ENFIELD SOLAR ONE, LLC

AND

VCP, LLC D/B/A VEROGY

PETITION FOR A DECLARATORY RULING THAT A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED IS NOT REQUIRED FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF A 4.0 MWAC SOLAR PHOTOVOLTAIC PROJECT AT 110 NORTH STREET, ENFIELD, CONNECTICUT

APRIL 25, 2022

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STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
	:	
A PETITION FOR A DECLARATORY RULING THAT A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED IS NOT REQUIRED FOR THE CONSTRUCTION, OPERATION AND MAINTENANCE OF A 4.0 MWAC SOLAR PHOTOVOLTAIC PROJECT AT 110 NORTH STREET IN ENFIELD, CONNECTICUT	:	PETITION NO. ____
	:	APRIL 25, 2022

PETITION FOR A DECLARATORY RULING:
INSTALLATION HAVING NO
SUBSTANTIAL ADVERSE ENVIRONMENTAL EFFECT

I. Introduction

Pursuant to Section 16-50k(a) and Section 4-176(a) of the Connecticut General Statutes ("CGS") and Section 16-50j-38 *et seq*. of the Regulations of Connecticut State Agencies ("RCSA"), Enfield Solar One, LLC and VCP, LLC d/b/a Verogy (collectively "Verogy" or "Petitioner") hereby petitions the Connecticut Siting Council (the "Siting Council") for a declaratory ruling that a Certificate of Environmental Compatibility and Public Need ("Certificate") is not required for the construction, maintenance and operation of a 4.0 megawatt ("MW") alternate current ("AC") ground-mounted solar photovoltaic ("PV") facility on property at 110 North Street in Enfield, Connecticut (the "Project").

CGS § 16-50k(a) provides, in relevant part:

> Notwithstanding the provisions of this chapter or title 16a, the council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . .the construction or location of any . . . grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, as long as: (i) Such project meets air and water quality standards of the Department of Environmental Protection [and], (ii) the council does not find a substantial adverse environmental effect…,

As described more fully below, the construction, operation and maintenance of the proposed Project satisfies the criteria of CGS § 16-50k(a) and will not have a substantial adverse environmental effect.

II. Petitioner

The Petitioner is a Connecticut limited liability company with an administrative office at 150 Trumbull Street, 4th Floor, Hartford, CT 06103.

Correspondence and/or communications regarding this petition should be addressed to:

William Herchel, Chief Executive Officer
Bryan Fitzgerald, Director of Development
Brad Parsons, P.E., Director of Design and Permitting
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A copy of all such correspondence or communications should also be sent to the Petitioner's attorney:

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(860) 275-8200

III. The Project

The Project will be developed on an approximately 19.65-acre portion (the "Project Area") of an approximately 73.88-acre parcel bounded on the north by North Street, on the west by vacant agricultural land and the St. Bernard Cemetery (both parcels fronting on Park Street), on the east by undeveloped agricultural and forested land and on the south by residential parcels

fronting on Stony Brook Road in Enfield, Connecticut (the "Property"). The Property is owned by the Catholic Cemeteries Association of the Archdiocese of Hartford. The Property is largely undeveloped with portions of the Property used for agricultural purposes. The northwest portion of the Property has also been used as a golf driving range. A small building and gravel parking area associated with the driving range use, are located in the northerly portion of the Property immediately south of North Street. The southwest portion of the Property is included as a part of the St. Bernard's Cemetery. A large wetland area exists in the southeasterly portion of the Property. This wetland area extends onto adjacent land to the south and east. The Project Area slopes gently down to the east and southeast portions of the Property toward the existing wetland area.

A. Site Selection

The site selection for the Project was based on a detailed evaluation of several key criteria including:

- Site suitability (solar resource size, grade and surrounding topography);
- Site availability (ability to lease or purchase land);
- Proximity to critical infrastructure (suitable electrical grid access);
- Compatibility with surrounding land use.

Once the initial site evaluation was completed, the Petitioner assessed potential effects of the Project on the environment and sensitive site resources, including but not limited to scenic views and vistas, historic and archeological resources, wetlands, water quality and water resources, rare and endangered species and air quality. Prior to the commencement of this process, the Petitioner met, on several occasions with local officials in Enfield to discuss the

Project. As discussed in detail below, after this evaluation, the Petitioner determined that the Property was suitable for development of the Project and that the Project will provide a significant benefit to the public.

B. Project Description

The Project will consist of the installation of approximately 11,050 540 MW PV modules, twenty-eight (28) solar inverters, two (2) pad-mounted switchgears, two (2) 2000 kVA transformers and one (1) electrical service interconnection line connecting to Eversource's existing distribution service along North Street. The Project will use a fixed tilt steel panel racking system attached to either pile-driven or ground screw foundations to allow for optimal utilization of the Project Area. An access roadway will extend from North Street, near the northwest corner of the Project Area, to the south along the western edge of the Property. A portion of the access driveway will also extend to the east, into the middle of the solar field, for access to two electric equipment pads.

The Project Area will be surrounded by a seven (7) foot tall chain link fence. A copy of the Project development plan illustrating the above-described attributes is included as Exhibit A. The Project is expected to produce in excess of 7,518,420 Kilowatt-Hours (kWh) of energy in the first year of operation, enough energy to power 671 homes. Energy produced by the Project will be sold to Eversource as a part of the Connecticut Shared Clean Energy Facility ("SCEF") Program. The SCEF Program, passed by the legislature and signed into law by Governor Lamont in 2018 (Public Act 18-50), is a six-year competitive energy procurement program supporting up to 150 MW of clean energy. The Petitioner was a successful bidder in year one of the SCEF Program. The SCEF Program seeks to deploy new and incremental Class 1 renewable generation projects ranging in size from 100 to 4,000 kW (AC) for a contract term of twenty (20) years.

Construction of the Project is expected to begin in the first quarter of 2023 with mobilization of equipment and minor land clearing and site grading. Site work and land preparation is expected to be completed by February of 2023 with construction and installation of the solar arrays and equipment completed in May of 2023. Final site stabilization, testing, and commissioning is expected be completed in July of 2023. The Project construction schedule is subject to change.

At the end of its useful life, the Project will be decommissioned in accordance with the requirements of the Petitioner's land lease agreement and the Project's Decommissioning and Restoration Plan attached hereto as Exhibit B. Included in Exhibit B is the Analytical Report summarizing the Toxicity Characteristic Leaching Procedures (TCLP) for the solar panel that the Petitioner intends to install as a part of the Project. The results show that the metals used to construct the solar modules are not present at levels that would be considered toxic by the United States Environmental Protection Agency.

C. Interconnection

Electrical interconnection for the Project will originate along North Street near the northwest corner of the Property and extend overhead, approximately 150 feet south, to the Project Area. (*See* Exhibit A). The Project will interconnect to the Connecticut Light and Power Company d/b/a Eversource Energy ("Eversource"), 23 kV, 27H7 circuit distribution system located on North Street. The proposed electrical interconnection will extend from the Eversource distribution system along North Street and transition to underground at the Project fence line. The electrical interconnection will require the installation of five (5) new utility poles in the northwest corner of the Property.

The interconnection facility design and construction will be performed in accordance with the Eversource Guidelines for Generator Interconnection and State of Connecticut, ISO-New England ("ISO-NE"), and Federal Energy Regulatory Commission ("FERC") requirements as applicable. As part of the interconnection process, the Petitioner has successfully completed a utility-sponsored Scoping Meeting, Interconnection Application Request and an Application Review, Impact Study, and has executed a Standard Fast Track and Study Process Generator Interconnection Agreement.

IV. Project Benefits

The Project will generate much, if not all, of its power at peak times, when the demand for electricity is greatest, and will thereby provide the electrical system with flexible peaking capacity that is necessary to keep the electrical grid stable.

Generally, the Project will support the State's energy policies as set forth in CGS § 16a-35k, including the goal to "develop and utilize renewable energy resources, such as solar and wind energy, to the maximum practicable extent." The Project will provide clean, renewable, solar-powered electricity and assist the State in meeting its legislatively-mandated obligations under the Renewable Portfolio Standard.

The Project will also assist the State of Connecticut in reducing greenhouse gas emissions and reducing criteria air emissions pollutants associated with the displacement of older, less efficient, fossil fuel generation. As part of larger state, national and global strategies, reductions in greenhouse gas emissions from this Project will have long-term secondary biological, social and economic benefits.

More specifically and as mentioned above, the Project was selected in year one of a six-year energy procurement program designed to help broaden participation in clean energy in

Connecticut by providing underserved customers with an opportunity to benefit from in-state clean energy projects.

V. Local Outreach and Public Notice

On July 2, 2021, the Petitioner met with Enfield's Assistant Town Manager Kasia Purciello and Director of Planning Laurie Whitten, to discuss the Project. The Petitioner introduced key members of its development team to local officials and provided a comprehensive introduction to the Project and the benefits to the Enfield community. On February 4, 2022, the Petitioner met again with local officials including the Town Manager, Ellen Zoppo-Sassu, the Assistant Town Manager Kasia Purciello and Planning Director Laurie Whitten. At this meeting, local officials were provided with updates on the status of the Project, the Council review process and an overview of potential environmental effects associated with the Project.

On March 24, 2022, the Petitioner was invited to and attended the regular meeting of the Enfield Planning and Zoning Commission ("PZC"). At that meeting, the Petitioner presented the Project to the PZC, including a detailed discussion of project materials, project benefits, information about the SCEF program, the site selection process and the environmental effects associated with the Project. After receiving answers to several questions, the Commission agreed to endorse the Project and provide the Council with a letter of support.

In addition to its outreach to municipal officials, the Petitioner also sent a Project Fact Sheet and other related information about the Project to abutting property owners and established a Project-specific web site (www.verogy.com/enfield-solar-one) to keep the public informed about the Project. Included in Exhibit C are copies of Verogy's public outreach materials including the Project Fact Sheet and a sample letter sent to abutting landowners as well as a list of abutting landowners notified.

Pursuant to the requirements of R.C.S.A. § 16-50j-40(a), on April 20, 2022, the Petitioner provided notice of its intent to file this Petition to: (a) Catholic Cemeteries Association of the Archdiocese of Hartford, the owner of the Property; (b) each abutting property owner listed on Exhibit D; and municipal officials and government agencies listed on Exhibit E.

V. Outreach to State Agencies

Pursuant to the requirements of CGS Section 16-50k(a), prior to filing the Petition, the Petitioner provided information about the Project to the Connecticut Department of Agriculture ("DoAG") and the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Natural Resources – State Forester. By letter dated March 16, 2022, the DoAG determined that, subject to the successful implementation of certain agricultural co-uses and the continuing farming activities described in the DoAG letter, the Project would not "materially affect the status of the project land as prime farmland".[1] Similarly, by letter dated March 22, 2022, Christopher Martin, the State Forester at DEEP determined that the Project would "not materially affect the status of such Site as core forest". A copy of the DoAG letter, the Sheep Grazing Plan and the State Forester's letter are included in Exhibit F.

VI. No Substantial Adverse Environmental Effects

Section 16-50k(a) of the General Statutes provides, in part, that a Certificate is not required if an electric generating facility meets the air and water quality standards of the DEEP and does not have a substantial adverse effect on the environment. The Petitioner and its consultant, All-Points Technology Corporation ("APT"), conducted a comprehensive Environmental Assessment (the "EA") of the Project dated June 2020. As part of this process, relevant agencies were consulted, environmental impacts were evaluated, and mitigation was

[1] Elements of the co-use plan include the implementation of a rotational sheep grazing plan and the introduction of a seed mix developed specifically to support sheep grazing and pollinator habitats throughout the Project Area.

applied as appropriate. A complete copy of the EA is included in Exhibit G.

A. Natural Environment and Ecological Balance

The Project Area is located in the undeveloped portion of the Property, on the south side of North Street and northeast of the St. Bernard Cemetery. The layout of the solar arrays utilizes existing grades within the Project Area to minimize the amount of earth work necessary to accommodate the solar arrays. Some earth work, however, will be necessary throughout the Project Area to control stormwater runoff. Soil disturbance is also required to install foundations and/or support structures for the PV panels, associated electrical equipment and concrete mounting pads, and site access roadways. Panel foundations will be secured using either a driven pile technology or ground screw foundations depending upon subsurface soil conditions. All racking will be designed to meet applicable building code requirements for wind and snow loads. The panels will be installed with adequate room above the ground (minimum of three (3) feet) to allow snow to melt or slide off.

Some hazardous substances are required to be used or stored on the Property during construction or operation of the Project. Namely, gasoline or diesel-powered equipment will be in regular use during construction activities, requiring some on-Property fuel storage. Further, the inverter step-up transformers located at each equipment pad will use biodegradable oil for cooling. Accordingly, a Spill Prevention, Control, and Countermeasure ("SPCC") Plan and an Operations and Maintenance ("O&M") Plan have been developed for the Project. (A copy of the SPCC Plan is included as Exhibit H. The Project's O&M Plan is included as Exhibit I).

B. Public Health and Safety

Overall, the Project will meet or exceed all health and safety requirements applicable to renewable electric power generation facilities in Connecticut. Each employee working on Site

will:

- Receive required general and Site-specific health and safety training;
- Comply with all health and safety controls as directed by local and state authorities;
- Understand and employ a Project health and safety plan while on the Property;
- Know the location of local emergency care facilities, travel times, ingress and egress routes; and
- Report all unsafe conditions to the construction manager.

During construction, higher levels of noise are anticipated, however, all work will be conducted during normal working hours (7 a.m. to 7 p.m. Monday through Saturday). As the Council is aware, noise associated with construction of the Project is temporary in nature and exempt from State and local noise limits.

The Petitioner will contact the Council if any changes to the normal working hours are required or needed. After construction is complete and during Project operations, minimal traffic is anticipated. For standard operations and maintenance activities, one or two light-duty vehicles will visit the Project Area on a monthly recurring basis, on average. There will not be permanent staff needed at the Project Area.

The Project will not produce significant noise during normal operation. The only noise generated from the equipment at the Facility will be from the inverters and transformers which have been strategically located in the center of the Project Area, thereby maximizing their distance to the nearest Property boundaries. The nearest Property line to the noise sources are approximately 410 feet to the west, a parcel located at the southeast corner of North Street and Park Street. At this distance, operational noise levels from the inverters and transformers would

be meet the State and local noise standards. (*See* Exhibit G, Section 3.9).

Because the solar modules are designed to absorb incoming solar radiation and minimize reflectivity, only a small percentage of incidental light will be reflected off the panels. This incidental light is significantly less reflective than common building materials, such as steel, and the surface of a smooth water body. Additionally, the panels will be tilted up toward the southern sky at a fixed angle of 25 degrees, thereby further reducing reflectivity.

The Petitioner submitted the Project location to the Federal Aviation Administration's (FAA) Obstruction Evaluation Group and received a Determination of No Hazard to Air Navigation. Based on this determination, there is no need for a glare analysis. The Project does not, therefore, pose a hazard to air navigation. (*See* Exhibit G, Section 3.11).

Prior to operation, the Petitioner will meet with Enfield's first responders to provide them information regarding response to emergencies at PV facilities, discuss industry best practices, and provide a tour of the Project Area and the Property.

C. Air Quality

Overall, the Project will have only minor emissions of regulated air pollutants during construction. An air permit is not required for these activities. During construction of the Project, any air emission effects will be temporary and will be controlled by enacting appropriate mitigation measures (e.g., water for dust control, avoid mass early morning vehicle startups, etc.). Accordingly, any potential effects on air quality as a result of the Project construction activities will be minimized.

During operation, the Project will not produce air emissions of any regulated air pollutants or greenhouse gases (e.g., PM10, PM2.5, VOCs, GHG or Ozone). Therefore, no adverse effect on air quality is anticipated and no air permit is required. Moreover, for the life of

the Project, an off-set equivalent to approximately 5,328 metric tons of CO_2 annually, the same amount of carbon sequestered by approximately 88,102 seedlings grown for ten years or 1,148 cars being taken off the road is anticipated.[2] (*See* Exhibit G, Section 3.5).

D. Scenic and Recreational Values

No designated State or local scenic roads or scenic areas, Connecticut Blue Blaze Trails or public open spaces or parks are located near or will be impacted by the Project. Furthermore, no designated scenic roads or public recreation areas would serve as potential observation points toward the Property. (*See* Exhibit G, Section 3.8 and Figure 6).

The Petitioner will maintain the substantial natural vegetative buffer around the Project Area to the south and east. These natural, undisturbed areas will help to reduce the potential for scenic impacts of the Project from nearby residential land uses. Views into the developed portion of the Project Area are predicted to be available from the open/undeveloped areas to the west and from agricultural and industrial uses to north. Seasonal views into the Project Area may extend beyond the Property during the winter months primarily to the north and west. (*See* Exhibit A and Exhibit G, Appendix G – Visibility Documentation).

E. Historic and Archeological Resources

On behalf of the Petitioner, Heritage Consultants, LLC ("Heritage") prepared a Phase 1-A Cultural Resources Assessment Survey and is in the process of completing a Phase 1-B Professional Cultural Resource Assessment and Reconnaissance Survey of the Project Area. Heritage reviewed State Historic Preservation Office files and conducted it own pedestrian survey and determined that two (2) historic properties and three (3) previously recorded archeological sites are located within one-mile of the Project Area. This information was

[2] U.S. EPA Greenhouse Gas Equivalencies Calculator.

provided to the State Historic Preservation Office ("SHPO") which concurred that neither the archeological sites nor the historic resources would be impacted by the Project. Notwithstanding this determination, the SHPO asked Heritage to complete a Phase 1B Professional Cultural Resources Assessment for the Property. The Phase 1B survey will be provided to the Council and the SHPO as soon as it is available. (*See* Exhibit G, Section 3.7).

F. Habitat and Wildlife

Site surveys for the Project identified four (4) distinct habitat types on the Property, two (2) of which are within the Project Area. Wetland habitats also occur on the Property, some of which are adjacent to the Project Area. (*See* Exhibit G, Section 3.4).

1. Habitat Type

a. Mixed Field

Mixed field habitat is the dominant habitat type on the Property. This habitat consists of regularly mowed/maintained turf fields associated with the golf driving range and active agricultural uses. Project development will result in approximately 18.3 acre of disturbance to this Mixed Field habitat. Because this area is previously disturbed Project development will not have a significant ecological impact. (Exhibit G, Section 3.4.1).

b. Edge Forest

Edge Forest habitat occupies the southern and eastern portions of the Property. Edge habitats are unique as they combine some of the characteristics of two or more adjacent vegetative cover types supporting a greater diversity of wildlife. There is no proposed clearing of any edge forest habitat. Any potential secondary short-term impacts during the development stages will be minimized through the proper stabilization of soils during construction through strict adherence to the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control.*

(Exhibit G, Section 3.4.1).

c. Forested Wetland

This habitat is located in the eastern and southeastern portions of the Property, outside of the Project Area. This area serves as a transitional zone between upland forested habitats and early successional/developed habitats associated with the agricultural and recreational operations. The Project will have no direct impacts on these wetland areas and all construction activity will be setback at least 200 feet from wetland areas. The Project will not, therefore, impact this forested wetland habitat. (Exhibit G, Section 3.4.1).

d. Developed

Developed areas exist in the north-central portion of the Property and consists of the existing gravel driveway and parking area and a small outbuilding associated with the golf driving range. A gravel access driveway servicing the St. Bernard Cemetery is also located in the southwest portion of the Property, south of the Project Area. The Project will result in the redevelopment of approximately 1.36 acres of Developed areas. (Exhibit G, Section 3.4.1).

5. Wildlife Habitat

As discussed in more detail in Exhibit G, the Project will alter, in some limited fashion, portions of two of the four habitat types located on the Property. The Developed and Mixed Field habitat areas currently provide limited wildlife value. Due to the relatively small size of the edge forest habitat on the Property and given the abundance of similar habitat surrounding the Property, the Project is not anticipated to result in a significant impact to wildlife in these areas. Finally, the Project will not encroach into Wetland Habitat on the Property. (*See* Exhibit G, Section 3.4.3).

6. Natural Diversity Database

The DEEP Natural Diversity Data Base ("NDDB") program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state listed species and to help landowners conserve the state's biodiversity. In furtherance of this endeavor, the DEEP develops maps to serve as a pre-screening tool to help determine if a Project could potentially have an impact on state-listed species. APT reviewed the most recent NDDB mapping (December 2021) and determined that an NDDB polygon exists within the Property but not within the Project Area. Consultation was performed with NDDB and a response was received on June 18, 2021 indicating a single species, the Blue-spotted salamander "complex" (*Ambystoma laterale*), a species of State Special Concern, was located on or near the Property. Blue-spotted salamanders are associated with riparian red maple swamps such as the forested wetland that occupies the eastern and southern portions of the Property. The Project will not directly impact blue-spotted salamander habitat and the stormwater management system and erosion and sedimentation control plan have been devised to ensure no discharges from the Facility. (Exhibit G, Section 3.5.1).

7. USFWS Consultation

According to the U.S. Fish and Wildlife Service ("USFWS"), the northern long-eared bat ("NLEB"; *Myotis septentrionalis*) is a federally-listed[3] threatened species also known to occur in the vicinity of the Property. The NLEB's range encompasses the entire State of Connecticut and suitable NLEB roost habitat includes trees (live, dying, dead, or snag) with a diameter at breast height ("DBH") of three (3) inches or greater.

[3] Listing under the federal Endangered Species Act

In compliance with the USFWS criteria for assessing NLEB, the Project will not likely result in an adverse effect or incidental take[4] of NLEB and does not require a permit from USFWS. A letter confirming compliance was received by USFWS on January 11, 2022 thus no further consultation with USFWS is required for the proposed activity. (*See* Exhibit G, Section 3.5.2)

8. Wetlands and Watercourses

APT identified one (1) large wetland on the Property, to the south and southeast of the Project Area. The field delineation was completed in May of 2021. The results of the field delineation are summarized in Exhibit G, Section 3.2.1. This wetland area generally drains to the south and east, into a larger swamp area. No wetlands or watercourses will be directly impacted by the Project. Portions of the Project Area will require grading upgradient of this resource to facilitate installation of the proposed stormwater management features, solar arrays and perimeter fencing. Clearing and grading limits for the Facility's infrastructure (solar arrays, associated equipment and fencing) would maintain a setback of more than 200 feet from the closest wetland habitat.

9. Vernal Pool

A singular flooded depression was identified in the central-west area of the wetland during a preliminary site inspection on May 21, 2019, which contained evidence of breeding by an obligate vernal pool species at that time. At the time of the wetland investigation (May 13, 2021), no evidence of vernal pool breeding was observed. The boundary of the vernal pool was delineated and surveyed during the May 13, 2021 investigation using field observations of the

[4] "Incidental take" is defined by the Endangered Species Act as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For example, harvesting trees can kill bats that are roosting in the trees, but the purpose of the activity is not to kill bats.

seasonally flooded extents. The vernal pool was found to support the wood frog (*Lithobates sylvaticus*) during the preliminary May 21, 2019 investigation. However, breeding during the 2021 season was not confirmed. Due to the variability of breeding data over these two inspection years, a follow-up investigation was performed on March 30, 2022. This investigation verified that the pool does support vernal pool indicator species but would not be considered a highly productive pool based on the single species and limited breeding activity. Regardless, the Project will not have a direct physical impact on the limits of the vernal pool and will comply with the Best Development Practices to protect this resource. The Petitioner does not anticipate that development of the Project will result in any long-term impacts to the vernal pool. Short term impacts that may occur during constriction can also be avoided by implementing a Resource Protection Plan as described further in Exhibit G, Section 3.2.2.

10. Floodplain Areas

According to the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Maps ("FIRM"), Community Panel No. 09003C 0232 F, dated September 26, 2008, the Property is located in Flood Zone X, an area of minimal flooding, typically above the 500-year flood level. (*See* Exhibit G, Section 3.2.4).

G. Water Quality

The Project will use no water during operations in the production of electricity. Any water utilized during the construction of the Project for dust suppression will be minimal and have no impact on the water quality near the Property. As mentioned above, the Property is located outside the 500-year floodplain, areas with a minimal risk for flooding. Thus, no impacts on water quality or supply would occur with the construction or operation of the proposed Project. (*See* Exhibit G, Section 3.3).

Groundwater underlying the Property is classified by DEEP as "GA". This classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment.[5] Based upon a review of available DEEP mapping, the Property is not located within a mapped preliminary or final Aquifer Protection Area. The closest APA is located more than 2,500 feet to the west.

The Project will have no adverse environmental effect on surface or ground water quality. Based upon the reviewed DEEP mapping, the Site is not located within a mapped Public Drinking Supply Watershed. The nearest Public Drinking Supply Watershed is located approximately 5.3 miles to the southeast.

H. Stormwater Management

The Project has been designed to meet the current draft of DEEP's Appendix I Stormwater Management at Solar Array Construction Projects requirements. To safeguard water resources from potential impacts during construction, the Petitioner is committed to implementing protective measures in the form of a Stormwater Pollution Control Plan ("SWPCP") to be finalized and submitted to the Council, pending approval by DEEP Stormwater Management. The SWPCP will include monitoring of established E&S controls that will be installed and maintained in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*. The Petitioner will also apply for a *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* from DEEP. (*See* Exhibit G, Section 3.3.3).

[5] Designated uses in GA classified areas include existing private and potential public or private supplies of water suitable for drinking without treatment and base flow for hydraulically connected surface waterbodies.

VII. Conclusion

The Project will provide numerous and significant benefits to Enfield, the State of Connecticut and its citizens, and will place Enfield at the forefront of green energy development while producing substantial environmental benefits with minimal environmental impact. Pursuant to CGS §16-50k(a), the Siting Council shall approve by declaratory ruling the construction or location of a grid-side distributed resources project or facility with a capacity of not more than 65 MW, as long as such project meets DEEP air and water quality standards and will not have a substantial adverse environmental effect. As amply demonstrated in this Petition, the Project meets these criteria.

The Petitioner, therefore, respectfully requests that the Siting Council issue a declaratory ruling that the proposed Project will comply with DEEP air and water quality standards, will not have a substantial adverse environmental effect and, does not require the issuance of a Certificate by the Siting Council.

Respectfully submitted,

ENFIELD SOLAR ONE, LLC AND VCP, LLC d/b/a VEROGY

By 

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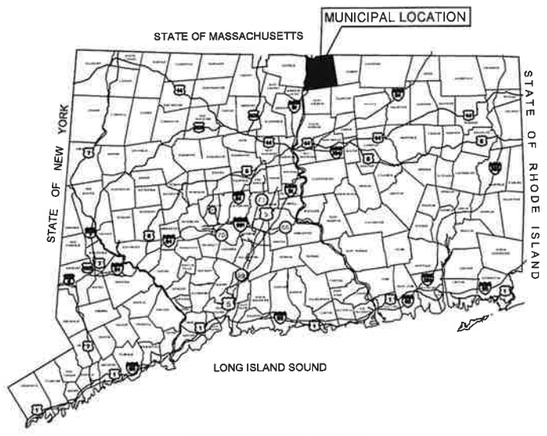
Its Attorney

EXHIBIT A



ENFIELD SOLAR ONE, LLC

"ENFIELD SOLAR ONE, LLC"
110 NORTH STREET
ENFIELD, CT 06082

CSC PETITION PLAN SET
APRIL 11, 2022

LIST OF DRAWINGS

SITE INFORMATION

SITE NAME: "ENFIELD SOLAR ONE, LLC"

LOCATION: 110 NORTH STREET
ENFIELD, CT 06082

SITE TYPE/DESCRIPTION: ADD GROUND MOUNTED SOLAR PANEL ARRAY W/ ASSOCIATED EQUIPMENT, GRAVEL ACCESS ROAD, AND STORMWATER MANAGEMENT.

PROPERTY OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
700 MIDDLETOWN AVE.
NORTH HAVEN, CT 06473

APPLICANT: ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET, 4TH FLOOR
HARTFORD, CT 06103

ENGINEER CONTACT: ROBERT C. BURNS, P.E.
(860) 552-2036

LATITUDE: 41°59'41.79" N
LONGITUDE: 72°31'31.83" W
ELEVATION: 188'± AMSL

MBLU: 100-5
ZONE: R33
EXISTING LAND USE: RESIDENTIAL - CEMETERY
PROPOSED LAND USE: COMMUNICATIONS, TRANSPORTATION AND PUBLIC UTILITY USES
- LARGE SCALE GROUND MOUNTED SOLAR PHOTOVOLTAIC INSTALLATIONS

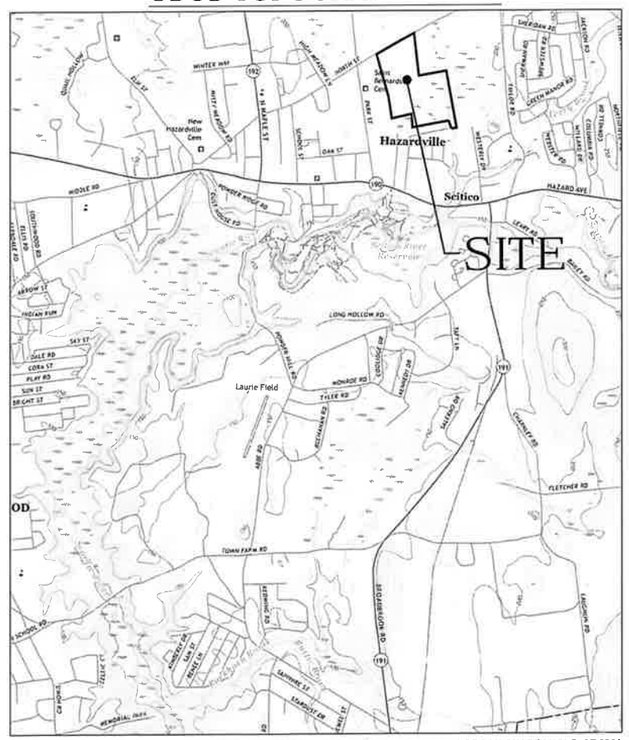
TOTAL SITE: 73.88± AC.
TOTAL DISTURBED AREA: 19.65± AC.

PROP. SITE GRADING
APPROX. VOLUME OF CUT : 1,430± CY
APPROX. VOLUME OF FILL: 930± CY

APPROX. OVERALL NET VOLUME: 500± CY OF CUT

PROP. GRAVEL ACCESS ROAD: 880± LINEAR FEET
PROP. SILT FENCE: 2,910± LINEAR FEET
TREE CLEARING AREA: 0± ACRE
IMPERVIOUS AREA: 18,910± SQUARE FEET

USGS TOPOGRAPHIC MAP



SCALE : 1" = 2000'± SOURCE: USGS 7.5 BROAD BROOK QUADRANGLE, CT 2021

ENFIELD SOLAR
ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
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1	03/16/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
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DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ABBOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT590230

DRAWN BY: CSH

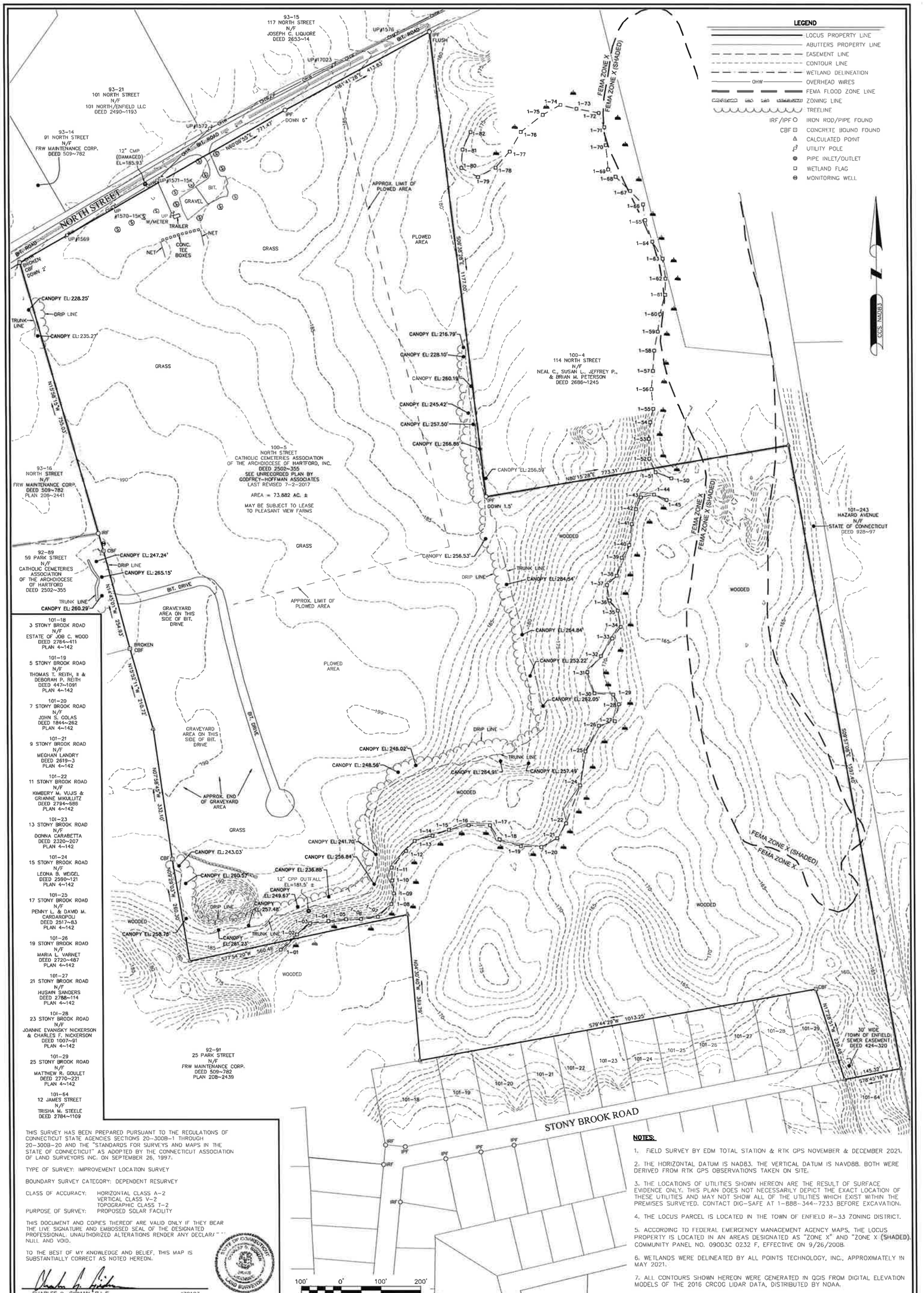
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1997.

TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY

BOUNDARY SURVEY CATEGORY: DEPENDENT RESURVEY

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

PURPOSE OF SURVEY: PROPOSED SOLAR FACILITY

THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE LIVE SIGNATURE AND EMBOSSED SEAL OF THE DESIGNATED PROFESSIONAL. UNAUTHORIZED ALTERATIONS RENDER ANY DECLARA[illegible] NULL AND VOID.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

CHARLES G. GIDMAN, P.L.S. #70103

STATE OF CONNECTICUT
CHARLES G. GIDMAN
#70103
LICENSED
LAND SURVEYOR

NOTES:

1. FIELD SURVEY BY EDM TOTAL STATION & RTK GPS NOVEMBER & DECEMBER 2021.
2. THE HORIZONTAL DATUM IS NAD83. THE VERTICAL DATUM IS NAVD88. BOTH WERE DERIVED FROM RTK GPS OBSERVATIONS TAKEN ON SITE.
3. THE LOCATIONS OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE ONLY. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION OF THESE UTILITIES AND MAY NOT SHOW ALL OF THE UTILITIES WHICH EXIST WITHIN THE PREMISES SURVEYED. CONTACT DIG-SAFE AT 1-888-344-7233 BEFORE EXCAVATION.
4. THE LOCUS PARCEL IS LOCATED IN THE TOWN OF ENFIELD R-33 ZONING DISTRICT.
5. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE LOCUS PROPERTY IS LOCATED IN AN AREAS DESIGNATED AS "ZONE X" AND "ZONE X (SHADED)", COMMUNITY PANEL NO. 09003C 0232 F, EFFECTIVE ON 9/26/2008.
6. WETLANDS WERE DELINEATED BY ALL POINTS TECHNOLOGY, INC., APPROXIMATELY IN MAY 2021.
7. ALL CONTOURS SHOWN HEREON WERE GENERATED IN QGIS FROM DIGITAL ELEVATION MODELS OF THE 2016 CRCOG LIDAR DATA, DISTRIBUTED BY NOAA.

SHEET NO. 1 OF 1	PLAN OF LAND IN ENFIELD, CT PREPARED FOR VEROGY	SURVEYOR: CGG DRAFTING: JDG FIELD WORK: NAE PROJECT NUMBER: 21-124 DRAWING NAME: 21-124.DWG	ENGINEER: – DESIGN: – HORZ. SCALE: 1"=100' VERT. SCALE: – DATE: 3-11-2022

BOUNDARY SURVEY & LIDAR CONTOURS

NORTHEAST SURVEY CONSULTANTS
3 FERRY STREET
STUDIO 1 EAST
EASTHAMPTON, MA 01027
(413) 203-5144

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH PROJECT DEVELOPER STANDARDS, TOWN OF ENFIELD STANDARDS, CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
2. IF NO PROJECT CONSTRUCTION SPECIFICATION PACKAGE IS PROVIDED BY THE PROJECT DEVELOPER OR THEIR REPRESENTATIVE, THE CONTRACTOR SHALL COMPLY WITH THE MANUFACTURER, TOWN OF ENFIELD, CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, OR CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND BE IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
3. THE PROJECT DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING AND STORMWATER PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL ENFIELD CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
4. REFER TO PLANS, DETAILS AND REPORTS PREPARED BY ALL-POINTS TECHNOLOGY CORPORATION FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE PROJECT DEVELOPER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING/CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE PROJECT DEVELOPER'S CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS AND SPECIFICATIONS TO THE PROJECT DEVELOPER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
6. SHOULD ANY UNKNOWN OR INCORRECTLY LOCATED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE PROJECT DEVELOPER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
7. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE PROJECT DEVELOPER OR OTHERS DURING OCCUPIED HOURS, EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE PROJECT DEVELOPER AND THE LOCAL MUNICIPALITY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
8. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.
9. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL COMPLY WITH OSHA CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
11. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OF PERSONNEL OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
12. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE PROJECT DEVELOPER OR THE TOWN OF ENFIELD.
13. THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE PROJECT DEVELOPER AT THE END OF CONSTRUCTION.
14. ALTERNATIVE METHODS AND PRODUCTS, OTHER THAN THOSE SPECIFIED, MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING/CONSTRUCTION PROCESS.
15. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "811" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
16. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

SITE PLAN NOTES

1. THE SURVEY WAS PROVIDED BY NORTHEAST SURVEY CONSULTANTS, DATED DECEMBER 22, 2021.
2. THERE ARE WETLANDS LOCATED ON THE SITE AS INDICATED ON THE PLANS. WETLAND BOUNDARIES WERE FLAGGED AND LOCATED BY ALL-POINTS TECHNOLOGY CORPORATION, IN MAY 2021.
3. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDED SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION CONTROL PLAN OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL BY THE ENGINEER AND/OR PERMITTING AGENCIES PRIOR TO THE START OF CONSTRUCTION. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
4. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY GOVERNMENT AGENCIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.
5. ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK, SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL, OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95% PERCENT OF OPTIMUM MOISTURE CONTENT.
6. ALL DISTURBANCE INCURRED TO PUBLIC, MUNICIPAL, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF ENFIELD AND STATE OF CONNECTICUT.
7. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT.

UTILITY NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF ENFIELD TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
2. REFER TO DRAWINGS BY PROJECT DEVELOPER FOR THE ONSITE ELECTRICAL DRAWINGS AND INTERCONNECTION TO EXISTING ELECTRICAL GRID. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT. THESE DETAILS ARE NOT INCLUDED IN THESE PLANS.
3. UTILITY LOCATIONS AND PENETRATIONS ARE SHOWN FOR THE CONTRACTORS INFORMATION AND SHALL BE VERIFIED WITH THE ELECTRICAL ENGINEER AND THE PROJECT DEVELOPER'S CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROP. SANITARY SEWERS AND WHERE PROP. STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE PROJECT DEVELOPER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
5. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.
6. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.
7. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.
8. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT, AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE TOWN OF ENFIELD.
9. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
10. RELOCATION OF UTILITY PROVIDER FACILITIES, SUCH AS POLES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.
11. THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.
12. CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.
13. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.
14. A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER, A 6-INCH TO 18-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE PROP. SANITARY PIPING.
15. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE PROJECT DEVELOPER AND THE TOWN OF ENFIELD.
16. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "CALL BEFORE YOU DIG" AT 811 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROP. UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.
17. THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.
18. ELECTRIC DRAWINGS AND REQUIREMENTS ARE NOT INCLUDED AS PART OF THIS DRAWING SET AND SHOULD BE OBTAINED FROM THE PROJECT DEVELOPER.
19. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
20. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE PROJECT DEVELOPER, TOWN OF ENFIELD, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

GENERAL LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
BUILDING SETBACK		
EASEMENT		
TREE LINE		
WETLAND		
WETLAND BUFFER		
VERNAL POOL		
VERNAL POOL BUFFER		
WATERCOURSE		
WATERCOURSE BUFFER		
LIMIT OF PLOWED AREA		
MAJOR CONTOUR		
MINOR CONTOUR		
UNDERGROUND ELECTRIC		E E
OVERHEAD ELECTRIC		OH OH
BASIN		
FENCE		X X X
LIMIT OF DISTURBANCE		LOD
SILT FENCE		SF SF

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APT FILING NUMBER: CT580230

DRAWN BY: CSH

DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1

ENVIRONMENTAL NOTES
RESOURCE PROTECTION MEASURES

VERNAL POOL PROTECTION PROGRAM

AS A RESULT OF THE FACILITY'S LOCATION IN THE VICINITY OF SENSITIVE VERNAL POOL AND WETLAND HABITAT, THE FOLLOWING PROTECTION PROGRAM SHALL BE IMPLEMENTED BY THE CONTRACTOR TO AVOID UNINTENTIONAL IMPACTS TO PROXIMATE WETLAND RESOURCES OR MORTALITY TO VERNAL POOL HERPETOFAUNA (I.E., WOOD FROG, SALAMANDERS, TURTLES, ETC.) DURING CONSTRUCTION ACTIVITIES. IN ADDITION, THIS PROTECTION PLAN WILL ADEQUATELY PROTECT ANY POTENTIAL BLUE-SPOTTED SALAMANDER "COMPLEX" (*AMBYSTOMA LATERALE*) POPULATIONS, A STATE-LISTED SPECIAL CONCERN SPECIES THAT UTILIZES VERNAL POOL HABITAT AND IS AFFORDED PROTECTION UNDER THE CONNECTICUT ENDANGERED SPECIES ACT.

THESE PROTECTION MEASURES SATISFY REQUIREMENTS FROM THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION ("DEEP") WILDLIFE DIVISION IN ACCORDANCE WITH THEIR NATURAL DIVERSITY DATA BASE ("NDDB") DETERMINATION LETTER (NO. 202107713) DATED JUNE 18, 2021 FOR THE PROTECTION OF BLUE-SPOTTED SALAMANDER "COMPLEX". THE NDDB DETERMINATION IS VALID UNTIL JUNE 18, 2023 PROVIDED THE SCOPE OF THE PROJECT HAS NOT CHANGED AND WORK HAS BEGUN ON THE PROJECT PRIOR TO THE EXPIRATION DATE.

IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COMPLIES WITH THE REQUIREMENT FOR THE INSTALLATION OF PROTECTIVE MEASURES AND THE EDUCATION OF ITS EMPLOYEES AND SUBCONTRACTORS PERFORMING WORK ON THE PROJECT SITE. ALL-POINTS TECHNOLOGY CORPORATION, P.C. ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THESE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY AND WILL PROVIDE AN EDUCATION SESSION ON THE PROJECT'S PROXIMITY TO SENSITIVE WETLAND RESOURCES AND ASSOCIATED VERNAL POOL HERPETOFAUNA PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONTACT DEAN GUSTAFSON, SENIOR BIOLOGIST AT APT, AT LEAST 5 BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING. MR. GUSTAFSON CAN BE REACHED BY PHONE AT (860) 552-2033 OR VIA EMAIL AT DGUSTAFSON@ALLPOINTSTECH.COM.

THIS RESOURCES PROTECTION PROGRAM CONSISTS OF SEVERAL COMPONENTS INCLUDING: EDUCATION OF ALL CONTRACTORS AND SUB-CONTRACTORS PRIOR TO INITIATION OF WORK ON THE SITE; INSTALLATION OF EROSION CONTROLS; PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION; PROTECTIVE MEASURES; HERBICIDE AND PESTICIDE RESTRICTIONS; AND, REPORTING.

1. CONTRACTOR EDUCATION:

a. PRIOR TO WORK ON SITE AND INITIAL DEPLOYMENT/MOBILIZATION OF EQUIPMENT AND MATERIALS, THE CONTRACTOR SHALL ATTEND AN EDUCATIONAL SESSION AT THE PRE-CONSTRUCTION MEETING WITH APT. THIS ORIENTATION AND EDUCATIONAL SESSION WILL CONSIST OF INFORMATION SUCH AS, BUT NOT LIMITED TO: IDENTIFICATION OF VERNAL POOL AND WETLAND RESOURCES PROXIMATE TO WORK AREAS, REPRESENTATIVE PHOTOGRAPHS OF TYPICAL HERPETOFAUNA THAT MAY BE ENCOUNTERED, CONNECTICUT AND FEDERAL LISTING STATUS OF SPECIES THAT COULD BE ENCOUNTERED, TYPICAL SPECIES BEHAVIOR, AND PROPER PROCEDURES IF SPECIES ARE ENCOUNTERED. THE MEETING WILL FURTHER EMPHASIZE THE NON-AGGRESSIVE NATURE OF THESE SPECIES, THE ABSENCE OF NEED TO DESTROY SUCH ANIMALS AND THE NEED TO FOLLOW PROTECTIVE MEASURES AS DESCRIBED IN FOLLOWING SECTIONS. THE CONTRACTOR WILL DESIGNATE ONE OF ITS WORKERS AS THE "PROJECT MONITOR", WHO WILL RECEIVE MORE INTENSE TRAINING ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA.

b. THE CONTRACTOR WILL DESIGNATE A MEMBER OF ITS CREW AS THE PROJECT MONITOR TO BE RESPONSIBLE FOR THE PERIODIC "SWEEPS" FOR HERPETOFAUNA WITHIN THE CONSTRUCTION ZONE EACH MORNING AND FOR ANY GROUND DISTURBANCE WORK. THIS INDIVIDUAL WILL RECEIVE MORE INTENSE TRAINING FROM APT ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA IN ORDER TO PERFORM SWEEPS. ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED.

c. THE CONTRACTOR'S PROJECT MONITOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT PERSONNEL TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH HERPETOFAUNA. EDUCATIONAL POSTER MATERIALS WILL BE PROVIDED BY APT AND DISPLAYED ON THE JOB SITE TO MAINTAIN WORKER AWARENESS AS THE PROJECT PROGRESSES.

d. APT WILL ALSO POST CAUTION SIGNS THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT PROVIDING NOTICE OF THE ENVIRONMENTALLY SENSITIVE NATURE OF THE WORK AREA, THE POTENTIAL FOR ENCOUNTERING VARIOUS AMPHIBIANS AND REPTILES AND PRECAUTIONS TO BE TAKEN TO AVOID INJURY TO OR MORTALITY OF THESE ANIMALS.

2. EROSION AND SEDIMENTATION CONTROLS

a. PLASTIC NETTING USED IN A VARIETY OF EROSION CONTROL PRODUCTS (I.E., EROSION CONTROL BLANKETS, FIBER ROLLS [WATTLES], REINFORCED SILT FENCE) HAS BEEN FOUND TO ENTANGLE WILDLIFE, INCLUDING REPTILES, AMPHIBIANS, BIRDS AND SMALL MAMMALS. NO PERMANENT EROSION CONTROL PRODUCTS OR REINFORCED SILT FENCE WILL BE USED ON THE PROJECT. TEMPORARY EROSION CONTROL PRODUCTS THAT WILL BE EXPOSED AT THE GROUND SURFACE AND REPRESENT A POTENTIAL FOR WILDLIFE ENTANGLEMENT WILL USE EITHER EROSION CONTROL BLANKETS AND FIBER ROLLS COMPOSED OF PROCESSED FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX (NETLESS) OR NETTING COMPOSED OF PLANAR WOVEN NATURAL BIODEGRADABLE FIBER TO AVOID/MINIMIZE WILDLIFE ENTANGLEMENT.

b. THE EXTENT OF EROSION CONTROLS WILL BE AS SHOWN ON THE SITE PLANS. THE CONTRACTOR SHALL HAVE ADDITIONAL SEDIMENTATION AND EROSION CONTROLS STOCKPILED ON SITE SHOULD FIELD OR CONSTRUCTION CONDITIONS WARRANT EXTENDING DEVICES. IN ADDITION TO THE CONTRACTOR MAKING THESE DETERMINATIONS, REQUESTS FOR ADDITIONAL CONTROLS WILL ALSO BE AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR.

c. INSTALLATION OF EROSION AND SEDIMENTATION CONTROLS, REQUIRED FOR EROSION CONTROL COMPLIANCE AND CREATION OF A BARRIER TOO POSSIBLE MIGRATING/DISPERSING HERPETOFAUNA (ONLY APPLICABLE DURING THE SEASONAL RESTRICTION PERIOD AND WILL BE INSTALLED AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR), SHALL BE PERFORMED BY THE CONTRACTOR IF ANY SOIL DISTURBANCE OCCURS OR HEAVY MACHINERY IS ANTICIPATED TO BE USED ON SLOPES. THE ENVIRONMENTAL MONITOR WILL INSPECT THE WORK ZONE AREA PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION. IN ADDITION, WORK ZONES IN PROXIMITY TO VERNAL POOL RESOURCES WILL BE INSPECTED PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION TO ENSURE THE AREA IS FREE OF HERPETOFAUNA AND SATISFACTORILY INSTALLED. THE INTENT OF THE BARRIER IS TO SEGREGATE THE MAJORITY OF THE WORK ZONE FROM MIGRATING/DISPERSING HERPETOFAUNA. OFTENTIMES COMPLETE ISOLATION OF A WORK ZONE IS NOT FEASIBLE DUE TO ACCESSIBILITY NEEDS AND LOCATIONS OF STAGING/MATERIAL STORAGE AREAS, ETC. IN THOSE CIRCUMSTANCES, THE BARRIERS WILL BE POSITIONED TO DEFLECT MIGRATING/DISPERSAL ROUTES AWAY FROM THE WORK ZONE TO MINIMIZE POTENTIAL ENCOUNTERS WITH HERPETOFAUNA AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR.

d. NO EQUIPMENT, VEHICLES, CONSTRUCTION MATERIALS, OR STAGING AREAS SHALL BE STORED/LOCATED WITHIN 100 FEET OF WETLAND RESOURCES.

e. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS, INCLUDING BUT NOT LIMITED TO FOR TEARS OR BREECHES AND ACCUMULATION LEVELS OF SEDIMENT, PARTICULARLY FOLLOWING STORM EVENTS THAT GENERATE A DISCHARGE AS DEFINED BY AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL MONITOR WITHIN 24 HOURS OF ANY BREECHES OF THE SEDIMENTATION AND EROSION CONTROLS AND ANY SEDIMENT RELEASES BEYOND THE PERIMETER CONTROLS THAT IMPACT WETLANDS, WATERCOURSES OR WITHIN 100 FEET OF WETLANDS AND WATERCOURSES. THE ENVIRONMENTAL MONITOR WILL PROVIDE PERIODIC INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ONLY AS IT PERTAINS TO PROTECTION OF NEARBY WETLANDS, WHICH WILL GENERALLY OCCUR ON A MONTHLY BASIS. IF APT IS NOTIFIED BY THE CONTRACTOR OF A SEDIMENT RELEASE, AN INSPECTION WILL BE SCHEDULED SPECIFICALLY TO INVESTIGATE AND EVALUATE POSSIBLE IMPACTS TO WETLAND RESOURCES.

f. ALL SILT FENCING OR OTHER POTENTIAL BARRIERS TO SAFE HERPETOFAUNA MIGRATION SHALL BE REMOVED WITHIN 30 DAYS OF COMPLETION OF WORK AND PERMANENT STABILIZATION OF SITE SOILS SO THAT REPTILE AND AMPHIBIAN MOVEMENT BETWEEN UPLANDS AND WETLANDS IS NOT RESTRICTED. IF FIBER ROLLS/WATTLES, STRAW BALES, OR OTHER NATURAL MATERIAL EROSION CONTROL PRODUCTS ARE USED, SUCH DEVICES WILL NOT BE LEFT IN PLACE TO BIODEGRADE AND SHALL BE PROMPTLY REMOVED AFTER SOILS ARE STABLE SO AS NOT TO CREATE A BARRIER TO MIGRATING WILDLIFE. SEED FROM SEEDING OF SOILS SHOULD NOT SPREAD OVER FIBER ROLLS/WATTLES AS IT MAKES THEM HARDER TO REMOVE ONCE SOILS ARE STABILIZED BY VEGETATION.

3. PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION

a. CERTAIN PRECAUTIONS ARE NECESSARY TO STORE PETROLEUM 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 PROXIMITY TO WETLAND RESOURCES.

b. A SPILL CONTAINMENT KIT CONSISTING OF A SUFFICIENT SUPPLY OF ABSORBENT PADS AND ABSORBENT MATERIAL WILL BE MAINTAINED BY THE 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 AND TIMELY DISPOSAL OFF SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS.

c. THE FOLLOWING PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING RESTRICTIONS AND SPILL RESPONSE PROCEDURES WILL BE ADHERED TO BY THE CONTRACTOR.

i. PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING
   1. REFUELING OF VEHICLES OR MACHINERY SHALL OCCUR A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES AND SHALL TAKE PLACE ON AN IMPERVIOUS PAD WITH SECONDARY CONTAINMENT DESIGNED TO CONTAIN FUELS.
2. ANY FUEL OR HAZARDOUS MATERIALS THAT MUST BE KEPT ON SITE SHALL BE STORED ON AN IMPERVIOUS SURFACE UTILIZING SECONDARY CONTAINMENT A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES.

ii. INITIAL SPILL RESPONSE PROCEDURES
   1. STOP OPERATIONS AND SHUT OFF EQUIPMENT.
2. REMOVE ANY SOURCES OF SPARK OR FLAME.
3. CONTAIN THE SOURCE OF THE SPILL.
   4. DETERMINE THE APPROXIMATE VOLUME OF THE SPILL.
   5. IDENTIFY THE LOCATION OF NATURAL FLOW PATHS TO PREVENT THE RELEASE OF THE SPILL TO SENSITIVE NEARBY WATERWAYS OR WETLANDS.
   6. ENSURE THAT FELLOW WORKERS ARE NOTIFIED OF THE SPILL.

iii. SPILL CLEAN UP & CONTAINMENT
   1. OBTAIN SPILL RESPONSE MATERIALS FROM THE ON-SITE SPILL RESPONSE KIT. PLACE ABSORBENT MATERIALS DIRECTLY ON THE RELEASE AREA.
   2. LIMIT THE SPREAD OF THE SPILL BY PLACING ABSORBENT MATERIALS AROUND THE PERIMETER OF THE SPILL.
   3. ISOLATE AND ELIMINATE THE SPILL SOURCE.
4. CONTACT THE APPROPRIATE LOCAL, STATE AND/OR FEDERAL AGENCIES, AS NECESSARY.
5. CONTACT A DISPOSAL COMPANY TO PROPERLY DISPOSE OF CONTAMINATED MATERIALS.

iv. REPORTING
   1. COMPLETE AN INCIDENT REPORT.
   2. SUBMIT A COMPLETED INCIDENT REPORT TO LOCAL, STATE AND FEDERAL AGENCIES, AS NECESSARY, INCLUDING THE CONNECTICUT SITING COUNCIL.

4. VERNAL POOL AND WETLAND PROTECTIVE MEASURES

a. A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR FOR HERPETOFAUNA PRIOR TO AND FOLLOWING INSTALLATION OF THE SILT FENCING BARRIER TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES. ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED. PERIODIC INSPECTIONS WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR THROUGHOUT THE DURATION OF THE CONSTRUCTION.

b. ANY STORMWATER MANAGEMENT FEATURES, RUTS OR ARTIFICIAL DEPRESSIONS THAT COULD HOLD WATER CREATED INTENTIONALLY OR UNINTENTIONALLY BY SITE CLEARING/CONSTRUCTION ACTIVITIES WILL BE PROPERLY FILLED IN AND PERMANENTLY STABILIZED WITH VEGETATION TO AVOID THE CREATION OF VERNAL POOL "DECOY POOLS" THAT COULD INTERCEPT AMPHIBIANS MOVING TOWARD THE VERNAL POOLS. STORMWATER MANAGEMENT FEATURES SUCH AS LEVEL SPREADERS WILL BE CAREFULLY REVIEWED IN THE FIELD TO ENSURE THAT STANDING WATER DOES NOT ENDURE FOR MORE THAN A 24-HOUR PERIOD TO AVOID CREATION OF DECOY POOLS AND MAY BE SUBJECT TO FIELD DESIGN CHANGES. ANY SUCH PROPOSED DESIGN CHANGES WILL BE REVIEWED BY THE DESIGN ENGINEER TO ENSURE STORMWATER MANAGEMENT FUNCTIONS ARE MAINTAINED.

c. EROSION CONTROL MEASURES WILL BE REMOVED NO LATER THAN 30 DAYS FOLLOWING FINAL SITE STABILIZATION SO AS NOT TO IMPEDE MIGRATION OF HERPETOFAUNA OR OTHER WILDLIFE.

5. HERBICIDE AND PESTICIDE RESTRICTIONS

a. THE USE OF HERBICIDES AND PESTICIDES AT THE FACILITY SHALL BE AVOIDED WHEN POSSIBLE. IN THE EVENT HERBICIDES AND/OR PESTICIDES ARE REQUIRED AT THE FACILITY, THEIR USE WILL BE USED IN ACCORDANCE WITH CURRENT INTEGRATED PEST MANAGEMENT ("IPM") PRINCIPLES WITH PARTICULAR ATTENTION TO MINIMIZE APPLICATIONS WITHIN 100 FEET OF WETLAND OR WATERCOURSE RESOURCES. NO APPLICATIONS OF HERBICIDES OR PESTICIDES ARE ALLOWED WITHIN ACTUAL WETLAND OR WATERCOURSE RESOURCES.

6. REPORTING

a. COMPLIANCE MONITORING REPORTS (BRIEF NARRATIVE AND APPLICABLE PHOTOS) DOCUMENTING EACH APT INSPECTION WILL BE SUBMITTED BY APT TO THE PERMITTEE AND ITS CONTRACTOR FOR COMPLIANCE VERIFICATION OF THESE PROTECTION MEASURES. THESE REPORTS ARE NOT TO BE USED TO DOCUMENT COMPLIANCE WITH ANY OTHER PERMIT AGENCY APPROVAL CONDITIONS (I.E., DEEP STORMWATER PERMIT MONITORING, ETC.). ANY NON-COMPLIANCE OBSERVATIONS OF EROSION CONTROL MEASURES OR EVIDENCE OF EROSION OR SEDIMENT RELEASE WILL BE IMMEDIATELY REPORTED TO THE PERMITTEE AND ITS CONTRACTOR AND INCLUDED IN THE REPORTS ALONG WITH ANY OBSERVATIONS OF VERNAL POOL HERPETOFAUNA.

b. FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A FINAL COMPLIANCE MONITORING REPORT TO THE PERMITTEE DOCUMENTING IMPLEMENTATION OF THE VERNAL POOL AND WETLAND PROTECTION PROGRAM AND MONITORING OBSERVATIONS. THE PERMITTEE IS RESPONSIBLE FOR PROVIDING A COPY OF THE FINAL COMPLIANCE MONITORING REPORT TO THE CONNECTICUT SITING COUNCIL FOR COMPLIANCE VERIFICATION.

c. ANY OBSERVATIONS OF RARE SPECIES WILL BE REPORTED TO CTDEEP BY APT, WITH PHOTO-DOCUMENTATION (IF POSSIBLE) AND WITH SPECIFIC INFORMATION ON THE LOCATION AND DISPOSITION OF THE ANIMAL.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	02/04/22	DRAFT SET FOR REVIEW: RCB
1	03/15/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT890230

DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
ENVIRONMENTAL NOTES RESOURCE PROTECTION MEASURES

SHEET NUMBER:
GN-2

1 OP-1 **OVERALL LOCUS MAP**
SCALE : 1" = 200'-0"

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
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HARTFORD, CT, 06103

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NO	DATE	REVISION
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2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT580230

DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:

OVERALL LOCUS MAP

SHEET NUMBER:

OP-1

1 OP-2 **PARTIAL SITE PLAN**
SCALE : 1" = 80'-0"

80 0 40 80 160
(IN FEET) 1 inch = 80 ft.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

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ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT590230

DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:

PARTIAL SITE PLAN

SHEET NUMBER:

OP-2

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLAN NOTES

1. THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF ENFIELD, PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.

2. THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.

3. A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.

4. THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.

5. THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.

6. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.

7. ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.

8. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA; FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.

9. CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXISTING.

10. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.

11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.

12. DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.

13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.

14. MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.

15. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.

16. VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.

17. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.

18. SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR DETENTION BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.
TEMPORARY SEDIMENT BASIN (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE. DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SEDIMENT TRAP (W/ BAFFLES)	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE. DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.

SEDIMENT & EROSION CONTROL NARRATIVE

1. THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT, INCLUDING GRADING OF APPROXIMATELY 19.65± ACRES OF EXISTING LOT.

THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

A. CLEARING, GRUBBING, AND GRADING OF EXISTING LOT.
B. CONSTRUCTION OF 11,050 GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT.
B. THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS.

2. FOR THIS PROJECT, THERE ARE APPROXIMATELY 19.65± ACRES OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE, AS ALL ACCESS THOUGH THE SITE WILL BE GRAVEL. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT & GRAVEL ACCESS DRIVE.

3. THE PROJECT SITE, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 18, DEC 6, 2018), CONTAINS TYPE 29A (HYDROLOGIC SOIL GROUP B) AND 701A (HYDROLOGIC SOIL GROUP C). A GEOTECHNICAL ENGINEERING REPORT IS AVAILABLE UNDER SEPARATE COVER.

4. IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 4-6 MONTHS.

5. REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.

6. STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF ENFIELD STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.

7. DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.

8. CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:
   A. STAGED CONSTRUCTION;
   B. MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
   C. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
   D. MINIMIZE IMPERVIOUS AREAS;
   E. UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.

9. THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:
   A. STORMWATER MANAGEMENT REPORT DATED MARCH 2022.
   B. SWPCP, TO BE ISSUED AT A LATER DATE.

SUGGESTED CONSTRUCTION SEQUENCE

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

1. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING, PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.

2. CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.

3. NOTIFY CALL BEFORE YOU DIG AT 811, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION.

PHASE 1

4. REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL DISTURBANCE TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE/S.

5. INSTALL PERIMETER EROSION CONTROL.

6. INSTALL TEMPORARY SEDIMENT TRAPS.

7. INSTALL ACCESS DRIVE.

8. INSTALL ELECTRICAL CONDUIT, RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS & GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION.

9. TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.

PHASE 2

10. REMOVE TEMPORARY SEDIMENT TRAPS.

11. INSTALL STORMWATER BASIN B-1.

12. AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK, INCLUDING ANY REQUIRED LANDSCAPE SCREENING, ACCESS DRIVE, CHAIN LINK FENCE, AND STABILIZE ALL DISTURBED AREAS.

13. FINE GRADE, RAKE, SEED AND MULCH ALL REMAINING DISTURBED AREAS.

14. AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE AND IF NECESSARY THE CONSERVATION AGENT, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

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DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06386

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

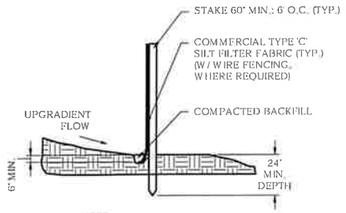
SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT690230

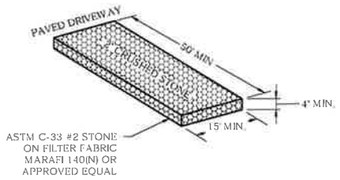
DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL NOTES

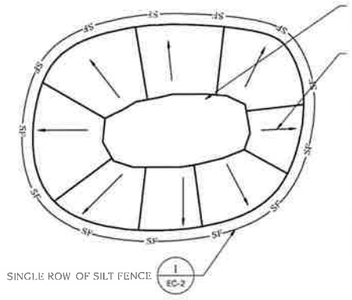
SHEET NUMBER:
EC-1



1 EC-2 SILT FENCE DETAIL
SCALE : N.T.S.



2 EC-2 CONSTRUCTION ENTRANCE DETAIL
SCALE : N.T.S.



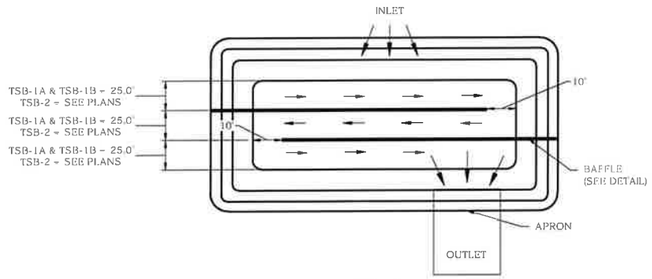
NOTES:
1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF.

2. SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS.

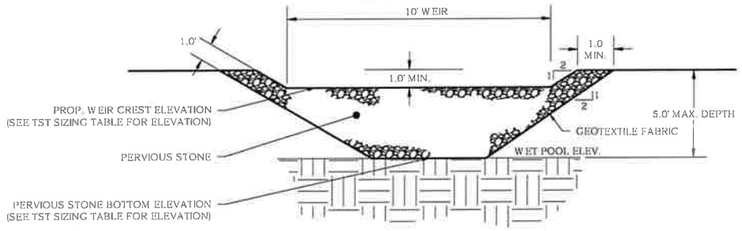
3. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.

4. STOCKPILE HEIGHTS MUST NOT EXCEED 35', STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

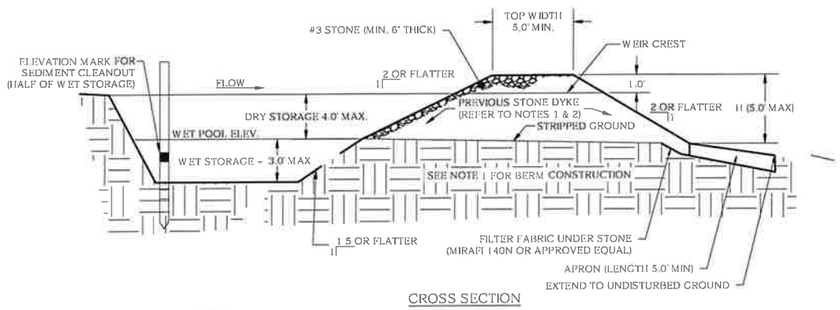
3 EC-2 MATERIALS STOCKPILE DETAIL
SCALE : N.T.S.



TOP VIEW



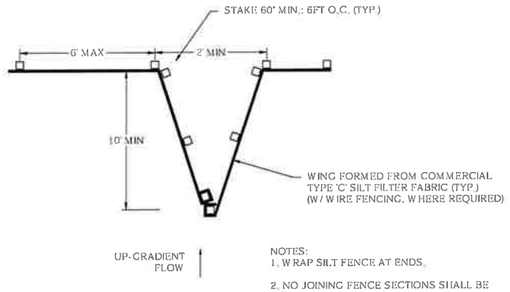
OUTLET ELEVATION



CROSS SECTION

NOTES:
1. CONSTRUCT TEMPORARY SEDIMENT TRAP BERMS AND SIDEWALLS PER THE INFILTRATION BASIN DETAIL.
2. PERVIOUS STONE DIKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIP-RAP WITH #3 STONE ON FACE.
3. SEDIMENT TRAP BAFFLES SHALL BE INSTALLED AS SHOWN ON EC-1 AND EC-2.
4. SEE TST SIZING TABLE FOR WET AND DRY STORAGE VOLUMES.

5 EC-4 TEMPORARY SEDIMENT TRAP
SCALE : N.T.S.



NOTES:
1. WRAP SILT FENCE AT ENDS.

2. NO JOINING FENCE SECTIONS SHALL BE INSTALLED WITHIN 30 FEET OF WING.

4 EC-2 SILT FENCE WING DETAIL
SCALE : N.T.S.

TEMPORARY SEDIMENT TRAP SIZING TABLE

NAME	DRAINAGE AREA (AC)	SEDIMENT VOLUME/ACRE AREA (CY)	REQ. VOLUME (CY)	REQ. WET VOLUME (CY)	PROP. BTM. ELEV. (FT)	PROP. STONE DIKE BTM. ELEV. (FT)	PROP. WEIR CREST ELEV. (FT)	PROP. TOP ELEV. (FT)	WET VOL. PROVIDED (CY)	TOTAL VOL. PROVIDED. (CY)
TST-1	4.99 AC	134 CY	669 CY	335 CY	178.0'	180.5'	181.0'	182.0'	429 CY	673 CY
TST-2	4.57 AC	134 CY	613 CY	307 CY	178.0'	180.5'	181.0'	182.0'	386 CY	632 CY
TST-3	4.26 AC	134 CY	571 CY	286 CY	179.0'	181.5'	182.0'	183.0'	360 CY	582 CY

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ENFIELD SOLAR ONE, LLC

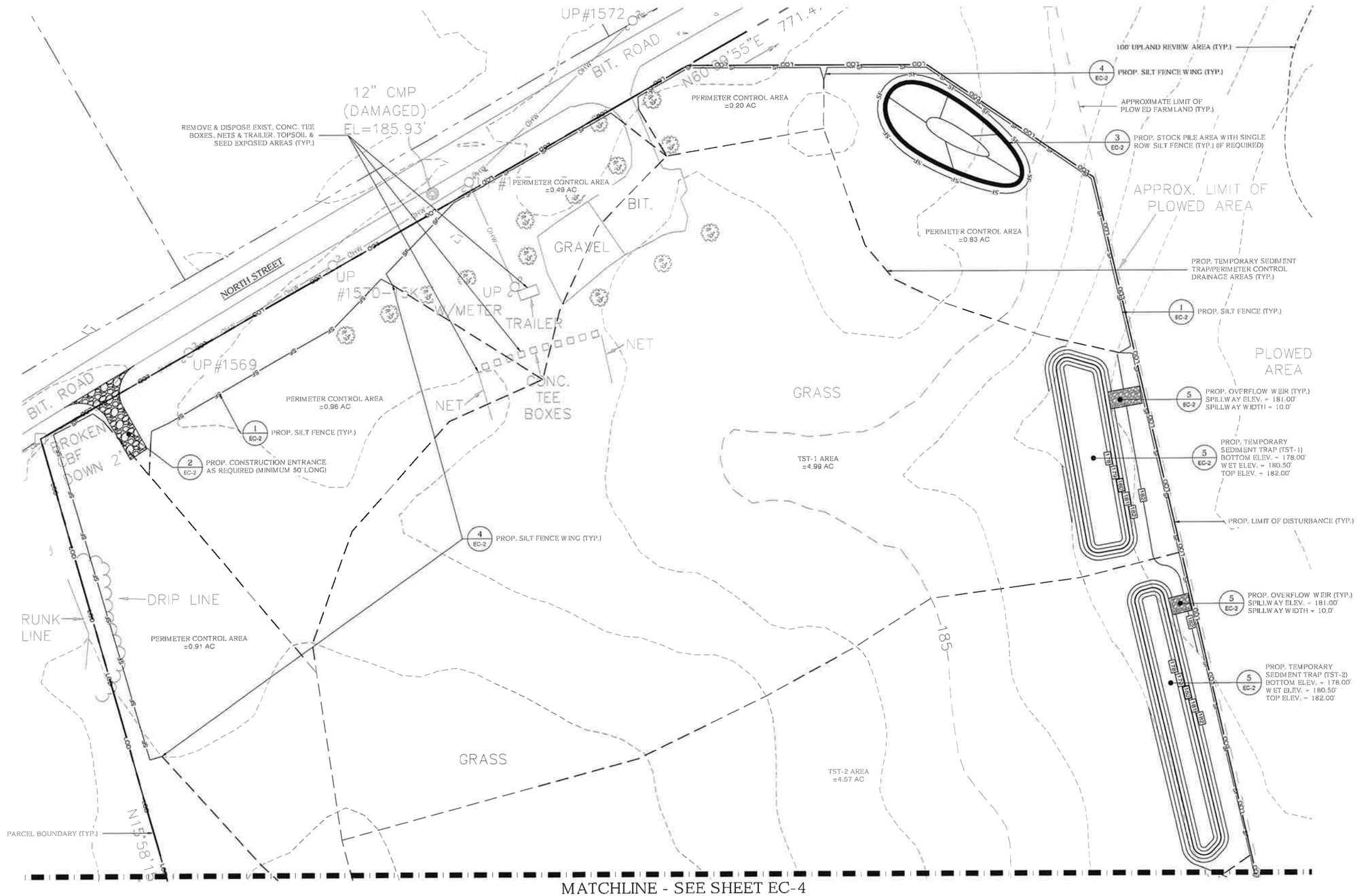
SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT590230

DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
SEDIMENTATION & EROSION CONTROL DETAILS

SHEET NUMBER:
EC-2



1 EC-3 **PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN**
SCALE : 1" = 40'-0"

(IN FEET) 1 inch = 40 ft

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SITE ADDRESS: 110 NORTH STREET, ENFIELD, CT 06082

APT FILING NUMBER: CT590230

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SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-3

MATCHLINE - SEE SHEET EC-3

N 14°45'01" W
755.03'

PERIMETER CONTROL AREA
=0.98 AC

TST-2 AREA
=4.57 AC

TST-3 AREA
=4.26 AC

PERIMETER CONTROL AREA
=0.66 AC

PARCEL BOUNDARY (TYP.)

IRF

CBF

DRIP LINE

TRUNK LINE

BIT. DRIVE

N 14°45'01" W

GRASS

GRAVEYARD
AREA ON THIS

APPROX. LIMIT OF
PLOWED AREA

5 / EC-2 PROP. OVERFLOW WEIR (TYP.)
SPILLWAY ELEV. = 182.00'
SPILLWAY WIDTH = 10.0'

5 / EC-2 PROP. TEMPORARY
SEDIMENT TRAP (TST-3)
BOTTOM ELEV. = 179.00'
WET ELEV. = 181.50'
TOP ELEV. = 183.00'

PROP. LIMIT OF DISTURBANCE (TYP.)

APPROXIMATE LIMIT OF PLOWED FARMLAND (TYP.)

1 / EC-2 PROP. SILT FENCE (TYP.)

N

1 / EC-4 **PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

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SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

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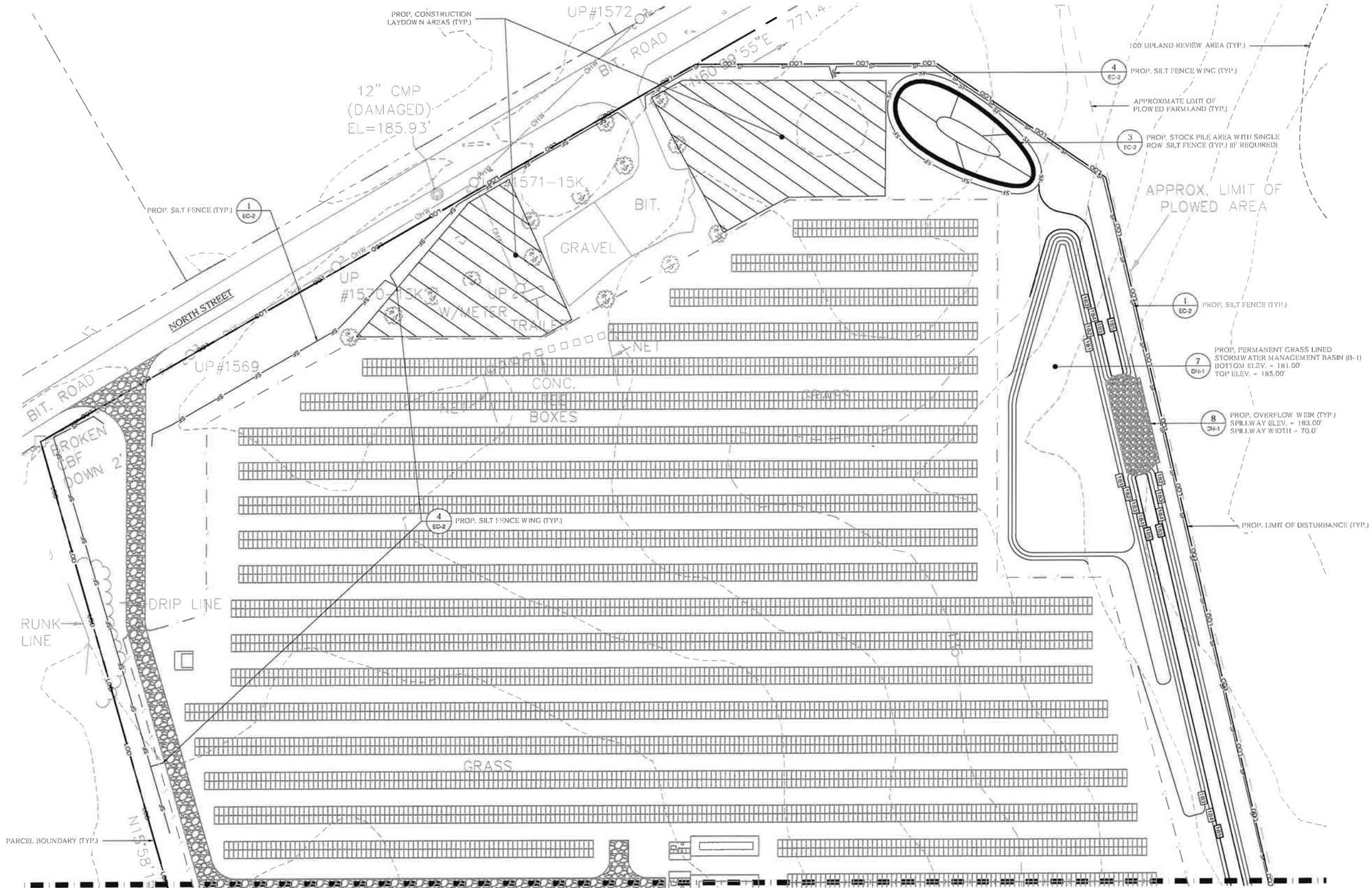
SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-4



MATCHLINE - SEE SHEET EC-6

1 EC-5 **PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN**
SCALE : 1" = 40'-0"

(IN FEET) 1 inch = 40 ft.

