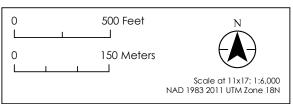
Legend
Survey Area – LIE Service Road / Interconnection Route
Phragmites australis (Common Reed Grass)

Robinia pseudoacacia (Black Locust)

Elaeagnus umbellata (Autumn Olive)

Phragmites australis (Common Reed Grass)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



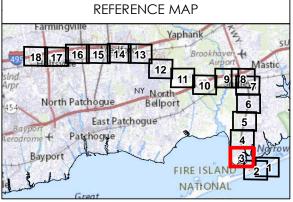




Figure 5 Invasive Plant Species Sheet 4 of 18

Sunrise Wind

Powered by Ørsted & Eversource

Legend
Survey Area – LIE Service Road / Interconnection Route
Robinia pseudoacacia (Black Locust)
Rosa multiflora (Multiflora Rose)

07/11/2022 Date 2028113199 Project Number Prepared By GAC Reviewed By DGN

500 Feet 150 Meters Scale at 11x17: 1:6,000 NAD 1983 2011 UTM Zone 18N

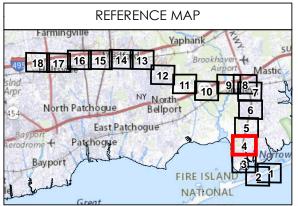




Figure 5 Invasive Plant Species Sheet 5 of 18

Sunrise Wind

Powered by Ørsted & Eversource

Lege	end

Survey Area – LIE Service Road / Interconnection Route

Alliaria petiolata (Garlic Mustard)

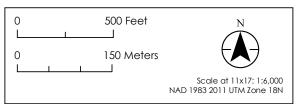
Celastrus orbiculatus (Oriental Bittersweet)

Phyllostachys aurea (Golden Bamboo)

Reynoutria japonica (Japanese Knotweed) Robinia pseudoacacia (Black Locust)

Rosa multiflora (Multiflora Rose)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



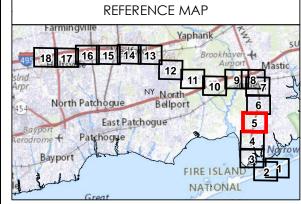




Figure 5 Invasive Plant Species Sheet 6 of 18

Sunrise Wind

Powered by Ørsted & Eversource

	Lege	end
•		

Survey Area – LIE Service Road / Interconnection Route

Acer platanoides (Norway Maple)

Artemisia vulgaris (Mugwort)

Berberis thunbergii (Japanese Barberry)

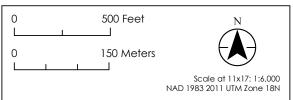
Celastrus orbiculatus (Oriental Bittersweet)

Centaurea stoebe (Spotted Knapweed) Ligustrum obtusifolium (Border Privet)

Robinia pseudoacacia (Black Locust)

Rosa multiflora (Multiflora Rose)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN



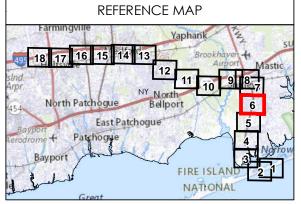


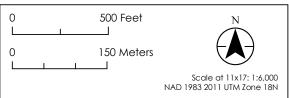


Figure 5 Invasive Plant Species Sheet 7 of 18

Sunrise Wind

Legend			
	Survey Area – LIE Service Road / Interconnection Route		
	Survey Area – Montauk or Peconic Alternative Routes		
	Acer pseudoplatanus (Sycamore Maple)		
	Alliaria petiolata (Garlic Mustard)		
	Artemisia vulgaris (Mugwort)		
	Celastrus orbiculatus (Oriental Bittersweet)		
\Diamond	Elaeagnus umbellata (Autumn Olive)		
0000	Lonicera japonica (Japanese Honeysuckle)		
	Rhamnus cathartica (Common Buckthorn)		
	Robinia pseudoacacia (Black Locust)		
	Rosa multiflora (Multiflora Rose)		
	Acer platanoides (Norway Maple)		
	Artemisia vulgaris (Mugwort)		
	Celastrus orbiculatus (Oriental Bittersweet)		
	Lonicera japonica (Japanese Honeysuckle)		
	Reynoutria japonica (Japanese Knotweed)		
	Rosa multiflora (Multiflora Rose)		

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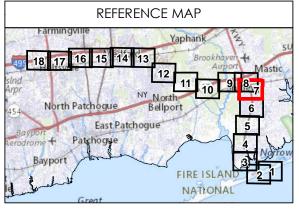


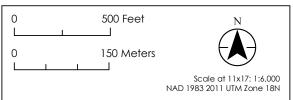


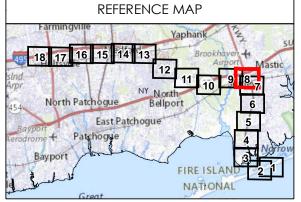
Figure 5 Invasive Plant Species Sheet 8 of 18

Sunrise Wind

Legend		
		Survey Area – LIE Service Road / Interconnection Route
		Survey Area – Montauk or Peconic Alternative Routes
	0	Acer pseudoplatanus (Sycamore Maple)
	<u> </u>	Alliaria petiolata (Garlic Mustard)
	00000	Artemisia vulgaris (Mugwort)
		Berberis thunbergii (Japanese Barberry)
		Celastrus orbiculatus (Oriental Bittersweet)
		Elaeagnus umbellata (Autumn Olive)
		Lonicera japonica (Japanese Honeysuckle)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)
		Acer platanoides (Norway Maple)
		Alliaria petiolata (Garlic Mustard)
		Artemisia vulgaris (Mugwort)
		Celastrus orbiculatus (Oriental Bittersweet)
		Lonicera japonica (Japanese Honeysuckle)
		Reynoutria japonica (Japanese Knotweed)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)
1	l	

Date	07/11/2022
Project Number	2028113199
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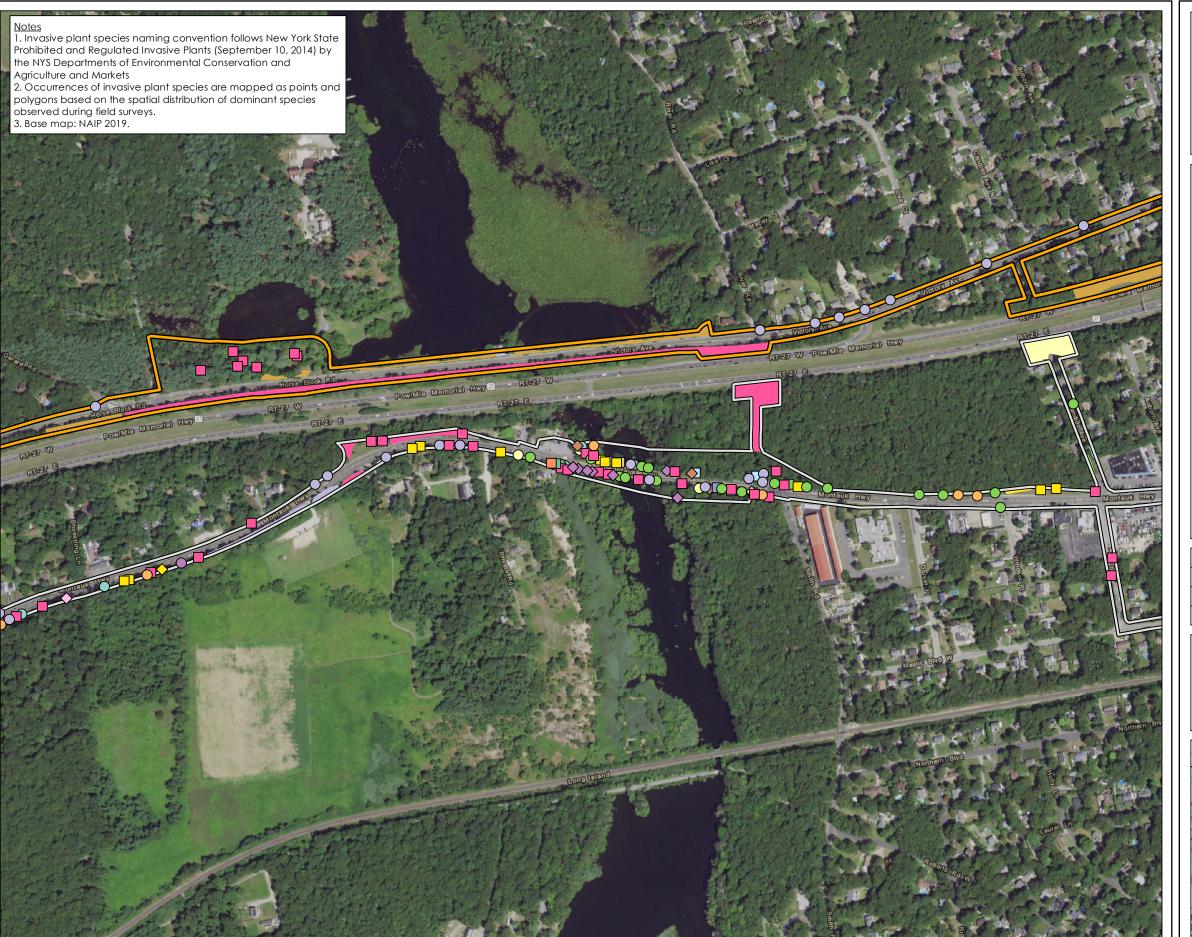
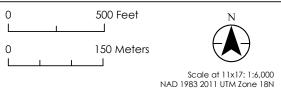


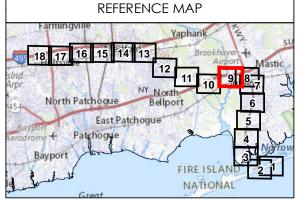
Figure 5 Invasive Plant Species Sheet 9 of 18

Sunrise Wind



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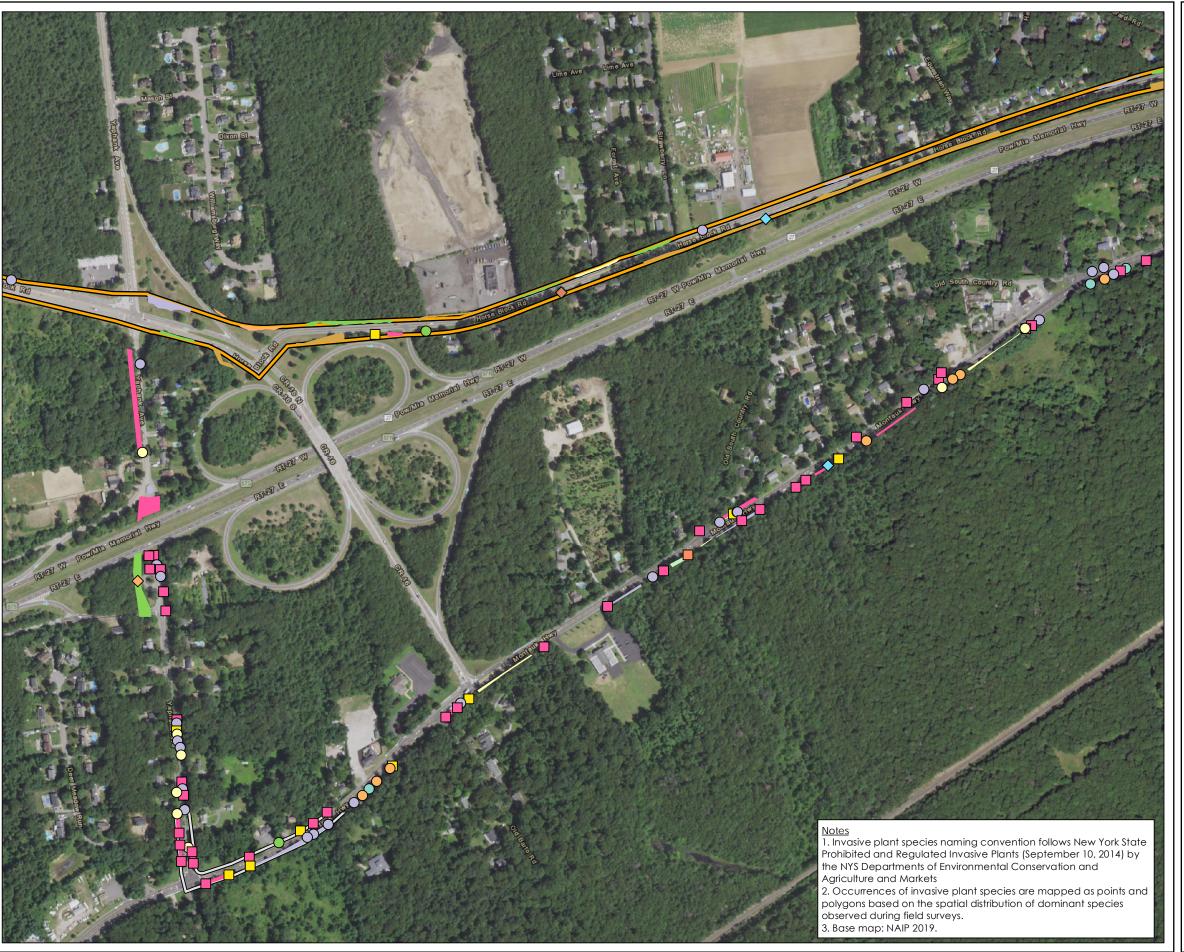
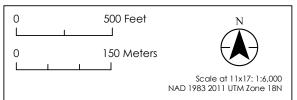


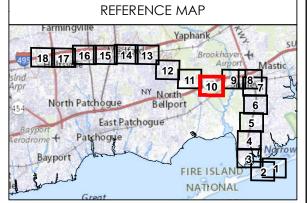
Figure 5 Invasive Plant Species Sheet 10 of 18

Sunrise Wind

Lege	end
	Survey Area – LIE Service Road / Interconnection Route
	Survey Area – Montauk or Peconic Alternative Routes
	Acer platanoides (Norway Maple)
0	Alliaria petiolata (Garlic Mustard)
	Artemisia vulgaris (Mugwort)
	Berberis thunbergii (Japanese Barberry)
O	Celastrus orbiculatus (Oriental Bittersweet)
\Diamond	Elaeagnus umbellata (Autumn Olive)
0000000	Lonicera japonica (Japanese Honeysuckle)
	Miscanthus sinensis (Chinese Silver Grass)
	Reynoutria japonica (Japanese Knotweed)
	Robinia pseudoacacia (Black Locust)
	Rosa multiflora (Multiflora Rose)
	Acer platanoides (Norway Maple)
	Alliaria petiolata (Garlic Mustard)
	Artemisia vulgaris (Mugwort)
	Celastrus orbiculatus (Oriental Bittersweet)
	Elaeagnus umbellata (Autumn Olive)
	Lonicera japonica (Japanese Honeysuckle)
	Reynoutria japonica (Japanese Knotweed)
	Rosa multiflora (Multiflora Rose)
l	

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
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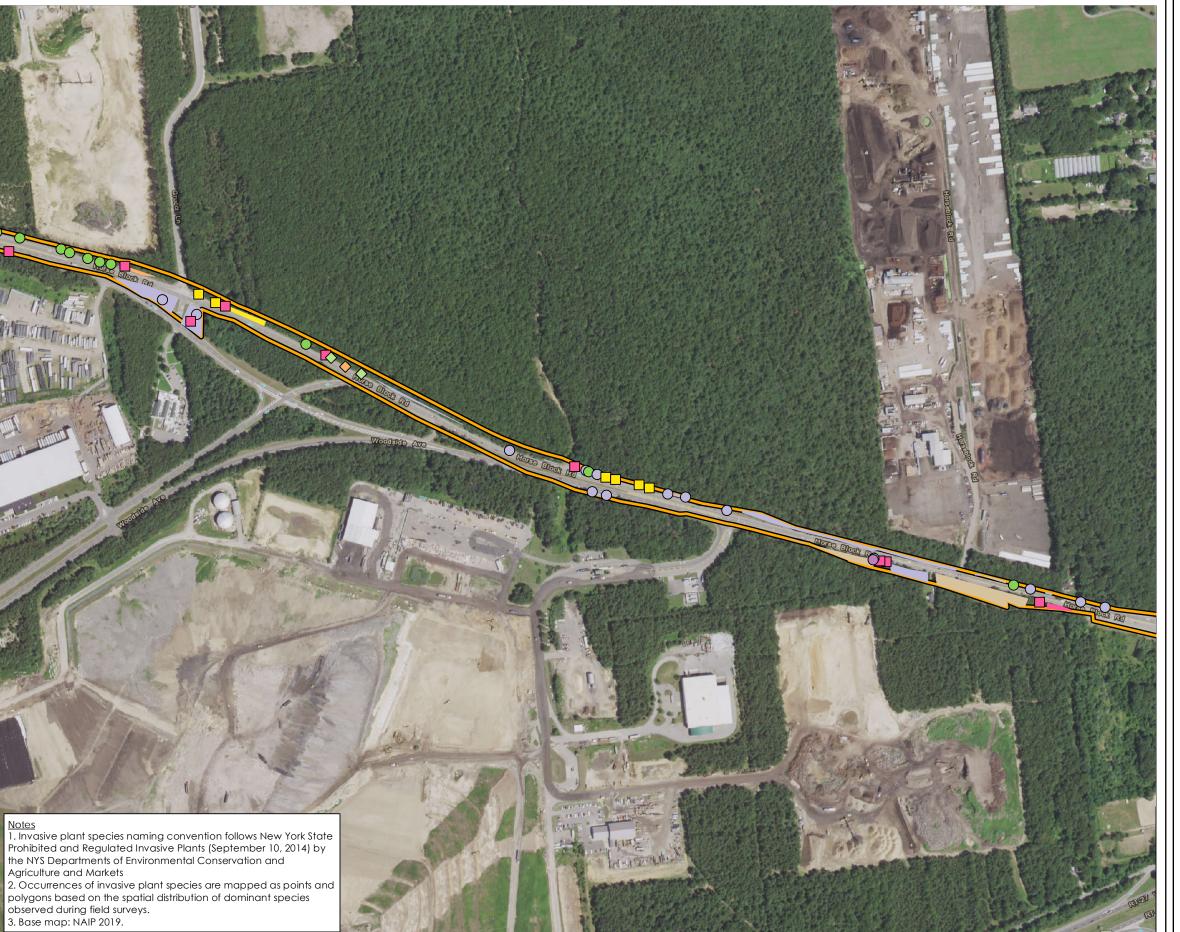
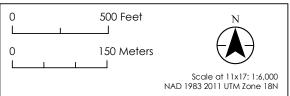


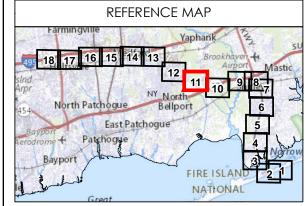
Figure 5 Invasive Plant Species Sheet 11 of 18

Sunrise Wind

Lege	nd
	Survey Area – LIE Service Road / Interconnection Route
	Acer platanoides (Norway Maple)
	Artemisia vulgaris (Mugwort)
	Celastrus orbiculatus (Oriental Bittersweet)
○ ○ ○	Cynanchum louiseae (Black Swallow-wort)
	Elaeagnus umbellata (Autumn Olive)
\Diamond	Frangula alnus (Smooth Buckthorn)
	Robinia pseudoacacia (Black Locust)
	Rosa multiflora (Multiflora Rose)
	Artemisia vulgaris (Mugwort)
	Elaeagnus umbellata (Autumn Olive)
	Lonicera tatarica (Tartarian Honeysuckle)
	Robinia pseudoacacia (Black Locust)
	Rosa multiflora (Multiflora Rose)
I	

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Project Number	2028113199
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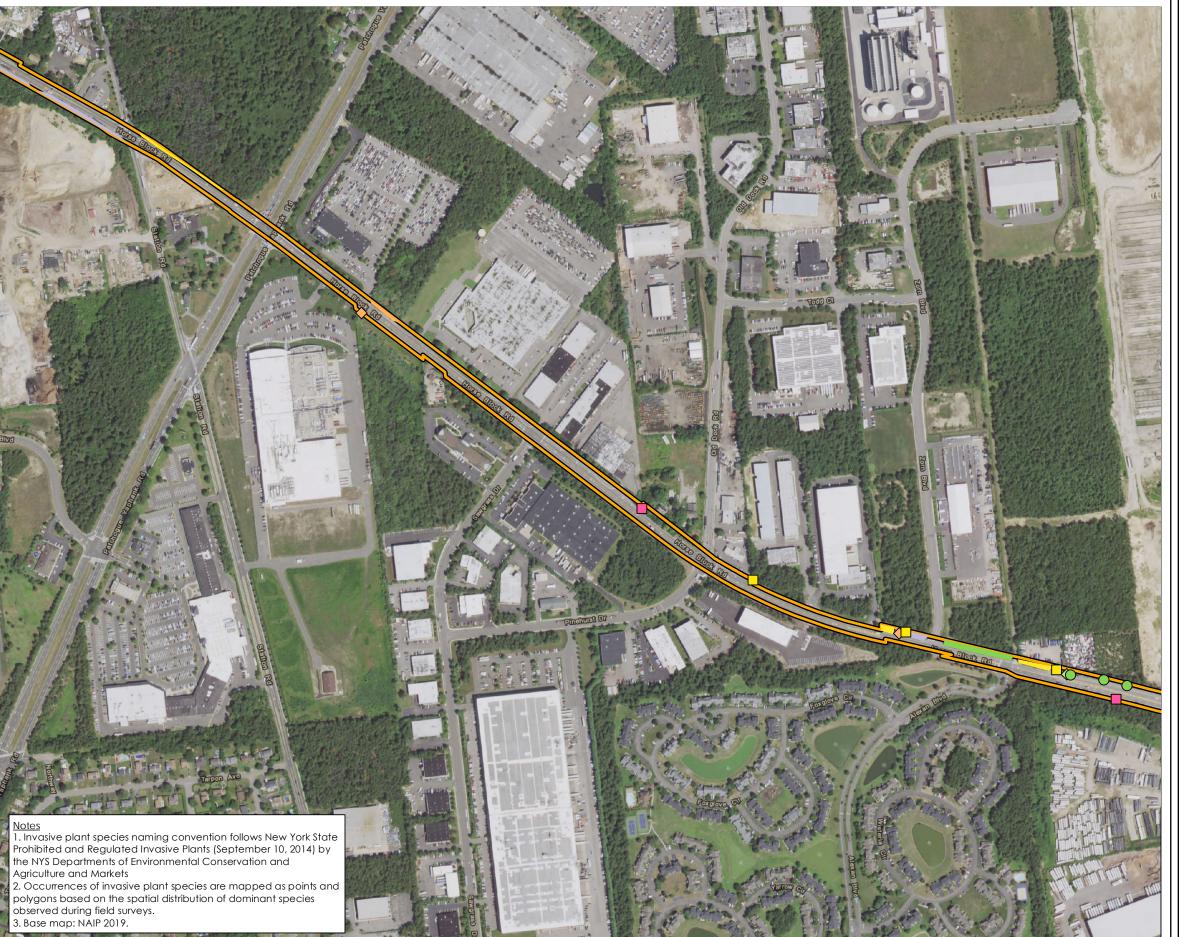


Figure 5 Invasive Plant Species Sheet 12 of 18

Sunrise Wind

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Lege	nd

Survey Area – LIE Service Road / Interconnection Route

Celastrus orbiculatus (Oriental Bittersweet)

Elaeagnus umbellata (Autumn Olive)

♦ Frangula alnus (Smooth Buckthorn) Robinia pseudoacacia (Black Locust)

Rosa multiflora (Multiflora Rose)

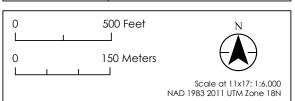
Artemisia vulgaris (Mugwort)

Celastrus orbiculatus (Oriental Bittersweet)

Elaeagnus umbellata (Autumn Olive)

Robinia pseudoacacia (Black Locust)

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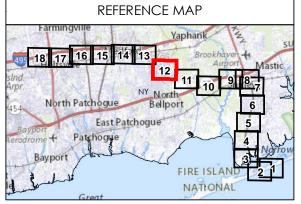


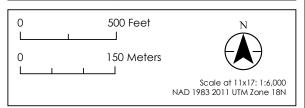


Figure 5 Invasive Plant Species Sheet 13 of 18

Sunrise Wind

	Lege	end
(Survey Area – LIE Service Road / Interconnection
(Survey Area – Montauk or Peconic Alternative Ro
	\bigcirc	Alliaria petiolata (Garlic Mustard)
	\bigcirc	Artemisia vulgaris (Mugwort)
		Berberis thunbergii (Japanese Barberry)
		Celastrus orbiculatus (Oriental Bittersweet)
		Cynanchum louiseae (Black Swallow-wort)
	\Diamond	Lonicera japonica (Japanese Honeysuckle)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)
		Artemisia vulgaris (Mugwort)
		Elaeagnus umbellata (Autumn Olive)
		Frangula alnus (Smooth Buckthorn)
		Lonicera japonica (Japanese Honeysuckle)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)

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Project Number	2028113199
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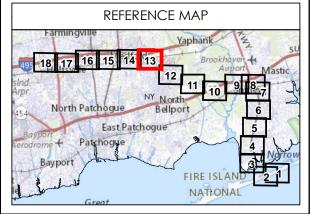




Figure 5 Invasive Plant Species Sheet 14 of 18

Sunrise Wind

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ec	ne.	n	d

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes
Artemisia vulgaris (Mugwort)

♦ Elaeagnus umbellata (Autumn Olive) Robinia pseudoacacia (Black Locust)

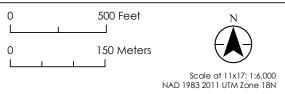
Rosa multiflora (Multiflora Rose) Artemisia vulgaris (Mugwort)

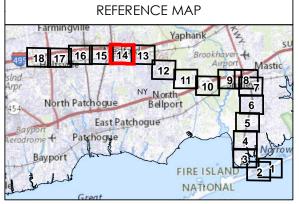
Elaeagnus umbellata (Autumn Olive)

Robinia pseudoacacia (Black Locust)

Rosa multiflora (Multiflora Rose)

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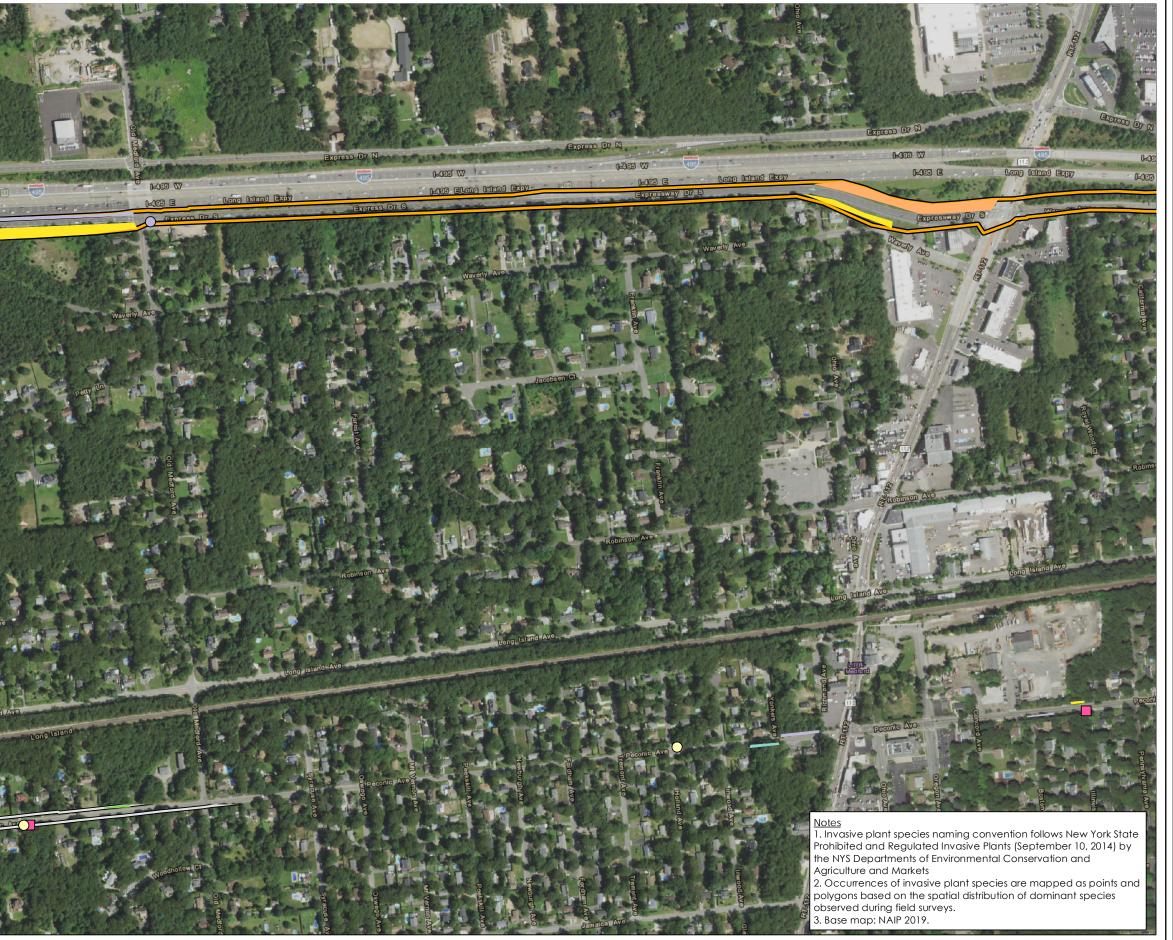


Figure 5 Invasive Plant Species Sheet 15 of 18

Sunrise Wind

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Legend	
	Survey Area – LIE Service Road / Interconnection Route
	Survey Area – Montauk or Peconic Alternative Routes
	Alliaria petiolata (Garlic Mustard)
	Artemisia vulgaris (Mugwort)
	Rosa multiflora (Multiflora Rose)
Acer platanoides (Norway Maple)	
	Artemisia vulgaris (Mugwort)

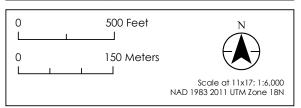


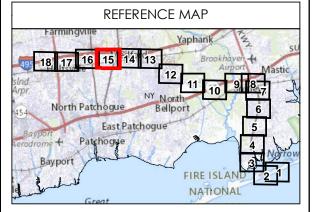
Celastrus orbiculatus (Oriental Bittersweet)

Elaeagnus umbellata (Autumn Olive)

Robinia pseudoacacia (Black Locust)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





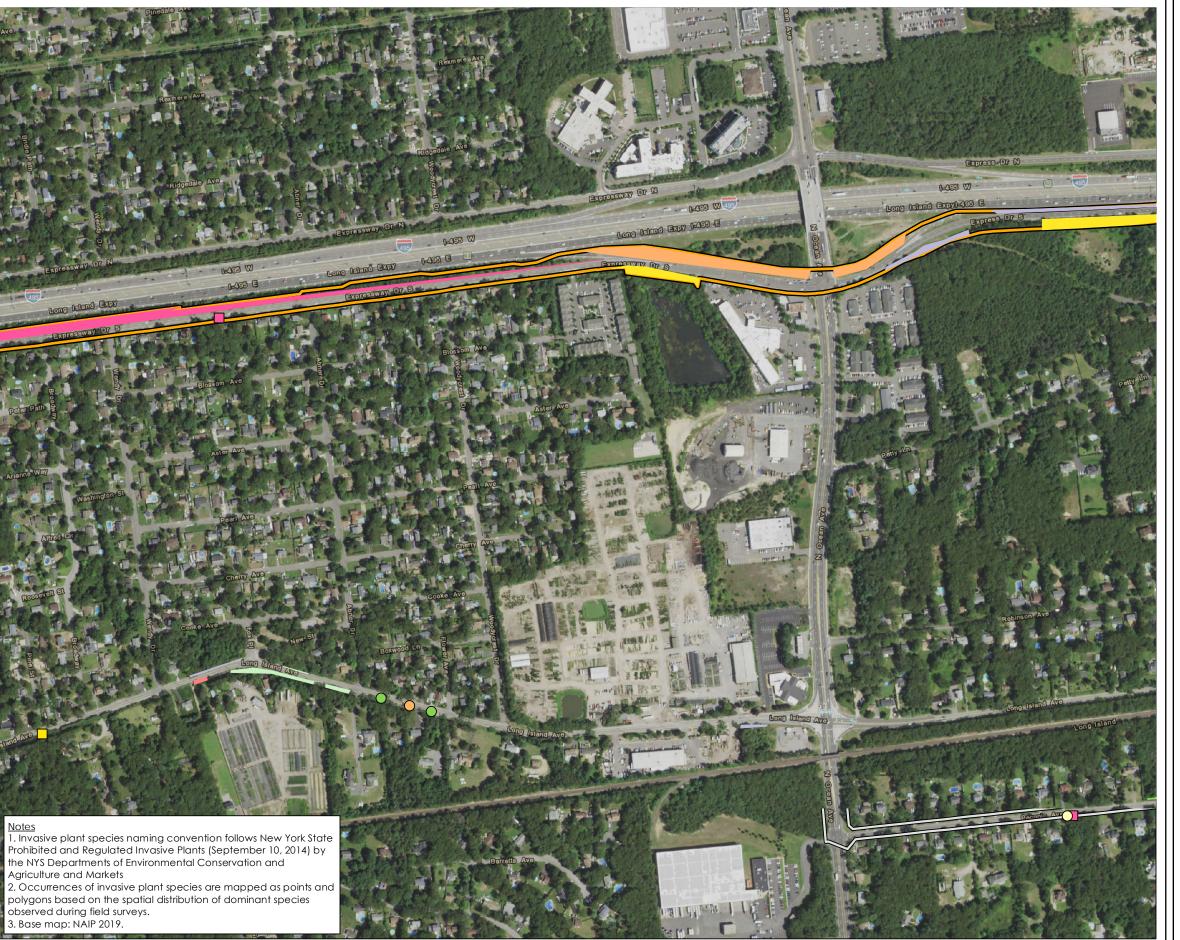
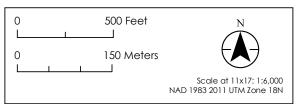


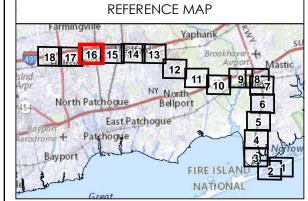
Figure 5 Invasive Plant Species Sheet 16 of 18

Sunrise Wind

	Lege	end
		Survey Area – LIE Service Road / Interconnection Route
		Survey Area – Montauk or Peconic Alternative Routes
		Alliaria petiolata (Garlic Mustard)
		Berberis thunbergii (Japanese Barberry)
		Celastrus orbiculatus (Oriental Bittersweet)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)
		Artemisia vulgaris (Mugwort)
		Cardamine impatiens (Narrowleaf Bittercress)
		Celastrus orbiculatus (Oriental Bittersweet)
		Elaeagnus umbellata (Autumn Olive)
		Reynoutria japonica (Japanese Knotweed)
		Robinia pseudoacacia (Black Locust)
		Rosa multiflora (Multiflora Rose)
1		
1		

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Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





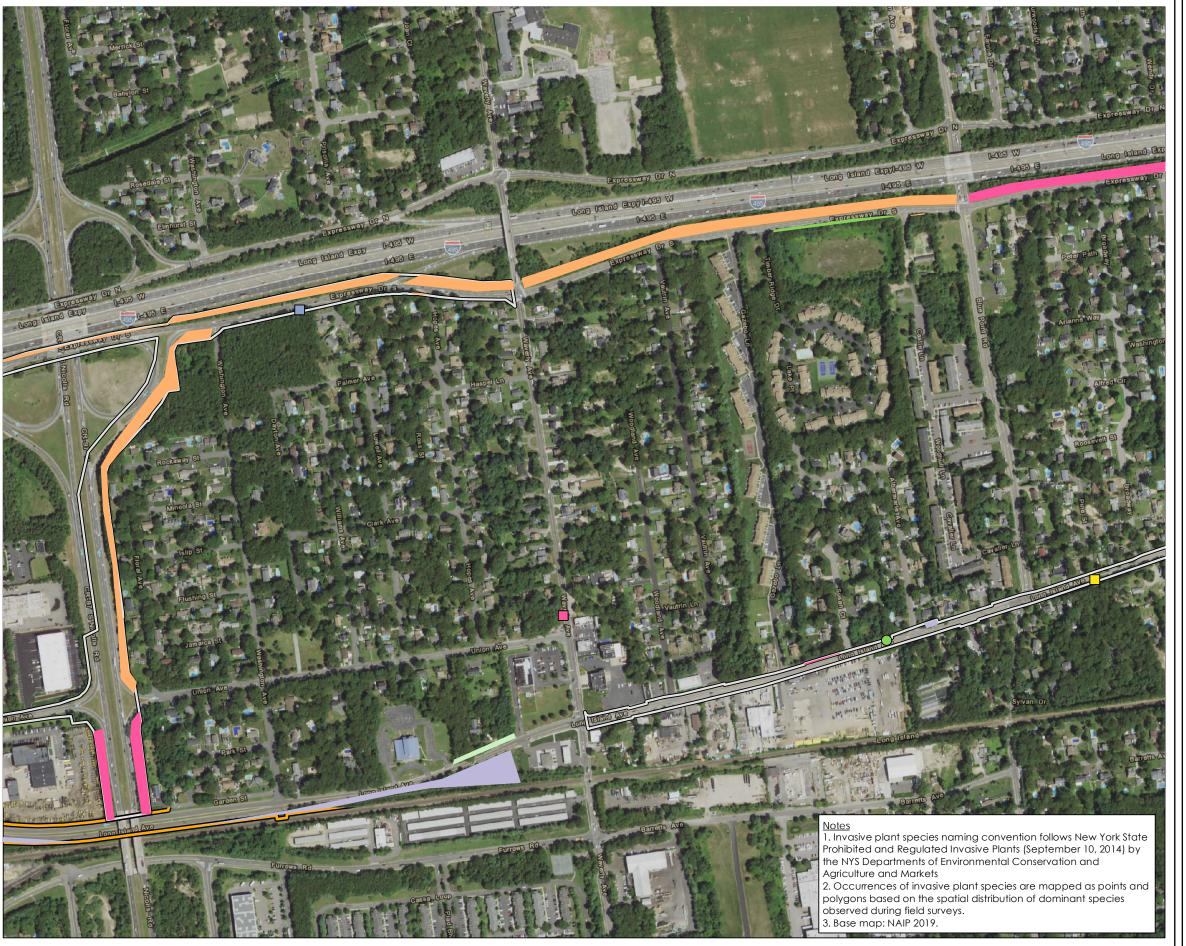


Figure 5 Invasive Plant Species Sheet 17 of 18

Sunrise Wind

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Lege	end

Survey Area – LIE Service Road / Interconnection Route
Survey Area – Montauk or Peconic Alternative Routes

Celastrus orbiculatus (Oriental Ritterment)

Rhamnus cathartica (Common Buckthorn) Robinia pseudoacacia (Black Locust)

Rosa multiflora (Multiflora Rose)

Artemisia vulgaris (Mugwort)

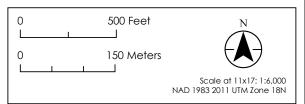
Celastrus orbiculatus (Oriental Bittersweet)

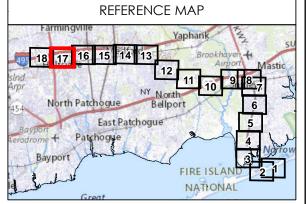
Elaeagnus umbellata (Autumn Olive)

Reynoutria japonica (Japanese Knotweed)

Rosa multiflora (Multiflora Rose)

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





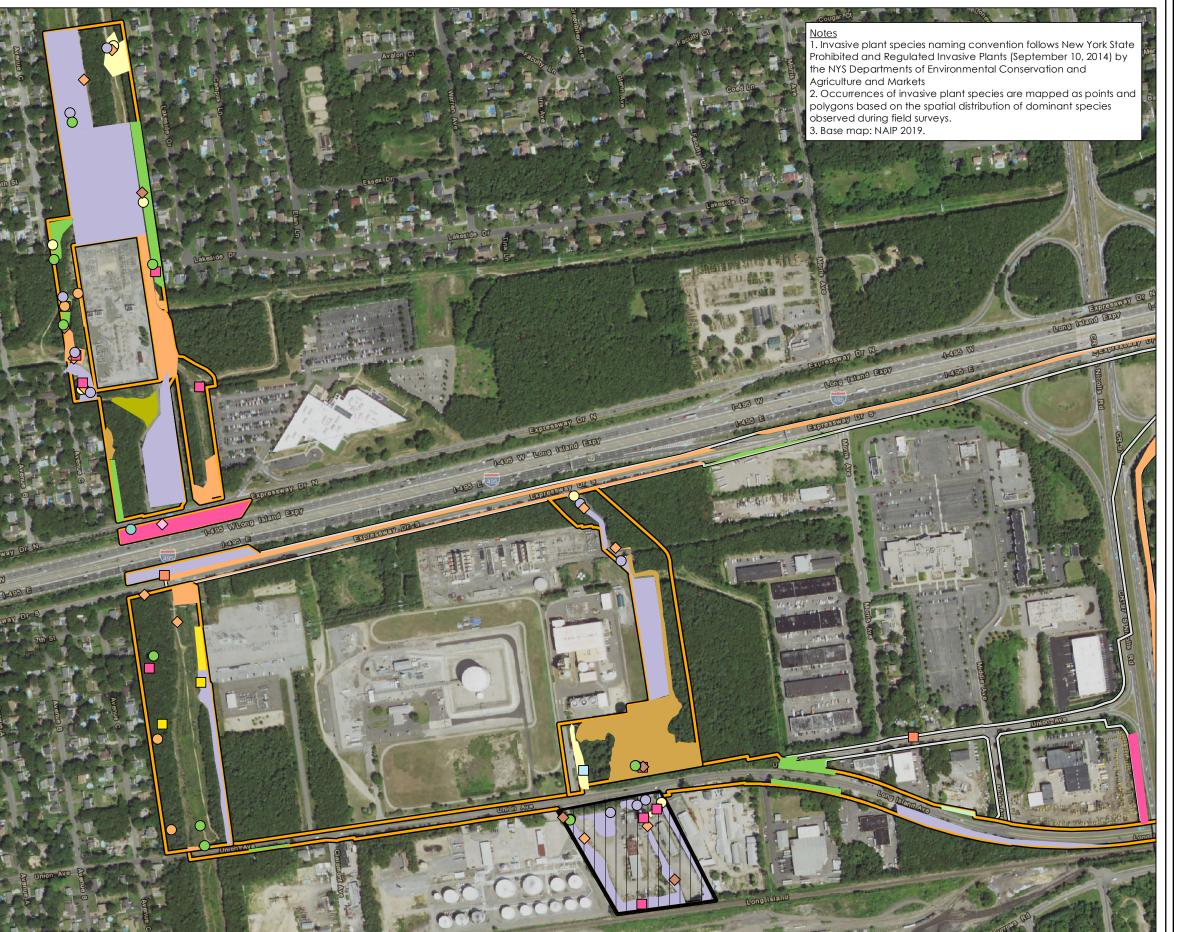
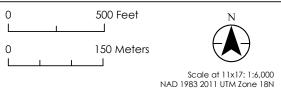


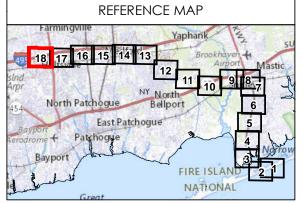
Figure 5 Invasive Plant Species Sheet 18 of 18

Sunrise Wind

Lege	nd
	Survey Area – LIE Service Road / Interconnection Route
	Survey Area – Montauk or Peconic Alternative Routes
	Acer platanoides (Norway Maple)
0	Alliaria petiolata (Garlic Mustard)
	Artemisia vulgaris (Mugwort)
	Berberis thunbergii (Japanese Barberry)
	Celastrus orbiculatus (Oriental Bittersweet)
\Diamond	Elaeagnus umbellata (Autumn Olive)
\bigcirc	Ligustrum obtusifolium (Border Privet)
\Diamond	Lonicera japonica (Japanese Honeysuckle)
	Reynoutria japonica (Japanese Knotweed)
	Robinia pseudoacacia (Black Locust)
	Rosa multiflora (Multiflora Rose)
	Rubus phoenicolasius (Wineberry)
	Alliaria petiolata (Garlic Mustard)
	Artemisia vulgaris (Mugwort)
	Celastrus orbiculatus (Oriental Bittersweet)
	Elaeagnus umbellata (Autumn Olive)
	Lonicera japonica (Japanese Honeysuckle)
	Reynoutria japonica (Japanese Knotweed)
	Robinia pseudoacacia (Black Locust)
	Rosa multiflora (Multiflora Rose)
	Berberis thunbergii (Japanese Barberry)
	Lespedeza cuneata (Chinese Lespedeza)
	Union Avenue Site

