Biological & Habitat Assessment Report

for

SHELBY CRUSHED STONE MITIGATION PROPERTY

Town of Barre

Orleans County, New York

for

Shelby Crushed Stone

EARTH DIMENSIONS, INC.
Soils Investigations • Wetland Delineations

October 20, 2022
EDI Project Code: **W4D12b**

REPORT SUMMARIZING
THE RESULTS OF
A BIOLOGICAL & HABITAT ASSESSMENT SURVEY OF

SHELBY CRUSHED STONE MITIGATION PROPERTY

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REPORT DATE: October 20, 2022
EDI PROJECT CODE: W4D12b

PROJECT INFORMATION

Project Name	Shelby Crushed Stone – Mitigation Property
Street Address	0 Pask Road
SBL Number	104.-1-3.1
Town	Barre
County	Orleans
State	New York
Latitude/Longitude (NAD83)	43.17878°N, -78.29619°W
Investigation Area	138.0± Acres
USGS 7.5 Minute Topographical Map	Knowlesville Quadrangle
Waterway	Fish Creek
Hydrologic Unit Code	04130001
Date of Investigation	May 24 & September 8, 2022
Consultant	Earth Dimensions, Inc. 1091 Jamison Road Elma, New York 14095
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Engineer	N/A
Authority	Section 7 ESA, 6NYCRR 182

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EXECUTIVE SUMMARY

Shelby Crushed Stone has proposed the expansion of the existing rock quarry within a 14.8± acre portion of a 95.0± acre parcel located on the south side of Blair Road in the Town of Shelby, County of Orleans, and State of New York. The proposed expansion will permanently impact Federally and State Jurisdictional wetlands, resulting in the need for wetland mitigation. The proposed wetland mitigation site is a 138.0± acre property on the south side of Pask Road in the Town of Barre, Orleans County, New York. Shelby Crushed Stone has retained Earth Dimensions, Inc. (EDI) to perform a Biological and Habitat Assessment study at the proposed wetland mitigation site to identify the existence or potential for listed State and/or Federal species and/or their habitats, as well as how the site is utilized by wildlife. This Biological and Habitat Assessment is in response to comments provided by NYSDEC in a letter dated November 8, 2021. The letter describes inadequacies regarding biota and vegetative descriptions and conditions of the site. Coordination with the New York State Department of Environmental Conservation (NYSDEC) and United States Fish & Wildlife Service (USFWS) was conducted to determine their jurisdictional authority over the investigation area, pursuant to Title 6 of the New York Codes, Rules and Regulations (6NYCRR), Part 360.8 and Section 7 of the Endangered Species Act.

A preliminary review of available information pertaining to listed species in the project area was implemented prior to conducting a field investigation at the site. Sources of information include the NYSDEC On-line Resource Mapper, NYSDEC EAF Mapper and USFWS on-line Information for Planning and Consultation (IPaC) tool. Additional baseline resources referenced include United States Geological Survey (USGS) (Figure 1), National Wetland Inventory (NWI) (Figure 2), Natural Resources Conservation Service (NRCS) (Figure 3), and NYSDEC Freshwater Wetland maps (Figure 4). EDI applied methodology specified by the New York Natural Heritage Program in performing the habitat assessment. Within the investigation area, EDI identified five (5) ecological communities.

During initial review, USFWS identified the potential for Federal Candidate Species Monarch Butterfly (*Danaus plexippus*) within the project area. Additionally, USFWS identified sixteen (16) migratory birds as Birds of Conservation Concern (BCC). No federally listed significant habitats were identified. NYSDEC Natural Heritage identified State Threatened Northern Harrier as potentially within the project area. No state listed significant habitats were identified.

Detailed field investigations were conducted on May 24 & September 8, 2022 to document existing site conditions and survey for listed species and/or habitats. Additionally, a detailed plant and wildlife inventory was conducted during each visit. The two dates chosen for field surveys were to document the site conditions during different seasons as well as peak songbird migration times/dates. To address the potential for wintering Northern Harriers within the mitigation site, winter raptor surveys were conducted from December 13, 2021 to March 21, 2022. The detailed Winter Raptor Survey report was submitted to NYSDEC on May 17, 2022.

During the field investigations, two (2) of the listed Birds of Conservation Concern were identified within the site. The species identified were Bald Eagle and Wood Thrush. It is EDI's professional opinion that the proposed project will have minimal effect on these species, based on the creation of wetland and preservation of the site. It is EDI's professional opinion that the site contains potentially suitable habitat for Federal Candidate species Monarch butterfly based on the presence of flowering plants, including milkweed species, within the site. Wintering Northern Harriers were not observed within the site during the Winter Raptor Survey period. The creation of the wetland mitigation area may increase the quality of habitat for Northern Harriers to utilize the site in the future.

SECTION I: INTRODUCTION

Shelby Crushed Stone has proposed the development of a wetland mitigation project within a portion of a 138.0± acre parcel located on the south side of Pask Road and east side of Townline Road in the Town of Barre, County of Orleans, and State of New York. The investigation area is currently dominated by active agricultural fields. Scattered wooded and emergent wetlands are present throughout the site. The site is located on the USGS 7.5 minute quadrangle map indexed as Knowlesville/USGS (Figure 1). The habitat assessment field work was completed on May 24 & September 8, 2022 by two Ecologists (one plant expert, one wildlife expert) from Earth Dimensions, Inc.

Shelby Crushed Stone has retained Earth Dimensions, Inc. (EDI) to complete a Biological & Habitat Assessment study at this site. The vegetative communities found during the field assessment used the technical document updated in 2014 titled, "Ecological Communities of New York State" (Edinger et al.). The investigation was designed to facilitate a determination of the extent of NYSDEC and USFWS jurisdiction over the project area pursuant to Title 6 of New York Codes, Rules and Regulations (6NYCRR) Part 360.8 and Section 7 of the Endangered Species Act. Additionally, the investigation was designed to document seasonal wildlife usage within the proposed impact and preservation areas.

The New York State Natural Heritage Program and the U.S. Fish and Wildlife Service (USFWS) on-line mapping resources were consulted in order to determine whether known occurrences of protected species have been located in the project vicinity. The Natural Heritage Program identified State Threatened species Northern Harrier as potentially within the site. USFWS identified Federal Candidate species Monarch butterfly as potentially within the project area. USFWS also identified sixteen (16) migratory birds that are identified as a Bird of Conservation Concern. The birds identified are American Golden Plover, Bald Eagle, Belted Kingfisher, Black-billed Cuckoo, Blue-Winged Warbler, Bobolink, Canada Warbler, Cerulean Warbler, Chimney Swift, Eastern Meadowlark, Eastern Whip-poor-will, Evening Grosbeak, Lesser Yellowlegs, Red-headed Woodpecker, Upland Sandpiper and Wood Thrush.

EDI has performed a biological and habitat assessment at the site under guidelines specified by the NYSDEC New York Natural Heritage Program and USFWS. The purpose of this report is to present EDI's findings with respect to the Shelby Crushed Stone Mitigation site.

SECTION II: SITE DESCRIPTION

The Shelby Crushed Stone Mitigation Property is comprised of one parcel totaling 138.0± acres. The project area is dominated by active agricultural fields with scattered emergent and forested wetlands and upland hedgerows. The site is bordered to the north by Pask Road, with mature wooded areas and active agriculture north of Pask Road. East and south of the site is dominated by large agricultural fields with scattered woodlots and farmsteads. The western edge of the site is bordered by Townline Road, with scattered residential lots and large agricultural fields with scattered woodlots west of the road. During the investigation in 2022, the agricultural fields onsite were planted with soybeans. The 3 fields closest to Townline Road had not been planted this year. The investigation area is outlined on Figure 1 in Appendix A.

The site is located in the Lake Ontario Lake Plain ecosystem, approximately six miles northeast of the Oak Orchard Swamp and Alabama Swamp, which are part of the Iroquois National Wildlife Refuge. The site sits within the Atlantic Flyway zone for bird migration, which funnels birds north to the boreal forest for breeding in the spring and south to wintering grounds in Central and South America in the fall.

The natural topography of the investigation area is flat. The uplands within the investigation area consisted of row crop, successional northern hardwood and successional old field communities. The wetland areas were found to consist of emergent marsh and hardwood swamp communities. A perennial stream/ditch is present in the central portion of the site. This perennial feature is identified as a Class C stream by NYSDEC. The vegetative communities of the investigation area are described according to *Ecological Communities of New York State* (Edinger et al. 2014).

Numerous invasive/noxious plant species were identified within the project site. Density is generally low; however some areas of nearly full coverage were identified for some species. Many species are scattered throughout the site in several habitat types. Invasive species are identified in the vegetation lists in Appendix C.

SECTION III: PURPOSE

The purpose of this study is to complete a general assessment of the site for listed species and to analyze the physical characteristics of communities on site. Additionally, the site investigation documented vegetation coverage and fish and wildlife species observed utilizing the property. The investigation was designed to provide additional biota and vegetative descriptions for the Draft EIS per NYSDEC comments. Additionally, the investigation was designed to facilitate a determination of the extent of the NYSDEC's jurisdiction over the project pursuant 6NYCRR Part 360.8(b) which states: "Endangered species. Person(s) must not construct a facility or laterally expand an existing one in a manner that causes or contributes to the taking of any endangered or threatened species or to the destruction or adverse modification of their critical habitat".

On-line resources and agency coordination were used prior to the site visit to determine if listed species and/or significant habitats were present within or adjacent to the site. USFWS identified Monarch Butterfly (candidate species) as potentially being present within the project area. NYSDEC Natural Heritage Program identified State Threatened Northern Harries as potentially within the project area. These on-line resource map documents are included in Appendix F of this report.

In response to the potential for listed species to be present within the project site, EDI has completed this Habitat Assessment to identify the potential for listed species or suitable habitats. In response to comments by NYSDEC requesting additional biota and vegetative descriptions, a detailed Biological Assessment was performed. A detailed field investigation was conducted during appropriate weather and season for each listed species, as well as migration and nesting season for the listed migratory birds.

SECTION IV: SPECIES DESCRIPTIONS

USFWS identified Federal Candidate Species Monarch Butterfly as potentially within the investigation area.

The Monarch Butterfly is not a Threatened or Endangered species federally or within New York. USFWS has recently added Monarch Butterfly as a candidate to be Federally listed based on recent population declines. The listing has been assigned a priority number of 8, which indicates the magnitude of threats as moderate, and those threats are imminent. The Monarch Butterfly's status will be reviewed each year until it is no longer a candidate. Monarch Butterfly is widespread in New York, frequenting open meadows and fields that usually contain a variety of wildflowers including milkweed. Potentially suitable habitat is present within the successional old field and emergent marsh communities of the site.

