STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 26, 2016

Kenneth C. Baldwin, Esq.
Joey Lee Miranda, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

RE: **PETITION NO. 1234** - SolarCity Corporation petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 2.8 Megawatt Solar Photovoltaic Electric Generating facility located at Becton, Dickinson & Company, 7 Grace Way, North Canaan, Connecticut.

Dear Attorneys Baldwin and Miranda:

At a public meeting held on July 21, 2016, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal would not have a substantial adverse environmental effect, and pursuant to Connecticut General Statutes § 16-50k, would not require a Certificate of Environmental Compatibility and Public Need, with the following conditions:

1. The Petitioner shall prepare a Development and Management Plan (D&M) for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Towns of North Canaan and Canaan for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
   a) A final site plan including, but not limited to, the electrical utility connections from solar arrays;
   b) Fence design including an anti-climb security fence around high voltage equipment or, if the Petitioner elects to fence the entire areas of the solar arrays, anti-climb fencing should be at a height of at least eight feet and raised six inches above grade to accommodate migration of small species;
   c) Consideration of installation of 4-foot by 8-foot plywood sheets in moat areas around arrays to improve habitat for the smooth green snake;
   d) Plans to perform tree clearing November 15th through February 1st to minimize impacts on salamanders or, in the alternative conduct a daily (?) sweep of the entire construction area for salamanders and, if found they should be moved out of construction area;
   e) Final determination from the Connecticut Department of Energy and Environmental Protection and compliance with any recommended mitigation measures;
   f) Name and resume of an independent environmental inspector for Council review and approval;
   g) Use of off-road construction equipment that meets the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including, but not limited to, retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel; and
   h) Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies that limit the idling of mobile sources to 3 minutes.

2. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed within three years from the date of the mailing of the Council's decision, this decision shall be void, and the facility owner/operator shall dismantle the facility and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's decision shall not be counted in calculating this deadline. Authority to monitor and modify this schedule, as necessary, is delegated to the Executive Director. The

facility owner/operator shall provide written notice to the Executive Director of any schedule changes as soon as is practicable;

- Any request for extension of the time period to fully construct the facility shall be filed with the Council not later than 60 days prior to the expiration date of this decision and shall be served on all parties and intervenors, if applicable, and the Town of North Canaan;

- Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;

- The facility owner/operator shall remit timely payments associated with annual assessments and invoices submitted by the Council for expenses attributable to the facility under Conn. Gen. Stat. §16-50v;

- This Declaratory Ruling may be transferred, provided the facility owner/operator/transferor is current with payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v and the transferee provides written confirmation that the transferee agrees to comply with the terms, limitations and conditions contained in the Declaratory Ruling, including timely payments to the Council for annual assessments and invoices under Conn. Gen. Stat. §16-50v; and

- If the facility owner/operator is a wholly owned subsidiary of a corporation or other entity and is sold/transferred to another corporation or other entity, the Council shall be notified of such sale and/or transfer and of any change in contact information for the individual or representative responsible for management and operations of the facility within 30 days of the sale and/or transfer.

This decision is under the exclusive jurisdiction of the Council and is not applicable to any other modification or construction. All work is to be implemented as specified in the petition dated June 15, 2016 and additional information received on July 11, 2016.

Enclosed for your information is a copy of the staff report on this project.

Very truly yours,

Robert Stein MMB

Robert Stein
Chairman

RS/MP/lm

Enclosure: Staff Report dated July 21, 2016

c: The Honorable Douglas E. Humes, Jr., First Selectman, Town of North Canaan
Ruth Mulcahy, Zoning Enforcement Officer, Town of North Canaan
Steve Allyn, Planning and Zoning Chairman, Town of North Canaan
Matthew Freund, Chairman, Inland Wetlands Conservation Commission, Town of North Canaan
Honorable Patricia Allyn Mechare, First Selectman, Town of Canaan
Fred Laser, Planning and Zoning Chairman, Town of Canaan
Michael Owen O'Neil, Zoning Officer, Town of Canaan
Ellery Sinclair, Chairman, Inland Wetlands Commission, Town of Canaan
Becton, Dickinson & Company, 7 Grace Way, North Canaan
Nichole Seidell, Director, Environmental Planning, SolarCity Corporation

