November 25, 2024

Josh Theodore

Operations Manager

FIWMD

PO Box 22

Fishers Island, NY 06390

Dear Josh,

On behalf of Pickett Power, LLC, we are pleased to submit our response to the Pickett Landfill Request for Proposal (RFP) issued on October 11, 2024.

We have carefully reviewed all provisions of the RFP, including any and all Addenda issued to date. We understand and agree to all terms and conditions outlined in the RFP documents.

Please find enclosed our response to the RFP.

We have designated the following individual as the primary contact for any questions or clarifications regarding our proposal:

Travis Garcelon

Pickett Power LCC

PO Box 766

Old Lyme, Ct 06371

2073292522

trgarcelon@gmail.com

We look forward to the opportunity to discuss our proposal further and to the possibility of working with FIWMD on this project.

Sincerely,

Travis Garcelon

Pickett Power LLC

TR6 on celon



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Pickett Power Proposal

Section 1 – General Respondent Information

Transmittal Letter

See Cover

Executive Summary

Pickett Power LLC was started to consider the viability of solar on Pickett Landfill. Fishers Island receives all of its electricity via a subsea cable from Groton Utilities in CT. It is entirely dependent upon the cable and electricity from CT with the exception of an on-island diesel generator that can, in emergencies, fulfill island electric load. While an island presents significant challenges to ensuring the reliable supply of energy to its residents, we believe it also presents unique opportunities to demonstrate innovation and sustainability.

Producing local, renewable energy with solar on Pickett Landfill represents substantial progress in reducing the island's carbon footprint. The economics of the project are challenging but we believe it can and must be done. Pickett Power have assembled a team deeply experienced in engineering, permitting and constructing solar projects sited on capped landfills in NY and CT. This project will supply approximately 25% of the annual electric needs of Fishers Island. The project will cost ratepayers nothing and will supply FIWMD with a steady stream of income, turning the landfill from a financial liability into an asset.

Pickett Power is looking forward to working with FIWMD on this exciting project.

Certificate of Non-Collusion

See Appendix #1

Section 2 – Experience & Qualification

o Company Overview

Provide a document with the following company information.

§ Year founded and number of continuous years in business

Pickett Power LLC was formed in 2023

§ Ownership status (public or private company, LLC, LLP, S-Corp, Sole Proprietor)

Limited Liability Company

§ Federal Tax Identification Number

93-1351874

§ Corporate & Local Office location

Locally - Kabinet by the Ordnance on Fishers Island, NY. LLC is registered in NYC.

§ Number of employees in corporate & local office at the time of submittal

Two, plus all outside consultants.

§ Your firm's Experience Modification Rate (EMR) for each of the past three years and your firm's OSHA ratings (Recordable Incidence Rates and Lost Workday Incident Rates) for the past three years.

CTec Solar

Year	EMR	OSHA Recordable Incident Rate	Lost Time Case Rate
2024	0.97		
2023	0.95	7.54	0
2022	0.88	0	0
2021		4.72	0

§ A description of any ongoing or previous litigation your firm has been involved in and a statement that the Respondent is not debarred, suspended, or otherwise prohibited from practice by any federal, state, or local agency

None.

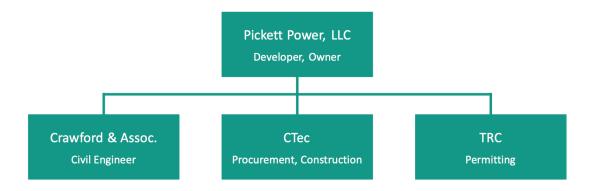
o Project Team

Provide information about the key personnel to be assigned to this project.

§ Project Team organizational chart including all key personnel and their proposed roles

Pickett Power, LLC includes Brad Burnham and Travis Garcelon. Pickett engaged Michael Rauch through his consulting business, Ember Consulting, LLC, to advise on development of the project. Additionally, Pickett has hired:

- Crawford & Associates, a New York-based woman-owned firm, for Civil Engineering;
- CTec, an Engineering, Procurement and Construction firm licensed in Connecticut and New York, and;
- TRC, a national firm with experience working on landfill-sited solar farms in the Town of Southold, for permitting.



§ Provide resumes, in an appendix, for all key personnel that will be assigned to this project

Appendix #2 includes bio's for the Pickett Power team as well as Statements of Qualifications and licenses from Crawford, CTec and TRC.

§ Provide evidence of all relevant licenses held by your firm to do work in New York State; attach list and copies of documents as an appendix

See Appendix #2.

o References

Provide references for completed and currently operating non-residential gridconnected PV systems, with preference towards New York municipalities and landfill or brownfield projects. Include the following information:

- § Location and Utility Company name
- § System size (kW DC)
- § Metering Type (Remote Net Metering, Community Distributed Solar, Onsite)
- § Date completed
- § Host Customer and/or Owner contact information (name, email, address, phone)

Location and Utility	System Size	Metering Type	Date	Customer (Site Owner)
Mt. Kisco, NY; ConEd; Landfill	750 kWdc + 500kW BESS	Community Distributed Generation	2020	Village/Town Ed Brancati ebrancati@mountkiscony. gov (914) 864-0001

o Project Development Experience

Provide the total number of megawatts of solar PV your firm has constructed over the last five (5) years.

Members of our team have constructed over 100MWdc in the last five years.

o Provide the total number of megawatts of solar PV your firm has constructed over the last five (5) years in New York.

Approximately 15MWdc in New York.

o Provide total number of megawatts and projects of solar PV your firm has constructed on landfills and brownfields.

Approximately 15MWdc in New York on landfills and brownfields.

o Detail the types of customers your firm has worked with in the past (for example, residential, commercial, nonprofit, or government).

Our experience includes developing, constructing and operating solar projects on municipally owned brownfield and landfill sites. Given New York's solar policy framework, these projects utilize the Value of Distributed Energy Resources framework as Community Distributed Generation to sell utility bill credits to local retail customers. Our experience also includes negotiating power purchase agreements with some of the largest utilities operating in wholesale markets for utility-scale renewable energy projects.

o Describe your firm's implementation of PV construction standards and other safety measures.

Please reference qualifications in Appendix #2

o Provide the number of operational PV systems under your firm's management.

The Pickett project will be the first project for Pickett Power. Michael Rauch is an owner of the Mt. Kisco solar project listed above. CTec is a construction firm that builds solar farms for clients and develops and owns projects itself. Their portfolio currently includes xyz solar projects.

Project Financing Capability

o Provide the number of PV systems you and/or your financing partner have financed.

Members of our team have financed approximately 15 solar projects.

o Provide the most recent audited financial statements, annual reports, consolidated financials, and Form 10-K (if any). If available, provide similar materials for parent entities, significant affiliates, and collaborators.

Appendix #3 for a letter from our bank confirming sufficient funds to develop and construct the project.

Section 3 – Proposal Narrative

Provide a detailed plan of the proposed project. Project plans must include the following:

Project Management Plan

o Provide a detailed narrative description of the approach for installing the proposed project, including how the Respondent will work with subcontractors, municipal agencies, and other relevant stakeholders. Detail how the Respondent will approach special site considerations such as capped landfills.

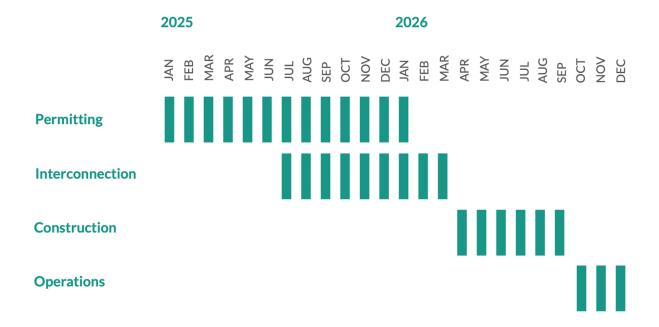
Our team includes project development, engineering and construction partners with significant experience installing solar projects on capped landfills. Maintaining the integrity of the landfill cap is the primary design objective and informs all aspects of the construction process. This includes key decisions during design and engineering, such as: planning a fixed-tilt ballasted system instead of a tracker system; selecting the right ballast to properly distribute weight and counter wind force, and; orchestrating equipment deliveries and construction activities to limit disturbance of the vegetative cover of the landfill cap.

The development team manages our engineering, permitting and construction partners and activities both remotely and from our local office as necessary for in-person or on-site meetings. We plan to hire locally for long-term Operations and Maintenance roles including mowing the site, performing basic electrical maintenance and monitoring the performance of the project. Our construction period is planned to occur during the off-season for a number of reasons including the potential to house construction workers on-island for some portion of that time and to minimize disturbance to the site.

We anticipate attending frequent meetings with local stakeholders including FIWMD, FIEC and others, as well as traveling to in-person meetings in Southold for permitting and zoning objectives.

o Provide a detailed description of each task and delivery. Include a project schedule indicating key milestones and durations of various activities.

We estimate an approximately two-year timeframe for development of the project beginning in January of 2025. The four major stages are Permitting, Interconnection, Construction and Operations.



o Respondents are responsible for all necessary zoning classification changes, environmental testing, permitting, and compliance. To the extent possible, Respondents should identify the regulatory and permit conditions relevant to their proposals, potential conflicts between the project and existing permit conditions, and variances that might be required.

Following execution of the site lease with FIWMD, we will focus on three key scopes of work: permitting, interconnection and offtake.

 Permitting efforts will first focus on the Post-Closure Use Modification Work Plan for the New York State Department of Environment Conservation (NYSDEC). Crawford, our engineering contractor, has experience with modification work plans in NYSDEC jurisdiction. We have allotted roughly six months for this process to accommodate refinement of our site plan, layout and equipment specification as we work through the development process.

Additionally, we understand that we might need to take on the rezoning of the Pickett site or the specific project footprint area within the site. While we anticipated working through the special/conditional use process, we believe that the potential rezoning process could be completed in a similar timeframe.

Last, we expect to negotiate a Payment In Lieu of Taxes (PILOT) with the Suffolk County Industrial Development Authority and potentially the Town of Southold and the Fishers Island School District. Each of these permitting activities could take approximately six months and can be coordinated to be carried out concurrently. Other ministerial permits

that are required for the project will be pursued closer to the start of construction as they require a final site plan.

- Interconnection is often the key driver to successful power generation. The Pickett project will work with FIEC to conduct a System Impact Study (or equivalent study) at the project's cost to determine the necessary equipment upgrades to interconnect the project. This is typically a six to nine month process. In most utility service territories, there is sufficient publicly available information to garner an basic estimate of potential interconnection costs early in the development process. Due to the unique characteristics of the local power grid, it is difficult to make an accurate estimate prior to conducting the full engineering study.
- Offtake is the revenue source for power generation projects. In all other service territories of investor-owned utilities in New York State, the Value of Distributed Energy Resources framework sets the revenue for a project of this scale. This framework consists of multiple attributes, including the wholesale price of power in the local load zone, a capacity value proxy and a fixed renewable energy credit value, among others. The sum of these attributes is typically well above \$0.10/kWh. Additionally, customers in all other service territories of investor-owned utilities in New York State pay a System Benefits Charge, which funds, among other things, upfront incentives for renewable energy projects sited in those service territories.

FIEC buys power from Groton Utilities, a municipal distribution utility that buys its power from a cooperative of similar entities in Connecticut that purchases wholesale power from the New England power market. This project will interconnect to FIEC's electrical grid. The Value of Distributed Energy Resources framework does not apply to the project, nor do any of the typical upfront incentives for solar as FIEC customers do not pay the System Benefits Charge. Our base case assumes that we can sell power to FIEC at the same price that they pay to Groton—currently just under \$0.10/kWh.

Last, we have included an adder to our rent proposal for a Battery Energy Storage System (BESS). As noted in the RFP, there is currently a BESS moratorium in the Town of Southold, though we anticipate that the moratorium will be lifted in the near term. The unique characteristics described above that challenge the success of the solar project also apply to BESS. BESS projects in most areas of NYS can participate in wholesale markets or retail proxies thereof to maximize revenue amounts and sources. They also typically receive significant upfront incentives. A battery on Fishers would likely only have one revenue opportunity—to reduce the demand charge that FIEC pays to Groton.

To monetize that opportunity, the BESS will need to sell its capacity to FIEC at a lower price than Groton's demand charge.

Financing Plan

o Describe how the proposed project will be financed. Identify any potential financial partners that will be involved in the project. Describe possible sources of funds and revenue streams other than the sale of energy, including all available tax credits, incentives, and subsidies that will be used to finance the project.

Funding for the project is fully committed. We anticipate approximately 40% of the project's cost will be offset by the federal Investment Tax Credit once the project comes online. Additional depreciation benefits will accrue during operations as well. We believe that there are no other grants or incentives available to the project.

Operations and Maintenance Plan

o The Respondent will be responsible for Operation & Maintenance (O&M) services for the full term of the Agreement. Describe the proposed O&M procedures for the system, detailing duties performed and if the contract will be maintained with the Respondent or a third-party provider.

Pickett Power will perform operations and maintenance for the project. We anticipate hiring a local landscaping company to mow the leased area at least twice per year. Two local electricians will be hired and trained to the North American Board of Certified Energy Practitioners (NABCEP) standard for O&M. We plan to use equipment from AlsoEnergy for data aggregation and remote monitoring, which monitors production from the project and automatically alerts us to any issues. As specified in Appendix #4, warranties on major equipment such as panels and inverters run for 30 and 10 years, respectively. Last, our EPC contractor is based in CT and will have access to our monitoring system so they can respond to the site promptly.

