ATTACHMENT 4

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No significant water flow and/or water quality changes are anticipated as a result of the construction or operation of the proposed facility. No wetlands or watercourses are located within the proposed AT&T facility compound or access drive locations. The closest point of the facility compound to the wetland associated with Cedar Hill Pond is approximately 380' and the closest point of the access drive to this wetland is approximately 18'. As set forth in the attached Wetlands Investigation report, no impacts to on-site wetlands are anticipated from the construction or operation of the proposed Facility. Best Management Practices to control storm water and soil erosion during construction will be implemented.

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.

C. LAND

Some tree removal, clearing and minimal grading will be required for the facility. 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.

E. POWER DENSITY

The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 9.97% of the MPE standard. Attached is a copy of a Power Density Report for the facility.

F. VISIBILITY

The potential visual impact of the proposed Facility was determined by preparation of the attached Visibility Analysis. The potential visibility was assessed within a 2-mile radius (Study Area) using a combination of a computer-based, predictive viewshed model and

in-field analysis. The Visibility Analysis concludes that year-round visibility associated with the proposed Facility is limited to a small footprint of approximately 62 acres in the immediate area of the site and extends generally northwest along Route 7 for a distance of approximately 0.75 mile. An additional approximately 140 acres of seasonal visibility is anticipated primarily to the south, extending down Route 7 and across the Housatonic River. Views from these areas will be distant and limited as the hillside provides a backdrop and the proposed Facility does not extend above the hillside. (See Photosimulation No. 6 in the Visibility Analysis). No schools or commercial child day care centers are located within 250' of the proposed Facility.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

On August 8, 2013, the Connecticut Department of Energy and Environmental Protection (CTDEEP) issued a determination that the proposed Facility will not result in negative impacts to any Federal or State Endangered, Threatened or Special Concern Species. The Connecticut State Historic Preservation Officer (SHPO) has been consulted and SHPO's response is pending. However, it is anticipated that the SHPO will issue a no effect determination given that no historic properties are located within the Area of Potential Effect and that the subject site is unlikely to contain cultural resources. AT&T's evaluation of the site in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 (NEPA) reveals that the site is not identified as a wilderness area, wildlife preserve, National Park, National Forest, National Parkway, Scenic River, State Forest, State Designated Scenic River or State Gameland. According to the site survey and field investigations, no federally regulated wetlands or watercourse or threatened or endangered species will be impacted by the proposed Facility. And, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps of the site indicate that it is not located within a 100-year floodplain.

Correspondence from DEEP



Connecticut Department of

ENERGY & ENVIRONMENTAL PROTECTION Wildlife Division Natural History Survey – Natural Diversity Data Base 79 Elm Street, 6th Floor Hartford, CT 06106-5127

August 8, 2013

Dean Gustafson All-Points Technology Corporation, P.C. (APT) 3 Saddlebrook Drive Killingworth, CT 06419

NDDB Determination No: 201303507

Project: AT&T New Milford Site No. CT4067, Kent Rd (Map 83, Lot 4); just north of Cedar Hill Dam and First Light hydroelectric generating facility; New Milford, CT

Dear Dean Gustafson,

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding the area delineated on the map provided for the site of the proposed telecommunications tower in New Milford, Connecticut. Based on our current records, we do not anticipate negative impacts to Federal or State Endangered, Threatened, or Special Concern species resulting from the proposed activities.

This determination is valid for one year. Please submit an updated NDDB Request for Review if the scope of the proposed work changes or if work has not begun by <u>August 8, 2014</u>.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy & Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, private conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site specific field investigations. Consultations with the Data Base should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available.

Please contact me if you have any questions (<u>nelson.debarros@ct.gov</u>; 860-424-3585). Thank you for consulting the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely, Ban Nelson B. DeBarros

Botanist/Ecologist

79 Elm Street, Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Wetlands Investigation Report



WETLAND INVESTIGATION

August 16, 2013

Site Acquisitins, Inc. 500 Enterprise Drive, Suite 3A Rocky Hill, CT 06067

Attn: Tim Burks

APT Project No.: CT1931020

Re: Proposed AT&T Facility Kent Road (Map 83 Lot 4) New Milford, Connecticut

Dear Mr. Burks,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by New Cingular Wireless PCS, LLC ("AT&T") at Kent Road (Map 83, Lot 4) in New Milford, Connecticut ("Site" or "Subject Property"). At your request, Matthew Gustafson, a Connecticut registered Soil Scientist with APT conducted inspections of the Subject Property on July 15 and August 5, 2013 to determine the presence or absence of wetlands and watercourses. The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the *Corps of Engineers Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Version 2.0 (January 2012). The results of this wetland investigation are provided below.