ENFIELD SOLAR ONE, LLC
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ENFIELD SOLAR ONE, LLC

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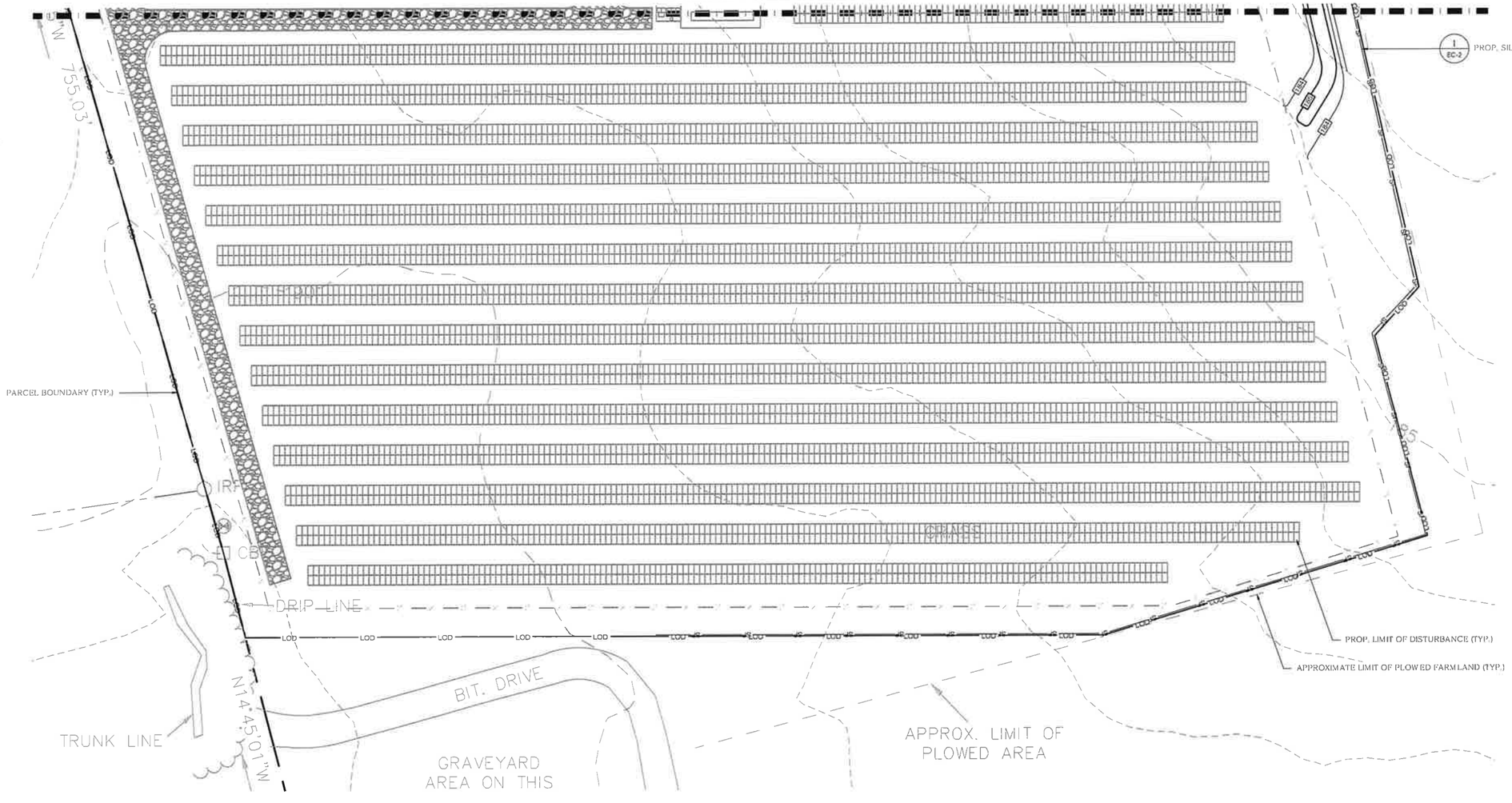
SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-5



1 EC-6 PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN

SCALE : 1" = 40'-0"

40 0 20 40 80

(IN FEET) 1 inch = 40 ft

ENFIELD SOLAR ONE, LLC
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APT FILING NUMBER: CTS90230

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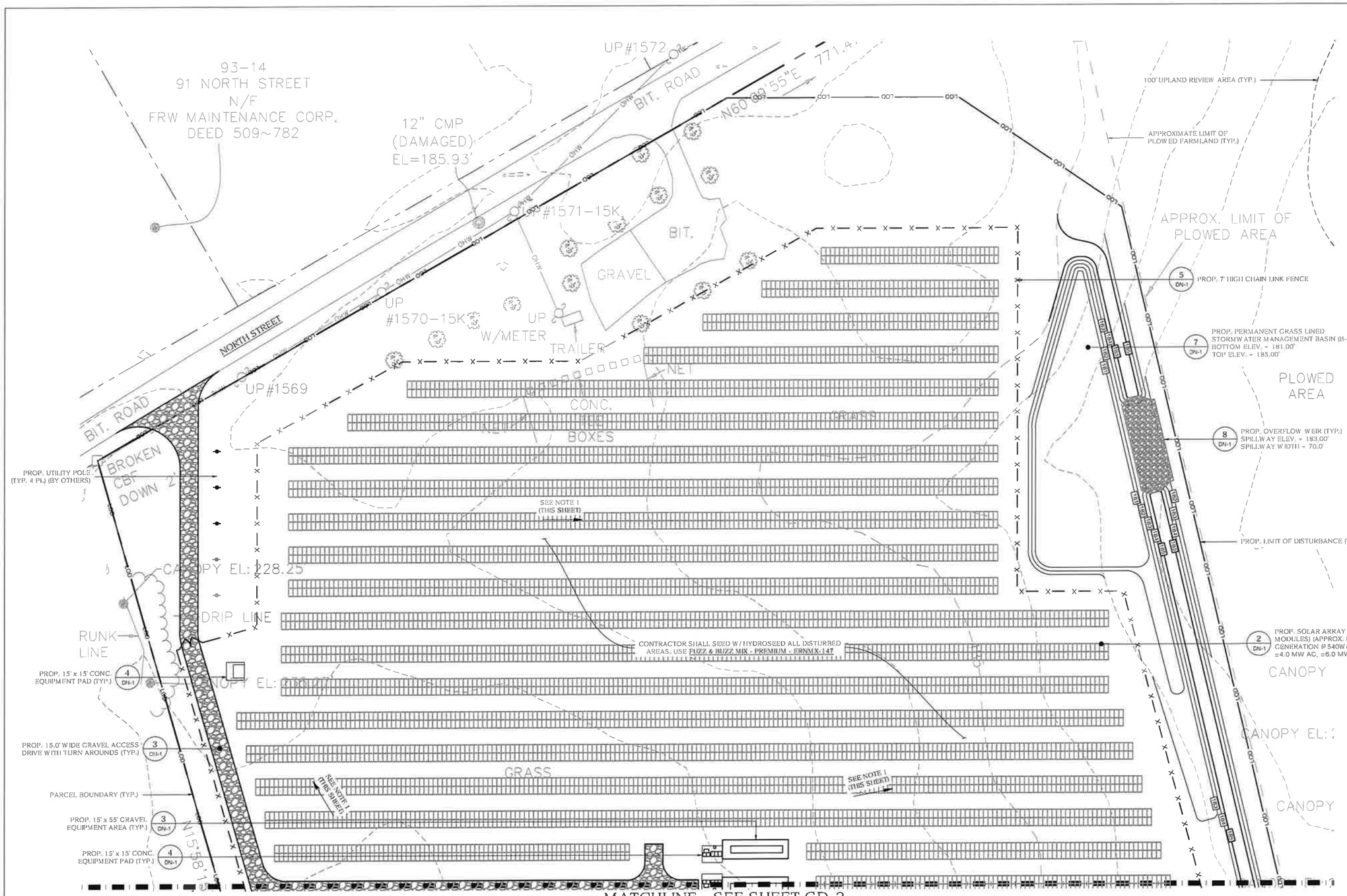
SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-6



MATCHLINE - SEE SHEET GD-2

1 GD-1 **FINAL GRADING & DRAINAGE PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft

NOTES:
1. GRADE/SHAPE AREA AS REQUIRED TO MAINTAIN EXIST. DRAINAGE PATTERNS.

ENFIELD SOLAR ONE, LLC
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ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06386

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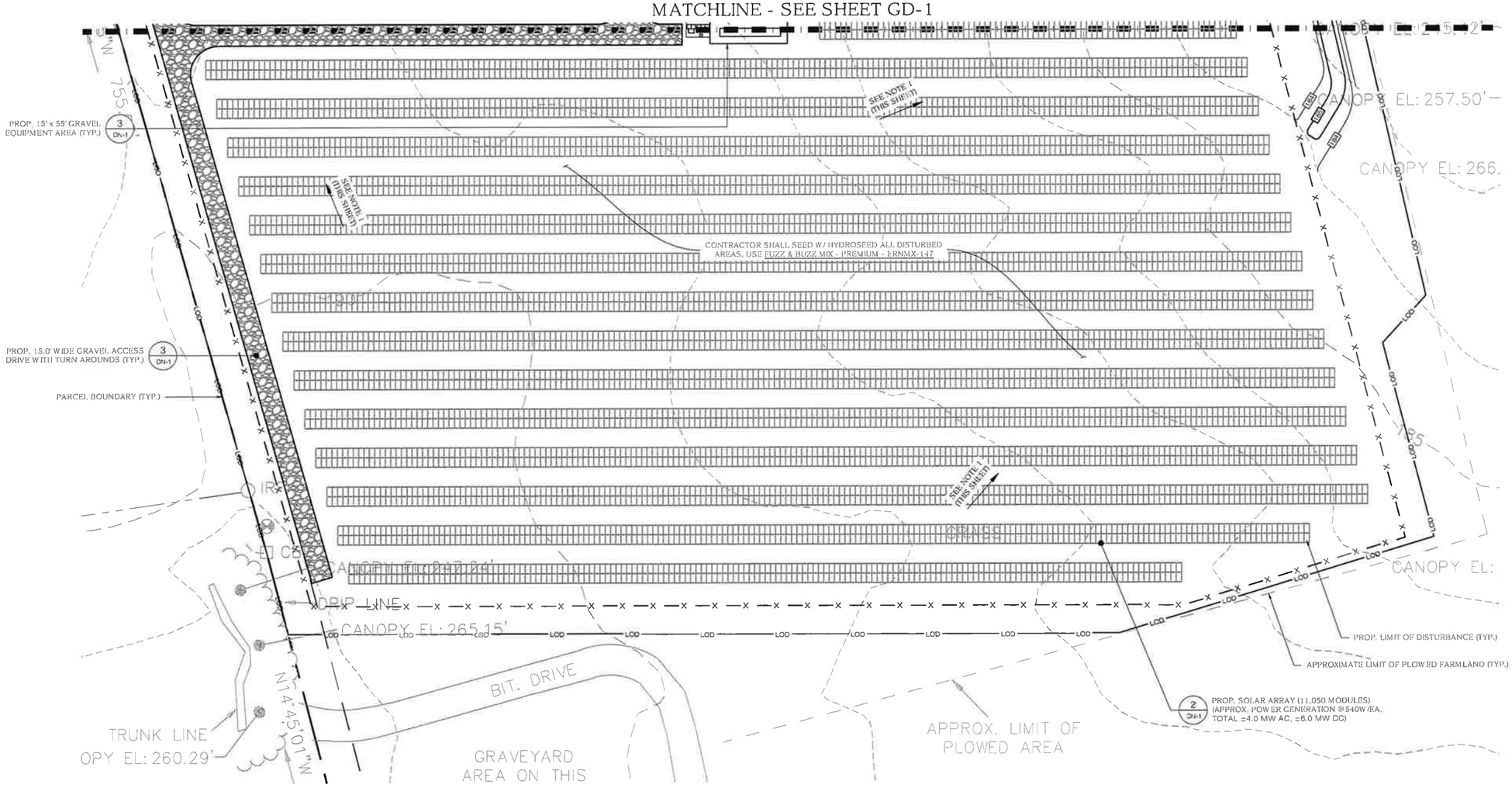
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-1



1 GD-2 **FINAL GRADING & DRAINAGE PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

NOTES:
1. GRADE/SHAPE AREA AS REQUIRED TO MAINTAIN EXIST. DRAINAGE PATTERNS.

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ENFIELD SOLAR ONE, LLC

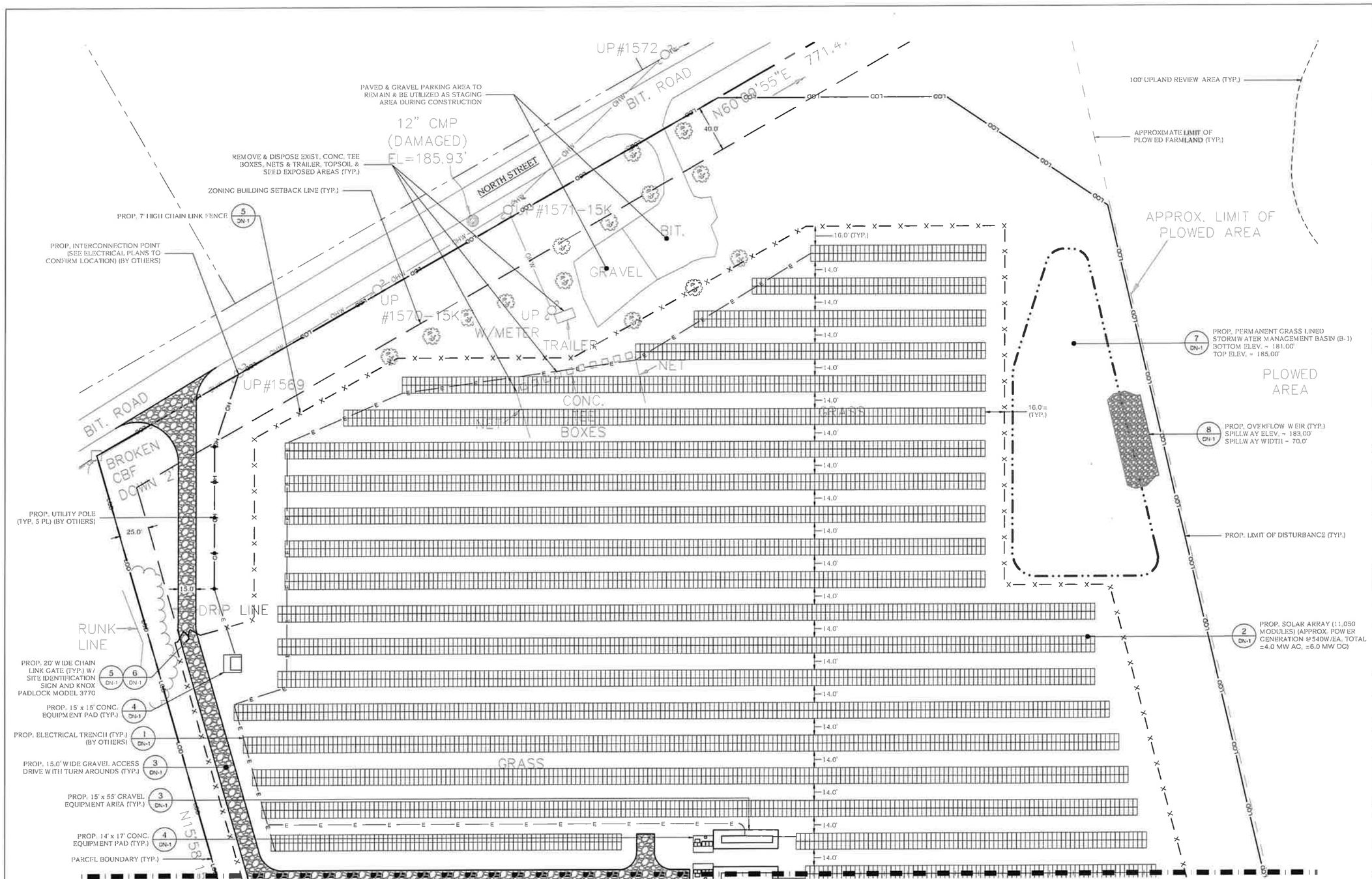
SITE ADDRESS: 110 NORTH STREET, ENFIELD, CT 06082

APT FILING NUMBER: CT690230

DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-2



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PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

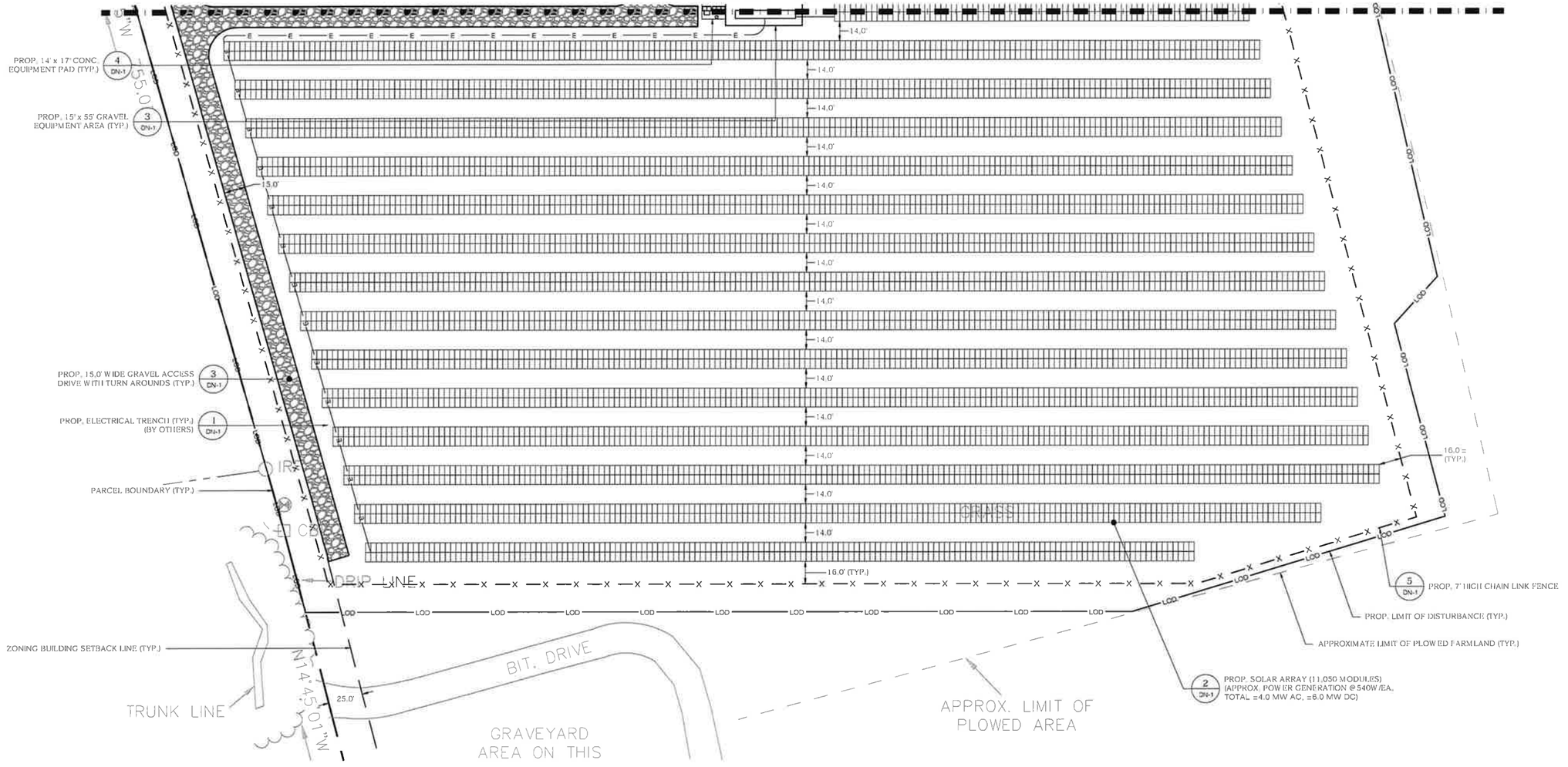
SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT590230

DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
SITE & UTILITY PLAN

SHEET NUMBER:
SP-1



1 SP-2 **SITE & UTILITY PLAN**
SCALE : 1" = 40'-0"

40 0 20 40 80
(IN FEET) 1 inch = 40 ft.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

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DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
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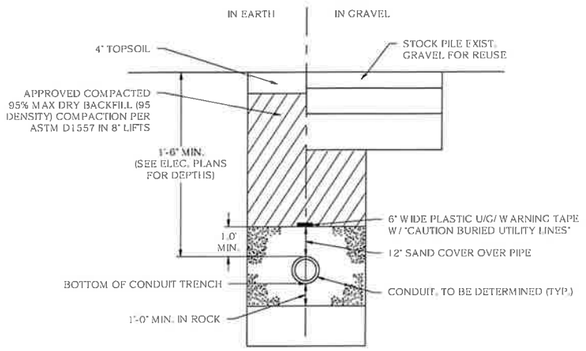
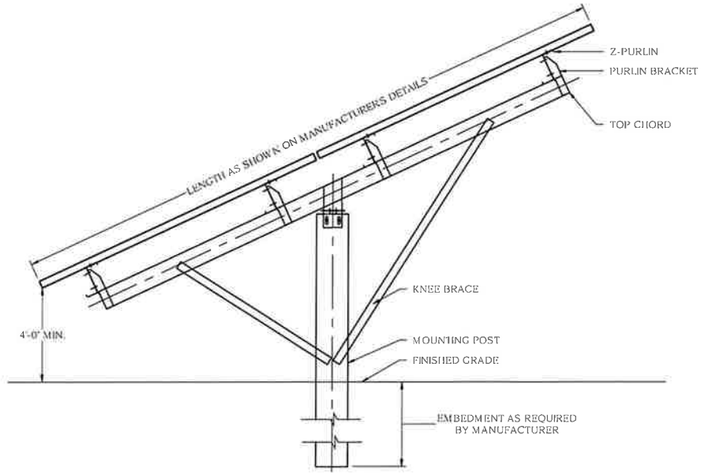
SITE & UTILITY PLAN

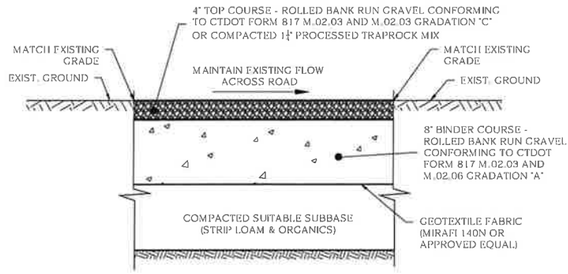
SHEET NUMBER:
SP-2



1 DN-1 **ELECTRICAL TRENCH DETAIL**
SCALE : N.T.S.

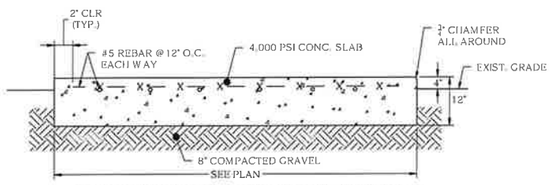


2 DN-1 **TYPICAL POST MOUNTED RACKING SYSTEM**
SCALE : N.T.S.

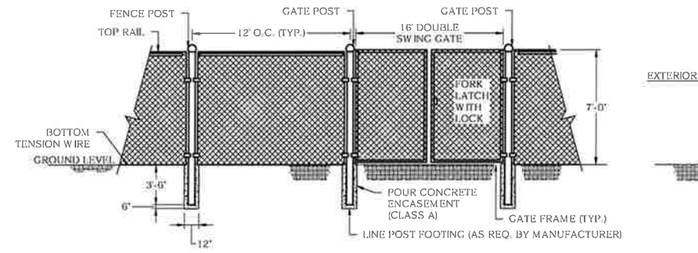


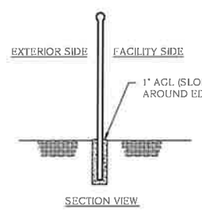
NOTES:
1. SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY.
2. SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS.
3. CONTRACTOR SHALL INSTALL ACCESS ROAD FLUSH WITH EXISTING GRADE TO ENSURE DRAINAGE FLOW PATHS ARE MAINTAINED.
4. SEE PLAN VIEW SHEETS FOR ROAD WIDTH.

3 DN-1 **GRAVEL ACCESS DRIVE SECTION**
SCALE : N.T.S.



4 DN-1 **CONCRETE EQUIPMENT PAD**
SCALE : N.T.S.





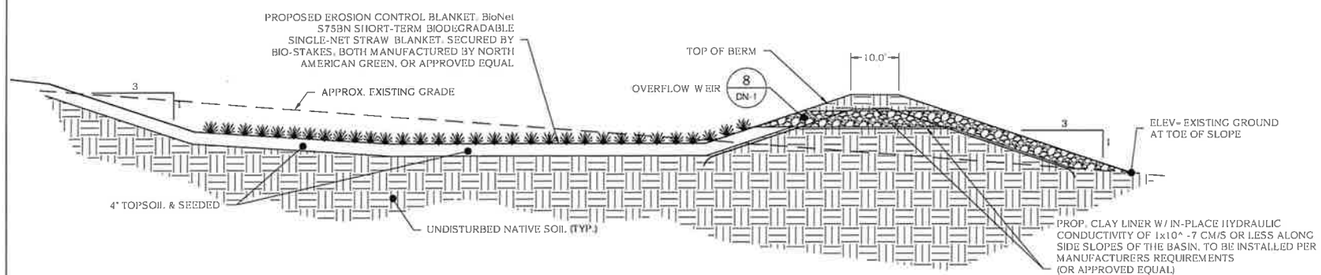
5 DN-1 **CHAIN-LINK FENCE & GATE DETAIL**
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC

IN CASE OF EMERGENCY CALL T.B.D.

NOTES:
EMERGENCY CALL NUMBER TO BE PROVIDED ONCE DETERMINED.

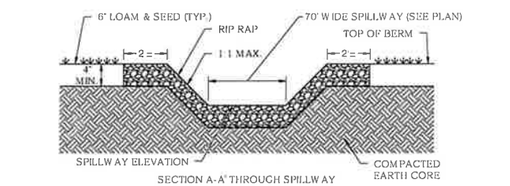
6 DN-1 **NOTIFICATION SIGN DETAIL**
SCALE : N.T.S.

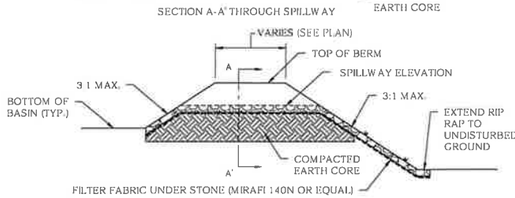


NOTES:
- SEED MIX TO BE NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR DETENTION BASINS & MOIST SITES ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147 ON THE SIDE SLOPES OR APPROVED EQUAL. SEE SHEET DN-2 FOR SEED MIXTURES.

NOTE: LINER SHALL EXTEND TO NATIVE SUBGRADE FOR BERMS WHOLLY OR PARTIALLY CONSTRUCTED WITH FILL MATERIAL

7 DN-1 **GRASS LINED BASIN**
SCALE : N.T.S.





8 DN-1 **OVERFLOW WEIR DETAIL**
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

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PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

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DRAWN BY: CSH
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SITE DETAILS

SHEET NUMBER:
DN-1

Ernst Conservation Seeds
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: April 14, 2021

Fuzz & Buzz Mix - Premium - ERNMX-147

	Botanical Name	Common Name	Price/lb
24.20 %	*Lolium perenne, 'Crave', Tetraploid*	Perennial Ryegrass, 'Crave', Tetraploid	3.48
17.70 %	*Dactylis glomerata, 'Pennlate'*	Orchardgrass, 'Pennlate'	3.00
17.70 %	*Festuca elatior*	Meadow Fescue	4.80
17.70 %	*Poa pratensis, 'Ginger'*	Kentucky Bluegrass, 'Ginger' (pasture type)	3.36
5.40 %	*Trifolium hybridum*	Alsike Clover	3.90
4.90 %	*Trifolium incarnatum, Variety Not Stated*	Crimson Clover, Variety Not Stated	1.92
4.50 %	*Trifolium pratense, Medium, Variety Not Stated*	Red Clover, Medium, Variety Not Stated	3.00
2.00 %	*Lotus corniculatus, 'Leo'*	Bird's Foot Trefoil, 'Leo'	7.50
1.30 %	*Chrysanthemum leucanthemum*	Oxeye Daisy	33.60
1.30 %	*Cichorium intybus*	Blue Chicory	19.20
0.80 %	*Chamaecrista fasciculata, PA Ecotype*	Partridge Pea, PA Ecotype	7.20
0.40 %	*Aster ablongifolius, PA Ecotype*	Aromatic Aster, PA Ecotype	336.00
0.40 %	*Aster prenanthoides, PA Ecotype*	Zigzag Aster, PA Ecotype	432.00
0.40 %	*Coreopsis lanceolata*	Lanceleaf Coreopsis	28.80
0.40 %	*Tradescantia ohiensis, PA Ecotype*	Ohio Spiderwort, PA Ecotype	192.00
0.40 %	*Zizia aurea*	Golden Alexanders	288.00
0.30 %	*Solidago nemoralis, PA Ecotype*	Gray Goldenrod, PA Ecotype	336.00
0.10 %	*Asclepias syriaca*	Common Milkweed	163.20
0.10 %	*Penstemon hirsutus*	Hairy Beardtongue	480.00
100.00 %		**Mix Price/lb Bulk:**	**$10.91**

Seeding Rate: Expect to apply about 42 lbs per acre with a cover crop of annual ryegrass at 12 lbs/acre.

Forage & Pasture Sites; Solar Sites

1 DN-2 **FUZZ & BUZZ MIX**
SCALE : N.T.S.

NEW ENGLAND WETLAND PLANTS, INC
820 WEST STREET, AMHERST, MA 01002
PHONE: 413-548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
Elymus riparius	Riverbank Wild Rye	FACW
Schizachyrium scoparium	Little Bluestem	FACU
Festuca rubra	Red Fescue	FACU
Andropogon gerardii	Big Bluestem	FAC
Panicum virgatum	Switch Grass	FAC
Vernonia noveboracensis	New York Ironweed	FACW+
Agrostis perennans	Upland Bentgrass	FACU
Bidens frondosa	Beggar Ticks	FACW
Eupatorium maculatum (Eutrochium maculatum)	Spotted Joe Pye Weed	OBL
Eupatorium perfoliatum	Boneset	FACW
Aster novae-angliae (Symphyotrichum novae-angliae	New England Aster	FACW-
Scirpus cyperinus	Wool Grass	FACW
Juncus effusus	Soft Rush	FACW+

PRICE PER LB. $37.00 MIN. QUANITY 3 LBS. **TOTAL:** $111.00 APPLY 35 LBS/ACRE :1250 sq ft/lb

The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to colonize generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long-term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed-to-soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed-free straw is recommended

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the mix will remain unchanged. Price is $/bulk pound, FOB warehouse, Plus SH and applicable taxes.

2 DN-2 **STORMWATER MANAGEMENT BASIN MIX**
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

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ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT590230

DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
LANDSCAPING DETAILS

SHEET NUMBER:
DN-2

EXHIBIT B

Decommissioning and Restoration Plan
Ground Mount PV Array
Enfield Solar One

Date:

April 2022

Prepared By:

VCP, LLC d/b/a Verogy

150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

VEROGY

Table of Contents

Decommissioning and Restoration Plan

1. Overview

After the proposed Photovoltaic Facility has reached the end of its operational lifetime, Verogy and/or the current owners of the proposed Photovoltaic (PV) facility will be responsible to decommission the project. The Project is designed for an operational life of at least 35 years. It is anticipated that advances in technology and efficiency over that timeframe will create an economic advantage in replacing the project.

Decommissioning of a PV facility is the removal of all system components associated with the generating system and restoring the site to as close to pre-construction conditions as possible. Decommissioning procedures are developed to ensure environmental protection, public safety and health, and that the work being performed is in compliance with all applicable regulations.

The Project owner will be responsible for:

- All decommissioning costs
- Obtaining all permits required for the decommissioning, removal and legal disposal of system components prior to the start of decommissioning activities
- The complete decommissioning of the facility, including the removal and disposal of all equipment and restoration of the site in accordance with applicable permits and in compliance with all applicable rules and regulations in effect governing material disposal
- Any other measures that the Siting Council may require in its approval of this Project.

2. Estimated Costs

The industry generally recognizes that a PV facility is constructed of components that will remain valuable at the time of decommissioning. We expect that the value of the components of the array at the end of the project's useful life in either a salvage or re-sale scenario will be greater than the expected cost of decommissioning the facility.

3. Materials

3.1. PV Modules

PV Modules are constructed of glass, aluminum, plastic, semiconductor rigid silicon cells, internal electrical conductors, silver solder, plus a variety of micro materials. Glass typically makes up 80% of the weight of a module.

3.2. Metals

Steel from pier foundations, racking, conduits, electrical enclosures, fencing, equipment buildings, and storage containers; aluminum from racking, module frames, electrical wire, and transformers; stainless steel from fasteners, electrical enclosures, and racking; copper from electrical wire, transformers, and inverters.

3.3. Plastics

A limited amount of plastic materials are used in PV systems due to a system's continuous exposure to the elements and long operational lifetime. Plastics typically are found in PV facilities as wire insulation, electrical enclosures, control and monitoring equipment, and inverter components. Plastic laminate films are also used in most PV module assemblies.

3.4. Concrete

Equipment pads and footings. Includes both reinforced and non-reinforced concrete.

4. Decommissioning & Restoration Plan

4.1. Preparation & Mobilization

Prior to decommissioning the system, the owner of the facility and the decommissioning contractors will begin the preparation and planning phase of the project. The decommissioning process shall be completed no later than 2 years following the discontinuation of operations of the facility. The onsite deconstruction and restoration effort may take up to six months to complete. Prior to decommissioning activity taking place a site assessment will take place to evaluate site conditions and put a protection plan together to protect surrounding natural resources. Upon site mobilization and prior to the start of the removal of any system components, proper erosion and sediment controls will be installed. The access roads and fencing will remain in place for use by the decommissioning and site restoration workers until decommissioning activities are completed unless the site owner requests that they remain in place. Debris will be placed in dumpsters on-site until transportation to proper disposal facilities is arranged.

4.2. Photovoltaic Equipment Removal

- The system will be de-energized from the utility power grid. The infrastructure connecting the facility to the utility power grid will be removed unless the landowner determines that the electrical service line will be beneficial for future use of the site, in which case the line may remain after decommissioning.
- All wirings, cables, conduits, panelboards, inverters, transformers and associated equipment will be uninstalled and recycled as applicable.
- PV modules will be uninstalled and recycled as applicable.
- The steel racking system will be disassembled and recycled as applicable

- Steel pilings which supported the module racking will be mechanically removed and recycled as applicable.

- The demolition debris and removed equipment may be cut or dismantled into smaller pieces that can be safely lifted or carried by the deconstruction equipment being used. Most of the glass and steel and aluminum will be processed for transportation and delivery to an off-site recycling center. Minimal non-recyclable materials are anticipated; these will be properly disposed of at a qualified disposal facility.

4.3 Civil Restoration

- Any resulting holes from the removal of the steel piles will be backfilled with locally imported soil to match existing site soil conditions.
- The concrete transformer and interconnection equipment pads will be broken up and removed
- The on-site access roads servicing the Project and the security fencing around the Project will remain in place during decommissioning activities to support the removal of equipment. Once removal activities are completed, discussion with the landowners will occur to determine if the roads or security fencing will be beneficial for future use of site. If the access roads or security fencing is determined to be beneficial for future use of site, these facilities may remain in place.
- Access roads that will not be utilized to support future use of the site will restored to preconstruction conditions. Aggregate base material of the roads will be removed, and the compacted base section will be filled with locally imported soil to match existing onsite soils. The areas will then be seeded to match existing onsite groundcover.
- If the security fencing is not to be used, it will be removed and transported to the nearest recycling facility.
- Once all Project equipment has been removed, additional activities will occur to return the property back to conditions similar to pre-construction. Reclamation will restore vegetative cover and hydrological function after the closure of the facility.
- As previously discussed, any excavated areas remaining after the removal of equipment pads, access road base materials, or fence posts will be backfilled with locally imported soil to match existing onsite soils.
- Storm Water Basins, if applicable, may remain if there is a benefit to the owner. If not, they will be removed and restored in a manner to minimize disturbance.
- Once landform features and soils are restored, a seed mix will be applied to match the existing onsite groundcover.

5. Health and Safety Concerns

Site decommissioning will entail the use of heavy equipment, the handling of heavy and sharp objects and limited exposure to potentially live electrical components. A Health and Safety Plan will be created based on the individual characteristics of the site to minimize and eliminate all possible risks and hazards. The Health and Safety Plan will include a Job Hazard Analysis that will analyze each step of construction for hazards, along with any climate

conditions or hazardous materials that may be seen or used throughout the duration of the job. The plan will outline steps to take if a hazard is identified and how to proceed with each hazard. Along with this, all workers will have training and personal protective equipment (PPE) in compliance with OSHA standards. A daily toolbox talk will be held where the foreman or supervisor will go over daily hazards and activities to be completed.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

Laboratory Job ID: 240-122464-1
Client Project/Site: Solar Module TCLP

For:
SUMEC Energy Holdings Co. Ltd.
No.1 Xinghuo Road
Nanjing Hi-tesh Zone
Nanjing, China 210061

Attn: Mr. Chester Chen

Authorized for release by:
12/3/2019 7:25:49 PM

Michael DelMonico, Project Manager I
(330)497-9396
michael.delmonico@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 240-122464-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: SUMEC Energy Holdings Co. Ltd.

Project: Solar Module TCLP

Report Number: 240-122464-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The sample was received on 11/18/2019 11:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 13.8° C.

TCLP METALS (ICP)

Sample SOLAR PANEL (240-122464-1) was analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/6010B. The sample was leached on 11/25/2019, prepared on 11/26/2019 and analyzed on 11/27/2019.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP MERCURY

Sample SOLAR PANEL (240-122464-1) was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The sample was leached on 11/25/2019, prepared on 11/26/2019 and analyzed on 11/27/2019.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Method Summary

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
1311	TCLP Extraction	SW846	TAL CAN
3010A	Preparation, Total Metals	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN
Part Size Red	Particle Size Reduction Preparation	None	TAL CAN

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-122464-1	SOLAR PANEL	Solid	11/14/19 00:00	11/18/19 11:10	

Detection Summary

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Client Sample ID: SOLAR PANEL

Lab Sample ID: 240-122464-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	4.3		0.050		mg/L	1		6010B	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Client Sample ID: SOLAR PANEL
Date Collected: 11/14/19 00:00
Date Received: 11/18/19 11:10

Lab Sample ID: 240-122464-1
Matrix: Solid

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1
Barium	ND		0.50		mg/L		11/26/19 14:00	11/27/19 10:08	1
Cadmium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1
Chromium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1
Lead	**4.3**		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1
Selenium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1
Silver	ND		0.050		mg/L		11/26/19 14:00	11/27/19 10:08	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		11/26/19 14:00	11/27/19 18:19	1

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-412722/2-A
Matrix: Solid
Analysis Batch: 412928

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 412722

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1
Barium	ND		0.50		mg/L		11/26/19 14:00	11/27/19 09:59	1
Cadmium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1
Chromium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1
Lead	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1
Selenium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1
Silver	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:59	1

Lab Sample ID: LCS 240-412722/3-A
Matrix: Solid
Analysis Batch: 412928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 412722

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	2.15		mg/L		108	50 - 150
Barium	2.00	2.00		mg/L		100	50 - 150
Cadmium	1.00	1.05		mg/L		105	50 - 150
Chromium	1.00	1.01		mg/L		101	50 - 150
Lead	1.00	0.900		mg/L		90	50 - 150
Selenium	2.00	2.13		mg/L		106	50 - 150
Silver	0.100	0.107		mg/L		107	50 - 150

Lab Sample ID: LB 240-412574/1-B
Matrix: Solid
Analysis Batch: 412928

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 412722

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1
Barium	ND		0.50		mg/L		11/26/19 14:00	11/27/19 09:54	1
Cadmium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1
Chromium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1
Lead	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1
Selenium	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1
Silver	ND		0.050		mg/L		11/26/19 14:00	11/27/19 09:54	1

Lab Sample ID: 240-122464-1 MS
Matrix: Solid
Analysis Batch: 412928

Client Sample ID: SOLAR PANEL
Prep Type: TCLP
Prep Batch: 412722

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		5.00	5.46		mg/L		109	75 - 125
Barium	ND		50.0	51.9		mg/L		103	75 - 125
Cadmium	ND		1.00	1.12		mg/L		112	75 - 125
Chromium	ND		5.00	5.38		mg/L		108	75 - 125
Lead	4.3		5.00	9.84		mg/L		110	75 - 125
Selenium	ND		1.00	1.14		mg/L		114	75 - 125
Silver	ND		1.00	1.07		mg/L		107	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-122464-1 MSD
Matrix: Solid
Analysis Batch: 412928

Client Sample ID: SOLAR PANEL
Prep Type: TCLP
Prep Batch: 412722

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		5.00	5.59		mg/L		112	75 - 125	2	20
Barium	ND		50.0	54.0		mg/L		108	75 - 125	4	20
Cadmium	ND		1.00	1.14		mg/L		114	75 - 125	2	20
Chromium	ND		5.00	5.43		mg/L		109	75 - 125	1	20
Lead	4.3		5.00	9.95		mg/L		112	75 - 125	1	20
Selenium	ND		1.00	1.16		mg/L		116	75 - 125	2	20
Silver	ND		1.00	1.09		mg/L		109	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-412725/2-A
Matrix: Solid
Analysis Batch: 413058

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 412725

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		11/26/19 14:00	11/27/19 18:15	1

Lab Sample ID: LCS 240-412725/3-A
Matrix: Solid
Analysis Batch: 413058

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 412725

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00549		mg/L		110	80 - 120

Lab Sample ID: LB 240-412574/1-D
Matrix: Solid
Analysis Batch: 413058

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 412725

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.0020		mg/L		11/26/19 14:00	11/27/19 18:13	1

Lab Sample ID: 240-122464-1 MS
Matrix: Solid
Analysis Batch: 413058

Client Sample ID: SOLAR PANEL
Prep Type: TCLP
Prep Batch: 412725

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00500	0.00564		mg/L		113	80 - 120

Lab Sample ID: 240-122464-1 MSD
Matrix: Solid
Analysis Batch: 413058

Client Sample ID: SOLAR PANEL
Prep Type: TCLP
Prep Batch: 412725

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00500	0.00563		mg/L		113	80 - 120	0	20

QC Association Summary

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Metals

Processed Batch: 412195

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	Part Size Red	
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	Part Size Red	
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	Part Size Red	

Leach Batch: 412574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	1311	412195
LB 240-412574/1-B	Method Blank	TCLP	Solid	1311	
LB 240-412574/1-D	Method Blank	TCLP	Solid	1311	
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	1311	412195
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	1311	412195

Prep Batch: 412722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	3010A	412574
LB 240-412574/1-B	Method Blank	TCLP	Solid	3010A	412574
MB 240-412722/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-412722/3-A	Lab Control Sample	Total/NA	Solid	3010A	
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	3010A	412574
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	3010A	412574

Prep Batch: 412725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	7470A	412574
LB 240-412574/1-D	Method Blank	TCLP	Solid	7470A	412574
MB 240-412725/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-412725/3-A	Lab Control Sample	Total/NA	Solid	7470A	
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	7470A	412574
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	7470A	412574

Analysis Batch: 412928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	6010B	412722
LB 240-412574/1-B	Method Blank	TCLP	Solid	6010B	412722
MB 240-412722/2-A	Method Blank	Total/NA	Solid	6010B	412722
LCS 240-412722/3-A	Lab Control Sample	Total/NA	Solid	6010B	412722
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	6010B	412722
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	6010B	412722

Analysis Batch: 413058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-122464-1	SOLAR PANEL	TCLP	Solid	7470A	412725
LB 240-412574/1-D	Method Blank	TCLP	Solid	7470A	412725
MB 240-412725/2-A	Method Blank	Total/NA	Solid	7470A	412725
LCS 240-412725/3-A	Lab Control Sample	Total/NA	Solid	7470A	412725
240-122464-1 MS	SOLAR PANEL	TCLP	Solid	7470A	412725
240-122464-1 MSD	SOLAR PANEL	TCLP	Solid	7470A	412725

Lab Chronicle

Client: SUMEC Energy Holdings Co. Ltd.
Project/Site: Solar Module TCLP

Job ID: 240-122464-1

Client Sample ID: SOLAR PANEL

Date Collected: 11/14/19 00:00
Date Received: 11/18/19 11:10

Lab Sample ID: 240-122464-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Processed	Part Size Red			412195	11/22/19 08:42	POP	TAL CAN
TCLP	Leach	1311			412574	11/25/19 16:55	DRJ	TAL CAN
TCLP	Prep	3010A			412722	11/26/19 14:00	MRL	TAL CAN
TCLP	Analysis	6010B		1	412928	11/27/19 10:08	WKD	TAL CAN
TCLP	Processed	Part Size Red			412195	11/22/19 08:42	POP	TAL CAN
TCLP	Leach	1311			412574	11/25/19 16:55	DRJ	TAL CAN
TCLP	Prep	7470A			412725	11/26/19 14:00	MRL	TAL CAN
TCLP	Analysis	7470A		1	413058	11/27/19 18:19	SLD	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: SUMEC Energy Holdings Co. Ltd.
Job ID: 240-122464-1
Project/Site: Solar Module TCLP

Laboratory: Eurofins TestAmerica, Canton

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
California	State Program	2927	02-23-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
7470A	7470A	Solid	Mercury

13.1/13.8

SUMEC

SUMEC ENERGY HOLDINGS CO.,LTD.
江苏苏美达能源控股有限公司

致TO Eurofins TestAmerica
4101 Shuffel Street NW, North Canton, OH 44720, USA

发票编号 INV.NO. SUMEC-EUROFINS-20191114
日期 DATE 2019/11/14

发　　票
COMMERCIAL INVOICE

L/C NO.

唛头及编号 Mark && Numbers	品名 Descriptions	数量 Quantities	单价 Unit Price	总价 Amount
N/M			USD	USD
	raw material sample of solar module	2 SET	5.00	10
		2 SET		10.00

TOTAL:PACKED IN: 1 CARTON
G/W: 1 KGS
N/W: 0.9 KGS

SUMEC ENERGY HOLDINGS CO.,LTD.
NO.1 XINGHUO ROAD, NATIONAL LEVEL NANJING
HI-TECH ZONE, NANJING, 210061 P.R. CHINA

江苏苏美达能源控股有限公司
SUMEC ENERGY HOLDINGS CO.,LTD

Accepted by Lab 11/13/19
FedEx ETA 1110

240-122464 Chain of Custody

Eurofins TestAmerica Canton Sample Receipt Form/Narrative **Login # : 122464**
Canton Facility

Client Sunnec Energy Holdings Inc Site Name _____ Cooler unpacked by: Ryan Cribler

Cooler Received on 11-18-19 Opened on 11-18-19 1110

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other DHL

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-10 (CF +0.7 °C) Observed Cooler Temp. 13.1 °C Corrected Cooler Temp. 13.8 °C
   IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC995364
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

Will log ID as "Solar Panel" sample date as 11/14/19 (date at top of COC/letter), no sample time. Will log TCLP metals w/ PSR per PM.

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

EXHIBIT C

PROJECT FACT SHEET

Enfield Solar One

PROJECT DESCRIPTION

- Enfield Solar One is a solar project located at 110 North Street in Enfield
- The 4.0 MW ac system will generate enough electricity to power 700 average homes for a year
- The project site is designed to have minimal environmental impacts with no disruption to wetlands or core forest

BENEFITS TO ENFIELD

- Increased new annual municipal tax revenues with no additional burden on town services
- Infrastructure upgrades that improve the reliability of Enfield's electrical grid
- Reduction in energy demand during peak usage will decrease energy costs for ratepayers statewide
- Strengthened renewable energy resources that produce electricity locally with zero pollution

ACHIEVING THE 100% ZERO CARBON TARGET BY 2040 & ENVIRONMENTAL BENEFITS

- As a Class I Renewable Energy Source, Enfield Solar One will help support the goals set forth in Governor Lamont's September 2019 Executive Order No. 3 100% zero carbon target for the electricity sector by 2040
- Once operational, the project will offset the equivalent of 5,729 metric tons of CO2 annually, equal to the emissions from 644,648 gallons of gasoline consumed, or to the carbon sequestered by 94,730 tree seedlings grown for 10 years
- Shared Clean Energy Facility (SCEF) projects will result in credits that will be applied to the bills of participating electric customers at no cost to those customers. Subscribers include low-income customers and moderate-income customers, as well as small business & municipal customers
- When completed, the project will use an estimated 20 acres out of a total 73 acres, leaving the balance of the parcel to continue its prior land use characteristics

APPROVAL PROCESS

Verogy requires approval from the Connecticut State Siting Council, who has jurisdiction over projects like Enfield Solar One. We will also be working closely with municipal departments in Enfield throughout the development of this project. Enfield Solar One will also obtain a Stormwater General Permit.

PROJECT FACT SHEET

Enfield Solar One cont...

ESTIMATED PROJECT CALENDAR

JANUARY	2022	Design phase completed
FEBRUARY	2022	Interconnection approvals from Eversource
FEBRUARY	2022	Completion of environmental studies
MARCH	2022	Public outreach begins
APRIL	2022	Application submitted to Connecticut Siting Council
OCTOBER	2022	Connecticut Siting Council decision issued
DECEMBER	2022	Construction groundbreaking
MAY	2023	Project completion

CONTACT US

Verogy is committed to keeping members of the Enfield community informed about our projects, please feel free to contact us with questions or concerns. Residents with questions about the approval process can contact Verogy's Director of Development, Bryan Fitzgerald at development@verogy.com or 860-288-7215 x701.

PROJECT CONTACT:

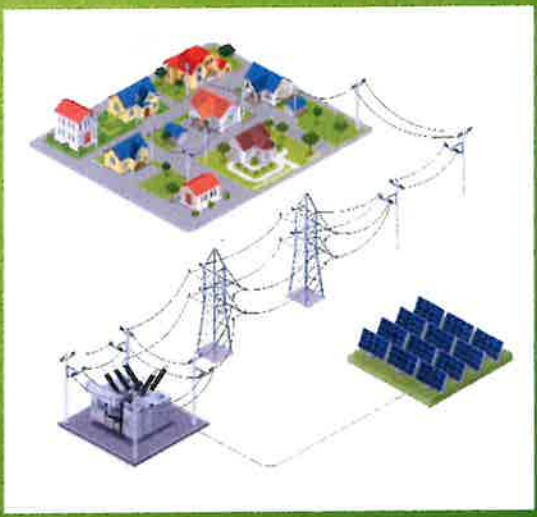
Bryan Fitzgerald

Director of Development

development@verogy.com

860-288-7215 x701.

FOR MORE INFO ON THIS PROJECT:



SOLAR ENERGY 101

1. Solar panels collect energy from the sun.
2. Inverters convert DC electricity to AC electricity.
3. Electricity is delivered to the circuit that connects to the substation through utility infrastructure.
4. Power is delivered to residential and business consumers through the local grid.

ABOUT VEROGY

Verogy is a Hartford-based solar developer focused on commercial, industrial and small utility scale projects. Built on 50+ years of combined industry experience, the professionals at Verogy have developed, financed and constructed hundreds of solar projects across the United States.

INTRODUCTORY LETTER

Enfield Solar One

AIELLO HENRIETTA D
22 STONY BROOK RD
ENFIELD, CT 06082

Dear Ms. Aiello,

I am writing to introduce you to Verogy. We are a Hartford-based renewable energy developer focused on operating Solar Farms for municipal and commercial clients. Our team has decades of experience in the development, financing, construction and management of solar energy projects and we are excited to announce that we're currently pursuing a solar project in Enfield.

The proposed project, Enfield Solar One, is located at 110 North Street. The project's design calls for a 4 megawatt system located on approximately 20 of the parcel's 73 acres. Once completed, Enfield Solar One is projected to generate enough energy to power 700 homes for a year, while generating zero pollution or carbon emissions. Shared Clean Energy Facility (SCEF) projects such as this one result in credits applied to the bills of participating electric customers at no cost to them. Subscribers include low and moderate-income customers, as well as small business & municipal customers. Additionally, Enfield Solar One will be an economic contributor to the town, generating new property tax revenues and creating jobs in the region.

Until we can meet in person, we wanted to introduce our company, share the enclosed fact sheet, and let you know that our website: www.verogy.com/enfield-solar-one will be available as a resource for you throughout this process. The website will be updated with the latest project information. We hope you let us know if you have any comments or questions through the Contact Us section at the bottom of the page. We are looking forward to investing in Enfield and appreciate your feedback as we finalize our proposed project.

The Verogy team looks forward to connecting with neighbors as we work to develop Enfield Solar One. If you have any questions, please feel free to reach out.

Sincerely,

Bryan Fitzgerald
Director of Development
Verogy | 150 Trumbull Street, 4th Floor
Hartford, CT 06103
860.288.7215 x701

VARNET MARIA L
19 STONY BROOK RD
ENFIELD, CT 06082

MORGAN DOROTHY Y
0024 STONY BROOK RD
ENFIELD, CT 06082

TEIGEN LISA M
21 STONY BROOK RD
ENFIELD, CT 06082

PETERSON NEAL C + SUSAN L +
114 NORTH ST
ENFIELD, CT 06082

WOOD JOB C EST OF
16 MAGNOLIA DR
ENFIELD, CT 06082

NICKERSON JOANNE EVANISKY +
0023 STONY BROOK RD
ENFIELD, CT 06082

REITH THOMAS T II + DEBORAH P
0005 STONY BROOK RD
ENFIELD, CT 06082

GOULET MATTHEW R
25 STONY BROOK RD
ENFIELD, CT 06082

GOLAS JOHN S
7 STONY BROOK RD
ENFIELD, CT 06082

CALABASH LLC
6106 DUNLEER CT
BETHESDA, MD 20817

101 NORTH/ENFIELD LLC
640 ENFIELD ST
ENFIELD, CT 06082

LANDRY MEGHAN
9 STONY BROOK RD
ENFIELD, CT 06082

FRW MAINTENANCE CORP
625 YALE AVE
MERIDEN, CT 06450

CONNECTICUT STATE OF
2800 BERLIN TPKE
NEWINGTON, CT 06111

VUJIS KIMBERLY M + MIKULLITZ BRIANN
11 STONY BROOK RD
ENFIELD, CT 06082

CATHOLIC CEMETERIES ASSOC OF THE
700 MIDDLETOWN AVE
NORTH HAVEN, CT 06473

LIQUORE JOSEPH C
117 NORTH ST
ENFIELD, CT 06082

CARABETTA DONNA
13 STONY BROOK RD
ENFIELD, CT 06082

ENFIELD TOWN OF
820 ENFIELD ST
ENFIELD, CT 06082

WEIGEL LEONA B
15 STONY BROOK RD
ENFIELD, CT 06082

STEELE TRISHA M
12 JAMES ST
ENFIELD, CT 06082

CARDAROPOLI PENNY L +DAVID M
17 STONY BROOK RD
ENFIELD, CT 06082

EXHIBIT D

ADJACENT PROPERTY OWNERS

PETITIONER: ENFIELD SOLAR ONE, LLC AND VCP, LLC D/B/A/ VEROGY

OWNER: CATHOLIC CEMETARY ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, 700 MIDDLETOWN AVENUE, NORTH HAVEN, CT

	Property Address	**Owner's and Mailing Address**
1.	19 Stony Brook Road	Maria L. Varnet 19 Stony Brook Road Enfield, CT 06082
2.	24 Stony Brook Road	Dorothy Y. Morgan 24 Stony Brook Road Enfield, CT 06082
3.	21 Stony Brook Road	Lisa M. Teigen 21 Stony Brook Road Enfield, CT 06082
4.	114 North Street	Neal C. and Susan L. Peterson 114 North Street Enfield, CT 06082
5.	16 Magnolia Drive	Estate of Job C. Wood 16 Magnolia Drive Enfield, CT 06082
6.	23 Stony Brook Road	Joanne Evanisky Nickerson and Charles Nickerson 23 Stony Brook Road Enfield, CT 06082
7.	5 Stony Brook Road	Thomas T. II and Deborah P. Reith 5 Stony Brook Road Enfield, CT 06082
8.	25 Stony Brook Road	Matthew R. Goulet 25 Stony Brook Road Enfield, CT 06082
9.	7 Stony Brook Road	John S. Golas 7 Stony Brook Road Enfield, CT 06082
10.	Taylor Road	Calabash LLC 6106 Dunleer CT Bethesda, MD 20817
11.	101 North Street	101 North/Enfield LLC 640 Enfield Street Enfield, CT 06082

	Property Address	Owner's and Mailing Address
12.	9 Stony Brook Road	Meghan Landry 9 Stony Brook Road Enfield, CT 06082
13.	25 Park Street 91 North Street North Street	FRW Maintenance Corp. 625 Yale Avenue Meriden, CT 06450
14.	Hazard Avenue	State of Connecticut 2800 Berlin Turnpike Newington, CT 06111
15.	11 Stony Brook Road	Kimberly M. Vujis and Briann Mikullitz 11 Stony Brook Road Enfield, CT 06082
16.	59 Park Street	Catholic Cemeteries Association of the Archdiocese of Hartford 700 Middletown Avenue North Haven, CT 06473
17.	117 North Street	Joseph C. Liquore 117 North Street Enfield, CT 06082
18.	13 Stony Brook Road	Donna Carabetta 13 Stony Brook Road Enfield, CT 06082
19.	Taylor Road	Town of Enfield 820 Enfield Street Enfield, CT 06082
20.	15 Stony Brook Road	Leona B. Weigel 15 Stony Brook Road Enfield, CT 06082
21.	17 Stony Brook Road	Penny L. and David M. Cardaropoli 17 Stony Brook Road Enfield, CT 06082
22.	12 James Street	Trisha M. Steele 12 James Street Enfield, CT 06082

CERTIFICATION OF SERVICE

I hereby certify that a copy of the foregoing letter was sent by certified mail, return receipt requested, to each of the parties on the attached list of abutting landowners.

April 20, 2022
Date

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103

Attorneys for ENFIELD SOLAR ONE, LLC AND VCP, LLC D/B/A VEROGY

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

April 20, 2022

Via Certificate of Mailing

«Name_and_Address»

Re: **Enfield Solar One, LLC and VCP, LLC d/b/a Verogy – Notice of Intent to File a Petition for Declaratory Ruling for the Construction, Operation and Maintenance of a 4.0 MW AC Solar Photovoltaic Project at 110 North Street, Enfield, Connecticut – Adjacent Property Owner Notice**

Dear «Salutation»:

Pursuant to the provisions of §16-50j-40(a) of the Regulations of Connecticut State Agencies, this letter serves as notice that Enfield Solar One, LLC and VCP, LLC d/b/a Verogy ("Verogy") intend to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") on or about April 25, 2022, seeking approval of the construction, operation and maintenance of a 4.0 megawatt (MW) AC solar generating facility, including all associated equipment, related site improvements and interconnection (the "Project"). The Project would be located on an approximately 19.65-acre portion of a larger 73.88-acre parcel at 110 North Street in Enfield, Connecticut (the "Property"). The Property is owned by the Catholic Cemetery Association of the Archdiocese of Hartford and is bounded by North Street on the west by vacant agricultural land and the St. Bernard Cemetery (both fronting on Park Street), on the east by undeveloped agricultural and forested land and on the south by residential uses fronting on Stony Brook Road.

The Project would consist of the installation of photovoltaic panels, centralized inverters and transformers, electrical lines, an electric transformer, a station controller, a perimeter fence and access road. For additional details regarding the location of the Project and the layout of site improvements, please see the attached Project Plans.

Pursuant to the provisions of Connecticut General Statutes § 16-50g *et seq.*, the location of certain Project features may change as this Petition proceeds through the Council's regulatory review process.

If you have any questions, please feel free to contact me. My contact information is provided above. You may also contact the Council directly at 860-827-2935.

Respectfully,

Kenneth C. Baldwin, Esq.

KCB/kmd
Attachment

VEROGY/ENFIELD

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2.		Calabash LLC 6106 Dunleer CT Bethesda, MD 20817				
3.		Catholic Cemeteries Association of the Archdiocese of Hartford 700 Middletown Avenue North Haven, CT 06473				
4.		Donna Carabetta 13 Stony Brook Road Enfield, CT 06082				
5.		Dorothy Y. Morgan 24 Stony Brook Road Enfield, CT 06082				
6.		Estate of Job C. Wood 16 Magnolia Drive Enfield, CT 06082				

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5.	Kimberly M. Vujis and Briann Mikullitz 11 Stony Brook Road Enfield, CT 06082				
6.	Leona B. Weigel 15 Stony Brook Road Enfield, CT 06082				

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1.	Lisa M. Teigen 21 Stony Brook Road Enfield, CT 06082				
2.	Maria L. Varnet 19 Stony Brook Road Enfield, CT 06082				
3.	Matthew R. Goulet 25 Stony Brook Road Enfield, CT 06082				
4.	Meghan Landry 9 Stony Brook Road Enfield, CT 06082				
5.	Neal C. and Susan L. Peterson 114 North Street Enfield, CT 06082				
6.	Penny L. and David M. Cardaropoli 17 Stony Brook Road Enfield, CT 06082				

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2.	Thomas T. II and Deborah P. Reith 5 Stony Brook Road Enfield, CT 06082				
3.	Town of Enfield 820 Enfield Street Enfield, CT 06082			OLD STATE HO… APR 20…	
4.	Trisha M. Steele 12 James Street Enfield, CT 06082				
5.					
6.					

EXHIBIT E

CERTIFICATION OF SERVICE

I hereby certify that on this 20th day of April 2022, notice of Enfield Solar One, LLC's intent to file the Petition was sent first class mail, postage prepaid, to the following:

STATE OFFICIALS:

The Honorable William Tong
Attorney General
Office of the Attorney General
55 Elm Street
Hartford, CT 06106

James C. Rovella, Commissioner
Department of Emergency Services and Public Protection
Emergency Management and Homeland Security Division
1111 Country Club Road
Middletown, CT 06457

Katie Dykes, Commissioner
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Manisha Juthani, MD, Commissioner
Department of Public Health
410 Capitol Avenue
Hartford, CT 06134-0308

Peter B. Hearn, Executive Director
Council on Environmental Quality
79 Elm Street
P.O. Box 5066
Hartford, CT 06106

Marissa Gillett, Chair
Public Utilities Regulatory Authority
Ten Franklin Square
New Britain, CT 06051

Jeffrey R. Beckham, Acting Secretary
Office of Policy and Management
450 Capitol Avenue
Hartford, CT 06106

David Lehman, Commissioner
Department of Economic and Community Development
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

Joseph Giulietti, Commissioner
Department of Transportation
2800 Berlin Turnpike
Newington, CT 06131-7546

Mary Dunne
State Historic Preservation Officer
Connecticut Commission on Culture & Tourism
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

Bryan P. Hurlburt, Commissioner
Department of Agriculture
450 Columbus Boulevard, Suite 5
Hartford, CT 06103

ENFIELD TOWN OFFICIALS:

Ellen Zoppo-Sassu
Town of Enfield
820 Enfield Street
Enfield, CT 06082

John A. Kissel
Senator – 7th District
Legislative Office Building, Room 3400
300 Capital Avenue
Hartford, CT 06106

The Honorable Thomas Arnone
Representative – 58th District
Legislative Office Building
300 Capitol Avenue, Room 4027
Hartford, CT 06106-1591

The Honorable Carol Hall
Representative – 59th District
Legislative Office Building
300 Capitol Avenue, Room 4200
Hartford, CT 06106

Sheila M. Bailey, Town Clerk
Town of Enfield
820 Enfield Street
Enfield, CT 06082

Lewis Fiore, Chairman
Planning and Zoning Commission
Town of Enfield
820 Enfield Street
Enfield, CT 06082

Lauren Whitten, Director of Development Services
Town of Enfield
820 Enfield Street
Enfield, CT 06082

Donna Corbin-Sobinski, Chairman
Inland Wetlands and Watercourses Agency
Town of Enfield
820 Enfield Street
Enfield, CT 06082

CAPITOL REGION COUNCIL OF GOVERNMENTS:

Lynn D. Wray, Executive Director
Capitol Region Council of Governments
241 Main Street, 4th Floor
Hartford, CT 06106-5130

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103
Telephone: (860) 275-8200
Attorneys for Enfield Solar One, LLC and
VCP, LLC d/b/a Verogy

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

April 20, 2022

Via Certificate of Mailing

«Name_and_Address»

Re: **Enfield Solar One, LLC and VCP, LLC d/b/a Verogy – Notice of Intend to File a Petition for Declaratory Ruling for the Construction, Operation and Maintenance of a 4.0 MW AC Solar Photovoltaic Project at 110 North Street, Enfield, Connecticut – State and Local Government Officials Notice**

Dear «Salutation»:

Pursuant to the provisions of §16-50j-40(a) of the Regulations of Connecticut State Agencies, this letter serves as notice that Enfield Solar One, LLC and VCP, LLC d/b/a Verogy ("Verogy") intend to file a Petition for Declaratory Ruling ("Petition") with the Connecticut Siting Council ("Council") on or about April 25, 2022, seeking approval of the construction, operation and maintenance of a 4.0 megawatt (MW) AC solar generating facility, including all associated equipment, related site improvements and interconnection (the "Project"). The Project would be located on an approximately 19.65-acre portion of a larger 73.88-acre site at 110 North Street in Enfield, Connecticut (the "Property"). The Property is owned by the Catholic Cemetery Association of the Archdiocese of Hartford and is bounded by North Street on the west by vacant agricultural land and the St. Bernard Cemetery (both fronting on Park Street), on the east by undeveloped agricultural and forested land and on the south by residential uses fronting on Stony Brook Road.

The Project would consist of the installation of photovoltaic panels, centralized inverters and transformers, electrical lines, an electric transformer, a station controller, a perimeter fence and access road. For additional details regarding the location of the Project and the layout of site improvements, please see the attached Project Plans.

Pursuant to the provisions of Connecticut General Statutes § 16-50g *et seq.*, the location of certain Project features may change as this Petition proceeds through the Council's regulatory review process.

If you have any questions, please feel free to contact me. My contact information is provided above. You may also contact the Council directly at 860-827-2935.

Respectfully,

Kenneth C. Baldwin, Esq.

KCB/kmd
Attachment

VEROGY/ENFIELD

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1.	The Honorable William Tong Attorney General Office of the Attorney General 55 Elm Street Hartford, CT 06106				
2.	James C. Rovella, Commissioner Department of Emergency Services and Public Protection Emergency Management and Homeland Security Division 1111 Country Club Road Middletown, CT 06457				
3.	Katie Dykes, Commissioner Department of Energy and Environmental Protection 79 Elm Street Hartford, CT 06106				
4.	Manisha Juthani, MD, Commissioner Department of Public Health 410 Capitol Avenue Hartford, CT 06134-0308				
5.	Peter B. Hearn, Executive Director Council on Environmental Quality 79 Elm Street P.O. Box 5066 Hartford, CT 06106				
6.	Marissa Gillett, Chair Public Utilities Regulatory Authority Ten Franklin Square New Britain, CT 06051				

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1.	Jeffrey R. Beckham, Acting Secretary Office of Policy and Management 450 Capitol Avenue Hartford, CT 06106				
2.	David Lehman, Commissioner Department of Economic and Community Development 450 Columbus Boulevard, Suite 5 Hartford, CT 06103				
3.	Joseph Giulietti, Commissioner Department of Transportation 2800 Berlin Turnpike Newington, CT 06131-7546				
4.	Mary Dunne State Historic Preservation Officer ~~Connecticut Commission on Culture & Tourism~~ ~~450 Columbus Boulevard, Suite 5~~ Hartford, CT 06103				
5.	Bryan P. Hurlburt, Commissioner Department of Agriculture 450 Columbus Boulevard, Suite 5 Hartford, CT 06103				
6.	Ellen Zoppo-Sassu Town of Enfield 820 Enfield Street Enfield, CT 06082				

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1.	John A. Kissel Senator – 7th District ~~Legislative Office Building, Room 3400~~ 300 Capital Avenue Hartford, CT 06106				
2.	The Honorable Thomas Arnone Representative – 58th District ~~Legislative Office Building~~ 300 Capitol Avenue, Room 4027 Hartford, CT 06106-1591				
3.	The Honorable Carol Hall Representative – 59th District ~~Legislative Office Building~~ 300 Capitol Avenue, Room 4200 Hartford, CT 06106				
4.	Sheila M. Bailey, Town Clerk Town of Enfield 820 Enfield Street Enfield, CT 06082				
5.	Lewis Fiore, Chairman Planning and Zoning Commission ~~Town of Enfield~~ 820 Enfield Street Enfield, CT 06082				
6.	Lauren Whitten, Director of Development Services Town of Enfield 820 Enfield Street Enfield, CT 06082				

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2.	Lynn D. Wray, Executive Director Capitol Region Council of Governments 241 Main Street, 4th Floor Hartford, CT 06106-5130				
3.					
4.					
5.					
6.					

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EXHIBIT F

From: Lalime, Holly <Holly.Lalime@ct.gov>
Sent: Thursday, March 17, 2022 1:09 PM
To: Bachman, Melanie
Cc: Brad Parsons; William Herchel; Bryan Fitzgerald (bfitzgerald@verogy.com); Hurlburt, Bryan; Smith, Jaime; DEEP OPPD; CSC-DL Siting Council; Dykes, Katie
Subject: Verogy - Enfield Solar One, LLC - 110 North Street, Enfield, CT DoAg Finding Ltr No Martial Impact to Prime Farmland Soils
Attachments: Verogy - Enfield Solar One 3.16.22.pdf

Dear Executive Director Bachman,

Attached please find a no material impact to prime farmland soils letter from the Department of Agriculture for the referenced Verogy, Enfield Solar One LLC, solar array project to be located at 110 North Street, Enfield.

No hardcopies will be sent. Please accept this email as our formal response.

Thank you,
Holly

Holly.Lalime@ct.gov
C: (860)969-7053
Farmland Preservation Program
CT FarmLink
Connecticut Dept. of Agriculture
www.ctgrown.gov
www.ctfarmlink.org

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CONNECTICUT DEPARTMENT OF AGRICULTURE
450 Columbus Blvd, Suite 701 | Hartford, Connecticut 06103 | 860.713.2500
Office of the Commissioner
An Equal Opportunity Employer

March 16, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Enfield Solar One, LLC – 110 North Street, Enfield

Dear Executive Director Bachman:

Pursuant to 16-50k(a) of the Connecticut General Statutes, we have reviewed the above cited project with respect to agricultural impacts, specifically, to determine whether "…such project will not materially affect the status of such land as prime farmland…"

This project will be located at 110 North Street in Enfield, on land owned by the Catholic Cemeteries Association. The project consists of a single parcel which is 73.88 acres in size. The parcel contains 48.6 acres of prime farmland, and there are approximately 15.6 acres of prime farmland within the project area (approximately 32 percent of the prime farmland on the parcel). The developers state that there is no production agriculture currently conducted within the project footprint.

In a letter to the Department of Agriculture (DoAg), dated September 28, 2021 and follow-up correspondence dated February 4, 2022, the developers (Verogy) have stated that they intend to develop this project with co-uses which include creation of pollinator habitat and rotational sheep grazing. Preliminary details of these co-uses are represented to the Department as follows:

1) Verogy will be implementing a rotational grazing system. The site will be stocked with sheep at a density that would adequately manage the vegetative growth of grasses and forbs within the perimeter fence at the site;

2) Verogy has also stated that a Connecticut based farmer would manage the grazing program. A draft Sheep Grazing Plan, prepared by Verogy, in conjunction with Agrivoltaic Solutions LLC, is attached to the aforementioned letter from the developers; and

3) Verogy intends to use a seed mix that is developed specifically for a combination of sheep grazing and pollinator habitats, one that will address the nutritional needs of the sheep while also providing nectar for native pollinator species. This would likely be a seed mix developed by Ernst Conservation Seeds, called the "Fuzz & Buzz" mix.

Based on preliminary information provided to DoAg (enclosed), and the successful implementation of the co-uses and continuing farming activities described above, the Department of Agriculture concludes this project will not materially affect the status of project land as prime farmland. The Department of Agriculture will continue to monitor the proposed project and should changes or additions to the proposal raise concerns to the Department, we reserve the right to modify our position on this project, including opposing it, as detailed plans are provided by the developers.

If you have any questions, please feel free to contact Holly Lalime of my staff. Holly can be reached at Holly.Lalime@ct.gov or at (860) 969-7053.

Sincerely,

Bryan P. Hurlburt
Commissioner

Enc.

Cc: Katie Dykes, Commissioner, Department of Energy and Environmental Protection
William Herchel, Verogy

VEROGY

Enfield Solar One

Sheep Grazing Plan
Ground Mount PV Array

Date:
April 2022

Prepared By:
VCP, LLC d/b/a Verogy
in conjunction with Kevin Edgerly of Bucking Ewes Farm.

VEROGY
150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

Introduction

Ground-mounted solar sites, by nature of their design, have ample fenced areas. The fencing at solar sites is uniquely suited to serve as grazing areas or be subdivided into grazing paddocks in a pasture rotation with sheep. The perimeter fencing also serves as predator deterrent, the solar panels provide shading and shelter for inhabitants, and the solar arrays provide palatable pasture species for ruminant nutrition. In turn, rotationally grazed sheep provide adequate and comparatively cheap vegetation management, optimal ground coverage and thus reduced erosion and run-off, as well as agricultural usage of lands that can add to the viability of farming communities.

Enfield Solar One, located at 110 North Street in Enfield, CT, is planned for approximately *14.5*- acres of fenced in solar array ("Facility"). Sheep grazing will be used to control vegetation within the fenced facility to:

- Prevent panel shading from vegetation,
- Control and remove invasive and unpalatable plant species,
- Avoid the growth of brush and woody species under the solar panels,
- Maintain a diverse forage population to support optimal sheep nutrition,
- Encourage flowering forb and plant species to maximize pollinator habitat,
- Optimize sequestered soil carbon through increasing top-soil amount and root matter,
- Control erosion.

To achieve these goals a rotational grazing system will be implemented. Rotational grazing is a technique where animals are moved as one group, from one pastured area ("paddock") to the next (Hodgson, 1979). Only one paddock is grazed at any given time throughout the rotation, while the other paddocks are given a rest period to achieve pasture regrowth. Compared to continuous or extensive grazing, rotational grazing inhibits weed growth, improves the health of pasture, sustains healthy vegetation, and improves sheep health.

Site Requirements

The perimeter fencing can be chain link or "ag type" woven wire and should be installed to the ground. It can be buried slightly below grade or have a maximum gap of 1-2". Gaps caused by uneven ground should be cleaned up with a with a small machine. If chain link fencing is used it should be installed with a bottom tensioning wire.

The perimeter gates should be installed to meet evenly and have an even spacing to the ground. The maximum gap between the gates and the ground should be 1-2". Care should be taken to add some gravel or grade the area to avoid large gaps.

The site should be building on an existing sod or hay-ground or planting an existing tilled field. The solar facility should be seeded with Ernst Conservation Seeds, Inc. Fuzz & Buzz mix or equivalent. The Fuzz & Buzz mix is the best way to blend grazing with solar and introducing pollinator friendly species. This seed mix was developed by Ernst and the Cornell Sheep Program in conjunction with the American Solar Grazing Association. For additional seedings, clover or legume mixes are a good option for vigor and grazing friendliness. For grass species fescue species should be avoided unless they are endophyte-free varieties.

Rotation planning

Enfield Solar One was assessed for a planned grazing rotation based on the preliminary panel layout, and *14.5*- acres fenced area under panels. The grazing plan requires division of the solar array into smaller grazing units, known as *paddocks*. The site layout can be subdivided into four *(4)* different grazing paddocks with Electronet® fencing (Figure 1). The Electronet® is a portable fence that is a product familiar to farmers in in the grazing community. It is a white, lightweight fence that is energized using a portable battery, battery/solar, or 110V power supply. This fencing is simple to power on/off and will only be located inside the fenced areas. Its use is to facilitate grazing inside the permanently fenced areas only. The Electronet® will be installed by the grazing manager according to the grazing plan.