If a BESS is added to the project, we will contract with a third-party operations company to manage charge/discharge cycles and all ongoing maintenance of the battery and inverter(s).

Decommissioning Plan

o Provide information regarding the proposed approach to system decommissioning and property restoration. This decommissioning plan should describe the Respondent's approach to providing financial assurance that funding will be available to decommission the system at the end of the contract term.

The owner of the Facility, as provided for in its lease with the landowner, shall restore the property to its condition as it existed before the Facility was installed, pursuant to measures which may include the following:

- · Removal of all operator-owned equipment, concrete, conduits, structures, fencing, and foundations to a depth of 36 inches below the soil surface.
- · Removal of any solid and hazardous waste caused by the Facility in accordance with local, state and federal waste disposal regulations.
- · Removal of all graveled areas and access roads unless the landowner requests in writing for it to remain.

Our engineering contractor, Crawford, estimates the cost of decommissioning the project to be \$100,000. Crawford designed the project with ballasted foundations, above ground cable trays and other equipment that minimizes ground disturbance. Additionally, our construction plan does not include construction of a gravel roadway onto the landfill cap. Our decommissioning estimate is further supported by NYSERDA's 2023 Solar Guidebook for Local Governments, which estimates a decommissioning cost of about \$60,000 or just under \$100,000 after 20 years at 2.5% annual inflation rate for a 2MW system.

We propose creating a decommissioning account, held by Pickett Power. The account will be funded with the estimated decommissioning cost before the start of operations. We are open to discussing the details and would plan to send annually proof of the account balance.

Local Business Utilization Plan

o Respondent shall submit a proposed local business utilization plan and must make a good faith effort to hire local business enterprises on the project. The utilization plan must demonstrate how this requirement will be met to the extent possible at this stage in the program.

Our engineering consultant and construction contractor are based in the Hudson Valley and Long Island areas of New York, respectively, and maintain New York licenses. It is critical that these contractors have the significant landfill solar experience that they have to ensure a successful project. We will hire local labor to the extent possible, including approximately [30] laborers during construction. Construction will occur during the offseason so that we can house any non-local workers on the island. As discussed above, our O&M Plan relies on retaining and training two electrical contractors to NABCEP's standards and engaging a local landscaping company for mowing.

Outreach Plan

o Respondent will provide a clear plan to best meet the goals and strategies specified in the **Project Scope** section for **Community Engagement**.

This solar project has endured at least three false starts by other developers. Pickett Power presented the latest plan to the Island Community Board in early October, published the presentation on FishersIsland.net and is responding to a public RFP for site control. We will continue to make the community aware of our progress at each milestone through development, construction and operations.

We look forward to engaging the community beyond general awareness of the project by encouraging the public to interact with our remote monitoring and data aggregation system. Specifically, we will make the project website, including live production data, publicly available online and continuously running on monitors installed in locations like the [Fishers Island School and/or the Library]. In our experience, students tend to enjoy monitoring solar production, comparing production against weather forecasts and converting production into avoided greenhouse gas emissions equivalencies via NOAA's website. We also fully intend to post annual financial reports to our website for the public to review.

Section 4 – Technical Proposal

All solar energy systems proposed under this RFP must conform to industry best practices. System Design and Components are not binding at the proposal stage, but this information will be used to evaluate Respondent proposals.

IMPORTANT note about Battery Energy Storage Systems (BESS):

As of the publication of this RFP, Southold Town continues to have a moratorium on BESS projects. A successful proposal must propose a BESS-free design; however, including an additional BESS option to account for likely changes in legislation is strongly encouraged.

· Components: Include an overview of the proposed photovoltaic system, including brief descriptions of the main components (at minimum modules, inverters, racking system, and monitoring system) including manufacturer and warranty information. Respondents are encouraged to provide specification sheets for any proposed technologies as an appendix.

All of the major equipment called for in our site plan is Tier 1 rated and used in gigawatts worth of projects world-wide. The table below includes the manufacturer and warranty for the primary components. Additional equipment details are included in Appendix #4.

	Module	Inverter	Racking	Monitoring
Manufacturer	VSUN 575N	Solectria XGI 1500	APA GeoBallast	AlsoEnergy
Warranty	30 years	10 years	NA	NA

• Design: Include Preliminary Drawings for the proposed PV system that include (at a minimum):

System size (in kWDC and kWAC)

1,525 kWdc and 0.999 - 1,200 kWac

Location of modules (including tilt)

Please see Site Layout in Appendix #5

o Location of inverters

Please see Site Layout in Appendix #5

- o Any other site-specific information that will aid in overall evaluation
- · Expected System Generation

o Provide estimated annual production of the proposed solar project for years 1-25 inclusive of the degradation rate.

Please see estimated annual production in Appendix #5

Section 5 – Price Proposal

The price proposal is submitted as Appendix #6. We propose a 20 year initial term with four (4) five (5) year extension options.

A flat \$5,000 / year will be added to the lease fees in the event BESS moratorium is removed and battery storage is installed. A 1.5% annual escalation will be applied to the BESS fee each year following the installation.

Appendix 1

Certificate of Non-Collusion

The undersigned certifies, under penalties of perjury, that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word "person" shall mean any natural person, business, partnership, corporation, union, committee, club or other organization, entity, or group of individuals.

176 on celon
(Signature)
Travis Garcelon
(Name of person signing proposal)
Pickett Power LLC
(Name of business)

Appendix 2

Pickett Power, LLC

Brad Burnham

Brad Burnham is a founding partner of Union Square Ventures (USV), a New York-based venture capital firm. At USV, he led investments in Indeed, Tumblr, Stack Overflow, Duolingo, Cloudflare, Protocol Labs, Pilot Fiber, and DuckDuckGo.

Brad started in venture capital at AT&T Ventures, focusing on telecom infrastructure and the consumer web, where he led the firm's early investment in Audible. Before that, he founded Echo Logic to commercialize Bell Laboratories compiler technology, and worked at AT&T Software Products, another Bell Labs spin-out. His early career included various roles in sales, marketing, and business development at AT&T, AT&T Computer Systems, and New York Telephone.

Currently, Brad serves as a Venture Partner at both Union Square Ventures and Placeholder, a crypto-focused venture fund. He advises young fund managers and is an active angel investor.

Brad graduated from Wesleyan University with a degree in political science. He lives in New York City with his wife and twin boys.

Travis Garcelon

Travis Garcelon is a Senior Director at Fair Isaac Corporation (FICO), a Bozeman, MT based data analytics firm best known for the FICO Score.

Travis has 15 years of software sales and client management experience, with over 10 years at FICO, engaging global enterprise customers in the financial services industry.

Travis graduated from St. Lawrence University with a degree in economics. He lives in Lyme, Connecticut with his wife and two kids.

Michael Rauch

Michael has more than 15 years of experience in renewable energy. He works as a consultant on community solar projects and has experience in selling power from utility-scale wind energy projects, financing landfill solar energy projects, and developing community energy savings initiatives.

Michael graduated from the University of Vermont with a BS in Environmental Policy and earned a Masters of Public Administration from the School of International and Public Affairs at Columbia University. He's worked for CleanCapital, BQ Energy, and Apex Clean Energy. He lives in the Hudson Valley region of New York with his wife and three kids.

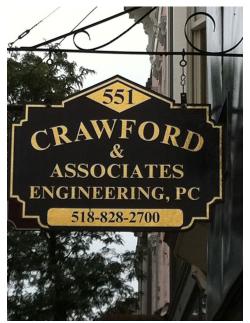
Statement of Qualifications

Crawford & Associates
Engineering & Land Surveying, PC
1 Hudson City Centre, Suite 300 • Hudson, NY 12534
Tel: (518) 828-2700 • Fax: (518) 828-2723
www.crawfordandassociates.com



Serving Upstate NY since 1992

FIRM PROFILE



Founded in 1992, Crawford & Associates Engineering & Land Surveying, PC is a certified Woman Owned Small Business (SBA WOSB, NYSWBE, NYSDOT DBE) offering an interdisciplinary mix of services from talented engineers, scientists, land surveyors and technicians working in separate, yet closely linked, disciplines. As a result we are able to provide our clients with comprehensive, integrated and timely service. Our clients include public and private entities, nonprofits, institutions and commercial enterprises in a wide range of market sectors including: clean energy, energy efficiency, housing, healthcare,

high end residential, land use planning, water, wastewater, stormwater, and more.

C&A is comprised of multiple sub-groups, each with their own technical specialties, that collaborate as needed in the interest of our clients. Each group is led by a Project Manager who is a professional engineer, environmental scientist, or land surveyor with years of experience in their field. The Project Managers work closely with their staff to define problems and develop thoughtful and feasible solutions that meet our clients' needs. Throughout the course of a project, C&A's consultants are known to strongly advocate on behalf of their clients, ensuring the success of the project.



Certified Women-Owned Business Enterprise







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FIRM PHILOSOPHY

C&A is a collaborative, multidisciplinary team of engineers, environmental scientists, and land surveyors who have the training and experience to guide a project from concept to reality.

We pride ourselves on being **problem solvers and innovators** who not only provide clear, concise and cost-effective solutions, but bring our projects to completion on time and on budget. We approach each project without preconceptions. Experience has taught us that there is more than one way to solve a problem. The first step is to clearly understand the ultimate goals, the priorities, the limitations, and the regulatory and political climate. Options and strategies are then explored and analyzed. Working closely with our client we determine the most effective and efficient plan to achieve their specific goal.

At C&A we listen to our clients, understand their needs, recognize their constraints and then create a solution which ensures a successful result.



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SERVICES

Civil Engineering

Site Planning

Wastewater Treatment Facility Design

Water Supply Evaluation

Construction Support

Traffic Impact Analyses

Stormwater Management

Mechanical, Electrical, Plumbing (MEP) Engineering

HVAC Design

Plumbing Design

Electrical and Lighting System Design

Energy Efficiency Analysis

Uniform Code Compliance Analysis

Structural Engineering

Assessment/Evaluations

Design & Analysis

Renovation/Reinforcement/Repair

Investigation Studies & Reports

Environmental Consulting

Environmental Site Assessments

Site Remediation Design and Monitoring

Regulatory Compliance Permitting

Wetland Delineation

Ecological Resource Surveys

Habitat/Ecological Assessments

Stormwater Management Permitting

Post-Closure Landfill Monitoring

Spill Prevention Plans

Land Surveying

Boundary Surveys

Construction Surveys

Topographic Surveys

Subdivisions

Lot Line Adjustments

ALTA/ACSM Surveys

Aerial Photo Overlays



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SOLAR DEVELOPMENT SERVICES





C&A specializes in engineering support for solar projects throughout New York, the northeast and mid-west. With in-house expertise in civil, electrical, mechanical, structural, environmental, and site planning services, C&A can handle most engineering needs from start to finish of a solar project. Some of our solar development services include:

Site Assessment

- Due Diligence / Fatal Flaw analysis
- Phase 1 Environmental Site Assessment
- Geotechnical soils evaluation
- Boundary and topographical surveying
- Wetland delineation

Design

- Solar layout optimization with topographic grading, shading, pier and collision analysis
- Energy modeling
- Design of medium voltage electrical interconnection & coordination with utilities
- Design of electrical PV array including automated generation of array cabling
- Grading & drainage design and SWPPP preparation
- Development of detailed civil and electrical construction drawings, details, and specs

Permitting

- Landfill Post-Closure Use Permitting
- Overall site planning services and acquisition of local/state permits
- Representation at public meetings
- Visibility Simulations and Screening Design
- Glare Analysis

Construction Support

- Automated bill of materials generation
- SWPPP inspections
- Submittal review
- Site inspection
- Preparation of record drawings

Operations & Maintenance Support

- Review of site data
- Performance troubleshooting
- Return on Investment (ROI) analysis



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Figure: Map of Crawford & Associates solar development projects as of August 2020

C&A has the skills and experience to lead solar development projects from conception through construction. The team has extensive experience with municipal boards and the SEQR process, as three staff sit on their local Planning Boards. C&A has also managed NYS Article 10 application preparation for a 100MW solar facility and is well versed in the complexities of utility scale solar permitting. Jen has over 15 years' experience in the solar industry, and the company's solar design team has been/is involved with over 80 solar projects for a total of over 1,721 MW. Most of C&A's portfolios have included projects in the 2 to 20 MW range, though the growing firm also supports a few 50 to 100MW solar facilities in development.

C&A's solar engineering team is proficient in a suite of specialty design softwares that facilitate efficient and accurate layout optimization and yield analysis. Our PV-specific software capabilities include:

Layout Optimization

- HelioScope (conceptual design)
- PVCase add-on to AutoCAD Civil 3D (advanced design)

Analysis

- PVSyst (energy modeling)
- NREL's System Advisor Model (energy modeling)
- ForgeSolar (glare analysis)
- SpidaCalc (structural analysis of OH pole)



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ENVIRONMENTAL SERVICES

C&A takes great pride in our ability to provide our clients with a comprehensive range of services, including Environmental. Our engineers and scientists understand the regulatory process, are sensitive to environmental issues, and possess experience in a multitude of various environmental program areas.

