III.G Vegetation and Wildlife

1. Introduction and Principal Conclusions

For the reasons described below, the proposed project would not result in any significant adverse impacts to vegetation or wildlife.

The project site is former agricultural land. The uplands on the site were originally maintained as agricultural fields and pastures associated with a dairy farm, but are now mostly overgrown with trees and invasive shrubs and vines such as autumn olive, multiflora rose, mile-a-minute, and oriental bittersweet. No buildings remain on the property, although roads and utility poles are still present.

The wetlands on the property contain a variety of vegetative habitats. Most of the wetlands on the site are deciduous wooded swamps that are seasonally or intermittently flooded, with the exception of the farm ponds which likely remain ponded year-round. To the east of Pugsley Road, the northern portion of Wetland 6 at the base of the hillside is wetter than the remainder of the wetlands on the site, and contains an area of emergent wetland habitat with deep muck soils. This area of Wetland 6 is suitable habitat (hydrology and soils) for Bog Turtles (*Glyptemys muhlenbergii*), a federal-listed Threatened species and a state-listed Endangered species. However, because no project impacts are proposed to Wetland 6, the project will have no impacts to these turtles, should they be present.

The remainder of the uplands on the site are potential summer habitat for the Northern Long-eared Bat *(Myotis septentrionalis*), also referred to as the northern myotis, which is a Federal and State listed Threatened species. The Northern Long-eared Bat is primarily associated with uplands and mature interior forest habitat, but will utilize a diversity of forest habitats for roosting, foraging, and raising young. Impacts to the Northern long-eared Bat are avoided by not cutting potential roost trees during the bat pup's rearing months of June 1 through July 31.

2. Existing Conditions

The project will not impact any significant vegetation. The great majority of the disturbance area is situated on abandoned farmland, with the dominant vegetation non-native invasive vines and shrubs. Only 0.05 acres of forested wetlands/emergent march community are proposed to be disturbed, and this limited impact is mitigated as described in Section III.D ("Surface Water and Wetlands", and Figure III.D-2 "Wetlands Map").

The only protected wildlife species that may occur on the site are the Northern Long-eared Bat, and the Bog Turtle. No bat hibernacula are present on the site, where hibernation and reproduction occur. Roost trees may occur on the site, however, impacts to bat roosting will be avoided by not cutting potential roost trees during the bat pup's rearing months of June 1 through July 31. Regarding the Bog Turtle, the only potential habitat found on the site occurs in Wetland 6. Because no project impacts are proposed to Wetland 6, the project will have no impacts to these turtles, should they be present.

a. General Types And Characteristics Of Vegetative Communities

The project site currently supports four broad vegetative communities: successional old field and shrubland, woodland transitional areas (including hedgerows and young second growth forest), forested wetlands, and emergent marsh / scrub shrub wetlands (Figure III.G-1). Wetlands comprise about 20% of the site, with uplands making up the remainder. As seen in the aerial photographs below, most of the upland portions of the site have undergone transition from active farmland to abandoned farmland over the last 20 to 25 years, while the wetlands have remained largely undisturbed.

Aerial photograph (Google Earth) taken in June of 1993 showing the active farm fields and woodlands.

Aerial photo (Google Earth) from April of 2016 showing successional old fields replacing former farmland.

The dominate vegetative communities on the upland portions of the site are successional old field and successional shrubland. The portions of the site that were most recently farmed, and therefore were periodically mowed, are characterized by forbs and grasses such as goldenrods (*Solidago altissima, S. nemoralis, S. rugosa, S. juncea, S. canadensis,* and *Euthamia graminifolia*), bluegrasses (*Poa pratensis, P. compressa*), timothy (*Phleum pratense*), quackgrass (*Elymus repens*), smooth brome (*Bromus inermis*), orchard grass (*Dactylis glomerate),* evening primrose (*Oenothera biennis*), old-field cinquefoil (*Potentilla simplex*), New England aster (*Sympyotrichum novae-angliae*), wild strawberry (*Fragaria virginiana*), Queen-

Anne's-lace (*Daucus carota*), ragweed (*Ambrosia artemisiifolia*), and hawkweeds (*Hieracium* spp.). Portions of the uplands that were abandoned earlier are dominated by shrubs including gray dogwood (*Cornus racemosa*), silky dogwood (*C. amomum*), arrowwood (*Viburnum dentatum*), raspberries (*Rubus* spp.), sumac (*Rhus typhina, R. glabra*), and eastern red cedar (*Juniperus virginiana*).

