



Preliminary USFWS, Migratory Birds & NDDB Compliance Determination

November 15, 2017

**Verizon Wireless
99 East River Drive
East Hartford, CT 06108**

APT Project No.: CT1417950

**Re: Proposed Lebanon Center CT Facility
917 Exeter Road
Lebanon, Connecticut**

On behalf of Cellco Partnership and its controlled affiliates doing business as Verizon Wireless ("Cellco"), All-Points Technology Corporation, P.C. ("APT") performed a preliminary evaluation with respect to possible federally- and state-listed, threatened or endangered species as well as migratory bird species in order to determine if the proposed referenced communications facility ("Facility") would result in a potential adverse effect to listed species and species of concern.

USFWS The federal consultation was completed in accordance with Federal Communications Commission ("FCC") rules implementing the National Environmental Policy Act ("NEPA") and Section 7 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC"). Based on the results of the IPaC review, one federally-listed¹ threatened species is known to occur in the vicinity of the subject property documented as the northern long-eared bat ("NLEB"; *Myotis septentrionalis*). As a result of this preliminary finding, APT performed an evaluation to determine if the proposed referenced Facility would result in a likely adverse effect to NLEB.

The proposed communications tower is located within a forested area adjacent to an existing cleared animal pasture that would result in minimal forest clearing; 12 trees would need to be removed. In addition, the project is not located near known NLEB hibernacula or maternity roost trees. Consultation with the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division Natural Diversity Data Base ("NDDB") revealed that the proposed Facility is not within 150 feet of a known occupied maternity roost tree and is not within 0.25 mile of a known NLEB hibernaculum. The nearest NLEB habitat resource to the proposed activity is located in North Branford ±30 miles to the southwest. Therefore, the proposed project is not likely to adversely affect NLEB.

APT has submitted the USFWS's Northern Long Eared Bat final 4(d) rule Streamlined Consultation Form under the consultation framework that allows federal agencies to rely upon the USFWS January 5, 2016, intra-Service Programmatic Biological Opinion ("BO") on the Final 4(d) Rule for the NLEB for section 7(a)(2) compliance. If the USFWS does not respond within 30 days from submittal of this form (December 6, 2017), one may presume that USFWS determination is informed by the best available information and that Cellco's project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS' BO.

¹ Listing under the federal Endangered Species Act

Cellco would consider following additional recommended measures for NLEB conservation, noted below, as encouraged in the April 29, 2016 FCC Public Notice², as the project schedule allows.

- Conduct tree removal activities outside of the NLEB pup season (June 1-July 31) and active season (April 1-October 31) to minimize impacts to pups at roosts not yet identified.
- Avoid clearing suitable spring staging and fall swarming habitat within a five-mile radius of known or assumed NLEB hibernacula during the staging and swarming seasons (April 1-May 15 and August 15-November 14, respectively). NOT APPLICABLE.
- Maintain dead trees and large trees when possible.
- Use herbicides and pesticides only if unavoidable.
- Minimize exterior lighting, opting for down-shielded, motion-sensor security lights under towers instead of constant illumination.

Migratory Birds In August 2016, the USFWS prepared its *Recommended Best Practices for Communication Tower Design, Siting, Construction, Operation, Maintenance, and Decommissioning*. These suggested best practices were developed to assist tower companies in developing their communication systems in a way which minimizes the risk to migratory birds and threatened and endangered species.

The proposed Facility would comply with the USFWS' recommended guidelines for reducing impacts to migratory birds as follows. The proposed Facility would consist of a 150-foot monopole structure which requires neither guy wires nor lighting and is therefore consistent with USFWS' suggested tower design criteria: tower height is less than 200 feet above ground level; would not contain guy wires; would not require tower lighting and on-ground security lighting would be down-shielded and motion-sensored. In addition, placement of the Facility avoids wetlands, known bird concentration areas (closest Important Bird Area is ±4.3 miles away – Lyme Forest Block in Lyme and East Lyme), rare species or critical habitat (site is not located within or near a DEEP NDDDB buffer area or a Connecticut Critical Habitat) and ridgelines, thereby minimizing environmental impacts that could affect migratory birds.