NYSDEC identified State Threatened Northern Harrier as potentially adjacent to the Wetland Mitigation Site. Northern Harrier is identified as a S3B, S3N/G5 species. S3B/S3N represents a species that is vulnerable to disappearing both as a breeder and as a non-breeder in New York. Currently, 21-80 breeding locations and 21-80 wintering populations have been identified, with few individuals, restricted range, or few remaining acres of suitable habitat. Northern Harrier populations in the northeastern United States were considered abundant and widespread historically. Populations began to decline in the 1950's, likely due to habitat loss from urban development expansion. While breeding populations have appeared to decline steadily, wintering populations appear to be consistent.

Northern Harrier is a 16-24 inch, slender-bodied hawk which hunts open grasslands and marshes for small rodents. Birds are identified by a long tail and wings, yellow legs, distinct facial disk, and a white rump patch. Sexes can be fairly accurately identified in the field; males are pale gray with black wing tips and a slightly banded tail. Females are browner overall with dark streaks on the breast. Juvenile Harriers are similar in appearance to females, but adult females have bright yellow eyes while juveniles have gray eyes. Primary prey items include small rodents such as meadow voles and field mice, and sometimes small birds. Northern Harriers utilize open grasslands, shrubland, and marshes.

The sixteen bird species identified by USFWS are only protected under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act. There are no Section 7 ESA regulations for migratory birds not specifically listed as threatened or endangered.

American Golden-plovers (*Pluvialis dominica*) do not breed in New York but utilize specific habitats during migration. The habitat preferred includes flooded farm fields, mudflats, pastures, rice fields and golf courses. This species migrates southward through New York in early to mid-fall and is an uncommon migrant. Per eBird data, there have been three sightings of this species within three miles of the project area, all in September 2020. The known location to observe migrating birds in the fall (August to October) is approximately six miles southwest, in the Iroquois National Wildlife Refuge wetlands and mudflats. This species is very rare during the spring migration season. Although pockets of wetland with potentially suitable habitat were identified in the agricultural fields during the spring visit, these pockets were completely dry and indistinguishable during the fall visit. The potential for suitable fall migration habitat does exist, especially during wetter than average late summer-fall periods. It is EDI's professional opinion that potentially suitable fall migration habitat may be present in some years. The proposed project will likely enhance the potential habitat, with the proposed creation of emergent wetland communities.

Bald eagle (*Haliaeetus leucocephalus*) is not listed as a Bird of Conservation Concern but warrants attention based on the Eagle Act. During the Winter Raptor Survey field investigation, four (4) Bald Eagles were observed within the investigation area. On January 31, 2022, a single adult Eagle was observed flying south over the site from the Pask Road observation point. The bird did not appear to be hunting based on the height and speed at which it was observed. On February 15, 2022, two (2) adult Eagles were observed 25 feet east of Townline Road feeding on a deer carcass in the cut soybean field. The birds were flushed when a car drove by and did not return. Eagles are advantageous feeders in the winter, and it is likely the birds were hunting a very large area when they detected the dead deer. On March 3, 2022, a single adult Bald Eagle was observed flying southwest over the site from the Pask Road observation point. The Eagle flushed a large flock of Ring-billed Gulls that were feeding in the cut soybean fields south of Pask Road. No hunting activity was observed. Breeding Bald Eagles prefer large, mature white pine or other large trees to build nests, generally close to open lakes or rivers. The lack of open water (ponds, lakes, large streams) and potentially suitable nesting trees in the immediate vicinity of the project site deter eagles from nesting. Additionally, very suitable nesting and feeding habitat is present 6 miles southwest of the site, in the National Wildlife Refuge. No eagle nests were observed

during the field investigation, and no suitable nesting trees were observed. Per eBird data, twelve Bald Eagle sightings within one mile of the site have been documented since 2013. The proposed project will have no negative impact to Bald Eagle based on the lack of suitable nesting trees and limited feeding areas.

Belted Kingfisher (*Megaceryle alcyon*) is a common and widespread breeder in New York. Belted Kingfishers utilize streams with steep banks where they nest in burrows in the earthen banks. They prefer to hunt calm streams and lakes where they can easily see fish and aquatic invertebrate prey. Per eBird data, there have been two sightings of this species within one mile of the project area. The known location to observe nesting and feeding birds is approximately six miles southwest, in the Iroquois National Wildlife Refuge wetlands and stream corridors. There is no suitable habitat for breeding or foraging Belted Kingfishers within the project site. The lack of open water communities for hunting and lack of stream corridors with steep earthen banks for breeding prohibit use for this species.

Black-billed Cuckoo (*Coccyzus erythropthalmus*) is a scattered breeder in Western New York, utilizing thickets, orchards, abandoned farm fields, brushy hillsides and forest edges for nesting locations (often near water). Substantial seasonal movement is common with this species, which tends to follow caterpillar outbreaks. Migrating Black-billed Cuckoos can be found in several types of habitat, including forested areas and early successional communities. Per eBird data, there have been three sightings of this species within one mile of the project area. These observations have been of breeding birds during breeding bird surveys of the outer National Wildlife Refuge area. Additional scattered nesting locations have been documented within the main Wildlife Refuge habitat. There is limited potentially suitable habitat present within the project area for migrating birds to feed, in the forested wetland community in the southeast corner of the site. It is EDI's professional opinion that the proposed project will have no effect on migrating Black-billed Cuckoos based on the plan to preserve the forested wetland community and to built additional wetland within the agriculture fields.

Blue-winged Warbler (*Vermivora pinus*) is a common, although localized, breeder in Western New York. This species prefers dry, early-to-mid successional habitats with a high density of shrubs for breeding. They prefer open spaces and edges of cleared habitats. Singing males are often seen perched from the tallest sapling within an early successional community. Per eBird data, blue-winged warbler is a semi-common migrant and breeder in Orleans County. Three sightings within one mile of the site have been documented on Ebird since 2020, each of which is a likely nesting location. No potentially suitable

breeding habitat is present within the site for blue-winged warblers, based on the lack of successional areas with dense shrubs.

Bobolink (*Dolichonyx oryzivorus*) is a locally common breeder in western New York. They are habitat specific breeders, utilizing open field areas with dense herbaceous vegetation and scattered shrubs for perching. Per Ebird data, seven sightings within one mile of the site have been recorded. The sightings appear to be nesting birds within a large fallow agricultural field. Potentially suitable habitat is not present within the site based on the lack of grasslands. The field areas are annually cultivated for row crop production, which is not suitable for bobolinks. It is EDI's professional opinion that the proposed project will have no negative effect on nesting Bobolink. Additionally, the proposed wetland mitigation project may improve the potential for breeding habitat onsite.

Canada Warbler (*Cardellina canadensis*) is an uncommon migrant and rare breeder in Western New York. Breeding birds are most commonly found in the southern portion of the ecozone, within the Alleghany Plateau and Hills. Only one breeding record is shown on the latest Breeding Bird Atlas for Orleans County. Canada Warblers prefer forested areas with dense understory for breeding and feeding during migration. It is found in a variety of deciduous and coniferous forests but prefers moist mixed forests with a well-developed understory. Per Ebird data, there have been no sightings within six miles of the project area. No known breeding locations are present, although numerous migration sightings are shown from the National Wildlife Refuge area. The forested community onsite is small and of low-quality. It is EDI's professional opinion that the proposed project will have no negative effect on breeding Canada Warblers due to the lack of potentially suitable breeding and feeding habitat.

Cerulean Warbler (*Dendroica cerulea*) is a localized breeder in Orleans County. They have a patchy breeding distribution due to the specific breeding habitat required. They prefer two distinct habitats for breeding; forested wetlands and riparian corridors dominated by sycamore, cottonwood, silver maple and red maple and forested ridgetops and hillsides dominated by mature oak-hickory forests. One of the densest breeding populations in New York is located six miles southwest of the site, in the National Wildlife Refuge forested swamps. No potentially suitable breeding habitat is present onsite based on the lack of large, forested wetlands with mature trees. It is EDI's professional opinion that the proposed project will have no negative effect on nesting or migrating Cerulean Warblers.

Chimney swift (*Chaetura pelagica*) is a bird of developed areas, often seen hunting over rooftops, roadways and fields near development. Chimney swift populations are declining due to nesting habitat loss, as chimneys become less frequently built and existing chimneys fall into disuse. There is no potentially suitable nesting habitat within or adjacent to the site. Per Ebird, the nearest observation cluster of this species is within the Village of Medina, five miles northwest of the site. Additional observations have been noted within the National Wildlife Refuge six miles southwest of the site. It is EDI's professional opinion that the proposed project will have no negative effect on breeding or feeding Chimney Swifts.

Eastern Meadowlark (*Sturnella magma*) is a locally common breeder and migrant in Western New York. Populations have been steadily declining in much of the state because of habitat loss. Eastern Meadowlark is a species of agricultural and developed landscapes, where it breeds in hay fields, grassy pastures and grassy areas of airports and golf courses. They prefer large, contiguous areas for nesting. Per Ebird data, this species has been observed three times within two miles of the project area. The majority of sightings and suitable habitat is within the Wildlife Refuge southwest of the site. There is no potentially suitable habitat present within the investigation area based on the lack of hayfields and grassy areas. It is EDI's professional opinion that the proposed project will have no negative effect on breeding or migrating Eastern Meadowlarks. Additionally, the proposed wetland mitigation project may increase the potential for suitable breeding habitat.

Eastern Whip-poor-will (*Antrostomus vociferus*) is a very rare breeder and migrant in Orleans County. No known breeding locations are depicted in the Breeding Bird Atlas for Orleans County. Less than ten sightings of this species in the county have been documented per Ebird data, with only one sighting in the Wildlife Refuge area. Eastern Whip-poor-wills breed in several habitats, all of which provide open areas for aerial foraging and shaded areas for nesting and roosting. They do not prefer large forested areas and forests with a closed forest canopy or areas with active agriculture. There is no potentially suitable breeding habitat present within the investigation area. It is EDI's professional opinion that the proposed project will have no negative effect on breeding or migrating Eastern Whip-poor-wills.

Evening Grosbeak (*Coccothraustes vespertinus*) is an uncommon migrant in Western New York. Per the most recent Breeding Bird Atlas, they are not known to breed in Orleans County, or any county adjacent to Orleans. Breeding is restricted to the Adirondack High Peaks. Sightings in Western New

York are during late fall and winter months, when birds move south following the seed and pinecone crop. It is unlikely this species utilizes the project site for winter feeding based on the lack of fruiting shrubs and cone-bearing conifer trees. It is EDI's professional opinion that the proposed project will have no negative effect on Evening Grosbeak.