However, the dominant vegetation in these former fields is now non-native invasive vines and shrubs, including multiflora rose (*Rosa multiflora*), Russian and autumn olive (*Elaeagnus angustifolia, E. umbellata*), Japanese barberry (*Berberis thunbergii*), winged euonymus (*Euonymus alatus*), hawthorne (*Crataegus* spp.), buckthorns (*Rhamnus cathartica, Frangula alnus*), and shrubby honeysuckles (*Lonicera tatarica, L. morrowii, L. maacckii*). In some areas, non-native invasive vines such as bittersweet (*Celastrus orbiculatus)* and mile-a-minute (*Persicaria perfoliate)* have become so abundant that the native species are in serious decline.

The old fields were typically bordered by hedgerows of mature trees, including maples (*Acer saccharum, A. rubrum, A. platanoides*), hickories (*Carya ovata, C. glabra),* and oaks (*Quercus rubra and Q. alba*), and seedlings of some trees are found near the field edges. However, as with the successional fields, the hedgerows are heavily vine infested and the trees in the central portion of the site are generally in decline. However, most of the wetlands on the site are forested and these areas show much less evidence of past disturbance.

The forested wetlands on the site are best characterized as red maple hardwood swamps. Vegetation in these wetlands includes red maple *(Acer rubrum)*, American elm *(Ulmus americana)*, and green ash *(Fraxinus pennsylvanica)* trees and saplings, multiflora rose *(Rosa multiflora)*, silky dogwood *(Cornus amomum)*, Japanese barberry *(Berberis thunbergii)*, and spicebush *(Lindera benzoin)* shrubs, Asiatic bittersweet *(Celastrus orbiculata)*, Virginia creeper *(Parthenocissus quinquefolia)*, and poison ivy *(Toxicodendron radicans)* vines, along with skunk cabbage *(Symplocarpus foetidus)*, tussock sedge *(Carex stricta)*, white hellebore (*Veratrum viride*), jewelweed

(Impatiens capensis), clearweed *(Pilea pumila)*, false nettle (*Boehmeria cylindrica*), royal fern (*O. regalis*), and marsh fern (*Thelypteris palustris*), cinnamon fern *(Osmunda cinnamomea)*, sensitive fern *(Onoclea sensibilis)*, Japanese stilt-grass *(Microstegium vimineum)*, and garlic mustard *(Alliaria petiolata)*. The forested wetlands on the site have developed in hydric mineral soils and are often associated with watercourses.

Finally, the wetlands to the east of Pugsley Road and north of Route 312, and on either side of the Barrett Road wetland crossing in the central portion of the site, are best characterized as emergent wetland and scrub shrub wetlands. The emergent wetlands are dominated by sedges (*Carex stricta, C. lurida*), tearthumbs *(Polygonum sagittatum, P. arifolium)*, blue vervain *(Verbena hastata)*, manna grass *(Glyceria sp.)*, ferns (*Osmunda cinnamomea*), false nettle *(Boehmeria cylindrica),* and goldenrod *(Solidago sp.)*. The portion of the emergent wetland immediately south of the Barrett Road crossing is now also partially dominated by common reed (*Phragmites australis)* and purple loosestrife *(Lythrum salicaria)*. These emergent wetlands differ from the other wetlands on the site by having either open water (north of Barrett Road) or deeper muck soils and an open canopy. In the southern portion of the wetland east of Pugsley Road and immediately north of Route 312, the emergent marsh transitions to a scrub shrub swamp, and drainage becomes more channelized, eventually forming the watercourse that flows under Route 312. This portion of the wetland is dominated by shrubs including alders (*Alnus* sp.), willows (Salix sp.), dogwoods (*Cornus sericea, C. amomum, C. racemosa*), swamp azalea (*Rhododendron viscosum*), highbush blueberry (*Vaccinium corymbosum*), male-berry (*Lyonia ligustrina*), spicebush (*Lindera benzoin*), wild raisin (*Viburnum nudum*), and arrowwood (*Viburnum dentatum*). Scattered young trees are present along the edges, such as red maple (*Acer rubrum*), American elm (*Ulmus americana*), and green ash (*Fraxinus pennsylvanica*).

b. List Of Wildlife Species Found Or Expected On The Site, Including Endangered, Threatened Or Species Of Special Concern, And Associated Habitats

As described above, the uplands are mainly successional young trees, along with invasive shrubs and vines that dominate the previously farmed fields. Despite the large land area, the upland habitats and cover types on site provide limited habitat for large mammals (other than white-tail deer) which require more open understory for travel and feeding. However, the dense shrub cover now found in the uplands provides excellent habitat for nesting song birds and small mammals.

