

**APPENDIX E**  
**Natural Resources**



# Environmental Resource Mapper

Base Map: Topographical Using this map

Search

Tools

## Layers and Legend

- ☒ All Layers
- ☒ Unique Geological Features
- ☒ Waterbody Classifications for Rivers/Streams
- ☒ Waterbody Classifications for Lakes
- ☒ State Regulated Freshwater Wetlands
- ☐ State Regulated Wetland Checkzone
- ☒ Significant Natural Communities
- ☐ Natural Communities Near This Location
- ☒ Rare Plants or Animals

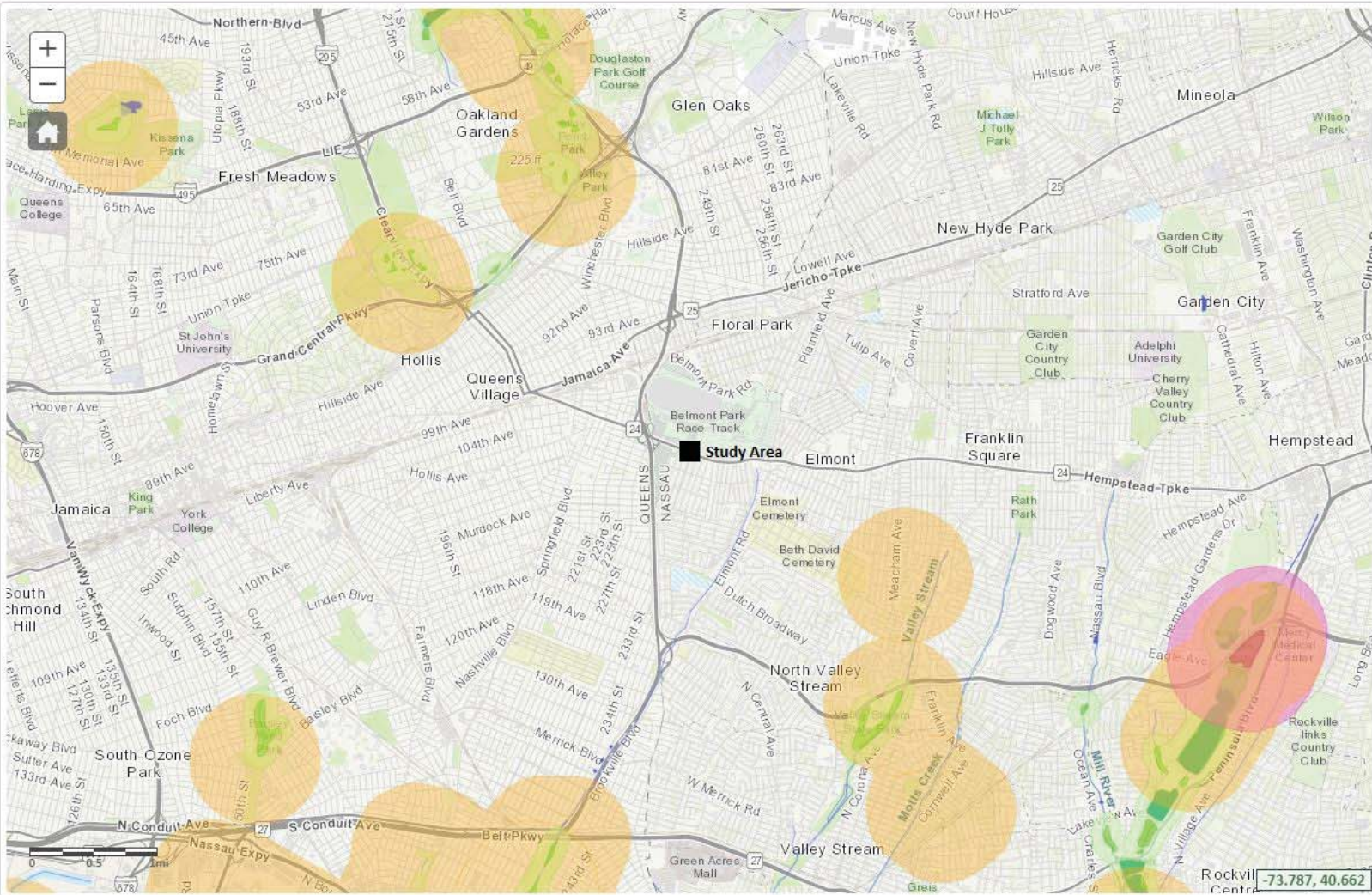
Other Wetland Layers

Reference Layers

Tell Me More...

