Attachment 4

ATTACHMENT 4

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

There are wetlands on the Property to the east (±285') and west (±319') of the proposed Facility. The western wetlands were modified previously and function as a detention basin for storm water control purposes. The wetlands to the east of the compound are left in their natural state and meander off the Property onto abutting property to the east. Neither wetland will be changed as a result of the proposed Facility being constructed. The proposed facility will be constructed in accordance with federal, state and local regulations, and Best Management Practices to control storm water and soil erosion will be implemented.

B. AIR QUALITY

Under ordinary operating conditions, the tower, antennas and telecommunications equipment used at the proposed facility would emit no air pollutants of any kind. A diesel generator used only for emergency power will comply with state air quality standards associated with its operation.

C. LAND

Some minimal clearing and grading will be necessary in the compound area. Other than the access drive extension and tower compound, the remainder of the parcel will remain unchanged by the construction and operation of the facility.

D. NOISE

The equipment to be in operation at the facility would not emit noise other than that provided by the operation of the installed heating, air-conditioning and ventilation system. Temporary power outages could involve sound from the emergency generator. Some construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks.

E. POWER DENSITY

The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 11.2% of the Federal MPE standard. Attached is a copy of a Power Density Report indicating same.

F. VISIBILITY

The potential visual impact of the proposed monopole was determined by preparation of the Visibility Analysis included as Attachment 5. Photographic simulations of the tower site from various vantage points were prepared and assumed antennas and lights mounted as proposed.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The Connecticut State Historic Preservation Officer ("SHPO") review of the project is still pending, but there are no known historic, State scenic, natural or recreational values that would be impacted by the proposed tower facility. Correspondence from SHPO will be provided to the Siting Council once received. The Connecticut Department of Energy and Environmental Protection ("CTDEEP") Natural Diversity Database ("NDDB") map for the proposed site has been reviewed and does not identify any potential species of concern. CTDEEP has confirmed that there are no records of species of concern in the vicinity.

Natural Diversity Data Base Areas NEW LONDON, CT

June 2013

State and Federal Listed Species & Significant Natural Communities



NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

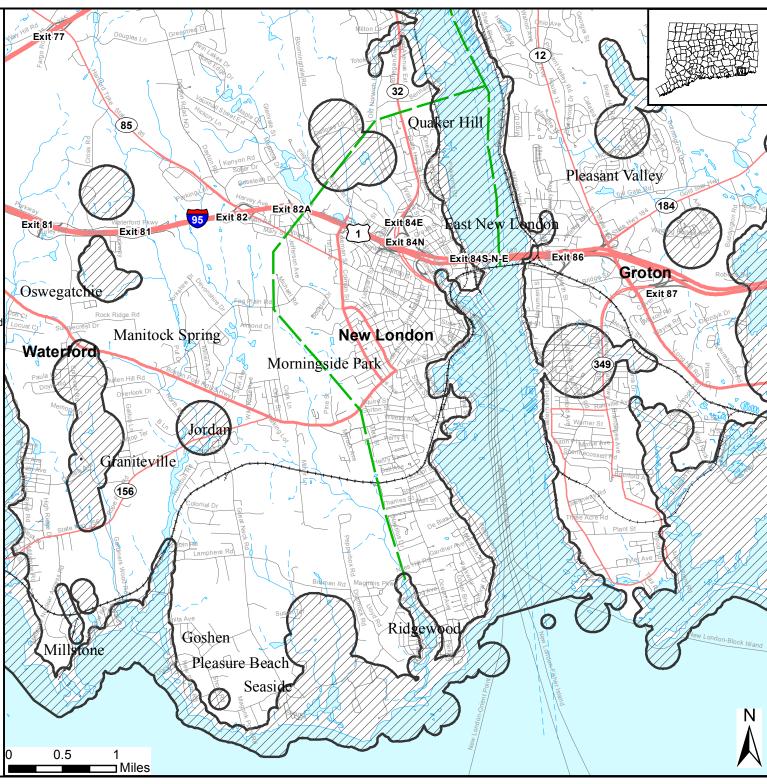
www.ct.gov/deep/nddbrequest

This file has PDF Layers. Look for the Layers tab on the left. Expand the layers and use the "eye" icons to change visibility.