The wooded cover types (the forested uplands and the red maple-hardwood swamp) provide nesting and food opportunities for a variety of species. White-tailed deer (*Odocoileus virginianus*) and Eastern coyote *(Canis latrans)* populations are well established in the vicinity and evidence of these species were present on site. Other mammals that are common to the forest habitat include raccoon (*Procyon lotor*), gray squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamius straiatus*), Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), rabbits (*Sylvilagus* spp.), white-footed mouse (*Peromyscus leucopus*), voles (*Microtis spp.)* and moles (*Scalopus aquaticus* or *Condylura cristata*). Oak, beech, and hickory trees provide mast (food) which is used by many species including deer, wild turkey, squirrels, chipmunks, and mice. In addition, any dead-and-down wood and standing dead trees (snags) within the wooded cover types can enhance the habitat value for species such as woodpeckers and other cavity nesters, amphibians (some of which live beneath rotting logs), and furbearing animals which use tree cavities. Some trees in the uplands may provide roosting habitat for bats, mainly along the edge of the open areas, where solar exposure is possible, and insects are readily available for food.

The forested wetlands provide important breeding habitat for many wetland-dependent species, such as northern spring peeper (*Pseudacris crucifer crucifer*),

American toad (*Bufo americanus americanus*), wood frog (*Rana sylvatica*), and spotted salamander (*Ambystoma maculatum).* A list of the wildlife species expected to occupy the site or documented on the site is provided below, and in the Biological Assessment Report in Appendix G-1. As discussed below, the only protected wildlife species that may occur on the site are the Northern Long-eared Bat, and the Bog Turtle. By not cutting potential bat roost trees during the bat pup's rearing months of June 1 through July 31, and avoiding disturbance to the only potential habit of the Bog Turtle on the site (Wetland 6), the project will have no impacts on these species.

Table III.G-1

Animals Potentially Occurring at Northeast Interstate Logistics Center

MAMMALS (alphabetically by scientific name)	
Common Name	**Scientific Name**
Short-tailed shrew	*Blarina brevicauda*
Eastern coyote	*Canis latrans*
Star-nosed mole	*Condylura cristata*
Virginia opossum	*Didelphis virginiana*
Big brown bat	*Eptesicus fuscus*
Northern long-eared bat	*Myotis septentrionalis*
Southern flying squirrel	*Glaucomys volans*
Bobcat	*Lynx rufus*
Woodchuck	*Marmota monax*
Fisher	*Martes pennanti*
Striped skunk	*Mephitis mephitis*
Meadow vole	*Microtus pennsylvanicus*
House mouse	*Mus musculus*
Ermine	*Mustela erminea*
Long tailed weasel	*Mustela frenata*

Mink	*Mustela vison*
Little brown myotis	*Myotis lucifugus*
Northern myotis	*Myotis septentrionalis*
White-tailed deer	*Odocoileus virginianus*
Muskrat	*Ondatra zibethicus*
White-footed mouse	*Peromyscus leucopus*
Raccoon	*Procyon lotor*
Norway rat	*Rattus norvegicus*
Eastern mole	*Scalopus aquaticus*
Gray squirrel	*Sciurus carolinensis*
Masked shrew	*Sorex cinereus*
Water shrew	*Sorex palustris*
Eastern cottontail	*Sylvilagus floridanus*
Eastern chipmunk	*Tamias striatus*
Black bear	*Ursus americanus*
Gray fox	*Vrocyon cinereoargenteus*
Red fox	*Vulpes vulpes*