Environmental Consulting

Stormwater Management, Permitting & Reporting –
Industrial / Construction / MS4

Post-Closure Landfill Monitoring & Reporting

Post-Closure Use Permitting

Environmental Site Assessments & Investigations

Environmental Impact Statement Preparation

Wetland Delineation, Mitigation & Reporting

Ecological Resource Surveys - Habitat/Ecological Assessments

Spill Prevention Plans/Reports (Petroleum & Chemical)









Serving Upstate NY since 1992

MUNICIPAL SERVICES

C&A has a long history of serving the public as problem solvers and plan reviewers. Municipal clients can rely on the expertise of our engineers, environmental scientists, and land surveyors in a variety of ways:

General Municipal Representation

Advisory review for municipal planning and zoning boards

Zoning and subdivision regulation development

Grant application assistance

Building Code review assistance

Water, Wastewater and Stormwater Services

Water, sewer and drainage district formation and extension

Municipal water treatment and distribution system design

Wastewater treatment and collection system design & long term planning

Facilities Engineering Services

Full-service civil, structural, mechanical, electrical and plumbing engineering design

Highway garages salt storage facility design

Fire stations and community shelter design

Energy studies and energy grant assistance

Land Planning and Site Design

Recreational facilities, parks, trailways and bikeways

Downtown and waterfront revitalization and streetscaping

Environmental Services

Phase I environmental site assessment for real property transfer

Brownfield site investigation, planning and remediation

Natural Resource Inventory

Environmental impact statements/assessments

Petroleum bulk storage tank closure investigation and remediation

Industrial permitting and compliance assistance

Transportation Engineering Services

Municipal highway construction specifications

Plan review and construction supervision



Crawford & Associates
Engineering & Land Surveying, PC
1 Hudson City Centre, Suite 300 • Hudson, NY 12534
Tel: (518) 828-2700 • Fax: (518) 828-2723
www.crawfordandassociates.com

Jennifer S. Crawford, PE

President



Work Experience

- Crawford & Associates Engineering & Land Surveying,
 P.C.: October 2013 Present, President
- CThree Group: 2008-2010 & 2014-2018, Senior Analyst of Solar Development Status
- Abengoa Solar, Inc., Boulder, CO: 2010-2013, Optical Assessment Engineer
- National Renewable Energy Laboratory, Golden, CO: 2009-2010, Graduate Student Intern

Education

- Bachelor of Science, Physics, Tufts University, Medford, MA, 2007
- Master of Science, Mechanical Engineering University of Colorado, Boulder, CO, 2010

Certifications

- Professional Engineer: NY license #100566, MA license #55819, TX license #139560, WV license #25330, VA license #065261
- NYS Fire Police, shield #70-154
- NYS Interior Firefighting Operations, Rescue Tech Basic, Pump Operations
- LGS Rescue Dive Tender
- SEI PV351L: Tools and Techniques for (Solar PV)
 Operations & Maintenance
- SEI PVOL303: Advanced Battery Based PV System Design

Affiliations

- Member, ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers)
- Member, IEEE (Institute of Electrical and Electronics Engineers)
- Corporate Member, New York Solar Energy Industries Association

Computer Applications

- Languages: Matlab, VBA for Excel, C++, EES
- CAD: PVCase, AutoCAD, AutoCAD Civil 3D, ArcGIS, QGIS, Mastercam, Visual Lighting

- Solar Modeling: PVSyst, NREL's System Advisor Model (SAM), NREL's PV-SMaRT, ForgeSolar (formerly SGHAT), SolTrace, Finite Element Ray Trace (FERT, codeveloped)
- MEP Engineering: eTap, AmpCalc, eQuest, Pipe Sizer, Duct Sizer, Manual J/D, ComCheck, Radiant Wizard

Volunteer Experience

Germantown, NY Parks Commission, Board of
Directors March 2022 to present
Germantown, NY Solar Zoning Law Consultant
March 2021 – November 2021
Germantown, NY Local Waterfront Revitalization
Program (LWRP) Committee
February 2020 – Present, Co-Chairperson
Germantown, NY Planning Board
May 2019 – Present, Member
Germantown, NY Volunteer Fire Department
August 2017 – Present, Firefighter
City of Hudson, NY Dive Team and Water Rescue Unit
November 2021 – Present, Tender & Swiftwater Tech

Qualifications

Jennifer is a licensed Professional Engineer (PE) with over 13 years of experience in the energy industry. Notably, she has led the establishment of C&A's solar photovoltaic design group by populating a library of solar references, creating standard templates, mentoring staff, and cultivating industry relationships.

Jen comes from an R&D background, where she helped develop optical assessment methods, energy and ray trace models, manufacturing QA/QC systems, and instrumentation for application in the solar power industry.

As a consulting engineer, Jen has over 10 years' experience in the areas of electrical, mechanical, and civil engineering design and construction support, site planning, regulatory processes. She has developed special expertise in the area of flood plain regulations and design, local waterfront revitalization planning, fire safety planning and building code review.

Relevant Project Experience

NAVSTA Newport Landfill and Tank Farm, RI, 12MW- AC - Performed solar layout optimization, and energy production modeling services. Coordinated with the utility, and supported preparation of civil and electrical engineering design drawings and associated regulatory agency and real estate permit applications, provided construction support services.

West Valley Solar Redevelopment Project, NY, 10MW-AC - Performed solar layout optimization and energy production modeling services. Coordinated with the utility, and oversaw the preparation of civil and electrical engineering design drawings. Supported the preparation of permit applications and provided construction support services.

Mount Kisco Landfill Solar + Storage, NY, 0.6MW-AC - Performed initial desktop site evaluation, solar layout optimization, and energy production modeling services. Oversaw development of electrical and civil engineering design drawings, and provided construction support services.

Bethel Landfill Solar, NY, 2.7MW-AC - Performed initial desktop site evaluation, solar layout optimization, and energy production modeling services. Oversaw the preparation of civil and electrical engineering design drawings. Supported the preparation of permit applications, and completed glare analysis. Provided construction support services.

Esopusol Landfill, 2MW-AC - Performed initial desktop site evaluation, solar layout optimization, and energy production modeling services. Prepared civil and electrical engineering design drawings. Supported the preparation of permit applications, and completed glare analysis. Provided construction support services.

Kings Park Landfill Solar, 4MW-AC

Performed initial desktop site evaluation, solar layout optimization, and energy production modeling services. Prepared civil and electrical engineering design drawings, coordinated with utility, provided construction support and conducted site inspections.

Homeridae, 3.2MW-AC - Performed solar layout optimization and energy production modeling services.

Prepared civil and electrical engineering design drawings, coordinated with utility, provided construction support and conducted site inspections.

Steel Sun 2, 6.0MW-AC - Performed solar layout optimization and energy production modeling services. Prepared civil and electrical engineering design drawings, coordinated with utility, provided construction support and conducted site inspections.

Beacon Landfill Solar, 2.0MW-AC - Performed solar layout optimization and energy production modeling services. Prepared civil and electrical engineering design drawings, provided construction support and conducted site inspections. Reviewed performance output data and advised on corrective action measures.

Esopusol, 0.6MW-AC - Performed solar layout optimization and energy production modeling services. Prepared civil and electrical engineering design drawings, provided construction support and conducted site inspections.

Holtwood Solar Coal Ash Basin Redevelopment Project, PA, 20MW-AC - Oversaw preliminary desktop site evaluation, solar and substation layout optimization, and energy production modeling services.

Sunnyside Landfill Redevelopment Project, TX 50MW-AC + 300MWhBESS- Oversaw solar and substation layout optimization, energy production modeling, grading and drainage design, emergency response design, and landfill permitting.

Columbus Solar Park, OH 50MW-AC - Prepared preliminary desktop site evaluation, solar and substation layout optimization, energy production modeling. Provided landfill permitting support.

Bluesky Utility LLC, MA/NY – Completed due diligence analysis, fire code review, municipal coordination and wetland permitting services for over (15) ~5MW 20MWh lithium-ion BESS prospective sites

Tallman Fire Department Plan Review

Provided site and building plan review services. Reviews included a 5MW, 26MWh proposed lithium-ion BESS facility.

Justin Tondo, EIT

Staff Engineer



Work Experience

- Crawford & Associates Engineering & Land Surveying,
 P.C., Hudson, NY: January 2022 Present, Staff
 Engineer
- SunCommon, Rhinebeck, NY: June 2020 August 2020, Solar Installer Intern
- Brookhaven National Laboratory, Upton, NY: June 2021 – August 2021, SULI Intern

Education

- Bachelor of Engineering, Electrical Engineering, Stony Brook University, Stony Brook, NY, 2021
- Master of Science, Electrical Engineering, Stony Brook University, Stony Brook, NY, 2021

Certifications

- NYS DEC 4-Hour Erosion and Sediment Control Training
- BPI Multifamily Building Analyst Professional (MFBA)

Computer Applications

- Languages: C, C++
- CAD: AutoCAD LT, AutoCAD Civil 3D
- Solar Modeling: Aurora Solar, Helioscope, PVCase, PVSyst, SAM
- Other Applications: ETAP, QGIS, Google Earth Pro, Visual Lighting, AmpCalc, MATLAB, Simulink, LTSpice, PSpice, Microsoft Office, Google Suite

Experience and Qualifications

Over his four and a half years at college, and two summers spent at internships, Justin accumulated experience with power engineering and photovoltaics.

During his time as a solar installer intern, Justin worked with the installation crew of a commercial solar project, a site evaluation team and the engineering team, and gained experience with the development/construction of a commercial solar project from multiple perspectives. As a SULI intern at BNL, Justin performed research on the correlation between changes in energy output of solar generation sites and the distance between said sites which allowed him to develop better problem-solving, Excel, MATLAB, report writing and presentation skills.

In his time with C&A, Justin has been immersed in projects relating to the solar industry, and has become skilled at performing PV layouts, low voltage and medium voltage electrical design, short circuit, arc flash and protection coordination studies, and other design tasks required for the development of solar facilities.

In addition to projects relating to the solar industry, Justin has accumulated experience with projects requiring MEP engineering, specifically with electrical load calculations, single line diagram development and floorplan layouts.

Justin has also begun taking on project management tasks for various ground mount PV projects currently being designed by C&A. His project experience includes but is not limited to:

Project Experience

Bethel Municipal Landfill Solar Project, NY, 2.7MW-AC—Performed solar layout optimization, site visit, arc flash and coordination study, and prepared civil and electrical design drawings. Provided construction support services.

Elk Street Solar Brownfield Development Project, NY, 2.3 MW-AC — Performed solar layout optimization, short circuit, arc flash and coordination study, wire and conduit sizing, and prepared electrical design drawings. Provided construction support services.

West Shore Landfill Solar Project, NY 2.0MW-AC - Performed solar layout optimization, short circuit, arc flash and coordination study, wire and conduit sizing, and prepared electrical design drawings. Provided construction support services.

Columbus Solar Park, OH, 50MW-AC – Performed solar layout optimization on closed landfill, glare analysis, and prepared civil and electrical design drawings.

Sunnyside Landfill Solar Project, TX, 50MW-AC – Performed solar layout optimization, grading analysis, and energy production modeling services.

Melissia Pentz

Environmental Scientist III, Environmental Group



Work Experience

- Crawford & Associates, Environmental Scientist
 2013 present
- CT Male Associates, Environmental Scientist, 2013
- Ecosystems Strategies, Inc., Field Technician, 2011-2013
- SPECTRA Environmental Group, Inc., Staff Scientist 2006-2011, Survey Technician Crew Chief 2002-2011

Education

SUNY College of Environmental Science and Forestry, Ranger School, Wanakena, NY AAS degree in Forest Technology

Training and Certifications

- USC Wetland Delineation Training. Instructor Michael Losito, Ph.D. Professor of Wildlife Management, SUNY Cobleskill; 2023
- NYS Wetland Forum's Basic Wetland Delineation Training Class; 2014
- Transportation Worker Identification Credential (TWIC); 2010
- DCSWCD- 8-Hour Training in Soil Erosion and Sediment Control Workshop; 2008, Refresher Training; Triennial
- MSHA Part 46 Safety Training; 2008
- DOT Flagger Training; 2007
- 40-Hour OSHA Hazardous Waste Operations Safety Training; 2006. OSHA 8-Hour Annual HAZWOPER Refresher Training; Annual
- Permit Required Confined Space Training; 2007
- 10-Hour Construction Safety Training; 2005

Experience and Qualifications

Melissia is a versatile environmental scientist skilled in both field and office work. She has a keen eye for recognizing environmental conditions at a site and is proficient in overseeing field investigatory activities. She has a solid grasp of environmental regulations that may apply to various situations. Melissia has experience in landfill monitoring, Phase I and II Environmental Site Assessments and Investigations, sampling techniques for soil, water and air, dust monitoring, underground storage tank closures,

identifying areas of environmental concern, preparing SPCC and SWPPP plans and conducting site monitoring for erosion and sediment controls. She is also an experienced survey technician and crew chief and is proficient with a wide variety of field monitoring and sampling equipment.

Melissia's specific experience includes the following:

- Performed Phase I Site Assessment activities in accordance with the ASTM guidelines at a variety of commercial, municipal and industrial properties to assess the presence or absence of recognizable environmental conditions. Prepared Phase I ESA reports to document findings.
- Performed Phase II Environmental Site Investigations to investigate area of potential environmental concern identified by Phase I ESAs.
- Performed Soil, Sediment, Surface and Groundwater Sampling for various types of industrial and commercial facilities and to document underground tank closures.
- Performed Petroleum Bulk Storage Tank System
 Assessments to determine compliance with PBS
 regulations for various facilities.
- Conducted inspections for Erosion and Sediment Controls for stormwater discharges from construction activity.
- Prepared annual Discharge Monitoring Reports as required by SPDES for multiple facilities.
- Directed Underground Storage Tank removal and closure in accordance with State regulations.
- Performed Chemical Bulk Storage Tank system assessments, annual inspections and updated Spill Prevention Reports.
- Performed Environmental Monitoring at a Brownfields redevelopment site including the implementation of a Remedial Action Work Plan; a Community Monitoring Plan.
- Wetlands Delineations / Permitting/ Mitigation Prepared wetland disturbance permit applications and provided field delineation/field inspection and annual reporting services. GPS located of wetlands.
- Authored technical reports for landfill monitoring and conducts landfill monitoring.
- Performed updating of mining permits.

