

June 2, 2021

APT Project No.: CT481500

Prepared For: C-TEC Solar
1 Griffin Road S., Suite 200
Bloomfield, CT 06002
Attn: Michael Morrison

Site Name: North Grosvenordale Solar

Site Address: 77 Pompeo Road, North Grosvenordale, Connecticut

Date of Investigation: 5/7/2021

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

Wetland/Watercourse Delineation Methodology¹:

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

Municipal Upland Review Area: **Wetlands:** 100 feet **Watercourses:** 200 feet

The wetlands inspection was performed by²:



Matthew Gustafson, Registered Soil Scientist

Enclosures: Wetland Delineation Field Forms & 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.³ 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.

¹ Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

² All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

³ APT has relied upon the accuracy of information provided by C-Tec Solar regarding the location and limits of the Study Area for the purposes of identifying wetlands and watercourses.

Attachments

- Wetland Delineation Field Forms
- Wetland Inspection Map

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1-01 to 1-16	
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 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: Wetland 1 consists of a broad forested wetland system with edge seep wetlands with seasonally saturated soils draining to interior seasonally flooded areas.		

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 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: None		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Cryptic'	
Comments: Interior flooded depression contained depths of inundation ranging from 8 to 12 inches at the time of inspection. Approximately 50 spotted salamander egg masses and numerous wood frog tadpoles were observed. The vernal pool habitat consisted of diffuse shallow pools with high hummock/hollow topography and numerous attachment sites. Some depressions contained deep organic and detritus accumulation.	

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:

Red Maple (<i>Acer rubrum</i>)	Japanese Barberry* (<i>Berberis thunbergii</i>)
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	Sweet Pepperbush (<i>Clethra alnifolia</i>)
Winterberry (<i>Ilex verticillata</i>)	Canada Mayflower (<i>Maianthemum canadense</i>)
Marsh Marigold (<i>Caltha palustris</i>)	Cinnamon Fern (<i>Osmunda cinnamomea</i>)
Sphagnum moss (<i>Sphagnum</i> spp.)	

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

<p>All-Points Technology Corp., P.C. ("APT") understands that C-TEC Solar proposes to install a commercial scale photovoltaic ("PV") solar energy generating facility ("Facility") in mature hardwood uplands located at 77 Pompeo Road in North Grosvenordale, Connecticut. Access the proposed Facility would be provided from Pompeo Road. Three wetlands were identified within and in proximity to the proposed solar facility.</p> <p>Wetland 1 is a south draining broad forested seep system dominated by a closed canopy red maple dominant overstory. This wetland contains interior pockets of seasonal flooding characterized by raised hummocks dominated by mosses/shrubs. Interior seasonally flooded areas ranging from 8 to 12-inches of inundation were observed at the time of inspection and found to support breeding by vernal pool indicator species. Eastern boundaries of this wetland consist of steep bedrock controlled slopes while western and northern extents of the resource are characterized by shallow sloping broad transitional seep areas.</p>

Wetland Delineation Field Form

Wetland I.D.:	Wetland 2	
Flag #'s:	WF 2-01 to 2-10	
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 type="checkbox"/>	Seasonally Saturated/perched <input checked="" type="checkbox"/>
Comments: Wetland 2 consists of an isolated depressional wetland with a seasonally perched water table. Evidence of seasonal flooding is present in the form of water-stained leaves, however at the time of inspection very shallow flooding was 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 checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Due to historic logging activities, overstory vegetation throughout Wetland 2 has been altered resulting in a dominance of emergent and scrub/shrub species. Due to periodic flooding and shallow soils to bedrock, vegetation throughout Wetland 2 is sparse.		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

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: Inundation depths are too shallow and no breeding activity by vernal pool indicator species was observed at the time of inspection.	