Site and Project Description:

The Subject Property consists of an approximately 168.5 acre parcel developed with a hydro-electric facility identified as Kent Road in New Milford, Connecticut. The area proposed for the wireless communications facility in the central portion of the Site is currently mature upland forest. Much of the Subject Property consists of open water associated with the Cedar Hill Pond created by a dam of a diversion canal from the Housatonic River for the purposes of generating hydroelectric power. The surrounding land use consists of residential development and mature forest blocks.

Two wetland areas were delineated on the Site consisting of a well-developed western bank of the Cedar Hill Pond created by Cedar Hill Dam and a small isolated back-water wetland area adjacent to Kent Road. Please refer to the enclosed Wetland Delineation Map for approximate location of the identified resource area. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: Wetland 1: WF 1 to 25; and, Wetland 2: WF 2-01 to 2-09. General weather conditions encountered during the above-referenced inspection include high 80 ° F temperatures with generally sunny skies.

Regulation of Wetlands:

Wetlands and watercourses are regulated by local, state and federal regulations, with each regulatory agency differing slightly in their definition and regulatory authority of resource areas, as further discussed below.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

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

The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council and therefore exempt from local regulation, although local wetland regulations are considered by the Siting Council. Wetlands identified on the Site may be considered Waters of the United States and therefore any activity that would result in direct impact would be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

- Town of New Milford: The Town of New Milford regulates activities within wetlands and watercourses and within 100 feet of wetlands and watercourses and 200 feet from the ordinary high waterline of Candlewood Lake, the east or west branch of the Aspetuck River, the Still River, the Housatonic River or watercourses within the West Aspetuck River watershed through administration of the Connecticut Inland Wetlands and Watercourses Act (IWWA).
- State of Connecticut:Freshwater Wetlands: The IWWA requires the regulation of activities affecting or
having the potential to affect wetlands under Sec. 22a-36 through 22a-45 of the
Connecticut General Statutes. The IWWA is administered through local
municipalities. The IWWA defines wetlands as areas of poorly drained, very poorly
drained, floodplain, and alluvial soils, as delineated by a soil scientist.
Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds,
rivers, streams, etc., whether natural or man-made, permanent or intermittent.
Intermittent watercourse determinations are based on the presence of a defined
permanent channel and bank, and two of the following characteristics: (1)
evidence of scour or deposits of recent alluvium or detritus; (2) the presence of
standing or flowing water for a duration longer than a particular storm incident;
and (3) the presence of hydrophytic vegetation.

ACOE: The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable waters, wetlands adjacent to those waters, and/or isolated wetlands that have a demonstrated interstate commerce connection. The ACOE Wetlands Delineation Manual defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

> Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been approved by the ACOE.

Soil Description:

Soil types encountered throughout the Site were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS")¹. No wetland soil types are mapped proximate to the Site although a large area of Open Water is identified in proximity to the Site. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation, including the

¹ NRCS Web Soil Survey, <u>http://websoilsurvey.nrcs.usda.gov/app/</u>, accessed on July 12, 2013.

proposed Facility location. They are dominated by Nellis fine sandy loam, Canton and Charlton soils and Udorthents. Wetland soils identified in Wetland 2 are classified as Fluvequents-Udifluvents, although they no longer appear to have an active connection to the Housatonic River floodplain. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The Fluvaquents-Udifluvents complex map unit consists primarily of poorly and very poorly drained, alluvial soils. These very deep soils formed in recent alluvial sediments on floodplains. Fluvaquents-Udifluvents complex have a seasonal watertable at a depth of 0 to 1.5 feet. These soils are subject to frequent flooding.

