



Vanasse Hangen Brustlin, Inc.

54 Tuttle Place  
Middletown, Connecticut 06457  
860 632-1500  
FAX 860 632-7879

**Memorandum**

To: Ms. Hollis M. Redding  
SBA Towers II LLC  
One Research Drive, Suite 200 C  
Westborough, MA 01581

Date: September 11, 2009

Project No.: 40999.27

From: Dean Gustafson  
Professional Soil Scientist

Re: Wetland Impact Analysis  
Barkhamsted – Site No. CT11709  
44 Gavitt Road (State Route 219)  
Barkhamsted, Connecticut

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Vanasse Hangen Brustlin, Inc. (VHB) previously completed on-site investigations to determine if wetlands and/or watercourses are located on the above-referenced Site.

The Site was inspected on May 28, 2009. The property consists on an unimproved primarily forested 36± acre parcel located on the north side of Gavitt Road (State Route 219) in Barkhamsted, Connecticut. Based on a review of plans prepared by Clough Harbour & Associated LLP (latest revised date 105/15/09) VHB understands that SBA Towers II LLC proposes to construct a wireless communications facility in the northeastern portion of the subject property in an upland forested area. An existing gravel/dirt road traverses the central portion of the property through primarily forested areas; three forest clearings are encountered along the existing road. VHB understands that the proposed access drive for the SBA Towers II LLC facility will generally follow along the existing gravel/dirt road with the exception of the final couple of hundred feet of access into the proposed facility. VHB also understands that minor improvements to the existing gravel/dirt road are part of the SBA Towers II LLC improvements and will consist of relatively minor regrading and top dressing with an appropriate gravel road surface material.

One wetland system was identified and delineated by VHB in the southern portion of the subject property in proximity to the proposed SBA Towers II LLC project. Wetland 1 is characterized as a palustrine forested wetland bordering along an intermittent watercourse (IWC). The IWC starts in the northwestern portion of the subject property and is conveyed into the delineated wetland system via a man-made channel that flows to the south/southeast. The channel drains into a small man-made pool (Pool #1) at flags IWC 6/WF 1 then traverses through a more natural stream channel bordered by forested wetlands as it flows towards Gavitt Road (State Route 219). This wetland system is intercepted by an existing gravel drive that conveys stream flows through a 24-inch corrugated plastic pipe. The outfall from the culvert flows into a man-made pool (Pool #2) located on the east side of the gravel drive. The delineated terminus of the wetland system contains an artificial seasonal impoundment (Pool #3) created by Gavitt Road. A wetland sketch map, dated 05/28/09, is enclosed.

Spotted salamander (*Ambystoma maculatum*) and wood frog (*Rana sylvatica*) egg masses and newly hatched wood frog tadpoles, both species considered obligate vernal pool species, were identified in each of the three pools referenced herein. Adult green frogs (*Rana clamitans melanota*), a vernal pool facultative species, was observed in Pool #2. Therefore, despite the man-made alterations resulting in the creation of these pools, they all provide some level of vernal pool habitat.

This wetland system is located approximately 1,000 feet south of the proposed SBA Towers II LLC tower facility. The proposed facility will occupy approximately 0.2 acre of upland forest and due to its small area and distance from vernal pools it is anticipated that the development will not result in a likely adverse impact to existing populations of pool-breeding amphibians. In addition, since the facility is unoccupied and wireless telecommunication carrier technicians will visit the site approximate once a month, very little traffic will be generated by the facility further minimizing impact to amphibians.

VHB understands that the existing culvert that conveys flows from the identified wetland will not be disturbed by the proposed project but minor improvements to the existing gravel/dirt road will necessitate or require minor regrading activities in close proximity to wetlands (e.g., 7± feet from road edge to wetland boundary) and in particular Pool #2. Although work is proposed in proximity to nearby wetland resource areas, no direct impact to wetlands or watercourses is anticipated by the proposed SBA Towers II LLC project. Assuming adequate erosion controls are properly installed and maintained to protect nearby wetland resources during construction indirect impacts will also be minimal. Due to the proximity of proposed development activities to sensitive wetland resource areas that provide vernal pool habitat, VHB recommends that an extensive erosion and sedimentation control plan be developed in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* to properly protect these special aquatic resources. VHB also recommends that a properly qualified professional independent of the site contractor monitor the installation and maintenance of erosion and sedimentation controls throughout the construction project and perform an initial and periodic sweep for amphibians to ensure that nearby wetlands are protected and amphibians are not trapped within the construction zone of the project.

