

Proposal for Solar Photovoltaic Services

Ferguson Township
3147 Research Drive
State College, PA 16801

Presented by Envinity, Inc.

January 15th, 2021



January 15, 2021

Ferguson Township
Attn: David Modricker, P.E.
3147 Research Drive
State College, PA 16801

Re: Request for Proposal for the Ferguson Township Public Works Facility Solar PV Array Installation

Mr. Modricker,

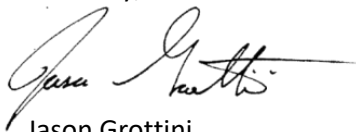
On behalf of Envinity, I am excited to present our response to your Request for Proposal for the Ferguson Township Public Works Facility Solar PV Array Installation released on November 25, 2020. To the best of my knowledge, we have met the requirements set in the RFP and have included all the requested information in the proposal that follows. We have reviewed the general conditions, project background and desired scope of work and strongly believe that our team and project approach will offer Ferguson Township the best experience and project outcome to achieve your energy, project certification and Township climate goals.

Envinity has developed two project options with our project partner, Solar Renewable Energy, LLC (SRE). Our base bid option is for a 114.8 kW DC roof ballasted solar array designed to fill the roof of the new Public Works facility. This design did not model to generate the desired 142,267 kWh per year. Our alternate design calls for a 223.8 kW DC system, which includes the base option array and adds roof mounted solar to the adjacent maintenance facility. The alternate system will exceed the Township's net positive energy goal, as well as lower the power purchasing rate. Envinity would recommend that the Township consider this alternative option to achieve better financial performance on the project.

Envinity will manage and perform all aspects of this project – design, permitting, procurement, construction, commissioning, and future maintenance. A project manager will be assigned to serve as the primary point of contact for Ferguson Township and coordinate all aspects of the project through completion. A NABCEP certified professional will be assigned as the on-site supervisor. SRE will finance the project and contract directly with Ferguson Township.

On behalf of all of us at Envinity and SRE, we thank Ferguson Township for their local leadership in addressing climate change and presenting us the opportunity to work with you on this important local project.

Sincerely,



Jason Grottini
Vice President, Envinity
25 Decibel Rd, Suite 205
State College, PA 16801
814.231.3927 x 7003
jgrottini@envinity.com

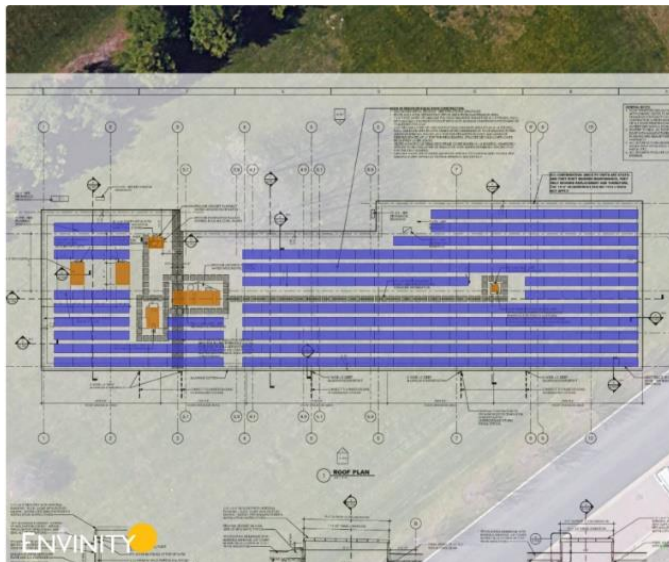
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EXECUTIVE SUMMARY

In June of 2017, the Ferguson Township Board of Supervisors adopted a resolution to achieve net zero greenhouse gas emissions from Township operations no later than 2050. With Ferguson Township taking the lead by forming a Climate Action Committee to inventory greenhouse gas emissions, this resolution has spurred a regional effort to act across all municipalities in the COG to achieve a similar climate goal. Members of Envinity have been a part of Township and regional greenhouse gas mitigation planning, and since our founding in 2005, have led the regional effort to mitigate the impacts of global climate change by making our built environments more energy efficient. While many of the bids the Township will receive for this project will be from respectable firms from outside the region, Envinity strongly believes that our mission aligns with the climate goals set by the Township. If awarded the bid, Envinity will be a reliable long-term partner to develop a project that will help Ferguson Township achieve their climate goals.

To develop the best possible project for Ferguson Township, Envinity has partnered with Solar Renewable Energy, LLC (SRE). SRE has been instrumental in developing other local projects for the University Area Joint Authority, Centre County Correctional Facility, and Borough of Millheim. Our individual roles in this project are well defined. Ferguson Township will negotiate and contract with SRE for the power purchasing agreement, while Envinity will perform all engineering, permitting, procurement, installation, and future maintenance on the system. Our combined team is comprised of highly experienced experts in our respective fields, with a commitment to jobsite safety and caring for all our employees. Ferguson Township can feel good knowing that you choose Envinity, everyone who is installing your solar array lives and works right here in the Centre Region.



Our team has performed the necessary preliminary work to propose a well-defined scope of work for the installation of a 114.8 kW solar photovoltaic array on the new Ferguson Township Public Works facility. The system design specifies the installation of (258) Tier I solar modules, (2) SMA Core1 3-Phase 50 kW solar inverters, and a Ecolibrium ballasted racking system. The project has been modelled in the Helioscope Advanced Solar Design software and is projected to produce 137,800 kWh per year, with 90% of that estimate guaranteed. *Our team does not believe it is feasible to expect that a solar array located on this facility can generate greater*

than the desired 142,267 kWh per year. In recognition of the Township's goal of being net positive energy for the Public Works facility and to achieve net zero greenhouse gas emissions by 2050, we are presenting an alternative bid to add solar to the adjacent maintenance facility. The alternative bid would add a 109.0 kW roof mounted array comprised of many of the same components as the base bid, except for the racking system. The total system size in this scenario is 223.8 kW. Envinity would recommend that the Township consider this alternative option to achieve better financial performance on the project.

SRE has developed two Power Service Agreements (PSA) for Ferguson Township’s consideration – one for the base bid, and one for the alternative bid. It should be noted that if the Township pursues the alternative bid, our team will need review the project site in detail to submit firm pricing. The PSA pricing and terms are as follows:

BASE BID – 114.8 kW	
Term Variables	Terms
Estimated PSA Payment	\$14,600 per year
Term of Agreement	28 years
Annual Escalation	2.0%
Buy Out Options	Year 6
Average Cost of Electricity (over 40 years)	\$0.066 per kWh
SREC Ownership	Ferguson Township

ALTERNATIVE BID – 223.8 kW	
Term Variables	Terms
Estimated PSA Payment	\$26,700 per year
Term of Agreement	28 years
Annual Escalation	2.0%
Buy Out Options	Year 6
Average Cost of Electricity (over 40 years)	\$0.062 per kWh
SREC Ownership	Ferguson Township

Full cash flow summaries are included as attachments to this proposal. Our team would appreciate an opportunity to walk Ferguson Township through our economic proposal prior to awarding the bid.

Envinity and SRE has reviewed the project timeline goals of the Township and have outlined a schedule that would achieve project installation by June 15th for the base bid. Achieving this target date assumes that all involved parties – Envinity, the Township, Centre Region Code, and West Penn Power – are hitting their target milestones and turning around permits and interconnection approval in a timely manner. While we believe that it is possible to have a fully installed solar array by June 15th, it is less likely that the public utility will grant permission to operate by that date.

Envinity and SRE care about the ultimate success of this project and believe we have developed a strong proposal to help Ferguson Township achieve their net positive energy goals for the new facility, as well as help achieve net zero greenhouse gas emissions goals as set by Township resolution. We know that you will receive other strong proposals for this project. If given the opportunity to interview, the Township will recognize that we are the best project partner to achieve the long-term success and promotion locally of this project.

COMPANY PROFILE – ENVINITY

Envinity was founded in 2005 to reduce climate impact by creating a more sustainable environment. We now live that vision daily while saving our clients' money, creating more comfortable spaces, and freeing up capital for investments in other areas. Envinity's core services include solar development, building new construction and retro-commissioning, MEP design engineering, data analytics, energy master planning, construction management, and design build of energy efficient buildings/renewable energy and energy storage systems – and one thing ties it all together: *we make buildings and systems work better*. We do not rest until operations are improved, performance is increased, staff are trained, and owner's goals are achieved.

Envinity is organized into two divisions, but the line between the two is blurry allowing for integration of the best internal team to satisfy a project's specific needs. The Building Energy Solutions (BES) division focuses on MEP engineering, commissioning, energy analytics, and construction management while the Design-Build-Energy (DBE) division focuses on construction, renewable energy, and energy storage projects for residential and commercial clients.

Our integrated team of in-house engineers, managers and tradespeople are experienced in the healthcare, pharmaceutical, government, data center, higher education, K-12, manufacturing, and commercial market sectors. Combined, we have decades of experience identifying and resolving facility operational issues with systems and equipment, and developing energy saving projects.

Envinity has earned a reputation as one of Pennsylvania's most experienced and professional solar and energy efficiency providers. Our team has been designing and installing solar power since 2005 with over 300 projects completed across Pennsylvania. Envinity is a member of the Amicus Solar Cooperative, an industry leading group of solar firms from across the country that includes installers, integrators, EPCs and developers who openly share and collaborate on projects. Envinity experiences the benefits of co-owning a large national cooperative, such as purchasing power and project financing, while remaining independently owned and operated. Amicus was founded in 2011 with the goal of supporting regional smaller solar companies by leveraging national scale and collective brainpower.

Envinity currently employs 45 fun, passionate and talented individuals. Envinity is a Pennsylvania registered sub-chapter S-corporation. Envinity has certificates of authority to operate in Pennsylvania, Maryland, New Jersey, and Florida. The main headquarters are located in State College, Pennsylvania with satellite offices in York, PA, Gainesville, FL, and Orlando, FL. Our strategic plan is to open an office in the Pittsburgh area in 2021.

Envinity Contact: Jason Grottini (jason@envinity.com; 814.231.3927 x 7003)

Primary Office Address: 25 Decibel Rd, Suite 205, State College, PA 16801

Primary Phone: 814.231.3927

Primary Website: envinity.com

COMPANY PROFILE – SOLAR RENEWABLE ENERGY, LLC (SRE)



Solar Renewable Energy LLC

Solar Renewable Energy (SRE), a Pennsylvania Limited Liability Corporation, was formed in January 2010 as a result of Mr. Berry's long-time association with

Parente Beard, a well-established public accounting firm. Collectively, SRE has financed, developed, and installed 100+ solar energy systems, generating over 50 megawatts total output annually. With an asset value of \$200+ million, SRE is a driving force behind new solar energy generation throughout the Mid-Atlantic region of the United States.

SRE delivers innovative solutions for financing, development, construction, and operation of solar renewable energy systems throughout the mid-Atlantic region of the United States.

SRE has quickly become one of the region's largest solar energy investors, developers, asset managers and renewable energy credit aggregator / brokers. We deliver cost-effective solar energy solutions for commercial, municipalities and not for profits entities with emphasis on effective ownership structures, long-term energy savings, financial returns and minimal or no out-of-pocket investment.

Solar Renewable Energy LLC's customer base includes:

- Tax Credit and Private Equity Investors
- Creditworthy Corporations and Commercial Entities
- Municipalities, Townships, and other Governmental Authorities (including Public Utilities)
- Not for profit entities, Retirement Communities, Health Providers and Systems and Educational Institutions

SRE has partnered with lenders and financial partners to provide project financing to credit qualified customers under various structures including:

- Power Service Agreement (PSA)
- Power Purchase Agreement (PPA)
- Private and Tax Equity Financing (various structures)
- Third Party Development

SRE is highly active in the Solar Renewable Energy Credit (SREC) futures exchange markets:

- SRE is a registered PJM Aggregator / Broker that sells SRECs for over 50 MWhs of solar output to public utilities in PA, NJ, MD, OH, CT and the District of Columbia.
- SRE has been awarded several 8 and 10-year contracts with Public Utility Companies to supply SRECs annually

SRE Contact: Seth Berry (sberry@srenergylc.com ; 717.790.9005 Ext. 102)

Primary Office Address: 4550 Lena Dr, Mechanicsburg, PA 17055

Primary Phone: 717.439.5341

Primary Website: srenergylc.com

RELEVANT PROJECT EXPERIENCE

Envinity has been a leader in developing residential and small commercial solar projects right here in Centre County, as well as across Pennsylvania. By combining our solar team with our engineering team, we design, manage, and install projects of any size and scope.

Projects designed and installed by Envinity locally include:

Diamondback Truck Covers

354 Enterprise Drive
Philipsburg, PA 16866
PV System Size: 397 kW
Date of Completion: January 2021

Services Provided: Envinity responded to a competitive RFP to design and install a max fit roof solar array. The system is made up of (913) REC Alpha 435-watt modules and (7) Sunny Tripower Core 1 inverters. The project is currently under construction with an anticipated completion of January 2021.

Project Reference
Paul Crowley
Director or Finance
Diamondback Truck Covers
pcrowley@diamondbackcovers.com
814.616.3914



Saint Vincent College – David P. Latimer Library

300 Fraser Purchase Rd
Latrobe, PA 15650
PV System Size: 151.8 kW
Date of Completion: September 2019

Services Provided: Envinity was introduced to Saint Vincent College leadership in March 2018 by the West Penn Power Sustainable Energy Fund (WPPSEF) to help manage their grant for the installation of solar on their soon to be renovated campus library. Envinity designed and installed a 151.8 kW max fit solar array on the 56,000 square foot library addition in the fall of 2019. The system is made up of (405) REC 375-watt modules and SolarEdge three-phase commercial inverters with power optimizers.



Project Reference

Peter Rusin
Faith Energy Investors
peter@faithenergy.net
970.445.0138

Organic Climbing, LLC

331 Enterprise Dr # F
Philipsburg, PA 16866
PV System Size: 80.5 kW
Date of Completion: October 2018

Services Provided: Organic Climbing contacted Envinity to design and install a solar PV system that would help their new manufacturing facility achieve net-zero energy. Envinity was involved in the project planning early on with the client's architect and engineer to coordinating material and design specifications. Our initial scope of work included developing an energy model of the yet to be constructed facility to project future energy usage, and then design a solar array that would generate more than what would be used. Once construction began, Envinity worked with the general contractor and the electrician to ensure a smooth installation process.