Upland Soils:

The **Canton** series consists of very deep, well drained soils formed in a loamy mantle underlain by sandy glacial till. They are on nearly level to very steep glaciated plains, hills, and ridges. Slope ranges from 0 to 35 percent. Permeability is moderately rapid in the solum and rapid in the substratum. The soils developed in a fine sandy loam mantle over acid sandy glacial till of Wisconsin age derived mainly from granite and gneiss and some fine-grained sandstone.

The **Charlton** series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

The **Nellis** series consists of very deep, well drained soils formed in calcareous till. They are nearly level to very steep soils on upland ridges, knolls, and hillsides. Saturated hydraulic conductivity is moderately high or high in the mineral soil. Pedons that have a Cd range to moderately low. Slope ranges from 0 to 60 percent. Mean annual temperature is 47 degrees F. and mean annual precipitation is 39 inches.

Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

Wetlands Discussion:

Wetland 1 Classification Summary:

Wetland 1 ²	System	Subsystem	Class Unconsolidated Shore Shore Shore	Water Regime	Special Modifier	
(WF 1 - 25)	Riverine	Lower Perennial		Cobble-Gravel	Artificially Flooded	Impounded
Watercourse Type	Perennial ⊠	Intermittent	Tidal	Special Aquatic Habitat (none)	Vernal Pool	Other

² Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. <u>http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents</u>.

Wetland 1 Description:

Wetland 1 is large open water wetland feature associated with the Cedar Hill Pond, an impounded diversion of the Housatonic River created by the Cedar Hill Dam. Impounded water is controlled by a hydro-electric facility located on the west side of Kent Road. Much of the western banks on Cedar Hill Pond are armored with rip-rap. As a result of the control of water elevation by the hydroelectric dam, this portion of the river appears to have been separated from any active floodplain. Sparse vegetation has colonized the banks.

Dominant Wetland Species	Dominant Adjacent Upland Species		
Common Name (Latin Name)	Common Name (Latin Name)		
Purple Loosestrife* (Lythrum salicaria)	Sugar Maple (Acer saccharum)		
Nodding Smartweed (Polyganum lapathifolium)	Northern Red Oak (Quercus rubra)		
Common Reed* (Phragmites australis)	Sycamore (Platanus occidentalis)		
Soft Rush (Juncus effuses)	American Basswood (Tilia americana)		
Multiflora Rose* (Rosa multiflora)	Garlic Mustard* (Alliaria petiolata)		
Sensitive Fern (Onoclea sensibilis)	Asiatic Bittersweet* (Celastrus orbiculatus)		
	Japanese Barberry* (Berberis thunbergii)		

Wetland 1 Dominant Vegetation:

* denotes Connecticut Invasive Plants Council invasive species

Wetland 2 Classification Summary:

Wetland 2 ³	System	Subsystem	Class Forested	Subclass Broad-leaved Deciduous	Water Regime	Special Modifier
(WF 2-01 to 2-09)	Palustrine				Seasonally Flooded	Artifical
Watercourse Type (none)	Perennial	Intermittent	Tidal	Special Aquatic Habitat (none)	Vernal Pool	Other

Wetland 2 Description:

Wetland 2 is a small isolated depressional backwater wetland area that appears to have been disconnected from former floodplain of the Housatonic River. Evidence of historic alluvial soil deposition activity was observed within soil profiles investigated within Wetland 2. It appears that with the building of the Cedar Hill Dam this wetland area lost some of its active hydrology.

³ Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents.

Wetland 2 Dominant Vegetation:

Dominant Wetland Species	Dominant Adjacent Upland Species		
Common Name (Latin Name)	Common Name (Latin Name)		
Bush Honeysuckles* (Lonicera spp.)	Sugar Maple (Acer saccharum)		
Sugar Maple (Acer saccharum)	Northern Red Oak (Quercus rubra)		
Green Ash (Fraxinus pennsylvanica)	Sycamore (Platanus occidentalis)		
Asiatic Bittersweet* (Celastrus orbiculatus)	American Basswood (Tilia americana)		
Poison Ivy (Toxicodendron radicans)	Garlic Mustard* (Alliaria petiolata)		
	Asiatic Bittersweet* (Celastrus orbiculatus)		
	Japanese Barberry* (Berberis thunbergii)		