THE UNIVERSITY OF THE STATE OF NEW YORK EDUCATION DEPARTMENT



BE IT KNOWN THAT

JENNIFER SUZANNE CRAWFORD

HAVING GIVEN SATISFACTORY EVIDENCE OF THE COMPLETION OF PROFESSIONAL AND OTHER REQUIREMENTS PRESCRIBED BY LAW IS QUALIFIED TO PRACTICE AS A

PROFESSIONAL ENGINEER

IN THE STATE OF NEW YORK

IN WITNESS WHEREOF THE EDUCATION DEPARTMENT GRANTS THIS LICENSE UNDER ITS SEAL AT ALBANY, NEW YORK THIS TENTH DAY OF DECEMBER, 2018.

LICENSE NUMBER
100566



DEPUTY COMMISSIONER
FOR THE PROFESSIONS

EXECUTIVE SECRETARY
STATE BOARD FOR
ENGINEERING, LAND SURVEYING AND GEOLOGY

THE UNIVERSITY OF THE STATE OF NEW YORK **EDUCATION DEPARTMENT**

THIS IS TO CERTIFY THAT HAVING MET THE REQUIREMENTS OF SECTION 7210 OF THE EDUCATION LAW AND IN ACCORDANCE THEREWITH THIS CERTIFICATE OF AUTHORIZATION IS GRANTED WHICH ENTITLES

> CRAWFORD & ASSOCIATES ENGINEERING & LAND SURVEYING PC 4411 ROUTE 9 **SUITE 200** HUDSON, NY 12534-0000

TO PROVIDE PROFESSIONAL ENGINEERING SERVICES IN THE STATE OF NEW YORK FOR

THE PERIOD 01/01/2024 TO 12/31/2026.

CERTIFICATE NUMBER 0021129

COMMISSIONER OF EDUCATION



Proposal For

Pickett Power, LLC - Fishers Island Landfill

EPC Proposal November 21st, 2024

Mickey Toro CTEC SOLAR, LLC

One Griffin Rd. South - Bloomfield, CT 860-580-7174 - www.ctecsolar.com





A - Proposer Qualifications

CTEC Solar Mission Statement:

"To fuel the growth of our energy resources, while empowering society to control their future costs and availability. Using our experience, technology and expertise to develop and maintain sustainable energy facilities throughout the region to help move the country toward a more sustainable future."

Founded in 2011, and headquartered in Bloomfield CT, CTEC Solar is one of the most experienced and trusted solar providers in the Northeast. We have built over 100 MW of Rooftop and Ground Mount Commercial, Industrial, and Utility Scale Solar plus Storage Projects. CTEC Develops, Builds, and Services Solar plus Storage projects internally and for partners. The company is private with strong financial backing, confirming that the organization is capable of completing and supporting your project today and for years to come.

We are a vertically integrated solar development, construction and operation services company. We handle all aspects of development, from design and engineering to procurement and installation. CTEC also manages the operations and maintenance of solar power systems with over 150 locations in service under management. We have 40 employees based in Bloomfield, CT with an additional office in Charlton, MA. The company holds a Connecticut Major Contractor license, and holds electrical licenses in the states of CT, MA, NY, NH, VT, ME and RI. We employ North American Board of Certified Energy Practitioners (NABCEP) certified employees. We also have expertise in landfill and brownfield solar development and construction best practices.

The company has proven to be a leader in its markets of operations, and is very well versed on the region's energy programs having completed one of the first Virtual Net Metering projects in the state of Connecticut. CTEC also built the first Community Solar project through the CT DEEP Community Solar Pilot Program, still the only one of it's kind developed and constructed in the state.. CTEC Solar is a leader in Solar plus storage, currently developing several battery plus storage projects in the states of CT, NY and MA while also being awarded one of the first SMART Program projects in the state of Massachusetts

Our professional staff of electricians, installers, engineers, and business developers is the backbone of the company. It is the dedication of its employees that has gained CTEC a superior reputation for quality and service.





A1 - Number of Employees

CTEC employs a core staff of 40 highly coordinated and skilled technicians, electricians, engineers and other professionals. CTEC supplements our staff with a strong network of trusted professionals and subcontractors.

A2 - Office Locations

CTEC Solar is based at 1 Griffin Rd S, Bloomfield, CT with an office in Charlton, MA.







B - Key Personnel

Mickey Toro - Owner/President/Business Development & Outreach

Mickey Toro is a veteran of The U.S Army and a resident of Simsbury, CT. He has spent most of his career working in a corporate environment as an executive for various companies throughout the US. Eventually, Mickey was driven to build his own business and has been doing so successfully for over 20 years. His latest company, CTEC Solar, servicing the Northeast market, has grown to be one of the largest and most recognizable Connecticut based solar companies in the last decade, developing over 100MW of renewable facilities during that time.

Jose Sucre - Senior Director of EPC

Before joining C-TEC Solar, Jose worked at Gridwealth as Director of EPC. At Gridwealth, Jose managed a team of construction management and procurement personnel. During Jose's tenure, the company had its best year in terms of solar PV installation. Previously, Jose spent almost a decade at Nexamp, where he held multiple management-level positions, including managing the pre-construction and estimation units. At Nexamp, Jose collaborated with developing and constructing more than 500MW of PV + BESS solar roof and ground mounts across the United States. Jose earned a bachelor's degree in civil engineering from the Universidad Central de Venezuela and a master's in engineering management from Tufts University. He is OSHA 30 Certified.

Ram Arunachalam P.E - Vice President of Development

Ram Arunachalam has over 16 years of experience in the electric power industry. He has managed engineering, procurement and construction of over 1.2 GW of renewable energy projects which were successfully interconnected to various utilities/transmission grid in the U.S. At CTEC, his role is to focus on bringing design solutions for the changing needs of solar and storage projects, building relationships with OEMs, contractors and utilities, and improving the Lifetime Cost of Energy for renewable projects. Ram has an B.E., in Electrical and Electronics Engineering from University of Madras, an M.S., in Electrical Engineering from Michigan Technological University and an M.B.A., in Finance and Entrepreneurship from the Wharton Business School.

Brandon Pizzoferrato - Lead Project Manager

Brandon lives in Granby CT and has 13 years of experience in the Construction, Project Management, and Environmental Remediation industry. He has led the installation for over 100 MW of rooftop and ground-mounted solar power. Brandon has worked on maintenance and construction in CT, NY, MA, VT and OH and has extensive Project Management, OSHA HAZWOPER and DOT Hazardous Material certificates and training.





E - Featured Projects

E1 - Putnam Landfill - Putnam, CT

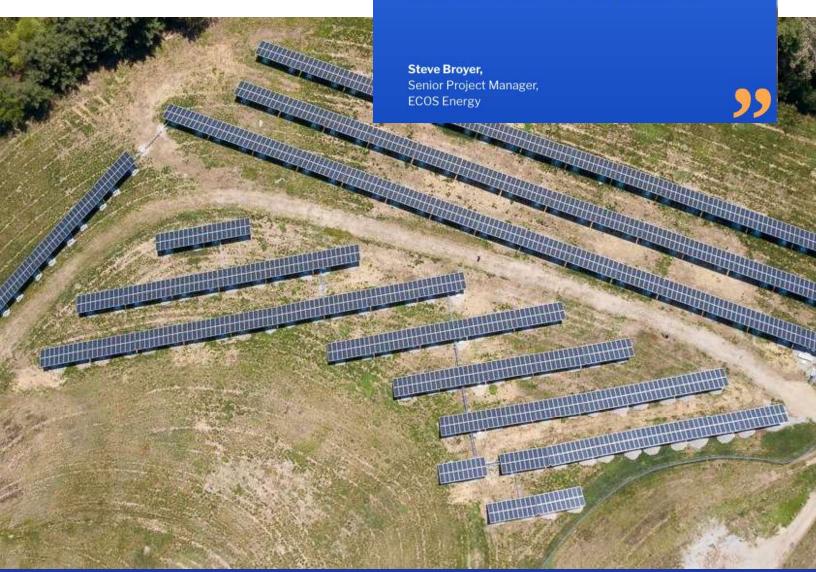
SYSTEM SIZE

656kW DC

INTERCONNECTION DATE

Q2 - 2020

When interpreting drawings to actual field construction, CTEC is thorough with their decision making. They interpret plans well, find room for improvement and make well thought out decisions. A key component of quality workmanship.







E2 - Windham Terracon - Lebanon, CT

SYSTEM SIZE

6.5 MW DC

INTERCONNECTION DATE

Q4 - 2017



They were able to accomplish our project on a very tight time constraint. All of the staff that worked on our project were knowledgeable and professional. We look forward to working with CTEC again on future projects.

Bruce Thompson

Environmental Project Manager SRSNE









E3 - Monument Valley PV & ESS - Stockbridge, MA

SYSTEM SIZE

2.80MW DC + 2,000kW ESS

INTERCONNECTION DATE

01 - 2022







Appendix A - Certificate of Insurance

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SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFOR THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE	DESC	RIPTION OF OPERATIONS / LOCATIONS / VEHICLE	S (AC	ORD 1	01, Additional Remarks Schedule, m	ay be attached if more c	, page is required)	,				
SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFOR THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE	(62/6)2				23							
Evidence of Insurance THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE	CEF	RTIFICATE HOLDER				CANCELLATION						
		Evidence of Insurance				THE EXPIRATION D	ATE THEREO	, NOTICE WILL BE DELIVERE		EFORE		
		В				AUTHORIZED REPRESE		20/-	_			

ACORD 25 (2016/03)

The ACORD name and logo are registered marks of ACORD



Why TRC?

TRC has exceptional experience in the development of renewable energy and energy storage in New York, where we have successfully permitted multiple facilities across the State, including solar projects on landfills and battery energy storage system (BESS) projects on Long Island. TRC has completed or is in the process of completing feasibility assessments, environmental and land surveys, permitting, civil engineering, electrical engineering, and geotechnical engineering on over 70 BESS projects nationally, and over 795 renewable development projects in New York alone, that have included development, permitting, or engineering support services. TRC has successfully supported the permitting of over 20 energy facilities on Long Island, totaling 1,145 MW over the past 20 years, and as a result, has unparalleled experience in working on some of the most important generation facilities in Nassau and Suffolk counties. TRC has recent experience in the Town of Southold providing similar services for renewable energy projects. TRC led an award-winning design and permitting of a solar farm on a closed landfill in New York. TRC is one of the leading firms providing engineering, permitting, and construction solutions for this unique type of development.

For 55 years, TRC has set the bar for clients who require consulting, environmental, engineering, and management services by combining science with the latest technology to devise solutions that stand the test of time. We have over 7,500 professionals in more than 150 offices across the globe, serving a broad range of public and private clients, steering complex projects from conception to completion to help solve the toughest challenges. We break through barriers for our clients and help them follow through for sustainable results.

Within the State of New York (NY), TRC operates six offices (Clifton Park, Ithaca, Liverpool, Melville, New York City (NYC), and West Seneca) and employs a diverse workforce of over 500 professionals serving the energy and utility industries including environmental professionals, engineers, geologists, designers, AutoCAD technicians, project and construction managers, and geographic information systems



years of industry leadership

150+
offices worldwide

7K+ professional experts

ENR

2023 Top Firms #5 Power #8 Hazardous Waste #9 Top 100 Pure Designers #16 Top 500 Design Firms (GIS) professionals. TRC has nearly 2,000 professionals within the Northeast, allowing us to support Picket Power, LLC with the resources to provide the highest level of local service and experience on your projects. Our professional staff are fully committed to maintaining our reputation as one of the most highly qualified and experienced energy consulting firms nationally.

Our goals are to make the client's job easier, be an extension of the client's staff, provide flexibility, and deliver a quality product. It is important that Picket Power, LLC has a consulting engineering partner with world class environmental services, engineering design and field operations services that demonstrates and is committed to:

- → Strong Safety Record: Everyone goes home safe every day. ISNetworld, Grade A.
- → Getting it Right the First Time: Quality as a core value & cornerstone of everything we do.
- → Elite Technical Experts: Right skills to do the job with a staff rooted in consulting for utilities.
- → Leveraging Technology: A unique set of digital tools for productivity & collaboration.
- → Future Proof Designs: Established design practices with the future in mind.
- → Resiliency: Hardened designs driven by climate forecasting & risk analysis for greater reliability.
- → Data Security: As an ISO 27001 Certified provider, your data is protected.

Appendix 3

Allen Investment Management LLC

711 Fifth Avenue – New York, N.Y. 10022

November 13, 2024
To Whom It May Concern:
We are the investment advisors for R. Bradford Burnham, III. We can confirm that Mr. Burnham has maintained investment accounts with Allen Investment Management LLC for more than sever (7) years and has liquid assets in excess of Three Million Dollars (\$3,000,000).
Please do not hesitate to call me at (212) 339-2467 with any further questions.
Sincerely yours,
Cathy Tse Managing Director

Appendix 4







NO MORE CONCRETE

By utilizing locally sourced quarry rock, simply drop the weight in and you're done. No more waiting on concrete trucks, renting concrete pumps, or washing out trucks onsite. No more labor hours for setting up temporary concrete molds. No more waiting 24 hours for concrete to cure. The flow and speed of your job is 100% in your control.