Date	07/11/2022
Project Number	2028113199
Prepared By	GAC
Reviewed By	DGN





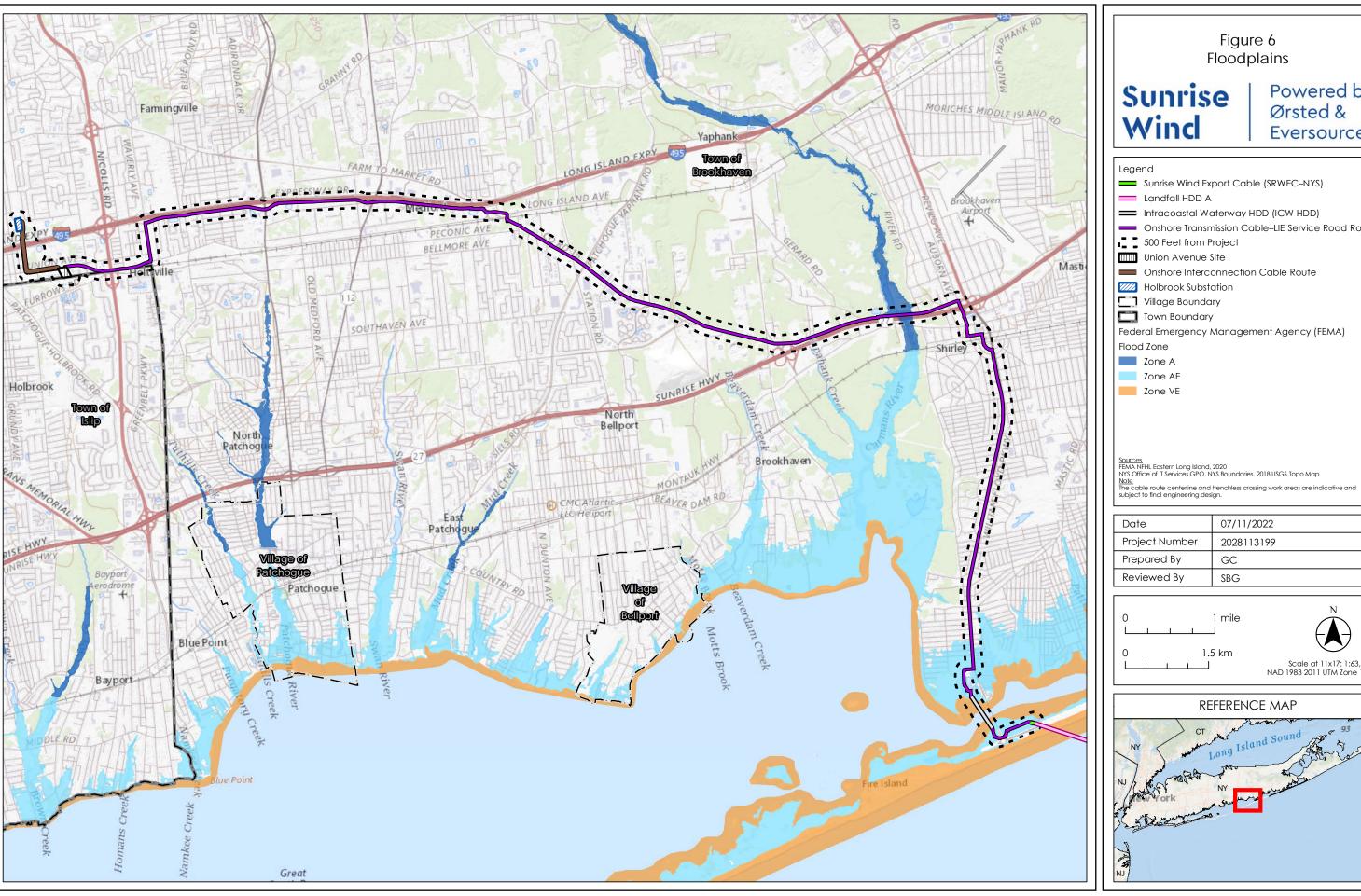
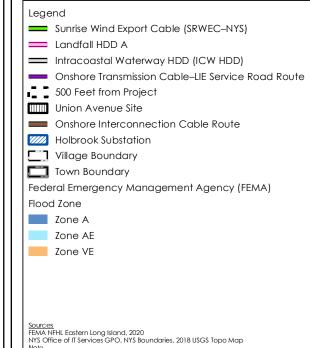


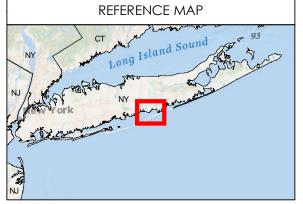
Figure 6 Floodplains

Sunrise Wind



Date	07/11/2022
Project Number	2028113199
Prepared By	GC
Reviewed By	SBG





SUNRISE WIND: ONSHORE ECOLOGICAL ASSESSMENT AND FIELD SURVEY REPORT

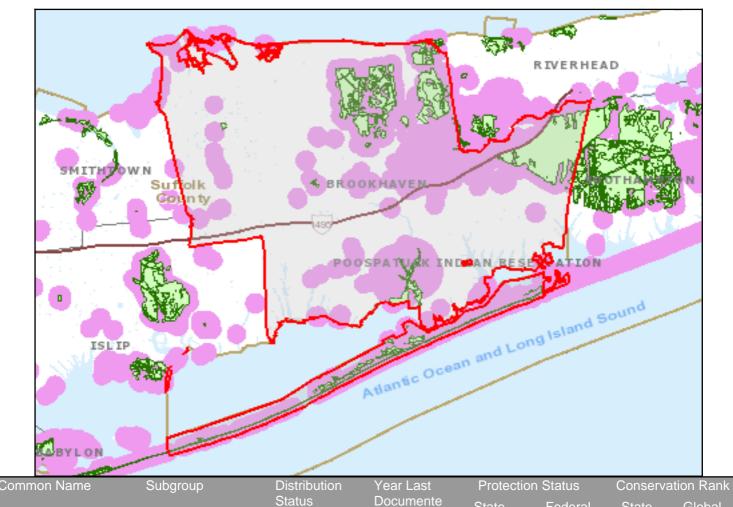
August 2022

Appendix B NEW YORK NATURE EXPLORER



Rare Species within Town of Brookhaven

Criteria: Town: Brookhaven



	Ciaiao	Boodinonio	State	Federa
Town: Brookhaven				

Animal: Birds

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 Status	Year Last Documente	Protection Status State Federal	Conse State	rvation Rank 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		Committee				
Animal: Reptiles	5					
Eastern Wormsnake	Snakes	Recently Confirmed	2015	Special Concern	S2	G5
Carphophis amoenus		Commined				
Animal: Amphib	ians					
Eastern Spadefoot	Frogs and Toads	Recently Confirmed	2008	Special Concern	S2S3	G5
Scaphiopus holbrookii						
Animal: Fish						
Atlantic Needlefish	Needlefishes	Recently Confirmed	1990		S2S3	G5
Strongylura marina						
Atlantic Silverside	Silversides	Recently Confirmed	1990		S2S3	G5
Menidia menidia		Commined				
Eastern Pirate Perch	Perches	Recently Confirmed	2016		S1S2	G5T5
Aphredoderus sayanus sayan		Johnnieu				
	ius					
Animal: Butterfli						
Animal: Butterfli		Recently Confirmed	2017		S1	G4
	es and Moths	Recently Confirmed	2017		S1	G4
A Geometrid Moth	es and Moths		2017		S1 S1S3	G4 G3G4

Black-bordered Lamon Moth Markinshar agraphabria Chain Fern Borer Moth Moths Recently Papatipema stenosekis Chocolate Renia Propatipema stenosekis Chocolate Renia Recently Papatipema stenosekis Chocolate Renia Resident September	Common Name	Subgroup	Distribution Status	Year Last Documente	Protection State		vation Rank
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Sympissis riparia Edwards' Hairstreak Susyriam edwardsii Golden Aster Flower Moth Schinia tuberculum Herodias or Pine Barrens Underwing Catocala herodias gerhardi Orange Holomelina Virbia aurantiaca Orange-striped Oakworm Moth Anisoa senatoria Packard's Lichen Moth Moths Recently Confirmed Orange-striped Oakworm Moth Moths Recently Confirmed Orange-striped Oakworm Moth Anisoa senatoria Packard's Lichen Moth Moths Recently Confirmed Orange-striped Oakworm Moth Moths Orange-striped Oakworm M	Hemileuca maia ssp. 5						
Edwards' Hairsteak Butterflies and Skippers Confirmed 2003 S3S4 G5 Sutyrium edwardsii Golden Aster Flower Moth Schinia tubercalum Herodias or Pine Barrens Underwing Confirmed 2017 Special Concern S1S2 G3T3 Garantia tubercalum Moths Recently Confirmed 2017 Special Concern S1S2 G47T4? Catocala herodias gerhardi Garantia Inderwing Moths Recently Confirmed 2017 Special Concern S1S2 G47T4? Catocala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Special Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Special Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Special Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Superial Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Superial Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Superial Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Superial Concern S1 G3 Caronala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Superial Concern S1 G3 Caronala jair ssp. 2 G47T4? Caronala jair	Dune Sympistis	Moths		2013		SU	G4
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Schinia tuberculum Herodias or Pine Barrens Underwing Catocala herodias gerhardi Jersey Jair Underwing Moths Recently Confirmed Catocala jair ssp. 2 Moths Butterflies and Skippers Historically Confirmed Confirmed Drange Holomelina Moths Recently Confirmed Moths Recently Confirmed Drange-striped Oakworm Moth Moths Recently Confirmed Drange-striped Oakworm Moth Moths Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Recently Confirmed Drackard's Lichen Moth Moths Recently Confirmed Drackard's Lichen Moth Recently Confirmed Drackard's Lichen Recently Confirmed	Satyrium edwardsii		•				
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Underwing Catocala herodias gerhardi Jersey Jair Underwing Moths Recently Confirmed 2017 Special Concern S1S2 G4?T4? Catocala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed 2017 Special Concern S1 G3 Erymnis martialis Orange Holomelina Moths Recently Confirmed 2017 SU G5 Virbia aurantiaca Orange-striped Oakworm Moth 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 SU G4 Zanclognatha martha Pine Tussock Moth Moths Recently Confirmed 2017 SU G4 Dasychira pinicola Umber Moth Moths Recently Confirmed 2017 SU G4	Schinia tuberculum		Commined				
Catocala jair ssp. 2 Mottled Duskywing Butterflies and Skippers Confirmed Prymis martialis Orange Holomelina Moths Recently Confirmed Prima aurantiaca Orange-striped Oakworm Moth Moths Recently Confirmed Prackard's Lichen Moth Moths Recently Confirmed Prima Prackard Successful Prima Barrens Zanclognatha Moths Recently Confirmed Prima Prima Dasychira pinicola Umber Moth Moths Recently Confirmed Prima P	Underwing	Moths		2017	Special Concern	S1S2	G3T3
Mottled Duskywing Butterflies and Skippers Confirmed 1966 Special Concern S1 G3 Erynnis martialis Orange Holomelina Moths Recently Confirmed 2017 SU G5 Virbia aurantiaca Orange-striped Oakworm Moth Moths Recently Confirmed SU G5 Anisota senatoria Packard's Lichen Moth Moths Recently Confirmed SU G5 Cisthene packardii Pine Barrens Zanclognatha Moths Recently Confirmed Su SU G4 Dasychira pinicola Umber Moth Moths Recently Confirmed SU G4 Moths Recently Confirmed SU G4 Dasychira pinicola Whoths Recently Confirmed SU G4 Butterflies and Skippers Su G3 SU G5 SU G5 SU G4	Jersey Jair Underwing	Moths		2017	Special Concern	S1S2	G4?T4?
Confirmed Survey	Catocala jair ssp. 2						
Orange Holomelina Moths Recently Confirmed 2017 SU G5 Virbia aurantiaca Orange-striped Oakworm Moth 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 Umber Moth Moths Recently Confirmed 2017 SU G4	Mottled Duskywing	Butterflies and Skippers		1966	Special Concern	S1	G3
Virbia aurantiaca Orange-striped Oakworm Moth Moths Anisota senatoria Packard's Lichen Moth Moths Confirmed Confirme	Erynnis martialis						
Orange-striped Oakworm Moth Moths Recently Confirmed Packard's Lichen Moth Cisthene packardii Pine Barrens Zanclognatha Moths Recently Confirmed Zanclognatha martha Pine Tussock Moth Dasychira pinicola Umber Moth Moths Recently Confirmed Zo13 SU G5 G4 C13 SU G5 G4 G4 G4 G5 G5 G5 G5 G5 G5	Orange Holomelina	Moths		2017		SU	G5
Anisota senatoria Packard's Lichen Moth Moths Recently Confirmed 2013 SU G5 Cisthene packardii Pine Barrens Zanclognatha Moths 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	Virbia aurantiaca						
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	Orange-striped Oakworm Moth	Moths		2013		SU	G5
Pine Barrens Zanclognatha Moths Recently Confirmed Zanclognatha martha Pine Tussock Moth Dasychira pinicola Umber Moth Moths Confirmed Zo13 Recently Confirmed Zo17 Su G4 Su G4 Su G4 Su G4 Su G4 Su G4	Anisota senatoria		•				
Pine Barrens Zanclognatha Moths Recently Confirmed Zanclognatha martha Pine Tussock Moth Moths Dasychira pinicola Umber Moth Moths Recently Confirmed Zo17 SU G4 G4 G4	Packard's Lichen Moth	Moths		2013		SU	G5
Pine Barrens Zanclognatha martha Pine Tussock Moth Moths Recently Confirmed 2017 SU G4 **Dasychira pinicola** Umber Moth Moths Recently Confirmed 2017 SU G4 **Dasychira pinicola** **Dasychira pinicola** **Dasychira pinicola** Umber Moth Moths Recently Confirmed 2017 SU G4	Cisthene packardii		Committee				
Zanclognatha martha Pine Tussock Moth Moths Recently Confirmed 2017 SU G4 Dasychira pinicola Woths Recently Confirmed 2017 SU G4	Pine Barrens Zanclognatha	Moths		2013		S1S2	G4
Dasychira pinicola Umber Moth Moths Confirmed 2017 Su G4 G4 G4 G4	Zanclognatha martha		Commingu				
Dasychira pinicola Umber Moth Moths Recently Confirmed 2017 SU G4	Pine Tussock Moth	Moths		2017		SU	G4
Umber Moth Moths Recently Confirmed 2017 SU G4	Dasychira pinicola		Commed				
Confirmed		Moths		2017		SU	G4
LI VIZIUELIA MUUZI MALI	Hypomecis umbrosaria		Confirmed				

	IACM	OIK INC	aluie		CI		
Common Name	Subgroup	Distribution Status	Year Last Documente	Protection State	Status Federal	Conser State	vation Rank 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		001					
Yellow-spotted Graylet	Moths	Recently Confirmed	2017			SU	G4
Hyperstrotia flaviguttata							
Animal: Dragonf	lies and Damse	Iflies					
Atlantic Bluet	Damselflies	Recently Confirmed	2009			S1S2	G5
Enallagma doubledayi							
Blue Corporal	Dragonflies	Recently Confirmed	2006			S2S3	G5
Ladona deplanata							
Comet Darner	Dragonflies	Recently Confirmed	2009			S2S3	G5
Anax longipes							
Common Sanddragon	Dragonflies	Recently Confirmed	2006	Special Concern		S1	G5
Progomphus obscurus							
Double-ringed Pennant	Dragonflies	Recently Confirmed	2009			S1	G5
Celithemis verna							
Golden-winged Skimmer	Dragonflies	Recently Confirmed	2006			S1S2	G5
Libellula auripennis							
Martha's Pennant	Dragonflies	Recently Confirmed	2009			S2	G4
Celithemis martha							
Rambur's Forktail	Damselflies	Recently Confirmed	2004			S2S3	G5
Ischnura ramburii							
Seaside Dragonlet	Dragonflies	Recently Confirmed	2004			S2	G5
Erythrodiplax berenice							
Southern Spreadwing	Damselflies	Recently Confirmed	2005			S2S3	G5
Lestes australis							
Spatterdock Darner	Dragonflies	Recently Confirmed	2005			S2	G4
Rhionaeschna mutata							
Yellow-sided Skimmer	Dragonflies	Historically Confirmed	1926			S1	G5
Libellula flavida							

Animal: Beetles

	Subgroup	Distribution	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 Cicindela dorsalis dorsalis	Tiger Beetles	Extirpated	1939	Threatened	Threatened	SX	G3G4T2
Animal: Animal A	Assemblages						
Gull Colony	Animal Assemblages	Recently Confirmed	2004			SNRB	GNR
Gull Colony							
American Ipecac	Other Flowering Plants	Confirmed	1928	Endangered		S1	G5
Plant: Flowering American Ipecac	Other Flowering Plants	Historically Confirmed	1928	Endangered		S1	G5
Euphorbia ipecacuanhae							
	Asters, Goldenrods and	Recently	2011	Threatened		S2S3	G5
	Asters, Goldenrods and Daisies	Recently Confirmed	2011	Threatened		S2S3	G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort			2011	Threatened Endangered		\$2\$3 \$1	G5
Annual Saltmarsh Aster Symphyotrichum subulatum	Daisies	Confirmed Historically					
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica	Daisies	Confirmed Historically					
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica	Daisies Other Flowering Plants	Confirmed Historically Confirmed Recently	1927	Endangered		S1	G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata	Daisies Other Flowering Plants	Historically Confirmed Recently Confirmed Historically	1927	Endangered		S1	G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata	Daisies Other Flowering Plants Sedges	Historically Confirmed Recently Confirmed	1927 2008	Endangered Threatened		\$1 \$3	G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii	Daisies Other Flowering Plants Sedges	Historically Confirmed Recently Confirmed Historically Confirmed Recently	1927 2008	Endangered Threatened		\$1 \$3	G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii	Daisies Other Flowering Plants Sedges Sedges	Historically Confirmed Recently Confirmed Historically Confirmed	1927 2008 1986	Endangered Threatened Threatened		\$1 \$3 \$2	G5 G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii Button Sedge Carex bullata	Daisies Other Flowering Plants Sedges Sedges	Historically Confirmed Recently Confirmed Historically Confirmed Recently Confirmed Recently Confirmed	1927 2008 1986	Endangered Threatened Threatened		\$1 \$3 \$2	G5 G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii Button Sedge Carex bullata	Daisies Other Flowering Plants Sedges Sedges Sedges	Historically Confirmed Recently Confirmed Historically Confirmed Recently Confirmed	1927 2008 1986 2001	Endangered Threatened Threatened Endangered		\$1 \$3 \$2 \$1	G5 G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii Button Sedge Carex bullata Carey's Smartweed	Daisies Other Flowering Plants Sedges Sedges Sedges	Historically Confirmed Recently Confirmed Historically Confirmed Recently Confirmed Recently Confirmed Historically Confirmed	1927 2008 1986 2001	Endangered Threatened Threatened Endangered		\$1 \$3 \$2 \$1	G5 G5 G5
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii Button Sedge Carex bullata Carey's Smartweed Persicaria careyi	Daisies Other Flowering Plants Sedges Sedges Sedges Other Flowering Plants	Historically Confirmed Recently Confirmed Historically Confirmed Recently Confirmed Recently Confirmed	1927 2008 1986 2001 2000	Endangered Threatened Threatened Endangered Endangered		\$1 \$3 \$2 \$1 \$1\$2	G5 G5 G5 G4
Annual Saltmarsh Aster Symphyotrichum subulatum var. subulatum Autumnal Water-starwort Callitriche hermaphroditica Black-edge Sedge Carex nigromarginata Brown Bog Sedge Carex buxbaumii Button Sedge Carex bullata Carey's Smartweed Persicaria careyi Carolina Redroot	Daisies Other Flowering Plants Sedges Sedges Sedges Other Flowering Plants	Historically Confirmed Recently Confirmed Historically Confirmed Recently Confirmed Recently Confirmed Historically Confirmed	1927 2008 1986 2001 2000	Endangered Threatened Threatened Endangered Endangered		\$1 \$3 \$2 \$1 \$1\$2	G5 G5 G5 G4

Common Name	Subgroup	Distribution	Year Last	Protection Status	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		G 0				
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						

Status Documente Strato Federal Stato Global	Common Name	Subgroup	Distribution	Year Last	Protection Status	Conser	vation Rank
Few-flowered Nul Sedge Sedges Historically Security participations Security Security participations Security participations Security Security participations Security Securit			Status	Documente	State Federal	State	Global
Few-flowered Nut Sedge Sedges Historically Confirmed 1985 Endangered S1 G5 Scleria pacicition Fibrous Bladderwort Other Flowering Plants Recently Confirmed Confirmed Utricularia striata Field Beadgrass Grasses Recently Confirmed 2003 Endangered S2 G4G5 Flow-led Whitetop Dasies Confirmed Dasies Confirmed Dasies Confirmed Dasies Confirmed S2 G5 Seriococarpus Initiational Dasies Other Flowering Plants Confirmed 1991 Threatened S2 G5 Globe-fruited Ludwigla Other Flowering Plants Recently Confirmed 1995 Threatened S2 G5 Globe-fruited Ludwigla Other Flowering Plants Platorically Confirmed 1984 Endangered S1 G5 Globe Platorically Confirmed 1984 Endangered S1 G5 Great Plains Flatsedge Sedges Historically Confirmed 1986 Threatened S1S2 G5T5? Cyperas Republicus septembers september	Featherfoil	Other Flowering Plants		1995	Threatened	S2	G4
Steria pauciflom Sedge Sedges Confirmed 1965 Entangletid 31 35	Hottonia inflata						
Fibrous Bladderwort Other Flowering Plants Recently Confirmed 2003 Endangered S2 G4G5	Few-flowered Nut Sedge	Sedges		1985	Endangered	S1	G5
Confirmed Conf	Scleria pauciflora						
Field Beadgrass Grasses Recently Confirmed 2003 Endangered \$2 G4G5	Fibrous Bladderwort	Other Flowering Plants		2005	Threatened	S2	G4G5
Papapatan laeve Flax-leaf Whitetop Asters, Goldenrods and Recently Confirmed 1991 Threatened S2 G5 Sericocarpus Initifolius Globe-fruited Ludwigia Other Flowering Plants Recently Confirmed 1995 Threatened S2 G5 Ladwigia sphaerocarpa Golden Dock Other Flowering Plants Historically Confirmed 1984 Endangered S1 G5 Rumes, fluerinus S4, Jugaillus S5, Jugaillus S6,	Utricularia striata						
Flax-leaf Whitetop Asters, Goldenrods and Daisles Recently Confirmed 1991 Threatened S2 G5	Field Beadgrass	Grasses		2003	Endangered	S2	G4G5
Sericocarpus linifolius Globe-fruited Ludwligia Other Flowering Plants Confirmed 1991 Threatened S2 G5 Eudwigia sphaerocarpa Golden Dock Other Flowering Plants Plants Confirmed 1984 Endangered S1 G5 Rumex fieginus Great Plains Flatsedge Sedges Historically Confirmed 1986 Threatened S1S2 G5T5? Crear Plains Flatsedge Sedges Other Flowering Plants Confirmed 1985 Threatened S2 G5 Xyris smalliana Little-leaf Tick Trefoil Other Flowering Plants Confirmed 2007 Threatened S2S3 G5 Recently Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Lemae perpusitla Minute Duckweed Other Flowering Plants Historically Confirmed 1986 Endangered S1S2 G5 Suacela linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1968 Endangered S1S2 G5 Suacela linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1968 Threatened S2 G5 Suacela linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1968 Threatened S2 G5 Suacela linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1968 Threatened S2 G5 Suacela linearis	Paspalum laeve						
Globe-fruited Ludwigla Other Flowering Plants Confirmed 1995 Threatened S2 G5 Ludwigla sphaerocarpa Golden Dock Other Flowering Plants Historically Confirmed 1984 Endangered S1 G5 Rumex fueginus Historically Confirmed 1966 Threatened S1S2 G5T5? Cyperus luquitimus sep. luquitimus se	Flax-leaf Whitetop			1991	Threatened	S2	G5
Luthrigia sphaerocarpa Golden Dock Other Flowering Plants Confirmed 1995 Infrastened S2 G5 Rumex Jueginus Great Plains Flatsedge Sedges Historically Confirmed Confirmed S2 G5 Cyperus Inputinus ssp. Inputinus ssp. Inputinus S3 G5 Large Yellow-eyed Grass Other Flowering Plants Confirmed 1985 Threatened S2 G5 Xyris smalliana Little-leaf Tick Trefoil Other Flowering Plants Pescently Confirmed 2007 Threatened S2 G5 Recently Confirmed 2008 Rare S2 G4 Rhynchaspara scirpoides Long-beaked Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchaspara scirpoides Lose-headed Beak Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Rhynchaspara chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Historically Confirmed 1986 Endangered S1S2 G5 Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed 1968 Endangered S1S2 G5 Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed 1968 Threatened S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Sericocarpus linifolius						
Golden Dock Other Flowering Plants Confirmed 1984 Endangered S1 G5 **Rumex fueginus** Great Plains Flatsedge Sedges Historically Confirmed 1966 Threatened S1S2 G5T5? **Cyperus lupulinus ssp. lupulin	Globe-fruited Ludwigia	Other Flowering Plants		1995	Threatened	S2	G5
Great Plains Flatsedge Sedges Historically Confirmed 1966 Threatened S1S2 G5T5? Cyperus lupulinus ssp. Integrinus Large Yellow-eyed Grass Other Flowering Plants Plants Confirmed Confirmed S2 G5 Xyris smalliana Little-leaf Tick Trefoil Other Flowering Plants Plants Confirmed Confirmed S2S3 G5 Desmodium ciliare Long-beaked Beak Sedge Sedges Recently Confirmed S2S3 G5 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Historically Confirmed 1944 Endangered S1 G5 Suacda linearis Narrow-leaf Sea Bilite Other Flowering Plants Historically Confirmed 1966 Endangered S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1966 Threatened S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1966 Threatened S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Ludwigia sphaerocarpa						
Great Plains Flatsedge Sedges Historically Confirmed 1966 Threatened S1S2 G5T5? Cyperus Lapulinus ssp. Large Yellow-eyed Grass Other Flowering Plants Plaints Plaints Syris smalliana Little-leaf Tick Trefoil Other Flowering Plants Pecently Confirmed 2007 Threatened S2S3 G5 Desmodium ciliare Long-beaked Beak Sedge Sedges Recently Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Plistorically Confirmed 1944 Endangered S1 G5 Suaceda linearis Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed 1968 Endangered S1S2 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Golden Dock	Other Flowering Plants		1984	Endangered	S1	G5
Cyperus lupulinus ssp. lupulinus Large Yellow-eyed Grass Other Flowering Plants Confirmed 1985 Threatened S2 G5 Xyris smalliana Little-leaf Tick Trefoil Other Flowering Plants Confirmed 2007 Threatened S2S G5 Desmodium citiare Long-beaked Beak Sedge Sedges Recently Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Confirmed 1944 Endangered S1S G5 Lemna perpusilla Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed Sauada linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed S2S G5 Historically Confirmed S2S G5 Threatened S1S2 G5 Threatened S1S2 G5 Threatened S1S2 G5 Threatened S1S2 G5	Rumex fueginus						
Little-leaf Tick Trefoil Other Flowering Plants Recently Confirmed Desmodium citiare Long-beaked Beak Sedge Sedges Recently Confirmed Desmodium citiare Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Marsh Straw Sedge Sedges Historically Confirmed Desmodium citiare 1985 Threatened S283 G4G5 Loose-headed Beak Sedge Sedges Historically Confirmed S283 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Historically Confirmed Sea Blite Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed Sauada Innearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed Sauada Innearis	Great Plains Flatsedge	Sedges		1966	Threatened	S1S2	G5T5?
Little-leaf Tick Trefoil Other Flowering Plants Confirmed Plants Personal Security Confirmed Plants Confirmed Plants Personal Security Confirmed Plants Plan							
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 Sedges Extirpated 1932 SX G5 **Rhynchospora chalarocephala** 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	Large Yellow-eyed Grass	Other Flowering Plants		1985	Threatened	S2	G5
Desmodium ciliare Long-beaked Beak Sedge Sedges Recently Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed 2008 Threatened S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Historically Confirmed 2008 Endangered S1 G5 Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed 2008 Threatened S2S3 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 2008 Endangered S2S3 G5 Threatened S2S3 G5 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 2008 Endangered S1 G5 Threatened S2S3 G5	Xyris smalliana						
Long-beaked Beak Sedge Sedges Recently Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala 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 Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Little-leaf Tick Trefoil	Other Flowering Plants		2007	Threatened	S2S3	G5
Confirmed 2008 Rare S2 G4 Rhynchospora scirpoides Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 Rhynchospora chalarocephala Marsh Straw Sedge Sedges Historically Confirmed S2S3 G4G5 Carex hormathodes Minute Duckweed Other Flowering Plants Historically Confirmed S1 G5 Lemna perpusilla Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed S1 G5 Suaeda linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed S2 G5 Historically Confirmed S2 G5 Threatened S2 G5	Desmodium ciliare						
Loose-headed Beak Sedge Sedges Extirpated 1932 SX G5 **Rhynchospora chalarocephala** 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	Long-beaked Beak Sedge	Sedges		2008	Rare	S2	G4
Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 **Carex hormathodes** Minute Duckweed Other Flowering Plants 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	Rhynchospora scirpoides						
Marsh Straw Sedge Sedges Historically Confirmed 1985 Threatened S2S3 G4G5 **Carex hormathodes** Minute Duckweed Other Flowering Plants Confirmed Confirmed 1944 Endangered S1 G5 **Lemna perpusilla** Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed S1S2 G5 **Suaeda linearis** Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Loose-headed Beak Sedge	Sedges	Extirpated	1932		SX	G5
Carex hormathodes Minute Duckweed Other Flowering Plants Confirmed 1944 Endangered S1 G5 Lemna perpusilla Narrow-leaf Sea Blite Other Flowering Plants Confirmed 1968 Endangered S1S2 G5 Suaeda linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Rhynchospora chalarocephala						
Minute Duckweed Other Flowering Plants Historically Confirmed 1944 Endangered S1 G5 **Lemna perpusilla** Narrow-leaf Sea Blite Other Flowering Plants Historically Confirmed Suaeda linearis Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed S2 G5 **Threatened S2	Marsh Straw Sedge	Sedges		1985	Threatened	S2S3	G4G5
Confirmed 1944 Endangered S1 G5	Carex hormathodes						
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	Minute Duckweed	Other Flowering Plants		1944	Endangered	S1	G5
Suaeda linearis Narrow-leaved Bush Clover Other Flowering Plants Confirmed Historically Confirmed 1986 Threatened S2 G5	Lemna perpusilla						
Narrow-leaved Bush Clover Other Flowering Plants Historically Confirmed 1986 Threatened S2 G5	Narrow-leaf Sea Blite	Other Flowering Plants	Historically Confirmed	1968	Endangered	S1S2	G5
Confirmed 1900 Theatened 32 GS	Suaeda linearis						
	Narrow-leaved Bush Clover	Other Flowering Plants		1986	Threatened	S2	G5
	Lespedeza angustifolia						

Common Name	Subgroup	Distribution	Year Last	Protection Status	Conservation Rank	
o initial in a line		Status	Documente		State	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						
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						

Common Name	Cubarous	Diotribution	VoorLest	Drotoct	tion Ctatus	Conse	votion Deal
Common Name	Subgroup	Distribution Status	Year Last Documente		tion Status Federal	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		Describe					
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							
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	Subgraup	Distribution	VoorLeet	Protection Status	Conse	rvation Rank
Common Name	Subgroup	Distribution Status	Year Last Documente		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		Commined				
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						

Subgroup	Distribution	Year Last	Protection Status	Conse	rvation Rank
	Status	Documente	State Federal	State	Global
Other Flowering Plants	Recently Confirmed	2005	Threatened	S2	G5
Other Flowering Plants	Historically Confirmed	1924	Endangered	S1	G5T5
Asters, Goldenrods and Daisies	Recently Confirmed	2004	Threatened	S2S3	G5T4
Other Flowering Plants	Recently Confirmed	2007	Threatened	S2	G4?
Other Flowering Plants	Historically Confirmed	1929	Endangered	SH	G5T5
Other Flowering Plants	Historically Confirmed	1988	Endangered	S1	G5
Rushes	Historically Confirmed	1936	Endangered	S1	G5
Sedges	Recently Confirmed	1991	Endangered	S1	G5
Other Flowering Plants	Historically Confirmed	1878	Endangered	S1	G5
Grasses	Historically Confirmed	1925	Endangered	S1S2	G4
Sedges	Possible but not Confirmed		Endangered	S1	G5
Conifers	Historically Confirmed	1923	Threatened	S2	G4
Conifers	Possible but not Confirmed	1878	Endangered	S1	G5
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	Salt panne						

Common Name	Subgroup	Distribution Status	Year Last Documente	Protection State	n Status Federal	Conse State	rvation Rank Global
Salt Shrub	Intertidal Wetlands	Recently Confirmed	1998			S1	G5
Salt shrub							
Natural Commun	ity: Marine						
Marine Back-barrier Lagoon Marine back-barrier lagoon	Marine Subtidal	Recently Confirmed	2016			S2	G5
Marine Eelgrass Meadow	Marine Subtidal	Recently 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.

SUNRISE WIND: ONSHORE ECOLOGICAL ASSESSMENT AND FIELD SURVEY REPORT

August 2022

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 | 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

NEW YORK
STATE OF POPORTUNITY
OPPORTUNITY
Environmental
Conservation

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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 Charadrius melodus Endangered Threatened

Breeding

Least Tern Sternula antillarum Threatened

Breeding

Common Tern Sterna hirundo Threatened

Breeding

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 Megaptera novaeangliae Endangered Endangered

Nonbreeding

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 Myotis septentrionalis Threatened Threatened

Maternity roosts and other summer locations

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.

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Report on Rare Animals, Rare Plants, and Significant Natural Communities

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 Beach, 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.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Sandplain Wild Flax Linum intercursum Threatened Imperiled in NYS

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

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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.

COMMON NAME HERITAGE CONSERVATION STATUS

Red Maple-Blackgum Swamp

High Quality Occurrence of Rare Community Type

Carmans River Wetlands, extending north and south of Montauk Highway: The swamp is of moderate size with good 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 community have been documented south of the proposed cable route in or along the Carmans River in Wertheim National Wildlife Refuge.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Water Pigmyweed Crassula aquatica Endangered Critically Imperiled in NYS

Carmans River, west side immediately south of Montauk Highway, 1988-08-31: Bank of an intertidal section of river at a road embankment.

Eastern Pirate Perch Aphredoderus sayanus Unlisted Critically Imperiled in NYS

sayanus

Carmans River within .3 mile south of Montauk Highway, also Yaphank Creek, 1990-11-15.

Atlantic Silverside Menidia menidia Unlisted Imperiled in NYS

Carmans River within .4 mile south of Montauk Highway, 1990-11-14.

Brackish Tidal Marsh

High Quality Occurrence of Uncommon Community Type

Carmans River Wetlands, within .4 mile south of Montauk Highway: This is a large marsh in good to fair condition, in a good landscape that is mostly protected.

The following species have been documented north of the proposed cable route in Southaven County Park.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Eastern Pirate Perch Aphredoderus sayanus Unlisted Critically Imperiled in NYS

sayanus

Carmans River just north of NYS Route 27, 2015-08-04.

Collins' Sedge Carex collinsii Endangered Critically Imperiled in NYS

Southaven County Park, within .25 mile of proposed cable route, 1986-11-04: Abandoned fish hatchery (part of Suffolk County Park) in a red maple-tupelo swamp.

Blunt-lobe Grape Fern Botrychium oneidense Threatened 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.

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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 HERITAGE CONSERVATION STATUS

Marine Eelgrass Meadow

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.

3/27/2020 Page 3 of 3



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: March 11, 2020

Consultation Code: 05E1LI00-2020-SLI-0367

Event Code: 05E1LI00-2020-E-00839 Project Name: Confidential Project

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/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: https://www.google.com/maps/place/40.81649280425459N72.91040200081957W



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. NOAA Fisheries, 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 *Myotis septentrionalis*

No critical habitat has been designated for this species.

Species profile: https://ecos.fws.gov/ecp/species/9045

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: https://ecos.fws.gov/ecp/species/6039

Red Knot Calidris canutus rufa

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864

Roseate Tern Sterna dougallii dougallii

Population: Northeast U.S. nesting population

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083

Threatened

Threatened

Threatened

Endangered

Flowering Plants

NAME

Sandplain Gerardia Agalinis acuta

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8128

Seabeach Amaranth *Amaranthus pumilus*

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549

Critical habitats

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

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 | F: (518) 402-8925 www.dec.ny.gov

April 15, 2021

Sarah Boucher Gravel Stantec 30 Park Drive Topsham, ME 04086

Re: Sunrise Offshore Wind Farm

County: Suffolk Town/City: Brookhaven

Dear Sarah 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 at, along, or near the onshore components of the project.

The New York Natural Heritage Program database does not include full information on the rare and listed species occurring in New York's offshore marine waters. For information on the presence of rare and listed marine species in the vicinity of the offshore components of this project, on potential impacts and permit considerations regarding these species, and on other marine natural resources, please contact the NYSDEC Division of Marine Resources at (631) 444-0462, marineprotectedresources@dec.ny.gov.

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 NYSDEC Division of Environmental Permits.

Sincerely,

Nicholas Conrad

Information Resources Coordinator New York Natural Heritage Program



The following state-listed animals have been documented at or near the onshore components and landfall locations of the proposed Sunrise Offshore Wind Farm.

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 Division of Environmental Permits.

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

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	FEDERAL LISTING	
Piping Plover Breeding	Charadrius melodus	Endangered	Threatened	1224
Least Tern Breeding	Sternula antillarum	Threatened		4472
Common Tern Breeding	Sterna hirundo	Threatened		12085

The following species has been documented at several locations within .5 mile of the onshore cable route, and at many more locations within 1.5 miles, between Smith Point County Park and NYS Route 112. 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.

CCIENTIFIC NAME

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	FEDERAL LISTING	
Northern Long-eared Bat				
	Myotis septentrionalis	Threatened	Threatened	
Maternity roosts and other summer locations				15849

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This report only includes records from the NY Natural Heritage database.

COMMONIMAME

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

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

4/15/2021 Page 1 of 1



Report on Rare Animals, Rare Plants, and Significant Natural Communities

The following rare plants, rare animals, and significant natural communities have been documented at or near the onshore components and landfall locations of the proposed Sunrise Offshore Wind Farm.

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. For species documented near the project site, if suitable habitat is present at the project site, the species may also be present. Field surveys may be necessary to determine the status of a species or its habitat at the project site, particularly for areas that are currently undeveloped. 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 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 in this report are listed as Endangered or Threatened by 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 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 location 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 Beach, 2017: Sand beach.

Maritime Beach and
Maritime Intertidal Gravel/Sand Beach

High Quality Occurrences of Uncommon Community Types

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 adjacent to the proposed cable route in Southaven County Park.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Eastern Pirate Perch Aphredoderus sayanus Unlisted Critically Imperiled in NYS

sayanus

Carmans River (Hards Lake) just north of NYS Route 27, 2015-08-04.

4/15/2021 Page 1 of 3

The following species have been documented just to the north of the proposed cable route in Southaven County Park.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Collins' Sedge Carex collinsii Endangered Critically Imperiled in NYS

Southaven County Park, within .2 mile of proposed cable route, 1986-11-04: Abandoned fish hatchery in a red maple-tupelo

swamp.

Blunt-lobe Grape Fern Botrychium oneidense Threatened Imperiled in NYS

Southaven County Park, within .2 mile of proposed cable route, 1986-11-04: In wet soil under shrubs and vines in red maple swamp.

The following species and community have been documented south of the proposed cable route in or along the Carmans River in Wertheim National Wildlife Refuge.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Water Pigmyweed Crassula aquatica Endangered Critically Imperiled in NYS

Carmans River, .2 mile south of proposed cable route, 1988-08-31: Bank of an intertidal section of river at a road embankment.

Eastern Pirate Perch Aphredoderus sayanus Unlisted Critically Imperiled in NYS

Carmans River, .4 mile south of proposed cable route, and Yaphank Creek, 1/3 mile south of proposed cable route, 1990.

Red Maple-Blackgum Swamp

High Quality Occurrence of Rare Community Type

Wetlands along the Carmans River, extending north to the south side of NYS Route 27, and also extending north along Yaphank Creek to 1/3 mile south of the proposed cable route The swamp is of moderate size with good 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 has been documented within .4 mile of the proposed cable route.

COMMON NAME SCIENTIFIC NAME NY STATE LISTING HERITAGE CONSERVATION STATUS

Sandplain Wild Flax Linum intercursum Threatened Imperiled in NYS

Station Avenue roadside, .6 mile south of intersection with Horseblock Road (County Route 160) and .4 mile southwest of proposed cable route, 1996-08-08: The plants are on a pine barrens roadside with very sparse vegetation, dominated by grasses and legumes.

4/15/2021 Page 2 of 3

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 HERITAGE CONSERVATION STATUS

Marine Eelgrass Meadow

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.

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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/97703.html for Ecological Communities of New York State.

4/15/2021 Page 3 of 3



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: April 19, 2021

Consultation Code: 05E1LI00-2021-SLI-0492

Event Code: 05E1LI00-2021-E-01156

Project Name: Onshore Transmission Project

Subject: List of threatened and endangered species that may occur in your proposed project

location 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/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: 05E1LI00-2021-SLI-0492
Event Code: 05E1LI00-2021-E-01156
Project Name: Onshore Transmission Project
Project Type: TRANSMISSION LINE

Project Description: The described section of the proposed onshore transmission project will

traverse along Victory Avenue in Shirley, NY.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.80148595,-72.89669998231415,14z



Counties: Suffolk County, New York

3

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 Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Piping Plover Charadrius melodus

Threatened

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. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/6039

Red Knot Calidris canutus rufa

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864

Roseate Tern Sterna dougallii dougallii

Endangered

Population: Northeast U.S. nesting population

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083

Flowering Plants

NAME STATUS

Sandplain Gerardia Agalinis acuta

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8128

Seabeach Amaranth *Amaranthus pumilus*

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549

Critical habitats

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



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: April 19, 2021

Consultation Code: 05E1LI00-2021-SLI-0493

Event Code: 05E1LI00-2021-E-01158

Project Name: Onshore Transmission Project

Subject: List of threatened and endangered species that may occur in your proposed project

location 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.*).

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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)

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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/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.

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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: 05E1LI00-2021-SLI-0493
Event Code: 05E1LI00-2021-E-01158
Project Name: Onshore Transmission Project
Project Type: TRANSMISSION LINE

Project Description: The outlined segment of the proposed onshore transmission project will

traverse from the existing road north to the existing infrastructure. The

timeline for the project is TBD.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.818811,-73.07195827317469,14z



Counties: Suffolk County, New York

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.

NOAA Fisheries, 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 Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Piping Plover Charadrius melodus

Threatened

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. The location of the critical habitat is not available.