Need A Permit?

Contacts



**Table 10-1**  
**Vegetation Identified within Site A**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Stratum</b>
Common mugwort	<i>Artemisia vulgaris</i>	Herb
Common milkweed	<i>Asclepias syriaca</i>	Herb
Lamb's quarters	<i>Chenopodium album</i>	Herb
Orchard grass	<i>Dactylis glomerata</i>	Herb
<b>Crabgrass</b>	<b><i>Digitaria sp.</i></b>	<b>Herb</b>
Path rush	<i>Juncus tenuis</i>	Herb
Field peppergrass	<i>Lepidium campestre</i>	Herb
Common evening primrose	<i>Oenothera biennis</i>	Herb
<b>English plantain</b>	<b><i>Plantago lanceolata</i></b>	<b>Herb</b>
Common plantain	<i>Plantago major</i>	Herb
<b>Kentucky bluegrass</b>	<b><i>Poa pratensis</i></b>	<b>Herb</b>
Creeping yellowcress	<i>Rorippa sylvestris</i>	Herb
Curly dock	<i>Rumex crispus</i>	Herb
Rough-fruited cinquefoil	<i>Sulphur Cinquefoil</i>	Herb
<b>Common dandelion</b>	<b><i>Taraxacum officinale</i></b>	<b>Herb</b>
<b>White clover</b>	<b><i>Trifolium repens</i></b>	<b>Herb</b>
Dogwood	<i>Cornus sp.</i>	Shrub
Wild hydrangea	<i>Hydrangea arborescens</i>	Shrub
<b>Rose</b>	<b><i>Rosa sp.</i></b>	<b>Shrub</b>
<b>Viburnum sp.</b>	<b><i>Viburnum sp.</i></b>	<b>Shrub</b>
<b>Norway maple</b>	<b><i>Acer platanoides</i></b>	<b>Tree</b>
Tree-of-heaven	<i>Ailanthus altissima</i>	Tree
European beech	<i>Fagus sylvatica</i>	Tree
White ash	<i>Fraxinus americana</i>	Tree
White mulberry	<i>Morus alba</i>	Tree
Eastern white pine	<i>Pinus strobus</i>	Tree
White oak	<i>Quercus alba</i>	Tree
<b>Pin oak</b>	<b><i>Quercus palustris</i></b>	<b>Tree</b>
Yew	<i>Taxus baccata</i>	Tree
American linden	<i>Tilia americana</i>	Tree
<b>Littleleaf linden</b>	<b><i>Tilia cordata</i></b>	<b>Tree</b>
Slippery elm	<i>Ulmus rubra</i>	Tree
Asiatic bitterweet	<i>Celastrus orbiculatus</i>	Vine
Winter creeper	<i>Euonymus fortunei</i>	Vine
Boston ivy	<i>Parthenocissus tricuspidata</i>	Vine
<b>Note:</b> Boldface denoted dominant vegetation within the study area		
<b>Source:</b> AKRF reconnaissance conducted on May 21, 2018		