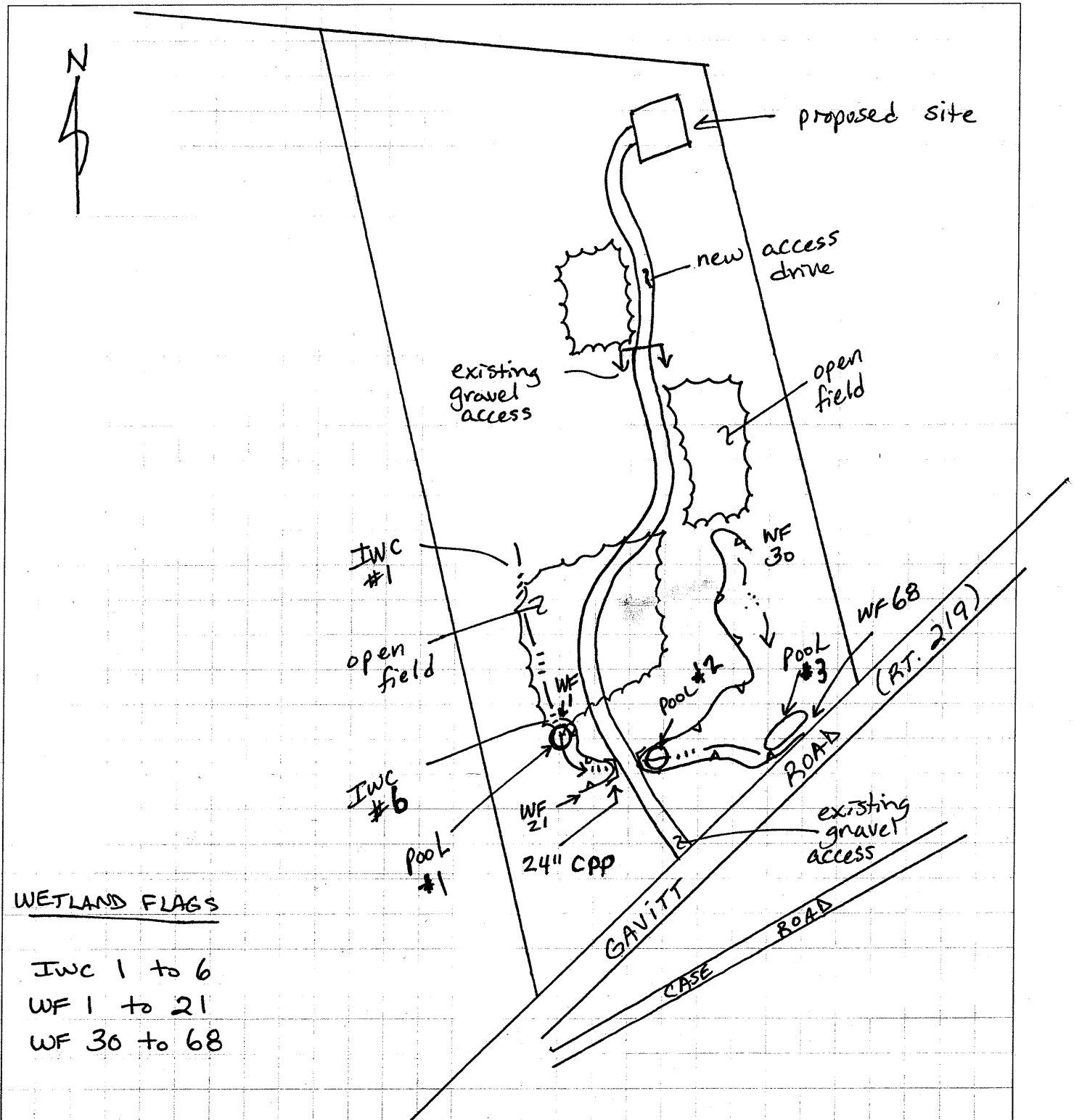
These precautions will also help mitigate CTDEP's findings that Northern Spring Salamander (*Gyrinophilus porphyriticus*), a state threatened species, is located in the vicinity of the project; refer to attached August 17, 2009 letter from Julie Victoria, Wildlife Biologist with CTDEP. VHB's wetland delineation findings revealed that potential habitat of this rare species may be provided by the wetlands within the subject property. Therefore, VHB is in agreement with DEP's recommendations that a herpetologist perform a survey for this species and its habitat and that any additional protective measure recommendations that result from this survey be incorporated into the development plans so that this species is properly protected, assuming it exists on the subject property. Therefore, so long as these recommendations are incorporated into the final development plans and properly implemented, construction of the proposed SBA Towers II LLC facility will not result in an adverse impact to nearby wetlands.

In addition, as no direct impact to federal wetlands is associated with SBA Towers II LLC construction 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.



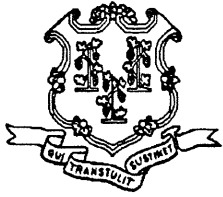
# Computations

Project: 44 GAVITT RD. Project # 40999.27  
 Location: BARKHAMSTED Sheet 1 of 1  
 Calculated by: DEG Date: 05/28/09  
 Checked by: Date:  
 Title WETLAND SKETCH



### WETLAND FLAGS

- IWC 1 to 6
- WF 1 to 21
- WF 30 to 68



STATE OF CONNECTICUT  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 FRANKLIN WILDLIFE MANAGEMENT AREA



391 ROUTE 32  
 NORTH FRANKLIN, CT 06254  
 TELEPHONE: (860) 642-7239

August 17, 2009

Ms. Coreen Kelsey  
 Vanasse Hangen Brustlin, Inc.  
 54 Tuttle Place  
 Middletown, CT 06457

re: telecommunication tower construction (SBA Towers II, LLCCT11709-Barkhamsted) 44 Gavitt Road, Barkhamsted

Dear Ms. Kelsey:

Your request was forwarded to me on 8/13/09 from Dawn McKay of the Department of Environmental Protection's (DEP) Natural Diversity Database (NDDB). Their records indicate that a state threatened species, the Northern Spring Salamander (*Gyrinophilus porphyriticus*) is in the vicinity.

This species requires cold, clean, well-oxygenated springs, brooks or seepage areas. Their favored habitat is heavily forested steep rocky ravines. Any activities that decreased the forest canopy would increase the water temperature, and this species definitely requires cold water. If there are drainages in this area that are well-oxygenated and heavily forested, they may be suitable habitat for this species and should be surveyed.

If this work will be conducted in any Northern Spring Salamander habitat, the Wildlife Division recommends that a herpetologist familiar with the habitat requirements of this species conduct surveys. A report summarizing the results of such surveys should include habitat descriptions, amphibian species list and a statement/resume giving the herpetologist' qualifications. The DEP doesn't maintain a list of qualified herpetologists. The results of this investigation can be forwarded to the Wildlife Division and, after evaluation, recommendations for additional surveys, if any, will be made.