Petition No. 1234
SolarCity Corporation
7 Grace Way, North Canaan
Staff Report
July 21, 2016

Introduction

On June 15, 2016, SolarCity Corporation (SolarCity or Petitioner) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the construction, operation and maintenance of a 2.28 megawatt (MW) direct current (DC) or approximately 2.05 MW alternating current (AC) solar photovoltaic generating facility at the Becton, Dickinson & Company (BDC) located at 7 Grace Way, North Canaan, Connecticut. Council member Robert Hannon, and Christina Walsh and Michael Perrone of the Council staff visited the site on July 8, 2016 to review this proposal. Michael Libertine, All Points Technology Corporation, P.C. (APT); Matthew Gustafson, APT; Eric Lebatte, APT; Kieran Siao, SolarCity; Dylan Venell, SolarCity; and Todd Piskuru, Engineering Manager, BDC also attended the field review.

Municipal Consultation

Representatives for the Petitioner met with local officials from the Town of North Canaan during December 2015 to discuss the project. On or about June 14, 2016, the Petitioner provided formal notice to the Town of North Canaan, the Town of Canaan (located within 2,500 feet of the proposed project), as well as other State and local officials and agencies. To date, the Council has not received any comments.

The Town of Canaan (located within 2500 feet of the proposed project that is physically located in the Town of North Canaan) Inland Wetlands and Conservation Commission submitted comments on July 18, 2016 indicating concerns over the potential environmental impacts to Robbins Swamp and requesting an "acknowledged guarantee" of oversight over the proposed project.

State Agency Comments

By letter dated July 19, 2016, the Connecticut Department of Transportation provided comments requesting that SolarCity obtain a Highway Encroachment Permit for any work performed within the State Route 7 right-of-way.

Public Benefit

The project would be a "grid-side distributed resources" facility, as defined in Connecticut General Statutes (CGS) § 16-1(a)(37). CGS § 16a-35k establishes the State's energy policy, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." The 2013 Connecticut Comprehensive Energy Strategy emphasizes low- or no-emission sources of electric generation and development of more distributed generation. The proposed facility is distributed generation. Specifically, the proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard as a zero emission Class I renewable energy source.

Proposed Site

The project would be located on the southern portion of a 77.1-acre parcel owned by BDC. The subject property currently hosts BDC's 387,000 square foot medical products manufacturing, distribution and warehouse facility in the northeast portion of the parcel. Railroad tracks running in an east-west direction roughly bisect the property into northern and southern portions. The southern, western and extreme eastern portions of the property are undeveloped and are wooded. Wetlands exist near the southeastern and southwestern corners of the parcel. A larger wetland system is located in the northwestern portion of the parcel.

The subject property is located in the southwestern portion of North Canaan and is located in the Town's Industrial Zone. To the north of the subject property is another industrial use. An existing electric transmission line corridor and the Northwest Connecticut Rod and Gun Club property are located to the south. An active rail line and low density residential development is located to the west. A residential parcel, Route 7, and undeveloped land is located to the east of the subject property.

Proposed Project

The solar field would include two ground-mounted arrays totaling 2.28 MW DC or 1.72 MW AC on fixed rack systems oriented to the south. The southwestern array would have 6,404 solar panels. The southeastern array would 756 solar panels. The ground-mounted arrays would have a total area of about 7.67 acres. A total of 9.37 acres would have to be cleared to accommodate the ground facility and minimize shading. These panels would be tilted on an angle of 25 degrees with the horizontal. The top edges of the ground-mounted solar panels would be approximately eight feet above ground level (agl). The bottom edges of the ground-mounted solar panels would be approximately two feet agl. The solar panel racking systems would be supported by steel mounting posts and concrete footings. The footings would be installed to a depth of five feet below grade.

One roof-mounted solar array with 1,672 solar panels is also proposed. It would total 0.469 MW DC or about 0.336 MW AC. The top edges of the rooftop solar array would be about 10 inches above the top of the roof. The bottom edges of the rooftop solar array would be about 2 inches above the top of the roof. The rooftop panels would also be fixed and oriented to the south, except at a smaller angle of about eight degrees above the horizontal.