**Table 10-2**  
**Vegetation Identified within Site B**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Stratum</b>
Wild onion	<i>Allium canadense</i>	Herb
Common mugwort	<i>Artemisia vulgaris</i>	Herb
Common milkweed	<i>Asclepias syriaca</i>	Herb
Orchard grass	<i>Dactylis glomerata</i>	Herb
<b>Crabgrass</b>	<b><i>Digitaria sp.</i></b>	<b>Herb</b>
<b>Path rush</b>	<b><i>Juncus tenuis</i></b>	<b>Herb</b>
Field peppergrass	<i>Lepidium campestre</i>	Herb
Japanese stiltgrass	<i>Microstegium vimineum</i>	Herb
Panicgrass	<i>Panicum sp.</i>	Herb
<b>English plantain</b>	<b><i>Plantago lanceolata</i></b>	<b>Herb</b>
Kentucky bluegrass	<i>Poa pratensis</i>	Herb
Curly dock	<i>Rumex crispus</i>	Herb
<b>Common dandelion</b>	<b><i>Taraxacum officinale</i></b>	<b>Herb</b>
White clover	<i>Trifolium repens</i>	Herb
Rose	<i>Rosa sp.</i>	Shrub
<b>Norway maple</b>	<b><i>Acer platanoides</i></b>	<b>Tree</b>
<b>Tree-of-heaven</b>	<b><i>Ailanthus altissima</i></b>	<b>Tree</b>
White ash	<i>Fraxinus americana</i>	Tree
<b>White mulberry</b>	<b><i>Morus alba</i></b>	<b>Tree</b>
<b>Black cherry</b>	<b><i>Prunus serotina</i></b>	<b>Tree</b>
White oak	<i>Quercus alba</i>	Tree
Pin oak	<i>Quercus palustris</i>	Tree
Willow oak	<i>Quercus phellos</i>	Tree
Black locust	<i>Robinia pseudoacacia</i>	Tree
Sassafras	<i>Sassafras albidum</i>	Tree
Asiatic bitterweet	<i>Celastrus orbiculatus</i>	Vine
Japanese honeysuckle	<i>Lonicera japonica</i>	Vine
Boston ivy	<i>Parthenocissus tricuspidata</i>	Vine
<b>Note:</b> Boldface denoted dominant vegetation within the study area		
<b>Source:</b> AKRF reconnaissance conducted on May 21, 2018		

**Table 10-3**  
**Vegetation Identified within the South Lot**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Statum</b>
Common mugwort	<i>Artemisia vulgaris</i>	Herb
Common milkweed	<i>Asclepias syriaca</i>	Herb
Lamb's quarters	<i>Chenopodium album</i>	Herb
<b>Crabgrass</b>	<b><i>Digitaria sp.</i></b>	<b>Herb</b>
Bedstraw	<i>Galium sp.</i>	Herb
Prickly lettuce	<i>Lactuca serriola</i>	Herb
<b>English plantain</b>	<b><i>Plantago lanceolata</i></b>	<b>Herb</b>
Common plantain	<i>Plantago major</i>	Herb
<b>Kentucky bluegrass</b>	<b><i>Poa pratensis</i></b>	<b>Herb</b>
Bulbous buttercup	<i>Ranunculus bulbosus</i>	Herb
Creeping yellowcress	<i>Rorippa sylvestris</i>	Herb
Common chickweed	<i>Stellaria media</i>	Herb
<b>Common dandelion</b>	<b><i>Taraxacum officinale</i></b>	<b>Herb</b>
Low hop clover	<i>Trifolium campestre</i>	Herb
<b>White clover</b>	<b><i>Trifolium repens</i></b>	<b>Herb</b>
White mulberry	<i>Morus alba</i>	Tree
<b>London planetree</b>	<b><i>Platanus × acerifolia</i></b>	<b>Tree</b>
Black cherry	<i>Prunus serotina</i>	Tree
American linden	<i>Tilia americana</i>	Tree
<b>Littleleaf linden</b>	<b><i>Tilia cordata</i></b>	<b>Tree</b>
<b>Note:</b> Boldface denoted dominant vegetation within the study area		
<b>Source:</b> AKRF reconnaissance conducted on May 21, 2018		

Table 10-4

**Vegetation Identified within the North Lot and Proposed Belmont Substation**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Stratum</b>
Common mugwort	<i>Artemisia vulgaris</i>	Herb
<b>Crabgrass</b>	<b><i>Digitaria sp.</i></b>	<b>Herb</b>
Yellow wood sorrel	<i>Oxalis stricta</i>	Herb
<b>English plantain</b>	<b><i>Plantago lanceolata</i></b>	<b>Herb</b>
Common plantain	<i>Plantago major</i>	Herb
<b>Kentucky bluegrass</b>	<b><i>Poa pratensis</i></b>	<b>Herb</b>
<b>Common dandelion</b>	<b><i>Taraxacum officinale</i></b>	<b>Herb</b>
<b>White clover</b>	<b><i>Trifolium repens</i></b>	<b>Herb</b>
Common blackberry	<i>Rubus allegheniensis</i>	Shrub
<b>Norway maple</b>	<b><i>Acer platanoides</i></b>	<b>Tree</b>
White ash	<i>Fraxinus americana</i>	Tree
Eastern red cedar	<i>Juniperus virginiana</i>	Tree
White mulberry	<i>Morus alba</i>	Tree
Japanese corktree	<i>Phellodendron japonicum</i>	Tree
Blue spruce	<i>Picea pungens</i>	Tree
Black cherry	<i>Prunus serotina</i>	Tree
Pin oak	<i>Quercus palustris</i>	Tree
Japanese honeysuckle	<i>Lonicera japonica</i>	Vine
<b>Note:</b> Boldface denoted dominant vegetation within the study area		
<b>Source:</b> AKRF reconnaissance conducted on May 21, 2018		

