



## WETLAND INSPECTION

November 4, 2019

APT Project No.: CT606110

**Prepared For:** LSE Phoenix LLC  
40 Tower Lane, Suite 201  
Avon, CT 06001  
Attn: Carrie Ortolano

**Site Address:** 100 Sand Road  
North Canaan, Connecticut

**Date(s) of Investigation:** 10/23/2019

**Field Conditions:** **Weather:** sunny, mid 60's  
**Soil Moisture:** dry to moist

**Wetland/Watercourse Delineation Methodology\*:**

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

**Municipal Upland Review Area:**

**Wetlands:** 100 feet  
**Watercourses:** 100 feet

The wetlands inspection was performed by<sup>†</sup>:

Dean Gustafson, Senior Wetland Scientist

Enclosures: Wetland Delineation Field Form & Wetland Inspection Map

*This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.<sup>‡</sup> If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.*

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\* Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

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

‡ APT has relied upon the accuracy of information provided by Lodestar Energy regarding proposed solar development area and access road/utility interconnection locations for identifying wetlands and watercourses within the study area.

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# Attachments

- Wetland Delineation Field Form
- Wetland Inspection Map

## Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1-01 to 1-17 (closed loop) and IWC 1 to 5	
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>

### WETLAND HYDROLOGY:

#### NONTIDAL

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input 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: Wetland 1 is a hillside seep that discharges to the northeast into narrow seasonal intermittent watercourse (no flows observed).		

#### TIDAL

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

### 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: None		

#### CLASS:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input type="checkbox"/>
Open Water <input type="checkbox"/>	Disturbed <input type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: None		

### WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed		
Comments: Seasonal intermittent watercourse has 1-2-foot-wide, 1-foot deep loam/sand channel.		

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

**SPECIAL AQUATIC HABITAT:**

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

**SOILS:**

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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**DOMINANT PLANTS:**

Narrow-Leaf Cattail ( <i>Typha augustifolia</i> )	Sensitive Fern ( <i>Onoclea sensibilis</i> )
Boneset ( <i>Eupatorium perfoliatum</i> )	Green Bulrush ( <i>Scirpus atrovirens</i> )
Multiflora Rose* ( <i>Rosa multiflora</i> )	Soft Rush ( <i>Juncus effuses</i> )
Water Horsetail ( <i>Equisetum fluviatile</i> )	

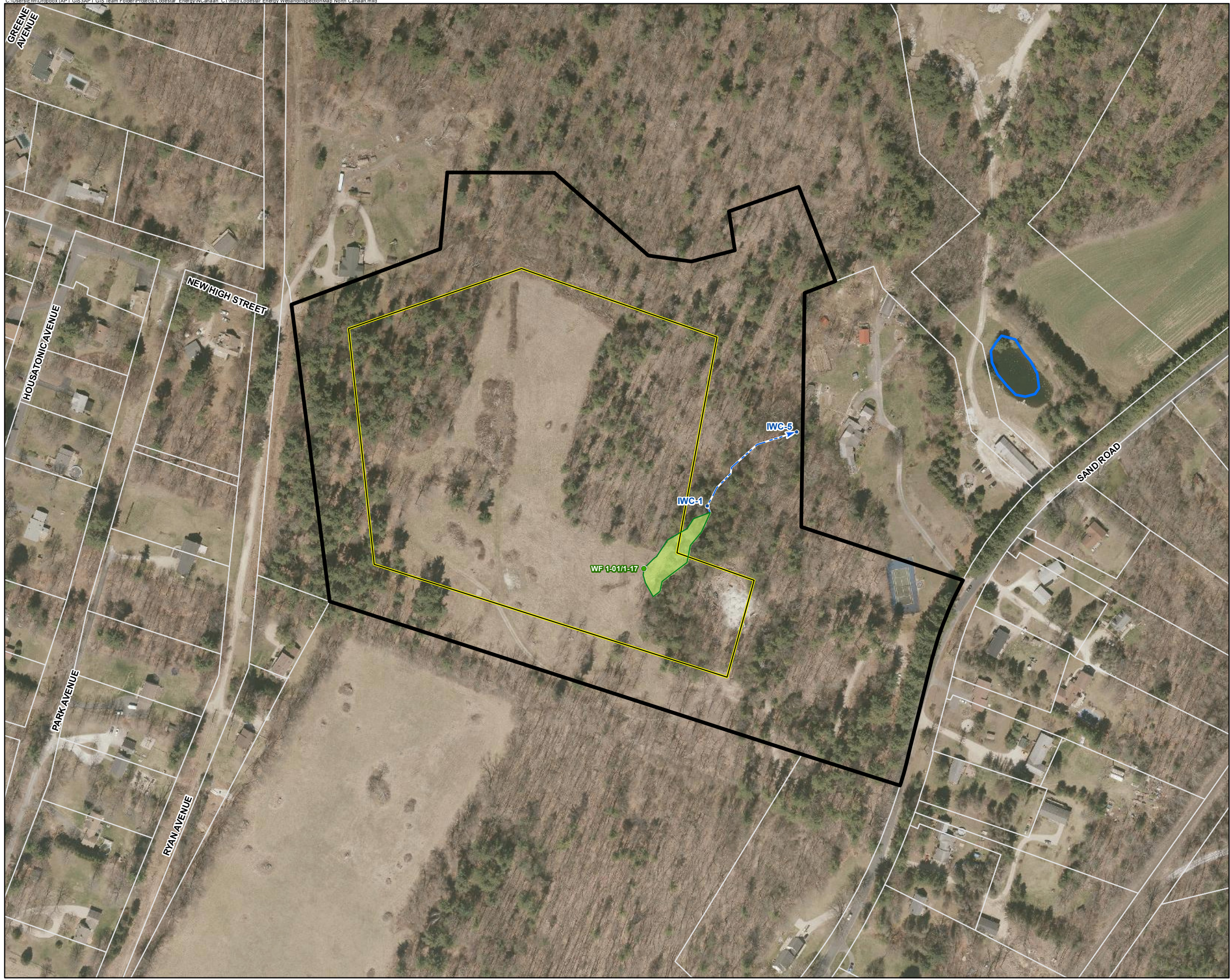
\* denotes Connecticut Invasive Species Council invasive plant species

