STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:
NEW CINGULAR WIRELESS PCS, LLC (AT&T) APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED AT ONE OF THE TWO PROPOSED SITES LOCATED IN ROXBURY, CONNECTICUT

DOCKET NO. 428

November 29, 2012

SUPPLEMENTAL SUBMISSION

New Cingular Wireless PCS, LLC ("AT&T") submits the following information to the State of Connecticut Siting Council in the captioned proceeding:

Attachment A: Memorandum and Materials Responsive to CSC Pre-Hearing Questions Set II Requesting Additional Information Regarding Visibility of Proposed Candidates prepared by All Points Technology Corporation dated November 7, 2012.

Attachment B: Memorandum and Materials Responsive to Public Comment Regarding Potential Vernal Pool Habitat at Site B (126 Transylvania Road) prepared by All Points Technology Corporation dated November 29, 2012.

It is important to note that this memorandum concludes that the identified onsite vernal pool will be not be directly impacted by the proposed development. In addition is was concluded that the proposed project would not impact the terrestrial habitat used by adult amphibians that breed in this vernal pool and the project will not influence the vernal pool hydroperiod or hydrology. In short, the proposed AT&T project will not result in a likely adverse impact to vernal pool and related terrestrial habitat but as indicated in the Application Best Management Practices ("BMPs") would be implemented during construction to minimize the potential for temporary impacts amphibians traveling through the construction area.

CERTIFICATE OF SERVICE

I hereby certify that on this day, a copy of the foregoing was sent electronically and by overnight mail to the Connecticut Siting Council with copy to:

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Dated: November 29, 2012

Daniel M. Laub

ATTACHMENT A

ALL-POINTS
TECHNOLOGY CORPORATION

MEMORANDUM

Date: November 7, 2012

Ref: CT Siting Council Docket 428 - Roxbury, Connecticut

To: Ms. Lucia Chiocchio
Cuddy & Feder, LLP

From: Michael Libertine

Re: Responses to CSC Pre-Hearing Questions - Set Two

In response to the Connecticut Siting Council's Pre-Hearing Questions, Set 2 (dated September 11, 2012), All-Points Technology Corporation, P.C. conducted supplemental balloon floats at each of the two Candidate sites on October 26, 2012 to evaluate views from three specific locations, as identified below. For reference, Site A is identified as Roxbury Tax Assessor Parcel ID #32-008, located off Route 67; Site B is located at 126 Transylvania Road. An approximately four-foot diameter red, helium-filled weather balloon was tethered at the proposed facility height of 170 above ground level ("AGL") at Site A. A similar black balloon was used at Site B, also tethered at 170 feet AGL.

In questions 6 and 7, the Siting Council requested that the applicant (AT&T) provide photo-simulations of the proposed tower at Site A when viewed from the cul-de-sac at Bronson Mountain Road in the vicinity of Lots 1 and 2, as well as from Transylvania Pond. Please note that the balloon associated with Site A was flown from an alternate location approximately 100 feet to the north of its original location (this change in location and subsequent evaluation was in response to question 4 of the Interrogatories of Bronson Mountain Farm Homeowners' Association, Set 1). Question 10 asked the applicant to provide a photo-simulation of the proposed tower at Site B as viewed from Highmeadow Lane.

The attached photographs and simulations are provided in response to these requests. Our observations and photographs were compiled from the following locations:

- View 1 – Bronson Mountain Road Cul-De-Sac – Site A. This view is from the same general location as that of photo simulation number 9 in the application submission (the lot 3 sign evident in simulation #9 is obscured by vegetation in the enclosed photographs). The potential re-location of Site A northward slightly shifts the perspective (to the right) when viewed from the end of the cul-de-sac.
- View 2 - Bronson Mountain Road at Entrance to Lot 2 – Site A. The balloon was not visible from this location, as it was obscured by the combination of the remaining leaves on the trees and the intervening mast. It is possible that some obscured, seasonal views might be achieved through the woods from this general area.

- View 3 - Bronson Mountain Road on Lot 2 – Site A. From the central portion of this lot (nearly 11 acres in size), the facility should be seasonally visible through the trees, as depicted in the photo-simulation.
- Views 4 & 5 – Bronson Mountain Road - Site A. Two views along the approach to the cul-de-sac illustrate partial views of the facility would be achieved. In view 4, the top 30± feet of the facility would be seen from this vantage point year-round, as a small "window" of visibility occurs through the trees. Even with the leaves off the trees, however, lower portions of the facility would be obscured. In view 5, the facility comes into sight briefly; this perspective would occur during leaf-off conditions only.
- View 6 – Transylvania Pond – Site A. As presented in the February 2011 Visual Resource Evaluation (see Viewshed Map behind Tab 3-C of the application), the facility would be visible year-round from southeast shoreline of Transylvania Pond. Views would be limited to the top 15± feet of the tower as it slightly eclipses the tree canopy.
- Candidate Site B is not visible from Locations 1 through 6 or their respective vicinities.
- Views 7A & 7B - Highmeadow Lane (at top of road along driveway). Neither Candidate would be visible at any time of year from this location.
- Views 8A & 8B - Highmeadow Lane (at top of confluence of top two driveways). Neither Candidate would be visible at any time of year from this location.

