

# **ATTACHMENT 5**

## ATTACHMENT 5

### Environmental Assessment Statement

#### I. PHYSICAL IMPACT

##### A. WATER FLOW AND QUALITY

A wetland delineation was conducted at the site and there were no wetlands identified in or immediately adjacent to the proposed access drive or facility compound. Wetlands are located approximately 245' west of the proposed compound and approximately 146' west of the proposed gravel access drive at its closest point. Proposed sedimentation and erosion controls will be designed, installed, and maintained during construction activities in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control which will minimize any temporary impacts. Additional protection measures such as phasing of erosion controls and soil stabilization techniques and redundant erosion control measures will be implemented to protect the nearby reservoir. No wetlands or inland waterways will be impacted by the proposed facility.

##### B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at the proposed facility would emit no air pollutants of any kind. An emergency backup power diesel generator would be exercised once a week and comply with the CT DEEP "permit by rule" criteria pursuant to R.C.S.A. §22a-174-3b.

##### C. LAND

Approximately 103 trees will need to be removed in order to construct the compound and the new access drive. Thirty-nine (39) of the 103 trees proposed for removal are 14" or greater dbh. The total area of disturbance will be approximately 40,000 s.f. The remaining land of the lessor would remain unchanged by the construction and operation of the facility.

##### D. NOISE

The equipment to be in operation at the facility would not emit noise other than that provided by the operation of the installed heating, air-conditioning and ventilation system. Some construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks. Temporary power outages could involve sound from the emergency generator which is tested weekly.

#### E. POWER DENSITY

The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 5.49% of the federal MPE standard. Attached is a copy of a Radio Frequency Emissions Analysis Report for the facility.

#### F. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

Homeland Towers conducted an evaluation of the proposed Facility's potential effects on historic resources and concluded that the proposed Facility will have no effect on historic properties listed or eligible for listing on the National Register of Historic Places. Attachment 9 includes this Preliminary Historic Resource Determination. Homeland Towers is consulting with the CT State Historic Preservation Office ("SHPO") to confirm these findings. Homeland will also conduct a Phase IB professional cultural resources assessment and reconnaissance survey and provide the results to SHPO.

The proposed Facility is located within a DEEP Natural Diversity Data Base ("NDDDB") buffer zone as shown in the map included in Attachment 9. According to DEEP, three State-listed species may be influenced by activities associated with the proposed Facility: Little brown bat, Red bat, and Eastern box turtle. Homeland will comply with all protective measures to minimize impacts to these species as detailed in DEEP's January 7, 2022 correspondence, a copy of which is included in Attachment 9.

Homeland also conducted a review of the potential impact of the Proposed Facility on the northern long-eared bat ("NLEB") and bog turtle, two federally listed threatened species. With respect to the NLEB, while the proposed Facility is not located within 150 ' of a known occupied NLEB maternity roost tree and is not

within 0.25 mile of a known NLEB hibernaculum, Homeland will implement the protection measures as outlined in the USFWS & NDDDB Compliance Report included in Attachment 9. An assessment of the potential suitable habitat for bog turtle revealed that the wetlands at the Site do not support the preferred habitat of bog turtles. As such, the proposed Facility will not effect bog turtles. See the USFWS & NDDDB Compliance Report included in Attachment 9

#### G. SCHOOLS/DAY CARE CENTERS

No schools or commercial childcare centers are located within 250' of the Parcel. West Elementary School of New Canaan is located approximately 2.4 miles southeast of the Parcel and no visibility is predicted from this school.



# **ATTACHMENT 6**

September 27, 2021

APT Project No.: CT283860

**Prepared For:** Homeland Towers, LLC  
9 Harmony Street, 2<sup>nd</sup> Floor  
Danbury, CT 06810

**Site Name:** CT050 New Canaan Northwest

**Site Address:** 1837 Ponus Ridge Road, New Canaan, Connecticut

**Date of Investigation:** 6/3/2021

**Field Conditions:** **Weather:** sunny, low 90's  
**Soil Moisture:** moist

**Wetland/Watercourse Delineation Methodology<sup>1</sup>:**

- Connecticut Inland Wetlands and Watercourses  
 U.S. Army Corps of Engineers

**Municipal Upland Review Area\*:** **Wetlands:** 100 feet **Watercourses:** 100 feet

*\* upland review area is expanded to 100 feet for properties located within public water supply watersheds*

The wetlands inspection was performed by<sup>2</sup>:



Matthew Gustafson, Registered Soil Scientist

Enclosures: Wetland Delineation Field Form & Wetland Inspection Map

*This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.<sup>3</sup> If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.*

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<sup>1</sup> Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

<sup>2</sup> All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

<sup>3</sup> APT has relied upon the accuracy of information provided by Homeland Towers LLC regarding the location and limits of the Study Area for the purposes of identifying wetlands and watercourses.

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# Attachments

- Wetland Delineation Field Form
- Wetland Inspection Map

## Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1-01 to 1-14	
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>

**WETLAND HYDROLOGY:**

**NONTIDAL**

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: Wetland 1 is a narrow hillside seep system with seasonally saturated soils.		

**TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

**WETLAND TYPE:**

**SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

**CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

**WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Intermittent watercourse flows south into Laurel Reservoir, a public water supply, owned by the Aquarion Water Company.		