Species profile: https://ecos.fws.gov/ecp/species/6039

Red Knot Calidris canutus rufa

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1864

Roseate Tern Sterna dougallii dougallii

Endangered

Population: Northeast U.S. nesting population

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083

Flowering Plants

NAME

Sandplain Gerardia Agalinis acuta

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8128

Seabeach Amaranth *Amaranthus pumilus*

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8549

Critical habitats

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

SUNRISE WIND: ONSHORE ECOLOGICAL ASSESSMENT AND FIELD SURVEY REPORT

August 2022

Appendix D USACE WETLAND DELINEATION FORMS AND SITE PHOTOGRAPHS





WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	Sunrise Wind	l/ Fire Island, NY					Stantec Project #:	2028113199		Date:	06/09/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1:	Andy Smith			Investi	igator #2:					State:	New York
Soil Unit:	-						VI/WWI Classification	:		Wetland ID:	W01ASA
Landform:	Rise	1 66 1			al Relief:			D - 4		Sample Point:	Upland
Slope (%):	0-1%	Latitude:	inal fau thia		ongitude:			Datum: ☑ Yes □	No	Community ID:	Upland
		ditions on the site typ or Hydrology □sign				o, explain in	Are normal circumst			1	
Are Vegetation	□, Soil □,	or Hydrology ⊟sigi or Hydrology ⊑natι	irally proble	emetic?			✓ Yes	□ No	L:		
SUMMARY OF		or riyurology — natt	arany probit	cmatic:			103	_110			
Hydrophytic Veg		sent?		✓ Yes	. □ No			Hydric Soils	Present?		☐ Yes ☑ No
Wetland Hydrol				Yes						Within A Wetlan	
Remarks:	ogy : 1000	•			110				Jg . J		
HYDROLOGY											
	ology Indic:	ators (Check here if	indicators	are not n	recent):⊏					
Primary:		ators (Oneck nere ii	indicators	are not p	JICSCIII	<i>)</i> —			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil	
	A2 - High Wa				B13 - Aqu				=	B10 - Drainage P	
	A3 - Saturation B1 - Water M			F	B15 - Mai C1 - Hydr				F	B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots		Ē	C8 - Crayfish Bur	
	B3 - Drift De				C4 - Pres	ence of R	educed Iron		⊑		isible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Der			F	C6 - Rece C7 - Thin		eduction in Tilled Soils		F	D1 - Stunted or S D2 - Geomorphic	
		on Visible on Aerial Ima	gerv	F.	Other (Ex				E	D3 - Shallow Aqu	
		y Vegetated Concave S		_	04.0. (22		, , , , , , , , , , , , , , , , , , ,			D4 - Microtopogra	aphic Relief
										D5 - FAC-Neutral	l Test
Field Observat	ions:										
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No
Water Table Pre		☐ Yes ☑ No	Depth:		(in.)			· · · · · · · · · · · · · · · · · · ·	urology i i		100 = 110
Saturation Pres	ent?	☐ Yes 🗹 No	Depth:		(in.)						
Describe Record	ed Data (str	eam gauge, monitorin	ıg well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Remarks:											
Remarks:											
SOILS											
SOILS Map Unit Name						S	Series Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	group):										
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to	the depth needed to document the indi	cator or confirm the a		ators.) (Type: C=		Series Drainage Class	wered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix)	Toytura
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains;		T	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	Horizon	Color (Matrix Moist)	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Bottom Depth 2	Horizon 1	Color (I	Matrix Moist) 2/2	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	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	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 2/2 5/3	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	 	(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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type		(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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	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	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): tion (Describe to Bottom Depth 2 18	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Bottom Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check here	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100 S8 - Polyl S9 - Thin	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): tion (Describe to Depth 2 18	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100 tot preser S8 - Polyy S9 - Thin F1 - Loan	Concentration, D	Color (Moist)	Mottles % Indicatol	Type s for Proble A10 - 2 cm A16 - Coasi	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): tion (Describe to Describe to Depth 2 18 Soil Field Ir A1- Histosol A2 - Histic E1 A3 - Black H A4 - Hydroge	Horizon 1 2 dicators (check heropipedon istic an Sulfide	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist) w Surface (LRR R, MLRA 149B) Wineral (LRR K, L) Matrix	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 18	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist) w Surface (LRR R, MLRA 149B) dace (LRR R, MLRA 149B) dineral (LRR K, L) Matrix K urface	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): tion (Describe to Depth 2 18	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Describe to Depth 2 18	Horizon 1 2 dicators (check here) istic en Sulfide d Layers ed Below Dark Surface Dark Surface Huck Mineral	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): tion (Describe to Depth 2 18	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): tion (Describe to Depth 2 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 18 18 19 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 2/2 5/3 ors are n	% 100 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01ASA Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	e species.)			
Tree Stratum (Plo	ot size: 10 meter radius)				
	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: 75.0% (A/B)
7.					(112)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	0			FACW spp 0
					FAC spp105
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp 0
1.	Morella pensylvanica	50	Υ	FAC	UPL spp. <u>15</u> x 5 = <u>75</u>
2.	Toxicodendron radicans	30	Υ	FAC	
3.					Total 120 (A) 390 (B)
4.					
5.					Prevalence Index = B/A = 3.250
6.					TOTAL CITE OF THE COLOR
7.	_ 				
8.					Hydronhytia Vagatation Indicators:
					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					
	Total Cover =	80			Yes No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	t size: 2 meter radius)				
1.	Toxicodendron radicans	25	Υ	FAC	*1.15 / 41.15 / 11.15 / 11.15
2.	Artemisia vulgaris	15	Υ	UPL	* Indicators of hydric soil and wetland hydrology must be
3.	<u></u>				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.					O It IOI I Weady plants less than 2 in DDI and greater than 2.00 ft
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					woody piditts 1855 tildii 3.20 ft. tali.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	40			
	. 516. 50701				
Woody Vine Strati	um (Plot size: 10 meter radius)				
1.					
2.					
					Hydrophytic Vegetation Bresent - T-Vee - No
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.				-	
	Total Cover =				
Remarks:	Prevelance index is > than 3.0, and no ind	icators o	f hydric s	soil or wet	tland hydrology present.
Additional Ren	marks:				
I					



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Applicant:		d/ Fire Island, NY					Stantec Project #:	2028113199)	Date:	06/09/20
Applicant: Investigator #1:	Sunrise Wind	TLLC		Investi	gator #2:					County: State:	Suffolk New York
Soil Unit:	Andy Similar			IIIVCSti	gator #2.		/I/WWI Classification:	:		Wetland ID:	W01ASA
Landform:	Floodplain			Loc	al Relief:					Sample Point:	Wetland
Slope (%):	0-1%	Latitude:			ongitude:			Datum	:	Community ID:	E2SS/EM
Are climatic/hyc	drologic cond	ditions on the site typ	ical for this	time of	year? (If no	o, explain in	remarks)		No]	
		or Hydrology □sign					Are normal circumst		ıt?		
Are Vegetation	□, Soil □,	or Hydrology ⊑ natı	urally proble	ematic?			✓ Yes	□No			
SUMMARY OF											
Hydrophytic Ve					□ No			Hydric Soils			
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Sam	pling Point \	Within A Wetlan	d? Yes No
Remarks:											
LIVEROL COV											
HYDROLOGY											
		ators (Check here if	indicators	are not p	resent)⊏					
Primary:	: A1 - Surface	Water			B9 - Wate	ar Stained	Leaves		Secondary:	B6 - Surface Soil	Cracks
	A2 - High Wa			E	B13 - Aqu				E	B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	Lines
I =	B1 - Water M				C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer B3 - Drift De			✓			spheres on Living Roots educed Iron		F	C8 - Crayfish Buri	rows sible on Aerial Imagery
	B4 - Algal Ma			F			duction in Tilled Soils		F	D1 - Stunted or S	
	B5 - Iron Dep			E	C7 - Thin				Ξ	D2 - Geomorphic	
		on Visible on Aerial Ima		E.	Other (Ex	plain in Re	marks)			D3 - Shallow Aqui	tard
	B8 - Sparsely	y Vegetated Concave S	urface						F	D4 - Microtopogra	aphic Relief
										D5 - FAC-Neutral	rest
Field Observat											
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes □ No
Water Table Pr		Yes No	Depth:		(in.)			•	0,		
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitorin	ıg well, aeria	al photos,	previous	inspectio	ns), if available:		N/A		
Remarks:	A wrack lin	e was observed with	in the wetla								
	A wrack lin	e was observed with	in the wetla								
SOILS		e was observed with	in the wetla		'	'	,				
SOILS Map Unit Name):	e was observed with	in the wetla				eries Drainage Class:	:			
SOILS Map Unit Name Taxonomy (Sub	e: ogroup):			and		S	eries Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	egroup):			and		S		vered/Coated Sand Grains	s; Location: PL=Pore	Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	e: ogroup): otion (Describe to Bottom	the depth needed to document the indi	cator or confirm the a	and bsence of indica Matrix	itors.) (Type: C=C	S	eries Drainage Class:	vered/Coated Sand Grains			Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	the depth needed to document the indi	cator or confirm the a	bsence of indica Matrix Moist)	ntors.) (Type: C=C	Soncentration, D	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cou	vered/Coated Sand Grains Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): ogroup): btion (Describe to Bottom Depth 2	the depth needed to document the indi Horizon 1	cator or confirm the a	bsence of indica Matrix Moist) 2/2	% 100	S Concentration, D-	eries Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	vered/Coated Sand Grains Mottles %	Type 	Location	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	e: pgroup): btion (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	cator or confirm the a Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2	% 100 85	Concentration, D:	eries Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	es: pgroup): ption (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indica Matrix Woist) 2/2 5/2	% 100 85	Concentration, D:	eries Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cox Color (Moist) 5/6	Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	e: pgroup): btion (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	cator or confirm the a Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2	% 100 85	Concentration, D:	eries Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	pgroup): htion (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2	% 100 85	SConcentration, D. 7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	es: pgroup): ption (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2	tors.) (Type: C=C	SConcentration, D. 7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	e: bgroup): btion (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2	% 100 85	7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	e: bgroup): btion (Describe to Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2	% 100 85	7.5YR	Color (Moist) 5/6	Wered/Coated Sand Grains Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): pgroup): ption (Describe to Depth 2 16 Soil Field In	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indical Matrix Moist) 2/2 5/2	% 100 85 oot preser	Concentration, D	Depletion, RM=Reduced Matrix, CS=Cox Color (Moist) 5/6	Wered/Coated Sand Grains Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): btion (Describe to Depth 2 16	Horizon 1 2	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 tot preser S8 - Polyv	7.5YR	Depletion, RM=Reduced Matrix, CS=Co. Color (Moist) 5/6 w Surface (LRR R, MLRA 1498)	Mottles % 3 Indicato	Type C rs for Proble A10 - 2 cm	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	e: Digroup): Dition (Describe to Depth 2 16 Soil Field Ir A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check her	Color (I 10YR 10YR	bsence of indical Matrix Moist) 2/2 5/2	% 100 85 oto preser S8 - Polyy S9 - Thin	7.5YR tt	Depletion, RM=Reduced Matrix, CS=Cox Color (Moist) 5/6 w Surface (LRR R, MLRA 149B)	Wered/Coated Sand Grains Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 16 Soil Field Ir A1 - Histosol A2 - Histos Ir A3 - Black H	the depth needed to document the indi Horizon 1 2 ndicators (check here)	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 ot preser \$8 - Polyn F1 - Loarn	Concentration, D. 7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	e: Digroup): Dition (Describe to Depth 2 16 Soil Field Ir A1- Histosol A2 - Histic E	Horizon 1 2 ndicators (check her	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oto preser S8 - Polyy S9 - Thin	7.5YR	Depletion, RM=Reduced Matrix, CS=Coo Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) dice (LRR R, MLRA 149B) Matrix Matrix	Mottles % 3 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	e: Dgroup): Dtion (Describe to Depth 2 16 Soil Field Ir A1- Histosol A2 - Histic E A3 - Black H A4 - Hydroge A5 - Stratifies A11 - Deplete	the depth needed to document the indi- Horizon 1 2 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Depl6 F6 - Redo	7.5YR tt	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix K trface	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	Bottom Depth 2 16 Soil Field Ir A1- Histosol A2 - Histic E, A3 - Black H A4 - Hydroge A5 - Stratifiee A11 - Deplet A12 - Thick I	Horizon 1 2 ndicators (check helpipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	segroup): pgroup): ption (Describe to Depth 2 16	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 Jark Surface Juck Mineral	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Depl6 F6 - Redo	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): btion (Describe to Depth 2 16	the depth needed to document the indicators	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	bgroup): btion (Describe to Depth 2 16	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 Muck Mineral Sleyed Matrix kedox	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam 49B) K. L. R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) 5 (MLRA 149B) 45, 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): pgroup): ption (Describe to Depth 2 16	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 Muck Mineral Sleyed Matrix kedox	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): pgroup): ption (Describe to Depth 2 16	Horizon 1 2	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	s: Digroup): Dition (Describe to Depth 2 16	Horizon 1 2	Color (I 10YR 10YR	besence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato Indicators disturbed introductions **Indicators **Indic	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam 49B) K. L. R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) aCe must be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): pgroup): ption (Describe to Depth 2 16	Horizon 1 2	Color (I 10YR 10YR	bsence of Indica Matrix Moist) 2/2 5/2 ors are n	% 100 85 oot preser \$8 - Polyn F1 - Loarn F2 - Loarn F3 - Deple F6 - RedG F7 - Deple	Concentration, D. 7.5YR	Color (Moist)	wered/Coated Sand Grains Mottles % 3 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01ASA Sample Point Wetland
VEGETATION	(Species identified in all uppercase are non not size: 10 meter radius)	native species.)			
Tree Stratum (Pic	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.					2011111ailea 100t 1101toileat
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: 100.0% (A/B)
7.				-	
8.				-	Prevalence Index Worksheet
9.				-	Total % Cover of: Multiply by:
10.					OBL spp20
	Total Cove	er = 0			FACW spp x 2 =60
					FAC spp. 0 x 3 = 0
	tum (Plot size: 5 meter radius)				FACU spp 0 x 4 = 0
1.	Rosa palustris	20	Y	OBL	UPL spp. 0 x 5 = 0
2.	Iva frutescens	10	Υ	FACW	
3.				-	Total(A)(B)
4.					5
5.					Prevalence Index = B/A =
6.					
7.					Hisduanhi dia Vanatatian Indiantana
8. 9.					Hydrophytic Vegetation Indicators:
10.	-				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	Total Cove				✓ Yes ☐ No Dominance Test is > 50%✓ Yes ☐ No Prevalence Index is ≤ 3.0 *
	Total Cove	ei – 30			<u> </u>
Harb Stratum /Dla	t aiza. 2 matar radius)				 ☐ Yes ☑ No Morphological Adaptations (Explain) * ☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	t size: 2 meter radius) Phragmites australis	20	Υ	FACW	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.			<u> </u>		* 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.
10.				-	tall.
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					woody plants less than 5.20 ft. tall.
14.					
15.	<u></u>				Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cove	er = 20			
	ım (Plot size: 10 meter radius)				
1.					
2.					Hydronhytia Vagatatian Brasant - G. Van G. N.
3. 4.					Hydrophytic Vegetation Present ☑ Yes ☐ No
5.					
).).	Total Cove	er = 0		-	
Remarks:	Total Cove	<u> </u>			
T.Ciliaiks.					
Additional Day	narko:				
Additional Ren	iidi No.				



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	Sunrise Wind	d/ Fire Island, NY					Stantec Project #:	2028113199		Date:	06/09/20
Applicant:	Sunrise Wind	LLC								County:	Suffolk
Investigator #1:	Andy Smith			Investi	igator #2:					State:	New York
Soil Unit:							VI/WWI Classification:	:		Wetland ID:	W01ASB
Landform:	Rise				cal Relief:					Sample Point:	Upland
Slope (%):	0-1%	Latitude:			ongitude:			Datum:		Community ID:	Upland
		ditions on the site typ				o, explain in			No		
Are Vegetation	□, Soil □,	or Hydrology ☐sigr	nificantly dis	sturbed?			Are normal circumst		i?		
Are Vegetation	□, Soil □, (or Hydrology ☐ nati	urally proble	ematic?			Yes	□No			
SUMMARY OF		10							- 40		
Hydrophytic Ve				Yes	_			Hydric Soils		A (: 41 - :)	☐ Yes ☑ No
Wetland Hydrol	logy Present	. ?		_ Yes	i L INO			is this samp	oling Point v	Within A Wetlar	id? • Yes • No
Remarks:											
LIVEROL COV											
HYDROLOGY											
		ators (Check here if	findicators	are not p	present)⊏			_		
Primary		Mater		_	DO Mata	r Ctainad	Laguas		Secondary:	DC Curfoss Cail	Cracks
l F	A1 - Surface A2 - High Wa			F	B9 - Wate B13 - Aqu				E	B6 - Surface Soil B10 - Drainage P	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim	
	B1 - Water M				C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer			F			spheres on Living Roots educed Iron		F	C8 - Crayfish Bur	rrows /isible on Aerial Imagery
	B3 - Drift Dep B4 - Algal Ma			F			educed fron eduction in Tilled Soils		F	D1 - Saturation v	
E	B5 - Iron Dep				C7 - Thin				Ē	D2 - Geomorphic	
I =		on Visible on Aerial Ima		Ε.	Other (Ex	plain in Re	emarks)			D3 - Shallow Aqu	
	B8 - Sparsely	y Vegetated Concave S	Surface						E	D4 - Microtopogr D5 - FAC-Neutra	
										D5 - FAC-Neulra	li Test
Field Observat											
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Pr	esent?	Yes 🗹 No
Water Table Pr		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	ded Data (stre	eam gauge, monitorir	ng well, aeria	al photos,	. previous	inspectio	ns) if available:		N/A		
					′ '		no), ii avallabio.				
Remarks:					, I		ne), ii avallable.				
					, 1		noj, ii avallabio.				
SOILS				'	· 1	·	,				
SOILS Map Unit Name					· 1	·	Geries Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	ogroup):					5	Series Drainage Class				
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	the depth needed to document the ind	icator or confirm the a	bsence of indica		5	,	wered/Coated Sand Grains;	Location: PL=Pore L	Lining, M=Matrix)	Tukus
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to			bsence of indica	ators.) (Type: C=C	5	Series Drainage Class	wered/Coated Sand Grains;	T		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Horizon	Color (I	ibsence of indica Matrix Moist)	ators.) (Type: C=C	Concentration, D	Series Drainage Class. -Depletion, RM-Reduced Matrix, CS-Color (Moist)	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 4/4	% 100	Concentration, D	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Col Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to) Bottom Depth 16	Horizon 1 	Color (I	Matrix Moist) 4/4	% 100	Concentration, D	Series Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to: Bottom Depth 16	Horizon 1 	Color (I 10YR 	Matrix Woist) 4/4	% 100	Concentration, D	Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to: Bottom Depth 16	Horizon 1 	Color (I 10YR	Matrix Moist) 4/4	% 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to: Bottom Depth 16	Horizon 1	Color (I 10YR 	Matrix Moist) 4/4	% 100	Concentration, D	Ceries Drainage Class:	Mottles %	Type		(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): ption (Describe to: Bottom Depth 16	Horizon 1	Color (I 10YR 	Matrix Moist) 4/4	% 100	Concentration, D	Ceries Drainage Class:	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to: Bottom Depth 16	Horizon 1	Color (I 10YR 	Matrix Moist) 4/4	% 100	Concentration, D	Ceries Drainage Class:	Mottles %	Type		(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0	pgroup): ption (Describe to: Bottom Depth 16	Horizon 1	Color (I	Matrix Moist) 4/4	% 100	Concentration, D	Ceries Drainage Class:	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0	ogroup): ption (Describe to: Bottom Depth 16 Soil Field In	Horizon 1	Color (I	Matrix Moist) 4/4 ors are r	% 100 ot preser	Concentration, D	Series Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Wered/Coated Sand Grains: Mottles	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	ogroup): otion (Describe to Depth 16 Soil Field In A1- Histosol	Horizon 1	Color (I	Matrix Moist) 4/4	% 100 S8 - Polyv	Concentration, D	Series Drainage Class: -Depletion, RM-Reduced Matrix, CS-Co Color (Moist)	Mottles %	Type s for Proble A10 - 2 cm	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0	ogroup): otion (Describe to Depth 16	Horizon 1 ndicators (check he	Color (I	Matrix Moist) 4/4 ors are r	% 100 S8 - Polyy S9 - Thin	Concentration, D	Series Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Wered/Coated Sand Grains: Mottles	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pogroup): potion (Describe to Depth 16	Horizon 1	Color (I	Matrix Moist) 4/4 ors are r	% 100	concentration. D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Depth 16	Horizon 1	Color (I	Matrix Woist) 4/4 ors are r	% 100 S8 - Polyv S9 - Thin F1 - Loarm F3 - Deple F3 - Depl	Concentration. D	Color (Moist)	Mottles % Indicator	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	Color (I	Matrix Moist) 4/4 ors are r	% 100	Concentration, D	Series Drainage Class	Mottles %	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color (I	Matrix Moist) 4/4 ors are r	% 100 S8 - Polyv S9 - Thin F1 - Loarm F3 - Deple F3 - Depl	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Describe to D	Horizon 1	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Describe to Depth 16	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Sleyed Matrix Redox	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Degroup): Defin (Describe to: Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Degroup): Defin (Describe to: Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Oark Surface Muck Mineral Sleyed Matrix Redox	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator [[[[[[[[[[[[[[[[[[Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Degroup): Defin (Describe to: Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator [[[[[[[[[[[[[[[[[[Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	Degroup): Defin (Describe to: Depth 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix	Color (I	Matrix Moist) 4/4	% 100	concentration, D	Color (Moist)	Mottles % Indicator [[[[[[[[[[[[[[[[[[Type	Location	(e.g. clay, sand, loam) sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Describe to Depth 16	Horizon 1 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix Redox I Matrix	Color (I	Matrix Moist) 4/4 ors are r	% 100	concentration, D	Color (Moist)	Mottles % Indicator [[[[[[[[[[[[[[[[[[Type	Location	(e.g. clay, sand, loam) sand 149B) R.K., L. R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (IS (MLRA 149B) 145, 149B) face



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01ASB Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	re species)			
	ot size: 10 meter radius)	e species.)			
·	Species Name	% Cover D	ominant	Ind.Status	Dominance Test Worksheet
1.	<u></u>				
2.					Number of Dominant Species that are OBL, FACW, or FAC:(A)
3.					
4.					Total Number of Dominant Species Across All Strata:2 (B)
5.					D
6. 7.	 				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
8.	 				Prevalence Index Worksheet
9.	<u></u>				Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	= 0			FACW spp. 0 x 2 = 0
					FAC spp. 0 x 3 = 0
Sapling/Shrub Str	ratum (Plot size: 5 meter radius)				FACU spp. 50 x 4 = 200
1.	Rosa multiflora	30	Υ	FACU	UPL spp. 0 x 5 = 0
2.	Prunus serotina	20	Υ	FACU	
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A =
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9. 10.				-	Yes No Rapid Test for Hydrophytic Vegetation
10.	 Total Cover =				✓ Yes □ No Dominance Test is > 50%□ Yes ☑ No Prevalence Index is ≤ 3.0 *
	Total Covel –	- 30			☐ Yes☑ No☐ Prevalence Index is ≤ 3.0 *☐ Yes☑ NoMorphological Adaptations (Explain) *
Herb Stratum (DI	ot size: 2 meter radius)				Yes No
1.					Tes Mo Frobletti 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 height (DBH), regardless of height.
7.					height (DBH), regardless of height.
8.					
9.	<u></u>				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					All borbosses (non-vised) A slante, regardless of slant and
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 =				Troody Villes 7 7 3
	Total Covel –	U			
Woody Vine Strat	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
	Total Cover =	= 0			
Remarks:					
Additional Re	marks:				



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

Project/Site:	Sunrise Wind	l/ Fire Island, NY					Stantec Project #:	2028113199	l .	Date:	06/09/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1:	Andy Smith			Investi	gator #2:					State:	New York
Soil Unit:							VI/WWI Classification:			Wetland ID:	W01ASB
Landform:	Floodplain				al Relief:		е			Sample Point:	Wetland
Slope (%):	0-1%	Latitude:			ongitude:			Datum:		Community ID:	E2SS/EM
		litions on the site typ				o, explain in			No		
		or Hydrology ☐sign					Are normal circumsta		t?		
		or Hydrology ⊑ nat∟	irally proble	ematic?			Yes	□No			
SUMMARY OF											
Hydrophytic Veg				Yes				Hydric Soils			
Wetland Hydrolo	ogy Present	?		Yes	□ No			Is This Sam	oling Point \	Within A Wetlan	d?
Remarks:											
HYDROLOGY											
Wetland Hydro	logy Indica	ators (Check here if	indicators	are not p	resent)⊏					
<u>Primary:</u>				_					Secondary:		
	A1 - Surface			E	B9 - Wate				F	B6 - Surface Soil	
	A2 - High Wa A3 - Saturation			F	B13 - Aqu B15 - Mar					B10 - Drainage Pa B16 - Moss Trim I	
	B1 - Water M				C1 - Hydro					C2 - Dry-Season	
	B2 - Sedimer			✓			spheres on Living Roots			C8 - Crayfish Burr	
J	B3 - Drift Dep	oosits					educed Iron				sible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or St	
	B5 - Iron Dep			E	C7 - Thin				F	D2 - Geomorphic	
		on Visible on Aerial Ima v Vegetated Concave Si		F	Other (Ex	piain in Re	emarks)		F	D3 - Shallow Aqui D4 - Microtopogra	
_	Do - Oparacij	vegetated concave of	uriacc						Ē	D5 - FAC-Neutral	
Field Observat	ons.										
Surface Water F		□ Yes ☑ No	Donth		(in)						
Water Table Pre		✓ Yes ✓ No	Depth:	10	(in.) (in.)			Wetland Hy	drology Pr	esent?	Yes No
Saturation Prese		□ Yes □ No	Depth: Depth:	10	(in.)						
			· ·		` '						
		eam gauge, monitorin			previous	inspectio	ns), if available:		N/A		
Remarks:	A wrack lin	e was observed with	in the wetla	and							
	A wrack line	e was observed with	in the wetla	and							
SOILS		e was observed with	in the wetla	and							
SOILS Map Unit Name		e was observed with	in the wetla	and		S	eries Drainage Class:				
SOILS Map Unit Name: Taxonomy (Sub	group):										
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group):			bsence of indica	ntors.) (Type: C=C		Series Drainage Class:	vered/Coated Sand Grains	Location: PL=Pore L	.ining, M=Matrix)	-
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to the Bottom	the depth needed to document the indi	cator or confirm the a	bsence of indica			=Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains		1	Texture
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to t Bottom Depth	the depth needed to document the indi	cator or confirm the a	bsence of indica Matrix Moist)	%	Concentration, D		vered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 2	the depth needed to document the indicember of t	Color (I	bsence of indica Matrix Moist) 2/2	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	wered/Coated Sand Grains Mottles %	Type 	Location 	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to t Bottom Depth	the depth needed to document the indi	cator or confirm the a	bsence of indica Matrix Moist)	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	vered/Coated Sand Grains; Mottles %	Туре	Location M	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 2	the depth needed to document the indicember of t	Color (I	bsence of indica Matrix Moist) 2/2	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	wered/Coated Sand Grains Mottles %	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 the Depth 2 9	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1	% 100 100 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to the Depth 2 9	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR	bsence of indice Matrix Moist) 2/2 4/1	% 100 100 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to the Depth 2 9	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1	% 100 100 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 3	Type C	Location M	(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 9	the depth needed to document the indices the depth needed to document the indices the indices that the indic	Color (I 10YR 10YR	bsence of indica Matrix Moist) 2/2 4/1	% 100 100 	7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3	Type C C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to 1) Bottom Depth 2 9	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1	% 100 100	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to the Bottom Depth 2 9	the depth needed to document the indices the depth needed to document the indices the indices that the indic	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1 ors are in indicate of indic	% 100 100 oot presen	7.5YR	Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 3 Indicato	Type C	Location M matic Soils 1	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to a Bottom Depth 2 9	Horizon 1 2 dicators (check hei	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1 ors are n	% 100 100 sot presen S8 - Polyv	7.5YR	Color (Moist) 5/6 W Surface (LRR R, MLRA 1498)	Mottles % 3 Indicato	Type C s for Proble	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 9 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 dicators (check here	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1 ors are in indicate of indic	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 1498)	Mottles % 3 Indicato	Type C s for Proble A10 - Coast	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 9 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR	bsence of indical Matrix Moist) 2/2 4/1 ors are n	% 100 100 tot preser \$8 - Polyy \$9 - Thin F1 - Loam	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) 306 (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % 3 Indicato	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M	Location M matic Soils ¹ Muck (LRR K, L, MLRA ¹) Prairie Redox (LRR	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to the sound of the s	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR	Matrix Moist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix	Mottles % 3 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K LX L	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to the street of the	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR	beence of indical Matrix Moist) 2/2 4/1 ors are in	% 100 100 oot preser 88 - Polyy S9 - Thin F1 - Loam F2 - Loam	7.5YR tt	Color (Moist) 5/6	Mottles % 3 Indicato	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA ¹) Prairie Redox (LRR	(e.g. clay, sand, loam) sandy loam sand LRR K, L, R) LRR K, L, L)
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Top the Top	Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % 3 Indicato	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) urface (LRR K, L, M) ue Below Surface (LRR K, L, L) langanese Masses	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to the state of the s	Horizon 1 2 dicators (check herostic in Sulfide de Layers ad Below Dark Surface duck Mineral	Color (I 10YR 10YR	Matrix Violist) 2/2 4/1 ors are in	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	wered/Coated Sand Grains Mottles %6 3 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to the street of the	Horizon 1 2 dicators (check here) stic en Sulfide d Layers ed Below Dark Surface Da	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	wered/Coated Sand Grains Mottles % Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L M) ue Below Surface (LRR K, L M) ue Below Surface (LRR K, L M) us Below Surface (LRR K, L M)	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to 1) Bottom Depth 2 9	Horizon 1 2 dicators (check here) bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral bleyed Matrix ledox	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	wered/Coated Sand Grains Mottles %6 3 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) anganese Masses ont Floodplain Soil Spodiic (MLRA 1444, 1	(e.g. clay, sand, loam) sandy loam sand 49B) 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 2 NRCS Hydric S	group): tion (Describe to Depth 2 9	Horizon 1 2 dicators (check here) bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral bleyed Matrix ledox	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	wered/Coated Sand Grains Mottles % 3 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 9	Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles %	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) Urface (LRR K, L, M) ue Below Surface (LRR K, L langanese Masses ont Floodplain Soil Spodic (MLRA 144A, 1 arent Material Shallow Dark Surf	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to	Horizon 1 2	Color (I 10YR 10YR	bsence of indical Matrix Moist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicato Indicators of disturbed of dis	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand 49B) K. L. R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace nust be present, unless
SOILS Map Unit Name: Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to Depth 2 9	Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Vloist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric S	group): tion (Describe to	Horizon 1 2	Color (I 10YR 10YR	bsence of indical Matrix Moist) 2/2 4/1 ors are n	% 100 100	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ACE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicato Indicators of disturbed of dis	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand 49B) K. L. R) LRR K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) ace nust be present, unless



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01ASB Sample Point Wetland
EGETATION	(Species identified in all uppersons are non-native	coories)			
EGETATION	(Species identified in all uppercase are non native ot size: 10 meter radius)	species.)			
ice onatum (Pi	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		70 COVE			Dominance Test Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
3.					Transport of Bornman eposition that are OBE, 171011, or 1710.
4.					Total Number of Dominant Species Across All Strata: 4 (B)
5.					Total Number of Dominant Opedies Across All Strata.
6.	<u></u>				Percent of Dominant Species That Are OBL, FACW, or FAC: 75.0% (A/B)
7.					reicent of Dominant Species That Are Obc., FACW, of FAC
8.					Prevalence Index Worksheet
9.	_ 				
10.					<u>Total % Cover of:</u>
10.	Total Cover =	0			· · · · · · · · · · · · · · · · · · ·
	Total Cover –	U			FACW spp. 50
1. (01 1 01	(D) () () () ()				FAC spp. 20 x 3 = 60
	ratum (Plot size: 5 meter radius)	20		EAC)4/	FACU spp 0
1. 2.	Baccharis halimifolia	30 20	Y	FACW	UPL spp. 10 x 5 = 50
	Morella pensylvanica	20		FAC	T-1-1 00 (A) 010 (B)
3. 4.					Total <u>80</u> (A) <u>210</u> (B)
					B
5.					Prevalence Index = B/A =
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.	<u></u>				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					
	Total Cover =	50			Yes □ No Prevalence Index is ≤ 3.0 *
					☐ Yes
	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Phragmites australis	20	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Atropa beladonna	10	Υ	UPL	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.
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 =	30			
oody Vine Strat	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
<u> </u>	Total Cover =	0			
Remarks:	Total Gover –	<u> </u>			
Ciliaino.					
dditional Re	marks:				



WETLAND DETERMINATION DATA FORM Northeast and Northcentral Region

B2 - Sediment Deposits	□ Yes □ No and? ■ Yes □ No oil Cracks □ Patterns m Lines no Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief
Soil Unit: Landform: Side slope	W01ASC Upland : Upland : Yes ✓ No and? ✓ Yes ✓ No oil Cracks Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants ic Position quitard graphic Relief ral Test
Landform: Side slope Local Relief: Convex Slope (%):	Upland : Upland : Upland : Yes ✓ No and? ✓ Yes ✓ No oil Cracks Patterns m Lines on Water Table surrows Visible on Aerial Imagery • Stressed Plants ic Position quitard graphic Relief ral Test
Slope (%):	□ Yes □ No and? ■ Yes □ No oil Cracks Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants ic Position quitard graphic Relief ral Test
Are climatic/hydrologic conditions on the site typical for this time of year? (tr no, explain in remarks)	□ Yes ☑ No and? ■ Yes ☑ No oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery 'Stressed Plants ic Position quitard graphic Relief ral Test
Are Vegetation Soil Or Hydrology significantly disturbed? Are Vegetation Soil Or Hydrology Inaturally problematic? Are Vegetation Soil Or Hydrology Inaturally problematic? Bydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Indicators (Check here if indicators are not present Vegetation Hydrology Vegetation Indicators (Check here if indicators are not present Vegetation Vegetation Hydrology Vegetation Vegetation Vegetation Hydrology Vegetation Vegetati	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Are Vegetation	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
SUMMARY OF FINDINGS Hydrophytic Vegetation Present? Yes	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Hydrophytic Vegetation Present? Wetland Hydrology Present? Wetland Hydrology Indicators (Check here if indicators are not present) Wetland Hydrology Indicators (Check here if indicators are not present) Primary: A1 - Surface Water B9 - Water-Stained Leaves B10 - Drainage B10 - Drai	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Vest No Is This Sampling Point Within A Wester Remarks: No Is This Sampling Point No Is This Sampling Point Within A Wester Remarks: No Is This Sampling Point No Is T	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Remarks: HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present): Primary: A1 - Surface Water A2 - High Water Table A3 - Saturation B15 - Marl Deposits B1 - Water Marks C1 - Hydrogen Sulfide Odor B3 - Ordift Deposits B3 - Diff Deposits B3 - Diff Deposits B3 - Adjal Mat or Crust B4 - Algal Mat or Crust B5 - In Deposits B5 - In Deposits B7 - In Indiation Visible on Aerial Imagery B7 - In Indiation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Wetland Hydrology Present? Wetland Hydrology Present? Ves No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SOILS Map Unit Name: Taxonomy (Subgroup): Profile Description (Descrete to the depth mediate to document the indicator or confirm the alternor of indicators), (Type C-Concentration, D-Deption, RM-Preduced Marks, CS-Covered Coaled Sand Grains, Location PL-Pore Living, Im-Mathon) Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location O 6 1 7, 57KR 4/3 1000	oil Cracks Patterns m Lines on Water Table turrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
### Wetland Hydrology Indicators (Check here if indicators are not present)	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Wetland Hydrology Indicators (Check here if indicators are not present); Primary; A1 - Surface Water B9 - Water-Stained Leaves B10 - Drainag B1	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Wetland Hydrology Indicators (Check here if indicators are not present); Primary; A1 - Surface Water B9 - Water-Stained Leaves B10 - Drainag B1	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
Primary:	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
A1 - Surface Water	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
A 2 - High Water Table	Patterns m Lines on Water Table surrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
A3 - Saturation	m Lines on Water Table durrows to Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
B1 - Water Marks	on Water Table furrows Visible on Aerial Imagery Stressed Plants nic Position quitard graphic Relief ral Test
B3 - Drift Deposits	Visible on Aerial Imagery Stressed Plants iic Position quitard graphic Relief ral Test
B4 - Algal Mat or Crust B5 - Iron Deposits B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface Field Observations: Surface Water Present? Yes No Depth: (in.) Water Table 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=CoveredCoated Sand Grains; Location: PL=Pore Lining, M=Matrix Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location O 6 1 7.5YR 3/3 100	Stressed Plants nic Position quitard graphic Relief ral Test
B5 - Iron Deposits	nic Position quitard graphic Relief ral Test
B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface D3 - Shallow D4 - Microtop D5 - FAC-Ne	quitard graphic Relief ral Test
Field Observations: Surface Water Present?	graphic Relief ral Test
Field Observations: Surface Water Present?	ral Test
Surface Water Present?	□ Yes ☑ No
Surface Water Present?	□ Yes ☑ No
Water Table Present? Saturation Present? Yes No Depth: (in.) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A Remarks: SollES Map Unit Name: 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) Top Bottom Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location 0 6 1 7.5YR 3/3 100	□ Yes ☑ No
Saturation Present?	
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) Top Bottom Depth Horizon Color (Moist) % Color (Moist) % Type Location O 6 1 7.5YR 3/3 100	
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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) Top Bottom Depth Horizon Color (Moist) % Color (Moist) % Type Location 0 6 1 7.5YR 3/3 100	
Profile Description (Description (D	
Top Bottom Matrix Mottles Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location 0 6 1 7.5YR 3/3 100	
Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location 0 6 1 7.5YR 3/3 100 <	
0 6 1 7.5YR 3/3 100 6 16 2 7.5YR 4/3 100	Texture
6 16 2 7.5YR 4/3 100	(e.g. clay, sand, loam
	sandy loam
	sandy loam
NRCS Hydric Soil Field Indicators (check here if indicators are not present Indicators for Problematic Soils 1	
☐ A1- Histosol ☐ S8 - Polyvalue Below Surface (LRR R, MLRA 1498) ☐ A10 - 2 cm Muck (LRR K, L, N	RA 149B)
☐ A2 - Histic Epipedon ☐ S9 - Thín Dark Surface (LRR R, MLRA 1498) ☐ A16 - Coast Prairie Redox	
☐ A3 - Black Histic ☐ F1 - Loamy Mucky Mineral (∟RR K, L) ☐ S3 - 5cm Mucky Peat of P	at (LRR K, L, R)
L A4 - Hydrogen Sulfide	
A5 - Stratified Layers F3 - Depleted Matrix S8 - Polyvalue Below Surf	
☐ A11 - Depleted Below Dark Surface ☐ F6 - Redox Dark Surface ☐ S9 - Thin Dark Surface ☐ S9 - Thin Dark Surface ☐ F12 - Iron-Manganese Ma	
S1 - Sandy Muck Mineral F8 - Redox Depressions F12 - Indi-Manganese Ma	
S1 - Sariny Microri	
□ S5 - Sandy Redox □ TF2 - Red Parent Material	A, 145, 149B)
☐ S6 - Stripped Matrix ☐ TF12 - Very Shallow Dark	A, 145, 149B)
☐ S7 - Dark Surface (LRR R, MLRA 1498) ☐ Other (Explain in Remarks	
¹Indicators of hydrophytic vegetation and wetland hydr	urface
disturbed or problematic.	urface
Restrictive Layer (If Observed) Type: Depth: Hydric Soil Present?	urface



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01ASC Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	species.)			
Tree Stratum (Pic	ot size: 10 meter radius) Species Name	% Cover I	Dominant	Ind.Status	Dominance Test Worksheet
1.		76 COVEL 1			Dominance rest Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 0 (A)
3.					(1)
4.	_ 				Total Number of Deminant Species Across All Strates (P)
5.	_ 				Total Number of Dominant Species Across All Strata:1(B)
6.					Descent of Deminant Chapter That Are ORL FACIN as FAC: 0.00/ (A/R)
7.	<u></u>				Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
8.					Prevalence Index Worksheet
9. 10.					Total % Cover of: Multiply by:
10.	Total Cover =	0		-	OBL spp. 0
	Total Cover –	U			FACW spp. 0 x 2 = 0
0 1 /01 1 01	· (D) (: 5 () !:)				FAC spp. 0 x 3 = 0
	atum (Plot size: 5 meter radius)				FAC spp. 0 x 3 = 0 FACU spp. 0 x 4 = 0
1. 2.					UPL spp. 0 x 5 = 0
					T-1-1 0 (A) 0 (B)
3.					Total(A)(B)
4.					5
5.					Prevalence Index = B/A = NA
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					✓ Yes ✓ No Dominance Test is > 50%
	Total Cover =	0			
					☐ Yes
Herb Stratum (Plo	t size: 2 meter radius)				
1.	Panicum dichotomiflorum	60	Υ		* Indicators of hydric soil and wetland hydrology must be
2.					present, unless disturbed or problematic.
3.					<u>'</u>
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 (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 =	60			
		-			
Woody Vine Strati	um (Plot size: 10 meter radius)				
1.		-			
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☑ No
4.					
5.					
J	Total Cover =	0			
Remarks:	Located on slope of earthen berm	<u> </u>			
Additional Day	marke:				
Additional Rer	iidinə.				



		l/ Long Island, NY					Stantec Project #:	2028113199		Date:	06/09/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1: Soil Unit:	Andy Smith			Investi	igator #2:		/I/WWI Classification			State:	New York
Landform:	Depression			Loc	al Relief:			:		Wetland ID: Sample Point:	W01ASC Wetland
Slope (%):	0-1%	Latitude:			ongitude:		5	Datum:		Community ID:	PEM
		litions on the site typ	ical for this				remarks)		No	Community ID.	r Livi
		or Hydrology ⊡sign				C, CAPIGIII III	Are normal circumst			1	
Are Vegetation	□, Soil □,	or Hydrology ⊑natı	ırally proble	ematic?			□ Yes	☑ No			
SUMMARY OF											
Hydrophytic Veg		sent?		✓ Yes	☐ No	ı		Hydric Soils	Present?		
Wetland Hydrol				Yes	□ No					Within A Wetlan	
Remarks:	Wetland is	contained in a man-	made basi	n				_	_		
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators	are not p	resent):⊏					
Primary:		•		•		,			Secondary:		
	A1 - Surface					er-Stained			✓		
	A2 - High Wa A3 - Saturation			F	B13 - Aqu	ıatıc ⊦auna rl Deposits				B10 - Drainage P B16 - Moss Trim	
	B1 - Water M			F		ogen Sulfi			E	C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots		Ē	C8 - Crayfish Bur	
	B3 - Drift Dep						educed Iron				isible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils			D1 - Stunted or S	
	B5 - Iron Dep					Muck Surf			J	D2 - Geomorphic	
<u> </u>		on Visible on Aerial Ima		F.	Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	bo - Sparsery	vegetated Concave S	uriace						E	D4 - Microtopogra D5 - FAC-Neutral	
Field Observat	ione									20 1710 11041141	
			.		(! \						
Surface Water I Water Table Pro		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☐ No
Saturation Pres		☐ Yes ☑ No ☑ Yes ☐ No	Depth:		(in.)						
Saturation Pres	ent?	res ∟ No	Depth:	0	(in.)						
Describe Record	led Data (stre	eam gauge, monitorin	ıg well, aeria	al photos,	previous	inspectio	ns), if available:		N/A		
Remarks:											
SOILS											
SOILS Map Unit Name):	0				S	eries Drainage Class	:			
Map Unit Name Taxonomy (Sub	group):										
Map Unit Name Taxonomy (Sub	group):			absence of indica	ntors.) (Type: C=I				Location: PL=Pore	Lining, M=Matrix)	
Map Unit Name Taxonomy (Sub	group):			absence of indica	ntors.) (Type: C=I		Series Drainage Class		Location: PL=Pore	Lining, M=Matrix)	Texture
Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to			Matrix	ottors.) (Type: C=6			wered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
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	Matrix			Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains;		T	
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to) Bottom Depth	the depth needed to document the indi	cator or confirm the a	Matrix Moist)	%	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 2	the depth needed to document the indi	cator or confirm the a	Matrix Moist) 4/6	% 100	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to) Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95	Concentration, D		wered/Coated Sand Grains; Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to: Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95 	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): tion (Describe to: Bottom Depth 2 16	Horizon 1 2	Color (I	Matrix Moist) 4/6 5/1	% 100 95 	Concentration, D	E-Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to: Bottom Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95 	7.5YR	E-Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to: Bottom Depth 2 16	Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95 	7.5YR	E-Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	pgroup): htion (Describe to Depth 2 16	the depth needed to document the indi Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95	7.5YR	Color (Moist) 5/6	Wered/Coated Sand Grains; Mottles	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	pgroup): httion (Describe to Depth 2 16 Soil Field In	the depth needed to document the indi Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95 oot preser	7.5YR	Color (Moist) 5/6	Mottles % 3 Indicator	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to Bottom Depth 2 16 Soil Field In A1- Histosol	Horizon 1 2 dicators (check he	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95 sot preser	7.5YR t	Color (Moist) 5/6	Mottles % 3 Indicator	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	pgroup): httion (Describe to Depth 2 16 Soil Field In	Horizon 1 2 ndicators (check he	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95 tot preser S8 - Polyn S9 - Thin	7.5YR tt	Color (Moist) 5/6 W Surface (LRR R, MLRA 1498)	Mottles % 3 Indicatoi	Type	Location M	(e.g. clay, sand, loam) sand sand
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Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric:	pgroup): ption (Describe to Describe to D	Horizon 1 2 dicators (check he objeedon stic an Sulfide di Layers	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95 tot preser S8 - Polyv S9 - Thin F1 - Loan F3 - Depl	7.5YR t	Color (Moist) 5/6	Mottles % 3 Indicatol	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): ption (Describe to Describe to De	Horizon 1 2 dicators (check he bipedon stic en sulfide d Layers ed Below Dark Surface	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95 s8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redo	7.5YR th value Belor Dark Surfa ny Mucky I ny Gleyed eted Matrix ox Dark Su	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix c rface	Mottles % 3 Indicator	Type C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da S9 - Thin Da	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): ption (Describe to: Bottom Depth 2 16 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I	Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % Indicator	Type	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	pgroup): ption (Describe to Describe to D	Horizon 1 2 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface Durk Surface Durk Surface Durk Surface Durk Surface Durk Mineral	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95 s8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redo	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % 3 Indicator	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric:	pgroup): ption (Describe to Describe to D	Horizon 1 2 dicators (check he bipedon stic sur Sulfide d Layers ed Below Dark Surface bleyed Matrix	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % Indicato	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric :	group): ption (Describe to Describe to De	Horizon 1 2 dicators (check he bipedon stic surface de Below Dark Surface luck Mineral sleyed Matrix ledox	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % Indicator	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric:	group): ption (Describe to: Bottom Depth 2 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1 2 dicators (check he bipedon stic surface de Below Dark Surface luck Mineral sleyed Matrix ledox	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % Indicato	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): ption (Describe to: Bottom Depth 2 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % 3 Indicatol	Type C	Location M	(e.g. clay, sand, loam) sand sand
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): ption (Describe to Describe to De	Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % 3 Indicator Indicators of disturbed of dist	Type C	Location M	(e.g. clay, sand, loam) sand sand 149B) K.K., L. R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R)
Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 NRCS Hydric	group): ption (Describe to: Bottom Depth 2 16 Soil Field In A4 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 7.5YR 7.5YR	Matrix Moist) 4/6 5/1 ors are n	% 100 95	7.5YR	Color (Moist) 5/6 N Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Matrix (frace Surface Surface	Mottles % 3 Indicatol	Type C	Location M	(e.g. clay, sand, loam) sand sand



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01ASC Sample Point Wetland
VEGETATION	(Species identified in all uppercase are non nativ	e species.)			
Tree Stratum (Plo	t size: 10 meter radius)				
	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: 100.0% (A/B)
7.					(145)
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 spp10
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp. $0 x 4 = 0$
1.	Iva frutescens	10	Υ	FACW	UPL spp. 0 x 5 = 0
2.					
3.					Total 100 (A) 210 (B)
4.					
5.					Prevalence Index = B/A = 2.100
6.	<u></u>				1 TOTALISTINO TIMON DITT - 2.100
7.	_ 				
					Hadran badla Varratatlara badlaratarra
8.					Hydrophytic Vegetation Indicators:
9.					
10.					✓ Yes ✓ No Dominance Test is > 50%
	Total Cover =	= 10			Yes No Prevalence Index is ≤ 3.0 *
Herb Stratum (Plo	t size: 2 meter radius)				
1.	Phragmites australis	80	Υ	FACW	
2.	Toxicodendron radicans	10	N	FAC	* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Dominiono di Vogotation ottatal
6					Tree
					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.					noight (2217), regulated of holyna
8.					- W W
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					 -
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 =				
1	Total Cover -	30			
Wood: Vin Ot :	um (Diet eizer 10 m-t				
	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☐ Yes ☐ No
4.					
5.					
	Total Cover =	= 0			
Remarks:					
1					
Additional Da	marke:				
Additional Rer	iidi N5.				