Cellco would consider following the USFWS' construction recommendations, noted below, as the project schedule allows.

- If construction activities should occur during the peak nesting period of April 15 through July 15³, efforts would be taken to complete tree clearing work prior to April 15.
- If tree clearing has not been completed by April 15, an avian survey may be conducted to determine if breeding birds would be disturbed.
- If the avian survey concludes that breeding birds would be disturbed, tree clearing activities may be restricted from the April 15 through July 15 peak nesting period (or a modified time frame based on the specific findings of the survey).

By observing these guidelines, the proposed Facility construction activities are not anticipated to result in significant disturbance to breeding birds protected by the Migratory Bird Treaty Act ("MBTA").

² Federal Communications Commission. *Tower Construction Guidance for Protection of Northern Long-Eared Bat Under the Endangered Species Act*. Public Notice DA 16-476. April 29, 2016.

³ USFWS identifies the peak avian nesting season as April 15 through July 15 and recommends clearing activities be performed before this period in order to comply with the Migratory Bird Treaty Act, personal communication with Maria Tur, USFWS New England Field Office, February 27, 2014.

NDDB No known areas of state-listed species are currently depicted on the most recent DEEP NDDB Maps in the location of the proposed Verizon Wireless development or in its vicinity. Please refer to the enclosed NDDB Map. Although no impacts to state-listed species are anticipated with the proposed Facility, APT has consulted with the DEEP to confirm that no documented occurrences of State Listed Endangered, Threatened, and Special Concern species occur in the vicinity of the proposed Facility. DEEP issued a November 8, 2017 determination letter indicating State Special Concern Terrapene carolina (eastern box turtle) in the vicinity of the project site and that protection strategies were recommended to protection this turtle; please refer to the enclosed letter. Cellco will adhere to DEEP's recommended turtle protection measures during construction to avoid potential impact to this State-listed species with implementation of the enclosed eastern box turtle protection plan.