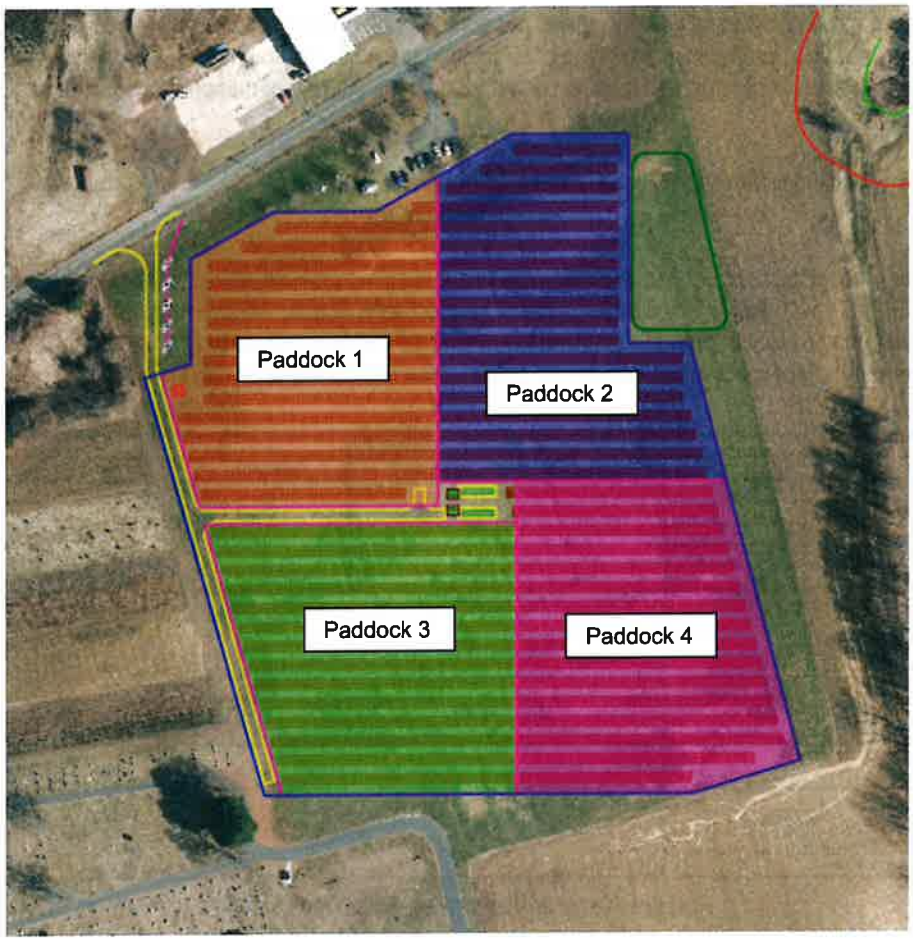

Figure 1. Enfield Solar One Layout with distinctly colored sections. Please note that this is an approximation and subject to change.

- Paddock 1 (3.6 acres)
- Paddock 2 (3.7 acres)
- Paddock 3 (3.6 acres)
- Paddock 4 (3.7 acres)

The number of grazing paddocks in each array is dependent on a unique set of factors. The number depends on size and layout of the permanently fenced array, panel orientation, and space used for access roads, inverter pads, and other non-forage producing areas.

Manure management is a subset of the flock management and sheep management planned for the solar site. The primary purpose of the placement of sheep on the solar site is to achieve vegetation management goals. The planned movement of the sheep around the solar site has the underlying benefit of moving and distributing sheep manure at the same time. Sheep manure is typically small and pelletized. For the layperson, sheep manure may resemble the manure of rabbits or deer. Similarly, the manure is typically invisible within a short period of time and begins nutrient cycling in the soils.

The correct sheep stocking rate and density (sheep per acre per unit of time) will be calculated before the grazing season based on site size, and quantity and type of vegetation present. This metric also ensures that no over-grazing occurs, and that the amount of manure deposition does not outpace the rate of manure decomposition throughout the grazing rotation.

The flock will not overwinter within the fenced area of the solar array.

Acreage

The sheep flock is sized to cover the four grazing paddocks in a full rotation, i.e. the amount of sheep needed to graze Paddock 1, 2, 3 and 4 with 3.6, 3.7, 3.6 and 3.7 acres, respectively, in a +/- 45-day rotation. The precise number of days per paddock may be adjusted over the season by the flock manager, depending on weather and forage growth conditions. The number of sheep determined by the grazing plan can be found in Table 1 below:

Enfield Solar One - Grazing Plan						
	Items	Paddock 1	Paddock 2	Paddock 3	Paddock 4	Site Totals
Paddock Info.	Total Paddock Area (ac)					14.5
	Number of Paddocks					4
	Paddock Rest Period (days)					45
	Paddock Use (days)					15
	Paddock Size (ac)	3.6	3.7	3.6	3.7	
Feed Anlysis	Vegetation Cover of Paddock (%),(ac)	80% 2.84	80% 2.92	80% 2.87	80% 2.96	80% 11.59
	Biomass (lbs/sy)	1.5	1.5	1.5	1.5	1.5
	Dry Matter (%), (lbs/sy)	20% 0.3	20% 0.3	20% 0.3	20% 0.3	20% 0.3
	Dry Matter per Acre (lbs)	1452	1452	1452	1452	1452
	Dry Matter per Paddock (lbs)	4126	4241	4170	4295	16832
	Refusals per Paddock (%), (lbs)	30% 1238	30% 1272	30% 1251	30% 1289	30% 5049
	Adjusted Dry Matter per Paddock (lbs)	2888	2969	2919	3007	11782
Feed Intake	Average sheep weight (lbs)					160.0
	Dry Matter Intake per Sheep (%),(lbs)					3.5% 5.6
Sheep Anlysis	Total Paddock Area (ac)					14.5
	Total Adjusted Dry Matter (lbs)					11782
	Number of Sheep for Site					35
	Sheep Stocking Rate					2.4

Table 1. Grazing Plan Enfield Solar One Project

The rest time for a given grazed area is largely guided by management for the sheep flock's health. The rest time can be considered the window during which the sheep are not present in a given area and the space is given a rest. The pasture rest period (time between grazing periods) in the US Northeast should not be less than 40-days to minimize internal parasite pressure for sheep. Internal parasites are a health risk to the sheep but not to humans. Internal parasites of sheep are not zoonotic, but a threat only to the health of sheep. This health risk to sheep is minimized by following the following prescriptive grazing plan.

A common internal parasite specific to ruminates is the stomach nematode *H. contortus* or barber pole worm. It has a life cycle of 40 days; thus, a clean pasture can only be achieved with rest periods of 40+ days to avoid reinfection through ingestion of larvae. However, in effective grazing regimens with parasite-resistant sheep flocks, exceptions

can be made by the flock manager if the vegetation pressure is too high to adhere to a 40-day rest period before re-grazing.

Sampling and analysis

In newly commissioned solar sites, full vegetation coverage cannot be expected in the first 1-2 years. Additionally, access roads, inverter pads and other site infrastructure will reduce the overall vegetation cover. The estimate for NY State solar sites lies between 65 and 85% vegetation coverage for new sites. This number should be estimated and considered separately for each individual paddock. This number will be adjusted over subsequent years and grazing seasons.

As previous management regimes for solar sites might consist of hay fields, crop fields, marginal pastures or brush areas, the vegetation coverage is expected to be heterogeneous. Therefore, vegetation sampling must be performed to determine sheep stocking rate and density, which is a requirement prior to establishing a grazing rotation. Tabular dry matter and nutrient values as they are published for uniform stands of established crops, hay field or other, are not adequate for evaluating solar array site vegetation for grazing. A detailed organic matter (OM) vegetation sampling protocol is published on the American Solar Grazing Association (ASGA) website. The grazing rotation will largely depend on the amount of forage dry matter (DM) growing within the individual areas. Manager may perform vegetation sampling at intervals to analyze the nutritional value of the forage.

Forage analysis laboratories such as Dairy One provide detailed analyses that can be used to calculate the available DM per grazing paddock from submitted OM samples. Dry matter is a percent of total percent plant weight minus water content. These DM values are necessary to establish the amount of available feed for sheep, and eventually the sheep stocking rate and density. Typically, pasture DM values in the Northeastern US for well-maintained pastures are between 18-25%, depending on the season.

Typically, well managed Northeast pastures can achieve yields above 2,500 lbs DM per acre. The yield in the grazing plan draft above is substantially lower; it is expected that the solar array pastures will take time after establishment to reach their potential. It is necessary to plan a grazing rotation prior to the grazing season, which would be used to guide a flock manager's rotation plan. The flock manager would then use his/her own experience and observation to decide daily if the rotation plan is reasonable and responsible, and to make necessary adjustments in rotation days and stocking rates.

Pasture utilization should be between 70 and 85% to ensure optimal regrowth and animal nutrition. Thus, pasture refusals (uneaten vegetation remaining after grazing) should be part of the calculation and should be between 15% and 35%.

Two examples of common adjustments to rotation plans include: First, in late spring after rain events and with the warming weather, stocking rates may have to be increased to be able to clear the vegetation growth. Secondly, in the summer, sheep may have to be moved from paddock to paddock faster than they were in spring or fall due to the slowed growth of dormant cool-season vegetation.

Feed Intake

It is recommended to graze uniform animal groups that are either dry (non-lactating) ewes, open (non-pregnant) ewes, ewes in their early stages of pregnancy, yearling ewes or growing lambs of at least 60 lb. (or alternatively, 50% of their mature body weight in case of small breeds). In the case of groups of growing lambs, the lambs should be of the same sex or the males should be castrated.

Table 2. Body weight and feed intake

Breed	***Stage of production***	***Body weight, lbs***	***Feed intake, DM %BW***	***Feed intake, lbs DM***
Katahdin hair sheep	Growing lamb, 50% mature BW	65	2.5	1.6
	Yearling	110	3.0	3.3
	Open, dry ewe	130	3.5	4.6
Polypay composite	Growing lamb, 50% mature BW	80	2.5	2.0
	Yearling	130	3.0	3.9
	Open, dry ewe	160	3.5	5.6
Texel	Growing lamb, 50% mature BW	90	2.5	2.3
	Yearling	150	3.0	4.5
	Open, dry ewe	180	3.5	6.3

Depending on the breed and uniformity of the group of sheep, an average weight for the individual animals in the flock can be determined. Table 2. Body weight and feed intake, gives an overview of BW (body weight) and feed intake across popular Northeastern sheep breeds. According to NRC nutritional requirements for small ruminants (NRC, 2007), daily DM consumption per animal can be estimated as a percentage of bodyweight.

Totals

These calculations can be used to determine the optimal number of sheep per paddock according to body weight and stage of production. By using this with the chosen grazing rotation days (or rest period), the stocking rate (the necessary sheep number for the calculated grazing time within each paddock) can be calculated, and the optimal grazing flock size calculated.

On the 14.5 acre Enfield Solar One project, the grazing plan allows for 35 mature ewes managed in four grazing paddocks, a stocking rate of 2.4 sheep per acre, and 15 grazing days per paddock with a 45-day rest period.

Animal welfare recommendations

Regardless of season, ad libitum clean and fresh water access is crucial for animal welfare (NRC, 2007). Site-specific amenities like well water or connection to municipal water lines are ideal, but transported water is typical of solar grazing operations. For sheep of the recommended production stages (non-lactating and > 60 lbs growing lambs), water requirements are very low in spring and fall. Typically, dry, non-gestating ewes will consume between 5 and 10 % of their BW water daily.

Granulated mineral feed must be available ad libitum and contain adequate concentrations. Mineral feed should be offered in troughs that can be moved with the flock according to the rotation and rotation days. Mineral feed is specially blended and commercially available for sheep producers (Cargill, 2019).

Sheep will be visually inspected on every rotation day by the flock manager. A closer inspection of each member of the flock is recommended at regular intervals (every 6 weeks on site), including parasite monitoring or treatment with a FAMACHA (FAffa MAlan CHArt) protocol (Wyk and Bath, 2002), and 5-point checks (Bath and van Wyk, 2009). Each spring, before the flocks begin the grazing season, certain protocols are recommended to ensure they are in optimal health before their work at the solar site begins:

- Feet must be checked and trimmed,
- Ear tags replaced or added, in compliance with USDA regulations,
- Wool sheep must be shorn,
- Wool sheep should be tail-banded,
- Body-condition scores should be recorded to monitor nutritional and health status across the grazing season,
- ***Sheep should be kept in a dry lot on hay 24 hours prior to moving on site in Spring and de-wormed with a commercially available de-wormer to prevent parasite infections on site.***

Emergency Protocols

In the event of a site emergency, the following protocol is to be on hand to ensure safe site access for emergency personnel:

- Clear signage will be displayed at the main gate with emergency contact information of the sheep manager. The manager should be contacted immediately in the event emergency personnel have to enter the site in order to ascertain if there are animals present, and to provide notification to the sheep manager that the animals may need to be removed.
- If portable electric fence is installed crossing site roadways, the fence charger will be placed clearly by the side of the roadway. In the event of emergency, the charger will only need to be switched off and the fence pulled up by hand to allow passage.
- If possible, animals should remain inside the site during an emergency, until the sheep manager can safely remove them. They will likely move as a flock away from any commotion and pose little risk of being in the way. If they do escape during the site emergency, they should be monitored and pushed towards fields and away from roads if possible.

Literature

Bath, G. F., and J. A. van Wyk. 2009. The Five Point Check© for targeted selective treatment of internal parasites in small ruminants. Small Ruminant Research 86(1):6-13. doi: https://doi.org/10.1016/j.smallrumres.2009.09.009

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HODGSON, J. 1979. Nomenclature and definitions in grazing studies. Grass and Forage Science 34(1):11-17. doi: 10.1111/j.1365-2494.1979.tb01442.x

NRC. 2007. Nutrient Requirements of Small Ruminants: Sheep, Goats, Cervids, and New World Camelids. The National Academies Press, Washington, DC.

Wyk, J. A. V., and G. F. Bath. 2002. The FAMACHA system for managing haemonchosis in sheep and goats by clinically identifying individual animals for treatment. Vet. Res. 33(5):509-529.

From: Martin, Christopher <Christopher.Martin@ct.gov>
Sent: Tuesday, March 22, 2022 1:16 PM
To: Bachman, Melanie
Cc: Brad Parsons; William Herchel; Bryan Fitzgerald; Hurlburt, Bryan; Lalime, Holly; Dickson, Jenny; DEEP OPPD; CSC-DL Siting Council
Subject: Enfield Solar One, LLC Proposed 4.0MW (AC) SCEF Project. DEEP Finding Ltr No Impact to Core Forest
Attachments: Enfield Solar One SCEF.docx

Dear Executive Director Bachman,

Attached please find a no material impact to core forest letter from DEEP for the referenced 4.0MW (AC) Shared Clean Energy Facilities (SCEF) Project, Enfield Solar One, LLC, 110 North Street in Enfield.

No hardcopies will be sent. Please accept this email correspondence as our formal response. Thank you.

Christopher R. Martin
Director/State Forester
Division of Forestry
Bureau of Natural Resources
Connecticut Department of Energy and Environmental Protection
79 Elm Street, Hartford, CT 06106-5127
P: 860.424-3630 | E: christopher.martin@ct.gov

Connecticut Department of
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March 22, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

cc: Bradley J. Parsons, PE, PMP
Director of Design and Permitting
Verogy | 150 Trumbull Street, 4th Floor
Hartford, CT 06103

RE: Enfield Solar One, LLC
Proposed 4.0MW (AC) SCEF Project
110 North Street, Enfield, Connecticut

T
Dear Ms. Bachman,

Bradley J. Parsons, Director of Design and Permitting, for Verogy ("Petitioner") has contacted the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Natural Resources and informed us of the intention to file a petition for a declaratory ruling with the Connecticut Siting Council. Petitioner proposes to construct a Shared Clean Energy Facilities (SCEF) with a capacity of two or more megawatts, to be located at 110 North Street, Enfield, Connecticut 06082 ("Site").

Pursuant to Sec. 16-50k of the Connecticut General Statutes the DEEP Bureau of Natural Resources staff have reviewed documents submitted by the Petitioner concerning this proposed project, which includes a site map dated May 21, 2021 attached to an email dated March 22, 2022 prepared by Verogy.

In conducting such review of the proposed project, DEEP Bureau of Natural Resources has determined that such proposed project, as represented in the above-mentioned documents **will not** materially affect the status of such Site as core forest.

Nothing in this letter relieves the Petitioner of other obligations under applicable federal, state, and local law that may be necessary as part of the proposed project design and implementation.

If you have any questions, you may contact me at 860-424-3060, or by mail at 79 Elm Street, Sixth Floor, Hartford, CT 06106-5127.

Connecticut is one of the most heavily forested states in America. Our forests clean our air and water, shelter our wildlife, sequester carbon, contribute tens of millions of dollars to our economy, and add immeasurably to the quality of our lives. Yet every day, our forests are under threat. Invasive insects and diseases and our dense and growing human population continue to stress our forests in unprecedented ways. Thank you for helping us to conserve a healthy core forest for future generations, providing public transparency and working to make thoughtful development choices.

Sincerely,

Christopher Martin, State Forester
Bureau of Natural Resources
Department of Energy and Environmental Protection

CC: Bryan P. Hurlburt, Connecticut Department of Agriculture

Holly Lalime, Connecticut Department of Agriculture

Jenny Dickson, Director of Wildlife, Bureau of Natural Resources, DEEP

DEEP.OPPD@ct.gov

siting.council@ct.gov

EXHIBIT G

ALL-POINTS
TECHNOLOGY CORPORATION

ENVIRONMENTAL ASSESSMENT

PROPOSED ENFIELD SOLAR ONE, LLC

SOLAR PROJECT

110 NORTH STREET

ENFIELD, CONNECTICUT

HARTFORD COUNTY

Prepared for:

Enfield Solar One, LLC
150 Trumbull Street, 4th Floor
Hartford, CT

Prepared by:

All-Points Technology Corporation, P.C.
567 Vauxhall Street Extension – Suite 311
Waterford, CT 06385

April 2022

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Figures

Figure No. **Title**

Table

Appendices

1 Introduction

All-Points Technology Corporation, P.C. ("APT") prepared this Environmental Assessment ("EA") on behalf of Enfield Solar One, LLC (hereinafter referred to as the "Petitioner") for the proposed installation and utility interconnection of a solar-based electric generating facility (collectively, the "Project"), with output of approximately 4.0 megawatts[1] ("MW") located in the Town of Enfield, Connecticut ("Town"). This EA has been completed to support the Petitioner's submission to the Connecticut Siting Council ("Council") of a petition for declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of the electric generating facility.

The results of this assessment demonstrate that the proposed development will comply with the Connecticut Department of Energy and Environmental Protection's ("DEEP") air and water quality standards and will not have an adverse effect on the existing environment and ecology of the Site or the surrounding area. Further, a review of Connecticut General Statutes § 22a-20a indicates that the proposed Project is neither defined as an "affecting facility"[2] nor located within an "environmental justice community"[3].

The Project will be located on a privately owned, 77.83-acre property south of North Street in Enfield, Connecticut (referred to herein as the "Site"). The Site contains a small building and parking area associated with its current use as a golf driving range. The Town Assessor records do not assign a street number to the property; however, the address for the existing business is 110 North Street. The northern portion of the Site is almost entirely cleared, with several mature deciduous trees near the parking area adjacent to North Street. Agricultural fields are at the northeastern and south-central portions of the Site; the far eastern and southern portions of the Site are wooded, with a stream near the southeastern Site boundary. The Site is zoned R33 – Residential; however, the Project is under the exclusive jurisdiction of the CT Siting Council.

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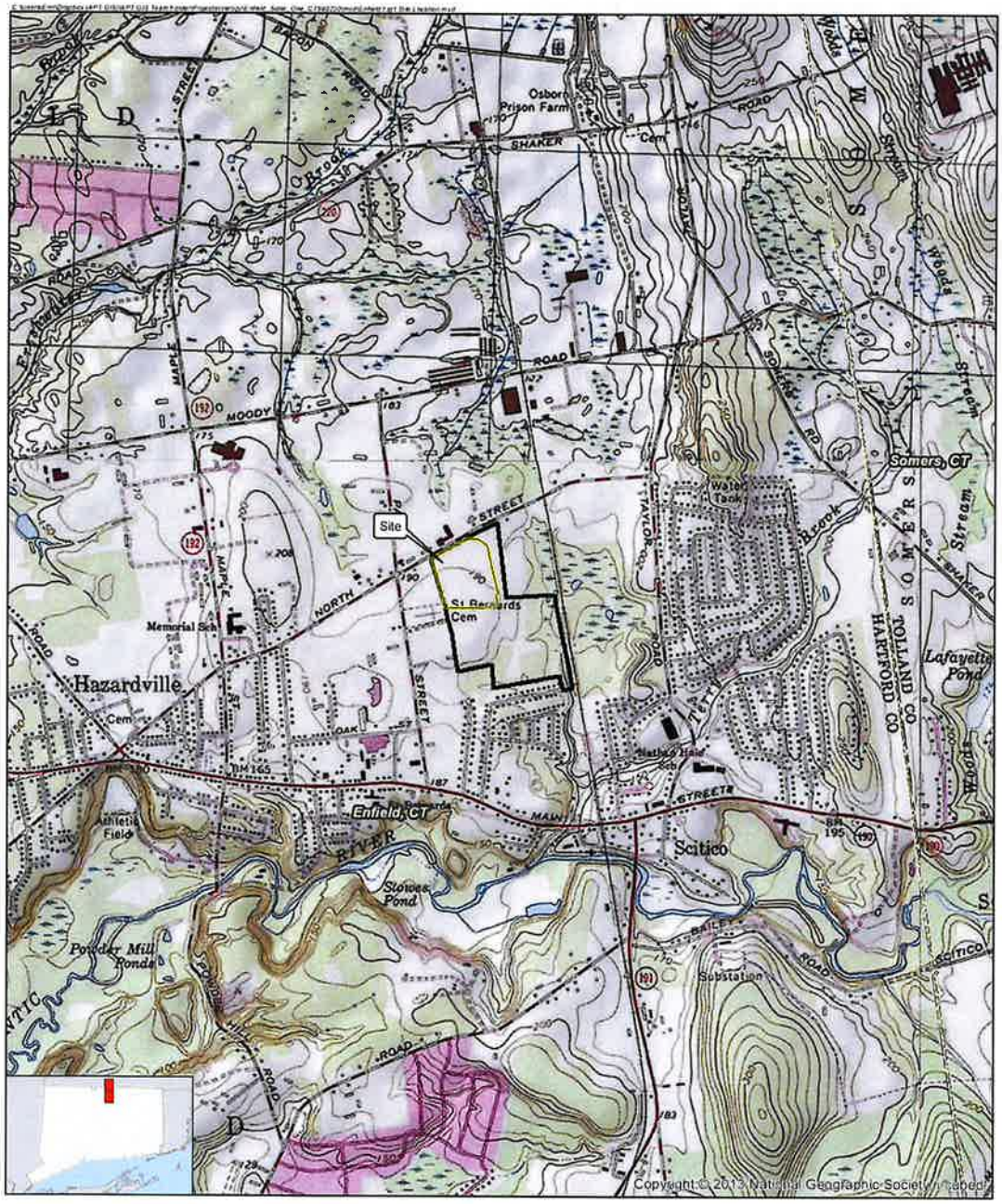
[1] The output referenced is Alternating Current (AC).

[2] "Affecting facility" is defined, in part, as any electric generating facility with a capacity of more than ten megawatts.

[3] "Environmental justice community" means (A) a United States census block group, as determined in accordance with the most recent United States census, for which thirty per cent or more of the population consists of low income persons who are not institutionalized and have an income below two hundred per cent of the federal poverty level, or (B) a distressed municipality, as defined in subsection (b) of § 32-9p.

Figure 1, *Site Location Map*, depicts the location of the Site and the immediate surrounding area.



Legend

- Site
- Project Area
- Municipal Boundary

Map Notes
Base Map Source: USGS 7.5 Minute Topographic Quadrangle Maps, Broad Brook, CT (1964) and Springfield South, MA-CT (1979)
Map Scale: 1 inch = 2,000 feet
Map Date: April 2022

2,000 1,000 0 2,000 Feet

Figure 1
Site Location Map

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

VERGY
ALL-POINTS TECHNOLOGY CORPORATION

2 Proposed Project

2.1 Project Setting

The Project will occupy ±19.65 acres in the northern portion of the Site (the "Project Area"), within a cleared area that has in recent years been in use as a golf center/driving range. The electrical service interconnection line will extend out to North Street at the northwestern corner of the Site. The access drive will extend south from North Street along the western Site boundary.

The Site's existing topography is generally level, ranging from approximately 160 feet above mean sea level ("AMSL") to 190 feet AMSL. Grades within the Project Area slope gently from west to east, with ground elevations ranging from approximately 190 feet AMSL to 180 feet AMSL.

Figure 2, *Existing Conditions*, depicts current conditions on the Site.

The surrounding land use is primarily agricultural, with sparse commercial and residential development along North Street and Park Street. A cemetery is located east of Park Street, and includes portions of the Site.

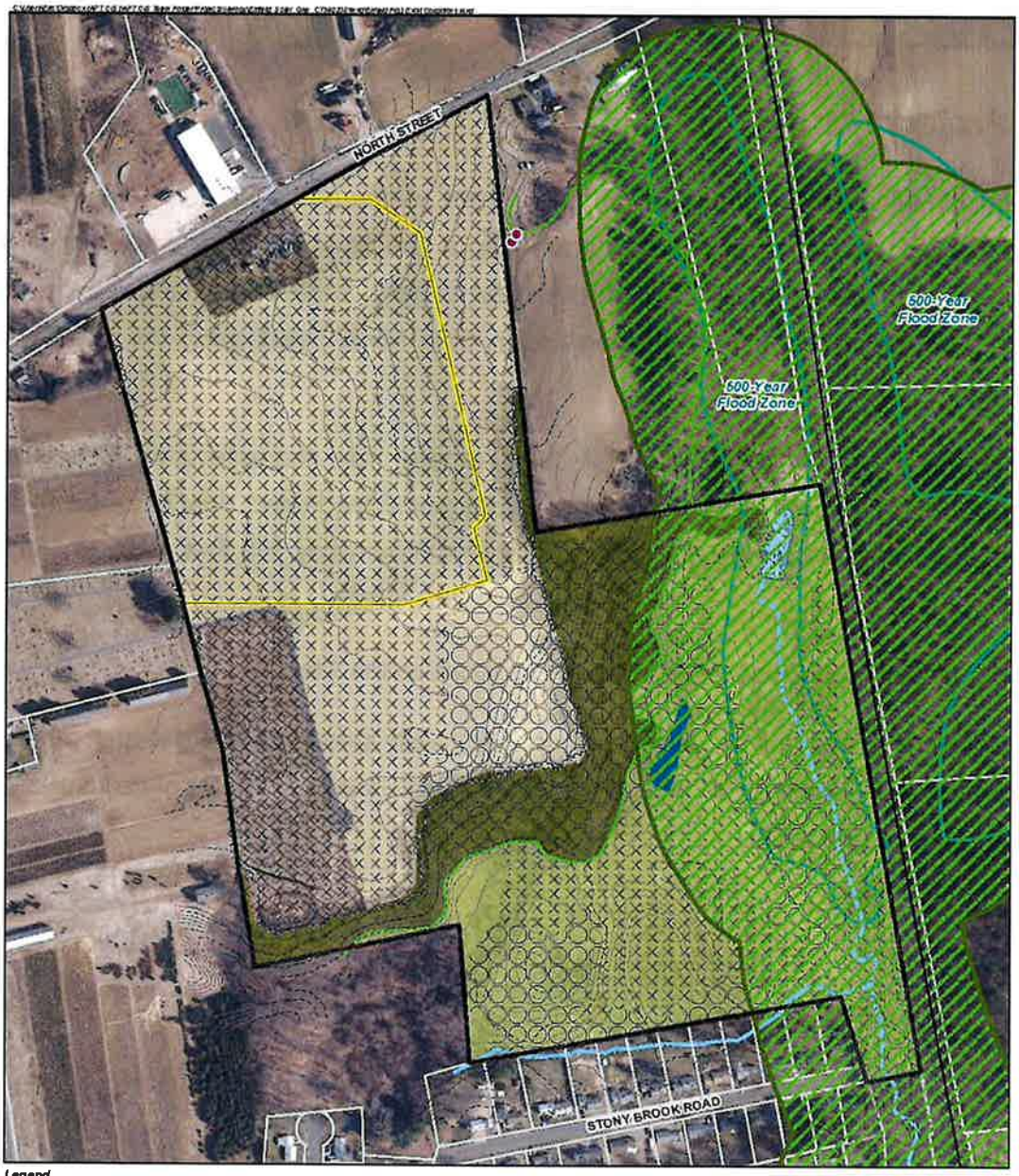


Figure 2
Existing Condtions

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

VERGY

ALL POINTS TECHNOLOGY CORPORATION

2.2 Project Development and Operation

Upon its completion, the solar electric energy generating facility (the "Facility") will consist of a total of 11,050 540W photovoltaic modules ("panels"); 28 inverters; two (2) pad mounted switchgears; and two (2) 2000 kVA transformers. A ground-mounted racking system will be used to secure the panel arrays. The perimeter of the Facility will be surrounded by a seven (7)-foot tall chain link fence. The Project will also require one (1) electrical service interconnection that will extend from the existing Eversource distribution system along North Street. The interconnection route will run overhead south from North Street and transition to underground at the Facility fence. Once complete, the fenced Facility will occupy approximately 15.21 acres of the Site with an additional ±4.44 acres of improvements beyond the fenced limits, for a total Project Area of ±19.65 acres.

Proposed development drawings are provided in Appendix A, *Project Plans*.

The leading edge of the panels will be approximately three (3) feet above the existing ground surface, which will provide adequate room for any accumulating snow to "sheet" off. Any production degradation due to snow build-up has already been modeled into the annual system output and performance calculations. The Petitioner does not envision requiring any "snow removal" operations; rather, the snow will be allowed to melt or slide off.

Construction activities within the Project Area will require the following:

- installing erosion and sedimentation control measures;
- creating one (1) water quality volume basin and associated grading;
- installing racking and modules;
- trenching for electrical service; and
- installing new overhead utility poles for interconnection to the existing electrical distribution system along North Street.

Earthwork is required to allow the Project development to comply with DEEP's *Appendix I, Stormwater Management at Solar Array Construction Projects.* ("Appendix I") to the *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* ("General Permit"), including creation of the access drive, grading associated with the required drainage and erosion and sedimentation control features (cuts/fills), and construction of the water quality feature.

The Facility is unstaffed; after construction is complete and the Facility is operable, traffic at the Site will be minimal. It is anticipated that the Facility will require routine maintenance of the electrical equipment one (1) time per year. Annual maintenance will typically involve two (2) technicians for a day. Repairs will be made on an as-needed basis. The Petitioner is proposing to graze sheep within the Facility, which would minimize or eliminate mowing within the Facility fenced area. It is expected that mowing outside the fenced Facility would occur 2-3 times per year.

2.2.1 Access

The Facility will be accessed from North Street via a new 15'-wide gravel drive. The access drive will extend south from North Street. It will run parallel to the interconnect pole line to the fence line, where a 16-foot-wide gate will be located, then extend along the western fence line, with a spur into the center of the Facility.

2.2.2 Public Health and Safety

The Project will meet applicable local, state, national and industry health and safety standards and requirements related to electric power generation. The Facility will not consume any raw materials, will not produce any by-products and will be unstaffed during normal operating conditions.

The Facility will be enclosed by a seven (7)-foot tall chain link fence. The entrance to the Facility will be gated, limiting access to authorized personnel only. All Town emergency response personnel will be provided access via a Knox padlock. The Facility will be remotely monitored and will have the ability to remotely de-energize in the case of an emergency.

2.2.3 Land Use Plans

The Project is consistent with state and federal policies and will support the state's energy goals by developing a renewable energy resource while not having a substantial adverse environmental effect.

The Town's Zoning Regulations address large-scale solar energy systems. *See* Zoning Regulations, Town of Enfield, Revised to June 11, 2020, Section 8.80.2. Although local land use requirements do not apply, the Project has been designed to comply, where possible, with the Town's Zoning Regulations, to the extent feasible. The Site is located in the Town's Residential

Zoning District, R-33, but the Town property card describes the Site's land use as commercial and includes a photo of the driving range. Abutting properties on the north, west and northwest corner of the Site are within the Town's Industrial I-1 zone.

The Town's Plan of Conservation and Development ("POCD"), adopted in 2011, noted that the Town established a Clean Energy Committee in 2007, intended to "promote clean power options; encourage the development of renewable energy in Enfield; and make recommendations to the Town Council." The 2021 POCD Update, currently in draft form, cites several steps to reduce impacts of climate change, including "[R]emoving regulatory barriers and allowing alternative energy sources to be installed in residential and commercial developments. For example, solar panels." Town of Enfield Plan of Conservation & Development, Preliminary Working Draft, July 8, 2021, page 34.

The Petitioner believes the Project will benefit the local community by improving electrical service for existing and future development through the availability of enhanced local, renewable generating capacity.

3 Environmental Conditions

This section provides an overview of the current environmental conditions at the Site and an evaluation of the Project's potential impacts on the environment. The results of this assessment demonstrate that the Project will comply with the DEEP air and water quality standards and will not have an undue adverse effect on the existing environment and ecology.

Please refer to Figure 3, *Proposed Conditions* for a depiction of the Project and its relationship with the resources discussed herein.

Figure 3
Proposed Condtions

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

3.1 Air Quality

Due to the nature of a solar energy generating facility, no air emissions will be generated during operations and, therefore, the operation of the Facility will have no adverse effects on air quality and no permit is required.

Temporary, potential, construction-related mobile source emissions will include those associated with construction vehicles and equipment. Any potential air quality impacts related to construction activities can be considered de minimis. Such emissions will be mitigated using available measures, including limiting idling times of equipment; proper maintenance of all vehicles and equipment; and watering/spraying to minimize dust and particulate releases. In addition, all on-site and off-road equipment will meet the latest standards for diesel emissions, as prescribed by the United States Environmental Protection Agency.

3.2 Water Resources

3.2.1 Wetlands and Watercourses

APT Registered Soil Scientists identified portions of one (1) wetland on or proximate to the Site during field inspections and wetland delineations completed on May 13, 2021. The results of the field delineation are summarized below. The location of this resource is depicted on Figure 2, *Existing Conditions*.

The Site's wetland consists of a very large complex system with a diversity of hydrological conditions, vegetation communities, and morphologies. Boundaries to this wetland are generally well defined with a distinct slope break with wetland habitat characterized by seasonally saturated seeps dominated by mature hardwood forest. The identified wetland generally drains east and south into interior broad swamp areas with pockets of seasonally flooded and/or semi-permanently flooded depressional areas. Evidence of historic anthropogenic influence was observed along the jurisdictional boundary in a constructed farm road projecting into the wetland and an apparent old, abandoned rail line. A historically constructed farm pond, accessed by the farm road, was identified interior to the wetland. This pond feature contains earthen berms along the eastern and northern edges with depths of permanent inundation exceeding five (5) feet. Fish populations were observed along the margins of the pond during the wetland investigation, which precludes this feature from being considered a potential vernal pool habitat. In addition, discontinuous watercourse features and backwater flooded areas were

noted interior to the wetland. This discontinuous watercourse becomes more channelized/well defined as it discharges from the farm pond.

A majority of the Site wetland is dominated by mature hardwood forest characterized by a dense shrub layer. Interior areas with various degrees of flooding are dominated by emergent vegetation with scrub/shrub cover occupying the transitional zones. Some wetland disturbance, particularly along the wetland edge, has occurred in association with the historical agricultural use of the property. Dominant vegetation throughout the wetland includes Red Maple (*Acer rubrum*), Yellow Birch (*Betula alleghaniensis*), Multiflora Rose* (*Rosa multiflora*), American Elm (*Ulmus americana*), Spicebush (*Lindera benzoin*), Winterberry (*Ilex verticillate*), Skunk Cabbage (*Symplocarpus foetidus*), Cinnamon Fern (*Osmunda cinnamomea*), Common Reed* (*Phragmites australis*), Silky Dogwood (*Cornus amomum*), Soft Rush (*Juncus effuses*), Jewelweed (*Impatiens capensis*), Bebb Willow (*Salix bebbiana*), Northern Arrow-wood (*Viburnum recognitum*), Common Buckthorn* (*Rhamnus cathartica*), and Fox Grape (*Vitis labrusca*).

*denotes Connecticut Invasive Plant Species

3.2.2 Vernal Pool

A singular flooded depression was identified in the central-west area of the wetland during a preliminary site inspection on May 21, 2019, which contained evidence of breeding by an obligate vernal pool species at that time (wood frog [*Lithobates sylvaticus*)] larvae observed). At the time of the wetland investigation (May 13, 2021), no evidence of vernal pool breeding was observed, which could be an indication of seasonal variability by vernal pool-dependent species. A subsequent inspection was performed on March 30th, 2022 in which a single adult wood frog and wood frog egg mass was observed. This observation verifies this pool does support breeding by a vernal pool indicator species but would not be considered a highly productive pool based on the single species and limited breeding activity. The boundary of the vernal pool was delineated and surveyed during the May 13, 2021 investigation using field observations of the seasonally flooded extents and confirmed during the March 30th, 2022 inspection. Survey methods included audial surveys to record chorusing wood frogs, visual surveys to search for adults, egg masses and larvae, and dip-netting within accessible areas to identify species within the water column and benthic material. Egg mass searches were conducted by slowly and methodically wading along the perimeter of accessible open water areas using polarized sunglasses under generally sunny skies.

The wood frog generally occurs statewide across all ecoregions and is one of the most common vernal pool indicator species. The maximum observed water depth was approximately 8 to 12 inches in the vernal pool. The relatively shallow pool bottom consists of accumulated detritus and organics with some shrubs providing attachment sites.

Construction and operation of the Facility would not result in a direct physical impact to the vernal pool. It is widely documented that vernal pool dependent amphibians are not solely reliant upon the actual vernal pool habitat for breeding (i.e., egg and larval development) but do require surrounding upland forest habitat for most of their adult lives. Accepted studies recommend protection of adjacent habitat up to 750 feet from the vernal pool edge for obligate pool-breeding amphibians (Calhoun, Klemens, 2002; "BDP").[4]

Vernal Pool Analysis

In order to evaluate potential impacts to the vernal pool and its surrounding upland habitat, the resource was assessed using the BDPs methodology developed by Calhoun and Klemens (2002) in combination with the US Army Corps of Engineers New England District's *Vernal Pool Best Management Practices* ("BMPs") (Calhoun, 2015)[5]. Collectively, these methodologies assess vernal pool ecological significance based on two (2) parameters: 1) biological value of the vernal pool (e.g., presence of state-listed species and the abundance and diversity of vernal pool indicator species); and 2) conditions of the critical terrestrial habitat. The terrestrial habitat is assessed based on the integrity of the vernal pool's two conservation zones: vernal pool envelope ("VPE" - within 100 feet of the pool's edge) and the critical terrestrial habitat ("CTH" - within 100-750 feet of the pool's edge). Based on these observations, intact forest represents the highest value habitat within both of these conservation zones to support breeding opportunities for the various obligate vernal pool indicator species that rely on forested habitat (e.g., wood frog and spotted salamander). Based on previous field observations in combination with spring 2022 vernal pool survey observations, this vernal pool meets the biological criteria for a Tier III pool.

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[4] Calhoun, A.J.K. and M.W. Klemens. 2002. Best Development Practices (BDPs): Conserving Pool-Breeding Amphibians in Residential and Commercial Developments in the Northeastern United States. WCS/MCA Technical Paper No. 5.

[5] https://www.nae.usace.army.mil/Portals/74/docs/regulatory/VernalPools/VPBMPsJan2015.pdf

The landscape condition of the vernal pool was then evaluated to determine the existing and proposed quality of the terrestrial (non-breeding) habitat. When assessing potential impacts on a vernal pool's CTH, one goal relying on the BDPs is to maintain a percentage of 25% or less development (including site clearing, grading and construction). The more recent BMPs guidance relies on preserving principal migratory vectors that link the vernal pool, forested aquatic habitats and forested terrestrial uplands that cover vernal pool indicator species' breeding, foraging, cover, and hibernation habitats.

The results of this combined landscape analysis show that the Project would comply with both the BDPs and BMPs by avoiding degradation of the vernal pool's existing tier rating or its terrestrial habitat integrity. The Project will not have any impacts in areas within 100 feet of the vernal pool and thus avoids impact to the VPE. The nearest points of the Project to the boundaries of the vernal pool are ±620 feet southeast of the fenced limits. Only 2.3% of the Project Area would be located in CTH consisting of existing mixed field associated with the golf driving range and agricultural field. This type of terrestrial habitat would be considered sub-optimal for vernal pool-dependent species due to the lack of mature forest cover. In addition, the Facility footprint would not exceed the 25% development threshold within the CTH. Proposed development within the CTH, which consists of only ±0.45 acre, would increase from 4% under existing conditions to 5% once the Facility is constructed. The proposed development also preserves the principal vernal pool migratory vectors that link it to adjacent forested wetland and terrestrial habitats, which are not intercepted by the proposed Project's footprint. In the case of the on-Site vernal pool, the directional corridor linking this vernal pool and the associated adjacent optimal habitats (e.g., forested terrestrial uplands and forested wetlands) extend radially in all directions around the pool within both the surrounding forested uplands to the north, south and west and the forested wetlands with interior upland inclusion to the northeast, east and southeast (including areas off-Site). It is anticipated that any vernal pool dependent species would use these surrounding suitable nonbreeding habitats as well as additional suitable nonbreeding habitats to the east and south beyond the Site limits. Vernal pool dependent species would not be expected to be encountered within the unsuitable Developed and suboptimal Mixed Field habitat areas associated with Project's action area. Therefore, the Project would not result in a likely adverse impact on this vernal pool resource, the associated suitable nonbreeding habitats, or to the population of vernal pool dependent species that utilize this special aquatic habitat.

Although no long-term impacts to the vernal pool will result from the Facility, short-term impacts could occur during construction activities if vernal pool-dependent species wander into the construction zone. As a precaution to avoid possible incidental injury or mortality to these species, the Petitioner proposes to implement a Resource Protection Plan.[6]

Figure 4, *Vernal Pool Analysis Map – Existing* and Figure 5, *Vernal Pool Analysis Map – Proposed* depict the Project's development relative to the vernal pool.

[6] See Appendix A, *Project Plans,* Environmental Notes – Resource Protection Measures, Sheet GN-2.

Figure 4
Vernal Pool Analysis Map - Existing

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

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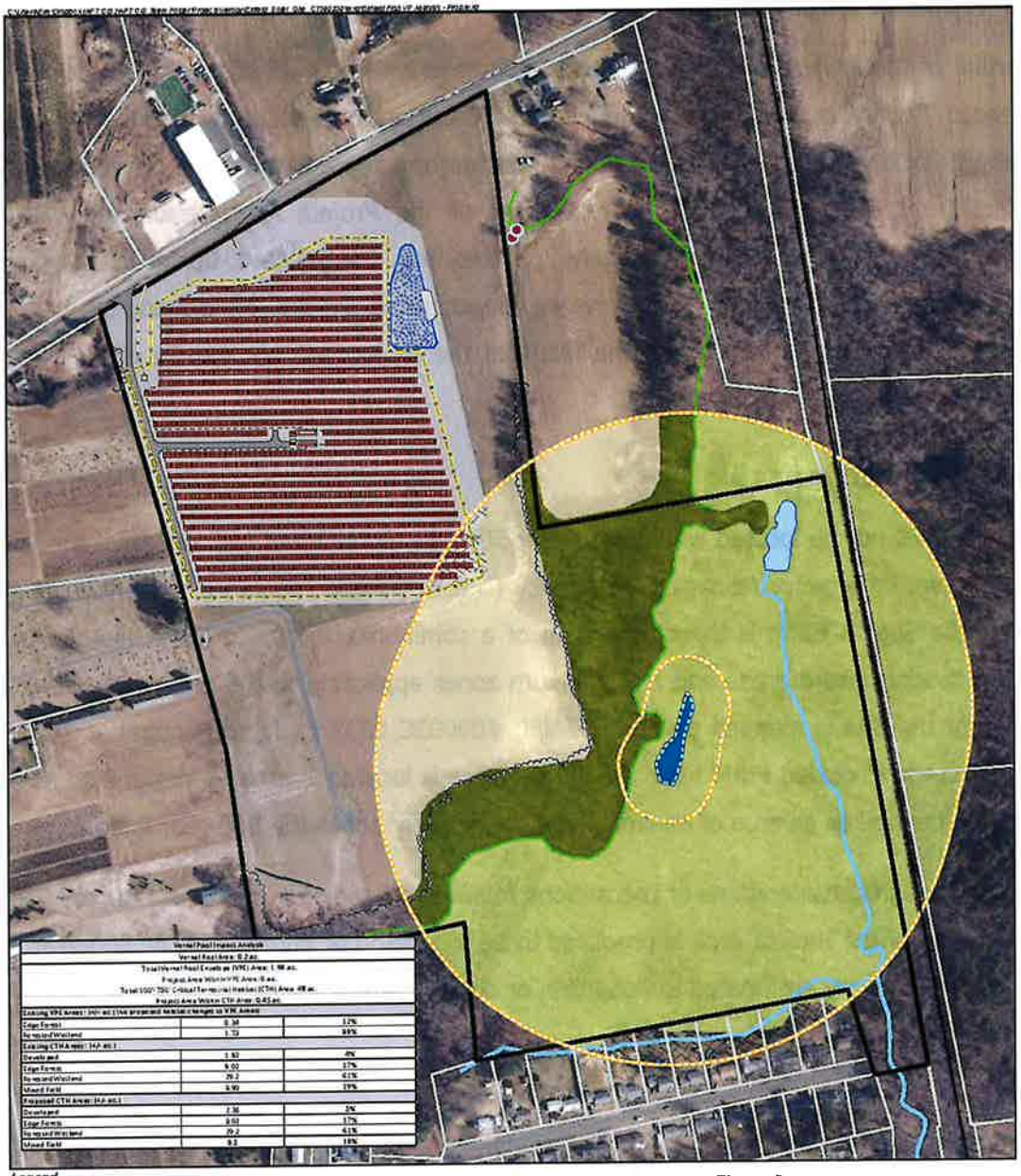

Figure 5
Vernal Pool Analysis Map - Proposed

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

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3.2.3 Wetland Impacts

No portion of the Project will result in direct impacts to wetlands. All of the solar modules and the fenced Facility maintain a minimum 100-foot buffer to the Site wetland. The nearest permanent Facility feature, consisting of the northeastern fenced limits, will be approximately 324 feet from the wetland. The nearest point of the Project Area, associated with the stormwater basin, would be approximately 233 feet from the wetland. Construction activities would not be expected to result in an adverse impact to the Site's wetland resources based on sufficient buffers being afforded and the fact that the Project will not require clearing of any mature vegetation within those buffers.

3.2.4 Floodplain Areas

The Facility will not be located within a 100- or 500-year flood zone. APT reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") covering the Site. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community. The area inclusive of the Site is mapped on FIRM PANEL #09003C 0232 F, dated September 26, 2008. Based upon the reviewed FIRM Map, the Project Area is located in an area designated as Zone X, which is defined as an area of minimal flooding, typically above the 500-year flood level.

No special design considerations or precautions relative to flooding are required for the Facility. As no portion of the Project Area is proposed to be located in or impact 100- or 500-year flood zones, no impacts are anticipated to floodplain or downstream areas.

3.3 Water Quality

As discussed in this section, the Project will comply with DEEP's water quality standards. Once operative, the Facility will be unstaffed, and no potable water uses or sanitary discharges are planned. No liquid fuels are associated with the operation of the Facility. Stormwater generated by the proposed development will be properly handled and treated in accordance with the 2004 *Connecticut Stormwater Quality Manual* and Appendix I.

3.3.1 Groundwater

Groundwater underlying the Site is classified by publicly available DEEP mapping as "GA".[7] This classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment. Based upon a review of available DEEP mapping, the Site is not located within a mapped (preliminary or final) DEEP Aquifer Protection Area; the nearest Aquifer Protection Areas are located approximately 2,500 feet west of the Site.

The Project will have no adverse environmental effect on ground water quality.

3.3.2 Surface Water

The Project will have no adverse environmental effect on surface water quality. Based upon DEEP mapping, the Site is located in Major Drainage Basin 4 (Connecticut River Basin). The majority of the Site and Project are located in Regional Drainage Basin 42 (Scantic River), Subregional Drainage Basin 4200 (Scantic River), and Local Drainage Basin 4200-23 (Terry Brook at mouth above Scantic River). The northwestern corner of the Site and Project are located in Regional Drainage Basin 40 (Connecticut River), Subregional Drainage Basin 4003 (Freshwater Brook), and Local Drainage Basin 4003-01 (Unnamed Brook at mouth above Freshwater Brook). Based upon DEEP mapping, the nearest mapped waterbody is an unnamed pond located on the eastern portion of the Site (identified in Section 3.2.1 as the historically constructed farm pond). This pond is located approximately 600 feet east of the closest portion of the Project and is classified as a Class A surface waterbody by the DEEP.[8] The Project will have no effect on this surface waterbody.

Based upon the reviewed DEEP mapping, the Site is not located within a mapped Public Drinking Supply Watershed. The nearest Public Drinking Supply Watershed is located approximately 5.3 miles to the southeast.

During construction, erosion and sediment ("E&S") controls will be installed and maintained in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*. Once

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[7] Designated uses in GA classified areas include existing private and potential public or private supplies of drinking water and base flow or hydraulically connected surface water bodies.

[8] Designated uses for A classified waterbodies include potential drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply and other legitimate uses including navigation.

operative, stormwater will be managed in accordance with the 2004 *Connecticut Stormwater Quality Manual*.

3.3.3 Stormwater Management

In addition to the 2004 Connecticut Stormwater Quality Manual and 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, the Project has been designed to meet Appendix I. Combined, these address three (3) main concerns: stormwater runoff peak attenuation, water quality volume treatment, and E&S control during construction. The Petitioner will apply for a General Permit from DEEP. Technical details, mapping, and HydroCAD modeling results are provided in a Stormwater Management Report to be provided to DEEP. A summary of these results is provided below.

Stormwater Runoff Peak Attenuation

The potential for changes in runoff from the Site as a result of Project construction has been evaluated and addressed in compliance with Appendix I. The Project will require the installation of underground utilities and overhead interconnection, an access drive and one (1) stormwater management feature. An increase in runoff will result due to the ½ step reduction of the Hydrologic Soil Group within the Facility limits as required by Appendix I.

To manage the increase in post-development runoff, one (1) grass-lined stormwater management basin with a rip-rap lined overflow weir is proposed. This feature will collect surface runoff from within the Facility, thus managing the timing and release of flow from the Project Area.

The stormwater calculations for the Project predict that the post-development peak discharges to the waters of the State of Connecticut for the 2-, 25-, 50- and 100- year storm events are less than the pre-development peak discharges. Therefore, the Project is not anticipated to result in any adverse conditions to the surrounding areas and properties.

Water Quality Volume Treatment

The Project design also provides for adequate treatment of water quality volume associated with effective impervious cover, which includes the proposed gravel access drive and concrete equipment pads. The proposed basin is designed to provide the requisite treatment volumes associated with these features.

Erosion and Sediment Control During Construction

To safeguard water resources from potential impacts during construction, the Petitioner is committed to implementing protective measures in the form of a Stormwater Pollution Control Plan ("SWPCP"), to be finalized and submitted to the Council, subject to approval by DEEP Stormwater Management. The SWPCP will include monitoring of established E&S controls that are to be installed and maintained in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control* and Appendix I.

To meet the requirement of the General Permit, three temporary sediment traps will be installed prior to the start of the Facility construction. Perimeter erosion controls (silt fence) will encircle the Project Area to capture sediment potentially mobilized during site work. The traps will be cleaned of deposited sediment as needed during construction to maintain sufficient sediment storage capacity. Upon final site stabilization, they will be removed and the stormwater management basin will be installed.

Open areas will be temporarily stabilized with quick growing annual seed during construction. The Project Area will subsequently be seeded with a permanent Ernst Pollinator-friendly Solar Farm Seed Mix (ERNMX-147 Fuzz & Buzz) upon completion of construction. The phased erosion control plan and details are provided in Appendix A, *Project Plans*.

With the incorporation of these protective measures, stormwater runoff from Project development is not anticipated to result in an adverse impact to water quality associated with nearby surface water bodies.

3.4 Habitat and Wildlife

Four (4) distinct habitat types (vegetative communities) separated by transitional ecotones are located on the Site; of these, two (2) are identified within the Project Area. These habitats were assessed using remote sensing and publicly available datasets and were physically inspected during a May 13, 2021 field evaluation.

The habitats occupying the Site are as follows:

- Mixed Field;
- Edge Forest;
- Forested Wetland; and
- Developed.

The Project Area contains Mixed Field and Developed habitats.

3.4.1 Habitat Types

Mixed Field

Mixed Field habitat encompasses a majority of the western half of the Site. This habitat consists of a regularly mowed/maintained turf field associated with the golf driving range in the northern quadrant and agricultural fields to the south. These surfaces are routinely maintained via mowing or tilling in association with their respective recreation and active agricultural uses. Routine maintenance of these fields suppresses other herbaceous and shrub species, resulting in limited wildlife habitat utilization. This habitat is dominated by cool season grasses and typical forbs like red clover (*Trifolium pratense*). Transitional scrub/shrub and edge forested areas, dominated by autumn olive (*Elaeagnus umbellata*), honeysuckle (*Lonicera japonica*), and multiflora rose, separate this habitat from surrounding wetland and forested habitats.

Project impacts will occur mostly within the Mixed Field habitat, with ±18.29 acres of disturbance. The Project's occupation of this habitat type is not viewed as significant from an ecological impact perspective, as this area is significantly disturbed from historic and current agricultural practices, lawn maintenance for the golf driving range, and a high level of human activity.

Edge Forest

Forested edge habitat occupies southern and eastern portions of the Site and serves as transitional areas between the Mixed Field and Forested Wetland habitats. Edge habitats are unique as they combine some of the characteristics of two or more adjacent vegetative cover types supporting a greater diversity of wildlife. The forested edge habitat is characterized by mature even-aged hardwood forest and a dense shrub layer which, together with adjacent forested wetland habitat, form a forested block. The forested edge habitat differs from the

adjacent Forested Wetland habitat by occurring entirely within well-drained upland soils and having a significantly different vegetative species composition. Dominant species within the Forested habitat include red oak (*Quercus rubra*) and sugar maple (*Acer saccharum*) with areas of black cherry (*Prunus serotina*), black birch (*Betula lenta*) and red maple. A moderately dense understory is dominated by bush honeysuckles (*Lonicera spp.)*, witch hazel (*Hamamelis virginiana*), multiflora rose, spicebush (*Lindera benzoin*), and Japanese barberry (*Berberis thindergii*). The forest floor consists of hayscented fern (*Dennstaedtia punctilobula*), cinnamon fern, and Canada mayflower (*Maianthemum candense*).

There is no proposed clearing of edge forest. Any potential secondary short-term impacts during the development stages will be minimized through the proper stabilization of soils during construction through strict adherence to the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*.

Forested Wetland

As introduced previously in Section 3.2.1, Wetland habitat occurs throughout the eastern and southeastern portions of the Site, and serves as a transitional ecotone between upland forested habitats and early successional/developed habitats associated with the agricultural and recreational operations. The on-Site wetland consists of a large complex system with diverse hydrology, morphology and vegetative communities. Seasonally saturated seeps dominated by a mature hardwood forest drain east and south into a broad swamp area with pockets of seasonally flooded and/or semi-permanent flooded depressions. Evidence of filled/altered areas appears along the wetland jurisdictional boundary along with interior anthropogenic features such as a constructed farm road, abandoned rail line, and constructed farm pond.

As discussed in Section 3.2.3, no direct impacts to wetlands are proposed from the proposed development; all construction activities will maintain setbacks exceeding 200 feet from surrounding Wetland habitat. There is no proposed clearing associated with the Project. Erosion and sediment control measures will be installed and maintained as part of the Project to avoid potential secondary impacts to the adjacent forested wetland.

Developed

The Site contains two Developed areas. The first is located along North Street in the central portion of the Site, and consists of a parking lot and an outbuilding servicing the golf driving

range operation. The second is located in the southwestern portion of the Site and consists of an access road and cemetery. The Facility will redevelop ±1.36 acres of Developed areas associated with the golf driving range parking lot and outbuilding.

Table 1, *Habitat Areas* provides the total acreages of each habitat type located on the Site and within the Project Area.

Table 1: Habitat Areas

Habitat Areas		
Habitat Type	Total Area On-Site (± ac.)	Area Occupied by Project (± ac.)
Developed	6.7	1.36
Edge Forest	8.6	0.00
Forested Wetland (including Farm Pond)	25.2	0.00
Mixed Field	33.4	18.29

3.4.2 Core Forest Determination

APT reviewed the DEEP's *Forestland Habitat Impact Mapping* [9], which revealed that the Site is not included within an area mapped as core forest. APT also reviewed UConn's Center for Land Use Education and Research's ("CLEAR") Forest Fragmentation Analysis ("FFA")[10] study and, based on FFA criteria, the Site does not contain any forested habitat identified as "core" forest. Based on the FFA criteria and using APT's independent analysis, only the far eastern side of the Site would be considered part of a small core forest patch located primarily off-Site farther to the east. The Project Area will be entirely located within an existing cleared area; no tree clearing is proposed. As a result, no impacts to forested resources will occur.

In accordance with Connecticut General Statutes §16-50k(a), and based on the size of the proposed Facility (>2.0 MW), the Petitioner sent email correspondence to DEEP Forestry on September 28, 2021 documenting that the Project will not materially affect core forest. The

[9] Source: http://ctdeep.maps.arcgis.com/apps/webappviewer/index.html?id=7b81844bab634281b544c20bf2d7bfb8: This spatial screening layer identifies prime contiguous and connected core forestland blocks. If the project intersects with the Forestland Habitat Impact Map there is a potential for material effects to core forest.

[10] CLEAR's FFA: http://clear.uconn.edu/projects/landscape/forestfrag/forestfrag_public%20summary.pdf

Petitioner received a letter from DEEP dated March 22, 2022 concurring that the Project would have no impact on core forest. See Appendix C, DEEP and DOA correspondence.

Development of the Project will not require clearing of any trees. No forested habitat will be impacted by the proposed Facility. Therefore, the Project will not affect core forest resources.

3.4.3 Wildlife

Development of the Project will occur within portions of two (2) of the Site's four (4) habitats, with a majority of the proposed Facility occupying what is currently Mixed Field. The Developed and Mixed Field habitat areas currently provide limited value from a wildlife utilization standpoint as a result of routine management of these areas and high level of human activity associated with the golf driving range and cultivated cropland. Project-related impacts within these habitats are limited and are not anticipated to adversely affect wildlife.

Based on the surrounding land uses, the adjacent edge upland forest located in proximity to the Project Area is likely utilized by species that prefer edge forest habitat and are more tolerant of human disturbance and habitat fragmentation. Generalist wildlife species, including among others several song birds and mammals such as raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), grey squirrel (*Sciurus carolinensis*), Virginia opossum (*Didelphus virginiana*), white-tailed deer (*Odocoileus virginianus*), and eastern chipmunk (*Tamias striatus*) could be expected to use this area. Due to the relatively small size of this habitat patch, and given the abundance of similar habitat surrounding the Site, the Project is not anticipated to result in a significant impact to wildlife.

The Project Area will not encroach into the southern/eastern Edge Forest or Wetland Forest habitats. Project development will occur in existing Mixed Field and Developed or disturbed areas that afford limited wildlife habitat. Wildlife utilization within nearby Edge Forest and Wetland Forest habitats is expected to continue relatively uninterrupted with the proposed Facility. Noise and associated human activities that would occur during construction may result in limited, temporary disruption to wildlife using nearby Edge Forest or Wetland Forest habitats. Any wildlife displaced during construction would be expected to temporarily disperse into surrounding Edge Forest and Wetland Forest habitats located farther to the east and south. Post construction, operation of the Facility will not result in a likely adverse effect to wildlife

using these habitats because it will be unoccupied and does not generate any significant noise, traffic, or high level of human activity.

3.5 Rare Species

APT reviewed publicly available information to determine the potential presence of state/federally listed species and critical habitat on or proximate to the Site. A discussion is provided in the following sections.

3.5.1 Natural Diversity Data Base

The DEEP Natural Diversity Data Base ("NDDB") program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state-listed species and to help landowners conserve the state's biodiversity. In furtherance of this endeavor, the DEEP also developed maps to serve as a pre-screening tool to help Petitioners determine if there is the potential for project-related impact to state-listed species.

The NDDB maps represent approximate locations of (i) endangered, threatened and special concern species and, (ii) significant natural communities in Connecticut. The locations of species and natural communities depicted on the maps are based on data collected over the years by DEEP staff, scientists, conservation groups, and landowners. In some cases, an occurrence represents a location derived from literature, museum records and/or specimens. These data are compiled and maintained in the NDDB. The general locations of species and communities are symbolized as shaded (or cross-hatched) polygons on the maps. Exact locations have been masked to protect sensitive species from collection and disturbance and to protect landowner's rights whenever species occur on private property.

APT reviewed the most recent DEEP NDDB mapping (December 2021), which revealed that a NDDB polygon exists within the Site but does not encroach into the Project Area. Because state-listed species or communities are documented on the Site, consultation with NDDB is required for the General Permit. Consultation was performed with NDDB and a response was received on June 18, 2021 indicating a single species, the Blue-spotted salamander "complex" (*Ambystoma laterale*), a species of State Special Concern, was located on or near the Site. The NDDB review letter indicated that the blue-spotted salamander "complex" results in the hybridization of the blue-spotted salamander with the Jefferson salamander. The hybrids can only be reliably distinguished by karyological and biochemical analyses. Blue-spotted salamanders are

associated with riparian red maple swamps such as the forested wetland that occupies the eastern and southern portions of the Site. Blue-spotted salamander populations are primarily threatened by habitat fragmentation.

The Facility will not directly impact blue-spotted salamander habitat and the stormwater management system and erosion and sedimentation control plan have been devised to ensure no discharges from the Facility (both during construction and post-construction operation) would negatively impact water chemistry, quality or quantity in nearby wetlands or the vernal pool.

No incidental evidence of blue-spotted salamander breeding or adults was observed during any of the referenced site inspections[11]. However, the Site contains habitat potentially suitable for blue-spotted salamander and the vernal pool could potentially support breeding habitat for this salamander. Therefore, protective measures will be implemented during construction of the Facility to prevent adverse impacts to surface water quality, including wetlands and the vernal pool. A Resource Protection Plan (*see* Appendix A) is proposed that focuses on the protection of any potential blue-spotted salamanders and other vernal pool-dependent species that might migrate into the construction zone.

3.5.2 USFWS Consultation

Federal consultation was completed in accordance with Section 7 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC"). Based on the results of the IPaC review, one federally-listed[12] threatened species is known to occur in the vicinity of the Site, northern long-eared bat ("NLEB"; *Myotis septentrionalis*). The NLEB's range encompasses the entire State of Connecticut and suitable NLEB roost habitat includes trees (live, dying, dead, or snag) with a diameter at breast height ("DBH") of three (3) inches or greater.

APT reviewed the DEEP's publicly available *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance* map (February 1, 2016) to determine the locations of any known maternity roost trees or hibernaculum in the state.

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[11] DEEP's June 18, 2021 letter did not require an active survey for blue-spotted salamander; therefore, none was performed.

[12] Listing under the federal Endangered Species Act

This map reveals that there are currently no known NLEB maternity roost trees in Connecticut. The nearest NLEB habitat resource to the Site is located in East Granby, approximately 10.3 miles to the west.

APT completed a determination of compliance with Section 7 of the Endangered Species Act of 1973 for the Project. In compliance with the USFWS criteria for assessing NLEB, the Project will not likely result in an adverse effect or incidental take[13] of NLEB and does not require a permit from USFWS. A USFWS letter dated January 11, 2022 confirmed compliance; thus, no further consultation with USFWS is required for the proposed activity.

A full review of the *Endangered Species Act (ESA) Compliance Determination* and USFWS's Response Letter is provided in Appendix B, *USFWS and NDDB Compliance Statement.*

3.6 Soils and Geology

The construction of the water quality basins and swales and grading within the Project Area will generate some excess material that will be redistributed on Site. Topsoil will be segregated from underlying soil, stockpiled, and spread over disturbed areas being seeded. See Appendix A, *Project Plans.*

All exposed soils resulting from construction activities will be properly and promptly treated in accordance with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control.*

Surficial materials within the Project Area are deposits of sand. Bedrock beneath the Subject Property is identified as Portland Arkose, which is described as a reddish-brown to maroon micaceous arkose and siltstone and red to black fissile silty shale.[14]

The Petitioner does not anticipate encountering bedrock during Project development.

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[13] "Incidental take" is defined by the Endangered Species Act as take that is "incidental to, and not the purpose of, the carrying out of an otherwise lawful activity." For example, harvesting trees can kill bats that are roosting in the trees, but the purpose of the activity is not to kill bats.

[14] Connecticut Natural Resources Atlas Series: Bedrock Geological map, cteco.uconn.edu/maps/state/Bedrock_Geologic_Map_of_Connecticut.pdf

3.6.1 Prime Farmland Soils

In accordance with the Code of Federal Regulations, CFR Title 7, part 657, farmland soils include land that is defined as prime, unique, or farmlands of statewide or local importance based on soil type. They represent the most suitable land for producing food, feed, fiber, forage, and oilseed crops.

According to the Connecticut Environmental Conditions Online Resource Guide[15], approximately 49 acres of the Site contain Prime Farmland Soils (See Figure 2, *Existing Conditions Map)*, including the entire Project Area. The ±19.65-acre Project Area represents ±40.0% of such soils on the Site. No portion of the Project Area is used for agricultural purposes, and no change is proposed for areas of the Site currently under use for agricultural purposes.

Clearing, excavation and regrading activities are necessary within areas mapped as Prime Farmland Soils to facilitate Project development. The water quality basin allows the Project to comply with Appendix I. Topsoil removed from these areas will be segregated from underlying horizons, temporarily stockpiled and used as top dressing for reestablishing vegetation (with a pollinator-friendly seed mix). No topsoil will leave the Site.

After its useful life, the Facility will be decommissioned and all of the disturbed areas will be reseeded with the same (or approved equivalent) blend as established within the rest of the Project Area, ultimately creating additional available cleared areas for agricultural use. Therefore, the Project will not materially affect Prime Farmland Soils.

In accordance with Connecticut General Statutes §16-50k(a), the Petitioner initiated consultation with the Connecticut Department of Agriculture ("DOA") in September 2021, including information on the Project and a proposed sheep grazing plan. The Petitioner has since met with representatives of the agency. The Petitioner received a letter from the DOA, dated March 16, 2022, stating that the Project will not materially affect Prime Farmland Soils. See Appendix C, DEEP and DOA correspondence.

[15] Connecticut Environmental Conditions Online (CTECO) Resource Guide, www.cteco.uconn.edu.

3.7 Historic and Archaeological Resources

At the request of APT, and on behalf of the Petitioner, Heritage Consultants LLC ("Heritage") reviewed relevant historic and archaeological information to determine whether the Site holds potential historic or cultural resource significance. Their review of historic maps and aerial images of the Site, examination of files maintained by the Connecticut State Historic Preservation Office ("SHPO"), and a pedestrian survey of the Site revealed two (2) National Register of Historic Places ("NRHP") or State Register of Historic Places properties and three previously recorded archaeological sites are located within one (1) mile of the Site. That information was presented to the SHPO in a Phase 1A Cultural Resources Assessment Survey. The SHPO concurred that neither the archaeological sites nor the NHRP resources will be impacted by the Project.

In terms of archaeological potential, Heritage determined that the Project Area retains a moderate to high potential to contain intact archaeological deposits in the subsoil. The SHPO concurred, and requested a Phase 1B Professional Cultural Resources Assessment and Reconnaissance Survey of the Project Area. That effort is ongoing, and will be shared with the SHPO upon completion.

The Phase 1A report is included in Appendix D.

3.8 Scenic and Recreational Areas

No state or local designated scenic roads or scenic areas are located near the Site and therefore none will be physically or visually impacted by development of the Project. The nearest scenic road is a portion of State Route 75 in Suffield, located approximately 6 miles west of the Project Area. There are no CT Blue Blaze Hiking Trails located proximate to the Site.

The nearest public open space is the Scantic River State Park, approximately 0.56 mile south of the Facility. See Figure 6, *Surrounding Features Map,* for these and other resources located within one mile of the Project Area.

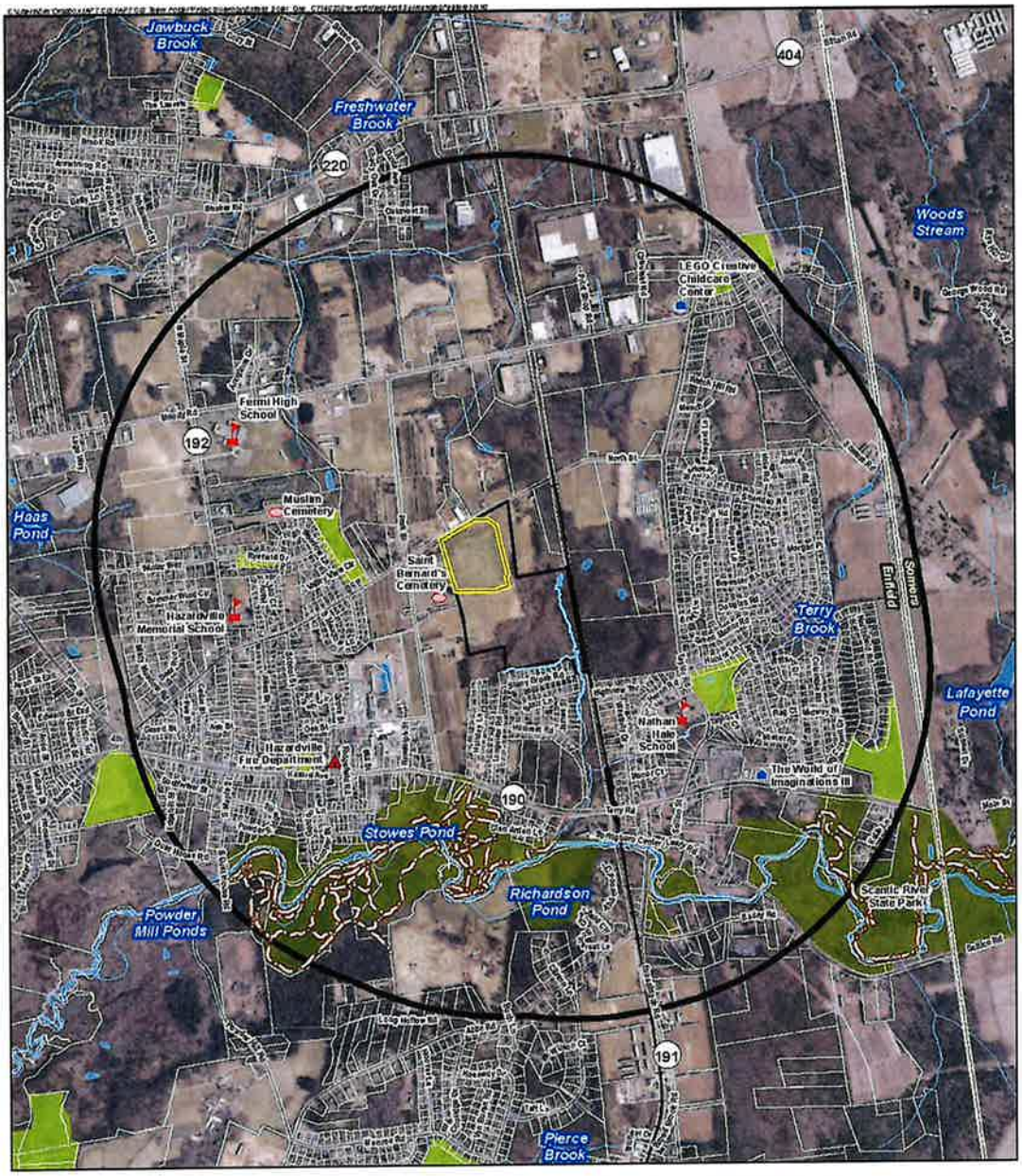

Figure 6
Surrounding Features Map

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

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3.9 Noise

The Site contains cleared fields, portions of a cemetery, and wooded land. Noise associated with human activities is currently generated on the Site.

Construction noise is exempted under State of Connecticut regulations for the control of noise, RCSA 22a-69-1.8(h) and the Town's noise ordinance. During construction of the Facility, the temporary increase in noise would likely raise localized ambient sound levels immediately surrounding the Project Area. Standard types of construction equipment would be used for the Project. In general, the highest noise level from this type of equipment (e.g., backhoe, bulldozer, crane, trucks, etc.) is approximately 88 dBA at the source.

Once operational, noise from the Facility will be minimal; the Facility's only noise generating equipment are the inverters and transformers. Based on the most conservative information provided by specified equipment manufacturers, the inverters are the loudest proposed equipment; they will generate a maximum sound level of approximately 73 dBA (measured at 1-meter away). The Site is located within a residential zoning district but the Facility would, conservatively, be considered a Class C (Industrial) noise emitter. The nearest property line from the inverters is ±410 feet to the west; that parcel, at the corner of North Street and Park Street is within an industrial zoning district but contains a residential dwelling, which would be considered a Class A Noise Receptor Zone.[16] As such, noise standards of 61 dBA during the daytime and 51 dBA at night apply.

Sound reduces with distance, and the inverters and transformers are inactive at night. APT applied the Inverse Square Law[17] to evaluate the relative sound level of the inverters to the nearest receptor. The calculation shows that the 73 dBA would reduce to 31.0 dBA at a distance of 410 feet. With increased distance from the source, the noise level would decrease further. Thus, all off-Site receptors are of sufficient distances from the proposed Project-related equipment that, once operational, noise levels during Facility operation will meet applicable State noise standards for a Class A Noise Receptor Zone.[18] Additionally, the Petitioner has

[16] RCSA 22a-69-3.5. Noise Zone Standards

[17] Inverse Square Law states that *the intensity of a force is inversely proportional to the square of the distance from that force*. With respect to sound, this means that any a noise will have a drastic drop-off in volume as it moves away from the source and then shallows out.

[18] It should be noted that several of the properties abutting the Site are Class B or Class C noise receptors, and therefore would be subject to higher limits.

commissioned a detailed noise study for the proposed equipment, which will be made available upon completion of the report.

Please refer to the transformer and inverter specification sheets provided in Appendix D, *Product Information Sheets*.

3.10 Lighting

Lighting is currently limited to minimal lighting at the northern end of the Site associated with the golf center during season operation. No exterior lighting is planned for the Project. There will be some small, non-intrusive lighting fixtures within the equipment to aid in maintenance.

3.11 FAA Determination

The Petitioner submitted relevant Project information to the Federal Aviation Administration ("FAA") for an aeronautical study to evaluate potential hazards to air navigation. The nearest airport is the Skylark Private Airport located approximately 6.6 miles to the southwest in the neighboring town of East Windsor. The FAA provided Determinations of No Hazard to Air Navigation on March 14, 2022. See Appendix F, *FAA Determinations.* Based on this determination, there is no need to conduct a glare analysis.

3.12 Visibility

The Facility will consist of 11,050 non-reflective solar panels measuring approximately 10 feet above grade. The proposed electrical interconnection will require the installation of approximately five (5) new utility poles in the northwestern corner of the Site.

The solar modules are designed to absorb incoming solar radiation and minimize reflectivity, such that only a small percentage of incidental light will be reflected off the panels. This incidental light is significantly less reflective than common building materials, such as steel, or the surface of smooth water. The panels will be tilted up toward the southern sky at a fixed angle of 25 degrees, thereby further reducing reflectivity.

APT assessed the predicted visibility of the Facility with a Project-specific computer analysis of a one-mile radius around the Site. As depicted on the resulting viewshed maps, year-round visibility of the proposed Facility may be experienced from off-Site surrounding areas across

open, cleared areas to the east, west and north along North Street and Park Street for distances up to approximately 0.4 mile. Photo 2 represents an unobstructed view at a close distance. At other locations along nearby roadways, distance, intervening obstructions and background will soften views of the Facility, as shown in Photos 1, 3 and 4. Seasonally, when the leaves are off the trees, some additional visibility may be experienced, primarily to the north. The Facility's interconnect utility poles are predicted to be visible in additional areas to the northwest and southwest. However, due to distance and proximity to existing utility infrastructure, the incremental impact on views is not anticipated to be significant.

Please see Appendix G, *Visibility Documentation* for viewshed maps and photo-simulations.

4 Conclusion

As demonstrated in this Environmental Assessment, the Project will comply with the DEEP air and water quality standards. Further, it will not have an undue adverse effect on the existing environment and ecology; nor will it affect the scenic, historic and recreational resources in the vicinity of the Project.

Once operative, the Facility will be unstaffed and generate minimal traffic.

The Project Area is cleared. Development of the Project will have no significant impact on existing habitats and wildlife. The Northern long-eared bat was identified as potentially occurring within the vicinity of the Site but the Project is not expected to result in an adverse effect or an incidental take.

The Project Area is located within mapped Prime Farmland Soils. The Petitioner has designed the Project to minimize disturbance to these soils by proposing minimally intrusive methods for construction and installation of Facility components and limiting excessive grading and compaction. No soil will be exported from the Site. The Petitioner will seed all disturbed areas with a pollinator-friendly seed mix. Once the Facility has reached the end of its useful life, the panels and equipment will be removed and the Project Area restored. In addition, the Petitioner has proposed a sheep grazing plan that will add an agricultural component to land not currently under agricultural use.