Lesser Yellowlegs (*Tringa flavipes*) do not breed in New York but utilize specific habitats during migration. The habitat preferred includes flooded farm fields, mudflats, pastures, rice fields and golf courses. This species migrates northward through Western New York from late-April to mid-May and is an uncommon migrant. Per eBird data, there have been no observations of this species within two miles of the project location. A cluster of observations is shown 2.25 miles northwest of the site in Millville. The most significant sightings cluster is southwest of the site, in the Iroquois National Wildlife Refuge. This species can be a common spring and fall migrant in the Refuge area. There is potentially suitable habitat for migrating lesser yellowlegs within the project site, based on the presence of flooded agricultural fields during spring and fall migration. Lesser yellowlegs prefer habitat with shallow water and dense muddy substrate rich with invertebrates, which may be present onsite. It is EDI's professional opinion that the proposed wetland creation project may improve potential habitat for migrating Lesser Yellowlegs.

Red-headed Woodpeckers (*Melanerpes erythrocephalus*) are rare to uncommon in New York. This species is found in habitats such as open areas with scattered trees, parks, golf courses, open swamps with dead trees and river bottoms with standing dead trees. Scattered nesting pairs are found in Orleans County, mostly along the Lake Ontario shore and within the Iroquois National Wildlife Refuge south of the site. Potentially suitable habitat is not present in the site based on the dominance of active agricultural fields. The small, forested community in the southeast corner of the site is not ideal nesting habitat, and more suitable habitat is present offsite. No red-headed woodpeckers were seen or heard during the field investigation. Per eBird data, one observation 0.75 mile southwest of the site has been recorded. It is not likely that the site is utilized for nesting based on the scarcity of the species and marginal quality of the habitat. It is EDI's professional opinion that the proposed wetland creation project will have no negative effect on Red-headed Woodpeckers.

The Upland Sandpiper (*Bartramia longicauda*) is a shorebird of prairies and open grasslands, being a mostly terrestrial shorebird. They are uncommon breeders in Western New York, with the known suitable breeding habitat being in the National Wildlife Refuge south of the site. Breeding occurs

from late April to Late July in old pastures, hayfields, airports and other similarly mowed areas. Nests are built on the ground in dense herbaceous vegetation. The New York Breeding Bird Atlas describes preferred nesting habitat as having perches and low vegetation for visibility during courting, higher vegetation to hide the nest and lower vegetation during supervision of young. This schedule of habitat maintenance is uncommon, attributing to the birds decline. Airports provide half or more of the suitable nesting habitat in New York. There is no potentially suitable nesting habitat within or adjacent to the site. It is EDI's professional opinion that the proposed project will have no negative effect on Upland Sandpipers.

Per eBird data, Wood Thrush (*Hylocichla mustelina*) is a very common migrant and local breeder. Wood thrushes breed in deciduous forests with a high canopy, a well-developed understory, and some moisture. Suitable breeding habitat is present within the site. During the May 24 visit, two individuals were heard singing in the southeast portion of the site in the forested community. Suitable nesting habitat is present within the forested community in the southeast corner of the investigation area. It is EDI's professional opinion that the proposed project may effect, but is not likely to adversely effect, breeding Wood Thrush. The area to be avoided in the southeast portion of the site is where the birds were observed during field visits and provides suitable nesting habitat.

Per NYSDEC comments in the DEIS review, a Winter Raptor Survey was conducted between December 12, 2021 and March 21, 2022. The species surveyed for was primarily Northern Harrier, although additional wintering species such as Short-eared Owl and Rough-legged Hawk were included in the surveys. No Northern Harriers or other desirable wintering raptors were seen within the site during the Winter Raptor Surveys.

SECTION V: FIELD INVESTIGATION PROCEDURES

Detailed field surveys were conducted at the site on May 24 & September 8, 2022 to document all plant and wildlife species. The survey periods were chosen based on song-bird migration overlapping with songbird breeding season, as well as vegetation growth. The site was traversed thoroughly, and all species encountered were documented. Each site visit was completed with two Ecologists from Earth Dimensions.

In order to accurately identify the limits of various vegetative communities, aerial photography (Figure 6) and ground truthing were utilized. Vegetation data was taken during transects through each community type and cumulative species lists were generated. Figure 5 depicts the locations of the photos included in Appendix B.

In addition to plant community descriptions, a full wildlife assessment was conducted during the site visits. All birds, mammals and reptiles/amphibians were identified while performing the ecological community and vegetation descriptions. During the site visits, five (5) mammals, seven (7) amphibians, two (2) reptiles and eighty-five (85) bird species were identified.

SECTION VI: STUDY AREA HABITATS

Within the investigation area, EDI identified five (5) major ecological communities, none of which are listed as vulnerable in New York State. They are as follows:

Ecological Community	Global Rank	State Rank
1. Successional Northern Hardwood	1. G5	1. S5
2. Successional Old Field	2. G5	2. S5
3. Row Crop	3. G5	3. S5
4. Emergent Marsh	4. G5	4. S5
5. Hardwood Swamp	5. G5	5. S5

Figure 5 in Appendix A depicts the vegetative communities as they existed at the time of the investigation. The vegetative communities of the investigation area are described according to Ecological Communities of New York State (Edinger et al. 2014). The following is a description of each major community type encountered.

The **successional northern hardwood** community is scattered throughout the upland portions of the site. This community is restricted to the hedgerows that separate active farm fields and property lines. The community is identified as semi-mature, with trees ranging from 40 to 60 years old. Tree species and sizes varied throughout the site. A moderately dense understory of shrubs/saplings and herbaceous plants is present in much of the community. A full plant species list for this community is included as Table 1 in Appendix C.

The **successional old field** community is present throughout the site. This community is scattered along the edges of the active farm fields and in areas where soybeans were not planted in 2022. A full plant species list for this community is included as Table 2 in Appendix C.

The **row crop** community dominates the site. Several fields that were planted in soybeans in 2021 and 2022 are present. The fields had not been planted at the time of the May 24, 2022 site visit. At that time, the fields were more of successional old field community based on farm weed growth. The plant species are limited in this community and are included in the successional old field community plant list (Table 2) in Appendix C.

The **emergent marsh** community is scattered throughout the site. The community includes wet pockets within the farm fields and a perennial stream/ditch in the central portion of the site. The community is heavily vegetated with herbaceous species. The community had one to six inches of standing water during the spring visit and was dry during the fall visit. A full plant species list for this community is included as Table 3 in Appendix C.

The **hardwood swamp** community is present in the southeast portion of the site. The community is similar to the upland forested communities in tree size and age. The understory is dense with sapling and shrub species and a well-established herbaceous layer scattered through the community. Evidence of inundation up to several inches was noted on tree bases. The community is depressional and has minimal topographic relief. A full plant species list for this community is included as Table 4 in Appendix C.

SECTION VII: WILDLIFE OBSERVATIONS

During the site visit, five (5) mammals, seven (7) amphibians, two (2) reptiles and eighty-five (85) bird species were identified. Individuals of chipmunk, gray squirrel and white-tailed deer were observed. Tracks of raccoon and skunk were also noted throughout the site. Within the wetland communities, northern leopard frog, green frog, American toad, bull frog, wood frog, gray tree frog and spring peeper were seen or heard. The two reptiles observed were painted turtles in the intermittent stream and a garter snake in the hedgerow community. Detailed bird lists were generated during each visit using Ebird mobile. A full bird species list by date of observation is included as Table 5 in Appendix C.

The plant and wildlife species identified during the Biological and Habitat Assessment field visits are common and expected. No rare or uncommon species were identified within the project site. Two (2) bird species were observed that are listed by USFWS. The first, Bald Eagle, is an expected species in the area. Bald Eagles warrant attention because of the Eagle Act and their susceptibilities to certain types of development. Four (4) adult Bald Eagles were observed during the Winter Raptor Survey visits in 2021 and 2022. Bald Eagles are common near the Iroquois National Wildlife Refuge and can travel several miles in the winter looking for food. Ebird sighting maps show this species as widespread in Orleans County. The second bird, Wood Thrush, is identified by USFWS and a Species of Conservation Concern. Two (2) singing males were observed from the forested area in the southeast corner of the site on May 24, 2022. Wood Thrush is an expected spring migrant and breeder in Orleans County. The proposed project will have no negative effect on either of the listed species.

SECTION VIII: CONCLUSION

Earth Dimensions, Inc. (EDI) has completed a Biological and Habitat assessment study at the Shelby Crushed Stone Mitigation Property located in the Town of Barre, County of Orleans, and State of New York. A field investigation was conducted by two Ecologists from EDI. The study identified five vegetative community types, five mammal species, seven amphibian species, two reptile species and eighty-five bird species present within the site.

A map which depicts the site boundaries, the dominant community types and the location of all photos taken during the field survey is included as Figure 5 in Appendix A of this report. Appendix B includes representative photographs of the community types. Appendix C includes vegetation community plant species lists and full bird list. Appendix D notes the references used during the preparation of this report and during the field investigation. Appendix E provides the names, addresses and phone numbers of the survey personnel involved in the Habitat Assessment study. Appendix F provides the correspondence from the USFWS and NYSDEC.

The Habitat Assessment found potentially suitable habitat for Monarch Butterfly present within the investigation area. The open field and emergent marsh communities contain numerous flowering plants and milkweed species. The milkweed is critical for breeding Monarchs to lay eggs and for caterpillars to feed. Based on the habitats within the proposed project area, EDI concludes that minor impacts to Monarch Butterfly may occur. However, the creation of the wetland mitigation project will likely increase the potential habitat for Monarch Butterfly within the site. There are currently no restrictions on vegetation removal or development for this species.

No other significant or unusual species or habitats were identified. The mammal, amphibian, reptile and bird species observed are common in the area and on adjacent properties. EDI expects the diversity of ecosystems onsite to increase after the development of the wetland mitigation project. Suitable habitat for several of the identified species may increase as a result of site preservation and wetland creation.