LOOKING TOWARDS
SITE A

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	**BRONSON MOUNTAIN ROAD CUL-DE-SAC**	**NORTHWEST**	**+/- 0.20 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
1	**BRONSON MOUNTAIN ROAD CUL-DE-SAC**	**NORTHWEST**	**+/- 0.20 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

LOOKING TOWARDS
SITE A

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
2	**BRONSON MOUNTAIN ROAD AT ENTRANCE TO LOT 2**	**NORTHWEST**	**+/- 0.20 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	**BRONSON MOUNTAIN ROAD ON LOT 2**	**NORTHWEST**	**+/- 0.16 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
3	**BRONSON MOUNTAIN ROAD ON LOT 2**	**NORTHWEST**	**+/- 0.16 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

LOOKING TOWARDS
SITE A

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**BRONSON MOUNTAIN ROAD**	**NORTHWEST**	**+/- 0.22 MILE**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
4	**BRONSON MOUNTAIN ROAD**	**NORTHWEST**	**+/- 0.22 MILE**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	**BRONSON MOUNTAIN ROAD**	**NORTHWEST**	**+/- 0.27 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

at&t

SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
5	**BRONSON MOUNTAIN ROAD**	**NORTHWEST**	**+/- 0.27 MILE**	**SEASONAL**

ALL-POINTS TECHNOLOGY CORPORATION

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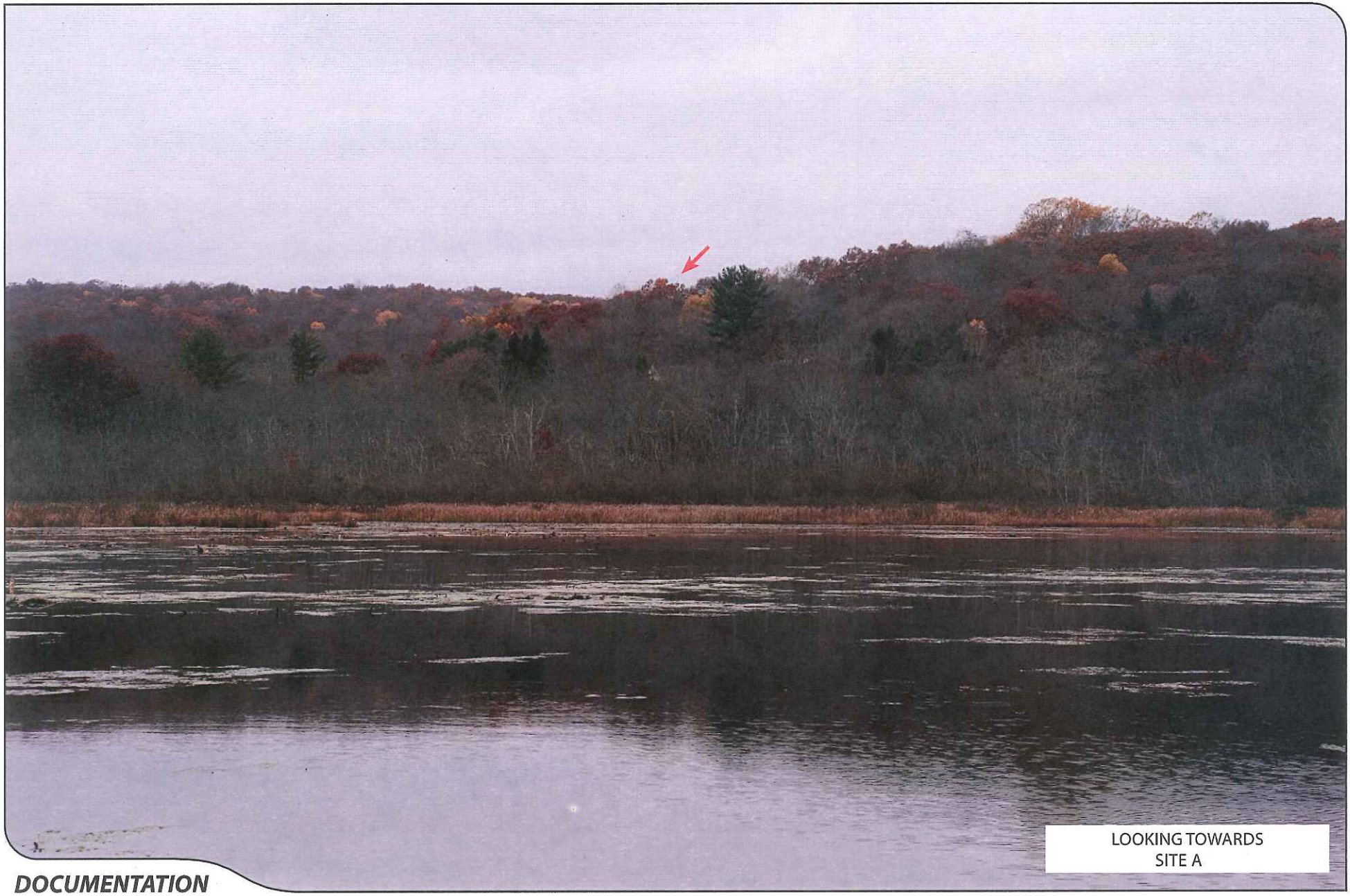