## Wetland Delineation Field Form (Cont.)

### SPECIAL AQUATIC HABITAT:

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

### SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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### DOMINANT PLANTS:

Red Maple ( <i>Acer rubrum</i> )	Spicebush ( <i>Lindera benzoin</i> )
Skunk Cabbage ( <i>Symplocarpus foetidus</i> )	Green Ash ( <i>Fraxinus pennsylvanica</i> )
American Beech ( <i>Fagus grandifolia</i> )	Japanese stiltgrass ( <i>Microstegium vimineum</i> )

\* denotes Connecticut Invasive Species Council invasive plant species

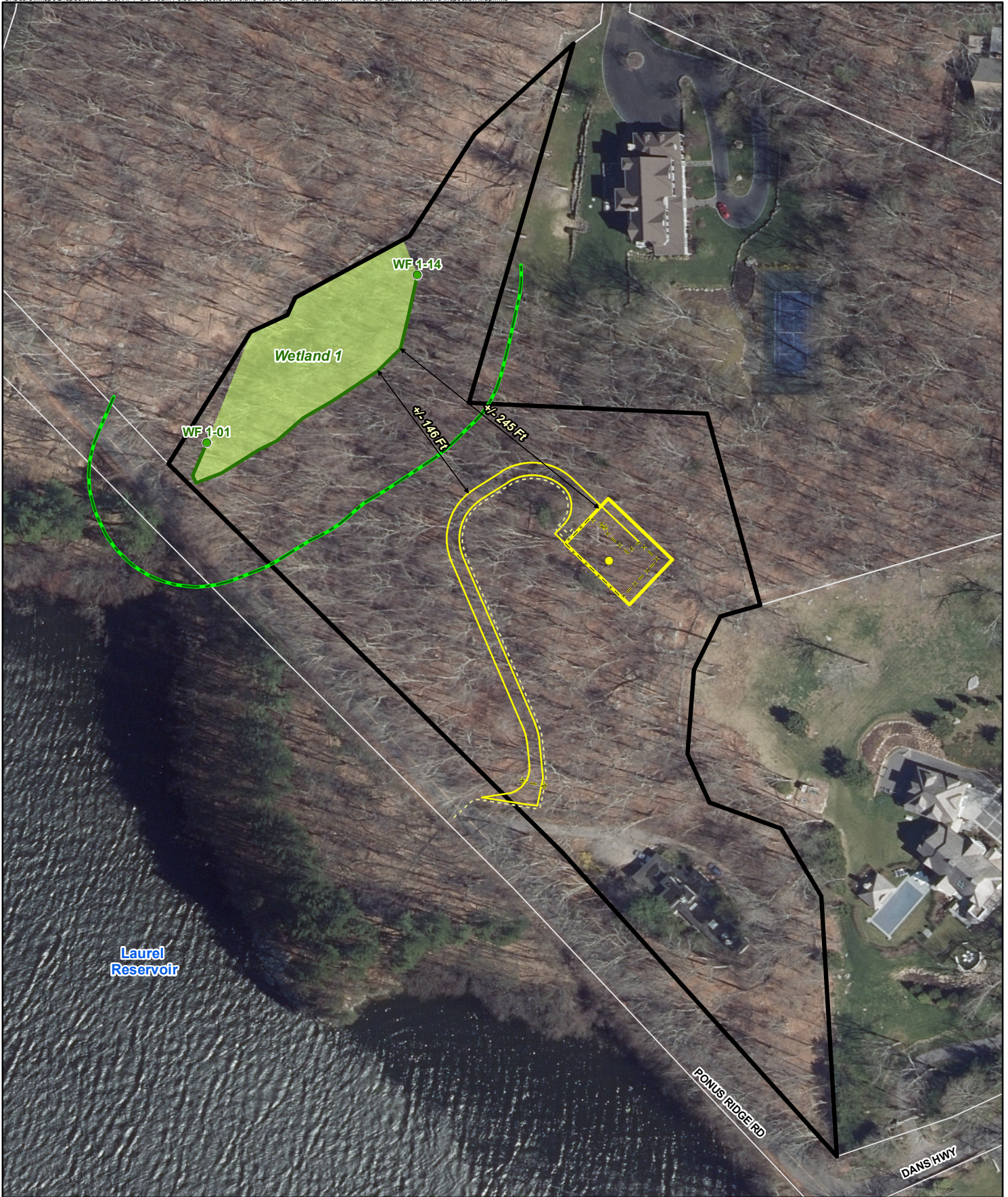
### GENERAL COMMENTS:

All-Points Technology Corp., P.C. ("APT") understands that Homeland Towers proposes to construct a wireless telecommunications facility ("Facility") located within forested upland areas in the northeastern portion of the subject property located at 1837 Ponus Ridge Road in New Canaan, Connecticut. The location of the facility consists of mature hardwood upland forest dominated by red, white, and black oak and sugar maple overstory.

One wetland area (Wetland 1) was identified along the subject property's western property boundary. Wetland 1 consists of a broad hillside seep system formed in dense glacial till with an interior diffuse intermittent watercourse the flows to the south/southwest into nearby Laural Reservoir located across Ponus Ridge Road. Numerous seep outbreaks were observed along the delineated wetland edge of this resource.

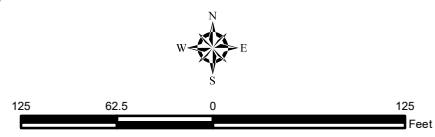
Due to the steep topography located between the proposed Facility and Wetland 1, APT recommends a review of the final site plans to assess potential impacts to Wetland 1 due to its sensitivity being a contributing resource to a nearby public water supply resource (Laural Reservoir). APT recommends appropriate erosion controls are designed, installed, and maintained in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control* and additional measures be incorporated into the design due to the property's location within a public water supply watershed and its close proximity to Laurel Reservoir. Such measures would include, but not be limited to, careful construction phasing of erosion controls and soil stabilization techniques to limit the areas of exposed soil at any one time, redundant erosion control measures, etc. APT understands that the details of construction phasing and additional erosion control measures would typically be provided during the Connecticut Siting Council's Development and Management Plan phase should it approve of the project.