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:

Highbush Blueberry (<i>Vaccinium corymbosum</i>)	Sphagnum moss (<i>Sphagnum</i> spp.)
Greenbrier (<i>Smilax rotundifolia</i>)	Red Maple (<i>Acer rubrum</i>)

* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

<p>All-Points Technology Corp., P.C. ("APT") understands that C-TEC Solar proposes to install a commercial scale photovoltaic ("PV") solar energy generating facility ("Facility") in mature hardwood uplands located at 77 Pompeo Road in North Grosvenordale, Connecticut. Access the proposed Facility would be provided from Pompeo Road. Three wetlands were identified within and in proximity to the proposed solar facility.</p> <p>Wetland 2 is an isolated depressional wetland with that has been recently logged with a majority of the overstory removed. There is a high hummock hollow microtopography with pockets of very shallow inundation less than 1 inch at the time of inspection. A majority of the wetland soils consist of shallow organic material overlying bedrock.</p>
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Wetland Delineation Field Form

Wetland I.D.:	Wetland 3	
Flag #'s:	WF 3-01 to 3-06	
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 checked="" 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 3 is a headwater hillside seep system with seasonally saturated surfaces draining north to a depression semi-permanently flooded area. Depths of inundation ranged from 6 inches to 2 feet or greater at the time of inspection.		

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 checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: As a result of edge clearing activities along the west side of the wetland which have resulted in some impact to this resource, portions of Wetland 3 are dominated by transitional scrub/shrub and emergent communities. Generally, the wetland is dominated by mature hardwood forest, with margins of the semi-permanently flooded areas dominated by emergent vegetation.		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: None		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: 'Cryptic'	
Comments: The interior semi-permanently flooded depressional areas associated with Wetland 3 were surveyed for breeding activity by vernal pool indicator species. Due to depths of water, poor light conditions and dark/tannic water at the time of inspection, complete visual survey of the pool was not possible. However, dip netting revealed several wood frog larvae; spotted salamander egg masses were assumed to be present.	

SOILS:

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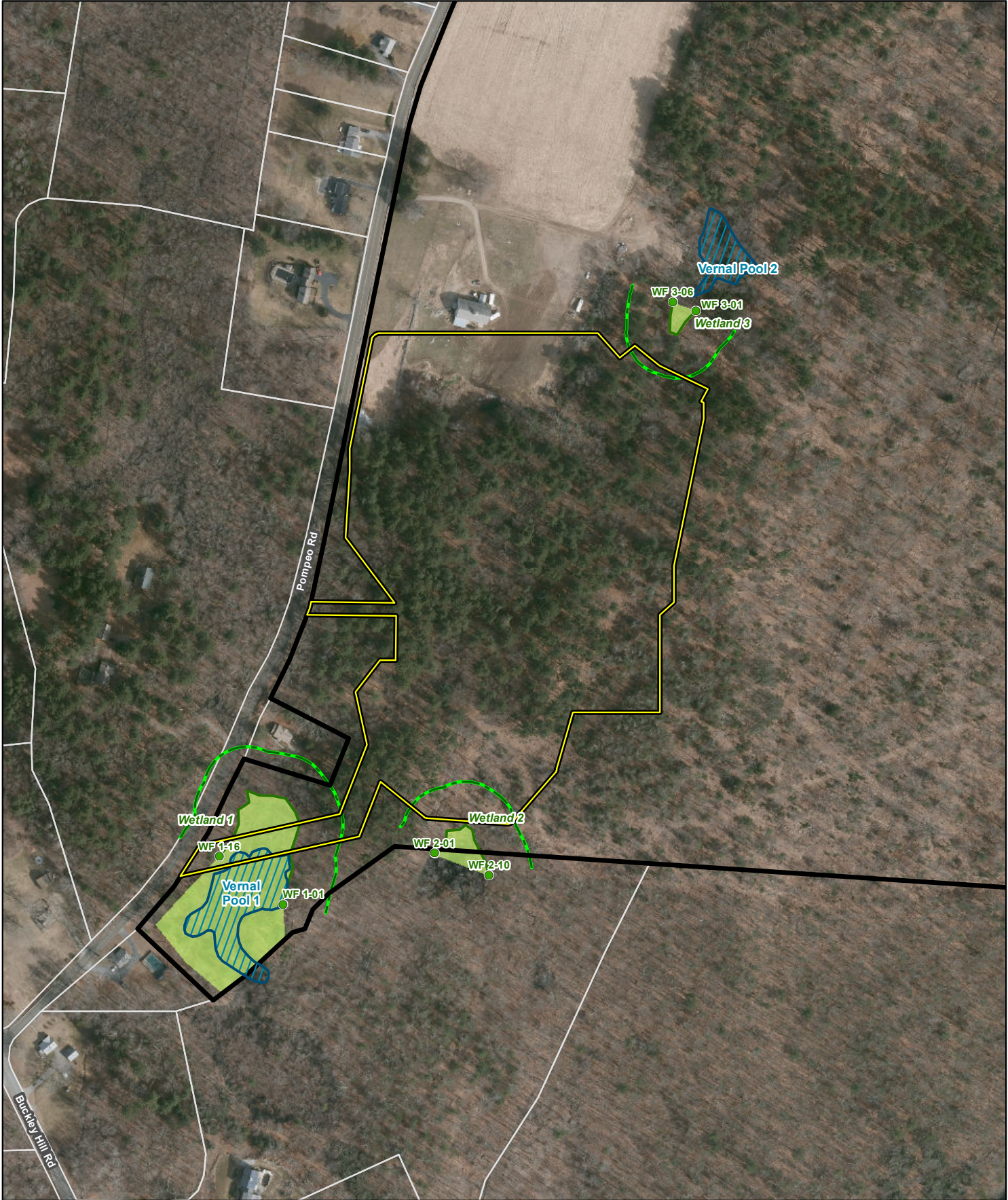
DOMINANT PLANTS:

