

# **APPENDIX G**

## Wetland and Vernal Pool Protection Plan

## ENVIRONMENTAL NOTES

### Wetland and Vernal Pool Protection Plan

As a result of the proposed development's location in the vicinity of wetlands and potential vernal pool habitat, the following Best Management Practices ("BMPs") are recommended to avoid unintentional impact to wetland habitats or mortality to vernal pool herpetofauna (i.e., spotted salamander, wood frog, turtles, etc.) during construction activities. This plan includes elements that will protect herpetofauna should construction activities occur during peak amphibian movement periods (early spring breeding [March 1st to May 15th] and late summer dispersal [July 15th to September 15th]). Complete details of the recommended BMPs are provided below and will be incorporated into the Connecticut Siting Council's Development and Management ("D&M") Plan.

A qualified professional from APT would serve as the Environmental Monitor for this project to ensure that vernal pool protection measures are implemented properly. The proposed wetland and vernal pool protection program consists of several components including: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; herpetofauna sweeps; education of all contractors and sub-contractors prior to initiation of work on the site; protective measures; and, reporting.

#### 1. Erosion and Sedimentation Controls

- a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. No permanent erosion control products or reinforced silt fence will be used on the project. Temporary erosion control products that will be exposed at the ground surface represent a potential for wildlife entanglement will use either erosion control blankets and fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (netless) or netting composed of planar woven natural biodegradable fiber to avoid/minimize wildlife entanglement.
- b. Installation of erosion and sedimentation controls, required for erosion control compliance and creation of a barrier to possible migrating/dispersing herpetofauna, shall be performed by the Contractor following clearing activities and prior to any earthwork. The Environmental Monitor will inspect the work zone area prior to and following erosion control barrier installation to ensure the area is free of herpetofauna and satisfactorily installed. The intent of the barrier is to segregate the majority of the work zone from migrating/dispersing herpetofauna. Oftentimes complete isolation of a work zone is not feasible due to accessibility needs and locations of staging/material storage areas, etc. In those circumstances (temporary crossing of Wetland 2 of the utility route), the barriers will be positioned to deflect migrating/dispersal routes away from the work zone to minimize potential encounters with herpetofauna.
- c. Silt fencing installed along the proposed utility routing through Wetland 2 shall be installed with gaps of 1 to 2 feet placed every 50 feet and a second row of erosion control shall be placed 1 to 2 feet behind the first row and staggered ("syncopated silt fencing"<sup>1</sup>) so that wildlife, particularly herpetofauna can navigate through the barrier but not compromise the integrity of the erosion and

---

<sup>1</sup> The use of a syncopated style of silt fence installation to create a herpetofauna "friendly" crossing was originally designed by Dr. Michael Klemens, a renowned expert in herpetology and assessment of development impacts to vernal pool habitats, in 2010 for a project in northwestern Connecticut that received approval from the Connecticut Siting Council (Petition No. 983).

sedimentation control measure. No syncopation openings should be included for the remaining areas circumventing the Project.

- d. All silt fencing shall be removed within 30 days of completion of work and permanent stabilization of site soils so that herpetofauna movements between uplands and wetlands are not restricted.