Project/Site:	Sunrise Wind	l/ Long Island, NY					Stantec Project #:	2028113199)	Date:	06/11/20
Applicant:	Sunrise Wind						•			County:	Suffolk
Investigator #1:	Andy Smith			Invest	igator #2:					State:	New York
Soil Unit:							VI/WWI Classification:			Wetland ID:	W01ASD
Landform:	Side slope				cal Relief:					Sample Point:	Upland
Slope (%):	0-1%	Latitude:			ongitude:			Datum:		Community ID:	Upland
		litions on the site typ				o, explain in I			No 40		
		or Hydrology □sign or Hydrology □natu					Are normal circumst	ances presen □ No	ι?		
SUMMARY OF		or Hydrology ∟nall	arally proble	emauc?			- res	□ INO			
Hydrophytic Veg		nont?		☐ Yes	. ☑ No			Hudria Caila	Drocont?		☐ Yes ☑ No
Wetland Hydrol				□ Yes				Hydric Soils		Within A Wetland	
Remarks:	ogy i resent	•		- 103	- 140			is This Carri	piling i oliti i	Within A Wetant	u: = 163 = 110
Tromants.											
HYDROLOGY											
	alagy Indias	otava (Chaok bara if	indicators	ara nat r	rocent	_					
Primary:		ators (Check here if	indicators	are not p	resent)⊏			Secondary:		
	A1 - Surface	Water			B9 - Wate	er-Stained	Leaves			B6 - Surface Soil (Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar				=	B16 - Moss Trim L	
I	B1 - Water M B2 - Sedimer				C1 - Hydro		spheres on Living Roots		F	C2 - Dry-Season V C8 - Crayfish Burn	
I =	B3 - Drift Dep			E			educed Iron		=		sible on Aerial Imagery
	B4 - Algal Ma	at or Crust					duction in Tilled Soils			D1 - Stunted or St	
I =	B5 - Iron Dep				C7 - Thin				=	D2 - Geomorphic I	
I		on Visible on Aerial Ima v Vegetated Concave S		F.	Other (Ex	plain in Re	emarks)			D3 - Shallow Aquit D4 - Microtopogra	
	Bo - Sparsery	vegetated Concave 3	uriace							D5 - FAC-Neutral	
Field Observat	ione:										·
Surface Water I		□ Yes ☑ No	Donth		(in.)						
Water Table Pro		□ Yes ☑ No	Depth: Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Saturation Pres		□ Yes ☑ No	Depth:		(in.)						
			· ·		. ,				NI/A		
	ed Data (Stre	eam gauge, monitorin	ig weii, aeria	ai pnotos	, previous	inspectio	ns), if available:		N/A		
Remarks:											
SOILS							teries Drainage Class				
SOILS Map Unit Name						S	Geries Drainage Class:	:			
SOILS Map Unit Name Taxonomy (Sub	group):	the death accord to decrease the indi	center or confirm the c	shooned of indicate	otern) (Turne Carl				Legation Dispers	ining MeMatrix	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to t	the depth needed to document the indi	cator or confirm the a		ators.) (Type: C=C		Series Drainage Class:	vered/Coated Sand Grains	; Location: PL=Pore L	i.ining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): Ition (Describe to to Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains	T		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%			vered/Coated Sand Grains	; 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 to the second sec	Horizon 1	Color (I	Matrix Moist) 4/2	% 100	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains Mottles %	Type 	Location	(e.g. clay, sand, loam)gravelly road fill
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Cox	vered/Coated Sand Grains; Mottles	Type	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to the street of the	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains: Mottles %	Type 	Location 	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to 1 Bottom Depth 6 15	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location 	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to 1 Bottom Depth 6 15	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox	wered/Coated Sand Grains. Mottles %	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox	wered/Coated Sand Grains Mottles %	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to: Bottom Depth 6 15	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to 1 Bottom Depth 6 15	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to to Depth 6 15	Horizon 1 2 dicators (check here	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 88 - Polyv	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 dicators (check her	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100 not presen \$8 - Polyy \$9 - Thin	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100 tot preser 88 - Polyv S9 - Thin F1 - Loam	Concentration, D	Color (Moist)	Mottles % Indicato	Type sfor Proble A10 - 2 cm II A16 - Coast S3 - 5cm Mi	Location matic Soils Prairie Redox (LRR K, L, MLRA 14 Prairie Redox (LRR K, L,	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to to Depth 6 15 Soil Field In A1- Histosol A2 - Histic Et A3 - Black Hi A4 - Hydroge	Horizon 1 2 dicators (check here) stic stic stic stic stic stic	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100 ot preser \$8 - Poly \$9 - Thin F1 - Loam F2 - Loam	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I) Joky Peat of Peat (LURI I) Joky Peat of Peat (LURI I)	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to to Depth 6 15	Horizon 1 2 dicators (check here) stic stic stic stic stic stic	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100 tot preser 88 - Polyv S9 - Thin F1 - Loam	t	Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	Mottles % Indicato	Type	Location matic Soils Prairie Redox (LRR K, L, MLRA 14 Prairie Redox (LRR K, L,	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E	Horizon 1 2 dicators (check here) pipedon stic en Sulfide d Layers ad Below Dark Surface Dark Surface	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles % Indicato	Type sfor Proble A10 - 2 coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval S9 - Thin Da F12 - Iron-M	Location matic Soils Prairie Redox (LRR K, L, MLRA 14 LAKEY Peat of Peat (LUTface (LRR K, L, M) user Solvaria Surface (LRR K, L) anganese Masses	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to to Depth 6 15	Horizon 1 2 dicators (check here) stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple	Concentration, D	Color (Moist)	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to to Depth 6 15	Horizon 1 2 dicators (check here) oipedon stic stic surface de Below Dark Surface oark Surface luck Mineral leyed Matrix	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to to Depth 6 15	Horizon 1 2 dicators (check here bipedon stic stic sh Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2 dicators (check here bipedon stic stic sh Sulfide d Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	Color (Moist)	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Thick E S1 - Sandy R S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3 ors are r	% 100 100	Concentration, D	Color (Moist)	Mottles % Indicato Indicators of disturbed of dis	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric:	group): tion (Describe to 1 Bottom Depth 6 15 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 4/3	% 100 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains Mottles % Indicato	Type	Location	(e.g. clay, sand, loam)gravelly road fill sandy loam



Project/Site:	Sunrise Wind/ Long Island, NY			Wetland ID: W01ASD Sample Point Upland
VEGETATION	(0)			
VEGETATION Tree Stratum (Plo	(Species identified in all uppercase are non national size: 10 meter radius)	ve species.)		
Tree Stratum (Fic	Species Name	% Cover Domi	inant Ind.Status	Dominance Test Worksheet
1.	Juglans nigra		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: 0.0% (A/B)
7.				
8.				Prevalence Index Worksheet
9.				Total % Cover of: Multiply by:
10.				OBL spp 0
	Total Cover	= 15		FACW spp. $0 \times 2 = 0$
				FAC spp. $0 \times 3 = 0$
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)			FACU spp. 15 X 4 = 60 60
1.				UPL spp60
2.				
3.				Total(A)(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	= 0		Yes No Prevalence Index is ≤ 3.0 *
				☐ Yes
	t size: 2 meter radius)			☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Artemisia vulgaris	60	Y UPL	* Indicators of hydric soil and wetland hydrology must be
2.				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 height (DBH), regardless of height.
7.				rieight (DBH), regardiess of height.
8.				O II (OI I Westerlands less than 0 in DDU and acceptable of 0.00 ft
9.				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				
11.				Mark All horhococus (non useas) A stanta vagasillaca of class and
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.				
14.				Mandy Visco All woody vines greater than 2.28 ft. in height
15.	T-t-1 O			Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover	= 60		
N/ 1 N/ 0/ 1	(DL) : 40 (; ; ;)			
Woody Vine Stratu	um (Plot size: 10 meter radius)			
	<u></u>			
2.				Hydrophytic Vogetation Present Vog V. Na
3.				Hydrophytic Vegetation Present ☐ Yes ☑ No
4.				
5.	Total Cover			
Remarks:	Total Cover	= 0		
i Nemarks.				
A alalitic! P				
Additional Rer	narks:			



Project/Site:		l/ Long Island, NY					Stantec Project #:	2028113199		Date:	06/11/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1: Soil Unit:	Andy Smith			Investi	igator #2:		VI/WWI Classification			State:	New York
Landform:	Floodplain			Loc	al Relief:			:		Wetland ID: Sample Point:	W01ASD Wetland
Slope (%):	0-3%	Latitude:			ongitude:		C	Datum:		Community ID:	PSS
		ditions on the site typ	ical for this				remarks)		No	Community ID.	100
		or Hydrology □sign				C, CAPIGITI III	Are normal circumst			1	
Are Vegetation	, Soil	or Hydrology ⊑natı	ırally proble	ematic?			✓ Yes	□No			
SUMMARY OF											
Hydrophytic Veg		sent?		✓ Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol				✓ Yes						Within A Wetlan	
Remarks:	- 57								<u> </u>		
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators	are not n	recent)⊏					
Primary:		ators (Oneck nere ii	indicators	are not p	i Cociii	<i>)</i> —			Secondary:		
	A1 - Surface				B9 - Wate	er-Stained	Leaves		Ĺ	B6 - Surface Soil	
✓	A2 - High Wa				B13 - Aqu					B10 - Drainage P	
	A3 - Saturation B1 - Water M			F		rl Deposits ogen Sulfi			F	B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer			F			spheres on Living Roots		F	C8 - Crayfish Bur	
	B3 - Drift Dep	posits					educed Iron		Ē		isible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils		⊑	D1 - Stunted or S	
	B5 - Iron Dep	oosits on Visible on Aerial Ima	aon.	E		Muck Sur			F	D2 - Geomorphic D3 - Shallow Aqu	
		Vegetated Concave S		⊢	Other (Ex	piaiii iii re	illaiks)		Ē	D4 - Microtopogra	
		, 9								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water F		□ Yes ☑ No	Depth:		(in.)					=	
Water Table Pre		☑ Yes ☐ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes No
Saturation Pres	ent?	☑ Yes ☐ No	Depth:		(in.)						
Describe Becord	ad Data (atr	eam gauge, monitorin			. ,	inanaatia	no) if available:		N/A		
	eu Data (Sili	eam gauge, monitorii	g well, aeria	ai priotos,	, previous	inspectio	iis), ii avallable.		IN//		
						-	,-				
Remarks:											
						•					
SOILS		0					Series Drainage Class				
SOILS Map Unit Name		0				S	Series Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	group):			obsence of indice	atore) (Tuna: C-l				Location: DI -Pore	I ining M-Matrix	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to				ators.) (Type: C=0		Series Drainage Class -Depletion, RM-Reduced Matrix, CS-Co	wered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): otion (Describe to	the depth needed to document the indi	cator or confirm the a	Matrix			=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains;		T	Texture
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	Matrix Moist)	%			wered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix) Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 10	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 2/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to) Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 2/1 3/1	% 100 95	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	wered/Coated Sand Grains; Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 10	the depth needed to document the indi Horizon 1	Color (I	Matrix Moist) 2/1 3/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	Type C	Location 	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to: Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1	% 100 95 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to: Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 2/1 3/1	% 100 95 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1	% 100 95 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	wered/Coated Sand Grains; Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to: Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 2/1 3/1	% 100 95 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	wered/Coated Sand Grains; Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	group): tion (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1	% 100 95	10YR	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	wered/Coated Sand Grains; Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Bottom Depth 10 20 Soil Field In	the depth needed to document the indi Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95 oot preser	Concentration, D	Depletion, RM=Reduced Matrix, CS=Correction (Moist)	Mottles	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Bottom Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1	% 100 95 not preser \$8 - Polyy	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/6	Mottles % 5 Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95 tot preser \$8 - Polys \$9 - Thin F1 - Loan	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) AGE (LRR R, KLRA 149B) Mineral (LRR K, L)	Mottles % 5 Indicator	Type	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Describe to Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95 ot preser S8 - Poly S9 - Thin F1 - Loan F2 - Loan	10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix	Mottles % Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Describe to Des	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95 tot preser S8 - Polyv S9 - Thin F1 - Loan F3 - Deple	10YR	Depletion, RM=Reduced Matrix, CS=Correct (Moist) 4/6 w Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Matrix (Mottles % 5 Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Describe to Des	Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix K crface	Mottles % Indicator	Type C sfor Proble A10 - 2 cm A16 - Coast S3 - 5cm M S7 - Dark S S8 - Polyva S9 - Thin Da S9 - Thin Da	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S	group): tion (Describe to Describe to Depth 10 20	Horizon 1 2 ndicators (check he pipedon istic en Sulfide di Layers ed Below Dark Surface park Surface park Surface	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95 tot preser S8 - Polyv S9 - Thin F1 - Loan F3 - Deple	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator	Type	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Describe to Des	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S	group): tion (Describe to Describe to Depth 10 20	Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface duck Mineral sleyed Matrix ledox	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric S	group): tion (Describe to Depth 10 20	Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface duck Mineral sleyed Matrix ledox	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator Indicators Indicators Indicators Indicators	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric S	group): tion (Describe to Depth 10 20	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles % Indicator Indicators Indicators Indicators Indicators	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric 3	group): tion (Describe to: Depth 10 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick I Sandy M S4 - Sandy G S5 - Sandy G S6 - Stripped S7 - Dark Su	Horizon 1 2	Color (I	Matrix Moist) 2/1 3/1 ors are n	% 100 95	Concentration, D 10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (rface Surface	Mottles %	Type C	Location M	(e.g. clay, sand, loam) sandy loam sand



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01ASD Sample Point Wetland
VEGETATION	(Species identified in all uppercase are non na	ative species)			
	ot size: 10 meter radius)	alive 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.	<u></u>				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>80.0%</u> (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp 0
	Total Cove	r = 0			FACW spp. 50 x 2 = 100
					FAC spp. 50 x 3 = 150
	ratum (Plot size: 5 meter radius)			E4011	FACU spp. 20 x 4 = 80
1.	Rosa multiflora	20	Y	FACU	UPL spp. 0 x 5 = 0
2.	Viburnum recognitum	10	Υ	FAC	T-1-1 400 (A) 200 (D)
3.					Total 120 (A) 330 (B)
4.					December of Index - D/A
5.					Prevalence Index = B/A = <u>2.750</u>
6. 7.					
					Hudranbudia Varatatian Indiantara
8. 9.					Hydrophytic Vegetation Indicators:
9. 10.	<u></u>				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation ☑ Yes ☐ No Dominance Test is > 50%
10.	 Total Cove	r = 30			
	Total Cove	1 – 30			☐ Yes ☐ No Prevalence Index is ≤ 3.0 *
Llank Chartery /DI	-t -i 0t di\				☐ Yes ☐ No Morphological Adaptations (Explain) *
Herb Stratum (Pi	ot size: 2 meter radius) Impatiens capensis	50	Υ	FACW	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.			<u>'</u>		* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Dominiono di Vogotation Grata.
6					Tree - Woody plants 2 in 77 6cm) or more in diameter at broast
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 Cove	r = 50			·
Woody Vine Stra	tum (Plot size: 10 meter radius)				
1.	Vitis riparia	20	Υ	FAC	
2.	Smilax hispida	20	Υ	FAC	
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cove	r = 40			
Remarks:					
Additional Re	marks:				



Project/Site:	Sunrise Wind	/ Long Island, NY					Stantec Project #:	2028113199)	Date:	06/11/20
Applicant:	Sunrise Wind						•			County:	Suffolk
Investigator #1:	Andy Smith			Investi	igator #2:					State:	New York
Soil Unit:						NV	VI/WWI Classification:	:		Wetland ID:	W01ASE
Landform:	Floodplain			Loc	al Relief:	Concav	e			Sample Point:	Upland
Slope (%):	0-3%	Latitude:			ongitude:			Datum:		Community ID:	Upland
		itions on the site typ				o, explain in			No		
		or Hydrology ☐sign					Are normal circumst		t?		
		or Hydrology ⊑ natı	urally proble	ematic?			Yes	□No			
SUMMARY OF											
Hydrophytic Ve				Yes				Hydric Soils			☐ Yes ☑ No
Wetland Hydrol	ogy Present	<u> </u>		☐ Yes	☑ No			Is This Samp	oling Point V	Within A Wetland	d? Yes Vo
Remarks:											
HYDROLOGY											
		itors (Check here if	indicators	are not p	resent):□					
Primary:		147		_	DO 14/ (01 : 1			Secondary:	DO 0 1 0 1	2 1
	A1 - Surface A2 - High Wa			<u> </u>	B9 - Wate B13 - Aqu					B6 - Surface Soil (B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim L	
	B1 - Water M				C1 - Hydro					C2 - Dry-Season V	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Burn	
	B3 - Drift Dep B4 - Algal Ma			F			educed Iron eduction in Tilled Soils		F	D1 - Saturation vis	sible on Aerial Imagery
	B5 - Iron Dep			E	C7 - Thin				Ē	D2 - Geomorphic	
		on Visible on Aerial Ima		Ε.	Other (Ex	plain in Re	emarks)			D3 - Shallow Aquit	
	B8 - Sparsely	Vegetated Concave S	urface							D4 - Microtopogra D5 - FAC-Neutral	
<u> </u>										D5 - FAC-Neutral	rest
Field Observat											
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pro	esent?	Yes ☑ No
Water Table Pro		✓ Yes □ No ✓ Yes □ No	Depth:		(in.)						
			Depth:		(in.)						
	ed Data (stre	eam gauge, monitorin	ıg well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Domorko											
Remarks:											
SOILS							Nation Brain and Olassa				
SOILS Map Unit Name						S	Series Drainage Class:	:			
SOILS Map Unit Name Taxonomy (Sub	group):										
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to t	he depth needed to document the indi	cator or confirm the a		ators.) (Type: C=C		Series Drainage Class:	vered/Coated Sand Grains;	; Location: PL=Pore L	ining, M=Matrix)	Touturo
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): Ition (Describe to to Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains;	ı		Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox	vered/Coated Sand Grains; Mottles	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to to the second sec	Horizon 1	Color (I	Matrix Moist) 4/2	% 100		=Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains;	ı		(e.g. clay, sand, loam) gravelly road fill
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to t Bottom Depth 4 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/2 3/2	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	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 t Bottom Depth 4 14	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/2 3/2	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	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	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/2 3/2	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	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 1 Bottom Depth 4 14	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %		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	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 4/2 3/2	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	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 1 Bottom Depth 4 14	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %		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 1 Bottom Depth 4 14 Soil Field In	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2 ors are r	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles % Indicato	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	group): tion (Describe to 1 Bottom Depth 4 14	Horizon 1 2 dicators (check he	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100 sot preser \$8 - Polyy	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist)	wered/Coated Sand Grains; Mottles %	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 1 Bottom Depth 4 14 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 2 dicators (check he	Color (I 10YR 10YR 	Matrix Voist) 4/2 3/2	% 100 100 tot preser 88 - Polyv S9 - Thin F1 - Loam		=Depletion, RM=Reduced Matrix, CS=Cox Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L)	wered/Coated Sand Grains; Mottles % Indicator	Type	Location matic Soils Prairie Redox (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, ML	(e.g. clay, sand, loam) gravelly road fill fine sandy loam SISB) K. L. R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 4	group): tion (Describe to to to percent) Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge	Horizon 1 2 dicators (check he	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2 ors are r	% 100 100 oot preser 88 - Poly 99 - Thin F1 - Loam F2 - Loam	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicato	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I) Joky Peat of Peat (LURI) Joky Peat of Peat (LURI)	(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 to to permit the second	Horizon 1 2 dicators (check he bipedon stic n Sulfide	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2 ors are r	% 100 100	t	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR 12 LOKY Peat of Peat (L LUFFACE (LRR K, L, M) ue Below Surface (IR	(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 to to permit the second	Horizon 1 2 dicators (check he bipedon stic n Sulfide de Layers and Below Dark Surface	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2 ors are r	% 100 100 oot preser 88 - Poly 99 - Thin F1 - Loam F2 - Loam	concentration, D	Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X x urface	wered/Coated Sand Grains; Mottles % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I) Joky Peat of Peat (LURI) Joky Peat of Peat (LURI)	(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 to to percent) Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon 1 2 dicators (check he bipedon stic n Sulfide I Layers ad Below Dark Surface luck Mineral	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	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:	group): tion (Describe to a function of the state of the	Horizon 1 2 dicators (check he bipedon stic n Sulfide I Layers ad Below Dark Surface luck Mineral leyed Matrix	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	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	group): tion (Describe to 1 Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R	Horizon 1 2 dicators (check he bipedon stic n Sulfide l Layers ad Below Dark Surface luck Mineral leleyed Matrix edox	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	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:	group): tion (Describe to 1 Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2 dicators (check he bipedon stic n Sulfide l Layers ad Below Dark Surface luck Mineral leleyed Matrix edox	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	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	group): tion (Describe to 1 Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains: Mottles %	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	group): tion (Describe to 1 Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A12 - Thick E S1 - Sandy R S4 - Sandy R S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains: Mottles %	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:	group): tion (Describe to 1 Bottom Depth 4 14 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 4/2 3/2	% 100 100	concentration, D	Color (Moist)	wered/Coated Sand Grains: Mottles %	Type	Location	(e.g. clay, sand, loam) gravelly road fill fine sandy loam

Sample Point Upland



Sunrise Wind/ Long Island, NY

Project/Site:

WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Wetland ID:

W01ASE

GETATION		o aro mon nauvo	ороскос.	• /		
ee Stratum (F	Plot size: 10 meter radius) Species Name		% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.			76 COVE	Dominant	inu.Status	Dominance rest Worksheet
2.						Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.						(1)
4.						Total Number of Dominant Species Across All Strata: 3 (B)
5.						Total Number of Bornillant Species Across All Strata.
6.						Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3% (A/B)
7.						reiterit of Dominant Species That Are Obl., PACW, of PAC. 33.3/6 (A/D)
8.						Prevalence Index Worksheet
9.						
10.						<u>Total % Cover of:</u>
10.		Total Cover =	0			FACW spp. 0 x 2 = 0
		Total Cover =	U			FAC spp. 75
olina/Chruh C	tratum (Diet size). E meter radius)					
1.	tratum (Plot size: 5 meter radius) Rosa multiflora		10	Y	FACU	
2.				<u> </u>		UPL spp. 0 x 5 = 0
3.						Total 14E (A) FOE (D)
3. 4.						Total <u>145</u> (A) <u>505</u> (B)
5.						Deviations Indox - D/A - 0.400
						Prevalence Index = B/A = 3.483
6. 7.						
8.						Hydrophytic Vocatation Indicators
9.	 					Hydrophytic Vegetation Indicators:
						☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	_ 	T-4-1 O				✓ Yes ☐ No Dominance Test is > 50%
		Total Cover =	10			✓ Yes
						☐ Yes ☑ No Morphological Adaptations (Explain) *
	lot size: 2 meter radius)		60		EACH	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Artemisia vulgaris		60	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
2.						present, unless disturbed or problematic.
3.						Definitions of Venetalism Of mater
4.						Definitions of Vegetation Strata:
5.						T
6						Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.						noight (DDT), regardiess of holynt.
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.						Woody Vines - All woody Vines greater than 5.20 ft. If fielght.
		Total Cover =	60			
	atum (Plot size: 10 meter radius)		7.5		F40	
1.	Smilax hispida		75	Y	FAC	
2.						
3.						Hydrophytic Vegetation Present ☐ Yes ☑ No
4.						
5.						
		Total Cover =	75			
emarks:						
dditional Re	emarks:					
ad side, roa						



Project/Site:	Sunrise Wind	l/ Long Island, NY					Stantec Project #:	2028113199)	Date:	06/11/20
Applicant:	Sunrise Wind	LLC								County:	Suffolk
Investigator #1:	Andy Smith			Invest	igator #2:					State:	New York
Soil Unit:						NV	VI/WWI Classification:			Wetland ID:	W01ASE
Landform:	Floodplain			Loc	cal Relief:	Concav	e			Sample Point:	Wetland
Slope (%):	0-3%	Latitude:			ongitude:			Datum:	:	Community ID:	PSS
Are climatic/hyd	drologic cond	litions on the site typ	ical for this	time of	year? (If no	o, explain in		✓ Yes	110		
Are Vegetation	□, Soil □,	or Hydrology □sign	ificantly dis	sturbed?			Are normal circumst	ances presen	t?		
Are Vegetation	□, Soil □,	or Hydrology ⊑ nat∟	urally proble	ematic?			Yes	□No			
SUMMARY OF	FINDINGS										
Hydrophytic Ve		sent?		✓ Yes	. □ No			Hydric Soils	Present?		Yes □ No
Wetland Hydrol					□ No					Within A Wetland	
Remarks:								•	<u> </u>		
HYDROLOGY											
	alamı badia	otana (Chaali hana if	in dia atawa			\					
		ators (Check here if	indicators	are not p	present)⊏			Casandanu		
Primary:	A1 - Surface	Water		1	B9 - Wate	r-Stained	Leaves		Secondary:	B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
✓					B15 - Mar					B16 - Moss Trim I	
	B1 - Water M				C1 - Hydr					C2 - Dry-Season \	
I =	B2 - Sedimei			⊑			spheres on Living Roots			C8 - Crayfish Burr	
l F	B3 - Drift De			F			educed Iron eduction in Tilled Soils		F	C9 - Saturation Vi D1 - Stunted or St	sible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Der			F	Co - Rece C7 - Thin				F	D1 - Sturited of St D2 - Geomorphic	
		on Visible on Aerial Ima	gery	Ē.	Other (Ex					D3 - Shallow Aqui	
		y Vegetated Concave Si		_	- ('	,			D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	tions:										
Surface Water	Present?	□ Yes ☑ No	Depth:		(in.)			14/-41	-l l D		V
Water Table Pr	esent?	☑ Yes ☐ No	Depth:		(in.)			Wetland Hy	arology Pr	esent?	Yes □ No
Saturation Pres	ent?	✓ Yes ☐ No	Depth:		(in.)						
Describe Descri	lad Data (atr		· .		. ,	inanastia	na) if available.		N/A		
	ieu Data (Sti	eam gauge, monitorin	ig well, aeria	ai priotos	, previous	irispectio	ris), ii avaliable.		19/75		
Remarks:											
SOILS											
SOILS Map Unit Name						S	Geries Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub	ogroup):						·				
SOILS Map Unit Name Taxonomy (Sub	ogroup):	the depth needed to document the indic	cator or confirm the a		ators.) (Type: C=C		Series Drainage Class:	vered/Coated Sand Grains	; Location: PL=Pore L	Lining, M=Matrix)	-
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Cov	rered/Coated Sand Grains	1	1	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Horizon	Color (I	Matrix Moist)	%		=Depletion, RM=Reduced Matrix, CS=Cov	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	pogroup): Describe to Describe to Depth 2	Horizon 1	Color (I	Matrix Moist) 2/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	wered/Coated Sand Grains Mottles %	Type 	Location 	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to Bottom Depth 2 8	Horizon 1 2	Color (I	Matrix Voist) 2/1 3/2	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	rered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pogroup): Describe to Describe to Depth 2	Horizon 1	Color (I	Matrix Moist) 2/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	wered/Coated Sand Grains Mottles %	Type 	Location 	(e.g. clay, sand, loam) fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to Bottom Depth 2 8	Horizon 1 2	Color (I 10YR 10YR	Matrix Voist) 2/1 3/2	% 100 95	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	wered/Coated Sand Grains; Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	ogroup): otion (Describe to Bottom Depth 2 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 2/1 3/2 5/1	% 100 95 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5	Type C	Location M 	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	ogroup): otion (Describe to Bottom Depth 2 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	pgroup): otion (Describe to Bottom Depth 2 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	pgroup): ption (Describe to Bottom Depth 2 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	pgroup): ption (Describe to Bottom Depth 2 8 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	pgroup): ption (Describe to Depth 2 8 18 Soil Field Ir	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 not preser	Concentration, D	Color (Moist) 4/6	Mottles % 5	Type C rs for Proble	Location M matic Soils ¹	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8	pgroup): ption (Describe to Depth	Horizon 1 2 3 ndicators (check here	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 not preser \$8 - Polyy	10YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 4/6	Mottles % 5 Indicato	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand 498)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3 ndicators (check her	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 tot preser \$8 - Polyx \$9 - Thin F1 - Loarn	10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) 306 (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % 5 Indicato	Type C rs for Proble A10 - 2 Coast S3 - 5cm Mi	Location M matic Soils Prairie Redox (LRR K, L, MLRA 1- Prairie Redox (LRR kuch y Peat of Peat (label))	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth 2 8 18 Soil Field Ir A1- Histosol A2 - Histic Ed. A3 - Black H A4 - Hydroge	Horizon 1 2 3 dicators (check here)	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100	10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Wineral (LRR K, L) Matrix Matrix	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M, L, M)	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth 2 8 18 Soil Field Ir A1- Histosol A2 - Histic E; A3 - Black H A4 - Hydroge A5 - Stratifier	Horizon 1 2 3 dicators (check here) istic en Sulfide d Layers	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 style="color: blue;">	10YR	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) Mileral (LRR K, L) Mileral (LRR K, L) Mileral (LRR K, L)	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1- Prairie Redox (LRR ucky Peat of Peat (urface (LRR K, L, M) ue Below Surface ((e.g. clay, sand, loam) fine sandy loam fine sandy loam sand LRR K, L, R) LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100	10YR tt	Color (Moist) 4/6 w Surface (LRR R, MLRA 149B) dace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K urface	Mottles % 5 Indicato	Type	Location M matic Soils Muck (LFR K, L, MLRA 1- Prairie Redox (LFR k, L) Urface (LFR K, L, M) ue Below Surface (LFR K, L) er Surface (LFR K, L) er Surface (LFR K, L)	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand 49B) K, L, R) LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3 ndicators (check here pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth 2 8 18	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LFR K, L, MLRA 1- Prairie Redox (LFR k, L) Urface (LFR K, L, M) ue Below Surface (LFR K, L) er Surface (LFR K, L) er Surface (LFR K, L)	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand 49B) 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 (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand 49B) 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 (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	mered/Coated Sand Grains Mottles % Indicato Indicators 'Indicators 'Ind	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1 ors are r	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	mered/Coated Sand Grains Mottles % Indicato Indicators 'Indicators 'Ind	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 8 NRCS Hydric	pgroup): ption (Describe to Depth	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 2/1 3/2 5/1	% 100 95 100 S8 - Polyx S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redc F7 - Deple	10YR 11 10YR 1 1 1 1 1 1 1 1 1-	Color (Moist) 4/6 w Surface (LRR R, MLRA 1498) 30ce (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicato [Type C	Location M	(e.g. clay, sand, loam) fine sandy loam fine sandy loam sand 49B) K. L. R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) face must be present, unless



Project/Site:	Sunrise Wind/ Long Island, N	۱Y				Wetland ID: W01ASE Sample Point Wetland
VEGETATION	(Species identified in all uppercas	e are non native	species.)			
Tree Stratum (Plo	ot size: 10 meter radius)					Deminance Test Werkshoot
1	Species Name	_	% Cover		Ind.Status	Dominance Test Worksheet
1. 2.						Number of Deminant Coopies that are ORL FACIAL or FACIAL (A)
3.						Number of Dominant Species that are OBL, FACW, or FAC:3(A)
3. 4.	-					Total Number of Descious Consists Assess All Charles (D)
					-	Total Number of Dominant Species Across All Strata:4(B)
5.						D
6.					-	Percent of Dominant Species That Are OBL, FACW, or FAC:(A/B)
7.						Burrelon or Index Models of
8.						Prevalence Index Worksheet
9.						Total % Cover of: Multiply by:
10.		T-4-1 O			-	OBL spp. 80 x 1 = 80
		Total Cover =	0			FACW spp. 30 x 2 = 60
0 11 /01 1 0/	. (5)					FAC spp. 75
	atum (Plot size: 5 meter radius)		40		EAGL	FACU spp10 x 4 =40
1.	Rosa multiflora		10	Υ	FACU	UPL spp. 0
2.						T-1-1 405 (A) 405 (D)
3.						Total <u>195</u> (A) <u>405</u> (B)
4.						2 24
5.						Prevalence Index = B/A =
6.						
7.						
8.						Hydrophytic Vegetation Indicators:
9.					-	☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.						
		Total Cover =	10			
						☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)				0.01	
1.	Symplocarpus foetidus		80	Y	OBL	* Indicators of hydric soil and wetland hydrology must be
2.	Impatiens capensis		30	Υ	FACW	present, unless disturbed or problematic.
3.					-	5 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
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.						neight (DDH), regardless of neight.
8.						O It (Ot It Wearly plants less than 2 in DRH and greater than 2 20 ft
9.						Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.						
11.						Hart. All horhogenic (new month) plants, recordings of size and
12.						Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.						••
14.						Mary J. M. Woody vines greater than 2.30 ft in height
15.						Woody Vines - All woody vines greater than 3.28 ft. in height.
	_	Total Cover =	110			
	um (Plot size: 10 meter radius)		75		E40	
1.	Smilax hispida		75	Υ	FAC	
2.					-	Hadron bodie Werstell B. C. V. C. V.
3.					-	Hydrophytic Vegetation Present ☑ Yes ☐ No
4.						
5.	_ 	T-4-1 0				
Damanica		Total Cover =	75			
Remarks:						
Additional Rei	marks:					



Project/Site:	Sunrise Wind	i/ Fire Island, NY					Stantec Project #:	2028113199		Date:	06/09/20
Applicant:	Sunrise Wind									County:	Suffolk
Investigator #1:	Charles Ferri	s		Invest	igator #2:					State:	New York
Soil Unit:							VI/WWI Classification	:		Wetland ID:	W01CFA
Landform:	Rise				cal Relief:					Sample Point:	Upland
Slope (%):	0-1%	Latitude:			ongitude:			Datum:		Community ID:	Upland
		litions on the site typ				o, explain in			No	4	
		or Hydrology ☐sigr					Are normal circumst		t?		
		or Hydrology ⊑ natı	urally probl	ematic?			Yes	□No			
SUMMARY OF											
Hydrophytic Ve				☑ Yes				Hydric Soils			☐ Yes ☑ No
Wetland Hydrol	logy Present	?		□ Yes	☑ No			Is This Samp	oling Point	Within A Wetlar	nd? Yes No
Remarks:											
HYDROLOGY											
Wetland Hydr	ology Indica	ators (Check here if	indicators	are not p	oresent)⊏					
Primary				_	50 14/ /				Secondary:		•
F	A1 - Surface A2 - High Wa				B9 - Wate				E	B6 - Surface Soil B10 - Drainage P	
	A3 - Saturation			F	B15 - Aqu				F	B16 - Moss Trim	
	B1 - Water M			E	C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Bur	
I =	B3 - Drift Dep						educed Iron		F		isible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep	at or Crust		E	C6 - Rece		eduction in Tilled Soils		F	D1 - Stunted or S D2 - Geomorphic	
l		on Visible on Aerial Ima	aerv	E.	Other (Ex				E	D3 - Shallow Aqu	
		y Vegetated Concave S		_	(,			D4 - Microtopogra	
										D5 - FAC-Neutra	l Test
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hyd	drology Dr	rocont2	Yes ☑ No
Water Table Pr	esent?	☐ Yes ☑ No	Depth:		(in.)			welland ny	urology Fr	esenti	TES INO
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)						
Describe Record	led Data (str	eam gauge, monitorir	na well aeri:	al nhotos	nrevious	inspectio	ns) if available:		N/A		
	ou Duta (ou	eam gaage, memeri	.g, ac	a. potoo	, p. 0 1. 0 d 0		,				
I Remarks											
Remarks:											
SOILS							Series Prainage Class				
SOILS Map Unit Name						Ç	Series Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	ogroup):	the death coded to decrease the indi	inches as confirm the c	abaanaa of india	otern) (Tuno Curi				Leastion DI «Daro	Fising MeMotivi	
SOILS Map Unit Name Taxonomy (Sub	ogroup): otion (Describe to	the depth needed to document the indi	icator or confirm the a		ators.) (Type: C=0		Series Drainage Class	wered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to			Matrix			=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains;		T	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	Horizon	Color (Matrix Moist)	%	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	ogroup): otion (Describe to Bottom Depth 2	Horizon 1	Color (I	Matrix Moist) 4/2	% 100	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	ogroup): otion (Describe to Depth 2 5	Horizon 1 2	Color (I 10YR 2.5Y	Matrix Moist) 4/2 4/3	% 100 100	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location 	(e.g. clay, sand, loam sandy loam sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y	Matrix Moist) 4/2 4/3 5/4	% 100 100 100	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y	Matrix Moist) 4/2 4/3 5/4	% 100 100 100 	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4	% 100 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4	% 100 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4	% 100 100 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): ption (Describe to: Bottom Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4	% 100 100 100	Concentration, E	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to: Bottom Depth 2 5 20 Soil Field In	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100 not preser	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to Depth 2 2 5 20	Horizon 1 2 3 dicators (check he	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4	% 100 100 100 not preser \$8 - Polyn	Concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to Describe to D	Horizon 1 2 3 ndicators (check he	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100 not preser \$8 - Polys \$9 - Thin	Concentration, C	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	ogroup): otion (Describe to Depth 2 2 5 20	Horizon 1 2 3 idicators (check he	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100 not preser \$8 - Polys \$9 - Thin	Concentration, C	Color (Moist)	Mottles % Indicator	Type s for Proble A10 - 2 Coast S3 - 5cm M	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5	pgroup): ption (Describe to Depth 2 5 20	Horizon 1 2 3 dicators (check he popedon istic en Sulfide d Layers	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration, C	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to Describe to Depth 2 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration, C	Color (Moist) w Surface (LRR R, MLRA 149B) dace (LRR R, MLRA 149B) dineral (LRR K, L) Matrix K urface	Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand 1496) R.K. L. R) (LRR K, L, R)
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick II	Horizon 1 2 3 ndicators (check he pipedon istic en Sulfide di Layers ed Below Dark Surface park Surface park Surface	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles % Indicator	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	pgroup): ption (Describe to Depth 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick II	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to Describe to Depth 2 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam sandy loam sand sand 149B) x.k. L. R) (LRR K, L, R) (LRR K, L, R) ils (MLRA 149B) 145, 149B)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles % Indicator	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	pgroup): ption (Describe to: Bottom Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100	Concentration. C	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam sandy loam sand sand
SOILS Map Unit Name Taxonomy (Sut Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to Describe to Depth 2 2 5 20	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist)	% 100 100 100 se Polyx S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redc F7 - Deply	Concentration. C	Color (Moist)	Mottles % Indicator Indicators c disturbed or	Type	Location	(e.g. clay, sand, loam sandy loam sand sand sand sand sand sand sand sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 5 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 2 5 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y 	Matrix Moist) 4/2 4/3 5/4 ors are r	% 100 100 100 se Polyx S9 - Thin F1 - Loan F2 - Loan F3 - Deply F6 - Redc F7 - Deply	Concentration. C	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loan sandy loam sand sand sand



Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01CFA Sample Point Uplan
VEGETATION	(Species identified in all uppercase are	non nativo anocios \			
	ot size: 10 meter radius)	non native species.)			
Troo otratam (F.	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: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: Multiply by:
10.	 T-4-1			-	OBL spp. 0 x 1 = 0
	lotai	Cover = 0			FACW spp 0
0 1: (0) 1 0:	. (5)				FAC spp. 120 x 3 = 360
	ratum (Plot size: 5 meter radius)	75	Υ	EAC	FACU spp. 0 x 4 = 0
1. 2.	Morella pensylvanica Toxicodendron radicans	75 30	Y	FAC FAC	UPL spp. <u>52</u> x 5 = <u>260</u>
3.	Prunus maritima	5	N N	NI	Total 172 (A) 620 (B)
3. 4.					10tai 172 (A) 020 (D)
5.					Prevalence Index = B/A = 3.605
6.					Trevalence mack - B/A
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
-	Total	Cover = 110			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 2 meter radius)				Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Avena sativa	25	Υ	UPL	
2.	Toxicodendron radicans	15	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.	Artemisia vulgaris	15	Υ	UPL	
4.	Ammophila breviligulata	7	N	UPL	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 (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					All best account from weath about a consultant of size and
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.		60			Woody Villes - 74 woody villes greater than 5.25 ft. in height.
	lotai	Cover = 62			
Woody Vino Strat	tum (Plot size: 10 meter radius)				
1.	.um (Plot size: 10 meter radius)				
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					injurophysio rogotation ricocht - 100 - 100
5.					
		Cover = 0			
Remarks:	Prevelance index is > than 3.0, at		hydric s	soil or wet	land hydrology present.
			,		,
Additional Re	marks:				



Applicant: Investigator #1: Soil Unit: Landform:	Sunrise Wind						Stantec Project #:	2028113199		Date:	06/09/20
Soil Unit:										County:	Suffolk
	Charles Ferri	s		Investi	igator #2:					State:	New York
Landform:						NV	/I/WWI Classification:			Wetland ID:	W01CFA
	Floodplain			Loc	al Relief:	Concav	е			Sample Point:	Wetland
	0-1%	Latitude:			ongitude:			Datum:		Community ID:	E2SS/EM
		ditions on the site typ				o, explain in			No		
		or Hydrology 🛚 sign					Are normal circumst		t?		
		or Hydrology ⊑ natu	rally proble	ematic?			Yes	□No			
SUMMARY OF											
Hydrophytic Veg								Hydric Soils			
Wetland Hydrolo	ogy Present	?		Yes	□ No			Is This Samp	oling Point \	Within A Wetland	d? 🔟 Yes 🗏 No
Remarks:											
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators a	are not p	resent)⊏					
Primary:						•			Secondary:		
	A1 - Surface			F	B9 - Wate				F	B6 - Surface Soil (
	A2 - High Wa A3 - Saturation			<u> </u>	B13 - Aqu B15 - Mar				F	B10 - Drainage Pa B16 - Moss Trim L	
	B1 - Water M			F	C1 - Hydr					C2 - Dry-Season \	
	B2 - Sedimer			Ē			spheres on Living Roots			C8 - Crayfish Burn	
	B3 - Drift Dep				C4 - Pres	ence of Re	educed Iron			C9 - Saturation Vis	sible on Aerial Imagery
	B4 - Algal Ma						duction in Tilled Soils		=	D1 - Stunted or St	
	B5 - Iron Dep				C7 - Thin				<u> </u>	D2 - Geomorphic	
		on Visible on Aerial Imag V Vegetated Concave Si		E.	Other (Ex	piain in Re	marks)		F	D3 - Shallow Aquit D4 - Microtopogra	
_	Do Oparooi	y vogotatou conouvo ot	aridoo						Ξ	D5 - FAC-Neutral	
Field Observati	ions:										
Surface Water F		□ Yes ☑ No	Depth:		(in.)						
Water Table Pre		✓ Yes ✓ No	Depth:	8	(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Saturation Prese		✓ Yes ☐ No	Depth:	0	(in.)						
					` '						
Describe Recorde	ed Data (stre	eam gauge, monitorin	g well, aeria	al photos,	previous	inspection	ns), if available:		N/A		
					•		,,				
Remarks:	A wrack lin	e was observed with	in the wetla		•	'	,				
Remarks:	A wrack lin	e was observed with	in the wetla			'	,				
Remarks:		e was observed with	in the wetla		•						
Remarks: SOILS Map Unit Name:		e was observed with	in the wetla				eries Drainage Class:				
Remarks: SOILS Map Unit Name: Taxonomy (Sub	group):			and		S	eries Drainage Class:				
Remarks: SOILS Map Unit Name: Taxonomy (Sub-	group): tion (Describe to			and		S		vered/Coated Sand Grains;	Location: PL=Pore I	Lining, M=Matrix)	Tautura
Remarks: SOILS Map Unit Name: Taxonomy (Sub- Profile Descrip Top	group): tion (Describe to	the depth needed to document the indic	eator or confirm the al	and bsence of indica Matrix	ators.) (Type: C=0	S	eries Drainage Class:	rered/Coated Sand Grains;		1	Texture
Remarks: SOILS Map Unit Name: Taxonomy (Sub- Profile Descrip Top Depth	group): tion (Describe to Bottom Depth	the depth needed to document the indic Horizon	cator or confirm the al	and bsence of indice Matrix Moist)	ators.) (Type: C=6	Concentration, D	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov	rered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
Remarks: 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 1	Color (N	bsence of indica Matrix Moist) 2/2	% 100	Concentration, D:	eries Drainage Class: -Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam) sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2	group): tion (Describe to Bottom Depth 2 9	the depth needed to document the indices Horizon 1 2	Color (N 10YR 2.5Y	bsence of indice Matrix Moist) 2/2 5/2	% 100 85	Concentration, D:	Peries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 3	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subprofile Descrip) Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9	the depth needed to document the indices the depth needed to document the indices that the	Color (N 10YR 2.5Y 2.5Y	basence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D	Color (Moist) 5/6 5/6	Mottles % 3 5	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subprofile Descrip) Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20	the depth needed to document the indices the depth needed to document the indices that the	Color (N 10YR 2.5Y 2.5Y	basence of indicate Matrix Moist) 2/2 5/2 5/1	% 100 85 85	7.5YR 7.5YR	Color (Moist) 5/6 5/6	Mottles % 3 5	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20	the depth needed to document the indices the depth needed to document the indices that the	Color (N 10YR 2.5Y 2.5Y	basence of indicate Matrix Moist) 2/2 5/2 5/1	% 100 85 85	7.5YR 7.5YR	Color (Moist) 5/6	Mottles % 3 5	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20	the depth needed to document the indices the depth needed to document the indices that the	Color (N 10YR 2.5Y 2.5Y	band basence of indica Matrix Moist) 2/2 5/2 5/1	% 100 85 85	7.5YR 7.5YR	Color (Moist) 5/6	Mottles % 3 5	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub. Profile Descrip Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20	the depth needed to document the indice Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85	7.5YR	Color (Moist) 5/6 5/6	### Mottles Mottles	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub) Profile Descrip Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20	the depth needed to document the indice Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	band Matrix Moist) 2/2 5/2 5/1	% 100 85	7.5YR 7.5YR	Color (Moist) 5/6	### Professional Control of Contr	Type C C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to: Bottom Depth 2 9 20 Soil Field In	the depth needed to document the indice Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	band Matrix Moist) 2/2 5/2 5/1	% 100 85 85	7.5YR 7.5YR	Depletion, RM=Reduced Matrix, CS=Cow Color (Moist) 5/6 5/6	### Mottles Mottles	Type C C srs for Proble	Location M M matic Soils ¹	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subprofile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Bottom Depth 2 9 20 Soil Field In	Horizon 1 2 3 dicators (check her	Color (N 10YR 2.5Y 2.5Y 	besence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85 tot preser S8 - Polyv	Concentration, D	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 5/6 W Surface (LRR R, MLRA 1498)	Mottles % 3 5 Indicatoi	Type C C	Location M M matic Soils Muck (LRR K, L, MLRA 1/4)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subprofile Descrip) Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 ndicators (check her	Color (N 10YR 2.5Y 2.5Y 	band Matrix Moist) 2/2 5/2 5/1	% 100 85 85 S8 - Polyl S9 - Thin	7.5YR 7.5YR tt	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 5/6 w Surface (LRR R, MLRA 149B)	### Mottles Mottles	Type	Location M M matic Soils Muck (LRR K, L, MLRA 1/4 Prairie Redox (LRR	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub. Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Depth 2 9 20 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 2 3 ndicators (check her	Color (N 10YR 2.5Y 2.5Y 	besence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85 ot preser S8 - Polyn F1 - Loan	Concentration, D. 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicatoi	Type C C s for Proble A10 - 2 Cast S3 - 5cm M	Location M M matic Soils Prairie Redox (LRR K, L, MLRA 14 Pratire Redox (LRR kucky Peat of Peat (I	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subpersite Descriped) Topenth 0 2 9 NRCS Hydric S	group): tion (Describe to Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 ndicators (check her	Color (N 10YR 2.5Y 2.5Y 	bsence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85 S8 - Polyl S9 - Thin	7.5YR 7.5YR 7.5YR 7.ort	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 5/6 W Surface (LRR R, MLRA 149B) dineral (LRR R, L) Matrix	Mottles % 3 5 Indicatol	Type C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S	Location M M matic Soils Muck (LRR K, L, MLRA 1/4 Prairie Redox (LRR	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Depth 2 9 20	Horizon 1 2 3 adicators (check her	Color (N 10YR 2.5Y 2.5Y 	basence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85 S8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deple F6 - Redo	7.5YR 7.5YR tt	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 5/6 w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix K fface	Mottles % 3 5 Indicato	Type C C	Location M M matic Soils Muck (LRR K, L, MLRA 1/2 Prairie Redox (LRR Lucky Peat of Peat (I urface (LRR K, L, M) ue Below Surface (LRR K, C, ark Surface (LRR K, C, ark Surface (LRR K, C)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub) Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Depth 2 9 20	Horizon 1 2 3 ndicators (check her pipedon istic en Sulfide di Layers ed Below Dark Surface park Surface park Surface	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicato	Type	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR kucky Peat of Peat (urface (LRR K, L, M) urface (LRR K, L, M) urface (LRR K, L, M) langanese Masses	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subpersite Descriped) Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Eg A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M S1 - Sandy	Horizon 1 2 3 dicators (check her bipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color (N 10YR 2.5Y 2.5Y 	basence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85 S8 - Polyn S9 - Thin F1 - Loan F2 - Loan F3 - Deple F6 - Redo	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicato	Type C C	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L) urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soils	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subpersite Descriped) Top Depth 0 2 9	group): tion (Describe to Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M S4	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicato	Type C C	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LCK) Peat of Peat (LURFACE (LRR K, L) M) UE Below Surface (LRR K, L) Janganese Masses ont Floodplain Soile Spodic (MLRA 144A, 1)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub: Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Eg A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M S1 - Sandy	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicato	Type C C	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L) urface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soils	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub) Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to: Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicatol	Type C C	Location M M M matic Soils Prairie Redox (LRR K. L. MLRA 14 Prairie Redox (LRR K. L. MLRA 14 Prairie Redox (LRR K. L. M) ue Below Surface (LRR K. L. M) ue Below Surface (LRR K. L. M) ue Below Surface (LRR K. L. M) sont Floodplain Soili Spodic (MLRA 144A, 14 Parent Material Shallow Dark Surfa ain in Remarks)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Sub) Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to: Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicator Indicators contents and grains.	Type C C	Location M M M matic Soils Prairie Redox (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L) langanese Masses ont Floodplain Soil: Spodic (MLRA 144A, 14	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam
Remarks: SOILS Map Unit Name: Taxonomy (Subperfile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to Describe to Depth 2 9 20	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	besence of indice Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles Mottles % 3 5 Indicator Indicators of disturbed of disturb	Type C C	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LOK) Peat of Peat (LUTFACE (LRR K, L) langanese Masses ont Floodplain Soils Spodic (MLRA 144A, 16 Parent Material Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam 49B) K. L, R) LRR K, L, R) LRR K, L, R) (IRR K, L, R) S (MLRA 149B) 45, 149B) ace nust be present, unless
Remarks: SOILS Map Unit Name: Taxonomy (Sub) Profile Descrip Top Depth 0 2 9 NRCS Hydric S	group): tion (Describe to: Bottom Depth 2 9 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier A12 - Thick I S1 - Sandy N S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (N 10YR 2.5Y 2.5Y 	bsence of indical Matrix Moist) 2/2 5/2 5/1	% 100 85 85	Concentration, D. 7.5YR 7.5YR 7.5YR tt	Color (Moist) 5/6 5/6	Mottles % 3 5 Indicator Indicators contents and grains.	Type C C	Location M M M matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR LOK) Peat of Peat (LUTFACE (LRR K, L) langanese Masses ont Floodplain Soils Spodic (MLRA 144A, 16 Parent Material Shallow Dark Surfain in Remarks)	(e.g. clay, sand, loam) sandy loam sandy loam sandy loam



Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01CFA Sample Point Wetland
VEGETATION	(0)				
VEGETATION Tree Stratum (Plo	(Species identified in all uppercase are non native of size: 10 meter radius)	e species.)			
Tree Stratum (Fic	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.					(4.15)
6. 7.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
8.	<u></u>				Prevalence Index Worksheet
9.	_ 				Total % Cover of: Multiply by:
10.					OBL spp 0 x 1 = 0
-	Total Cover =	0			FACW spp. 115 x 2 = 230
					FAC spp. 15 x 3 = 45
Sapling/Shrub Stra	atum (Plot size: 5 meter radius)				FACU spp 0 x 4 = 0
1.	Iva frutescens	40	Y	FACW	UPL spp. 0 x 5 = 0
2.	Morella pensylvanica	15	Υ	FAC	T
3. 4.					Total 130 (A) 275 (B)
5.					Prevalence Index = B/A = 2.115
6.	_ 				Prevalence Index = B/A =
7.	_ 				
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					
	Total Cover =	55			✓ Yes ✓ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)			=	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Phragmites australis	75	Υ	FACW	* Indicators of hydric soil and wetland hydrology must be
2. 3.	_ 				present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Definitions of Vogetation offata.
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.					cair.
11.					N. A. All body and the state of
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.
10.	Total Cover =	75			
	10141 00001 -	. 0			
Woody Vine Stratu	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.	Total Cavan -				
Remarks:	Total Cover =	0			
i Nemaiks.					
<u> </u>					
Additional Ren	marks:				
, laditional IVel	iidi iidi				



Project/Site:	Sunrise Wind	l/ Long Island, NY					Stantec Project #:	2028113199	1	Date:	06/09/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1:	Charles Ferri	s		Investi	igator #2:					State:	New York
Soil Unit:							/I/WWI Classification:			Wetland ID:	W01CFB
Landform:	Side slope				cal Relief:					Sample Point:	Upland
Slope (%):	3-5%	Latitude:			ongitude:			Datum:		Community ID:	Upland
		litions on the site typ				o, explain in			No		
		or Hydrology ⊡sign					Are normal circumst		t?		
Are Vegetation	⊏, Soil ∟, o	or Hydrology ⊑ natu	rally proble	ematic?			□ Yes	☑ No			
SUMMARY OF											
Hydrophytic Ve				☑ Yes	□ No			Hydric Soils			☐ Yes ☑ No
Wetland Hydrol					. ☑ No			Is This Samp	oling Point \	Within A Wetlan	id? 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)⊏					
Primary:				_	50 14/4	o			Secondary:		
I	A1 - Surface A2 - High Wa			F	B9 - Wate B13 - Aqu				E	B6 - Surface Soil B10 - Drainage P	
	A3 - Saturation			F	B15 - Mar				Ē	B16 - Moss Trim	
	B1 - Water M	larks			C1 - Hydr					C2 - Dry-Season	
I =	B2 - Sedimer						spheres on Living Roots		<u> </u>	C8 - Crayfish Bur	
	B3 - Drift Dep B4 - Algal Ma			F			educed Iron duction in Tilled Soils		F	C9 - Saturation V D1 - Stunted or S	isible on Aerial Imagery
	B5 - Iron Dep			F	C7 - Thin				E	D2 - Geomorphic	
		on Visible on Aerial Ima	gery	Ē.	Other (Ex	plain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsely	Vegetated Concave S	urface	_					<u> </u>	D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat											
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hye	drology Pr	esent?	Yes ☑ No
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)						
Saturation Pres	ent?	☐ Yes 🗹 No	Depth:		(in.)						
Describe Record	ed Data (stre	eam gauge, monitorin	g well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Remarks:											
SOILS											
	:					S	eries Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	group):						•				
SOILS Map Unit Name Taxonomy (Sub	group):	the depth needed to document the indi	ator or confirm the a	absence of indica	ators.) (Type: C=0		eries Drainage Class:		; Location: PL=Pore L	_ining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	the depth needed to document the indi	tator or confirm the a	absence of indica	ators.) (Type: C=C		Depletion, RM=Reduced Matrix, CS=Con		; Location: PL=Pore L	_ining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to t	the depth needed to document the indi	cator or confirm the a	Matrix	ators.) (Type: C=0		•	vered/Coated Sand Grains;	; Location: PL=Pore L	ining, M=Matrix)	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): Ition (Describe to to Bottom			Matrix			Depletion, RM=Reduced Matrix, CS=Con	vered/Coated Sand Grains;	T		-
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Con	vered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to the Bottom Depth 20	Horizon 1	Color (I	Matrix Moist) 4/3	% 100	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to	Horizon 1 	Color (I 2.5Y	Matrix Moist) 4/3	% 100 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Coo Color (Moist) 	wered/Coated Sand Grains; Mottles %	Type 	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20	Horizon 1 	Color (I 2.5Y 	Matrix Moist) 4/3	% 100 	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Coo	wered/Coated Sand Grains; Mottles %	Type	Location 	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20	Horizon 1 	Color (I 2.5Y 	Matrix Moist) 4/3	% 100 	Concentration, D	E-Depletion, RM=Reduced Matrix, CS=Coo	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20	Horizon 1	Color (I 2.5Y 	Matrix Moist) 4/3	% 100 	Concentration, D	E-Depletion, RM=Reduced Matrix, CS=Cov	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20	Horizon 1	Color (I 2.5Y 	Matrix Moist) 4/3	% 100 	Concentration, D	E-Depletion, RM=Reduced Matrix, CS=Cov	wered/Coated Sand Grains; Mottles %	Type	Location	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20	Horizon 1	Color (I	Matrix Moist) 4/3	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles %6	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 to Depth 20	Horizon 1 dicators (check her	Color (I	Matrix Moist) 4/3	% 100	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 dicators (check her	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles %	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA + Prairie Redox (LRR	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 20 Soil Field In A1- Histosol A3 - Black Hi	Horizon 1 dicators (check here)	Color (I	Matrix Moist) 4/3 ors are r	% 100 tot preser 88 - Polyy 89 - Thin F1 - Loarn	Concentration, D	Color (Moist)	Mottles % Indicator	Type s for Proble A10 - 2 cm A16 - 2 cast S3 - 5 cm M	Location matic Soils ¹ Muck (LRR K, L, MLRA ¹ Prairie Redox (LRR ucky Peat of Peat i	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 dicators (check here) stic stic stic stic stic stic stic stic	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	Mottles %	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S	Location matic Soils ¹ Muck (LRR K, L, MLRA + Prairie Redox (LRR	(e.g. clay, sand, loam) loamy sand
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratiffec A11 - Deplete	Horizon 1 dicators (check here bipedon stic stic no Sulfide d Layers ed Below Dark Surface	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	Mottles % Indicator	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 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplete A12 - Thick E	Horizon 1	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	Type	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to to Depth 20	Horizon 1 dicators (check here pipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Juck Mineral	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplete A12 - Thick E	Horizon 1 dicators (check here) stic surface stic surface delelow Dark Surface bark Surface fuck Mineral leleyed Matrix	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	Type	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric:	group): tion (Describe to to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy R S4 - Sandy G S5 - Sandy R	Horizon 1 dicators (check here bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator	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 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1 dicators (check here bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	Mottles % Indicator	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 1 Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped	Horizon 1	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator Indicators of Indicat	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 to Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick E Sandy R S4 - Sandy R S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	Mottles % Indicator [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 to Depth 20	Horizon 1	Color (I	Matrix Moist) 4/3 ors are r	% 100	Concentration, D	Color (Moist)	wered/Coated Sand Grains; Mottles % Indicator Indicators of Indicat	Type	Location	(e.g. clay, sand, loam) loamy sand



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01CFB Sample Point Upland
VECETATION	(Considerational and a second	-4:i			
VEGETATION Tree Stratum (Plo	(Species identified in all uppercase are non not size: 10 meter radius)	ative species.)			
,	Species Name	% 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.	_ 				Total Number of Dominant Species Across All Strata.
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.	T.1.10				OBL spp. 0 x 1 = 0
	Total Cove	er = 0			FACW spp. 90
Sanling/Shrub Str	atum (Plot size: 5 meter radius)				FAC spp. 0 x 4 = 0
1.					UPL spp. 3 X 5 = 15
2.					
3.					Total(A)(B)
4.					
5.					Prevalence Index = B/A = 2.143
6.					
7. 8.	_ 				Hydrophytic Vegetation Indicators:
9.	_ 				Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cove	r = 0			✓ Yes ✓ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herb Stratum (Plo	ot size: 2 meter radius)				
1.	Phragmites australis	90	Y	FACW	* Indicators of hydric soil and wetland hydrology must be
2.	Solidago rugosa	5	N	FAC	present, unless disturbed or problematic.
3. 4.	Artemisia vulgaris	3	N 	UPL 	Definitions of Vegetation Strata:
5.	_ 				Definitions 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. tall.
10.					talli.
11.					II. d. All borbon or from the district of the second of th
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.
75.	Total Cove				
	um (Plot size: 10 meter radius)				
1.				-	
2.					Hydrophytic Vagetetian Present Van U.N.
3. 4.	_ 	<u></u>			Hydrophytic Vegetation Present ☑ Yes ☐ No
5.					
J.	Total Cove				
Remarks:	Located on slope of earthen berm				
Additional Ren	marks:				



Project/Site:	Sunrise wind	l/ Long Island, NY					Stantec Project #:	2028113199		Date:	06/09/20
Applicant:	Sunrise Wind									County:	Suffolk
Investigator #1:	Charles Ferri	S		Invest	igator #2:					State:	New York
Soil Unit:						NW	/I/WWI Classification	:		Wetland ID:	W01CFB
Landform:	Depression	1		Loc	cal Relief:	Concave	е			Sample Point:	Wetland
Slope (%):	0-1%	Latitude:			.ongitude:			Datum:		Community ID:	PEM
		litions on the site typ				o, explain in	remarks)	✓ Yes	No	_	
		or Hydrology ⊡sigr					Are normal circumst		t?		
		or Hydrology ⊑ nati	urally probl	ematic?			□ Yes	☑ No			
SUMMARY OF	FINDINGS										
Hydrophytic Ve				Yes				Hydric Soils			Yes □ No
Wetland Hydrol					□ No)		Is This Samp	oling Point \	Within A Wetlar	nd?
Remarks:	Wetland is	contained in a man-	-made basi	n							
HYDROLOGY											
Wetland Hydre	ology Indica	ators (Check here if	indicators	are not p	oresent):⊏					
Primary:		•				,			Secondary:	<u>.</u>	
	A1 - Surface					er-Stained				B6 - Surface Soil	
	A2 - High Wa			F		uatic Fauna				B10 - Drainage P	
Ė	A3 - Saturation B1 - Water M			F		rl Deposits rogen Sulfic			F	B16 - Moss Trim C2 - Dry-Season	
	B2 - Sedimer			F			spheres on Living Roots		F	C8 - Crayfish Bur	
	B3 - Drift De			F			educed Iron		F		isible on Aerial Imagery
	B4 - Algal Ma			F			duction in Tilled Soils		F	D1 - Stunted or S	
	B5 - Iron Dep			Ē		Muck Surf			J	D2 - Geomorphic	
		on Visible on Aerial Ima	igery	Ē.	Other (Ex	oplain in Re	marks)			D3 - Shallow Aqu	
	B8 - Sparsely	Vegetated Concave S	urface	_	,		,			D4 - Microtopogr	
										D5 - FAC-Neutra	l Test
Field Observat	ions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			W-41	I D		W E N-
Water Table Pr	esent?	□ Yes ☑ No	Depth:		(in.)			Wetland Hy	arology Pr	esent?	Yes □ No
Saturation Pres		✓ Yes ☐ No	Depth:		(in.)						
					. ,						
Describe Record	ed Data (stre	eam gauge, monitorir	ng well, aeria	al photos	, previous	inspection	ns), if available:		N/A		
							,,				
Remarks:							,				
Remarks:						•	,				
Remarks:						•	,				
SOILS	:	0				S	,				
SOILS Map Unit Name		0				S	eries Drainage Class	:			
SOILS Map Unit Name Taxonomy (Sub	group):			absence of indica	ratore) /Tuna: C-		eries Drainage Class		Location: DI -Pore I	Lining M-Matriyi	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): otion (Describe to				ators.) (Type: C=		,	wered/Coated Sand Grains;	Location: PL=Pore L	Lining, M=Matrix)	Teyture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to	the depth needed to document the ind	icator or confirm the a	Matrix			Series Drainage Class	wered/Coated Sand Grains;			Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to) Bottom Depth	the depth needed to document the ind	cator or confirm the a	Matrix Moist)	%	Concentration, D=	Geries Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): ation (Describe to Depth 20	the depth needed to document the ind Horizon 1	Color (Matrix Moist) 4/2	% 90	Concentration, D=	Geries Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ation (Describe to) Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (Matrix Moist) 4/2	% 90 	Concentration, D=	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C 	Location M 	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pgroup): ation (Describe to Depth 20	the depth needed to document the ind Horizon 1	Color (Matrix Moist) 4/2	% 90	Concentration, D=	Geries Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ation (Describe to) Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (Matrix Moist) 4/2	% 90 	Concentration, D=	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C 	Location M 	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 	Concentration, D=	Geries Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	Mottles % 10	Type C 	Location M 	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to 1) Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 	7.5YR	Color (Moist) 5/6	Mottles % 10	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): otion (Describe to: Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 	7.5YR	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type	Location M	(e.g. clay, sand, loam) fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ption (Describe to: Bottom Depth 20	the depth needed to document the ind Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 	7.5YR	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ation (Describe to: Bottom Depth 20	Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 	7.5YR	Series Drainage Class -Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	wered/Coated Sand Grains; Mottles % 10	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): Ation (Describe to Depth 20 Soil Field In	the depth needed to document the ind Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 not presel	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	Mottles	Type	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): btion (Describe to Depth 20 Soil Field In	Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90	7.5YR type plane and the plan	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6	Mottles % 10 Indicator	Type C s for Proble A10 - 2 cm	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ption (Describe to Describe to De	Horizon 1 dicators (check he	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90	7.5YR nt	Color (Moist) 5/6 W Surface (LRR R, MLRA 149B)	Mottles	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ption (Describe to Inc.) Bottom Depth 20 Soil Field In A1 - Histosol A3 - Black Hi	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) Aloe (LRR R, MLRA 149B) Aloe (LRR R, MLRA 149B)	Mottles % 10 Indicator	Type C s for Proble A10 - C coast S3 - 5cm M	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Describe to Depth 20	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AIDER R, MLRA 149B) Matrix Matrix	Mottles % 10 Indicator	Type C 	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to Describe to Depth 20	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): ption (Describe to Describe to De	Horizon 1 dicators (check he pipedon stic en Sulfide et Layers et Below Dark Surface	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90	7.5YR	Ceries Drainage Class Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGC (LRR R, MLRA 149B) Alineral (LRR K, L) Matrix K (rface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): tion (Describe to Describe to Depth 20	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR tnt	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to: Bottom Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick I	Horizon 1 dicators (check he bipedon stic en Sulfide d Layers ed Below Dark Surface luck Mineral	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	stransport of the stransport o	Horizon 1 dicators (check he objedon stic an Sulfide d Layers ed Below Dark Surface Dark Mineral Bleyed Matrix	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to Describe to De	Horizon 1 dicators (check he pipedon stic en Sulfide d Layers ed Below Dark Surface fluck Mineral sleyed Matrix leedox	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1 dicators (check he pipedon stic en Sulfide d Layers ed Below Dark Surface fluck Mineral sleyed Matrix leedox	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator Indicators 'Indicators of the lates	Type C	Location M	(e.g. clay, sand, loam fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to Describe to Depth 20	Horizon 1	Color (2.5Y	Matrix Moist) 4/2	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator Indicators c disturbed o	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	group): ption (Describe to: Depth 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped	Horizon 1	Color (2.5Y	Matrix Moist) 4/2 cors are r	% 90 S8 - Poly S9 - Thin F1 - Loar F2 - Loar F3 - Depl F6 - Red F7 - Depl	7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 5/6 W Surface (LRR R, MLRA 149B) AGE (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K frace Surface	Mottles % 10 Indicator Indicators 'Indicators of the lates	Type C	Location M	(e.g. clay, sand, loam) fine sandy loam



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01CFB Sample Point Wetland
VEGETATION	(Species identified in all uppercase are no	n native species.)			
Tree Stratum (Pic	ot size: 10 meter radius) Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.		<u> </u>			Dominance rest Worksheet
2.					Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)
3.					Number of Boliniant openies that are OBE, 1 AOV, of 1 AO(7)
4.	_ 				Total Number of Deminant Species Agrees All Strate: 1 (R)
5.	_ 				Total Number of Dominant Species Across All Strata:1(B)
6.	_ 				Descent of Deminant Chapter That Are ORL FACIN as FAC: 100.09/ (A/R)
7.	<u></u>				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.	Tatal C	over = 0		-	OBL spp. 0 x 1 = 0
	Total Co	over = U			FACW spp. 100
0 11 101 1 01	. (5)				FAC spp. 0 x 3 = 0
	atum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.					UPL spp. 0 x 5 = 0
2.					T () (0) (0)
3.					Total 100 (A) 200 (B)
4.					
5.					Prevalence Index = B/A =
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					
10.					✓ Yes ✓ No Dominance Test is > 50%
	Total Co	over = 0			Yes No Prevalence Index is ≤ 3.0 *
Herb Stratum (Plo	t size: 2 meter radius)				
1.	Phragmites australis	100	Υ	FACW	* Indicators of budge sail and watland budgelogy must be
2.					* Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
3.					procent, unloss distarbed or 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 (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 Co				
	i otal ot	2.31			
Woody Vine Strati	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.	_ 				Trydrophydio rogolation i resent 11 163 1100
5.					
J	Total Co				
Remarks:	i otai Co	UVEI - U			
i temarks.					
Additional Rer	narks:				



Project/Site:		I/ Long Island, NY					Stantec Project #:	2028113199)	Date:	06/11/20	
Applicant:	Sunrise Wind							County: Suffolk				
Investigator #1:	Charles Ferri	S		Invest	igator #2:		///A/\A/I Classification			State:	New York	
Soil Unit:	0:-1				- I D - I' - 6		VI/WWI Classification	:		Wetland ID:	W01CFC	
Landform:	Side slope	1 -4141			al Relief:			Deture		Sample Point:	Upland	
Slope (%):	0-1%	Latitude:	inal fau thia		ongitude:			Datum: ☑ Yes □	No	Community ID:	Upland	
		litions on the site typ				o, explain in T				-		
Are Vegetation	_,S0II □,0	or Hydrology □sign or Hydrology □natι	ifficantly dis	sturbed?			Are normal circumst	tances presen □No	l?			
SUMMARY OF		or Hydrology — hall	rally proble	emauc?			<u> </u>	□ INO				
		t0		□ Vaa	□ Na			Lludaia Caila	D=====±0		Vac V Na	
Hydrophytic Veg				☐ Yes				Hydric Soils		A/:4b::- A \A/-4l-:-	☐ Yes ☑ No	
Wetland Hydrol	ogy Present	<u>'</u>		⊢ res	i L INO	l		is this Sam	oling Point	Within A Wetlan	id? - Yes - No	
Remarks:												
HVDDOL OOV												
HYDROLOGY												
		ators (Check here if	indicators	are not p	present)⊏						
Primary:	A1 - Surface	Motor		_	B9 - Wate	or Ctainad	Laguas		Secondary:	B6 - Surface Soil	Cracks	
	A2 - High Wa			E	B13 - Aqu				E	B10 - Drainage P		
	A3 - Saturation				B15 - Mar				E	B16 - Moss Trim		
	B1 - Water M				C1 - Hydr					C2 - Dry-Season		
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Bur		
	B3 - Drift Dep						educed Iron duction in Tilled Soils		F	C9 - Saturation Vi D1 - Stunted or S	isible on Aerial Imagery	
	B4 - Algal Ma B5 - Iron Dep			E	Co - Rece				F	D1 - Stunted or S D2 - Geomorphic		
		on Visible on Aerial Ima	aerv	Ē.	Other (Ex					D3 - Shallow Aqui		
		Vegetated Concave S		_	- (•	,			D4 - Microtopogra	aphic Relief	
										D5 - FAC-Neutral	I Test	
Field Observat	ions:											
Surface Water F	Present?	□ Yes ☑ No	Depth:		(in.)			Matlemal III.	duala au . Du		Vaa 🗔 Na	
Water Table Pre	esent?	□ Yes ☑ No	Depth:		(in.)			Wetland Hy	arology Pr	esent?	Yes 🗹 No	
Saturation Pres	ent?	☐ Yes ☑ No	Depth:		(in.)							
Dogoribo Booord	od Doto (otre	eam gauge, monitorin	a well perio	al photon	provious	inanastia	no) if available:		N/A			
Remarks:	eu Data (Sire	sam gauge, monitorin	y well, aeria	ai pilotos,	, previous	irispectio	iis), ii avaliable.		19/73			
I Remarks												
SOILS												
SOILS Map Unit Name						5	Series Drainage Class	:				
SOILS Map Unit Name Taxonomy (Sub	group):											
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to t	the depth needed to document the indic	cator or confirm the a		ators.) (Type: C=0		Series Drainage Class	wered/Coated Sand Grains	; Location: PL=Pore l	Lining, M=Matrix)	Tankura	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to t Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains		1	Texture	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to to Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to to Bottom Depth 2	Horizon 1	Color (I	Matrix Moist) 3/1	% 100		=Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains			(e.g. clay, sand, loam) sandy loam	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2	group): tion (Describe to the street of the	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 3/1 4/3	% 100 80	Concentration, D	-Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to to Bottom Depth 2	Horizon 1	Color (I	Matrix Moist) 3/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	wered/Coated Sand Grains Mottles %	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 the street of the	Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 3/1 4/3	% 100 80	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains: Mottles %	Type	Location 	(e.g. clay, sand, loam) sandy loam sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10	group): tion (Describe to 1 Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 3/1 4/3 5/3	% 100 80 85	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10	group): tion (Describe to	Horizon 1 2 3	Color (I 10YR 10YR 10YR	Matrix Moist) 3/1 4/3 5/3	% 100 80 85 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains, Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10	group): tion (Describe to I Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3	% 100 80 85 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10	group): tion (Describe to 1 Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3	% 100 80 85 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10	group): tion (Describe to 1 Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3	% 100 80 85 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains Mottles %		Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3	% 100 80 85 not preser	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 dicators (check here	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 not preser \$8 - Polys \$9 - Thin	Concentration, D	Color (Moist)	Mottles %	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA I	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1 - Histool A3 - Black Hi	Horizon 1 2 3 dicators (check here)	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 oot preser S8 - Polyn S9 - Thin F1 - Loan	Concentration, D	Color (Moist)	Mottles Mottles % Indicato	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm M	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR ucky Peat of Peat ((e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to to Depth 2 10 20	Horizon 1 2 3 dicators (check here) stic en Sulfide	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 ot preser S8 - Poly S9 - Thin F1 - Loan F2 - Loan	Concentration, D	Color (Moist)	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to to Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 2 3 dicators (check heropedon stic in Sulfide di Layers	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 ot preser \$8 - Polyx \$9 - Thin F1 - Loan F3 - Deple	Concentration, D	Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles Mottles % Indicato	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand (LRR K, L, R) (LRR K, L)	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to to Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic E; A3 - Black Hi A4 - Hydroge A5 - Stratifier	Horizon 1 2 3 dicators (check here) bipedon stic stic sh Sulfide 1 Layers ed Below Dark Surface	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 ot preser S8 - Poly S9 - Thin F1 - Loan F2 - Loan	Concentration, D	Color (Moist) w Surface (LRR R, MLRA 149B) dineral (LRR K, L) Matrix C rface	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A4 - Hydroge A5 - Stratiffec A11 - Deplete	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85 oot preser \$8 - Poly \$9 - Thin F1 - Loan F2 - Loan F3 - Deple	Concentration, D	Color (Moist)	Mottles %	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to to Describe to	Horizon 1 2 3 dicators (check here) stic in Sulfide di Layers ed Below Dark Surface dark Surface dark Surface dark Surface deliver Mineral Gleyed Matrix	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles % Indicato	Type	Location	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A12 - Thick E S1 - Sandy R S4 - Sandy G S5 - Sandy R	Horizon 1 2 3 dicators (check here) bipedon stic bipedon stic bipedon stic di Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles % Indicato	Type	Location Locati	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles %	Type	Location Location Location Location Location Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, Mura 1 Prairie Redox (LRR K, L, Mlra 1 Location Loc	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2 3 dicators (check here) bipedon stic bipedon stic bipedon stic di Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles %	Type	Location Locati	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles %	Type	Location Locati	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric S	group): tion (Describe to 1 Bottom Depth 2 10 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S4 - Sandy R S6 - Stripped	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles %	Type	Location Locati	(e.g. clay, sand, loam) sandy loam sand sand	
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 2 10 NRCS Hydric 3	group): tion (Describe to 1 Bottom Depth 2 10 20	Horizon 1 2 3	Color (I 10YR 10YR 10YR 	Matrix Moist) 3/1 4/3 5/3 ors are r	% 100 80 85	Concentration, D	Color (Moist)	Mottles %	Type	Location Locati	(e.g. clay, sand, loam) sandy loam sand sand	



GETATION	(Species identified in all uppercase are non native	species)			
	ot size: 10 meter radius)	ороогоо.,			
,	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Quercus velutina	80	Υ	UPL	
2.	Nyssa sylvatica	30	Υ	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 3 (A)
3.	Acer rubrum	25	Υ	FAC	
4.					Total Number of Dominant Species Across All Strata: 5 (B)
5.					(B)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)
7.					(14b)
8.					Prevalence Index Worksheet
9.	 				
					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	135			FACW spp. 0 x 2 = 0
					FAC spp. 133 x 3 = 399
	ratum (Plot size: 5 meter radius)				FACU spp. <u>26</u> x 4 = <u>104</u>
1.	Clethra alnifolia	65	Y	FAC	UPL spp. <u>80</u> x 5 = <u>400</u>
2.	Nyssa sylvatica	10	N	FAC	
3.	Acer rubrum	3	N	FAC	Total(A)(B)
4.					
5.					Prevalence Index = B/A = 3.778
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	78			☐ Yes ☑ No Prevalence Index is ≤ 3.0 *
	10141 00101	10			
h Ctratum /Dla	et eizer 2 meter redius)				, , , , ,
1.	ot size: 2 meter radius) Celastrus scandens	20	Υ	FACU	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
2.	Maianthemum canadense	3	N N	FACU	* Indicators of hydric soil and wetland hydrology must be
					present, unless disturbed or problematic.
3.	Maianthemum racemosum	3	N	FACU	Definitions of Venezation Official
4.				-	Definitions of Vegetation Strata:
5.					_
6					Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast
7.	<u></u>				height (DBH), regardless of height.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					wan.
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 =	26			Í
	10141 30001 -	20			
ndy Vine Strat	um (Plot size: 10 meter radius)				
1.	uni (Fiot size. To meter radius)				
2.					
					Hydrophytic Vegetation Present ☐ Yes ☑ No
3.					nyurophytic vegetation Present 🗀 Yes 🗹 No
4.					
5.					
	Total Cover =	0			
	Prevelance index is > than 3.00, and no ind	dicators	of hydric	soil or we	etland hydrology present.
emarks:					
marks:					
ditional Re	marke:				



Project/Site:	Sunrise Wind	d/ Long Island, NY					Stantec Project #:	2028113199	9	Date:	06/11/20
Applicant:	Sunrise Wind	LLC								County:	Suffolk
Investigator #1:	Charles Ferri	is		Invest	igator #2:					State:	New York
Soil Unit:						NW	/I/WWI Classification:	PFO		Wetland ID:	W01CFC
Landform:	Floodplain			Loc	cal Relief:	Concave	е			Sample Point:	Wetland
Slope (%):	0-1%	Latitude:			ongitude:			Datum	:	Community ID:	PFO
Are climatic/hyd	drologic cond	ditions on the site typ	oical for this	time of	year? (If no	o, explain in	remarks)	✓ Yes	No		
		or Hydrology □sigr					Are normal circumst	ances presen	nt?		
Are Vegetation	□, Soil □,	or Hydrology ⊏nati	urally proble	ematic?			Yes	□No			
SUMMARY OF	FINDINGS										
Hydrophytic Ve	getation Pre	sent?		Yes	□ No			Hydric Soils	Present?		
Wetland Hydrol	ogy Present	?		✓ Yes	□ No			Is This Sam	pling Point \	Within A Wetlan	d? 🛂 Yes 🗏 No
Remarks:											
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators	are not r	resent)⊏					
Primary:		ators (Oncor nere ii	maioators	are not p	resent	<i>)</i> —			Secondary:		
	A1 - Surface	Water		J	B9 - Wate	er-Stained	Leaves			B6 - Surface Soil	Cracks
✓	A2 - High Wa	ater Table			B13 - Aqu	iatic Fauna	į			B10 - Drainage Pa	atterns
✓						I Deposits				B16 - Moss Trim I	
I =	B1 - Water M					ogen Sulfic				C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots		<u>_</u>	C8 - Crayfish Burr	
I =	B3 - Drift Dep			<u> </u>			educed Iron		<u> </u>		sible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep			<u> </u>		ent Iron Re Muck Surf	duction in Tilled Soils		F	D1 - Stunted or St	
		องรแร on Visible on Aerial Ima	aon.	<u> </u>		plain in Re			F	D2 - Geomorphic D3 - Shallow Aqui	
I =		y Vegetated Concave S		⊢	Other (EX	piairi iri re	iliaiks)		F	D4 - Microtopogra	
	Do oparoon	y vogotatod conouve c	andoo						Ē	D5 - FAC-Neutral	
Field Observat	lione:										
					<i>(</i> : \						
Surface Water		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pr		☑ Yes ☐ No	Depth:		(in.)			•			
Saturation Pres	ent?	✓ Yes ☐ No	Depth:	0	(in.)						
Describe Record	led Data (stre	eam gauge, monitorir	ng well, aeria	al nhotos	nrevious	inenection	ne) if available:		N/A		
							13), II avallable.				
Remarks:	•	3 3 7	,	ai priotoo	, previous	mapection	is), ii avallable.				
Remarks:	•	3 3 7	.9,	ar priotoc	, previous	пареспо	is), ii avaliable.				
	,	3 3 7	.5 ,	и риосоо	, previous	Пэреспо	is), ii avaliabie.				
SOILS	· ·			ai priotoc	, previous	·					
SOILS Map Unit Name		0		ai priotoc	, previous	·	eries Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub	ogroup):	0		•		S	eries Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	ogroup): otion (Describe to	0		bsence of indica		S		vered/Coated Sand Grains		.ining, M=Matrix)	Taytura
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	ogroup): otion (Describe to Bottom	0 the depth needed to document the indi	icator or confirm the a	bsence of indice	ators.) (Type: C=C	S	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains	s; Location: PL=Pore I	1	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	ogroup): otion (Describe to Bottom Depth	0 the depth needed to document the indi	icator or confirm the a	bsence of indica Matrix Moist)	ators.) (Type: C=C	S Concentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov	vered/Coated Sand Grains Mottles %	s; Location: PL=Pore I	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	pogroup): Describe to Describe to Depth Double 10	the depth needed to document the indi Horizon 1	cator or confirm the a	bsence of indica Matrix Moist) 3/1	ators.) (Type: C=0	S Concentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	wered/Coated Sand Grains Mottles %	s; Location: PL=Pore I	Location 	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to) Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	bsence of indica Matrix Moist) 3/1 4/2	% 100 95	Sconcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	wered/Coated Sand Grains Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	bsence of indical Matrix Moist) 3/1 4/2	% 100 95	Sconcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	bsence of indic. Matrix Moist) 3/1 4/2	% 100 95	S Concentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to: Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indic. Matrix Moist) 3/1 4/2	% 100 95	SConcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I	bsence of indic. Matrix Moist) 3/1 4/2	% 100 95	S Concentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	ogroup): otion (Describe to: Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indic. Matrix Moist) 3/1 4/2	% 100 95	SConcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	pgroup): ption (Describe to Bottom Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indications Matrix Moist) 3/1 4/2	% 100 95	SConcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles Mottles % 5	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indication Matrix Moist) 3/1 4/2	% 100 95	7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Word Word	s; Location: PL=Pore I	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indication Matrix Moist) 3/1 4/2	% 100 95 ot preser	SConcentration, D-	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Word Word	Type Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2 ndicators (check he	Color (I 10YR 10YR	Matrix Moist) 3/1 4/2 ors are r	% 100 95 sot preser S8 - Polyv	7.5YR tt	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles	Type C	Location M matic Soils ¹	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic	Color (I 10YR 10YR	bsence of indice Matrix Moist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D=	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) ICIO (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Eg. A3 - Black Hi A4 - Hydroge	Horizon 1 2 ndicators (check he	Color (I 10YR 10YR	bisence of indice Matrix Moist) 3/1 4/2	% 100 95 S8 - Poly, S9 - Thin F1 - Loarm F2 - Loarm F2 - Loarm F2 - Loarm	Scancentration, D-	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) lice (LRR R, MLRA 149B) Matrix Matrix	Mottles % 5 Indicato	Type Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Muck (LRR K, L, MK)	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers	Color (I 10YR 10YR	bsence of indice Matrix Moist) 3/1 4/2 ors are r	% 100 95 tot preser S8 - Polyx S9 - Thin F1 - Loam F3 - Deple	7.5YR	eries Drainage Class: Depletion, RM-Reduced Matrix, CS-Cov Color (Moist) 5/6 v Surface (LRR R, MLRA 149B) Aineral (LRR K, L) Mineral (LRR K, L) Matrix (x	Mottles % 5 Indicato	Type C srs for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR Lucky Peat of Peat of	(e.g. clay, sand, loam) sandy loam sandy loam LRR K, L, R) LRR K, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95 S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F6 - Redo	7.5YR tt	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) dice (LRR R, MLRA 149B) direral (LRR K, L) Matrix M	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) Urface (LRR K, L, M) ur Below Surface (LRR K, L	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 NRCS Hydric	pgroup): ption (Describe to Depth 10 20	Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Moist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5 Indicato	Type C	Location M matic Soils ¹ Muck (LRR K, L, MLRA 1: Prairie Redox (LRR Lucky Peat of Peat (urface (LRR K, L, M) ue Below Surface (LRR K, L, L) anganese Masses	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to: Bottom Depth 10 20 Soil Field In A1- Histosol A2 - Histic Eg A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplett A12 - Thick E S1 - Sandy M	Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	7.5YR tt	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L urface (LRR K, L, M) ue Below Surface (LRR K, L, M) alanganese Masses ont Floodplain Soil	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2 ndicators (check he pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Gleyed Matrix	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5 Indicato	s; Location: PL=Pore I Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR LCK) Peat of Peat curface (LRR K, L M) ue Below Surface (LRR K, L L M) ue Below Surface (LRR K, L M) sont Floodplain Soil Spodic (MLRA 144A, 1	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR R, L, M) use Below Surface (LRR K, L, M) use Below Surface (LRR K, L langanese Masses ont Floodplain Soil Spodic (MLRA 1444, 1	(e.g. clay, sand, loam) sandy loam sandy loam 49B) 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 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5 Indicato	Type	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, M) urface (LRR K, L, M) ue Below Surface (LRR K, L, M) ue Below Surface (LRR K, L, M) anganese Masses ont Floodplain Soil arent Material Shallow Dark Surf	(e.g. clay, sand, loam) sandy loam sandy loam 49B) 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 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % Indicato	Type	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR R, L, M) use Below Surface (LRR K, L, M) use Below Surface (LRR K, L langanese Masses ont Floodplain Soil Spodic (MLRA 1444, 1	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % Indicato	Type Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Describe to D	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Violist) 3/1 4/2 ors are r	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % Indicato	Type C C ors for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red F TF12 - Very Of hydrophytic veget or problematic.	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MUFAC 1 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L) Prairie Redox (LRR K	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 10 NRCS Hydric	pgroup): ption (Describe to Depth 10 20	the depth needed to document the indi Horizon 1 2	Color (I 10YR 10YR	bsence of indice Matrix Moist) 3/1 4/2	% 100 95	Sconcentration, D= 7.5YR	eries Drainage Class: Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles Mottles % 5 Indicators Indicators disturbed instructions of the control of the contr	Type C C ors for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M F19 - Piedm TA6 - Mesic TF2 - Red F TF12 - Very Of hydrophytic veget or problematic.	Location M matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR K, L, MUFAC 1 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L, MUFAC 2 Prairie Redox (LRR K, L) Prairie Redox (LRR K	(e.g. clay, sand, loam) sandy loam sandy loam 49B) K. L. R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B) face must be present, unless



oject/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01CFC Sample Point We
CETATION	(Species identified in all uppersess are permeting	o coccio	\		
GETATION Stratum (Pl	(Species identified in all uppercase are non native of size: 10 meter radius)	species.)		
e Stratum (Fi	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Acer rubrum	60	Y	FAC	Dominance rest Worksheet
2.	Nyssa sylvatica	30	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)
3.					Number of Dominant Species that are ODE, 1 ACW, of 1 AC(A)
4.					Total Number of Deminant Species Across All Strates 5 (D)
<u>4.</u> 5.					Total Number of Dominant Species Across All Strata:5(B)
					D
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)
7.					B
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 40 x 1 = 40
	Total Cover =	90			FACW spp. 35 x 2 = 70
					FAC spp. 150
_	ratum (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	Υ	FACW	
3.	Rosa multiflora	10	N	FACU	Total <u>250</u> (A) <u>660</u> (B)
4.					
5.					Prevalence Index = B/A =2.640
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes □ No Dominance Test is > 50%
	Total Cover =	95			 ✓ Yes
					☐ Yes ☑ No Morphological Adaptations (Explain) *
rh Stratum (Ple	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Symplocarpus foetidus	40	Υ	OBL	
2.	Onoclea sensibilis	10	N	FACW	* Indicators of hydric soil and wetland hydrology must be
3.	Celastrus scandens	10	N	FACU	present, unless disturbed or problematic.
4.	Maianthemum canadense	5	N	FACU	Definitions of Vegetation Strata:
5.					Dominion of Vogotation official
6					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.					
11.					Herb - All herbaceous (non-woody) plants, regardless of size, and
12.					woody plants less than 3.28 ft. tall.
13.					
14.					All was deviced as a second of the best of
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	65			
	time (Diet size) 40 marting "				
ody Vine Strat	tum (Plot size: 10 meter radius)				
2.					
3.					Hydrophytic Vogetation Bresent 7 Voc 7 No
					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
emarks:					
ditional Re	marks:				