QUESTIONS: Department of Energy and Environmental Protection (DEEP) 79 Elm St., Hartford CT 06106 Phone (860) 424-3011



Connecticut Department of Energy & Environmental Protection Bureau of Natural Resources Wildlife Division





June 5, 2013

Dean Gustafson All-Points Technology Corporation, P.C. 3 Saddlebrook Dr Killingworth, CT 06419 dgustafson@allpointstech.com

Project: New Telecommunications Facility, MCM SITE #CT502 New London Facility, Bates Woods

Park, New London

NDDB Determination No.: 201302825

Dear Dean Gustafson,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map provided for the proposed New Telecommunications Facility, MCM SITE #CT502 New London Facility, Bates Woods Park, New London, Connecticut. I have determined that the proposed activities will not impact any extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur in the vicinity of this property. This determination is good for one year. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by June 5, 2014.

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. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

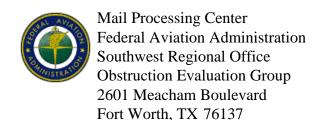
Please contact me if you have further questions at (860) 424-3592, or dawn.mckay@ct.gov . Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. McKay

Coun m. moka

Environmental Analyst 3



Aeronautical Study No. 2013-ANE-667-OE Prior Study No. 2012-ANE-175-OE

Issued Date: 06/13/2013

Maria A. Scotti Message Center Management 40 Woodland Street Hartford, CT 06405

** 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: Monopole New London-Bates Woods

Location: New London, CT

Latitude: 41-21-21.96N NAD 83

Longitude: 72-07-27.12W

Heights: 126 feet site elevation (SE)

145 feet above ground level (AGL)271 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:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part I)
X	Within 5 days after the construction reaches its greatest height (7460-2, Part II

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/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 expires on 12/13/2014 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- (c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

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.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

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

If we can be of further assistance, please contact our office at (817) 321-7755. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2013-ANE-667-OE.

(DNE)

Signature Control No: 190097265-191663959

Debbie Cardenas Technician

Attachment(s) Frequency Data

cc: FCC

Frequency Data for ASN 2013-ANE-667-OE

LOW FREQUENCY	HIGH FREQUENCY	FREQUENCY UNIT	ERP	ERP UNIT
698	806	MHz	1000	W
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



Michael Lawton SAI Communications 260 Cedar Hill St. Marlborough, MA 01752 Mike.Lawton@sai-comm.com

January 24, 2013

Connecticut Siting Council

Subject: AT&T Wireless, S2838 Bates Wood Park - New London, CT

Dear Connecticut Siting Council:

At the request of AT&T Wireless, SAI Comunications has performed an assessment of the RF Power Density at the proposed site located in Bates Wood Park, New London, CT.

Calculations were done in compliance with FCC OET Bulletin 65. This report provides an FCC compliance assessment based on a "worst-case" analysis that all transmitters are simultaneously operating at full power and pointing directly at the ground.

FCC OET Bulletin 65 formula:

$$S = \frac{2.56 * 1.64 * ERP}{4 * \pi * R^2}$$

Transmission Mode	Antenna Centerline AGL (ft)	Frequency (MHz)	Number of Channels	Effective Radiated Power per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	% MPE (Uncontrolled/ General Public)
AT&T UMTS	111	850	2	500.00	0.0292	0.5667	5.15%
AT&T UMTS	111	1900	2	500.00	0.0292	1	2.92%
AT&T LTE	111	700	1	500.00	0.0146	0.4667	3.13%
Total							11.20%

Conclusion: AT&T's proposed antenna installation is calculated to be within 11.20% of FCC Standard for General Public/Uncontrolled Maximum Permissible Exposure (MPE).

Sincerely,

Michael Lawton

SAI Communications



WETLANDS DELINEATION REPORT

April 29, 2013

Attn: Virginia King

Message Center Management, Inc. 40 Woodland St Hartford, CT 06105

Re: Wetlands Delineation Report

Bates Woods Park New London, Connecticut

APT Project No.: CT242295

Dear Ms. King,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by Message Center Management, Inc. ("MCM") at Bates Woods Park in New London, Connecticut ("Site" or "Subject Property"). At your request, Matthew Gustafson, a Connecticut registered Soil Scientist with APT conducted an inspection of the Subject Property on April 25, 2013 to determine the presence or absence of wetlands and watercourses. The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the *Corps of Engineers Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, Version 2.0 (January 2012). The results of this wetland investigation are provided below.

Site and Project Description:

The Subject Property consists of two adjoining parcels totaling approximately 125 acres and occupied by a municipal recreational park including athletic fields, and various outbuildings. Much of the southern portion of the Subject Property is a complex of upland and wetland forest. The area proposed for the wireless communications facility is south of the eastern-most baseball field and is occupied by an existing light stanchion. The surrounding land use consists of residential development to the north, south, east, and west with a large graveyard comprising much of the northern land use.