Predicted visibility of the proposed Facility beyond the Site is primarily limited to areas within approximately 0.4 mile to the north, west and east, and over cleared fields.

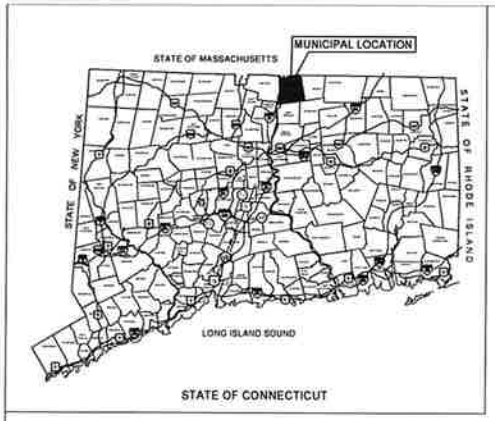
There are no impacts, direct or indirect, to wetlands on the Site. The nearest wetland boundary to the Project area is over 200 feet away. E&S controls will be installed and maintained throughout construction in accordance with the Project's Resource Protection Plan. The distance from the main areas of disturbance within the fenced Facility to wetlands and implementation of protective management techniques will mitigate potential impacts to these resources during construction.

Overall, the Project's design minimizes the creation of impervious surfaces and maintains existing grades. Grading and excavation will be required for the development of the Facility and

the construction of the water quality management feature. The Project has been designed to adequately handle water volume, in accordance with the DEEP's *General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities* as well as Appendix I. The Petitioner will implement a SWPCP, in accordance with the 2002 *Connecticut Guidelines for Soil Erosion and Sediment Control*, that will include provisions for monitoring of development activities and the establishment of E&S controls to be installed and maintained throughout construction.

APPENDIX A

PROJECT PLANS



ENFIELD SOLAR ONE, LLC

"ENFIELD SOLAR ONE, LLC"
110 NORTH STREET
ENFIELD, CT 06082

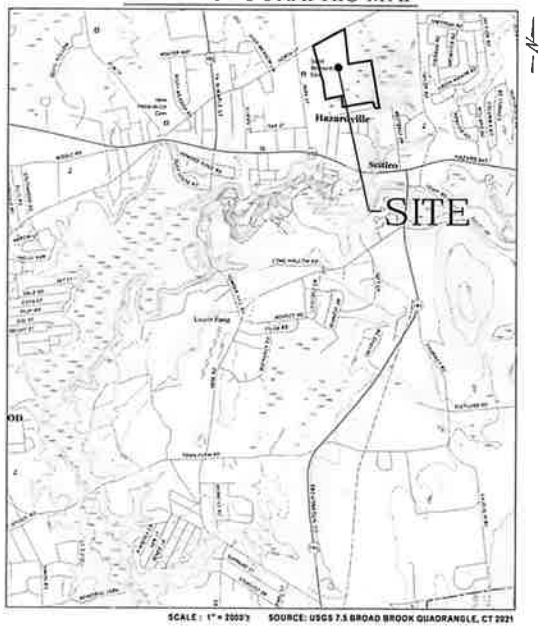
CSC PETITION PLAN SET
APRIL 11, 2022

LIST OF DRAWINGS

SITE INFORMATION

SITE NAME:	"ENFIELD SOLAR ONE, LLC"
LOCATION:	110 NORTH STREET ENFIELD, CT 06082
SITE TYPE/DESCRIPTION:	ADD GROUND MOUNTED SOLAR PANEL ARRAY W/ ASSOCIATED EQUIPMENT, GRAVEL ACCESS ROAD, AND STORMWATER MANAGEMENT.
PROPERTY OWNER:	CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC. 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473
APPLICANT:	ENFIELD SOLAR ONE, LLC 150 TRUMBULL STREET, 4TH FLOOR HARTFORD, CT 06103
ENGINEER CONTACT:	ROBERT C. BURNS, P.E. (860) 552-2036
LATITUDE: LONGITUDE: ELEVATION:	41°59'41.79" N 72°31'31.83" W 168'± AMSL
MBLU: ZONE: EXISTING LAND USE: PROPOSED LAND USE:	100 5 R33 RESIDENTIAL - CEMETERY COMMUNICATIONS, TRANSPORTATION AND PUBLIC UTILITY USES LARGE SCALE GROUND MOUNTED SOLAR PHOTOVOLTAIC INSTALLATIONS
TOTAL SITE: TOTAL DISTURBED AREA:	73.88± AC 19.65± AC
PROP. SITE GRADING APPROX. VOLUME OF CUT: APPROX. VOLUME OF FILL:	 1,430± CY 930± CY
APPROX. OVERALL NET VOLUME:	500± CY OF CUT
PROP. GRAVEL ACCESS ROAD: PROP. SILT FENCE: TREE CLEARING AREA: IMPERVIOUS AREA:	880± LINEAR FEET 2,910± LINEAR FEET 0± ACRE 18,910± SQUARE FEET

USGS TOPOGRAPHIC MAP



SCALE: 1" = 2000' SOURCE: USGS 7.5 BROAD BROOK QUADRANGLE, CT 2021

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHAUL STREET EXTENSION - SUITE 311
WATERFORD CT 06385 PHONE (860)493-1997
WWW.ALLPOINTSTECH.COM FAX (860)493-0512

CSC PERMIT SET

NO	DATE	REVISION
0	03/04/22	DRAFT SET FOR REVIEW: RCB
1	03/15/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT1902230

DRAWN BY: CSH

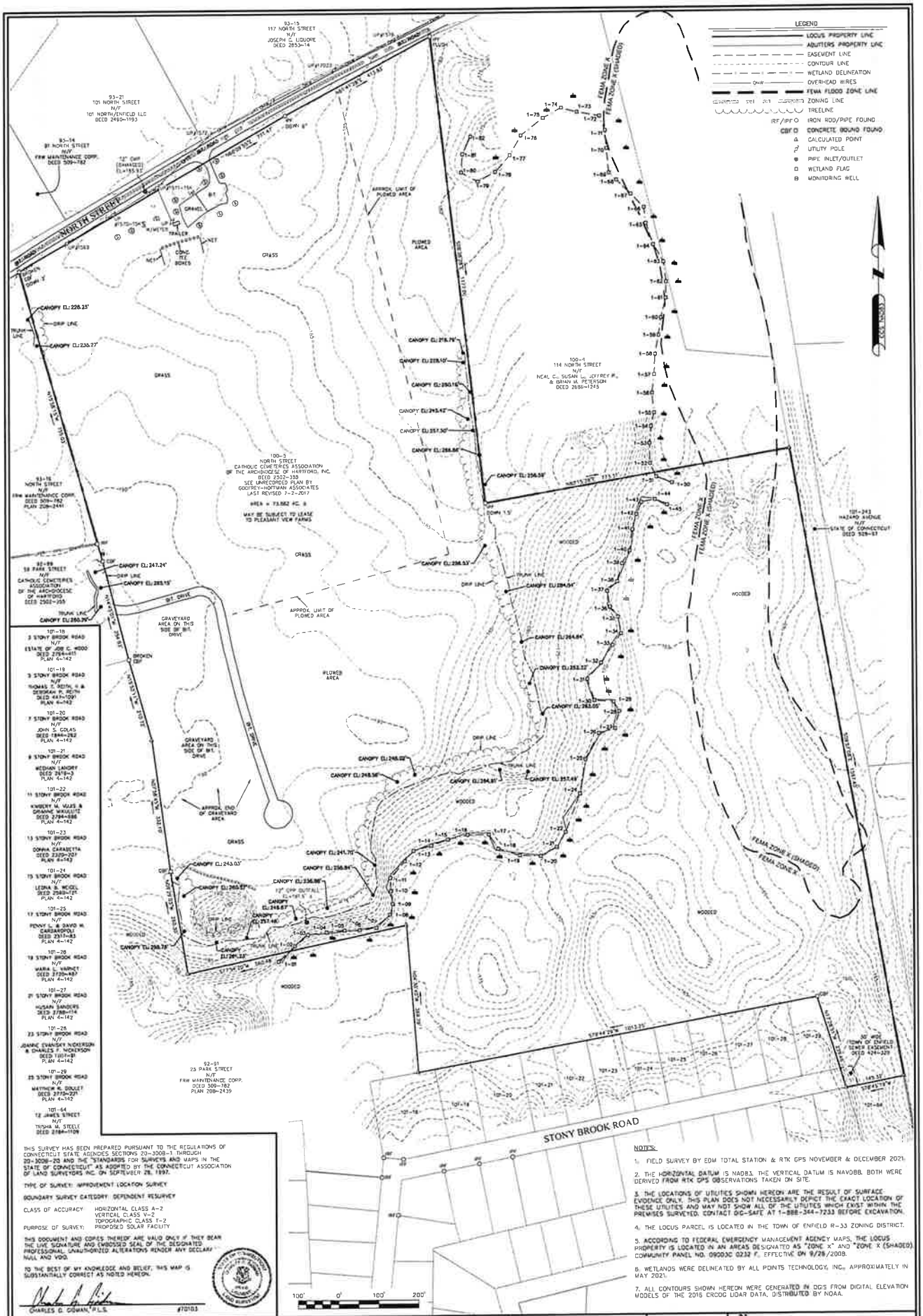
DATE: 03/04/22 CHECKED BY: RCB

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

T-1



THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300B-1 THROUGH 20-300B-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1997.

TYPE OF SURVEY: IMPROVEMENT LOCATION SURVEY

BOUNDARY SURVEY CATEGORY: DEPENDENT RESURVEY

CLASS OF ACCURACY: HORIZONTAL CLASS A-2
VERTICAL CLASS V-2
TOPOGRAPHIC CLASS T-2

PURPOSE OF SURVEY: PROPOSED SOLAR FACILITY

THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE LIVE SIGNATURE AND EMBOSSED SEAL OF THE DESIGNATED PROFESSIONAL. UNAUTHORIZED ALTERATIONS RENDER ANY DECLARATIONS NULL AND VOID.

TO THE BEST OF MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

CHARLES G. GOWAN, P.L.S. #70183

NOTES:

1. FIELD SURVEY BY EDM TOTAL STATION & RTK GPS NOVEMBER & DECEMBER 2021.
2. THE HORIZONTAL DATUM IS NAD83. THE VERTICAL DATUM IS NAVD88. BOTH WERE DERIVED FROM RTK GPS OBSERVATIONS TAKEN ON SITE.
3. THE LOCATIONS OF UTILITIES SHOWN HEREON ARE THE RESULT OF SURFACE EVIDENCE ONLY. THIS PLAN DOES NOT NECESSARILY DEPICT THE EXACT LOCATION OF THESE UTILITIES AND MAY NOT SHOW ALL OF THE UTILITIES WHICH EXIST WITHIN THE PREMISES SURVEYED. CONTACT DIG-SAFE AT 1-888-344-7233 BEFORE EXCAVATION.
4. THE LOCUS PARCEL IS LOCATED IN THE TOWN OF ENFIELD R-33 ZONING DISTRICT.
5. ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY MAPS, THE LOCUS PROPERTY IS LOCATED IN AN AREAS DESIGNATED AS "ZONE X" AND "ZONE X (SHADED) COMMUNITY PANEL NO. 09003C 0232 F, EFFECTIVE ON 9/26/2008.
6. WETLANDS WERE DELINEATED BY ALL POINTS TECHNOLOGY, INC. APPROXIMATELY IN MAY 2021.
7. ALL CONTOURS SHOWN HEREON WERE GENERATED IN DGS FROM DIGITAL ELEVATION MODELS OF THE 2016 CRCOG LIDAR DATA, DISTRIBUTED BY NOAA.

SHEET NO. 1 OF 1	PLAN OF LAND IN ENFIELD, CT PREPARED FOR VEROGY		
SURVEYOR: CGG	ENGINEER: –	BOUNDARY SURVEY & LIDAR CONTOURS	NORTHEAST SURVEY CONSULTANTS
DRAFTING: JDC	DESIGN: –		3 FERRY STREET STUDIO 1 EAST BASTHAMPTON, MA 01027 (413) 203-1144
FIELD WORK: NAE	HORZ. SCALE: 1"=100'		
PROJECT NUMBER: 21-124	VERT. SCALE: –		
DRAWING NAME: 21-124.DWG	DATE: 3-11-2022		

GENERAL NOTES

1. ALL CONSTRUCTION SHALL COMPLY WITH PROJECT DEVELOPER STANDARDS, TOWN OF ENFIELD STANDARDS, CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY
2. IF NO PROJECT CONSTRUCTION SPECIFICATION PACKAGE IS PROVIDED BY THE PROJECT DEVELOPER OR THEIR REPRESENTATIVE, THE CONTRACTOR SHALL COMPLY WITH THE MANUFACTURER, TOWN OF ENFIELD, CONNECTICUT DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION, OR CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND BE IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS
3. THE PROJECT DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING AND STORMWATER PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL ENFIELD CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK
4. REFER TO PLANS, DETAILS AND REPORTS PREPARED BY ALL POINTS TECHNOLOGY CORPORATION FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE PROJECT DEVELOPER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING/CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE PROJECT DEVELOPER'S CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION
5. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS AND SPECIFICATIONS TO THE PROJECT DEVELOPER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW
6. SHOULD ANY UNKNOWN OR INCORRECTLY LOCATED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE PROJECT DEVELOPER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA
7. DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE PROJECT DEVELOPER OR OTHERS DURING OCCUPIED HOURS, EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE PROJECT DEVELOPER AND THE LOCAL MUNICIPALITY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED
8. THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS
9. THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR
10. THE CONTRACTOR SHALL COMPLY WITH OSHA CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS
11. THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OF PERSONNEL OR TO SUPERVISE SAFETY AND DOES NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY
12. THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE PROJECT DEVELOPER OR THE TOWN OF ENFIELD
13. THE CONTRACTOR SHALL PROVIDE AS BUILT RECORDS OF ALL CONSTRUCTION INCLUDING UNDERGROUND UTILITIES TO THE PROJECT DEVELOPER AT THE END OF CONSTRUCTION
14. ALTERNATIVE METHODS AND PRODUCTS, OTHER THAN THOSE SPECIFIED, MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING/CONSTRUCTION PROCESS.
15. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT 811 AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS
16. NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS IS GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES

SITE PLAN NOTES

1. THE SURVEY WAS PROVIDED BY NORTHEAST SURVEY CONSULTANTS, DATED DECEMBER 22, 2021
2. THERE ARE WETLANDS LOCATED ON THE SITE AS INDICATED ON THE PLANS. WETLAND BOUNDARIES WERE FLAGGED AND LOCATED BY ALL POINTS TECHNOLOGY CORPORATION, IN MAY 2021
3. THE CONTRACTOR SHALL FOLLOW THE RECOMMENDED SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION CONTROL PLAN OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL BY THE ENGINEER AND/OR PERMITTING AGENCIES PRIOR TO THE START OF CONSTRUCTION. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW
4. PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR WETLANDS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY GOVERNMENT AGENCIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN
5. ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK, SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95% PERCENT OF OPTIMUM MOISTURE CONTENT
6. ALL DISTURBANCE INCURRED TO PUBLIC, MUNICIPAL, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF ENFIELD AND STATE OF CONNECTICUT
7. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPER'S ENVIRONMENTAL CONSULTANT

UTILITY NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF ENFIELD TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES
2. REFER TO DRAWINGS BY PROJECT DEVELOPER FOR THE ONSITE ELECTRICAL DRAWINGS AND INTERCONNECTION TO EXISTING ELECTRICAL GRID. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT. THESE DETAILS ARE NOT INCLUDED IN THESE PLANS
3. UTILITY LOCATIONS AND PENETRATIONS ARE SHOWN FOR THE CONTRACTOR'S INFORMATION AND SHALL BE VERIFIED WITH THE ELECTRICAL ENGINEER AND THE PROJECT DEVELOPER'S CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION
4. THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROP. SANITARY SEWERS AND WHERE PROP. STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE PROJECT DEVELOPER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
5. UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW
6. THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER
7. THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT
8. ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT AFTER UTILITY INSTALLATION IS COMPLETED. THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE TOWN OF ENFIELD.
9. ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD
10. RELOCATION OF UTILITY PROVIDER FACILITIES, SUCH AS POLES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER
11. THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION
12. CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS
13. ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS
14. A ONE FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER. A 6 INCH TO 18 INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE PROP. SANITARY PIPING
15. THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE PROJECT DEVELOPER AND THE TOWN OF ENFIELD
16. INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "CALL BEFORE YOU DIG" AT 811 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROP. UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS
17. THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY
18. ELECTRIC DRAWINGS AND REQUIREMENTS ARE NOT INCLUDED AS PART OF THIS DRAWING SET AND SHOULD BE OBTAINED FROM THE PROJECT DEVELOPER
19. ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION
20. THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS NOTE AUTHORIZED TO DISCONNECT BY THE PROJECT DEVELOPER, TOWN OF ENFIELD, UTILITY PROVIDERS AND GOVERNING AUTHORITIES

GENERAL LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
BUILDING SETBACK		
EASEMENT		
TREE LINE		
WETLAND		
WETLAND BUFFER		
VERNAL POOL		
VERNAL POOL BUFFER		
WATERCOURSE		
WATERCOURSE BUFFER		
LIMIT OF PLOWED AREA		
MAJOR CONTOUR		
MINOR CONTOUR		
UNDERGROUND ELECTRIC		E E
OVERHEAD ELECTRIC		OE OE
BASIN		
FENCE		X X X
LIMIT OF DISTURBANCE		LOD
SILT FENCE		SF SF

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
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CSC PERMIT SET

NO	DATE	REVISION
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1	03/16/22	FOR PERMIT: RCB
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DESIGN PROFESSIONAL OF RECORD

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OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
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ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT380230

DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER:
GN-1

ENVIRONMENTAL NOTES
RESOURCE PROTECTION MEASURES

VERNAL POOL PROTECTION PROGRAM

AS A RESULT OF THE FACILITY'S LOCATION IN THE VICINITY OF SENSITIVE VERNAL POOL AND WETLAND HABITAT, THE FOLLOWING PROTECTION PROGRAM SHALL BE IMPLEMENTED BY THE CONTRACTOR TO AVOID UNINTENTIONAL IMPACTS TO PROXIMATE WETLAND RESOURCES OR MORTALITY TO VERNAL POOL HERPETOFAUNA (I E , WOOD FROG, SALAMANDERS, TURTLES, ETC) DURING CONSTRUCTION ACTIVITIES IN ADDITION, THIS PROTECTION PLAN WILL ADEQUATELY PROTECT ANY POTENTIAL BLUE-SPOTTED SALAMANDER "COMPLEX" (AMBYSTOMA LATERALE) POPULATIONS, A STATE LISTED SPECIAL CONCERN SPECIES THAT UTILIZES VERNAL POOL HABITAT AND IS AFFORDED PROTECTION UNDER THE CONNECTICUT ENDANGERED SPECIES ACT .

THESE PROTECTION MEASURES SATISFY REQUIREMENTS FROM THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION ("DEEP") WILDLIFE DIVISION IN ACCORDANCE WITH THEIR NATURAL DIVERSITY DATA BASE ("NDDB") DETERMINATION LETTER (NO 202107713) DATED JUNE 18, 2021 FOR THE PROTECTION OF BLUE SPOTTED SALAMANDER "COMPLEX" THE NDDB DETERMINATION IS VALID UNTIL JUNE 18 2023 PROVIDED THE SCOPE OF THE PROJECT HAS NOT CHANGED AND WORK HAS BEGUN ON THE PROJECT PRIOR TO THE EXPIRATION DATE

IT IS OF THE UTMOST IMPORTANCE THAT THE CONTRACTOR COMPLIES WITH THE REQUIREMENT FOR THE INSTALLATION OF PROTECTIVE MEASURES AND THE EDUCATION OF ITS EMPLOYEES AND SUBCONTRACTORS PERFORMING WORK ON THE PROJECT SITE ALL POINTS TECHNOLOGY CORPORATION, P C ("APT") WILL SERVE AS THE ENVIRONMENTAL MONITOR FOR THIS PROJECT TO ENSURE THAT THESE PROTECTION MEASURES ARE IMPLEMENTED PROPERLY AND WILL PROVIDE AN EDUCATION SESSION ON THE PROJECT'S PROXIMITY TO SENSITIVE WETLAND RESOURCES AND ASSOCIATED VERNAL POOL HERPETOFAUNA PRIOR TO THE START OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL CONTACT DEAN GUSTAFSON, SENIOR BIOLOGIST AT APT, AT LEAST 5 BUSINESS DAYS PRIOR TO THE PRE-CONSTRUCTION MEETING MR GUSTAFSON CAN BE REACHED BY PHONE AT (860) 553-2035 OR VIA EMAIL AT DGUSTAFSON@ALLPOINTSTECH COM

THIS RESOURCES PROTECTION PROGRAM CONSISTS OF SEVERAL COMPONENTS INCLUDING EDUCATION OF ALL CONTRACTORS AND SUB-CONTRACTORS PRIOR TO INITIATION OF WORK ON THE SITE; INSTALLATION OF EROSION CONTROLS, PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION, PROTECTIVE MEASURES, HERBICIDE AND PESTICIDE RESTRICTIONS, AND, REPORTING

1. CONTRACTOR EDUCATION:

a PRIOR TO WORK ON SITE AND INITIAL DEPLOYMENT/MOBILIZATION OF EQUIPMENT AND MATERIALS, THE CONTRACTOR SHALL ATTEND AN EDUCATIONAL SESSION AT THE PRE-CONSTRUCTION MEETING WITH APT THIS ORIENTATION AND EDUCATIONAL SESSION WILL CONSIST OF INFORMATION SUCH AS, BUT NOT LIMITED TO IDENTIFICATION OF VERNAL POOL AND WETLAND RESOURCES PROXIMATE TO WORK AREAS, REPRESENTATIVE PHOTOGRAPHS OF TYPICAL HERPETOFAUNA THAT MAY BE ENCOUNTERED, CONNECTICUT AND FEDERAL LISTING STATUS OF SPECIES THAT COULD BE ENCOUNTERED, TYPICAL SPECIES BEHAVIOR, AND PROPER PROCEDURES IF SPECIES ARE ENCOUNTERED THE MEETING WILL FURTHER EMPHASIZE THE NON-AGGRESSIVE NATURE OF THESE SPECIES, THE ABSENCE OF NEED TO DESTROY SUCH ANIMALS AND THE NEED TO FOLLOW PROTECTIVE MEASURES AS DESCRIBED IN FOLLOWING SECTIONS THE CONTRACTOR WILL DESIGNATE ONE OF ITS WORKERS AS THE "PROJECT MONITOR", WHO WILL RECEIVE MORE INTENSE TRAINING ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA

b THE CONTRACTOR WILL DESIGNATE A MEMBER OF ITS CREW AS THE PROJECT MONITOR TO BE RESPONSIBLE FOR THE PERIODIC "SWEEPS" FOR HERPETOFAUNA WITHIN THE CONSTRUCTION ZONE EACH MORNING AND FOR ANY GROUND DISTURBANCE WORK THIS INDIVIDUAL WILL RECEIVE MORE INTENSE TRAINING FROM APT ON THE IDENTIFICATION AND PROTECTION OF HERPETOFAUNA IN ORDER TO PERFORM SWEEPS ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED

c THE CONTRACTOR'S PROJECT MONITOR WILL BE PROVIDED WITH CELL PHONE AND EMAIL CONTACTS FOR APT PERSONNEL TO IMMEDIATELY REPORT ANY ENCOUNTERS WITH HERPETOFAUNA EDUCATIONAL POSTER MATERIALS WILL BE PROVIDED BY APT AND DISPLAYED ON THE JOB SITE TO MAINTAIN WORKER AWARENESS AS THE PROJECT PROGRESSES

d APT WILL ALSO POST CAUTION SIGNS THROUGHOUT THE PROJECT SITE FOR THE DURATION OF THE CONSTRUCTION PROJECT PROVIDING NOTICE OF THE ENVIRONMENTALLY SENSITIVE NATURE OF THE WORK AREA, THE POTENTIAL FOR ENCOUNTERING VARIOUS AMPHIBIANS AND REPTILES AND PRECAUTIONS TO BE TAKEN TO AVOID INJURY TO OR MORTALITY OF THESE ANIMALS

2. EROSION AND SEDIMENTATION CONTROLS

a PLASTIC NETTING USED IN A VARIETY OF EROSION CONTROL PRODUCTS (I E , EROSION CONTROL BLANKETS, FIBER ROLLS [WATTLES], REINFORCED SILT FENCE) HAS BEEN FOUND TO ENTANGLE WILDLIFE, INCLUDING REPTILES, AMPHIBIANS, BIRDS AND SMALL MAMMALS NO PERMANENT EROSION CONTROL PRODUCTS OR REINFORCED SILT FENCE WILL BE USED ON THE PROJECT TEMPORARY EROSION CONTROL PRODUCTS THAT WILL BE EXPOSED AT THE GROUND SURFACE AND REPRESENT A POTENTIAL FOR WILDLIFE ENTANGLEMENT WILL USE EITHER EROSION CONTROL BLANKETS AND FIBER ROLLS COMPOSED OF PROCESSED FIBERS MECHANICALLY BOUND TOGETHER TO FORM A CONTINUOUS MATRIX (NETLESS) OR NETTING COMPOSED OF PLANAR WOVEN NATURAL BIODEGRADABLE FIBER TO AVOID/MINIMIZE WILDLIFE ENTANGLEMENT

b THE EXTENT OF EROSION CONTROLS WILL BE AS SHOWN ON THE SITE PLANS THE CONTRACTOR SHALL HAVE ADDITIONAL SEDIMENTATION AND EROSION CONTROLS STOCKPILED ON SITE SHOULD FIELD OR CONSTRUCTION CONDITIONS WARRANT EXTENDING DEVICES IN ADDITION TO THE CONTRACTOR MAKING THESE DETERMINATIONS, REQUESTS FOR ADDITIONAL CONTROLS WILL ALSO BE AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR

c INSTALLATION OF EROSION AND SEDIMENTATION CONTROLS, REQUIRED FOR EROSION CONTROL COMPLIANCE AND CREATION OF A BARRIER TOO POSSIBLE MIGRATING/DISPERSING HERPETOFAUNA (ONLY APPLICABLE DURING THE SEASONAL RESTRICTION PERIOD AND WILL BE INSTALLED AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR), SHALL BE PERFORMED BY THE CONTRACTOR IF ANY SOIL DISTURBANCE OCCURS OR HEAVY MACHINERY IS ANTICIPATED TO BE USED ON SLOPES THE ENVIRONMENTAL MONITOR WILL INSPECT THE WORK ZONE AREA PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION IN ADDITION, WORK ZONES IN PROXIMITY TO VERNAL POOL RESOURCES WILL BE INSPECTED PRIOR TO AND FOLLOWING EROSION CONTROL BARRIER INSTALLATION TO ENSURE THE AREA IS FREE OF HERPETOFAUNA AND SATISFACTORILY INSTALLED THE INTENT OF THE BARRIER IS TO SEGREGATE THE MAJORITY OF THE WORK ZONE FROM MIGRATING/DISPERSING HERPETOFAUNA OFTENTIMES COMPLETE ISOLATION OF A WORK ZONE IS NOT FEASIBLE DUE TO ACCESSIBILITY NEEDS AND LOCATIONS OF STAGING/MATERIAL STORAGE AREAS, ETC IN THOSE CIRCUMSTANCES, THE BARRIERS WILL BE POSITIONED TO DEFLECT MIGRATING/DISPERSAL ROUTES AWAY FROM THE WORK ZONE TO MINIMIZE POTENTIAL ENCOUNTERS WITH HERPETOFAUNA AT THE DISCRETION OF THE ENVIRONMENTAL MONITOR

d NO EQUIPMENT, VEHICLES, CONSTRUCTION MATERIALS, OR STAGING AREAS SHALL BE STORED/LOCATED WITHIN 100 FEET OF WETLAND RESOURCES

e THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS, INCLUDING BUT NOT LIMITED TO FOR TEARS OR BREECHES AND ACCUMULATION LEVELS OF SEDIMENT, PARTICULARLY FOLLOWING STORM EVENTS THAT GENERATE A DISCHARGE AS DEFINED BY AND IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL MONITOR WITHIN 24 HOURS OF ANY BREECHES OF THE SEDIMENTATION AND EROSION CONTROLS AND ANY SEDIMENT RELEASES BEYOND THE PERIMETER CONTROLS THAT IMPACT WETLANDS, WATERCOURSES OR WITHIN 100 FEET OF WETLANDS AND WATERCOURSES THE ENVIRONMENTAL MONITOR WILL PROVIDE PERIODIC INSPECTIONS OF THE SEDIMENTATION AND EROSION CONTROLS THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES ONLY AS IT PERTAINS TO PROTECTION OF NEARBY WETLANDS, WHICH WILL GENERALLY OCCUR ON A MONTHLY BASIS IF APT IS NOTIFIED BY THE CONTRACTOR OF A SEDIMENT RELEASE, AN INSPECTION WILL BE SCHEDULED SPECIFICALLY TO INVESTIGATE AND EVALUATE POSSIBLE IMPACTS TO WETLAND RESOURCES

f ALL SILT FENCING OR OTHER POTENTIAL BARRIERS TO SAFE HERPETOFAUNA MIGRATION SHALL BE REMOVED WITHIN 30 DAYS OF COMPLETION OF WORK AND PERMANENT STABILIZATION OF SITE SOILS SO THAT REPTILE AND AMPHIBIAN MOVEMENT BETWEEN UPLANDS AND WETLANDS IS NOT RESTRICTED IF FIBER ROLLS/WATTLES, STRAW BALES OR OTHER NATURAL MATERIAL EROSION CONTROL PRODUCTS ARE USED, SUCH DEVICES WILL NOT BE LEFT IN PLACE TO BIODEGRADE AND SHALL BE PROMPTLY REMOVED AFTER SOILS ARE STABLE SO AS NOT TO CREATE A BARRIER TO MIGRATING WILDLIFE SEED FROM SEEDING OF SOILS SHOULD NOT SPREAD OVER FIBER ROLLS/WATTLES AS IT MAKES THEM HARDER TO REMOVE ONCE SOILS ARE STABILIZED BY VEGETATION

3. PETROLEUM MATERIALS STORAGE AND SPILL PREVENTION

a CERTAIN PRECAUTIONS ARE NECESSARY TO STORE PETROLEUM 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 PROXIMITY TO WETLAND RESOURCES

b A SPILL CONTAINMENT KIT CONSISTING OF A SUFFICIENT SUPPLY OF ABSORBENT PADS AND ABSORBENT MATERIAL WILL BE MAINTAINED BY THE 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 AND TIMELY DISPOSAL OFF SITE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL LAWS.

c THE FOLLOWING PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING RESTRICTIONS AND SPILL RESPONSE PROCEDURES WILL BE ADHERED TO BY THE CONTRACTOR

- PETROLEUM AND HAZARDOUS MATERIALS STORAGE AND REFUELING
  1. REFUELING OF VEHICLES OR MACHINERY SHALL OCCUR A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES AND SHALL TAKE PLACE ON AN IMPERVIOUS PAD WITH SECONDARY CONTAINMENT DESIGNED TO CONTAIN FUELS
2. ANY FUEL OR HAZARDOUS MATERIALS THAT MUST BE KEPT ON SITE SHALL BE STORED ON AN IMPERVIOUS SURFACE UTILIZING SECONDARY CONTAINMENT A MINIMUM OF 100 FEET FROM WETLANDS OR WATERCOURSES

- INITIAL SPILL RESPONSE PROCEDURES
  1. STOP OPERATIONS AND SHUT OFF EQUIPMENT.
2. REMOVE ANY SOURCES OF SPARK OR FLAME
3. CONTAIN THE SOURCE OF THE SPILL
   a. DETERMINE THE APPROXIMATE VOLUME OF THE SPILL.
   b. IDENTIFY THE LOCATION OF NATURAL FLOW PATHS TO PREVENT THE RELEASE OF THE SPILL TO SENSITIVE NEARBY WATERWAYS OR WETLANDS.
   c. ENSURE THAT FELLOW WORKERS ARE NOTIFIED OF THE SPILL.

- SPILL CLEAN UP & CONTAINMENT
  1. OBTAIN SPILL RESPONSE MATERIALS FROM THE ON SITE SPILL RESPONSE KIT. PLACE ABSORBENT MATERIALS DIRECTLY ON THE RELEASE AREA.
  2. LIMIT THE SPREAD OF THE SPILL BY PLACING ABSORBENT MATERIALS AROUND THE PERIMETER OF THE SPILL.
  3. ISOLATE AND ELIMINATE THE SPILL SOURCE
4. CONTACT THE APPROPRIATE LOCAL, STATE AND/OR FEDERAL AGENCIES, AS NECESSARY.
5. CONTACT A DISPOSAL COMPANY TO PROPERLY DISPOSE OF CONTAMINATED MATERIALS

- REPORTING
  1. COMPLETE AN INCIDENT REPORT.
  2. SUBMIT A COMPLETED INCIDENT REPORT TO LOCAL, STATE AND FEDERAL AGENCIES, AS NECESSARY, INCLUDING THE CONNECTICUT SITING COUNCIL.

4. VERNAL POOL AND WETLAND PROTECTIVE MEASURES

a A THOROUGH COVER SEARCH OF THE CONSTRUCTION AREA WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR FOR HERPETOFAUNA PRIOR TO AND FOLLOWING INSTALLATION OF THE SILT FENCING BARRIER TO REMOVE ANY SPECIES FROM THE WORK ZONE PRIOR TO THE INITIATION OF CONSTRUCTION ACTIVITIES ANY HERPETOFAUNA DISCOVERED WOULD BE TRANSLOCATED OUTSIDE THE WORK ZONE IN THE GENERAL DIRECTION THE ANIMAL WAS ORIENTED PERIODIC INSPECTIONS WILL BE PERFORMED BY APT'S ENVIRONMENTAL MONITOR THROUGHOUT THE DURATION OF THE CONSTRUCTION

b ANY STORMWATER MANAGEMENT FEATURES, RUTS OR ARTIFICIAL DEPRESSIONS THAT COULD HOLD WATER CREATED INTENTIONALLY OR UNINTENTIONALLY BY SITE CLEARING/CONSTRUCTION ACTIVITIES WILL BE PROPERLY FILLED IN AND PERMANENTLY STABILIZED WITH VEGETATION TO AVOID THE CREATION OF VERNAL POOL "DECOY POOLS" THAT COULD INTERCEPT AMPHIBIANS MOVING TOWARD THE VERNAL POOLS STORMWATER MANAGEMENT FEATURES SUCH AS LEVEL SPREADERS WILL BE CAREFULLY REVIEWED IN THE FIELD TO ENSURE THAT STANDING WATER DOES NOT ENDURE FOR MORE THAN A 24 HOUR PERIOD TO AVOID CREATION OF DECOY POOLS AND MAY BE SUBJECT TO FIELD DESIGN CHANGES ANY SUCH PROPOSED DESIGN CHANGES WILL BE REVIEWED BY THE DESIGN ENGINEER TO ENSURE STORMWATER MANAGEMENT FUNCTIONS ARE MAINTAINED

c EROSION CONTROL MEASURES WILL BE REMOVED NO LATER THAN 30 DAYS FOLLOWING FINAL SITE STABILIZATION SO AS NOT TO IMPEDE MIGRATION OF HERPETOFAUNA OR OTHER WILDLIFE

5. HERBICIDE AND PESTICIDE RESTRICTIONS

a THE USE OF HERBICIDES AND PESTICIDES AT THE FACILITY SHALL BE AVOIDED WHEN POSSIBLE IN THE EVENT HERBICIDES AND/OR PESTICIDES ARE REQUIRED AT THE FACILITY, THEIR USE WILL BE USED IN ACCORDANCE WITH CURRENT INTEGRATED PEST MANAGEMENT ("IPM") PRINCIPLES WITH PARTICULAR ATTENTION TO MINIMIZE APPLICATIONS WITHIN 100 FEET OF WETLAND OR WATERCOURSE RESOURCES NO APPLICATIONS OF HERBICIDES OR PESTICIDES ARE ALLOWED WITHIN ACTUAL WETLAND OR WATERCOURSE RESOURCES

6 REPORTING

a COMPLIANCE MONITORING REPORTS (BRIEF NARRATIVE AND APPLICABLE PHOTOS) DOCUMENTING EACH APT INSPECTION WILL BE SUBMITTED BY APT TO THE PERMITTEE AND ITS CONTRACTOR FOR COMPLIANCE VERIFICATION OF THESE PROTECTION MEASURES THESE REPORTS ARE NOT TO BE USED TO DOCUMENT COMPLIANCE WITH ANY OTHER PERMIT AGENCY APPROVAL CONDITIONS (I E , DEEP STORMWATER PERMIT MONITORING, ETC) ANY NON-COMPLIANCE OBSERVATIONS OF EROSION CONTROL MEASURES OR EVIDENCE OF EROSION OR SEDIMENT RELEASE WILL BE IMMEDIATELY REPORTED TO THE PERMITTEE AND ITS CONTRACTOR AND INCLUDED IN THE REPORTS ALONG WITH ANY OBSERVATIONS OF VERNAL POOL HERPETOFAUNA

b FOLLOWING COMPLETION OF THE CONSTRUCTION PROJECT, APT WILL PROVIDE A FINAL COMPLIANCE MONITORING REPORT TO THE PERMITTEE DOCUMENTING IMPLEMENTATION OF THE VERNAL POOL AND WETLAND PROTECTION PROGRAM AND MONITORING OBSERVATIONS THE PERMITTEE IS RESPONSIBLE FOR PROVIDING A COPY OF THE FINAL COMPLIANCE MONITORING REPORT TO THE CONNECTICUT SITING COUNCIL FOR COMPLIANCE VERIFICATION

c ANY OBSERVATIONS OF RARE SPECIES WILL BE REPORTED TO DEEP BY APT, WITH PHOTO DOCUMENTATION (IF POSSIBLE) AND WITH SPECIFIC INFORMATION ON THE LOCATION AND DISPOSITION OF THE ANIMAL.

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COMP: ALL-POINTS TECHNOLOGY CORPORATION
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ENFIELD SOLAR ONE, LLC
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APT FILING NUMBER: CT5982330

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SHEET TITLE:
ENVIRONMENTAL NOTES RESOURCE PROTECTION MEASURES

SHEET NUMBER:
GN-2

OVERALL LOCUS MAP

SCALE : 1" = 200'-0"

(IN FEET) 1 inch = 200 ft

ENFIELD SOLAR ONE, LLC
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ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT5800230

DRAWN BY: CSH

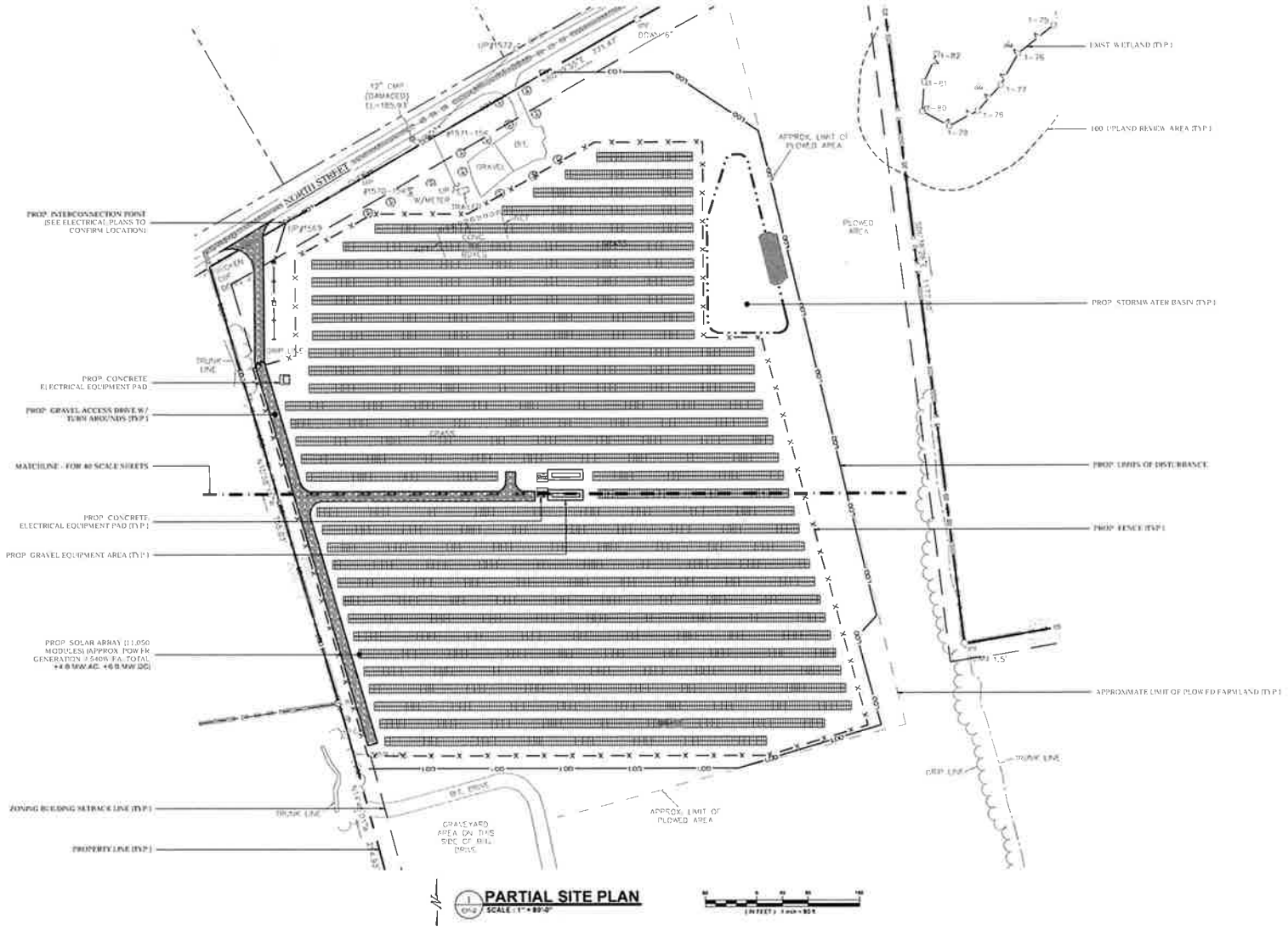
DATE: 03/04/22 CHECKED BY: RCB

SHEET TITLE:

OVERALL LOCUS MAP

SHEET NUMBER:

OP-1



PARTIAL SITE PLAN

SCALE: 1" = 80'-0"

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

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ADDRESS: ENFIELD, CT 06082
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SHEET TITLE:
PARTIAL SITE PLAN

SHEET NUMBER:
OP-2

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLAN NOTES

1 THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF ENFIELD, PERMITTEE AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS

2 THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION

3 A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE

4 THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, SITE ENGINEER, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR

5 THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER

6 THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS

7 ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS THAN 5% FINES PASSING THROUGH A #200 SIEVE. BANK RUN, SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS

8 PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA. FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION

9 CONSTRUCTION ENTRANCES (ANTI TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI TRACKING PADS PRIOR TO EXISTING

10 ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER

11 NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED

12 DIRECT ALL DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY

13 THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE ACCUMULATION OF RUBBISH ON CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT

14 MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH FACTOR 85

15 SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION FOR DUST CONTROL. PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED

16 VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE IDLE FOR LONGER THAN 30 DAYS

17 MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY

18 SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. SEW ENGLAND EROSION CONTROL / RESTORATION MIX FOR DETENTION BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE USED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET EC-2 FOR ALL SEED MIXTURES.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR

E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY
TEMPORARY SEDIMENT BASIN W/ BAFFLES	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE. DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SEDIMENT TRAP W/ BAFFLES	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.5"	REMOVE SEDIMENT ONCE IT HAS ACCUMULATED TO ONE HALF OF MINIMUM REQUIRED VOLUME OF THE WET STORAGE. DEWATERING AS NEEDED. RESTORE TRAP TO ORIGINAL DIMENSIONS. REPAIR/REPLACE BAFFLES WHEN FAILURE OR DETERIORATION IS OBSERVED.
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH

SEDIMENT & EROSION CONTROL NARRATIVE

1 THE PROJECT INVOLVES THE CONSTRUCTION OF A GROUND MOUNTED SOLAR PANEL FACILITY WITH ASSOCIATED EQUIPMENT, INCLUDING GRADING OF APPROXIMATELY 19.63+ ACRES OF EXISTING LOT

THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

A CLEARING, GRUBBING, AND GRADING OF EXISTING LOT
B CONSTRUCTION OF 11,050 GROUND MOUNTED SOLAR PANELS AND ASSOCIATED EQUIPMENT
C THE STABILIZATION OF DISTURBED AREAS WITH PERMANENT VEGETATIVE TREATMENTS

2 FOR THIS PROJECT, THERE ARE APPROXIMATELY 19.63+ ACRES OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE, AS ALL ACCESS THROUGH THE SITE WILL BE GRAVEL. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT & GRAVEL ACCESS DRIVE

3 THE PROJECT SITE, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 18, DEC 6, 2018), CONTAINS TYPE 29A (HYDROLOGIC SOIL GROUP B) AND 701A (HYDROLOGIC SOIL GROUP C). A GEOTECHNICAL ENGINEERING REPORT IS AVAILABLE UNDER SEPARATE COVER

4 IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 4-6 MONTHS

5 REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES

6 STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF ENFIELD STANDARDS, TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE. EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.

7 DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN

8 CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:

A STAGED CONSTRUCTION;
B MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
C STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7 DAYS FOLLOWING DISTURBANCE;
D MINIMIZE IMPERVIOUS AREAS;
E UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES

9 THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:

A STORMWATER MANAGEMENT REPORT DATED MARCH 2022
B SWPCP, TO BE ISSUED AT A LATER DATE

SUGGESTED CONSTRUCTION SEQUENCE

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE, THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES, THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN (SWPCP) AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION

1 THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING

2 CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNERS REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING

3 NOTIFY CALL BEFORE YOU DIG AT 811, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION

PHASE 1

4 REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL DISTURBANCE TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCES

5 INSTALL PERIMETER EROSION CONTROL

6 INSTALL TEMPORARY SEDIMENT TRAPS

7 INSTALL ACCESS DRIVE

8 INSTALL ELECTRICAL CONDUIT, RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS & GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION

9 TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE

PHASE 2

10 REMOVE TEMPORARY SEDIMENT TRAPS

11 INSTALL STORMWATER BASIN B-1

12 AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK, INCLUDING ANY REQUIRED LANDSCAPE SCREENING, ACCESS DRIVE, CHAIN LINK FENCE, AND STABILIZE ALL DISTURBED AREAS

13 FINE GRADE, RAKE, SEED AND MULCH ALL REMAINING DISTURBED AREAS

14 AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE AND IF NECESSARY THE CONSERVATION AGENT, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS

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PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
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ENFIELD SOLAR ONE, LLC

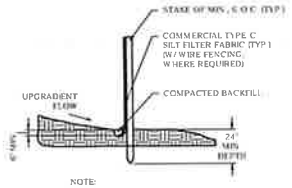
SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT5900220

DRAWN BY: CSN
DATE: 03/04/22 CHECKED BY: RCB

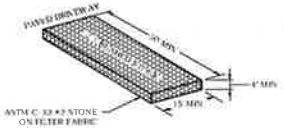
SHEET TITLE:
SEDIMENTATION & EROSION CONTROL NOTES

SHEET NUMBER:
EC-1

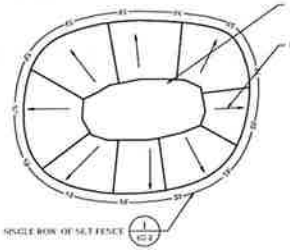


NOTE:
SILT FENCE SHALL BE LAPPED ONLY WHEN NECESSARY PER THE MANUFACTURER RECOMMENDATIONS

1 EC-2 SILT FENCE DETAIL
SCALE : N.T.S.



CONSTRUCTION
2 EC-2 ENTRANCE DETAIL
SCALE : N.T.S.



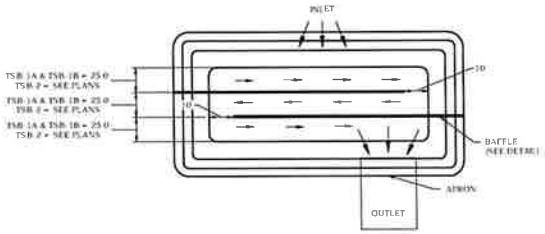
NOTES:
1 ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF

2 SOIL/AGGREGATE STOCKPILE SITES TO BE WHERE SHOWN ON THE DRAWINGS

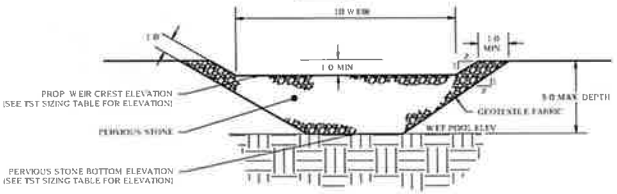
3 RESTORE STOCKPILE SITES TO PRE EXISTING PROJECT CONDITION AND RESEED AS REQUIRED

4 STOCKPILE HEIGHTS MUST NOT EXCEED 35 STOCKPILE SLOPES MUST BE 2:1 OR FLATTER

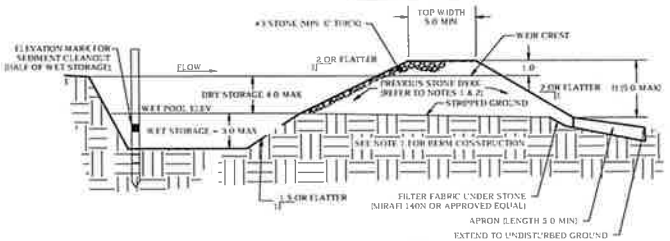
3 EC-2 MATERIALS STOCKPILE DETAIL
SCALE : N.T.S.



TOP VIEW



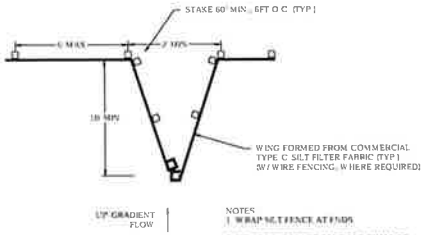
OUTLET ELEVATION



CROSS SECTION

NOTES:
1 CONSTRUCT TEMPORARY SEDIMENT TRAP BERMS AND SIDEWALLS PER THE INFILTRATION BASIN DETAIL
2 PERVIOUS STONE DYKE SHALL BE CONSTRUCTED OF CT DOT MODIFIED RIP-RAP WITH #3 STONE ON FACE
3 SEDIMENT TRAP BAFFLES SHALL BE INSTALLED AS SHOWN ON EC-1 AND EC-2
4 SEE TST SIZING TABLE FOR WET AND DRY STORAGE VOLUMES

5 EC-4 TEMPORARY SEDIMENT TRAP
SCALE : N.T.S.



NOTES
1 WRAP SILT FENCE AT ENDS

2 NO JOINING FENCE SECTIONS SHALL BE INSTALLED WITHIN 30 FEET OF WING

4 EC-2 SILT FENCE WING DETAIL
SCALE : N.T.S.

TEMPORARY SEDIMENT TRAP SIZING TABLE

NAME	DRAINAGE AREA (AC)	SEDIMENT VOLUME/ACRE AREA (CY)	REQ VOLUME (CY)	REQ WET VOLUME (CY)	PROP BTM ELEV (FT)	PROP STONE DIKE HEIGHT ELEV (FT)	PROP WEIR CREST ELEV (FT)	PROP TOP ELEV (FT)	WET VOL PROVIDED (CY)	TOTAL VOL PROVIDED (CY)
TST 1	4.58 AC	134 CY	613 CY	333 CY	178.0	180.5	181.0	182.0	429 CY	873 CY
TST 2	4.5 AC	134 CY	613 CY	307 CY	178.0	180.5	181.0	182.0	396 CY	632 CY
TST 3	4.26 AC	134 CY	571 CY	296 CY	179.0	181.5	182.0	183.0	300 CY	582 CY

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ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT0900230

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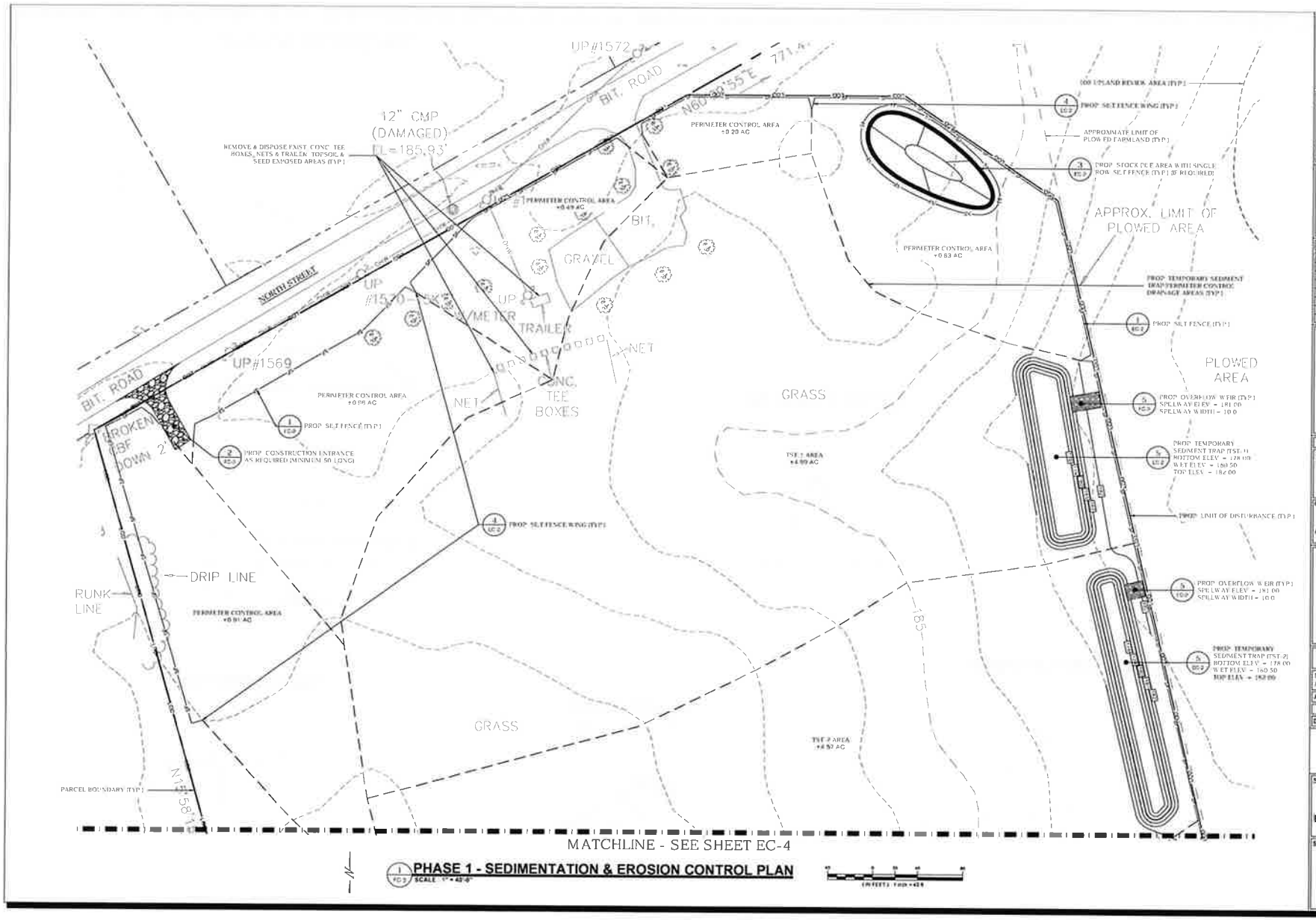
SHEET TITLE:
SEDIMENTATION & EROSION CONTROL DETAILS

SHEET NUMBER:
EC-2



PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN

SCALE: 1" = 40'-0"

(IN FEET) 1 inch = 40 ft

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SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082
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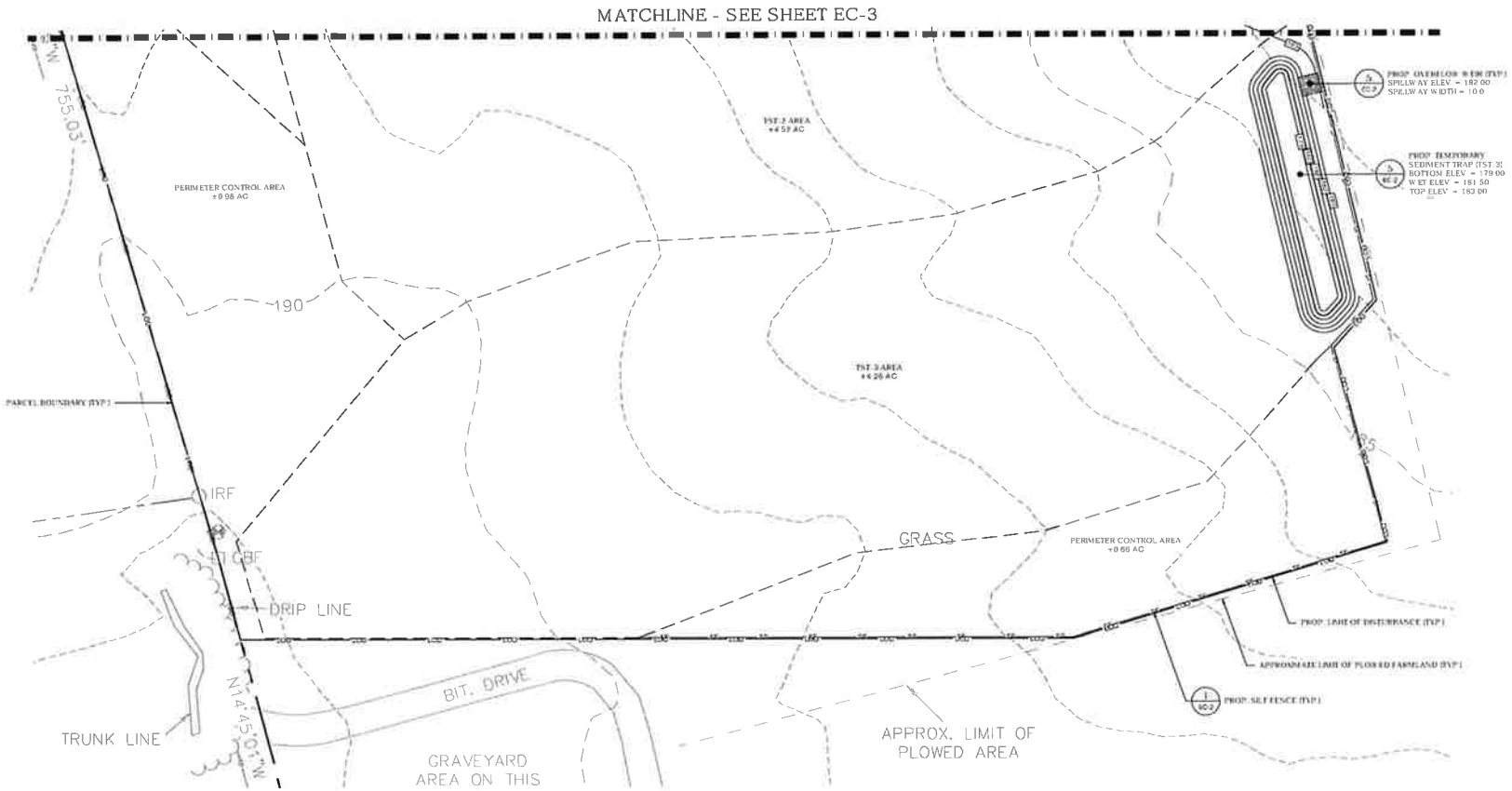
SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-3



PHASE 1 - SEDIMENTATION & EROSION CONTROL PLAN

SCALE: 1" = 40'-0"

IN FEET 1 inch = 40 ft

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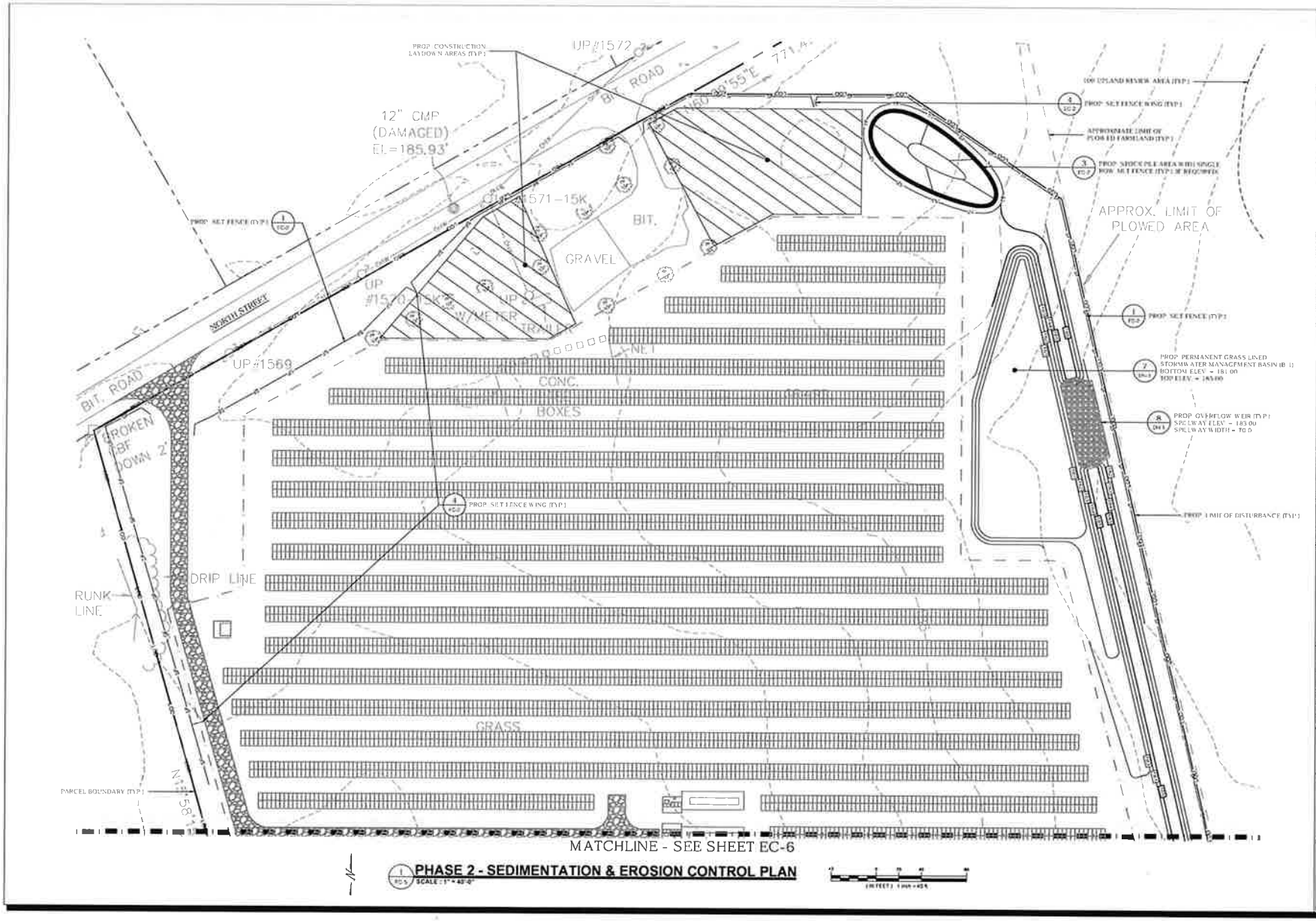
SHEET TITLE:
PHASE 1 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-4



1 PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN
SCALE: 1" = 40'-0"

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APT FILING NUMBER: CT350230
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DATE: 02/04/22
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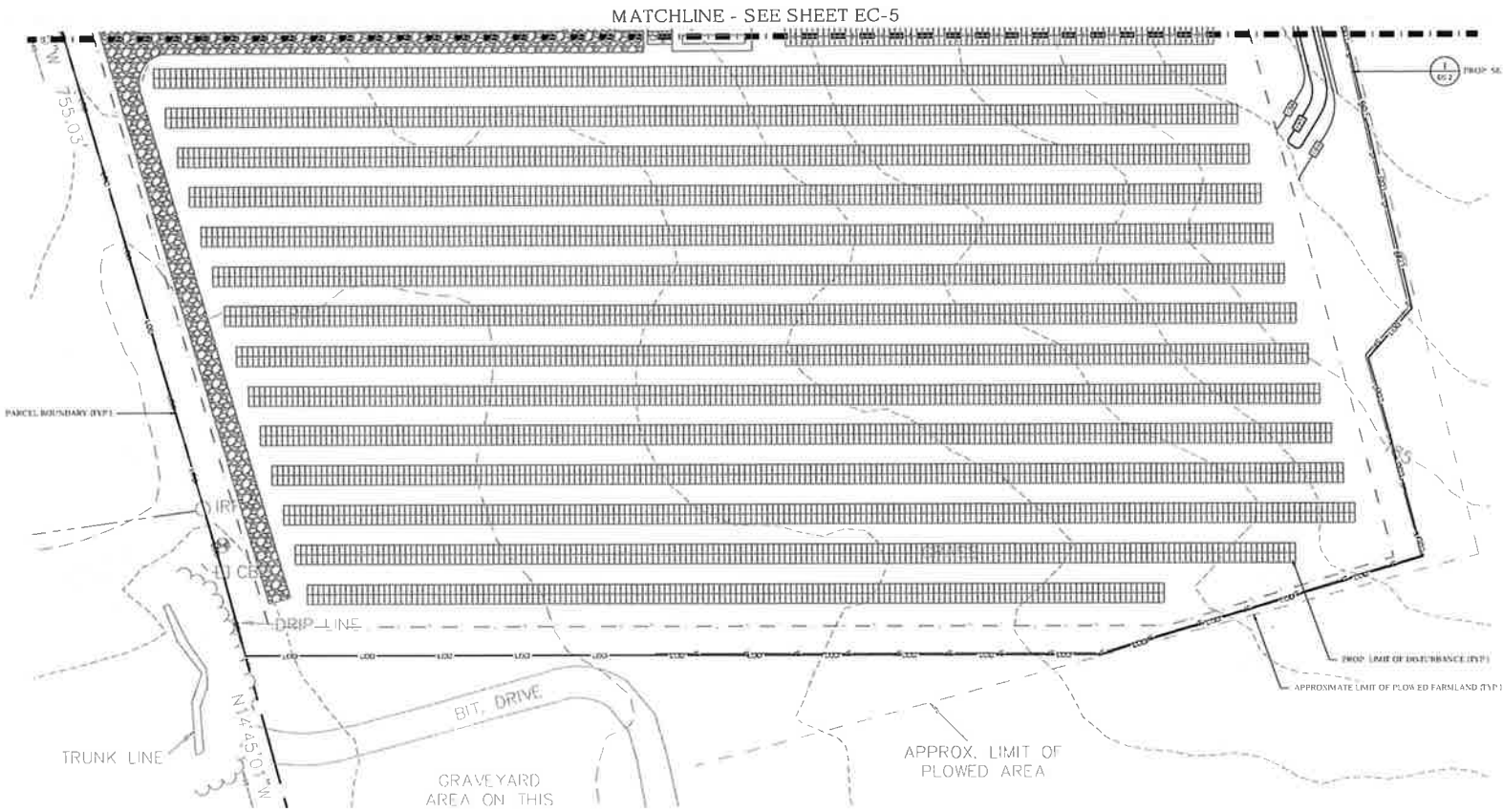
SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-5



PHASE 2 - SEDIMENTATION & EROSION CONTROL PLAN

SCALE: 1" = 40'-0"

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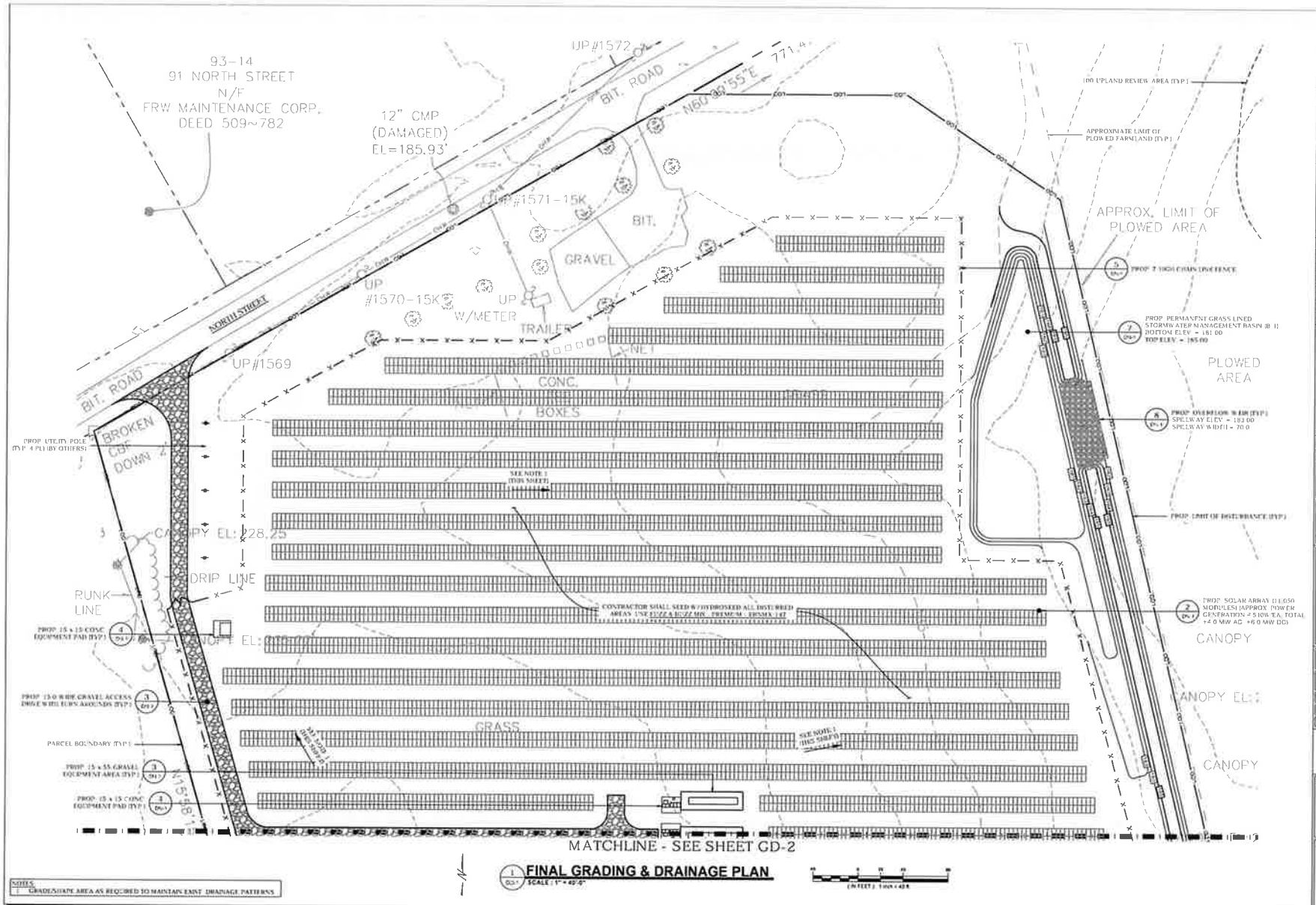
SHEET TITLE:
PHASE 2 SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:
EC-6



1 GD-1 **FINAL GRADING & DRAINAGE PLAN**
SCALE: 1" = 40'-0"

NOTES:
1. GRADE/SEDIMENT AREA AS REQUIRED TO MAINTAIN EXIST. DRAINAGE PATTERNS

ENFIELD SOLAR ONE, LLC
160 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-2670

CSC PERMIT SET

NO	DATE	REVISION
0	02/04/22	DRAFT SET FOR REVIEW: RCB
1	03/16/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD
PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

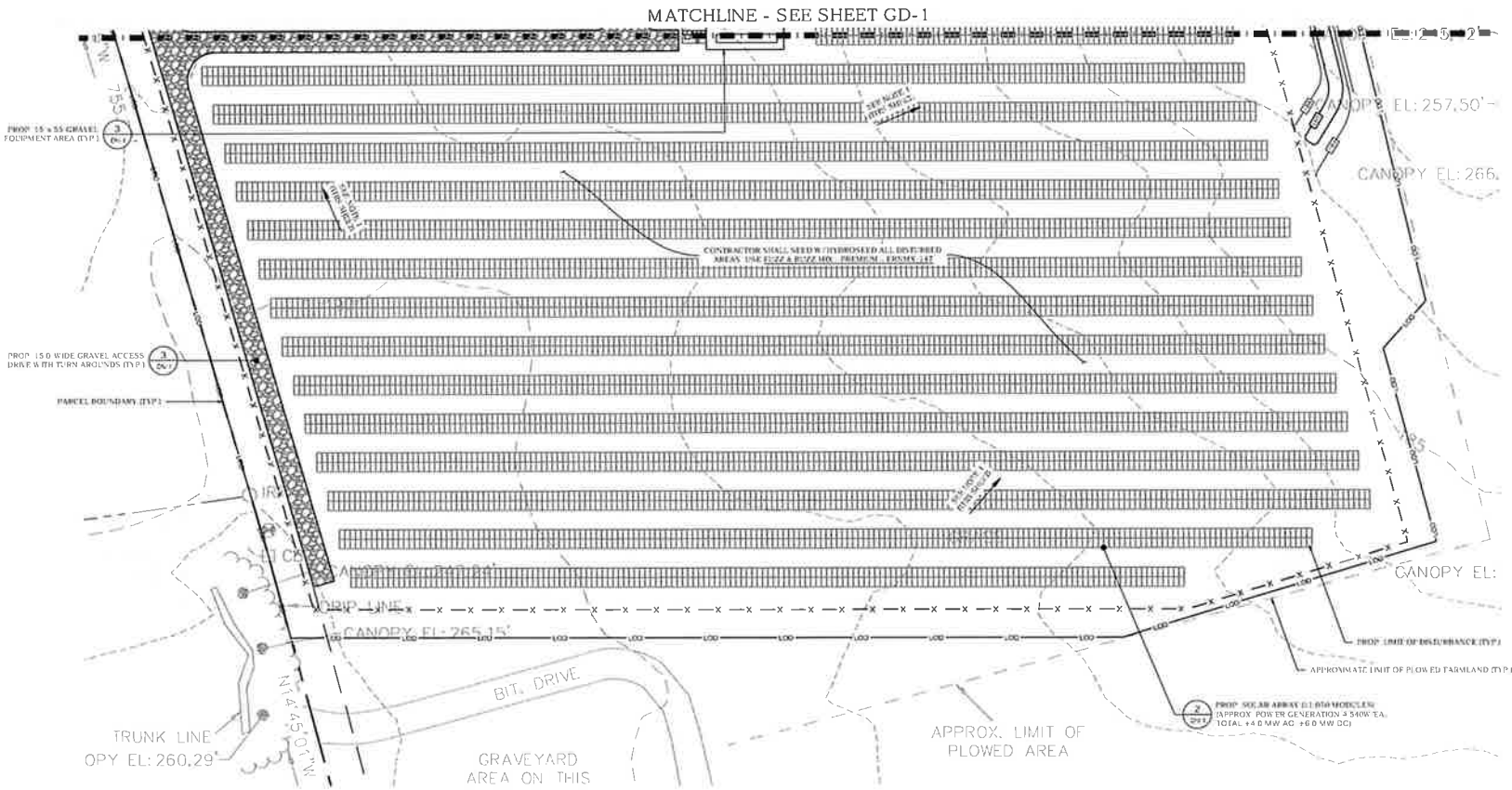
OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06472

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET, ENFIELD, CT 06082
APT FILING NUMBER: CT590239
DRAWN BY: CSH
DATE: 03/04/22 CHECKED BY: RCB

SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-1



FINAL GRADING & DRAINAGE PLAN

SCALE: 1" = 40'-0"

NOTES:
1. GRADE/SHAPE AREA AS REQUIRED TO MAINTAIN EXIST. DRAINAGE PATTERNS.