Wetland Hydrology Present? Yes No In this Sampling Point Within A Wetland?	Project/Site:	Sunrise Wind	/ Long Island, NY					Stantec Project #:	2028113199		Date:	06/11/20	
Soil Unit: Load Relief: Convex Load Re											County:	Suffolk	
Load Relief: Convex Datum: Community (D: Upland Surple Port) Load Relief: Convex Datum: Community (D: Upland Are climatichydrologic conditions on the site typical for this wine of year? Prox. aprain nerversis Types No		Charles Ferri	S		Invest	igator #2:					-1		
Sloge (%): 0-1% Latitude: Longitude: Datum: Ommunity D. Upland Care captain memoria. Datum: Ommunity D. Upland Care captain memoria. Datum: Ommunity D. Upland Captain									:		Wetland ID:	W01CFD	
Are degetation [Sollcrytytrology Engineering disablands Reversion Re		•									Sample Point:	Upland	
Are NegetationSollOr Hydrologynaturally problematic?											Community ID:	Upland	
Are Vegelation T., Soil C., or Hydrology Inaturally problematic? Yes No Hydrology Present? Yes No Hydrology Indicators (Check here if indicators are not present Yes State Secondary S							o, explain in						
SUMMARY OF FINDINGS Hydric Soils Present? Yes No									•	1?			
Hydrofogy Present? Yes No			or Hydrology ∟ natı	urally proble	ematic?			Yes	∟ No				
Wetland Hydrology Indicators (Check here if indicators are not present No Secondary													
HYDROLOGY Wetland Hydrology Indicators (Check here if indicators are not present													☑ No
Wetland Hydrology Indicators (Check here if indicators are not present)		ogy Present	?		∟ Yes	i <u> </u>			Is This Samp	oling Point	Within A Wetlar	id?	s ☑ No
Wetland Hydrology Indicators (Check here if indicators are not present) Pinnary 1. Surface Water Table	Remarks:												
Wetland Hydrology Indicators (Check here if indicators are not present) Pinnary 1. Surface Water Table													
Primary	HYDROLOGY												
A 1 - Surface Water Table B 5 - Surface Soll Cracks B 13 - August Fana B 15 - Surface Soll Cracks B 13 - August Fana B 15 - Surface Soll Cracks B 16 - Moss Trim Lines B 15 - Surface Soll Cracks B 16 - Moss Trim Lines B 15 - Surface Soll Cracks B 16 - Moss Trim Lines B 16 - Moss Trim	Wetland Hydro	ology Indica	ators (Check here if	indicators	are not p	oresent)⊏						
A2 - High Water Table					_	50 14/ /				Secondary:			
B15 - Mart Deposits B16 - Mart Deposits B16 - Mart Deposits B2 - Sediment Deposits C3 - Oxidized Phizogene Sulfide Odor C2 - Dry-Season Water Table Poposits C3 - Oxidized Phizogene Sulfide Odor C3 - Oxidized Phizogenes on Living Roots C3 - Crayfish Burrows C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced from C9 - Saturation Visible on Agricultural State of C4 - Presence of Reduced Careave Surface C9 - Saturation Present? C9 - Saturation Present C9 - Saturation Present? C9 - Saturation Present C9 - Saturati					F					F			
BI - Water Marks					F					F			
□ B3 - Drift Deposits □ C4 - Presence of Reduced Iron □ □ G3 - Saturation Visible on Area □ B4 - Algal Mat or Crust □ B6 - Iron Deposits □ C7 - Thin Muck Surface □ D1 - Saturation Visible on Aerial Imagery □ B7 - Inundation Visible on Aerial Imagery □ B7 - Inundation Visible on Aerial Imagery □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D5 - FAC-Neutral Test □ D7 - Saturation Present? □ Yes □ No Depth: (in.) Wetland Hydrology Present? □ Yes □ No Depth: (in.) Saturation Present? □ Yes □ No Depth: (in.) Wetland Hydrology Present? □ Yes □ No Depth: (in.) NA Remarks: SOILS Map Unit Name: Series Drainage Class: Taxonomy (Subgroup): Profile Description Counte the december of industry in ordinate the industry or ordinate december of industry. □ Top Bottom Depth Horizon Color (Moist) % Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Saturation Mark (Exclosed Color (Moist) % Type □ Location (e.g. clay Depth Horizon Color (Moist) % Color (Moist) % Saturation Depth Horizon Color (Moist) % Saturation Depth Horizon Color (Moist) % Color (Moist) % Saturation Depth Horizon Colo													
Ba - Ayaja Mat or Crust													
□ B8 - Iron Deposits □ B7 - Irundation Visible on Aerial Imagery □ C7 - Thin Muck Surface □ D2 - Geomorphic Position □ B8 - Sparsely Vegetated Concave Surface □ C7 - Thin Muck Surface □ D3 - Shallow Aquitard □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D4 - Microtopographic Relief □ D5 - FAC-Neutral Test □ D5 - FAC-Neutral Test □ D7 - Saturation Present? □ Yes □ No Depth: (in.) □ Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: N/A □ D8 - Saturation Present? □ Yes □ No Depth: (in.) □ D8 - Series Drainage Class: □ N/A □ N/A □ D8 - Series Drainage Class: □ N/A □ N/A □ D8 - Series Drainage Class: □ N/A					F					F			nagery
B7 - Inundation Visible on Aerial Imagery B8 - Sparsely Vegetated Concave Surface B8 - Sparsely Vegetated Concave Surface B8 - Sparsely Vegetated Concave Surface B7 - Field Observations: Surface Water Present? Surface Water Vater Vater Present? Surface Water Vater Vate					F					F			
Field Observations: Surface Water Present?				gery	Ξ.					Ē			
Field Observations: Surface Water Present?		B8 - Sparsely	Vegetated Concave S	urface	_								
Surface Water Present?										L	D5 - FAC-Neutra	Test	
Water Table Present?	Field Observati	ions:											
Water Lable Present?	Surface Water F	Present?		Depth:		(in.)			Wetland Hy	drology Pr	resent?	Yes ☑ No	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: NI/A				Depth:		(in.)			Wettand Hy	arology i i	Cociici _	103 1110	
Remarks:	Saturation Prese	ent?	☐ Yes 🗵 No	Depth:		(in.)							
Remarks:	Describe Recorde	ed Data (stre	eam gauge, monitorin	ng well, aeria	al photos.	previous	inspectio	ns), if available:		N/A			
Map Unit Name: Series Drainage Class:	Remarks:	,											
Map Unit Name: Series Drainage Class:													
Taxonomy (Subgroup):	SOILS												
Taxonomy (Subgroup):	Map Unit Name:						9	Series Drainage Class	:				
Profile Description (Describe to the depth needed to document the indicator or confirm the absence of indicators.) (Type: C*Concentration. D*Deptietion, RMM-Reduced Matrix.) S*Control Matrix Mottles								J -					
Top Bottom Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. clay Color (Moist) Type Location T			he depth needed to document the indi-	cator or confirm the a	absence of indica	ators.) (Type: C=0	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Co	vered/Coated Sand Grains;	Location: PL=Pore	Lining, M=Matrix)		
Depth Depth Horizon Color (Moist) % Color (Moist) % Type Location (e.g. cla)						, , , ,					,	Textu	ire
10	Depth	Depth	Horizon	Color (I	Moist)	%		Color (Moist)	%	Туре	Location	ີ່ (e.g. clay, sa	nd, loam)
10	0	10	1	10YR	3/1	100						sandy l	oam
16	10	16	2	10YR	5/3	100						sandy l	
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A11 - Depleted Below Dark Surface A12 - Thick Dark Surface A12 - Thick Dark Surface A12 - Thick Dark Surface S3 - Redox Dark Surface S4 - Sandy Muck Mineral S5 - Sandy Redox S6 - Stripped Matrix S6 - Stripped Matrix S7 - Dark Surface S9 - Thin Dark Surface T6 - Redox Depressions T6 - Mesic Spodic (MLRA 144A, 145, 1498) T72 - Red Parent Material T74 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 1498)			3		1							sandy l	
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A5 - Stratified Layers A11 - Depleted Below Dark Surface A12 - Thick Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral S1 - Sandy Muck Mineral S2 - Redox Depressions S3 - Redox Depressions S4 - Sandy Redox S7 - Dark Surface (LRR R, MLRA 149B) S7 - Dark Surface S8 - Polyvalue Below Surface Indicators for Problematic Soils A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MLRA 149B) A10 - 2 cm Muck (LRR K, L, MRA 149B) A10 - 2 cm Muck (LRR K, L,	_												-
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2- Histic Epipedon A3- Black Histic A4- Hydrogen Sulfide A5- Stratified Layers A1- Depleted Below Dark Surface A1- Thick Dark Surface S1- Sandy Muck Mineral S1- Sandy Muck Mineral S1- Sandy Muck Mineral S2- Redox Depressions S3- Stratiped Matrix S4- Sandy Redox S5- Sandy Redox S5- Dark Surface (LRR K, L) Rea 1498) Indicators for Problematic Soils A10- 2 cm Muck (LRR K, L, MLRA 1498) A10- 2 cm Muck (LRR K, L, RRA 1498)													
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A1 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral S1 - Sandy Muck Mineral S2 - Redox Depressions S3 - Servent Mack (LRR K, L, R) S4 - Sandy Gleyed Matrix S5 - Sandy Redox S6 - Stripped Matrix S7 - Dark Surface S7 - Dark Surface S7 - Dark Surface S8 - Polyvalue Below Surface LRR R, MLRA 1498) A10 - 2 cm Muck (LRR K, L, MLRA 1498) A10 - 2 cm Muck (LRR K, L, MLRA 1498) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A16 - Coast Prairie Redox (LRR K, L, R) A17 - Coast Prairie Redox (LRR K, L, R) S3 - 5 cm Mucky Peat of Peat (LRR K, L, R) S7 - Dark Surface (LRR K, L, R) S8 - Polyvalue Below Surface (LRR K, L) S8 - Polyvalue Below Surface (LRR K, L) S8 - Polyvalue Below Surface (LRR K, L) S9 - Thin Dark Surface (LRR K, L) T10 - Piedmont Floodplain Soils (MLRA 1498) T10 - Piedmont Floodplain Soils (MLRA 1498) T11 - Piedmont Floodplain Soils (MLRA 1498) T12 - Red Parent Material T13 - Piedmont Floodplain Soils (MLRA 144A, 145, 1498) T14 - Very Shallow Dark Surface Other (Explain in Remarks)													
NRCS Hydric Soil Field Indicators (check here if indicators are not present A1- Histosol A2 - Histic Epipedon A3 - Black Histic A4 - Hydrogen Sulfide A5 - Stratified Layers A1 - Depleted Below Dark Surface A12 - Thick Dark Surface S1 - Sandy Muck Mineral S1 - Sandy Muck Mineral S2 - Redox Depressions S3 - Service (LRR R, MLRA 1498) Indicators for Problematic Soils A10 - 2 cm Muck (LRR K, L, MLRA 1498) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck (LRR K, L, R) A10 - 2 cm Muck											 		
A1- Histosol S8 - Polyvalue Below Surface (LRR R, MLRA 1498) A10 - 2 cm Muck (LRR K, L, MLRA 1498) A16 - Coast Prairie Redox (LRR K, L, R) A3 - Black Histic F1 - Loamy Mucky Mineral (LRR K, L) S3 - 5 cm Mucky Peat of Peat (LRR K, L, R) 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 K, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR K, L) S1 - Sandy Muck Mineral F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 1498) S2 - Sandy Redox F17 - Popleted Matrix T746 - Mesic Spodic (MLRA 144A, 145, 1498) S3 - Sandy Redox T751 - Piedmont Floodplain Soils (MLRA 1498) S6 - Stripped Matrix T751 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 1498) Other (Explain in Remarks)													
A1- Histosol S8 - Polyvalue Below Surface (LRR R, MLRA 1498) A10 - 2 cm Muck (LRR K, L, MLRA 1498) A16 - Coast Prairie Redox (LRR K, L, R) A3 - Black Histic F1 - Loamy Mucky Mineral (LRR K, L) S3 - 5 cm Mucky Peat of Peat (LRR K, L, R) 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 K, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR K, L) S1 - Sandy Muck Mineral F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 1498) S2 - Sandy Redox F17 - Popleted Matrix T746 - Mesic Spodic (MLRA 144A, 145, 1498) S3 - Sandy Redox T751 - Piedmont Floodplain Soils (MLRA 1498) S6 - Stripped Matrix T751 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 1498) Other (Explain in Remarks)	NRCS Hydric S	Soil Field In	dicators (check he	re if indicat		not preser	nt T	<u> </u>	Indicator	e for Proble	matic Soile 1	1	
A2 - Histic Epipedon S9 - Thin Dark Surface (LRR R, MLRA 149B) A16 - Coast Prairie Redox (LRR K, L, R) A3 - Black Histic F1 - Loamy Mucky Mineral (LRR K, L) S3 - 5cm Mucky Peat of Peat (LRR K, L, R) A4 - Hydrogen Sulfide F2 - Loamy Gleyed Matrix S7 - Dark Surface (LRR K, L, M) A5 - Stratified Layers F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR K, L) A11 - Depleted Below Dark Surface F6 - Redox Dark Surface S9 - Thin Dark Surface (LRR K, L) A12 - Thick Dark Surface F7 - Depleted Dark Surface F7 - Pepleted Dark Surface F7 -			dicators (check he	ie ii iiiuicai				W Surface (LDD D MLDA 140B)				(40P)	
A3 - Black Histic			pipedon		Ē								
A5 - Stratified Layers		A3 - Black Hi	stic			F1 - Loam	ny Mucky I	Mineral (LRR K, L)		S3 - 5cm M	ucky Peat of Peat	(LRR K, L, R)	
A11 - Depleted Below Dark Surface													
A12 - Thick Dark Surface F7 - Depleted Dark Surface F12 - Iron-Manganese Masses (LRR K, L, R) S1 - Sandy Muck Mineral F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 149B) S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 144A, 145, 149B) S5 - Sandy Redox T72 - Red Parent Material S6 - Stripped Matrix T741 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 149B) Other (Explain in Remarks)					듣				F				
S1 - Sandy Muck Mineral F8 - Redox Depressions F19 - Piedmont Floodplain Soils (MLRA 1498) S4 - Sandy Gleyed Matrix TA6 - Mesic Spodic (MLRA 1498) S5 - Sandy Redox TF2 - Red Parent Material S6 - Stripped Matrix TF12 - Very Shallow Dark Surface S7 - Dark Surface (LRR R, MLRA 1498) Other (Explain in Remarks)					<u> </u>				F				
□ S4 - Sandý 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)	_				F				_				
☐ S5 - Sandy Redox ☐ TF2 - Red Parent Material ☐ S6 - Stripped Matrix ☐ TF12 - Very Shallow Dark Surface ☐ S7 - Dark Surface (LRR R, MLRA 1498) ☐ Other (Explain in Remarks)					_		p. 500	•	Ē				
☐ S7 - Dark Surface (LRR R, MLRA 1498) ☐ Other (Explain in Remarks)		S5 - Sandy R	edox						<u>_</u>	TF2 - Red F	Parent Material		
									F			face	
¹ Indicators of hydrophytic vegetation and wetland hydrology must be present, u	L	S7 - Dark Su	rtace (LRR R, MLRA 149B)						¹ Indicatore o			must be present unless	
disturbed or problematic.									disturbed o	r problematic.	and wasaird nydrology	Do prodeit, unioss	
Restrictive Layer Type: Depth: Hydric Soil Present?		Type:			Depth:				Hydric Soil	Present?		Yes 🗵 No	
(If Observed) Remarks:	(ii Onserveu)								-				



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01CFD Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	species.)			
Tree Stratum (Plo	ot size: 10 meter radius)				Dawinana Tast Warkshart
1	Species Name Acer rubrum	<u>% Cover</u> <u>C</u>	<u>Y</u>	Ind.Status FAC	Dominance Test Worksheet
1. 2.		25	Y	FAC	Number of Deminant Species that are ORL FACIAL or FACIAL (A)
3.	Nyssa sylvatica	25		FAC	Number of Dominant Species that are OBL, FACW, or FAC:3(A)
					Total Number of Deminerat Consider Assess All Charles (D)
4. 5.					Total Number of Dominant Species Across All Strata:5(B)
					D ((D) (O) TI (A OD) FACIN FAC (0.00/ (A/D)
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 60.0% (A/B)
7.					Dusyalanas Inday Maylahast
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.	T-t-1 O	400			OBL spp. 0 x 1 = 0
	Total Cover =	100			FACW spp. 10 x 2 = 20
					FAC spp. 180
	atum (Plot size: 5 meter radius)	00		E40	FACU spp. 17
1.	Clethra alnifolia	80	Y	FAC	UPL spp 0
2.	Lindera benzoin	10	N	FACW	T. I. I. 2027 (A) 2020 (D)
3.					Total(A)(B)
4.					5 50
5.					Prevalence Index = B/A =
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.					☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					
	Total Cover =	90			Yes No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Maianthemum canadense	10	Υ	FACU	* Indicators of hydric soil and wetland hydrology must be
2.	Parthenocissus quinquefolia	7	Υ	FACU	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 height (DBH), regardless of height.
7.					neight (DBH), regardless of neight.
8.					
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					roody promo rood than 0.20 H. Will.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	17			
	um (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =	0			
Remarks:					
Additional Ren	marks:				



Project/Site:	Sunrise Wind	l/ Long Island, NY					Stantec Project #:	2028113199)	Date:	06/11/20
Applicant:	Sunrise Wind									County:	Suffolk
Investigator #1:	Charles Ferri	s		Investi	igator #2:					State:	New York
Soil Unit:						NV	VI/WWI Classification:	PFO		Wetland ID:	W01CFD
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 \Box sign					Are normal circumsta		t?		
		or Hydrology ⊑ nat∟	irally proble	ematic?			Yes	□No			
SUMMARY OF											
Hydrophytic Veg	getation Pres	sent?		Yes				Hydric Soils			Yes □ No
Wetland Hydrol	ogy Present	?		Yes	□ No			Is This Sam	pling Point \	Within A Wetland	d? 🛂 Yes 🗏 No
Remarks:											
HYDROLOGY											
Wetland Hydre	ology Indica	ators (Check here if	indicators	are not r	resent):⊏					
Primary:		ALOIS (OFFICIAL III	maioators	are not p	// COCIIC	<i>/</i> —			Secondary:		
	A1 - Surface	Water		✓	B9 - Wate	er-Stained	Leaves			B6 - Surface Soil (Cracks
✓	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation				B15 - Mar					B16 - Moss Trim L	
	B1 - Water M B2 - Sedimer			F	C1 - Hydr		ae Odor spheres on Living Roots		F	C2 - Dry-Season \ C8 - Crayfish Burr	
	B3 - Drift Dep			F			educed Iron		F		sible on Aerial Imagery
	B4 - Algal Ma			E			eduction in Tilled Soils		E	D1 - Stunted or St	
	B5 - Iron Dep				C7 - Thin	Muck Surf	face			D2 - Geomorphic	Position
		on Visible on Aerial Ima		Ε.	Other (Ex	plain in Re	emarks)			D3 - Shallow Aquit	
	B8 - Sparsely	y Vegetated Concave S	urtace						F	D4 - Microtopogra D5 - FAC-Neutral	
<u> </u>										D3 - FAC-Neuliai	Test
Field Observat		_									
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes □ No
Water Table Pr		☑ Yes ☐ No	Depth:		(in.)			•	0,		
Saturation Pres	ent?	✓ Yes ☐ No	Depth:	0	(in.)						
Describe Record	ed Data (stre	eam gauge, monitorin	g well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Remarks:											
ixciliaiks.											
ixemarks.											
SOILS											
	:					S	Series Drainage Class:				
SOILS Map Unit Name Taxonomy (Sub	group):										
SOILS Map Unit Name Taxonomy (Sub	group):	the depth needed to document the indi	cator or confirm the a	bsence of indica	ators.) (Type: C=C				; Location: PL=Pore L	Lining, M=Matrix)	
SOILS Map Unit Name Taxonomy (Sub	group):	the depth needed to document the indic	cator or confirm the a	absence of indica	ators.) (Type: C=0		Series Drainage Class:		; Location: PL=Pore L	Lining, M=Matrix)	Texture
SOILS Map Unit Name Taxonomy (Sub Profile Descrip	group): tion (Describe to	the depth needed to document the indic Horizon	cator or confirm the a	Matrix	ators.) (Type: C=C			vered/Coated Sand Grains	; Location: PL=Pore L	Lining, M=Matrix) Location	Texture (e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top	group): tion (Describe to Bottom			Matrix			=Depletion, RM=Reduced Matrix, CS=Cov	rered/Coated Sand Grains	1		-
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth	group): tion (Describe to) Bottom Depth	Horizon	Color (I	Matrix Moist)	%	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	rered/Coated Sand Grains; Mottles %	Туре	Location	(e.g. clay, sand, loam)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0	group): tion (Describe to) Bottom Depth 6	Horizon 1	Color (I	Matrix Moist) 3/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	wered/Coated Sand Grains Mottles %	Type 	Location 	(e.g. clay, sand, loam) sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to) Bottom Depth 6 20	Horizon 1 2	Color (I 10YR 10YR	Matrix Voist) 3/1 4/1	% 100 95	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	weed/Coated Sand Grains Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1	% 100 95 	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to: Bottom Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1	% 100 95 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to: Bottom Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1	% 100 95 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Bottom Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1	% 100 95 	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	Mottles % 5	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Bottom Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1	% 100 95	7.5YR	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) 5/6	### Provided Sand Grains Mottles	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Bottom Depth 6 20 Soil Field In A1- Histosol	Horizon 1 2 dicators (check her	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95 tot preser \$8 - Polyy	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 1498)	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1/4	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to: Bottom Depth 6 20 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 ndicators (check here	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95 not preser S8 - Polyx S9 - Thin	7.5YR tt	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B)	Mottles	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6	group): tion (Describe to Depth 6 20	Horizon 1 2 dicators (check her	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95 tot preser 88 - Polys S9 - Thin F1 - Loarn	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) 306 (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % 5 Indicato	Type C rs for Proble A10 - 2 Coast S3 - 5cm Mi	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Depth 6 20	Horizon 1 2 dicators (check here)	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95 ot preser S8 - Poly S9 - Thin F1 - Loam F2 - Loam	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) Wineral (LRR K, L) Matrix Matrix	Mottles % 5 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Describe to Depth 6 20	Horizon 1 2 dicators (check here) stic stic suffide d Layers	Color (I 10YR 10YR 	Matrix Woist) 3/1 4/1 ors are r	% 100 95 tot preser S8 - Polyx S9 - Thin F1 - Loarn F3 - Deple	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) 3Ce (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix K	Mottles % 5 Indicato	Type C	Location M matic Soils Muck (LRR K, L, MLRA 1/4 Prairie Redox (LRR k, L, MLRA 1/4 Prairie Redox (LRR Lucky Peat of Peat (Lurface (LRR K, L, M) lue Below Surface ((e.g. clay, sand, loam) sandy loam sandy loam LRR K, L, R) LRR K, L, L)
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Describe to Depth 6 20	Horizon 1 2 ndicators (check here) pipedon istic point of the control of the co	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95 ot preser S8 - Poly S9 - Thin F1 - Loam F2 - Loam	7.5YR tt ralue Belor Dark Surfa y Mucky I ny Gleyed eted Matrix ox Dark Su	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) dace (LRR R, MLRA 149B) Matrix Matrix K urface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Describe to Depth 6 20	Horizon 1 2 dicators (check here) istic en Sulfide d Layers ed Below Dark Surface Oark Surface Juck Mineral	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Describe to Des	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to Describe to Depth 6 20	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam 49B) 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 6 NRCS Hydric	group): tion (Describe to: Bottom Depth 6 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	Mottles % 5 Indicato	Type	Location M	(e.g. clay, sand, loam) sandy loam sandy loam 49B) 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 6 NRCS Hydric	group): tion (Describe to: Bottom Depth 6 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	mered/Coated Sand Grains Mottles % Indicato	Type C	Location M M	(e.g. clay, sand, loam) sandy loam sandy loam
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to: Bottom Depth 6 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A1 - Deplete A12 - Thick I Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicato Indicators of disturbed of dis	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam 49B) K. L. R) LRR K, L, R) LRR K, L, R) (IRR K, L, R) S (MLRA 149B) 45, 149B) ace nust be present, unless
SOILS Map Unit Name Taxonomy (Sub Profile Descrip Top Depth 0 6 NRCS Hydric	group): tion (Describe to: Bottom Depth 6 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplett A12 - Thick E S1 - Sandy N S4 - Sandy N S4 - Sandy N S6 - Stripped S6 - Stripped	Horizon 1 2	Color (I 10YR 10YR 	Matrix Moist) 3/1 4/1 ors are r	% 100 95	7.5YR	Color (Moist) 5/6 w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix (riface Surface	mered/Coated Sand Grains Mottles % Indicato	Type C	Location M	(e.g. clay, sand, loam) sandy loam sandy loam



Project/Site:	Sunrise Wind/ Long Island, NY				Wetland ID: W01CFD Sample Point Wetland
VEGETATION	(Species identified in all uppercase are non na	tive species.)			
Tree Stratum (Plo	t size: 10 meter radius) Species Name	% Cover [Cominant	Ind.Status	Dominance Test Worksheet
1.	Nyssa sylvatica	50	Y	FAC	Dominance rest Worksheet
2.	Acer rubrum	40	Y	FAC	Number of Dominant Species that are OBL, FACW, or FAC: 5 (A)
3.					Number of Bollman openies that all OBE, 17,000, 011710.
4.					Total Number of Dominant Species Across All Strata: 6 (B)
5.					(b)
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
	Total Cover	= 90			FACW spp. $\frac{5}{}$ $\times 2 = \frac{10}{}$
					FAC spp. 175 x 3 = 525 FACU spp. 8 x 4 = 32
Sapling/Shrub Stra	tum (Plot size: 5 meter radius)				FACU spp. 8 x 4 = 32
1.	Clethra alnifolia	60	Υ	FAC	UPL spp. 0 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 = <u>2.528</u>
6.					
7.					
8.					Hydrophytic Vegetation Indicators:
9.	<u></u>				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.	<u></u>				
	Total Cover	= 68			
					☐ Yes ☑ No Morphological Adaptations (Explain) *
	size: 2 meter radius)	00		ODI	☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1. 2.	Symplocarpus foetidus	60 5	Y	OBL FACU	* Indicators of hydric soil and wetland hydrology must be
3.	Maianthemum canadense				present, unless disturbed or problematic.
3. 4.					Definitions of Vegetation Strata:
5.					Definitions of Vegetation Strata.
6	<u></u>				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			
	m (Plot size: 10 meter radius)				
1.	Smilax hispida	25	Υ	FAC	
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
D	Total Cover	= 25			
Remarks:					
Additional Ren	narks:				



Project/Site: Applicant:	Sunrise Wind						Stantec Project #:	2028113199	ı	Date: County:	10/19/20 Suffolk
Investigator #1:	Matt Arsenau	ult		Invest	igator #2:			LIBI		State:	New York
Soil Unit: Landform:	Terrace			Loc	al Relief:		VI/WWI Classification:	UPL		Wetland ID: Sample Point:	W01JRA
Slope (%):	0-1%	Latitude:	40.801237		ongitude:		1	Datum:		Community ID:	Upland Upland
		ditions on the site typ							No	Community ID:	Opiana
		or Hydrology □sign					Are normal circumsta	ances present	t?		
Are Vegetation	□, Soil □,	or Hydrology ⊑ natu	rally proble	ematic?			✓ Yes	□No			
SUMMARY OF											
Hydrophytic Ve				Yes				Hydric Soils			☐ Yes ☑ No
Wetland Hydrol	ogy Present	?		└ Yes	. ☑ No			Is This Samp	oling Point \	Within A Wetlan	d? Yes No
Remarks:											
HYDROLOGY											
	ology India	etara (Chaak hara if	indicators	ara nat r	rocent	\r					
Primary:		ators (Check here if	indicators	are not p	present).✓			Secondary:		
	A1 - Surface	Water			B9 - Wate	r-Stained	Leaves			B6 - Surface Soil	Cracks
	A2 - High Wa				B13 - Aqu					B10 - Drainage Pa	
	A3 - Saturation B1 - Water M			F	B15 - Mari C1 - Hydro				F	B16 - Moss Trim I C2 - Dry-Season	
	B2 - Sedimer			E			spheres on Living Roots			C8 - Crayfish Burr	
	B3 - Drift Dep				C4 - Prese	ence of Re	educed Iron		⊑		sible on Aerial Imagery
	B4 - Algal Ma B5 - Iron Dep			E	C6 - Rece C7 - Thin		eduction in Tilled Soils		F	D1 - Stunted or St D2 - Geomorphic	
		oosแร on Visible on Aerial Imag	gerv	F.	Other (Exp				E	D3 - Shallow Aqui	
		y Vegetated Concave Si		_	- \		,			D4 - Microtopogra	phic Relief
									L	D5 - FAC-Neutral	Test
Field Observat		_									
Surface Water I		☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☑ No
Water Table Pro		☐ Yes ☑ No	Depth:		(in.)						
		□ Yes □ No	Depth:		(in.)						
Describe Record		└─ Yes			(/	inspectio	ns), if available:		N/A		
					(/	inspectio	ns), if available:		N/A		
Describe Record Remarks:					(/	inspectio	ns), if available:		N/A		
Describe Record Remarks:	ed Data (stre	eam gauge, monitorin	g well, aeria	al photos	, previous i	·					
Describe Record Remarks: SOILS Profile Descrip	ed Data (stre	eam gauge, monitorin	g well, aeria	al photos	, previous i	·	ns), if available: =Depletion, RM=Reduced Matrix, CS=Cov			ining, M=Matrix)	Texture
Describe Record Remarks: SOILS Profile Descrip Top	ed Data (stre	eam gauge, monitoring	g well, aeria	al photos,	, previous i	·	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles	Location: PL=Pore L	ı	Texture
Describe Record Remarks: SOILS Profile Descrip Top Depth	ed Data (stre	eam gauge, monitoring the depth needed to document the indic	g well, aeria	bsence of indication Matrix Moist)	ators.) (Type: C=C	·				Lining, M=Matrix) Location	(e.g. clay, sand, loam)
Describe Record Remarks: SOILS Profile Descrip Top	ed Data (stre	eam gauge, monitoring	g well, aeria	al photos,	, previous i	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles %	Location: PL=Pore L	Location	-1
Describe Record Remarks: SOILS Profile Descrip Top Depth 0	ed Data (stre	eam gauge, monitoring the depth needed to document the indicess. Horizon 1	g well, aeria	bsence of indice Matrix Moist) 3/1	previous i	concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3	otion (Describe to: Bottom Depth 3 8	the depth needed to document the indic	g well, aeria cator or confirm the a Color (I 2.5Y 10YR	bsence of indice Matrix Moist) 3/1 5/3	, previous i	concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) peat sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	btion (Describe to Depth 3 8 16 20	the depth needed to document the indices the depth needed to document the indices that the	g well, aeria Color (I 2.5Y 10YR 7.5YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3	% 100 100 100 100 100 100 100 100 100 10		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	ption (Describe to: Bottom Depth 3 8 16 20	the depth needed to document the indices the depth needed to document the indices that the	g well, aeria Color (I 2.5Y 10YR 7.5YR 7.5YR	bsence of indications indications in the sence of	% 100 100 100 100 100 100 100 100 100 10	concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	btion (Describe to Bottom Depth 3 8 16 20	the depth needed to document the indices the depth needed to document the indices the depth needed to document the document the depth needed to document the do	g well, aeria Color (I 2.5Y 10YR 7.5YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3	% 100 100 100 100 100 100 100 100 100 10	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	btion (Describe to Bottom Depth 3 8 16 20	the depth needed to document the indices the depth needed to document the indices the depth needed to document the document the depth needed to document the depth needed to documen	g well, aeria Color (I 2.5Y 10YR 7.5YR	basence of indice Matrix Moist) 3/1 5/3 4/4 4/3	% 100 100 100 100 100 100 100 100 100 10		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	btion (Describe to Bottom Depth 3 8 16 20 Soil Field In	the depth needed to document the indices the depth needed to document the indices the depth needed to document the document the depth needed to document the do	g well, aeria Color (I 2.5Y 10YR 7.5YR	basence of indicate Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 100 100 100 100 100 10		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles % Indicatoi	Type	Location matic Soils ¹	(e.g. clay, sand, loam) peat sand sand sand
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	ntion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep	the depth needed to document the indic Horizon 1 2 3 4 ndicators (check her	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indicates Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100	concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B)	Mottles	Type	Location matic Soils ¹ Wuck (LRRK, L, MLRA 1) Prairie Redox (LRR	(e.g. clay, sand, loam) peat sand sand sand 49B) K. L. R)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	the depth needed to document the indice the i	g well, aeria Color (I 2.5Y 10YR 7.5YR	bisence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 ot presen 88 - Polyv S9 - Thin I F1 - Loam		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % Indicator	Type	Location matic Soils ¹ Wuck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) peat sand sand sand 49B) K. L. R)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric	btion (Describe to Bottom Depth 3 8 16 20 Soil Field In A1 - Histosoi A2 - Histic El A3 - Black Hi A4 - Hydroge	the depth needed to document the indic Horizon 1 2 3 4 adicators (check her	g well, aeria Color (I 2.5Y 10YR 7.5YR	besence of indicates Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 not presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam	t Zalue Belo Dark Surfay Mucky I y Mucky I y Gleyed	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) Wineral (LRR K, L) Matrix	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand LRR K, L, R)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16	ption (Describe to Depth 3 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifier	the depth needed to document the indic Horizon 1 2 3 4 adicators (check her	g well, aeria Color (I 2.5Y 10YR 7.5YR	bisence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 ot presen 88 - Polyv S9 - Thin I F1 - Loam	t zalue Belo Dark Surfuy Mucky I y Gleyed Matrix	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Matrix X	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand 49B) K, L, R) LRR K, L, R)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1 - Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I	the depth needed to document the indice the i	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type s for Proble A10 - 2 cm I A16 - Coast S3 - 5 cm Mt S7 - Dark St S8 - Polyval F12 - Iron-M	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, L, M) urface (LRR K, L, M) ue Below Surface (LRR K, L, L) langanese Masses	(e.g. clay, sand, loam) peat sand sand sand LER K, L, R) LURR K, L, R)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric	btion (Describe to Describe to	the depth needed to document the indic Horizon 1 2 3 4	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indicates Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 not presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand s, L, R, L, R, L, R, CLRR K, L, R, S, S, (MLRA 149B)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric	bed Data (street of the control of t	the depth needed to document the indice the depth needed to document the indice the depth needed to document the indice t	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA 1 Prairie Redox (LRR L, L, M) urface (LRR K, L, M) ue Below Surface (LRR K, L, L) langanese Masses	(e.g. clay, sand, loam) peat sand sand sand s, L, R, L, R, L, R, CLRR K, L, R, S, S, (MLRA 149B)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric:	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	the depth needed to document the indice the i	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand 49B) K, L, R) LRR K, L, R) LRR K, L, R) S (MLRA 149B) 45, 149B)
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric:	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	the depth needed to document the indic Horizon 1 2 3 4 ndicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral Sleyed Matrix kedox	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand (49B) K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) 460
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric:	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	the depth needed to document the indice the i	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand (49B) K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) 460
Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 8 16 NRCS Hydric:	btion (Describe to: Bottom Depth 3 8 16 20 Soil Field In A1 - Histosol A2 - Histosol A3 - Black Hi A4 - Hydroge A5 - Stratifiee A11 - Deplete A12 - Thick I S1 - Sandy N S4 - Sandy S S5 - Sandy R S6 - Stripped	the depth needed to document the indice the i	g well, aeria Color (I 2.5Y 10YR 7.5YR	bsence of indical Matrix Moist) 3/1 5/3 4/4 4/3 ors are r	% 100 100 100 100 step Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	concentration, 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 x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand (49B) K, L, R) LRR K, L, R) (LRR K, L, R) S (MLRA 149B) 45, 149B) 46Ce



Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01JRA Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	species.)			
Tree Stratum (Plo	t size: 10 meter radius)				
	Species Name	% Cover	Dominant	Ind.Status	Dominance Test Worksheet
1.	Acer rubrum	55	Υ	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.					<u> </u>
6.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
7.					(VID)
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	55			FACW spp. 0 x 2 = 0
					FAC spp. 150 x 3 = 450
Sapling/Shrub Stra	tum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.	Clethra alnifolia	85	Υ	FAC	UPL spp 0
2.					
3.					Total 150 (A) 450 (B)
4.					, , ,, , ,
5.					Prevalence Index = B/A = 3.000
6.					- COO
7.	_ 				
					Hydraubytia Varatatian Indiantara
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 *
Herb Stratum (Plot	size: 2 meter radius)				
1.	Clethra alnifolia	5	Υ	FAC	
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.					Definitions of Vegetation Strata:
5.					Dominiono di Vogotation ottatal
6					Tree - W
7.	_ 				Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					Delta de la Manda de desta la Delta de la Delta de la Companya de
9.	<u></u>				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.					
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					woody plants less than 3.26 ft. tall.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
-	Total Cover =	5			•
	10101 00101	•			
Woody Vino Strati	m (Plot size: 10 meter radius)				
1.	m (Plot size: 10 meter radius) Smilax rotundifolia	5	Υ	FAC	
			-		
2.					Undershirt Variation Bureaut
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.				-	
5.					
	Total Cover =	5			
Remarks:	Prevelance index is > than 3.0, and no indi	icators o	f hydric s	soil or wet	tland hydrology present.
Additional Ren	narke:				
Auditional Ren	iai no.				



Project/Site:	Sunrise Wind	l/ Fire Island, NY					Stantec Project #:	2028113199		Date:	10/19/20
Applicant:	Sunrise Wind	ILLC								County:	Suffolk
Investigator #1:	Matt Arsenau	ılt		Investi	igator #2:					State:	New York
Soil Unit:							VI/WWI Classification:	: PFO		Wetland ID:	W01JRA
Landform:	Floodplain				cal Relief:					Sample Point:	Wetland
Slope (%):	0-1%		40.801325		ongitude:			Datum:		Community ID:	PFO
		litions on the site typ				o, explain in T			No	-	
		or Hydrology ☐sign					Are normal circumst	ances presen □ No	[?		
SUMMARY OF		or Hydrology ☐ natu	irally probl	emauc?			res	□ INO			
Hydrophytic Ve		nont?		✓ Yes	. □ No			Hydria Saile	Procent?		
Wetland Hydrol				✓ Yes				Hydric Soils	Ning Point	Within A Wetlan	
Remarks:	logy i resent	:		- 103	- 110			is This Camp	Jillig i Ollic	Willim A Wellan	u: = 163 = 110
Tromanto.											
HYDROLOGY											
Wetland Hydr	ology Indica	ators (Check here if	indicators	are not p	resent)⊏					
Primary	<u>:</u>	,		•		,			Secondary:		
	A1 - Surface				B9 - Wate				F	B6 - Surface Soil	
	A2 - High Wa A3 - Saturation			F	B13 - Aqu B15 - Mar				F	B10 - Drainage P B16 - Moss Trim	
	B1 - Water M				C1 - Hydr					C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots			C8 - Crayfish Bur	
	B3 - Drift Dep B4 - Algal Ma			F			educed Iron eduction in Tilled Soils		✓	C9 - Saturation V D1 - Stunted or S	isible on Aerial Imagery
	B5 - Iron Dep			E	C7 - Thin				1	D2 - Geomorphic	
		on Visible on Aerial Ima		₽:	Other (Ex	plain in Re	emarks)			D3 - Shallow Aqu	
	B8 - Sparsely	Vegetated Concave Si	urface						7	D4 - Microtopogra	
Field Observed										D5 - FAC-Neutral	Test
Field Observat		E	.		(: \						
Surface Water Water Table Pr		☑ Yes ☐ No ☑ Yes ☐ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes ☐ No
Saturation Pres		✓ Yes ☐ No	Depth: Depth:		(in.) (in.)						
Saturation Fres	CIII:	- res _ no	Depui.	. 0	(111.)						
	led Data (stre	eam gauge, monitorin	g well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Describe Record Remarks:	led Data (stre	eam gauge, monitorin	g well, aeria	al photos,	, previous	inspectio	ns), if available:		N/A		
Remarks:	led Data (stre	eam gauge, monitorin	g well, aeri	al photos,	, previous	inspectio	ns), if available:		N/A		
Remarks:	,			•		·	,				
Remarks: SOILS Profile Descrip	otion (Describe to			absence of indica		·	ns), if available: -Depletion, RM=Reduced Matrix, CS=Cov			.ining, M=Matrix)	Toyture
Remarks: SOILS Profile Descrip	otion (Describe to t	the depth needed to document the indic	cator or confirm the a	absence of indica	ators.) (Type: C=C	·	=Depletion, RM=Reduced Matrix, CS=Cor	Mottles	Location: PL=Pore I	ı	Texture
Remarks: SOILS Profile Descrip Top Depth	otion (Describe to to Bottom Depth	the depth needed to document the indic	cator or confirm the a	absence of indica Matrix Moist)	ators.) (Type: C=C	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor	Mottles %	Location: PL=Pore I	Location	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0	Dition (Describe to a Bottom Depth 30	the depth needed to document the indic Horizon 1	cator or confirm the a	absence of indices Matrix Moist) 2.5/1	% 100	·	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles % 	Type	Location 	_
Remarks: SOILS Profile Descrip Top Depth 0	Dation (Describe to 1) Bottom Depth 30	the depth needed to document the indices Horizon 1	Color (2.5Y	absence of indica Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cool Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0	Dition (Describe to a Bottom Depth 30	the depth needed to document the indic Horizon 1	Color (absence of indica Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles % 	Type	Location 	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0	Dotion (Describe to to Bottom Depth 30	the depth needed to document the indices the depth needed to document the indices the indices that the indices the indices that the indices th	Color (absence of indica Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location 	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0	btion (Describe to Depth 30	the depth needed to document the indices the indices of the indice	Color (2.5Y	absence of indica Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0	btion (Describe to Depth 30	the depth needed to document the indice Horizon 1	Color (2.5Y	absence of indice Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0	Bottom Depth 30	the depth needed to document the indice Horizon 1	Color (2.5Y	absence of indical Matrix Moist) 2.5/1	9/6 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0	Describe to Bottom Depth 30	the depth needed to document the indices the depth needed to document the indices the indices that the indic	Color (2.5Y	absence of indical	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 30 Soil Field In	Horizon 1	Color (2.5Y	absence of indical Matrix Moist) 2.5/1	% 100 S8 - Polyv	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist) w Surface (LRR R, MLRA 1498)	Mottles	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Bottom Depth 30 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 dicators (check her	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist) w Surface (LRR R, MLRA 149B)	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Describe to the state of the st	Horizon 1 dicators (check her	Color (2.5Y	absence of indical Matrix Moist) 2.5/1	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % Indicator	Type	Location matic Soils ¹ Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat)	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Describe to the state of the st	Horizon 1 dicators (check her	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Coo Color (Moist) w Surface (LRR R, MLRA 149B) Milleral (LRR K, L) Matrix	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to the Depth 30	Horizon 1 dicators (check her bipedon stic en Sulfide bl Layers ed Below Dark Surface	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cool Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR LOCATE REDOX (LRR LOC	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to 1 Bottom Depth 30 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifice A11 - Deplete A12 - Thick E	Horizon 1	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) langanese Masses	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Soil Field In A1- Histosol A2 - Histic Eq. A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplett A12 - Thick E S1 - Sandy M	Horizon Hor	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	Soil Field In A1- Histosol A2 - Histic Ep A3 - Stratifier A11 - Deplete A12 - Thick E A13 - Sandy M S4 - Sandy M S4 - Sandy M	Horizon 1 dicators (check her cipedon stic in Sulfide d Layers ed Below Dark Surface bark Surface luck Mineral Gleyed Matrix	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA + Prairie Redox (LRR ucky Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) langanese Masses	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Long Depth 30	Horizon 1	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location Location Location Location Location Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, MLRA 14 Location Location Muck (LRR K, L, MLRA 14 Location Lo	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Long Depth 30	Horizon 1 dicators (check her bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface fluck Mineral sleyed Matrix ledox	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth NRCS Hydric	btion (Describe to Long Depth 30	Horizon 1	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location Location Location Location Location Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, MLRA 14 Location Location Muck (LRR K, L, MLRA 14 Location Lo	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth 0 NRCS Hydric	btion (Describe to Long Depth 30	Horizon 1	Color (2.5Y	absence of indication Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) muck
Remarks: SOILS Profile Descrip Top Depth NRCS Hydric	btion (Describe to to Depth 30	Horizon 1	Color (2.5Y	absence of indical Matrix Moist) 2.5/1 tors are r	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x xr trface Surface	Mottles % Indicator Indicators of disturbed of	Type	Location	(e.g. clay, sand, loam) muck



Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01JRA Sample Point Wetla
ECETATION	(Charies identified in all unpersons are non	nativa anasias)			
Tree Stratum (Pl	(Species identified in all uppercase are non ot size: 10 meter radius)	native species.)			
ree Stratum (F)	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.			<u> </u>		11 Trainbor of Bornmant openior that are OBE, 171011, 01 1710.
4.					Total Number of Dominant Species Across All Strata: 4 (B)
5.					Total Number of Dominant Species Across All Strata(D)
6.		<u></u>			Descent of Deminant Species That Are ORL FACIAL or FAC: 100.00/ (A/P)
7.					Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
					Dravalance Index Workshoot
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 10 x 1 = 10
	Total Co	ver = 70			FACW spp. 3 x 2 = 6
					FAC spp. 175 x 3 = 525
	ratum (Plot size: 5 meter radius)				FACU spp. 2 x 4 = 8
1.	Clethra alnifolia	75	Y	FAC	UPL spp0
2.	Viburnum recognitum	10	N	FAC	
3.					Total(A)(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 Co	ver = 85			Yes □ No Prevalence Index is ≤ 3.0 *
					☐ Yes ☑ No Morphological Adaptations (Explain) *
Herh Stratum (Pl	ot size: 2 meter radius)				
1.	Clethra alnifolia	20	Υ	FAC	Tes E No Problem Hydrophysic Vegetation (Explain)
2.	Carex trisperma	5	N.	OBL	* Indicators of hydric soil and wetland hydrology must be
3.	Glyceria striata	5	N	OBL	present, unless disturbed or problematic.
4.	Pilea pumila	1	N	FACW	Definitions of Vegetation Strata:
5.	Thalictrum pubescens	2	N	FACW	Definitions of Vegetation otrata.
6	Rosa multiflora	2	N	FACU	Troo
 7.				FACU	Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
8.					O . It . (Ot . It . Weady plants less than 2 in DDII and greater than 2.20 ft
9.					Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.					
11.	<u></u>				
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					riosa, piano ioso man 0.20 m. an.
14.					
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Co	ver = 35			
Noody Vine Strat	tum (Plot size: 10 meter radius)				
1.					
2.					
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
J.	Total Co				
Remarks:	Total Co	<u>vei – </u>			
Ciliaiks.					
Additional Re	marks:				