- Legend**
- Subject Property
  - Proposed Telco and Electrical Service
  - Proposed Fenced Compound
  - Proposed Lease Area
  - Proposed Access Drive
  - Wetland Flag
  - Approximate Wetland Area
  - 100-Foot Upland Review Area
  - Delineated Wetland Boundary
  - Approximate Parcel Boundary

**Map Notes:**  
 Subject property located within Aquarion Water Co.  
 Public Water Supply Watershed #CT1350011  
 Base Map Source: 2019 CT Aerial Imagery (CTECO)  
 Map Scale: 1 inch = 125 feet  
 Map Date: October 2021



**Wetland Inspection Map**  
 Proposed Wireless Telecommunications Facility  
 CT050 - New Canaan Northwest  
 1837 Ponus Ridge Road  
 New Canaan, Connecticut







## AVIAN RESOURCES EVALUATION

April 4, 2022

Homeland Towers, LLC  
9 Harmony Street, 2nd Floor  
Danbury, Connecticut 06810

Re: Proposed CT050 New Canaan Northwest Facility  
1837 Ponus Ridge Road  
New Canaan, Connecticut  
APT Project No.: CT283860

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Homeland Towers, LLC ("Homeland") proposes to construct a new wireless telecommunications Facility at 1837 Ponus Ridge Road in New Canaan, Connecticut (the "host Property"). The host Property consists of an approximately 5.16-acre undeveloped forested parcel. The area proposed for the Facility is located in the central portion of the host Property ("Site") in an area that is currently comprised of mature upland hardwood forest. Homeland proposes to install a 110-foot tall, free-standing monopole tower designed to resemble a pine tree ("monopine") with faux branches extending an additional 5' above the top of the pole, and ground equipment enclosure within a 50-foot by 50-foot gravel compound area surrounded with an 8-foot-tall chain link fence ("Facility"). Access will be from Ponus Ridge Road along an existing paved driveway that serves the residence then along a proposed 12-foot-wide gravel access drive for  $\pm 600$  feet. Proposed underground utilities would follow along the shoulder of the proposed access drive.

The purpose of this evaluation is to document the proposed Facility's proximity to avian resource areas and its compliance with recommended guidelines of the United States Fish and Wildlife Service ("USFWS") for minimizing the potential for telecommunications towers to impact bird species. It is not definitively understood why direct and indirect bird mortality occurs around towers, but evidence suggests that night-migrating songbirds are either attracted to or disoriented by tower obstruction warning lighting systems, especially during overcast (i.e., low cloud ceiling), foggy, or other low visibility conditions. Additionally, birds moving across the landscape at night can collide with communication tower guy wires when they are placed in high bird movement areas. Tower height also appears to have a relationship to bird collisions with towers greater than 199 feet above ground level that can intercept the average bird flight height. Towers less than 200 feet provides sufficient airspace between the top of the tower and average bird flight height, even in weather conditions with reduced cloud ceiling. The proposed Facility consists of a 110-foot tall monopine, is unlit and does not contain guy wires.

All-Points Technology Corporation, P.C. ("APT") reviewed several publicly-available sources of avian data for the state of Connecticut to provide the following information with respect to potential impacts on migratory birds associated with the proposed development. This desktop analysis and attached graphics identify avian resources and their proximities to the host Property. Information within an approximate 3-mile radius of the host Property is graphically depicted on the attached Avian Resources Map. Some of the avian data referenced herein are not located in proximity to the host Property and are therefore not visible on the referenced map due to its scale. However, in those cases the distances separating the host Property from the resources are identified in the discussions below.

**ALL-POINTS TECHNOLOGY CORPORATION, P.C.**

3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

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## **Proximity to Important Bird Areas**

The National Audubon Society has identified 27 Important Bird Areas (“IBAs”) in the state of Connecticut. IBAs are sites that provide essential habitat for breeding, wintering, and/or migrating birds. To achieve this designation, an IBA must support species of conservation concern, restricted-range species, species vulnerable due to concentration in one general habitat type or biome, or species vulnerable due to their occurrence at high densities as a result of their congregatory behavior<sup>1</sup>. The closest IBA to the host Property is the Ward Pound Ridge Reservation, located in several towns in Westchester County, NY approximately 3 miles to the north. This ±17,000-acre site includes Westchester County’s largest park, the ±4,700-acre Ward Pound Ridge Reservation. Approximately 80% of the site is forested, and includes Appalachian oak-pine, deciduous wetland, evergreen northern hardwood, oak, and sugar maple mesic forests. This varied habitat supports an exceptional regional bird community, representative of the hardwood forests of southern New England. The closest IBA to the host Property in Connecticut is The Nature Conservancy’s Devil’s Den Preserve in Weston and Redding located approximately 9.8 miles to the northeast. This preserve is The Nature Conservancy’s largest contiguous preserve in Connecticut, and is part of the largest tract of protected land in densely developed Fairfield County. Devil’s Den supports large populations of all of Connecticut’s forest interior nesting bird species.

Due to its distance from the site, this IBA would not experience an adverse impact resulting from the proposed development of the Facility.

## **Supporting Migratory Bird Data**

Beyond Audubon’s IBAs, the following analysis and attached graphics also identify several additional avian resources and their proximities to the host Property. Although these data sources may not represent habitat indicative of important bird areas, they may indicate possible bird concentrations<sup>2</sup> or migratory pathways.

## **Critical Habitat**

Connecticut Critical Habitats depict the classification and distribution of 25 rare and specialized wildlife habitats in the state. It represents a compilation of ecological information collected over many years by state agencies, conservation organizations and individuals. Critical habitats range in size from areas less than one acre to areas that are tens of acres in extent. The Connecticut Critical Habitats information can serve to highlight ecologically significant areas and to target areas of species diversity for land conservation and protection but may not necessarily be indicative of habitat for bird species. The nearest Critical Habitat to the proposed Facility is an estuarine beachshore Area associated with Cove Island Park located approximately 8.8 miles to the southwest. Based on the distance separating this resource from the proposed Facility, no adverse impacts are anticipated.

