



WETLAND IMPACT ANALYSIS

June 2, 2024

Verizon Wireless
20 Alexander Drive
Wallingford, Connecticut 06492

Re: Proposed Verizon Wireless Milford East CT Telecommunications Facility
425 Old Tavern Road, Orange, Connecticut
APT Project No. CT1416440

On behalf of Verizon Wireless ("Verizon"), All-Points Technology Corporation, P.C. ("APT") performed an evaluation of wetland impacts associated with the proposed wireless telecommunication facility ("Facility") on a forested parcel off Old Tavern Road in Orange, Connecticut ("Subject Property"). The Subject Property, which is located north of Woodruff Road and west of Old Tavern Road, is a residentially developed mainly forested parcel with two wetland complexes and an intermittent stream draining north to south toward Woodruff Road. Some tree clearing in uplands would be required to accommodate the proposed Facility.

This wetland impact analysis is based on a field inspection performed on May 20, 2022 by an APT senior wetland scientist along with a review of project site plans prepared by On Air Engineering, LLC (latest revision date 04/18/24).

Wetland Resources

Two wetland areas were identified by an APT senior wetland scientist during the May 20, 2022 inspection proximate to the proposed Facility activities. Details of the APT wetland investigation are provided in a July 31, 2022 Wetland Inspection report, separately attached, with a summary provided below. Enclosed is a Wetland Inspection Map updated with the current Facility design. A forested, seasonally saturated wetland system with an interior intermittent watercourse (identified as Wetland 1) was identified in the east-central portion of the Subject Property just east of the proposed Facility. Wetland 2, located along the western portion of the Site, within proximity to the western boundary of the proposed Facility, consists of a seasonally saturated forested complex.

Wetland 1 is located in the east-central portion of the Subject Property and drains toward Woodruff Road where it terminates prior to encroachment into the roadway. This wetland generally occurs in a forested setting with a dominant overstory of red maple and black gum. A diverse shrub layer dominated by native species spicebush, winterberry, highbush blueberry, and northern arrowwood was observed with inclusions of invasive shrubs species multiflora rose and Japanese barberry. The hydrology of Wetland 1 is associated with hillside seepage and perched seasonally shallow groundwater due to underlying dense glacial till hardpan. A secondary component to this wetland's hydrology is overflow from a man-made pond located on the adjacent parcel to the north. Those flows are generally concentrated into an intermittent watercourse channel that flows south within the interior of Wetland 1.

Wetland 2 is located in the western portion of the Subject Property, to the west of the proposed Facility. Similar to Wetland 1, this complex is a seasonally saturated forested complex formed from hillside seepage and underlying hardpan soils which create a seasonally perched groundwater table. Vegetative and species distribution is consistent with the shrub and tree layers in Wetland 1, with an herbaceous layer of tussock sedge, skunk cabbage, royal fern, and cinnamon fern. Wetland 2 drains south to the interface of Woodruff Road where flows are conveyed into a catch basin.

Wetland Impact Analysis

The fundamental concept of wetland impact analysis is based on the precept that wetland impacts should first be avoided where possible. Secondly, if practicable alternatives do not exist to avoid wetland impacts, then impacts should be minimized. Thirdly, unavoidable wetland impacts should be mitigated.

The proposed Facility has been designed to avoid any direct wetland impacts to either Wetlands 1 or 2. In addition, due to wetland constraints to both the east and west the Facility compound has been modified to a 30-foot width and expansion to 100 feet in length to maximize buffers to wetlands to the east and west. The Facility location has been selected to provide a mature forested buffer to Woodruff Road while at the same time maximizing those buffers to Wetlands 1 and 2. As a result of these design considerations, both eastern and western sides of the proposed Facility's fenced compound would be ± 37 feet to the boundaries of Wetland 1 and 2 at its narrowest point at the north end of the compound. Movement of the Facility farther north would result in buffers reduced to ± 10 feet to both wetlands. The upland forest habitat that would remain between the Facility and Wetlands 1 and Wetland 2 would provide sufficient buffer to minimize any indirect impacts to the nearby wetlands. To further enhance the upland forested buffer and mitigate for any indirect impacts, a buffer enhancement plan is proposed to include native shrub plantings and native seed mix surrounding the compound and access road.

Due to the proximity of wetlands, protection of these resources during construction to avoid potential short-term impacts is proposed. First, protection measures including the installation and maintenance of erosion controls in accordance with the *2024 Connecticut Guidelines for Soil Erosion and Sediment Control* will be implemented during construction to avoid unintentional impacts. Secondly, a Wetland Protection Plan will be implemented during construction that will include an environmental monitor to ensure the contractor is aware of the environmentally sensitive nature of the project and to review protective erosion control measures throughout the duration of construction. Please refer to the Environmental Notes – Resources Protection Measures provided on Sheet No. C-3 of the project site plans for additional details. By implementing these protective techniques throughout the duration of construction, potential adverse impacts to nearby wetland resources will be mitigated.

Considering the close encroachment of the Facility to Wetlands 1 and 2, additional measures are recommended to enhance the remaining vegetation that buffers the Facility from both wetlands. A wetland buffer enhancement plan is proposed surrounding the Facility's compound and access road totaling $\pm 10,000$ SF that would include plantings of native shrubs and removal of invasive species multiflora rose and Japanese barberry. These plantings would enhance the upland understory thereby providing improvements to functions of the buffer and nearby wetlands with a focus on water quality and wildlife habitat enhancements. Details of the wetland buffer enhancement plan are provided on Sheets C-2 and C-3 of the project site plans.

Potential long-term secondary impacts to wetland resources associated with the operation of this Facility are minimized due to its unstaffed nature and negligible traffic associated with maintenance visits that typically require one visit every two to three months.

With implementation of erosion controls and wetland protection measures during construction and enhancements to the wetland buffer, the proposed Facility would not result in a likely adverse impact to wetland resources.

If you have any questions regarding the above-referenced information, please feel free to contact me by telephone at (860) 552-2033 or via email at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.



Dean Gustafson
Senior Wetland Scientist

cc: Kenneth C. Baldwin, Robinson & Cole, LLP

Enclosures

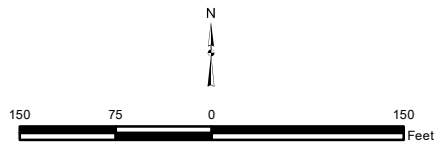
Wetland Inspection Map



Legend

- Proposed Monopole
- Proposed Verizon Wireless Site Layout
- Proposed Wetland Buffer Enhancement Area
- - - - - Intermittent Stream
- - - - - 100' Upland Review
- - - - - Delineated Wetland Boundary
- Approximate Wetland
- Existing Catch Basin
- Subject Property
- Approximate Parcel Boundary
- Municipal Boundary

Map Notes:
 Base Map Source: 2019 Aerial Photograph (CTECO)
 Map Scale: 1 inch = 150 feet
 Map Date: May 2024



Wetland Inspection Map
 Proposed Wireless
 Telecommunications Facility
 Milford East CT
 425 Old Tavern Road
 Orange, Connecticut

