

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 Web Site: portal.ct.gov/csc

VIA ELECTRONIC MAIL & CERTIFIED MAIL RETURN RECEIPT REQUESTED

March 17, 2023

Lee D. Hoffman, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 lhoffman@pullcom.com

RE: **PETITION NO. 1551** – C-Tec Solar, LLC petition for a declaratory ruling, pursuant to Connecticut General Statutes §4-176 and §16-50k, for the proposed construction, maintenance and operation of a 1.3-megawatt AC solar photovoltaic electric generating facility located at the former New Britain landfill on Deming Road east of the intersection with Christian Lane, Berlin, Connecticut and associated electrical interconnection.

Dear Attorney Hoffman:

At a public meeting held on March 16, 2023, the Connecticut Siting Council (Council) considered and ruled that the above-referenced proposal meets air and water quality standards of the Department of Energy and Environmental Protection and 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. Approval of any project changes be delegated to Council staff;
- 2. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction;
- 3. Submit the final structural design for the post and ballast racking systems stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;
- 4. Provide training to emergency responders that includes an itemized list of necessary fire suppression equipment;
- 5. Revise the Operations and Maintenance Plan to include reporting of landfill cap erosion issues within the solar facility site to the City of New Britain;
- 6. The Council shall be notified in writing at least two weeks prior to the commencement of site construction activities:
- 7. 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;

- 8. 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, the City of New Britain and the Town of Berlin;
- 9. Within 45 days after completion of construction, the Council shall be notified in writing that construction has been completed;
- 10. 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;
- 11. The facility owner/operator shall file an annual report on a forecast of loads and resources pursuant to Conn. Gen. Stat. §16-50r; and
- 12. This Declaratory Ruling may be transferred or partially transferred, provided both the facility owner/operator/transferor and the transferee are current with payments to the Council for their respective annual assessments and invoices under Conn. Gen. Stat. §16-50v. 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. Both the facility owner/operator/transferor and the transferee shall provide the Council with a written agreement as to the entity responsible for any quarterly assessment charges under Conn. Gen. Stat. §16-50v(b)(2) that may be associated with this facility, including contact information for the individual acting on behalf of the transferee.

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 November 22, 2022, and additional information dated February 8, 2023.

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

Sincerely,

Melanie A. Bachman Executive Director

MAB/RDM/laf

Enclosure: Staff Report dated March 16, 2023

c: The Honorable Erin Stewart, Mayor, City of New Britain (Mayor@NewBritainCT.gov)
The Honorable Mark H. Kaczynski, Mayor, Town of Berlin (mkaczynski@town.berlin.ct.us)
Arosha Jayawickrema, Town Manager, Town of Berlin (ajayawickrema@town.berlin.ct.us)
Donald King, Fire Marshal, New Britain Fire Department (donald.king@newbritainct.gov)
Steve Waznia, Fire Marshal, Berlin Town Hall (swaznia@town.berlin.ct.us)



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Petition No. 1551
C-Tec Solar, LLC

1.3 MW AC Solar Photovoltaic Electric Generating Facility
New Britain Landfill, Deming Road, Berlin
Staff Report
March 16, 2023

Introduction

On November 23, 2022, the Connecticut Siting Council (Council) received a petition from C-Tec Solar, LLC (C-Tec) for a declaratory ruling pursuant to Connecticut General Statutes (CGS) §4-176 and §16-50k for the construction, operation and maintenance of a 1.3 megawatt (MW) alternating current (AC) solar photovoltaic electric generating facility located on the former New Britain Landfill, located off Deming Road east of the intersection with Christian Lane in Berlin, Connecticut and associated electrical interconnection (Petition or Project).

Pursuant to Regulations of Connecticut State Agencies (RCSA) §16-50j-40 on or about November 18, 2022, C-Tec notified abutting property owners, Town of Berlin (Town) officials, and state officials and agencies of the proposed Project. No comments were received.

Pursuant to CGS §4-176(e) of the Uniform Administrative Procedure Act, an administrative agency is required to take an action on a petition for a declaratory ruling within 60 days of receipt. On December 22, 2022, pursuant to CGS §4-176(e), the Council voted to set the date by which to render a decision on the Petition as no later than May 22, 2023, which is the 180-day statutory deadline for a final decision under CGS §4-176(i).

On January 17, 2023, the Council issued interrogatories to C-Tec. C-Tec submitted responses to the interrogatories on February 8, 2023, one of which included photographic documentation of site-specific features intended to serve as a "virtual" field review of the Project.