REPTILES AND AMPHIBIANS	
Common Name	**Scientific Name**
Spotted salamander	*Ambystoma maculatum*
Northern two-lined salamander	*Eurycea bislineata*
Redback salamander	*Plethodon cinereus*
Red-spotted newt	*Notophthalmus v. viridescens*
Eastern American toad	*Bufo a. americanus*
Gray treefrog	*Hyla versicolor*
Northern spring peeper	*Pseudacris c. crucifer*
Bullfrog	*Rana catesbeiana*
Green frog	*Rana clamitans melonota*

Pickerel frog	*Rana palustris*
Northern leopard frog	*Rana pipiens*
Wood frog	*Rana sylvatica*
Common snapping turtle	*Chelydra s. serpentina*
Painted turtle	*Chrysemys picta*
Spotted turtle	*Clemmys guttata*
Bog turtle	*Glyptemys muhlenbergii*
Eastern box turtle	*Terrapene c. carolina*
Northern black racer	*Coluber c. constrictor*
Black rat snake	*Elaphe o. obsoleta*
Northern water snake	*Nerodia s. sipedon*
Northern brown snake	*Storeria d. dekayi*
Northern redbelly snake	*Storeria o. occipito-maculata*
Eastern garter snake	*Thamnophis s. sirtalis*

BIRDS	
Common Name	**Scientific Name**
Mute Swan	*Cygnus olor*
Canada Goose	*Branta canadensis*
Wood Duck	*Aix sponsa*
Mallard	*Anas platyrhynchos*
Mallard x Am. Black Duck Hybrid	*Anas platyrhynchos x A. rubripes*
Great Blue Heron	*Ardea Herodias*
Green Heron	*Butorides virescens*
Turkey Vulture	*Cathartes aura*
Black Vulture	*Coragyps atratus*
Cooper's Hawk	*Accipiter cooperii*
Red-tailed Hawk	*Buteo jamaicensis*
American Kestrel	*Falco sparverius*

Great Horned Owl	*Bubo virginianus*
Eastern Screech-Owl	*Megascops asio*
Killdeer	*Charadrius vociferus*
Rock Pigeon	*Columba livia*
Mourning Dove	*Zenaida macroura*
Ruby-throated Hummingbird	*Archilochus colubris*
Ruffed Grouse	*Bonasa umbellus*
Wild Turkey	*Meleagris gallopavo*
Red-bellied Woodpecker	*Melanerpes carolinus*
Yellow-bellied Sapsucker	*Sphyrapicus varius*
Pileated Woodpecker	*Dryocopus pileatus*
Downy Woodpecker	*Picoides pubescens*
Hairy Woodpecker	*Picoides villosus*
Northern Flicker	*Colaptes auratus*
Eastern Wood-Pewee	*Contopus virens*
Willow Flycatcher	*Empidonax traillii*
Eastern Phoebe	*Sayornis phoebe*
Great Crested Flycatcher	*Myiarchus crinitus*
Eastern Kingbird	*Tyrannus tyrannus*
Blue-gray Gnatcatcher	*Polioptila caerulea*
Ruby-crowned Kinglet	*Regulus calendula*
Golden-crowned Kinglet	*Regulus satrapa*
Yellow-throated Vireo	*Vireo flavifrons*
Warbling Vireo	*Vireo gilvus*
Red-eyed Vireo	*Vireo olivaceus*
Blue Jay	*Cyanocitta cristata*
American Crow	*Corvus brachyrhynchos*
Yellow-billed Cuckoo	*Coccyzus americanus*
Northern Rough-winged Swallow	*Stelgidopteryx serripennis*
Barn Swallow	*Hirundo rustica*

Tree Swallow	*Tachycineta bicolor*
Black-capped Chickadee	*Poecile atricapillus*
Tufted Titmouse	*Baeolophus bicolor*
White-breasted Nuthatch	*Sitta carolinensis*
Brown Creeper	*Certhia americana*
Carolina Wren	*Thryothorus ludovicianus*
House Wren	*Troglodytes aedon*
Eastern Bluebird	*Sialia sialis*
Veery	*Catharus fuscescens*
Hermit Thrush	*Catharus guttatus*
Wood Thrush	*Hylocichla mustelina*
American Robin	*Turdus migratorius*
Gray Catbird	*Dumetella carolinensis*
Northern Mockingbird	*Mimus polyglottos*
Brown Thrasher	*Toxostoma rufum*
European Starling	*Sturnus vulgaris*
Cedar Waxwing	*Bombycilla cedrorum*
Yellow Warbler	*Dendroica petechia*
Chestnut-sided Warbler	*Dendroica pensylvanica*
Black-throated Green Warbler	*Dendroica virens*
Worm-eating Warbler	*Helmitheros vermivorum*
Black-and-white Warbler	*Mniotilta varia*
Northern Parula Warbler	*Parula americana*
Hooded Warbler	*Wilsonia citrina*
American Redstart	*Setophaga ruticilla*
Ovenbird	*Seiurus aurocapilla*
Louisiana Waterthrush	*Seiurus motacilla*
Common Yellowthroat	*Geothlypis trichas*
Scarlet Tanager	*Piranga olivacea*
Eastern Towhee	*Pipilo erythrophthalmus*