## **Avian Survey Routes and Points**

### **Breeding Bird Survey Route**

The North American Breeding Bird Survey is a cooperative effort between various agencies and volunteer groups to monitor the status and trends of North American bird populations. Routes are randomly located to sample habitats that are representative of an entire region and do not necessarily represent

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<sup>1</sup> [http://web4.audubon.org/bird/iba/iba\\_intro.html](http://web4.audubon.org/bird/iba/iba_intro.html)

<sup>2</sup> “bird concentrations” is related to the USFWS *Revised Voluntary Guidelines for communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning* (September 27, 2013) analysis provided at the end of this document



concentrations of avifauna or identification of critical avian habitats. Each year during the height of the avian breeding season (June for most of the United States) participants skilled in avian identification collect bird population data along roadside survey routes. Each survey route is approximately 24.5 miles long and contains 50 stops located at 0.5-mile intervals. At each stop, a three-minute count is conducted. During each count, every bird seen or heard within a 0.25-mile radius is recorded. The resulting data is used by conservation managers, scientists, and the general public to estimate population trends and relative abundances and to assess bird conservation priorities. The nearest survey route to the host Property is the Greenwich Breeding Bird Survey Route (Route #18010) located approximately 0.7 mile to the southwest. This ±23-mile long bird survey route begins on North Street in Greenwich and generally winds its way northeast through Stamford and New Canaan before terminating in Wilton. Since bird survey routes represent randomly selected data collection areas, they do not necessarily represent a potential restriction to development projects, including the proposed Facility.

### **Hawk Watch Site**

The Hawk Migration Association of North America (“HMANA”) is a membership-based organization committed to the conservation of raptors through the scientific study, enjoyment and appreciation of raptor migration. HMANA collects hawk count data from almost 200 affiliated raptor monitoring sites throughout the United States, Canada and Mexico, identified as “Hawk Watch Sites.” In Connecticut, Hawk Watch Sites are typically situated on prominent hills and mountains that tend to concentrate migrating raptors. The nearest Hawk Watch Site, Quaker Ridge, is located in Greenwich, approximately 9.2 miles to the southwest of the proposed Facility. Based on the distance separating this possible raptor migratory route from the proposed Facility, no adverse impacts are anticipated.

Most hawks migrate during the day (diurnal) to take advantage of two theorized benefits: (1) diurnal migration allows for the use of updrafts or rising columns of air called thermals to gain lift without flapping thereby reducing energy loss; and, (2) day migrants can search for prey and forage as they migrate. Therefore, no adverse impacts to migrating hawks are anticipated with development of the Facility, based on the ±9.2-mile separation distance to the nearest Hawk Watch Site and hawk migration behavior occurring during the daytime under favorable weather conditions when thermals form.

### **Bald Eagle Survey Route**

Bald Eagle Survey Routes consist of locations of midwinter Bald Eagle counts from 1986 to 2005 with an update provided in 2008. This survey was initiated in 1979 by the National Wildlife Federation. This database includes information on statewide, regional and national trends. Survey routes are included in the database only if they were surveyed consistently in at least four years and where at least four eagles were counted in a single year. The nearest Bald Eagle Survey Route is Aspetuck & Saugatuck Reservoir located in the towns of Easton, Redding, and Weston approximately 11 miles northeast of the host Property.

Bald eagle migration patterns are complex, dependent on age of the individual, climate (particularly during the winter) and availability of food.<sup>3</sup> Adult birds typically migrate alone and generally as needed when food becomes unavailable, although concentrations of migrants can occur at communal feeding and roost sites. Migration typically occurs during the middle of day (10:30–17:00) as thermals provide for opportunities to

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<sup>3</sup> Buehler, David A. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/506> [Accessed 09/09/13].

soar up with limited energetic expense; Bald Eagle migration altitudes are estimated to average 1,500–3,050 m by ground observers.<sup>4</sup> Four adults tracked by fixed-wing aircraft in Montana averaged 98 km/d during spring migration and migrated at 200–600 m above ground (McClelland et al. 1996).<sup>5</sup>

In addition, the USFWS's *National Bald Eagle Management Guidelines* (May 2007) recommends a 660 foot buffer to bald eagle nests if the activity will be visible from the nest with an additional management practice recommendation of retaining mature trees and old growth stands, particularly within 0.5 mile from water. No known bald eagle nests occur in the vicinity of the host Property. Reports of bald eagle at Laurel Reservoir, located just west of the Site across Ponus Ridge Road, during the winter months have been made as recently as last year. However, APT is not aware of any active bald eagle nest sites at Laurel Reservoir.

Therefore, no adverse impacts to migrating Bald Eagle are anticipated with development of the Facility. This conclusion is based on the short (110-foot) height of the Facility, eagle migration patterns during the daytime under favorable weather conditions when thermals form and compliance with USFWS bald eagle management guidelines.

## Flyways

The host Property is located in Fairfield County, approximately 7.9 miles north of Long Island Sound. The Connecticut coast lies within the Atlantic Flyway, one of four generally recognized regional primary migratory bird flyways (Mississippi, Central and Pacific being the others). This regional flyway is used by migratory birds travelling to and from summering and wintering grounds. The Atlantic Flyway is particularly important for many species of migratory waterfowl and shorebirds, and Connecticut's coast serves as vital stopover habitat. Migratory land birds also stop along coastal habitats before making their way inland. Smaller inland migratory flyways ("secondary flyways") are often concentrated along major riparian areas as birds use these valuable stopover habitats to rest and refuel as they make their way further inland to their preferred breeding habitats. The Connecticut Migratory Bird Stopover Habitat Project (Stokowski, 2002)<sup>6</sup> identified potential flyways along the Housatonic, Naugatuck, Thames, and Connecticut Rivers. This study paralleled a similar earlier study conducted by the Silvio O. Conte National Fish & Wildlife Refuge (Neotropical Migrant Bird Stopover Habitat Survey<sup>7</sup>), which consisted of collection of migratory bird data along the Connecticut River and the following major Connecticut River tributaries: Farmington, Hockanum, Scantic, Park, Mattabesset, Salmon, and Eight Mile Rivers. Of these potential flyways, the nearest to the host Property is the Housatonic River, located approximately 21.8 miles to the east. The Mill River riparian corridor and by extension Laurel Reservoir, located just west 0.45 miles southwest of the host Property, is not identified as a potential flyway but potentially forms a secondary flyway as birds move northward from the Housatonic River corridor during the spring migration.