Municipal Consultation

The City of New Britain (City) owns the host parcel and manages the former landfill. The Project was developed through a request for proposal process with the City.

C-Tec initiated outreach with the Town in May 2022. A virtual meeting was held with the Town and the City on or about September 15, 2022.

On November 25, 2022, the Council sent correspondence to the Town stating that the Council has received the Petition and invited the Town to contact the Council with any questions or comments by December 23, 2022. No comments were received.

State Agency Comments

On November 25, 2022, pursuant to RCSA §16-50j-40, the Council sent correspondence requesting comments on the proposed Project from the following state agencies by December 23, 2022: Department of Energy and Environmental Protection (DEEP); Department of Agriculture (DOAg); Department of

Public Health (DPH); Council on Environmental Quality (CEQ); Public Utilities Regulatory Authority (PURA); Office of Policy and Management (OPM); Department of Economic and Community Development (DECD); Department of Emergency Services and Public Protection (DESPP); Department of Labor (DOL); Department of Administrative Services (DAS); Department of Transportation (DOT); the Connecticut Airport Authority (CAA); and the State Historic Preservation Office (SHPO).

In response to the Council's solicitation, CEQ submitted comments on December 16, 2022 in support of the Project.¹ DEEP submitted comments on December 22, 2022 in support of the Project.²

No other state agencies provided written comments on the Project.

While the Council is obligated to consult with and solicit comments from state agencies by statute, the Council is not required to abide by the comments from state agencies.³

Public Act 17-218

Effective July 1, 2017, Public Act (PA) 17-218⁴ requires, "for a solar photovoltaic facility with a capacity of two or more megawatts, to be located on prime farmland or forestland, excluding any such facility that was selected by DEEP in any solicitation issued prior to July 1, 2017, pursuant to section 16a-3f, 16a-3g or 16a-3j, the DOAg represents, in writing, to the Council that such project will not materially affect the status of such land as prime farmland **or** DEEP represents, in writing, to the Council that such project will not materially affect the status of such land as core forest."

The proposed solar facility has a generating capacity of 1.3 MW; therefore, it is exempt from the provisions of Public Act 17-218.

Public Benefit

The Project would be a distributed energy resource facility as defined in CGS § 16-1(a)(49). 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 state Comprehensive Energy Strategy (CES) examines future energy needs and identifies opportunities to reduce ratepayer costs, ensure reliable energy availability, and mitigate public health and environmental impacts. CES Strategy No. 3 is "Grow and sustain renewable and zero-carbon generation in the state and region." The state Integrated Resource Plan assesses the state's future electric needs and a plan to meet those future needs, including, but not limited to, pathways to achieve a 100 percent zero carbon electric supply by 2040. Furthermore, Governor Lamont's Executive Orders and Council on Climate Change examine existing policies and identify new strategies to combat climate change. The proposed facility will contribute to fulfilling the State's Renewable Portfolio Standard and Global Warming Solutions Act as a zero emission Class I renewable energy source.

C-Tec was awarded a 15-year contract under the state's Low and Zero Emissions Renewable Energy Credit Programs (LREC/ZREC Program) ⁵ to sell the renewable energy credits (RECs) from the facility and has a virtual net metering (VNM) contract. The LREC/ZREC Program was developed as part of Public Act 11-

¹ CEO Comments P 1551

² DEEP Comments P 1551

³ Corcoran v. Connecticut Siting Council, 284 Conn. 455 (2007)

⁴ Codified at Conn. Gen. Stat. §16-50k(a) and §16a-3k (2021)

⁵ Zero emission renewable energy credit (ZREC) contracts are limited to 1 MW, and LREC contracts are limited to 2 MW. (CGS §16-244r)

80, "An Act Concerning the Establishment of the [DEEP] and Planning for Connecticut's Energy Future." Specifically, C-Tec has one LREC contract for 1.3 MW AC.

The LREC/ZREC Program creates a market-driven bidding process for renewable energy projects ranging from rooftop solar panels to fuel cells to compete to obtain a 15-year revenue stream from the sale of RECs to the electric utilities. It requires The Connecticut Light and Power Company d/b/a Eversource Energy (Eversource) and The United Illuminating Company to procure Class I RECs under 15-year contracts with owners or developers of renewable energy projects in the state.

The LREC/ZREC Program is not among the competitive energy procurement programs that are exempt from PA 17-218.