* denotes Connecticut Invasive Plants Council invasive species

Summary:

Based on a review of the Site/Site Survey Plan prepared by Centek Engineering (Sheet No. C-1A, latest revision date 08/13/13), no direct impact to wetlands is associated with the proposed AT&T development. Although portions of the proposed access drive are located in close proximity to wetland resources (within approximately 18 feet of wetland flag 10), no temporary impacts associated with construction activities are anticipated provided sedimentation and erosion controls are designed, installed and maintained during construction activities in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*. Long term secondary impacts to wetland resources possibly associated with the operation of this Facility are minimized by the fact the development is unmanned, it minimizes the creation of impervious surfaces with the use of a gravel access drive and gravel compound, and it creates minimal traffic. APT recommends that stormwater generated by the proposed development be properly handled and treated in accordance with the *2004 Connecticut Stormwater Quality Manual*. Provided these recommendations are implemented, it is APT's opinion that the proposed AT&T development will not result in a likely adverse impact to wetland resources.

In addition, as no direct impact to federal wetlands is associated with AT&T's development activities, **NO** significant change in surface features (e.g., wetland fill, deforestation or water diversion) will result in accordance with the National Environmental Policy Act Categorical Exclusion checklist.

If you have any questions regarding the above-referenced information, please feel free to contact me at (860) 617 - 0613 or at mgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Matthew Gustafson Registered Soil Scientist

Enclosure

Wetland Delineation Map



 CT Parcel
 Tuesday, August 13, 2013

 Path: C:\All_Points_Tech\Projects\Client\AT&T\CT1931020_NewMilford\GIS\Maps\Wetland_Delineation_Map.mxd

Avian Resources Evaluation



AVIAN RESOURCES EVALUATION

Date: September 11, 2013

Mr. Tim Burks Site Acquisitions, Inc. 500 Enterprise Drive, Suite 3A Rocky Hill, CT 06067 APT Project No.: CT1931020

Re: Proposed New Milford Facility – CT4067 Kent Road New Milford, Connecticut

New Cingular Wireless PCS, LLC ("AT&T") proposes to construct a new wireless telecommunications Facility ("Facility") off Kent Road in New Milford, Connecticut (the "host Property"), identified as Tax Assessor Parcel ID Map 83, Lot 4. The host Property consists of 168.5± acres and is currently developed a dam, gatehouse and penstock associated with the Bull's Bridge Hydro-electric Station located on a separate parcel to the south across Kent Road. The proposed Facility is located in the southern portion of the host Property within mature upland forest at a ground elevation of approximately 366.5 feet above mean sea level ("AMSL"). Much of the Subject Property consists of undeveloped forest and open water associated with the Cedar Hill Pond created by the dam and diversion canal from the Housatonic River. AT&T proposes to install a 150-foot tall monopole and ground equipment enclosure within a 75-foot by 75-foot gravel compound area surrounded with an 8-foot tall chain link fence. A 12-foot wide, approximately 430-foot long gravel access is proposed utilizing an existing paved and gravel maintenance drive for the canal and then along a short, new gravel driveway in order to gain admission to the Facility.

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 for minimizing the potential for telecommunications towers to impact bird species.

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 2-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.

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. The 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 behavior¹. The closest IBA to the host Property is the Good Hill Farm Preserve in Woodbury and Roxbury located approximately 13 miles to the southeast. Good Hill Farm Preserve is a high elevation grassland area situated on a historic farm that contains a small private airstrip. The grassland is part of a 467-acre parcel of land owned by the Roxbury Land Trust with approximately 170 acres of this parcel providing grassland bird habitat. The Good Hill Farm Preserve has supported breeding populations of special concern and high conservation priority species including grassland bird species such as Bobolink, Eastern Meadowlark and Savannah Sparrows. Due to its distance from the host Property, 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 concentrations² 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 a terrestrial forested dry circumneutral forest area, denoted as the New Milford Riverside Outcrop located approximately 400 feet to the west along the east bank of the Housatonic River across Route 7. This Critical Habitat consists of dry, rich forests often dominated by oaks and sugar maple, generally with a diverse herbaceous layer, on marble bedrock. Subtypes include cedar woodlands and maple/ yellow oak. The New Milford Riverside Outcrop Critical Habitat is not anticipated to support bird concentrations. Development of the proposed Facility would not impact this Critical Habitat.