## **2. Contractor Education:**

- a. Prior to work on site and initial deployment/mobilization of equipment and materials, the Contractor shall attend an educational session at the pre-construction meeting with APT. This orientation and educational session will consist of information such as, but not limited to: representative photographs of typical herpetofauna that may be encountered, Connecticut and Federal listing status of species that could be encountered, typical species behavior, and proper procedures if species are encountered. The meeting will further emphasize the non-aggressive nature of these species, the absence of need to destroy such animals and the need to follow Protective Measures as described in Section 4 below. The Contractor will designate one of its workers as the "Project Monitor", who will receive more intense training on the identification and protection of herpetofauna.
- b. The Contractor will designate a member of its crew as the Project Monitor to be responsible for the periodic "sweeps" for herpetofauna within the work zone each morning, during any and all transportation of vehicles along the access drive, and for any ground disturbance work. This individual will receive more intense training from APT on the identification and protection of herpetofauna in order to perform sweeps. Any herpetofauna discovered will be reported to APT, photographed if possible, and relocated outside the work zone in the general direction the animal was oriented.
- c. The Contractor's Project Monitor will be provided with cell phone and email contacts for APT personnel to immediately report any encounters with herpetofauna. Educational poster materials will be provided by APT and displayed on the job site to maintain worker awareness as the project progresses.
- d. APT will also post Caution Signs throughout the project site for the duration of the construction project providing notice of the environmentally sensitive nature of the work area, the potential for encountering various amphibians and reptiles and precautions to be taken to avoid injury to or mortality of these animals.

## **3. Petroleum Materials Storage and Spill Prevention**

- a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location in proximity to sensitive wetlands.
- b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the Contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper and timely disposal off site in accordance with applicable local, state and federal laws.

- c. The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.
  - i. Petroleum and Hazardous Materials Storage and Refueling
    - 1. Refueling of vehicles or machinery shall take place on an impervious pad with secondary containment designed to contain fuels.
    - 2. Any refueling drums/tanks or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.
  - ii. Initial Spill Response Procedures
    - 1. Stop operations and shut off equipment.
    - 2. Remove any sources of spark or flame.
    - 3. Contain the source of the spill.
    - 4. Determine the approximate volume of the spill.
    - 5. Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
    - 6. Ensure that fellow workers are notified of the spill.
  - iii. Spill Clean Up & Containment
    - 1. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
    - 2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
    - 3. Isolate and eliminate the spill source.
    - 4. Contact the appropriate local, state and/or federal agencies, as necessary.
    - 5. Contact a disposal company to properly dispose of contaminated materials.
  - iv. Reporting
    - 1. Complete an incident report.
    - 2. Submit a completed incident report to the Connecticut Siting Council.

#### **4. Protective Measures**

- a. A thorough cover search of the construction area will be performed by APT's Environmental Monitor for herpetofauna prior to and following installation of the silt fencing barriers to remove any species from the work zone prior to the initiation of construction activities. Any herpetofauna discovered would be relocated outside the work zone in the general direction the animal was oriented. Periodic inspections will be performed by APT's Environmental Monitor throughout the duration of the construction.
- b. The Contractor's Project Monitor will inspect the work area each morning and escort initial vehicle access into the site each morning along the access drive to visually inspect for any herpetofauna. Any herpetofauna discovered would be relocated outside the work zone in the general direction the animal was oriented.

- c. Any herpetofauna requiring relocation out of the work zone will be captured with the use of a net for careful handling and placement out of the work zone in the general direction it was observed heading.
- d. Any stormwater management features, ruts or artificial depressions that could hold water created intentionally or unintentionally by site clearing/construction activities will be properly filled in and permanently stabilized with vegetation to avoid the creation of vernal pool “decoy pools” that could intercept amphibians moving toward the vernal pools. Stormwater management features such as level spreaders will be carefully reviewed in the field to ensure that standing water does not endure for more than a 24 hour period to avoid creation of decoy pools and may be subject to field design changes. Any such proposed design changes will be reviewed by the design engineer to ensure stormwater management functions are maintained.
- e. Erosion control measures will be removed no later than 30 days following final site stabilization so as not to impede migration of herpetofauna or other wildlife.

**5. Herbicide and Pesticide Restrictions**

- a. Use of herbicides and pesticides at the proposed wireless telecommunications Facility shall be restricted.

**6. Reporting**

- a. A summary inspection report (brief narrative and applicable photos) will be submitted to the Connecticut Siting Council documenting inspections performed by APT for compliance verification following completion of the project. Any observations of herpetofauna will be included in the report. Any observations of rare species will be reported to the Connecticut Department of Energy & Environmental Protection Natural Diversity Data Base.