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	**TRANSYLVANIA POND**	**WEST**	**+/- 1.37 MILES**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

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SIMULATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
6	**TRANSYLVANIA POND**	**WEST**	**+/- 1.37 MILES**	**YEAR ROUND**

ALL-POINTS TECHNOLOGY CORPORATION

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DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7A	**HIGHMEADOW LANE (AT TOP ALONG DRIVEWAY)**	**SOUTHEAST**	**+/- 0.40 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

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DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
7B	**HIGHMEADOW LANE (AT TOP ALONG DRIVEWAY)**	**NORTH**	**+/- 0.77 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

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DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8A	**HIGHMEADOW LANE (AT CONFLUENCE OF TOP TWO DRIVEWAYS)**	**SOUTHEAST**	**+/- 0.39 MILE**	**NOT VISIBLE**

ALL-POINTS TECHNOLOGY CORPORATION

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DOCUMENTATION

PHOTO	LOCATION	ORIENTATION	DISTANCE TO SITE	VISIBILITY
8B	HIGHMEADOW LANE (AT CONFLUENCE OF TOP TWO DRIVEWAYS)	NORTH	+/- 0.71 MILE	NOT VISIBLE

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ATTACHMENT B

ALL-POINTS
TECHNOLOGY CORPORATION

MEMORANDUM

Date: November 29, 2012

New Cingular Wireless PCS, LLC
500 Enterprise Drive, Suite 3A
Rocky Hill, CT 06067

APT Project No.: CT193863

Re: Vernal Pool Impact Evaluation
Proposed AT&T Roxbury Facility
Candidate B: 126 Transylvania Road
Roxbury, Connecticut

New Cingular Wireless PCS, LLC ("AT&T") proposes to construct a new wireless telecommunications Facility ("Facility") at one of two possible locations in Roxbury, Connecticut (the "project area"). The Facility would provide needed wireless services in the Town of Roxbury along Route 67, Route 172 and other local roads as well as the surrounding area including southern Roxbury, western Woodbury and northern Southbury.

Two candidate sites are currently under consideration: one located in the south-central portion of an approximately 96.5-acre parcel off Southbury Road/Route 67 (Roxbury Tax Assessor Parcel ID #32-008), referred to as "Candidate A"; and, a second located in the south-central portion of a 21.02-acre parcel at 126 Transylvania Road, referred to as "Candidate B". At either Candidate location, AT&T proposes to install a self-supporting 170-foot tall monopole and associated 12-foot by 20-foot equipment shelter within a fence-enclosed 75-foot by 75-foot compound.

A relatively large wetland area that has the physical characteristics to potentially support vernal pool habitat is located on the Candidate B parcel. During the Connecticut Siting Council (the "Council") public hearing on September 18, 2012 for Docket No. 428, Mr. John Ambruso of 118 Transylvania Road made reference to a large vernal pool on the 126 Transylvania Road parcel (the "subject property" and raised concern of project-related impacts to this resource. The following analysis provides information regarding the potential vernal pool and if the proposed AT&T development will result in a likely adverse impact to this special aquatic habitat.

Introduction and Purpose

The subject property is a 20.78 ± acre property currently developed with a residence in the southwestern portion of the parcel. The remainder of the subject property is undeveloped woodlands with a mix of wetland and upland forest areas. The proposed Facility would be located in undeveloped, wooded uplands in the south central portion of the property.

One potential vernal pool was identified during a wetland investigation and delineation conducted on the property on October 26, 2012. The potential vernal pool comprises most of the far eastern portion of the subject property, located approximately 295 feet east of the proposed AT&T wireless telecommunications Facility. The location of this wetland area is depicted on site plans provided under Attachment 4 of the Applicant's Application for a Certificate of Environmental Compatibility and Public Need filed with the Connecticut Siting Council (*Applicant's Exhibit 1, Docket 428*).