Two wetland areas were delineated in the south end of the Site consisting of a stony hillside seep wetland system (Wetland 1) and an isolated constructed storm water wetland feature (Wetland 2). Please refer to the enclosed Wetlands Delineation Map for approximate locations of the identified resource areas. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: WF 1-01 to 1-10 and WF 2-01 to 2-18. General weather conditions encountered during the above-referenced inspection include mid 40 ° F temperatures with generally sunny skies. Weather conditions preceding the above-referenced inspection date resulted in ground conditions of no snow accumulation and no evidence of ground frost throughout the inspection.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

🗵 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

Regulation of Wetlands:

Wetlands and watercourses are regulated by local, state and federal regulations, with each regulatory agency differing slightly in their definition and regulatory authority of resource areas, as further discussed below. The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council and therefore exempt from local regulation, although local wetland regulations are considered by the Siting Council. Wetlands identified on the Site may be considered Waters of the United States and therefore any activity that would result in direct impact would be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

City of New London:

The City of New London regulates activities within wetlands and watercourses and within 100 feet of wetlands and within 100 feet of watercourses through administration of the Connecticut Inland Wetlands and Watercourses Act (IWWA).

State of Connecticut:

Freshwater Wetlands: The IWWA requires the regulation of activities affecting or having the potential to affect wetlands under Sec. 22a-36 through 22a-45 of the Connecticut General Statutes. The IWWA is administered through local municipalities. The IWWA defines wetlands as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist. Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds, rivers, streams, etc., whether natural or man-made, permanent or intermittent. Intermittent watercourse determinations are based on the presence of a defined permanent channel and bank, and two of the following characteristics: (1) evidence of scour or deposits of recent alluvium or detritus; (2) the presence of standing or flowing water for a duration longer than a particular storm incident; and (3) the presence of hydrophytic vegetation.

ACOE:

The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable waters, wetlands adjacent to those waters, and/or isolated wetlands that have a demonstrated interstate commerce connection. The ACOE Wetlands Delineation Manual defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been approved by the ACOE.

Soil Description:

Soil types encountered throughout the Site were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS") ¹. Wetland soils on the property

¹ NRCS Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/, accessed on April 28, 2013.

include Ridgebury, Leicester, and Whitman soils. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation, including the proposed Facility location. They are dominated by Charlton-Chatfield complex, urban land, and udorthents. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The **Leicester** series consists of very deep, poorly drained loamy soils formed in friable till. They are nearly level or gently sloping soils in drainage ways and low-lying positions on hills. Depth to bedrock is commonly more than 6 feet. Rock fragments range from 5 to 35 percent by volume to a depth of 40 inches and up to 50 percent below 40 inches. Leicester soils have a water table at or near the surface much of the year.

The **Ridgebury** series consists of very deep, somewhat poorly and poorly drained soils formed in glacial till derived mainly from granite, gneiss and schist. They are nearly level to gently sloping soils in low areas in uplands. This series includes phases that are poorly drained and the wetter part of somewhat poorly drained. A perched, fluctuating water table above the dense till saturates the solum to or near the surface for 7 to 9 months of the year.

The **Whitman** series consists of very deep, very poorly drained soils formed in glacial till derived mainly from granite, gneiss, and schist. They are nearly level or gently sloping soils in depressions and drainage ways on uplands. Depth to dense till is 12 to 30 inches. Some pedons have organic horizons overlying the A horizon. They are fibric hemic or sapric material, and are up to 5 inches thick. Whitman soils are found on nearly level and gently sloping soils in depressions and in drainage ways of glacial uplands. Slopes are typically 0 to 2 percent but range up to 8 percent where wetness is due to seepage water. This soil is very poorly drained. A perched water table, or excess seepage water, is at or near the surface for about 9 months of the year.

Upland Soils:

The **Charlton** series is a very deep, well drained loamy soil formed in friable till. They are nearly level to very steep soils on till plains and hills. Depth to bedrock and the seasonal high water table is commonly more than 6 feet.

The **Chatfield** series consists of moderately deep, well drained, and somewhat excessively drained soils formed in till. They are nearly level to very steep soils on glaciated plains, hills, and ridges. Slope ranges from 0 to 70 percent. Crystalline bedrock is at depths of 20 to 40 inches. The soils formed in a moderately thick mantle of glacial till overlying granite, gneiss, or schist bedrock. Rock outcrops are rare to common and are limited to the more resistant bedrock.

Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

Urban land is a miscellaneous land type consisting mostly of buildings, paved roads and parking lots. Typically included with this unit are small, intermingled areas disturbed by cutting, filling, or grading such that the original soil profile can no longer be discerned.