Project/Site:		l/ Fire Island, NY					Stantec Project #:	2028113199		Date:	10/19/20
Applicant:	Sunrise Wind									County:	Suffolk
Investigator #1:	Matt Arsenau	ılt		Invest	igator #2:					State:	New York
Soil Unit:							VI/WWI Classification:	: PFO		Wetland ID:	W01JRA
Landform:	Floodplain	1 (1)			cal Relief:			D-4		Sample Point:	Wetland
Slope (%):	0-1%		40.801275		ongitude:			Datum:		Community ID:	PFO
		litions on the site typ				o, explain in I			No 10		
		or Hydrology ☐sign					Are normal circumst ✓ Yes		ť?		
		or Hydrology ⊑ nat∟	irally proble	ematic?			<u> </u>	□No			
SUMMARY OF											
Hydrophytic Vec	•			☑ Yes				Hydric Soils		A/'	☑ Yes □ No
Wetland Hydrol	ogy Present	?		Yes	s □ No			Is This Samp	oling Point \	Within A Wetland	d? ✓ Yes ✓ No
Remarks:											
HYDROLOGY											
Wetland Hydro	ology Indica	ators (Check here if	indicators	are not p	oresent)⊏					
Primary:		`		•		,			Secondary:		
	A1 - Surface				B9 - Wate					B6 - Surface Soil (
	A2 - High Wa A3 - Saturation			F	B13 - Aqu B15 - Mar				✓	B10 - Drainage Pa B16 - Moss Trim L	
	B1 - Water M			F	C1 - Hydro				Ë	C2 - Dry-Season V	
	B2 - Sedimer			Ē			spheres on Living Roots		Ē	C8 - Crayfish Burre	
	B3 - Drift Dep				C4 - Prese	ence of Re	educed Iron				sible on Aerial Imagery
I =	B4 - Algal Ma			⊑			eduction in Tilled Soils		<u> </u>	D1 - Stunted or St	
	B5 - Iron Dep	oosits on Visible on Aerial Ima	gory.	<u> </u>	C7 - Thin Other (Ex				J	D2 - Geomorphic I D3 - Shallow Aquit	
I =		Vegetated Concave S		⊢	Other (EX	piaii iii re	marks)		J	D4 - Microtopogra	
		, g								D5 - FAC-Neutral	
Field Observat	ions:										
Surface Water I		□ Yes ☑ No	Depth:		(in.)						=
Water Table Pre		□ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Pr	esent?	Yes No
Saturation Pres		□ Yes ☑ No	Depth:		(in.)						
					. ,						
	ad Data (etr				provious				N/A		
		eam gauge, monitorin	g well, aella	ai priotos,	, previous	irispectio	iis), ii avaliable.		14// (
Remarks:		cators of hydrology	g well, aeria	ai priotos,	, previous	irispeciio	ns), ii available.		1077		
Remarks:			g well, aeria	ai priotos,	, previous	Пэреспо	ns), ii avallable.		14/73		
Remarks:	Subtle indic	cators of hydrology	_	•	-	·					
Remarks: SOILS Profile Descrip	Subtle indication (Describe to	cators of hydrology	_	bsence of indica	-	·	=Depletion, RM=Reduced Matrix, CS=Cov			.ining, M=Matrix)	
Remarks: SOILS Profile Descrip Top	Subtle indication (Describe to Bottom	cators of hydrology the depth needed to document the indice	cator or confirm the a	bsence of indica	ators.) (Type: C=C	·	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles	Location: PL=Pore L	ı	Texture
Remarks: SOILS Profile Descrip Top Depth	Subtle indicestible to the subtle indicestible to the subtle indicestible to the subtle indicestible to the subtle indicestible indices	cators of hydrology	cator or confirm the a	bsence of indica Matrix Moist)	ators.) (Type: C=C	·		Mottles %		ining, M=Matrix)	Texture (e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0	Subtle indicesting to the subtle indicesting to the subtle indicesting to the subtle indicesting the subtle indice	cators of hydrology the depth needed to document the indice Horizon 1	Color (I	Matrix Moist) 3/1	% 100	·	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles	Location: PL=Pore L	ı	+
Remarks: SOILS Profile Descrip Top Depth 0 3	tion (Describe to) Bottom Depth 3 9	cators of hydrology the depth needed to document the indice Horizon 1 2	Color (I 10YR 2.5Y	Matrix Moist) 3/1 5/1	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles %	Location: PL=Pore L	Location	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0 3 9	tion (Describe to Depth 3 9 12	cators of hydrology the depth needed to document the indice Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y	Matrix Moist) 3/1 5/1 5/3	% 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles %	Type	Location 	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0 3	tion (Describe to) Bottom Depth 3 9	cators of hydrology the depth needed to document the indice Horizon 1 2	Color (I 10YR 2.5Y	Matrix Moist) 3/1 5/1	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) peat sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9	tion (Describe to Depth 3 9 12	cators of hydrology the depth needed to document the indice Horizon 1 2 3	Color (I 10YR 2.5Y 2.5Y	Matrix Moist) 3/1 5/1 5/3	% 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location 	(e.g. clay, sand, loam) peat sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12	tion (Describe to Depth 3 9 12 18	Cators of hydrology the depth needed to document the indice Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR	Matrix Moist) 3/1 5/1 5/3 4/4/	% 100 100 100 100 100	concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12	tion (Describe to Depth 3 9 12 18	cators of hydrology the depth needed to document the indice Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR	Matrix Moist) 3/1 5/1 5/3 4/4/	% 100 100 100 100		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12	tion (Describe to Depth 3 9 12 18	cators of hydrology the depth needed to document the indice Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR	Matrix Moist) 3/1 5/1 5/3 4/4/	% 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cow Color (Moist)	Mottles	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	Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR	Matrix Moist) 3/1 5/1 5/3 4/4/	% 100 100 100		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	tion (Describe to Bottom Depth 3 9 12 18	cators of hydrology the depth needed to document the indice Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 not presen	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic Ep	Horizon 1 2 3 4	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 not presen S8 - Polyy S9 - Thin		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B)	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I	(e.g. clay, sand, loam) peat sand sand sand SABB) K. L. R)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	subtle indicestribe to Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi	Horizon 1 2 3 4 dicators (check her	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 oot presen 88 - Polyv S9 - Thin I F1 - Loam		=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) 3Ce (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR IL Loky Peat of Peat (L	(e.g. clay, sand, loam) peat sand sand sand SABB) K. L. R)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 3	subtle indicestion (Describe to Depth 3 9 12 18	Horizon 1 2 3 4 dicators (check here)	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 not presen S8 - Polyw S9 - Thinl F1 - Loam F2 - Loam F2 - Loam	concentration. D	Color (Moist) w Surface (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I Joky Peat of Peat (L	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic E; A3 - Black H 44 - Hydroge A5 - Stratifier	Horizon Horizon 1 2 3 4 dicators (check here) stic in Sulfide di Layers	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 star Polyv S9 - Thin I F1 - Loam F3 - Deple	concentration. D	Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 149B) 3Ce (LRR R, MLRA 149B) Minatrix (Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR IL LCKY Peat of Peat (L LUTface (LRR K, L, M) ue Below Surface (I	(e.g. clay, sand, loam) peat sand sand sand supply sand sand sand sand sand sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 3	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic E; A3 - Black H 44 - Hydroge A5 - Stratifier	Horizon 1 2 3 4 dicators (check here) bipedon stic sin Sulfide 1 Layers ad Below Dark Surface	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 not presen S8 - Polyw S9 - Thinl F1 - Loam F2 - Loam F2 - Loam	concentration, 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 % Indicator	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mt S7 - Dark S 88 - Polyval S9 - Thin Da	Location matic Soils Muck (LRR K, L, MLRA 14 Prairie Redox (LRR I Joky Peat of Peat (L	(e.g. clay, sand, loam) peat sand sand sand sigs) RR K, L, R) LRR K, L)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	tion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic E ₁ A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Horizon Horizon A A A Idicators (check here) Stic In Sulfide J Layers Ed Below Dark Surface Joark Surface Juck Mineral	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100 not presen S8 - Polyv S9 - Thin I F1 - Loam F2 - Loam F3 - Deple F6 - Redo	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic E ₁ A3 - Black Hi A4 - Hydroge A5 - Stratifier A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sand	Horizon Horizon 1 2 3 4 dicators (check hele bipedon stic in Sulfide di Layers ed Below Dark Surface dark Surface loseyed Matrix	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	subtle indicate indic	Horizon 1 2 3 4 dicators (check here) bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface luck Mineral sleeyed Matrix ledox	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand 198) K, L, R) LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 3	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 - Stripped S6 - S6 - Stripped S6 - S6	Horizon 1 2 3 4 Idicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Bleyed Matrix Eledox Matrix	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand 198) K, L, R) LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 3	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 - Stripped S6 - S6 - Stripped S6 - S6	Horizon 1 2 3 4 dicators (check here) bipedon stic en Sulfide 1 Layers ed Below Dark Surface bark Surface luck Mineral sleeyed Matrix ledox	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric :	subtle indicate indic	Horizon 1 2 3 4 Idicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Bleyed Matrix Eledox Matrix	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator Indicators c disturbed o	Type	Location	(e.g. clay, sand, loam) peat sand sand sand sigs) (K, L, R) RR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L, R)
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric 3	Subtle indicestion (Describe to Depth 3 9 12 18 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - S6 - Stripped S6 - S6 - Stripped S6 - S6	Horizon 1 2 3 4 Idicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Bleyed Matrix Eledox Matrix	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 9 12 NRCS Hydric:	subtle indicate indic	Horizon 1 2 3 4 Idicators (check here) bipedon stic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Dark Surface Bleyed Matrix Eledox Matrix	Color (I 10YR 2.5Y 2.5Y 7.5YR re if indicate	Matrix Moist) 3/1 5/1 5/3 4/4/ ors are r	% 100 100 100 100	concentration, D tt	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist) w Surface (LRR R, MLRA 1498) ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix (riface Surface	Mottles % Indicator Indicators c disturbed o	Type	Location	(e.g. clay, sand, loam) peat sand sand sand sigs) (K, L, R) RR K, L, R) LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L) (LRR K, L, R)



Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01JRA Sample Point Wetland
VEGETATION		ative species.)			
Tree Stratum (PI	ot size: 10 meter radius)				
	Species Name	% Cover [Ind.Status	Dominance Test Worksheet
1.	Acer rubrum	60	Υ	FAC	
2.	Nyssa sylvatica	20	Υ	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: 100.0% (A/B)
7.					
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
10.	Total Cove	er = 80			FACW spp. 0
	Total Gove	51 - 00			FAC spp. 186 X 3 = 558
Canling/Chruh Ctr	ratum (Diet eizer E meter redice)				
	ratum (Plot size: 5 meter radius)	90	Υ	EAC	
1.	Clethra alnifolia	80		FAC	UPL spp. 0
2.	Nyssa sylvatica	20	N	FAC	T. I. (0) (1) (7)
3.					Total <u>186</u> (A) <u>558</u> (B)
4.					
5.					Prevalence Index = B/A =
6.	<u></u>				
7.					
8.					Hydrophytic Vegetation Indicators:
9.					Yes No Rapid Test for Hydrophytic Vegetation
10.					
	Total Cove	er = 100			✓ Yes ✓ No Prevalence Index is ≤ 3.0 *
Herb Stratum (Plo	ot size: 2 meter radius)				☐ Yes ☑ No Problem Hydrophytic Vegetation (Explain) *
1.	Clethra alnifolia	5	Υ	FAC	
2.					* Indicators of hydric soil and wetland hydrology must be
3.					present, unless disturbed or problematic.
4.				_	Definitions of Vegetation Strata:
5.					20
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.					All body constants of the constants
12.					Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.					**
14.	<u></u>				
15.					Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cove	er = 5			
Woody Vine Strat	tum (Plot size: 10 meter radius)				
1.	Smilax rotundifolia	1	N	FAC	
2.					
3.				-	Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cove	er = 1			
Remarks:	Acer rubrum and Nyssa sylvatica trees		sing and	shallow r	roots
			.5		
A alalisi a 1 P	manuta.				
Additional Re	тагкs:				
i					



Project/Site:	Sunrise Wind	l/ Fire Island, NY					Stantec Project #:	2028113199		Date:	10/20/20
Applicant:	Sunrise Wind						Claritoo i rojoot ii.	2020110100		County:	Suffolk
Investigator #1:				Invest	igator #2:	Joe Ro	1			State:	New York
Soil Unit:	. Watt / Woonac	arc .		1111000	igator #2.		VI/WWI Classification:	· LIPI		Wetland ID:	W01JRB
Landform:	Terrace			Loc	cal Relief:		TI, TT TT CIGOOMICGUOTI	. 0. 2		Sample Point:	Upland
Slope (%):	0-1%	Latituda:	40.800517		ongitude:		65	Datum:		Community ID:	Upland
		ditions on the site typ							No	Community ID.	Opiand
		or Hydrology □sign				O, explain in	Are normal circumst			-	
		or Hydrology ⊟sign or Hydrology ⊑natu					✓ Yes	□ No	ι:		
SUMMARY OF		or riyurology — natu	irally proble	cinatio:			100	-110			
Hydrophytic Ve		cont?		✓ Yes	s □ No			Hydric Soils	Procent?		☐ Yes ☑ No
Wetland Hydro				Yes				le Thie Samr	oling Doint \	Within A Wetlan	
Remarks:	logy Fresent	:		- 163	- INU			is This Saint	Jilly Follic	Willin A Wellan	u: = 165 = 110
ixemaiks.											
HVPPOLOOV											
HYDROLOGY											
		ators (Check here if	indicators	are not p	oresent).✓					
Primary				_	DO 14/ /				Secondary:		
	A1 - Surface A2 - High Wa			F	B9 - Wate B13 - Aqu				E	B6 - Surface Soil B10 - Drainage Pa	
				F	B15 - Aqu				F	B16 - Moss Trim	
										C2 - Dry-Season	
	B2 - Sedimer						spheres on Living Roots		E	C8 - Crayfish Bur	rows
	B3 - Drift Dep B4 - Algal Ma			F			educed Iron		F		isible on Aerial Imagery
				E	Co - Rece		eduction in Tilled Soils		F	D1 - Stunted or S D2 - Geomorphic	
		on Visible on Aerial Ima	gery	Ξ.	Other (Ex				Ē	D3 - Shallow Aqui	
		y Vegetated Concave Si		_	` '		,			D4 - Microtopogra	
										D5 - FAC-Neutral	Test
Field Observat	tions:										
Surface Water	Present?	☐ Yes ☑ No	Depth:		(in.)			Wetland Hy	drology Dr	ocont?	Yes ☑ No
Water Table Pr	resent?	☐ Yes ☑ No	Depth:		(in.)			welland ny	urology Fr	esenti	res 🖭 NO
Saturation Pres	sent?	☐ Yes ☑ No	Depth:		(in.)						
H											
I Describe Record	ded Data (stre	eam gauge monitorin	g well aeria	al photos	previous	inspectio	ns) if available:		N/A		
	ded Data (stre	eam gauge, monitorin	g well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	ded Data (stre	eam gauge, monitorin	g well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:	ded Data (stre	eam gauge, monitorin	g well, aeria	al photos	, previous	inspectio	ns), if available:		N/A		
Remarks:				•		·	,				
Remarks: SOILS Profile Descrip	ption (Describe to			absence of indica		·	ns), if available: -Depletion, RM-Reduced Matrix, CS-Core			.ining, M=Matrix)	Texture
Remarks: SOILS Profile Descrip Top	ption (Describe to	the depth needed to document the indic	cator or confirm the a	absence of indica	ators.) (Type: C=C	·	=Depletion, RM=Reduced Matrix, CS=Cor	Mottles	Location: PL=Pore I	1	Texture
Remarks: SOILS Profile Descrip Top Depth	ption (Describe to Bottom Depth	the depth needed to document the indic Horizon	cator or confirm the a	Matrix Moist)	ators.) (Type: C=C	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor	Mottles %	Location: PL=Pore I	Location	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0	ption (Describe to) Bottom Depth 3	the depth needed to document the indic Horizon 1	Color (I	Matrix Moist) 3/3	% 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles % 	Type	Location 	(e.g. clay, sand, loam)
Remarks: SOILS Profile Descrip Top Depth 0 3	ption (Describe to) Bottom Depth 3 4	the depth needed to document the indices Horizon 1 2	Color (I 10YR 10YR	Matrix Moist) 3/3 3/1	% 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cool Color (Moist)	Mottles %	Type	Location 	(e.g. clay, sand, loam) peat sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4	ption (Describe to Depth 3 4 8	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR 10YR	Matrix Moist) 3/3 3/1 5/3	% 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location 	(e.g. clay, sand, loam) peat sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8	ption (Describe to Depth 3 4 8 16	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR 10YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6	% 100 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cov Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16	ption (Describe to Depth 3 4 8 16 20	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6	% 100 100 100 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16	ption (Describe to Depth 3 4 8 16 20	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6	% 100 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16	ption (Describe to Depth 3 4 8 16 20	the depth needed to document the indices the depth needed to document the indices the indices of	Color (I 10YR 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6	% 100 100 100 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles	Type		(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16	ption (Describe to Depth 3 4 8 16 20	the depth needed to document the indices the depth needed to document the indices that the	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6	% 100 100 100 100	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist)	Mottles	Type		(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In	the depth needed to document the indices the depth needed to document the indices the indices of	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 100 not presen	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Bottom Depth 3 4 8 16 20 Soil Field In A1- Histosol	Horizon 1 2 3 4 5 adicators (check her	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 100 not presen	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist) w Surface (LRR R, MLRA 1498)	Mottles	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to: Bottom Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic E	Horizon 1 2 3 4 5 adicators (check her	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 not presen \$8 - Polyy \$9 - Thin	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist) w Surface (LRR R, MLRA 149B)	Mottles % Indicator	Type	Location matic Soils Muck (LRR K, L, MLRA 1 Prairie Redox (LRR	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Bottom Depth 3 4 8 16 20 Soil Field In A1- Histosol	Horizon 1 2 3 4 5 adicators (check her	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 not presen \$8 - Polyy \$9 - Thin	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L)	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Bottom Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic E; A4 - Hydroge A5 - Stratiflet	Horizon 1 2 3 4 5 dicators (check her	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 100 not presen S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cor Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Matrix X	Mottles % Indicator	Type s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval	Location	(e.g. clay, sand, loam) peat sand sand sand (LAPB) K.K., L. R) (LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic E ₁ A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A11 - Deplete	Horizon 1 2 3 4 5 ndicators (check her	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 100 not presen S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Cool Color (Moist) w Surface (LRR R, MLRA 149B) ace (LRR R, MLRA 149B) Mineral (LRR K, L) Matrix X	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand (LRR K, L, R) (LRR K, L)
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick I	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide di Layers ed Below Dark Surface park Surface park Surface	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location Location Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, MLRA 1 Prairie Gedox (LRR k, L, MLRA 2 Location (LRR K, L, MLRA 3 Location (LRR K, L, MLRA 4 Location (LRR K, L) (LRR K, L) Location (LRR K, L)	(e.g. clay, sand, loam) peat sand sand sand (LA9B) (LK, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R)
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic E ₁ A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick [S1 - Sandy M	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Muck Mineral	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 100 not presen S8 - Polyy S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MRRA 1498)
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic E; A4 - Hydroge A5 - Stratifier A11 - Depletk A12 - Thick E S1 - Sandy M S4 - Sandy G S4 - Sandy M S4 - Sandy G S4 - Sandy M S4 - Sandy G	Horizon 1 2 3 4 5 dicators (check her pipedon stic en Sulfide d Layers ed Below Dark Surface Dark S	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location Location Location Muck (LRR K, L, MLRA 1 Prairie Redox (LRR k, L, MLRA 1 Prairie Gedox (LRR k, L, MLRA 2 Location (LRR K, L, MLRA 3 Location (LRR K, L, MLRA 4 Location (LRR K, L) (LRR K, L) Location (LRR K, L)	(e.g. clay, sand, loam) peat sand sand sand (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (LRR K, L, R) (S (LRR K, L, R) (S (MRRA 1498)
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped S6 - Stripped	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Slelyed Matrix tedox	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location Location Location Location Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, MLRA 14 Prairie Redox Surface (LRR K, L, M) Location Location Muck (LRR K, L, MLRA 14 Location Locat	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped S6 - Stripped	Horizon 1 2 3 4 5 ndicators (check her pipedon istic on Sulfide d Layers ed Below Dark Surface Dark Surface fluck Mineral sleyed Matrix ledox	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped S6 - Stripped	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Slelyed Matrix tedox	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location Location Location Location Location Muck (LRR K, L, MLRA 14 Prairie Redox (LRR K, L, MLRA 14 Prairie Redox Surface (LRR K, L, M) Location Location Muck (LRR K, L, MLRA 14 Location Locat	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to: Bottom Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydrose A5 - Stratifier A11 - Deplete A12 - Thick I Sandy M S4 - Sandy G S5 - Sandy R S6 - Stripped S7 - Dark Su	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Slelyed Matrix tedox	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator	Type	Location Locati	(e.g. clay, sand, loam) peat sand sand sand
Remarks: SOILS Profile Descrip Top Depth 0 3 4 8 16 NRCS Hydric	ption (Describe to Depth 3 4 8 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A11 - Deplet A12 - Thick E S1 - Sandy M S4 - Sandy M S6 - Stripped S6 - Stripped S6 - Stripped	Horizon 1 2 3 4 5 Idicators (check her pipedon istic en Sulfide d Layers ed Below Dark Surface Dark Surface Dark Surface Muck Mineral Slelyed Matrix tedox	Color (I 10YR 10YR 10YR 7.5YR 7.5YR	Matrix Moist) 3/3 3/1 5/3 4/6 5/6 ors are r	% 100 100 100 100 S8 - Polyv S9 - Thin F1 - Loam F2 - Loam F3 - Deple F6 - Redo F7 - Deple	Concentration, D	=Depletion, RM=Reduced Matrix, CS=Con Color (Moist) w Surface (LRR R, MLRA 1498) Ace (LRR R, MLRA 1498) Mineral (LRR K, L) Matrix x x x x x x x x x x x x x x x x x x	Mottles % Indicator Indicators c disturbed of	Type	Location Locati	(e.g. clay, sand, loam) peat sand sand sand



Project/Site:	Sunrise Wind/ Fire Island, NY			Wetland ID: W01JRB Sample Point Upland
VEGETATION	(Species identified in all uppercase are non native	species.)		
Tree Stratum (Pic	ot size: 10 meter radius) Species Name	% Cover Dom	inant Ind.Sta	us Dominance Test Worksheet
1.	Acer rubrum		Y FAC	
2.	Nyssa sylvatica		Y FAC	
3.	Quercus rubra		N FAC	
4.				
5.				Total Number of Dominant Species Across All Strata:5(B)
6.				D
7.	_ 			Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)
8.				Prevalence Index Worksheet
				
9. 10.				Total % Cover of: Multiply by:
10.	Total Cover =	85		OBL spp. 0
	Total Cover –	00		
0 1 /01 1 01	· (D) (: 5 () !:)			FAC spp. 120 x 3 = 360
	atum (Plot size: 5 meter radius)	25	Y FAC	FACU spp. 10 x 4 = 40
1.	Clethra alnifolia			
2.	Vaccinium corymbosum			
3.				Total 140 (A) 420 (B)
4.				D 1 1 1 D/2
5.				Prevalence Index = B/A = 3.000
6.				
7.				
8.				Hydrophytic Vegetation Indicators:
9.				☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.				
	Total Cover =	45		✓ Yes ✓ No Prevalence Index is ≤ 3.0 *
	t size: 2 meter radius)			
1.	Clethra alnifolia		Y FAC	* Indicators of hydric soil and wetland hydrology must be
2.				present, unless disturbed or problematic.
3.				
4.	<u></u>			Definitions of Vegetation Strata:
5.				<u>_</u>
6				Tree - Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height.
7.				neight (DBH), regardless of neight.
8.				
9.				Sapling/Shrub - Woody plants less than 3 in. DBH and greater than 3.28 ft. tall.
10.				
11.				
12.				Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall.
13.				Floody planta 1000 than 10.20 ft. tall.
14.				
15.				Woody Vines - All woody vines greater than 3.28 ft. in height.
	Total Cover =	10		
	um (Plot size: 10 meter radius)			
1.				
2.	<u></u>			
3.				Hydrophytic Vegetation Present ☑ Yes ☐ No
4.				
5.				
	Total Cover =	0		
Remarks:	Buttressing on Acer rubrum and Nyssa syl	vatica		
Additional Ren	marks:			



Project/Site:		/ Fire Island, NY					Stantec Project #:	2028113199		Date:	10/20/20	
Applicant:	Sunrise Wind									County:	Suffolk	
Investigator #1	: Matt Arsenau	lt		Invest	igator #2:	Joe Roy	/I/WWI Classification	. DEO		State:	New York	
Soil Unit: Landform:	Floodplain			Loc	cal Relief:		/I/WWWI Classification	PFU		Wetland ID: Sample Point:	W01JRB Wetland	
Slope (%):	0-1%	Latituda:	40.800535			-72.88245	:4	Datum:		Community ID:	PFO	
		itions on the site typ							No	Community ID.	PFU	
		or Hydrology 🗆 sign				o, explain in i	Are normal circumst					
		or Hydrology ⊟sigi or Hydrology ⊟nati					✓ Yes	□ No	.:			
SUMMARY OF		or riyurology — nak	arany probit	cmado:			100	-110				
Hydrophytic Ve		sent?		✓ Yes	s □ No	1		Hydric Soils	Present?		7	Yes □ No
Wetland Hydro	•			☑ Yes						Within A Wetlar		Yes ■ No
Remarks:												
HYDROLOGY												
	rology Indica	itors (Check here if	findicators	are not p	oresent)⊏						
Primary				_	DO 14/				Secondary:			
\ 	A1 - Surface A2 - High Wa			E		er-Stained l uatic Fauna			E	B6 - Surface Soil B10 - Drainage P		
✓				F		rl Deposits			✓	B16 - Moss Trim		
✓	B1 - Water M	arks		E	C1 - Hydr	rogen Sulfic				C2 - Dry-Season	Water Table	•
				⊨			spheres on Living Roots			C8 - Crayfish Bur		
				F			duced Iron duction in Tilled Soils		7	C9 - Saturation V D1 - Stunted or S		
	B5 - Iron Dep			E		Muck Surf			J	D2 - Geomorphic		11.5
	B7 - Inundation	on Visible on Aerial Ima		E.	Other (Ex	plain in Re	marks)			D3 - Shallow Aqu		
	B8 - Sparsely	Vegetated Concave S	Surface						E	D4 - Microtopogra D5 - FAC-Neutra		
										D3 - 1 AC-Neulla	11631	
Field Observa	tions:											
Field Observa		✓ Ves □ No	Denth:	2	(in)					_		
Surface Water	Present?	✓ Yes □ No	Depth:		(in.) (in.)			Wetland Hyd	drology Pr	esent?	Yes 🗆	No
	Present? resent?	✓ Yes ☐ No ✓ Yes ☐ No ✓ Yes ☐ No	Depth:	0	(in.)			Wetland Hyd	drology Pr	esent?	Yes	No
Surface Water Water Table Pi Saturation Pres	Present? resent? sent?	✓ Yes ☐ No ✓ Yes ☐ No	Depth:	0	(in.) (in.)	inenaction	as) if available:	Wetland Hyd		esent?	Yes 🗆	No
Surface Water Water Table Po Saturation Press Describe Record	Present? resent? sent?	☑ Yes ☐ No	Depth:	0	(in.) (in.)	inspection	ns), if available:	Wetland Hyd	drology Pr	esent?	Yes 🗆	No
Surface Water Water Table Pi Saturation Pres	Present? resent? sent?	✓ Yes ☐ No ✓ Yes ☐ No	Depth:	0	(in.) (in.)	inspection	ns), if available:	Wetland Hyd		esent?	Yes 🗆	No
Surface Water Water Table Pr Saturation Pres Describe Record Remarks:	Present? resent? sent?	✓ Yes ☐ No ✓ Yes ☐ No	Depth:	0	(in.) (in.)	inspection	ns), if available:	Wetland Hyd		esent?	Yes 🗆	No
Surface Water Water Table Pr Saturation Pres Describe Record Remarks:	Present? resent? sent? ded Data (stre	☑ Yes □ No ☑ Yes □ No eam gauge, monitorin	Depth: Depth: ng well, aeria	0 0 al photos	(in.) (in.) , previous				N/A		Yes	No
Surface Water Water Table Pr Saturation Press Describe Record Remarks: SOILS Profile Descri	Present? resent? sent? ded Data (stre	☑ Yes □ No ☑ Yes □ No eam gauge, monitorin	Depth: Depth: ng well, aeria	0 0 al photos	(in.) (in.) , previous		ns), if available: Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains;	N/A			No
Surface Water Water Table Pr Saturation Pres Describe Record Remarks: SOILS Profile Descrip	Present? resent? sent? ded Data (stre	Yes No Yes No earn gauge, monitoring	Depth: Depth:	0 0 al photos absence of indice Matrix	(in.) (in.) , previous		Depletion, RM=Reduced Matrix, CS=Co		N/A Location: PL=Pore L	Lining, M=Matrix)		exture
Surface Water Water Table Pr Saturation Press Describe Record Remarks: SOILS Profile Descri	Present? resent? sent? ded Data (street) ption (Describe to	☑ Yes □ No ☑ Yes □ No eam gauge, monitorin	Depth: Depth: ng well, aeria	0 0 al photos absence of indica Matrix Moist)	(in.) (in.) , previous			wered/Coated Sand Grains;	N/A		Te	exture y, sand, loam)
Surface Water Water Table Pr Saturation Pres Describe Record Remarks: SOILS Profile Descri Top Depth 0	Present? resent? sent? ded Data (stre	Yes No Yes No earn gauge, monitoring the depth needed to document the indi	Depth: Depth: ng well, aeria	0 0 al photos absence of indice Matrix Moist) 3/2	(in.) (in.) , previous ators.) (Type: C=	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co	wered/Coated Sand Grains; Mottles %	N/A Location: PL=Pore L	_ining, M=Matrix)	Te (e.g. clay	exture y, sand, loam) a <mark>ty muc</mark> k
Surface Water Water Table Pr Saturation Pres Describe Record Remarks: SOILS Profile Descri Top Depth	Present? resent? sent? ded Data (street) ption (Describe to	Yes No Yes No earn gauge, monitoring	Depth: Depth: ng well, aeria	0 0 al photos Matrix Moist) 3/2 2/1	(in.) (in.) , previous	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles %	N/A Location: PL=Pore L Type	Lining, M=Matrix) Location	Te (e.g. clay	exture y, sand, loam)
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4	Present? resent? sent? ded Data (street) ption (Describe to	Yes No Yes No earn gauge, monitoring the depth needed to document the indi Horizon 1 2	Depth: Depth: ng well, aeria cicator or confirm the a Color (I 10YR 10YR 10YR	0 0 al photos Matrix Moist) 3/2 2/1 5/2	(in.) (in.) , previous ators.) (Type: C=	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist)	wered/Coated Sand Grains; Mottles % 3	N/A Location: PL=Pore L Type C	ining, M=Matrix) Location	(e.g. clay	exture y, sand, loam) aty muck sand sand
Surface Water Water Table Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5	Present? resent? sent? ded Data (street) ption (Describe to	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4	Depth: Depth: ng well, aeria cicator or confirm the a Color (I 10YR 10YR 10YR 7.5YR	0 0 0 all photos Matrix Moist) 3/2 2/1 5/2 5/2	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4	wered/Coated Sand Grains; Mottles % 3 5	N/A Location: PL=Pore L Type C C	Location M M	Te (e.g. clay	exture y, sand, loam) aty muck sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4	Present? resent? ded Data (street) ption (Describe to	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5	Depth: Depth: ng well, aeria cicator or confirm the a Color (I 10YR 10YR 7.5YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4	wered/Coated Sand Grains; Mottles % 3 5 5	N/A Location: PL=Pore L Type C	Lining, M=Matrix) Location M M M	Te (e.g. clay	exture y, sand, loam) aty muck sand sand sand sand
Surface Water Water Table Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10	Present? resent? sent? ded Data (street) ption (Describe to	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4	Depth: Depth: ng well, aeria cicator or confirm the a Color (I 10YR 10YR 10YR 7.5YR	0 0 0 all photos Matrix Moist) 3/2 2/1 5/2 5/2	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4	wered/Coated Sand Grains; Mottles % 3 5	N/A Location: PL=Pore L Type C C C	Location M M	Te (e.g. clay	exture y, sand, loam) aty muck sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16	Present? resent? ded Data (street) ption (Describe to	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6	Depth: Depth: Depth: ng well, aeria cator or confirm the a Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4	wered/Coated Sand Grains; Mottles % 3 5 5	N/A Location: PL=Pore L Type C C C C	Lining, M=Matrix) Location M M M M	Te (e.g. clay	exture y, sand, loam) aty muck sand sand sand sand sand sand
Surface Water Water Table Prostrible Prostrible Record Remarks: SOILS Profile Description Top Depth 0 3 4 5 10 16	Present? resent? ded Data (street) ption (Describe to	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4	wered/Coated Sand Grains; Mottles % 3 5 5	N/A Location: PL=Pore L Type C C C C	Lining, M=Matrix) Location M M M M	Te (e.g. clay	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prostrible Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? ded Data (street) ption (Describe to the street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol	Yes No Yes No eam gauge, monitoring Horizon 1 2 3 4 5 6 dicators (check he	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.) , previous ators.) (Type: C= % 100 100 97 95 95 97 not presets 88 - Poly	Concentration, D= 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR nt value Belov	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 1498)	wered/Coated Sand Grains; Mottles % 3 5 5 3 Indicator	N/A Type C C C C s for Proble A10 - 2 cm	Lining, M=Matrix) Location M M M M matic Soils Muck (LRR K, L, MLRA	Te	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prostrible Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Ep	Yes No Yes No earn gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6 dicators (check he	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.), previous ators.) (Type: C= % 100 100 97 95 97 not presents 88 - Poly S9 - Thin	Concentration, D= 7.5YR 7.5YR 7.5YR 7.5YR nt Facility Value Belov Dark Surfa	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) ICE (LRR R, MLRA 149B)	wered/Coaled Sand Grains; Mottles % 3 5 5 Indicator	N/A Type C C C C s for Proble A10 - 2 cm A16 - Coast	Lining, M-Matrix) Location M M M M M M M M M M A Prairie Redox (LRR K, L, MLRA Prairie Redox (LRR R)	Te (e.g. clay pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prostrible Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Hi	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6 dicators (check he objection stice)	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 oto preset S8 - Poly S9 - Thin F1 - Loan	Concentration, D= 7.5YR 7.5YR 7.5YR 7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) fineral (LRR K, L)	wered/Coated Sand Grains; Mottles % 3 5 5 Indicator	N/A Location: PL=Pore L Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5cm Mi	Location Location M M M M M M M Prairie Redox (LRR K, L, MLRA A, Prairie Redox (LR Lucky Peat of Peat	Te (e.g. clay pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prostrible Prostrible Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Eq A3 - Black Hi A4 - Hydroge	Yes No Yes No eam gauge, monitoring he depth needed to document the indi Horizon 1 2 3 4 5 6 dicators (check he bipedon stic	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.) , previous stors.) (Type: C= % 100 100 97 95 95 97 not preser S8 - Poly S9 - This F1 - Loan	Concentration, D= 7.5YR 7.5YR 7.5YR 7.5YR nt Feature Below	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) filteral (LRR K, L) Matrix	wered/Coated Sand Grains; Mottles % 3 5 5 5 Indicator	N/A Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm Mi S7 - Dark S	Lining, M=Matrix) Location M M M M M M M M Arairic Soils Prairie Redox (LRR k, L, MLRA Locky Peat of Peat urface (LRR k, L, M)	Te (e.g. clay pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratifiec A11 - Deplete A11 - Deplete	Yes No Yes No eam gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6 dicators (check he objeedon stic no Sulfide I Layers and Below Dark Surface	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.) , previous ators.) (Type: C= % 100 100 97 95 95 97 not preset S8 - Poly S9 - Thin F1 - Loan F3 - Depl	Concentration, D= 7.5YR 7.5YR 7.5YR 7.5YR	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) filneral (LRR K, L) Matrix	wered/Coated Sand Grains; Mottles % 3 5 5 Indicator	N/A Type C C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M: S7 - Dark S 88 - Polyval S9 - Thin Da S9 - Thin Da	Location Location M M M M M M M And Frairie Redox (LRR K. L. MLRA Prairie Redox (LRR K. L. MLRA Prairie Redox (LRR K. L. MLRA Prairie Redox Surface LRR K. L. MLRA Surface (LRR K. R. K. R. K. Surface (LRR K. R. K. MLRA)	Te (e.g. clay pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descri Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? ded Data (street) ption (Describe to	Yes No Yes No Ream gauge, monitoring Ream gau	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	wered/Coated Sand Grains; Mottles % 3 5 5 Indicator	N/A Type C C C C s for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval F12 - Iron-N	Location Location M M M M M M M A Prairie Redox (LRR K. L. MLRA Prairie Redox (LRR	Te (e.g. clay) pea 149B) R K, L, R) (LRR K, L, R) (LRR K, L, R) S (LRR K, L, R)	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Eg A3 - Black Hi A4 - Hydroge A5 - Stratified A11 - Deplete A12 - Thick E S1 - Sandy M	Yes No Yes No An am gauge, monitoring The depth needed to document the individual to t	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	o o o o o o o o o o o o o o o o o o o	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 7.5YR 9.1000 Avalue Belov Dark Surfany Mucky M Ny M N	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	wered/Coated Sand Grains; Mottles % 3 5 5 5 1 Indicator	N/A Type C C C C C A10 - 2 cm A16 - Coasts S3 - 5 cm Mi S7 - Dark S S8 - Polyval S9 - Thin Da S9 - Thin Da F12 - Iron-M F19 - Piedm	Lining, M=Matrix) Location M M M M M M matic Soils Prairie Redox (LRR K, L, MI/RA LP rearrie Redox (LRR K, L, MI/RA LP rearrie Redox (LRR K, L, MI/RA LOCKY Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L) langanese Masses tont Floodplain Soi	(e.g. clay pea (e.g. clay) pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descri Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Er A3 - Black Histor A4 - Hydroge A5 - Stratified A1 - Deplete A12 - Thick D S1 - Sandy M S4 - Sandy G	Yes No Yes No am gauge, monitoring the depth needed to document the indi Horizon 1 2 3 4 5 6 dicators (check he bipedon stic n Sulfide I Layers and Below Dark Surface lark Surface luck Mineral leyed Matrix	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	wered/Coated Sand Grains; Mottles % 3 5 5 5 3 Indicator	N/A Type Type C C C C C C S for Proble A10 - 2 cm A16 - Coast S3 - 5 cm M S7 - Dark S S8 - Polyval S9 - Thin Da F12 - Iron-M TA6 - Mesic	Lining, M=Matrix) Location Location M M M M M M M M M M M M M	(e.g. clay pea (e.g. clay) pea	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descrip Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2 - Histic Ep A3 - Black Hi A4 - Hydroge A5 - Stratified A12 - Thick E S1 - Sandy M S4 - Sandy G S5 - Sandy R	Yes No Yes No Pam gauge, monitoring The depth needed to document the individual to	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	Mottles Mottles % 3 5 5 Indicator	N/A Type C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm M S7 - Dark S 8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm TA6 - Mesic TF2 - Red F	Lining, M=Matrix) Location M M M M M M matic Soils Prairie Redox (LRR K, L, MI/RA LP Relow Surface urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) tanganese Masses tont Floodplain Soi	149B) RK, L, R) (LRR K, L, R) (LRR K, L, R) (IRR K, L, R) 145 (MLRA 149B) 145, 149B)	exture y, sand, loam) aty muck sand sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descri Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2- Histic Ep A3 - Black Hi A4- Hydroge A5- Stratified A1- Deplete A12- Thick D S1- Sandy M S4- Sandy G S5- Sandy R S6- Stripped	Yes No Yes No Pam gauge, monitoring The depth needed to document the individual to	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	wered/Coated Sand Grains; Mottles % 3 5 5 5 1 3 Indicator	N/A Type C C C C C To for Proble A10 - 2 cm A10 - 2 cm A10 - Coast S - Polyval S - Polyval S - Polyval F - Piedm F - Piedm F - Red F F - Red F F - Red F F - Red F F - Very Other (Expla	Lining, M-Matrix) Location Location M M M M M M M M M M M Location In the second of the second o	(e.g. clay pea (e.g.	fexture y, sand, loam) aty muck sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descri Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2- Histic Ep A3 - Black Hi A4- Hydroge A5- Stratified A1- Deplete A12- Thick D S1- Sandy M S4- Sandy G S5- Sandy R S6- Stripped	Yes No Yes No Ream gauge, monitoring Ream gau	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	Mottles Mottles % 3 5 5 Indicator	N/A Type C C C C C To for Proble A10 - 2 cm A10 - 2 cm A10 - Coast S - Polyval S - Polyval S - Polyval F - Piedm F - Piedm F - Red F F - Red F F - Red F F - Red F F - Very Other (Expla	Lining, M=Matrix) Location M M M M M M matic Soils Prairie Redox (LRR K, L, MLRA A- LAGY Peat of Peat urface (LRR K, L, M) ue Below Surface ark Surface (LRR K, L, M) rark Surface (LRR K, L) langanese Masses nont Floodplain Soi Spodic (MLRA 144A, 2- arent Material Shallow Dark Sur	(e.g. clay pea (e.g.	fexture y, sand, loam) aty muck sand sand sand sand
Surface Water Water Table Prosaturation Press Describe Record Remarks: SOILS Profile Descri Top Depth 0 3 4 5 10 16 NRCS Hydric	Present? resent? sent? ded Data (street) Bottom Depth 3 4 5 10 16 20 Soil Field In A1- Histosol A2- Histic Ep A3 - Black Hi A4- Hydroge A5- Stratified A1- Deplete A12- Thick D S1- Sandy M S4- Sandy G S5- Sandy R S6- Stripped	Yes No Yes No Ream gauge, monitoring Ream gau	Depth: Depth: Depth: ng well, aeria Color (I 10YR 10YR 10YR 10YR 10YR 10YR 10YR 10YR	al photos al photos alseence of indic. Matrix Moist) 3/2 2/1 5/2 4/3 4/5 ors are r	(in.) (in.) (in.), previous ators.) (Type: C= % 100 100 97 95 95 97 ord preset S8 - Polly S9 - Thin F1 - Loan F2 - Loan F3 - Depl F6 - Redc F7 - Depl	Concentration, D=	Depletion, RM=Reduced Matrix, CS=Co Color (Moist) 4/4 4/4 4/4 4/4 v Surface (LRR R, MLRA 149B) lineral (LRR K, L) Matrix fface Surface	Mottles Mottles % 3 5 5 Indicator	N/A Type C C C C C C s for Proble A10 - 2 cm I A16 - Coast S3 - 5cm M S7 - Dark S 8 - Polyval S9 - Thin Da F12 - Iron-N F19 - Piedm TA6 - Mesic TF12 - Very Other (Expla) f hydrophytic vegeter problematic.	Location Location M M M M M M M M M M M M M	(e.g. clay pea (e.g.	Texture y, sand, loam) aty muck sand sand sand



WETLAND DETERMINATION DATA FORM

Northeast and Northcentral Region

Project/Site:	Sunrise Wind/ Fire Island, NY				Wetland ID: W01JRB Sample Point Wetlar
VEGETATION	(Species identified in all uppercase are non native	snecies)			
	lot size: 10 meter radius)	эрсоюз.)			
,	Species Name	% Cover D	ominant	Ind.Status	Dominance Test Worksheet
1.	Acer rubrum	65	Υ	FAC	
2.	Nyssa sylvatica	35	Υ	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: 100.0% (A/B)
7.				-	
8.					Prevalence Index Worksheet
9.					Total % Cover of: Multiply by:
10.					OBL spp. 0 x 1 = 0
	Total Cover =	100			FACW spp. 0 x 2 = 0
					FAC spp. 195
Sanling/Shruh Str	ratum (Plot size: 5 meter radius)				FACU spp. 0 x 4 = 0
1.	Clethra alnifolia	80	Υ	FAC	UPL spp. 0 x 5 = 0
2.					от Е эрр х о
3.					Total 195 (A) 585 (B)
3. 4.					Total <u>195</u> (A) <u>585</u> (B)
					Describeres ladar - D/A - 2000
5. 6.					Prevalence Index = B/A = 3.000
					
7.					Hadasahada Vanatalian Indiatana
8.				-	Hydrophytic Vegetation Indicators:
9.				-	☐ Yes ☑ No Rapid Test for Hydrophytic Vegetation
10.					✓ Yes ☐ No Dominance Test is > 50%
	Total Cover =	80			Yes
					✓ Yes ✓ No Morphological Adaptations (Explain) *
	ot size: 2 meter radius)				
1.	Clethra alnifolia	15	Υ	FAC	* Indicators of hydric soil and wetland hydrology must be
2.	<u></u>				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.
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 =				
	tum (Plot size: 10 meter radius)				
1.	<u></u>				
2.				_	
3.					Hydrophytic Vegetation Present ☑ Yes ☐ No
4.					
5.					
	Total Cover =				
Remarks:	Acer rubrum and Nyssa sylvatica with buttr	ressing an	d expos	sed roots	
	-				
Additional Re	marks:				

Project/Site: Sunrise Wind	City/County: Brookh	naven/Long Island Sampling Date: 3/29/2021					
Applicant/Owner: Sunrise Wind LLC		State: NY Sampling Point: Upland					
Investigator(s): Matt Arsenault	Section, Township, R	Section, Township, Range:					
Landform (hillslope, terrace, etc.): Footslope	Local relief (concave, cor	nvex, none): <u>Concave</u> Slope (%) <u>5 - 5</u>					
Subregion (LRR or MLRA): MLRA 149B	Lat: 40.803009 Lo	ng: <u>-72.882256</u> Datum: <u>NAD83</u>					
Soil Map Unit Name:		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site		(No (if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	· ·	ormal Circumstances" present? Yes <u>X</u> No					
Are Vegetation, Soil, or Hydrology	ynaturally problematic? (if neede	ed, explain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site ma	p showing sampling point locations	s, transects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sample						
Hydric Soil Present? Yes	No X within a Wetl	and? Yes No X					
Wetland Hydrology Present? Yes		al Wetland Site ID:					
Remarks: (Explain alternative procedures here or in a se							
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: o	check all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots						
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C						
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)					
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)					
Surface Water Present? Yes No X	Depth (inches)						
Water Table Present? Yes No X	_ · · · · 	tland Hydrology Present? Yes No X					
Saturation Present? Yes No X	Depth (inches)	india riyarology riesent: res NoX					
Describe Recorded Data (stream gauge, mon	itoring well, aerial photos, previous insp	ections), if available:					
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: Upland-01GPB Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** 10 FACU That Are OBL, FACW, or FAC: (A) Prunus serotina Pinus rigida 5 Χ **FACU Total Number of Dominant** 5 Quercus rubra Χ **FACU** Species Across All Strata: (B) 5 20 = Total Cover Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 0% **Prevalence Index Worksheet: OBL** species x 1 0 Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) Status % Cover Species? **Shrub Stratum FAC** species 5 х3 15 Berberis thunbergii 40 Χ **FACU** Clethra alnifolia 5 FAC **FACU** species 75 x 4 300 Lonicera morrowii 5 **FACU UPL** species 0 x 5 0 50 = Total Cover **Column Totals** 80 (A) 315 (B) Prevalence Index = B/A = 3.94 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? **Woody Vine Stratum** Status height. 10 **FACU** Lonicera japonica Χ 10 = Total Cover Hydrophytic Vegetation Present? Yes _ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Upland-01GPB