Table 10-5

**Vegetation Identified within the Blue Lot**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Stratum</b>
<b>Common mugwort</b>	<b><i>Artemisia vulgaris</i></b>	<b>Herb</b>
Spotted knapweed	<i>Centaurea maculosa</i>	Herb
Common chicory	<i>Cichorium intybus</i>	Herb
Orchard grass	<i>Dactylis glomerata</i>	Herb
Wild carrot	<i>Daucus carota</i>	Herb
<b>Crabgrass</b>	<b><i>Digitaria sp.</i></b>	<b>Herb</b>
Daisy fleabane	<i>Erigeron annuus</i>	Herb
Lady's thumb	<i>Persicaria maculosa</i>	Herb
<b>English plantain</b>	<b><i>Plantago lanceolata</i></b>	<b>Herb</b>
<b>Common plantain</b>	<b><i>Plantago major</i></b>	<b>Herb</b>
<b>Kentucky bluegrass</b>	<b><i>Poa pratensis</i></b>	<b>Herb</b>
Goldenrod	<i>Solidago sp.</i>	Herb
White clover	<i>Trifolium repens</i>	Herb
Multiflora rose	<i>Rosa multiflora</i>	Shrub
Eastern red cedar	<i>Juniperus virginiana</i>	Tree
Tree-of-heaven	<i>Ailanthus altissima</i>	Tree
Norway maple	<i>Acer platanoides</i>	Tree
Japanese honeysuckle	<i>Lonicera japonica</i>	Vine
Boston ivy	<i>Parthenocissus tricuspidata</i>	Vine
<b>Note:</b> Boldface denoted dominant vegetation within the study area		
<b>Source:</b> AKRF reconnaissance conducted on September 27, 2018		

**Table 10-6**  
**NYS Breeding Bird Atlas (2000–2005) Block 6050A**

<b>Common Name</b>	<b>Scientific Name</b>
Canada Goose	<i>Branta canadensis</i>
Mute Swan	<i>Cygnus olor</i>
Mallard	<i>Anas platyrhynchos</i>
Killdeer	<i>Charadrius vociferus</i>
Rock Pigeon	<i>Columba livia</i>
Mourning Dove	<i>Zenaida macroura</i>
Chimney Swift	<i>Chaetura pelagica</i>
Downy Woodpecker	<i>Picoides pubescens</i>
Northern Flicker	<i>Colaptes auratus</i>
Eastern Kingbird	<i>Tyrannus tyrannus</i>
Red-eyed Vireo	<i>Vireo olivaceus</i>
Blue Jay	<i>Cyanocitta cristata</i>
American Crow	<i>Corvus brachyrhynchos</i>
Tree Swallow	<i>Tachycineta bicolor</i>
Barn Swallow	<i>Hirundo rustica</i>
Black-capped Chickadee	<i>Poecile atricapillus</i>
Tufted Titmouse	<i>Baeolophus bicolor</i>
American Robin	<i>Turdus migratorius</i>
Gray Catbird	<i>Dumetella carolinensis</i>
Northern Mockingbird	<i>Mimus polyglottos</i>
European Starling	<i>Sturnus vulgaris</i>
Common Yellowthroat	<i>Geothlypis trichas</i>
Chipping Sparrow	<i>Spizella passerina</i>
Song Sparrow	<i>Melospiza melodia</i>
Northern Cardinal	<i>Cardinalis cardinalis</i>
Indigo Bunting	<i>Passerina cyanea</i>
Red-winged Blackbird	<i>Agelaius phoeniceus</i>
Common Grackle	<i>Quiscalus quiscula</i>
Brown-headed Cowbird	<i>Molothrus ater</i>
Baltimore Oriole	<i>Icterus galbula</i>
House Finch	<i>Carpodacus mexicanus</i>
House Sparrow	<i>Passer domesticus</i>
<b>Source: NYS Breeding Bird Atlas (2000–2005) for Block 6050A</b>	