The following narrative describes the vernal pool inspection methodology, the characteristics of the identified vernal pool, the potential impacts to the habitat resulting from the proposed development and recommendations to avoid impacting species potentially utilizing this habitat.

Vernal Pool Inspection Methodology

Vernal pools provide an important wildlife habitat type. They are generally small, seasonally-inundated wetlands that lack fish populations and provide breeding habitat for obligate vernal pool species such as wood frogs (*Rana sylvatica*) and spotted salamander (*Ambystoma maculatum*). Numerous other wildlife species use vernal pools and the areas immediately adjacent for feeding, cover, and/or overwintering habitat.

The methods employed on the subject property to conclusively identify potential vernal pool habitat (as restricted by the seasonal limitations during which the investigation was performed) include a variety of recognized scientific field exploration techniques. Potential vernal pools are conclusively identified based on both physical characteristics (i.e., occurs within a confined depression or basin that lacks a permanent outlet stream, maintains standing water for approximately two months during the growing season, lacks any fish population, and dries out most years) and the occurrence of one or more obligate wildlife species (i.e., spotted salamander, marbled salamander [*Ambystoma opacum*], wood frog, and fairy shrimp [*Eubranchipus vernalis*]). The vernal pool physical and biological identification methodology utilized in this study generally follows the guidelines noted in *A Guide to the Identification and Protection of Vernal Pool Wetlands of Connecticut*[1] and *Guidelines for Certification of Vernal Pool Habitat*[2] along with various amphibian and vernal pool species field guides[3].

The vernal pool located in the far eastern portion of the subject property was inspected and mapped in the field by Dean Gustafson, a senior wetland scientist with All-Points technology Corporation, P.C. ("APT"), who is experienced in vernal pool identification. Weather conditions during the inspection consisted of overcast skies and mid 60°F temperatures. Mr. Gustafson surveyed the potential vernal pool for direct and indirect evidence of obligate and facultative species breeding (e.g. presence of larvae and adult amphibians and invertebrates such as fairy shrimp and fingernail clam shells) during an October 26,

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1 Donahue, D.F. 1997. A Guide to the Identification and Protection of Vernal Pool Wetlands of Connecticut. State University of Connecticut Cooperative Extension System.

2 Massachusetts Natural Heritage and Endangered Species Program. 2001. Guidelines for the Certification of Vernal Pool Habitat.

3 DeGraaf, R.M. and D.D. Rudis. 1983. Amphibians and Reptiles of New England. The University of Massachusetts Press. 83 pp.
Kenney, L.P. and M.R Burne. 2000. A Field Guide to the Animals of Vernal Pools. Mass Div Fish. & Wildlife. NHESP. 77 pp.
Klemens, M.W. 1993. Amphibians and Reptiles of Connecticut and Adjacent Regions. State Geological and Natural History Survey of Connecticut Bulletin 112. 318 pp.
Maine Audubon, The University of Maine and Maine Department of Inland Fisheries and Wildlife. 2003. Maine Citizen's Guide to Locating and Documenting Vernal Pools. 97 pp.
State Geological and Natural History Survey of Connecticut Bulletin 112. 318 pp.

2012 inspection to determine if vernal pool habitat is being provided by this resource. Considering the timing of the fall inspection, it was unlikely that significant biological indicators would be observed in the vernal pool this late in the season. However, an attempt was still made in case the pool contained marbled salamander (*Ambystoma opacum*), a species whose eggs hatch during the fall or early winter. In addition, cover searches were performed (i.e., overturning downed tree limbs, logs, and large rocks) in the vicinity of the vernal pool for adult salamanders and frogs, although APT anticipated that most adults had already entered hibernation in borrows. The potential vernal pool interior was inspected with the aid of hip waders to visually survey the water column (using polarized sunglasses) and survey the pool and bottom with an aquatic dip net. The inspection was focused within an area inundated at the time of the evaluation. The location of the vernal pool is illustrated in the *Vernal Pool Evaluation Map* found in the Figures Attachment.

Vernal Pool Study Results

The area in question encompasses 1.88± acres located in the eastern end of the subject property. The inundated area was primarily vegetated with buttonbush (*Cephalanthus occidentalis*). Water depths within the "existing limits of inundation" denoted on the *Vernal Pool Evaluation Map* was measured at less than 6 inches deep. The majority of the pool was not inundated at the time of the inspection. Photographs of the vernal pool are provided in Attachment A.

The area was found to contain the necessary physical characteristics to provide vernal pool habitat. The pool is a confined basin and appears to contain semi-permanent to permanent inundation of significant (e.g., greater than 2 feet) depth during its peak hydroperiod. Based on our understanding of the wetland's characteristics, its location on the subject property relative to the proposed Facility site, and the presence of an intervening topographic drainage divide (also identified on the *Vernal Pool Evaluation Map*), the base hydrology for the vernal pool is isolated from the upland forest proposed to be developed with the Facility. During the peak hydroperiod and when the pool exceeds its banks (anticipated during significant precipitation events at peak hydroperiod; combined events that may not occur every year), the pool outlets through a diffuse swale near the northwest corner of the wetland with flows draining to the north.