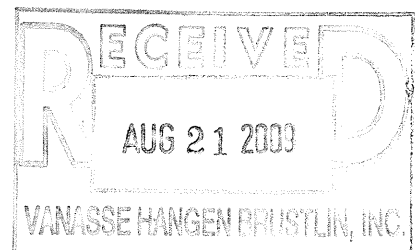
Standard protocols for the protection of wetlands should be followed and maintained during the course of the project. Additionally, all silt fencing should be removed after soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Please be advised that the Wildlife Division has not made a field inspection of the project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. The time of year when this work will take place will affect this species if they are present on the site when the work is scheduled. Please be advised that should state permits be required or should state involvement occur in some other fashion, specific restrictions or conditions relating to the species discussed above may apply. In this situation, additional evaluation of the proposal by the DEP Wildlife Division should be requested. If the proposed project has not been initiated within 6 months of this review, contact the NDDB for an updated review. If you have any additional questions, please feel free to contact me at [Julie.Victoria@ct.gov](mailto:Julie.Victoria@ct.gov), please reference the NDDB # at the bottom of this letter when you e-mail. Thank you for the opportunity to comment.

Sincerely,

Julie Victoria, Wildlife Biologist  
 Franklin Wildlife Management Area  
 391 Route 32  
 N. Franklin, CT 06254

cc: NDDB - 17100





**WETLANDS DELINEATION REPORT**

*Vanasse Hangen Brustlin, Inc.*

**Date:** September 11, 2009  
**Project No.:** 40999.27  
**Prepared For:** Ms. Hollis M. Redding  
SBA Towers II LLC  
One Research Drive, Suite 200 C  
Westborough, MA 01581  
**Site Location:** 44 Gavitt Road (State Route 219)  
Barkhamsted, Connecticut  
**Site Map:** VHB Wetland Sketch, 04/28/09  
**Inspection Date:** May 28, 2009  
**Field Conditions:** Weather: sunny, low 80's      General Soil Moisture: moist  
Snow Depth: none      Frost Depth: none

**Type of Wetlands Identified and Delineated:**

- Connecticut Inland Wetlands and Watercourses
- Connecticut Tidal Wetlands
- U.S. Army Corps of Engineers

**Inland Wetland Regulated Upland Review Areas:** Wetlands: 100 feet    Watercourses: 100 feet

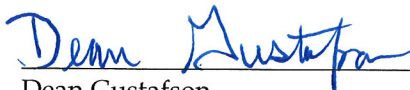
**Field Numbering Sequence of Wetlands Boundary:** WF 1 to 21; WF 30 to 68; IWC 1 to 6 (same location as WF 1)

*[as depicted on attached wetland sketch map]*

*The classification systems of the National Cooperative Soil Survey, the U.S. Department of Agriculture, Natural Resources Conservation Service, County Soil Survey Identification Legend, Connecticut Department of Environmental Protection and United States Army Corps of Engineers New England District were used in this investigation.*

*All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.*

The wetlands delineation was conducted and reviewed by:

  
\_\_\_\_\_  
Dean Gustafson  
Professional Soil Scientist

Enclosures

# Attachments



- 
- Wetland Delineation Field Form
  - Soil Map
  - Soil Report
  - Wetland Delineation Sketch Map

**Wetland Delineation Field Form**

Project Address:	44 Gavitt Road (State Route 219) Barkhamsted, CT	Project Number:	40999.27
Inspection Date:	5/28/09	Inspector:	Dean Gustafson, PSS
Wetland I.D.:	Wetland 1		

Field Conditions:	Weather: sunny, low 80's	Snow Depth: none
	General Soil Moisture: moist	Frost Depth: none
Type of Wetland Delineation:	CT Inland <input checked="" type="checkbox"/>	
	CT Tidal <input type="checkbox"/>	
	ACOE <input type="checkbox"/>	
Field Numbering Sequence: WF 1 to 21; WF 30 to 68; IWC 1 to 6		

**WETLAND HYDROLOGY:**

**NONTIDAL**

Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated – seepage <input checked="" type="checkbox"/>	Seasonally Saturated - perched <input type="checkbox"/>
Comments:		

**TIDAL**

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Seasonally Flooded <input type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>	
Comments: N/A		

**WETLAND TYPE:**

**SYSTEM:**

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments:		

**CLASS:**

Emergent <input type="checkbox"/>	Scrub-shrub <input type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments:		

**WATERCOURSE TYPE:**

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Comments: IWC feature is conveyed in a man-made channel to a man-made pool at WF 1		

**SPECIAL AQUATIC HABITAT:**

Vernal Pool <input checked="" type="checkbox"/>	Other <input type="checkbox"/>	
Comments: three man-made impoundments provide vernal pool habitat		

**Wetland Delineation Field Form (Cont.)**

**MAPPED SOILS:**

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Ridgebury, Leicester and Whitman soils, extremely stony (3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sutton fine sandy loam (52)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Canton and Charlton soils (61)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Charlton-Chatfield complex (73)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hollis-Chatfield-Rock outcrop complex (75)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**DOMINANT PLANTS:**

red maple ( <i>Acer rubrum</i> )	false hellebore ( <i>Veratrum viride</i> )
black birch ( <i>Betula lenta</i> )	highbush blueberry ( <i>Vaccinium corymbosum</i> )
winterberry ( <i>Ilex verticillata</i> )	skunk cabbage ( <i>Symplocarpus foetidus</i> )