The Project will generate the most power during the summer electrical peak.

C-Tec may participate in an ISO New England, Inc. (ISO-NE) Forward Capacity Auction (FCA) in the future.

Proposed Site

Pursuant to CGS §16-50x, the Council has exclusive jurisdiction over the proposed solar electric generating facility "site." Under RCSA §16-50j-2a(29), "site" means a contiguous parcel of property with specified boundaries, including, but not limited to, the leased area, right-of-way, access and easements on which a facility and associated equipment is located, shall be located or is proposed to be located. The Council does not have jurisdiction or authority over any portion of the host parcel beyond the boundaries of the Project "site." This includes portions of the parcel retained by the landowner and portions of the parcel the landowner may lease to third parties. Once a facility is decommissioned, the Council no longer has jurisdiction or authority over the Project "site."

Under a lease agreement with the City, C-Tec proposes to construct the solar facility on an approximate 5.0-acre site within a 43.4-acre parcel located on Deming Road in Berlin. The host parcel is within the general industrial zoning district and contains the New Britain Landfill, which closed in 2014 and was subsequently capped. An electrical transmission corridor traverses the eastern portion of the parcel.

The landfill is located in the center of the parcel. An existing access road extends south from Deming Road which provides access to the landfill and other areas of the host parcel. An existing gravel access road ascends the north slope of the landfill cap.

The Project site would be located on the upper portion of the landfill. The landfill cap is vegetated with managed grass and has steep, lower slopes that decrease towards the top. The solar array would be located on slopes that would not exceed 12 percent. The landfill rises from 32 feet to 105 feet above mean sea level.

Land use surrounding the host parcel consists of commercial and industrial use. A forested wetland/floodplain surrounds the landfill to the east, south and west. The nearest abutting property line from the site is approximately 231 feet to the south at 604 Berlin Turnpike. This parcel is within the general industrial zoning district. The nearest residence from the site is approximately 1,151 feet to the northeast at 244 Deming Road.

C-Tec selected the site to utilize existing, non-productive land.

The Project has an operational life of 20 to 35 years. At the end of the lease term, C-Tec must decommission the Project and restore the site to its pre-existing condition.

Proposed Project

The proposed Project consists of 3,228 solar panels rated at 540 Watts installed on a concrete ballast racking system facing south at a 20-degree angle. The panels would be approximately 7.5 feet above grade at the highest point and 3 feet above grade at the lowest point. The aisles between the panel rows would be approximately 14.2 feet wide.

Use of the concrete ballast racking system would avoid disturbance to the landfill cap. The premanufactured ballasts would be approximately 2.5 feet wide by 9.5 feet long by one-foot tall, each weighing approximately 3,575 pounds. The ballasts would be placed on a gravel subbase.

Panel row wiring would extend along the racking system to reduce potential damage from weather events, maintenance activities or animals. Conduit on a cable tray would extend from the racking to a transformer/inverter pad at the north end of the solar field.

From the transformer pad, the electrical interconnection route would descend the landfill cap using a ground-mounted cable tray, extending for 240 feet to the edge of an existing parking area. At this point, the line would extend overhead for approximately 130 feet using four new 40-foot tall utility poles to connect to existing Eversource distribution service on Deming Road.

C-Tec has an interconnection agreement with Eversource. An ISO-NE interconnection review was not required. The Project may be able to support a battery storage system in the future.

The landfill is enclosed by an existing eight-foot tall chain link fence with anti-climb mesh. The entrance is gated, limiting access to authorized personnel only. No additional fencing is proposed. The existing landfill access road would be used to access the solar facility.

C-Tec submitted a request for an Authorization for Disruption of a Solid Waste Disposal Area and a request for a Change to Post-Closure Use to DEEP on December 14, 2022, which is under review.

The capacity factor for the Project is approximately 21.8 percent. The power output of the panels would decline over time with an anticipated annual power loss of approximately 0.5 percent.

Construction would occur over an approximately eight-month period. Typical construction hours and workdays of the week are Monday – Friday, 7:00 AM to 5:00 PM.

The estimated cost of the Project is \$3 million.

Public Safety

The Project would comply with the current National Electrical Code (NEC), National Electrical Safety Code and National Fire Protection Association codes and standards, as applicable. C-Tec designed the system in accordance with the CT State Fire Prevention Code, Section 11.12.3 – Ground Mounted Photovoltaic System Installations.