As a result of the time of year our inspection took place, no obligate or facultative vernal pool species were found within the pool. Although the vernal pool was not confirmed to contain the required biological characteristics, the physical characteristics observed appear to have the capacity to support a variety of obligate vernal pool species. Based on Mr. Gustafson's experience performing vernal pool surveys throughout Connecticut over the past 24 years, APT anticipates that this pool would support both wood frogs and spotted salamanders. Therefore, notwithstanding the limitations of the survey noted due to the time of year the inspection was performed, the subject of this evaluation is conclusively identified as a vernal pool habitat.

Impact Analysis

This section details a recognized scientific method for analyzing the potential impact a project may have on a particular vernal pool and its surrounding upland habitat.

Physical Impact to Pool and Surrounding Terrestrial Habitat

Construction and operation of the Facility will not result in direct physical impact to the nearby vernal pool. It is widely documented that vernal pool dependent amphibians are not only solely dependent upon the actual vernal pool habitat for breeding and egg and juvenile development but require surrounding upland habitat for most of their adult lives. Recent studies recommend protection of adjacent habitat up to 750 feet from the vernal pool edge for obligate pool-breeding amphibians.[4]

In order to evaluate potential impacts to this vernal pool and its surrounding upland habitat, the resource was assessed using methodology developed by Calhoun and Klemens (2002). This methodology assesses vernal pool ecological significance based on two parameters: 1) biological value of the vernal pool, and 2) conditions of the critical terrestrial habitat. The biological rating is based on the presence of federal or state-listed species and abundance and diversity of vernal pool indicator species. (Note: due to the time of year the evaluation was conducted and the absence of obligate vernal pool species, the highest biological values are assumed to be supported by the vernal pool.) The terrestrial habitat is assessed based on the integrity of the vernal pool envelope (within 100 feet of the pool's edge) and the critical terrestrial habitat (within 100-750 feet of the pool's edge). Pools with 25% or less developed areas in the critical terrestrial habitat are identified as having high priority for maintaining less than 25% development within this terrestrial habitat, including site clearing, grading and construction (Calhoun and Klemens, 2002). Based on these data, the conservation priority rating of Tier I, Tier II or Tier III was assigned to the vernal pool, with Tier I considered to have relatively high breeding activity and intact terrestrial habitat and Tier III pools representing lower amphibian productivity and fragmented terrestrial habitat.

The vernal pool evaluated in this assessment was rated based on this criterion for both the existing condition and the proposed condition (e.g., AT&T's proposed development) to determine if the proposed Facility disturbances would result in a reduction in the tier rating system or reduce the terrestrial habitat integrity below the critical 75% non-development. Due to the time of year restrictions in the vernal pool investigation, it was conservatively assumed that the vernal pool currently has the highest conservation priority rating of Tier I. Details of the rating system and calculations used to evaluate the existing and proposed conditions of the terrestrial habitat are provided in the *Vernal Pool Assessment Sheet* and *Vernal Pool Impact Assessment Sheet* contained in Attachment B. The results of this analysis show that the proposed development will not result in further degradation of the existing tier rating or terrestrial habitat integrity of the vernal pool due to the minimal disturbance associated with the development of the proposed Facility. The vernal pool envelope will not be impacted as the proposed ground equipment is located approximately 295 feet west of the closest vernal pool edge. The total area of the critical terrestrial habitat associated with the vernal pool, which includes land located off the subject property, is 66.75± acres with 10.20± acres consisting of existing development (including roads, residential structures, yards and driveways). This equates to approximately 15% of the critical terrestrial habitat as being already developed. The proposed wireless telecommunications Facility compound and access road will develop 0.35± acre, which represents only 0.52% of the total critical terrestrial habitat of the vernal pool. Therefore, the proposed development will not result in a likely adverse impact to existing amphibian

4 Oscarson, D.B. and A.J.K. Calhoun. 2007. Developing Vernal Pool Conservation Plans at the Local Level Using Citizen-Scientists. Wetlands. Vol. 27, No. 1. 80-95. & Calhoun, A.J.K. and M.W. Klemens. 2002. Best Development Practices (BDPs): Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. WCS/MCA Technical Paper No. 5.

productivity and will not adversely impact the terrestrial habitat due to its existing fragmented and partially developed condition.