The solar electric system will be tied directly into the main electric infrastructure of BDC, resulting in a net metering application. Electric utility connections from the ground-mounted arrays to the building would be underground. Electric utility connections from the rooftop arrays would connect directly to the building's electrical system. BDC would first consume the electricity produced by the proposed solar facility. If BDC requires additional electricity, it would draw from the existing utility service. If BDC does not utilize all of the electricity produced by the solar facility, the surplus power would be fed back into the distribution system. SolarCity's utility interconnection application is in process. SolarCity is awaiting the results of the interconnection study with Eversource.

The project would utilize an eight-foot tall security fence with two-inch mesh to separately surround the southwestern ground-mounted array and the southeastern ground-mounted array. The Petitioner has considered the use of a smaller mesh size as an anti-climbing measure, but believes that the proposed two-inch mesh size is adequate for their security purposes.

The Petitioner would utilize existing access to the BDC property from Grace Way. The Petitioner would construct a 12-foot wide gravel access drive (with a total length of roughly 600 feet) from the existing paved area near the railroad tracks to the eastern side of the southwestern array. Similarly,

the Petitioner would construct a 12-foot wide gravel access drive from an existing developed parking area to the north to the southeastern array, for a distance of about 240 feet.

Environment, Cultural and Scenic Values

The 9.37 acres of trees to be cleared results in the removal of roughly 1,818 trees, primarily consisting of oak and hemlock. SolarCity had a comprehensive carbon debt analysis performed. While the loss of trees necessarily reduces carbon capturing ability, the carbon dioxide emissions reductions due to the solar power displacing more traditional generation (which includes fossil-fueled generation) results in a "carbon payback period" of slightly less than three years of projected solar energy production. Council staff notes that, for the simple comparison of the lost carbon sequestration effects of tree removal versus the displacement of non-baseload traditional electric generation, the "carbon payback period" can often be very rapid, on the order of days. However, SolarCity had a more conservative/comprehensive analysis performed that included the carbon emissions associated with the production of the photovoltaic modules and associated equipment. Nevertheless, the end result is that the proposed project will provide a long-term net carbon dioxide reduction benefit for the environment.

Approximately 1,000 cubic yards of cut and approximately 1,000 cubic yards of fill would be required to grade the project. No excess material would be trucked off of the site.

A stormwater management plan has been developed by APT in accordance with the *2004 Connecticut Stormwater Quality Manual.* The proposed infiltration basins would reduce peak runoff flow rates for all major storm events and also treat the runoff. As a result, the proposed development would not result in adverse stormwater impacts to surrounding areas and properties.

A Decommissioning Plan was included in the Petition and has provisions for project removal in the event that the project is permanently removed from service. The expected life of the solar facility is 35 years. The current Power Purchase Agreement (PPA) between SolarCity and BDC is for 20 years.

The project is located within a Connecticut Department of Energy and Environmental Protection (DEEP) GA groundwater classification area. Designated uses in GA-classified areas include existing private and potential public or private supplies of drinking water and base flow for hydraulically-connected surface water bodies. However, the proposed project is not located within a DEEP-designated Aquifer Protection Area. The entire project would be located outside of both the 100-year and the 500-year flood zones.

There are three wetlands in proximity to the project. Wetland 1 is part of a broad complex of wetlands that includes the northerly extent of a large wetland system locally known as Robbins Swamp. Wetland 1, located near the western limits of the subject parcel, is approximately 70 feet from the clearing/grading limits of the southwestern ground-mounted array at its nearest point. Wetland 2 is a small isolated forested wetland pocket located east of Wetland 1. Wetland 2, located just south of the railroad tracks in the southwestern portion of the subject parcel, is approximately 203 feet from the southwestern array fenceline at its nearest point. Wetland 3 consists of two depressional wetland pockets that generally drain south. Wetland 3, located near the southeastern limits of the subject parcel, is approximately 494 feet from the eastern fenceline of the southeastern ground-mounted array at its closest point. Potential short-term impacts to wetlands associated the project would be minimal with proper erosion and sedimentation controls (E&S Controls), which would be designed in accordance with the *2002 Connecticut Guidelines for Erosion and Sedimentation Control.* Staff suggests including a condition that the final E&S Controls Plan be provided in the D&M Plan. Potential long-term secondary impacts to wetland resources are minimized by the fact that the facility would be unstaffed and avoids the installation of impervious surfaces, and the

Petitioner would treat the majority of the surface around the solar installation with native grass/vegetation.