**GENERAL COMMENTS:**

All-Points Technology Corp., P.C. ("APT") understands that LSE Phoenix LLC is proposing to construct a solar generation facility at 100 Sand Road in North Canaan, CT. The property consists of a relatively large open maintained field centrally located on the subject parcel, surrounded by forested areas. An existing gravel drive provides access to the open field from Sand Road. One wetland area was identified along the northeast corner of the eastern portion of the open field.

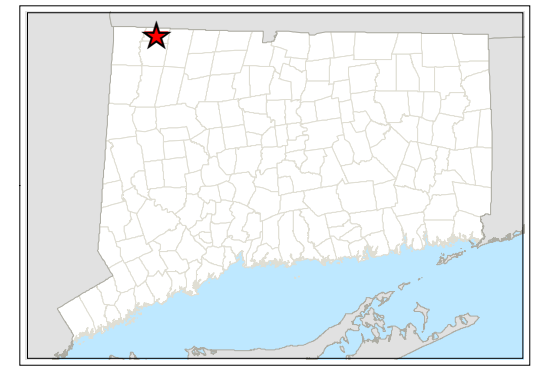
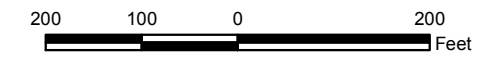
Wetland 1 consists of a relatively small ( $\pm 8,500$  sq. ft.) hillside seep wetland located in the central-east portion of the subject property in the northeast corner of the open field. This wetland has formed in poorly drained calcareous glacial till with dense subsoil; the dense subsoil has created a shallow perched seasonal high groundwater table. The wetland is located on a moderate slope that drains to the northeast with surface flows from the wetland discharging into a small seasonal intermittent watercourse. Although saturated soils within 12 inches of the surface were observed in Wetland 1, no flows were observed in the intermittent watercourse channel at the time of the inspection. It is anticipated that the intermittent watercourse only flows during the late winter/early spring months and following significant precipitation events. The intermittent watercourse flows onto the adjacent residential property, eventually entering into a northwest-to southeast-oriented narrow wetland corridor located  $\pm 250$  feet off the subject property from the far northeast property corner.

# Wetland Inspection Map Solar Energy Facility 100 Sand Road, Parcel ID 07/111-0 North Canaan, CT



### Legend

- Site
- Project Area
- Approximate Parcel Boundary (CTDEEP)
- Watercourse (CTDEEP)
- Wetland Flags (WF-1-01)
- Delineated Wetland Boundary Line
- Delineated Wetland Area
- Intermittent Watercourse Flag (IWC-1)
- Intermittent Watercourse



### Map Sources:

Ortho Base Map: State of Connecticut 2016 aerial imagery with 0.5-foot ground resolution provided by CTECO Map Service

Wetlands Field Delineated by: Dean Gustafson, Professional Soil Scientist, APT; October 23, 2019

CTDEEP's data library (<http://www.ct.gov/deep>) Data layers are maintained and updated by CTDEEP and represent the most recent publications.

Map Date: November 2019