**Table 10-7**

**Reptiles and Amphibians Documented by the NYSDEC Herp Atlas Project in the  
Lynbrook Census Quadrant**

<b>Common Name</b>	<b>Scientific Name</b>
Spotted salamander	<i>Ambystoma maculatum</i>
Fowler's toad	<i>Bufo fowleri</i>
Common snapping turtle	<i>Chelydra s. serpentina</i>
Painted turtle	<i>Chrysemys picta</i>
Northern redback salamander	<i>Plethodon c. cinereus</i>
<b>Italian wall lizard</b>	<b><i>Podarcis sicula</i></b>
Northern spring peeper	<i>Pseudacris c. crucifer</i>
Bullfrog	<i>Rana catesbeiana</i>
Green frog	<i>Rana clamitans melanota</i>
Wood frog	<i>Rana sylvatica</i>
<b>Northern brown snake</b>	<b><i>Storeria dekayi</i></b>
Eastern box turtle	<i>Terrapene c. carolina</i>
<b>Common garter snake</b>	<b><i>Thamnophis sirtalis</i></b>
Red-eared slider	<i>Trachemys scripta elegans</i>
<b>Note:</b> Boldface indicates the subset of species that are considered to have the potential to occur in the study area on the basis of their habitat requirements (Mitchell et al. 2006, Gibbs et al. 2007).	





## 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:

May 30, 2018

Consultation Code: 05E1LI00-2018-SLI-0595

Event Code: 05E1LI00-2018-E-01349

Project Name: Belmont Park Redevelopment 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](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

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## Project Summary

Consultation Code: 05E1LI00-2018-SLI-0595

Event Code: 05E1LI00-2018-E-01349

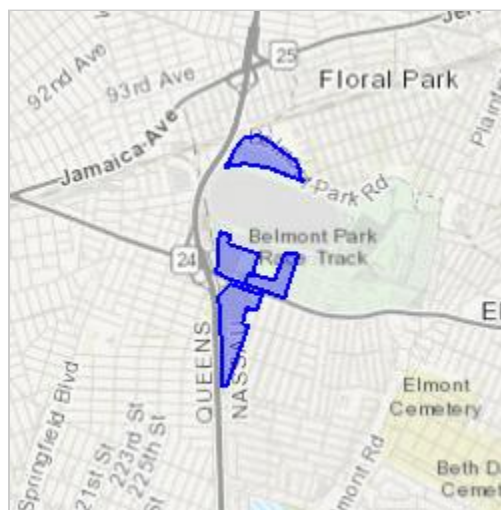
Project Name: Belmont Park Redevelopment Project

Project Type: DEVELOPMENT

**Project Description:** New York Arena Partners, LLC (“NYAP” or “the Applicant”) proposes to construct a sports and entertainment destination (the “Proposed Project”) at Belmont Park. The Proposed Project would redevelop the Project Sites with: an arena for the New York Islanders National Hockey League (NHL) franchise and for other entertainment events; dining, retail, and entertainment uses; a hotel; commercial office space; community center space; publicly accessible open space; parking; and a pedestrian bridge providing access between Sites A and B. In addition to the parking proposed for the Project Sites, it is expected that visitors to the Proposed Project would also utilize existing parking at Belmont Park in the “North Lot” and “South Lot” through a shared parking agreement with the FOB and NYRA. Construction of the Proposed Project would be expected to occur in a single phase over a period of approximately 28 months, starting in 2019, with full build-out of all project components in 2021.

### Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/40.71841986381136N73.72340513747878W>



Counties: Nassau, NY | Queens, 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 Fisheries<sup>1</sup>, 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.