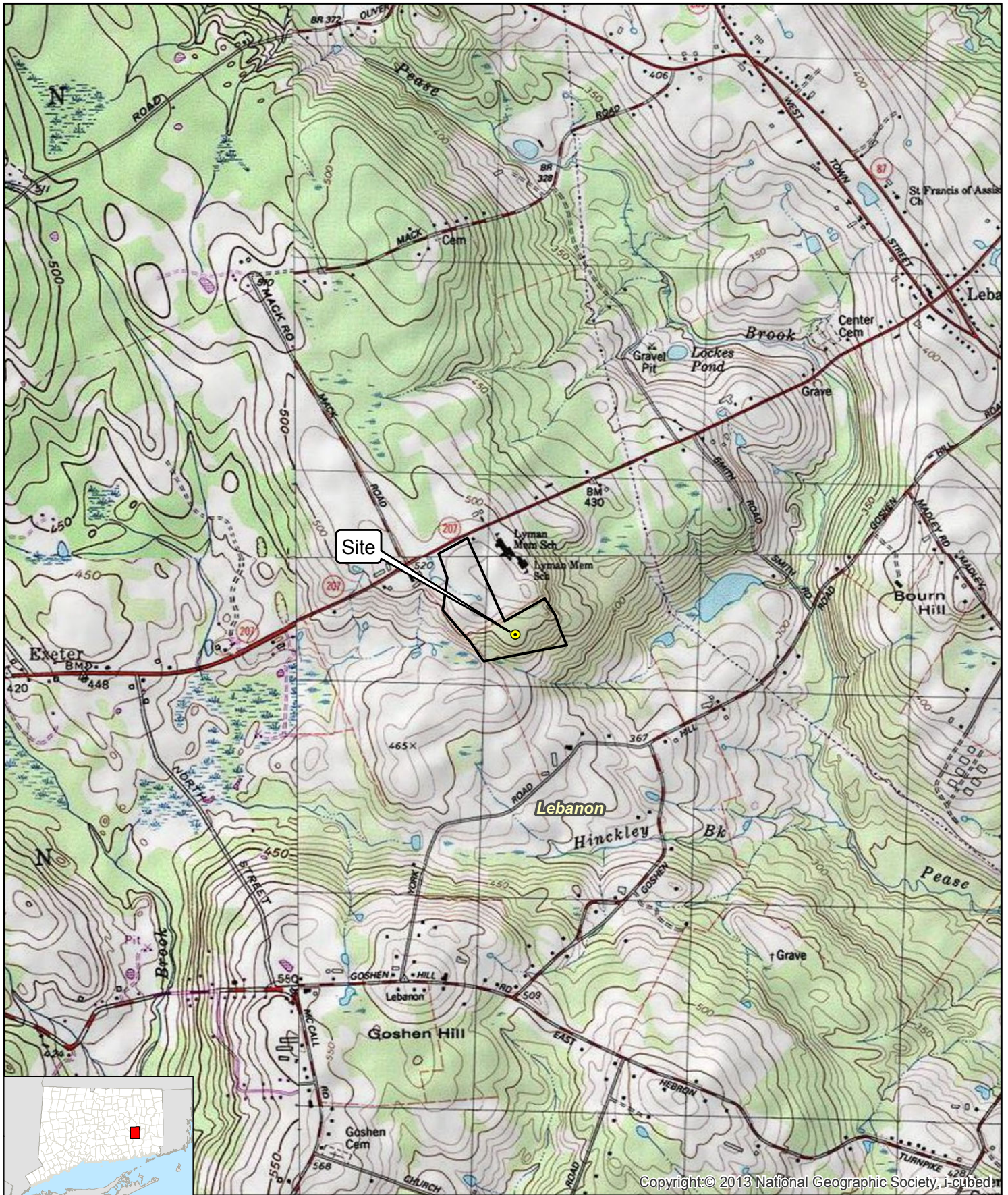
Sincerely,



Dean Gustafson
Senior Environmental Scientist





Enclosures

NDDDB Map

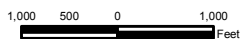


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Legend

-  Proposed Monopole Tower
-  Subject Property
-  Natural Diversity Database (updated June 2017)*
-  Municipal Boundary

Map Notes:
 * Item Not Located within Mapped Area
 Base Map Source: USGS 7.5 Minute Topographic
 Quadrangle Map, Fitchville, CT (1983)
 Map Scale: 1:24,000
 Map Date: September 2017



NDDB Map

Proposed Wireless
 Telecommunications Facility
 Lebanon Center CT
 917 Exeter Road
 Lebanon, Connecticut



NDDB Determination Letter



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

November 8, 2017

Mr. Dean Gustafson
All-Points Technology Corporation, P.C.
30 Boggs Lane
Lebanon, CT 06249
dgustafson@allpointstech.com

Project: Verizon Wireless Telecommunications Facility and Monopole, Lyman Memorial High School,
917 Exeter Rd, Lebanon, Connecticut
NDDB Determination No.: 201709477

Dear Dean Gustafson,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed Verizon Wireless Telecommunications Facility and Monopole, Lyman Memorial High School, 917 Exeter Rd, Lebanon 1, Connecticut. According to our records we have known extant populations of State Special Concern *Terrapene carolina* (eastern box turtle) in the vicinity of the project site.

Eastern Box Turtle: The eastern box turtle is a small terrestrial turtle recognized by its domed shell and hinged plastron. Eastern box turtles inhabit old fields and deciduous forests, which can include power lines and logged woodlands. They are often found near small streams and ponds. The adults are completely terrestrial but the young may be semiaquatic, and hibernate on land by digging down in the soil from October to April often with its carapace just a few inches beneath the soil surface. . They have an extremely small home range and can usually be found in the same area year after year. Eastern box turtles have been negatively impacted by the loss of suitable habitat. Some turtles may be killed directly by construction activities, but many more are lost when important habitat areas for shelter, feeding, hibernation, or nesting are destroyed. As remaining habitat is fragmented into smaller pieces, turtle populations can become small and isolated. Reducing the frequency that motorized vehicles enter box turtle habitat would be beneficial in minimizing direct mortality of adults.