The nearest airport is the Robertson Airport located approximately 6.2 miles to the southeast. The Federal Aviation Administration (FAA) issued a Determination of No Hazard to Air Navigation for the Project on September 30, 2022.

The proposed facility would be remotely monitored through a 24/7 data acquisition system. If a problem with the facility is detected, system diagnostics would remotely shut down the inverters.

A manual disconnect switch would be located on-site. C-Tec would conduct facility operation and safety training for local emergency responders.

The proposed facility would be in compliance with DEEP Noise Control Standards. Noise modeling indicates noise from the Project would be approximately 28 dBA at the nearest property line (231 feet to the south). Construction noise is exempt from DEEP Noise Control Standards.

Portions of the host parcel are within a Federal Emergency Management Agency designated 100-year and 500-year flood zone; however, the upper portion of the landfill, where the solar facility would be located, is elevated approximately 40 feet above the mapped base flood elevation.

Environmental Effects and Mitigation Measures

Historic and Recreational Resources

C-Tec submitted an archeological and historic review of the Project to SHPO on September 6, 2022 which determined that the Project would have no effect on cultural resources. SHPO submitted correspondence to C-Tec on October 28, 2022, indicating that no additional archaeological investigations were warranted, and no historic properties would be affected by the Project.

A Town open space parcel (Woodland Road Municipal Open Space), composed of floodplain forest and wetlands, abuts the host parcel to the south. The parcel does not have a public access point. Due to the Project's location on an existing landfill, there would be no physical or visual impact on the open space parcel.

Visibility

C-Tec performed a visibility assessment that determined the solar array would be visible year-round from Deming Road directly north of the Project area. Seasonal visibility may occur up to 0.25 mile away, mostly from Deming Road and adjacent developed industrial/commercial properties.

Agriculture

The Project would not be located on prime farmland soils according to mapping maintained by the United States Department of Agriculture (USDA) Natural Resource Conservation Service. Under PA 17-218, "prime farmland" means land that meets the criteria for prime farmland as described in 7 Code of Federal Regulations (C.F.R.) 657, as amended from time to time. 7 C.F.R. 657 defines prime farmland in relevant part as "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses."

Wetlands and Watercourses

The Project is located on a landfill. No wetlands are proximate to the Project area. The nearest wetland, associated with the Mattabessett River, is approximately 190 feet south of the Project limit of disturbance at its closest point.

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C-Tec would establish erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control.

Wildlife

The site is not located within a DEEP Natural Diversity Database (NDDB) buffered area. By letter dated October 13, 2022, DEEP indicates that the Project would not affect state-listed species.

The northern long-eared bat (NLEB), a federally-listed and state-listed Endangered Species, occurs in Connecticut. The Project is not located within 0.25-mile of known NLEB hibernaculum or within 150 feet of a known NLEB maternity roost tree. Thus, the Project is not expected to impact the NLEB.

Forest

The Project is located on a landfill. No forest would be affected. One tree would be removed near Deming Road to install the overhead interconnection line.

Air Quality

The Project would not produce air emissions as a result of operation. The Project would not produce emissions of regulated air pollutants or greenhouse gases during operation.

Water Quality

The site is not located within a DEEP-designated Aquifer Protection Area or a Public Water Supply Watershed. The Site is located within the Berlin Water Control Commission service area.

The facility would not use or discharge water during operation.

Stormwater

Pursuant to CGS Section 22a-430b, DEEP retains final jurisdiction over stormwater management and administers permit programs to regulate stormwater discharges. DEEP regulations and guidelines set forth standards for erosion and sedimentation control, stormwater pollution control and best engineering practices. The DEEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (General Permit) requires implementation of a Stormwater Pollution Control Plan (SWPCP) to prevent the movement of sediments off construction sites into nearby water bodies and to address the impacts of stormwater discharges from a project after construction is complete.

The capped landfill has an existing stormwater management system consisting of four concrete drainage swales that collect water from shallow swale along the top edge of the landfill cap. The existing swales discharge at the base of the landfill, towards the onsite wetlands.

C-Tec is not proposing any additional stormwater management systems. The Project would comply with the DEEP-General Permit Appendix I, *Stormwater Management at Solar Array Construction Projects*.

Erosion of the landfill cap from the panel drip edge is not anticipated as the cap is already vegetated and any disturbed areas from construction activities would be stabilized with a grass seed mix. Water from rain events would drip along the gaps between each panel rather than falling off as concentrated sheet flow.