SHELBY CRUSHED STONE MITIGATION PROPERTY

APPENDIX A - FIGURES

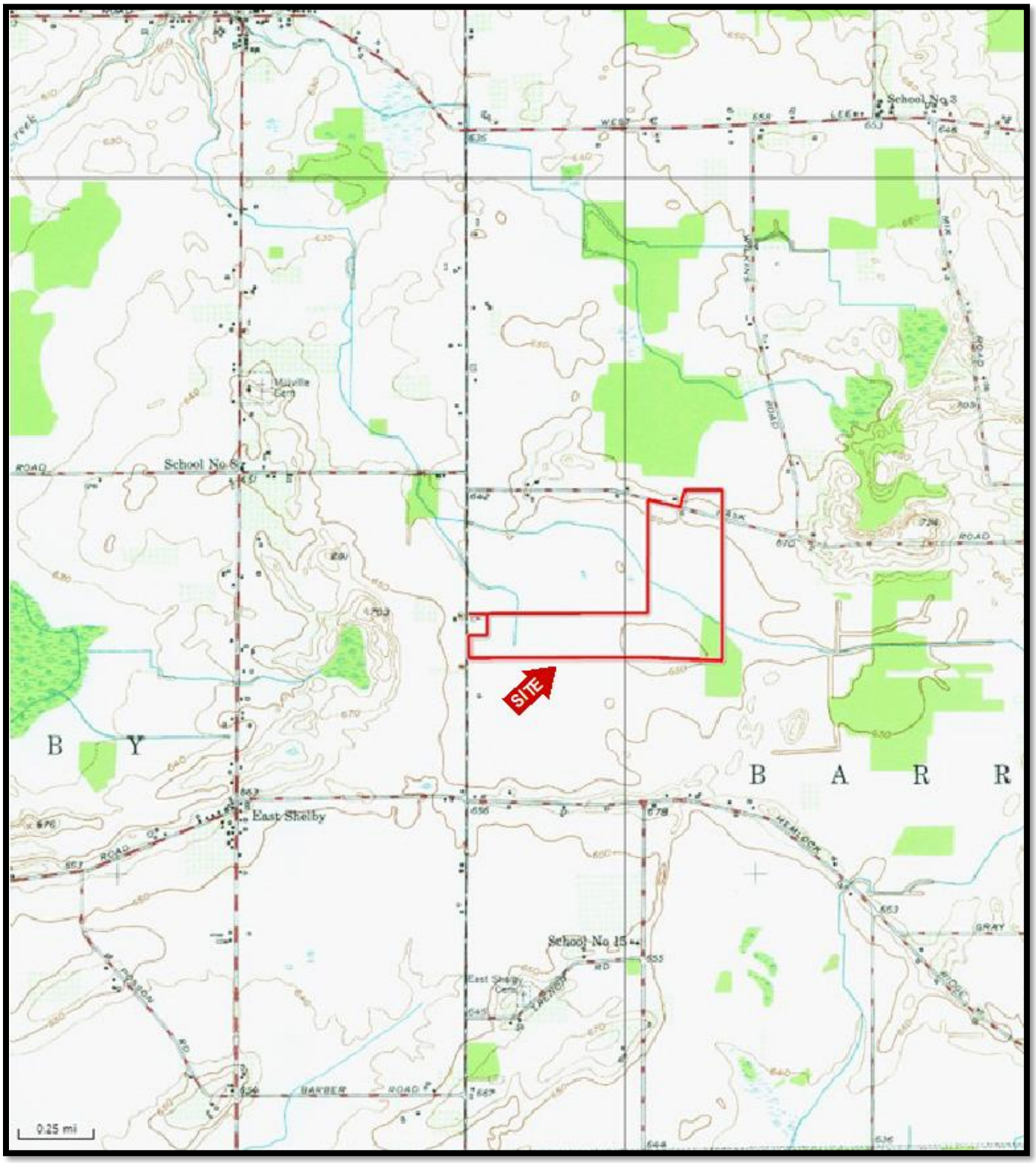


FIGURE 1: USGS 7.5 MINUTE TOPOGRAPHICAL MAP

Knowlesville Quadrangle / U.S. Geological Survey

Shelby Crushed Stone Mitigation Property

Town of Barre, Orleans County, New York

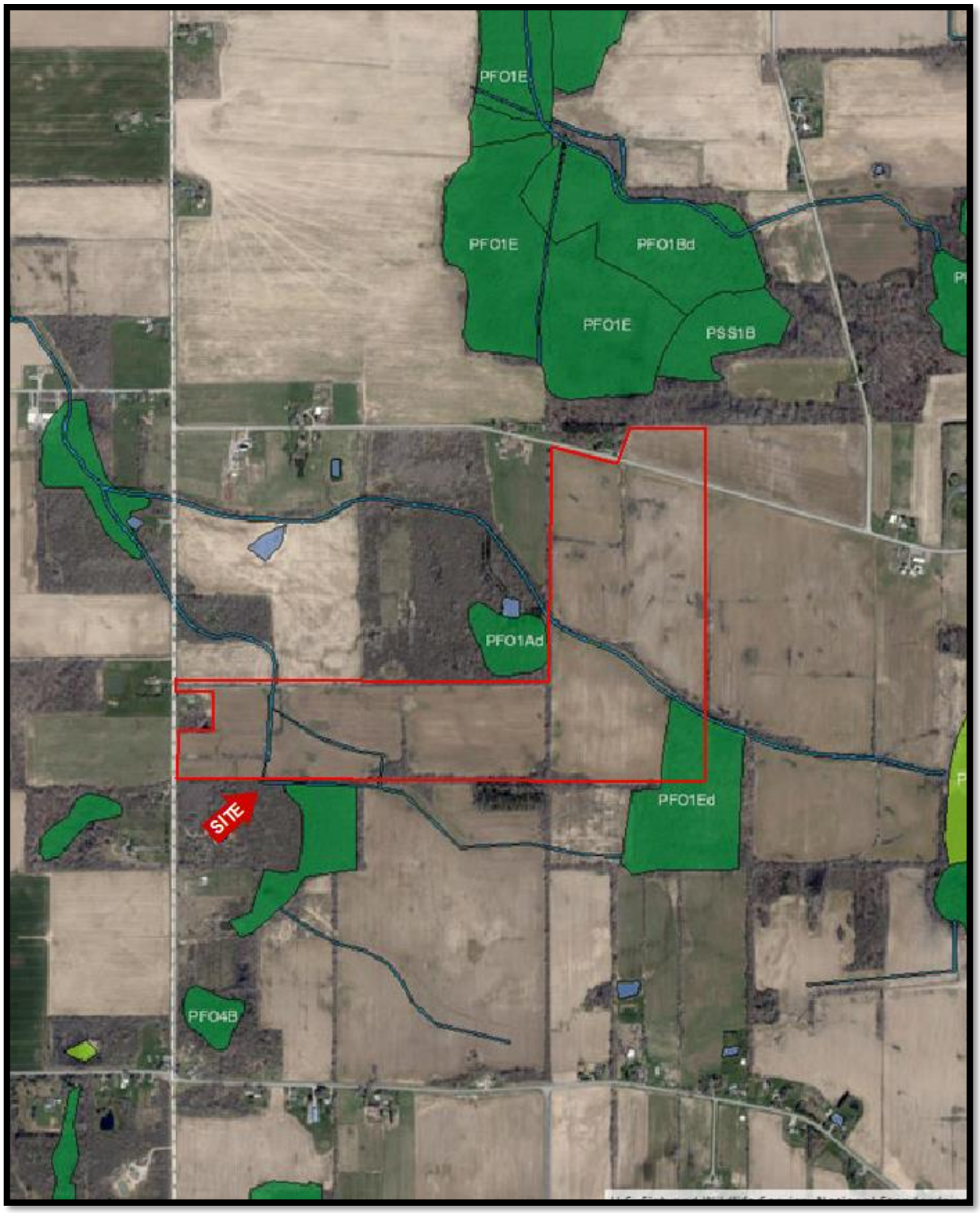


FIGURE 2: NATIONAL WETLANDS INVENTORY MAP

https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/ (Visited 10/18/22)

Shelby Crushed Stone Mitigation Property

Town of Barre, Orleans County, New York

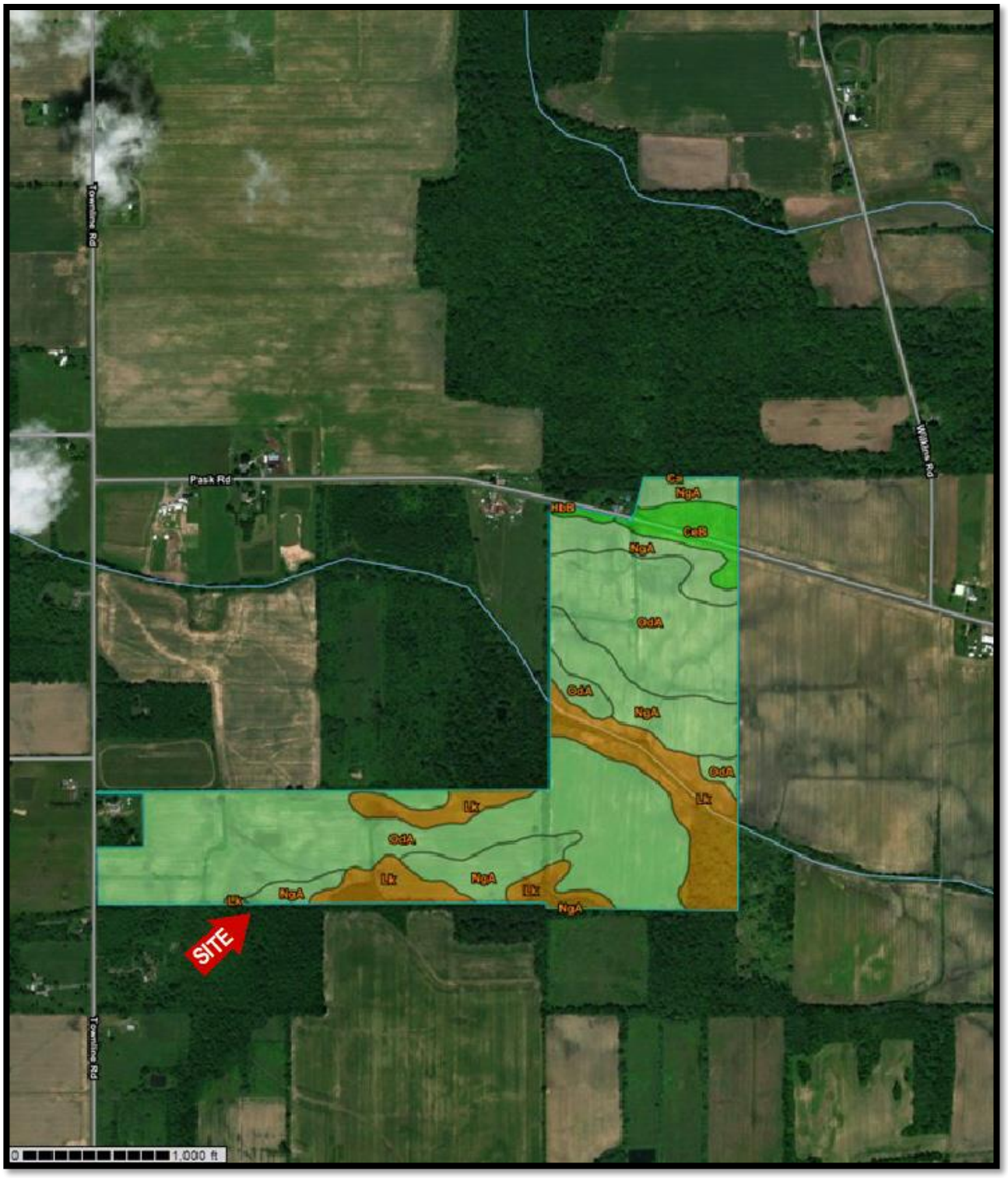


FIGURE 3: NRCS ORLEANS COUNTY SOIL SURVEY MAP

http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx (Visited 10/18/22)