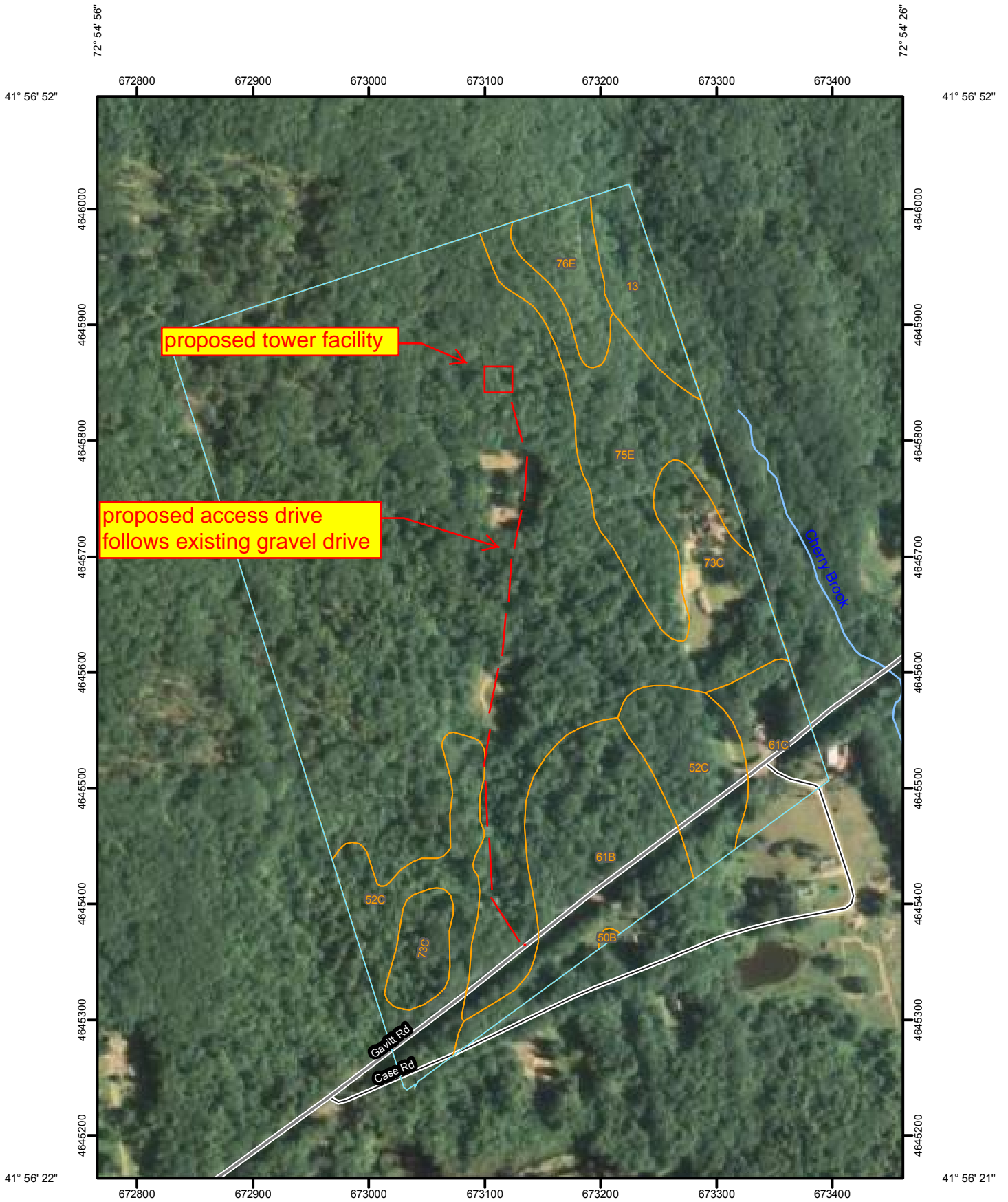
**WETLAND NARRATIVE:**

Wetland 1 is characterized as a palustrine forested wetland bordering along an intermittent watercourse (IWC). The IWC starts in the northwestern portion of the subject property and is conveyed into the delineated wetland system via a man-made channel that flows to the south/southeast. The channel drains into a small man-made pool (Pool #1) at flags IWC 6/WF 1 then traverses through a more natural stream channel bordered by forested wetlands as it flows towards Gavitt Road (State Route 219). This wetland system is intercepted by an existing gravel drive that conveys stream flows through a 24-inch corrugated plastic pipe. The outfall from the culvert flows into a man-made pool (Pool #2) located on the east side of the gravel drive. The delineated terminus of the wetland system contains an artificial seasonal impoundment (Pool #3) created by Gavitt Road.

Spotted salamander (*Ambystoma maculatum*) and wood frog (*Rana sylvatica*) egg masses and newly hatched wood frog tadpoles, both species are considered obligate vernal pool species, were identified in each of the three pools referenced herein. Adult green frogs (*Rana clamitans melanota*), a vernal pool facultative species, was observed in Pool #2. Therefore, despite the man-made alterations resulting in the creation of these pools, they all provide some level of vernal pool habitat.

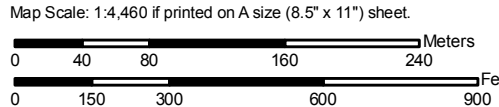


Soil Map—State of Connecticut  
(44 Gavitt Road (Rt. 219), Barkhamsted, CT)



proposed tower facility

proposed access drive follows existing gravel drive



## MAP LEGEND






















### Area of Interest (AOI)


 Area of Interest (AOI)

### Soils


 Soil Map Units

### Special Point Features



-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other



### Special Line Features

-  Gully
-  Short Steep Slope
-  Other





### Political Features

 Cities

### Water Features

-  Oceans
-  Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

## MAP INFORMATION

Map Scale: 1:4,460 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut  
 Survey Area Data: Version 6, Mar 22, 2007

Date(s) aerial images were photographed: 8/14/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
13	Walpole sandy loam	1.8	2.8%
50B	Sutton fine sandy loam, 3 to 8 percent slopes	0.0	0.1%
52C	Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony	6.4	9.9%
61B	Canton and Charlton soils, 3 to 8 percent slopes, very stony	5.7	8.8%
61C	Canton and Charlton soils, 8 to 15 percent slopes, very stony	2.1	3.2%
73C	Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky	41.4	64.2%
75E	Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes	5.5	8.5%
76E	Rock outcrop-Hollis complex, 3 to 45 percent slopes	1.6	2.5%
<b>Totals for Area of Interest</b>		<b>64.4</b>	<b>100.0%</b>