Wetlands Discussion:

Wetland 1 Classification Summary:

Wetland 1 ² (WF 1-01 – 1-10)	System Palustrine	Subsystem	Class Forested	Subclass Broad-leaved Deciduous	Water Regime Seasonally Flooded	Special Modifier
Watercourse Type (none)	Perennial	Intermittent	Tidal	Special Aquatic Habitat (none)	Vernal Pool □	Other

Wetland 1 Description:

Wetland 1 is a very stony hillside seep wetland system formed in dense glacial till located approximately 320 feet southeast of the proposed Facility. This wetland system generally flows southeast until being constrained by Bates Woods Park Road to the south. Delineated portions of Wetland 1 are classified as single-aged red maple forest.

Wetland 1 Dominant Vegetation:

Dominant Wetland Species Common Name (<i>Latin Name</i>)	Dominant Adjacent Upland Species Common Name (Latin Name)		
Red Maple (Acer rubrum)	Red Oak (Quercus rubra)		
Spicebush (Lindera benzoin)	Skunk Cabbage (Symplocarpus foetidus)		
Poison Ivy (Toxicodendron radicans)	Black Birch (Betula lenta)		
Soft Rush (Juncus effuses)	Spicebush (Lindera benzoin)		
Tussock Sedge (Carex stricta)	Multiflora Rose* (Rosa multiflora)		
Multiflora Rose* (Rosa multiflora)	Yellow Birch (Betula alleghaniensis)		
Yellow Birch (Betula alleghaniensis)	Japanese Barberry* (Berberis thunbergii)		
Japanese Barberry* (Berberis thunbergii)	Cinnamon Fern (Osmunda cinnamomea)		
Trillium (<i>Trillium sp.</i>)	European Privet (Ligustrum vulgare)		
Skunk Cabbage (Symplocarpus foetidus)			

^{*} denotes Connecticut Invasive Plants Council invasive species

Wetland 2 Classification Summary:

Wetland 2	System	Subsystem	Class	Subclass	Water Regime Intermittently	Special Modifier
(WF 2-01 – 2-18)	Palustrine		Emergent	Persistent	Exposed	Artifical
Watercourse Type (none)	Perennial	Intermittent	Tidal	Special Aquatic Habitat (Ambystoma maculatum egg masses present)	Vernal Pool ⊠	Other

² Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents.

Wetland 2 Description:

Wetland 2 is a constructed storm water detention basin with a stone forebay and overflow concrete weir structure out-letting to the south into a rip-rap splash pad. The level of the concrete weir structure allows for Wetland 2 to retain ponded water for significant periods (as noted by the dominance of wetland obligate plant species). Wetland 2 eventually drains south flowing into non-delineated portions of Wetland 1. At the time of inspection, the detention basin was inundated with approximately 18-24 inches of standing water. Wetland 2 is located approximately 410 feet west-southwest of the proposed Facility. During inspection of Wetland 2, two spotted salamander (*Ambystoma maculatum*) egg masses were observed attached to emergent narrowleaf cattail (*Typha angustifolia*).

Wetland 2 Dominant Vegetation:

Dominant Wetland Species Common Name (<i>Latin Name</i>)	Dominant Adjacent Upland Species Common Name (<i>Latin Name</i>)
Narrowleaf Cattail (<i>Typha angustifolia</i>)	Maintained lawn
Tussock Sedge (Carex stricta)	
Soft Rush (Juncus effuses)	
Parrotfeather* (Myriophyllum aquaticum)	
Purple Loosestrife* (lythrum salicaria)	
Pickerelweed (Pontederia cordata)	
Japanese Knotweed* (Polygonum cuspidatum)	

^{*} denotes Connecticut Invasive Plants Council invasive species

Summary:

No likely adverse impact to wetlands is associated with the proposed MCM development due to the approximate 320 foot and 410 foot separating distances to Wetland 1 & 2, respectively. No temporary impacts to wetlands associated with the proposed construction activities are anticipated provided sedimentation and erosion controls are designed, installed and maintained during construction in accordance with the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control.

In addition, as no direct impact to federal wetlands is associated with MCM's development 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.

If you have any questions regarding the above-referenced information, please feel free to contact me at (860) 617-0613 or at mgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Matthew Gustafson Registered Soil Scientist

Enclosure

Wetlands Delineation Map



APT Delineated Wetland Boundary Approximate Wetland Area Subject Property Connecticut Parcel

New London, Connecticut

Sunday, April 28, 2013