The proposed AT&T development includes a proposed gravel access road that contains stormwater management features to properly collect and treat stormwater generated by the proposed gravel-surface compound and access drive with a series of infiltration units that outlet to level spreaders. It is widely understood that road traffic can result in mortality of migrating amphibians. In addition, stormwater management features such as catch basins, hydrodynamic separators, and the like can serve as traps to amphibians that migrate over these features. This is of particular concern when roads are curbed due to the resultant "funneling effect" that encourages amphibians into catch basin openings. The proposed AT&T development will result in very low traffic following construction of the Facility with a service technician visiting the site approximately once per month. No curbing is proposed for the gravel access drive which could otherwise "funnel" amphibians into the relatively small 18-inch drainage basin inlets to the infiltration units. Therefore, the proposed development will not physically impact the vernal pool and its surrounding terrestrial habitat.

Hydraulic Alterations

Land-use changes (i.e., clearing, increases in impervious surface) can increase surface runoff in the watershed of a vernal pool. Direct inputs of stormwater flows into a pool may produce sudden water level increases in a short period of time and may lengthen the duration of flooding (hydroperiod). Diversion of stormwater flows past a pool may have the opposite effect of decreasing water levels and shortening the pool's hydroperiod. In addition, stormwater features that create temporary pools of water can result in a biological "sink" as breeding amphibians deposit eggs into a water body without the necessary hydraulic period to allow for successful development of the eggs into juveniles.

Site clearing and grading activities will not de-water the nearby vernal pool or alter surface water drainage patterns associated with the pool. In fact, the proposed development is located in a completely separate watershed than that of the vernal pool. The topographic drainage divide bisecting the property isolates the vernal pool from the proposed Facility such that any surface water generated from the AT&T compound and/or access road would drain to the west, away from the vernal pool. Impervious surfaces associated with the proposed AT&T project have been minimized with the use of a relatively narrow 12-foot wide gravel access road and gravel surface within the wireless telecommunications Facility compound. The proposed development will not alter existing surface or subsurface flow conditions or directions. In addition, stormwater infiltration units and riprap level spreaders located along the proposed gravel access drive have been designed to properly treat storm water and avoid creation of a temporary pool and "sink" that could potentially affect breeding amphibians intercepted on their migration to the nearby vernal pool. Therefore, the proposed development will not alter the hydrology of the nearby vernal pool.

Conclusions and Best Management Practices Recommendations

The onsite vernal pool will be not be directly impacted by the proposed development. The vernal pool was evaluated for its ability to provide vernal pool habitat and how the proposed development may affect the habitat. The vernal pool was conservatively classified as Tier I, the highest conservation priority rating. It was further shown that the proposed project would not impact the terrestrial habitat used by

adult amphibians that breed in this vernal pool and that the project will not influence the vernal pool hydroperiod or hydrology. Based on these results, the proposed AT&T project will not result in a likely adverse impact to vernal pool and related terrestrial habitat. However, construction activities have the potential to temporarily impact amphibians traveling through the construction area. As a result, the following Best Management Practices ("BMPs") are recommended to be implemented during construction.

As a result of correspondence with Connecticut Department of Energy and Environment Protection (CT DEEP), it was revealed that known populations of Connecticut-listed State Species of Special Concern, eastern box turtle (*Terrapene Carolina carolina*) occur in proximity to the proposed development. As such, a methodological protective measures plan was developed for the construction of this Facility to avoid unintentional mortality to eastern box turtles. The protection program consists of several components: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; education of all contractors and sub-contractors prior to initiation of work on the site; protective measures; and, reporting. Details of the eastern box turtle protection plan can be found in Attachment 3(D) of the Applicant's Application for a Certificate of Environmental Compatibility and Public Need filed with the Connecticut Siting Council (*Applicant's Exhibit 1, Docket 428*). The BMPs identified in the eastern box turtle protection plan will also serve to protect possible amphibians traveling through the proposed construction area. One modification is recommended to the eastern box turtle plan in order to provide proper seasonal protection to amphibians due to the differences in active periods between various species. Since the vernal pool active season begins earlier than the turtle's active period (which starts on April 1), it is recommended the BMPs be implemented on March 1. In addition, educational information regarding vernal pool species should be added to inform the contractors of additional species to be protected during construction and procedures to follow should they be encountered. Should the proposed Facility be approved by the Connecticut Siting Council, the complete details of the recommended BMPs should be included on the final site plans during the Council's Development and Management Plan process.