Project Reference

Josh Helke
Owner, Organic Climbing Company
josh@organicclimbing.com
651.245.1079

Penn State Class Gift of 2015

Penn State University
University Park, PA 16802
PV System Size: 2.32 kW (Off Grid)
Date of Completion: November 2017

Services Provided: The total solar array system size may not jump off the page as being overly impressive, however this project serves as the highest example of Envinity's quality of work through the entire design and installation process. Envinity and a partner architecture firm responded to the RFP to turn the Penn State Class of 2015's gift of a functioning solar



photovoltaic array into a reality. Upon award of the contract, Envinity’s team began a lengthy design process that included all project stakeholders including the student representatives, Office of Physical Plant, Office of Annual Giving, Information Technology Services, upper-level administration, and Centre Area Transportation Authority (CATA). At the end of the design process, the project team agreed that the best project that met all identified objectives was to retrofit a soon to be installed bus shelter to include a solar roof system. The project was sited directly outside of Beaver Stadium to take advantage of one of the highest traffic areas on campus, and to include off-grid capability, as well as amenities such as portable device charging and a real-time dashboard display that communicates both solar production and the bus schedule. Envinity was then selected as the firm to install the solar array. Our team executed the project within the given timeline, providing a final product that will remain a centerpiece of Penn State’s commitment to renewable energy for years to come.

Project Reference

Brian Hayes
Project Manager, Penn State Office of Physical Plant
Bwh11@psu.edu
814.863.4665

Relevant Project Experience – Solar Renewable Energy, LLC

- **University Area Joint Authority** (State College, PA) – Ground Mount – 3.7MW – under construction
 - Second-phase of 2018 installation
- **University Area Joint Authority** (State College, PA) – Ground Mount – 2.6MW – completed in 2018
- **Centre County Correctional Facility** (Bellefonte, PA) – 1.2 MW – completed in 2020
- **Millheim Borough** (Millheim, PA) – Ground Mount - 314kW – completed in 2020
- NJ American Water/Canoe Brook (NJ) – Floating Solar – 8.5MW – under construction
- Borough of Sayreville (NJ) – Floating Solar – 4.4MW – completed in 2018
- Middle-West School District (Middleburg, PA) – Ground Mount – 2.5MW – completed in 2020
- Tamaqua School District (Tamaqua, PA) – Ground Mount – 2.5MW – completed in 2020
- Masonic Villages (Elizabethtown, PA) – Ground Mount – 2.0MW – completed in 2018
 - Second-phase of 2011 installation
- Londonderry Village (Palmyra, PA) – Ground Mount – 2.0MW – under construction
- Pottsville School District (Pottsville, PA) – Roof Mount – 1.5MW – completed in 2020
- Rhode Island Row (DC) – Parking Garage – 1.0MW – completed in 2020
- Susquehanna Township (Harrisburg, PA) – Roof Mount – 323kW – completed in 2020
- Commonwealth Charter Academy (Harrisburg, PA) – Roof Mount – 388 kW – completed in 2019



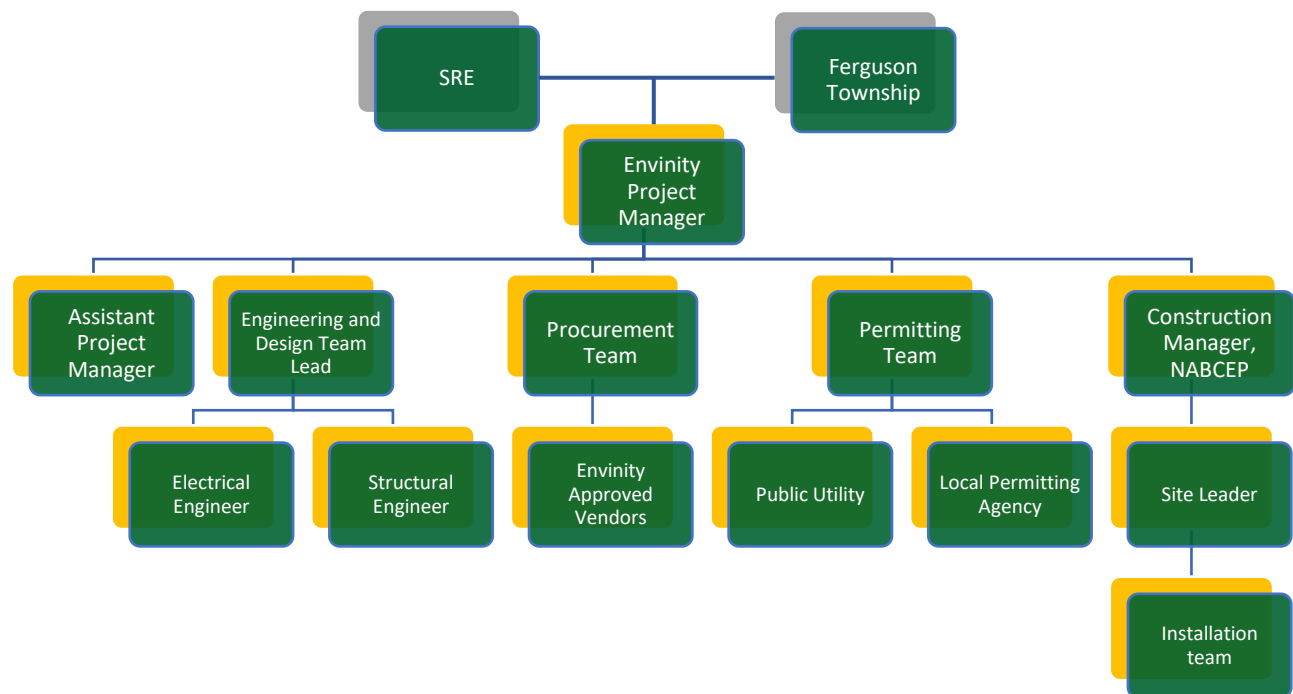
Figure 1 - UAJA's 2.6 MW solar array completed in 2018 was made possible in part by SRE.

All SRE references can be made available upon request.

PROJECT TEAM AND PROJECT ROLES

While each project is unique, Envinity believes in taking a consistent approach to structuring a team around the client that has the best chance for creating a great experience for all stakeholders. We believe in a central point of contact for the client and bringing in subject matter experts as the project evolves. On site, we maintain a consistent chain of command that puts the client in daily contact with experienced field leaders, and our team in daily communication to achieve the milestones and deliverables promised in the contract.

For the Ferguson Township Project, we would propose the following project organizational structure:



Under this organizational structure, Ferguson Township would authorize a Power Service Agreement with SRE. Envinity would be under agreement with SRE to carry out the full scope of work.

Envinity anticipates the following key personnel will be assigned to your project:



Jason Grottini

Vice President of Energy Services

Jason serves as the project lead for matters related to contracting, scope development, internal peer review, and overall project quality control. In his position at Envinity, Jason leads an interdisciplinary team of engineers, project managers, and field personnel to meet his clients' energy savings goals. Jason has been recognized for his project management ability through his work on the RE Farm Café, PSU 2015 Class Gift and GreenBuild projects in State College, PA.

Project Role: Project Manager



Shaun Pardi

President

Shaun is a founding member and President of Envinity. His primary role as it relates to our solar services is managing the group's operations. He serves as a mentor/manager to our design, estimating, permitting and procurement group, and can frequently be found performing quality control inspections of our commercial and industrial solar installations.

Project Role: Assistant Project Manager



Asa Myers, NABCEP PVIP

Solar Project Manager

Asa serves as the project manager for a wide variety of renewable energy projects. He is certified through the North American Board-Certified Energy Professionals as a solar installer. Asa is an employee-owner at Envinity and has been part of the company since 2008. He has been a part of the majority of Envinity's solar projects.

Project Role: Construction Management



Rodney K. Lynch, PE, HFDP, LEED AP BD+C

MEP Engineering Team Leader

Rodney leads Envinity's MEP Engineering team. Rodney develops, designs, and manages energy retrofit projects for commercial and institutional clients, and is responsible for technical analysis and document production for entire projects. This includes schematic design, detailed design, and construction administration of the project.

Project Role: Engineering Team Lead



Jim Baughman

Solar Project Manager

Jim is an experienced field leader well-versed in a variety of building trades including solar power, HVAC, and carpentry. He serves as the primary point of contact on site for our clients and directs the day-to-day operations of our installation teams.

Project Role: Site Leader



Matthew Rooke, PE, CPMP

Commissioning Team Leader

Matthew leads Envinity's Commissioning team and is involved in project management as well as active involvement in design review, sequence reviews, and functional testing. Matt has diverse experience in retro and new project commissioning in healthcare facilities, solar facilities, central plants, and other large institutions.

Project Role: Commissioning Professional



Lucas Reinke

Permitting and Procurement

Lucas is responsible for Envinity's solar permitting and procurement services and is well-versed in responsible solar design and regional code requirements. He serves as the back of office contact for our site teams, lending guidance on design decisions and material selections. Lucas is older than he looks.

Project Role: Solar Design and Estimating

Labor Practices & Workforce

Envinity would perform the desired scope utilizing the following labor:

Project & Construction Management	Envinity Employees
Permitting & Procurement	Envinity Employees
Electrical Design & Engineering	Envinity Employees
Structural Engineering (if needed)	Subcontractor
On Site Labor	Envinity Employees
Commissioning	Envinity Employees

All Envinity employees are full time and receive full benefits. Our benefits package includes health, vision, dental, retirement, long term and short-term disability, accident insurance, life insurance, paid holidays, paid vacation, paid flex time, two hours paid time off each Election Day, and a spot on the company softball team. Our employees believe in each other and the purpose behind their work.

A NABCEP certified Installation Professional (Asa Myers) will be assigned to your project to lead field operations.

All employees at Envinity have a minimum of OSHA 10, while all site leaders have obtained their OSHA 30. Further safety information is provided later in this response.

Project Team – Solar Renewable Energy, LLC

DOUGLAS BERRY, CPA

President and CEO

Mr. Berry is the CEO and President of Achieve Energy Solutions, LLC (AES), and Solar Renewable Energy, LLC (SRE). Mr. Berry has more than 25 years of experience providing a wide variety of energy solutions, solar energy systems, and real estate consulting and development services. He was a partner with KPMG for over 20-years. His experience includes the areas of energy solution services, capital investment and financing, development services, merger and acquisition, and strategic planning.

SETH BERRY, CPA

Manager

Mr. Berry previously worked as a Senior Auditor for Ernst and Young, LLP, a nationwide leading accounting and consulting firm. He has more than five years of experience in financial, business, and auditing primarily concentrated on energy clients. His clients included a Fortune 500 energy generation company, A Fortune 75 renewable energy division and a startup liquified natural gas company. He is responsible for financial modeling of projects; project management for construction of solar projects; and assisting with project equity, debt, and investment tax credit investors. Mr. Berry is currently involved in a wide array of project modeling and tax equity financing for current and potential clientele in the mid-Atlantic region, including New Jersey, Pennsylvania, Washington, D.C., and Massachusetts, ranging from ground mount and roof top to parking canopies and large floating solar arrays. Mr. Berry will provide front-end modeling and performance financial metric analytics for the project.

TECHNICAL SOLUTION AND SCOPE OF WORK

Design Summary – Base Bid

Envinity has developed the design for a 114.8 kW DC solar array at the Ferguson Township Public Works facility project site. This option is presented as our base bid to respond to the project requests made by the Township.

As currently designed and the basis of the project cost estimates, the system would be comprised of:

- (258) Tier I 445+ watt solar modules¹
- (2) SMA Sunny Tripower Core1 50-US-41inverters with extended 10-year warranty
- Ecolibrium Ecofoot2 ballasted racking system
- System monitoring provided through AlsoEnergy Portal
- All necessary balance of system components to complete the project to meet code and industry standards (NEC 2014, IBC 2015) including wiring, conduit, disconnects, combiners, junction boxes and labels
- Envinity employees to perform all design, engineering, permitting, utility interconnection, procurement, project management, installation, and commissioning

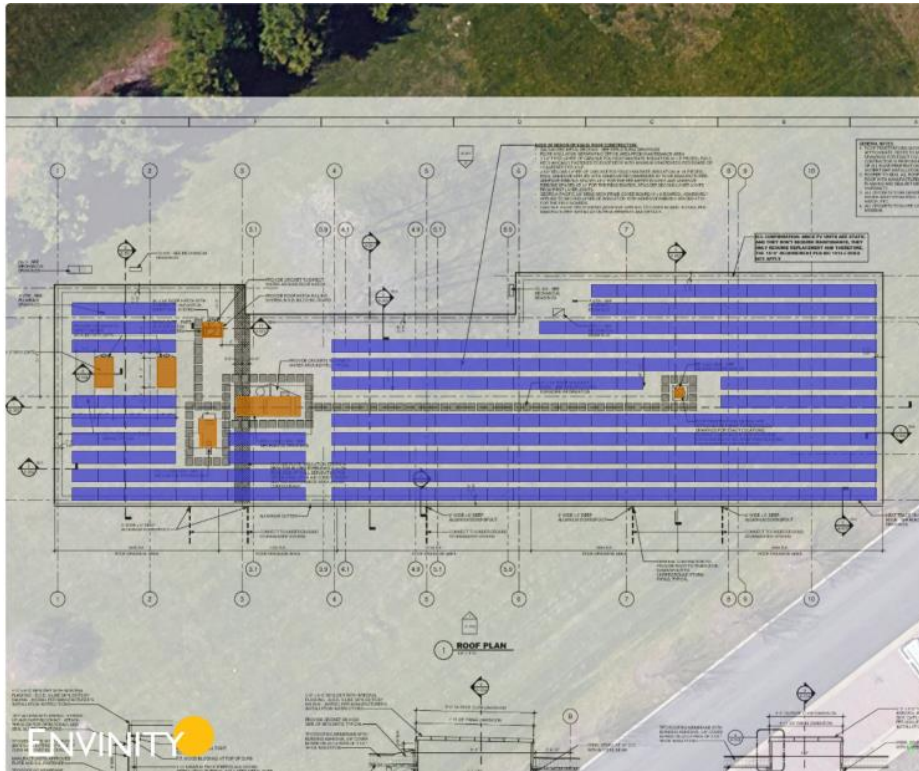


Figure 2 - Layout of a 114.8 kW solar array.

Final design to be approved by Owner and Owner's Representative.

¹ Basis of design is for Astronomy 445-watt modules. Actual module selected will depend on availability at the time of the Township authorizing notice to proceed with the project.

Design Summary – Alternative Bid

Envinity has developed an alternative design for a 114.8 kW DC solar array at the Ferguson Township Public Works facility project site (Base Bid) and a 109.0 kW DC solar array to be located on the adjacent maintenance facility. The total project size is 223.8 kW.

We are presenting this alternative for two reasons:

1. To achieve the goal of net positive energy at the new Public Works facility
2. To achieve a lower, more competitive PSA rate

If selected as the winning bidder, our team would like to further discuss the option of adding even more solar to the Township offices and facilities to achieve net positive energy across all accounts on the property.