Recommended Protection Strategies for Turtles:

Any work should occur when these turtles are active (April 1st to October 30th). Conducting land clearing while the turtle is active will allow the animal to move out of harm's way and minimize mortality to hibernating individuals. I recommend the additional following protection strategies in order to protect this turtle:

- Exclusionary practices will be required to prevent any turtle access into construction areas. These measures will need to be installed at the limits of disturbance.
- Exclusionary fencing must be at least 20 in tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through. Do not use plastic netted silt-fence.

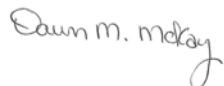
- All staging and storage areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed to remove individuals and exclude them from re-entry.
- All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species, and instructed to relocate turtles found inside work areas or notify the appropriate authorities to relocate individuals.
- Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
- No heavy machinery or vehicles may be parked in any turtle habitat.
- Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal pools.
- The Contractor must search the work area each morning prior to any work being done.
- Avoid and limit any equipment use within 50 feet of streams and brooks.
- Any confirmed sightings of box, wood or spotted turtles should be reported and documented with the NDDDB (nddbrequestdep@ct.gov) on the appropriate special animal form found at (http://www.ct.gov/deep/cwp/view.asp?a=2702&q=323460&depNav_GID=1641)

If these protection strategies are followed then the proposed activities will lessen the impact on this state-listed species. This determination is good for two years. Please re-submit an NDDDB Request for Review if the scope of work changes or if work has not begun on this project by November 8, 2019.

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 and Environmental Protection's Natural History Survey 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 substitutes 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 further questions at (860) 424-3592, or dawn.mckay@ct.gov . Thank you for consulting the Natural Diversity Data Base. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEEP for the proposed site.

Sincerely,



Dawn M. McKay
Environmental Analyst 3

Eastern Box Turtle Protection Plan

ENVIRONMENTAL NOTES

Eastern Box Turtle Protection Program

Eastern Box Turtle, a State Special Concern species afforded protection under the Connecticut Endangered Species Act, is known to occur within the vicinity of the site. The following rare species protective measures satisfy requirements from the Connecticut Department of Energy & Environmental Protection ("DEEP") Wildlife Division in accordance with their letter dated November 8, 2017.

It is of the utmost importance that the Contractor complies with the requirement for implementation of these protective measures and the education of its employees and subcontractors performing work on the project site. This protection plan shall be implemented if work will occur during the turtle's active period (April 1st to October 30th). All-Points Technology Corporation, P.C. ("APT") will serve as the Environmental Monitor for this project to ensure that these protection measures are implemented properly and will provide an education session on rare species that may be encountered and the project's proximity to sensitive habitat prior to the start of construction activities. The Contractor shall contact Dean Gustafson, Senior Environmental Scientist at APT, at least 5 business days prior to the pre-construction meeting. Mr. Gustafson can be reached by phone at (860) 663-1697 ext. 201 or via email at dgustafson@allpointstech.com.

The proposed protection program consists of several components: education of all contractors and sub-contractors prior to initiation of work on the site; protective measures; periodic inspection of the construction project; and, reporting.