Shelby Crushed Stone Mitigation Property

Town of Barre, Orleans County, New York

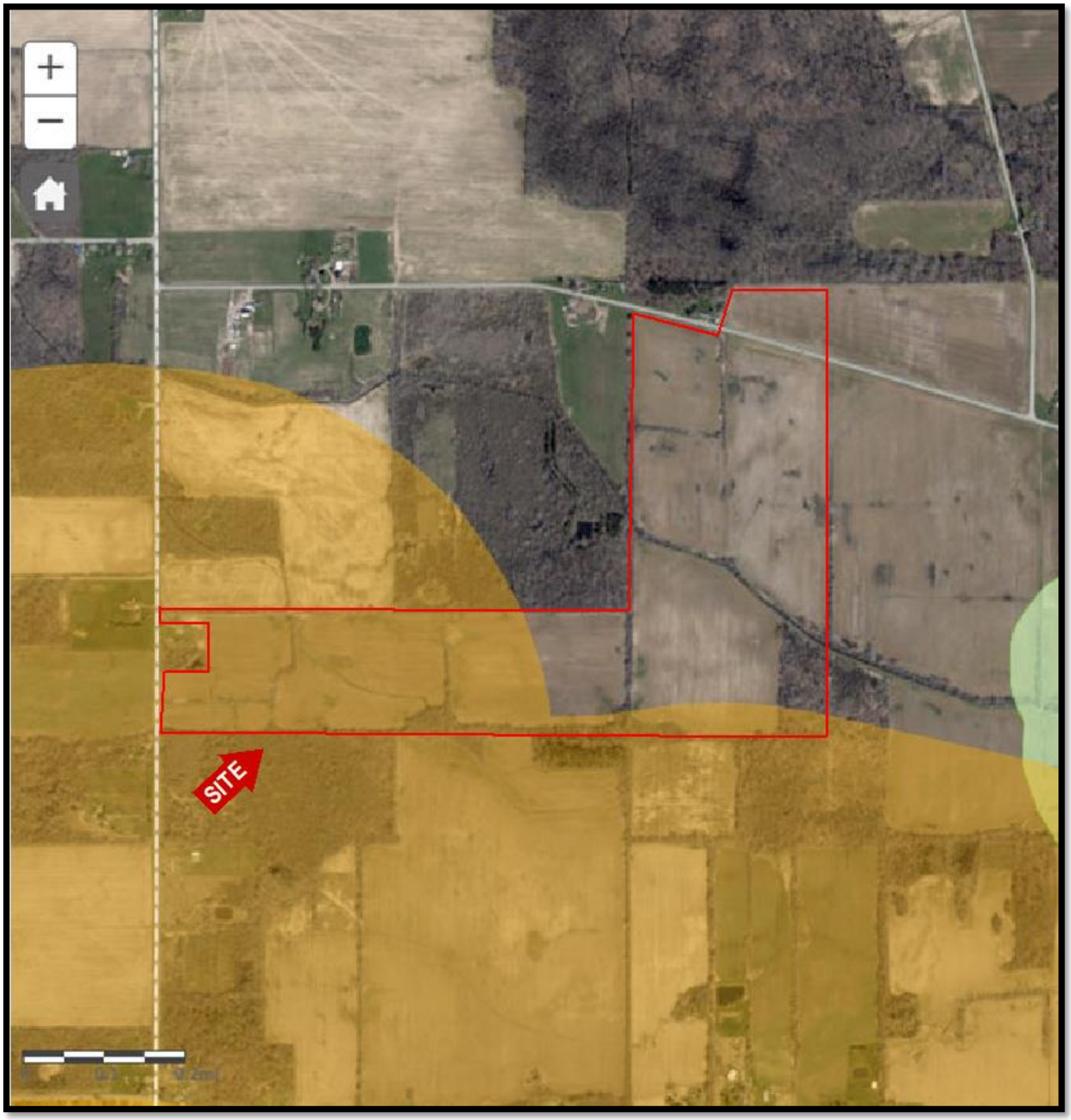


FIGURE 4: NYSDEC ENVIRONMENTAL RESOURCE MAPPER

https://gisservices.dec.ny.gov/gis/erm/ (Visited 10/18/22)

Shelby Crushed Stone Mitigation Property

Town of Barre, Orleans County, New York

Figure 5 - Vegetative Community & Photo Location Map

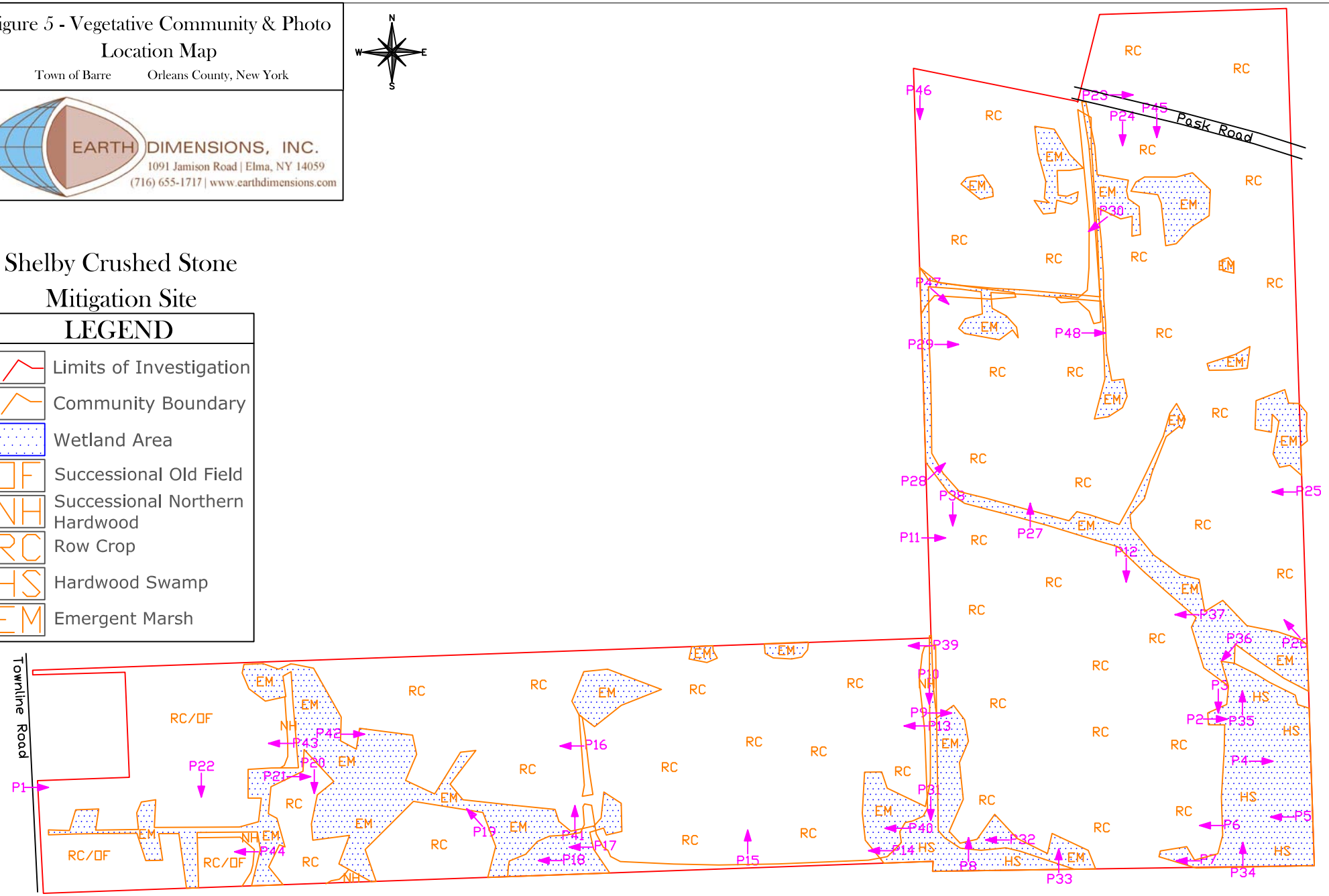
Town of Barre Orleans County, New York

EARTH DIMENSIONS, INC.
1091 Jamison Road | Elma, NY 14059
(716) 655-1717 | www.earthdimensions.com

Shelby Crushed Stone Mitigation Site

LEGEND

- Limits of Investigation
- Community Boundary
- Wetland Area
- OF — Successional Old Field
- NH — Successional Northern Hardwood
- RC — Row Crop
- HS — Hardwood Swamp
- EM — Emergent Marsh



Scale: 0 200' 400'	
Map Date: October 18, 2022/ TJS for EDI Revised:	
Base Map Provided By: Trimble Geo 7X	
File Name: Figure 5.dwg	
EDI Project Code: W4D12b	