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<sup>4</sup> Harmata, A. R. 1984. Bald Eagles of the San Luis valley, Colorado: their winter ecology and spring migration. Ph.D. Thesis. Montana State Univ. Bozeman.

<sup>5</sup> McClelland, B. R., P. T. McClelland, R. E. Yates, E. L. Caton, and M. E. McFadden. 1996. Fledging and migration of juvenile Bald Eagles from Glacier National Park, Montana. *J. Raptor Res.* 30:79-89.

<sup>6</sup> Stokowski, J.T. 2002. Migratory Bird Stopover Habitat Project Finishes First Year. *Connecticut Wildlife*, November/December 2002. P.4.

<sup>7</sup> The Silvio O. Conte National Fish & Wildlife Refuge Neotropical Migrant Bird Stopover Habitat Survey <http://www.science.smith.edu/stopoverbirds/index.html>

These major riparian corridors may provide secondary flyways as they likely offer more food and protection than more exposed upland sites, particularly during the spring migration<sup>8</sup>.

Siting of tower structures within flyways can be a concern, particularly for tall towers and even more particularly for tall towers with guy wires and lighting. The majority of studies on bird mortality due to towers focuses on very tall towers (greater than 1000 feet), illuminated with non-flashing lights, and guyed. These types of towers, particularly if sited in major migratory pathways, do result in significant bird mortality (Manville, 2005)<sup>9</sup>. The proposed Facility is not this type of tower, being an unlit, unguyed monopole structure only 110 feet in height. More recent studies of short communication towers (<300 feet) reveal that they rarely kill migratory birds<sup>10</sup>. Studies of mean flight altitude of migrating birds reveal flight altitudes of 410 meters (1350 feet), with flight altitudes on nights with bad weather between 200 and 300 meters above ground level (656 to 984 feet)<sup>11</sup>.

No adverse impacts to migrating bird species are anticipated with development of the Facility, based on its design (unlit and unguyed) and relatively short (110-foot) height, even if the Mill River/Laurel Reservoir serve as a secondary flyway.

### **Waterfowl Focus Areas**

The Atlantic Coast Joint Venture ("ACJV") is an affiliation of federal, state, regional and local partners working together to address bird conservation planning along the Atlantic Flyway. The ACJV has identified waterfowl focus areas recognizing the most important habitats for waterfowl along the Atlantic Flyway. Connecticut contains several of these waterfowl focus areas. The nearest waterfowl focus area to the host Property is the Norwalk Islands area, located approximately 6.6 miles to the east. Please refer to the attached Connecticut Waterfowl Focus Areas Map. Based on the distance of this waterfowl focus area to the host Property, no impact to migratory waterfowl would result from development of the proposed Facility.

### **CTDEEP Migratory Waterfowl Data**

The Connecticut Department of Energy and Environmental Protection ("CTDEEP") created a Geographic Information System ("GIS") data layer in 1999 identifying concentration areas of migratory waterfowl at specific locations in Connecticut. The intent of this data layer is to assist in the identification of migratory waterfowl resource areas in the event of an oil spill or other condition that might be a threat to waterfowl species. This data layer identifies conditions at a particular point in time and has not been updated since 1999.

The nearest migratory waterfowl area, the Holly Pond in Darien, is located approximately 7.8 miles to the northeast of the host Property. The associated species are identified as American black duck, bufflehead, Canada

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<sup>8</sup> The Silvio O. Conte National Fish & Wildlife Refuge Neotropical Migrant Bird Stopover Habitat Survey. [http://www.science.smith.edu/stopoverbirds/Chapter5\\_Conclusions&Recommendations.html](http://www.science.smith.edu/stopoverbirds/Chapter5_Conclusions&Recommendations.html)

<sup>9</sup> Manville, A.M. II. 2005. Bird strikes and electrocutions at power lines, communications towers, and wind turbines: state of the art and state of the science - next steps toward mitigation. Bird Conservation Implementation in the Americas: Proceedings 3rd International Partners in Flight Conference 2002. C.J. Ralph and T.D. Rich, editors. USDA Forest Service General Technical Report PSW-GTR-191. Pacific Southwest Research Station, Albany CA. pp. 1-51-1064.

<sup>10</sup> Kerlinger, P. 2000. Avian Mortality at Communication Towers: A Review of Recent Literature, Research, and Methodology. Prepared for U.S. Fish and Wildlife Service Office of Migratory Bird Management.

<sup>11</sup> Mabee, T.J., B.A. Cooper, J.H. Plissner, D.P. Young. 2006. Nocturnal bird migration over an Appalachian ridge at a proposed wind power project. Wildlife Society Bulletin 34:682-690.

goose, canvasback, mallard, hooded merganser. Based on the distance of this migratory waterfowl area to the host Property, no impact to migratory waterfowl would result from development of the proposed Facility.

### **CTDEEP Natural Diversity Data Base**

CTDEEP's Natural Diversity Data Base ("NDDB") program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state listed species and to help landowners conserve the state's biodiversity. State agencies are required to ensure that any activity authorized, funded or performed by a state agency does not threaten the continued existence of endangered or threatened species. Maps have been developed to serve as a pre-screening tool to help applicants determine if there is a potential impact to state listed species.

The NDDB maps represent approximate locations of endangered, threatened and special concern species and significant natural communities in Connecticut. The locations of species and natural communities depicted on the maps are based on data collected over the years by CTDEEP staff, scientists, conservation groups, and landowners. In some cases an occurrence represents a location derived from literature, museum records and/or specimens. These data are compiled and maintained in the NDDB. The general locations of species and communities are symbolized as shaded areas on the maps. Exact locations have been masked to protect sensitive species from collection and disturbance and to protect landowner's rights whenever species occur on private property.

