

ATTACHMENT B



## **TITICUS VALLEY AQUIFER ASSESSMENT**

**April 15, 2014**

**Homeland Towers  
22 Shelter Rock Road, Bld. C  
Danbury, CT 06810**

**APT Project No.: CT283122**

**Re: Proposed Ridgefield Ledges Facility – CT-897  
Old Stagecoach Road and Aspen Ledges Road  
Ridgefield, Connecticut**

All-Points Technology Corporation, P.C. (“APT”) understands that a wireless telecommunications facility (“Facility”) is proposed by Homeland Towers off Old Stagecoach Road in Ridgefield, Connecticut (“Subject Property”). The proposed Facility is located approximately 1,500 feet northeast of the Titicus Valley Aquifer, identified as a locally-defined Aquifer Protection Zone. Refer to enclosed Titicus Valley Aquifer Map. Section 6.2 of the Ridgefield Zoning Regulations (Aquifer Protection Zone) defines the purpose of this zone as “The Aquifer Protection Zone (locally-defined) is adopted to protect the public health by reducing or minimizing the potential for the contamination of groundwater resources in certain identified stratified drift aquifers, in order to ensure a present and future supply of safe and healthy drinking water for present and future generations.”

Although the proposed Facility is not located within the Titicus Valley Aquifer Protection Zone (Locally-defined), it is located relatively close to a headwater wetland system within the watershed that feeds both the Titicus River and the Titicus Valley Aquifer. In order to protect the Titicus Valley Aquifer resource, APT recommends the following precautions, protective measures, monitoring, notifications and restrictions be implemented. These recommendations should be incorporated into the final plans during the Connecticut Siting Council’s Development and Management (D&M) Plan process should the Facility receive approval.

### **Contractor Awareness**

During the project’s pre-construction meeting, the contractor will be made aware of the special protective precautions that are required due to the project’s location in the watershed of the Titicus Valley Aquifer. The Connecticut Siting Council will be noticed at least 48 hours in advance of a pre-construction meeting with an invitation to attend.

### **Erosion and Sedimentation Controls**

The proposed Homeland Towers construction project will follow an approved soil erosion and sedimentation control plan designed in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*. The installed erosion devices will be inspected once every seven days and after significant rainfall events of greater than one quarter inch over a 24-hour period to ensure that proper precautions are taken to avoid the release of sediment

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into nearby resource areas. These inspections will be documented on an Erosion and Sedimentation Control Site Inspection Form (please refer to attached example form). In addition to the site contractor being responsible for the proper installation and daily inspection of erosion and sedimentation (E&S) controls, staff from APT will independently inspect E&S controls and document their condition and recommend any actions necessary to bring the controls back into compliance. This E&S control inspection procedure will help avoid erosion and sedimentation problems by ensuring that the erosion control devices are maintained and functioning properly. A summary report will be submitted to the Connecticut Siting Council at the completion of the construction project.

Erosion and sedimentation control items subject to inspection include, but are not limited to the following:

- Construction Entrance Pad
- Sediment Traps
- Sediment/ Detention Basins
- Temporary Soil Stockpile Areas
- Silt Fencing/Hay Bales
- Seeding & Mulching
- Drainage Swales
- Drainage Swale Check Dams
- Other Site-Specific Erosion Control Devices

#### **Petroleum/Hazardous Materials Storage and Spill Prevention Plan**

Certain precautions are necessary during construction of the Facility to store petroleum and hazardous materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, etc.) spill due to the project's location in the Titicus Valley Aquifer and Titicus River watersheds. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the site contractor at the construction site throughout the duration of the project. In addition, a waste drum will be kept on site to contain any used absorbent pads/material for proper disposal off site.

The site designed includes a diesel fueled generator. The generator will include a double-walled steel fuel belly tank that provides 100% secondary containment. Fuel containment facilities (e.g., 5-gallon spill box<sup>i</sup>) will also be provided at the fill tube to capture fuel, should there be a spill or overflow of fuel tank. The fuel tank will include a float and alarm to alert the operator when the tank is full to assist in prevention of overfills. APT understands that wireless carrier service providers typically monitor various emergency generator functions remotely at their switch stations. APT recommends the generator be fitted with an overflow alarm sensor and an inner fuel belly tank wall alarm sensor that can be monitored remotely by the wireless carrier service provider.