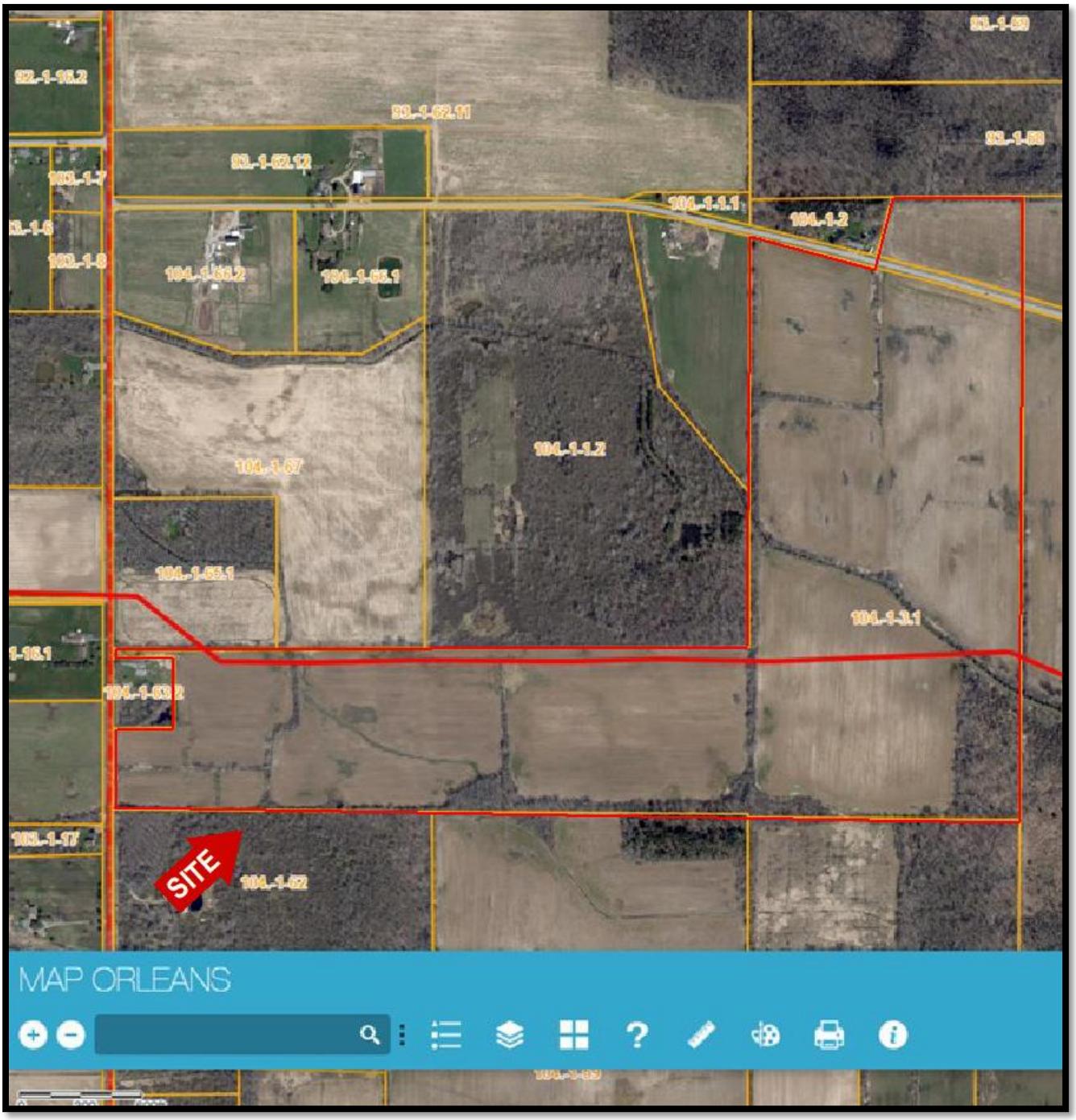


FIGURE 6: SITE AERIAL PHOTOGRAPH

https://orleansplanning.maps.arcgis.com/apps/webappviewer/index.html (Visited 10/18/22)

Shelby Crushed Stone Mitigation Property

Town of Barre, Orleans County, New York

SHELBY CRUSHED STONE MITIGATION PROPERTY

APPENDIX B - SITE PHOTOGRAPHS

Photo 1: Facing east. Depicts the western portion of the site from Townline Road. 5/24/22

Photo 2: Facing east. Depicts the hardwood swamp community in the southeast corner of the site. 5/24/22

Photo 3: Facing south. Depicts the hardwood swamp community in the southeast corner of the site. 5/24/22

Photo 4: Facing east. Depicts the hardwood swamp community in the southeast corner of the site. 5/24/22

Photo 5: Facing west. Depicts the hardwood swamp community in the southeast corner of the site. 5/24/22

Photo 6: Facing west. Depicts the row crop/oldfield community in the southeast portion of the site. 5/24/22

Photo 7: Facing west. Depicts an emergent marsh in the southeast portion of the site. 5/24/22

Photo 8: Facing north. Depicts the row crop/oldfield community in the southeast portion of the site. 5/24/22

Photo 9: Facing east. Depicts the row crop/oldfield community in the eastern portion of the site. 5/24/22

Photo 10: Facing south. Depicts a hedgerow community in the eastern portion of the site. 5/24/22

Photo 11: Facing Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 12: Facing south. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 13: Facing west. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 14: Facing west. Depicts the row crop/old field community along the southern limits of the site. 5/24/22

Photo 15: Facing north. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 16: Facing west. Depicts the row crop/old field community along the southern limits of the site. 5/24/22

Photo 17: Facing west. Depicts the hardwood swamp community along the southern limits of the site. 5/24/22

Photo 18: Facing west. Depicts the hardwood swamp community along the southern limits of the site. 5/24/22

Photo 19: Facing northwest. Depicts the row crop/old field community in the western portion of the site.

Photo 20: Facing south. Depicts the row crop/old field community in the western portion of the site. 5/24/22

Photo 21: Facing east. Depicts the row crop/old field community in the western portion of the site. 5/24/22

Photo 22: Facing south. Depicts the row crop/old field community in the western portion of the site. 5/24/22

Photo 23: Facing east. Depicts the row crop community north of Pask Road. 5/24/22

Photo 24: Facing south. Depicts the row crop/old field community in the northeast portion of the site. 5/24/22

Photo 25: Facing west. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 26: Facing northwest. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 27: Facing north. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 28: Facing northeast. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 29: Facing east. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 30: Facing southwest. Depicts the row crop/old field community in the eastern portion of the site. 5/24/22

Photo 31: Facing south. Depicts the hardwood swamp in the southern portion of the site. 9/8/22

Photo 32: Facing west. Depicts the emergent marsh community in the southern portion of the site. 9/8/22

Photo 33: Facing north. Depicts the row crop community in the southern portion of the site. 9/8/22

Photo 34: Facing north. Depicts the hardwood swamp in the southeast portion of the site. 9/8/22

Photo 35: Facing north. Depicts the hardwood swamp in the southeast portion of the site. 9/8/22

Photo 36: Facing southwest. Depicts the row crop/old field community in the eastern portion of the site. 9/8/22

Photo 37: Facing west. Depicts the edge of the intermittent stream in the center of the site. 9/8/22

Photo 38: Facing south. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 39: Facing west. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 40: Facing west. Depicts the row crop/old field community in the central portion of the site. 9/8/22

Photo 41: Facing north. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 42: Facing east. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 43: Facing west. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 44: Facing west. Depicts the row crop/old field community in the western portion of the site. 9/8/22

Photo 45: Facing south. Depicts the row crop community south of Pask Road. 9/8/22

Photo 46: Facing south. Depicts the row crop community south of Pask Road. 9/8/22

Photo 47: Facing southeast. Depicts the row crop community in the eastern portion of the site. 9/8/22

Photo 48: Facing east. Depicts the row crop/old field community in the eastern portion of the site. 9/8/22

SHELBY CRUSHED STONE MITIGATION PROPERTY

APPENDIX C – VEGETATION COMMUNITY LISTS & BIRD SPECIES LIST

Table 1: Successional Northern Hardwood Community Hardwood forest areas on site, generally consists of hedgerows and property edges.				
Common Name	**Scientific Name**	**Indicator Status**	**Dominant**	**Invasive Species**
Curly dock	*Rumex crispus*	FAC	N	
Bird's foot trefoil	*Lotus corniculatus*	FACU	N	
Flat-topped goldenrod	*Euthamia graminifolia*	FAC	N	
Butter & eggs	*Linaria vulgaris*	NI	N	
Scarlet pimpernal	*Anagalis arvensis*	FACU	N	
Moth mullein	*Verbascum blattaria*	FACU	N	
Common St. John's wort	*Hypericum perfoliatum*	FACU	N	
English plantain	*Plantago lanceolata*	FACU	N	
Pennsylvania smartweed	*Polygonum pennsylvanicum*	FACW	N	
Devil's beggar ticks	*Bidens frondosa*	FACW	N	
Common milkweed	*Asclepias syriaca*	FACU	N	
Horseweed	*Erigeron canadensis*	FACU	N	
Witch grass	*Panicum capillare*	FAC	N	
Hawkweed	*Hieracium spp.*	NI	N	
Burnweed	*Erechtites hieracifolius*	FACU	N	
Red root amaranth	*Amaranthus retroflexus*	NI	N	Y
Yellow nut sedge	*Cyperus strigosus*	FACW	N	
chicory	*Cichorium intybus*	NI	N	
Black willow	*Salix nigra*	FACW	N	
Quaking aspen	*Populus tremuloides*	FAC	Y	
Bull thistle	*Cirsium vulgare*	FACU	Y	Y
Crabapple	*Malus sylvestris*	NI	Y	Y
Ox-eye daisy	*Chrysanthemum leucanthemum*	FACU	N	
Black mustard	*Brassica nigra*	FACU	N	Y
Field horsetail	*Equisetum arvensis*	FAC	N	
Yellow foxtail	*Setaria pumila*	NI	N	
Wood nettle	*Lactuca canadensis*	FACU	N	
Summer grape	*Vitis aestivalis*	FACU	N	
Daisy fleabane	*Erigeron philadelphicus*	FAC	N	
American mannagrass	*Glyceria grandis*	OBL	N	
Common buckthorn	*Rhamnus cathartica*	FAC	Y	Y
Common dandelion	*Taraxacum officinale*	FACU	Y	
Sweet cherry	*Prunus avium*	FACU	Y	
Eastern cottonwood	*Populus deltoides*	FAC	Y	
Cuckoo weed	*Cardamime pratensis*	NI	N	
Common apple	*Malus officinalis*	NI	N	
White snakeroot	*Eupatorium rugosum*	FAC	N	Y
Ditch stone crop	*Penthorum sedoides*	OBL	N	
Purple leaf willowherb	*Epilobium coloratum*	OBL	N	
Smooth bromegrass	*Bromus inermis*	UPL	N	
Indian hemp	*Apocynum cannibinum*	FAC	N	
Deptford pink	*Dianthus armeria*	UPL	N	
Purple stemmed aster	*Symphyotrichum puniceum*	OBL	N	
Black cherry	*Prunus serotina*	FACU	N	
Staghorn sumac	*Rhus typhina*	FACU	N	
Shagbark hickory	*Carya ovata*	FACU	N	
Fuller's teasel	*Dipsacus fullonum*	NI	N	Y
Pussy willow	*Salix discolor*	FACW	N	
Tartarian honeysuckle	*Lonicera tatarica*	FACU	Y	Y
Nannyberry	*Viburnum lentago*	FACW	N	
yellow rocket	*Barbarea vulgaris*	FACU	Y	
Ox-eye daisy	*Chrysanthemum leucanthemum*	FACU	N	