ENFIELD SOLAR ONE, LLC
160 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	02/04/22	DRAFT SET FOR REVIEW: RCB
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2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

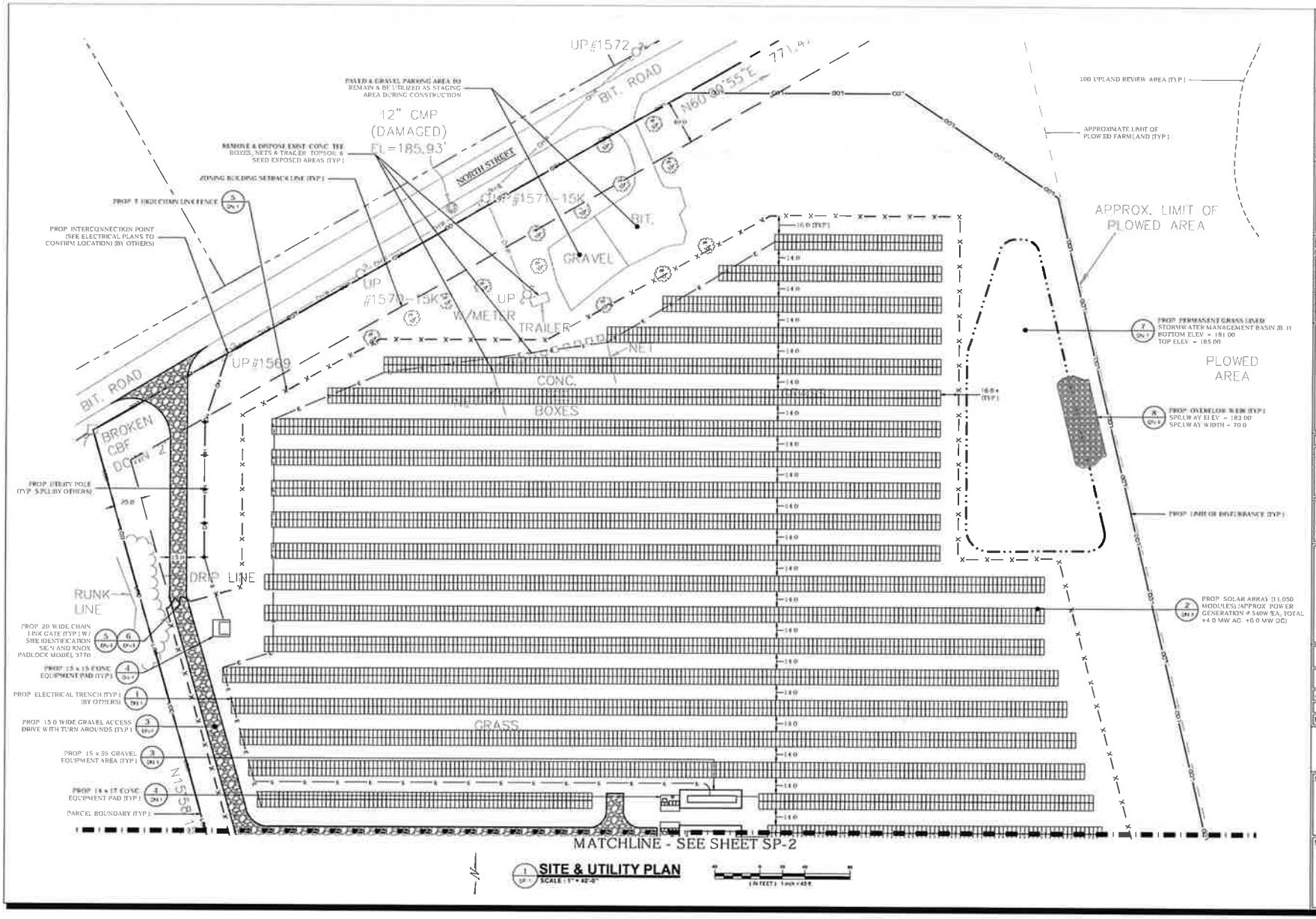
DESIGN PROFESSIONAL OF RECORD
PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC
SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082
APT FILING NUMBER: CT5160330
DRAWN BY: CSH
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
FINAL GRADING & DRAINAGE PLAN

SHEET NUMBER:
GD-2



1 SP-1 **SITE & UTILITY PLAN**
SCALE: 1" = 40'-0"

(IN FEET) 1 inch = 40 ft

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

CSC PERMIT SET

NO.	DATE	REVISION
0	02/04/22	DRAFT SET FOR REVIEW: RCB
1	03/16/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

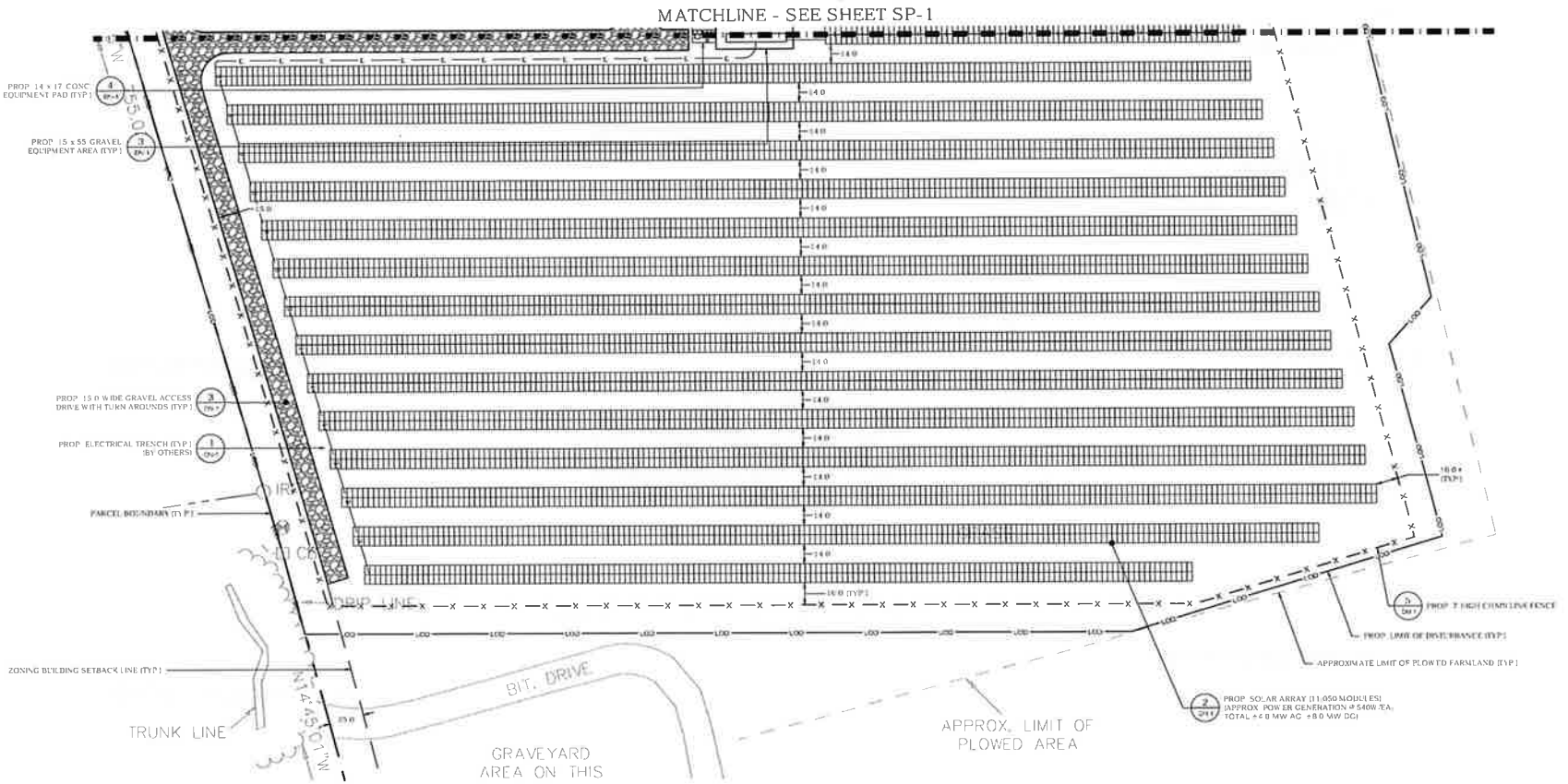
DESIGN PROFESSIONAL OF RECORD
PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHAUL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC
SITE ADDRESS: 110 NORTH STREET, ENFIELD, CT 06082
APT FILING NUMBER: CT380230
DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
SITE & UTILITY PLAN

SHEET NUMBER:
SP-1



1 SITE & UTILITY PLAN
SCALE: 1" = 40'-0"

(IN FEET) 1 inch = 40 ft

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	02/04/22	DRAFT SET FOR REVIEW: RCB
1	03/16/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

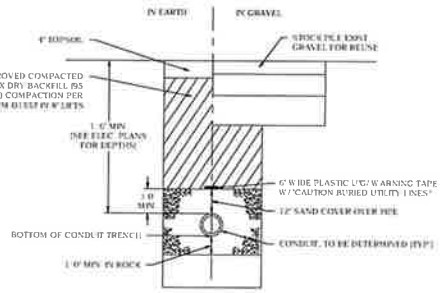
SITE ADDRESS: 150 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT380030

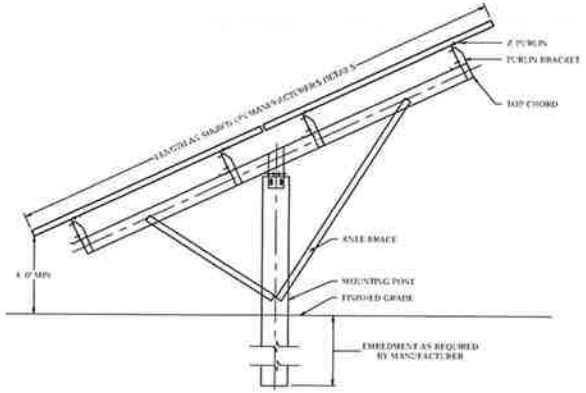
DRAWN BY: CSN
DATE: 02/04/22
CHECKED BY: RCB

SHEET TITLE:
SITE & UTILITY PLAN

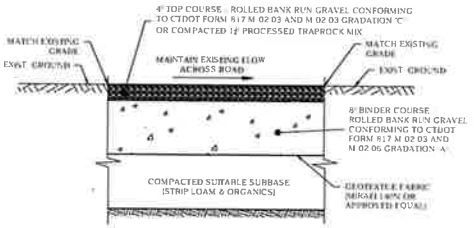
SHEET NUMBER:
SP-2



1 ELECTRICAL TRENCH DETAIL
SCALE : N.T.S.

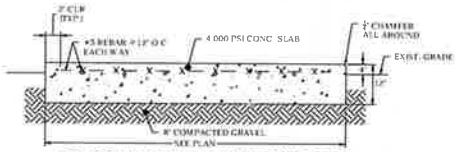


2 TYPICAL POST MOUNTED RACKING SYSTEM
SCALE : N.T.S.

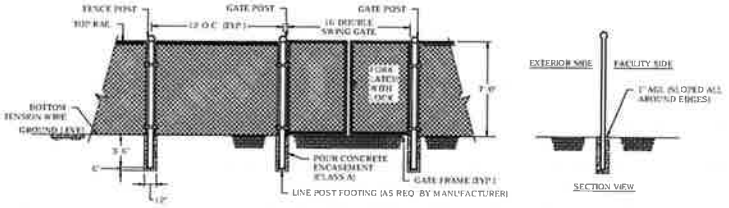


NOTES:
1. SUBBASE MAY CONSIST OF NATIVE MATERIALS IF FOUND ACCEPTABLE BY THE ENGINEER. SUBBASE TO BE COMPACTED TO 95% MAX DRY DENSITY
2. SUBBASE IS TO BE FREE FROM DEBRIS AND UNSUITABLE MATERIALS
3. CONTRACTOR SHALL INSTALL ACCESS ROAD FLUSH WITH EXISTING GRADE TO ENSURE DRAINAGE FLOW PATHS ARE MAINTAINED
4. SEE PLAN VIEW SHEETS FOR ROAD WIDTH

3 GRAVEL ACCESS DRIVE SECTION
SCALE : N.T.S.



4 CONCRETE EQUIPMENT PAD
SCALE : N.T.S.



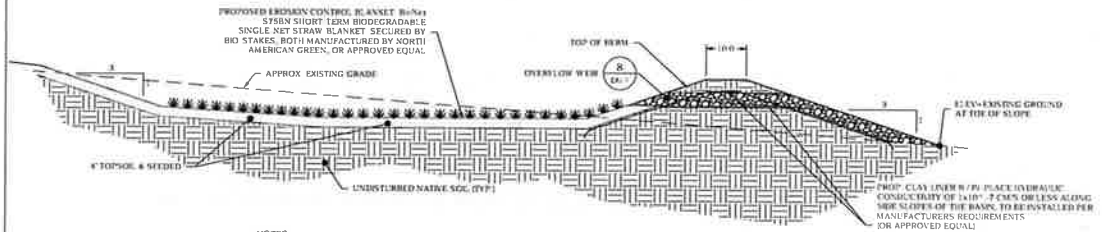
5 CHAIN-LINK FENCE & GATE DETAIL
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC

IN CASE OF EMERGENCY CALL T.B.D.

NOTES:
EMERGENCY CALL NUMBER TO BE PROVIDED ONCE DETERMINED

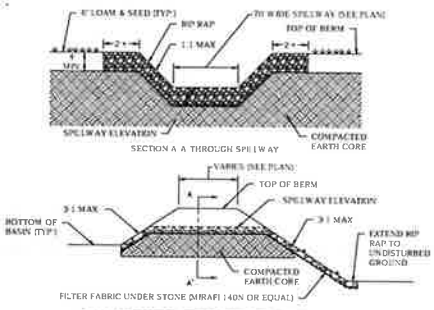
6 NOTIFICATION SIGN DETAIL
SCALE : N.T.S.



NOTES:
1. SEED MIX TO BE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DRY ENTRY BASINS & MOIST SIDES ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX PREMIUM ERNMX-141 ON THE SIDE SLOPES OR APPROVED EQUAL. SEE SHEET DN-2 FOR SEED MIXTURES

NOTE: LINER SHALL EXTEND TO NATIVE SUBGRADE FOR BERMS WHOLLY OR PARTIALLY CONSTRUCTED WITH FILL MATERIAL

7 GRASS LINED BASIN
SCALE : N.T.S.



8 OVERFLOW WEIR DETAIL
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC
160 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALL-POINTSTECH.COM FAX: (860) 663-0935

CSC PERMIT SET

NO	DATE	REVISION
0	03/04/22	DRAFT SET FOR REVIEW: RCB
1	03/16/22	FOR PERMIT: RCB
2	04/11/22	FOR PERMIT: RCB
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE ADDRESS: 110 NORTH STREET ENFIELD, CT 06082

APT FILING NUMBER: CT380235

DRAWN BY: CSH

DATE: 03/04/22 CHECKED BY: RCB

SHEET TITLE:

SITE DETAILS

SHEET NUMBER:

DN-1

Ernst Conservation Seeds
8884 Mercer Pike
Meadville, PA 16335
(800) 873-3321 Fax (814) 336-5191
www.ernstseed.com

Date: April 14, 2021

Fuzz & Buzz Mix - Premium - ERNMX-147

	Botanical Name	Common Name	Price/lb
24.20 %	*Lolium perenne, 'Dave', Tetraploid*	Perennial Ryegrass, 'Dave', Tetraploid	3.48
17.70 %	*Dactylis glomerata, 'Pennlate'*	Orchardgrass, 'Pennlate'	3.00
17.70 %	*Festuca ellator*	Meadow Fescue	4.80
17.70 %	*Poa pratensis, 'Ginger'*	Kentucky Bluegrass, 'Ginger' (pasture type)	3.36
5.40 %	*Trifolium hybridum*	Alsike Clover	3.90
4.59 %	*Trifolium incarnatum, Variety Not Stated*	Crimson Clover, Variety Not Stated	1.92
4.50 %	*Trifolium pratense, Medium, Variety Not Stated*	Red Clover, Medium, Variety Not Stated	3.00
2.00 %	*Lotus corniculatus, 'Leo'*	Bird's Foot Trefoil, 'Leo'	7.50
1.30 %	*Chrysanthemum leucanthemum*	Ox-eye Daisy	33.40
1.30 %	*Cichorium intybus*	Blue Chicory	19.20
0.80 %	*Chamaecrista fasciculata, PA Ecotype*	Partridge Pea, PA Ecotype	7.20
0.40 %	*Aster oblongifolius, PA Ecotype*	Aromatic Aster, PA Ecotype	336.00
0.40 %	*Aster pilosus/laevis, PA Ecotype*	Frosty Aster, PA Ecotype	432.00
0.40 %	*Coreopsis lanceolata*	Lanceleaf Coreopsis	28.80
0.40 %	*Tradescantia ohiensis, PA Ecotype*	Ohio Spiderwort, PA Ecotype	192.00
0.40 %	*Zizia aurea*	Golden Alexanders	288.00
0.30 %	*Solidago nemoralis, PA Ecotype*	Gray Goldenrod, PA Ecotype	336.00
0.10 %	*Asclepias syriaca*	Common Milkweed	163.20
0.10 %	*Penstemon hirsutus*	Hairy Beardtongue	480.00
100.00 %		**Mix Price/lb Bulk:**	**$10.91**

Seeding Rate: Expect in apply about 42 lbs per acre with a cover crop of annual ryegrass at 12 lbs/acre.

Forage & Pasture Sites; Solar Sites

1 DN-2 **FUZZ & BUZZ MIX**
SCALE : N.T.S.

NEW ENGLAND WETLAND PLANTS, INC

820 WEST STREET, AMHERST, MA 01002
PHONE: 413 548-8000 FAX 413-549-4000
EMAIL: INFO@NEWP.COM WEB ADDRESS: WWW.NEWP.COM

New England Erosion Control/Restoration Mix For Detention Basins and Moist Sites

Botanical Name	Common Name	Indicator
Elymus riparius	Riverbank Wild Rye	FACW
Schizachyrium scoparium	Little Bluestem	FACU
Festuca rubra	Red Fescue	FACU
Andropogon gerardii	Big Bluestem	FAC
Panicum virgatum	Switch Grass	FAC
Vernonia noveboracensis	New York Ironweed	FACW+
Agrostis perennans	Upland Bentgrass	FACU
Rubus hispidus	Bagged T chs	FACW
Eupatorium maculatum (Eupatorium maculatum)	Spotted Joe Pye Weed	OBL
Eupatorium perfoliatum	Boneset	FACW
Aster novae-angliae (Symphyotrichum novae-angliae)	New England Aster	FACW-
Scirpus cyperinus	Wool Grass	FACW
Juncus effusus	Soft Rush	FACW+

PRICE PER LB. $37.00 MIN. QUANITY 3 LBS. **TOTAL: $111.00** APPLY 15 LBS/ACRE 2250 sq ft

The New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites contains a selection of native grasses and wildflowers designed to enhance generally moist, recently disturbed sites where quick growth of vegetation is desired to stabilize the soil surface. It is an appropriate seed mix for ecologically sensitive restorations that require stabilization as well as long term establishment of native vegetation. This mix is particularly appropriate for detention basins that do not hold standing water. Many of the plants in this mix can tolerate infrequent inundation, but not constant flooding. The mix may be applied by hand, by mechanical spreader, or by hydro-seeder. After sowing, lightly rake, roll or cultipack to insure good seed to soil contact. Best results are obtained with a Spring or late Summer seeding. Late Fall and Winter dormant seeding requires an increase in the application rate. A light mulching of clean, weed free straw is recommended.

New England Wetland Plants, Inc. may modify seed mixes at any time depending upon seed availability. The design criteria and ecological function of the new will remain unchanged. Price is 5/bulk pound. FOB warehouse, Plus SH and applicable taxes

2 DN-2 **STORMWATER MANAGEMENT BASIN MIX**
SCALE : N.T.S.

ENFIELD SOLAR ONE, LLC
150 TRUMBULL STREET
4TH FLOOR
HARTFORD, CT, 06103

ALL-POINTS TECHNOLOGY CORPORATION
56 VAUXHALL STREET EXTENSION, SUITE 311
WATERFORD, CT 06385 PHONE (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX (860) 663-1935

CSC PERMIT SET

NO	DATE	REVISION
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4		
5		
6		

DESIGN PROFESSIONAL OF RECORD
PROF: ROBERT C. BURNS, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION
ADD: 567 VAUXHALL STREET EXTENSION - SUITE 311 WATERFORD, CT 06385

OWNER: CATHOLIC CEMETERIES ASSOCIATION OF THE ARCHDIOCESE OF HARTFORD, INC.
ADDRESS: 700 MIDDLETOWN AVE. NORTH HAVEN, CT 06473

ENFIELD SOLAR ONE, LLC

SITE: 110 NORTH STREET
ADDRESS: ENFIELD, CT 06082
APT FILING NUMBER: CT190239

DRAWN BY: CSH
DATE: 02/04/22 CHECKED BY: RCB

SHEET TITLE:
LANDSCAPING DETAILS

SHEET NUMBER:
DN-2

APPENDIX B

USFWS AND NDDB

COMPLIANCE STATEMENT

ALL-POINTS TECHNOLOGY CORPORATION

USFWS & NDDB COMPLIANCE

January 11, 2022

Mr. Steven DeNino, COO
Verogy
150 Trumbull Street, 4th Floor
Hartford, CT 06103

Re: Enfield Solar One, 110 North Street, Enfield, CT
APT Job No: CT590230

On behalf of Verogy, All-Points Technology Corporation, P.C. ("APT") performed an evaluation with respect to possible federally- and state-listed, threatened, endangered or special concern species in order to determine if the proposed referenced solar energy generation facility ("Facility") would result in a potential adverse effect to listed species.

APT understands that Verogy proposes the construction of a solar energy generation facility to be generally located on a rectangularly shaped parcel that consists of ±26.9 acres of mostly undeveloped agricultural land, with forested/shrub transitional areas including wetlands along the east and south sides of the site, located at 110 North Street in Enfield, Connecticut ("Subject Property").

USFWS

The federal consultation was completed in accordance with Section 7 of the Endangered Species Act through the U.S. Fish and Wildlife Service's ("USFWS") Information, Planning, and Conservation System ("IPaC"). Based on the results of the IPaC review, one federally listed[1] threatened species is known to occur in the vicinity of the subject property documented as the northern long-eared bat ("NLEB"; *Myotis septentrionalis*). As a result of this preliminary finding, APT performed an evaluation to determine if the proposed referenced Facility would result in a likely adverse effect to NLEB.

The proposed Facility would be located within mostly undeveloped agricultural land, with a small portion of the eastern extent of the site being wooded and will require limited tree clearing/trimming that could potentially impact NLEB habitat; trees potentially provide NLEB habitat. A review of the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division Natural Diversity Data Base ("NDDB") NLEB habitat map[2] revealed that the proposed Facility is not within 150 feet of a known occupied NLEB maternity roost tree and is not within 0.25 mile of a known NLEB hibernaculum. The nearest NLEB habitat resource to the proposed Facility is located ±10.3 miles to the west/southwest in East Granby.

APT submitted the effects determination using the NLEB key within the IPaC system for the proposed Facility (the "Action"). This IPaC key assists users in determining whether a Federal action is consistent

[1] Listing under the federal Endangered Species Act

[2] *Northern long-eared bat areas of concern in Connecticut to assist with Federal Endangered Species Act Compliance* map. February 1, 2016.

with the activities analyzed in the USFWS's January 5, 2016, intra-Service Programmatic Biological Opinion ("PBO") on the Final 4(d) Rule for the NLEB for Section 7(a)(2) compliance.

Based upon the IPaC submission, the Action is consistent with activities analyzed in the PBO; please refer to the enclosed January 11, 2022 USFWS letter. The Action may affect NLEB; however, any take that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). If the USFWS does not respond within 30 days from the date of the letter (February 11, 2022), one may presume that the IPaC-assisted determination was correct and that the PBO satisfies Verogy's responsibilities for this Action under ESA Section 7(a)(2) with respect to NLEB. No response was received from USFWS; therefore, the Action complies with ESA Section 7(a)(2) with respect to NLEB.

In addition, Verogy would consider the following additional recommended voluntary measures, where appropriate and as the project schedule allows, to reduce the potential for impact to NLEB.

- Conduct tree removal activities outside of the NLEB pup season (June 1-July 31) and active season (April 1-October 31) to minimize impacts to pups at roosts not yet identified. *Not applicable: no significant tree removal proposed.*
- Avoid clearing suitable spring staging and fall swarming habitat within a five-mile radius of known or assumed NLEB hibernacula during the staging and swarming seasons (April 1-May 15 and August 15-November 14, respectively). *Not applicable: site is located > 5 miles from the nearest hibernacula.*
- Maintain dead trees (snags) and large trees when possible. *Not applicable: no significant tree removal proposed.*
- Use herbicides and pesticides only if unavoidable. If necessary, spot treatment is preferred over aerial application.
- Minimize exterior lighting, opting for down-shielded, motion-sensor security lights instead of constant illumination.

NDDB

DEEP issued a June 18, 2021 determination letter (No. 202107713) indicating that one State-listed Special Concern Species is known to occur in the vicinity of the Facility: Blue-spotted salamander "complex" (*Ambystoma laterale*). DEEP's letter recommended protection strategies for Blue-spotted salamander; please refer to the enclosed letter. Verogy is committed to following DEEP's recommendations to avoid potential impact to this State-listed species. Details of these protection measures are provided in a Resources Protection Plan included as environmental notes on the project site plans, provided under separate cover.

Therefore, with implementation of these protective measures the proposed Facility is not anticipated to adversely impact any federal or state threatened, endangered or species of special concern.

Sincerely,
All-Points Technology Corporation, P.C.

Dean Gustafson
Senior Biologist

Enclosures

USFWS NLEB Letter

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Ecological Services Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5094
Phone: (603) 223-2541 Fax: (603) 223-0104
http://www.fws.gov/newengland

IPaC Record Locator: 927-108812656

January 11, 2022

Subject: Consistency letter for the 'Verogy Enfield Solar One' project indicating that any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Dear Deborah Gustafson:

The U.S. Fish and Wildlife Service (Service) received on January 11, 2022 your effects determination for the 'Verogy Enfield Solar One' (the Action) using the northern long-eared bat (*Myotis septentrionalis*) key within the Information for Planning and Consultation (IPaC) system. You indicated that no Federal agencies are involved in funding or authorizing this Action. This IPaC key assists users in determining whether a non-Federal action may cause "take"[1] of the northern long-eared bat that is prohibited under the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 et seq.).

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o). Unless the Service advises you within 30 days of the date of this letter that your IPaC-assisted determination was incorrect, this letter verifies that the Action is not likely to result in unauthorized take of the northern long-eared bat.

Please report to our office any changes to the information about the Action that you entered into IPaC, the results of any bat surveys conducted in the Action area, and any dead, injured, or sick northern long-eared bats that are found during Action implementation.

If your Action proceeds as described and no additional information about the Action's effects on species protected under the ESA becomes available, no further coordination with the Service is required with respect to the northern long-eared bat.

The IPaC-assisted determination for the northern long-eared bat **does not** apply to the following ESA-protected species that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the animal species listed above.

---

[1]Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct [ESA Section 3(19)].

Action Description
You provided to IPaC the following name and description for the subject Action.

1. Name

Verogy Enfield Solar One

2. Description

The following description was provided for the project 'Verogy Enfield Solar One':

> Verogy intends to lease a portion of the ±54.8-acre Property for development of a ±4.0 (AC) megawatt solar photovoltaic electric generating facility. Based on information from the Client, the Project would encompass approximately 26 acres.

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.993840649999996,-72.52363432625575,14z

Determination Key Result

This non-Federal Action may affect the northern long-eared bat; however, any take of this species that may occur incidental to this Action is not prohibited under the final 4(d) rule at 50 CFR §17.40(o).

Determination Key Description: Northern Long-eared Bat 4(d) Rule
This key was last updated in IPaC on **May 15, 2017**. Keys are subject to periodic revision.

This key is intended for actions that may affect the threatened northern long-eared bat.

The purpose of the key for non-Federal actions is to assist determinations as to whether proposed actions are excepted from take prohibitions under the northern long-eared bat 4(d) rule.

If a non-Federal action may cause prohibited take of northern long-eared bats or other ESA-listed animal species, we recommend that you coordinate with the Service.

Determination Key Result

Based upon your IPaC submission, any take of the northern long-eared bat that may occur as a result of the Action is not prohibited under the ESA Section 4(d) rule adopted for this species at 50 CFR §17.40(o).

Qualification Interview

1. Is the action authorized, funded, or being carried out by a Federal agency?

   No

2. Will your activity purposefully **Take** northern long-eared bats?

   No

3. [Semantic] Is the project action area located wholly outside the White-nose Syndrome Zone?

   Automatically answered
   No

4. Have you contacted the appropriate agency to determine if your project is near a known hibernaculum or maternity roost tree?

   Location information for northern long-eared bat hibernacula is generally kept in state Natural Heritage Inventory databases – the availability of this data varies state-by-state. Many states provide online access to their data, either directly by providing maps or by providing the opportunity to make a data request. In some cases, to protect those resources, access to the information may be limited. A web page with links to state Natural Heritage Inventory databases and other sources of information on the locations of northern long-eared bat roost trees and hibernacula is available at www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html.

   Yes

5. Will the action affect a cave or mine where northern long-eared bats are known to hibernate (i.e., hibernaculum) or could it alter the entrance or the environment (physical or other alteration) of a hibernaculum?

   No

6. Will the action involve Tree Removal?

   No

Project Questionnaire

If the project includes forest conversion, report the appropriate acreages below. Otherwise, type '0' in questions 1-3.

1. Estimated total acres of forest conversion:

0

2. If known, estimated acres of forest conversion from April 1 to October 31

0

3. If known, estimated acres of forest conversion from June 1 to July 31

0

If the project includes timber harvest, report the appropriate acreages below. Otherwise, type '0' in questions 4-6.

4. Estimated total acres of timber harvest

0

5. If known, estimated acres of timber harvest from April 1 to October 31

0

6. If known, estimated acres of timber harvest from June 1 to July 31

0

If the project includes prescribed fire, report the appropriate acreages below. Otherwise, type '0' in questions 7-9.

7. Estimated total acres of prescribed fire

0

8. If known, estimated acres of prescribed fire from April 1 to October 31

0

9. If known, estimated acres of prescribed fire from June 1 to July 31

0

If the project includes new wind turbines, report the megawatts of wind capacity below. Otherwise, type '0' in question 10.

10. What is the estimated wind capacity (in megawatts) of the new turbine(s)?

0

NDDB Determination Letter

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

June 18, 2021

Dean Gustafson
All-Points Technology Corporation, P.C.
567 Vauxhall Stree Ext, Suite 311
Waterford, CT 06385
dgustafson@allpointstech.com

NDDB DETERMINATION NUMBER: 202107713

Project: Construction of a commercial scale PV solar energy generation facility - VEROGY-ENFIELD SOLAR ONE, 110 NORTH ST., ENFIELD, CT

Expiration: June 18, 2023

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding this project. According to our records, there are State-listed species (RCSA Sec. 26-306) documented nearby the proposed project area.

- **Blue-spotted salamander "complex" (*Ambystoma laterale*)- State Special Concern**

The blue-spotted salamander "complex" results in the hybridization of the blue-spotted salamander with the Jefferson salamander. The hybrids can only be reliably distinguished by karyological and biochemical analyses. Blue-spotted salamanders are associated with riparian red maple swamps. They breed in March and April and may be found on the road surface on wet rainy nights. Populations are threatened by fragmentation. High numbers are lost to roadkill during the spring breeding season when animals migrate in large numbers to temporary breeding pools. Changes in salinity content of breeding pools can affect larvae and newly transformed salamanders.

- Ensure that site design and any changes in stormwater run-off do not negatively impact water chemistry, quality or quantity in nearby wetlands and vernal pools.

Construction protection measures:
Land disturbance activities need to consider local habitat features and apply fencing protection measures as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site.

Protection measures should include:

- Exclusionary practices will be required to prevent any salamander access into construction areas. These measures will need to be installed to allow passage around construction to critical habitat features.
- Exclusionary fencing be at least 20 inches tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
- No heavy machinery or vehicles may be parked in the 100ft wetland buffer.

- Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal vernal pools.

Site Design Recommendations:
If planned properly, you can increase the value of the habitat for wildlife and state listed species with your development.

- **Create a site management plan to promote native vegetation growth in the area under the solar panels.** Restoring native vegetation will attract pollinators and avoid the need for constant mowing. Reduced need for mowing will reduce the risk for wildlife.
- Provide habitat for wildlife and allow for connectivity for wildlife movement. Use wildlife-friendly fencing to allow movement through the solar development.

This is determination is valid for two years.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

Please contact me if you have any questions (shannon.kearney@ct.gov). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

/s/ Shannon B. Kearney
Wildlife Biologist

APPENDIX C

DEEP AND DOA CORRESPONDENCE

Enfield Solar One, LLC
150 Trumbull Street, 4th Floor
Hartford, CT 06103
Verogy.com

September 28, 2021

VIA ELECTRONIC MAIL

Stephen Anderson
Supervising Environmental Analyst
State of Connecticut Department of Agriculture
450 Columbus Blvd., Suite 701
Hartford, CT 06103

RE: Enfield Solar One – Department of Agriculture Consultation

Dear Mr. Anderson:

Enfield Solar One, LLC ("Enfield Solar One") is currently proposing a 4 megawatt ("MW") solar-based electric generating facility ("Project" or; "Facility") located at 110 North Street in Enfield, Connecticut ("Project Site"; or the "Site"). The Facility was selected by Eversource under the Shared Clean Energy Facilities ("SCEF") program. Attached for your review you will find the proposed Facility site plan, farmland soils map for the parcel with and without current use areas identified, and a draft sheep grazing plan. The sheep grazing plan would be finalized and sent for your review as the project progresses through the permitting process.

Section 16-50k(a) of the Connecticut General Statues requires, for any solar photovoltaic facility with a capacity of two (2) or more megawatts measured in alternating current ("AC") that petitions for a declaratory ruling by the Connecticut Siting Council ("Council"), the Department of Agriculture represents, in writing, that the project will not materially affect the status of such land as prime farmland.

Enfield Solar One would like to submit this project as a Petition for Declaratory Ruling with the Council and respectfully requests that the Department of Agriculture review the project and our proposal. Below you will find the detailed information on the parcel and our project.

1. **Farm / Property Information**

   a. Farm owner(s), farm name and locations

      i. Catholic Cemeteries Association of The Archdiocese of Hartford Inc. ("CCA")

      ii. The parcel is being used by three different entities. The southwest corner of the parcel is part of the Saint Bernards Cemetery (~5.6 ac), which is accessed from Park Street. The northwest and northcentral portion of the parcel is occupied by the Pleasant View Golf Park (~21.7 ac). The northeast and central portion of the parcel is currently being farmed by a tenant farmer (~13.1 ac)

iii. 110 North Street, Enfield, CT 06082

b. Total acreage, identification of prime, statewide and or/ locally important farmland soils and acreage

i. 73.88 acres total

ii. ~48.6 acres prime farmland soils

iii. ~18.8 acres statewide important farmland soils

iv. ~6.48 acres neither

c. Current production agriculture on the farm and the approximate location of crops, farm buildings, etc. used to support the farming operation

i. Current production: corn field on ~13.1 acres with no buildings to support farming operation.

2. Energy Project Information

a. Describe the energy project

i. The energy project is a 4.00 MW AC (6.13 MW DC) solar photovoltaic array consisting of 11,362 solar modules. Additional infrastructure needed to support the project include 26 string level inverters, driven post racking, DC string wiring, AC wire runs, transformers, switchgear, and metering equipment

b. Describe what the energy will be used for and how it will benefit the farming operation

i. The project is currently configured as a Shared Clean Energy Facility which is designed to cost-effectively deploy clean energy projects in Connecticut and deliver the benefit of such projects to: (1) low-income utility customers (20% of total energy production); (2) low to moderate-income utility customers (40% of total energy production); (3) small business utility customers (20% of total energy production); (4) state or municipal utility customers (not more than 20% of total energy production); (5) commercial customers (not more than 20% of total energy production); and (6) non low to moderate-income residential utility customers that would otherwise be ineligible for onsite solar (not more than 20% of total energy production).

c. Are there future plans to increase energy capacity beyond what is proposed? If so, please describe these future plans, and any impacts the increase may have on prime farmland or the overall farming operation

i. No, there are no future plans to increase energy capacity beyond what is proposed at this Site.

3. **Agricultural Resource Impacts**

   a. Describe any production agriculture currently being conducted within the footprint of the solar project;

      i. There is no agriculture production within the footprint of the solar project as it is located entirely within the existing driving range.

   b. Describe overall how the project will impact production agriculture currently being conducted on the farm; and

      i. The project will not impact agriculture production on the parcel.

   c. Provide a description of any plans by the farm owner(s) to foster production agriculture within or as a result of the development (e.g., grazing animals in and around the solar project, providing pollinator habitat)

      i. The project developer / operator intends to introduce a pollinator habitat and grazing of sheep within the Project area. The project developer / operator plans to find a Connecticut based farmer to manage the grazing program at the Site. Attached is a draft grazing plan that would be implemented as part of the Project.

4. **Alternatives to Locating the Energy Project on Prime Farmland**

   a. Provide a description of any alternatives considered by the farm owner(s) to developing the project on prime farmland soils (e.g., the option of selling agricultural development rights for the farm instead of developing for solar, or as a mitigation measure to reduce the size of the solar development);

      i. The property is owned by the CCA and is currently used as a golf driving range, a cemetery, and for crop farming. The area to be used for solar will displace the existing golf driving range. The area currently used for farming will be undisturbed by the project. The solar project is viewed by the owner as a productive alternative to the driving range as it will create clean energy (reducing Connecticut's carbon footprint and combatting climate change) and allow for the co-location of livestock grazing on otherwise unfarmed land. As of now, it is our understanding that the CCA will retain development rights to ensure the ability to expand the existing cemetery in the future, if it becomes necessary to do so.

   b. Describe any alternatives examined which might enable placement of some or all of the solar panels in locations other than on prime farmland (e.g., elsewhere on the property or on farm buildings); and

      i. There are no buildings on the property that could have been used for solar.

      ii. The other areas of the parcel were not able to be used for the solar facility because they are mapped wetlands.

c. Provide a description of any other form of mitigation considered by the farm owner(s) (e.g., farmland restoration, or a future commitment to preserve the farm)

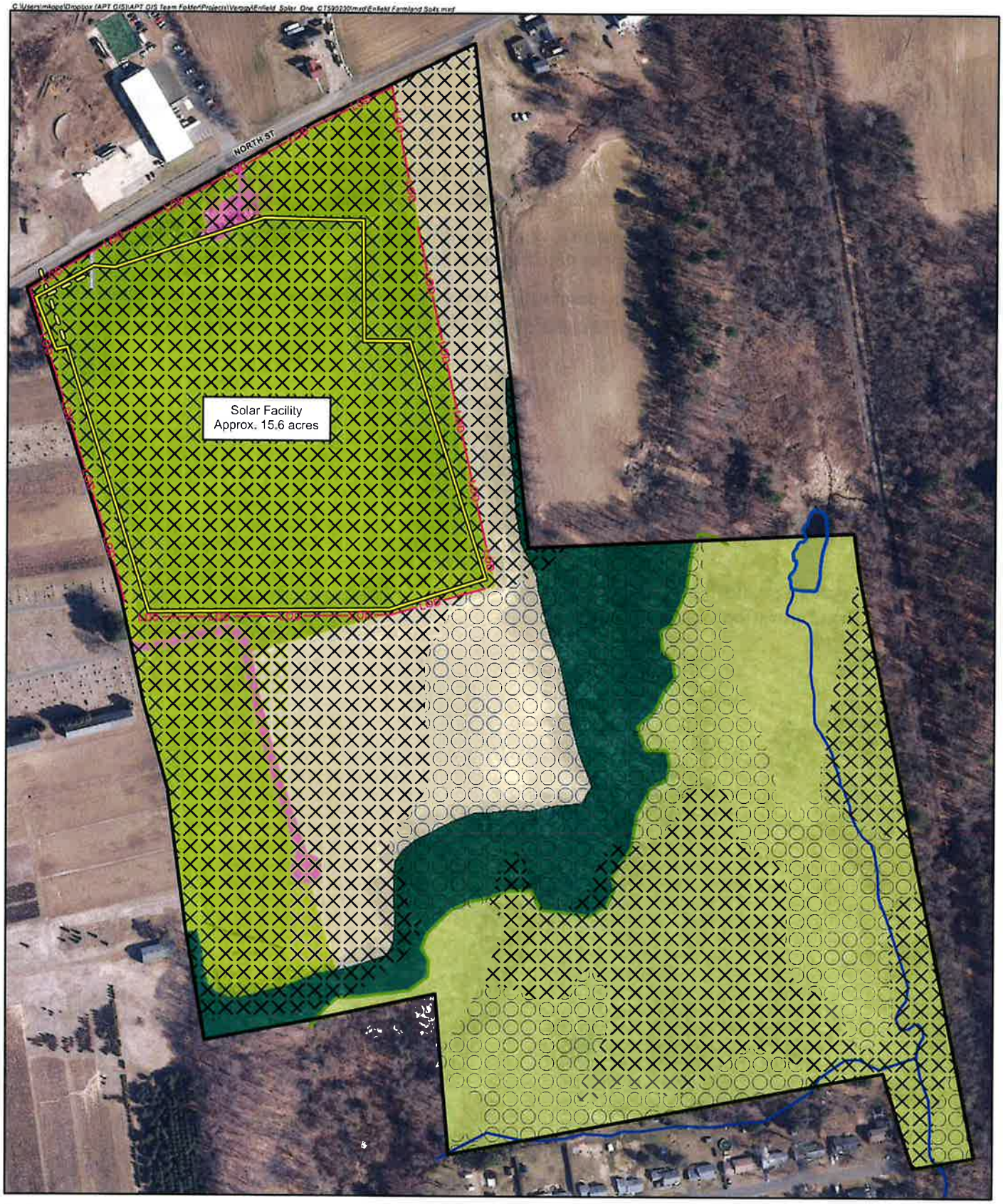
i. The CCA will retain development rights to expand the existing cemetery in the future if it becomes necessary to do so.

Thank you very much for your time and consideration should you have any questions or comments please feel free to contact me at wherchel@verogy.com or (860) 288-7215.

Sincerely,

William Herchel
Authorized Person

Cc: Bryan Fitzgerald (bfitzgerald@verogy.com)
Brad Parsons (bparsons@verogy.com)



Legend

- Site
- Approximate Project Area
- Approximate Interconnect Path
- Approximate Access Drive
- Approximate Watercourse
- Delineated Wetland Boundary
- Existing Farm Pond

Farmland Soils

- Prime Farmland Soils
- Statewide Important Farmland Soils

Habitat Cover Type

- Cultivated Agricultural Field
- Developed
- Forested Wetland
- Maintained Lawn
- Mixed Hardwood Forest

N

300 150 0 300 Feet

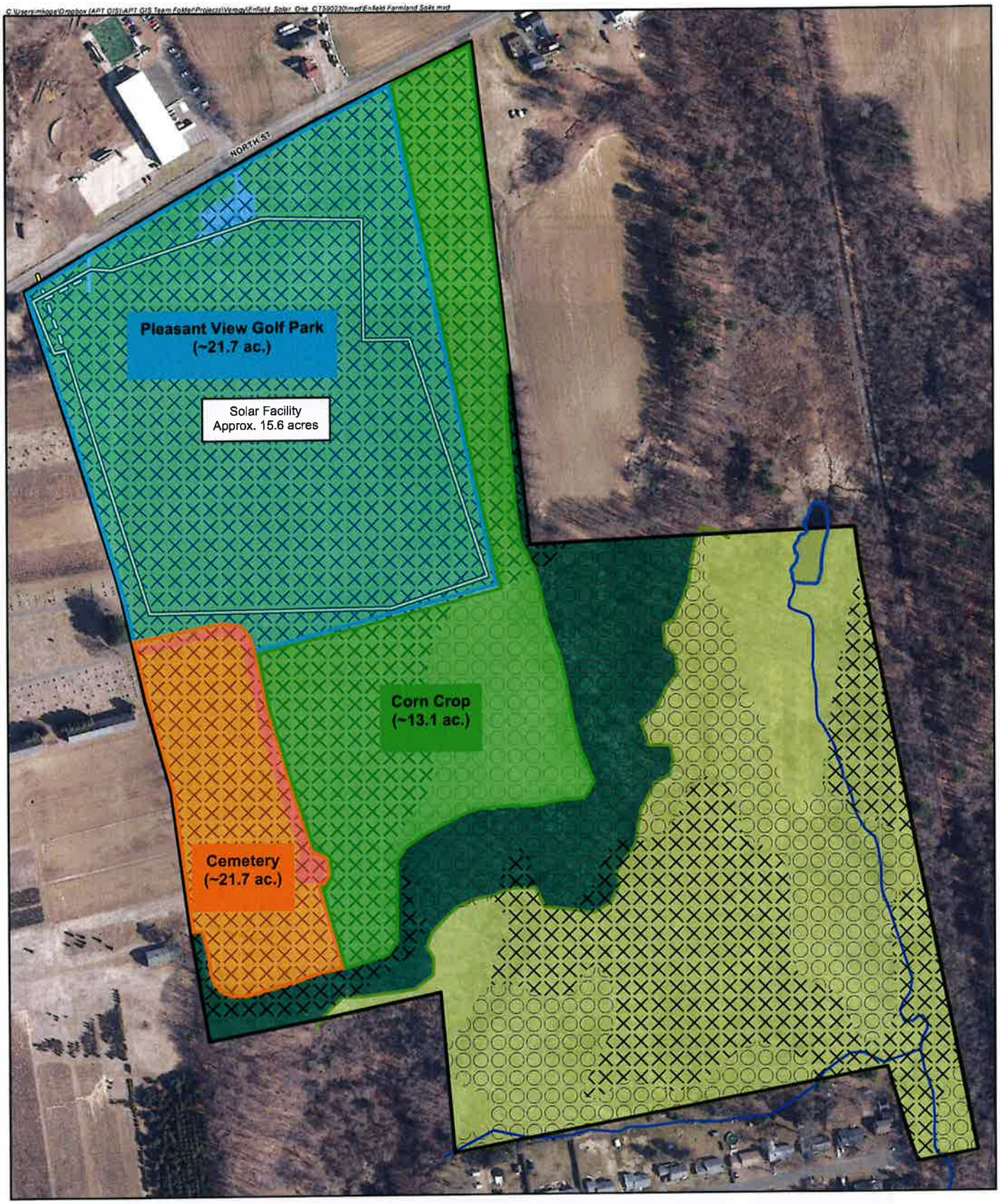
Map Notes:
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Scale: 1 inch = 300 feet
Map Date: September 2021

Farmland Soils Map

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

VEROGY

ALL-POINTS TECHNOLOGY CORPORATION



Legend

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Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

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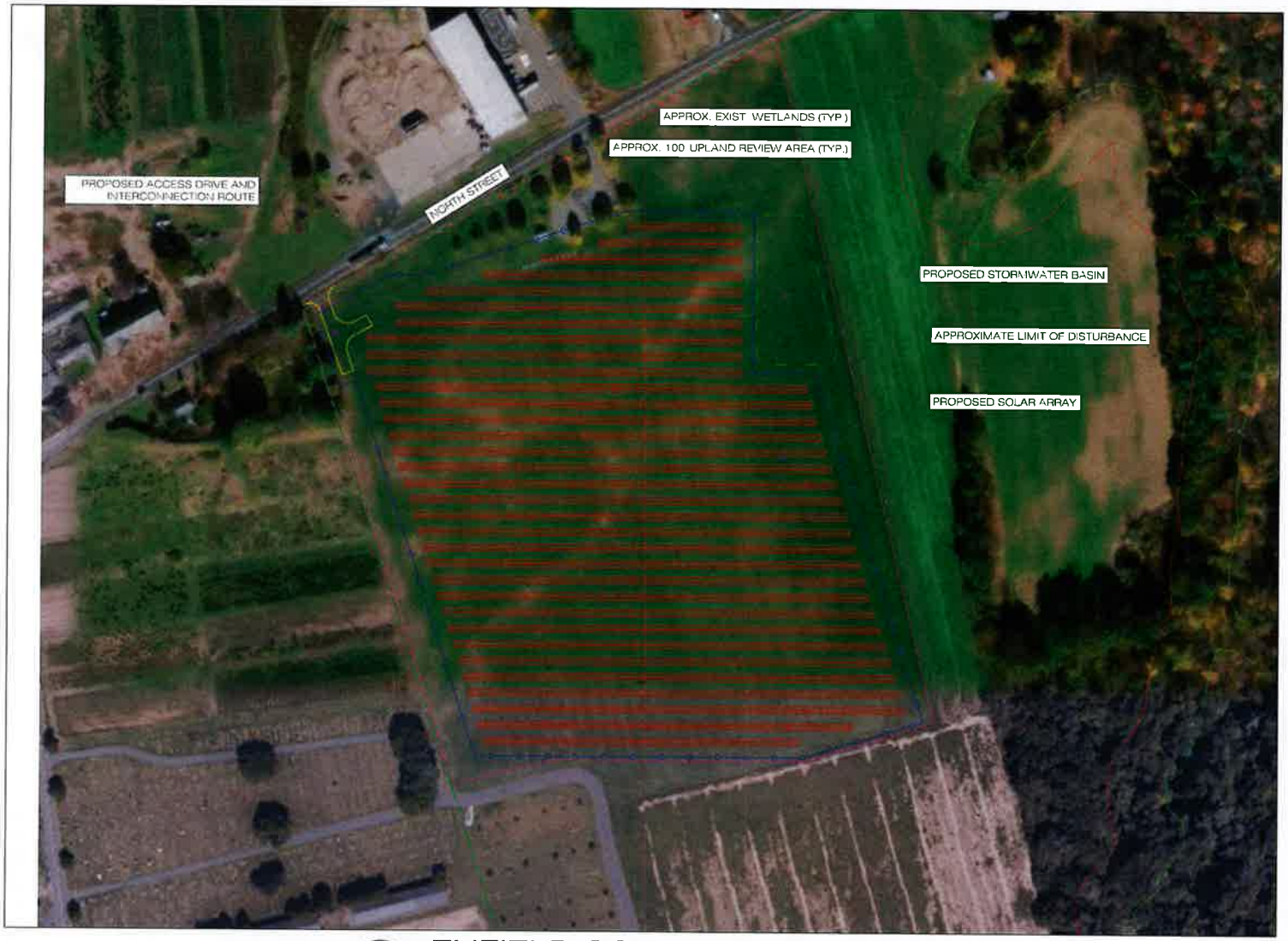

CP-1 ENFIELD SOLAR ONE

SCALE: 1"=80'

General Notes

SYSTEM SPECIFICATIONS	
DC SYSTEM SIZE	6,135.5 kW
AC SYSTEM SIZE	4,000.0 kW
MODULE QUANTITY	11,362
MODULE POWER	540 W
TILT	25°
AZIMUTH	180°
NOTES	INTERCONNECTION AT STREET. NO UPGRADES OR EXTENSIONS ASSUMED

No.	Revision/Issue	Date
1	ADDED LOD	9/10

VERGY
150 TRUMBULL STREET
HARTFORD, CT 06103

ENFIELD SOLAR ONE
110 NORTH STREET
ENFIELD, CT 06082
41.9949019509, -72.525268299

Project: ENFIELD SOLAR ONE
Date: 08/20/2021
Drawn By: BJP
Sheet: CP-1

DRAFT-GENERIC

Sheep Grazing Plan
Ground Mount PV Array
Project Name

Date:
Month 2021

Prepared By:
VCP, LLC d/b/a Verogy
in conjunction with Agrivoltaic Solutions LLC

150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

Introduction

Ground-mounted solar sites, by nature of their design, have ample fenced areas. The fencing at solar sites is uniquely suited to serve as grazing areas or be subdivided into grazing paddocks in a pasture rotation with sheep. The perimeter fencing also serves as predator deterrent, the solar panels provide shading and shelter for inhabitants, and the solar arrays provide palatable pasture species for ruminant nutrition. In turn, rotationally grazed sheep provide adequate and comparatively cheap vegetation management, optimal ground coverage and thus reduced erosion and run-off, as well as agricultural usage of lands that can add to the viability of farming communities.

The Verogy *Project Name*, located in *Town*, CT, is planned for approximately *xx.x* acres. Sheep grazing will be used to control vegetation at the project site to:

- Prevent panel shading from vegetation,
- Control and remove invasive and unpalatable plant species,
- Avoid the growth of brush and woody species under the solar panels,
- Maintain a diverse forage population to support optimal sheep nutrition,
- Encourage flowering forb and plant species to maximize pollinator habitat,
- Optimize sequestered soil carbon through increasing top-soil amount and root matter,
- Control erosion.

To achieve these goals a rotational grazing system will be implemented. Rotational grazing is a technique where animals are moved as one group, from one pastured area ("paddock") to the next (Hodgson, 1979). Only one paddock is grazed at any given time throughout the rotation, while the other paddocks are given a rest period to achieve pasture regrowth. Compared to continuous or extensive grazing, rotational grazing inhibits weed growth, improves the health of pasture, sustains healthy vegetation, and improves sheep health.

Site Requirements

The perimeter fencing can be chain link or "ag type" woven wire and should be installed to the ground. It can be buried slightly below grade or have a maximum gap of 1-2". Gaps caused by uneven ground should be cleaned up with a dozer. If chain link fencing is used it should be installed with a bottom tensioning wire.

The perimeter gates should be installed to meet evenly and have an even spacing to the ground. The maximum gap between the gates and the ground should be 1-2". Care should be taken to add some gravel or grade the area to avoid large gaps.

The site should be building on an existing sod or hay-ground or planting an existing tilled field. The solar facility should be seeded with Ernst Conservation Seeds, Inc. Fuzz & Buzz mix or equivalent. The Fuzz & Buzz mix is the best way to blend grazing with solar and introducing pollinator friendly species. This seed mix was developed by Ernst and the Cornell Sheep Program in conjunction with the American Solar Grazing Association. For additional seedings, clover or legume mixes are a good option for vigor and grazing friendliness. For grass species fescue species should be avoided unless they are endophyte-free varieties.

Rotation planning

The Verogy *Project Name* was assessed for a planned grazing rotation based on the preliminary panel layout, and *xx.x* acres fenced area under panels. The grazing plan requires division of the solar array into smaller grazing units, known as *paddocks*. The site layout can be subdivided into *x* different grazing paddocks with Electronet® fencing (Figure 1). The Electronet® is a portable fence that is a product familiar to farmers in in the grazing community. It is a white, lightweight fence that is energized using a portable battery, battery/solar, or 110V power supply. This fencing is simple to power on/off and will only be located inside the fenced areas. Its use is to facilitate grazing inside the permanently fenced areas only. The Electronet® will be installed by the grazing manager according to the grazing plan.

Provided Fence details for paddock layouts.

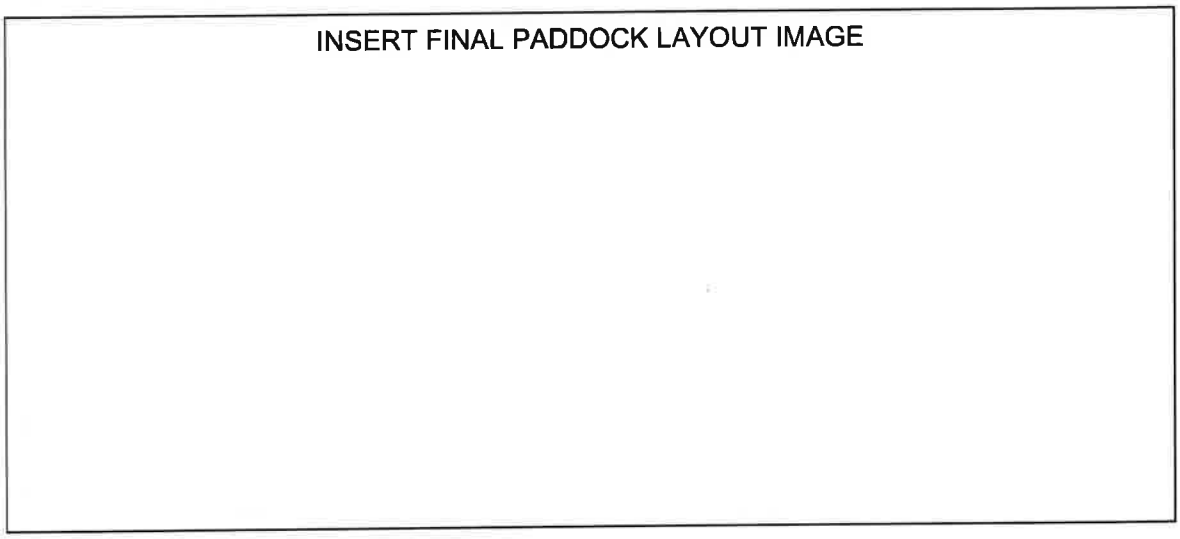

Figure 1. Verogy *Project Name* Site Layout with distinctly colored sections. Please note that this is an approximation and subject to change.

- Paddock 1 (x.x acres)
- Paddock 2 (x.x acres)
- Paddock 3 (x.x acres)

The number of grazing paddocks in each array is dependent on a unique set of factors. The number depends on size and layout of the permanently fenced array, panel orientation, and space used for access roads, inverter pads, and other non-forage producing areas.

Manure management is a subset of the flock management and sheep management planned for the solar site. The primary purpose of the placement of sheep on the solar site is to achieve vegetation management goals. The planned movement of the sheep around the solar site has the underlying benefit of moving and distributing sheep manure at the same time. Sheep manure is typically small and pelletized. For the layperson, sheep manure may resemble the manure of rabbits or deer. Similarly, the manure is typically invisible within a short period of time and begins nutrient cycling in the soils.

The correct sheep stocking rate and density (sheep per acre per unit of time) will be calculated before the grazing season based on site size, and quantity and type of vegetation present. This metric also ensures that no over-grazing

occurs, and that the amount of manure deposition does not outpace the rate of manure decomposition throughout the grazing rotation.

The flock will not overwinter within the fenced area of the solar array.

Acreage

The sheep flock is sized to cover the xxxxx grazing paddocks in a full rotation, i.e. the amount of sheep needed to graze Paddock 1, 2, and 3 with xx, xx, and xx acres, respectively, in a +/- 45-day rotation. The precise number of days per paddock may be adjusted over the season by the flock manager, depending on weather and forage growth conditions. The number of sheep determined by the grazing plan can be found in *Project Name* Project:

Table 1. Grazing Plan *Project Name* Project

INSERT FINAL PADDOCK TABLE

The rest time for a given grazed area is largely guided by management for the sheep flock's health. The rest time can be considered the window during which the sheep are not present in a given area and the space is given a rest. The pasture rest period (time between grazing periods) in the US Northeast should not be less than 40-days to minimize internal parasite pressure for sheep. Internal parasites are a health risk to the sheep but not to humans. Internal parasites of sheep are not zoonotic, but a threat only to the health of sheep. This health risk to sheep is minimized by following the following prescriptive grazing plan.

A common internal parasite specific to ruminates is the stomach nematode *H. contortus* or barber pole worm. It has a life cycle of 40 days; thus, a clean pasture can only be achieved with rest periods of 40+ days to avoid reinfection through ingestion of larvae. However, in effective grazing regimens with parasite-resistant sheep flocks, exceptions can be made by the flock manager if the vegetation pressure is too high to adhere to a 40-day rest period before re-grazing.

Sampling and analysis

In newly commissioned solar sites, full vegetation coverage cannot be expected in the first 1-2 years. Additionally, access roads, inverter pads and other site infrastructure will reduce the overall vegetation cover. The estimate for NY State solar sites lies between 65 and 85% vegetation coverage for new sites. This number should be estimated and considered separately for each individual paddock. This number will be adjusted over subsequent years and grazing seasons.

As previous management regimes for solar sites might consist of hay fields, crop fields, marginal pastures or brush areas, the vegetation coverage is expected to be heterogeneous. Therefore, vegetation sampling must be performed to determine sheep stocking rate and density, which is a requirement prior to establishing a grazing rotation. Tabular dry matter and nutrient values as they are published for uniform stands of established crops, hay field or other, are not adequate for evaluating solar array site vegetation for grazing. A detailed organic matter (OM) vegetation sampling protocol is published on the American Solar Grazing Association (ASGA) website. The grazing rotation will largely depend on the amount of forage dry matter (DM) growing within the individual areas. Manager may perform vegetation sampling at intervals to analyze the nutritional value of the forage.

Forage analysis laboratories such as Dairy One provide detailed analyses that can be used to calculate the available DM per grazing paddock from submitted OM samples. Dry matter is a percent of total percent plant weight minus water content. These DM values are necessary to establish the amount of available feed for sheep, and eventually the sheep stocking rate and density. Typically, pasture DM values in the Northeastern US for well-maintained pastures are between 18-25%, depending on the season.

Typically, well managed Northeast pastures can achieve yields above 2,500 lbs DM per acre. The yield in the grazing plan draft above is substantially lower; it is expected that the solar array pastures will take time after establishment to reach their potential. It is necessary to plan a grazing rotation prior to the grazing season, which would be used to guide a flock manager's rotation plan. The flock manager would then use his/her own experience and observation to decide daily if the rotation plan is reasonable and responsible, and to make necessary adjustments in rotation days and stocking rates.

Pasture utilization should be between 70 and 85% to ensure optimal regrowth and animal nutrition. Thus, pasture refusals (uneaten vegetation remaining after grazing) should be part of the calculation and should be between 15% and 35%.

Two examples of common adjustments to rotation plans include: First, in late spring after rain events and with the warming weather, stocking rates may have to be increased to be able to clear the vegetation growth. Secondly, in the summer, sheep may have to be moved from paddock to paddock faster than they were in spring or fall due to the slowed growth of dormant cool-season vegetation.

Feed Intake

It is recommended to graze uniform animal groups that are either dry (non-lactating) ewes, open (non-pregnant) ewes, ewes in their early stages of pregnancy, yearling ewes or growing lambs of at least 60 lb. (or alternatively, 50% of their mature body weight in case of small breeds). In the case of groups of growing lambs, the lambs should be of the same sex or the males should be castrated.

Table 2. Body weight and feed intake

Breed	***Stage of production***	***Body weight, lbs***	***Feed intake, DM %BW***	***Feed intake, lbs DM***
Katahdin hair sheep	Growing lamb, 50% mature BW	65	2.5	1.6
	Yearling	110	3.0	3.3
	Open, dry ewe	130	3.5	4.6
Polypay composite	Growing lamb, 50% mature BW	80	2.5	2.0
	Yearling	130	3.0	3.9
	Open, dry ewe	160	3.5	5.6
Texel	Growing lamb, 50% mature BW	90	2.5	2.3
	Yearling	150	3.0	4.5
	Open, dry ewe	180	3.5	6.3

Depending on the breed and uniformity of the group of sheep, an average weight for the individual animals in the flock can be determined. Table 2. Body weight and feed intake, gives an overview of BW (body weight) and feed intake across popular Northeastern sheep breeds. According to NRC nutritional requirements for small ruminants (NRC, 2007), daily DM consumption per animal can be estimated as a percentage of bodyweight.

Totals

These calculations can be used to determine the optimal number of sheep per paddock according to body weight and stage of production. By using this with the chosen grazing rotation days (or rest period), the stocking rate (the necessary sheep number for the calculated grazing time within each paddock) can be calculated, and the optimal grazing flock size calculated.

On the XX.X acre *Project Name* project, the grazing plan allows for XX mature ewes managed in three grazing paddocks, a stocking rate of XX sheep per acre, and XX grazing days per paddock with a 45-day rest period.

Animal welfare recommendations

Regardless of season, ad libitum clean and fresh water access is crucial for animal welfare (NRC, 2007). Site-specific amenities like well water or connection to municipal water lines are ideal, but transported water is typical of solar grazing operations. For sheep of the recommended production stages (non-lactating and > 60 lbs growing lambs), water requirements are very low in spring and fall. Typically, dry, non-gestating ewes will consume between 5 and 10 % of their BW water daily.

Granulated mineral feed must be available ad libitum and contain adequate concentrations. Mineral feed should be offered in troughs that can be moved with the flock according to the rotation and rotation days. Mineral feed is specially blended and commercially available for sheep producers (Cargill, 2019).

Sheep will be visually inspected on every rotation day by the flock manager. A closer inspection of each member of the flock is recommended at regular intervals (every 6 weeks on site), including parasite monitoring or treatment with a FAMACHA (FAffa MAlan CHArt) protocol (Wyk and Bath, 2002), and 5-point checks (Bath and van Wyk, 2009). Each spring, before the flocks begin the grazing season, certain protocols are recommended to ensure they are in optimal health before their work at the solar site begins:

- Feet must be checked and trimmed,
- Ear tags replaced or added, in compliance with USDA regulations,
- Wool sheep must be shorn,
- Wool sheep should be tail-banded,
- Body-condition scores should be recorded to monitor nutritional and health status across the grazing season,
- ***Sheep should be kept in a dry lot on hay 24 hours prior to moving on site in Spring and de-wormed with a commercially available de-wormer to prevent parasite infections on site.***

Emergency Protocols

In the event of a site emergency, the following protocol is to be on hand to ensure safe site access for emergency personnel:

- Clear signage will be displayed at the main gate with emergency contact information of the sheep manager. The manager should be contacted immediately in the event emergency personnel have to enter the site in order to ascertain if there are animals present, and to provide notification to the sheep manager that the animals may need to be removed.
- If portable electric fence is installed crossing site roadways, the fence charger will be placed clearly by the side of the roadway. In the event of emergency, the charger will only need to be switched off and the fence pulled up by hand to allow passage.
- If possible, animals should remain inside the site during an emergency, until the sheep manager can safely remove them. They will likely move as a flock away from any commotion and pose little risk of being in the way. If they do escape during the site emergency, they should be monitored and pushed towards fields and away from roads if possible.

Literature

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CONNECTICUT DEPARTMENT OF AGRICULTURE
450 Columbus Blvd, Suite 701 | Hartford, Connecticut 06103 | 860.713.2500
Office of the Commissioner
An Equal Opportunity Employer

March 16, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Enfield Solar One, LLC – 110 North Street, Enfield

Dear Executive Director Bachman:

Pursuant to 16-50k(a) of the Connecticut General Statutes, we have reviewed the above cited project with respect to agricultural impacts, specifically, to determine whether "…such project will not materially affect the status of such land as prime farmland…"

This project will be located at 110 North Street in Enfield, on land owned by the Catholic Cemeteries Association. The project consists of a single parcel which is 73.88 acres in size. The parcel contains 48.6 acres of prime farmland, and there are approximately 15.6 acres of prime farmland within the project area (approximately 32 percent of the prime farmland on the parcel). The developers state that there is no production agriculture currently conducted within the project footprint.

In a letter to the Department of Agriculture (DoAg), dated September 28, 2021 and follow-up correspondence dated February 4, 2022, the developers (Verogy) have stated that they intend to develop this project with co-uses which include creation of pollinator habitat and rotational sheep grazing. Preliminary details of these co-uses are represented to the Department as follows:

1) Verogy will be implementing a rotational grazing system. The site will be stocked with sheep at a density that would adequately manage the vegetative growth of grasses and forbs within the perimeter fence at the site;

2) Verogy has also stated that a Connecticut based farmer would manage the grazing program. A draft Sheep Grazing Plan, prepared by Verogy, in conjunction with Agrivoltaic Solutions LLC, is attached to the aforementioned letter from the developers; and

3) Verogy intends to use a seed mix that is developed specifically for a combination of sheep grazing and pollinator habitats, one that will address the nutritional needs of the sheep while also providing nectar for native pollinator species. This would likely be a seed mix developed by Ernst Conservation Seeds, called the "Fuzz & Buzz" mix.

Based on preliminary information provided to DoAg (enclosed), and the successful implementation of the co-uses and continuing farming activities described above, the Department of Agriculture concludes this project will not materially affect the status of project land as prime farmland. The Department of Agriculture will continue to monitor the proposed project and should changes or additions to the proposal raise concerns to the Department, we reserve the right to modify our position on this project, including opposing it, as detailed plans are provided by the developers.

If you have any questions, please feel free to contact Holly Lalime of my staff. Holly can be reached at Holly.Lalime@ct.gov or at (860) 969-7053.

Sincerely,

Bryan P. Hurlburt
Commissioner

Enc.

Cc: Katie Dykes, Commissioner, Department of Energy and Environmental Protection
William Herchel, Verogy

Enfield Solar One, LLC
150 Trumbull Street, 4th Floor
Hartford, CT 06103
Verogy.com

September 27, 2021

VIA ELECTRONIC MAIL

Commissioner Katie S. Dykes
Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

RE: Enfield Solar One, LLC (4.0 MW SCEF Solar Photovoltaic Generating Facility)

Dear Commissioner Dykes:

Enfield Solar One, LLC ("Enfield Solar One") is writing to notify the department of a planned solar photovoltaic electric generating facility of four megawatts (4.0MW) (the "Project"). The Project will be located on land south of North Street in Enfield Connecticut.

The Project was awarded a contract in the Year-One Shared Clean Energy Facility RFP administered by the Department of Energy and Environmental Protection. Enfield Solar One intends to file a petition for declaratory ruling with the Connecticut Siting Council, Pursuant to Conn. Gen. Stat. §§ 4-176 and 16-50k(a) and Regs. Conn. State Agencies §§ 16-50j-38 et seq. for the proposed construction, operation and maintenance of the Project.

Pursuant to Sec. 16-50k of the Connecticut General Statutes, Enfield Solar One respectfully requests that the Department of Energy and Environmental Protection review the proposed project and offer their determination as it relates to any potential impacts to Core Forest.

Attached for your review is the Forestland Habitat Impact Map for the Project with the proposed project limits depicted. There are no Forestland Habitat located on the Project parcel and the closest habitat is located over 2,300 feet to the south.

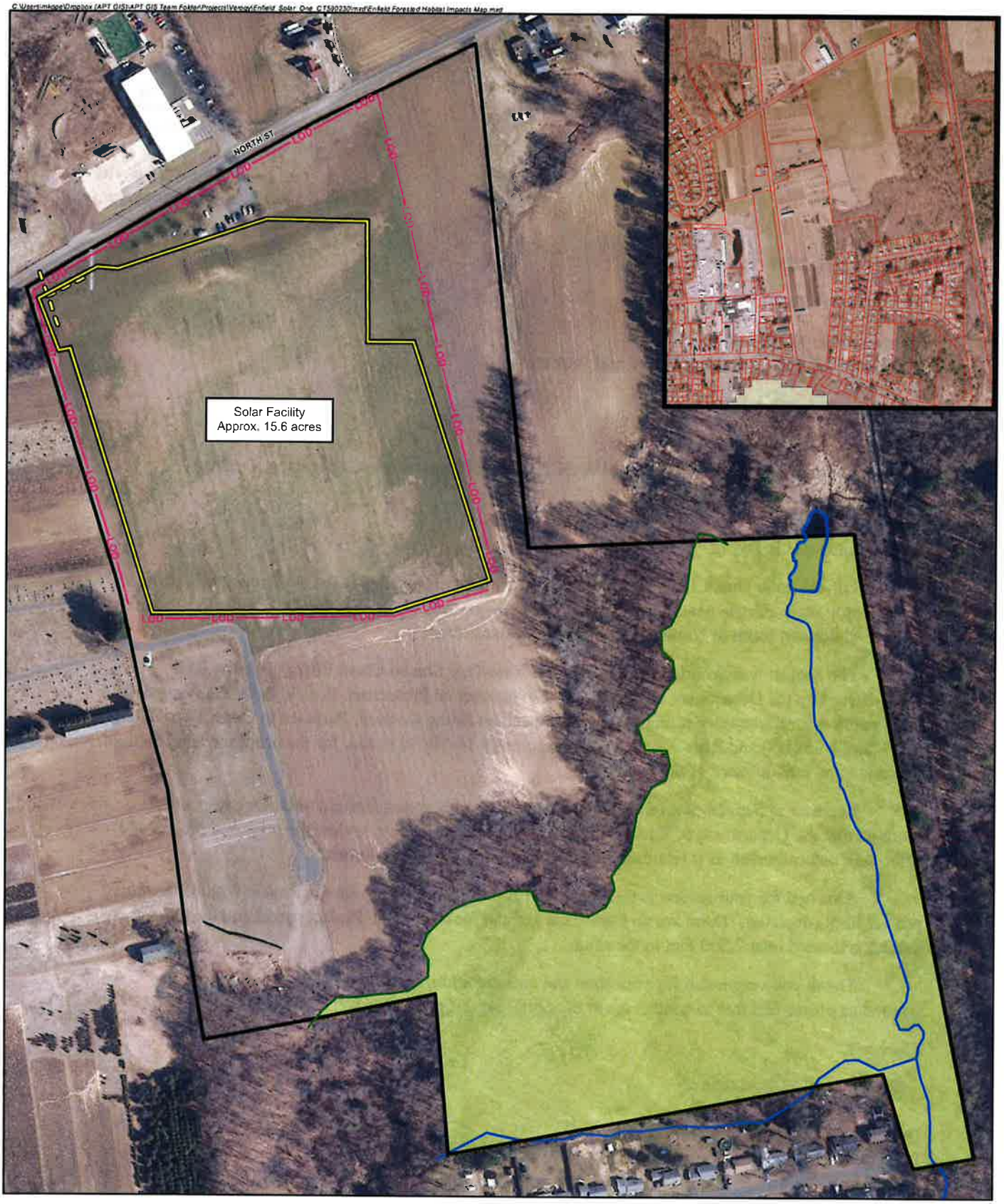
Thank you very much for your time and consideration, should you have any questions or comments please feel free to contact me at bfitzgerald@verogy.com or (203) 257-3375.

Sincerely,

Bryan Fitzgerald

Bryan Fitzgerald
Director of Development

Cc: Brad Parsons (bparsons@verogy.com)
William Herchel (wherchel@verogy.com)



Legend

- Site
- Approximate Project Area
- Approximate Access Drive
- Approximate Interconnect Path
- Delineated Wetland Boundary
- Approximate Wetland Area
- Forestland Habitat Impact (CTDEEP)*
- Existing Farm Pond
- Approximate Watercourse

Map Notes:
**Item not located within map extent*
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Scale: 1 inch = 300 feet
Map Date: May 2021

N

300 150 0 300 Feet

Forested Habitat Impacts Map

Proposed Enfield Solar One
Solar Facility
110 North Street
Enfield, Connecticut

VEROGY

ALL-POINTS TECHNOLOGY CORPORATION

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

March 22, 2022

Melanie A. Bachman
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

cc: Bradley J. Parsons, PE, PMP
Director of Design and Permitting
Verogy | 150 Trumbull Street, 4th Floor
Hartford, CT 06103

RE: Enfield Solar One, LLC
Proposed 4.0MW (AC) SCEF Project
110 North Street, Enfield, Connecticut

T
Dear Ms. Bachman,

Bradley J. Parsons, Director of Design and Permitting, for Verogy ("Petitioner") has contacted the Connecticut Department of Energy and Environmental Protection ("DEEP") Bureau of Natural Resources and informed us of the intention to file a petition for a declaratory ruling with the Connecticut Siting Council. Petitioner proposes to construct a Shared Clean Energy Facilities (SCEF) with a capacity of two or more megawatts, to be located at 110 North Street, Enfield, Connecticut 06082 ("Site").

Pursuant to Sec. 16-50k of the Connecticut General Statutes the DEEP Bureau of Natural Resources staff have reviewed documents submitted by the Petitioner concerning this proposed project, which includes a site map dated May 21, 2021 attached to an email dated March 22, 2022 prepared by Verogy.

In conducting such review of the proposed project, DEEP Bureau of Natural Resources has determined that such proposed project, as represented in the above-mentioned documents **will not** materially affect the status of such Site as core forest.

Nothing in this letter relieves the Petitioner of other obligations under applicable federal, state, and local law that may be necessary as part of the proposed project design and implementation.

If you have any questions, you may contact me at 860-424-3060, or by mail at 79 Elm Street, Sixth Floor, Hartford, CT 06106-5127.

Connecticut is one of the most heavily forested states in America. Our forests clean our air and water, shelter our wildlife, sequester carbon, contribute tens of millions of dollars to our economy, and add immeasurably to the quality of our lives. Yet every day, our forests are under threat. Invasive insects and diseases and our dense and growing human population continue to stress our forests in unprecedented ways. Thank you for helping us to conserve a healthy core forest for future generations, providing public transparency and working to make thoughtful development choices.

Sincerely,

Christopher Martin, State Forester
Bureau of Natural Resources
Department of Energy and Environmental Protection

CC: Bryan P. Hurlburt, Connecticut Department of Agriculture

Holly Lalime, Connecticut Department of Agriculture

Jenny Dickson, Director of Wildlife, Bureau of Natural Resources, DEEP

DEEP.OPPD@ct.gov

siting.council@ct.gov

APPENDIX D

CULTURAL RESOURCES REVIEW

Department of Economic and Community Development
State Historic Preservation Office

July 26, 2021

Mr. David R. George
Heritage Consultants
PO Box 310249
Newington, CT 06131

Subject: Phase IA Cultural Resource Reconnaissance Survey
Verogy Solar
110 North Street
Enfield, Connecticut
ENV-22-0070

Dear Mr. George:

The State Historic Preservation Office (SHPO) has reviewed the cultural resource reconnaissance survey prepared by Heritage Consultants, LLC (Heritage), dated July 2021. The proposed activities are under the jurisdiction of the Connecticut Siting Council and are subject to review by this office pursuant to the Connecticut Environmental Policy Act (CEPA). The proposed undertaking includes the construction of a solar facility, which is to occupy an approximately 25.25 acre project area within a larger 73 acre parcel. The area is bordered to the north by North Street, along with a sand and gravel facility, to the east by wetland and woodlands, to the south by a residential subdivision, and to the west by agricultural fields. The submitted report is well-written, comprehensive, and meet the standards set forth in the *Environmental Review Primer for Connecticut's Archaeological Resources*.

Three previously recorded archaeological sites are located within 1 mile of the project area; however, they will not be impacted by the proposed undertaking. Two properties listed on the National Register of Historic Places (NR), the Enfield Shakers Historic District (NR# 79002663), and the Hazzardville Historic District (NR# 80004061) are located within one mile of the project area; however, neither will be impacted by the proposed undertaking.