## Map Unit Description (Brief)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Description (Brief)" report gives a brief, general description of the major soils that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

## Report—Map Unit Description (Brief)

### State of Connecticut

**Description Category:** SOI

**Map Unit:** 13—Walpole sandy loam

Walpole Sandy Loam This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 37 to 50 inches (940 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Walpole soils. 20 percent minor components. Walpole soils This component occurs on outwash plain terrace, depression, and drainageway landforms. The parent material consists of sandy and gravelly glaciofluvial deposits from gniess, granite, and schist. The slope ranges from 0 to 3 percent and the runoff class is very low. The depth to a restrictive feature is greater than 60 inches. The drainage class is poorly drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 5.2 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 6 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 4w Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 7 inches; sandy loam 7 to 21 inches; sandy loam 21 to 25 inches; gravelly sandy loam 25 to 41 inches; stratified very gravelly coarse sand to loamy fine sand 41 to 65 inches; stratified very gravelly coarse sand to loamy fine sand

**Map Unit:** 50B—Sutton fine sandy loam, 3 to 8 percent slopes

Sutton Fine Sandy Loam, 3 To 8 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Sutton soils. 20 percent minor components. Sutton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, gneiss, and schist. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is moderately well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 7.5 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2w Typical Profile: 0 to 6 inches; fine sandy loam 6 to 12 inches; fine sandy loam 12 to 24 inches; fine sandy loam 24 to 28 inches; fine sandy loam 28 to 36 inches; gravelly fine sandy loam 36 to 65 inches; gravelly sandy loam

**Map Unit:** 52C—Sutton fine sandy loam, 2 to 15 percent slopes, extremely stony

Sutton Fine Sandy Loam, 2 To 15 Percent Slopes, Extremely Stony This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Sutton soils. 20 percent minor components. Sutton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, gneiss, and schist. The slope ranges from 2 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is moderately well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 7.3 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 6 inches; fine sandy loam 6 to 12 inches; fine sandy loam 12 to 24 inches; fine sandy loam 24 to 28 inches; fine sandy loam 28 to 36 inches; gravelly fine sandy loam 36 to 65 inches; gravelly sandy loam

**Map Unit:** 61B—Canton and Charlton soils, 3 to 8 percent slopes, very stony

Canton And Charlton Soils, 3 To 8 Percent Slopes, Very Stony This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 45 percent Canton soils, 35 percent Charlton soils. 20 percent minor components Canton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from schist, granite, and gneiss. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 5.6 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; gravelly fine sandy loam 3 to 15 inches; gravelly loam 15 to 24 inches; gravelly loam 24 to 30 inches; gravelly loam 30 to 60 inches; very gravelly loamy sand Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist, and gneiss. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 6.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam

**Map Unit:** 61C—Canton and Charlton soils, 8 to 15 percent slopes, very stony

Canton And Charlton Soils, 8 To 15 Percent Slopes, Very Stony This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 45 percent Canton soils, 35 percent Charlton soils. 20 percent minor components Canton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from schist, granite, and gneiss. The slope ranges from 8 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 1.98 in/hr (moderately rapid), with about 5.6 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; gravelly fine sandy loam 3 to 15 inches; gravelly loam 15 to 24 inches; gravelly loam 24 to 30 inches; gravelly loam 30 to 60 inches; very gravelly loamy sand Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist, and gneiss. The slope ranges from 8 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 6.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam

**Map Unit:** 73C—Charlton-Chatfield complex, 3 to 15 percent slopes, very rocky



Charlton-Chatfield Complex, 3 To 15 Percent Slopes, Very Rocky This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 45 percent Charlton soils, 30 percent Chatfield soils. 25 percent minor components. Charlton soils This component occurs on upland hill landforms. The parent material consists of melt-out till derived from granite, schist and gneiss. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 6.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 4 inches; fine sandy loam 4 to 7 inches; fine sandy loam 7 to 19 inches; fine sandy loam 19 to 27 inches; gravelly fine sandy loam 27 to 65 inches; gravelly fine sandy loam Chatfield soils This component occurs on upland hill and ridge landforms. The parent material consists of melt-out till derived from gneiss, granite, and schist. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is 20 to 40 inches to bedrock (lithic). The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 3.3 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 1 inches; highly decomposed plant material 1 to 6 inches; gravelly fine sandy loam 6 to 15 inches; gravelly fine sandy loam 15 to 29 inches; gravelly fine sandy loam 29 to 36 inches; unweathered bedrock

**Map Unit:** 75E—Hollis-Chatfield-Rock outcrop complex, 15 to 45 percent slopes

Hollis-Chatfield-Rock Outcrop Complex, 15 To 45 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 54 degrees F. (7 to 12 degrees C.) This map unit is 35 percent Hollis soils, 30 percent Chatfield soils, 15 percent Rock Outcrop. 20 percent minor components. Hollis soils This component occurs on upland hill and ridge landforms. The parent material consists of melt-out till derived from granite, gneiss, and schist. The slope ranges from 15 to 45 percent and the runoff class is high. The depth to a restrictive feature is 10 to 20 inches to bedrock (lithic). The drainage class is somewhat excessively drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 1.8 inches (very low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 1 inches; highly decomposed plant material 1 to 6 inches; gravelly fine sandy loam 6 to 9 inches; channery fine sandy loam 9 to 15 inches; gravelly fine sandy loam 15 to 25 inches; unweathered bedrock Chatfield soils This component occurs on upland hill and ridge landforms. The parent material consists of melt-out till derived from gneiss, granite, and schist. The slope ranges from 15 to 45 percent and the runoff class is high. The depth to a restrictive feature is 20 to 40 inches to bedrock (lithic). The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 3.3 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 1 inches; highly decomposed plant material 1 to 6 inches; gravelly fine sandy loam 6 to 15 inches; gravelly fine sandy loam 15 to 29 inches; gravelly fine sandy loam 29 to 36 inches; unweathered bedrock Rock Outcrop This component occurs on bedrock controlled landforms. The slope ranges from 15 to 45 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8