As currently designed the alternative system would be comprised of:

- (503) Tier I 445+ watt solar modules²
- (4) SMA Sunny Tripower Core1 50-US-41inverters with extended 10-year warranty
- Ecolibrium Ecofoot2 ballasted racking system for Public Works facility
- IronRidge XR100 racking system for Maintenance Facility
- System monitoring provided through AlsoEnergy Portal
- All necessary balance of system components to complete the project to meet code and industry standards (NEC 2014, IBC 2015) including wiring, conduit, disconnects, combiners, junction boxes and labels.
- Envinity employees to perform all design, engineering, permitting, utility interconnection, procurement, project management, installation, and commissioning

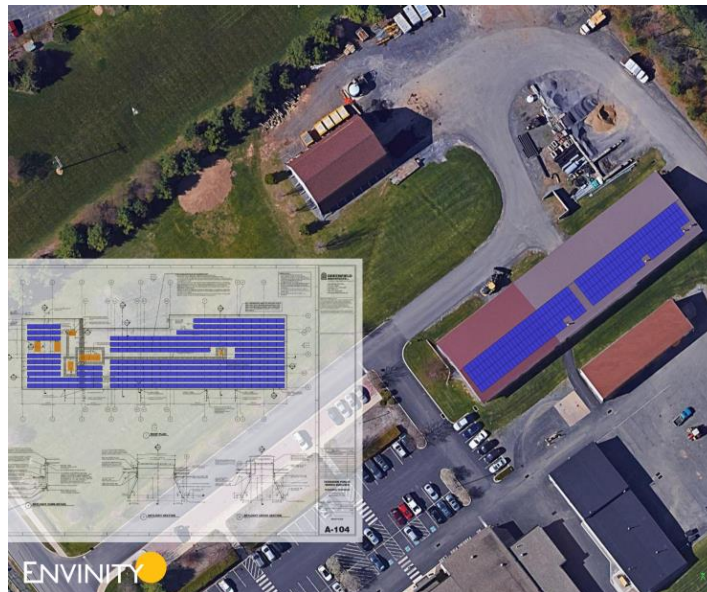


Figure 3 - Preliminary design for alternative bid 223.8 kW solar array

² Basis of design is for Astronomy 445-watt modules. Actual module selected will depend on availability at the time of the Township authorizing notice to proceed with the project.

*Please note that the design and the combined power service agreement rate on the adjacent facility should be considered preliminary at this stage. If Envinity is awarded the bid, our first step will be to firm up this design and pricing for final Township approval.

Major Product Specifications and Warranties for Base Bid

The following products are specified for this project:

1. Tier I Solar Modules – Astronomy AstroSemi Mono, 445-watt solar modules (basis of design)
 - a. 12-year manufacturer warranty on workmanship and labor
 - b. 25-year manufacturer production warranty at 84.8%
 - c. Product specification sheet attached
2. SMA Sunny TriPower Core 1
 - a. 10-year manufacturer warranty + 10-year extended warranty
 - b. Product specification sheet attached
3. Ecolibrium Racking System
 - a. 25-year warranty
 - b. Product specification sheet attached

In addition to the above product warranties, Envinity provides a (10) Year Limited Workmanship Warranty (warranty details attached) to SRE to maintain the system. If the Township decides to purchase the solar array at Year 6, Envinity will transfer our remaining warranty to the Township.

Engineering, Permitting and Procurement Plan

Upon authorization of the final agreement between parties, Envinity’s Project Manager will convene with the Engineering, Permitting and Procurement Team Leads to set the following in motion:

1. Work with Township and SRE on a final project design (if the alternate system option is selected)
2. Secure deliver of solar modules with approval from Township and SRE
3. Communicate with the public utility’s interconnection department
4. Schedule a site visit date with all applicable design team members
5. Contact local code and zoning authorities
6. Schedule recurring design team meetings and work with Project Manager and Owner on setting the engineering schedule and milestone targets
7. Prepare all permitting and interconnection paperwork ahead of engineering team so that we are ready to submit as soon as the design work is finalized
8. Place order for all remaining major equipment (inverters, and racking) and set delivery date
9. Develop balance of system bid list to share with preferred vendor network for competitive pricing

Operations and Maintenance Plan and System Monitoring

As part of the power service agreement, annual operations and maintenance will be provided by Envinity. Envinity would perform this service on behalf of SRE, with a primary focus of ensuring the solar array is producing at least to the minimum 90% performance guarantee. The scope of work that Envinity will provide to SRE for annual operations and maintenance is as follows:

1. Visual inspection of general site conditions, PV array, electrical equipment & connections, mounting structure, shading, vegetation, animal damage

2. Ongoing remote monitoring of system using the AlsoSolar monitoring system
3. Infrared scans of electrical equipment
4. Testing and verification of inverter strings
5. All associated administration and reporting

The scope of work also includes the following time and materials services:

1. On-call service to respond to issues
2. Service calls for troubleshooting that are not included as part of annual maintenance

Standard Exclusions:

1. Internet repair or service upgrades
2. Module cleaning
Vegetation management

Operations and maintenance of the system will be provided for the duration of the Power Service Agreement.

SYSTEM PRODUCTION

Both the base bid system and the alternative bid system option were modelled in Helioscope Advanced Solar Design software. Both production reports are attached to this proposal. Each system option is summarized as follows:

BASE BID – 114.8 kW	
System Metrics	
System Size DC	114.8 kW
System Size AC	100.0 kW
Annual Production Estimated	137.8 MWh
kWh/kW	1,200.3
Weather Data Set	TMY, State College (Penn State SURFRAD)
System Loss %	18.2%

ALTERNATIVE BID – 223.8 kW	
System Metrics	
System Size DC	223.8 kW
System Size AC	200 kW
Annual Production Estimated	266.9 MWh
kWh/kW	1,192.3
Weather Data Set	TMY, State College (Penn State SURFRAD)
System Loss %	19.7%

PRODUCTION GUARANTEE

SRE is guaranteeing 90% of the energy production estimated in the previous section.

BASE BID – 114.8 kW	
System Size DC	114.8 kW
System Size AC	100.0 kW
Annual Production Estimated	137.8 MWh
90% Production Guarantee	124.02 MWh

Currently, we are not able to place a guarantee on the alternative bid design. If the Township decides to pursue a larger project in line with what we have proposed, a 90% production guarantee will be extended on the final Helioscope estimate.

General terms of the production guarantee are: Calculations of amounts shall begin on January 1 of an applicable calendar year period. Minimum Annual Output will be reduced for the reasons, including weather adjustments, force majeure events, and customer and utility-caused outages. Further, Minimum Annual Output decreases due to anticipated degradation of the System due to wear and tear. If the generation of the Annual Output exceeds the Minimum Annual Output, then the excess carries forward to the next Annual Output period. For each subsequent Annual Output period, prior periods excess shall be carried forward from the preceding periods for the next period calculation.

INCENTIVES

SRE will monetize the higher valued PA SRECs produced by the solar system and replace with an equal quantity of qualifying Green Energy Certified RECs to maximize the cash return to the township and keep the building LEED v4 Gold Certified.

State and Federal Investment tax credits and depreciation will be utilized by the for-profit system owner.

Any grants or rebates, including but not limited to grants from the West Penn Power Sustainable Energy Fund, obtained in connection with the installation of the System will be split 50/50 between Ferguson Township and System Owner.

POWER SERVICE AGREEMENT

Our team is proposing a Power Service Agreement (PSA), as opposed to a Power Purchasing Agreement (PPA). After running numerous financial scenarios, it is our professional opinion that what we are proposing is the best path forward for Ferguson Township. As the details of any such agreement can get thick with details, we would welcome the opportunity to explain the differences between a PSA and PPA, and the reasoning behind our recommendation.

Base Bid: Power Service Agreement (PSA) w/ Prepayment

BASE BID – 114.8 kW	
Term Variables	Terms
Estimated PSA Payment	\$14,600 per year
Term of Agreement	28 years
Annual Escalation	2.0%
Buy Out Options	Year 6
Average Cost of Electricity (over 40 years)	\$0.066 per kWh
SREC Ownership	Ferguson Township

A full cash flow summary has been developed for this option and can be found attached.

Alternative Bid: Power Service Agreement (PSA) w/ Prepayment

ALTERNATIVE BID – 223.8 kW	
Term Variables	Terms
Estimated PSA Payment	\$26,700 per year
Term of Agreement	28 years
Annual Escalation	2.0%
Buy Out Options	Year 6
Average Cost of Electricity (over 40 years)	\$0.062 per kWh
SREC Ownership	Ferguson Township

A full cash flow summary has been developed for this option and can be found attached.

Currently Excluded from all PSA Pricing

- Structural modifications if required by engineer or local code office
- Internet access
- Transformer upgrade or other utility required upgrades
- Prevailing wage rates
- Module cleaning in annual maintenance
- Unforeseen underground conditions (alternative bid only)
- Patching of asphalt required for conduit run (alternative bid only)

Assumptions

- Design and construction to 2014 National Electric Code standards
- Structural drawings issued for construction are acceptable for regional code submission

SAFETY PLAN

Envinity invests in OSHA certification and continuous safety training for all employees. All site leaders working on this project will hold a current OSHA 30 certification, and all site laborers will hold at least an OSHA 10 certification.

Prior to all construction activities, the construction manager will perform a jobsite hazard analysis with the installation team. From that point forward, each morning includes a safety meeting to address known and potential safety hazards on site, and the appropriate PPE that will be required for the day's work. A flagged safety perimeter will be established prior to the start of installation that will be inspected by a member of Envinity's safety committee. Envinity would encourage a safety representative from the Township to meet with our team to discuss any safety requirements or important safety information upon the start of the project.

All field personnel are provided with the following PPE on site by Envinity:

- Electrically rated steel toe footwear
- ANSI Z89 rated hardhats
- OSHA approved ear and eye protection
- Insulated gloves for electrical work

Envinity has a Pennsylvania state certified safety committee to oversee employee trainings, policy, PPE, and PPE allowances. The safety committee is comprised of the company president, and a representative from each company department. The committee meets monthly to review and develop policy, decide on monthly training subjects, make safety equipment purchasing decisions, and field questions from the rest of the company.

Covid-19 Safety Plan

Envinity has addressed the Covid-19 pandemic with the utmost seriousness from the onset. We formed a COVID-19 Response Team that is made up of company leadership and HR committee members to develop a written policy and help our employees navigate the pandemic the best we can. The Response Team has continued to meet 2 to 3 times per week, every week, since March 2020, and have maintained consistent communication with all employees throughout. Envinity employees have been trained in mitigating the spread of the virus at work and would follow all company and Township COVID-19 requirements.

A copy of our COVID-19 Response Policy is attached.

PROJECT SCHEDULE

Envinity projects the following timeline for the proposed project:

Project Milestone	Start Date	End Date
Notice of Intent to Award	February 16, 2021	-
PPA Contract Executed	February 19, 2021	-
Project Notice to Proceed	March 15, 2021	-
Procure Major Equipment	March 15, 2021	March 19, 2021
Design and Engineering	March 15, 2021	April 2, 2021
Permitting and Interconnection	April 5, 2021	April 30, 2021
Solar Construction	May 3, 2021	June 4, 2021
Project Commissioning and Punch List	June 7, 2021	June 11, 2021
Inspections/Certificate of Completion/Permission to Operate	June 14, 2021	July 9, 2021

Envinity has several methods for maintaining and communicating the project schedule. Applicable strategies for this project include:

- Assigning an experienced Project Manager to serve as the single point of contact throughout the project
- Assigning an onsite Construction Manager with NABCEP certification at the start of the project who will attend all meetings
- Maintain a regular meeting schedule through the duration of the project
- Maintain an online project schedule that is available to all team members and Ownership
- Work with our preferred vendors to procure and hold major equipment early in the project
- Communicate with the utility interconnection office and local code agency early in the project prior to application submittals

The proposed project schedule assumes the Township achieves their target milestones listed in the RFP. Envinity will do all we can to help accelerate the portions of the project that are in the control of local code enforcement and utility interconnection.

PROPOSED TERMS AND CONDITIONS

A. DATE OF WORK COMMENCEMENT AND SUBSTANTIAL COMPLETION OF WORK

Commencement of work and time through substantial completion is specified in the proposal. Time does not include delays and adjustments for delays caused by additional time required for Additional Work, delays caused by Client in furnishing information, delays caused by Client's other consultants, and other delays unavoidable or beyond the control of Consultant. Client expressly authorizes Consultant to rely on the accuracy of any existing reports which are furnished to Consultant by Client or Client's consultants.

B. CONSULTANT COMPENSATION AND BILLING

Client agrees to pay Consultant as set forth below:

1. Solar owner will provide client with the full Power Service Agreement (PSA) upon request. The full contract will spell out all terms & conditions.
 - a. Once project has reached completion, client will pay the monthly PSA invoice on or before the first day of each calendar month in advance. As an example, the invoice for the upcoming January's production will be paid by client on or before January 1.

C. CONSULTANTS

Consultant is not responsible for the work of other consultants on the project. Client shall ensure that the work of other consultants does not delay or interfere with the work of consultant. Consultant shall not be responsible for any delays or interruptions of its work due to the acts of client or other consultant.

Consultant shall have no responsibility for the components of this agreement serviced by any other consultant retained by Client and shall not be liable for injuries or damages resulting from work of such consultants. Client agrees to promptly pay all consultants in accordance with the terms of the various Client/Consultant agreements. Failure to do so will delay progress of Consultant's work.

D. INSURANCE

Consultant will maintain the following insurances through the course of this Agreement:

Commercial General Liability
Each Occurrence \$1,000,000
Damage to Rented Premises \$500,000
Medical Expense \$15,000 per person
Personal & Adv. Injury \$1,000,000
General Aggregate \$3,000,000 per project
Products - Comp/Op. Agg. \$3,000,000 per project

Automobile Liability

\$1,000,000 combined single limit per occurrence including: Bodily Injury and Property Damage, and covering all owned, non-owned and hired vehicles

Workers' Compensation Statutory

Each Accident \$1,000,000
Disease-Each Employee \$1,000,000
Disease-Policy Limit \$1,000,000

Umbrella Liability

Each Occurrence \$4,000,000
Aggregate \$4,000,000

Professional Liability

Each Claim \$2,000,000
Aggregate \$2,000,000

E. LIMITATIONS ON REMEDIES

Neither party shall be liable to the other for any consequential damages incurred due to the fault of the other party, regardless of the nature of the fault or whether it was committed by Client or Consultant. Consequential damages include, but are not limited to, loss of use and loss of profit.

With regard to the services to be performed by the Consultant pursuant to the terms of this Agreement, the Consultant shall not be liable to the Client, or to anyone who may claim any right due to any relationship with the Client, for any acts or omissions in the performance of the services on the part of the Consultant or in the part of the agents or employees of the Consultant, except when these acts or omissions of the Consultant are due to their willful misconduct or culpable negligence. The Client shall hold the Consultant free and harmless from any obligations, costs, claims, judgments, attorney's fees, and attachments arising from or growing out of the services rendered to Client pursuant to the terms of this Agreement or in any way connected with the rendering of services, except when the same shall arise due to the willful misconduct or culpable negligence of the Consultant and the Consultant is adjudged to be guilty of willful misconduct or culpable negligence by a court of competent jurisdiction.

In recognition of the relative risks, rewards, and benefits of the project to both Client and Consultant, the risks have been allocated so that Client agrees to limit Consultant's liability under this Agreement to the actual amount of damages suffered, or the 2 times the amount of compensation paid under this Agreement to Consultant for services, whichever is less. If client prefers not to limit liability to this sum, Consultant can adjust this limitation if Client pays additional consideration for this adjustment.