¹ http://web4.audubon.org/bird/iba/iba_intro.html

² "bird concentrations" is related to the USFWS Interim Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers (September 14, 2000) analysis provided at the end of this document

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. 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 Sherman Breeding Bird Survey Route (Route #18009) located approximately 0.75 mile to the east. This ± 25 -mile long bird survey route begins near Lake Mauweehoo in Sherman on Route 37 and generally winds its way north through the northwest corner of New Milford, and Kent before terminating in Sharon. 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, Briggs Hill, is located in Sherman, approximately 7 miles to the south of the proposed Facility. Based on the distance separating this possible raptor migratory route from the proposed Facility, no adverse impacts are anticipated.

Bald Eagle Survey Routes and Sites

Bald Eagle Survey Routes and Sites 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, which generally follow along major riparian corridors, 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. Bald Eagle Survey Sites typically consist of prominent viewing locations located along major water bodies, including rivers and lakes. A Bald Eagle Site Survey Route (survey route #4) passes within 0.1 mile west of the proposed Facility along the Housatonic River. This route begins on Route 133 at the Brookfield/Bridgewater municipal boundary (Lake Lillinoah bridge over Housatonic River) and extends north along Route 7 to the Massachusetts border.

Bald Eagle migration patterns are complex, dependent on age of the individual, climate (particularly during the winter) and availability of food.³ 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 soar up with limited energetic expense.⁴ Bald Eagle migration altitudes are estimated to average 1,500–3,050 m by ground observers.⁴ Four adults tracked by fixedwing aircraft in Montana averaged 98 km/d during spring migration and migrated at 200–600 m above ground (McClelland et al. 1996).⁵

No adverse impacts to migrating Bald Eagle are anticipated with the proposed development, based on the short (150-foot) height of the Facility and eagle migration patterns during the daytime under favorable weather conditions when thermals form.

Flyways

The project area is located in Litchfield County, approximately 38 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)⁶ 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 Survey⁷), 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 0.1 mile to the west. 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 migration⁸.

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

³ 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].

⁴ Harmata, A. R. 1984. Bald Eagles of the San Luis valley, Colorado: their winter ecology and spring migration. Phd Thesis. Montana State Univ. Bozeman.

⁵ 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.

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

⁸ The Silvio O. Conte National Fish & Wildlife Refuge Neotropical Migrant Bird Stopover Habitat Survey. http://www.science.smith.edu/stopoverbirds/Chapter5_Conclusions&Recommendations.html

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)⁹. The proposed Facility is not this type of tower, being an unlit, unguyed monopole structure only 150 feet in height. More recent studies of short communication towers (<300 feet) reveal that they rarely kill migratory birds¹⁰. 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)¹¹.

No adverse impacts to migrating bird species are anticipated with development of the Facility, based on its relatively short (150-foot) height and the fact that it will be unlit and not guyed.

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 31 miles to the south. Please refer to the attached Connecticut Waterfowl Focus Areas Map. Based on the distance of these resources to the host Property, no direct impacts would occur 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.

No migratory waterfowl areas are located within the Town of New Milford. The nearest migratory waterfowl area (Bantam Lake in Litchfield and Morris, CT) is located approximately 13.5 miles to the east of the host Property. The associated species are identified as bufflehead, Canada goose, mallard, green wing teal, and wood duck. Based on its distance to the site, no impacts to migratory waterfowl habitat are anticipated to result from development of the proposed Facility.

⁹ 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.

¹⁰ 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.

¹¹ 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.

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.

According to an August 8, 2013 letter from the CTDEEP NDDB, "there are no known extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur on this property."

USFWS Communications Towers Compliance

The U.S Fish and Wildlife Service ("USFWS") prepared its *Interim Guidance on the Siting*, *Construction, Operation and Decommissioning of Communications Towers* (September 14, 2000), which recommends the 12 voluntary actions below be implemented in order to mitigate potential bird strikes that could result by the construction of telecommunications towers. APT offers the following responses to each of the USFWS recommendations.