**Map Unit:** 76E—Rock outcrop-Hollis complex, 3 to 45 percent slopes

Rock Outcrop-Hollis Complex, 3 To 45 Percent Slopes This map unit is in the New England and Eastern New York Upland, Southern Part Major Land Resource Area. The mean annual precipitation is 37 to 49 inches (940 to 1244 millimeters) and the average annual air temperature is 45 to 54 degrees F. (7 to 12 degrees C.) This map unit is 55 percent Rock Outcrop, 25 percent Hollis soils. 20 percent minor components. Rock Outcrop This component occurs on bedrock controlled landforms. The slope ranges from 3 to 45 percent and the runoff class is very high. The Nonirrigated Land Capability Class is 8 Hollis soils This component occurs on upland hill and ridge landforms. The parent material consists of melt-out till derived from granite, gneiss, and schist. The slope ranges from 3 to 45 percent and the runoff class is medium. The depth to a restrictive feature is 10 to 20 inches to bedrock (lithic). The drainage class is somewhat excessively drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 1.8 inches (very low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 1 inches; highly decomposed plant material 1 to 6 inches; gravelly fine sandy loam 6 to 9 inches; channery fine sandy loam 9 to 15 inches; gravelly fine sandy loam 15 to 25 inches; unweathered bedrock

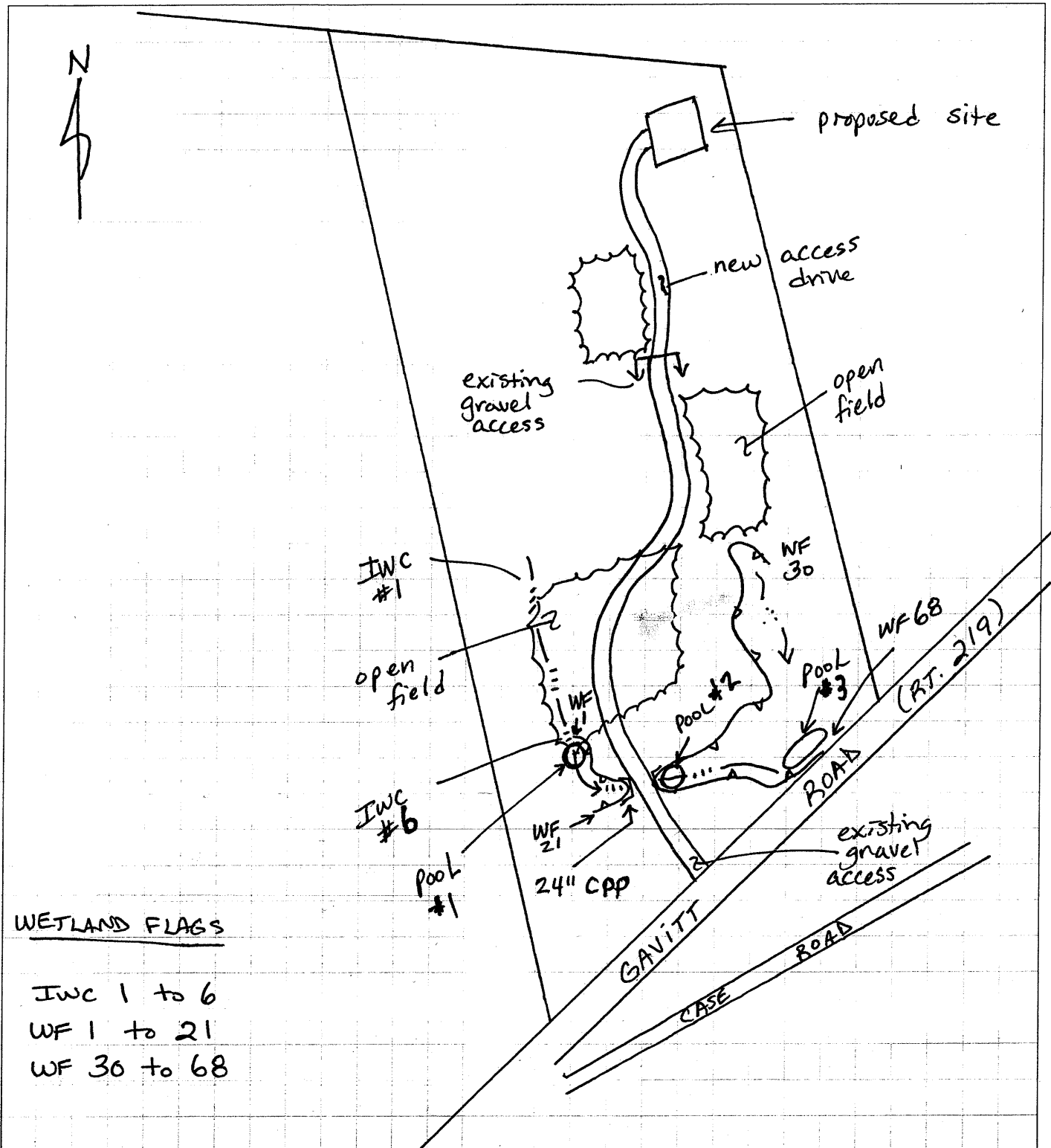
### **Data Source Information**

Soil Survey Area: State of Connecticut  
Survey Area Data: Version 6, Mar 22, 2007