APT submitted a review request to the CTDEEP NDDB on December 21, 2021 with respect to this project. The CTDEEP responded in a January 7, 2022 letter that, according to NDDB information, records exist in the vicinity of the host Property for one State Endangered Species: Little brown bat (*Myotis lucifugus*) and two State Species of Concern: Red bat (*Lasiurus borealis*) and Eastern box turtle (*Terrapene carolina carolina*). Construction-phase protection measures and time of year restrictions for tree clearing will be implemented by Homeland to avoid impact to these non-avian species.

### **USFWS Communications Towers Compliance**

In 2021, the USFWS prepared its *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning*<sup>12</sup> for tower construction and operation. These voluntary guidelines are designed to assist tower companies in developing their communication systems in a way which minimizes the risk to migratory birds. APT offers the following responses to each of the USFWS recommendations which are abridged from the original document for brevity.

### **Siting and Construction of New Towers**

1. *Contact with USFWS Field Office. Communicate project plans to nearest USFWS Field Office.*

The USFWS New England Field Office has been contacted to determine what review process has been developed for the receipt of communication project plans. A response has not been received to date.

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<sup>12</sup> Migratory Bird Program, U.S. Fish and Wildlife Service. March 2021. Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning. These recommendations replace all previous recommendations for communication tower construction and operation. These recommendations have been modified and updated from previous versions to incorporate the state of the science and the 2020 Federal Aviation Administration [Obstruction Marking and Lighting Advisory Circular AC 70/7460-1M](#).

2. *Collocation of the communications equipment on an existing communication tower or other structure (e.g., billboard, water and transmission tower, distribution pole, or building mounts). This recommendation is intended to reduce the number of towers across the landscape.*

Collocation opportunities on existing towers, buildings or non-tower structures are not available in the area while achieving the required radio frequency ("RF") coverage objectives of Homeland's tenant(s).

3. *All new towers should be sited to minimize environmental impacts to the maximum extent practicable.*

- a. *Place new towers within existing "antenna farms" (i.e., clusters of towers) when possible.*

There are no existing "antenna farms" in the vicinity of the proposed tower site that would satisfy the RF coverage objectives of Homeland's tenant(s).

- b. *Select already degraded areas for tower placement.*

No degraded areas exist at the Site.

- c. *Towers should not be sited in or near wetlands, other known bird concentration areas (e.g., state or federal refuges, staging areas, rookeries, and Important Bird Areas), or in known migratory bird movement routes, daily movement flyways, areas of breeding concentration, in habitat of threatened or endangered species, key habitats for Birds of Conservation Concern, or near the breeding areas ("leks") of prairie grouse.*

The proposed Facility is not within wetlands, known bird concentration area, migratory or daily movement flyway or result in fragmentation of a core forest habitat that could potentially provide habitat for Birds of Conservation Concern.

- d. *Towers should avoid ridgelines, coastal areas, wetlands or other known bird concentration areas.*

The Facility is not sited on a ridgeline and is not located within coastal areas, wetlands or other known bird concentration areas.

- e. *Towers and associated facilities should be designed, sited, and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint". In addition, several shorter, un-guyed towers may be preferable to one, tall guyed, lit tower.*

The Facility has been designed to avoid impacts to wetland habitat and minimizes to the degree possible impact to forested uplands with the access road and tower compound. The proposed 110-foot tall monopine tower is self-supporting (no guys) and is unlit.

4. *During construction, the following considerations can reduce the risk of take of birds:*

- a. *Schedule all vegetation removal and maintenance (e.g., general landscaping activities, trimming, grubbing) activities outside of the peak bird breeding season to reduce the risk of bird take.*

Tree clearing restrictions recommended by CTDEEP NDDDB for the protection of rare species will also minimize risk to birds as tree removal work would generally occur outside of the peak bird breeding season.

- b. *When vegetation removal activities cannot avoid the bird breeding season, conduct nest clearance surveys.*

New clearance surveys would not be necessary given the tree clearing restrictions noted previously.

- c. *Prevent the introduction of invasive plants during construction to minimize vegetation community degradation by: Use only native and local (when possible) seed stock for all temporary and permanent vegetation establishment; and ii. Use vehicle wash stations prior to entering sensitive habitat areas to prevent accidental introduction of non-native plants.*

Invasive species control techniques will be used during construction of the proposed Facility to minimize the introduction of invasive plants.

- 5. *Tower design should consider the following attributes:*

- a. *It is recommended that new towers should be not more than 199 ft. above ground level (AGL).*

The Facility satisfies this recommendation with a height of 110 feet AGL.

- b. *Guy Wires. We recommend using free standing towers such as lattice towers or monopole structures.*

The Facility satisfies this recommendation with a self-supporting monopine structure.

- c. *Lights are a primary source of bird aggregation around towers, thus minimizing all light is recommended. No tower lighting is the preferred option if Federal Aviation Administration (FAA) regulations and lighting standards (FAA 2015, 2020, Patterson 2012) permit.*

The Facility will not contain tower lighting.

## **Operation And Maintenance of All Towers**

- 6. *We recommend that existing infrastructure be unlit, when allowed by FAA regulations. If associated buildings require security or operational lighting, minimize light trespass using motion sensors and down-shielding with minimum intensity light.*

Equipment within the compound requires security lighting, which will be set on motion sensors, down-shielded and minimum intensity lighting.

- 7. *Schedule all vegetation removal and maintenance (e.g., general landscaping activities, trimming, grubbing, etc.) activities outside of the peak bird breeding season to reduce the risk of bird take. When vegetation removal activities cannot avoid the bird breeding season, conduct nest clearance surveys.*

Once the Facility is constructed, minimal vegetation maintenance is anticipated and would only occur immediately adjacent to the tower compound and access road, both areas of which would support limited bird nesting habitat. Therefore, restricting this minimal vegetation maintenance work to outside the peak bird breeding season is not deemed necessary.