1. Any company/applicant/licensee proposing to construct a new communications tower should be strongly encouraged to collocate the communications equipment on an existing communications tower or other structure (e.g., billboard, water tower, or building mount). Depending on tower load factors, from 6 to 10 providers may collocate on an existing tower.

Collocation opportunities on existing towers, buildings or other structures are not available in the area while achieving the required radio frequency ("RF") coverage objectives of AT&T.

2. If collocation is not feasible and a new tower or towers are to be constructed, communications service providers should be strongly encouraged to construct towers no more than 199 feet above ground level (AGL), using construction techniques which do not require guy wires (e.g., use a lattice structure, monopole, etc.). Such towers should be unlighted if Federal Administration regulations permit.

The proposed Facility would consist of a 150-foot monopole structure which requires neither guy wires nor lighting.

3. If constructing multiple towers, providers should consider the cumulative impacts of all of those towers to migratory birds and threatened and endangered species as well as the impacts of each individual tower.

Multiple towers are not proposed as part of this project.

4. If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). Towers should not be sited in or near wetlands, or other known bird concentration areas (e.g., state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. Towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.

There are no existing "antenna farms" in the area. The proposed Facility is not within wetlands, known bird concentration area, migratory or daily movement flyway, or habitat of threatened/endangered species. No habitat of threatened/endangered avian species occurs on the host Property. In Connecticut, seasonal atmospheric conditions can occasionally produce fog, mist and/or low ceilings. However, high incidences of these meteorological conditions, relative to the region, are not known to exist in the vicinity of the host Property.

5. If taller (>199 feet AGL) towers requiring lights for aviation safety must be constructed, the minimum amount of pilot warning and obstruction avoidance lighting required by the FAA should be used.

The proposed Facility height (150 feet AGL) is less than 199 feet and would not require any aviation safety lighting.

6. Tower designs using guy wires for support which are proposed to be located in known raptor or waterbird concentration areas or daily movement routes, or in major migratory bird movement routes or stopover sites, should have daytime visual markers on the wires to prevent collisions by these diurnally moving species.

The proposed Facility would be free-standing and would not require guy wires or visual marking.

7. Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower "footprint." However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

The proposed Facility is sited, designed, and would be constructed to accommodate proposed equipment and to allow for future collocations within the smallest footprint possible. The Facility is designed to occupy a modest area of 75 feet by 75 feet and would be located along a forest edge adjacent to Cedar Hill Pond and the gravel maintenance road. Therefore, since the proposed Facility is sited adjacent to this existing clearing, the proposed AT&T development will not result in habitat fragmentation.

8. If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal; restrictions on construction may be advisable in order to avoid disturbance during periods of high bird activity.

Significant numbers of breeding, feeding, or roosting birds are not known to habitually use the proposed tower construction area at the host Property.

9. In order to reduce the number of towers needed in the future, providers should be encouraged to design new towers structurally and electrically to accommodate the applicant/licensee's antennas and comparable antennas for at least two additional users (minimum of three users for each tower structure), unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.

The proposed Facility has been designed in accordance with this guidance, as it could accommodate a total of four antenna platform positions and the Town's emergency communications system antennas. The proposed, free-standing Facility would be neither lighted nor guyed.

10. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

Security lighting for on-ground facilities would be down-shielded using Dark Sky compliant fixtures set on motion sensor with timer.

11. If a tower is constructed or proposed for construction, Service personnel or researchers from the Communication Tower Working Group should be allowed access to the site to evaluate bird use, conduct, dead-bird searches, to place net catchments below the towers but above the ground, and to place radar, Global Positioning System, infrared, thermal imagery, and acoustical monitoring equipment as necessary to assess and verify bird movements and to gain information on the impacts of various tower sizes, configurations, and lighting systems.

With prior notification to AT&T, USFWS personnel would be allowed access to the proposed Facility to conduct evaluations.

12. Towers no longer in use or determined to be obsolete should be removed within 12 months of cessation of use.

If the proposed Facility was no longer in use or determined to be obsolete, it would be removed within 12 months of cessation of use.