APT performed vernal pool surveys in March 2016. Survey methods included visual surveys, live trapping, chorus surveys and cover searching. One vernal pool invertebrate indicator species was observed, the fairy shrimp. Three amphibian vernal pool indicator species were confirmed as breeding on the property: the wood frog; the spotted salamander; and the blue-spotted salamander complex. The blue-spotted salamander complex is a State-listed Species of Special Concern. Five adult specimens were collected from the site under a DEEP Scientific Collector's Permit for future genetic analysis. These specimens will be catalogued at the American Museum of Natural History in New York. Additionally, a Special Animal Survey Form was completed and submitted to DEEP documenting the observations.

A total of five vernal pools were identified. All five vernal pools were cryptic vernal pools embedded within larger wetland systems. Vernal Pools 1 through 4 are embedded within Wetland 1, and Vernal Pool 5 is embedded within Wetland 3. All five vernal pools meet the biological criteria of Tier 1 vernal pools under the Calhoun and Klemens 2002 Best Develoment Practices – Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States (2002 BDPs). The five vernal pools have existing development within their 100-foot Vernal Pool Envelopes (VPE). Vernal Pools 1 through 5 have existing percent development in the VPEs of 25 percent, 5 percent, 10 percent, 2 percent, and 37 percent, respectively. However, no additional development is proposed within the VPEs for Vernal Pools 1 through 5. The area ranging from 100 feet to 750 feet from a vernal pool is known as the Critical Terrestrial Habitat (CTH). The 2002 BDPs require limiting development to not more than 25 percent of the CTH area. See Vernal Pool CTH table below.

Vernal Pool	Percent Existing CTH Development	Percent Increase in CTH Development as Proposed	Percent Increase in Original Layout	Percent Change Reconfigured Project	Total Post-Development CTH Final
1	36%	6%	8%	-2%	42%
2	14%	8%	11%	-3%	22%
3	23%	1%	2%	-1%	24%
4	11%	9%	10%	-1%	20%
5	22%	1%	3%	-2%	23%

Accordingly, Vernal Pools 2 through 5 are compliant with the 2002 BDPs because the percentages of post-development areas to their CTH areas are all less than 25 percent. However, Vernal Pool 1 is not compliant because the total post-development would be 42 percent of the CTH area. See attached Figure 2.

To compensate for the additional development in the Vernal Pool 1 CTH, the Petitioner is proposing a Vernal Pool Mitigation Plan (VPMP). The proposed VPMP strategy is to improve these historically filled wetland areas bordering Vernal Pool 1, which contains existing impacts within the eastern portions of both the VPE and the CTH, primarily in the form of existing development associated with the BDC facility. The Petitioner notes that, per the 2002 BDPs, the first 100 feet bordering a vernal pool is the most critical for protection. Areas bordering Vernal Pool 1 were overlain with spoils likely originating from the digging of a drainage ditch that feeds the wetland system supporting this resource. Enhancement of historically filled wetland areas bordering Vernal Pool 1 would include the spreading/leveling of any large fill piles placed in Wetland 1. (See attached Figure 3.) Any mature trees would be protected during the enhancement. Existing invasive shrubs

would be treated and eradicated prior to the planting of the enhancement area. In addition, considering that these filled areas are compacted, the surface would be broken up using a tiller or suitable alternative to allow for easier plant growth. In areas where trees will be planted, additional placement of topsoil will be utilized to assist plant tree survivorship.

Subsequently, upland forest plantings would be installed throughout the enhancement area to stabilize and re-vegetate the affected areas. A planting plan would be developed under the direction of an environmental professional experienced in wetland mitigation/enhancement that would promote the regeneration of the terrestrial forest habitat. Enhanced terrestrial areas would be protected by a leaf, straw or other suitable alternative mulch and under sown with the seed mix "New England Conservation Seed Mix" or an approved substitute. In addition, signage would be installed at the edge of the enhancement areas identifying them as protected and sensitive to promote the prevention of potential future impacts and degradation.