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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 <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Birds

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

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## Flowering Plants

NAME	STATUS
<b>Sandplain Gerardia</b> <i>Agalinis acuta</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8128">https://ecos.fws.gov/ecp/species/8128</a>	Endangered
<b>Seabeach Amaranth</b> <i>Amaranthus pumilus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8549">https://ecos.fws.gov/ecp/species/8549</a>	Threatened

## Critical habitats

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

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October 23, 2018

United States Fish and Wildlife Service  
Endangered Species Program  
Long Island Ecological Services Field Office  
340 Smith Road  
Shirley, NY 11967-2258

Re: Request for Northern Long-Eared Bat Review, Belmont Park Redevelopment Project, Elmont,  
Town of Hempstead, Nassau County, NY

Dear Endangered Species Program:

New York Arena Partners, LLC and its affiliates (collectively, “NYAP” or “the Applicant”) are proposing to redevelop a portion of Belmont Park (the “Proposed Project”), located in the unincorporated hamlet of Elmont in the Town of Hempstead in Nassau County, New York. On behalf of Empire State Development (ESD), lead agency under the State Environmental Quality Review Act (SEQRA), AKRF is respectfully requesting review of the Proposed Project to determine whether compliance with Section 4(d) of the Endangered Species Act (“4(d) Rule”)<sup>1</sup> for the northern long-eared bat applies when the existing habitat within the Project Sites and surrounding landscape are taken into consideration.

The Proposed Project would redevelop the Project Sites with: an arena for the New York Islanders National Hockey League (NHL) franchise and for other sports, music, and entertainment events; dining, retail, and entertainment uses; a hotel; commercial office space; community center space; publicly accessible open space; parking; and one or more pedestrian connections providing access between Sites A and B. Visitors to the Proposed Project would also utilize existing parking at Belmont Park in the North, South, and Blue Lots (See Figure 1-1).

There are no documented northern long-eared bat hibernacula or roosting locations within 40 miles of the Project Sites.<sup>2</sup> Furthermore, the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper indicates “no” records of any state- or federally-listed species within or in the vicinity of the Project Sites. No bats were observed during site visits in May 2018 and September 2018.

The Project Sites are heavily developed and lack any large tracts of forest that would be capable of supporting northern long-eared bats. The majority of the Project Sites consists of low-quality and disturbed ecological communities, including paved parking lots, mowed lawns, and fragmented successional forests, in an urbanized setting that provides limited habitat for birds and other wildlife typical of developed

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<sup>1</sup> U.S. Fish and Wildlife Service (USFWS). 2016. Endangered and Threatened Wildlife and Plants; 4(d) Rule for the Northern Long-Eared Bat. Federal Register. Vol. 81, No. 9. January 14, 2016.

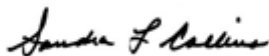
<sup>2</sup> <https://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

suburban areas. Vegetation within these ecological communities is restricted to the edges of the parking lots, cracks in the pavement, and a few planted trees in the parking lot interiors. In addition, successional southern hardwoods are found along the perimeter of some paved areas. The Proposed Project would eliminate or modify ecological communities that are of limited value to wildlife (e.g., paved road/path and mowed lawn with trees), but would result in the loss of a number of mature trees, including 124 trees in Site A.

Summer habitat suitable for the northern long-eared bat typically includes mature, closed-canopy, upland and riparian forest within heavily forested landscapes (Ford et al. 2005, Henderson et al. 2008), usually within about 60 miles of the hibernaculum (Caceras and Barclay 2000, USFWS 2014). The northern long-eared bat is considered to be an interior forest-dependent species that is sensitive to fragmentation and requires large tracts of unbroken forest for both foraging and breeding (Foster and Kurta 1999, Broders et al. 2006, Henderson et al. 2008, Segers and Broders 2014). Unlike many other bats of the Northeast, northern long-eared bats will commonly glean prey from leaves and other surfaces rather than strictly hawking flying insects in the air, and are thereby well-adapted to foraging in cluttered, structurally complex, forest interior habitat (Owen et al. 2003, Lacki et al. 2007). Northern long-eared bats do not concentrate along riparian corridors or other linear landscape features as much as strictly aerial-foraging species do (Owen et al. 2003, Ford et al. 2005, Harvey et al. 2011, USFWS 2014), and most radio-telemetry and acoustic studies have found that they typically avoid roads and other sharp forest edges (Owen et al. 2003, Patriquin and Barclay 2003, Carter and Feldhammer 2005, Morris et al. 2010, Segers and Broders 2014), where prey availability is expected to be lower than in the forest interior (Owen et al. 2003). Mature forest is considered to be the most important foraging habitat for the northern long-eared bat (USFWS 2013, 2014).