RAPID SETUP

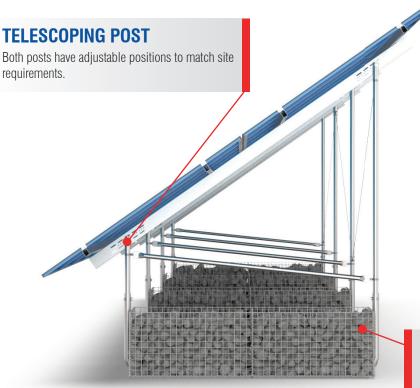
The galvanized steel wire box is delivered to the site over 70% pre-assembled. Simply unfold the box, install the spiral wires and connect the anchor tubes. The Geoballast foundation is then fully assembled and can be moved to the proper position in the row and filled with quarry rock. It's easy to assemble, stage, and stringline.

GEOBALLAST FOUNDATION

The **Geoballast Foundation** was developed after years of installing ballasted solar projects. Concrete, whether pre-cast or pour in place, proved to be an expensive and time-consuming method. Our innovative engineering and R&D teams developed a revolutionary process for ballasted projects. The goal was to remove all concrete and take the idea of a standard gabion basket and engineer it to excel as a ballast solution. Our highly engineered Geoballast box has the fastest installation time available, and is one of the most cost effective products on the market.

In business since 2008, APA offers a versatile line of racking and foundation solutions for projects in even the most challenging environments. With projects nationwide, APA is a trusted racking partner.

WHY USE A GEOBALLAST FOUNDATION?



STANDARD SPECIFICATIONS

Engineering: APA Drawings can be PE stamped for all 50 States and territories

Tilt Angles: 5°-35° Tilt Options **Wind Loading:** Up to 130mph **Snow Loading:** Up to 100psf

Mounting Orientation: 2-High in Portrait **Weight Requirement:** 2,250 lbs per basket **Foundation Coating:** Galvanized with PVC

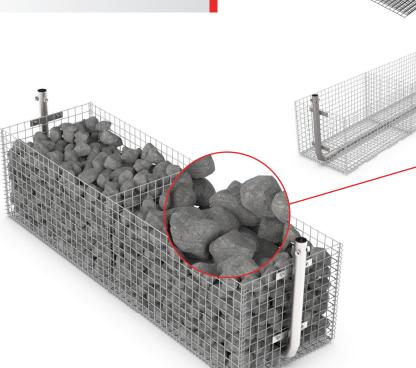
coating for added protection

PRE-ASSEMBLED BASKET

The ballast is shipped 70% assembled, which allows for lower labor cost and quick deployment.



- Place folded ballast basket on the ground
- Unfold basket and insert lower tube
- Install spiral retainers and u-bolt connections
- Place in desired location and fill with quarry rock



STANDARD QUARRY ROCK

Rock can be sourced from local quarries to reduce shipping costs.







VSUN575N-144BMH-DG

VSUN575N-144BMH-DG VSUN565N-144BMH-DG

VSUN570N-144BMH-DG VSUN560N-144BMH-DG

575W

Highest power output

22.26%

Module dfficiency

1.0%

First-year degradation warranty 0.4%

Annual degradation over 30 years

KEY FEATURES

TOPcon TOPcon technology



Higher output power



MBB technology with Circular Ribbon



Positive tolerance offer



Bifacial cells, converting more sunlight into electricity



Better shading tolerance



Better temperature coefficient



Excellent PID Resistance



Lower LCOE

ABOUT VSUN

Invested by Fuji Solar, VSUN SOLAR is a solar solution provider with headquartered in Tokyo, Japan that offers reliability, high efficiency solar products and technology globally. VSUN is rated as BNEF Tier 1 PV module manufacturer, PVEL Lab "Best performer" and EcoVadis "Bronze Award".

PRODUCT CERTIFICATION





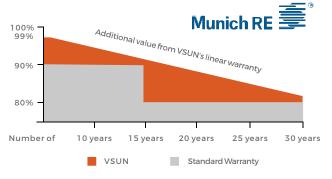








WARRANTY



Electrical Characteristics at Standard Test Conditions(STC)

Module Type	VSUN575N-144BMH-DG	VSUN570N-144BMH-DG	VSUN565N-144BMH-DG	VSUN560N-144BMH-DG
Maximum Power - Pmax (W)	575	570	565	560
Open Circuit Voltage - Voc (V)	51.26	51.07	50.87	50.67
Short Circuit Current - Isc (A)	14.31	14.25	14.19	14.13
Maximum Power Voltage - Vmpp (V)	42.53	42.34	42.14	41.95
Maximum Power Current - Impp (A)	13.54	13.48	13.41	13.34
Module Efficiency	22.26%	22.07%	21.87%	21.68%

Standard Test Conditions (STC): irradiance 1,000 W/m²; AM 1,5; module temperature 25°C. Pmax Sorting: 0~5W. Measuring Tolerance: ±3%. Remark: Electrical data do not refer to a single module and they are not part of the offer. They only serve for comparison among different module types.

Electrical Characteristics with different rear side power gain(reference to 570 front)

Pmax (W)	Voc (V)	Isc (A)	Vmpp (V)	Impp (A)	Pmax gain
599	51.07	14.96	42.34	14.15	5%
628	51.07	15.68	42.34	14.83	10%
684	51.11	17.10	42.29	16.18	20%
713	51.11	17.81	42.29	16.85	25%

Material Characteristics

Dimensions 2278×1134×35mm (L×W×H)

Weight 32.7kg

Frame Silver anodized aluminum profile

Front Glass AR-coating Semi-toughened glass, 2.0mm

Cell Encapsulation EVA (Ethylene-Vinyl-Acetate) or POE

Back Glass Glazed & Semi-toughened glass, 2.0mm

Cells 12×12 pieces monocrystalline solar cells series

strings

Junction Box IP68, 3 diodes

Cable&Connector Potrait: 500 mm (cable length can be customized) , 1×4 mm2 or 12AWG

Packaging

Dimensions(L×W×H) 2310×1125×1253mm

Container 20' 150 Container 40' 300

Container 40'HC 600 or 540 for US

System Design

Maximum System Voltage [V]	1500
Series Fuse Rating [A]	30
Bifaciality	80%±5%

Fire Rating Class C for IEC and TYPE 29 for US

PV module classification Class II

Temperature Range -40 °C to + 85 °C

Maximum Surface Load 5,400 Pa

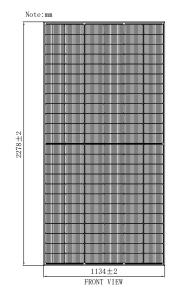
Application class Class A

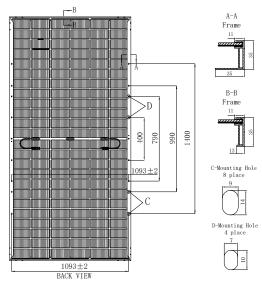
Withstanding Hail Maximum diameter of 25 mm with impact speed of 23 m/s

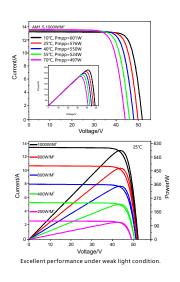
Temperature Characteristics

NOCT $45^{\circ}\text{C}(\pm 2^{\circ}\text{C})$ Voltage Temperature Coefficient $-0.26\%/^{\circ}\text{C}$ Current Temperature Coefficient $+0.046\%/^{\circ}\text{C}$ Power Temperature Coefficient $-0.30\%/^{\circ}\text{C}$

Dimensions IV-Curves







SOLECTRIA® XGI 1500-166 SERIES

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
- Additional models available certified to UL1699b, Photovoltaic DC Arc-Fault Circuit Protection
- 99.0% peak efficiency
- Flexible solution for distributed and centralized system architecture
- Advanced grid-support functionality Rule 21/UL1741SB
- Robust, dependable, & 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

OPTIONS

- String combiners for distributed and centralized systems
- Web-based monitoring
- Extended warranty





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 UL1741SB 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.



SOLECTRIA® XGI 1500-166 SERIES TECHNICAL DATA

SPECIFICATIONS

		XGI 1500 INVERTER MODEL						
PRODUCT SPECIFIC	CATION	XGI 1500-125/125-UL XGI 1500-125/125-UL-A	XGI 1500-125/150-UL XGI 1500-125/150-UL-A	XGI 1500-150/166-UL XGI 1500-150/166-UL-A	XGI 1500-166/166-UL XGI 1500-166/166-UL-A			
	Absolute Max Input Voltage	1500 VDC	1500 VDC	1500 VDC	1500 VDC			
	Max Power Input Voltage	860-1250 VDC	860-1250 VDC	860-1250 VDC	860-1250 VDC			
Range (MPPT) Operating Voltage Range (MPPT) Number of MPP Trackers Max Operating Input Current Max Operating PV Power Max DC/AC Ratio Max Rated PV Power Max Rated PV Short-Circuit Current (∑Isc x 1.25) Nominal Output Voltage AC Voltage Range Continuous Real Output Power Continuous Apparent Output Power Max Output Current		860-1450 VDC	860-1450 VDC	860-1450 VDC	860-1450 VDC			
	Number of MPP Trackers	1 MPPT	1 MPPT	1 MPPT	1 MPPT			
DC Input	Max Operating Input Current	148.3 A	148.3 A	178.0 A	197.7 A			
	Max Operating PV Power	128 kW	128 kW	153 kW	170 kW			
		2.6 332 kW	2.6 332 kW	2.2 332 kW	2.0 332 kW			
	Max Rated PV Short-Circuit	500 A	500 A	500 A	500 A			
	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			
	Max Output Current	120 A	144 A	160 A	160 A			
AC Output	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			
	Peak Efficiency	98.9%	98.9%	99.0%	99.0%			
Efficiency	CEC Average Efficiency	98.5%	98.5%	98.5%	98.5%			
	Tare Loss	2.75 W	2.75 W	2.75 W	2.75 W			
	Ambient Temp 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)			
Temperature	Storage Temperature Range	-40°F to 167°F	(-40C to 75C)	-40°F to 167°F	(-40C to 75C)			
	Relative Humidity (non-condensing)	0 - 9	95%	0 - 9	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)						
	Advanced Graphical User Interface		W	iFi				
	Communication Interface	Ethernet						
Communications	Third-Party Monitoring Protocol		SunSpec Modbus TCP/IP					
	Web-Based Monitoring		Opti	onal				
	Firmware Updates		Remote o					
	Safety Listings & Certifications	UL 16991	UL1741SB, IEEE 1547, b Photovoltaic Arc-Fault Circ	UL 1998 (All models) cuit Protection Certified (-A	models)			
Testing &	Advanced Grid Support Functionality		Rule 21, l	JL 1741SB				
Certifications	Testing Agency		E.	ΓL				
	FCC Compliance		FCC Part 15 (Sub	opart B, Class A)				
Warranty	Standard and Options		5 Years Standard;	Option for 10 Years				
	Acoustic Noise Rating		73 dBA @ 1 m	; 67dBA @ 3 m				
	DC Disconnect		Integrated 2-Pole 2	50 A DC Disconnect				
Enclosure	Mounting Angle		Vertic	al only				
	Dimensions	Height: 29.	5 in. (750 mm) Width: 39.4	in. (1000 mm) Depth: 15.1 ir	ı. (380 mm)			
	Weight		270 lbs	(122 kg)				
	Enclosure Rating and Finish	Type 4X, Polyester Powder-Coated Aluminum						







Appendix 5



DRAWING NOTES:

1. ORTHOIMAGERY AND TOPOGRAPHY DOWNLOADED FROM NEW YORK STATE GIS RESOURCES. IMAGERY

DATED 2023, TOPOGRAPHY DATED 2014. ACCESSED AND DOWNLOADED 09/13/2024. 2. PROPERTY BOUNDARIES DOWNLOADED FROM TAX PARCEL POLYGON DATASET FROM SUFFOLK COUNTY

GIS OPEN DATA, DATED 2023, ACCESSED AND DOWNLOADED 09/16/2024.

3. EXISTING FEATURES APPROXIMATED BASED ON ORTHOIMAGERY FROM NEW YORK STATE GIS

4. EXISTING WETLAND BOUNDARIES DOWNLOADED FROM FRESHWATER WETLAND POLYGON DATASET FROM

SUFFOLK COUNTY GIS OPEN DATA, DATED 2020, ACCESSED AND DOWNLOADED 09/26/2024. 5. LANDFILL CAP LIMITS APPROXIMATED FROM EXISTING CONDITIONS SURVEY FOR FISHERS ISLAND PICKETT

LANDFILL, PREPARED BY CME ASSOCIATES ENGINEERING & LAND SURVEYING, PLLC, DATED 9/17/2003.