Chipping Sparrow	*Spizella passerina*
Field Sparrow	*Spizella pusilla*
Song Sparrow	*Melospiza melodia*
Northern Cardinal	*Cardinalis cardinalis*
Rose-breasted Grosbeak	*Pheucticus ludovicianus*
Indigo Bunting	*Passerina cyanea*
Red-winged Blackbird	*Agelaius phoeniceus*
Common Grackle	*Quiscalus quiscula*
Brown-headed Cowbird	*Molothrus ater*
Baltimore Oriole	*Icterus galbula*
Purple Finch	*Carpodacus purpureus*
House Finch	*Carpodacus mexicanus*
American Goldfinch	*Carduelis tristis*
House Sparrow	*Passer domesticus*
American Tree Sparrow	*Spizella arborea*

3. Future Without the Proposed Project

Without the proposed project, the site would continue as it is today, with successional species and invasive species dominating the landscape as it reverts from abandoned agricultural land to mixed hardwood forest.

4. Anticipated Impacts

a. Tree Survey To Verify No Excessive Clearing Within The Ridgeline Overlay Protection District Is Proposed

A Tree Survey has been prepared (see full sized drawings C-701 through C-705, "Tree and Forest Preservation Plan", and C-711 and C-712, "Tree and Forest Preservation List"), with trees within and immediately adjacent to the proposed

limits of disturbance surveyed. Section III.C Visual Resources" of the DEIS discusses extensively the measures taken by the project to comply with or to be substantially less than the maximums permitted by the Town's ridgeline protection provisions. Figures III.C-3 and III.C-4 in Section III.C illustrate that the project will remove trees at a ratio substantially below the maximum number of trees permitted by the Town, and preserve existing trees within the ridgeline and adjacent areas where practicable. As shown on the above noted figures, the areas around Buildings #1 and #2 will have 2.9 trees removed per quarter acre where up to 10 are permitted to be removed per the ridgeline provisions, and the areas around Buildings #3 and #4 will have 1.4 trees removed per quarter acre. Thus, the project conforms with and is substantially below the tree removal criteria threshold of the ridgeline protection provisions.

In addition, a row of mature deciduous trees will remain between Building 4 and the Twin Brook Manor development.

Thousands of additional existing trees on the site which have not been surveyed will be preserved.

b. <u>Project Design In Relation To Existing Significant Vegetation</u>

As described above, the uplands are mainly successional young trees, along with invasive shrubs and vines that dominate the previously farmed fields. Potential adverse impacts to vegetation and wildlife habitats have been avoided to the maximum extent practical by utilizing portions of the property which are former agricultural fields. Figure III.G-2 illustrates the location and extent of disturbance to the vegetative communities on the site, with the proposed project site plan overlain to illustrate disturbance and preservation areas. The majority of site disturbance (84.5 acres) is to the successional old field/shrubland vegetative community. 29.6 acres of disturbance is proposed to the woodland transitional areas, and 5.9 acres of disturbance to the former farm vegetative community. Only

0.05 acres of disturbance is proposed to the forested wetlands/emergent marsh community, as discussed in Section III.D Surface Water and Wetlands of the DEIS. Minor permanent encroachments into the wetland would occur only at the existing on-site road crossing (improvements at the Barrett Road wetland crossing between Wetlands 4 and 5), and will be mitigated by the measures discussed in Section III.D.

c. Loss Of Wildlife Habitat

The proposed project is designed to utilize portions of the property that were previously used for farming and are therefore primarily in the old field and transitional woodland vegetative communities. As described above, these communities are extensive on the site, so loss of vegetative cover type or wildlife habitat are not of concern. However, there are two protected wildlife species that have been identified as potential inhabitants for this site, and alteration of the vegetative cover could impact both of these species. Therefore, potential impacts to each species have been evaluated, and are discussed below.