Petition No. 1551 Page 7 of 11

A DEEP-issued General Permit is required prior to commencement of construction activities, as defined in the General Permit. The General Permit and associated SWPCP incorporates project designs consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and the 2004 Connecticut Stormwater Quality Manual.

Construction measures include, but are not limited to, staged construction, minimization of disturbed areas, stabilization of disturbed areas as soon as possible, minimization of impervious areas, and establish and maintain erosion control measures.

C-Tec met with DEEP on October 18, 2022. DEEP did not recommend changes to the stormwater plan. On November 21, 2022, C-Tec submitted an application to DEEP for a General Permit, and it is currently under review.

Operations and Maintenance

A post-construction Operations and Maintenance (O&M) Plan has been developed that includes provisions for periodic inspections of physical site features and structural and electrical components.

An evaluation of the facility and performance of preventative maintenance measures would be conducted in accordance with manufacturer's specifications and would occur at least once pr year. The evaluation would include the electrical system/components, physical infrastructure, and site vegetation. Replacement modules would not be stored on-site.

Module cleaning, when necessary, would utilize water.

Vegetation within the solar array would be managed by C-Tec. Mowing is anticipated at least once per year to prevent woody vegetation from taking root on the landfill cap. If erosion issues with the landfill are identified during inspection of the solar array area, C-Tec would report the issue to the City for corrective action.

Decommissioning

The Project has a minimal operational life of 20 years. At the end of the Project's useful life, it would be decommissioned and the site restored to its original condition.

It is anticipated that the steel racking system, electrical component and wiring and solar modules would be recycled as applicable. All recyclable materials would be transported to appropriate recycling facilities.

Any non-recyclable materials will be properly disposed of in accordance with applicable permits and regulations. The transformer and interconnection equipment pads would be removed. The concrete foundation would also be removed unless requested to remain in place by the property owner. Disturbed areas would be backfilled with soil and seeded.

The selected solar panels for the Project meet current Toxicity Characteristic Leaching Procedure (TCLP) criteria for characterization as nonhazardous waste in the event the solar panels are not recycled at the end of the Project's life.

Conclusion

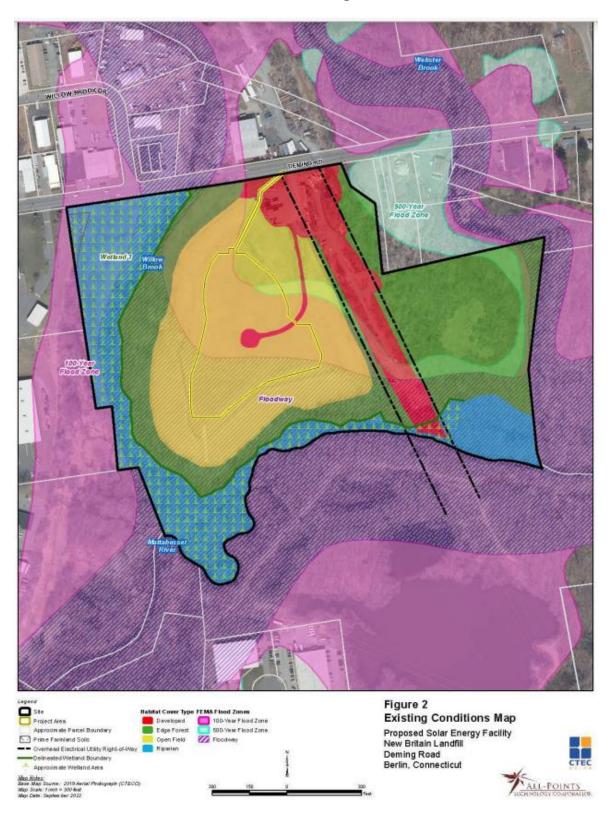
The Project is a customer-side distributed energy resource with a capacity of not more than sixty-five megawatts, meets DEEP air and water quality standards, and would not have a substantial adverse environmental effect. The proposed project will not produce air emissions, will not utilize water to produce electricity, was designed to minimize environmental impacts, and furthers the State's energy policy by developing and utilizing renewable energy resources and distributed energy resources. Furthermore, the Project was selected under the State's LREC/ZREC Program and would further the state's VNM program.