8. *Birds Nesting on Towers: If birds are nesting on communication towers that require maintenance activities, contact the state natural resource protection agency and/or the USFWS for permits, recommendations, and requirements.*

Following construction of the Facility, if tower maintenance activities encounter bird nests, CTDEEP Wildlife Division and USFWS will be contacted.

9. *Representatives from the USFWS or researchers should be allowed access to the site to evaluate bird use, conduct dead-bird searches, and conduct other research, as necessary.*

Homeland agrees, upon advance notice from USFWS, to allow agency representatives access to the Facility.

### **Summary and Conclusions**

Based on the results of this desk-top evaluation, no migratory bird species are anticipated to be impacted by Homeland's proposed development. The proposed Facility is not proximate to an Important Bird Area and would comply with the USFWS guidelines for minimizing the potential impacts to bird species.

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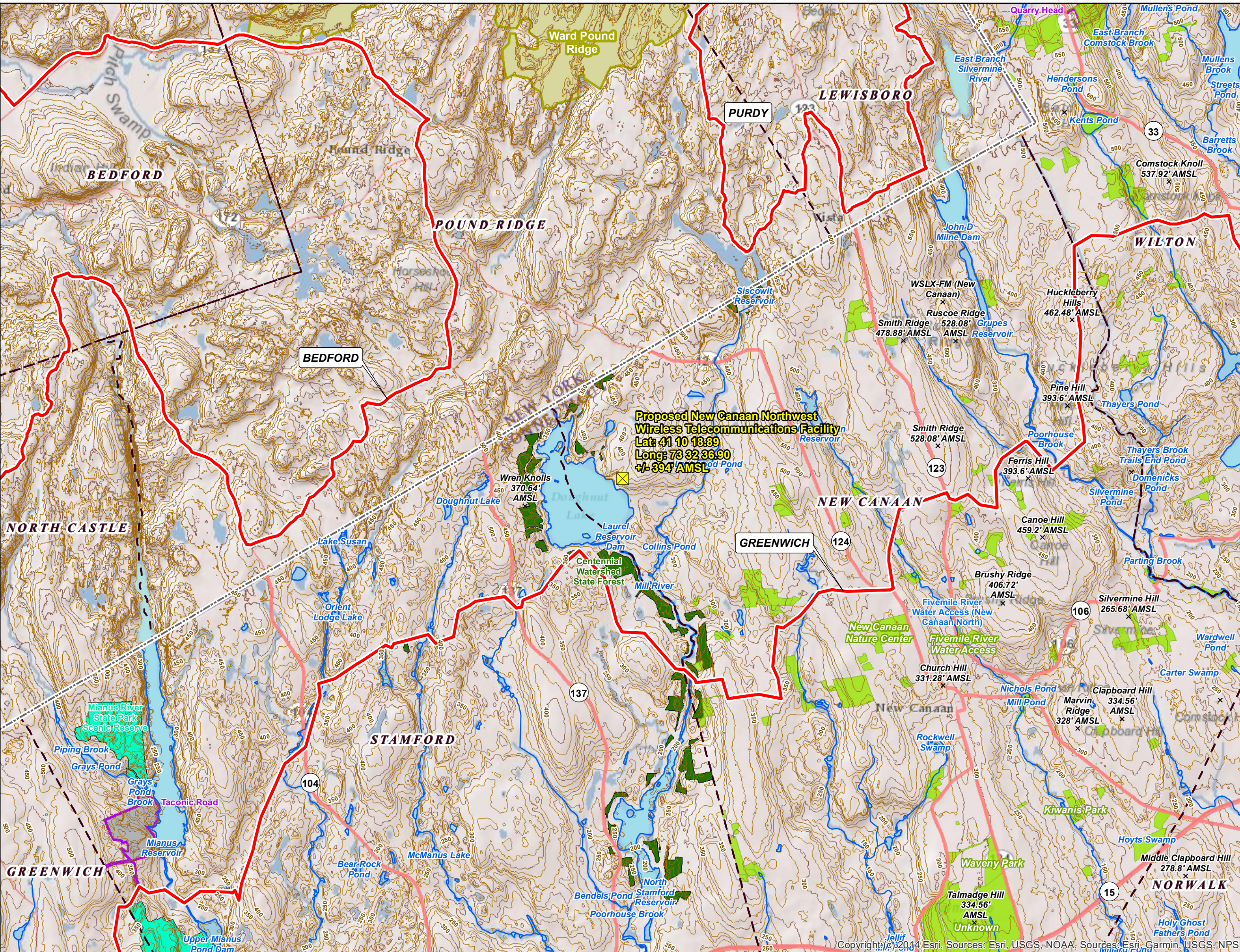
# Figures

- Avian Resources Map
- Connecticut Waterfowl Focus Areas Map



# Avian Resources Map

Proposed Wireless  
Telecommunications Facility  
New Canaan Northwest  
1837 Ponus Ridge Road  
New Canaan, Connecticut



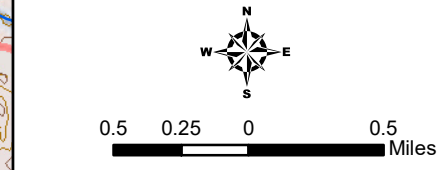
## Legend

- Proposed Facility
- Bald Eagle Site\*
- Hawk Watch Site\*
- Important Bird Site\*
- Important Bird Area
- Bald Eagle Survey Route\*
- Breeding Bird Survey Route
- Migratory Waterfowl (CTDEEP, 2019)\*
- Protected Open Space (CTDEEP, 2011)
- Federal Open Space (CTDEEP, 2004)\*
- CT DEP Property (CT DEEP, 12/2010)**
- State Forest
- State Park\*
- DEP Owned Waterbody\*
- State Park Scenic Reserve
- Historic Preserve\*
- Natural Area Preserve\*
- Fish Hatchery\*
- Flood Control\*
- State Park Trail\*
- Water Access
- Wildlife Area\*
- Wildlife Sanctuary\*
- Other
- Open Water
- Town Boundary
- State Boundary