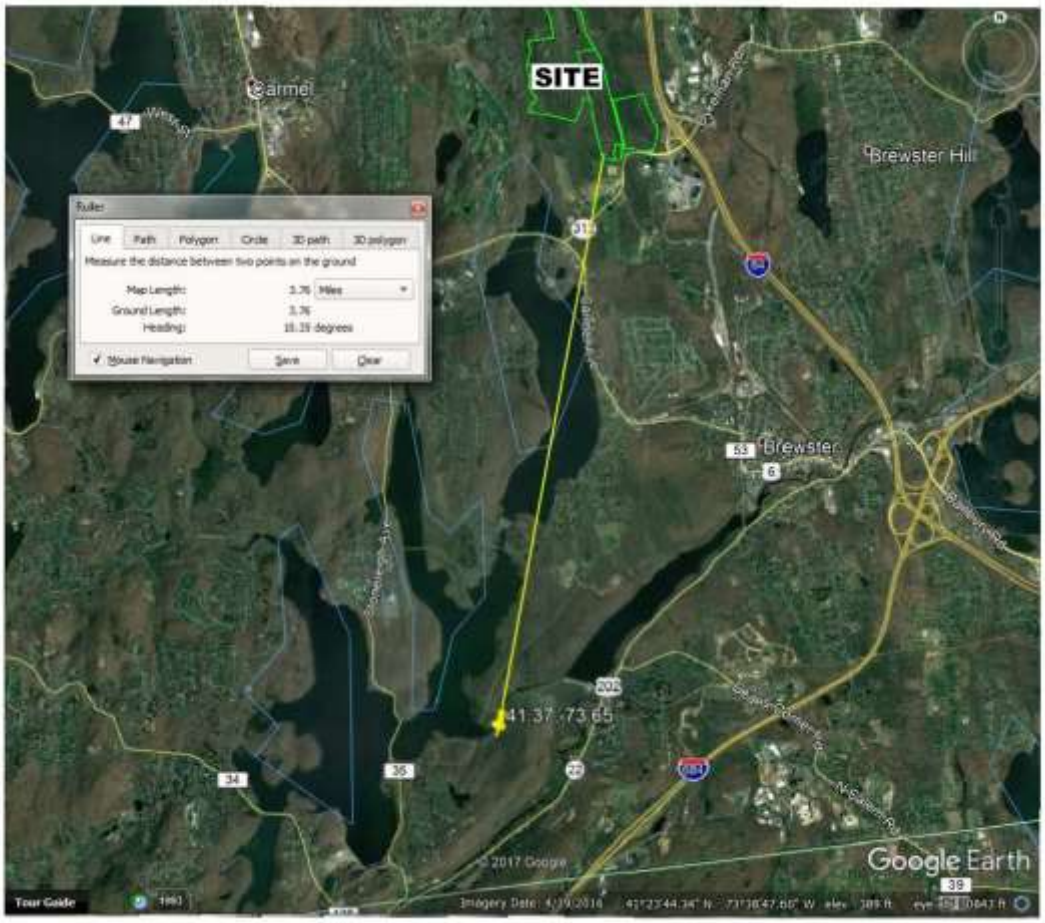
Northern Long-eared Bat

The Northern Long-eared Bat has a range that includes much of the eastern and north-central United States (which includes New York State). Reproduction (fertilization) and hibernation occurs in or near very specific areas consisting of caves or mines (called hibernacula). However, Northern Long-eared Bats are opportunistic in choosing summer feeding and/or roosting habitat, and they can use a variety of habitats, including those found on the site.

According to a map prepared by the DEC, Northern Long-eared Bat Occurrences by Town,[1] the Town of Southeast contains confirmed winter occurrences of Northern Long-eared Bats (which would indicate the presence of one or more hibernacula). The USF&WS lists approximate latitude/longitude measurements of

[1] http://www.dec.ny.gov/animals/106090.html

known hibernacula.[2] The coordinates of the hibernaculum closest to the subject property was located and the distance between the two locations was found to be greater than 3.76 miles. (See also letter from DEC in Appendix I-2.)