LEGEND EXISTING PROPERTY LINE ———— — EXISTING ADJACENT PROPERTY LINE EXISTING CONTOUR MINOR INTERVAL — — 30 — EXISTING CONTOUR MAJOR INTERVAL CAP CAP APPROXIMATE EXISTING LANDFILL CAP LIMITS EXISTING ROAD EDGE EXISTING DRIVEWAY EXISTING STATE WETLAND 100-FOOT BUFFER ZONE —— OE —— OE —— EXISTING OVERHEAD ELECTRIC EXISTING TREELINE 0 EXISTING UTILITY POLE EXISTING VENT W/ 5' & 10' OFFSETS EXISTING STATE WETLAND AREA

NOTE: Site access is TBD pending site constraints

REV # DESCRIPTION DATE BY FISHERS ISLAND SOLAR SITE PLAN **EXISTING CONDITIONS**

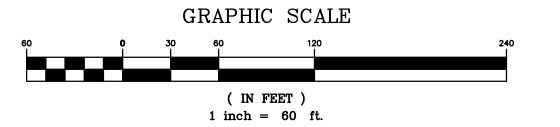
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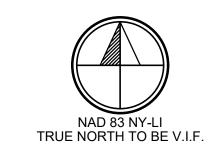
APPROVED BY: JSC

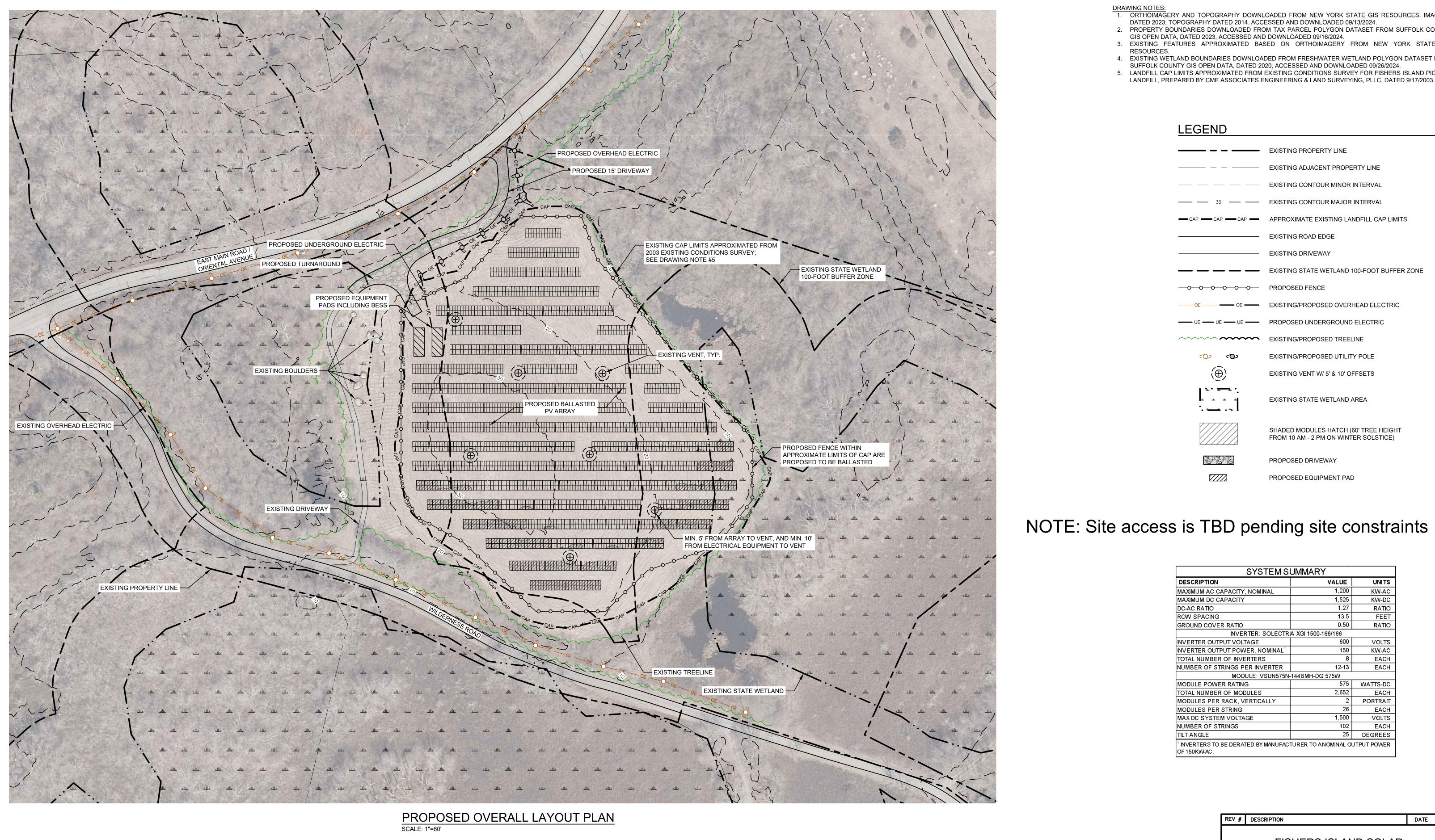
SCALE AS SHOWN

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DESCRIPTION	VALUE	UNITS
MAXIMUM AC CAPACITY, NOMINAL	1,200	KW-AC
MAXIMUM DC CAPACITY	1,525	KW-DC
DC-AC RATIO	1.27	RATIO
ROW SPACING	13.5	FEET
GROUND COVER RATIO	0.50	RATIO
INVERTER: SOLECTRIA	XGI 1500-166/166	
INVERTER OUTPUT VOLTAGE	600	VOLTS
INVERTER OUTPUT POWER, NOMINAL ¹	150	KW-AC
TOTAL NUMBER OF INVERTERS	8	EACH
NUMBER OF STRINGS PER INVERTER	12-13	EACH
MODULE: VSUN575N-1	44BMH-DG 575W	
MODULE POWER RATING	575	WATTS-DC
TOTAL NUMBER OF MODULES	2,652	EACH
MODULES PER RACK, VERTICALLY	2	PORTRAIT
MODULES PER STRING	26	EACH
MAX DC SYSTEM VOLTAGE	1,500	VOLTS
NUMBER OF STRINGS	102	EACH
TILT ANGLE	25	DEGREES

DRAWING NOTES:

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5. LANDFILL CAP LIMITS APPROXIMATED FROM EXISTING CONDITIONS SURVEY FOR FISHERS ISLAND PICKETT LANDFILL, PREPARED BY CME ASSOCIATES ENGINEERING & LAND SURVEYING, PLLC, DATED 9/17/2003.

EXISTING PROPERTY LINE

CAP CAP CAP APPROXIMATE EXISTING LANDFILL CAP LIMITS

EXISTING DRIVEWAY

EXISTING STATE WETLAND 100-FOOT BUFFER ZONE

EXISTING/PROPOSED UTILITY POLE

EXISTING VENT W/ 5' & 10' OFFSETS

EXISTING STATE WETLAND AREA

PROPOSED DRIVEWAY

PROPOSED EQUIPMENT PAD

SHADED MODULES HATCH (60' TREE HEIGHT FROM 10 AM - 2 PM ON WINTER SOLSTICE)

EXISTING CONTOUR MINOR INTERVAL

EXISTING ADJACENT PROPERTY LINE

— 30 — EXISTING CONTOUR MAJOR INTERVAL

EXISTING ROAD EDGE

OE — OE — EXISTING/PROPOSED OVERHEAD ELECTRIC

— UE — UE — PROPOSED UNDERGROUND ELECTRIC

EXISTING/PROPOSED TREELINE

——O—O—O—O—O—— PROPOSED FENCE

SUFFOLK COUNTY GIS OPEN DATA, DATED 2020, ACCESSED AND DOWNLOADED 09/26/2024.

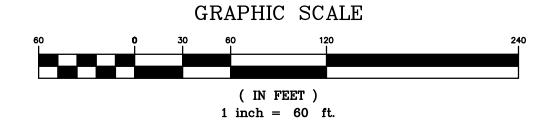
DATED 2023, TOPOGRAPHY DATED 2014. ACCESSED AND DOWNLOADED 09/13/2024.

GIS OPEN DATA, DATED 2023, ACCESSED AND DOWNLOADED 09/16/2024.

LEGEND

- NOTES:

 1. THE WETLAND BOUNDARIES SHOWN WERE DOWNLOADED FROM SUFFOLK COUNTY GIS OPEN DATA, AND ARE APPROXIMATE. A WETLAND DELINEATION MAY BE REQUIRED FOR MORE PRECISE
- 2. DISTURBANCE WITHIN STATE REGULATED FRESHWATER WETLANDS OR ADJACENT AREAS MAY
- 3. EXISTING CONDITIONS SURVEY FOR FISHERS ISLAND PICKETT LANDFILL REFERENCED IN DRAWING
- NOTE #3 SHOWS WETLANDS BOUNDARIES WHICH DIFFER FROM WHAT IS SHOWN. 4. APPROXIMATE EXISTING TREE HEIGHT OF 60' ESTIMATED USING PUBLICLY AVAILABLE LIDAR.

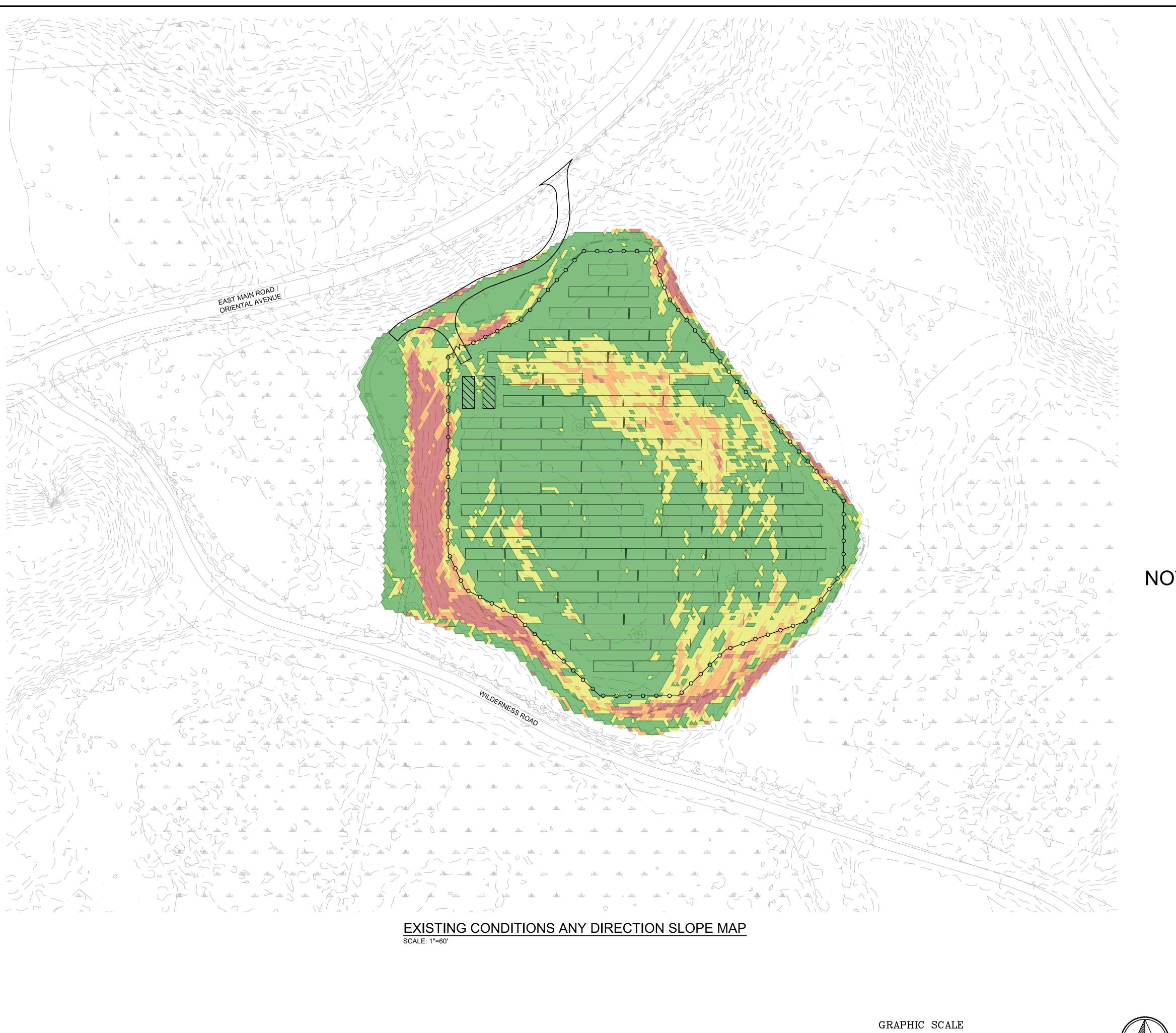




	ſ	FISHERS ISL	AND SOLAF	₹		
	TOWN OF SOUTH	OLD	SUFF	OLK COUNTY, NY		
		SITE	PLAN			
. C	PROPOSED OVERALL LAYOUT					
DRAFFOR TON CONSTRUCTION	H	ENGINEERING &	RD & ASS LAND SURVEYING, I 300, Hudson New York 1253 iates.com	PC		
IT IS A VIOLATION OF THE NEW YORK	DATE	DRAWN BY: JAT	H:\WORK\5843.0 Fisher Island	Solar\DWG\5843.0 SITE.dwg		
TATE EDUCATION LAW FOR ANY PERSON O ALTER THESE DOCUMENTS IN ANY WAY,	9/27/2024 SCALE	DESIGNED BY: JAT CHECKED BY: JSC	C&A JOB#	DRAWING:		
NLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER.	AS SHOWN	APPROVED BY: JSC	5843.0	C-1.1		

DATE BY

REV # DESCRIPTION



- DRAWING NOTES:

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LEGEND

—O—O—O—O—O—— PROPOSED FENCE PROPOSED DRIVEWAY

PROPOSED EQUIPMENT PAD

ANY DIRECTION SLOPE LEGEND					
SLOPE MIN., 9	%	SLOPE MAX., %	COLOR		
	0.00	10.00			
1	0.00	15.00			
1	5.00	20.00			
2	0.00	MAX			

NOTE: Site access is TBD pending site constraints

NAD 83 NY-LI TRUE NORTH TO BE V.I.F.

(IN FEET) 1 inch = 60 ft.