APT assessed the potential presence of several State-listed plant species identified by DEEP in their letter dated January 12, 2015 regarding the Natural Diversity Database (NDDB). These plant species are the following: mountain spleenwort; wallrue spleenwort; foxtail sedge; sedge; chestnut-colored sedge; long-bracted green orchid; large-bracted tick-trefoil; and large-flowered bellwort. Further investigation by a field ecologist experienced with State-listed plant species found that the project area does not support suitable habitat for any of the listed plant species.

DEEP's letter also listed five vertebrate species: blue-spotted salamander, a State-listed Species of Special Concern for the "complex" type and State-listed Endangered for diploid populations; alder flycatcher, a State-listed avian Species of Special Concern; smooth green snake, a State-listed Species of Special Concern; burbot, a State-listed fish Endangered Species; and northern leopard frog, a State-listed Species of Special Concern.

While the blue-spotted salamander was found on the subject property, this species favors herbaceous-dominated floodplain wetlands for breeding, but also breeds in riprarian wooded swamps. The potential for project-related impacts to the other vertebrate species identified by DEEP is limited due to the fact that these species are associated with early-successional habitats (i.e. non-forested habitats) which do not occur within or immediately adjacent to the proposed project area. In February 2016, APT submitted an updated request to DEEP for an updated NDDB review. No response has been received to date.

Notwithstanding, the Petitioner proposes wildlife impact mitigation in the form of habitat enhancement measures which include a narrow strip of land between the perimeter fence and the newly-created forest edge that would remain clear. This area can be managed for wildlife by restricting mowing on a rotational basis every 4 to 7 years. This would create a "soft" ecotone that would provide cover and habitat for a number of "edge" species.

Finally, with respect to federally-listed species, the northern long-eared bat is a federally-listed Threatened Species which may occur in the vicinity of the site. However, APT has reviewed the U.S. Fish and Wildlife Service's *Northern Long-Eared Bat 4(d) Rule for Non-Federal Activities Key* and found that the proposed project would not result in an adverse impact to the northern long-eared bat. However, the Petitioner proposes conducting tree removal activities only between October 1 and March 31 when NLEB are in hibernation. This restriction would also serve to avoid disturbance to breeding bird species during periods of high bird activity.

No historic resources listed on or eligible for listing on the National Register of Historic Places exist within ½ mile of the subject property. However, the State Historic Preservation Office (SHPO) has requested that SolarCity have a professional cultural resources reconnaissance survey performed.

Heritage has performed such survey and recommended no additional fieldwork in the project area. The results of Heritage's assessment has been provided to SHPO.

The proposed project is expected to meet the DEEP noise standards at the property boundaries.

The nearest residence to the southeastern array is located approximately 512 feet to the east and on Route 7. No residences are located in the vicinity of the southwestern array or the rooftop array.

The roof-mounted array would be approximately 750 feet west of Route 7. This array would be set back sufficiently from abutting properties and public roads and would not be expected to be visible from most off-site locations. The western ground-mounted array would be set back sufficiently from abutting properties and public roads such that it would not be visible from off-site locations. Views of the eastern ground-mounted array may be possible from one the nearest residence on Route 7 during leaf-off conditions. However, the top edges of the solar panels would be about equal to the height of the fence (i.e. eight feet) and thus would not protrude above the fenced compound.

SolarCity estimates that the project would take about three to four weeks to construct upon securing all necessary permits and approvals including Council review and approval of the D&M Plan. Construction hours would typically occur Monday through Saturday, 7:00 a.m. to 7:00 p.m. Noise related to construction would be exempt per DEEP noise regulations.

Conclusion

The Petitioner contends that pursuant to CGS § 16-50k(a), the Siting Council shall approve by declaratory ruling the construction or location of "any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection." The proposed project meets these criteria. The proposed project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize wetland impacts, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. In addition, as demonstrated above, the proposed project will not have a substantial adverse environmental effect.

Recommendations

Staff recommends inclusion of the following conditions:

1. The Petitioner shall prepare a Development and Management Plan (D&M) for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be served on the Towns of North Canaan and Canaan for comment and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) A final site plan including, but not limited to, the electrical utility connections from solar arrays;
    b) Final determination from the Connecticut Department of Energy and Environmental Protection and compliance with any recommended mitigation measures;
    c) Name and resume of an independent environmental inspector for Council review and approval;

d) Use of off-road construction equipment that meets the latest EPA or California Air Resources Board standards, or in the alternative, equipment with the best available controls on diesel emissions, including, but not limited to, retrofitting with diesel oxidation catalysts, particulate filters and use of ultra-low sulfur fuel; and

e) Compliance with the provisions of Section 22a-174-18(b)(3)(C) of the Regulations of Connecticut State Agencies that limit the idling of mobile sources to 3 minutes.