Summary and Conclusions

Based on the results of this desk-top evaluation, no migratory bird species are anticipated to be impacted by AT&T'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 birds.

Figures

- Avian Resources Map
- Connecticut Waterfowl Focus Areas Map



ts\Client\AT&T\CT1931020_NewMilford\GIS\Maps



by the Atlantic Coast Joint Venture Partnership

Cultural Resources Report



INTEGRATED HISTORIC PRESERVATION PLANNING

June 24, 2013

Mike Libertine All-Points Technology Corporation 3 Saddlebrook Drive Killingworth, CT 06419

RE: Preliminary Cultural Resources Assessment of a Proposed Telecommunications Tower Located on Kent Road in New Milford, Connecticut

Mr. Libertine:

Heritage Consultants, LLC, is pleased to have this opportunity to provide All-Points Technology Corporation with the following preliminary archeological assessment of a proposed telecommunications tower located on Kent Road (designated on Assessor's Map 83 as Lot 4) in New Milford, Connecticut (Figure 1). The current project entailed completion of an existing conditions cultural resources summary based on the examination of GIS data obtained from the Connecticut State Historic Preservation Office, as well as historical data, aerial photographs, and topographic quadrangles maintained by Heritage Consultants, LLC. This investigation did not consider the effects of the proposed construction upon built resources, and it is based upon project location information provided to Heritage Consultants, LLC by All-Points Technology Corporation. The objectives of this study were to gather and present data regarding previously identified cultural resources situated within the vicinity of the Areas of Potential Effect and to investigate the proposed project parcel in terms of it natural and historical characteristics so that the need for completing additional cultural resources investigations could be evaluated.

As Figures 2 through 5 depict, the immediate vicinity of the proposed tower was situated along a rural section of roadway that connected the more populated communities of Bulls Bridge to the north and Gaylordsville to the south. No historic structures are noted in the vicinity of the project parcel on these mid to late nineteenth century maps. Figure 6, which is an aerial image dating from 1934, reveals that major impacts to the project region had occurred by the early twentieth century. These impacts included the construction of a dam that currently surrounds the proposed tower location. This project undoubtedly required massive earth moving to create this facility. It is likely that this would have disturbed/destroyed any archaeological sites in the immediate vicinity of the proposed tower location. Figures 7 through 12 are a sequence of aerial images from the mid twentieth century to the current day. These images show that other than changing vegetation, no discernible changes occurred in the project area. Only a few changes can be noted in the larger project region, such as a few residential structures and a golf course. Finally, a review of environmental characteristics identified in the vicinity of the proposed tower suggests that this location consists of Udorthents-Smoothed soils (Figure 13). This is a well drained to moderately well drained soil area that has had 0.6 m (2.0 ft) or more of the original soil surface altered by filling, excavating or grading activities. As with the current project area, they are commonly associated with

Mr. Libertine June 24, 2013 Page 2

large construction projects. As a result, it is unlikely that significant subsurface cultural deposits are intact in the proposed project parcel.

In addition, a review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office revealed that no historic properties and two archeological sites are located within 0.8 km (0.5 mi) of the proposed tower location (Figures 14 and 15). Previously recorded archeological sites 96-53 and 96-54 were reported by Dr. Kevin McBride in 1986. Site 96-54 was described as a small campsite as evidenced by a few quartz artifacts that likely did not have much research potential. Site 96-53, however, was described as potentially significant of unknown cultural affiliation that yielded a wide range of artifacts through systematic shovel testing. Finally, representatives of Heritage Consultants, LLC completed a pedestrian survey of the proposed project area. The field conditions at the time of this investigation are documented in Figure 16 and Photos 1 through 10. Based upon this field survey, it is clear that the proposed project area has been substantially modified. It appears to occupy a large spoil pile that has been leveled and contoured. The results of pedestrian survey of the proposed project area revealed that no prehistoric or historic cultural material or cultural features were visible within the proposed construction areas.