F. TERMINATION FOR CONVENIENCE

Either Client or Consultant may terminate this Agreement at any time, with or without cause, upon giving the other party ten (10) days prior written notice. Client shall within ten (10) days of termination pay Consultant for all services rendered and all costs incurred up to the date of termination in accordance with the provisions of this Agreement. Consultant shall apply the initial

deposit to all costs incurred up to date of termination with the unapplied deposit, if applicable, refunded to Client. No work product (complete or incomplete) will be released to Client until Consultant has been paid in full for all work completed through the date of termination. Such work product will be released to Client within 10 business days of payment.

G. DISPUTE RESOLUTION AND ATTORNEY'S FEES

Any controversy or claim arising out of or related to this Agreement involving an amount less than \$12,000 must be heard by the District Magistrate in State College, Pennsylvania. Any dispute over the dollar limit of the District Magistrate arising out of this Agreement shall be submitted to binding arbitration before the American Arbitration Association in accordance with the Rules of the American Arbitration Association then in effect. Judgment upon the award may be entered in any Court having jurisdiction thereof.

The prevailing party in any legal proceeding related to this Agreement shall be entitled to payment of reasonable attorney's fees, costs, and post-judgment interest at the legal rate.

H. CLIENT RESPONSIBILITIES

Client agrees to provide Consultant with full information as set forth in this Agreement including, but not limited to objectives, schedule, constraints, budget, hazardous materials data, and a copy of the full set of construction drawings, if such drawings exist. Client will make a diligent effort to locate such drawings. All original materials will be returned to the Client. Scaled photocopies of any existing blueprints or construction drawings will be acceptable. Consultant is not responsible for the accuracy of Client-provided information.

End Terms and Conditions

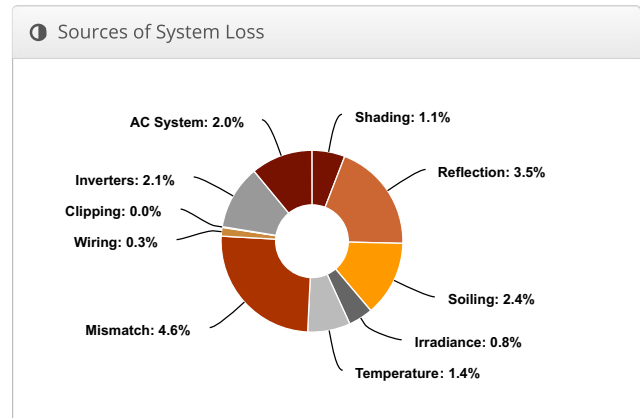
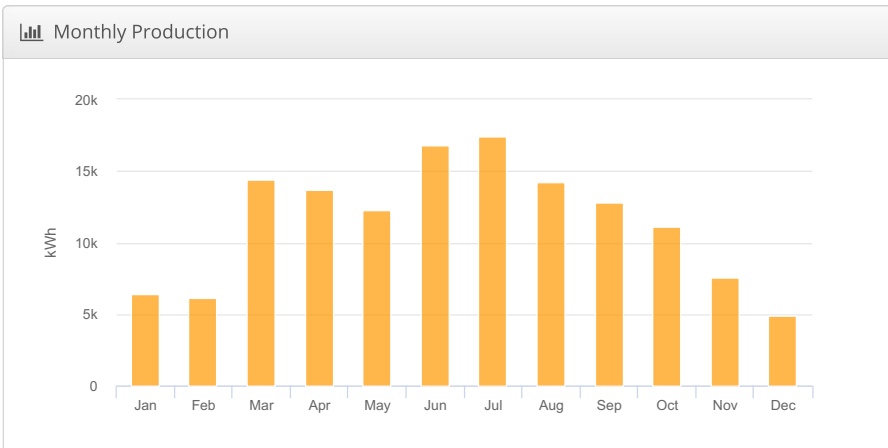
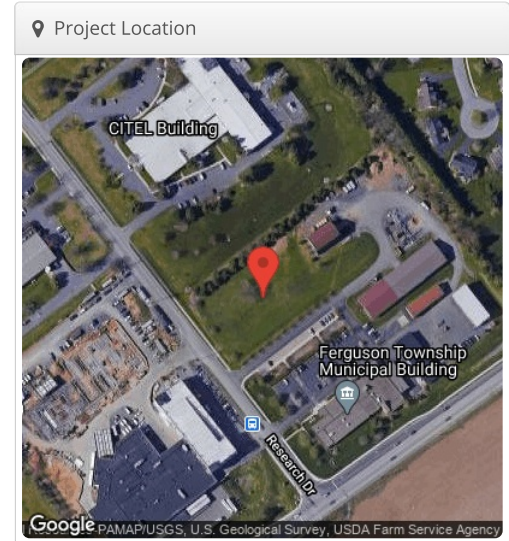
ATTACHMENT A: HELIOSCOPE PRODUCTION REPORT

Spec System Astronergy 445

Ferguson Township Public Works, 3147 Research Drive, State College, PA 16801

Report	
Project Name	Ferguson Township Public Works
Project Address	3147 Research Drive, State College, PA 16801
Prepared By	Lucas Reinke lreinke@envinity.com

System Metrics	
Design	Spec System Astronergy 445
Module DC Nameplate	114.8 kW
Inverter AC Nameplate	100.0 kW Load Ratio: 1.15
Annual Production	137.8 MWh
Performance Ratio	83.1%
kWh/kWp	1,200.3
Weather Dataset	TMY, STATE COLLEGE [PENN STATE - SURFRAD], NSRDB (tmy3, II)
Simulator Version	8a7215b171-d9c7bb36e2-077dbb99ac-acffd7d0a7



Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,340.7	
	POA Irradiance	1,443.5	7.7%
	Shaded Irradiance	1,428.1	-1.1%
	Irradiance after Reflection	1,377.5	-3.5%
	Irradiance after Soiling	1,343.8	-2.4%
	Total Collector Irradiance	1,343.8	0.0%
Energy (kWh)	Nameplate	154,280.1	
	Output at Irradiance Levels	153,056.8	-0.8%
	Output at Cell Temperature Derate	150,940.3	-1.4%
	Output After Mismatch	144,043.3	-4.6%
	Optimal DC Output	143,639.9	-0.3%
	Constrained DC Output	143,603.2	0.0%
	Inverter Output	140,618.1	-2.1%
	Energy to Grid	137,805.8	-2.0%
Temperature Metrics			
	Avg. Operating Ambient Temp		12.6 °C
	Avg. Operating Cell Temp		20.2 °C
Simulation Metrics			
	Operating Hours		4448
	Solved Hours		4448

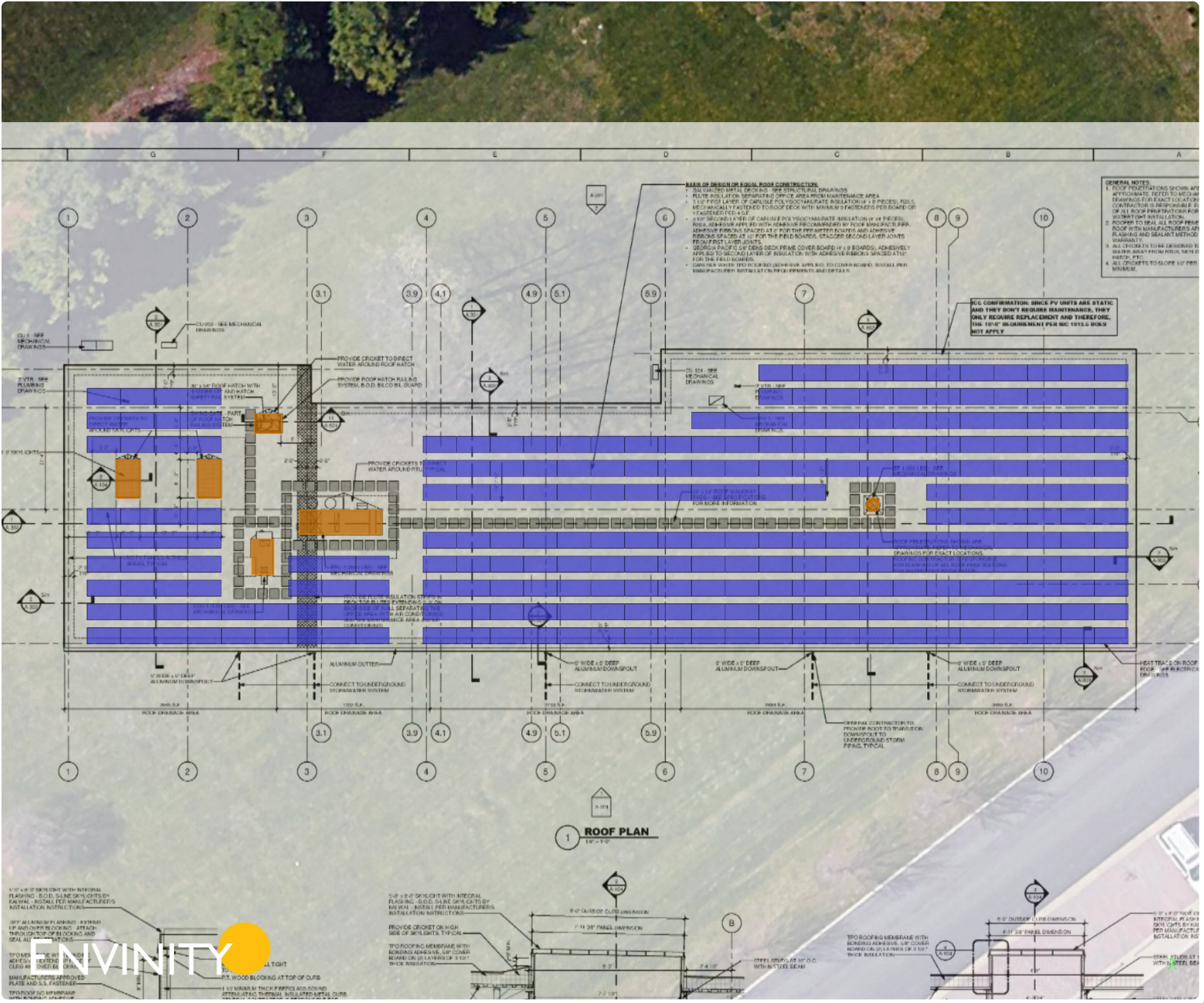
Condition Set												
Description	Condition Set 2											
Weather Dataset	TMY, STATE COLLEGE [PENN STATE - SURFRAD], NSRDB (tmy3, II)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
	East-West	-3.56	-0.075	3°C								
	Carport	-3.56	-0.075	3°C								
Soiling (%)	J	F	M	A	M	J	J	A	S	O	N	D
	7	3	3	2	2	2	2	2	2	2	2	4
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	2.00%											
Module Characterizations	Module	Uploaded By		Characterization								
	CHSM72M-HC 445 (Astronergy)	Folsom Labs		Spec Sheet Characterization, PAN								
Component Characterizations	Device	Uploaded By		Characterization								
	Sunny Tripower_Core1 50-US-41 (SMA)	Folsom Labs		Default Characterization								

Components		
Component	Name	Count
Inverters	Sunny Tripower_Core1 50-US-41 (SMA)	2 (100.0 kW)
Strings	10 AWG (Copper)	16 (1,950.9 ft)
Module	Astronergy, CHSM72M-HC 445 (445W)	258 (114.8 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	4-18	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	180°	1.6 ft	1x1	258	258	114.8 kW

Detailed Layout

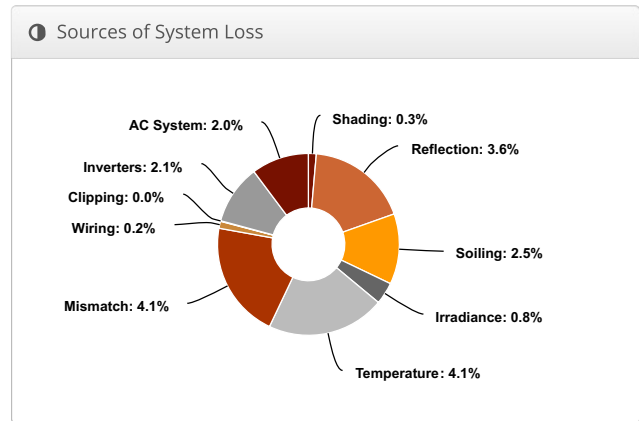
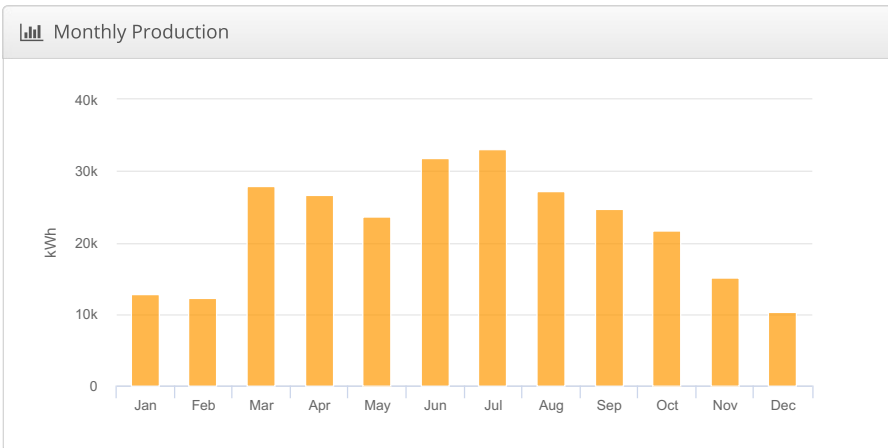
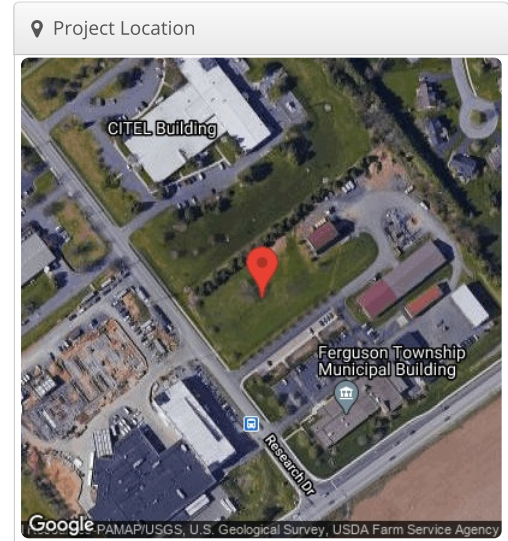


Alternative System Astronergy 445

Ferguson Township Public Works, 3147 Research Drive, State College, PA 16801

Report	
Project Name	Ferguson Township Public Works
Project Address	3147 Research Drive, State College, PA 16801
Prepared By	Lucas Reinke lreinke@envinity.com