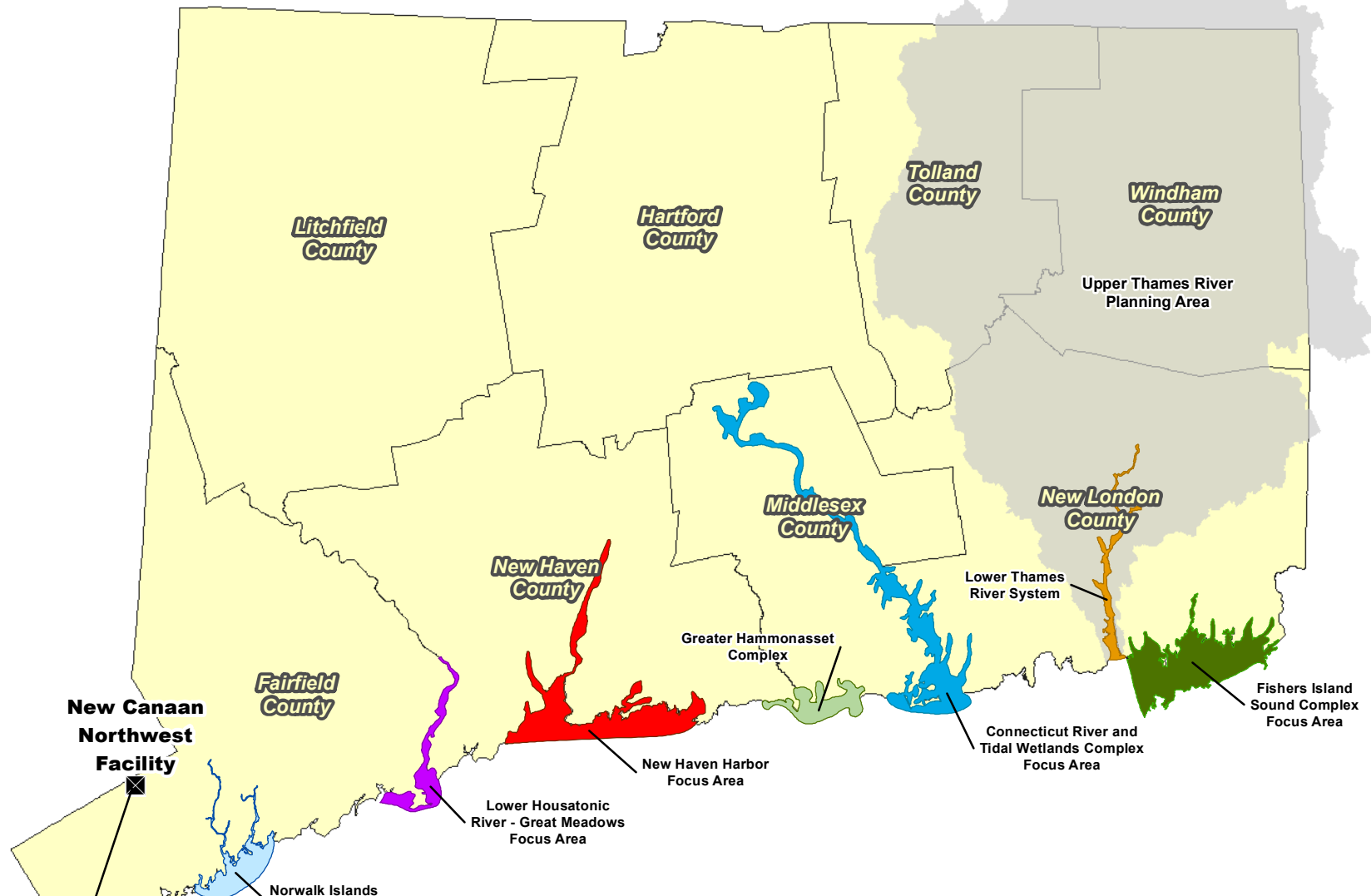
\*None within mapped extents

**Avian Source Information:**  
 Bald Eagle Sites: U.S. Geological Survey, National Biological Information Infrastr. 2008, Midwinter Bald Eagle Counts, 1986-2005 (update 2008).  
 Hawk Watch Sites: Hawk Migration Association of North America (HMANA), Hawk Count website: <http://hawkcount.org/sitesel.php?country=USA&stateprov=Connecticut>  
 Migratory Waterfowl: CTDEEP GIS, 2019  
 Important Bird Sites/Areas: National Audubon Society, Audubon Connecticut  
[http://ct.audubon.org/BirdSci\\_IBAs.html](http://ct.audubon.org/BirdSci_IBAs.html)  
 Breeding Bird Survey Routes: Patuxent Wildlife Research Center of the U.S. Geological Survey and the Canadian Wildlife Service's National Wildlife Research Centre  
<http://www.nationalatlas.gov/mid/bbsrsl.html>

Base Map Source: ESRI Shaded Relief  
 Map Date: February 2022







+/- 6.6 Miles to  
Norwalk Islands  
Focus Area

**Legend**

- ☒ Proposed Facility
- Waterfowl Planning Area**
- Upper Thames River
- Waterfowl Focus Areas**
- Connecticut River and Tidal Wetlands Complex
- Fishers Island Sound Complex
- Greater Hammonasset Complex
- Lower Housatonic River - Great Meadows
- Lower Thames River System
- New Haven Harbor
- Norwalk Islands

**Connecticut Waterfowl  
Focus Areas Map**

Proposed Wireless  
Telecommunications Facility  
New Canaan Northwest  
1837 Ponus Ridge Road  
New Canaan, Connecticut