Environmental characteristics frequently are used to predict the location of archeological sites. Typically distance to water, slope, and soil types are included as part of these predictive models. A review of environmental characteristics identified in the vicinity of the proposed tower suggests that while this location may have once been favorable to past human settlement and landuse, it has been highly modified and it is unlikely to contain intact cultural deposits from either the prehistoric or historic eras. In addition, no historic properties were identified within the Area of Potential Effect associated with the proposed undertaking. As a result, it is the professional opinion of Heritage Consultants, LLC that no further cultural resources investigations of the proposed telecommunications tower are warranted. If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-667-3001 or email us info@heritage-consultants.com. We are at your service.

Sincerely,

Catherine M. Labadia, M.A. President & Principal Investigator



Figure 1. Excerpt from recent USGS topographic quadrangle map, depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 2. Excerpt from an 1853 historic map depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 3. Excerpt from an 1859 historic map depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 4. Excerpt from an 1874 historic map depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 5. Excerpt from an historic 1898 topographic quadrangle depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 6. Excerpt from a 1934 aerial image depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 7. Excerpt from a 1941 aerial image depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 8. Excerpt from a 1944 aerial image depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 9. Excerpt from a 1951 aerial image, depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 10. Excerpt from a 1990 aerial image, depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 11. Excerpt from a 2004 aerial image, depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 12. Excerpt from a 2012 aerial image depicting the proposed telecommunications tower location in New Milford, Connecticut.



Figure 13. Map depicting soil series located within the vicinity of proposed telecommunications tower in New Milford, Connecticut (Note: soil codes 308 and 309 are Udorthents, Smoothed and Udorthents, Flood Control, respectively).



Figure 14. Digital map depicting the locations of previously recorded archaeological sites in the vicinity of the proposed telecommunications tower location in New Milford, Connecticut.



Figure 15. Digital map depicting the locations of previously recorded National Register of Historic Places properties in the vicinity of the proposed telecommunications tower location in New Milford, Connecticut.



Figure 16.

Aerial view of the location of the proposed telecommunications tower in New Milford, Connecticut depicting the location and direction of each the following photographs.



Photo 1. Overview photo from the proposed tower location facing north.



Photo 2. Overview photo from the proposed tower location facing east.



Photo 3. Overview photo of the proposed tower location facing west.



Photo 4. Overview photo from the proposed tower location along the proposed access road facing south.



Photo 5. Overview photo towards the proposed tower location facing north along the proposed access road.



Photo 6. Overview photo of the proposed access road facing south.



Photo 7. Overview photo of the proposed access road towards the tower location facing north.



Photo 8. Overview photo of the existing access road facing southwest.



Photo 9. Overview photo of the existing access road toward the tower location facing northeast.



Photo 10. Overview photo of the existing access road facing northeast.

Power Density Report



Michael Lawton SAI Communications 260 Cedar Hill St. Marlborough, MA 01752 <u>Mike.Lawton@sai-comm.com</u>

October 25, 2013

Connecticut Siting Council

Subject: AT&T Wireless, CT4067 – New Milford

Dear Connecticut Siting Council:

At the request of AT&T Wireless, SAI Communications has performed an assessment of the RF Power Density for the proposed site located at Kent Road, New Milford, CT.

Calculations were done in compliance with FCC OET Bulletin 65. This report provides an FCC compliance assessment based on a "worst-case" analysis that all transmitters are simultaneously operating at full power and pointing directly at the ground.

FCC OET Bulletin 65 formula:

c –	2.56 * 1.64 * <i>ERP</i>			
5 =	$4 * \pi * R^2$			

Transmission Mode	Antenna Centerline AGL (ft)	Frequency (MHz)	Number of Channels	Effective Radiated Power per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	% MPE (Uncontrolled/ General Public)
AT&T UMTS	146	850	2	500.00	0.0169	0.5667	2.98%
AT&T UMTS	146	1900	2	500.00	0.0169	1	1.69%
AT&T LTE	146	700	2	500.00	0.0169	0.4667	3.62%
AT&T LTE	146	2100	2	500.00	0.0169	1	1.69%
Total							9.97%

Conclusion: AT&T's proposed antenna installation is calculated to be within 9.97% of FCC Standard for General Public/Uncontrolled Maximum Permissible Exposure (MPE).

Sincerely,

Michael Lawton SAI Communications