System Metrics	
Design	Alternative System Astronergy 445
Module DC Nameplate	223.8 kW
Inverter AC Nameplate	200.0 kW Load Ratio: 1.12
Annual Production	266.9 MWh
Performance Ratio	82.0%
kWh/kWp	1,192.3
Weather Dataset	TMY, STATE COLLEGE [PENN STATE - SURFRAD], NSRDB (tmy3, II)
Simulator Version	8a7215b171-d9c7bb36e2-077dbb99ac-acffd7d0a7



Annual Production

	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,340.7	
	POA Irradiance	1,454.6	8.5%
	Shaded Irradiance	1,450.6	-0.3%
	Irradiance after Reflection	1,399.0	-3.6%
	Irradiance after Soiling	1,364.6	-2.5%
	Total Collector Irradiance	1,364.7	0.0%
Energy (kWh)	Nameplate	305,449.0	
	Output at Irradiance Levels	303,106.4	-0.8%
	Output at Cell Temperature Derate	290,642.5	-4.1%
	Output After Mismatch	278,811.3	-4.1%
	Optimal DC Output	278,134.8	-0.2%
	Constrained DC Output	278,078.7	0.0%
	Inverter Output	272,322.3	-2.1%
	Energy to Grid	266,875.9	-2.0%
Temperature Metrics			
	Avg. Operating Ambient Temp		12.6 °C
	Avg. Operating Cell Temp		24.3 °C
Simulation Metrics			
	Operating Hours		4448
	Solved Hours		4448

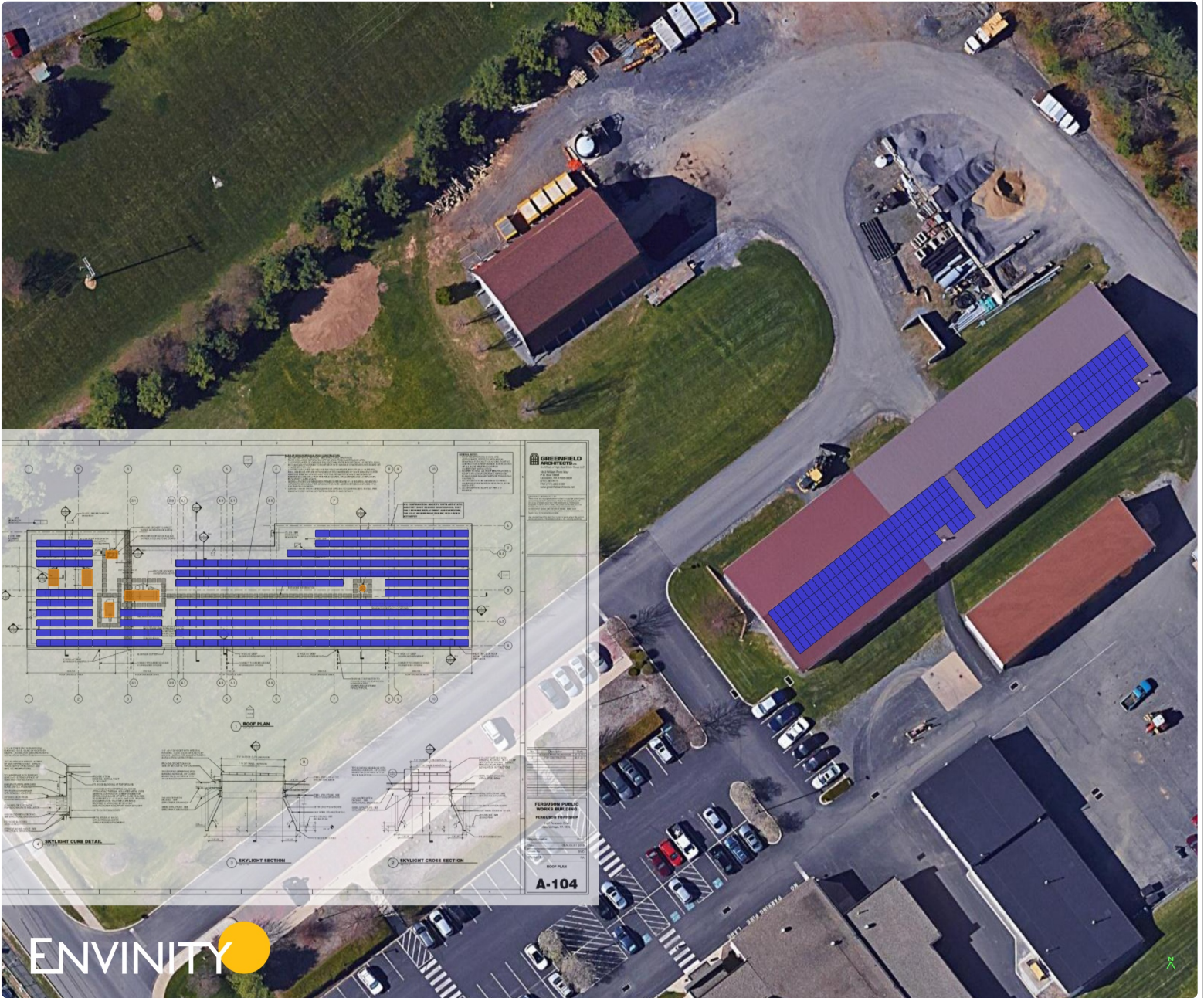
Condition Set												
Description	Condition Set 2											
Weather Dataset	TMY, STATE COLLEGE [PENN STATE - SURFRAD], NSRDB (tmy3, II)											
Solar Angle Location	Meteo Lat/Lng											
Transposition Model	Perez Model											
Temperature Model	Sandia Model											
Temperature Model Parameters	Rack Type	a	b	Temperature Delta								
	Fixed Tilt	-3.56	-0.075	3°C								
	Flush Mount	-2.81	-0.0455	0°C								
	East-West	-3.56	-0.075	3°C								
Soiling (%)	Carport	-3.56	-0.075	3°C								
	J	F	M	A	M	J	J	A	S	O	N	D
	7	3	3	2	2	2	2	2	2	2	2	4
	Irradiation Variance											
5%												
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	2.00%											
Module Characterizations	Module	Uploaded By		Characterization								
	CHSM72M-HC 445 (Astronergy)	Folsom Labs		Spec Sheet Characterization, PAN								
Component Characterizations	Device	Uploaded By		Characterization								
	Sunny Tripower_Core1 50-US-41 (SMA)	Folsom Labs		Default Characterization								

Components		
Component	Name	Count
Inverters	Sunny Tripower_Core1 50-US-41 (SMA)	4 (200.0 kW)
Strings	10 AWG (Copper)	30 (3,695.5 ft)
Module	Astronergy, CHSM72M-HC 445 (445W)	503 (223.8 kW)

Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	12	4-18	Along Racking
Wiring Zone 2	12	4-18	Along Racking

Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Fixed Tilt	Landscape (Horizontal)	10°	180°	1.6 ft	1x1	258	258	114.8 kW
Field Segment 2	Flush Mount	Portrait (Vertical)	18.43°	142.04044°	0.0 ft	1x1	245	245	109.0 kW

Detailed Layout



ATTACHMENT B: POWER SERVICE AGREEMENT CASH FLOW SUMMARIES

Power Service Agreement (PSA)

- Year 1 - \$14,600 annual, paid monthly
- PSA Payment Escalation Rate - 2%
- REC's (Renewable Energy Credit) go to HOST

40 YEAR CASH FLOWS

28-year PSA (Power Service Agreement) - buyout in year 6

Debt Financing beginning in year 6

30-year term, 2% interest rate

40 year Cash Flow Schedule

1) Buyout in year 6 - funding via long-term, low-interest debt financing (equity/non-debt buyout is available as well)

2) Average cost of electricity over the next 40 years - \$0.066/kWh (see M)

Private & Confidential

Year	1		2		C	D = A/1000 x B		E = A x C		F = D + E			K = G + H + I + J			L = F - K		M = (K - D) / A
	A	B	C	D		E	F	G	H	I	J	K	L	M				
	Solar Electricity Generated	Solar Renewable Energy Credit Unit	Avoided Cost of Electricity	SREC	Electricity	Total Cash	Contract Service	Debt Financing/Down-Payment		Operations and Maintenance	Total Cash	Net Cash	Cumulative Net Cash	Cost of Electric Rate/kWh				
	(kWhs)	Value	(kWh)	Income	Savings	Inflows	Payment	Principal	Interest	Maintenance	Outflows	Flows	Flows					
1	137,800	\$ 22	\$ 0.056	\$ 3,032	\$ 7,717	\$ 10,748	\$ 14,600				\$ 14,600	\$ (3,852)	\$ (3,852)	\$ 0.084				
2	137,114	\$ 22	0.057	3,017	7,832	10,848	14,892				14,892	(4,044)	(7,895)	0.087				
3	136,432	\$ 22	0.058	3,002	7,949	10,950	15,190				15,190	(4,239)	(12,135)	0.089				
4	135,753	\$ 22	0.059	2,987	8,068	11,054	15,494				15,494	(4,440)	(16,574)	0.092				
5	135,078	\$ 22	0.061	2,972	8,188	11,160	15,804				15,804	(4,644)	(21,218)	0.095				
6	134,406	\$ 15	0.062	2,016	8,310	10,326	-	\$ 4,034	\$ 3,273	\$ 1,715	9,021	1,305	(19,913)	0.052				
7	133,737	\$ 15	0.063	2,006	8,434	10,440	-	\$ 4,114	\$ 3,192	\$ 1,758	9,064	1,376	(18,537)	0.053				
8	133,072	\$ 15	0.064	1,996	8,560	10,556	-	\$ 4,197	\$ 3,110	\$ 1,802	9,108	1,448	(17,089)	0.053				
9	132,410	\$ 15	0.066	1,986	8,688	10,674	-	\$ 4,280	\$ 3,026	\$ 1,847	9,153	1,521	(15,568)	0.054				
10	131,751	\$ 15	0.067	1,976	8,817	10,794	-	\$ 4,366	\$ 2,940	\$ 1,893	9,199	1,594	(13,974)	0.055				
11	131,096	\$ 15	0.068	1,966	8,949	10,916	-	\$ 4,453	\$ 2,853	\$ 1,940	9,247	1,669	(12,305)	0.056				
12	130,444	\$ 15	0.070	1,957	9,083	11,039	-	\$ 4,542	\$ 2,764	\$ 1,989	9,295	1,744	(10,561)	0.056				
13	129,795	\$ 15	0.071	1,947	9,218	11,165	-	\$ 4,633	\$ 2,673	\$ 2,039	9,345	1,820	(8,741)	0.057				
14	129,149	\$ 15	0.072	1,937	9,356	11,293	-	\$ 4,726	\$ 2,580	\$ 2,090	9,396	1,897	(6,843)	0.058				
15	128,506	\$ 15	0.074	1,928	9,495	11,423	-	\$ 4,821	\$ 2,486	\$ 2,142	9,448	1,975	(4,868)	0.059				
16	127,867	\$ 10	0.075	1,279	9,637	10,916	-	\$ 4,917	\$ 2,389	\$ 2,195	9,502	1,414	(3,454)	0.064				
17	127,231	\$ 10	0.077	1,272	9,781	11,053	-	\$ 5,015	\$ 2,291	\$ 2,250	9,557	1,497	(1,958)	0.065				
18	126,598	\$ 10	0.078	1,266	9,927	11,193	-	\$ 5,116	\$ 2,191	\$ 2,306	9,613	1,580	(377)	0.066				
19	125,968	\$ 10	0.080	1,260	10,075	11,335	-	\$ 5,218	\$ 2,088	\$ 2,364	9,670	1,664	1,287	0.067				
20	125,341	\$ 10	0.082	1,253	10,226	11,479	-	\$ 5,322	\$ 1,984	\$ 2,423	9,730	1,749	3,036	0.068				
21	124,718	\$ 10	0.083	1,247	10,378	11,625	-	\$ 5,429	\$ 1,878	\$ 11,669	18,975	(7,350)	(4,313)	0.142				
22	124,097	\$ 10	0.085	1,241	10,533	11,774	-	\$ 5,537	\$ 1,769	\$ 2,546	9,852	1,922	(2,391)	0.069				
23	123,480	\$ 10	0.087	1,235	10,690	11,925	-	\$ 5,648	\$ 1,658	\$ 2,610	9,916	2,009	(382)	0.070				
24	122,865	\$ 10	0.088	1,229	10,850	12,078	-	\$ 5,761	\$ 1,545	\$ 2,675	9,981	2,097	1,715	0.071				
25	122,254	\$ 10	0.090	1,223	11,012	12,234	-	\$ 5,876	\$ 1,430	\$ 2,742	10,048	2,186	3,901	0.072				
26	121,646	\$ 10	0.092	1,216	11,176	12,393	-	\$ 5,994	\$ 1,313	\$ 2,810	10,117	2,276	6,177	0.073				
27	121,041	\$ 10	0.094	1,210	11,343	12,553	-	\$ 6,114	\$ 1,193	\$ 2,880	10,187	2,367	8,544	0.074				
28	120,439	\$ 10	0.096	1,204	11,512	12,717	-	\$ 6,236	\$ 1,070	\$ 2,952	10,259	2,458	11,002	0.075				
29	119,839	\$ 10	0.097	1,198	11,684	12,882	-	\$ 6,361	\$ 946	\$ 3,026	10,333	2,550	13,552	0.076				
30	119,243	\$ 10	0.099	1,192	11,858	13,051	-	\$ 6,488	\$ 819	\$ 3,102	10,408	2,643	16,194	0.077				
31	118,650	\$ 10	0.101	1,186	12,035	13,222	-	\$ 6,618	\$ 689	\$ 3,179	10,486	2,736	18,930	0.078				
32	118,060	\$ 10	0.103	1,181	12,215	13,396	-	\$ 6,750	\$ 556	\$ 3,259	10,565	2,830	21,761	0.079				
33	117,472	\$ 10	0.106	1,175	12,397	13,572	-	\$ 6,885	\$ 421	\$ 3,340	10,647	2,925	24,686	0.081				
34	116,888	\$ 10	0.108	1,169	12,582	13,751	-	\$ 7,023	\$ 284	\$ 3,424	10,730	3,021	27,707	0.082				
35	116,306	\$ 10	0.110	1,163	12,770	13,933	-	\$ 7,163	\$ 143	\$ 3,510	10,816	3,117	30,824	0.083				
36	115,728	\$ 10	0.112	1,157	12,961	14,118	-	-	-	\$ 3,597	3,597	10,521	41,345	0.021				
37	115,152	\$ 10	0.114	1,152	13,154	14,306	-	-	-	\$ 3,687	3,687	10,619	51,964	0.022				
38	114,579	\$ 10	0.117	1,146	13,351	14,496	-	-	-	\$ 3,779	3,779	10,717	62,681	0.023				
39	114,009	\$ 10	0.119	1,140	13,550	14,690	-	-	-	\$ 3,874	3,874	10,816	73,497	0.024				
40	113,442	\$ 10	0.121	1,134	13,752	14,886	-	-	-	\$ 3,971	3,971	10,916	84,412	0.025				
	5,009,456			\$ 64,853	\$ 418,114	\$ 482,967	\$ 75,979	\$ 163,635	\$ 55,554	\$ 103,386	\$ 398,554	\$ 84,412	\$ 0.066	40-year Average Electricity Cost/kWh				

Savings

1 The solar panels installed are Bloomberg tier-1 rated panels. The solar panels come with a 30-year power production warranty.