Figure 1 - Proposed Site Layout

Legend

- Site Boundary
- Project Area (and limit of demo/clearing; ±9 acres)
- Ground-mounted Fenced Facility (+/- 8 acres)
- Solar Module Array
- Electrical Equipment
- Wetland Boundary
- Wetland Area (within Site Boundary)
- Vernal Pool
- CTDEEP Watercourse
- Railroad
- FEMA 100-Year Flood Line

Figure 5
Proposed Conditions Map

Proposed Solar Facility
7 Grace Way
North Canaan, Connecticut

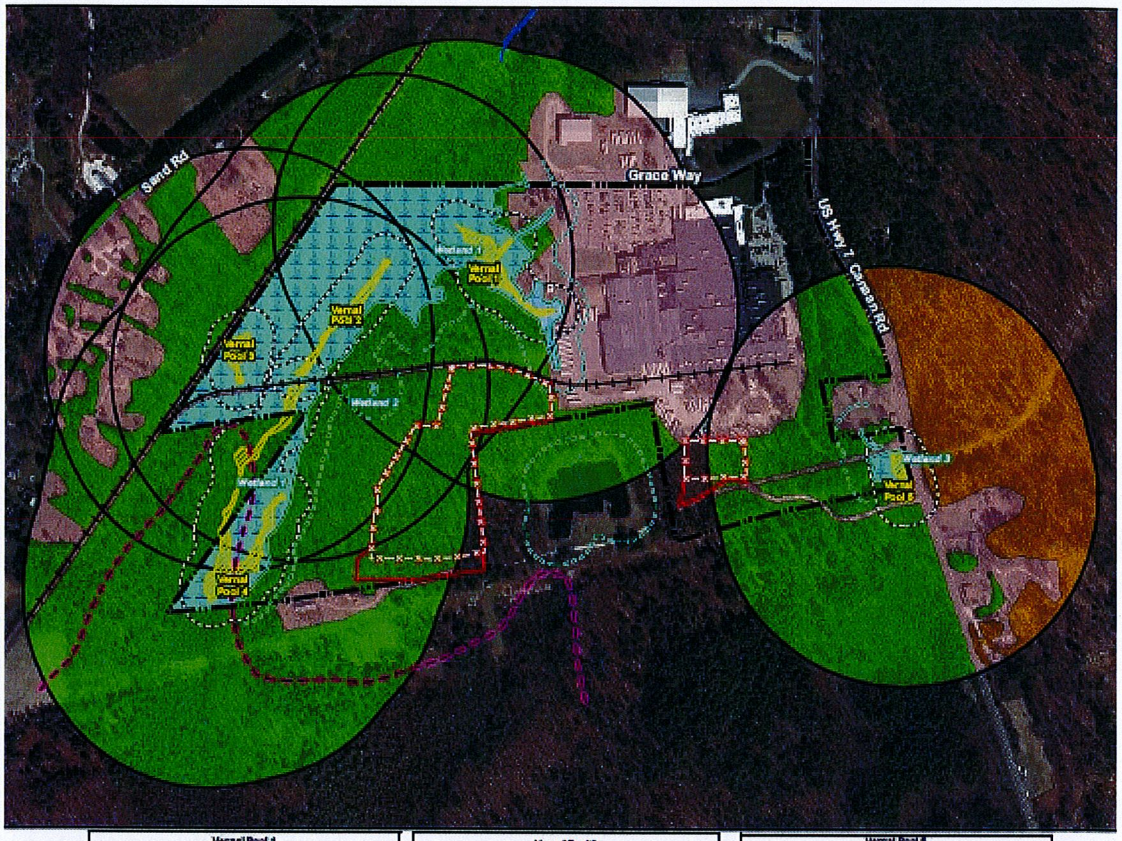
Map Notes:
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Scale: 1 inch = 450 feet Map Date: June 2016