Following a pedestrian survey, it was determined that the majority of the project area is characterized as having low slopes, well-drained soils, little evidence of disturbance beyond the upper portion of the soil collumn, and proximity to fresh water sources. Therefore, it retains a moderate to high potential to contain intact archaeological deposits. We therefore request that a

Phase IB professional cultural resources assessment and reconnaissance survey that includes subsurface testing techniques be completed in areas identified as having moderate to high archaeological sensitivity and will be impacted by the proposed solar project prior to construction. All work should be in compliance with our *Environmental Review Primer for Connecticut's Archaeological Resources* and no construction or other project-related ground disturbance should be initiated until SHPO has had an opportunity to review and comment upon the requested survey.

This office appreciates the opportunity to review and comment upon this project. For additional information, please contact Marena Wisniewski, Environmental Reviewer, at (860) 500-2357 or marena.wisniewski@ct.gov.

Sincerely,

Jonathan Kinney
Deputy State Historic Preservation Officer

JULY 2021

PHASE IA CULTURAL RESOURCES ASSESSMENT SURVEY OF THE PROPOSED VEROGY SOLAR FACILITY PROJECT, 110 NORTH STREET, ENFIELD, CONNECTICUT

PREPARED FOR:

ALL-POINTS TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION – SUITE 311
WATERFORD, CT 06385

PREPARED BY:

HERITAGE CONSULTANTS

55 EAST CEDAR STREET
NEWINGTON, CONNECTICUT 06111

ABSTRACT

This report presents the results of a Phase IA Cultural Resources Assessment Survey for a proposed solar facility located at 110 North Street, Enfield, Connecticut. The project parcel encompasses approximately 73 acres of land, of which 25.25 acres will be developed into the solar center. The current investigation consisted of: 1) preparation of an overview of the region's prehistory, history, and natural setting); 2) a literature search to identify and discuss previously recorded cultural resources in the vicinity of the solar facility; 3) a review of readily available historical maps and aerial imagery depicting the impact areas to identify potential historical resources and/or areas of past disturbance within the project parcel and solar area; and 4) pedestrian survey and photo-documentation of the impact areas to determine their archaeological sensitivity. The results of the Phase IA survey indicate that the project parcel is characterized by mostly level topography and is located in close proximity to streams and wetlands. While area has been cleared and used for agricultural purposes and as a golf driving range in the recent past, it is still moderately sensitive for cultural deposits buried in subsoil contexts.

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CHAPTER I
INTRODUCTION

This report presents the results of a Phase IA Cultural Resources Assessment Survey of a proposed solar facility (the Facility) in the Hazardville section of Enfield, Connecticut (Figures 1 and 2). All-Points Technology Corporation (All-Points), working on behalf of Verogy Solar (Verogy), requested that Heritage Consultants, LLC (Heritage) complete the Phase IA survey as part of the planning process for the Facility, which will impact 25.25 acres of land at 110 North Street in Enfield, Connecticut. The proposed Facility is bounded to the north by North Street and a sand/gravel operation, to the east by woodlands and wetlands, to the south by a residential subdivision, and to the west by agricultural fields. The southern part of the project parcel remains wooded, but this area will not be developed during construction of the Facility. Heritage completed this investigation on behalf of All-Points in June of 2021. All work associated with this project was performed in accordance with the *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987), which is promulgated by the Connecticut State Historic Preservation Office (CT-SHPO).

Project Description and Methods Overview

The proposed project will include the construction of the Facility and associated infrastructure, including photovoltaic panels and associated electrical equipment. A total of approximately 15,184 solar panels will be installed within the Facility area. The Facility will interconnect with North Street to the northwest (Figure 2). This Phase IA Cultural Resources Assessment Survey consisted of the completion of the following tasks: 1) a contextual overview of the region's prehistory, history, and natural setting (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously recorded cultural resources in the region encompassing the Facility area; 3) a review of readily available historical maps and aerial imagery depicting the project parcel and proposed Facility in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the Facility area in order to determine its archaeological sensitivity.

Project Results and Management Overview

The review of historical maps and aerial images of the project region and files maintained by the CT-SHPO, as well as pedestrian survey of the Facility area, resulted in the identification of three previously identified archaeological sites within 1.6 km (1 mi) of the Facility. They include Sites 49-5, 49-7, and 49-10 (Figure 9). Their presence demonstrates that prehistoric and historical archaeological resources exist in the region containing the Facility; they are discussed further in Chapter V of this document. In addition, 16 Connecticut State Historical Register properties (49-22, 49-47, 49-48, 49-53, 49-54, 49-55, 49-57, 49-58, 49-59, 49-94, 49-129, 49-131, 49-132, 49-133, 49-134, and 49-135) falling within two National Register of Historic Places districts (Enfield Shakers Historic District and Hazardville Historic District) also were identified in the vicinity of the Facility. They too are discussed in Chapter V of this report.

In addition to the identification of the previously recorded cultural resources discussed above, Heritage combined data from the pedestrian survey along with historical map and aerial image analysis to aid in assessment of the archaeological sensitivity of the impact areas associated with the proposed Facility. Following the pedestrian survey, which included a thorough walkover of the impact areas, as well as photo-documentation, it was determined that the proposed Facility is located within an area characterized by relatively even topography and slight slopes and is in close proximity to streams and

wetlands. While the landscape has been altered by clearing and farming, the Facility area retains a moderate potential to contain intact cultural deposits.

Project Personnel

Key personnel for this project included Mr. David R. George, M.A., R.P.A. (Principal Investigator); Ms. Renée Petruzelli, M.A. R.P.A. (Project Archaeologist); Mr. Antonio Medina, B.A. (Operations Manager); Cory Atkins, M.A., (Field Supervisor); Dr. Kristen Keegan (Historian); and Mr. Tevin Jourdain, B.A. (GIS Specialist).

CHAPTER II
NATURAL SETTING

Introduction

This chapter provides a brief overview of the natural setting of the region containing the proposed Facility in Enfield, Connecticut. Previous archaeological research has documented that a few specific environmental factors can be associated with both prehistoric and historical period site selection. These include general ecological conditions, as well as types of fresh water sources and soils present. The remainder of this section provides a brief overview of the ecology, hydrological resources, and soils present within the impact areas and the larger region in general.

Ecoregions of Connecticut

Throughout the Pleistocene and Holocene Periods, Connecticut has undergone numerous environmental changes. Variations in climate, geology, and physiography have led to the "regionalization" of Connecticut's modern environment. It is clear, for example, that the northwestern portion of the state has very different natural characteristics than the coastline. Recognizing this fact, Dowhan and Craig (1976), as part of their study of the distribution of rare and endangered species in Connecticut, subdivided the state into various ecoregions. Dowhan and Craig (1976:27) defined an ecoregion as:

> "an area characterized by a distinctive pattern of landscapes and regional climate as expressed by the vegetation composition and pattern, and the presence or absence of certain indicator species and species groups. Each ecoregion has a similar interrelationship between landforms, local climate, soil profiles, and plant and animal communities. Furthermore, the pattern of development of plant communities (chronosequences and toposequences) and of soil profile is similar in similar physiographic sites. Ecoregions are thus natural divisions of land, climate, and biota."

Dowhan and Craig defined nine major ecoregions for the State of Connecticut. They are based on regional diversity in plant and animal indicator species (Dowhan and Craig 1976). Only one of the ecoregions is germane to the current investigation: North-Central Lowlands ecoregion. A brief summary of this ecoregion is presented below. It is followed by a discussion of the hydrology and soils found in and adjacent to the project area.

North-Central Lowlands Ecoregion

The North-Central Lowlands ecoregion consists of a broad valley located between 40.2 and 80.5 km (25 and 50 mi) to the north of Long Island Sound (Dowhan and Craig 1976). It is characterized by extensive floodplains, backwater swamps, and lowland areas situated near large rivers and tributaries. Physiography in this region is composed of a series of north-trending ridge systems, the easternmost of which is referred to as the Bolton Range (Bell 1985:45). These ridge systems comprise portions of the terraces that overlook the larger rivers such as the Connecticut and Farmington Rivers. The bedrock of the region is composed of Triassic sandstone, interspersed with very durable basalt or "traprock" (Bell 1985). Soils found in the upland portion of this ecoregion are developed on red, sandy to clayey glacial till, while those soils situated nearest to the rivers are situated on widespread deposits of stratified sand, gravel, silt, and alluvium resulting from the impoundment of glacial Lake Hitchcock.

Hydrology in the Vicinity of the Facility

The proposed Facility is situated within a region that contains several sources of freshwater, including the Scantic River, Freshwater Brook, and Terry Brook, as well as several unnamed streams, ponds, and

wetlands. These freshwater sources may have served as resource extraction areas for Native American and historical populations. Previously completed archaeological investigations in Connecticut have demonstrated that streams, rivers, and wetlands were focal points for prehistoric occupations because they provided access to transportation routes, sources of freshwater, and abundant faunal and floral resources.

Soils Comprising the Facility Area

Soil formation is the direct result of the interaction of many variables, including climate, vegetation, parent material, time, and organisms present (Gerrard 1981). Once archaeological deposits are buried within the soil, they are subject to various diagenic and taphonomic processes. Different classes of artifacts may be preferentially protected, or unaffected by these processes, whereas others may deteriorate rapidly. Cyclical wetting and drying, freezing, and thawing, and compression can accelerate chemically and mechanically the decay processes for animal bones, shells, lithics, ceramics, and plant remains. Lithic and ceramic artifacts are largely unaffected by soil pH, whereas animal bones and shells decay more quickly in acidic soils. In contrast, acidic soils help preserve charred plant remains.

A review of the soils within the proposed impact areas is presented below. They are characterized by four major soil types: Ninigret, Tisbury, Agawam, and Windsor (Figure 3). A review of these soils shows that they are moderately well drained to excessively well drained sandy loams that are typically correlated with prehistoric and historical use and occupation. Descriptive profiles for each soil type are presented below; they were gathered from the National Resources Conservation Service.

Ninigret Soils (21A)

The Ninigret series consists of very deep, moderately well drained soils formed in loamy over sandy and gravelly glacial outwash. They are nearly level to strongly sloping soils on glaciofluvial landforms, typically in slight depressions and broad drainage ways. A typical profile associated with Ninigret soils is as follows: **Ap** --0 to 8 inches; very dark grayish brown (10YR 3/2) fine sandy loam; pale brown (10YR 6/3) dry; weak medium granular structure; very friable; many fine roots; strongly acid; abrupt smooth boundary; **Bw1** --8 to 16 inches; yellowish brown (10YR 5/6) fine sandy loam; weak coarse granular structure; very friable; few fine roots; strongly acid; clear wavy boundary; **Bw2** --16 to 26 inches; yellowish brown (10YR 5/4) fine sandy loam; very weak coarse granular structure; very friable; very few fine roots; common medium distinct light brownish gray (10YR 6/2) and brownish yellow (10YR 6/6) redoximorphic features; strongly acid; clear wavy boundary; and **2C** --26 to 65 inches; pale brown (10YR 6/3) loamy sand and few lenses of loamy fine sand; single grain; loose; many medium distinct light olive gray (5Y 6/2) and many prominent yellowish brown (10YR 5/8) redoximorphic features; strongly acid (https://soilseries.sc.egov.usda.gov/OSD_Docs/N/NINIGRET.html).

Tisbury Soils (21A)

The Tisbury series consists of very deep, moderately well drained loamy soils formed in silty eolian deposits overlying outwash. They are nearly level and gently sloping soils on outwash plains and terraces, typically in slight depressions and broad drainageways. A typical profile associated with Tisbury soils is as follows: **Ap**--0 to 8 inches; very dark grayish brown (10YR 3/2) silt loam; weak coarse granular structure; friable; many very fine and fine roots; few scattered pebbles; strongly acid; abrupt smooth boundary; **Bw1**--8 to 18 inches; yellowish brown (10YR 5/6) silt loam; weak medium and coarse subangular blocky structure; very friable; common very fine and fine roots; few scattered pebbles; strongly acid; clear wavy boundary; **Bw2**--18 to 26 inches; brownish yellow (10YR 6/6) silt loam; massive; very friable; few fine roots; few scattered pebbles; common medium prominent grayish brown (2.5Y 5/2) iron depletions and common medium distinct strong brown (7.5YR 5/6) masses of iron

accumulation; strongly acid; clear wavy boundary; and **2C**--26 to 60 inches; grayish brown (10YR 5/2) extremely gravelly sand; single grain; loose; 60 percent gravel; common medium prominent strong brown (7.5YR 5/6) masses of iron accumulation and common medium faint light brownish gray (10YR 6/2) iron depletions; strongly acid (https://soilseries.sc.egov.usda.gov/OSD_Docs/T/TISBURY.html).

Agawam Soils (29A)

The Agawam series consists of very deep, well drained soils formed in sandy, water deposited materials. They are level to steep soils on outwash plains and high stream terraces. A typical profile associated with Agawam soils is as follows: **Ap**--0 to 11 inches; dark grayish brown (10YR 4/2) fine sandy loam; light brownish gray (10YR 6/2) dry; weak medium and coarse subangular blocky structure; very friable; common fine and medium roots; strongly acid; abrupt smooth boundary; **Bw1**--11 to 16 inches; dark yellowish brown (10YR 4/4) fine sandy loam; weak medium and coarse subangular blocky structure; very friable; common fine and medium roots; strongly acid; abrupt smooth boundary; **Bw2**--16 to 26 inches; light olive brown (2.5Y 5/4) fine sandy loam; weak medium subangular blocky structure; very friable; common fine and medium roots; strongly acid; clear smooth boundary; **2C1**--26 to 45 inches; olive(5Y 5/3) loamy fine sand; massive; very friable; few fine roots; strongly acid; clear smooth boundary; **2C2**--45 to 55 inches; olive brown (2.5Y 4/4) loamy fine sand; massive; very friable; strongly acid; abrupt smooth boundary; and **2C3**--55 to 65 inches; olive (5Y 5/3) loamy sand; single grain; loose; strongly acid (https://soilseries.sc.egov.usda.gov/OSD_Docs/A/AGAWAM.html).

Windsor Soils (36B)

The Windsor series consists of very deep, excessively drained soils formed in sandy outwash or eolian deposits. They are nearly level through very steep soils on glaciofluvial landforms. A typical profile associated with Windsor soils is as follows: **Oe**--0 to 3 cm; black (10YR 2/1) moderately decomposed forest plant material; many very fine and fine roots; very strongly acid; abrupt smooth boundary; **A**--3 to 8 cm; very dark grayish brown (10YR 3/2) loamy sand; weak medium granular structure; very friable; many very fine and fine roots; strongly acid; abrupt wavy boundary; **Bw1**--8 to 23 cm; strong brown (7.5YR 5/6) loamy sand; very weak fine granular structure; very friable; many fine and medium roots; strongly acid; gradual wavy boundary; **Bw2**--23 to 53 cm; yellowish brown (10YR 5/6) loamy sand; very weak fine granular structure; very friable; common fine and medium roots; strongly acid; gradual wavy boundary; **Bw3**--53 to 64 cm; light yellowish brown (10YR 6/4) sand; single grain; loose; few coarse roots; strongly acid; clear wavy boundary; and **C**--64 to 165 cm; pale brown (10YR 6/3) and light brownish gray (10YR 6/2) sand; single grain; loose; few coarse roots; strongly acid (https://soilseries.sc.egov.usda. gov/OSD_Docs/W/WINDSOR.html).

Summary

The natural setting of the area containing the proposed Facility is common throughout the North-Central Lowlands ecoregion. Streams and rivers of this area empty into the Connecticut River, which in turn drains into the Long Island Sound. Further, the landscape is dominated by low slopes and sandy loamy soil types with some wetland soils intermixed. In general, the region was well suited to Native American occupation throughout the prehistoric era. This portion of Enfield was also used throughout the historical era, as evidenced by the presence of numerous historical residences, barns, outbuildings, and agricultural fields throughout the region; thus, archaeological deposits dating from the prehistoric and historical era may be expected near or within the proposed Project area.

CHAPTER III
PREHISTORIC SETTING

Introduction

Prior to the late 1970s and early 1980s, few systematic archaeological surveys of large portions of the state of Connecticut had been undertaken. Rather, the prehistory of the region was studied at the site level. Sites chosen for excavation were highly visible and located in the coastal zone, e.g., shell middens, and Connecticut River Valley. As a result, a skewed interpretation of the prehistory of Connecticut was developed. It was suggested that the upland portions of the state, i.e., the northeastern and northwestern hills ecoregions, were little used and rarely occupied by prehistoric Native Americans, while the coastal zone, i.e., the eastern and western coastal and the southeastern and southwestern hills ecoregions, were the focus of settlements and exploitation in the prehistoric era. This interpretation remained unchallenged until the 1970s and 1980s when several town-wide and regional archaeological studies were completed. These investigations led to the creation of several archaeological phases that subsequently were applied to understand the prehistory of Connecticut. This chapter provides an overview of the prehistoric setting of the region encompassing the project area.

Paleo-Indian Period (12,000 to 10,000 Before Present [B.P.])

The earliest inhabitants of the present-day State of Connecticut, who have been referred to as Paleo-Indians, arrived in the area by ca., 12,000 B.P. (Gramly and Funk 1990; Snow 1980). Paleo-Indians are often described as big-game hunters due to the presence of large Pleistocene mammals at that time and the ubiquity of large fluted projectile points in archaeological deposits of this age, (Ritchie and Funk 1973; Snow 1980). However, as discussed below, it is more likely they hunted a wide variety of animals.

While there have been numerous surface finds of Paleo-Indian projectile points throughout the State of Connecticut, only two sites, the Templeton Site (6-LF-21) in Washington, Connecticut, and the Hidden Creek Site (72-163) in Ledyard, Connecticut, have been studied in detail and dated using the radiocarbon method (Jones 1997; Moeller 1980). The Templeton Site (6-LF-21) is located in Washington, Connecticut and was occupied between 10,490 and 9,890 years ago (Moeller 1980). In addition to a single large and two small fluted points, the Templeton Site produced a stone tool assemblage consisting of gravers, drills, core fragments, scrapers, and channel flakes, which indicates that the full range of stone tool production and maintenance took place at the site (Moeller 1980). Moreover, the use of both local and non-local raw materials was documented in the recovered tool assemblage, suggesting that not only did the site's occupants spend some time in the area, but they also had access to distant stone sources, the use of which likely occurred during movement from region to region.

Another Connecticut Paleo-Indian site studied in detail is the Hidden Creek Site (72-163) situated on the southeastern margin of the Great Cedar Swamp on the Mashantucket Pequot Reservation in Ledyard, Connecticut (Jones 1997). While excavation of the Hidden Creek Site produced evidence of Terminal Archaic and Woodland Period components (see below) in the upper soil horizons, the lower levels of the site yielded artifacts dating from the Paleo-Indian era. Recovered Paleo-Indian artifacts included broken bifaces, side-scrapers, a fluted preform, gravers, and end-scrapers. Based on the types and number of tools present, Jones (1997:77) has hypothesized that the Hidden Creek Site represented a short-term occupation, and that separate stone tool reduction and rejuvenation areas were present.

While archaeological evidence for Paleo-Indian occupation is scarce in Connecticut, it, combined with data from the West Athens Road and King's Road Site in the Hudson drainage and the Davis and Potts Sites in northern New York, supports the hypothesis that there was human occupation of the area not long after ca. 12,000 B.P. (Snow 1980). Further, site types currently known suggest that the Paleo-Indian settlement pattern was characterized by a high degree of mobility, with groups moving from region to region in search of seasonally abundant food resources, as well as for the procurement of high-quality raw materials from which to fashion stone tools.

Archaic Period (10,000 to 2,700 B.P.)

The Archaic Period, which succeeded the Paleo-Indian Period, began around 10,000 B.P. (Ritchie and Funk 1973; Snow 1980) and has been divided into three subperiods: Early Archaic (10,000 to 8,000 B.P.), Middle Archaic (8,000 to 6,000 B.P.), and Late Archaic (6,000 to 3,400 B.P.). These periods were devised to describe all non-farming, non-ceramic producing populations in the area. Regional archeologists recently have recognized a final "transitional" Archaic Period, the Terminal Archaic Period (3,400-2,700 B.P.), which was meant to describe those groups that existed just prior to the onset of the Woodland Period and the widespread adoption of ceramics into the toolkit (Snow 1980; McBride 1984; Pfeiffer 1984, 1990; Witthoft 1949, 1953).

Early Archaic Period (10,000 to 8,000 B.P.)

To date, few Early Archaic sites have been identified in southern New England. As a result, researchers such as Fitting (1968) and Ritchie (1969) have suggested a lack of these sites likely is tied to cultural discontinuity between the Early Archaic and preceding Paleo-Indian Period, as well as a population decrease from earlier times. However, with continued identification of Early Archaic sites in the region, and the recognition of the problems of preservation, it is difficult to maintain the discontinuity hypothesis (Curran and Dincauze 1977; Snow 1980).

Like their Paleo-Indian predecessors, Early Archaic sites tend to be small and produce few artifacts, most of which are not temporally diagnostic. While Early Archaic sites in other portions of the United States are represented by projectile points of the Kirk series (Ritchie and Funk 1973) and by Kanawha types (Coe 1964), sites of this age in southern New England are recognized on the basis of a series of ill-defined bifurcate-based projectile points. These projectile points are identified by the presence of their characteristic bifurcated base, and they generally are made from high quality raw materials. Moreover, finds of these projectile points have rarely been in stratified contexts. Rather, they occur commonly either as surface expressions or intermixed with artifacts representative of later periods. Early Archaic occupations, such as the Dill Farm Site and Sites 6LF64 and 6LF70 in Litchfield County, are represented by camps that were relocated periodically to take advantage of seasonally available resources (McBride 1984; Pfeiffer 1986). In this sense, a foraging type of settlement pattern was employed during the Early Archaic Period.

Middle Archaic Period (8,000 to 6,000 B.P.)

By the onset of the Middle Archaic Period, essentially modern deciduous forests had developed in the region (Davis 1969). It is at this time that increased numbers and types of sites are noted in Connecticut (McBride 1984). The most well-known Middle Archaic site in New England is the Neville Site, which is located in Manchester, New Hampshire and studied by Dincauze (1976). Analysis of the Neville Site indicated that the Middle Archaic occupation dated from between 7,700 and 6,000 years ago. In fact, Dincauze obtained several radiocarbon dates from the Middle Archaic component of the Neville Site associated with the then-newly named Neville type projectile point, ranged from 7,740±280 and 7,015±160 B.P. (Dincauze 1976).

In addition to Neville points, Dincauze (1976) described two other projectile points styles that are attributed to the Middle Archaic Period: Stark and Merrimac projectile points. While no absolute dates were recovered from deposits that yielded Stark points, the Merrimac type dated from 5,910±180 B.P. Dincauze argued that both the Neville and later Merrimac and Stark occupations were established to take advantage of the excellent fishing that the falls situated adjacent to the site area would have afforded Native American groups. Thus, based on the available archaeological evidence, the Middle Archaic Period is characterized by continued increases in diversification of tool types and resources exploited, as well as by sophisticated changes in the settlement pattern to include different site types, including both base camps and task-specific sites (McBride 1984:96)

Late Archaic Period (6,000 to 3,700 B.P.)

The Late Archaic Period in southern New England is divided into two major cultural traditions that appear to have coexisted. They include the Laurentian and Narrow-Stemmed Traditions (Funk 1976; McBride 1984; Ritchie 1969a and b). Artifacts assigned to the Laurentian Tradition include ground stone axes, adzes, gouges, ulus (semi-lunar knives), pestles, atlatl weights, and scrapers. The diagnostic projectile point forms of this time period in southern New England include the Brewerton Eared-Notched, Brewerton Eared and Brewerton Side-Notched varieties (McBride 1984; Ritchie 1969a; Thompson 1969). In general, the stone tool assemblage of the Laurentian Tradition is characterized by flint, felsite, rhyolite, and quartzite, while quartz was largely avoided for stone tool production.

In terms of settlement and subsistence patterns, archaeological evidence in southern New England suggests that Laurentian Tradition populations consisted of groups of mobile hunter-gatherers. While a few large Laurentian Tradition occupations have been studied, sites of this age generally encompass less than 500 m^2 (5,383 ft^2). These base camps reflect frequent movements by small groups of people in search of seasonally abundant resources. The overall settlement pattern of the Laurentian Tradition was dispersed in nature, with base camps located in a wide range of microenvironments, including riverine as well as upland zones (McBride 1978, 1984:252). Finally, subsistence strategies of Laurentian Tradition focused on hunting and gathering of wild plants and animals from multiple ecozones.

The second Late Archaic tradition, known as the Narrow-Stemmed Tradition, is unlike the Laurentian Tradition and it likely represents a different cultural adaptation. The Narrow-Stemmed tradition is recognized by the presence of quartz and quartzite narrow stemmed projectile points, triangular quartz Squibnocket projectile points, and a bipolar lithic reduction strategy (McBride 1984). Other tools found in Narrow-Stemmed Tradition artifact assemblages include choppers, adzes, pestles, antler and bone projectile points, harpoons, awls, and notched atlatl weights. Many of these tools, notably the projectile points and pestles, indicate a subsistence pattern dominated by hunting and fishing, as well the collection of a wide range of plant foods (McBride 1984; Snow 1980:228).

Terminal Archaic Period (3,700 to 2,700 B.P.)

The Terminal Archaic, which lasted from ca., 3,700 to 2,700 BP, is perhaps the most interesting, yet confusing of the Archaic Periods in southern New England prehistory. Originally termed the "Transitional Archaic" by Witthoft (1953) and recognized by the introduction of technological innovations, e.g., broadspear projectile points and soapstone bowls, the Terminal Archaic has long posed problems for regional archeologists. While the Narrow-Stemmed Tradition persisted through the Terminal Archaic and into the Early Woodland Period, the Terminal Archaic is coeval with what appears to be a different technological adaptation, the Susquehanna Tradition (McBride 1984; Ritchie 1969b). The Susquehanna Tradition is recognized in southern New England by the presence of a new stone tool industry that was

based on the use of high-quality raw materials for stone tool production and a settlement pattern different from the "coeval" Narrow-Stemmed Tradition.

The Susquehanna Tradition is based on the classification of several Broadspear projectile point types and associated artifacts. There are several local sequences within the tradition, and they are based on projectile point type chronology. Temporally diagnostic projectile points of these sequences include the Snook Kill, Susquehanna Broadspear, Mansion Inn, and Orient Fishtail types (Lavin 1984; McBride 1984; Pfeiffer 1984). The initial portion of the Terminal Archaic Period (ca., 3,700-3,200 BP) is characterized by the presence of Snook Kill and Susquehanna Broadspear projectile points, while the latter Terminal Archaic (3,200-2,700 BP) is distinguished by the use of Orient Fishtail projectile points (McBride 1984:119; Ritchie 1971).

It was during the late Terminal Archaic that interior cord marked, grit tempered, thick walled ceramics with conoidal (pointed) bases made their initial appearance in the Native American toolkit. These are the first ceramics in the region, and they are named Vinette I (Ritchie 1969a; Snow 1980:242).This type of ceramic vessel appears with much more frequency during the ensuing Early Woodland Period. In addition, the adoption and widespread use of soapstone bowls, as well as the implementation of subterranean storage, suggests that Terminal Archaic groups were characterized by reduced mobility and longer-term use of established occupation sites (Snow 1980:250).

Finally, while settlement patterns appeared to have changed, Terminal Archaic subsistence patterns were analogous to earlier patterns which were diffuse in nature and scheduled carefully. Typical food remains recovered from sites of this period consist of fragments of white-tailed deer, beaver, turtle, fish, and various small mammals. Botanical remains recovered from the site area consisted of *Chenopodium* sp., hickory, butternut, and walnut (Pagoulatos 1988:81). Such diversity in food remains suggests at least minimal use of a wide range of microenvironments for subsistence purposes.

Woodland Period (2,700 to 350 B.P.)

Traditionally, the advent of the Woodland Period in southern New England has been associated with the introduction of pottery; however, as mentioned above, early dates associated with pottery now suggest the presence of Vinette I ceramics appeared toward the end of the preceding Terminal Archaic Period (Ritchie 1969a; McBride 1984). Like the Archaic Period, the Woodland Period has been divided into three subperiods: Early, Middle, and Late Woodland. The various subperiods are discussed below.

Early Woodland Period (ca., 2,700 to 2,000 B.P.)

The Early Woodland Period of the northeastern United States dates from ca., 2,700 to 2,000 B.P., and it has thought to have been characterized by the advent of farming, the initial use of ceramic vessels, and increasingly complex burial ceremonialism (Griffin 1967; Ritchie 1969a and 1969b; Snow 1980). In the Northeast, the earliest ceramics of the Early Woodland Period are thick walled, cord marked on both the interior and exterior, and possess grit temper.

Careful archaeological investigations of Early Woodland sites in southern New England have resulted in the recovery of narrow stemmed projectile points in association with ceramic sherds and subsistence remains, including specimens of White-tailed deer, soft and hard-shell clams, and oyster shells (Lavin and Salwen: 1983; McBride 1984:296-297; Pope 1952). McBride (1984) has argued that the combination of the subsistence remains and the recognition of multiple superimposed cultural features at various sites indicates that Early Woodland Period settlement patterns were characterized by multiple re-use of the same sites on a seasonal basis by small co-residential groups.

Middle Woodland Period (2,000 to 1,200 B.P.)

The Middle Woodland Period is marked by increased ceramic vessel types and forms utilized (Lizee 1994a) as well as an increase in the amount of exotic lithic raw material used in stone tool manufacture (McBride 1984). The latter suggests that regional exchange networks were established, and that they were used to supply local populations with necessary raw materials (McBride 1984; Snow 1980). The Middle Woodland Period is represented archaeologically by narrow stemmed and Jack's Reef projectile points, increased amounts of exotic raw materials in recovered lithic assemblages, including chert, argillite, jasper, and hornfels as well as conoidal ceramic vessels decorated with dentate stamping. Ceramic types that are indicative of the Middle Woodland Period include Linear Dentate, Rocker Dentate, Windsor Cord Marked, Windsor Brushed, Windsor Plain, and Hollister Stamped (Lizee 1994a:200).

In terms of settlement patterns, the Middle Woodland Period is characterized by the occupation of village sites by large co-residential groups that utilized native plant and animal species for food and raw materials in tool making (George 1997). These sites were the principal place of occupation and were positioned close to major river valleys, tidal marshes, estuaries, and the coastline, all of which would have supplied an abundance of plant and animal resources (McBride 1984:309). In addition to villages, numerous temporary and task-specific sites were utilized in the surrounding upland areas, as well as in closer ecozones such as wetlands, estuaries, and floodplains. The use of temporary and task-specific sites to support large village populations indicates that the Middle Woodland Period was characterized by a resource acquisition strategy best described as logistical collection (McBride 1984:310).

Late Woodland Period (ca., 1,200 to 350 B.P.)

The Late Woodland Period in southern New England dates from around 1,200 to 350 B.P. and is characterized by the earliest evidence for the use of corn in the lower Connecticut River Valley (Bendremer 1993; Bendremer and Dewar 1993; Bendremer et al. 1991; George 1997; McBride 1984), increased frequency of exchange of non-local lithics (Feder 1984; George and Tryon 1996; McBride 1984; Lavin 1984), increased variability in ceramic form, function, surface treatment, and decoration (Lavin 1980, 1986, 1987; Lizee 1994a, 1994b) along with a continued trend towards larger, more permanent settlements in riverine, estuarine, and coastal ecozones (Dincauze 1974; McBride 1984; Snow 1980).

Stone tool assemblages associated with Late Woodland occupations, especially village-sized sites, are functionally variable and they reflect plant and animal resource processing and consumption on a large scale. Finished stone tools recovered from Late Woodland sites include Levanna and Madison projectile points; drills; side-, end-, and thumbnail scrapers; mortars and pestles; nutting stones; netsinkers; and celts, adzes, axes, and digging tools. These tools were used in activities ranging from hide preparation to plant processing to the manufacture of canoes, bowls, and utensils, as well as other settlement and subsistence-related items (McBride 1984; Snow 1980). Finally, ceramic assemblages recovered from Late Woodland sites are as variable as the lithic assemblages. Ceramic types identified include Windsor Fabric Impressed, Windsor Brushed, Windsor Cord Marked, Windsor Plain, Clearview Stamped, Sebonac Stamped, Selden Island, Hollister Plain, Hollister Stamped, and Shantok Cove Incised (Lavin 1980, 1988a, 1988b; Lizee 1994a; Pope 1953; Rouse 1947; Salwen and Ottesen 1972; Smith 1947). These types are more diverse stylistically than their predecessors, with incision, shell stamping, punctation, single point, linear dentate, rocker dentate stamping, and stamp and drag impressions common (Lizee 1994a:216).

Summary of Connecticut Prehistory

The prehistory of Connecticut spans from around 12,000 to 350 B.P. and it is characterized by numerous changes in tool types, subsistence patterns, and land use strategies. Much of the prehistoric era is characterized by local Native American groups who practiced a subsistence pattern based on a mixed economy of hunting and gathering wild plant and animal resources. It is not until the Late Woodland Period that evidence for the use of domesticated species is available. Further, settlement patterns throughout the prehistoric era shifted from seasonal occupations of small co-residential groups to large aggregations of people in riverine, estuarine, and coastal ecozones. In terms of the region containing the proposed project area, a variety of prehistoric site types may be expected. These range from seasonal camps utilized by Archaic populations to temporary and task-specific sites of the Woodland era.

CHAPTER IV
HISTORICAL OVERVIEW

Introduction

The project parcel is located in the Hazardville section of the town of Enfield, which is situated just to the south of the Massachusetts border in Hartford County, Connecticut. Settled around 1680, Enfield was originally referred to as part of the Massachusetts Bay Colony due to a surveyor error. In 1734, the eastern portion of Enfield became the town of Somers and in 1749, the town of Enfield became incorporated as part of the Connecticut Colony. While the town experienced significant growth in the nineteenth and twentieth centuries, Enfield remains a combination of urban areas, housing developments, and farmland. This chapter presents an overview of the history of the town of Enfield and also presents data specific to the project parcel.

Native American History

Analysis of land purchases and other documents indicates that the area encompassing present-day Enfield and Somers was part of the territory of the tribe known as the Agawam. This Native American tribe occupied and utilized lands on both sides of the Connecticut River around the present-day towns of Springfield and Agawam, Massachusetts. The Agawam also occupied areas to the south near the southern boundary of Enfield, as well as other towns in Connecticut to the east and west (Spiess 1930). In 1678, three Native Americans named Wequagun (formerly named Wrutherna), Wawapaw (formerly named Naiapompolan), and Waquompo confirmed a 1675 sale of the part of Enfield lying to the north of Freshwater River, which had not been recorded because of the outbreak of King Philip's War. In 1680, a Native American named Tawtaps (also known as Nottatuck) sold the land south of the Freshwater River to the falls on the Connecticut River (in what is now East Windsor), reserving hunting and fishing rights on the common lands. This deed was witnessed by Momando, Cogoranasset, and Nessataquakis, as well as several English men (Wright 1905). Unfortunately, the documents do not refer to specific tribal affiliations of the Native American signers.

The Agawam was one of several native groups that occupied both sides of the Connecticut River in what are now Massachusetts, northern Connecticut, southern New Hampshire, and Vermont. All of these groups were decimated by war and disease in the 1620s and 1630s in addition to warfare with colonists and other Native Americans in the late seventeenth and early eighteenth centuries. Very little was recorded about these Connecticut River groups in colonial records so it can only be assumed that they were culturally similar to other northeastern Algonquian groups. This means that they likely lived in small kin groups that practiced a pattern of seasonal mobility, cultivating corn, squash, beans and other crops in summer while moving to smaller fall/winter camps to collect forest resource and hunt for game (Grumet 1995).

Colonial Era through the Eighteenth Century

The community of Enfield was claimed by Massachusetts Bay Colony based on the results of a 1642 survey of the boundary line with Connecticut Colony. In 1679, Springfield established a committee to form a new town in the vicinity of the Freshwater River. The 1680 land purchase was in aid of this plan and the first colonists arrived there in 1681, settling to the south of the river. In 1703, Connecticut began asserting ownership of Enfield and other areas along the Massachusetts border due to errors detected in the above-referenced 1642 survey. In addition, because the southern boundary of Enfield was originally thought to be the colony line from 1642, a two-mile strip of land was claimed by both

Enfield and the town of Windsor, Connecticut. In 1713, the matter was finally settled, and Windsor relinquished its claim in exchange for other land elsewhere. Enfield and other towns along the border soon concluded that they would prefer to be part of Connecticut than Massachusetts, though it was not until 1747 that they petitioned the legislature of both colonies to be transferred. Connecticut agreed but Massachusetts objected. In 1749, the British monarch decided in Connecticut's favor, although Enfield had already begun sending representatives to the Connecticut legislature by that time (Winch 1886). In 1762, the town was reported to house 1,082 residents, and by 1782 there were 1,562 residents (Keegan 2012). During the Revolutionary War Enfield sent many of its citizens to fight as part of the Continental Army and at least 14 died in service (Winch 1886).

Nineteenth and Early Twentieth Centuries

Enfield's industrial legacy began in the early 1800s with the manufacture of carpeting in the village of Thompsonville near the Connecticut River. By 1837, the factories had 120 looms and 300 adult employees. The town also had a village of followers of the Shaker religion, which started in England in ca., 1770 and moved to New England in 1774. The Shaker community in Enfield was established in 1780 and persisted well into the 1830s (Barber 1837). A second industrial village, called Hazardville, began expanding around the manufacture of gunpowder. By the 1880s, multiple companies were clustered along the Scantic River and they employed 150 men (Winch 1886). As a result of this industrial activity, Enfield saw steady population growth through most of the nineteenth century. The town had 2,129 residents in 1830, then increased to 7,199 in 1890 before falling slightly to 6,699 in 1900 (Keegan 2012). Despite this industrial boon, agriculture remained important, particularly the growth of fruit trees, grains, dairying, and tobacco.

Transportation in the United States changed dramatically during this period. Initially, states tried to encourage road improvements by chartering corporations to build and operate turnpike roads in exchange for tolls. These enterprises met with varying success; however, no company or individual tried to build one directly through Enfield (Wood 1919). This was possibly because Enfield is bordered by the Connecticut River on the west and, after 1829, the Windsor Locks canal made the rapids below Enfield passable. Railroads followed quickly thereafter, putting the competing turnpikes out of business. In 1844, the Hartford & Springfield Railroad was built along the west bank of the Connecticut River. It crossed the east bank to the south of Enfield in East Windsor and passed through Thompsonville on its way to the state border. The Connecticut Central Railroad was not opened until 1876, and it was quickly thereafter leased by the Hartford & Connecticut Valley Railroad (Turner and Jacobus 1989). The advent of electrical power in the late nineteenth century encouraged the development of light rail passenger transport or trolleys, one of which was built between Springfield, Massachusetts and East Windsor. Branch lines serviced the village of Scitico, which lasted from 1895 into the 1920s, when automobile competition ended its service (Debell 1977).

Modern Period (1920-Present)

In 1932, Enfield's principal industries included the manufacturing of carpets, paper, textiles, and hardware, as well as agriculture (Connecticut 1932). As in other parts of the Connecticut River Valley, tobacco was an important crop in Enfield in the early twentieth century. By 1920, the new technique of growing "shade tobacco" under tents had become standard, and it was both more profitable but also more expensive to grow than the open-field variety. As a result, large corporations began buying up small farms and over the century tobacco production declined (Alcorn 1970). During the first half of the century, the town's population more than doubled, rising from 6,699 residents in 1900 to 15,464 in 1950 (Secretary of the State Denise W. Merrill 2021a). Interstate 91 reached Enfield in 1949, suggesting that the population growth was due to a mix of industry and residential development facilitated by

highway access (Oglesby 2014). In the ensuing years, however, the population nearly tripled, reaching 46,189 by 1970, further underscoring the importance of the highway in the growth of the town of Enfield (Secretary of the State Denise W. Merrill 2021b).

By the early twenty-first century, the economic character of the town had shifted away from industry and agriculture. As of 2019 only 3.6 percent of jobs in Enfield were in manufacturing. Like many other post-industrial towns, the majority of jobs were in tertiary-sector areas, namely retail, health care, hotels, and restaurants. Enfield's largest employers were Lego Systems Inc. and Hallmark Cards, followed by an insurance company and a retail wholesaler. By 2020, the population had fallen from its peak in 1970 to 43,120 residents (AdvanceCT and CTData Collaborative 2020). While manufacturing is not as prevalent as it once was, a variety of items are still produced in Enfield, including water filtration systems, toys, wooden reels for wire and cables, electronic assemblies, envelopes, tools and gages, and ice cream. Vegetable and tobacco farming were considered principal industries as of 2020 as is evidenced by the agricultural fields present throughout the town particularly in the eastern end (Connecticut 2020). Limited growth is projected for the town of Enfield and although the town embraced its position as a suburb between the urban centers of Springfield, Massachusetts and Hartford, Connecticut it intends to preserve its "small town feel" and agricultural identity (Enfield 2011).

History of the Project Area

According to an 1855 map of Enfield, the project parcel was located adjacent to what is now North Street, which was situated to the north of the Hazardville and Scitico neighborhoods and was fairly densely populated with houses, shops, and a hotel clustered closely together (Figure 4). The area containing the Facility was more rural, with homesteads located much farther apart. The homestead of A. Pease was across the street, Thos. Pease and E. P. Davis were to the northeast on North Street and T. Sheldon was located to the southeast of the Facility on what is now Taylor Road. There also was one homestead that was within the project parcel and adjacent to the northeastern corner of the Facility area, which belonged to Wareham Parsons Simons. According to the 1850 census, Simons was a 38-year-old farmer with $2,500 in real estate holdings (U.S. Census Bureau 1850). By 1860, he was 48-years-olf and his real estate holdings had doubled to $5,000 (U. S. Census Bureau 1860).

According to an 1869 map of the region, the street that is now called Park Street had been established and ran perpendicular to North Street to the west of the project parcel (Figure 5). A few more homesteads appeared in the area and the ownership on some of the existing properties had changed. A. Pease had moved to Park Street and Wareham Parsons Simons (listed on the map as W. P. Simons) had moved across the street to Pease's former residence. Within the northernmost limits of the project parcel and just to the north of the Facility area on North Street was the homestead of R. Jones. Unfortunately, information on Jones could not be located in the census data. E. P. Davis was still situated to the northeast and the other homesteads close to the parcel were those belonging to F. Gates, located approximately 152 m (500 ft) to the west on Park Street. In 1870, Francis Gates was 45 years old, worked in a powder mill, and owned $1,000 in real estate (U. S. Census Bureau 1870). Ten years later, he was 54, working as a joiner, and his real estate holdings were not listed (U. S. Census Bureau 1880).

In 1934, the project parcel was comprised largely of agricultural fields, still on North Street, with Park Street to the west and railroad tracks approximately 38 m (125 ft) from its easternmost boundary (Figure 6). The parcel itself consisted of cleared, mostly agricultural land with 10 barns and tobacco sheds; the southeastern part of the parcel was wooded at that time. As of 1934, eight tobacco sheds were within the Facility area. The neighborhood of Hazardville was to the southwest of the parcel and

various other farmsteads were located on North Street and Park Street. By 1951, few changes had taken place; however, most of the tobacco sheds and other farm-related structures had been removed from the project parcel, including all of those within the Facility area (Figure 7). To the west was St. Bernard's Cemetery and a paved road that ran down the middle. Hazardville to the southwest was a bit more developed by the middle of the twentieth century, but the rest of the area surrounding the parcel had not seen much new construction. The composition of the land within the parcel had not changed and was still a combination of cleared and forested land. In 2019, the regional landscape was markedly different in that significant housing development had taken place around the parcel to the east, to the west, and directly to the south (Figure 8). The land along Park Street was still primarily farmland with related structures dotted throughout. The paved road that ran through St. Bernard's Cemetery now extended into the project parcel and ran parallel to the western border for approximately 200 m (656 ft). Along North Street was a paved parking area and small structure, both of which are related to the Pleasant View driving range that is now located on the property.

Conclusion

The project parcel encompasses the historic locations of the homesteads of Wareham Parsons Simons and R. Jones. Based on the historic use of the land for agriculture, there is the possibility of encountering the buried remains of farmhouses, outbuildings, or other evidence of historic farming within the Facility area. However, Simons, Jones, and other nearby landowners were not of local, state, or national importance. Any archaeological deposits associated with the individuals who owned the land, and their occupations, are not likely to be considered historically significant.

CHAPTER V
PREVIOUS INVESTIGATIONS

Introduction

This chapter presents an overview of previous archaeological research completed within the vicinity of the proposed Facility in Enfield, Connecticut. This discussion provides the comparative data necessary for assessing the results of the current Phase IA Cultural Resources Assessment Survey, and it ensures that the potential impacts to all previously recorded cultural resources located within and adjacent to the Facility are taken into consideration. Specifically, this chapter reviews previously identified archaeological sites and National/State Register of Historic Places properties situated within 1.6 km (1 mi) of the proposed Facility (Figures 9 and 10). The discussions presented below are based on information currently on file at the CT-SHPO in Hartford, Connecticut. In addition, the electronic site files maintained by Heritage were examined during the course of this investigation. Both the quantity and quality of the information contained in the original archaeological site and National/State Register of Historic Places properties forms are reflected below.

Previously Recorded Archaeological Sites and National/State Register of Historic Places Properties/Districts in the Vicinity of the Facility

A review of data currently on file at the Connecticut State Historic Preservation Office, as well as the electronic site files maintained by Heritage identified three archaeological sites situated within 1.6 km (1 mi) of the project area, including Sites 49-5, 49-7, and 49-10 (Figure 9). In addition, two National Register of Historic Places districts (Enfield Shakers Historic District and Hazardville Historic District) and 16 State Register of Historic Properties (49-22, 49-47, 49-48, 49-53, 49-54, 49-55, 49-57, 49-58, 49-59, 49-94, 49-129, 49-131, 49-132, 49-133, 49-134, and 49-135) also have been recorded within 1.6 km (1 mi) of the Facility (Figure 10). These resources are described below.

Site 49-5

Site 49-5 is a prehistoric occupation that was identified off of Park Street and to the east of St. Bernard's Cemetery in Enfield, Hartford County; it is located just to the west of the project parcel boundary (Figure 9). The site was recorded by R. Gradie and L. Rivers of Public Archaeology Survey Team, Inc., (PAST) in June of 1978. At the time the site was recorded, the location was used for the cultivation of tobacco and corn, but the prehistoric use of the site is unknown. The site is of unknown period and unknown size. PAST staff recovered a single quartz flake from the site area and determined that the site was of unknown archaeological or historical importance. The submitted site form reports that it was "possible that [a] site exists but because [the] field had been planted[,] extensive surface collecting was not possible." At the time of its recording, Site 49-5 retained fair integrity. Site 49-5 was not assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It will not be impacted by the proposed project.

Site 49-7

Site 49-7 is a prehistoric occupation that was identified on what is referred to as "Glen Arders Property" in Enfield, Hartford County (Figure 9). The site was recorded by R. Gradie and L. Rivers of Public Archaeology Survey Team, Inc., (PAST) in June of 1978. At the time the site was recorded, the location was a residential housing subdivision, but was historically used as a pasture. PAST recovered projectile points from the site and, using the Ritchie classification system, determined that the site was of the Late Archaic and "Transitional" (Terminal Archaic) period. The site was previously excavated by M. Thompson

in 1943 and described by Thompson in a 1945 publication (Thompson 1945). The site is historically significant because it is one of few Terminal Archaic occupations in the area and has the potential to provide information about subsistence, settlement, and manufacturing during these periods. Site 49-7 was not assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). This site is located well to the southwest of the development area and it will not be impacted by the proposed project.

Site 49-10

Site 49-10, also known as the Powder Hollow site, is a prehistoric archaeological site located between County Route 20 and the Connecticut River. The site is situated to the east of Maple Street and to the north of Scantic River in the Hazardville section of Enfield (Figure 9). The site was recorded by the Connecticut Archaeological Society (CAS) in May of 1979. The Powder Hollow site, which was estimated at approximately two acres in size, was described as a multicomponent occupation that produced Archaic and Woodland period material culture. At the time the site was recorded, it was situated on "open space" and its historical use was listed as unknown. Between 1940 and 1945, M. Thompson, R. Irons, and R. Bidwell conducted archaeological survey of the site area, which produced a large quantity of prehistoric cultural material. Objects recovered from the site included lithic projectile points, lithic tools such as knives, scrapers, drills, and ground stone tools. Other notable elements of the site included hearths and ceramic sherds. The CAS reported that the site was archaeologically significant due to the quantity and diversity of cultural material that it produced, as well as its potential to provide information concerning prehistoric activities performed at the site. Site 49-10 was not assessed applying the qualities of significance as defined by the National Register of Historic Places criteria for evaluation (36 CFR 60.4 [a-d]). It is located away from the Facility and will not be impacted by the proposed project.

Enfield Shakers Historic District

The Enfield Shakers Historic District is the historical location of the only Shaker settlement in Connecticut; it was listed on the National Register of Historic Places in May of 1979 (Figure 10). This district was occupied by members of the Shaker community between 1780 and 1917, when the last members left Enfield. The Enfield Shakers were notable for their thriving garden-seed industry. This district is historically significant because it was occupied by members of the Shaker community and architecturally significant because the buildings reflect the communal nature of Shaker ideology. While the first Shaker buildings were erected in the 1780s, most remaining Shaker buildings were constructed during the community's peak between 1830 and 1860. As of 1979, when the district was added to the National Register of Historic Places, 15 buildings from the original settlement remained. These 15 buildings comprise approximately one sixth of the original settlement as it remained in 1917 when the last Shakers left Enfield. These 15 buildings include "the meetinghouse, one large brick dwelling, a large laundry building, five barns, four small workshops, a saw mill, an icehouse, and a slaughterhouse." The Enfield Shakers Historic District is located nearly 1.6 km (1 mi) to the northeast of the Facility. The district is comprised of buildings located on Shaker, Taylor, and Cybulski Roads. In addition, the two structures on the Connecticut State Historical Register listed below fall within the Enfield Shakers Historic District (Figure 10). They are Shaker style residences. Neither the residences nor the Enfield historic district will be impacted, directly or indirectly, by the construction of the proposed Facility.

Table 2. Inventoried Connecticut State Register Properties in the Enfield Shakers Historic District

State Register of Historic Places Number	Structure / Property Name	Address	Type	Year Built	Style
49-47	South Family Shaker House	Cybulski Road	Residence	ca. 1820-1830	Plain Shaker
49-48	n/a	Cybulski Road	Residence	ca. 1850-1860	Plain Shaker

Hazardville Historic District

The Hazardville Historic District is the location of both the Hazard Powder Company gunpowder production facilities and an associated nineteenth century town. The Hazardville Historic District, which was added to the National Register of Historic Places in February of 1980, encompasses the locations of both the former powder company site, known as Powder Hollow, and the associated company town. Together, the former production facilities and town cover 1,075 acres of land and include 260 contributing sites and structures. The Hazard Powder Company was in operation between the years of 1835 and 1913. When the site was added to the National Register of Historic Places in 1980, the dams, canals, and buildings that made up Powder Hollow were no longer standing. They had been replaced by a wooded area and only a few buildings that comprised the Hazard Powder Company remained standing. The public school building in the district is now used as a day care center. A former horse barn of the Hazard Powder Company, located at 32 South Maple Avenue, was converted into a square dancing hall in 1959; it is still used as a venue for special events. The foundations of 21 buildings of the original gunpowder factory complex (originally 200 buildings) can still be found near the Scantic River within Scantic River State Park. The Hazardville Institute building, at the corner of Hazard and Maple Avenues, was used for many years as a public hall and community center. It was abandoned in the 1970s and was saved from demolition when it was leased to the Hazardville Institute Conservancy. The building is currently undergoing renovation. When renovation is complete, there are plans for the building to include an exhibit concerning the history of the Hazard Powder Company. A total of 15 structures on the Connecticut State Historical Register, listed below, also fall within the northeastern limits of the Hazardville Historic District. They include 11 residences built in the Federal, Italian Villa, and Greek Revival Style, as well as a commercial building, church, and municipal structure built in the Ne-Classical, Victorian Gothic, and Italian Villa Style; none of these resources will be impacted by the proposed solar project (Figure 10). Neither these residences nor the Hazardville Historic District will be impacted, directly or indirectly, by the construction of the proposed Facility.

Table 3. Inventoried Connecticut State Register Properties in the Hazardville Historic District

State Register of Historic Places Number	Structure / Property Name	Address	Type	Year Built	Style
49-22	n/a	Water Street	Residence	ca. 1800	Federal
49-53	n/a	School Street	Residence	ca. 1840	Italian Villa
49-54	n/a	School Street	Residence	ca. 1860-1865	Civil War Transition
49-55	Hazardville Institute	Hazard Avenue	Municipal	1869	Italian Villa
49-57	Hazardville Methodist Church	Hazard Avenue	Church	1880's	Victorian Gothic
49-58	Hazardville Public School	Hazard Avenue	Commercial	1880	Neo-Classic Victorian
49-59	n/a	Hazard Avenue	Residence	pre-1800	Colonial Period
49-94	n/a	Scitico Street	Residence	ca. 1825	Greek Revival
49-129	n/a	School Street	Residence	ca. 1840	Greek Revival
49-131	n/a	Hazard Avenue	Residence	1840	Greek Revival
49-132	n/a	Hazard Avenue	Residence	1840	Greek Revival
49-133	n/a	Hazard Avenue	Residence	ca. 1860's	Greek Revival
49-134	n/a	Hazard Avenue	Residence	ca. 1840	Greek Revival
49-135	n/a	Hazard Avenue and Water Street	Residence	Pre.1800	Federal

Summary and Interpretations

The review of previously identified cultural resources in the vicinity of the proposed Facility indicates that the larger project region contains numerous prehistoric and historical cultural resources related to Native American habitation and resource extraction, as well as colonial farming and later industrial activities related to Enfield's history. None of the previously identified cultural resources sites will be impacted by the proposed Facility either directly or indirectly. Their presence, however, suggests that other archaeological resources may be expected within or near the Facility location.

CHAPTER VI
METHODS

Introduction

This chapter describes the research design and field methodology used to complete the Phase IA Cultural Resources Assessment Survey of the proposed Facility in Enfield, Connecticut. The following tasks were completed during this investigation: 1) study of the region's prehistory, history, and natural setting, as presented in Chapters II through IV; 2) a literature search to identify and discuss previously recorded cultural resources in project region; 3) a review of historical maps, topographic quadrangles, and aerial imagery depicting the Facility in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the Facility in order to determine its archaeological sensitivity. These methods are in keeping with those required by the Connecticut State Historic Preservation Office in the document entitled *Environmental Review Primer for Connecticut's Archaeological Resources* (Poirier 1987).

Research Framework

The current Phase IA Cultural Resources Assessment Survey was designed to assess the archaeological sensitivity of the Facility area, as well as to visually examine it for evidence of any previously unidentified cultural resources during pedestrian survey. The undertaking was comprehensive in nature, and project planning considered the distribution of previously recorded cultural resources located within the region, as well as a visual assessment of the Facility area. The methods used to complete this investigation were designed to provide coverage of all portions of the Facility. The fieldwork portion of this undertaking entailed pedestrian survey, photo-documentation, and mapping (see below).

Archival Research & Literature Review

Background research for this investigation included a review of a variety of historical maps depicting the proposed Facility and the larger project parcel; an examination of USGS 7.5' series topographic quadrangles; an examination of aerial images dating from 1934 through 2019; and a review of all previously recorded archaeological sites and National and State Register of Historic Places within 1.6 km (1 mi) of the Facility area on file with the CT-SHPO, as well as electronic cultural resources data maintained by Heritage. The intent of this review was to identify all previously recorded cultural resources situated within and immediately adjacent to the Facility area, and to provide a natural and cultural context for the project region. This information then was used to develop the archaeological context of the impact areas associated with the proposed Facility, and to assess their sensitivity with respect to the potential for producing intact cultural resources.

Field Methodology and Data Synthesis

Heritage also performed fieldwork for the Phase IA Cultural Resources Assessment Survey of the Facility area in Enfield, Connecticut. This included pedestrian survey, photo-documentation, and mapping of Facility area. During the completion of the pedestrian survey, representatives from Heritage photo-documented all potential areas of impact using digital media.

CHAPTER VII
RESULTS & MANAGEMENT OVERVIEW

Introduction

This chapter presents the results of the Phase IA cultural resources assessment survey of the proposed Facility in Enfield, Connecticut. As stated in the introductory section of this report, the goals of the investigation included completion of the following tasks: 1) a contextual overview of the region's prehistory, history, and natural setting (e.g., soils, ecology, hydrology, etc.); 2) a literature search to identify and discuss previously recorded cultural resources in the project region; 3) a review of readily available historical maps and aerial imagery depicting the Facility in order to identify potential historical resources and/or areas of past disturbance; and 4) pedestrian survey and photo-documentation of the project items in order to determine their archaeological sensitivity.

Determining Archaeological Sensitivity of the Proposed Facility

The field data associated with soils, slopes, aspect, distance to water, and previous disturbance collected during the pedestrian survey and presented above was used in conjunction with the analysis of historical maps, aerial images, and data regarding previously identified archaeological sites and National/State Register of Historic Places properties to stratify the project items into zones of no/low, moderate, and/or high archaeological sensitivity. In general, historical period archaeological sites are relatively easy to identify on the current landscape because the features associated with them tend to be relatively permanent constructions that extend above the ground surface (i.e., stone foundations, pens, wells, privies, etc.). Archaeological sites dating from the prehistoric era, on the other hand, are less often identified during pedestrian survey because they are buried, and predicting their locations relies more on the analysis and interpretation of environmental factors that would have informed Native American site choices.

With respect to the potential for identifying prehistoric archaeological sites, the project area was deemed as having moderate archaeological potential by analyzing the landform types, slope, aspect, soils contained within them, and their distance to water. In general, areas located less than 300 m (1,000 ft) from a freshwater source and that contain slopes of less than 8 percent and well-drained soils possess a high potential for producing prehistoric archaeological deposits. Those areas located between 300 and 600 m (1,000 and 2,000 ft) from a freshwater source and well drained soils are considered moderate probability areas. This is in keeping with broadly based interpretations of prehistoric settlement and subsistence models that are supported by decades of previous archaeological research throughout the region. It is also expected that there may be variability of prehistoric site types found in the moderate/high sensitivity zones. For example, large Woodland period village sites and Archaic period seasonal camps may be expected along large river floodplains and near stream/river confluences, while smaller temporary or task specific sites may be expected on level areas with well-drained soils that are situated more than 300 m (1,000 ft) but less than 600 m (2,000 ft) from a water source. Finally, steeply sloping areas, poorly drained soils, or areas of previous disturbance are generally deemed to retain a no/low archaeological sensitivity with respect to their potential to contain prehistoric archaeological sites.

In addition, the potential for a given area to yield evidence of historical period archaeological deposits is based not only on the above-defined landscape features but also on the presence or absence of previously identified historical period archaeological resources as identified during previous

archaeological surveys, recorded on historical period maps, or captured in aerial images of the region under study. In this case, proposed project items that are situated within 100 m (328 ft) of a previously identified historical period archaeological site, a National or State Register of Historic Places district/individually listed property, or an area that contains known historical period buildings also may be deemed to retain a moderate/high archaeological sensitivity. In contrast, areas situated over 100 m (328 ft) from the above-referenced properties would be considered to retain a no/low historical period archaeological sensitivity.

Results of Phase IA Survey

The desktop review of historical maps, aerial images, land deeds, and pedestrian survey indicates that the proposed Facility, which is situated at elevations ranging from 56 to 58 m (183.8 to 190.3 ft), NGVD consists of relatively level well-drained ground. In recent years, the area has been used as a golf driving range and utilized before that for agricultural production. Soils found throughout the Facility area consist of Ninigret, Tisbury, Agawam, and Windsor loams, all of which generally extend to 165 cm (65 in) below surface and are well-drained (Figure 3). These types of soils are generally well-correlated with the locations of prehistoric site and occupations.

Pedestrian survey of the Facility area, supplemented by the results of the desktop analysis and photo-documentation, revealed that while some impacts to the upper portions of the local soil column have occurred in the past, the area retains a moderate potential to contain archaeological deposits buried in the subsoil (Figure 11). The presence of wetlands to the east and southeast of the Facility area also suggests that prehistoric occupations may be present within the Facility area since Native Americans preferred well-drained level soils located near sources of freshwater and plant and animal resources for their occupations. Finally, the Facility is situated in the vicinity of former historical farmsteads, suggesting that buried historical deposits may exist there.

Management Overview

The Phase IA Cultural Resources Assessment Survey, which included the review of historical maps, aerial images, and pedestrian survey, indicates that the proposed Facility is characterized mostly by relatively level topography and well drained soils that are typically correlated with prehistoric and historical use and occupation. Moreover, the proposed Facility is located near wetlands and streams. These landscape features were attractive to Native Americans since they provided a source of potable water and nearby plant and animal resources. The Facility also will be built in close proximity to former historical farmsteads and could contain the buried remains of farm buildings and scatter of artifacts related to agricultural use of the property. Heritage personnel determined that the area containing the proposed Facility retains a moderate potential to yield intact archaeological deposits.

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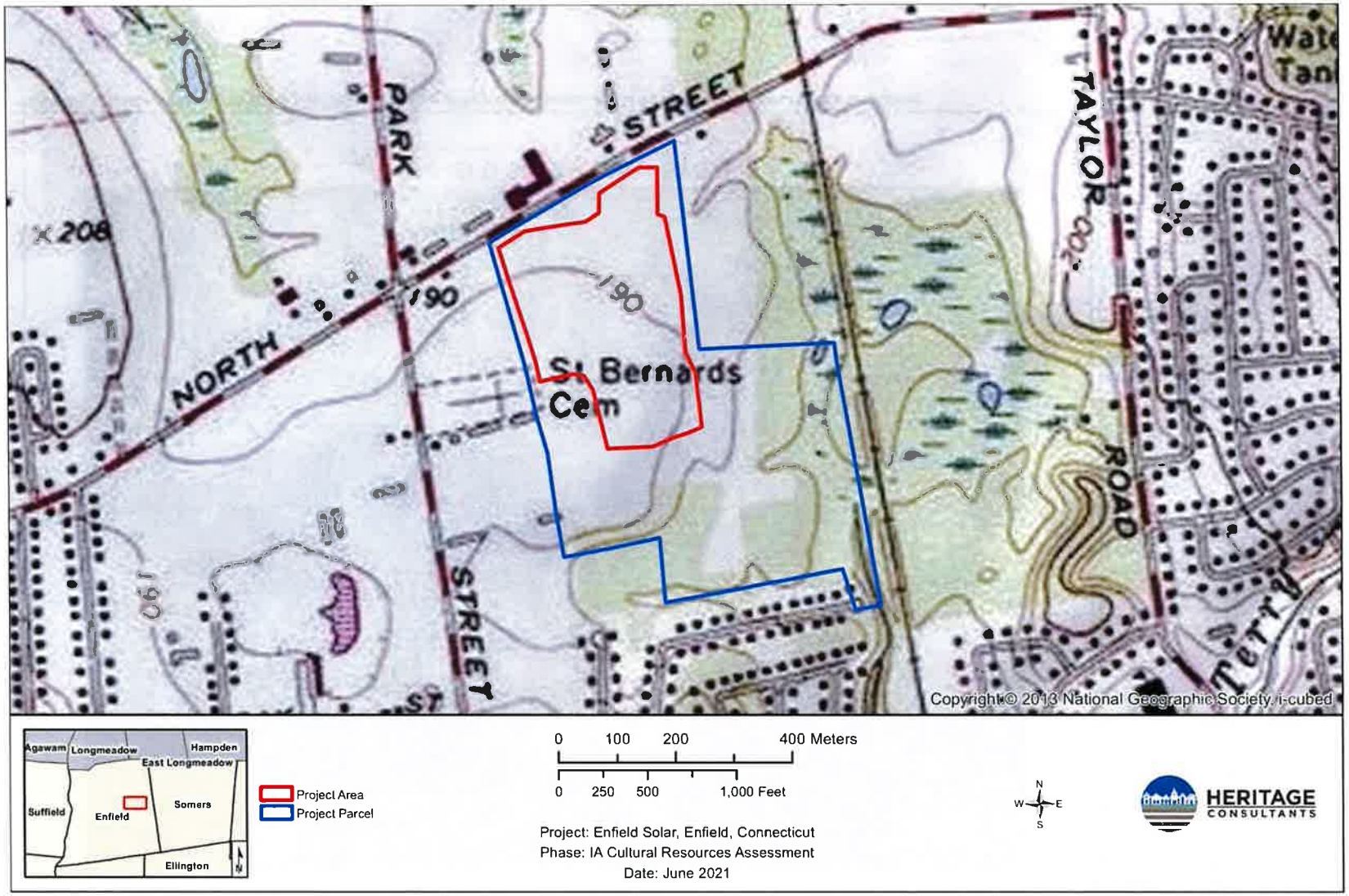


Figure 1. Excerpt from a 1996 USGS 7.5' series topographic quadrangle image showing the location of the project area in Hazardville, Enfield, Connecticut (USGS 1986).

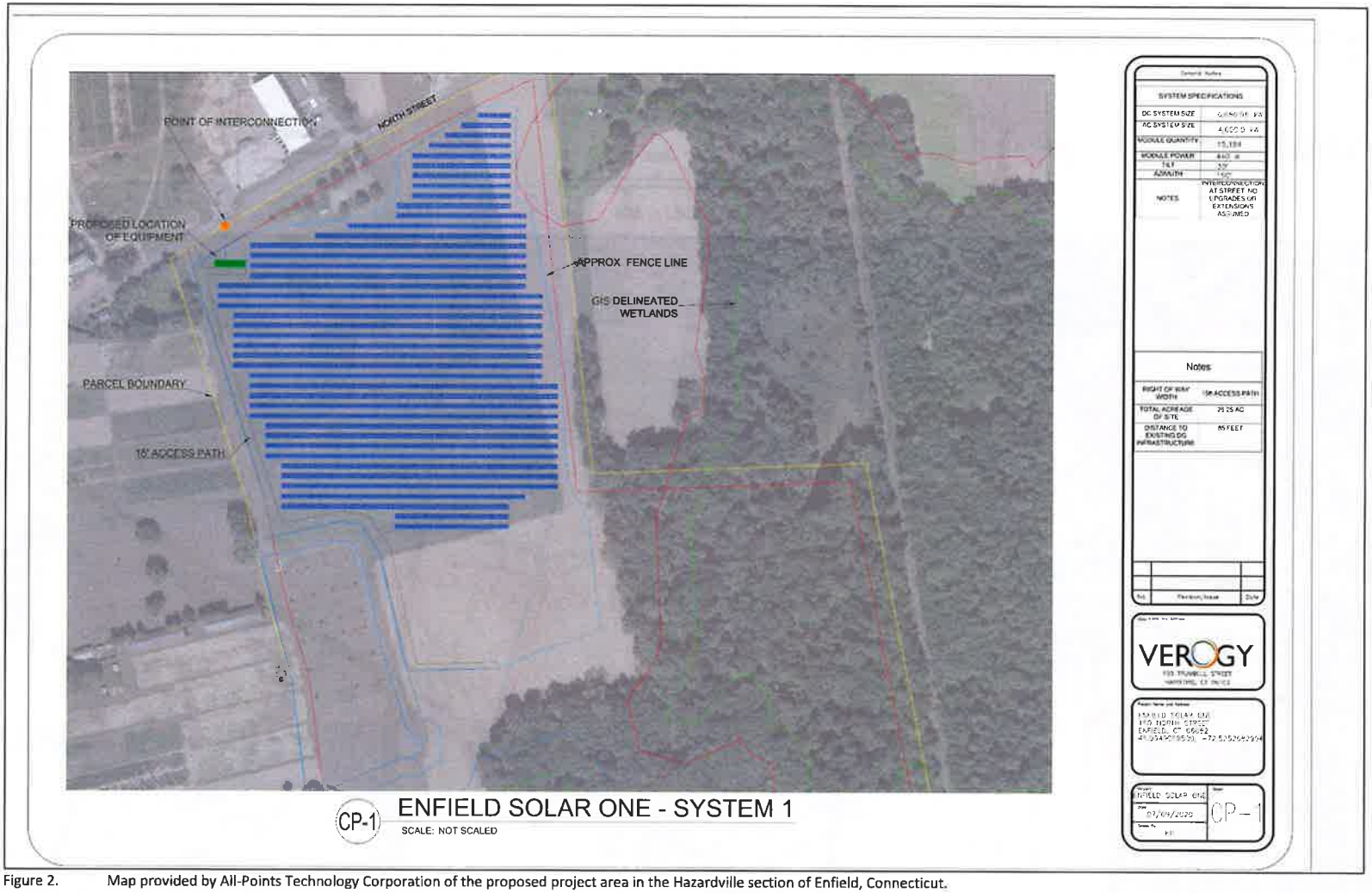


Figure 2. Map provided by All-Points Technology Corporation of the proposed project area in the Hazardville section of Enfield, Connecticut.

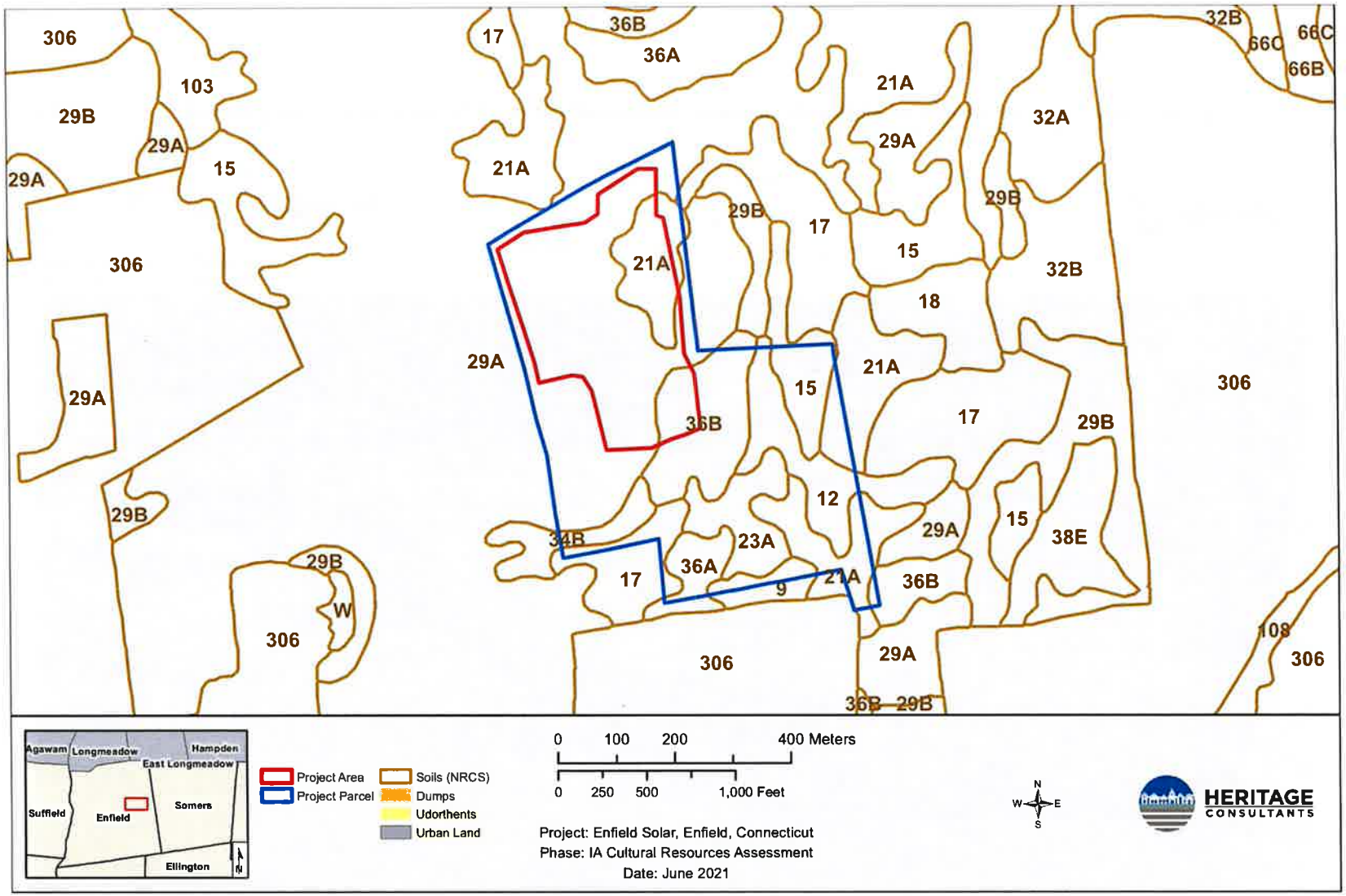


Figure 3. Map of soils located in the vicinity of the project area in Hazardville, Enfield, Connecticut (National Resources Conservation Service).

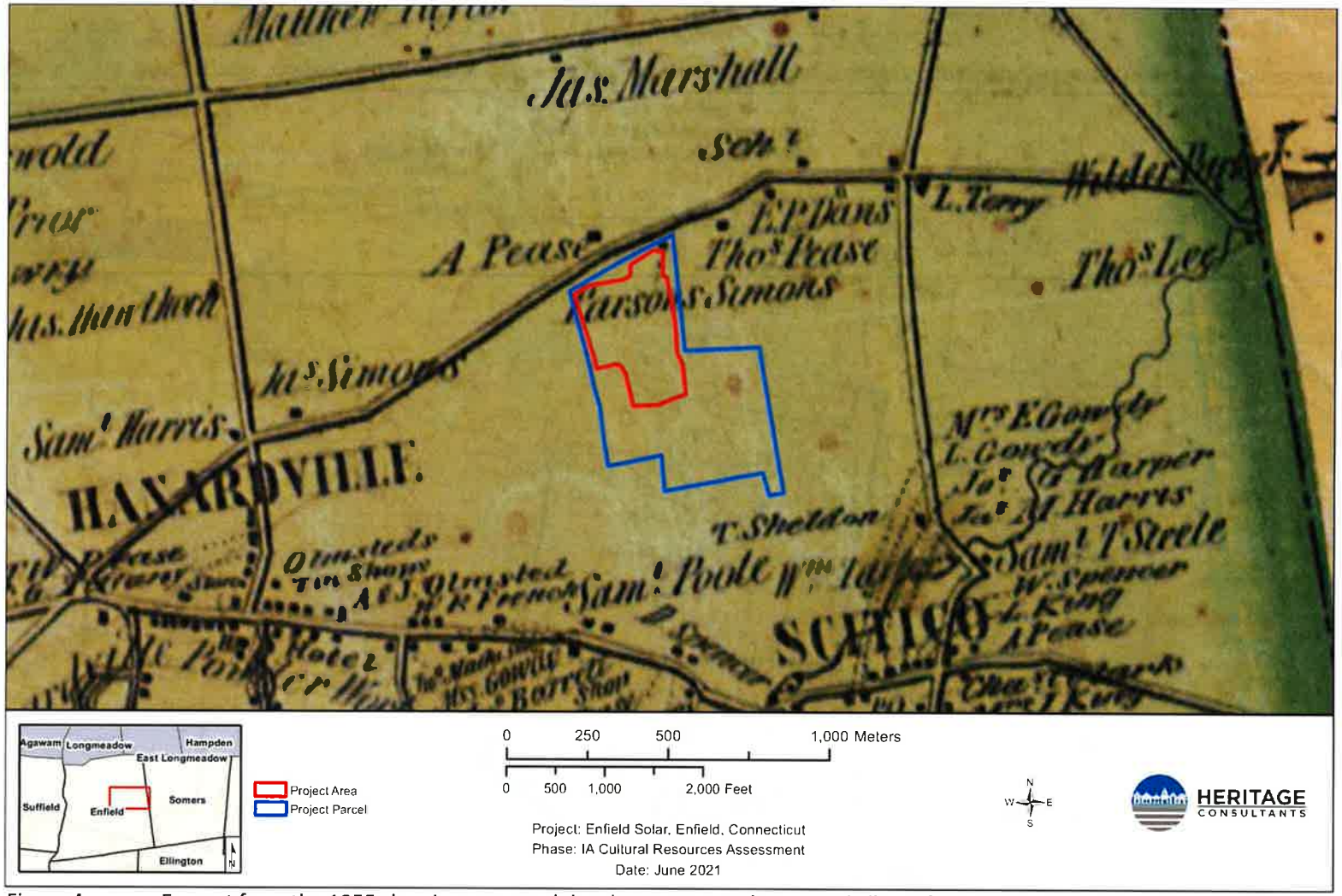


Figure 4. Excerpt from the 1855 showing proposed development parcel in Hazardville, Enfield, Connecticut (Woodford 1855).