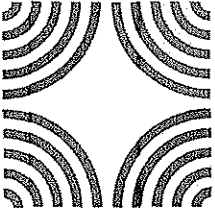
# Computations

Project: 44 GAVITT RD. Project # 40999.27  
 Location: BARKHAMSTED Sheet 1 of 1  
 Calculated by: DEG Date: 05/28/09  
 Checked by: Date:  
 Title WETLAND SKETCH



### WETLAND FLAGS

- IWC 1 to 6
- WF 1 to 21
- WF 30 to 68



Connecticut Commission on Culture & Tourism

August 26, 2009

Historic Preservation  
and Museum Division

One Constitution Plaza  
Second Floor  
Hartford, Connecticut  
06103

860.256.2800  
860.256.2763 (f)

Ms. Coreen Kelsey  
Vanasse Hangen Brustlin Inc.  
54 Tuttle Place  
Middletown, CT 06457-1847

Subject: SBA Towers II LLC Telecommunications Facility  
44 Gavitt Road  
Barkhamsted, CT  
CT11709-Barkhamsted

Dear Ms. Kelsey:

The State Historic Preservation Office has reviewed the above-named project. This office expects that the proposed undertaking will have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

This office appreciates the opportunity to have reviewed and commented upon the proposed undertaking.

This comment is provided in accordance with the National Historic Preservation Act and the Connecticut Environmental Policy Act.

For further information, please contact Dr. David A. Poirier, Staff Archaeologist.

Sincerely,

David Bahlman  
Deputy State Historic Preservation Officer

CONNECTICUT  
www.cultureandtourism.org

An Affirmative Action  
Equal Opportunity Employer





STATE OF CONNECTICUT  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
FRANKLIN WILDLIFE MANAGEMENT AREA



391 ROUTE 32  
NORTH FRANKLIN, CT 06254  
TELEPHONE: (860) 642-7239

August 17, 2009

Ms. Coreen Kelsey  
Vanasse Hangen Brustlin, Inc.  
54 Tuttle Place  
Middletown, CT 06457

re: telecommunication tower construction (SBA Towers II, LLCCT11709-Barkhamsted) 44 Gavitt Road, Barkhamsted

Dear Ms. Kelsey:

Your request was forwarded to me on 8/13/09 from Dawn McKay of the Department of Environmental Protection's (DEP) Natural Diversity Database (NDDB). Their records indicate that a state threatened species, the Northern Spring Salamander (*Gyrinophilus porphyriticus*) is in the vicinity.

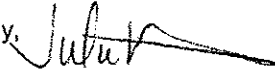
This species requires cold, clean, well-oxygenated springs, brooks or seepage areas. Their favored habitat is heavily forested steep rocky ravines. Any activities that decreased the forest canopy would increase the water temperature, and this species definitely requires cold water. If there are drainages in this area that are well-oxygenated and heavily forested, they may be suitable habitat for this species and should be surveyed.

If this work will be conducted in any Northern Spring Salamander habitat, the Wildlife Division recommends that a herpetologist familiar with the habitat requirements of this species conduct surveys. A report summarizing the results of such surveys should include habitat descriptions, amphibian species list and a statement/resume giving the herpetologist's qualifications. The DEP doesn't maintain a list of qualified herpetologists. The results of this investigation can be forwarded to the Wildlife Division and, after evaluation, recommendations for additional surveys, if any, will be made.

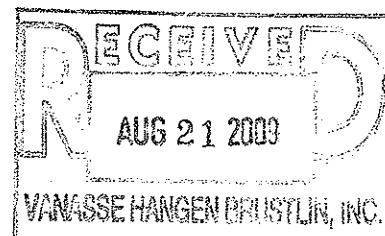
Standard protocols for the protection of wetlands should be followed and maintained during the course of the project. Additionally, all silt fencing should be removed after soils are stable so that reptile and amphibian movement between uplands and wetlands is not restricted.

Please be advised that the Wildlife Division has not made a field inspection of the project nor have we seen detailed timetables for work to be done. Consultation with the Wildlife Division should not be substituted for site-specific surveys that may be required for environmental assessments. The time of year when this work will take place will affect this species if they are present on the site when the work is scheduled. Please be advised that should state permits be required or should state involvement occur in some other fashion, specific restrictions or conditions relating to the species discussed above may apply. In this situation, additional evaluation of the proposal by the DEP Wildlife Division should be requested. If the proposed project has not been initiated within 6 months of this review, contact the NDDB for an updated review. If you have any additional questions, please feel free to contact me at [Julie.Victoria@ct.gov](mailto:Julie.Victoria@ct.gov), please reference the NDDB # at the bottom of this letter when you e-mail. Thank you for the opportunity to comment.

Sincerely,

  
Julie Victoria, Wildlife Biologist  
Franklin Wildlife Management Area  
391 Route 32  
N. Franklin, CT 06254

cc: NDDB - 17100





New Cingular Wireless PCS, LLC  
500 Enterprise Drive  
Rocky Hill, Connecticut 06067-3900  
Phone: (860) 513-7636  
Fax: (860) 513-7190

**Steven L. Levine**  
**Real Estate Consultant**

June 29, 2009

TO: Hollis Redding, SBA Towers

FROM: Steve Levine

RE: Power Density Calculation for Proposed Antennas on a Proposed Tower at Gavitt Road, Barkhamsted

The cumulative worst-case power density for this site in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at ground level beside the tower follows.

This worst-case calculation assumes all channels working simultaneously at full power with the antennas facing directly downward.