2 Solar Renewable Energy Credits (SREC's) are "green certificates" awarded for each 1,000 kWhs of solar electricity generated in PA. The credits are traded on a managed market in the state. The \$22 value shown in column B is equivalent to \$0.022/kWh. However, the solar industry is expecting PA SREC values to increase over the next several years.

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4 Columns H and I show the principal and interest payments for the 30-year term, low-interest tax-exempt financing offered on solar arrays in note 4 above.

5 Operations and maintenance are included in the contract service payments until you have elected to buyout the solar system. After system purchase, an operations and maintenance contract will pay for routine system maintenance. The cash flow assumes the inverters will carry a 20-year inverter warranty, and will need fully replaced in year 21.

Power Service Agreement (PSA)

- Year 1 - \$26,700 annual, paid monthly
- PSA Payment Escalation Rate - 2%
- REC's (Renewable Energy Credit) go to HOST

40 YEAR CASH FLOWS

28-year PSA (Power Service Agreement) - buyout in year 6

Debt Financing beginning in year 6

30-year term, 2% interest rate

40 year Cash Flow Schedule

1) Buyout in year 6 - funding via long-term, low-interest debt financing (equity/non-debt buyout is available as well)

2) Average cost of electricity over the next 40 years - \$0.062/kWh (see M)

Private & Confidential

Year	1	2	C	D = A/1000 x B	E = A x C	F = D + E	3	4	5	J	K = G + H + I + J	L = F - K	M = (K - D) / A	
	A	B	C	D = A/1000 x B	E = A x C	F = D + E	G	H	I	J	K = G + H + I + J	L = F - K	M = (K - D) / A	
	Solar Electricity Generated	Solar Renewable Energy Credit Unit	Avoided Cost of Electricity	SREC Income	Electricity Savings	Total Cash Inflows	Contract Service Payment	Debt Financing/Down-Payment		Operations and Maintenance	Total Cash Outflows	Net Cash Flows	Cumulative Net Cash Flows	Cost of Electric Rate/kWh
Year	(kWhs)	Value	(kWh)	Income	Savings	Inflows	Payment	Principal	Interest	Maintenance	Outflows	Flows	Flows	Rate/kWh
1	266,900	\$ 22	\$ 0.056	\$ 5,872	\$ 14,946	\$ 20,818	\$ 26,700				\$ 26,700	\$ (5,882)	\$ (5,882)	\$ 0.078
2	265,572	\$ 22	0.057	5,843	15,169	21,012	27,234				27,234	(6,222)	(12,104)	\$ 0.081
3	264,251	\$ 22	0.058	5,814	15,396	21,209	27,779				27,779	(6,569)	(18,673)	\$ 0.083
4	262,936	\$ 22	0.059	5,785	15,626	21,410	28,334				28,334	(6,924)	(25,597)	\$ 0.086
5	261,628	\$ 22	0.061	5,756	15,859	21,615	28,901				28,901	(7,286)	(32,883)	\$ 0.088
6	260,326	\$ 15	0.062	3,905	16,096	20,000	-	\$ 7,835	\$ 6,357	\$ 2,718	16,910	3,091	(29,792)	\$ 0.050
7	259,031	\$ 15	0.063	3,885	16,336	20,221	-	\$ 7,992	\$ 6,200	\$ 2,786	16,978	3,244	(26,549)	\$ 0.051
8	257,743	\$ 15	0.064	3,866	16,580	20,446	-	\$ 8,152	\$ 6,040	\$ 2,855	17,047	3,398	(23,150)	\$ 0.051
9	256,460	\$ 15	0.066	3,847	16,827	20,674	-	\$ 8,315	\$ 5,877	\$ 2,927	17,119	3,555	(19,595)	\$ 0.052
10	255,184	\$ 15	0.067	3,828	17,078	20,906	-	\$ 8,481	\$ 5,711	\$ 3,000	17,192	3,714	(15,881)	\$ 0.052
11	253,915	\$ 15	0.068	3,809	17,333	21,142	-	\$ 8,650	\$ 5,542	\$ 3,075	17,267	3,875	(12,006)	\$ 0.053
12	252,652	\$ 15	0.070	3,790	17,592	21,382	-	\$ 8,823	\$ 5,369	\$ 3,152	17,344	4,038	(7,968)	\$ 0.054
13	251,395	\$ 15	0.071	3,771	17,854	21,625	-	\$ 9,000	\$ 5,192	\$ 3,231	17,423	4,203	(3,765)	\$ 0.054
14	250,144	\$ 15	0.072	3,752	18,121	21,873	-	\$ 9,180	\$ 5,012	\$ 3,311	17,503	4,370	604	\$ 0.055
15	248,899	\$ 15	0.074	3,733	18,391	22,125	-	\$ 9,364	\$ 4,828	\$ 3,394	17,586	4,539	5,143	\$ 0.056
16	247,661	\$ 10	0.075	2,477	18,666	21,142	-	\$ 9,551	\$ 4,641	\$ 3,479	17,671	3,472	8,615	\$ 0.061
17	246,429	\$ 10	0.077	2,464	18,944	21,409	-	\$ 9,742	\$ 4,450	\$ 3,566	17,758	3,651	12,265	\$ 0.062
18	245,203	\$ 10	0.078	2,452	19,227	21,679	-	\$ 9,937	\$ 4,255	\$ 3,655	17,847	3,832	16,097	\$ 0.063
19	243,983	\$ 10	0.080	2,440	19,514	21,954	-	\$ 10,135	\$ 4,057	\$ 3,746	17,938	4,016	20,113	\$ 0.064
20	242,769	\$ 10	0.082	2,428	19,805	22,233	-	\$ 10,338	\$ 3,854	\$ 3,840	18,032	4,201	24,314	\$ 0.064
21	241,561	\$ 10	0.083	2,416	20,101	22,517	-	\$ 10,545	\$ 3,647	21,985	36,177	(13,661)	10,653	\$ 0.140
22	240,359	\$ 10	0.085	2,404	20,401	22,805	-	\$ 10,756	\$ 3,436	\$ 4,035	18,227	4,578	15,231	\$ 0.066
23	239,164	\$ 10	0.087	2,392	20,706	23,097	-	\$ 10,971	\$ 3,221	\$ 4,135	18,327	4,770	20,001	\$ 0.067
24	237,974	\$ 10	0.088	2,380	21,015	23,394	-	\$ 11,190	\$ 3,002	\$ 4,239	18,431	4,964	24,965	\$ 0.067
25	236,790	\$ 10	0.090	2,368	21,328	23,696	-	\$ 11,414	\$ 2,778	\$ 4,345	18,537	5,159	30,124	\$ 0.068
26	235,612	\$ 10	0.092	2,356	21,647	24,003	-	\$ 11,642	\$ 2,550	\$ 4,453	18,645	5,357	35,482	\$ 0.069
27	234,440	\$ 10	0.094	2,344	21,970	24,314	-	\$ 11,875	\$ 2,317	\$ 4,565	18,757	5,557	41,039	\$ 0.070
28	233,273	\$ 10	0.096	2,333	22,298	24,630	-	\$ 12,113	\$ 2,079	\$ 4,679	18,871	5,759	46,798	\$ 0.071
29	232,113	\$ 10	0.097	2,321	22,630	24,951	-	\$ 12,355	\$ 1,837	\$ 4,796	18,988	5,964	52,762	\$ 0.072
30	230,958	\$ 10	0.099	2,310	22,968	25,278	-	\$ 12,602	\$ 1,590	\$ 4,916	19,108	6,170	58,932	\$ 0.073
31	229,809	\$ 10	0.101	2,298	23,311	25,609	-	\$ 12,854	\$ 1,338	\$ 5,039	19,231	6,378	65,311	\$ 0.074
32	228,666	\$ 10	0.103	2,287	23,659	25,946	-	\$ 13,111	\$ 1,081	\$ 5,165	19,357	6,589	71,900	\$ 0.075
33	227,528	\$ 10	0.106	2,275	24,012	26,287	-	\$ 13,373	\$ 819	\$ 5,294	19,486	6,802	78,701	\$ 0.076
34	226,396	\$ 10	0.108	2,264	24,370	26,634	-	\$ 13,641	\$ 551	\$ 5,426	19,618	7,016	85,717	\$ 0.077
35	225,270	\$ 10	0.110	2,253	24,734	26,987	-	\$ 13,914	\$ 278	\$ 5,562	19,754	7,233	92,951	\$ 0.078
36	224,149	\$ 10	0.112	2,241	25,103	27,345	-	-	-	\$ 5,701	5,701	21,644	114,595	\$ 0.015
37	223,034	\$ 10	0.114	2,230	25,478	27,708	-	-	-	\$ 5,843	5,843	21,865	136,460	\$ 0.016
38	221,924	\$ 10	0.117	2,219	25,858	28,077	-	-	-	\$ 5,989	5,989	22,088	158,548	\$ 0.017
39	220,820	\$ 10	0.119	2,208	26,244	28,452	-	-	-	\$ 6,139	6,139	22,313	180,861	\$ 0.018
40	219,721	\$ 10	0.121	2,197	26,636	28,833	-	-	-	\$ 6,292	6,292	22,541	203,402	\$ 0.019
	9,702,639			\$ 125,611	\$ 809,830	\$ 935,441	\$ 138,948	\$ 317,851	\$ 107,910	\$ 167,331	\$ 732,039	\$ 203,402	\$ 203,402	\$ 0.062

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Savings

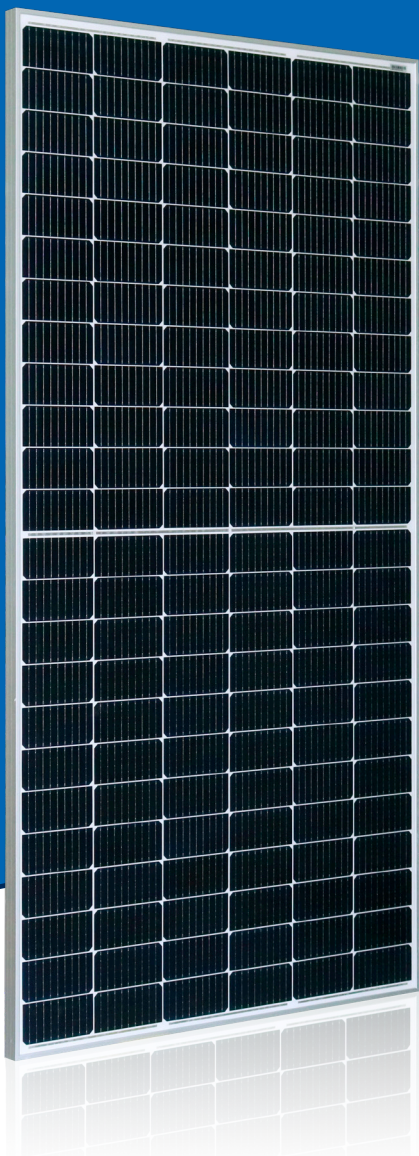
40-year Average Electricity Cost/kWh

ATTACHMENT C: PRODUCT SPECIFICATIONS AND WARRANTIES

*Full product warranty documentation are available upon request

AstroSemi™

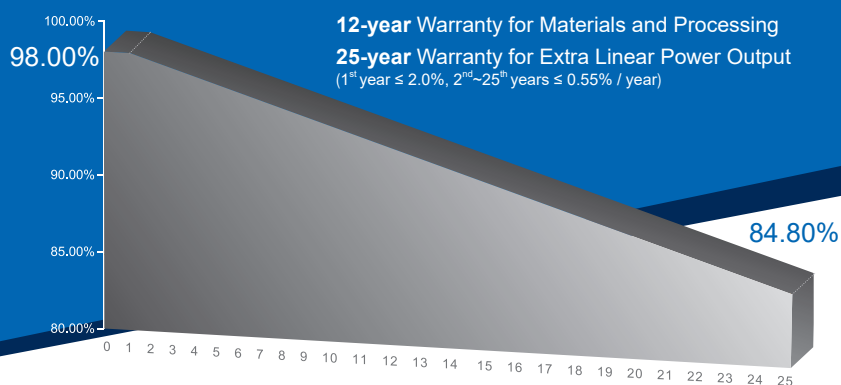
Incredible Power for Small Body



445W~455W

Monocrystalline PV Module

CHSM72M-HC Series (166)



KEY FEATURES

- OUTPUT POSITIVE TOLERANCE**
 Guaranteed 0~+5W positive tolerance ensure power output reliability.
- INNOVATIONAL HALF-CELL TECHNOLOGY**
 Improve the module output, decrease the risk of micro cracking, enhance the module reliability.
- INNOVATIVE PERC CELL TECHNOLOGY**
 Excellent cell efficiency and output.
- REDUCE SHADOW LOSS**
 Effectively reduce the effect of shading on the module surface.
- REDUCE INTERNAL MISMATCH LOSS**
 Reduce mismatch loss and improve output.
- PASSED HAIL TEST**
 Certified to hail resistance: ice ball size (d=25mm) and ice ball velocity (v=23m/s).
- Anti PID RESISTANCE**
 Excellent PID resistance at 96 hours (@85°C /85%) test, and also can be improved to meet higher standards for the particularly harsh environment.

COMPREHENSIVE CERTIFICATES



First solar company which passed the TUV Nord IEC/TS 62941 certification audit.