Very truly yours,

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

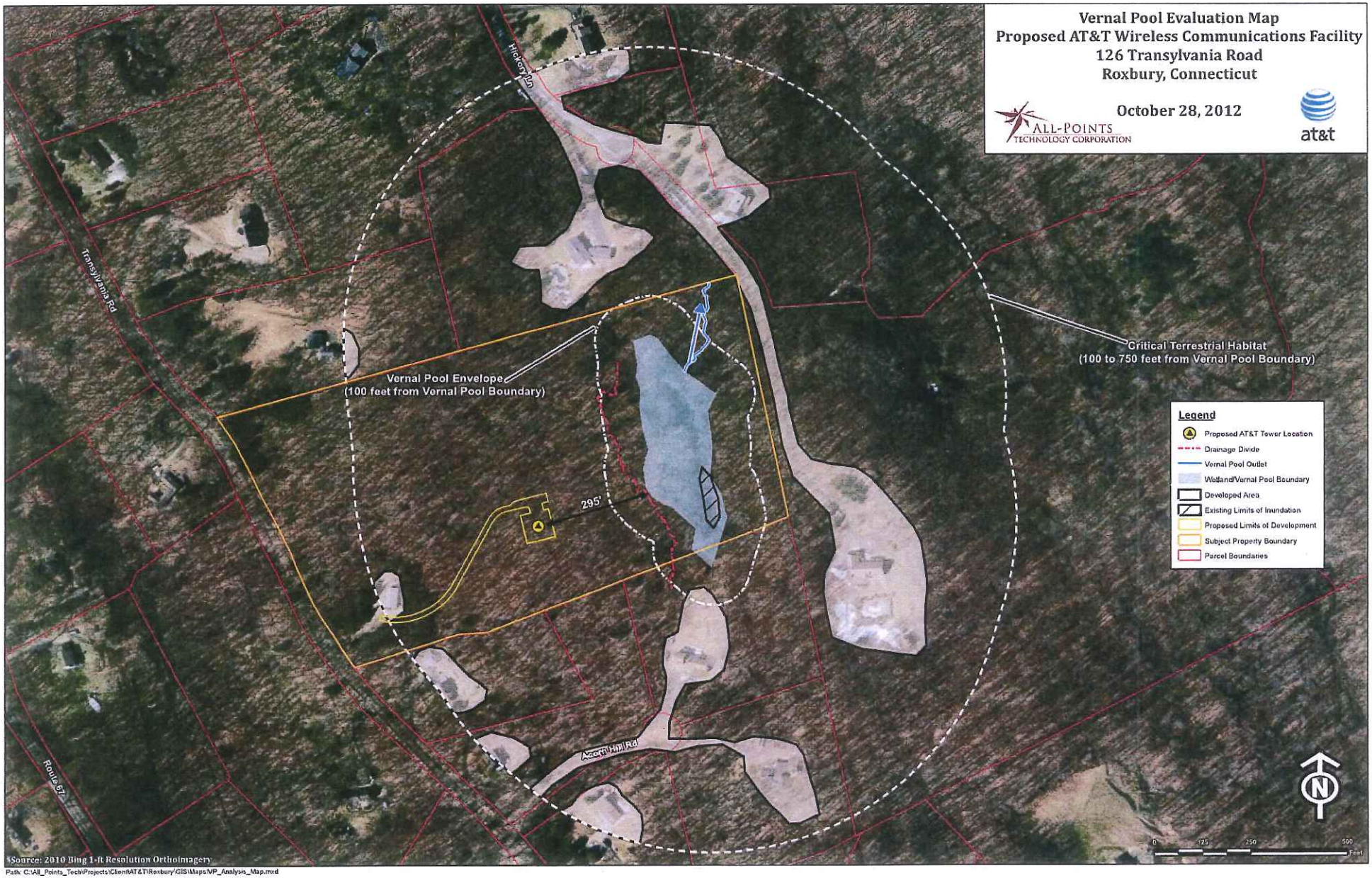
Dean Gustafson

Senior Wetland Scientist

Enclosures

Figures

- Vernal Pool Evaluation Map


Vernal Pool Evaluation Map
Proposed AT&T Wireless Communications Facility
126 Transylvania Road
Roxbury, Connecticut
October 28, 2012
ALL-POINTS TECHNOLOGY CORPORATION
at&t
Transylvania Rd
Hickory Run
Vernal Pool Envelope
(100 feet from Vernal Pool Boundary)
Critical Terrestrial Habitat
(100 to 750 feet from Vernal Pool Boundary)
295'
Acorn Hill Rd
Route 67
Legend
Proposed AT&T Tower Location
Drainage Divide
Vernal Pool Outlet
Wetland/Vernal Pool Boundary
Developed Area
Existing Limits of Inundation
Proposed Limits of Development
Subject Property Boundary
Parcel Boundaries
N
0
125
250
500
Feet
Source: 2010 Bing 1-ft Resolution Orthoimagery
Path: C:\All_Points_Tech\Projects\Client\AT&T\Roxbury\GIS\Maps\VP_Analysis_Map.mxd

Attachment A
Photodocumentation

ALL-POINTS TECHNOLOGY CORPORATION

VERNAL POOL PHOTOGRAPHS
126 Transylvania Road
Roxbury, Connecticut
October 26, 2012

Photo 1: View of north end of inundation area within potential vernal pool, looking north.