Depth	Matrix	(Redo	x Featu	ıres	
(inches	Color	%	Color	%	Туре	Loc	Textur	re Remarks
0-16	10YR 3/3	100					Loamy S	Gand
16-20	10YR 4/4	100					Sand	
								•
Hydric So	il Indicators:							Indicators for Problematic Soils:
Hist	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
Hist	tic Epipedon ((A2)			Thin Dar	k Surfac	e (S9)	Coast Prarie Redox (A16)
	ck Histic (A3)				-	-	ineral (F1)	5 cm Mucky Peat or Peat (S3)
	drogen Sulfide						atric (F2)	Dark Surface (S7)
	atified Layers				Depleted			Polyvalue Below Surface (S8)
Depleted Below Dark Surface (A11) Redox Dark Surface							Thin Dark Surface (S9)	
	ck Dark Surfac						urface (F7)	Iron-Manganese Masses (F12)
	idy Mucky Mi				Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
	dy Gleyed Ma		·)					Mesic Spodic (TA6)
	dy Redox (S5) pped Matrix (Red Parent Material (F21) Very Shallow Dark Surface (TF12)
	k Surface (S7)							Other (Explain in Remarks)
	K Sarrace (S7)	,						Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:						
	Depth (ir	-						Hydric Soil Present? Yes No X
	Deptii (ii	iciies).						
Remarks	S:							

Project/Site: Sunrise Wind	City/County: Brookhav	en/Long Island Sampling Date: 3/29/2021				
Applicant/Owner: Sunrise Wind LLC		State: NY Sampling Point: Wetland				
Investigator(s): Matt Arsenault	Section, Township, Ran	ge:				
Landform (hillslope, terrace,etc.): Floodpla	in Local relief (concave, conve	ef (concave, convex, none): Linear Slope (%) 0 - 0				
Subregion (LRR or MLRA): MLRA 149B	Lat: <u>40.803108</u> Long	-72.882386 Datum: NAD83				
Soil Map Unit Name:		NWI Classification: PFO				
Are climatic / hyrologic conditions on the site						
Are Vegetation, Soil, or Hydrolog						
Are Vegetation, Soil, or Hydrolog	gy naturally problematic? (if needed,	explain any answers in Remarks.)				
CLINANA DV OF FINIDINGS. Attack site on		and the first of the state of t				
SUMMARY OF FINDINGS - Attach site m		•				
Hydrophytic Vegetation Present? Yes	X No Is the Sampled A					
Hydric Soil Present? Yes	X No within a wetian	within a Wetland? Yes X No No				
Wetland Hydrology Present? Yes	X No if yes, optional V	Vetland Site ID: 01GPB				
Remarks: (Explain alternative procedures here or in a	separate report.)					
HYDROLOGY						
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required:	: check all that apply)	Surface Soil Cracks (B6)				
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)				
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)				
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)				
X Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	X Geomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)				
Surface Water Present? Yes No >	C Depth (inches)					
Water Table Present? Yes No >	(Depth (inches) Wetlar	nd Hydrology Present? Yes X No				
Saturation Present? Yes No >	Depth (inches)					
						
Describe Recorded Data (stream gauge, mo	nitoring well, aerial photos, previous inspec	tions), if available:				
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: Wetland-01GPB Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** Acer rubrum FAC That Are OBL, FACW, or FAC: (A) 65 Ulmus americana 12 FACW **Total Number of Dominant** = Total Cover 77 Species Across All Strata: (B) 1 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet:** x 1 **OBL** species 0 Absolute Dominant Indicator **FACW** species 12 x 2 24 (Plot Size: 15'radius) Status **Shrub Stratum** % Cover Species? **FAC** species 68 х3 204 = Total Cover **FACU** species 0 x 4 0 **UPL** species 0 x 5 0 **Column Totals** 80 (A) 228 (B) Prevalence Index = B/A = 2.85 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) % Cover Species? Status **Woody Vine Stratum** height. Smilax rotundifolia FAC 3 = Total Cover Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Wetland-01GPB

JOIL								Jamping Fourt. Wetland-Oldi B		
Depth	Matrix				Redo	x Featur	res			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks		
0-3	10YR 3/1	100					Mucky Peat			
3-5	10YR 3/1	100					Mucky Loam			
5-8	10YR 4/2	90	7.5YR 4/6	10	С	М	Sand			
8-20	2.5Y 5/2	85	10YR 5/6	15	С	М	Sand			
Hydric So	il Indicators:							ndicators for Problematic Soils:		
	tosol (A1)				•		Surface (B15)	2 cm Muck (A10)		
Histic Epipedon (A2)						k Surface		Coast Prarie Redox (A16)		
Black Histic (A3)					-	-	neral (F1)	5 cm Mucky Peat or Peat (S3)		
Hydrogen Sulfide (A4)					-	leyed Ma		Dark Surface (S7)		
Stratified Layers (A5)					-	d Matrix (<u> </u>	Polyvalue Below Surface (S8)		
X Depleted Below Dark Surface (A11)						ark Surfac		Thin Dark Surface (S9)		
	ck Dark Surfac				-		rface (F7)	Iron-Manganese Masses (F12)		
	idy Mucky Mii	-			Redox Depressions (F8) Piedmont Floodplain Soils Magic Spedic (TAS)					
	dy Gleyed Ma	-)				-	Mesic Spodic (TA6)		
	idy Redox (S5)						-	Red Parent Material (F21)		
	pped Matrix (k Surface (S7)						-	Very Shallow Dark Surface (TF12) Other (Explain in Remarks)		
Dar	K Surface (S7))					_	Other (Explain in Remarks)		
Restrictiv	ve Layer (if obs	erved):								
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
	Depth (in	Type:					Hydric S	oil Present? Yes X No		
	Deptii (iii	- -								
Remarks	5:									

Project/Site: Sunrise Wind	City/County: Brookhaven/I	ong Island Sampling Date: 3/29/2021					
Applicant/Owner: Sunrise Wind LLC	State: NY Sampling Point: Upland						
Investigator(s): Matt Arsenault	Section, Township, Range:						
Landform (hillslope, terrace,etc.): Side Slope	Local relief (concave, convex, none): Concave Slope (%) 10 - 10						
Subregion (LRR or MLRA): MLRA 149B	Lat: 40.802673 Long:7	2.884687 Datum: <u>NAD83</u>					
Soil Map Unit Name:		NWI Classification: UPL					
Are climatic / hyrologic conditions on the site ${\bf t}$	ypical for this time of year? Yes X No	(if no, explain in Remarks.)					
Are Vegetation, Soil, or Hydrology	·						
Are Vegetation, Soil, or Hydrology	naturally problematic? (if needed, expl	ain any answers in Remarks.)					
SUMMARY OF FINDINGS - Attach site map	showing sampling point locations, trans	sects, important features, etc.					
Hydrophytic Vegetation Present? Yes	No X Is the Sampled Area	-					
Hydric Soil Present? Yes	No X within a Wetland?	Yes No X					
· ·	$\frac{100 \times 100}{100 \times 100}$ if yes, optional Wetli						
Wetland Hydrology Present? Yes							
Remarks: (Explain alternative procedures here or in a sep	parate report.)						
Sample point on roadway embankment							
HYDROLOGY							
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)					
Primary Indicators (minimum of one is required: ch	neck all that apply)	Surface Soil Cracks (B6)					
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)					
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)					
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)					
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)					
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3)	Saturation Visible in Aerial Imagery (C9)					
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)					
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6)	Geomorphic Position (D2)					
Iron Deposits (B5)	Thin Muck Surface (C7)						
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)					
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)	FAC-Neutral Test (D5)					
		TAC-Neutral Test (D3)					
Surface Water Present? Yes NoX	Depth (inches)						
Water Table Present? Yes NoX	Depth (inches) Wetland H	ydrology Present? Yes No X					
Saturation Present? Yes NoX	Depth (inches)						
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, previous inspection	s), if available:					
5	6 - 7						
Remarks:							

VEGETATION - Use scie	ntific names	of plants				Sampl	ing Point	: Uplan	d-01GI	C
Tues Churchen	(Diet Cies	20'radius \		Dominant		Dominance Test \	Norkshee	t:		
Tree Stratum	(Plot Size:		% Cover	Species?	Status	Number of Dom That Are OBL, FA	•		0	(A)
Quercus rubra			40	X _= Total Cov	<u>FACU</u> ver	Total Numbe	er of Domi	nant	0	_
						Species Ac Percent of Dor			2	(B)
						That Are OBL,			0%	_(A/B)
						Prevalence Index	Workshee	et:		
			Absolute	Dominant	Indicator	OBL species	0	_ x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	0	_ x 2 _	0	
Rosa multiflora			3		FACU	FAC species	0	_ x 3	0	
			3	_= Total Cov	ver	FACU species	113	x 4	452	
						UPL species	0	x 5	0	
						Column Totals	113	(A)	452	(B)
						Prevalen	ce Index =	B/A =	4	
						Hydrophytic Vege	etation Inc	dicators	1	
				Dominant		1- Rapid Tes	st For Hyd	rophytic	Vegeta	tion
Herb Stratum	(Plot Size:		% Cover	Species?	Status	2- Dominan	ce Test is	> 50%		
Carex pensylvanica			<u>70</u> 70	= Total Cov	FACU ver	3- Prevalend	ce Index is	s =< 3.0		
						4- Morphol	ogical Ada	ptations	5	
						5- Problema	atic Hydro	phytic V	egetatio	n
						Definitions of Veget	ation Strat	a:		
						Tree- Woody plants breast height (DBH),				neter at
						Sapling/Shrub- Woo greater than or equa				and
						Herb- All herbaceous size, and woody plar				less of
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	greater th	nan 3.28f	t in
Lonicera japonica			<u> </u>	= Total Cov	FACU	11	h			
				_ · Total Co	v CI	Hydrop Vegeta	-			
						_	ent? Ves	,	No x	

Remarks: (Include photo numbers here or on a separate sheet.)

Carex pensylvanica is not listed on the NWPL; assigned status of FACU based on published description of habitat per Haines 2011: "Dry, well-drained, often sandy, soils of grasslands and oak-, pine-, and/or hickory-dominated woodlands and forests"

SOIL Sampling Point: Upland-01GPC

Depth Matrix	Redox Features					
(inches Color % Color	% Type Loc	Texture	Remarks			
0-16 10YR 4/3 100		Sand				
Hydric Soil Indicators:		Indio	cators for Problematic Soils:			
Histosol (A1)	Polyvalue Below Surface (B15)	2 cm Muck (A10)			
Histic Epipedon (A2)	Thin Dark Surface (S9)		Coast Prarie Redox (A16)			
Black Histic (A3)	Loamy Mucky Mineral (F1		5 cm Mucky Peat or Peat (S3)			
Hydrogen Sulfide (A4)	Loamy Gleyed Matric (F2)		Dark Surface (S7)			
Stratified Layers (A5)	Depleted Matrix (F3)		Polyvalue Below Surface (S8)			
Depleted Below Dark Surface (A11)	Redox Dark Surface (F6)		Thin Dark Surface (S9)			
Thick Dark Surface (A12)	Depleted Dark Surface (F7		Iron-Manganese Masses (F12)			
Sandy Mucky Mineral (S1)	Redox Depressions (F8)		Piedmont Floodplain Soils (F19)			
Sandy Gleyed Matrix (S4)			_Mesic Spodic (TA6)			
Sandy Redox (S5)			Red Parent Material (F21)			
Stripped Matrix (S6)			Very Shallow Dark Surface (TF12)			
Dark Surface (S7)			Other (Explain in Remarks)			
Restrictive Layer (if observed):						
Type: Hardpan		Hydric Soil F	Present? Yes No X			
Depth (inches): 16						
Remarks:						

Project/Site: Sunrise Wind	City/County	y: Brookhaven/Long Isl	and Sampling Date: 3/29/2021				
Applicant/Owner: Sunrise Wind LLC	State:	NY Sampling Point: Wetland					
Investigator(s): Matt Arsenault	Section, To	ownship, Range:					
Landform (hillslope, terrace,etc.): Depression	Local relief (co	Local relief (concave, convex, none): Concave Slope (%) 0 - 0					
Subregion (LRR or MLRA): MLRA 149B	Lat: 40.802627	Long: <u>-72.8846</u>					
Soil Map Unit Name:		NW	I Classification: PFO				
Are climatic / hyrologic conditions on the site t	ypical for this time of year? '	Yes X No	(if no, explain in Remarks.)				
Are Vegetation, Soil, or Hydrology	significantly disturbed?	Are "Normal Circums					
Are Vegetation, Soil, or Hydrology	naturally problematic?	(if needed, explain any	answers in Remarks.)				
SUMMARY OF FINDINGS - Attach site map	showing sampling point	locations, transects, i	important features, etc.				
Hydrophytic Vegetation Present? Yes X		ne Sampled Area					
		nin a Wetland?	Yes X No				
Hydric Soil Present? Yes X	No if ye	es, optional Wetland Site					
Wetland Hydrology Present? Yes X	es, optional wetland site						
Remarks: (Explain alternative procedures here or in a se	· ·						
Wetland positioned in narrow vegetated	zone between roadways						
HYDROLOGY							
Wetland Hydrology Indicators:		Second	ary Indicators (minimum of two required)				
Primary Indicators (minimum of one is required: cl	neck all that apply)	Sı	urface Soil Cracks (B6)				
X Surface Water (A1)	X Water-Stained Leaves (B9)	D	rainage Patterns (B10)				
X High Water Table (A2)	Aquatic Fauna (B13)	N	loss Trim Lines (B16)				
X Saturation (A3)	Marl Deposits (B15)	D	ry-Season Water Table (C2)				
X Water Marks (B1)	Hydrogen Sulfide Odor (C1) —— Ci	Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on I	iving Roots (C3) Sa	aturation Visible in Aerial Imagery (C9)				
Drift Deposits (B3)	Presence of Reduced Iron (· · · —	tunted or Stressed Plants (D1)				
Algal Mat or Crust (B4)	Recent Iron Reduction in T		eomorphic Position (D2)				
Iron Deposits (B5)	Thin Muck Surface (C7)	· · · ——	nallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)		licrotopographic Relief (D4)				
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Nemarks)		AC-Neutral Test (D5)				
			AC-Neutral Test (D3)				
Surface Water Present? Yes X No	Depth (inches) 3						
Water Table Present? Yes X No	Depth (inches) 3	Wetland Hydrolog	gy Present? Yes X No				
Saturation Present? Yes X No	Depth (inches) 0						
Describe Recorded Data (stream gauge, monit	oring well, aerial photos, pre	evious inspections), if av	ailable:				
Domorkes							
Remarks:							

VEGETATION - Use scientific names of plants Sampling Point: Wetland-01GPC Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) % Cover Species? Status **Tree Stratum Number of Dominant Species** 65 FAC That Are OBL, FACW, or FAC: (A) Acer rubrum 65 = Total Cover **Total Number of Dominant** Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet: OBL** species 20 x 1 20 Absolute Dominant Indicator **FACW** species 3 x 2 6 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 70 х3 210 FAC Viburnum recognitum Χ Lyonia ligustrina 1 **FACW FACU** species 0 x 4 0 6 = Total Cover **UPL** species 0 x 5 0 **Column Totals** 93 (A) 236 (B) Prevalence Index = B/A = 2.54 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Juncus effusus 15 Χ OBL X 3- Prevalence Index is =< 3.0 OBL Carex stricta 5 Χ 4- Morphological Adaptations Osmundastrum cinnamomeum 2 **FACW** 22 = Total Cover 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Wetland-01GPC

JOIL								Jamping Fourt. Wetland-Oldi C
Depth	Matrix				Redo	ox Featu	res	
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-16	10YR 4/2	90	10YR 5/6	10	С	М	Sand	
Hvdric So	oil Indicators:							Indicators for Problematic Soils:
-	tosol (A1)				Polyvalu	e Below S	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Coast Prarie Redox (A16)
	ck Histic (A3)				Loamy N	lucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hyd	drogen Sulfide	(A4)			Loamy G	ileyed Ma	ntric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)			Depleter	d Matrix (F3)	Polyvalue Below Surface (S8)
Dep	oleted Below [Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
	ck Dark Surfac						rface (F7)	Iron-Manganese Masses (F12)
	ndy Mucky Mir				-	epressior	· · · · · · · · · · · · · · · · · · ·	Piedmont Floodplain Soils (F19)
	ndy Gleyed Ma	-	-			•	·	Mesic Spodic (TA6)
	ndy Redox (S5)	-					•	Red Parent Material (F21)
	pped Matrix (•	Very Shallow Dark Surface (TF12)
	k Surface (S7)						•	Other (Explain in Remarks)
							•	
Restrictiv	ve Layer (if obs	erved):						
		Type:					Hydric S	Soil Present? Yes X No
	Depth (in	_					11741100	γουν reseme.
	2 3 7 1 1 1 1 1 1 1 1 1 1	_						
Remarks	s:							

Project/Site: Sunrise Wind	City/County: B	ookhaven/Long Island Sampling Date: 3/29/2021
Applicant/Owner: Sunrise Wind LLC		State: NY Sampling Point: Upland
Investigator(s): Matt Arsenault	Section, Towns	nip, Range:
Landform (hillslope, terrace,etc.): Footslope	Local relief (concav	e, convex, none): <u>Concave</u> Slope (%) <u>0 - 0</u>
Subregion (LRR or MLRA): MLRA 149B	Lat: <u>40.802823</u>	Long:72.890673 Datum: _NAD83
Soil Map Unit Name:		NWI Classification: UPL
Are climatic / hyrologic conditions on the site	cypical for this time of year? Yes	X No (if no, explain in Remarks.)
Are Vegetation, Soil, or Hydrology	significantly disturbed? An	e "Normal Circumstances" present? Yes X No
Are Vegetation, Soil, or Hydrology	naturally problematic? (if	needed, explain any answers in Remarks.)
SUMMARY OF FINDINGS - Attach site ma	o showing sampling point loca	tions, transects, important features, etc.
Hydrophytic Vegetation Present? Yes		mpled Area
Hydric Soil Present? Yes X	No within a	Wetland? Yes No X
Wetland Hydrology Present? Yes		tional Wetland Site ID:
Remarks: (Explain alternative procedures here or in a se		
Nemarks. (Explain alternative procedures here of in a se	parate report.)	
HYDROLOGY		
Wetland Hydrology Indicators:		Secondary Indicators (minimum of two required)
Primary Indicators (minimum of one is required: c		Surface Soil Cracks (B6)
Surface Water (A1)	Water-Stained Leaves (B9)	Drainage Patterns (B10)
High Water Table (A2)	Aquatic Fauna (B13)	Moss Trim Lines (B16)
Saturation (A3)	Marl Deposits (B15)	Dry-Season Water Table (C2)
Water Marks (B1)	Hydrogen Sulfide Odor (C1)	Crayfish Burrows (C8)
Sediment Deposits (B2)	Oxidized Rhizospheres on Living	Roots (C3) Saturation Visible in Aerial Imagery (C9)
Drift Deposits (B3)	Presence of Reduced Iron (C4)	Stunted or Stressed Plants (D1)
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled S	oils (C6) Geomorphic Position (D2)
Iron Deposits (B5)	Thin Muck Surface (C7)	Shallow Aquitard (D3)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Microtopographic Relief (D4)
Sparsley Vegetated Concave Surface (B8)		FAC-Neutral Test (D5)
Surface Water Present? Yes No X	Depth (inches)	
Water Table Present? Yes No X	Depth (inches)	Wetland Hydrology Present? Yes No X
Saturation Present? Yes No X	Depth (inches)	
Describe Recorded Data (stream gauge, moni	toring well periol photos proviou	inspections) if available:
Describe Necorded Data (stream gauge, mon	torning went, aeriai priotos, previou	s inspections), if available.
Remarks:		

	ific names	oi piants				Jampi		Оріці	nd-10M	HD
Tree Stratum	(Plot Size:	30'radius)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test V				
Pinus strobus			65	X	FACU	That Are OBL, FA	-		1	(A)
			65	_= Total Cov	ver	Total Numbe Species Ac			2	(B)
						Percent of Dor That Are OBL,	-		50%	(A/B)
						Prevalence Index	Workshee	t:		
			Absoluto	Dominant	Indicator	OBL species	0	x 1	0	
Shrub Stratum	(Plot Size:	15'radius)	% Cover	Species?	Status	FACW species	12	x 2	24	
Vaccinium corymbosum	n		12	Х	FACW	FAC species	4	x 3	12	
			12	= Total Cov	ver	FACU species	66	_ x 4	264	
						UPL species	0	x 5	0	
						Column Totals	82	(A)	300	(B)
						Prevalenc	e Index =		3.66	
						Hydrophytic Vege	tation Ind	licators	;;	
			Absolute	Dominant	Indicator	1- Rapid Tes	st For Hydr	ophyti	c Vegeta	tion
Herb Stratum	(Plot Size:	5'radius)	% Cover	Species?	Status	2- Dominan	ce Test is >	> 50%		
Smilax rotundifolia			1		FAC	3- Prevalenc	ce Index is	=< 3.0		
Pinus strobus		1	= Total Cov	FACU ver	4- Morpholo			S		
				_= 10tal cov	vei	5- Problema				n
						Definitions of Veget Tree- Woody plants breast height (DBH),	3 in. (7.6cm	ı) or mo		eter at
						Sapling/Shrub- Wood greater than or equa	dy plants le	ss than	3 in. DBH	and
						Herb- All herbaceous size, and woody plan			_	less of
Woody Vine Stratum	(Plot Size:	30'radius)	% Cover	Dominant Species?	Status	Woody Vines- All wo height.	ody vines g	reater t	han 3.28f	t in
Smilax rotundifolia			3	= Total Cov	<u>FAC</u> ver	Hydrop Vegeta	=			

SOIL Sampling Point: Upland-10MAB

								- O
Depth	Matrix			Redo	x Featu			
(inches	Color	%	Color	%	Type	Loc	Texture	Remarks
0-3	10YR 4/3	100					Loamy San	d
3-16	10YR 4/2	95	7.5YR 4/6	5	С	М	Loamy San	d
	•		•				•	
Hydric Sc	oil Indicators:							Indicators for Problematic Soils:
His	tosol (A1)				Polyvalu	e Below	Surface (B15)	2 cm Muck (A10)
His	tic Epipedon (A2)			Thin Dar	k Surface	e (S9)	Coast Prarie Redox (A16)
Bla	ck Histic (A3)				Loamy N	1ucky Mi	neral (F1)	5 cm Mucky Peat or Peat (S3)
Hyd	drogen Sulfide	e (A4)			Loamy G	leyed M	atric (F2)	Dark Surface (S7)
Stra	atified Layers	(A5)			Depleted	d Matrix	(F3)	Polyvalue Below Surface (S8)
Dep	oleted Below	Dark Su	rface (A11)		Redox D	ark Surfa	ce (F6)	Thin Dark Surface (S9)
Thick Dark Surface (A12)					Depleted	d Dark Su	ırface (F7)	Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)					Redox D	epressio	ns (F8)	Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)								Mesic Spodic (TA6)
X Sandy Redox (S5)								Red Parent Material (F21)
Stripped Matrix (S6)					_			Very Shallow Dark Surface (TF12)
Dark Surface (S7)					_			Other (Explain in Remarks)
Restrictiv	ve Layer (if obs	erved):						
		Type:	Hardpan				H	dric Soil Present? Yes X No
Depth (inches): 16							Пу	dric Soil Present? Yes X No
	Depth (ii	-	10					
Remarks	ς.							

Project/Site: Sunrise Wind	City/County: Brookhaven/Long Island Sampling Date: 3/29/2021				
Applicant/Owner: Sunrise Wind LLC	State: NY Sampling Point: Wetland				
Investigator(s): Matt Arsenault	Sectio	n, Township, Range:			
Landform (hillslope, terrace,etc.): Depression	Local relie	f (concave, convex, n	one): <u>Concave</u> Slope (%) <u>0 - 0</u>		
Subregion (LRR or MLRA): MLRA 149B	Lat: 40.802835	Long:7			
Soil Map Unit Name:			NWI Classification: PSS		
Are climatic / hyrologic conditions on the site t	•		(if no, explain in Remarks.)		
Are Vegetation, Soil, or Hydrology			Circumstances" present? Yes X No		
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expl	ain any answers in Remarks.)		
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, trans	sects, important features, etc.		
Hydrophytic Vegetation Present? Yes X		Is the Sampled Area	-		
Hydric Soil Present? Yes X	No	within a Wetland?			
Wetland Hydrology Present? Yes X		if yes, optional Wetla	and Site ID: 10MAB		
Remarks: (Explain alternative procedures here or in a sep					
HYDROLOGY					
Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)		
Primary Indicators (minimum of one is required: ch	neck all that apply)		Surface Soil Cracks (B6)		
X Surface Water (A1)	Water-Stained Leaves	(B9)	Drainage Patterns (B10)		
X High Water Table (A2)	Aquatic Fauna (B13)		Moss Trim Lines (B16)		
X Saturation (A3)	Marl Deposits (B15)		Dry-Season Water Table (C2)		
Water Marks (B1)	Hydrogen Sulfide Odo	r (C1)	Crayfish Burrows (C8)		
Sediment Deposits (B2)	Oxidized Rhizospheres		Saturation Visible in Aerial Imagery (C9)		
Drift Deposits (B3)	Presence of Reduced		Stunted or Stressed Plants (D1)		
Algal Mat or Crust (B4)	Recent Iron Reduction		X Geomorphic Position (D2)		
Iron Deposits (B5)	Thin Muck Surface (C7		Shallow Aquitard (D3)		
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem		Microtopographic Relief (D4)		
Sparsley Vegetated Concave Surface (B8)	Other (Explain in Neil)	arksy	FAC-Neutral Test (D5)		
			TAC-Neutral Test (D3)		
Surface Water Present? Yes X No	Depth (inches) 4	-			
Water Table Present? Yes X No	Depth (inches) 4	Wetland H	ydrology Present? Yes X No		
Saturation Present? Yes X No	Depth (inches) 0	-			
Describe Recorded Data (stream gauge, monit	toring well, aerial photos	, previous inspections	s), if available:		
Remarks:					
Remarks.					

VEGETATION - Use scientific names of plants Sampling Point: Wetland-10MAB Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** Pinus strobus FACU That Are OBL, FACW, or FAC: (A) 35 Acer circinatum 17 Χ FAC **Total Number of Dominant** = Total Cover 52 Species Across All Strata: (B) 4 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 75% **Prevalence Index Worksheet: OBL** species x 1 0 Absolute Dominant Indicator **FACW** species 45 x 2 90 (Plot Size: 15'radius) Status % Cover Species? **Shrub Stratum FAC** species 27 х3 81 **FACW** Rhododendron viscosum 25 Χ Vaccinium corymbosum 15 Χ **FACW FACU** species 35 x 4 140 10 FAC Clethra alnifolia **UPL** species 0 x 5 0 Lyonia ligustrina 5 **FACW Column Totals** 107 311 (B) 55 = Total Cover (A) Prevalence Index = B/A = 2.91 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% X 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes X No Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Wetland-10MAB Depth Matrix **Redox Features** (inches Color % Color % Type **Texture** Remarks Loc 0-20 10YR 3/1 100 Mucky Peat **Hydric Soil Indicators:** Indicators for Problematic Soils: X Histosol (A1) Polyvalue Below Surface (B15) 2 cm Muck (A10) Histic Epipedon (A2) Thin Dark Surface (S9) Coast Prarie Redox (A16) Black Histic (A3) Loamy Mucky Mineral (F1) 5 cm Mucky Peat or Peat (S3) Hydrogen Sulfide (A4) Loamy Gleyed Matric (F2) Dark Surface (S7) Stratified Layers (A5) Depleted Matrix (F3) Polyvalue Below Surface (S8) Depleted Below Dark Surface (A11) Redox Dark Surface (F6) Thin Dark Surface (S9) Thick Dark Surface (A12) Depleted Dark Surface (F7) Iron-Manganese Masses (F12) Sandy Mucky Mineral (S1) Redox Depressions (F8) Piedmont Floodplain Soils (F19) Sandy Gleyed Matrix (S4) Mesic Spodic (TA6) Sandy Redox (S5) Red Parent Material (F21) Stripped Matrix (S6) Very Shallow Dark Surface (TF12) Dark Surface (S7) Other (Explain in Remarks) Restrictive Layer (if observed):

Type: Hydric Soil Present? Yes X No _____

Depth (inches):

Remarks:

Project/Site: Sunrise Wind	City/County: Brookhaven/Long Island Sampling Date: 3/30/2021					
Applicant/Owner: Sunrise Wind LLC	State: NY Sampling Point: Upland					
Investigator(s): Matt Arsenault	Section, Township, Range:					
Landform (hillslope, terrace,etc.): Toeslope	Local relie	ef (concave, convex, no	one): <u>Concave</u> Slope (%) <u>1 - 1</u>			
Subregion (LRR or MLRA): MLRA 149B	Lat: 40.802779	Long: <u>-72</u>	.891871 Datum: NAD83			
Soil Map Unit Name:			NWI Classification: UPL			
Are climatic / hyrologic conditions on the site \ensuremath{t}	ypical for this time of ye	ar? Yes X No	(if no, explain in Remarks.)			
Are Vegetation, Soil, or Hydrology			rcumstances" present? Yes X No			
Are Vegetation, Soil, or Hydrology	naturally problema	atic? (if needed, expla	in any answers in Remarks.)			
SUMMARY OF FINDINGS - Attach site map	showing sampling po	oint locations, trans	ects, important features, etc.			
Hydrophytic Vegetation Present? Yes	No X	Is the Sampled Area	Yes No X			
Hydric Soil Present? Yes	No X	within a Wetland?				
Wetland Hydrology Present? Yes	No X	if yes, optional Wetla	nd Site ID:			
Remarks: (Explain alternative procedures here or in a sep						
Nemano. (Explain alternative procedures here of in a sep	surate reporting					
LIVEROLOGY						
HYDROLOGY Wetland Hydrology Indicators:			Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	neck all that annly)	<u>-</u>	Surface Soil Cracks (B6)			
Surface Water (A1)	Water-Stained Leaves	- (PO)	Drainage Patterns (B10)			
High Water Table (A2)	Aquatic Fauna (B13)	_	Moss Trim Lines (B16)			
		_				
Saturation (A3)	Marl Deposits (B15)	- (C1)	Dry-Season Water Table (C2)			
Water Marks (B1)	Hydrogen Sulfide Odo	-	Crayfish Burrows (C8)			
Sediment Deposits (B2)	Oxidized Rhizosphere		Saturation Visible in Aerial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced	-	Stunted or Stressed Plants (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction	` ' =	Geomorphic Position (D2)			
Iron Deposits (B5)	Thin Muck Surface (C	_	Shallow Aquitard (D3)			
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Rem	arks)	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)			FAC-Neutral Test (D5)			
Surface Water Present? Yes No X	Depth (inches)					
Water Table Present? Yes No X	Depth (inches)	Wetland Hy	Hydrology Present? Yes No X			
Saturation Present? Yes No X	Depth (inches)	_				
Describe Recorded Data (stream gauge, monit	toring well periol photos	nrovious inspections) if available:			
Describe Necorded Data (stream gauge, month	tornig well, aerial photos	s, previous inspections	j, ii avaliabie.			
Remarks:						
Remarks:						

VEGETATION - Use scientific names of plants Sampling Point: Upland-10MAC Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** FACU That Are OBL, FACW, or FAC: (A) Quercus rubra Nyssa sylvatica 20 Χ FAC **Total Number of Dominant** Pinus strobus 20 Χ **FACU** Species Across All Strata: (B) 4 65 = Total Cover Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 50% **Prevalence Index Worksheet: OBL** species x 1 0 Absolute Dominant Indicator **FACW** species 0 x 2 0 (Plot Size: 15'radius) % Cover Species? Status **Shrub Stratum FAC** species 90 х3 270 Clethra alnifolia 70 Χ FAC 70 = Total Cover **FACU** species 45 x 4 180 **UPL** species 0 x 5 0 **Column Totals** 135 (A) 450 (B) Prevalence Index = B/A = 3.33 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status 2- Dominance Test is > 50% 3- Prevalence Index is =< 3.0 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall. Absolute Dominant Indicator Woody Vines- All woody vines greater than 3.28ft in (Plot Size: 30'radius) Status **Woody Vine Stratum** % Cover Species? height. = Total Cover Hydrophytic Vegetation Present? Yes _ No _ X Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Upland-10MAC

SUIL								36	impling Point. Opiand-TolviAC		
Depth	Matrix	Redox Features									
(inches	Color	%	Color	%	Type	Loc	Texture	e Re	emarks		
0-2	2.5Y 3/1	100					Peat				
2-8	2.5Y 4/3	100					Sand				
8-18	10YR 4/6	100			Sand						
18-20	10YR 5/6	100					Sand				
Hydric So	il Indicators:							Indicato	ndicators for Problematic Soils:		
Hist	tosol (A1)			Polyvalue Below Surface (B15)				2 (2 cm Muck (A10)		
Hist	tic Epipedon (A2)			Thin Dar	k Surface	(S9)	Co	Coast Prarie Redox (A16)		
Blac	ck Histic (A3)				Loamy Mucky Mineral (F1)				5 cm Mucky Peat or Peat (S3)		
Нус	drogen Sulfide	e (A4)			Loamy G	ileyed Mat	tric (F2)	Da	Dark Surface (S7)		
Stra	atified Layers	(A5)		Depleted Matrix (F3)					Polyvalue Below Surface (S8)		
Dep	oleted Below	Dark Su	rface (A11)		Redox Dark Surface (F6)				in Dark Surface (S9)		
Thic	ck Dark Surfac	ce (A12)			Depleted Dark Surface (F7)				on-Manganese Masses (F12)		
	dy Mucky Mi	-	-		Redox Depressions (F8)				edmont Floodplain Soils (F19)		
Sandy Gleyed Matrix (S4)					_				esic Spodic (TA6)		
Sandy Redox (S5)								ed Parent Material (F21)			
Stripped Matrix (S6)					<u> </u>			· 	ery Shallow Dark Surface (TF12)		
Dar	k Surface (S7))			Other (Exp			her (Explain in Remarks)			
Restrictiv	e Layer (if obs	erved):									
		Type:					F	Hydric Soil Present? Yes No X			
	Depth (in	nches):					<u> </u>				
Domonto											
Remarks:											

Project/Site: Sunrise Wind	City/County: Brookhaven/Long Island Sampling Date: 3/30/2021				
Applicant/Owner: Sunrise Wind LLC	State: NY Sampling Point: Wetland				
Investigator(s): Matt Arsenault	Section, Township, Range:				
Landform (hillslope, terrace,etc.): Floodplain	Local relief (concave, convex, none): Concave Slo	pe (%) <u>0 - 0</u>			
Subregion (LRR or MLRA): MLRA 149B Soil Map Unit Name:	Lat: 40.802836 Long: -72.891746 Date NWI Classification: PF	um: <u>NAD83</u>			
Are climatic / hyrologic conditions on the site t					
Are Vegetation , Soil , or Hydrology	· · · · · · · · · · · · · · · · · · ·	•			
Are Vegetation , Soil , or Hydrology	naturally problematic? (if needed, explain any answers in Remarks.)				
<u> </u>		_			
-	p showing sampling point locations, transects, important feature	es, etc.			
Hydrophytic Vegetation Present? Yes X	•	a			
Hydric Soil Present? Yes X	No within a Wetland? Yes X	Yes X No			
Wetland Hydrology Present? Yes X	No if yes, optional Wetland Site ID: 10MA	ıC			
Remarks: (Explain alternative procedures here or in a sep	parate report.)				
HYDROLOGY					
Wetland Hydrology Indicators:	Secondary Indicators (minim	Secondary Indicators (minimum of two required)			
Primary Indicators (minimum of one is required: ch	heck all that apply) Surface Soil Cracks (B6)	Surface Soil Cracks (B6)			
X Surface Water (A1)	X Water-Stained Leaves (B9) Drainage Patterns (B10	Drainage Patterns (B10)			
X High Water Table (A2)	Aquatic Fauna (B13) Moss Trim Lines (B16)	Moss Trim Lines (B16)			
X Saturation (A3)	Marl Deposits (B15) Dry-Season Water Tabl	Dry-Season Water Table (C2)			
X Water Marks (B1)	Hydrogen Sulfide Odor (C1) Crayfish Burrows (C8)				
Sediment Deposits (B2)	Oxidized Rhizospheres on Living Roots (C3) X Saturation Visible in Ae	erial Imagery (C9)			
Drift Deposits (B3)	Presence of Reduced Iron (C4) Stunted or Stressed Pla	ints (D1)			
Algal Mat or Crust (B4)	Recent Iron Reduction in Tilled Soils (C6) X Geomorphic Position (I	D2)			
Iron Deposits (B5)	Thin Muck Surface (C7) Shallow Aquitard (D3)				
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks) Microtopographic Relie	Microtopographic Relief (D4)			
Sparsley Vegetated Concave Surface (B8)	FAC-Neutral Test (D5)				
Surface Water Present? Yes X No	Depth (inches) 4				
Water Table Present? Yes X No	- · · · · · · · · · · · · · · · · · · ·	X No			
Saturation Present? Yes X No	Depth (inches) 0	<u> </u>			
Describe Recorded Data (stream gauge monit	toring well, aerial photos, previous inspections), if available:				
besende necoraea bata (stream gauge, monte	tornig wen, aeriai priotos, previous inspections), ii available.				
Remarks:					

VEGETATION - Use scientific names of plants Sampling Point: Wetland-10MAC Absolute Dominant Indicator **Dominance Test Worksheet:** (Plot Size: 30'radius) **Tree Stratum** % Cover Species? Status **Number of Dominant Species** 45 Χ FAC That Are OBL, FACW, or FAC: (A) Nyssa sylvatica Acer rubrum 30 Χ FAC **Total Number of Dominant** = Total Cover 75 Species Across All Strata: (B) 6 Percent of Dominant Species (A/B) That Are OBL, FACW, or FAC: 100% **Prevalence Index Worksheet: OBL** species 10 x 1 10 Absolute Dominant Indicator **FACW** species 40 x 2 80 (Plot Size: 15'radius) Status % Cover Species? **Shrub Stratum** FAC species 100 х3 300 **FACW** Rhododendron viscosum 25 Χ Vaccinium corymbosum 15 Χ **FACW** 0 **FACU** species x 4 0 Χ FAC Clethra alnifolia 15 **UPL** species 0 x 5 0 Acer rubrum 10 FAC **Column Totals** 150 390 (B) 65 = Total Cover (A) Prevalence Index = B/A = 2.6 **Hydrophytic Vegetation Indicators:** Absolute Dominant Indicator 1- Rapid Test For Hydrophytic Vegetation **Herb Stratum** (Plot Size: 5'radius) % Cover Species? Status X 2- Dominance Test is > 50% Symplocarpus foetidus 10 Χ OBL X 3- Prevalence Index is =< 3.0 10 = Total Cover 4- Morphological Adaptations 5- Problematic Hydrophytic Vegetation **Definitions of Vegetation Strata:** Tree- Woody plants 3 in. (7.6cm) or more in diameter at breast height (DBH), regardless of height. Sapling/Shrub- Woody plants less than 3 in. DBH and greater than or equal to 3.28ft (1m) tall. Herb- All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28ft tall.

= Total Cover

Woody Vines- All woody vines greater than 3.28ft in height.

Hydrophytic Vegetation

Present? Yes X No

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL Sampling Point: Wetland-10MAC

Depth	oth <u>Matrix</u>		Redox Features						
(inches	Color	%	Color	or % Type Loc Texture			Textu	ıre	Remarks
0-6	2.5Y 2.5/1	100		Mucky Peat				Peat	
6-9	2.5Y 3/1	100		Sand				d	
10-20	2.5Y 5/1	100					Sand	d	
	ŕ								
Huduia Ca	oil Indicators:							l m ali:	cators for Problematic Soils:
•	stosol (A1)				Polyvalu	e Relow	Surface (B15)	inai	2 cm Muck (A10)
	stic Epipedon (A2)			Thin Dar				Coast Prarie Redox (A16)
	ick Histic (A3)	,					neral (F1)		5 cm Mucky Peat or Peat (S3)
	drogen Sulfide	e (A4)			•	-	atric (F2)		, Dark Surface (S7)
	atified Layers	-			Depleted	-			Polyvalue Below Surface (S8)
X De	pleted Below I	Dark Su	ırface (A11)	Redox Dark Surface (F6)					Thin Dark Surface (S9)
Thi	ick Dark Surfac	ce (A12)	Depleted Dark Surface (F7)					Iron-Manganese Masses (F12)
Sandy Mucky Mineral (S1)					Redox Depressions (F8)				Piedmont Floodplain Soils (F19)
Sandy Gleyed Matrix (S4)					_				_Mesic Spodic (TA6)
Sandy Redox (S5)									_Red Parent Material (F21)
Stripped Matrix (S6)									_Very Shallow Dark Surface (TF12)
Dark Surface (S7)									Other (Explain in Remarks)
Do obviobi		aal\.							
Kestricti	ve Layer (if obs	ervea):							
		Type:						Hydric Soil F	Present? Yes X No
	Depth (in	nches):							
Remark	S:								



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 10MAA – Wetland View looking north. Stantec. March 2021.



Photograph 12. Wetland 10MAB – Wetland View looking north. Stantec. March 2021.



Photograph 13. Wetland 10MAC – Wetland View looking north. Stantec. March 2021.



Photograph 14. Wetland 01GPA (Carmans River impoundment)— Wetland View looking east. Stantec. March 2021.



Photograph 15. Wetland 01GPB- Wetland View looking north. Stantec. March 2021.



Photograph 16. Wetland 01GPC- Wetland View looking east. Stantec. March 2021.



Photograph 17. Watercourse S-10MA. Stream view facing south. Stantec. March 2021.



Photograph 18. Watercourse S-01GP. View northwest of Dam on Carmans River from Victory Avenue. Stantec. March 2021.



Photograph 19. Watercourse S-01GP. View south of Carmans River between Victory Avenue and State Route 27. Stantec. March 2021.



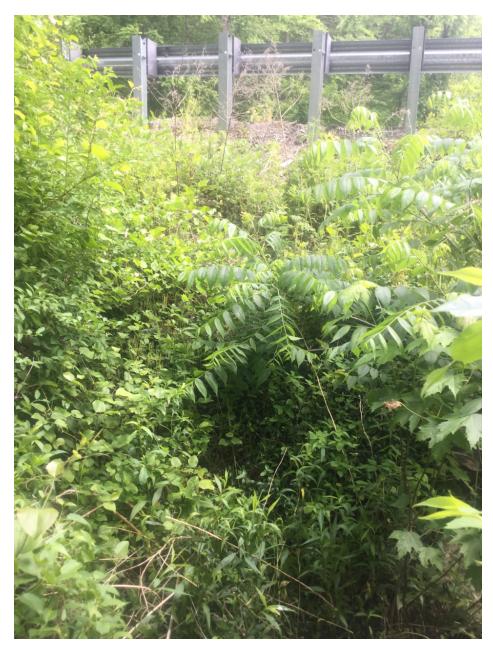
Photograph 20. Wetland 01CFC/01JRB – Upland View looking east across Carmans River from public right-of-way. Stantec. June 2020.



Photograph 21. Wetland 01CFD/01JRA – Wetland View looking north. Stantec. October 2020.



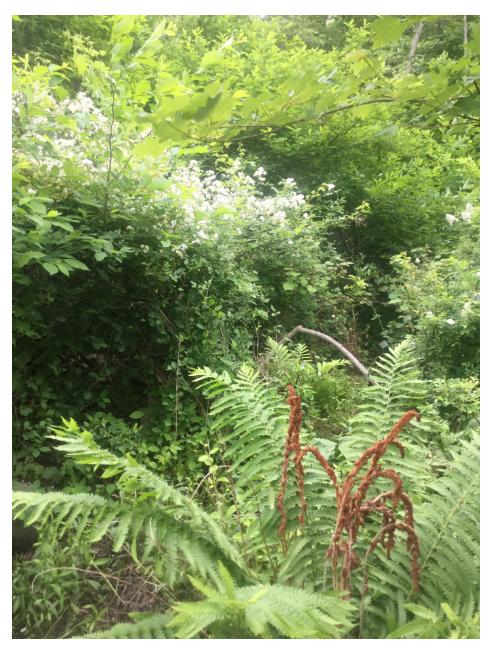
Photograph 22. Wetland 01CFD/01JRA – Upland View looking east. Stantec. October 2020.



Photograph 23. Wetland 01ASD – Wetland View looking south towards Montauk Highway. Stantec. June 2020.



Photograph 24. 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.



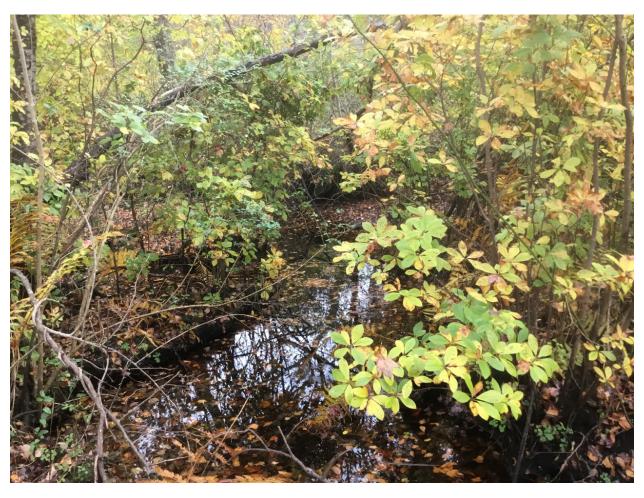
Photograph 25. Wetland 01ASE – Wetland View looking south from public right-of-way. Stantec. June 2020.



Photograph 26. Wetland 01ASE – Upland View looking east across Montauk Highway from public right-of-way. Stantec. June 2020.



Photograph 27. Watercourse S-01CF – Carmans River looking south from public right-of-way. Stantec. June 2020.



Photograph 28. Watercourse S-02MA – Tributary to Carmans River looking east. Stantec. October 2020.



Photograph 29. Watercourse S-01AS – Yaphank Creek looking south towards Montauk Highway from public right-of-way. Stantec. June 2020.

SUNRISE WIND: ONSHORE ECOLOGICAL ASSESSMENT AND FIELD SURVEY REPORT

August 2022

Appendix E RARE PLANT SURVEY RESULTS

Contains Confidential Information - Not for Public Disclosure

This Appendix contains trade secrets and/or commercial or financial information that is exempt from the public disclosure under the Federal Freedom of Information Act, the New York Freedom of Information Law, the Massachusetts Public Records Law, and the Rhode Island Access to Public Records Act.