Green ash	*Fraxinus pennsylvanica*	FACW	Y	
Northern arrowwood	*Viburnum dentatum*	FACW	N	
Silky dogwood	*Cornus amomum*	FACW	N	
Kentucky bluegrass	*Poa pratensis*	FACU	N	
Swamp white oak	*Quercus bicolor*	FACW	N	
American basswood	*Tilia americana*	FACU	N	
Common red raspberry	*Rubus idaeus*	FACU	Y	
Common wood sorrel	*Oxalis stricta*	FACU	N	

Table 2: Row Crop/Successional Old Field Community Planted agriculture fields and edges of fields.				
Common Name	**Scientific Name**	**Indicator Status**	**Dominant**	**Invasive Species**
Soy bean	*Glycine max*	NI	Y	
Curly dock	*Rumex crispus*	FAC	N	
Indian-tobacco	*Lobelia inflata*	FACU	N	
Moth mullein	*Verbascum blattaria*	FACU	N	Y
Marsh seedbox	*Ludwigia palustris*	OBL	N	
Beaked spikerush	*Eleocharis rostellata*	OBL	N	
Suckling clover	*Trifolium dubium*	FACU	N	Y
Autumn olive	*Elaeagnus angustifolia*	FACU	N	Y
Gallant soldier	*Galinsoga parviflora*	UPL	N	Y
American Bugleweed	*Lycopus americana*	OBL	N	
Purple leaf willowherb	*Epilobium coloratum*	OBL	N	
Allegheny blackberry	*Rubus allegheniensis*	FACU	N	
Blue vervain	*Verbena hastata*	FACW	N	
Bull thistle	*Cirsium vulgare*	FACU	N	Y
annual bluegrass	*Poa annua*	FACU	Y	
Common dandelion	*Taraxacum officinale*	FACU	N	
Cursed buttercup	*Ranunculus sceleratus*	OBL	N	
Eastern cottonwood	*Populus deltoides*	FAC	N	
Cuckoo weed	*Cardamine pratensis*	NI	N	
Common plantain	*Plantago major*	FACU	N	
Flat topped goldenrod	*Euthamia graminifolia*	FAC	N	
American bugleweed	*Lycopus americana*	OBL	N	
yellow rocket	*Barbarea vulgaris*	FACU	Y	Y
Ox-eye daisy	*Chrysanthemum leucanthemum*	FACU	N	
Sheep sorrel	*Rumex acetosa*	UPL	N	
Poor man's field pepper	*Lepidium campestre*	NI	N	
Stink daisy	*Anthemis cotula*	FACU	N	
Path rush	*Juncus tenuis*	FAC	N	
Rich weed	*Collinsonia canadensis*	FAC	N	
Reed canary grass	*Phalaris arundinacea*	FACW	Y	Y
Black mustard	*Brassica nigra*	FACU	Y	Y
Thymeleaf speedwell	*Veronica serpuyllifolia*	FAC	N	
Canada goldenrod	*Solidago canadensis*	FACU	Y	
Sweet vernal grass	*Anthoxanthum odoratum*	FACU	Y	
Old field cinquefoil	*Potentilla simplex*	FACU	N	
Queen Anne's lace	*Daucus carota*	FACU	N	
Canada thistle	*Cirsium arvensis*	FACU	N	Y
Mare's tail	*Conyza canadensis*	FACU	N	Y
Daisy fleabane	*Erigeron philadelphicus*	FAC	N	
Ramps	*Allium tricoccum*	FACU	N	
Blue vervain	*Verbena hastata*	FACW	N	
Mouse eared chickweed	*Cerastium vulgatum*	FACU	N	
White avens	*Geum canadense*	FACU	N	
Garden vetch	*Vicia sativa*	FACU	N	
Sticky willy	*Gallium aparine*	FACU	N	
English plantain	*Plantago lanceolata*	FACU	N	
Common ragweed	*Ambrosia artemisia*	FACU	N	
Cheat grass	*Bromus tectorum*	NI	Y	

Table 3: PEM Shallow Emergent Marsh Community

Wetland pockets within agricultural fields and along ditches, evidence of variable water levels. Some scattered shrubs and invasive species.

Common Name	Scientific Name	Indicator Status	Dominant	Invasive Species
Northern bedstraw	*Galium boreale*	FACU	N	
Ditch stonecrop	*Penthorum sedoides*	OBL	N	
Bladder sedge	*Carex intumescens*	OBL	N	
Toad rush	*Juncus bufonius*	OBL	N	
Hairy willowherb	*Epilobium hirsutum*	FACW	N	
Softstem bulrush	*Schoenoplectus tabernaemontani*	OBL	N	
Purple loosestrife	*Lythrum salicaria*	OBL	N	Y
Bugleweed	*Lycopus americana*	OBL	N	
Red-osier dogwood	*Cornus stolonifera*	FACW	N	
Common boneset	*Eupatorium perfoliatum*	FACW	Y	
Tall goldenrod	*Solidago gigantea*	OBL	N	
Rice cut grass	*Leersia oryzoides*	OBL	Y	
Nodding beggar's ticks	*Bidens cernua*	OBL	Y	
Devil's beggar ticks	*Bidens frondosa*	FACW	N	
Blunt spike rush	*Eleocharis obtusa*	OBL	Y	
Minor duckweed	*Lemna minor*	OBL	Y	
Flat topped goldenrod	*Euthamia graminifolia*	FAC	N	
Water plantain	*Alisma plantago-aquatica*	OBL	Y	
Curly dock	*Rumex crispus*	FAC	N	
Reed manna grass	*Glyceria maxima*	OBL	Y	
Red maple	*Acer rubrum*	FAC	N	
Pennsylvania smartweed	*Polygonum pensylvanicum*	FACW	N	
Green ash	*Fraxinus pennsylvanica*	FACW	N	
Hybrid cattail	*Typha x glauca*	OBL	N	Y
Soft rush	*Juncus effusus*	OBL	Y	
Canada rush	*Juncus canadensis*	OBL	N	
Major duckweed	*Lemna major*	OBL	N	
Swamp buttercup	*Ranunculus septentrionalis*	OBL	Y	Y
Spreading bentgrass	*Agrostis stolonifera*	FACW	N	
Black mustard	*Brassica nigra*	NI	N	Y
Marsh seedbox	*Ludwigia palustris*	OBL	N	
Canadian waterweed	*Elodea canadensis*	OBL	N	
Lance leaf aster	*Symphyotrichum simplex*	FACW	N	
Calico aster	*Symphyotrichum lanceolatum*	FAC	N	

Table 4: PFO Hardwood Swamp Community

Forested wetland areas on-site, generally along the southern border and in the southeast corner of the site.

Common Name	Scientific Name	Indicator Status	Dominant	Invasive Species
Bur oak	*Quercus macrocarpa*	FACW	N	
Poison ivy	*Toxicodendron radicans*	FAC	Y	
Sensitive fern	*Onoclea sensibilis*	FACW	Y	
Spotted touch me not	*Impatiens capensis*	FACW	Y	
American elm	*Ulmus americana*	FACW	N	
Fowl manna grass	*Glyceria striata*	OBL	Y	
Enchanter's nightshade	*Circea quadrisulcata*	FAC	N	Y
Curly dock	*Rumex crispus*	FAC	N	
Broom sedge	*Carex scoparia*	FACW	Y	
Wood violet	*Viola sororia*	FAC	N	

Wood reed grass	*Cinna arundinacea*	FACW	N	
Virginia creeper	*Parthenocissus quinquefolia*	FACU	N	
Swamp aster	*Symphyotrichum puniceum*	OBL	N	
Lady fern	*Asplenium filix-foemina*	FAC	N	
American basswood	*Tilia americana*	FACU	N	
Common reed	*Phragmites australis*	FACW	N	Y
Sweet scented bedstraw	*Galium trifidum*	FACW	N	
Purple loosestrife	*Lythrum salicaria*	OBL	N	Y
Shagbark hickory	*Carya ovata*	FACU	N	
Rosy sedge	*Carex rosea*	FAC	N	
Reed canary grass	*Phalaris arundinacea*	FACW	Y	Y
Pussy willow	*Salix discolor*	FACW	N	
Awl fruited sedge	*Carex stipata*	OBL	N	
Flat topped goldenrod	*Euthamia graminifolia*	FAC	N	
Jack in the pulpit	*Arisaema triphyllum*	FACW	N	
Northern spicebush	*Lindera benzoin*	FACW	N	
Red maple	*Acer rubrum*	FAC	N	
Bladder sedge	*Carex intumescens*	OBL	N	
Green ash	*Fraxinus pennsylvanica*	FACW	N	
Tall goldenrod	*Solidago gigantea*	OBL	N	
Soft rush	*Juncus effusus*	OBL	Y	
Graceful sedge	*Carex gracillima*	FACU	N	
European buckthorn	*Rhamnus cathartica*	FAC	N	Y
Swamp white oak	*Quercus bicolor*	FACW	N	
Tartarian honeysuckle	*Lonicera tatarica*	FACU	N	Y
Brome-like sedge	*Carex bromoides*	FACW	N	
Freeman's maple	*Acer fremanii*	FAC	N	
Spinulose wood fern	*Dryopteris spinulosa*	FACW	N	
Honey locust	*Gleditsia tricanthos*	FAC	N	
Multiflora rose	*Rosa multiflora*	FACU	N	Y
Virginia creeper	*Parthenocissus quinquefolia*	FACU	N	
White turtlehead	*Chelone glabra*	OBL	N	
Indian hemp	*Apocynum cannabinum*	FAC	N	
Tall hairy grovebur	*Agrimonia gryposepala*	FACU	N	
Summer grape	*Vitis aestivalis*	FACU	N	
Hop sedge	*Carex lupulina*	OBL	N	
Common yellow oxalis	*Oxalis stricta*	FACU	N	
Wool grass	*Scirpus cyperinus*	OBL	N	
Climbing nightshade	*Solanum dulcamara*	FAC	N	Y
Lance-leaved aster	*Symphyotrichum lanceolata*	FACW	N	
American manna grass	*Glyceria grandis*	OBL	N	
Fringed sedge	*Carex crinita*	OBL	N	
Wrinkleleaf goldenrod	*Solidago rugosa*	FAC	N	
Yellow avens	*Geum aleppicum*	FAC	N	
Purple leaf willowherb	*Epilobium coloratum*	OBL	Y	
Black willow	*Salix nigra*	FACW	Y	
Virginia strawberry	*Fragaria virginiana*	FACU	N	
Bebb's sedge	*Carex bebbiana*	OBL	N	
Silky dogwood	*Cornus amomum*	FACW	N	
Field horsetail	*Equisetum arvense*	FAC	N	
Jumpseed	*Polygonum virginianum*	FAC	Y	
Bugleweed	*Lycopus americana*	OBL	N	