For Global Market



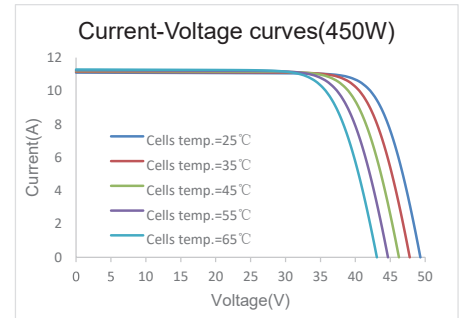
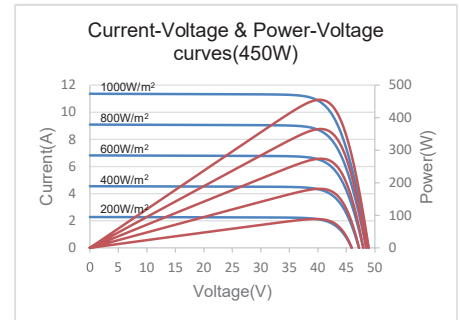
ASTRONERGY
A CHNT COMPANY

ELECTRICAL SPECIFICATIONS

STC rated output (P_{mpp})*	445 Wp	450 Wp	455 Wp
Rated voltage (V_{mpp}) at STC	41.05 V	41.32 V	41.51 V
Rated current (I_{mpp}) at STC	10.84 A	10.89 A	10.96 A
Open circuit voltage (V_{oc}) at STC	48.80 V	49.05 V	49.35 V
Short circuit current (I_{sc}) at STC	11.30 A	11.37 A	11.44 A
Module efficiency	20.1%	20.4%	20.6%
Rated output (P_{mpp}) at NMOT	330.8 Wp	334.5 Wp	338.2 Wp
Rated voltage (V_{mpp}) at NMOT	38.12 V	38.37 V	38.55 V
Rated current (I_{mpp}) at NMOT	8.68 A	8.72 A	8.78 A
Open circuit voltage (V_{oc}) at NMOT	45.70 V	45.94 V	46.22 V
Short circuit current (I_{sc}) at NMOT	9.10 A	9.16 A	9.22 A
Temperature coefficient (P_{mpp})	- 0.35%/°C		
Temperature coefficient (I_{sc})	+0.04%/°C		
Temperature coefficient (V_{oc})	- 0.28%/°C		
Nominal module operating temperature (NMOT)	44±2°C		
Maximum system voltage (IEC/UL)	1500V _{DC}		
Number of diodes	3		
Junction box IP rating	IP 68		
Maximum series fuse rating	20 A		

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5
 NMOT: Irradiance 800W/m², Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

CURVE



MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	2108 x 1048 x 35 mm
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Front glass thickness	3.2 mm
Cable length (IEC/UL)	Portrait: 350 mm Landscape: 1300 mm
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Fire performance (IEC/UL)	Class C (IEC) or Type 1 (UL)
Connector type (IEC/UL)	MC4 compatible

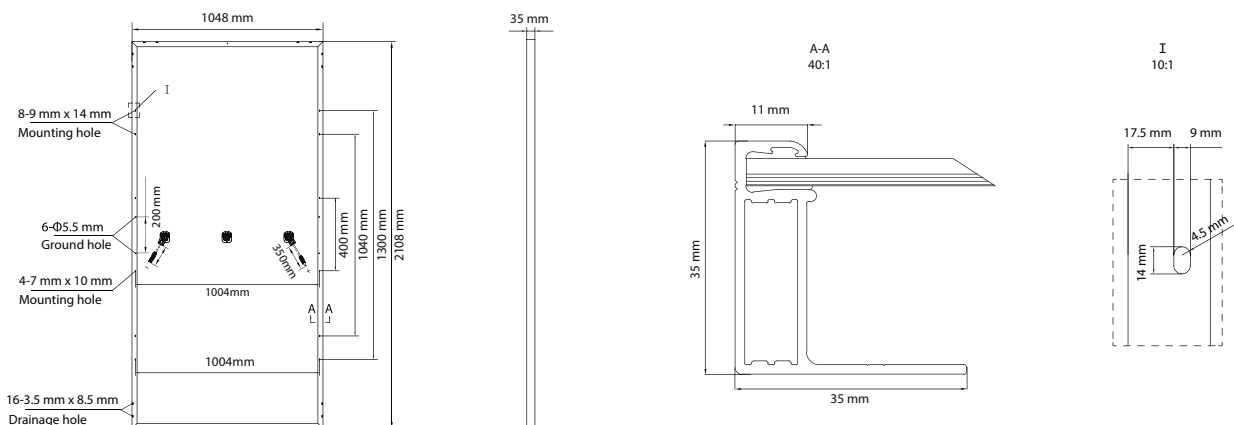
① Refer to Astronergy crystalline installation manual or contact technical department.
 Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

PACKING SPECIFICATIONS

① Weight (module only)	24.0 kg
② Packing unit	31 pcs / box
Weight of packing unit (for 40'HQ container)	791 kg
Number of modules per 40'HQ container	682 pcs

① Tolerance +/- 1.0kg
 ② Subject to sales contract

MODULE DIMENSION DETAILS





SUNNY TRIPOWER CORE1 33-US / 50-US / 62-US

STP 33-US-41 / STP 50-US-41 / STP 62-US-41

**UP TO 60% FASTER
INSTALLATION FOR
COMMERCIAL PV SYSTEMS**



Fully integrated

- Innovative design requires no additional racking for rooftop installation
- Integrated DC and AC disconnects and overvoltage protection
- 12 direct string inputs for reduced labor and material costs

Increased power, flexibility

- Multiple power ratings for small to large scale commercial PV installations
- Six MPP trackers for flexible stringing and maximum power production
- ShadeFix, SMA's proprietary shade management solution, optimizes at the string level

Enhanced safety, reliability

- Integrated SunSpec PLC signal for module-level rapid shutdown compliance to 2017 NEC
- Next-gen DC AFCI arc-fault protection certified to new Standard UL 1699B Ed. 1

Smart monitoring, control, service

- Advanced smart inverter grid support capabilities
- Increased ROI with SMA ennexOS cross sector energy management platform
- SMA Smart Connected proactive O&M solution reduces time spent diagnosing and servicing in the field

SUNNY TRIPOWER CORE1 33-US / 50-US / 62-US

It stands on its own

The Sunny Tripower CORE1 is the world's first free-standing PV inverter for commercial rooftops, carports, ground mount and repowering legacy solar projects. From distribution to construction to operation, the Sunny Tripower CORE1 enables logistical, material, labor and service cost reductions, and is the most versatile, cost-effective commercial solution available. Integrated SunSpec PLC for rapid shutdown and enhanced DC AFCI arc-fault protection ensure compliance to the latest safety codes and standards. With Sunny Tripower CORE1 and SMA's ennexOS cross sector energy management platform, system integrators can deliver comprehensive commercial energy solutions for increased ROI.

Technical data	Sunny Tripower CORE1 33-US	Sunny Tripower CORE1 50-US	Sunny Tripower CORE1 62-US
Input (DC)			
Maximum array power	50000 Wp STC	75000 Wp STC	93750 Wp STC
Maximum system voltage	1000 V		
Rated MPP voltage range	330 V... 800 V	500 V... 800 V	550 V... 800 V
MPPT operating voltage range	150 V... 1000 V		
Minimum DC voltage / start voltage	150 V / 188 V		
MPP trackers / strings per MPP input	6 / 2		
Maximum operating input current / per MPP tracker	120 A / 20 A		
Maximum short circuit current per MPPT / per string input	30 A / 30 A		
Output (AC)			
AC nominal power	33300 W	50000 W	62500 W
Maximum apparent power	33300 VA	53000 VA	66000 VA
Output phases / line connections	3 / 3-(N)-PE		
Nominal AC voltage	480 V / 277 V WYE		
AC voltage range	244 V... 305 V		
Maximum output current	40 A	64 A	80 A
Rated grid frequency	60 Hz		
Grid frequency / range	50 Hz, 60 Hz / -6 Hz... +6 Hz		
Power factor at rated power / adjustable displacement	1 / 0.0 leading... 0.0 lagging		
Harmonics THD	<3%		
Efficiency			
CEC efficiency	97.5%	97.5%	97.5%
Protection and safety features			
Load rated DC disconnect	●		
Load rated AC disconnect	●		
Ground fault monitoring: Riso / Differential current	● / ●		
DC AFCI arc-fault protection	●		
SunSpec PLC signal for rapid shutdown	●		
DC reverse polarity protection	●		
AC short circuit protection	●		
DC surge protection: Type 2 / Type 1+2	○ / ○		
AC surge protection: Type 2 / Type 1+2	○ / ○		
Protection class / overvoltage category (as per UL 840)	I / IV		
General data			
Device dimensions (W/H/D)	621 mm / 733 mm / 569 mm (24.4 in x 28.8 in x 22.4 in)		
Device weight	84 kg (185 lbs)		
Operating temperature range	-25 °C... +60 °C (-13 °F... +140 °F)		
Storage temperature range	-40 °C... +70 °C (-40 °F... +158 °F)		
Audible noise emissions (full power @ 1m and 25 °C)	65 dB(A)		
Internal consumption at night	5 W		
Topology	Transformerless		
Cooling concept	OptiCool (forced convection, variable speed fans)		
Enclosure protection rating	Type 4X, 3SX (as per UL 50E)		
Maximum permissible relative humidity (non-condensing)	100%		
Additional information			
Mounting	Free-standing with included mounting feet		
DC connection	Amphenol UTX PV connectors		
AC connection	Screw terminals - 4 AWG to 4/0 AWG CU/AL		
LED indicators (Status / Fault / Communication)	●		
Network interfaces: Ethernet / WLAN / RS485	● (2 ports) / ● / ○		
Data protocols: SMA Modbus / SunSpec Modbus / Webconnect	● / ● / ●		
Multifunction relay	●		
ShadeFix technology for string level optimization	●		
Integrated Plant Control / Q on Demand 24/7	● / ●		
Off-Grid capable / SMA Fuel Save Controller compatible	● / ●		
SMA Smart Connected (proactive monitoring and service support)	●		
Certifications			
Certifications and approvals	UL 1741, UL 1699B Ed. 1, UL 1998, CSA 22.2 107-1, PV Rapid Shutdown System Equipment		
FCC compliance	FCC Part 15 Class A		
Grid interconnection standards	IEEE 1547, UL 1741 SA - CA Rule 21, HECO Rule 14H		
Advanced grid support capabilities	L/HFRT, L/HVRT, Volt-VAr, Volt-Watt, Frequency-Watt, Ramp Rate Control, Fixed Power Factor		
Warranty			
Standard	10 years		
Optional extensions	15 / 20 years		
○ Optional features ● Standard features - Not available			
Type designation	STP 33-US-41	STP 50-US-41	STP 62-US-41



SMA Data Manager M
EDMM-US-10



SMA Sensor Module
MD.SEN-US-40



Universal Mounting System
UMS_KIT-10



AC Surge Protection Module Kit
AC_SPD_KIT1-10, AC_SPD_KIT2_T1T2
DC Surge Protection Module Kit
DC_SPD_KIT4-10, DC_SPD_KIT5_T1T2

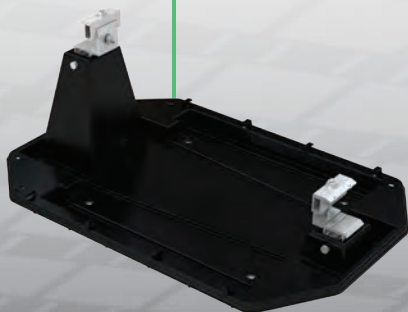
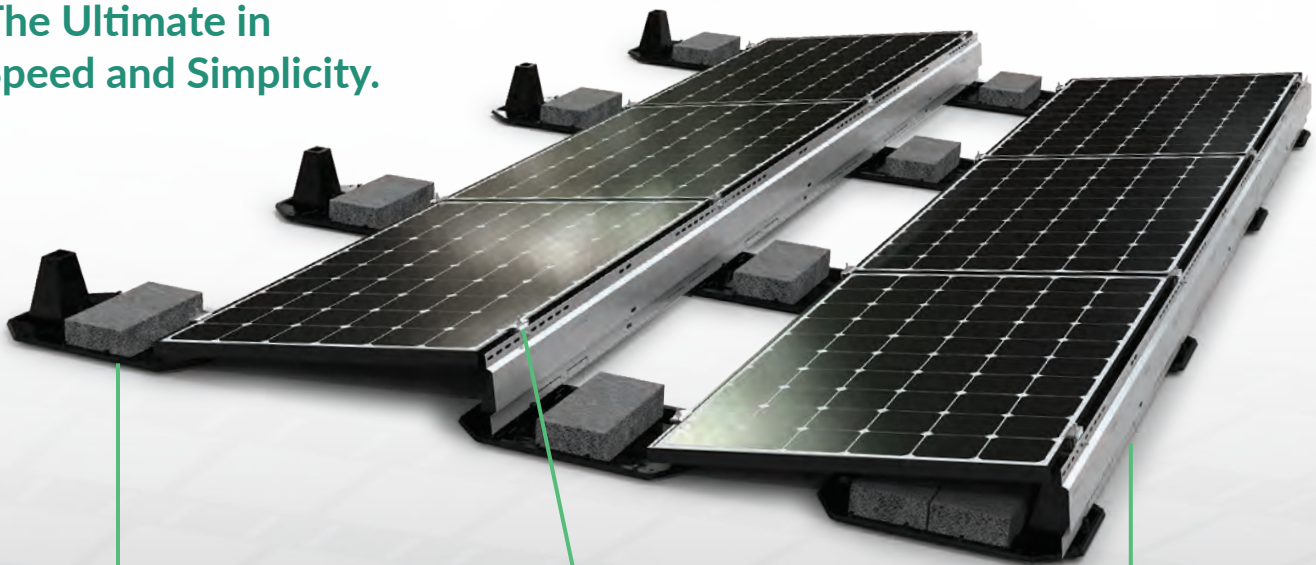
EcoFoot2[®]+

Ballasted Racking System

Installer-Preferred for Low-Slope Roofs

Three Main Components.

The Ultimate in
Speed and Simplicity.



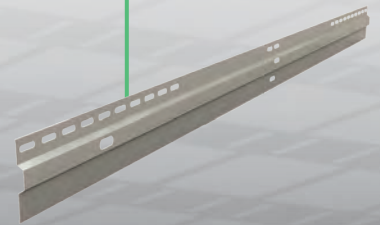
Base

UL-Listed ASA based resin is a durable material commonly used for automotive and construction products. Wire Clips are built-in for easy wire management. Class A fire rated and UL2703 Certified.



Universal Clamp

The preassembled Universal Clamp is ready to go right out of the box. Simply drop the Clamp into the Base. Integrated Bond Pin achieves integrated grounding without the use of grounding washers. Fits 30-50mm module frames with a single component.



Wind Deflector

Corrosion-resistant wind deflector on every module helps minimize uplift, reduce ballast requirements and carries UL2703 validated ground path from modules and racking components.



EcolibriumSolar

Contact: 740.249.1877 | sales@ecolibrumsolar.com | www.ecolibrumsolar.com

Pure Performance

Unbeatable, Right Out of the Box.

No other racking products install flat roof arrays better than EcoFoot2+ Racking Solution. Installers prefer EcoFoot2+ because it's fast, simple, and durable. The line-up is unbeatable:

- Ready-to-go, preassembled components and simple installation
- No PV panel prep required: bases self-align
- Low-effort roof layout, just two chalk lines required
- No training required, 5-minute learning curve

Master the Most Challenging Rooftop



Stackable Bases fit up to 50kW of Bases delivered on a standard pallet.

Technical Specifications

Dimensions: 26.5"L x 18.25"W x 8.3"H
Typical System Weight: 3.5–6 lbs. per sq. ft.
Module orientation: Landscape/Portrait
Tilt angle: Landscape 10°/Portrait 5°
Module inter-row spacing: 18.9"
Roof pitch: 0° to 7°
Clamping range: 30-50mm
Ballast requirements: 4" x 8" x 16"
Warranty: 25 years
Slip sheets: not required by Ecolibrium Solar.
If required by roofer, use 20"x29" under Base.