450 225 0 450 Feet

SolarCity

ALL-POINTS TECHNOLOGY CORPORATION

Figure 2 - Vernal Pool Analysis Map



Vernal Pool 1
100' Vernal Pool Envelope: ±4.34 acres
100'-750' Critical Terrestrial Habitat Area: ±50 acres

No Impact to 100' Vernal Pool Envelope		
Developed	±1.06 acres	25%
Undeveloped	±3.18 acres	75%
Existing Critical Terrestrial Habitat Areas:		
Developed	±21 acres	36%
Undeveloped	±37 acres	64%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±24.45 acres	42%
Undeveloped	±33.55 acres	58%

Vernal Pool 2
100' Vernal Pool Envelope: ±4 acres
100'-750' Critical Terrestrial Habitat Area: ±58 acres

No Impact to 100' Vernal Pool Envelope		
Developed	±0.2 acres	5%
Undeveloped	± 3.8 acres	95%
Existing Critical Terrestrial Habitat Areas:		
Developed	±8 acres	14%
Undeveloped	±50 acres	86%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±12.3 acres	21%
Undeveloped	±45.7 acres	79%

Vernal Pool 3
100' Vernal Pool Envelope: ±2 acres
100'-750' Critical Terrestrial Habitat Area: ±47 acres

No Impact to 100' Vernal Pool Envelope		
Developed	±0.2 acres	10%
Undeveloped	±1.8 acres	90%
Existing Critical Terrestrial Habitat Areas:		
Developed	±10.7 acres	23%
Undeveloped	±36.3 acres	77%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±11.1 acres	24%
Undeveloped	±35.9 acres	76%

Vernal Pool 4
100' Vernal Pool Envelope: ±3.3 acres
100'-750' Critical Terrestrial Habitat Area: ±71 acres

No Impact to 100' Vernal Pool Envelope		
Developed	±0.2 acres	2%
Undeveloped	±3 acres	97%
Existing Critical Terrestrial Habitat Areas:		
Developed	±8 acres	11%
Undeveloped	±63 acres	89%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±13.9 acres	20%
Undeveloped	±57.1 acres	80%

Vernal Pool 5
100' Vernal Pool Envelope: ±3.88 acres
100'-750' Critical Terrestrial Habitat Area: ±47 acres

No Impact to 100' Vernal Pool Envelope		
Developed	±0.37 acres	37%
Undeveloped	±1.16 acres	58%
Restricted Habitat	±0.15 acres	7%
Existing Critical Terrestrial Habitat Areas:		
Developed	±10.2 acres	22%
Undeveloped	±20.5 acres	43%
Restricted Habitat	±16.3 acres	35%
Proposed Critical Terrestrial Habitat Areas:		
Developed	±10.6 acres	23%
Undeveloped	±19.9 acres	43%
Restricted Habitat	±16.3 acres	35%

Legend
- Site Boundary
- Project Area (and limit of demo/clearing; ±9 acres)
- Ground-mounted Fenced Facility (+/- 8 acres)
- Railroad
- CTDEEP Watercourse
- FEMA 100-Year Flood Line
- Wetland Boundary
- 100' Wetland Buffer
- Wetland Area (within Site Boundary)
- Vernal Pool
- 100' Vernal Pool Envelope
- 100'-750' Critical Terrestrial Habitat Area