The following restrictions, protective measures and procedures will be adhered to by the contractor during construction of the facility.

#### Petroleum and Hazardous Materials Storage and Refueling

- Servicing of machinery should be completed on an impervious pad with secondary containment designed to contain any release of oils, fuel, etc.
- Refueling of vehicles or machinery should take place on an impervious pad with secondary containment designed to contain fuels.
- Any fuel or hazardous materials should be stored on an impervious surface utilizing secondary containment.

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<sup>i</sup> The 5-gallon spill box screws into the existing fuel fill port of the base tank. It captures and contains fuel if over fueling or spilling occurs during the fill process. Its rugged, weatherproof enclosure is comprised of powder painted steel and pipe. It features a cover latch that can be locked for security. An example spec sheet can be found at [http://www.electricgeneratorsdirect.com/manuals/ProtectorSpillBox\\_Spec.pdf](http://www.electricgeneratorsdirect.com/manuals/ProtectorSpillBox_Spec.pdf)

#### Initial Response

- Stop operations and shut off equipment.
- Remove any sources of spark or flame.
- Contain the source of the spill.
- Determine the approximate volume of the spill.
- Identify the location of natural flow paths to prevent the release of the spill to sensitive nearby waterways or wetlands.
- Ensure that fellow workers are notified of the spill.

#### Clean Up & Containment

- Obtain spill response materials from the on-site spill response kit.
- Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
- Contact appropriate local, state and/or federal agencies, as necessary.
- Contact a disposal company to properly dispose of contaminated materials.

#### Follow-Up

- Complete an incident report.
- Submit a completed incident report to Connecticut Siting Council.

#### **Herbicide/Pesticide Restrictions**

The use of herbicides and pesticides at the proposed wireless telecommunications facility and along the proposed access drive are strictly prohibited. Exceptions to this restriction include the use of appropriate herbicides for the removal and treatment of invasive plant species, as necessary.

#### **Stormwater Management System**

The Stormwater Management System ("SWMS") is designed in accordance with the State of Connecticut Department of Environmental Protection's 2004 Stormwater Quality Manual and the requirements of their Stormwater and Dewatering Wastewaters from Construction Activities General Permit. The hydraulics and other design criteria are consistent with the State of Connecticut Department of Transportation's 2000 Drainage Manual.

The site discharges to the same watershed as the existing conditions with no change to existing drainage patterns. The site is designed to maintain, or reduce, the velocity of runoff through the implementation of flatter slopes, longer drainage paths, and use of permanent erosion control textiles on filled slopes along the perimeter of the developed areas. These design elements will reduce the site's ability to transport sediment by reducing the energy within the stormwater runoff.

The design incorporated will reduce the runoff peak rate of flow for all storms reviewed. This reduction also will maintain or reduce the ability of the site to experience erosion or sediment transport. The site uses a retention basin sized to accommodate the "first flush" volume of runoff from the access road impervious area. This BMP will accomplish two key items in conjunction with the entire SWMS; it will reduce the volume of runoff leaving the site for all storms studied through infiltration, and it will provide for water quality treatment improving the quality of the runoff. The design of the telecommunications compound area incorporates a clean broken gravel surface treatment, over a granular fill at grades less than 5%. This design element will slow the rate of flow across some of the steeper grades of the existing undeveloped area, promote increased infiltration and prevent shallow concentrated flow where erosion rills could be created.

As a result of these various SWMS design features, it is anticipated that the proposed development will provide:

- Decreased runoff velocities;
- Decreased runoff rates;
- Decreased runoff volumes; and,
- Increased runoff quality.

If you have any questions regarding the above-referenced information, please feel free to contact Dean Gustafson by telephone at (860) 663-1697 ext. 201 or via email at [dgustafson@allpointstech.com](mailto:dgustafson@allpointstech.com) or John Whitcomb by telephone at (860) 663-1697 ext. 207 or via email at [jwhitcomb@allpointstech.com](mailto:jwhitcomb@allpointstech.com).

Sincerely,

All-Points Technology Corporation, P.C.



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Enclosures