1. Isolation Measures & Sedimentation and Erosion 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, but particularly snakes. No permanent erosion control products or reinforced silt fence will be used on the Verizon Wireless project. Temporary erosion control products 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 sedimentation and erosion controls, required for erosion control compliance and creation of a barrier to possible migrating/dispersing turtles, 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 Eastern Box Turtle and document barriers have been satisfactorily installed. The intent of the barrier is to segregate the majority of the work zone and isolate it from foraging/migrating/dispersing turtles, snakes and other herpetofauna. Oftentimes complete isolation of a work zone is not feasible due to accessibility needs and locations of staging/material storage areas, etc. Although the barriers may not completely isolate the work zone, they will be positioned to deflect migrating/dispersal routes away from the work zone to minimize potential encounters with turtles, snakes and other herpetofauna.
- c. The Contractor is responsible for daily inspections of the sedimentation and erosion controls for tears or breeches and accumulation levels of sediment, particularly following storm events that generate a discharge. APT will provide periodic inspections of the sedimentation and erosion controls throughout the duration of construction activities only as it pertains to protection of rare species and nearby wetlands. Third party monitoring of sedimentation and erosion controls will be

performed by other parties, as necessary, under applicable local, state and/or federal regulations.

- d. The extent of the sedimentation and erosion controls will be as shown on the site plans. The Contractor shall have additional sedimentation and erosion controls stockpiled on site should field or construction conditions warrant extending the controls as directed by APT.
- e. No equipment, vehicles or construction materials shall be stored outside of the sedimentation and erosion controls within 100 feet of wetlands or watercourses.
- f. All sedimentation and erosion controls shall be removed within 30 days of completion of work and permanent stabilization of site soils so that reptile and amphibian movement between uplands and wetlands is not restricted.

2. Contractor Education

- a. Prior to work on site, the Contractor shall attend an educational session at the pre-construction meeting with APT. This orientation and educational session will consist of an introductory meeting with APT providing photos of Eastern Box Turtle emphasizing the non-aggressive nature of these species, the absence of need to destroy animals that might be encountered and the need to follow Protective Measures as described in Section 4 below. Workers will also be provided information regarding the identification of other turtles, snakes and common herpetofauna species that could be encountered.
- b. The education session will also focus on means to discriminate between the species of concern and other native species to avoid unnecessary "false alarms". Encounters with any species of turtles or snakes will be documented.
- c. The Contractor will be provided with cell phone and email contacts for APT personnel to immediately report any encounters with eastern box turtle or other species. Educational poster materials will be provided by APT and displayed on the job site to maintain worker awareness as the project progresses.

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 to avoid possible impact to nearby habitats.
- 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 occur a minimum of 100 feet from wetlands or watercourses and shall take place on an impervious pad with secondary containment designed to contain fuels.

2. Any fuel 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 Town of Lebanon.

4. Species Protective Measures

- a. Prior to the start of construction each day, the Contractor shall search the entire work area for turtles.
- b. If a turtle is found, it shall be immediately moved, unharmed, by carefully grasped in both hands, one on each side of the shell, between the turtle's forelimbs and the hind limbs, and placed just outside of the isolation barrier in the same approximate direction it was walking.
- c. Special care shall be taken by the Contractor during early morning and evening hours so that possible basking or foraging turtles are not harmed by construction activities.

5. Herbicide and Pesticide Restrictions

- a. The use of herbicides and pesticides at the proposed facility shall be avoided when possible. In the event herbicides and/or pesticides are required at the proposed facility, their use will be used in accordance with Integrated Pest Management ("IPM") principles with particular attention to minimize applications within 100 feet of wetland or watercourse resources. No applications of herbicides or pesticides are allowed within actual wetland or watercourse resources.

6. Reporting

- a. Daily Compliance Monitoring Reports (brief narrative and applicable photos) documenting each APT inspection will be submitted by APT to Verizon Wireless for compliance verification. Any observations of turtles will be included in the reports.
- b. Following completion of the construction project, APT will provide a Compliance Monitoring Summary Report to Verizon Wireless documenting implementation of the rare species and wetland protection program, monitoring and any species observations. Verizon Wireless will provide a copy of the Compliance Monitoring Summary Report to the Connecticut Siting Council for compliance verification.
- c. Any observations of Eastern Box Turtle will be reported to CTDEEP by APT, with photo-documentation (if possible) and with specific information on the location and disposition of the animal.