Habitat Type
- Developed
- Undeveloped
- Restricted Habitat

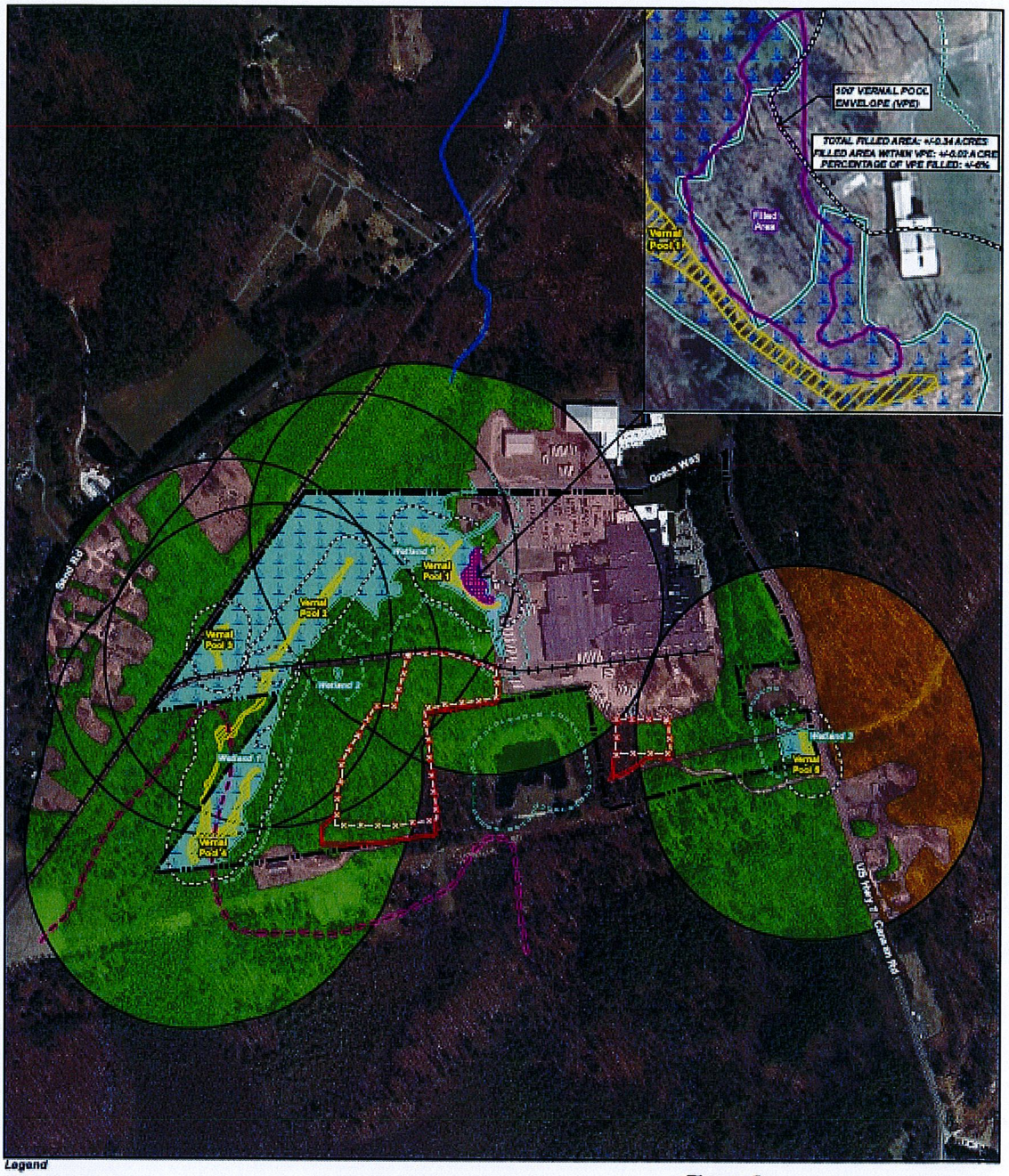
Map Notes:
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Scale: 1 inch = 600 feet
Map Date: June 2016

600 300 0 600 Feet

Figure 7
Vernal Pool Analysis Map
Proposed Solar Facility
7 Grace Way
North Canaan, Connecticut

SolarCity
ALL-POINTS TECHNOLOGY CORPORATION

Figure 3 - Vernal Pool Mitigation Plan



Legend

- Site Boundary
- Project Area (and limit of demo/clearing; ±9 acres)
- Ground-mounted Fenced Facility (+/- 8 acres)
- Railroad
- CTDEEP Watercourse
- FEMA 100-Year Flood Line
- Wetland Boundary
- 100' Wetland Buffer
- Wetland Area (within Site Boundary)
- Vernal Pool
- 100' Vernal Pool Envelope
- 100'-750' Critical Terrestrial Habitat Area
- Developed Habitat
- Undeveloped Habitat
- Restricted Habitat
- Proposed Mitigation Area (+/- 0.34 acres)

Map Notes:
Base Map Source: 2012 Aerial Photograph (CTECO)
Map Scale: 1 inch = 600 feet
Map Date: June 2016

600 300 0 600 Feet

Figure 8
Restoration and Mitigation Areas
Proposed Solar Facility
7 Grace Way
North Canaan, Connecticut

SolarCity
ALL-POINTS TECHNOLOGY CORPORATION