Table 5: Bird Species list Yellow indicates birds listed by USFWS as Birds of Conservation Concern.				
Species #	**Species**	**5/24/22**	**9/8/22**	**Winter Raptor Survey '21/22**
1	Alder Flycatcher	X		
2	American Crow	X	X	X
3	American Goldfinch	X	X	X
4	American Kestrel	X		
5	American Redstart	X		
6	American Robin	X	X	X
7	American Tree Sparrow			X
8	Bald Eagle			X
9	Baltimore Oriole	X		
10	Barn Swallow	X		
11	Black-capped Chickadee	X	X	X
12	Blackpoll Warbler	X		
13	Blue Jay	X	X	X
14	Brown-headed Cowbird	X	X	X
15	Canada Goose	X	X	X
16	Cedar Waxwing	X	X	
17	Chestnut-sided Warbler	X		
18	Chipping Sparrow	X	X	
19	Common Grackle	X		X
20	Common Raven			X
21	Common Yellowthroat	X	X	
22	Cooper's Hawk			X
23	Dark-eyed Junco			X
24	Downy Woodpecker	X	X	X
25	Eastern Bluebird	X	X	X
26	Eastern Kingbird	X		
27	Eastern Wood-Pewee	X	X	
28	Eastern Phoebe			
29	European Starling	X	X	X
30	Field Sparrow	X	X	
31	Gray Catbird	X	X	
32	Great Blue Heron	X		
33	Great Crested Flycatcher	X		
34	Hairy Woodpecker			X
35	Horned Lark	X	X	X
36	House Sparrow			X
37	House Wren		X	
38	Indigo Bunting	X		
39	Killdeer	X	X	X

Species #	Species	5/24/22	9/8/22	Winter Raptor Survey '21/22
40	Least Flycatcher	X		
41	Least Sandpiper	X		
42	Magnolia Warbler		X	
43	Mallard	X		X
44	Mourning Dove	X	X	X
45	Northern Cardinal	X	X	X
46	Northern Flicker	X	X	X
47	Northern Mockingbird			X
48	Ovenbird	X		
49	Palm Warbler		X	
50	Pileated Woodpecker	X		
51	Purple Finch	X	X	
52	Purple Martin	X		
53	Red-bellied Woodpecker	X	X	X
54	Red-eyed Vireo	X	X	
55	Red-tailed Hawk	X	X	X
56	Red-winged Blackbird	X		X
57	Ring-billed Gull			X
58	Rock Pigeon			X
59	Rose-breasted Grosbeak			
60	Ruby-throated Hummingbird		X	
61	Rusty Blackbird	X		X
62	Savannah Sparrow		X	
63	Scarlet Tanager			
64	Semipalmated Sandpiper	X		
65	Sharp-shinned Hawk			X
66	Snow Goose			X
67	Song Sparrow	X	X	X
68	Swainson's Thrush	X		
69	Tennessee Warbler	X		
70	Tree Swallow	X		
71	Tufted Titmouse		X	X
72	Turkey Vulture	X	X	X
73	Warbling Vireo	X	X	
74	White-breasted Nuthatch		X	X
75	White-throated Sparrow			X
76	Wild Turkey			X
77	Willow Flycatcher	X		
78	Wilson's Snipe			X
79	Wood Duck	X	X	X
80	Wood Thrush	X		

Species #	Species	5/24/22	9/8/22	Winter Raptor Survey '21/22
81	Yellow Warbler	X		
82	Yellow-bellied Sapsucker			X
83	Yellow-billed Cuckoo	X		
84	Yellow-rumped Warbler	X		
85	Yellow-throated Vireo		X	

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APPENDIX D - REFERENCES

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APPENDIX E - FIELD INVESTIGATION PERSONNEL

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APPENDIX F – AGENCY CORRESPONDENCE

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Orleans County, New York

Local office

New York Ecological Services Field Office

(607) 753-9334
(607) 753-9699
fw5es_nyfo@fws.gov

3817 Luker Road
Cortland, NY 13045-9385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. 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.

The following species are potentially affected by activities in this location:

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-

measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover Pluvialis dominica This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Belted Kingfisher Megaceryle alcyon This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 15 to Jul 25
Black-billed Cuckoo Coccyzus erythropthalmus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Blue-winged Warbler Vermivora pinus This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30

Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler *Dendroica cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 20 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Meadowlark *Sturnella magna* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 31
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Evening Grosbeak *Coccothraustes vespertinus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Upland Sandpiper *Bartramia longicauda* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9294	Breeds May 1 to Aug 31

Wood Thrush *Hylocichla mustelina* Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

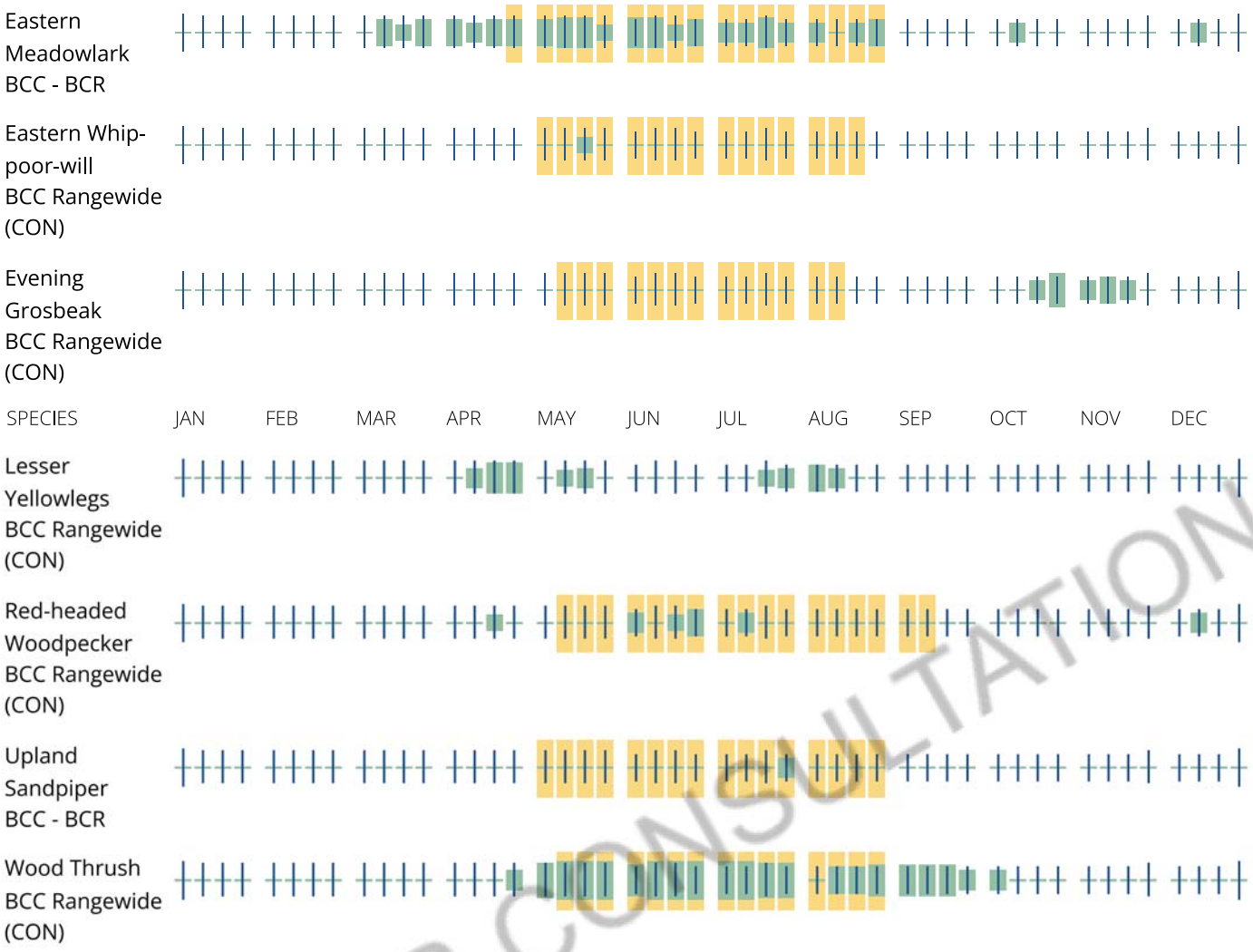
Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid

cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

There are no known coastal barriers at this location.

Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the official CBRS maps. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation

Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact CBRA@fws.gov.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

Palustrine

RIVERINE

Riverine

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information		
Name of Action or Project:		
Project Location (describe, and attach a location map):		
Brief Description of Proposed Action:		
Name of Applicant or Sponsor:	Telephone: E-Mail:	
Address:		
City/PO: q	State:	Zip Code:

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☐	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:	NO ☐	YES ☐

3. a. Total acreage of the site of the proposed action? _____ acres
   b. Total acreage to be physically disturbed? _____ acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☐ Urban ☐ Rural (non-agriculture) ☐ Industrial ☐ Commercial ☐ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☐	☐
b. Consistent with the adopted comprehensive plan?	☐	☐	☐

	NO	YES
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	☐	☐

	NO	YES
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?		
If Yes, identify: _____	☑	☐

	NO	YES
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	☐	☐
b. Are public transportation services available at or near the site of the proposed action?	☐	☐
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	☐	☐

	NO	YES
9. Does the proposed action meet or exceed the state energy code requirements?		
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	☐	☐

	NO	YES
10. Will the proposed action connect to an existing public/private water supply?		
If No, describe method for providing potable water: _____ _____	☐	☐

	NO	YES
11. Will the proposed action connect to existing wastewater utilities?		
If No, describe method for providing wastewater treatment: _____ _____	☐	☐

	NO	YES
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	☑	☐
b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	☑	☐

	NO	YES
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	☐	☑
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	☐	☐
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____		

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☐ Urban ☐ Suburban

	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered? Northern Harrier	☐	☑
16. Is the project site located in the 100-year flood plan?	☐	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☐
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☐	☐
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☐	☐
If Yes, briefly describe: _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: _____	☐	☐
~~1~~9. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	☐	☐
20.Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	☑	☐

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: _____ Date: _____

Signature: _____ Title: _____

PRINT FORM

EAF Mapper Summary Report

Thursday, October 13, 2022 9:51 AM

Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.

Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	Yes
Part 1 / Question 15 [Threatened or Endangered Animal - Name]	Northern Harrier
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No