	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm <sup>2</sup> )	Standard Limits (mW/cm <sup>2</sup> )	Percent of Limit
AT&T GSM	167	1900 Band	2	427	0.0110	1.0000	1.10
AT&T UMTS	167	1900 Band	1	500	0.0064	1.0000	0.64
AT&T GSM	167	880 - 894	4	296	0.0153	0.5867	2.60
AT&T UMTS	167	880 - 894	1	500	0.0064	0.5867	1.10
<b>Total</b>							<b>5.4%</b>

**PULLMAN & COMLEY, LLC**  
ATTORNEYS AT LAW

CARRIE L. LARSON  
90 State House Square  
Hartford, CT 06103-3702  
p (860) 424-4312  
f (860) 424-4370  
clarson@pullcom.com  
www.pullcom.com

**VIA FEDERAL EXPRESS**

First Selectman Donald S. Stein  
67 Ripley Hill Road  
Pleasant Valley (Barkhamsted), CT 06063-0558

**Re: Proposed Development of a Telecommunications Facility  
44 Gavitt Road, Barkhamsted**

Dear First Selectman Stein:

Enclosed please find two (2) copies of the technical report in compliance with Connecticut General Statutes Section 16-501(e) and in anticipation of filing an application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility at 44 Gavitt Road in Barkhamsted. The technical report includes information regarding the public need for the facility, the site selection process, and the environmental effects of the facility.

The Town of Barkhamsted may conduct public hearings and meetings as it deems necessary to provide recommendations or comments to SBA Towers II LLC concerning this proposal. If a hearing or meeting is scheduled, we request notice and will be pleased to provide an informational summary of the proposal. If the Town has any recommendations or comments, it must provide them to us within sixty (60) days of the receipt of this filing.

We would like to meet with you (or your designee) to review the proposed project and will contact you next week to set up an appointment at your convenience.

If you have any questions, please do not hesitate to contact me directly.

Very truly yours,



Carrie L. Larson

cc: Rista Holda, Zoning Officer, Town of Barkhamsted  
Hollis Redding  
Kenneth Baldwin, Esq.  
Christopher Fisher, Esq.

Hartford/72517.61/CLARSON/377523v1



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Hartford, CT 06103-3702  
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July 24, 2009

**VIA FEDERAL EXPRESS**

First Selectman Donald S. Stein  
67 Ripley Hill Road  
Pleasant Valley (Barkhamsted), CT 06063-0558

**Re: Proposed Development of a Telecommunications Facility  
44 Gavitt Road, Barkhamsted**

Dear First Selectman Stein:

This is a follow up to our meeting on July 15, 2009 concerning SBA Towers II, LLC's ("SBA") proposed telecommunications facility at 44 Gavitt Road in Barkhamsted.

First, you had inquired regarding one of the propagation maps from AT&T contained in SBA's technical report. Specifically, you had review the map labeled "current coverage plus proposed site at 167'" and asked why it was not depicting more coverage, particularly to the south and southeast. Below is the technical explanation SBA has obtained from AT&T.

"PCS 1900 Mhz frequencies are approximately 8 db lower as compared to Cellular 850 Mhz frequencies. The 850 Mhz frequencies are therefore a factor of 6 times stronger than 1900 Mhz. Viewing the SBA site at 1900 Mhz and 850 Mhz provides a visual demonstration of the different frequency propagation characteristics. In both plots, the green area is in building coverage and yellow is in-vehicle coverage. As expected 850 Mhz signals have a much larger geographic coverage area. AT&T deploys both frequencies in its network and when deployed both are equipped with the latest technologies, 3G or otherwise. Currently, AT&T generally uses 1900 Mhz spectrum in Connecticut to add to its capacity in cell sites given the superior propagation characteristics of 850 Mhz."

In addition, you had mentioned the Barkhamsted East fire department property as a possible alternative site. SBA requested that both AT&T and Verizon Wireless review the potential coverage from that site. Verizon responded that the fire department does not work for Verizon's coverage needs. AT&T responded that, while the fire department site does provide some coverage for AT&T, the proposed SBA site works better with AT&T's existing network.

Page 2

Again, as we had mentioned during our meeting on July 15<sup>th</sup>, SBA is willing to attend a public informational session, if the Town believes that this would be helpful. If you would like SBA to attend such a meeting, please forward, to my attention, a request with a date, time and location and SBA will make its representatives available. In addition, if the Town would like any additional information concerning the proposed facility at 44 Gavitt Road, please forward such request to my attention and SBA will endeavor to provide such information. Please let me know if you have any questions.

Very truly yours,



Carrie L. Larson

cc: Hollis Redding  
Kenneth Baldwin, Esq.  
Christopher Fisher, Esq.

Hartford/72517.61/CLARSON/381341v1



Federal Aviation Administration  
Air Traffic Airspace Branch, ASW-520  
2601 Meacham Blvd.  
Fort Worth, TX 76137-0520

Aeronautical Study No.  
2009-ANE-759-OE

Issued Date: 08/20/2009

Clinton Papenfuss  
SBA Towers  
5900 Broken Sound Parkway NW  
Boca Raton, FL 33487

**\*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\***

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Antenna Tower CT 11709-S
Location:	Barkhamsted, CT
Latitude:	41-56-45.90N NAD 83
Longitude:	72-54-41.30W
Heights:	175 feet above ground level (AGL) 1312 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory circular 70/7460-1 K Change 2.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (781) 238-7522. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2009-ANE-759-OE.

**Signature Control No: 646096-117914543**

( DNE )

Suzanne Dempsey

Technician

Attachment(s)

Frequency Data

**Frequency Data for ASN 2009-ANE-759-OE**

<b>LOW FREQUENCY</b>	<b>HIGH FREQUENCY</b>	<b>FREQUENCY UNIT</b>	<b>ERP</b>	<b>ERP UNIT</b>
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	W
869	894	MHz	500	W
896	901	MHz	500	W
901	902	MHz	7	W
930	931	MHz	3500	W
931	932	MHz	3500	W
932	932.5	MHz	17	dBW
935	940	MHz	1000	W
940	941	MHz	3500	W
1850	1910	MHz	1640	W
1930	1990	MHz	1640	W
2305	2310	MHz	2000	W
2345	2360	MHz	2000	W