Distance between site and closest Northern Long-eared Bat hibernaculum (Aerial and length measurement from: Google Earth, accessed 9/20/2017)

Summer feeding and roosting habitat, however, could include areas on or near the subject property. Therefore, the majority of recommendations to avoid impacts to the NLEB refer to the presumed summer occurrences, and not winter

[2] https://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html

occurrences, since none have been documented as being located near the site. The main threat to this bat is white-nose syndrome (which has no causal connection to site development activities, such as the proposed project), which is the reason it is listed for state and federal protection. Significant population declines have not been observed due to loss or degradation of summer habitat. Therefore, the main threat to this species from development of the proposed project would be direct mortality of the bats if trees are removed while the bats are roosting.

The USF&WS issued a final rule for the Northern Long-eared Bat on January 13, 2016 (effective February 16, 2016). In accordance with this ruling, requirements and recommendations were provided to avoid impacts to the NLEB.[3] In areas of the country where white-nose syndrome is present (which includes the subject property), if there are no hibernacula within a quarter mile of the site or known maternal roost trees on or within 150 feet of the site, then there would be no development restrictions at any time of year with regard to the northern long-eared bat. However, because there is no certainty that there would not be occupied maternal roost trees, potential roost trees must not be cut down during the bat's pup rearing months (June 1 through July 31).

Bog Turtle

Bog Turtles inhabit a variety of wetland types throughout their range, but generally are found in small, open-canopy, herbaceous sedge meadows and fens that are bordered by more-thickly vegetated wooded areas. These open-canopy meadows and fens form the primary habitat for foraging, reproduction, and basking for this species, while nearby closed-canopy, densely-vegetated wetlands may be used for hibernation. Primary Bog Turtle habitat is typically associated with seepage or spring-fed emergent wetlands and is often found near the headwaters of streams

[3] Northern Long-eared Bat Project Review Fact Sheet - New York Field Office (last modified May 2016), found at: https://www.fws.gov/northeast/nyfo/es/NYSpecies.htm (accessed September 20, 2017).

or small tributaries within a riparian wetland complex. This habitat is often transitional between drier upland areas and other types of wetland, such as wooded swamp or marsh. Bog Turtles will also utilize other types of wetlands as dispersal or travel corridors between their preferred habitat patches. (US F&WS, May 2001, revised April 2006)[4].

Direct impacts to Bog Turtle habitat have been completely avoided because the only potential Bog Turtle habitat on the site is associated with Wetland 6, and no wetland impacts are proposed to Wetland 6, nor is any work proposed within 200 feet of the potential Bog Turtle habitat. The improvements to the site access road (Pugsley Road) and to the intersection at Route 312 include encroachments into the wetland buffer of Wetland 6, but this would occur in the southwest corner of the wetland, outside of the area identified as potential Bog Turtle habitat, and at an existing road intersection. Finally, there are no proposed changes to the drainage patterns in this portion of the site, so the hydrology of the emergent marsh wetland will not be impacted by the development.

5. Mitigation Measures

a. Landscaping Plan

As discussed in Section III.C "Visual Resources", extensive evergreen trees and other plantings are proposed, as depicted on the Landscaping Plans (drawings C-501 through C-505). A total of 420 trees are proposed, including 332 evergreen trees and 88 deciduous trees. the vast majority of which are located within the ridgelines. Most of the trees are proposed adjacent to the building perimeter parking areas to maximize the screening of the buildings and parking. In addition, approximately 2,800 shrubs will be planted throughout the site.

[4]U. S. Fish and Wildlife Service, Bog Turtle (*Clemmys muhlenbergii*) Northern Population, Recovery Plan, May 2001, revised April 2006.

b. Maintenance Of Existing Vegetation

As described in this section, potential adverse impacts to vegetation and wildlife habitats have been avoided to the maximum extent practical by utilizing portions of the property which are former agricultural fields. Preservation of the remaining successional old field/shrubland habitats on the site, as well as protection of the wetland corridors on the site will provide shelter and nesting habitat for song birds and small mammals, as well as wetland dependent species that are presently found on the site. Finally, limiting tree clearing to the fall and winter months will avoid potential impacts to any bats that may be using the site as summer habitat.

p:\2014\14012\admin\deis\deis\deis with redlined completeness responses 05-2018\iii.g vegetation and wildlife.docx