Recommendations

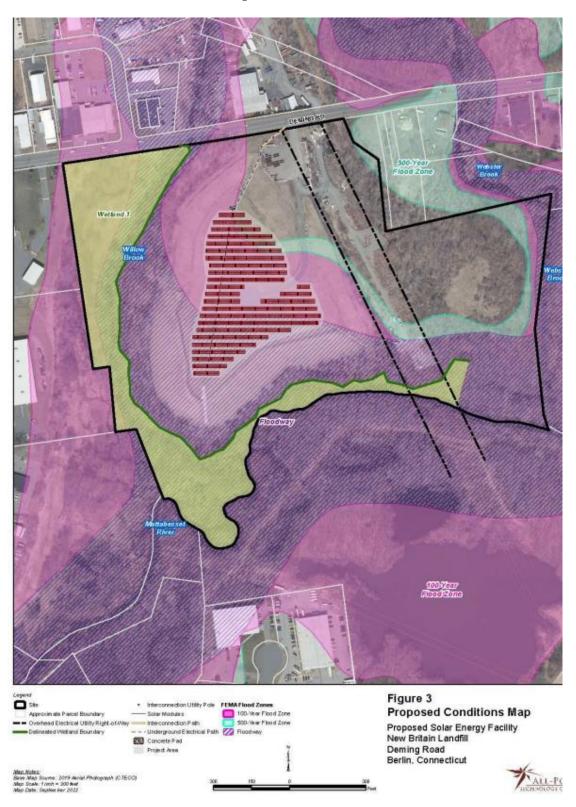
If approved, staff recommends inclusion of the following conditions:

- 1. Approval of any project changes be delegated to Council staff;
- 2. Submit a copy of the DEEP Stormwater Permit prior to the commencement of construction;
- 3. Submit the final structural design for the post and ballast racking systems stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;
- 4. Provide training to emergency responders; and
- 5. Revise the Operations and Maintenance Plan to include reporting of landfill cap erosion issues within the solar facility site to the City of New Britain.

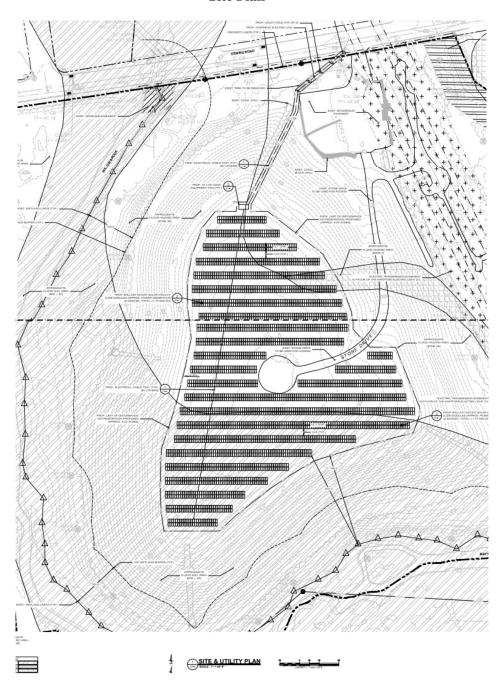
Site Location and Exsting Conditions



Proposed Conditions



Site Plan



STATE OF CONNECTICUT)	
	: ss. Southington, Connecticut	March 17, 2023
COUNTY OF HARTFORD)	
I hereby certify that the foregoing	ing is a true and correct copy of the De	ecision and Staff Report in
Petition No. 1551 issued by the Conn	necticut Siting Council, State of Connection	cut.
	ATTEST:	
	Maluid Real	
_	Melanie A. Bachman	

STATE OF CONNECTICUT)

: ss. New Britain, Connecticut March 17, 2023

COUNTY OF HARTFORD)

I certify that a copy of the Connecticut Siting Council Decision and Staff Report in Petition No. 1551 has been forwarded by Certified First Class Return Receipt Requested mail, on March 17, 2023, to all parties and intervenors of record as listed on the attached service list, dated November 23, 2022.

Executive Director Connecticut Siting Council

ATTEST:

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Lisa A. Mathews Office Assistant

Connecticut Siting Council

Date: November 23, 2022 Petition No. 1551
Page 1 of 1

LIST OF PARTIES AND INTERVENORS $\underline{SERVICE\;LIST}$

Status Granted	Document Service	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Petitioner	⊠ E-mail	C-Tec Solar, LLC	Lee D. Hoffman, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 Phone (860) 424-4315 lhoffman@pullcom.com Michael Morrison C-Tec Solar, LLC 1 Griffin Road South, Suite 200 Bloomfield, CT 06002 Phone (860) 580-7174 ext. 121 michael.morrison@ctecsolar.com