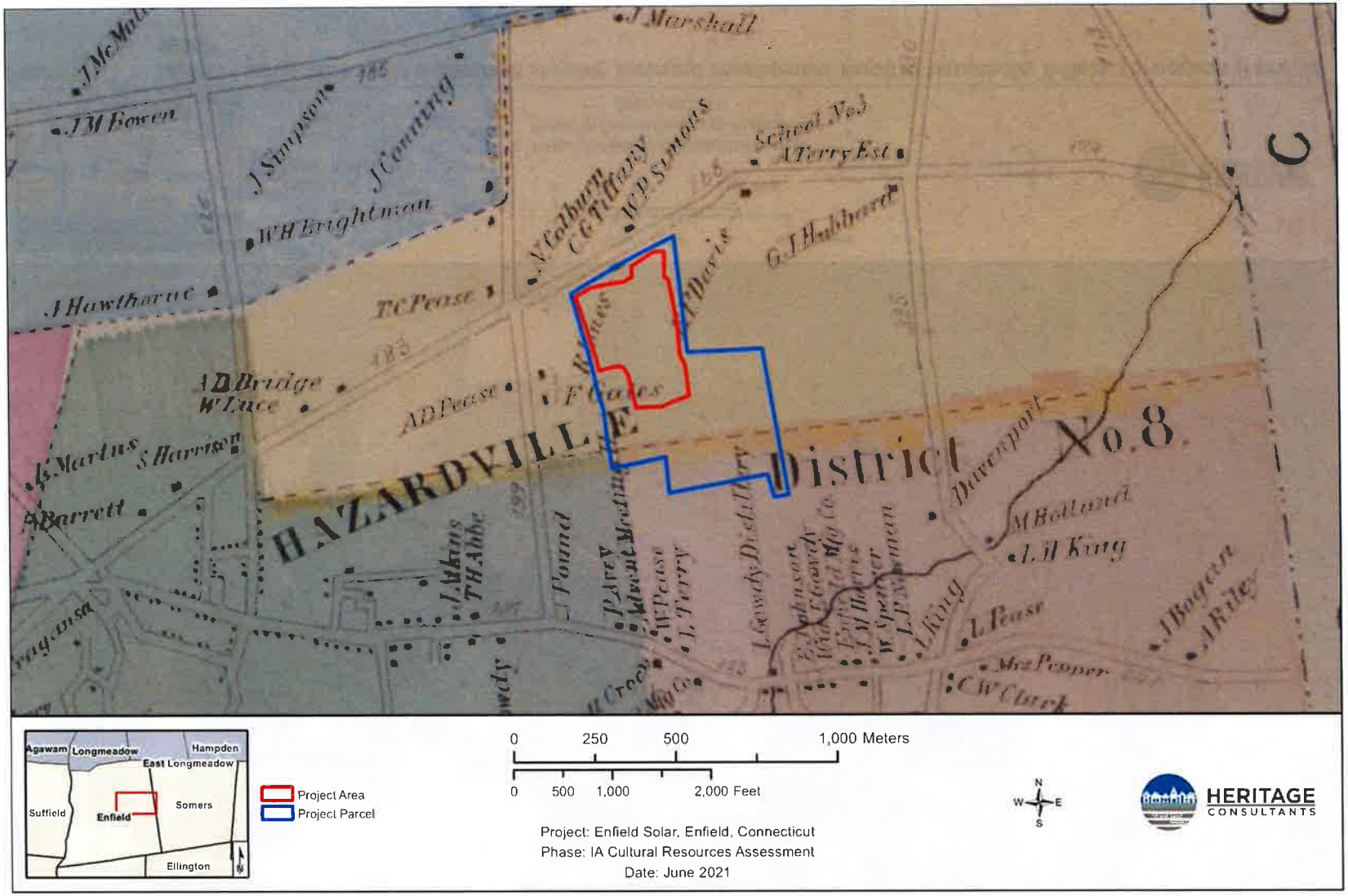


Figure 5. Excerpt from the 1869 showing proposed development parcel in Hazardville, Enfield, Connecticut (Beers 1869).

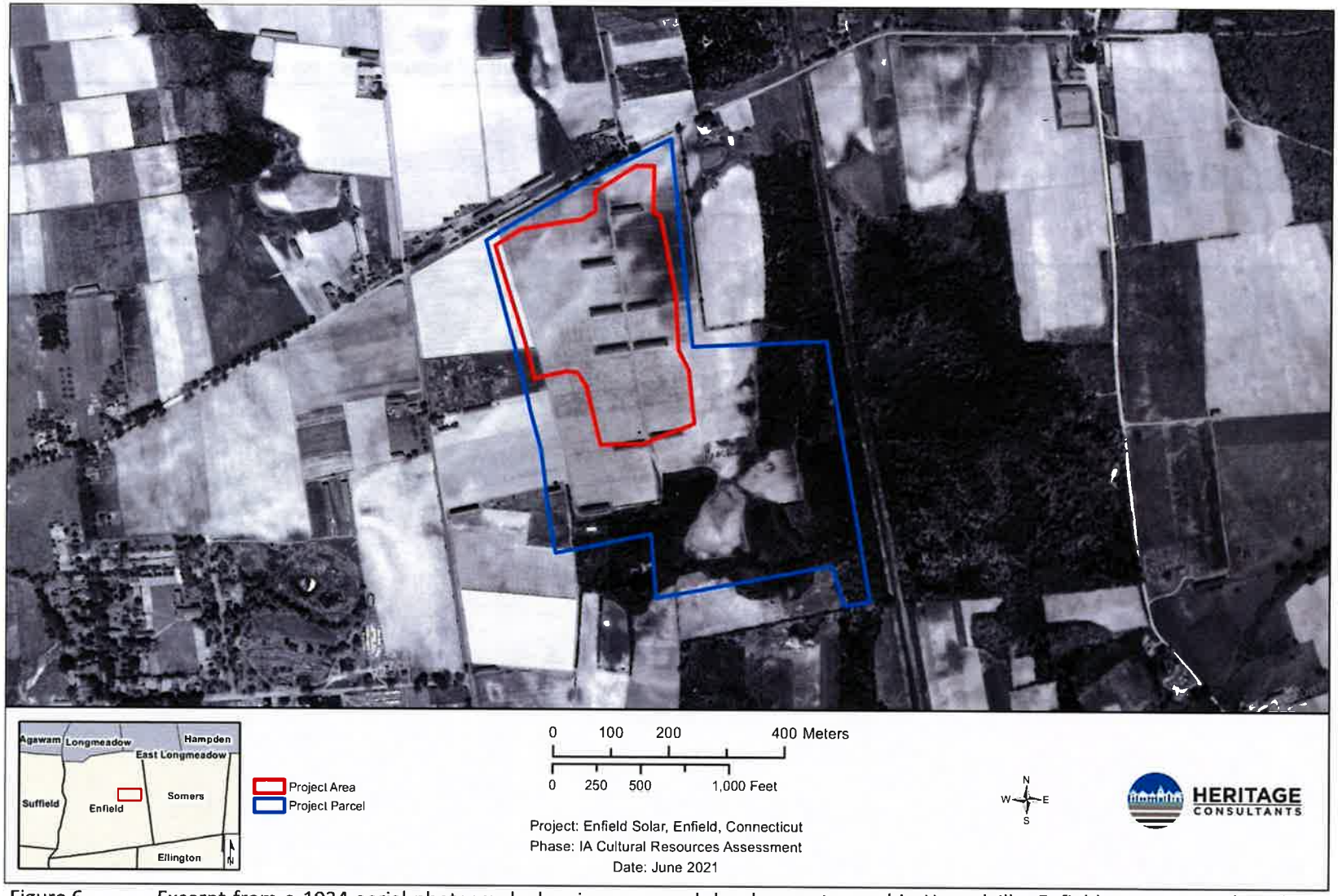


Figure 6. Excerpt from a 1934 aerial photograph showing proposed development parcel in Hazardville, Enfield, Connecticut (Fairchild 1934).

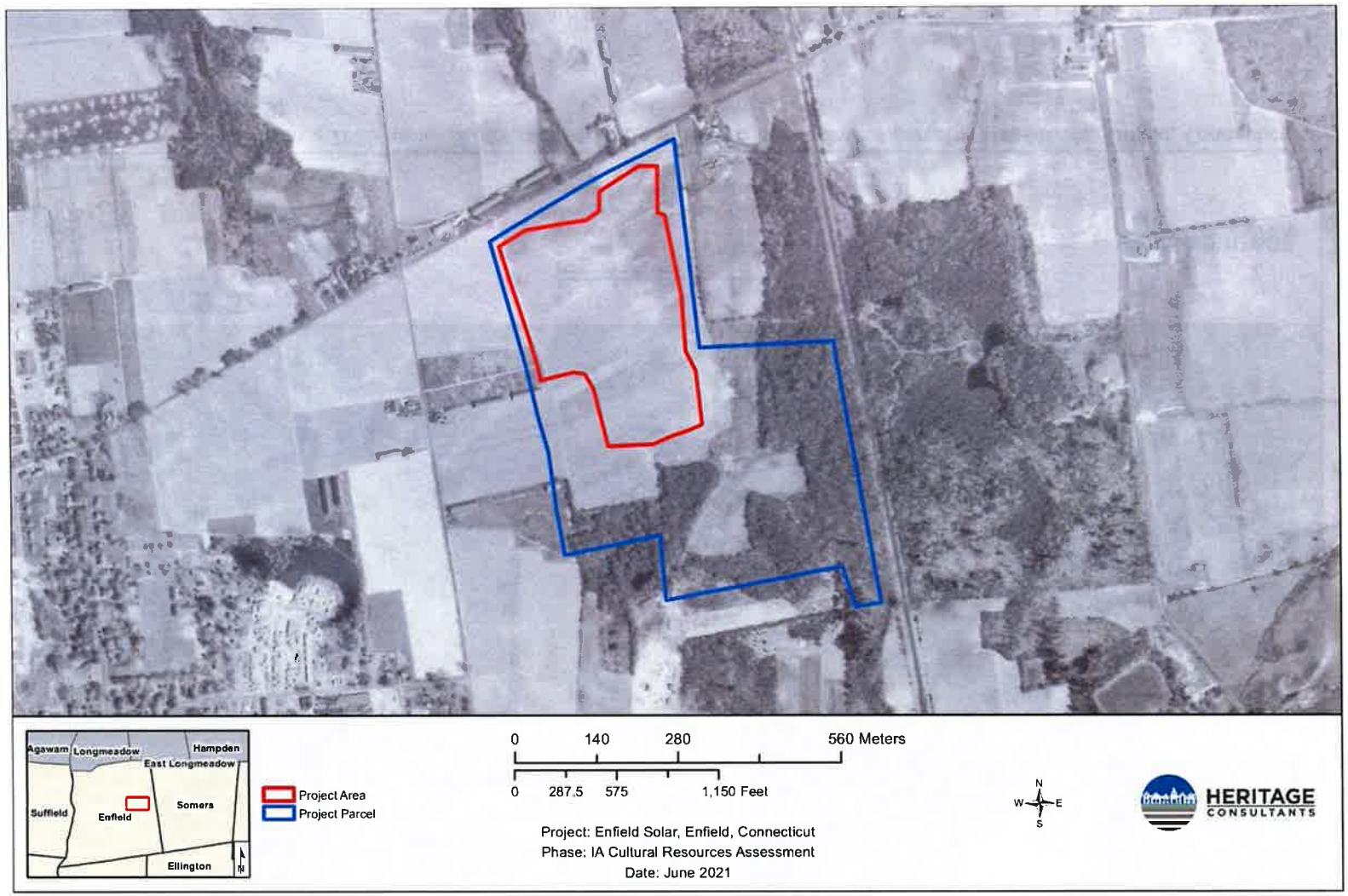


Figure 7. Excerpt from a 1986 Connecticut USDA aerial photograph showing proposed development parcel in Hazardville, Enfield, Connecticut (USDA 1986).

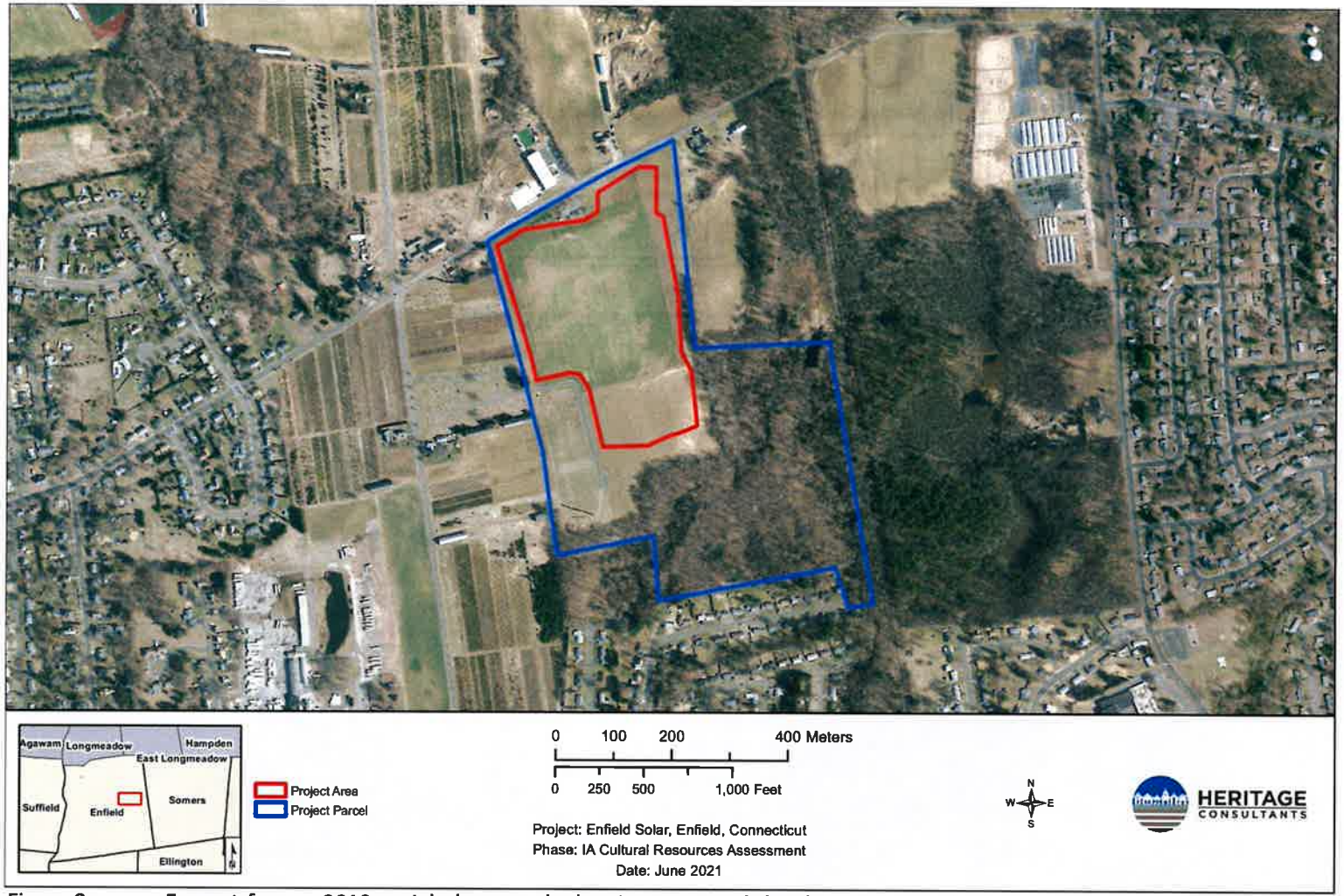


Figure 8. Excerpt from a 2019 aerial photograph showing proposed development parcel in Hazardville, Enfield, Connecticut (ECO 2019).

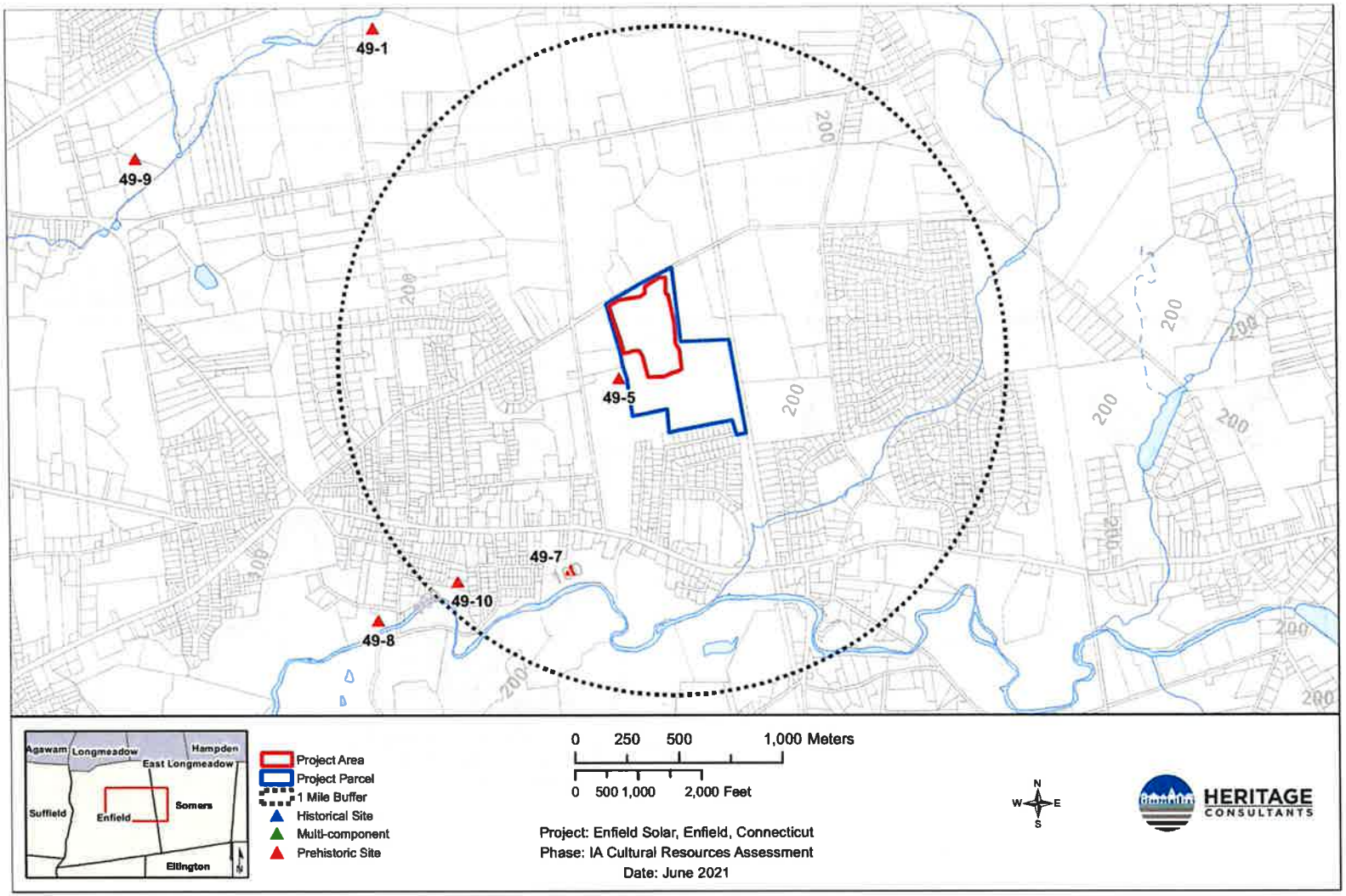


Figure 9. Digital map depicting the location of Site 136-5, a previously identified archaeological sites in the vicinity of the proposed development parcel in Hazardville, Enfield, Connecticut.

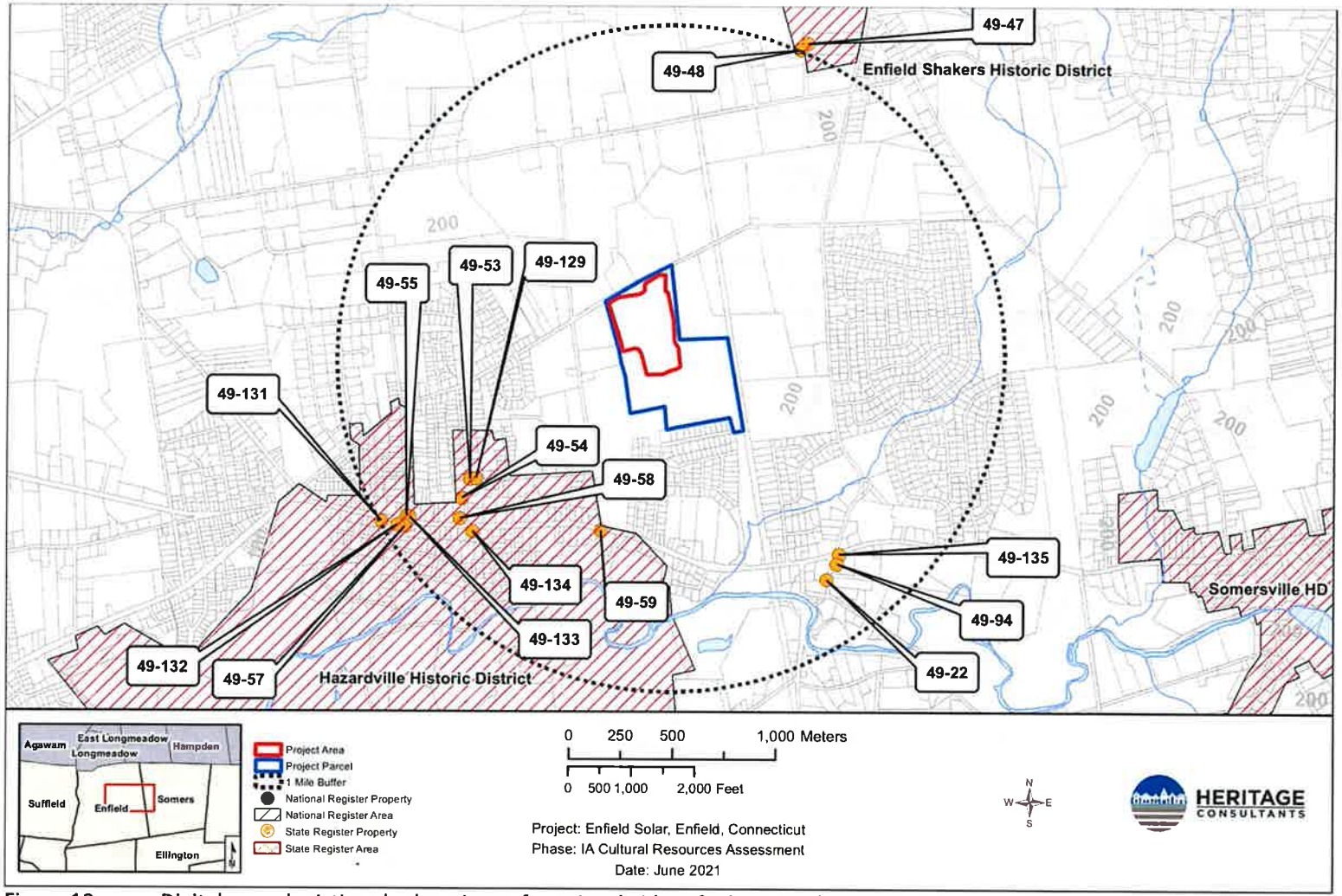


Figure 10. Digital map depicting the locations of previously identified National Register of Historic Places properties in the vicinity of the proposed development parcel in Hazardville, Enfield, Connecticut.

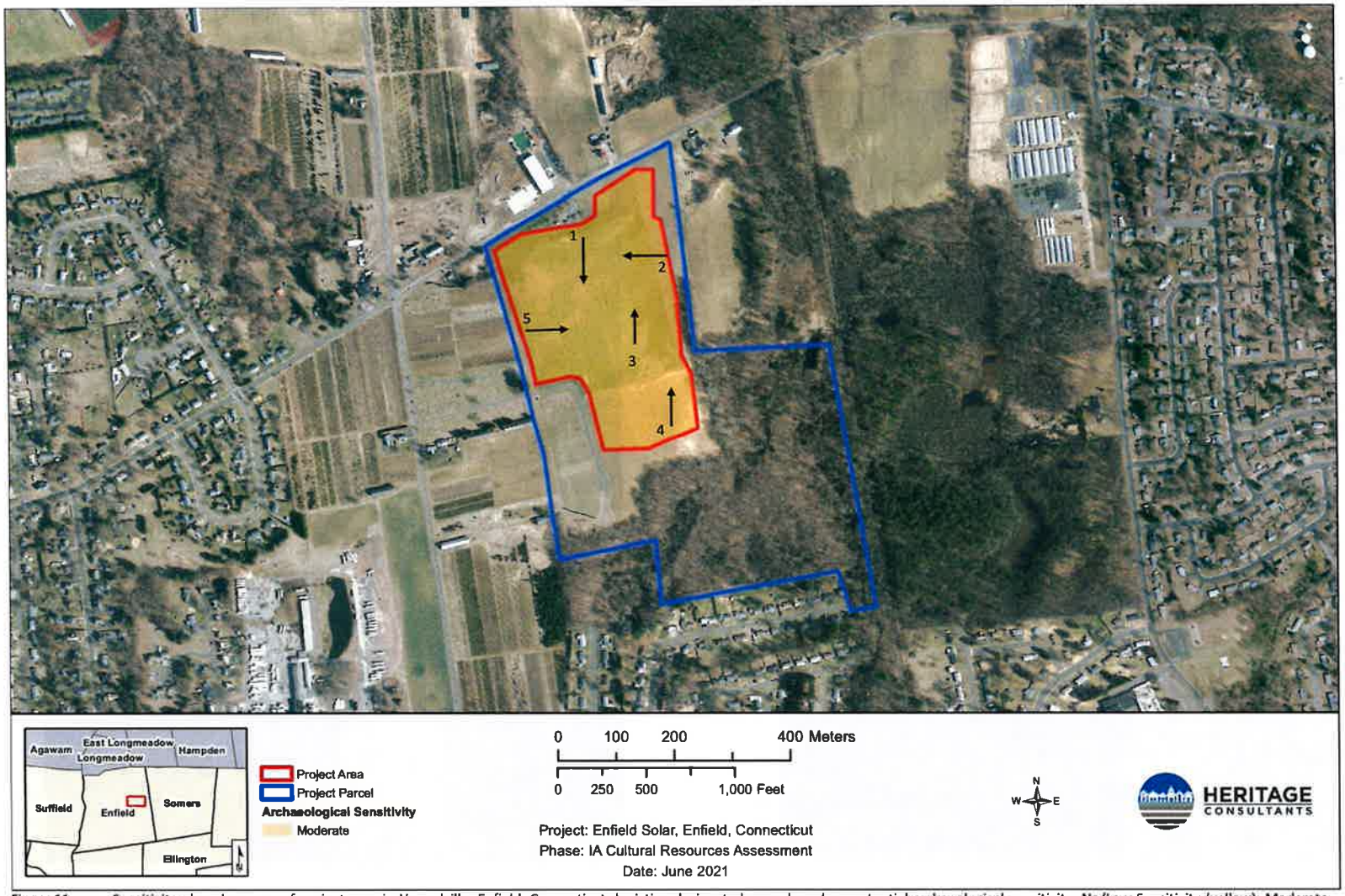


Figure 11. Sensitivity plan view map of project area in Hazardville, Enfield, Connecticut depicting designated areas based on potential archaeological sensitivity; No/Low Sensitivity (yellow); Moderate Sensitivity (brown); & High Sensitivity (red). Location of Photo 1 – 5 numbered in black with orientation / point of view noted with a black arrow.

Photo 1. Representative view of the northern edge of the proposed project area facing south across present-day golf driving range in Enfield, Connecticut.

Photo 2. Representative view of the eastern edge of the proposed project area facing west across present-day cornfield in Enfield, Connecticut.

Photo 3. Representative view of the southern center view of the proposed project area facing north across present-day golf driving range in Enfield, Connecticut.

Photo 4. Representative view of the southern edge of the proposed project area facing north across present-day cornfield in Enfield, Connecticut.

Photo 5. Representative view of the western edge of the proposed project area facing east across present-day driving range in Enfield, Connecticut.

APPENDIX E

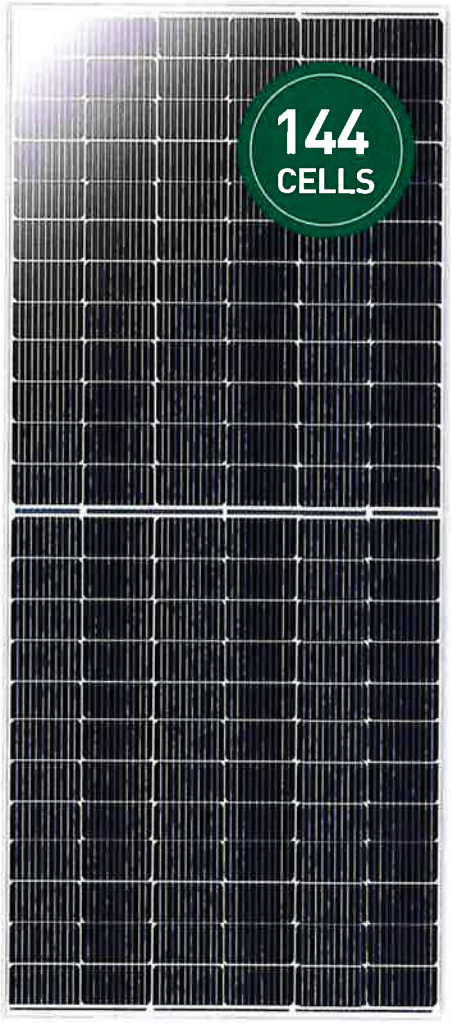
PRODUCT INFORMATION SHEETS

Phono® Solar

TWINPLUS MODULE SERIES

HIGH EFFICIENCY MONO-PERC M6-10B-R

530-550W



OUTSTANDING PRODUCT PERFORMANCE

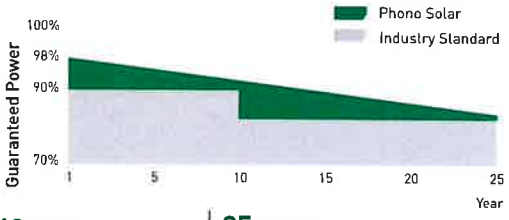
- Competitive high-temperature performance with ameliorated temperature coefficient
- Minimized power loss in cell connection
- Better performance under shading effect
- Decreased nominal operating cell temperature to 43 ± 2°C
- Higher power generation with multi-busbar and half-cut technology

TRUSTWORTHY QUALITY AND RELIABILITY

- Guaranteed 0~+5W positive tolerance secures reliable power output
- 5400Pa maximum snow load, 2400Pa maximum wind load
- Optimized electrical design lowers hot spot risk and operating current

PID RESISTANT

- Industry-leading cell processing technology and electrical design ensure solid PID resistance



12-year Product Warranty | **25-year** Linear Performance Warranty

MANAGEMENT SYSTEM CERTIFICATES

IEC 61215, IEC 61730
ISO 9001:2015 / Quality management system
ISO 14001:2015 / Standards for environmental management system
OHSAS 18001:2007 / International standards for occupational health & safety
IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules-guidelines for increased confidence in PV module design qualification and type approval

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PV MODULE RELIABILITY SCORECARD

www.phonosolar.com info@phonosolar.com

ELECTRICAL TYPICAL VALUES

Model	PS530M6-24/TH PS530M6H-24/TH		PS535M6-24/TH PS535M6H-24/TH		PS540M6-24/TH PS540M6H-24/TH		PS545M6-24/TH PS545M6H-24/TH		PS550M6-24/TH PS550M6H-24/TH	
Testing Condition	**STC**	**NOCT**	**STC**	**NOCT**	**STC**	**NOCT**	**STC**	**NOCT**	**STC**	**NOCT**
Rated Power (Pmpp)	530	401	535	405	540	409	545	412	550	416
Rated Current (Impp)	12.86	10.38	12.92	10.43	12.98	10.48	13.04	10.53	13.10	10.57
Rated Voltage (Vmpp)	41.22	38.64	41.41	38.82	41.61	39.00	41.80	39.18	41.99	39.36
Short Circuit Current (Isc)	13.46	10.86	13.54	10.93	13.62	10.99	13.70	11.06	13.78	11.12
Open Circuit Voltage (Voc)	49.06	45.70	49.13	45.77	49.20	45.83	49.27	45.90	49.34	45.97
Module Efficency (%)	20.56		20.76		20.95		21.14		21.34	

STC(Standard Testing Conditions):Irradiance 1000W/m², AM 1.5, Cell Temperature 25°C

NOCT (Nominal Operation Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/S

MECHANICAL CHARACTERISTICS

Cell Type	Monocrystalline 182mm x 91mm
Dimension (L× W × H)	Length: 2273mm (89.49 inch) Width: 1134mm (44.65 inch) Height: 40mm (1.57 inch)
Weight	29.0kg (63.93 lbs)
Front Glass	3.2mm Toughened Glass
Frame	Anodized Aluminium Alloy
Cable	4mm² (IEC), Length:350mm (vertical) 1300mm (horizontal) or Customized Length
Junction Box	IP 68 Rated

TEMPERATURE RATINGS

Voltage Temperature Coefficient	-0.30%/°C
Current Temperature Coefficient	+0.05%/°C
Power Temperature Coefficient	-0.38%/°C
Tolerance	0~+5w
NOCT	43±2°C

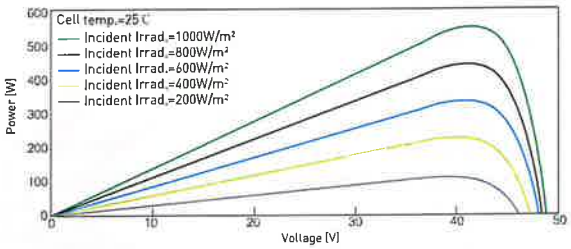
ABSOLUTE MAXIMUM RATING

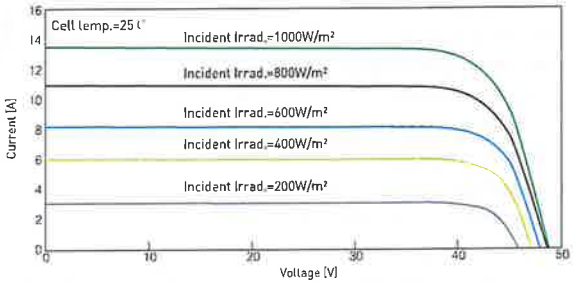
Operating Temperature	From -40 to +85°C
Hail Diameter @ 80km/h	Up to 25mm
Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Maximum Series Fuse Rating	20A
PV Module Classification	II
Fire Rating (IEC 61730)	C
Module Fire Performance (UL 1703)	Type 4
Maximum System Voltage	DC 1000V/1500V

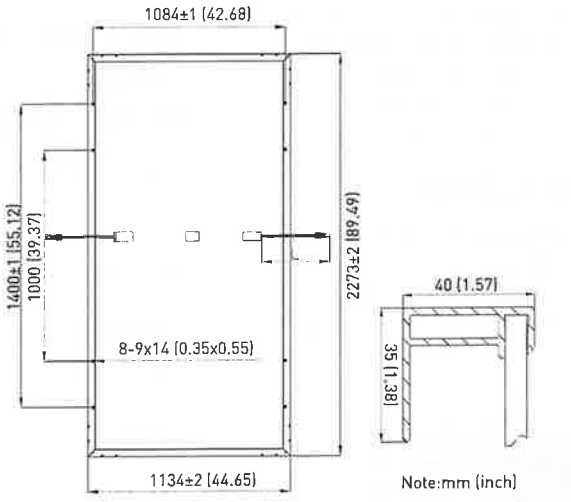
PACKING CONFIGURATION

Container	20' GP	40' HQ
Pieces/Container	205	540

ELECTRICAL CHARACTERISTICS







Phono® Solar

SOLECTRIA™ XGI 1500

PREMIUM 3-PHASE TRANSFORMERLESS UTILITY-SCALE INVERTERS

FEATURES

- Made in the USA with global components
- Buy American Act (BAA) compliant
- Four models:
  - 125kW/125kVA,
  - 125kW/150kVA,
  - 150kW/166kVA,
  - 166kW/166kVA
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SA
- Robust, dependable and built to last
- Lowest O&M and installation costs
- Access all inverters on site via WiFi from one location
- Remote diagnostics and firmware upgrades
- SunSpec Modbus Certified
- Tested compatible with the TESLA PowerPack Microgrid System
- app for system visibility

OPTIONS

- String combiners for distributed and centralized systems
- Web-based monitoring
- Extended warranty

MADE IN THE USA

With U.S. and Global Components

Yaskawa Solectria Solar's XGI 1500 utility-scale string inverters are designed for high reliability and built of the highest quality components that were selected, tested and proven to last beyond their warranty.

XGI 1500 inverters provide advanced grid-support functionality and meet the latest IEEE 1547 and UL 1741 standards for safety. They are the most powerful 1500 VDC string inverters in the PV market and have been engineered for both distributed and centralized system architecture.

Designed and engineered in Lawrence, MA, XGI inverters are assembled and tested at Yaskawa America's facilities in Buffalo Grove, IL. They are Made in the USA with global components and are compliant with the Buy American Act.

YASKAWA SOLECTRIA SOLAR

Yaskawa Solectria Solar 1-978-683-9700 | Email: inverters@solectria.com | solectria.com
Document No. FL.XGI1500.01 | 05/03/2021 |

SOLECTRIA™ XGI 1500 TECHNICAL DATA

SPECIFICATIONS

SOLECTRIA XGI 1500 Model		XGI 1500-125/125	XGI 1500-125/150	XGI 1500-150/166	XGI 1500-166/166
DC Input	Absolute Maximum Input Voltage	1500 VDC	1500 VDC	1500 VDC	1500 VDC
	Maximum Power Input Voltage Range (MPPT)	860-1250 VDC	860-1250 VDC	860-1250 VDC	860-1250 VDC
	Operating Voltage Range (MPPT)	860-1450 VDC	860-1450 VDC	860-1450 VDC	860-1450 VDC
	Number of MPP Trackers	1 MPPT	1 MPPT	1 MPPT	1 MPPT
	Maximum Operating Input Current	148.3 A	148.3 A	178.0 A	197.7 A
	Maximum Operating PV Power	128 kW	128 kW	153 kW	170 kW
	Maximum DC/AC Ratio | Max Rated PV Power	2.6 | 332 kW	2.6 | 332 kW	2.2 | 332 kW	2.0 | 332 kW
	Max Rated PV Short-Circuit Current (∑Isc x 1.25)	500 A	500 A	500 A	500 A
AC Output	Nominal Output Voltage	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph	600 VAC, 3-Ph
	AC Voltage Range	-12% to +10%	-12% to +10%	-12% to +10%	-12% to +10%
	Continuous Real Output Power	125 kW	125 kW	150 kW	166 kW
	Continuous Apparent Output Power	125 kVA	150 kVA	166 kVA	166 kVA
	Maximum Output Current	120 A	144 A	160 A	160 A
	Nominal Output Frequency	60 Hz	60 Hz	60 Hz	60 Hz
	Power Factor (Unity default)	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable	+/- 0.80 Adjustable
	Total Harmonic Distortion (THD) @ Rated Load	<3%	<3%	<3%	<3%
	Grid Connection Type	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND	3-Ph + N/GND
	Fault Current Contribution (1 cycle RMS)	144 A	173 A	192 A	192 A
Efficiency	Peak Efficiency	98.9%	98.9%	99.0%	99.0%
	CEC Average Efficiency	98.5%	98.5%	98.5%	98.5%
	Tare Loss	<1 W	<1 W	<1 W	<1 W
Temperature	Ambient Temperature Range	-40°F to 140°F (-40C to 60C)		-40°F to 140°F (-40C to 60C)	
	De-Rating Temperature	122°F (50C)		113°F (45C)	
	Storage Temperature Range	-40°F to 167°F (-40C to 75C)		-40°F to 167°F (-40C to 75C)	
	Relative Humidity (non-condensing)	0 - 95%		0 - 95%	
	Operating Altitude	Full Power up to 9,840 ft (3.0 km); De-Rate to 70% of Full Power at 13,123 ft (4.0 km)			
Communications	Advanced Graphical User Interface	WiFi			
	Communication Interface	Ethernet			
	Third-Party Monitoring Protocol	SunSpec Modbus TCP/IP			
	Web-Based Monitoring	Optional			
	Firmware Updates	Remote and Local			
Testing & Certifications	Safety Listings & Certifications	UL 1741, IEEE 1547, UL 1998			
	Advanced Grid Support Function-ality	Rule 21, UL 1741SA			
	Testing Agency	ETL			
	FCC Compliance	FCC Part 15 (Subpart B, Class A)			
Warranty	Standard and Options	5 Years Standard; Option for 10 Years			
Enclosure	Acoustic Noise Rating	73 dBA @ 1 m ; 67dBA @ 3 m			
	DC Disconnect	Integrated 2-Pole 250 A DC Disconnect			
	Mounting Angle	Vertical only			
	Dimensions	Height: 29.5 in. (750 mm) | Width: 39.4 in. (1000 mm) | Depth: 15.1 in. (380 mm)			
	Weight	270 lbs (122 kg)			
	Enclosure Rating and Finish	Type 4X, Polyester Powder-Coated Aluminum			

IT'S PERSONAL

YASKAWA SOLECTRIA SOLAR

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Document No. FL.XGI1500.01 | 05/03/2021 |

PARK

SWITCHGEAR

Engineered Solutions for Power Distribution

Switchgear

In this brochure, we present a complete range of advanced, problem-solving switchgear products that have established Park as an industry leader in power distribution systems. Shown and described are medium voltage switchgear units for many diverse applications, all featuring the Park hallmarks of modern design and cutting-edge technology. With some of the industry's finest electrical engineers on staff, Park is ideally equipped to handle difficult custom jobs that many other companies may not have the capability to undertake.

Special projects are one of our particular strengths at Park, evidenced by our outstanding record for delivering these systems on tight schedules, and often under demanding circumstances.

Whatever your switchgear requirements, you can always rely on Park to provide you with the finest, state-of-the-art products and support services.

FEATURES & ADVANTAGES

- Interrupter switches are completely factory adjusted.
- No taping of bus connections
- Built-in access control eliminates expensive fencing
- Wide-view windows allow inspection of switches from outside
- Louvers and space heaters reduce moisture
- Spare fuses store in built-in racks
- Generous access and ample work space
- Hot dipped galvanized base
- Sturdy, lockable latches
- Welded construction for security and strength
- Heavy duty hinges
- Manufactured to applicable utility standards

Metal Enclosed

Metal Enclosed Load Interrupter Switchgear

Park Switchgear configurations are limited only by your imagination.

Each unit features welded steel construction with wideview windows that allow checking switchgear without opening doors. Corrosionproof, rainproof louvers at the bottom and top, and space heaters inside each unit maintain air circulation to keep the interior dry. Three point cam-type, high-strength latches seal the doors shut. The lockable latches and screened louvers discourage tampering. Wide bulkhead doors provide easy access to all bays. Each full-length door has durable heavy-duty hinges with brass pivots. Foot operated holders lock the doors open, providing ample room for pulling cables and making terminations.

All interrupter switches are maintence-free and are available in 200, 600, and 1200 amp ratings. S&C® Power Fuses provide full-fault-spectrum protection. The switches are manually operated by nonremovable switch handles. Bus connections are silverplated copper for long life. Continuous ground bus in multibay lineups has a short-circuit rating equal to that of the integrated assembly. The HV meter bays are built to utility specifications and multibay lineups are assembled with a minimum of interbay bolting.

Call today and discuss your requirements with a Park sales representative.

UL® Listed up tp 15KV

SPECIFICATIONS

Ratings of S&C Mini-Ruptor Switches

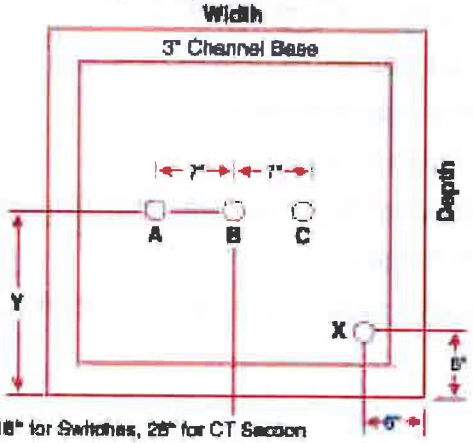
KV			Amperes, RMS				
				Interrupting			Mom. &
Nom.	Max. Des.	BIL	Cont.	Load	Cap.	Mag.	Fault Close (ASYM KA)
5	5.5	60	600	600	35	21	40
5	5.5	60	1200	1200	35	21	61
15	17	95	600	600	35	21	40
15	17	95	1200	1200	35	21	61
25	29	125	600	400	35	21	40
34.5	38	150	600	600	35	21	28

Physical Sizes & Park Numbers

Park No.	Voltage KV	Height	Depth	Width
PM 315-4.8	4.8	104"	44"	42"
PM 315-15	15	104"	44"	42"
PM 315-25	25	120"	44"	42"
PM 315-35	34.5	130"	70"	60"
PM 315-CT	PT/CT Bay	to match	to match	to match
PM 315-WM	Meter Bay	to match	to match	60"

To order specify current rating & fuse size.

Cabling Locations



Y=18" for Switches, 28" for CT Section

A,B,C,- Approximate Cable Termination Points

X - Approximate Heating Cable Termination (for Sw only)

Switchgear

FEATURES & ADVANTAGES

- Interrupter switches are completely factory adjusted
- Built-in access control eliminates expensive fencing
- Standard drilling and tapping for mounting various size and manufacturers' current and potential transformers
- No taping of bus connections
- Front operator standard
- Side operator available as an option
- Louvers and space heaters reduce moisture
- Spare fuses store in built in racks
- Sturdy 3 point door latch
- Heavy duty hinges
- Sturdy, lockable latches
- Welded construction for security and strength
- Hot dipped galvanized base
- Manufactured to applicable utility standards
- Finished with one prime and two enamel coats for corrosion resistance

PM 123

Pad-mounted 15KV Primary Switch and Metering Cubicle

Each unit features welded steel construction. Corrosionproof, rainproof louvers at the bottom and top, and space heaters inside each unit maintain air circulation to keep the interior dry. Three point cam-type, high-strength latches seal the doors shut. The lockable latches and screened louvers discourage tampering. Wide bulkhead doors provide easy access. Each full-length door has durable heavy-duty hinges with brass pivots. Foot operated holders lock the doors open and provides ample room for pulling cables and making terminations.

Interruptor switches are maintenance-free and are 600 amp rated. S&C® Power Fuses provide full-fault-spectrum protection. The switches are manually operated by removable switch handles. Bus connections are silverplated copper for long life. The HV meter bays are built to utility specifications.

Call today and discuss your requirements with a Park sales representative.

UL® Listed up tp 15KV

SPECIFICATIONS

Ratings of S&C Mini-Ruptor Switches

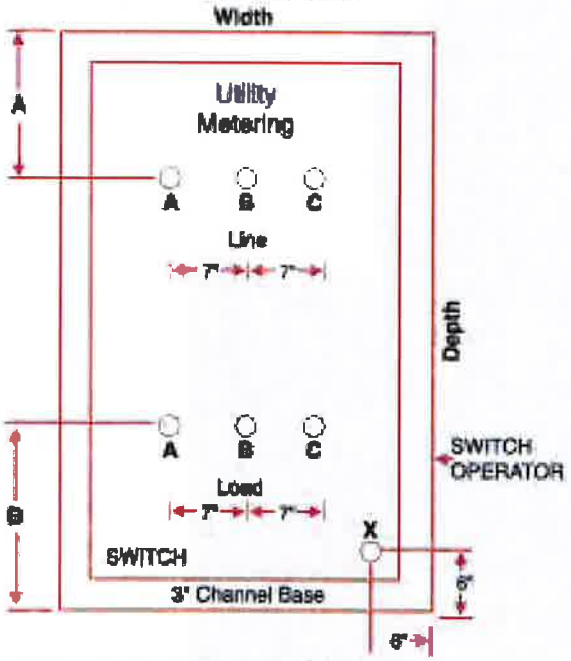
KV			Amperes, RMS				
				Interrupting			Mom. &
Nom.	Max. Des.	BIL	Cont.	Load	Cap.	Mag.	Fault Close (ASYM KA)
15	17	95	600	600	35	21	40
25	29	125	600	400	35	21	40

Physical Sizes & Park Numbers

Park No.	Voltage KV	Height	Depth	Width	A	B
PM 123-4.8	4.8	82"	60"	40"	19"	12"
PM 123-15	15	82"	60"	40"	19"	12"
PM 123-25	25	94"	60"	54"	19"	14"

To order specify current rating & fuse size.

Cabling Locations



A,B,C.– Approximate Cable Termination Points

X – Approximate Heating Cable Termination

NOTE: Front and rear clearance of 4' required—2' on right for handle operations

Switchgear

FEATURES & ADVANTAGES

- Welded steel construction for security and strength.
- Various combinations of switch and fuse arrangements available.
- Interrupter switches are factory adjusted.
- Built-in access control eliminates expensive fencing.
- No taping of bus connections.
- Folding switch handle stores in padlockable compartment on enclosure side.
- Sturdy 3 point lockable door latches.
- Heavy duty hinges.
- Louvers help reduce moisture.
- Manufactured to applicable utility standards.
- Hot dipped galvanized base.
- Finished with one prime and two enamel coats for corrosion resistance.

PM-255

PM-155

PM 155 & 255

Pad-mounted 15 & 25KV Switch & Fuse

All 155 and 255 units feature welded steel construction. Louvers at the top and bottom of each unit are rainproof and corrosion proof, maintain air circulation to keep interior dry. Three point cam-type, high-strength latches seal the doors shut. Lockable latches and screened louvers discourage tampering. Wide bulkhead doors provide easy access. Each full-length door has durable heavy-duty hinges with brass pivots. Foot operated holders lock the doors open, and provide ample room for pulling cables and making terminations.

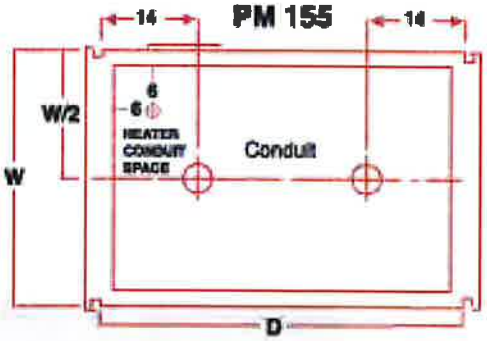
Interruptor switches are maintenance-free and rated at 600 amp. S&C® Power Fuses provide full-fault-spectrum protection. Switches are manually operated by removable switch handles. Bus connections are silverplated copper for long life.

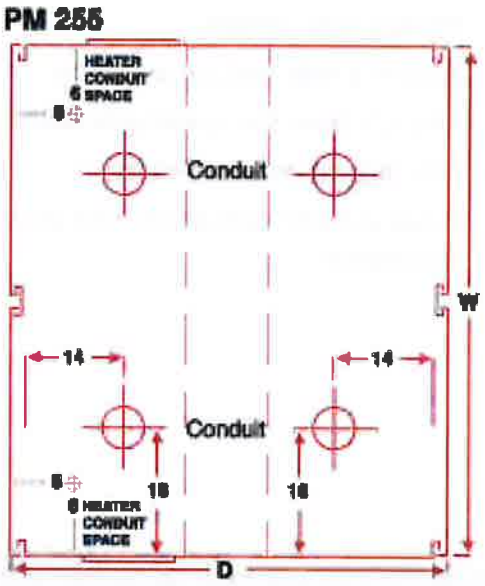
Call today and discuss your requirements with a Park sales representative.

SPECIFICATIONS

Park #	Volts	Height*	Width	Depth
155	15 kv	60	36	52
155	25 kv	66	40	62
255	15 kv	60	72	62
255	25 kv	65	82	72

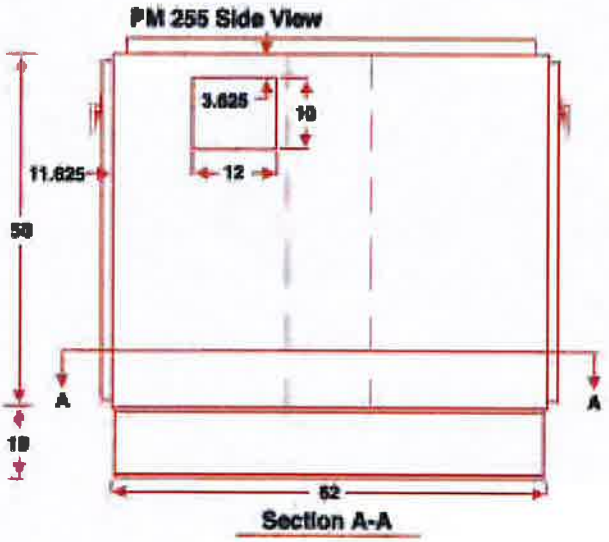
*Height includes 10" base.





PM-155 front view ▲

rear view ▲



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THREE PHASE PADMOUNT TRANSFORMERS

Short for "Tamper-proof, compartmentalized, liquid-filled, pad mounted transformer", all padmount designs feature fully enclosed tamper-proof terminal compartments and can be supplied with dead-front or live-front configuration, for loop or radial feed applications, with Type II mineral oil, or environmentally friendly and high flash-point Envirotemp™ FR3™.

All new Maddox padmount transformers are constructed of the highest quality materials and built in the US to heavy duty industrial standards, making them ideal for commercial and industrial applications such as data centers, solar step-up, manufacturing facilities, shopping centers, etc. Our padmounts are designed to the latest department of energy efficiency standards built and tested in accordance with industry standards including NEMA, ANSI C.57, DOE, and IEEE as applicable.

With thousands of new units in stock and ready-to-ship, and the manufacturing ability to produce almost any custom design, Maddox stands ready to meet your transformer need(s). Maddox stocks all standard configurations to match most common applications and deliver on short notice.

Design

HV Bushing Config.:
- Dead front or live front
- Loop feed or radial feed

Fluid Options:
- Type II Mineral Oil
- Envirotemp™ FR3™

Standard Gauge/Accessory Package:
- Pressure relief valve
- Pressure vacuum gauge
- Liquid temp & level gauges
- Drain & sample valve
- Adjustment taps

Switch Options:
- 2 Position LBOR Switch
- 4 Position LBOR Switch (V-blade or T-blade)
- (3) 2 Position LBOR Switches

Fusing Options:
- Bayonets w/ isolation links or CLFs

Construction:
- 5-legged core
- Rectangular wound copper or aluminum windings
- Carbon rienforced or stainless steel tank
- Steel divider between HV and LV cabinets
- Penta-head captive bolt

Optional Design Features & Accessories:
- Gauges w/ Contacts
- External drain and sample valve
- Electrostatic Shielding
- Step-up Design
- Surge-Arresters

Available Ratings

Table 1. Typical Transformer Ratings

Sizes (kVA)	45, 75, 112.5, 150, 225, 300, 500, 750, 1000, 1500, 2000, 2500, 3000, 3750, 5000
Frequency	60 Hz or 50 Hz
Cooling Class	ONAN or KNAN
Temp Rise	55°C, 65°C, 55/65°C, 75°C
Voltages	*Available in Δ or Y configuration*
600V	208
	240
	416
	480
	600
2.5kv – 5kv	2400
	4160
	4800
15kV	12000
	12470
	13200
	13800
	14400
25kV	20780
	21600
	22900
	24940
	26400
35kV	33000
	34500

Fig 1. Padmount Transformer Outline

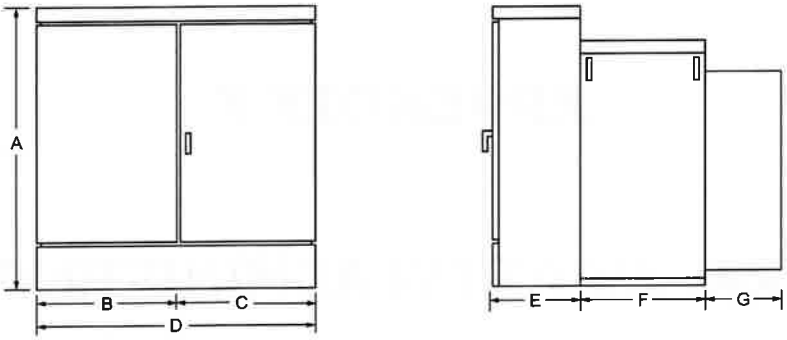


Table 2. Approximate Transformer Dimensions

kVA	A	B	C	D	E	F	G	Gallons	Weight (Lbs)
300	59"	29.5"	22"	51.5"	20.5"	24"	10"	196	4,056
500	59"	33"	26.5"	59.5"	24"	26.5"	10"	210	5,023
750	73"	36"	29"	65"	24"	26.5"	10"	358	7,664
1000	73"	36"	29"	65"	24"	27"	10"	354	8,530
1500	73"	36"	35.5"	71.5	24"	33.5"	10"	410	10,782
2000	75"	39.5"	28"	67.5	24"	35"	27"	433	12,490
2500	78"	39.5"	35.5"	75.5"	24"	37.5"	22.5"	545	14,246
3000	84"	30.5"	32"	62.5"	24"	37.5"	38"	550	14,014
3750	75"	50.5"	30"	80.5"	25.5"	42"	38"	730	17,785

Fig 2. Three Phase Maddox Padmount Transformer

Table 3. Common Accessories

1. Bayonet Fuses

2. Loadbreak Switch

3. Tap-changer

4. Bushings

5. Parking Stand

6: Gauges

APPENDIX F

FEDERAL AVIATION ADMINISTRATION DETERMINATIONS

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1254-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 1
Location:	Enfield, CT
Latitude:	41-59-46.90N NAD 83
Longitude:	72-31-31.26W
Heights:	186 feet site elevation (SE)
	40 feet above ground level (AGL)
	226 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1254-OE

Signature Control No: 514058307-517735114 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1254-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 226 feet above mean sea level.

Location: The structure will be located 4.67 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

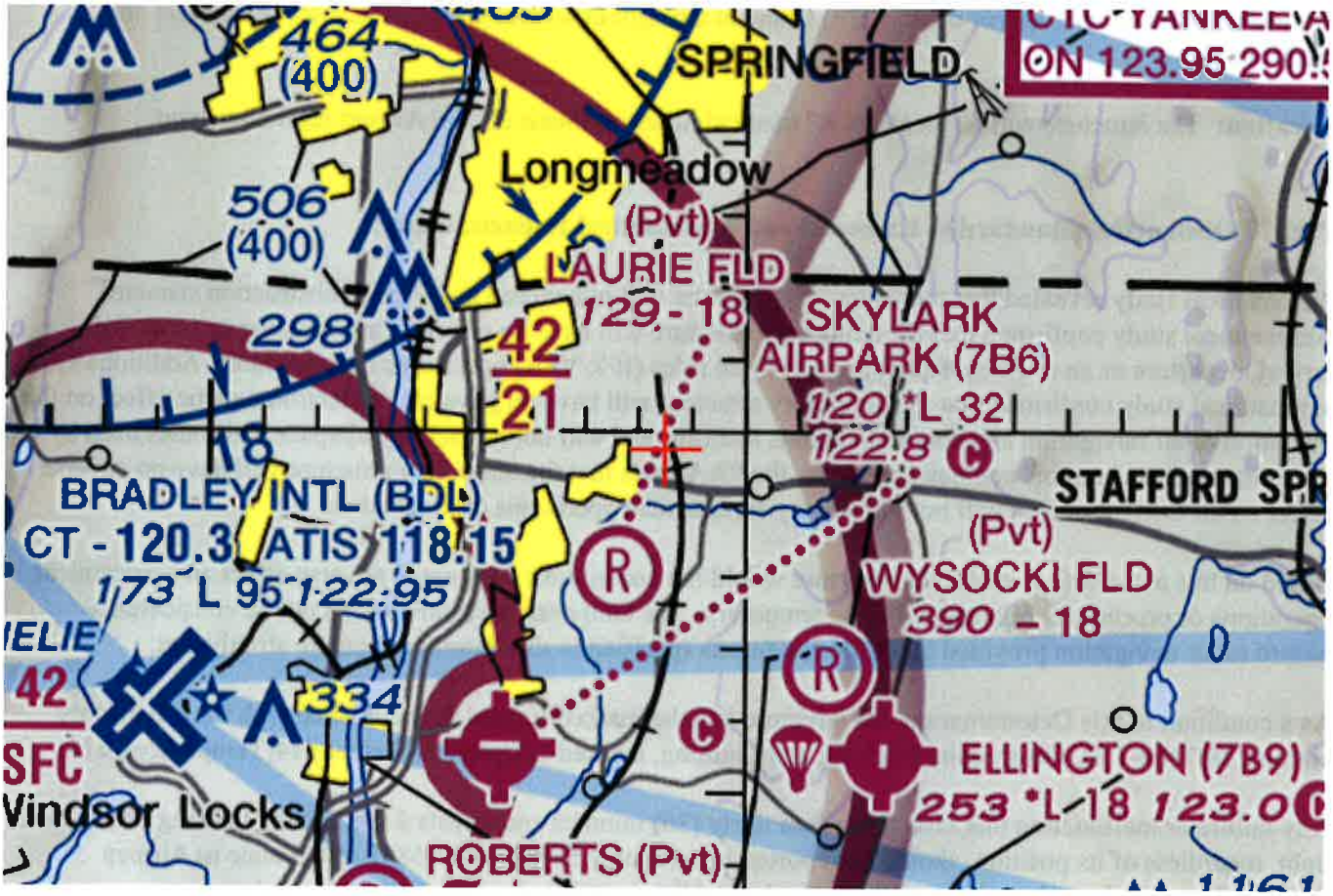
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1254-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1255-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 2
Location:	Enfield, CT
Latitude:	41-59-46.90N NAD 83
Longitude:	72-31-29.42W
Heights:	186 feet site elevation (SE)
	40 feet above ground level (AGL)
	226 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1255-OE

Signature Control No: 514058313-517735121 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1255-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 226 feet above mean sea level.

Location: The structure will be located 4.68 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

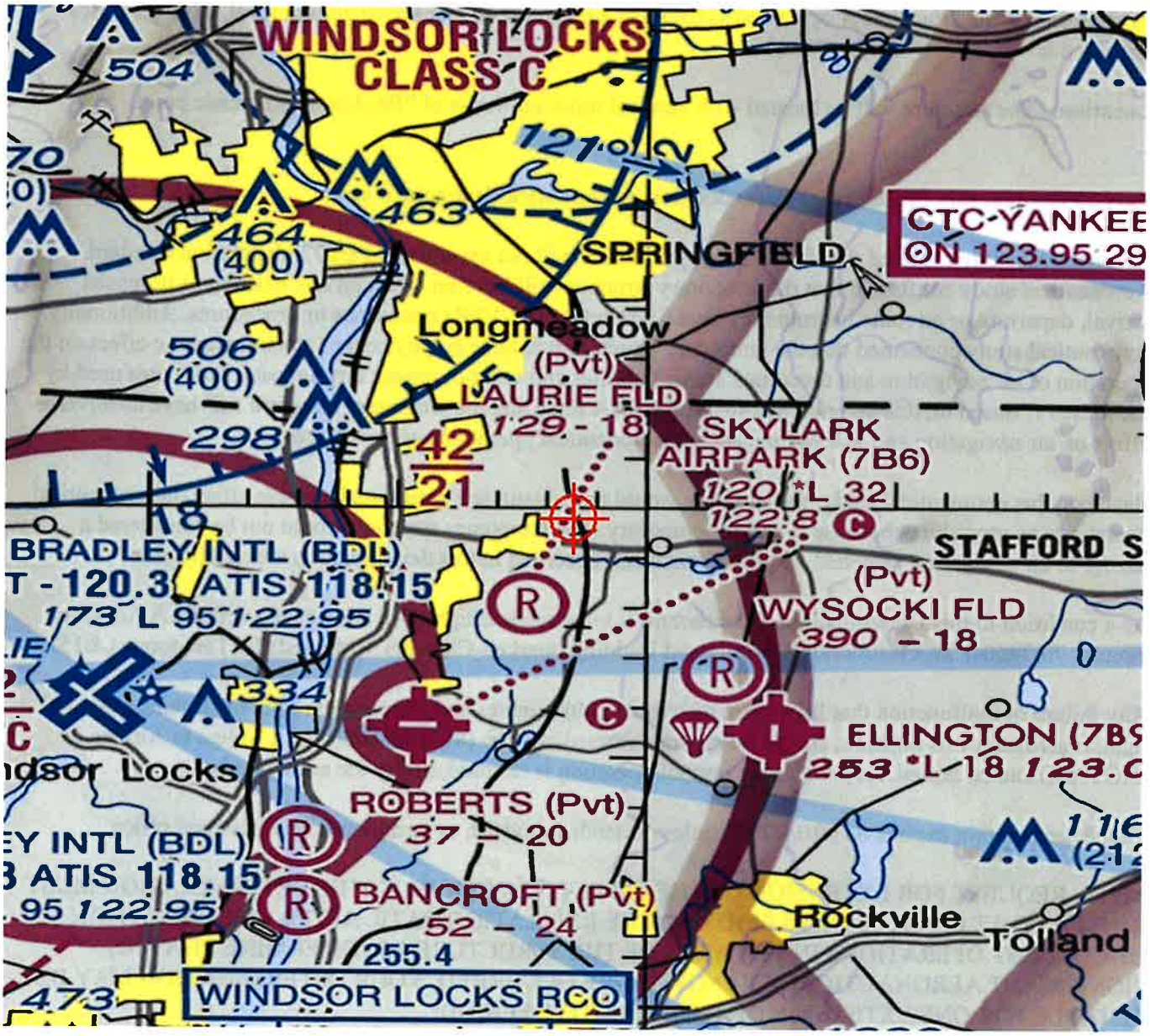
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1255-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1256-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 3
Location:	Enfield, CT
Latitude:	41-59-43.90N NAD 83
Longitude:	72-31-28.16W
Heights:	183 feet site elevation (SE)
	40 feet above ground level (AGL)
	223 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1256-OE

Signature Control No: 514058325-517735119 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1256-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 223 feet above mean sea level.

Location: The structure will be located 4.65 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

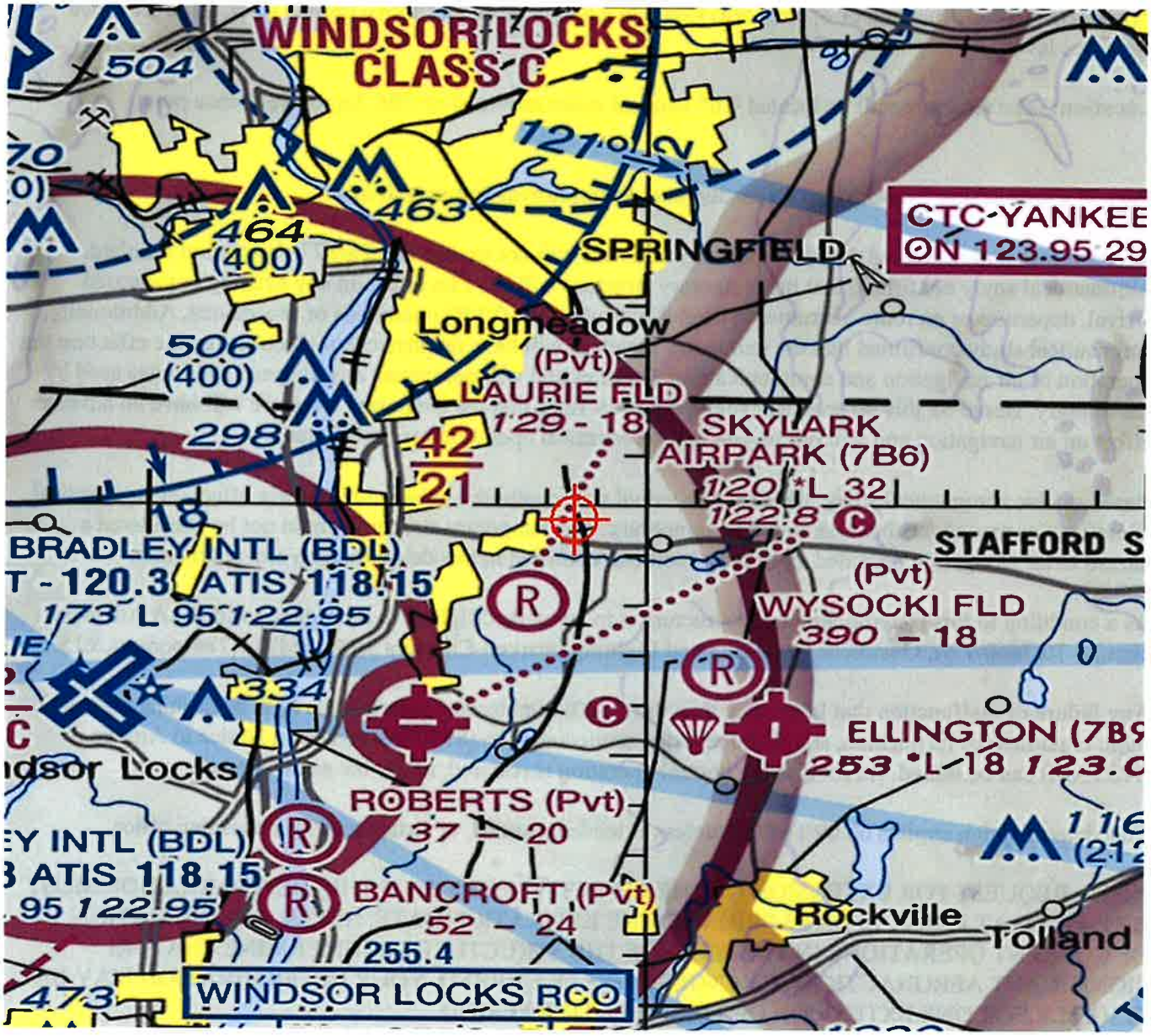
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1256-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1257-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 4
Location:	Enfield, CT
Latitude:	41-59-38.44N NAD 83
Longitude:	72-31-26.26W
Heights:	186 feet site elevation (SE)
	40 feet above ground level (AGL)
	226 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1257-OE

Signature Control No: 514058327-517735122 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1257-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 226 feet above mean sea level.

Location: The structure will be located 4.58 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

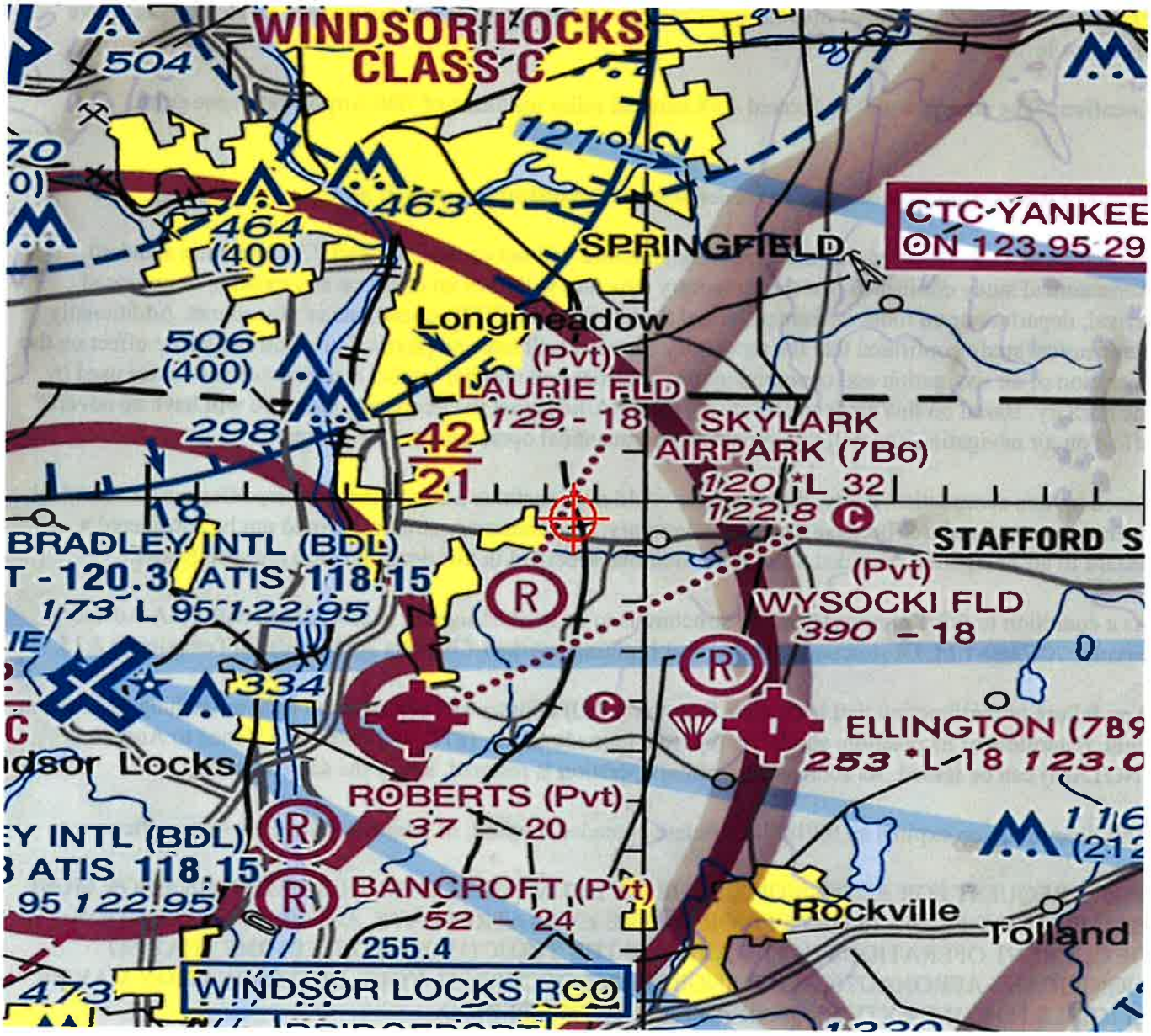
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1257-OE



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Federal Aviation Administration
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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1258-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 5
Location:	Enfield, CT
Latitude:	41-59-37.82N NAD 83
Longitude:	72-31-28.63W
Heights:	188 feet site elevation (SE)
	40 feet above ground level (AGL)
	228 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1258-OE

Signature Control No: 514058334-517735117 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1258-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 228 feet above mean sea level.

Location: The structure will be located 4.56 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

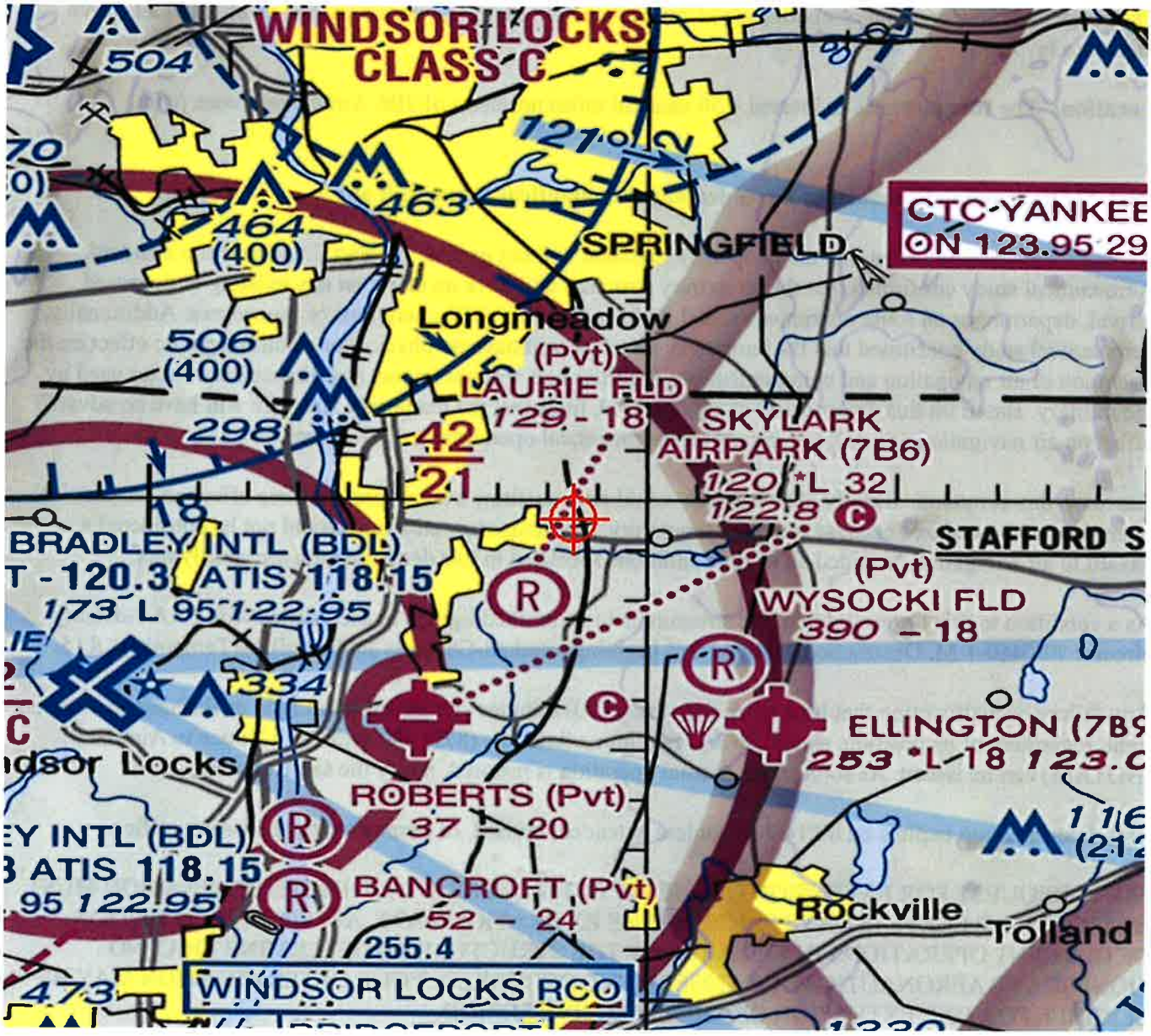
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1258-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1259-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 6
Location:	Enfield, CT
Latitude:	41-59-37.82N NAD 83
Longitude:	72-31-35.87W
Heights:	191 feet site elevation (SE)
	40 feet above ground level (AGL)
	231 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1259-OE

Signature Control No: 514058336-517735120 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1259-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 231 feet above mean sea level.