Due to lack of suitable habitat, it is AKRF's position that the seasonal tree clearing restrictions of the USFWS's 4(d) Rule<sup>3</sup> for the northern long-eared bat do not apply to the Proposed Project, and that the Proposed Project would have "no effect" to this species in accordance with the Endangered Species Act (16 U.S.C. §1531 et seq.). AKRF, on behalf of ESD, respectfully requests your concurrence with this determination. Please feel free to contact me at 646-388-9657 or by email at [scollins@akrf.com](mailto:scollins@akrf.com) if you should have any questions regarding these materials.

Sincerely,  
AKRF, Inc.



Sandy Collins  
Vice President

cc: Rachel Shatz, ESD

Enclosures: Figure 1-1

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<sup>3</sup> U.S. Fish and Wildlife Service (USFWS). 2016. Endangered and Threatened Wildlife and Plants; 4(d) Rule for the Northern Long-Eared Bat. Federal Register. Vol. 81, No. 9. January 14, 2016.



## References:

- Broders, H.G., G.J. Forbes, S. Woodley, and I.D. Thompson. 2006. Range extent and stand selection for forest-dwelling northern long-eared and little brown bats in New Brunswick. *Journal of Wildlife Management* 70: 1174-1184.
- Caceres, M. and R.M.R. Barclay. 2000. *Myotis septentrionalis*. *Mammal Species* 634:1-4.
- Carter, T.C., and G.A. Feldhamer. 2005. Roost tree use by maternity colonies of Indiana bats and northern long-eared bats in southern Illinois. *Forest Ecology and Management* 219:259-268.
- Ford, W.M., M.A. Menzel, J.L. Rodrigue, J.M. Menzel, and J.B. Johnson. 2005. Relating bat species presence to simple habitat measures in a central Appalachian forest. *Biological Conservation* 126: 528-539.
- Foster, R.W. and A. Kurta, A. 1999. Roosting ecology of the northern bat (*Myotis septentrionalis*) and comparisons with the endangered Indiana bat (*Myotis sodalis*). *Journal of Mammalogy* 80: 659-672
- Harvey, M.J., J.S. Altenbach, and T.L. Best. 2011. *Bats of the United States and Canada*. Johns Hopkins University Press, Baltimore.
- Henderson, L.E. and H.G. Broders. 2008. Movements and resource selection of the northern long-eared myotis (*Myotis septentrionalis*) in a forest-agriculture landscape. *Journal of Mammalogy* 89:952-963.
- Lacki, M.J., S.K. Amelon, and M.D. Baker. 2007. Foraging ecology of bats in forests. Pp. 83-127 in: *Bats in forests: conservation and management* (M.J. Lacki, J.P. Hayes, and A. Kurta, eds.). Johns Hopkins Press, Baltimore, MD.
- Morris, A.D., D.A. Miller, and M.C. Kalcounis-Reuppell. Use of forest edges by bats in a managed pine forest landscape. *Journal of Wildlife Management* 74: 26-34.
- Owen, S.F., M.A. Menzel, W.M. Ford, B.R. Chapman, K.V. Miller, J.W. Edwards, and P.B. Wood. 2003. Home-range size and habitat used by the northern myotis (*Myotis septentrionalis*). *American Midland Naturalist* 150:352-359.
- Patriquin, K.J. and R.M.R. Barclay. 2003. Foraging by bats in cleared, thinned and unharvested boreal forest. *Journal of Applied Ecology* 40:646-657.
- Segers, J. L. and H. G. Broders. 2014. Interspecific effects of forest fragmentation on bats. *Canadian Journal of Zoology* 92: 665-673.
- U.S. Fish and Wildlife Service (USFWS). 2014. Northern long-eared bat interim conference and planning guidance. Available from: <http://www.fws.gov/midwest/endangered/mammals/nlba/pdf/NLEBinterimGuidance6Jan2014.pdf>.
- U.S. Fish and Wildlife Service (USFWS). 2013. Northern long-eared bat. Available from: <http://www.fws.gov/midwest/endangered/mammals/nlba/nlbaFactSheet.html>.





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- Project Sites
- North, South, and Blue Parking Lots
- Proposed Belmont Electrical Substation
- Long Island Rail Road (LIRR)
- Belmont Park LIRR Station
- Nassau County/Queens County Boundary