DATE BY REV # DESCRIPTION FISHERS ISLAND SOLAR

SUFFOLK COUNTY, NY

EXISTING CONDITIONS ANY DIRECTION SLOPE MAP





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AS SHOWN

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Jennifer S. Crawford, P.E.

PRINCIPAL EMERITUS
David J. Crawford, P.E.

ASSOCIATES
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MEMORANDUM

To: Bradford Burnham, Pickett Power LLC

From: Justin Tondo, EIT, C&A

Re: Fishers Island NY Solar Harvest Report v0

C&A # 5843.0

Date: September 27, 2024

As requested, I've simulated the energy output for the Fishers Island Solar PV project. The energy model uses PVSyst v7.4.8. The simulation models a 1.525 MW-DC, 1.2 MW-AC nominal PV system using fixed tilt racking with a ground cover ratio (GCR) of 0.5. The module selection is a VSUN 575 W Module (VSUN575N-144BMH-DG) and the inverter selection is a Solectria XGI 1500-166/166 inverter. This harvest report corresponds with the layout in the drawing titled "Fishers Island Solar Site Plans", dated 9/27/2024.

Weather File

Synthetic hourly data was generated by the MeteoNorm 8.1 function in PVSyst. MeteoNorm 8.1 is able to interpolate data between weather stations and satellite data to provide monthly GHI estimates, but uses a stochastic model to generate hourly data. The Fishers Island NY meteonorm weather file was used for this simulation. The synthetic hourly data was chosen for this project opposed to a proximal TMY3 file because, after years of experience comparing the two at a variety of sites, data provided by the MeteoNorm function has proven to adequately similar to TMY3 weather files, and provides higher spatial resolution so that satellite data at the exact location of the proposed site can be used.

Monthly albedo, used in the bifacial module definition, was taken from the National Renewable Energy Laboratory (NREL) National Solar Resource Database (NSRDB v3.2.2)

Losses

For consistency, typical losses were calibrated to match standard PVSyst inputs, with the following exceptions:

- Snow cover updated for Fishers Island, NY based on NOAA data for 2013-2022 at nearby stations. Analysis uses DSNW, which is the number of days where it snowed more than 1".
- A baseline 2% soiling factor was maintained. Where >2%, the % snow cover losses is used instead of a baseline 2% soiling factor.

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- Conductor losses were estimated at a total of 3% at STC across the low and medium voltage circuits.
- A 3D shading scene was added to the model with the layout in the "Fishers Island Solar Site Plans", dated 9/27/2024. This includes shading from nearby trees, whose maximum height of approximately 60' was estimated from publicly available LIDAR data.
- Light Induced Degradation (LID) losses were included, at a rate of 1.5% based on similar projects.
- Incidence Angle Modifier (IAM) loss curve was changed from the one defined by the manufacturer in the PAN file to a more conservative default PVsyst curve, which is the Fresnel curve with a standard glass.¹
- A 1% system unavailability factor was included based on time, at 3.65 days per year, consistent
 with similar simulations. However, a 1% time unavailability does not always equate to a 1%
 power loss due to unavailability, but the dates were adjusted to more accurately achieve a 1%
 energy loss.
- The AC capacity has been limited by derating the inverters, and applied in PVSyst by altering the nominal power of the inverters from 166 kW-AC to 150 kW-AC.

<u>Annual Variability</u>

In addition to the year 1 P50 simulation, P90 and P99 simulations have also been provided, which indicate the energy expected to be generated in year one with 90% and 99% probabilistic confidence, respectively. The MeteoNorm 8.1 database estimates year-to-year global horizontal irradiance variability at this site to be 5.2%. PVsyst default inputs² were also included for 4 other variability categories:

- PV module modeling/params = 1%
- Inverter efficiency = 0.5%
- Soiling, mismatch = 1%
- Degradation estimation = 0% (this is not a standard PVSyst input, but is not relevant for a year 1 simulation)

The P90 and P99 results are intended to represent annual variability, and not uncertainty. That is to say, it does not quantify accuracy of the overall energy model but rather changes in output that would be expected from year to year (in addition to facility degradation).

<u>Results</u>

The projected annual energy output is 1,812 MWh/yr, which represents a DC capacity factor of 0.136 and an AC capacity factor of 0.172.

Please see below for a table summarizing the system, and attached for a summary of the assumptions and results for the project.

¹ Please note: The VSUN575N-144MBMH-DG module spec sheet states that the modules have anti-reflective coated glass. Using the standard glass is considered conservative compared to the module's specified glass.

² C&A has not evaluated the applicability of PVSyst default inputs with respect to this project.

Table 1: System Summary

SYSTEM SUMMARY						
DESCRIPTION	VALUE	UNITS				
MAXIMUM AC CAPACITY, NOMINAL	1,200	KW-AC				
MAXIMUM DC CAPACITY	1,525	KW-DC				
DC-AC RATIO	1.27	RATIO				
ROW SPACING	13.5	FEET				
GROUND COVER RATIO	0.50	RATIO				
FIRST YEAR KWH OUTPUT	1,812,000	KWH-AC				
AC CAPACITY FACTOR	0.172	RATIO				
DC CAPACITY FACTOR	0.136	RATIO				
INVERTER: SOLECTRIA XGI 1500-166/166						
INVERTER OUTPUT VOLTAGE	600	VOLTS				
INVERTER OUTPUT POWER, NOMINAL ¹	150	KW-AC				
TOTAL NUMBER OF INVERTERS	8	EACH				
NUMBER OF STRINGS PER INVERTER	12-13	EACH				
DESCRIPTION MAXIMUM AC CAPACITY, NOMINAL MAXIMUM DC CAPACITY MAXIMUM						
MODULE POWER RATING	575	WATTS-DC				
TOTAL NUMBER OF MODULES	2,652	EACH				
MODULES PER RACK, VERTICALLY	2	PORTRAIT				
MODULES PER STRING	26	EACH				
MAX DC SYSTEM VOLTAGE	1,500	VOLTS				
NUMBER OF STRINGS	102	EACH				
TILT ANGLE	25	DEGREES				
¹ INVERTERS TO BE DERATED BY MANUFACTOR 150KW-AC.	TURER TO A NOMINAL O	UTPUT POWER				

OF 150KW-AC.



PVsyst - Simulation report

Grid-Connected System

Project: Fishers Island NY

Variant: Fishers Island NY v0
Ground system (tables) on a hill
System power: 1525 kWp
Fishers Island - United States

Author

Crawford Associates Engineering PC (United States)





Variant: Fishers Island NY v0



0.20

PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

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Project summary

Geographical Site

Situation

Project settings

Latitude

41.26 °N

Albedo

Fishers Island

United States

Longitude

41.26 °N

Longitude

-72.00 °W

Altitude

9 m

Time zone UTC-5

Weather data

Fishers Island

Meteonorm 8.1 (1991-2005), Sat=33% - Synthetic

System summary

Grid-Connected System Ground system (tables) on a hill

PV Field OrientationNear ShadingsUser's needsFixed planeAccording to strings : Fast (table)Unlimited load (grid)

Fixed plane According to strings : Fast (table)

Tilt/Azimuth 25.3 / -4.9 ° Electrical effect 100 %

System information

PV Array Inverters

 Nb. of modules
 2652 units
 Nb. of units
 8 units

 Pnom total
 1525 kWp
 Pnom total
 1200 kWac

Pnom ratio 1.271

Results summary

Produced Energy 1811995 kWh/year Specific production 1188 kWh/kWp/year Perf. Ratio PR 73.94 %



Variant: Fishers Island NY v0



VC0, Simulation date: 09/27/24 11:41 with V7.4.8

PVsyst V7.4.8

Crawford Associates Engineering PC (United States)

General parameters

Grid-Connected System Ground system (tables) on a hill

PV Field Orientation

Orientation Sheds configuration Models used

Fixed plane Nb. of sheds 106 units Transposition Perez
Tilt/Azimuth 25.3 / -4.9 ° Sizes Diffuse Perez, Meteonorm

Tilt/Azimuth 25.3 / -4.9 ° Sizes Diffuse Perez, Meteonorm Sheds spacing 8.27 m Circumsolar separate

Collector width 4.57 m Ground Cov. Ratio (GCR) 55.2 %

Shading limit angle

Limit profile angle 25.2 °

HorizonNear ShadingsUser's needsFree HorizonAccording to strings : Fast (table)Unlimited load (grid)

Free Horizon According to strings : Fast (table)

Electrical effect 100 %

Bifacial system

Model 2D Calculation

unlimited sheds

Bifacial model geometry Bifacial model definitions

Sheds spacing 8.27 m Ground albedo average 80.0 Sheds width Bifaciality factor 80 % 4.57 m Limit profile angle 25.2° Rear shading factor 5.0 % **GCR** 55.2 % Rear mismatch loss 10.0 % 0.91 m 0.0 % Height above ground Shed transparent fraction

Monthly ground albedo values

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year
0.08	0.08	0.07	0.07	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08

PV Array Characteristics

PV module		Inverter	
Manufacturer	VSUN	Manufacturer	Yaskawa Solectria Solar
Model	VSUN575N-144BMH-DG	Model	XGI 1500-166 10-16-20
(Custom parameters defir	nition)	(Custom parameters defin	nition)
Unit Nom. Power	575 Wp	Unit Nom. Power	150 kWac
Number of PV modules	2652 units	Number of inverters	8 units
Nominal (STC)	1525 kWp	Total power	1200 kWac
Modules	102 string x 26 In series	Operating voltage	860-1250 V
At operating cond. (50°C)		Pnom ratio (DC:AC)	1.27
Pmpp	1433 kWp		
U mpp	1032 V		
I mpp	1388 A		
Total PV power		Total inverter power	
Nominal (STC)	1525 kWp	Total power	1200 kWac
Total	2652 modules	Number of inverters	8 units
Module area	6851 m²	Pnom ratio	1.27



Variant: Fishers Island NY v0



PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

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Array losses

Array Soiling Losses

Average loss Fraction 3.2 %

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
6.7%	7.2%	3.7%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	4.8%

Thermal Loss factor DC wiring losses LID - Light Induced Degradation

Module temperature according to irradiance

Global array res. 16 m Ω

Loss Fraction

20.0 W/m²K Loss Fraction 2.0 % at STC

Uv (wind) 0.0 W/m²K/m/s

Module Quality Loss Module mismatch losses Strings Mismatch loss

Loss Fraction -0.8 % Loss Fraction 2.0 % at MPP Loss Fraction 0.2 %

IAM loss factor

Uc (const)

Incidence effect (IAM): Fresnel smooth glass, n = 1.526

0°	30°	50°	60°	70°	75°	80°	85°	90°
1.000	0.998	0.981	0.948	0.862	0.776	0.636	0.403	0.000

System losses

Unavailability of the system Auxiliaries loss

Time fraction 1.0 % constant (fans) 5.00 kW

3.7 days, 0.0 kW from Power thresh.

3 periods

AC wiring losses

Inv. output line up to MV transfo

Inverter voltage 600 Vac tri
Loss Fraction 0.50 % at STC

Inverter: XGI 1500-166 10-16-20

Wire section (8 Inv.) Copper 8 x 3 x 70 mm 2 Average wires length 36 m

MV line up to Injection

 $\begin{array}{ccc} \text{MV Voltage} & 20 \text{ kV} \\ \text{Wires} & \text{Copper 3 x 10 mm}^2 \\ \text{Length} & 710 \text{ m} \\ \text{Loss Fraction} & 0.50 \% \text{ at STC} \\ \end{array}$

AC losses in transformers

MV transfo

Medium voltage 20 kV

Transformer parameters



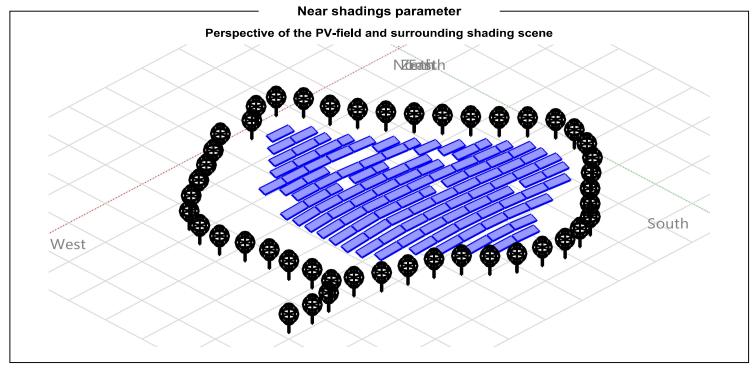
PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

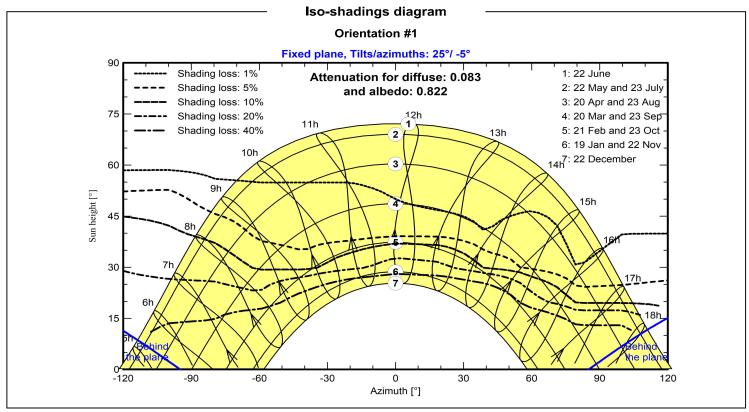
Project: Fishers Island NY





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Variant: Fishers Island NY v0



PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

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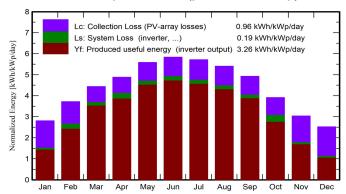
Main results

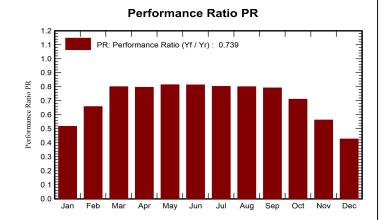
System Production

Produced Energy 1811995 kWh/year Specific production Perf. Ratio PR

1188 kWh/kWp/year 73.94 %

Normalized productions (per installed kWp)





Balances and main results

	GlobHor	DiffHor	T_Amb	Globinc	GlobEff	EArray	E_Grid	PR	
	kWh/m²	kWh/m²	°C	kWh/m²	kWh/m²	kWh	kWh	ratio	
January	57.5	27.09	-2.87	87.2	68.9	73087	68704	0.517	
February	75.6	34.30	-1.49	104.2	87.3	115111	104608	0.658 0.801	
March	113.8	52.35	3.15	137.7	123.3	175837	168084		
April	135.3	72.61	9.02	146.5	133.6	190213	177677	0.796	
May	172.2	84.28	14.45	173.1	158.2	224238	214914	0.814	
June	179.0	91.10	19.43	175.1	160.4	226615	217319	0.814	
July	178.2	86.26	23.38	177.2	162.5	226259	216867	0.803	
August	159.0	79.94	22.89	167.6	153.6	213419	204663	0.801	
September	127.9	61.02	18.38	147.8	134.7	186278	178456	0.792	
October	93.3	44.06	12.39	121.4	109.6	147011	131578	0.711	
November	60.4	27.04	6.65	91.3	76.1	82896	78245	0.562	
December	48.9	23.44	1.04	78.2	59.8	54798	50881	0.427	
Year	1401.0	683.50	10.60	1607.2	1428.0	1915762	1811995	0.739	

Legends

GlobInc

GlobHor Global horizontal irradiation **EArray** Effective energy at the output of the array

DiffHor Horizontal diffuse irradiation E Grid Energy injected into grid PR Performance Ratio T_Amb **Ambient Temperature**

Global incident in coll. plane GlobEff Effective Global, corr. for IAM and shadings

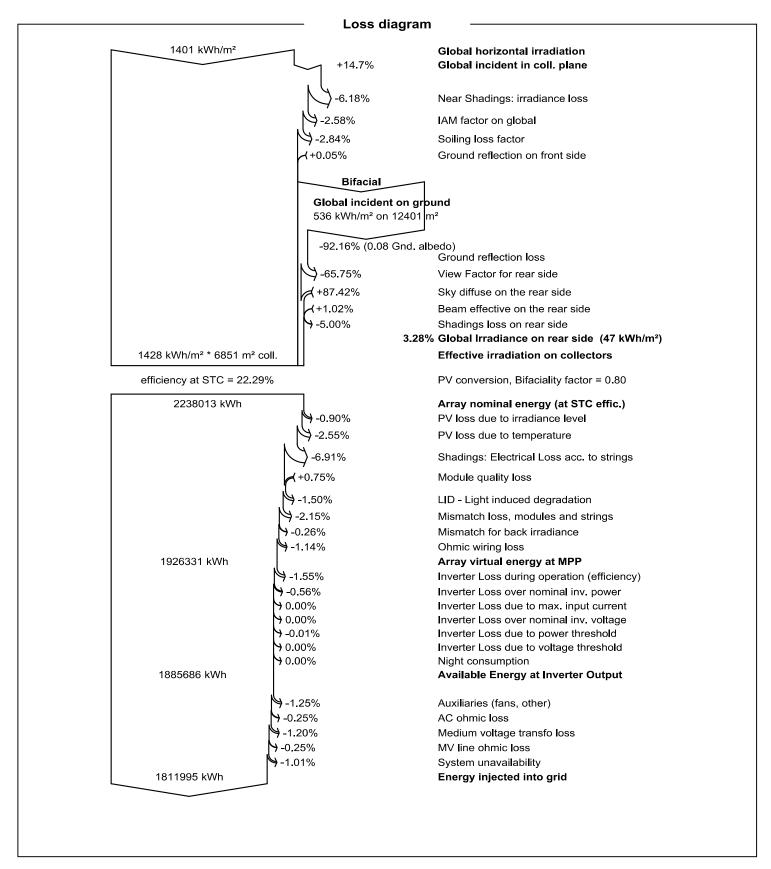


Variant: Fishers Island NY v0



PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

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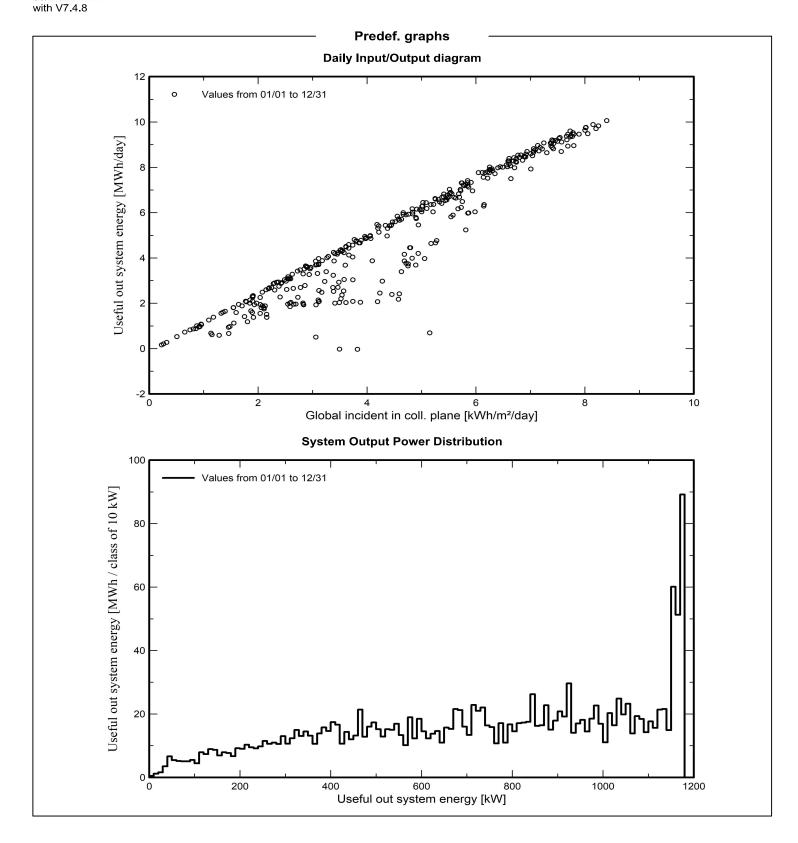


PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41

Project: Fishers Island NY Variant: Fishers Island NY v0



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Variant: Fishers Island NY v0



PVsyst V7.4.8 VC0, Simulation date: 09/27/24 11:41 with V7.4.8

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P50 - P90 evaluation Weather data Simulation and parameters uncertainties Source Meteonorm 8.1 (1991-2005), Sat=33% PV module modelling/parameters 1.0 % Inverter efficiency uncertainty 0.5 % Kind TMY, multi-year Year-to-year variability(Variance) 5.2 % Soiling and mismatch uncertainties 1.0 % **Specified Deviation** Climate change 0.0 % Global variability (weather data + system) Annual production probability Variability (Quadratic sum) 5.4 % Variability 98.0 MWh P50 1812.0 MWh P90 1686.4 MWh P99 1584.0 MWh **Probability distribution** 0.50 0.45 P50 = 1812.0 MWh 0.40 Grid simul = 1812.0 MWh 0.35 0.30 Probability 0.25 0.20 P90 = 1686.4 MWh 0.15 0.10 0.05 . P99 = 1584.0 MWh 0.00 1500 1600 1700 1800 1900 2000 2100 E_Grid system production MWh

Appendix 6

Ground Lease Price Proposal

PV System Size	<u>1.525</u> kW dc	Annual System Degradation Factor	<u>0.5%</u> %/year
Operations Period			
Year 1 Estimated	1,812,000 kWh		
kWh Generation			

The Respondent hereby agrees to pay FIWMD the following amounts for the lease area to construct and operate a solar energy system for 30 years pursuant to Section 8 of the proposed Ground Lease Agreement, which reads as follows: Tenant agrees to pay Rent to the Landlord as follows:

- (a) Development Period. During the Development Period, subject to any Rent Abatement for Taxes / PILOT (as may be exercised by Tenant in accordance with Section 9(c), Tenant shall pay to Landlord the sum of
- US\$ 2,000 per year, payable on the first day of the applicable quarter. The first full month's Quarter and rent for any partial quarter during the Development Period, if applicable, shall be paid within ten (10) business days of the Effective Date.
- (b) Operations Period. During the Operations Period, including any extensions thereof, subject to any Rent increase for Taxes/PILOT (as may be exercised by Tenant in accordance with Section 9(c), Tenant shall pay to Landlord the sum of US\$\frac{15,000}{25,000} per MWac per year, over Contract length (30 years) payable on the first day of the applicable quarter. The Rent shall increase at a rate of 1.5% per year during the Operations Period, including any extensions thereof.
- (c) Decommissioning Period. During the Decommissioning Period, subject to any Rent Increase for Taxes/PILOT (as may be exercised by Tenant in accordance with Section 9(c), Tenant shall be obligated to continue to pay Landlord Rent at the rate specified in 8(b).

Development Period Lease	\$ <u>2,000</u> /year	Annual Lease Escalator (none)
Payments Operations	\$ <u>15,000</u> /MW	Annual Lease
Period	ac/yer	Escalator (1.5%)
Lease Pavments		

A flat \$5,000 / year will be added to the lease fees in the event BESS is installed.

Respondents shall understand that the submitted price proposals must include the scope of work and all deliverables as defined in the Lease Agreement and as specified in this RFP.

Appendix 7



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 11/22/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in liqu of such endorsement(s)

	is certificate does not confer rights to						may require	an endorsement. A statem	ent or	1			
	DUCER				CONTACT Garrett Matthews								
Rer	newable Guard Insurance Brokers LLC				PHONE FAX (A/C, No, Ext): (A/C, No):								
155	Montgomery St				E-MAIL address: garrett.matthews@renewableguard.com								
Suit	te 507				INSURER(S) AFFORDING COVERAGE					NAIC #			
Sar	n Francisco			CA 94104	INSURER A: Hartford Underwriters Insurance Company					30104			
INSURED					INSURER B:								
	Pickett Power LLC				INSURER C:								
	40 5TH AVE UNIT 12E				INSURE								
					INSURER E :								
	NEW YORK			NY 10011	INSURER F :								
CO	VERAGES CER	TIFIC	ATE	NUMBER: 24-25 Liab				REVISION NUMBER:					
IN C	HIS IS TO CERTIFY THAT THE POLICIES OF IDICATED. NOTWITHSTANDING ANY REQU ERTIFICATE MAY BE ISSUED OR MAY PERT XCLUSIONS AND CONDITIONS OF SUCH PO	IREME AIN, T OLICIE	NT, TE	ERM OR CONDITION OF ANY (SURANCE AFFORDED BY THE ITS SHOWN MAY HAVE BEEN	CONTRA E POLICI	ACT OR OTHER IES DESCRIBEI	DOCUMENT NO HEREIN IS S	WITH RESPECT TO WHICH THIS					
INSR LTR	TYPE OF INSURANCE	INSD	WVD	POLICY NUMBER		(MM/DD/YYYY)	(MM/DD/YYYY)	LIMITS					
	CLAIMS-MADE OCCUR							DAMAGE TO RENTED	1,000				
	CLAIMS-MADE OCCUR							PREIMISES (Ea OCCUITETICE) \$					
Α				57 SBM BL9ZU3		11/21/2024	11/21/2025	WLD LAF (Ally one person) 3	1,000				
	GEN'L AGGREGATE LIMIT APPLIES PER:							FERSONAL & ADV INJURT 3	2,000				
	POLICY PRO- JECT LOC								2,000	,000			
	OTHER:							\$					
	AUTOMOBILE LIABILITY							COMBINED SINGLE LIMIT (Ea accident) \$	1,000	,000			
	ANY AUTO							BODILY INJURY (Per person) \$					
Α	OWNED SCHEDULED AUTOS ONLY			57 SBM BL9ZU3		11/21/2024	11/21/2025	BODILY INJURY (Per accident) \$					
	HIRED NON-OWNED AUTOS ONLY							PROPERTY DAMAGE (Per accident) \$					
	7.0.100 0.112							\$					
	➤ UMBRELLA LIAB ➤ OCCUR							EACH OCCURRENCE \$	2,000	,000			
Α	EXCESS LIAB CLAIMS-MADE			57 SBM BL9ZU3		11/21/2024	11/21/2025	AGGREGATE \$	2,000	,000			
	DED RETENTION \$ 10,000							\$					
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY							PER OTH- STATUTE ER					
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?	N/A						E.L. EACH ACCIDENT \$					
	(Mandatory in NH)				l			E.L. DISEASE - EA EMPLOYEE \$					
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT \$					
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHICL	ES (AC	ORD 1	01, Additional Remarks Schedule,	may be a	ttached if more sp	ace is required)						
CEI	RTIFICATE HOLDER			1	CANC	ELLATION							
Proof of Coverage				SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.									
					AUTHORIZED REPRESENTATIVE								
								// -					