Location: The structure will be located 4.51 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

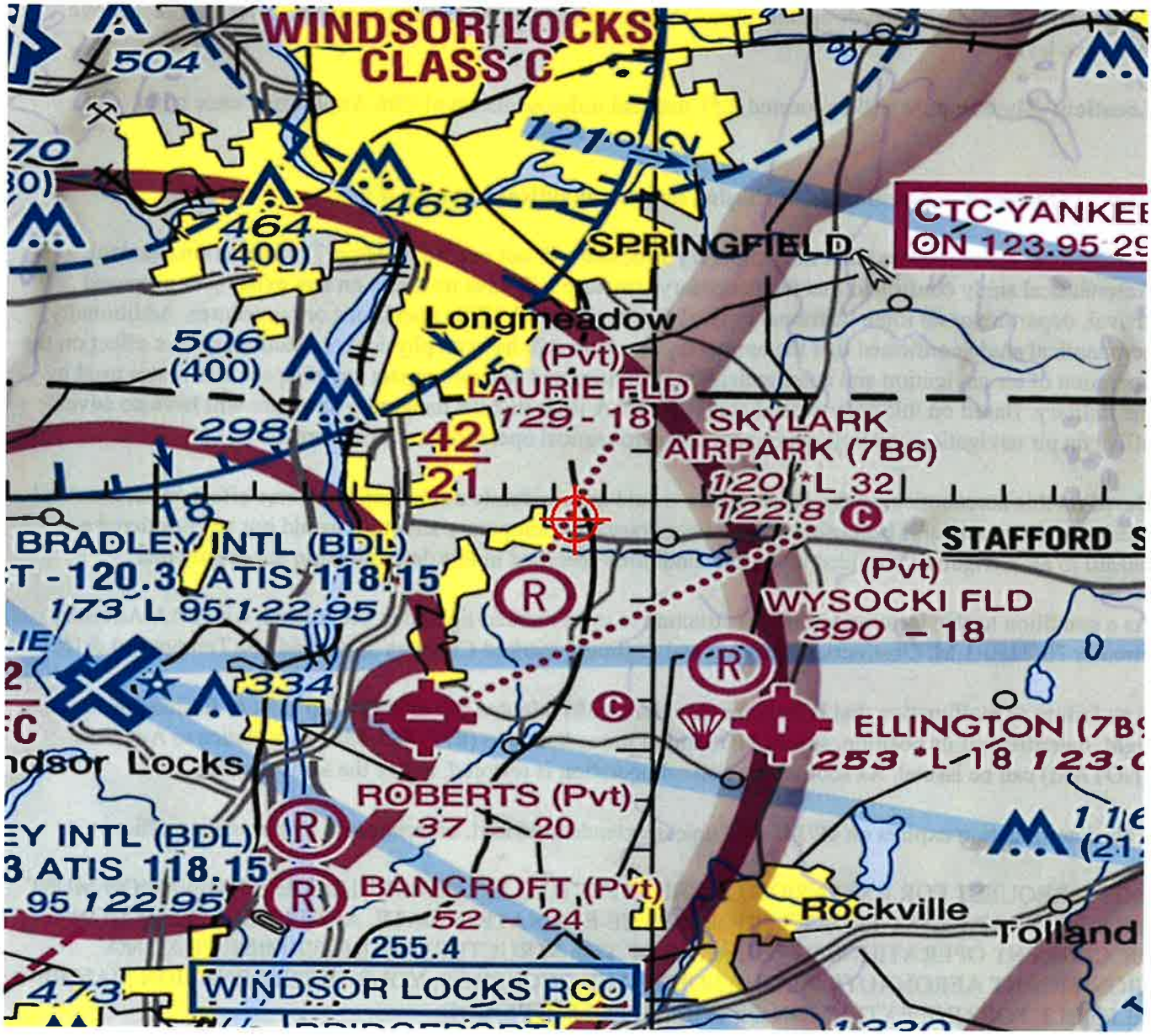
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1259-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1260-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 7
Location:	Enfield, CT
Latitude:	41-59-43.15N NAD 83
Longitude:	72-31-37.78W
Heights:	188 feet site elevation (SE)
	40 feet above ground level (AGL)
	228 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1260-OE

Signature Control No: 514058338-517735115 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1260-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 228 feet above mean sea level.

Location: The structure will be located 4.58 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

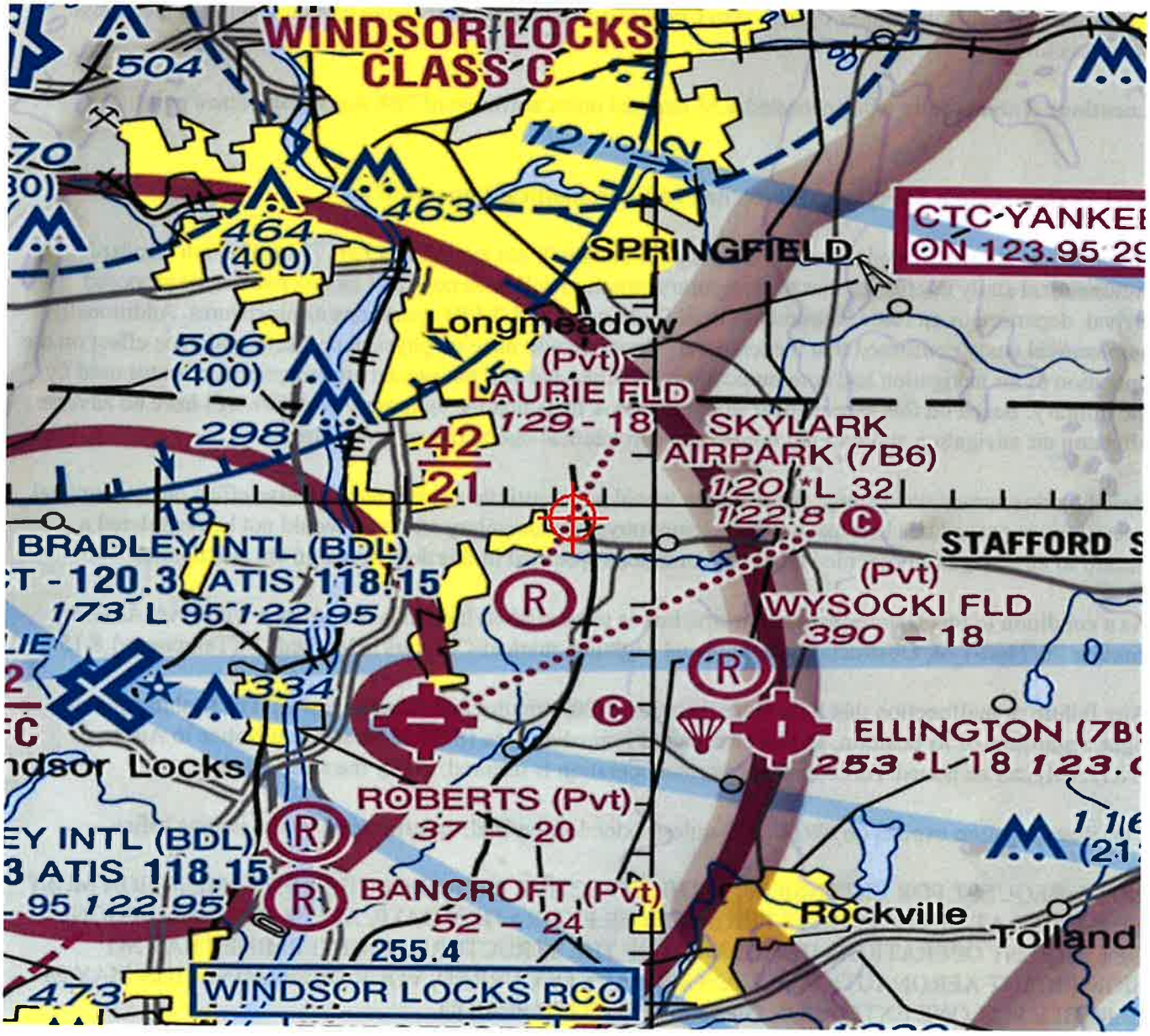
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1260-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1261-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 8
Location:	Enfield, CT
Latitude:	41-59-45.31N NAD 83
Longitude:	72-31-37.27W
Heights:	187 feet site elevation (SE)
	40 feet above ground level (AGL)
	227 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1261-OE

Signature Control No: 514058340-517735118 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1261-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 227 feet above mean sea level.

Location: The structure will be located 4.61 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

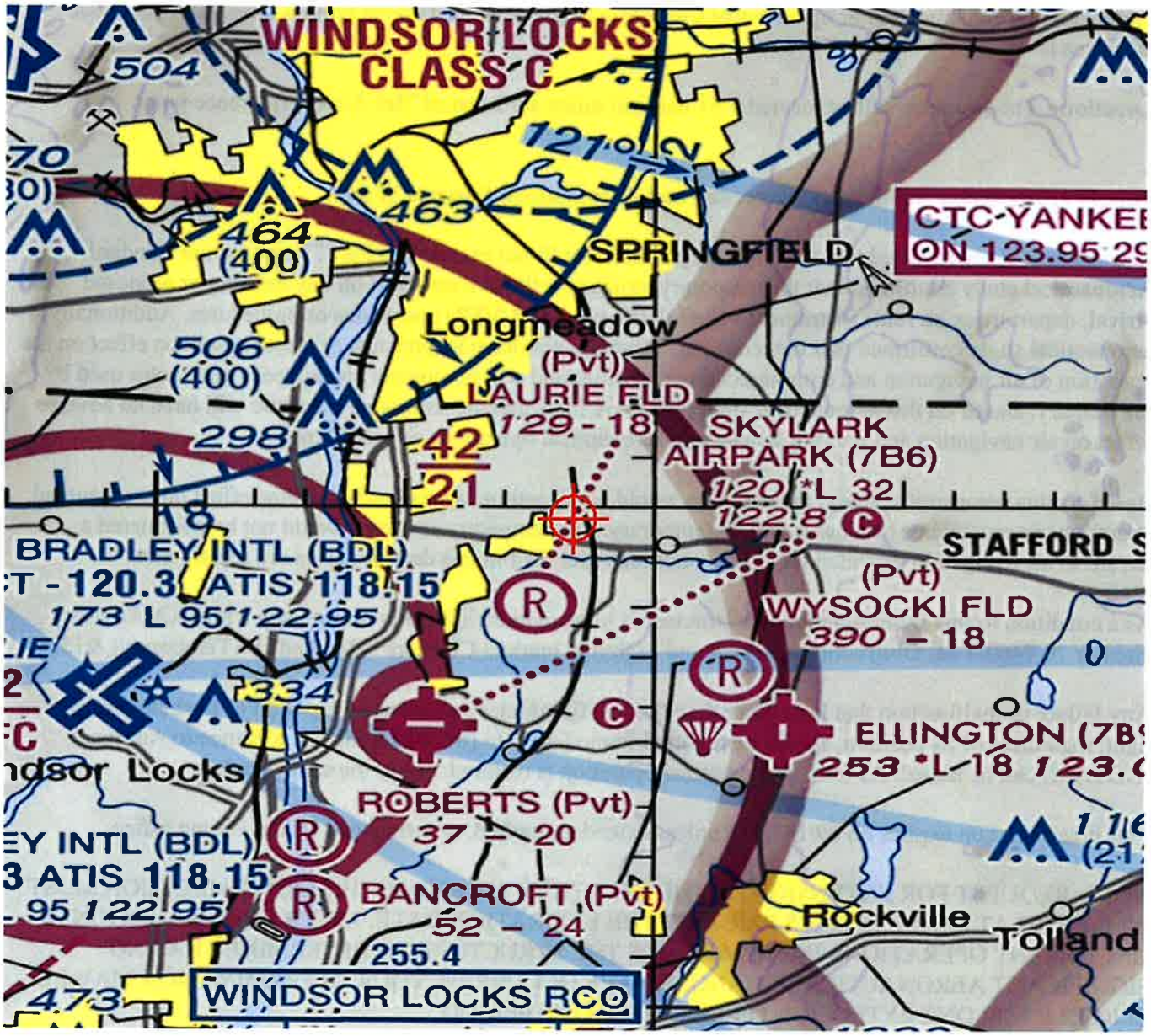
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1261-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1262-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Point 9
Location:	Enfield, CT
Latitude:	41-59-45.89N NAD 83
Longitude:	72-31-35.87W
Heights:	186 feet site elevation (SE)
	40 feet above ground level (AGL)
	226 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice To Airman (NOTAM).

If you have any questions, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1262-OE

Signature Control No: 514058342-517735116 (TMP)
Stephanie Kimmel
Specialist

Additional Condition(s) or Information for ASN 2022-ANE-1262-OE

Proposal: To construct and/or operate a(n) Crane to a height of 40 feet above ground level, 226 feet above mean sea level.

Location: The structure will be located 4.63 nautical miles northeast of 7B6 Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

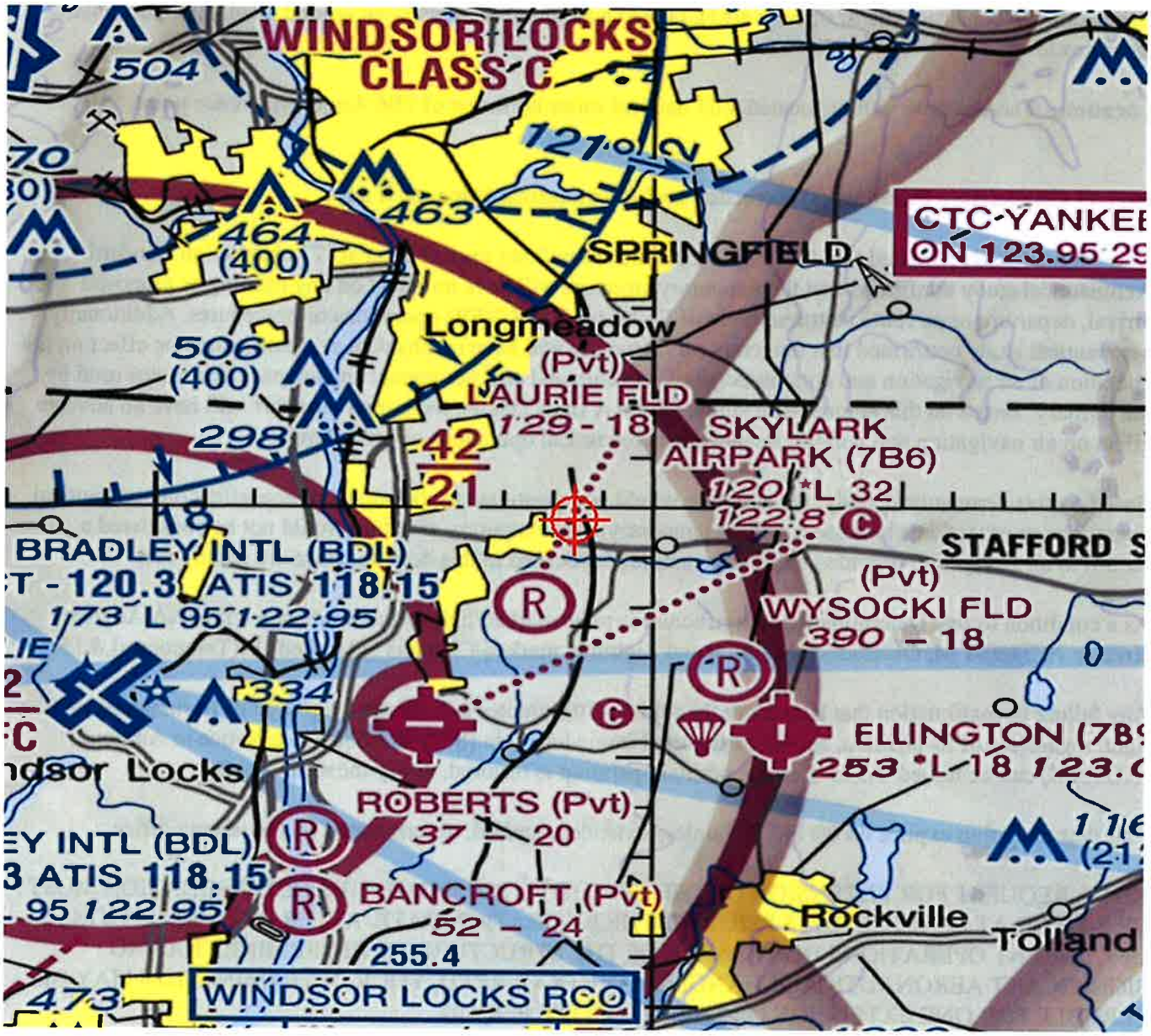
As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M, Obstruction Marking and Lighting, marked-Chapters 3(Marked),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

This determination expires on 09/14/2023 unless extended, revised, or terminated by the issuing office.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2022-ANE-1262-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1264-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 1
Location:	Enfield, CT
Latitude:	41-59-46.90N NAD 83
Longitude:	72-31-31.26W
Heights:	186 feet site elevation (SE)
	10 feet above ground level (AGL)
	196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

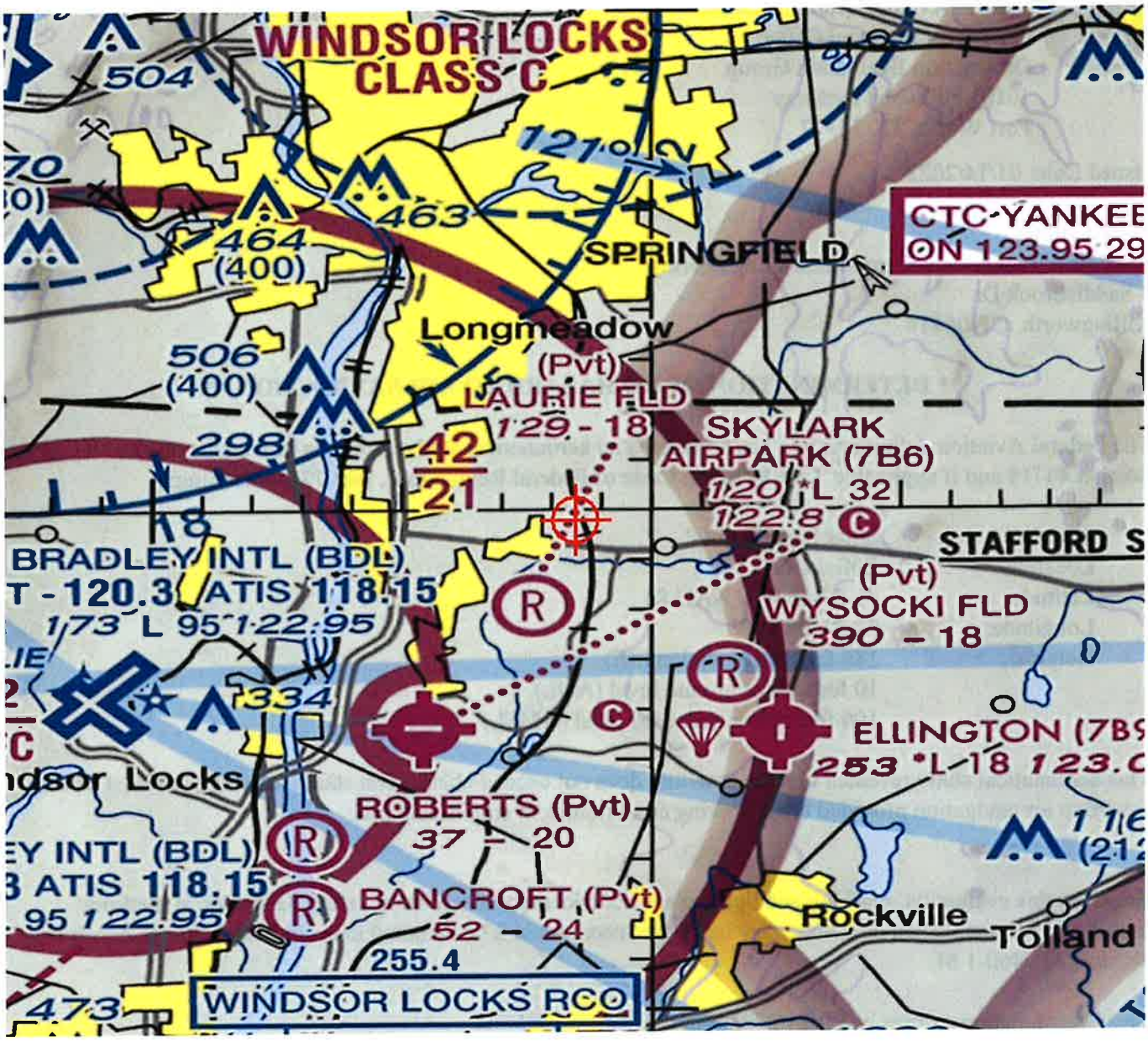
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1264-OE.

Signature Control No: 514083737-517734100 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1264-OE



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Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1265-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 2
Location:	Enfield, CT
Latitude:	41-59-46.90N NAD 83
Longitude:	72-31-29.42W
Heights:	186 feet site elevation (SE)
	10 feet above ground level (AGL)
	196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

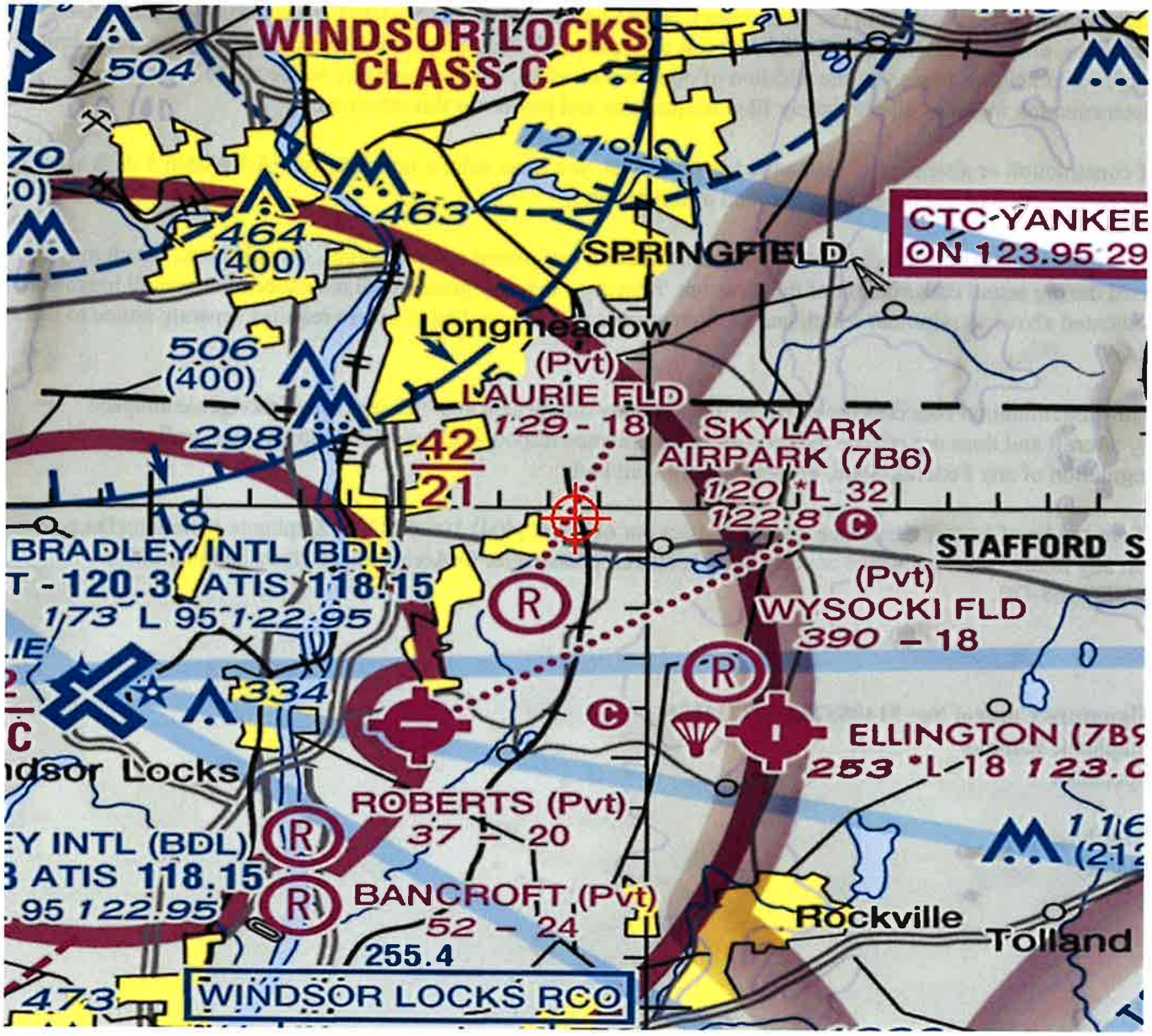
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1265-OE.

Signature Control No: 514083738-517734106 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1265-OE



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10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1266-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 3
Location:	Enfield, CT
Latitude:	41-59-43.90N NAD 83
Longitude:	72-31-28.16W
Heights:	183 feet site elevation (SE)
	10 feet above ground level (AGL)
	193 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

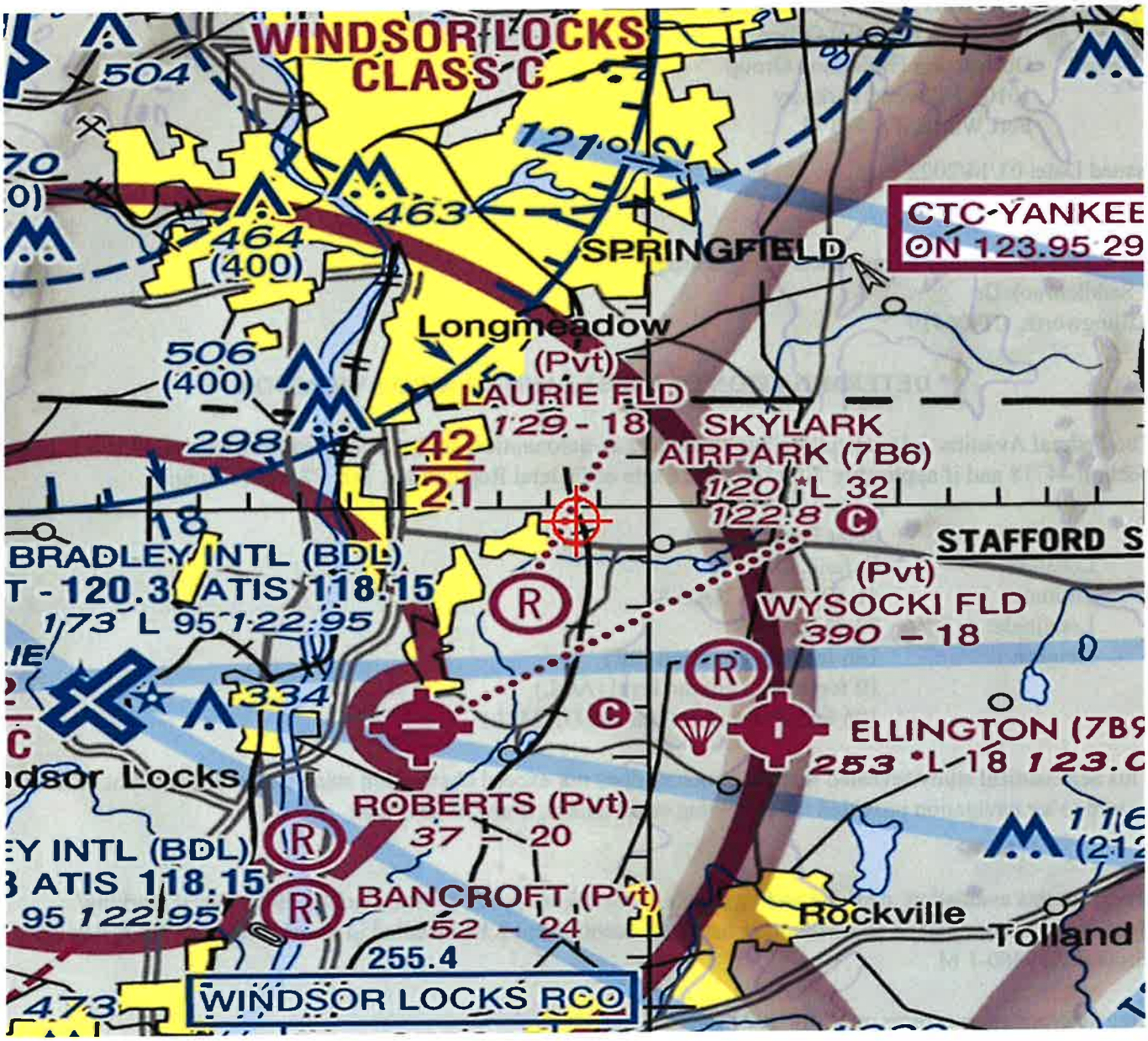
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1266-OE.

Signature Control No: 514083739-517734098 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1266-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1267-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 4
Location:	Enfield, CT
Latitude:	41-59-38.44N NAD 83
Longitude:	72-31-26.26W
Heights:	186 feet site elevation (SE)
	10 feet above ground level (AGL)
	196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
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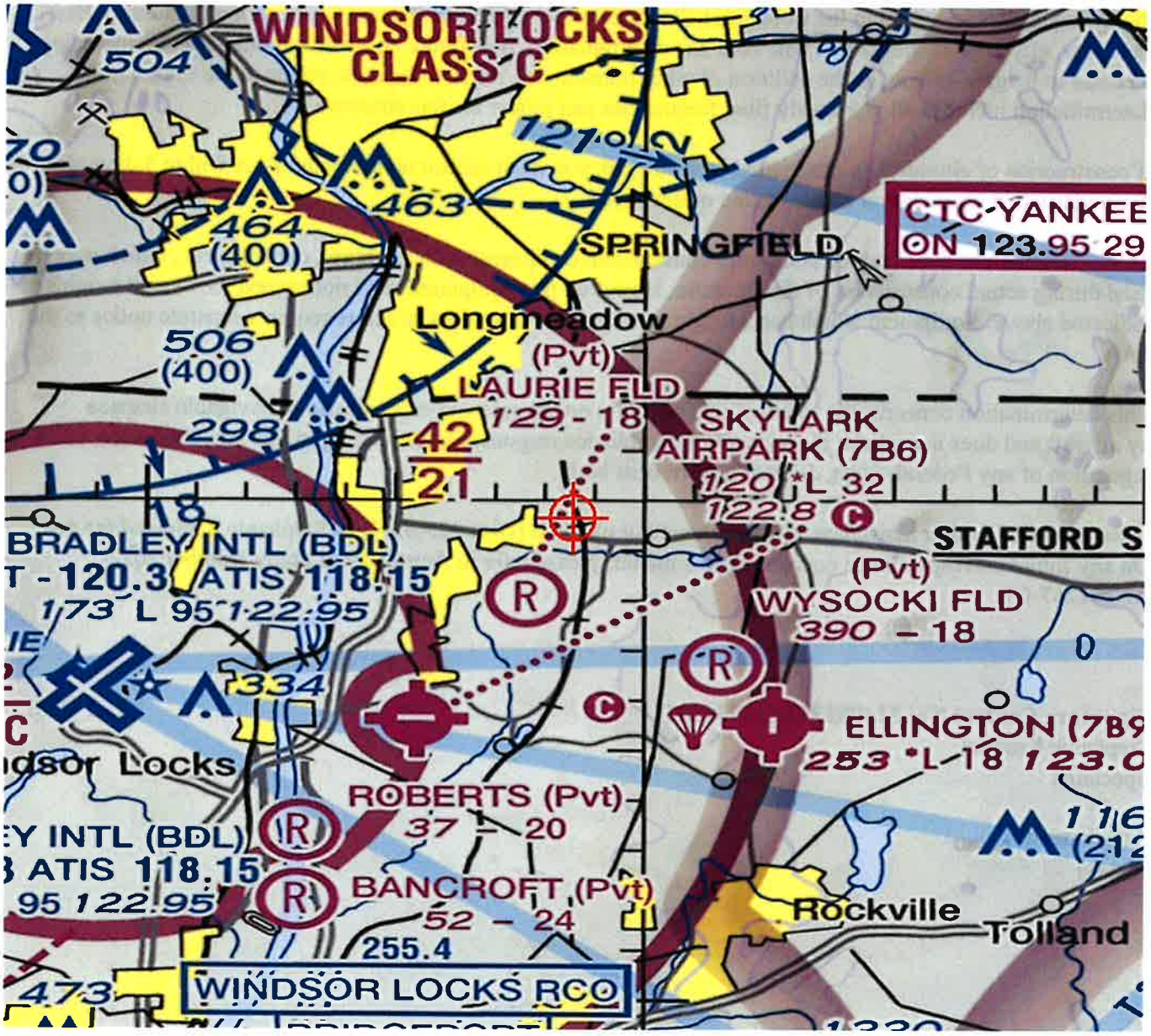
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1267-OE.

Signature Control No: 514083740-517734105 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1267-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1268-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 5
Location:	Enfield, CT
Latitude:	41-59-37.82N NAD 83
Longitude:	72-31-28.63W
Heights:	188 feet site elevation (SE)
	10 feet above ground level (AGL)
	198 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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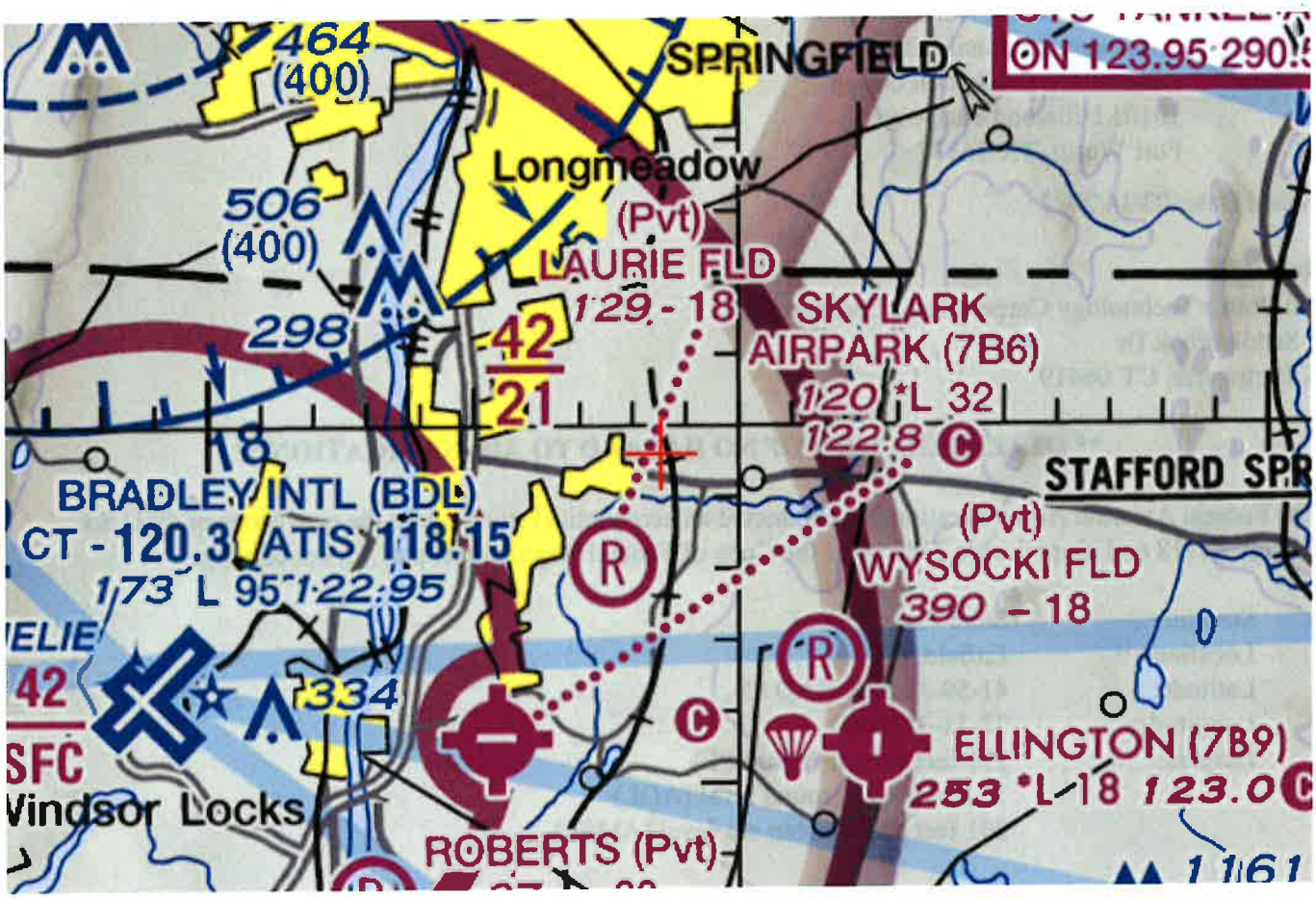
If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1268-OE.

Signature Control No: 514083741-517734104 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1268-OE



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Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1269-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 6
Location:	Enfield, CT
Latitude:	41-59-37.82N NAD 83
Longitude:	72-31-35.87W
Heights:	191 feet site elevation (SE) 10 feet above ground level (AGL) 201 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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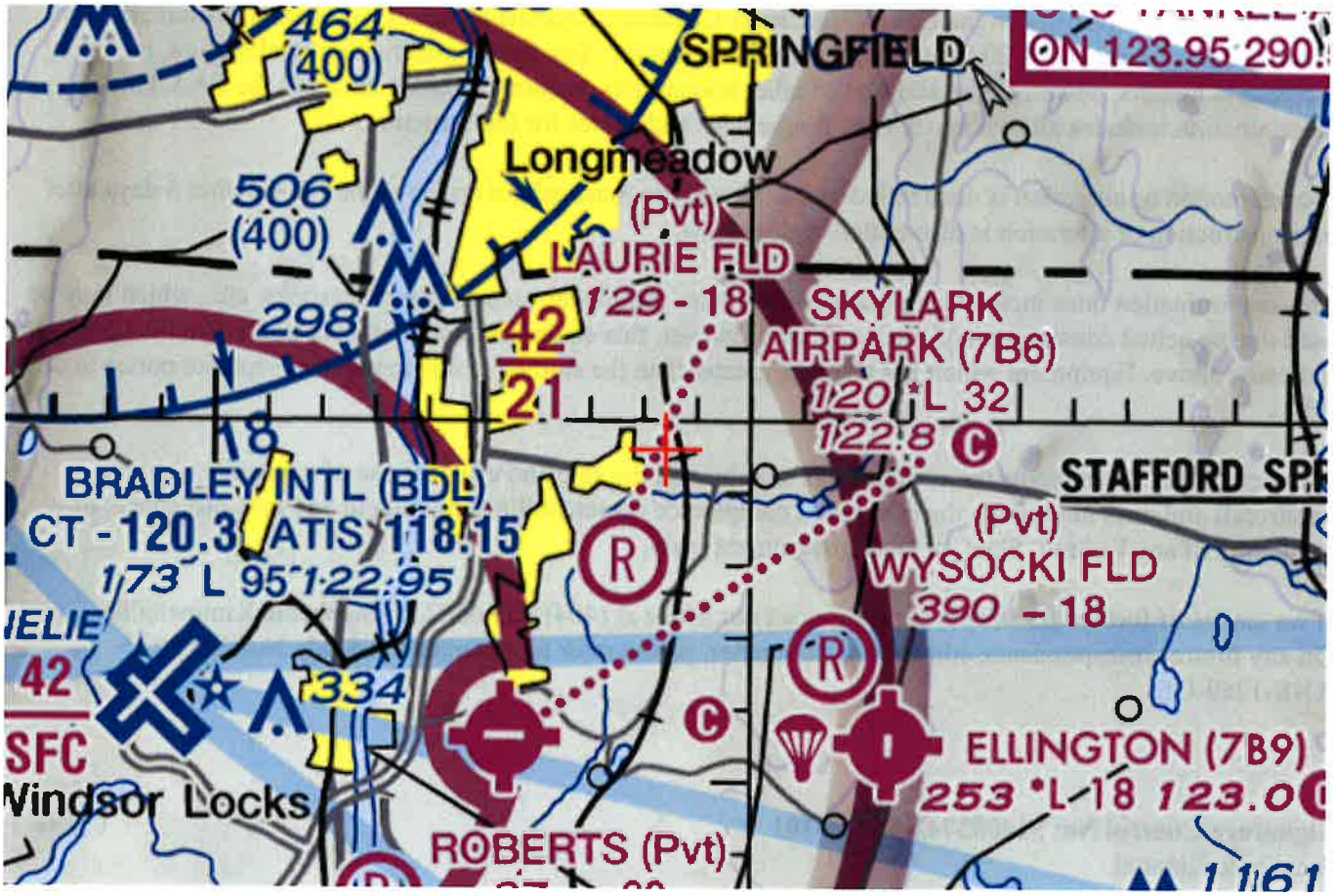
This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1269-OE.

Signature Control No: 514083742-517734101 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1269-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1270-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 7
Location:	Enfield, CT
Latitude:	41-59-43.15N NAD 83
Longitude:	72-31-37.78W
Heights:	188 feet site elevation (SE)
	10 feet above ground level (AGL)
	198 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
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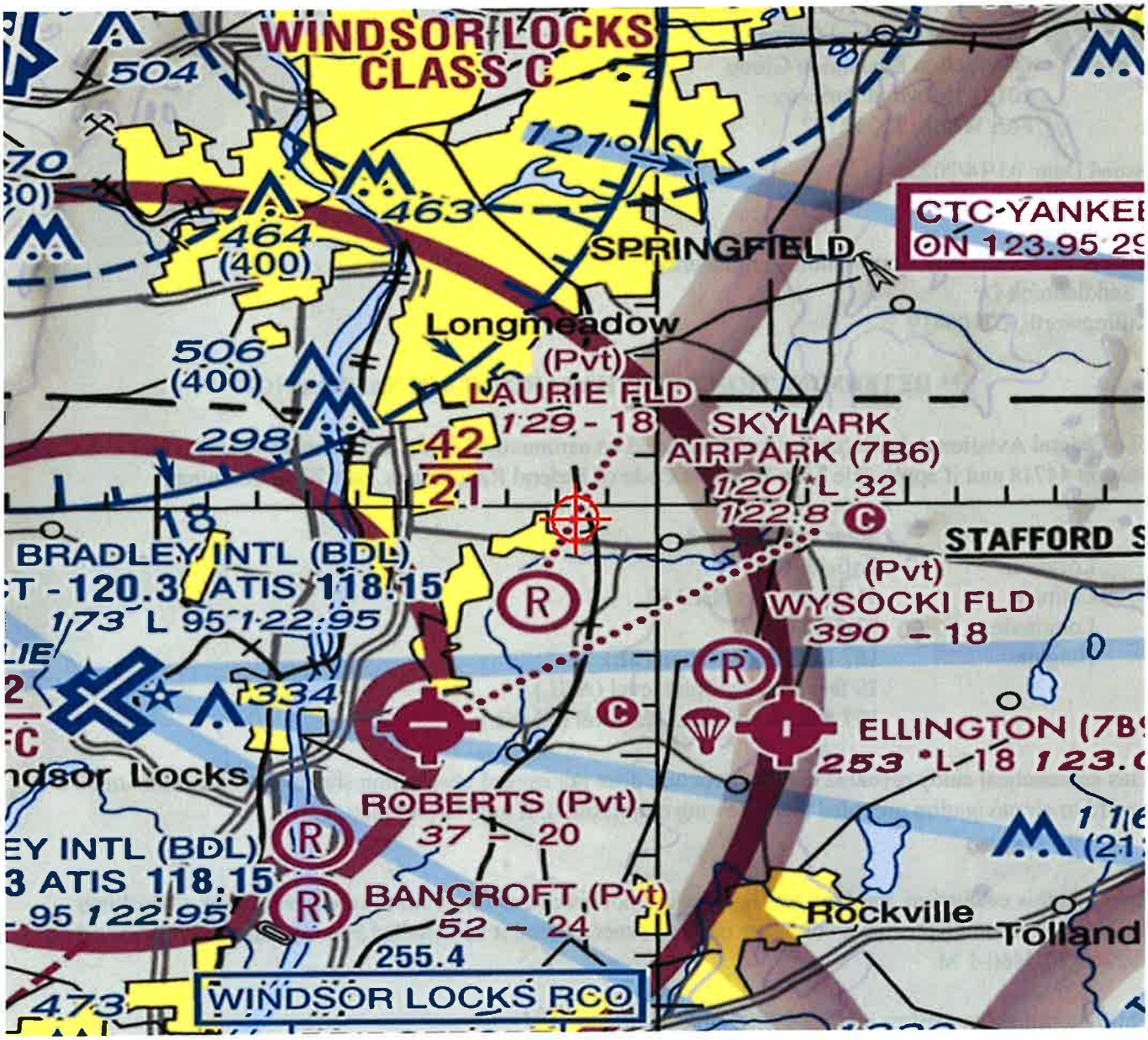
If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1270-OE.

Signature Control No: 514083743-517734099 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1270-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1271-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 8
Location:	Enfield, CT
Latitude:	41-59-45.31N NAD 83
Longitude:	72-31-37.27W
Heights:	187 feet site elevation (SE)
	10 feet above ground level (AGL)
	197 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

This determination expires on 09/14/2023 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

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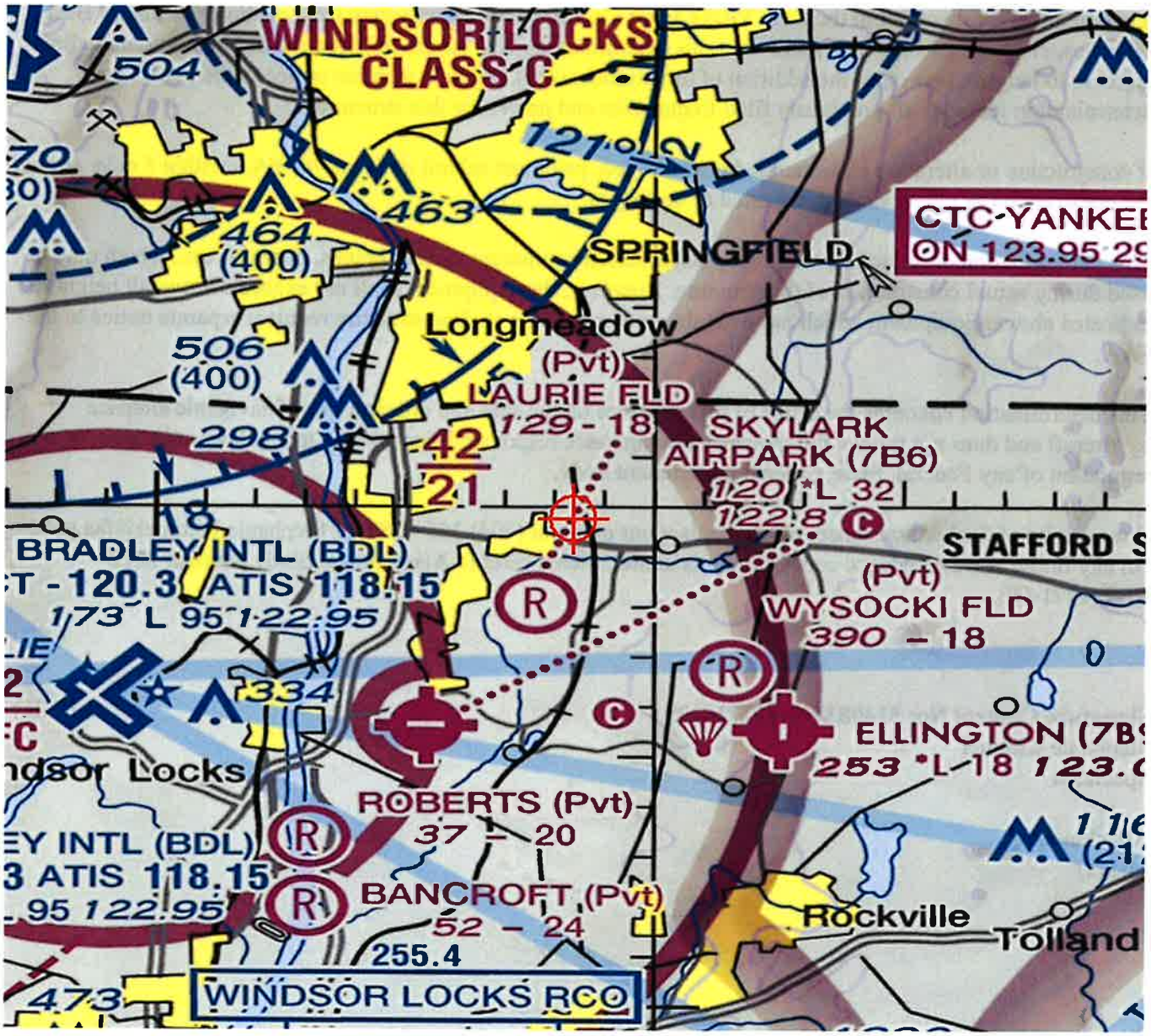
If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1271-OE.

Signature Control No: 514083744-517734103 (DNE)
Stephanie Kimmel
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1271-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2022-ANE-1272-OE

Issued Date: 03/14/2022

Robert Burns
All-Points Technology Corporation - Engineering
3 Saddlebrook Dr
Killingworth, CT 06419

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Solar Panel Point 9
Location:	Enfield, CT
Latitude:	41-59-45.89N NAD 83
Longitude:	72-31-35.87W
Heights:	186 feet site elevation (SE)
	10 feet above ground level (AGL)
	196 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M.

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(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
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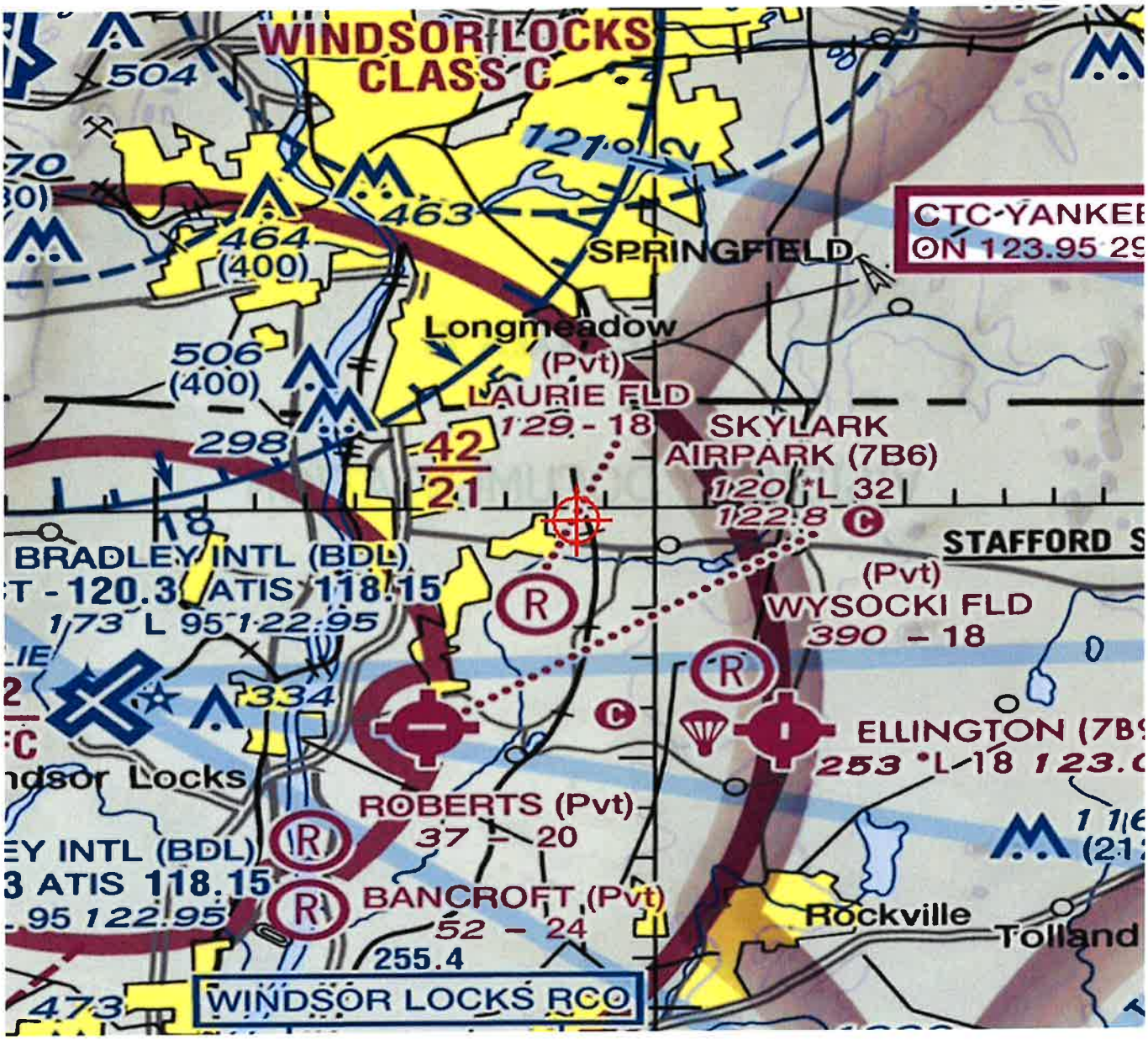
If we can be of further assistance, please contact our office at (404) 305-6582, or Stephanie.Kimmel@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2022-ANE-1272-OE.

Signature Control No: 514083745-517734102 (DNE)
Stephanie Kimmel
Specialist

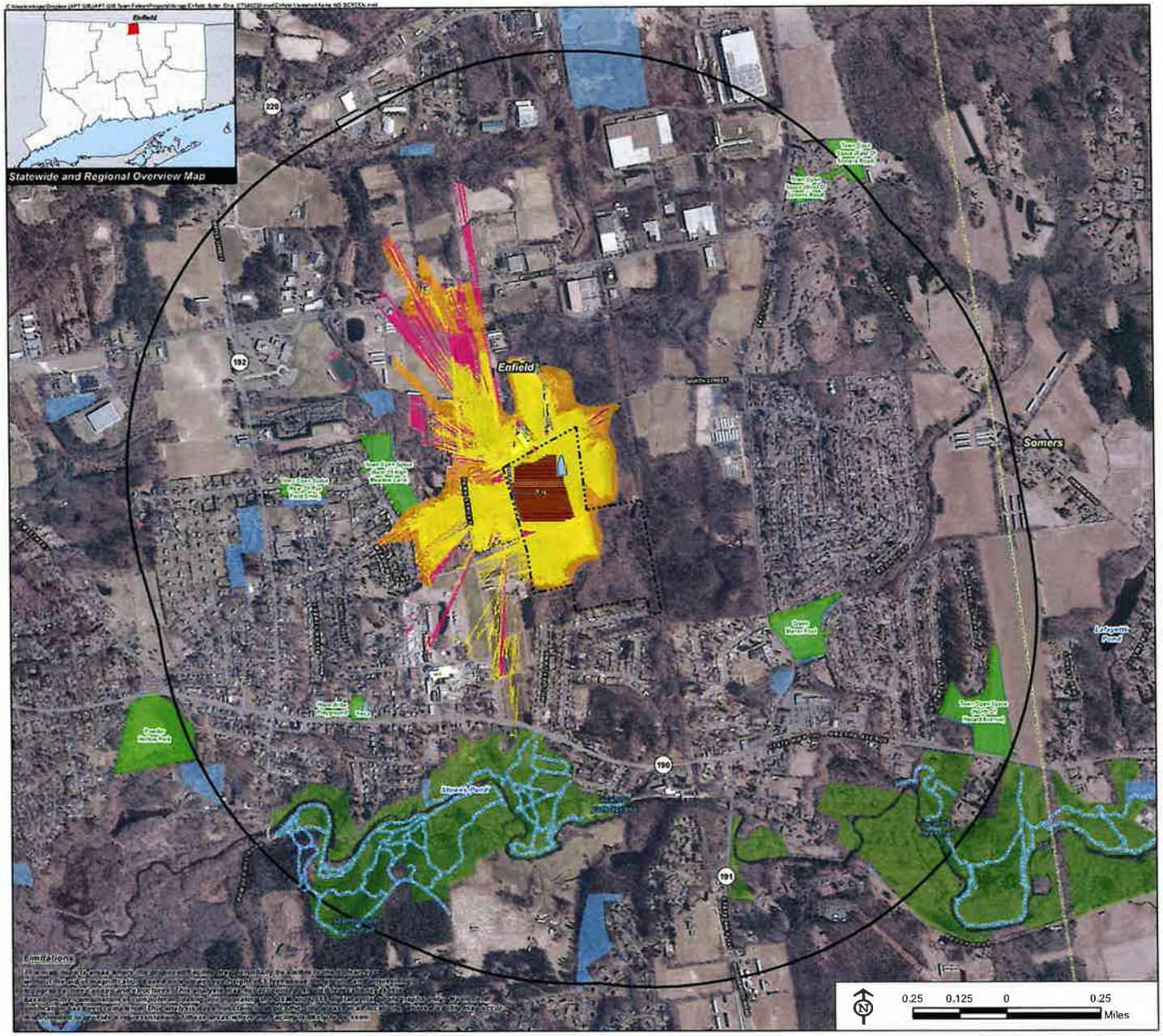
Attachment(s)
Map(s)

Sectional Map for ASN 2022-ANE-1272-OE



APPENDIX G

VISIBILITY DOCUMENTATION



Viewshed Analysis Map

Proposed Enfield Solar One Solar Facility
110 North Street
Enfield, Connecticut

Proposed solar modules to be mounted on approximate 10' AGL support structures.
Proposed interconnect utility poles to be approximately 40' AGL.
Forest canopy height and topographic contours are derived from LiDAR data.
Study area encompasses a 1-mile radius and includes 3,045 acres.
Information provided on this map has not been field verified.
Base Map Source: 2019 Aerial Photograph (CTECO)
Map Date: April 2022

Legend

- Site
- Study Area (1-Mile Radius)
- Interconnection Utility Pole
- Solar Modules/Equipment
- Concrete Pad
- Gravel Access Drive
- Stormwater Basin
- Stormwater Gravel Outfall
- Areas of Potential Seasonal Visibility, Proposed Utility Poles and/or Modules (41 Acres)

Predicted Year-Round Visibility (158 Acres Total)

- Proposed Utility Poles Only (32 Acres)
- Proposed Modules and Utility Poles (126 Acres)
- Municipal Boundary
- Trail
- Scenic Highway
- DEEP Boat Launches
- Municipal and Private Open Space Property
- State Forest/Park

Protected Open Space Property

- Federal
- Land Trust
- Municipal
- Private
- State

Data Sources:

Physical Geography / Background Data

A digital surface model (DSM) was created from the State of Connecticut 2016 LiDAR LAS data points. The first return LiDAR LAS values, associated with the highest feature in the landscape (such as a treetop or top of building), were used to capture the natural and built features on the Earth's surface beyond the approximate limits of clearing associated with the proposed solar facility. The "bare-earth" return values were utilized to reflect proposed conditions where vegetative clearing associated with the proposed solar facility would occur.

Municipal Open Space, State Recreation Areas, Trails, County Recreation Areas, and Town Boundary data obtained from CT DEEP. Scenic Roads: CTDOT State Scenic Highways (2015); Municipal Scenic Roads (compiled by APT)

Dedicated Open Space & Recreation Areas

Connecticut Department of Energy and Environmental Protection (DEEP): DEEP Property (May 2007; Federal Open Space (1997); Municipal and Private Open Space (1997); DEEP Boat Launches (1994)

Connecticut Forest & Parks Association, Connecticut Walk Books East & West

Other

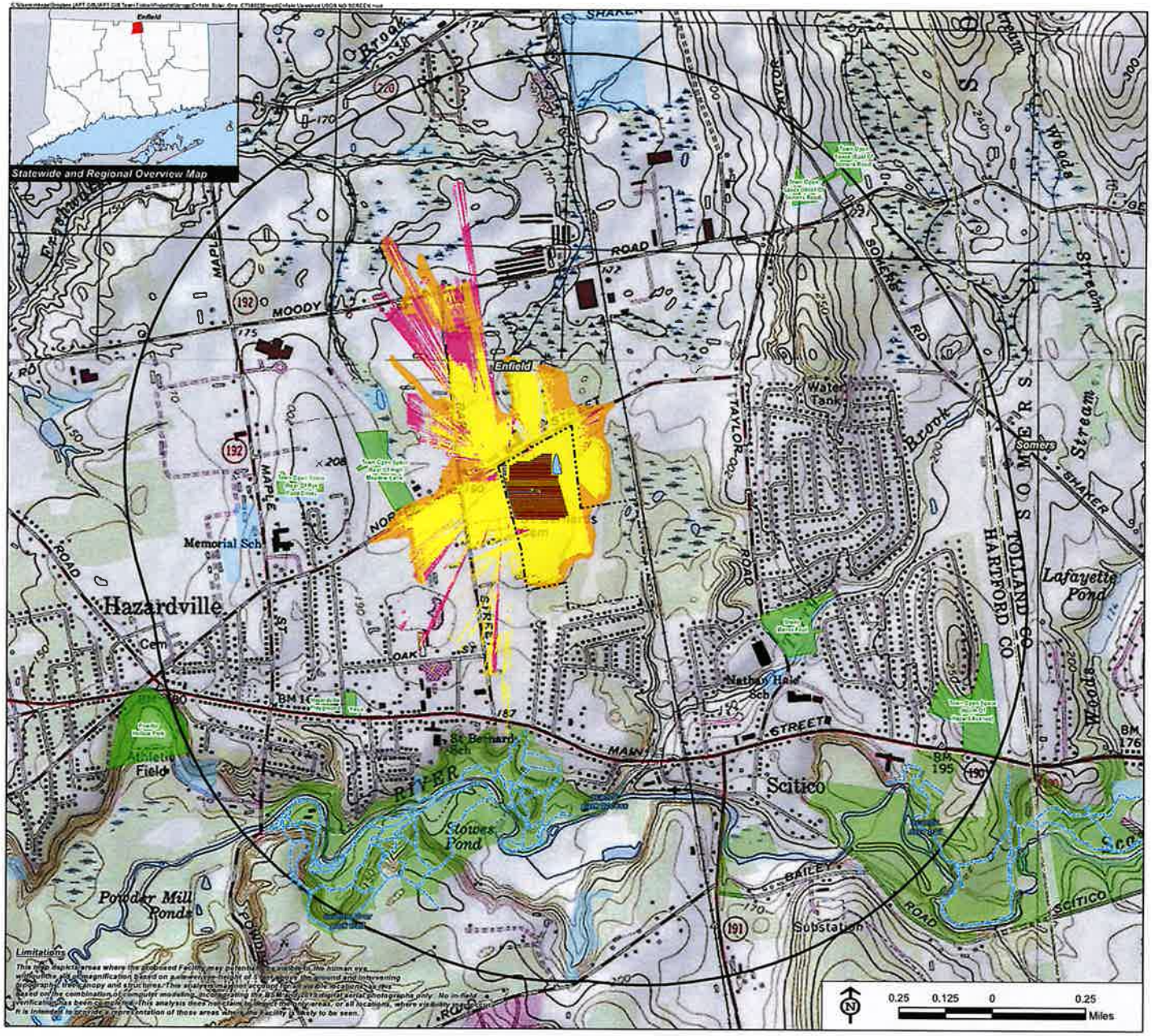
CTDOT Scenic Strips (based on Department of Transportation data)

Notes

***Not all the sources listed above appear on the Viewshed Maps. Only those features within the scale of the graphic are shown.*

VERCGY

ALL POINTS



Viewshed Analysis Map

Proposed Enfield Solar One Solar Facility
110 North Street
Enfield, Connecticut

Proposed solar modules to be mounted on approximate 10' AGL support structures.
Proposed interconnect utility poles to be approximately 40' AGL.
Forest canopy height and topographic contours are derived from LiDAR data.
Study area encompasses a 1-mile radius and includes 3,045 acres.
Information provided on this map has not been field verified.
Base Map Source: USGS 7.5 Minute Topographic
Quadrangle Maps, Broad Brook, CT (1984), Ellington, CT (1984),
Hampden, MA-CT (1970) and Springfield South, MA-CT (1979)
Map Date: April 2022

Legend

- Site
- Study Area (1-Mile Radius)
- Interconnection Utility Pole
- Solar Modules/Equipment
- Concrete Pad
- Gravel Access Drive
- Stormwater Basin
- Stormwater Gravel Outfall
- Areas of Potential Seasonal Visibility, Proposed Utility Poles and/or Modules (41 Acres)

Predicted Year-Round Visibility (158 Acres Total)

- Proposed Utility Poles Only (32 Acres)
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VERGY

All-Points

PHOTO LOG

Legend

● Photographic Location ▭ Site ▭ Project Area

1 inch = 500 feet

500 250 0 500 Feet

ALL-POINTS TECHNOLOGY CORPORATION

Enfield Solar One, LLC

PHOTOGRAPHED 01/29/2022

EXISTING

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
1	**NORTH STREET**	**+/- 0.11 MILE**	**SOUTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION

Enfield Solar One, LLC

PROPOSED

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
1	**NORTH STREET**	**+/- 0.11 MILE**	**SOUTHWEST**

PHOTOGRAPHED ON 2/9/2022

EXISTING

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
2	**NORTH STREET**	**+/- 90 FEET**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

Enfield Solar One, LLC

PROPOSED

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
2	**NORTH STREET**	**+/- 90 FEET**	**SOUTHEAST**

PHOTOGRAPHED ON 12/9/2022

EXISTING

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
3	**PARK STREET**	**+/- 0.12 MILE**	**EAST**

ALL-POINTS TECHNOLOGY CORPORATION

Enfield Solar One, LLC

PROPOSED

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
3	**PARK STREET**	**+/- 0.12 MILE**	**EAST**

PHOTOGRAPHED ON 2/9/2022

EXISTING

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
4	**PARK STREET**	**+/- 0.18 MILE**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

Enfield Solar One, LLC

PROPOSED

PHOTO	LOCATION	DISTANCE TO FENCE AT NEAREST POINT	ORIENTATION
4	**PARK STREET**	**+/- 0.18 MILE**	**SOUTHEAST**

EXHIBIT H

VEROGY

Enfield Solar One

Spill Prevention, Control, and Countermeasure Plan (SPCC)

Date:
April 2022

Prepared By:
VCP, LLC d/b/a Verogy for Enfield Solar One, LLC

VEROGY
150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

Petroleum Materials Storage and Spill Prevention

a. Certain precautions are necessary to store petroleum materials, refuel and contain and properly clean up any inadvertent fuel or petroleum (i.e., oil, hydraulic fluid, biodegradable transformer insulating fluid, etc.) spill due to the project's location in proximity to sensitive wetland resources.

b. A spill containment kit consisting of a sufficient supply of absorbent pads and absorbent material will be maintained by the 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 and timely disposal off site in accordance with applicable local, state, and federal laws.

c. The following petroleum and hazardous materials storage and refueling restrictions and spill response procedures will be adhered to by the Contractor.

i. Petroleum and Hazardous Materials Storage and Refueling

1. Refueling of vehicles or machinery shall take place on an impervious pad with secondary containment designed to contain fuels.
2. Any refueling drums/tanks or hazardous materials that must be kept on site shall be stored on an impervious surface utilizing secondary containment a minimum of 100 feet from wetlands or watercourses.

ii. Initial Spill Response Procedures

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

iii. Spill Clean Up & Containment

1. Obtain spill response materials from the on-site spill response kit. Place absorbent materials directly on the release area.
2. Limit the spread of the spill by placing absorbent materials around the perimeter of the spill.
3. Isolate and eliminate the spill source.
4. Contact the appropriate local, state and/or federal agencies, as necessary.
5. Contact a disposal company to properly dispose of contaminated materials.

iv. Reporting

1. Complete an incident report.

2. Submit a completed incident report to local, state and federal agencies, as required.
3. The Connecticut Department of Energy & Environmental Protection (DEEP), Emergency Response Unit should be contacted at: (860) 424-3338, in the event of an emergency spill

d. Site Contact and Emergency Contact

Project Owner: Enfield Solar One, LLC Phone: (860) 288-7215	**Local Fire Department:** Enfield Fire Chief, Edward N. Richards Phone (non-emergency): (860) 745-1878 Phone (emergency): 911
Project Site Contact: Enfield Solar One, LLC Name: Steven DeNino, Chief Operating Officer Phone: (860) 288-7215	**Local Police Department:** Phone (non-emergency): (860) 763-6400 Phone (emergency): 911
Construction Oversight Contact: Enfield Solar One, LLC Name: Steven DeNino, Chief Operating Officer Phone: (860) 288-7215	**State Agency: Connecticut Department of Energy & Environmental Protection (DEEP), Emergency Response Unit** Phone: (860) 424-3338 Alternate Phone: (860) 424-3333
Spill Clean Up Contractor: **Clean Harbors Environmental** 51 Broderick Road, Bristol, CT 06010 Phone: (860) 583-8917	

e. Contractor Training in Accordance with the Resource Protection Plan

i Education of all contractors and sub-contractors prior to initiation of work on the site **(To be implemented prior to start of construction)**

EXHIBIT I

Operations and Maintenance Plan

Enfield Solar One

Date:

April 2022

Prepared By:

VCP, LLC d/b/a Verogy

150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

Table of Contents

Operations and Maintenance Plan

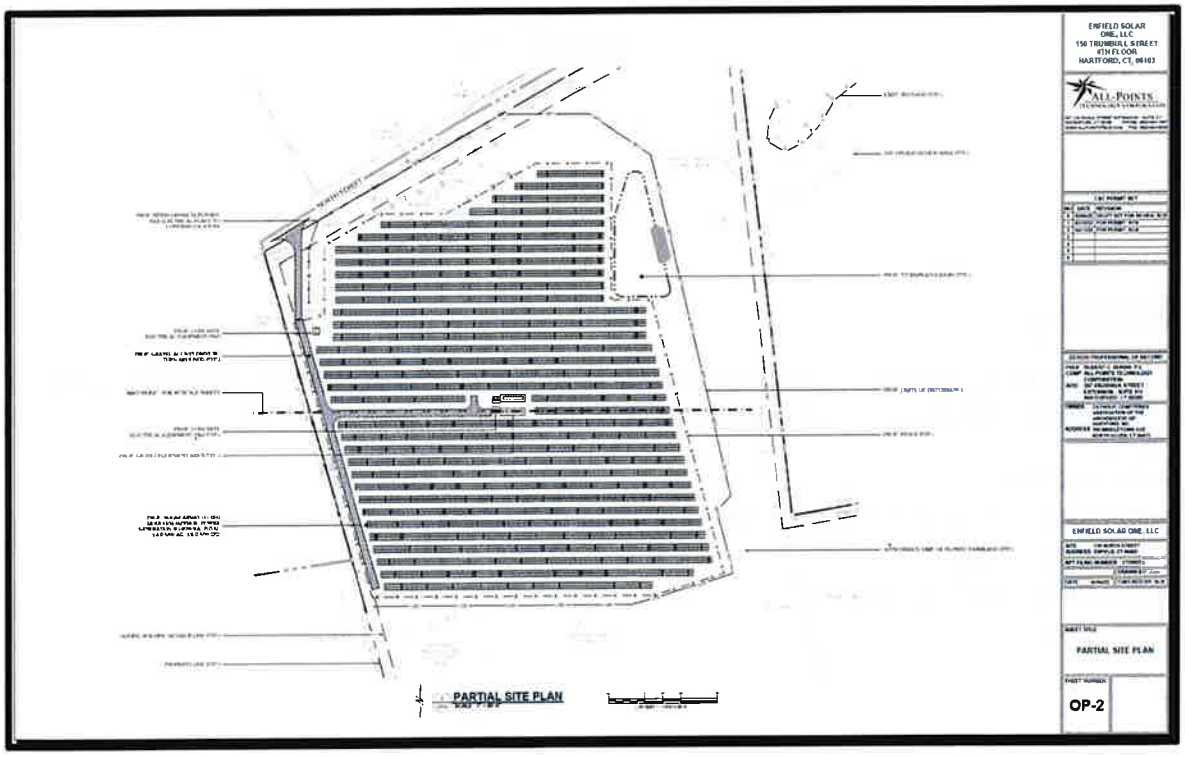
150 Trumbull Street, 4th Floor | Hartford, CT 06103 | (860) 288-7215 | www.verogy.com

1. Introduction

As the owner of the Enfield Solar One solar project, VCP, LLC (Verogy) is responsible for maintaining and servicing the photovoltaic (PV) electric system as well as the related facilities during the operational phase of the project. Related facilities include fencing, lighting, grass, roads, storm water devices, etc. This O&M Plan describes the project components, commissioning procedures, monitoring system, Maintenance provisions and emergency response

2. Project Description

The proposed Project is a 4.0 MW ground mounted solar array located in Enfield, CT that will consist of solar modules, inverters, switchgear, transformers, electrical systems interconnected to the utility grid along North Street. The Project also includes access roads, security fencing and stormwater management areas.



3. Contact Information

Verogy

Table 1. Project Contact Information

Owner	Enfield Solar One, LLC 150 Trumbull Street Hartford, CT 06103 (860)288-7215 development@verogy.com
O&M Service Provider	VCP, LLC d/b/a Verogy 150 Trumbull Street Hartford, CT 06103 (860)288-7215 sdenino@verogy.com

4. Commissioning

Prior to the project reaching operation, the following inspections and tests will be performed by the O&M provider. The results will be included in the projects commissioning report.

- Full visual Inspection
- Mechanical inspection including torque verification of critical connections
- String Testing (IV curve test)
- Full System Production Evaluation
- Thermal Scanning

5. Monitoring

The O&M provider will utilize a continuous 24/7 remote monitoring system to provide alarm and performance data of the system. The monitoring system will include full site and inverter level production and alarms as well as site weather and irradiance data. The O&M provider will analyze performance data to make sure that the system is performing as designed and will be responsible for dispatching crews for system maintenance and repair related issues. The O&M provider will be contractually obligated to comply with this O&M Plan, as well as the conditions of all permits or regulatory approvals.

6. Maintenance

O&M services are outlined below. (The frequency of these services is outlined in Table 2)

6.1. Site Access

The solar array and all associated equipment shall be located behind 6 to 8-foot chain link fence with gates as depicted on the construction drawings or as directed by permitting authorities. Access to that facility shall be granted to authorized personnel only. Access to that facility shall be arranged with the owner or O&M provider as identified in table 1. Provisions will be in place for Emergency personnel to access the site via a universal key box (i.e. Knox Box) that will have that appropriate key(s) to access the facility.

6.2. Equipment Maintenance

Verogy and/or its authorized subcontractors will inspect and maintain electrical and PV equipment in accordance with the manufacturers requirements to maintain proper operation and warranty status.

The O&M provider will also perform the following inspections. The results from these inspections/tests will be provided in an O&M inspection report.

- The operation of all safety devices will be reviewed and corrected to maintain proper function.
- Full visual Inspection of all equipment, subassemblies, wiring, connectors, etc.
- Thermal Scanning of electronic equipment, wiring terminations, connectors, etc.
- Mechanical inspection including torque verification of critical connections
- String Testing (IV curve test)
- Air filter elements

6.3. Site Maintenance

Verogy and/or its authorized subcontractors will visit the site monthly to asses site conditions and perform maintenance as needed. Signage and egress functionality will be inspected at this time and repaired, if necessary.

6.3.1. Grass Management

The primary means of vegetation management will come in the form of the Livestock Grazing Program to be deployed by Enfield Solar One, LLC in partnership with Bucking Ewes Farm of Connecticut. In Summary, the sheep grazing program will be used to control vegetation at the project site in order to achieve the following:

- Prevent panel shading from vegetation
- Control and remove invasive and unpalatable plant species
- Avoid the growth of brush and woody species under the solar panels
- Maintain a diverse forage population to support optimal sheep nutrition
- Encourage forage population to support optimal sheep nutrition
- Optimize sequestered soil carbon through increasing top-soil amount and root matter
- Control erosion

6.3.2. Panel Cleaning

Panel Cleaning is rarely necessary in the Northeast, but if that panels are to experience enough soiling to adversely affect production the panels will be cleaned using water and soft bristle brooms. No chemicals will be used.

6.3.3. Snow Maintenance

Verogy and/or its authorized subcontractors will clear snow from the access roads to all the electrical equipment pads. Snow will be plowed or removed in a manner to maintain emergency turnarounds. Verogy does not intend on removing snow from panels

6.4. Long-Term Stormwater Maintenance Plan

Currently, the extent of any stormwater management devices is unknown. The O&M team will provide maintenance in accordance with the approved stormwater maintenance plan produced by the engineer of record.

Table 2. Scheduled Maintenance Activity

Task	Frequency
On-Site Ground Inspection	Monthly
Visual Array & Equipment Inspection	1x per year or per equipment manufacturer requirements
Mechanical and Electrical Inspections	1x per year or per equipment manufacturer requirements
Panel Cleaning	As Needed
Mowing and Trimming / Co-use Sheep Grazing	In accordance with livestock grazing Plan. Mowing and trimming as needed.
Snow Removal	As needed
Perimeter Fence Inspection	1x per year
Stormwater Management System Inspection	1x per year or per engineer's stormwater management plan

7. Emergency Response

Verogy will coordinate with the Town of Enfield police and fire departments regarding access to the facility and emergency shutoff switches. Table 3 provides an emergency contact list for the Town of Enfield. Each of the entrance gates will have a universal key lock (e.g. Knox lock) for emergency responders.

Table 3. Town of Enfield Emergency Contacts

Emergencies	Dial 911
Enfield Police Station	Alaric Fox, Chief of Police 293 Elm Street Enfield, CT 06082 Emergency Calls: 911 Routine Calls: (860)763-6400
Enfield Fire Department	Edward N. Richards, Fire Chief 200 Phoenix Ave. Enfield, CT 06082 Emergency Calls: 911 Routine Calls: (860)745-1878