Red Maple (<i>Acer rubrum</i>)	Greenbrier (<i>Smilax rotundifolia</i>)
Tussock Sedge (<i>Carex stricta</i>)	Multiflora Rose* (<i>Rosa multiflora</i>)
Highbush Blueberry (<i>Vaccinium corymbosum</i>)	Cinnamon Fern (<i>Osmunda cinnamomea</i>)









* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

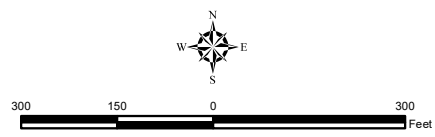
<p>All-Points Technology Corp., P.C. ("APT") understands that C-TEC Solar proposes to install a commercial scale photovoltaic ("PV") solar energy generating facility ("Facility") in mature hardwood uplands located at 77 Pompeo Road in North Grosvenordale, Connecticut. Access the proposed Facility would be provided from Pompeo Road. Three wetlands were identified within and in proximity to the proposed solar facility.</p> <p>Wetland 3 consists of a headwater seep system which generally drains north. Topography flattens within the wetland to the north leading to a large semi-permanently flooded depression in the interior, surrounded by the seep system. Overstory vegetation is dominated by mature hardwood forest with a dense scrub/shrub understory. This resource continues to drain north as a broader hillside seep system extending beyond the limits of the investigation. The west side of this wetland has been disturbed by clearing activities and storage/deposition of materials.</p>



Legend

-  Site
-  Project Area
-  Wetland Flag
-  100-foot Upland Review Area
-  Delineated Wetland Boundary
-  Approximate Wetland Area
-  Vernal Pool
-  Approximate Parcel Boundary

Map Notes:
 Base Map Source: 2019 CT Aerial Imagery (CTECO)
 Map Scale: 1 inch = 300 feet
 Map Date: June 2021



Wetland Inspection Map

Proposed Pompeo Solar Energy Facility
 77 Pompeo Road
 North Grosvenor Dale, Connecticut