Photo 2: View of buttonbush area with deeper inundation within potential vernal pool, looking north.

Photo 3: View of depth of inundation within buttonbush area.

Photo 4: View of south end of inundated potential vernal pool area, looking south.

Photo 5: View of nearby residence to south end of potential vernal pool, looking south.

Photo 6: View of open canopy above inundation area in potential vernal pool, looking north.

Attachment B
Vernal Pool Assessment Sheet and Vernal Pool Impact Assessment Sheet

ALL-POINTS TECHNOLOGY CORPORATION, P.C.
3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

VERNAL POOL ASSESSMENT SHEET[1]

A. **Biological Value of the Vernal Pool**

(1) Are there any state-listed species (Endangered, Threatened, or Special Concern) present or breeding in the pool?
Yes_____ No__X__

(2) Are there two or more vernal pool indicator species breeding (i.e., evidence of egg masses, spermatophores [sperm packets], mating, larvae) in the pool?*
Yes___ X____ No_____

(3) Are there 25 or more egg masses (regardless of species) present in the pool by the conclusion of the breeding season?*
Yes___X___ No_____

* assumed to have positive determinations due to limitations of October 26, 2012 inspection

B. **Existing Condition of the Critical Terrestrial Habitat[2]**

(1) Is at least 75% of the land 100 feet from the pool undeveloped?
Yes___ X____ No_____

(2) Is at least 50% of the habitat from 100-750 feet of the pool undeveloped?
Yes___ X____ No_____

C. **Proposed Condition of the Critical Terrestrial Habitat[3]**

(1) Is at least 75% of the land 100 feet from the pool undeveloped?
Yes___ X___ No___ ___

(2) Is at least 50% of the habitat from 100-750 feet of the pool undeveloped?
Yes___ X___ No___ ___

NOTE: For these purposes, "undeveloped" means open land largely free of roads, structures, and other infrastructure. It can be forested, partially forested, or open agricultural land.

D. **Tier Rating Matrix[4]**

Number of questions answered YES in Category A	+	Number of questions answered YES in Category B/C	=	Rating (I = highest priority)
1-3		2		Tier I
1-3		1		Tier II
0		1-2		Tier III
1-3		0		Tier III

E. **Tier Rating Impact Assessment[5]**

	Category A	Category B/C	Tier Rating
Existing Condition	2	2	I
Proposed Condition[6]	2	2	I

[1] Vernal Pool Assessment Sheet (source: Calhoun and Klemens 2002)
[2] Existing % Total VPE (100 feet) Disturbance = 1.01%; Existing % Total CTH (100-750 feet) Disturbance = 15.28%
[3] Proposed % Total VPE (100 feet) Disturbance = 0.00%; Proposed % Total CTH (100-750 feet) Disturbance = 0.52%
[4] Use to evaluate Tier rating of Vernal Pool on a site-specific basis
[5] Specific to the subject Vernal Pool located on property at 126 Transylvania Road, Roxbury, CT
[6] It is assumed that the biological data collected for the existing condition will be equal to the proposed condition for the purposes of this evaluation.

VERNAL POOL IMPACT ASSESSMENT
126 Transylvania Road
Roxbury, CT

VERNAL POOL	Square Feet	Acres	%
TOTAL AREA OF POOL	81,957	1.88	
VPE AREA	257,240	5.91	
CTH AREA	2,907,455	66.75	
EXISTING DISTURBED AREA IN VPE	2,608	0.06	
EXISTING DISTURBED AREA IN CTH	444,150	10.20	
% EXISTING DISTURBANCE IN VPE			1.01%
% EXISITNG DISTURBANCE IN CTH			15.28%
PROPOSED DISTURBANCE IN VPE (PERVIOUS)	0.00	0.00	
PROPOSED DISTURBANCE IN VPE (IMPERVIOUS)	0.00	0.00	
PROPOSED DISTURBANCE IN CTH (PERVIOUS)	15,162	0.35	
PROPOSED DISTURBANCE IN CTH (IMPERVIOUS)	0.00	0.00	
% PROPOSED DISTURBANCE IN VPE (PERVIOUS)			0.00%
% PROPOSED DISTURBANCE IN VPE (IMPERVIOUS)			0.00%
% PROPOSED TOTAL VPE DISTURBANCE			0.00%
%PROPOSED DISTURBANCE IN CTH (PERVIOUS)			0.52%
%PROPOSED DISTURBANCE IN CTH (IMPERVIOUS)			0.00%
% PROPOSED TOTAL CTH DISTURBANCE			0.52%

Notes:
VPE = Vernal Pool Envelope (100 feet from vernal pool edge)
CTH = Critical Terrestrial Habitat (100 - 750 feet from vernal pool edge)
Disturbed Area = existing disturbance resulting from residential development