System Benefits

- Low part count
- Rapid system deployment
- Preassembled Universal Clamp
- Increased design flexibility
- More ballast capacity
- Simplified logistics
- Ship up to 50kW per pallet

Validation Summary

- Certified to UL2703 Fire Class A for Type I and II modules
- Certified to UL2703
- Grounding and Bonding
- Wind tunnel tested to 150mph
- SEAOC seismic compliant
- CFD and structurally tested
- DNV GL rated at 13.5 panels per installer-hour



Commercial



Residential



Design Flexibility



Wire Management Built-In



Ecolibrium Solar

740-249-1877 | www.ecolibriumsolar.com
507 Richland Avenue, Athens, OH 45701

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ATTACHMENT D: ENVINITY CERTIFICATE OF INSURANCE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

04/08/2020

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 lieu of such endorsement(s).

PRODUCER Doty & Hench 100 Radnor Road State College PA 16801		CONTACT NAME: Allyce Boone PHONE (A/C, No, Ext): (814) 238-6725 E-MAIL ADDRESS: aboone@dotyhench.com FAX (A/C, No): (814) 238-5404	
		INSURER(S) AFFORDING COVERAGE	
		INSURER A: Selective Ins Co of Southeast	NAIC # 39926
		INSURER B: Berkley Casualty Company	15911
		INSURER C: Underwriters at Lloyd's London	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 2020-2021


REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			S 2330474	04/01/2020	04/01/2021	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 15,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 3,000,000 PRODUCTS - COMP/OP AGG \$ 3,000,000 \$
A	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			S 2330474	04/01/2020	04/01/2021	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$ 0			S 2330474	04/01/2020	04/01/2021	EACH OCCURRENCE \$ 4,000,000 AGGREGATE \$ 4,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	AMWC323701	04/01/2020	04/01/2021	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
C	ERRORS & OMISSIONS			B0621PENVI000720	04/01/2020	04/01/2021	EACH CLAIM \$ 2,000,000 AGGREGATE \$ 2,000,000 DEDUCTIBLE \$ 15,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

Envinity, Inc. 25 Decibel Road Suite 205 State College PA 16801	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 
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ATTACHMENT E: ENVINITY COVID-19 RESPONSE PLAN

COVID-19 EXPOSURE PREVENTION, PREPAREDNESS AND RESPONSE POLICY

Envinity takes the health and safety of our employees very seriously. With the spread of the coronavirus or “COVID-19,” a respiratory disease caused by the SARS-CoV-2 virus, we all must remain vigilant in mitigating the outbreak. To be safe and maintain operations, we have developed this COVID-19 Exposure Prevention, Preparedness and Response Policy to be implemented throughout Envinity and at all of our job sites. We have also identified a team of employees as the Essential Work Committee and the COVID Response Team to monitor available U.S. Center for Disease Control and Prevention (“CDC”) Occupational Safety and Health Administration (“OSHA”), state Departments of Health (DOH), and state or local government guidance on the virus. Contact information for team members is in Appendix A.

This plan is based on currently available information from the CDC, OSHA, DOH, and state and local government and is subject to change based on further information provided by these and other public officials. Envinity may also amend this plan based on operational needs. If any federal state or local orders or guidelines differ from what is included in this policy, whichever is more stringent will apply.

COVID-19 related definitions

Who needs to quarantine? People who have been in close contact with someone who has COVID-19; excluding people some people that have had COVID-19 within the past 3 months. People who have tested positive for COVID-19 do not need to quarantine or get tested again for up to 3 months as long as they do not develop symptoms again. People who develop symptoms again within 3 months of their first bout of COVID-19 may need to be tested again. Quarantining means keeping someone who might have been exposed to COVID-19 away from others. People in quarantine should stay home and separate themselves from others.¹

Who needs to isolate? People who have COVID-19

- People who have symptoms of COVID-19 and are able to recover at home
- People who have no symptoms (are asymptomatic) but have tested positive for infection with SARS-CoV-2

Isolating means separating someone infected with COVID-19 away from people who are not infected. People who are in isolation should stay home until it’s safe for them to be around others. In the home, anyone sick or infected should separate themselves from others by staying in a specific “sick room” or area and using a separate bathroom (if available).²

Symptomatic – being infected and having symptoms of the illness (fever of 100.4 plus one or more additional symptom such as cough, headache, fatigue, loss of taste or smell, etc.)

Asymptomatic – being infected and not having any symptoms. A person with an asymptomatic case of COVID-19 will not feel sick, but is still infected and can spread the disease to others for up to 14 days. The illness may not be asymptomatic for those it is spread to, particularly elderly or those with pre-existing health conditions. It is estimated that 40% of COVID-19 cases are asymptomatic.³

¹ <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/quarantine.html>

² <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

³ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/planning-scenarios.html>

Close Contact – being within 6 feet of an infected person for a cumulative total of 15 minutes or more over a 24-hour period starting from 2 days before illness onset (or, for asymptomatic patients, 2 days prior to test specimen collection).⁴

Suspected Exposure - having close contact with a person known to have COVID-19 or showing symptoms of COVID-19 but has not been tested as a confirmed case.

Testing Results

Positive – person is infected with COVID-19.

Negative – person is not infected with COVID-19 at the time of testing.

COVID-19 Detected – person is infected with COVID-19.

COVID-19 Not Detected - person is not infected with COVID-19 at the time of testing.

Incubation Period – Period of time between exposure to an infection and onset of symptoms. The incubation period for COVID-19 is up to 14 days. During the incubation period, a person will not have symptoms but will be contagious and able to spread the virus to others.

1. Responsibilities of Managers and Supervisors

All managers and supervisors must be familiar with this plan and be ready to answer questions from employees. Managers and supervisors must always set a good example by following this plan. This involves practicing good personal hygiene and job site safety practices to prevent the spread of the virus. Managers and supervisors must encourage this same behavior from all employees. Each site supervisor will be designated as the Pandemic Safety Officer and will be required to keep up to date on the most recent version of the Envinity COVID Response Policy, enforce the plan set forth and help keep all employees safe. Managers and supervisors are required to report any known or suspected exposures to COVID-19 by employees to any member of the COVID Response Team listed in Appendix A.

2. Responsibilities of Employees

We are asking every one of our employees to help with our prevention efforts while at work. To minimize the spread of COVID-19 job site, we all must play our part. As set forth below, Envinity has instituted various housekeeping, social distancing, and other safety measures at our job sites, shop and office suites. All employees must follow these. In addition, employees are expected to report to their managers or supervisors if they are experiencing signs or symptoms of COVID-19, as described below. If there is a specific question about this plan or COVID-19, please contact a manager or supervisor. If they cannot answer the question, please contact a member of the Essential Work Committee.

OSHA and the CDC have provided the following control and preventative guidance to all workers, regardless of exposure risk:

- 1) Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol.
- 2) Avoid touching your eyes, nose, or mouth with unwashed hands.
- 3) Practice social distancing.

⁴ <https://www.cdc.gov/coronavirus/2019-ncov/php/contact-tracing/contact-tracing-plan/appendix.html#contact>

- 4) Wear a cloth face covering indoors or when social distance cannot be practiced.
- 5) Follow proper respiratory etiquette, which includes covering for coughs and sneezes.
- 6) Avoid close contact with people who are sick.

In addition, employees must familiarize themselves with the symptoms of COVID-19:

- 1) Coughing;
- 2) Fever;
- 3) Sudden change in taste or smell;
- 4) Shortness of breath, difficulty breathing; and
- 5) Early symptoms such as chills, body aches, sore throat, headache, diarrhea, nausea/vomiting, and runny nose.

If you, or someone in your home, develops a fever of 100.4° F or higher and symptoms of respiratory illness, such as cough or shortness of breath, **DO NOT GO TO WORK** and call your healthcare provider right away. Likewise, if you, or someone in your home, has any known or suspected exposure to COVID-19, **DO NOT GO TO WORK** and call your healthcare provider right away. In addition, contact your manager and reference Section 5. of this document for further guidance.

If you become aware of any known or suspected exposures to COVID-19 by other employees, contact your manager.

3. Job Site Protective Measures

Envinity has instituted the following protective measures at all job sites. In addition, adhere to all owner's safety precautions and policies that are in effect at commercial project sites we visit. If requested, Envinity will provide a copy of the protective measures contained in this policy (Appendix B).

A. General Safety Policies and Rules

- 1) Any employee/contractor/visitor that develops a fever of 100.4°F or higher and is showing symptoms of COVID-19 will be asked to leave the job site and return home.
- 2) It is the responsibility of the site supervisor to communicate to sub-contractors when on Envinity job sites the expectation to maintain social distancing and wear a facial mask when not able to social distance.
- 3) All employees are required to wear the following PPE while on a job site:
 - a. Indoors – KN95, N95, Surgical, two-layer cotton or equivalent masks (masks should be washed or replaced after each day and if the mask has been contaminated)
 - b. Outdoors – Face coverings such as neck gaiters are permitted
 - c. In the event that required PPE has been deemed more of a hazard and cannot be worn or if an employee has a health condition, a Job Hazard Analysis must be completed and signed by the employee, their supervisor, and a member of the safety committee

- 4) All employees are encouraged to wear the following PPE at all times while on a job site:
 - a. Eye protection (prescription eyeglasses are acceptable when safety eyewear is not required per the PPE policy)
 - b. Task specific gloves
 - c. More stringent PPE shall be worn when appropriate or required by OSHA standards
- 5) All in-person meetings shall be limited. Meetings shall be by tele-conferencing, videoconferencing, or outdoors if possible. If meetings are conducted in-person, attendance shall be collected verbally. Attendance shall not be tracked through passed-around sign-in sheets or mobile devices. During any in-person meetings, avoid gathering in groups of more than ten (10) people and participants must remain at least six (6) feet apart.
- 6) Employees must avoid physical contact with others and direct employees, contractors, and visitors to increase personal space to at least six (6) feet, where possible. Where work trailers are used, only one employee may be in the trailer at a time unless this creates other hazards such as good lifting practices.
- 7) Envinity will provide a handwashing station for employees use. Employees are encouraged to sanitize or wash hands at least once per hour, and required to do so before and after using the restroom, and before and after eating.
- 8) Employees should limit the use of coworkers' tools and equipment. To the extent tools or equipment must be shared, Envinity will provide sanitizing wipes to clean tools before and after each use. When cleaning tools and equipment, consult manufacturer's recommendations for proper cleaning techniques and restrictions.
- 9) Employees are encouraged to minimize ridesharing. Employees are permitted to have two occupants per vehicle and must wear masks while ridesharing. Masks are not required in a vehicle where there is only one occupant.
- 10) If practicable, employees should use/drive the same truck or piece of equipment every shift.
- 11) Employees are to wipe and disinfect all vehicles and equipment after each shift.
- 12) All site small refuse containers are required to have liners and be emptied when full by an employee wearing nitrile or equivalent gloves.
- 13) Employees are to disinfect portable toilets at the end of each workday in between rental company regular cleanings.
- 14) In lieu of using a common source of drinking water, such as a cooler, employees should use individual water bottles.

B. *Workers entering Occupied Building and Homes*

- 1) When employees perform construction and maintenance activities within occupied homes, office buildings, and other establishments, these work locations present unique hazards with regards to COVID-19 exposures. All such workers should evaluate the specific hazards when determining best practices related to COVID-19. A Job Hazard Analysis can be used to identify tasks, hazards, and mitigation efforts.

- 2) Employees are required to wear face coverings at all times while on a job site. Face coverings are also required in an office setting when social distancing cannot be accommodated or in the case that the client prefers face coverings at all times.
- 3) During indoor work, employees must sanitize the work areas upon arrival, throughout the workday, and immediately before departure. Envinity will provide sanitizing wipes for this purpose.
- 4) Employees should ask other occupants to keep a personal distance of six (6) feet at a minimum. Workers should wash or sanitize hands immediately before starting and after completing the work.

4. Working in the Office Protective Measures

As COVID-19 guidelines are becoming less restrictive, many office personnel may find a need or want to return to the office to work on occasion. Envinity has established the following guidelines to aid employees as they work their way back into the office:

- 1) Employees should adjust workspaces as needed to maintain distancing of greater than six feet.
- 2) Ten employees are permitted to work at one time in office suite 201. (A calendar is set up for employees to schedule times)
- 3) Four employees are permitted to work at one time in suite 205. (A calendar is set up for employees to schedule times)
- 4) Employees should follow all current social distancing protocols.
- 5) Masks are required at all times when in common spaces within the office buildings (walking around the building, restrooms, conference rooms if not alone, kitchen/coffee area, etc.). Masks may be removed if:
 - An employee is alone in the office suite, or
 - Employees can socially distance themselves within a private office or their own cubicle.
- 6) Workspaces should stay consistent the entire time an employee is present.
- 7) Conference rooms may be used for internal or external meetings while following the guidelines of this policy. Some additional guidelines are as follows:
 - Employees must social distance where possible
 - Occupancy limits on conference rooms are as follows:
 - Green – Four (4) people
 - Yellow – Three (3) people
 - Grey – Two (2) people
 - Attendees are required to wear masks at all time while in conference rooms
 - Doors must remain open to allow for more airflow
 - Thermostat fan setting to be placed “on” to increase outdoor air
 - Employees should continue to use the Outlook Calendar to schedule meetings
 - Employees are required to disinfect any surface in which they came into contact.
- 8) Office cleaning procedures must be followed as outlined in the Housekeeping Procedures.
- 9) Third party cleaning will continue to take place after 6PM. Employees are encouraged to not be present in the office while third party cleaning is occurring.
- 10) Any food or drink must be consumed in the employee’s workspace.
- 11) Employees must wash or sanitize hands on arrival and departure of the office space. Employees must wash their hands for at least 20 seconds with soap and water after using the restroom, after eating, and after coughing or sneezing. Hand sanitizer and disinfectant are available for use.

5. Potential COVID-19 Exposure Situations & Response

COVID-19 exposure and illness involve significant amounts of time in quarantine or isolation away from work. Envinity's first priority is to keep our employees healthy and safe. We also need to be able to continue to provide services to our clients. It is in the best interest of the organization that employees make personal decisions to minimize exposure. It is recommended that employees avoid personal travel to high risk areas, practice social distancing, and wear a mask when social distancing can't be maintained.

If an employee has a known or suspected exposure to COVID-19, or is experiencing a fever plus 1 or more other COVID-19 symptoms, they must:

- (1) stay home from work,**
- (2) inform their supervisor, and**
- (3) contact their Primary Care Provider (PCP) as soon as possible after exposure to get medical instructions on quarantine and testing. These instructions need to be shared with Envinity as appropriate to support paid leave time.**

If the employee does not have a PCP, they may use virtual care through Capital Blue (<https://www.capbluecross.com/wps/portal/cap/home/explore/resource/virtual-care>).

A. Employee exposure to COVID-19

- 1) Employees who have tested positive for COVID-19 do not need to quarantine or get tested for up to 3 months if they do not develop symptoms again. Employees who develop symptoms within 3 months of their first bout of COVID-19 may need to quarantine and be tested again.
- 2) If an employee learns that they have had a known or suspected exposure to COVID-19, they must immediately alert a manager or supervisor of the close contact and self-quarantine for fourteen (14) days starting from the last date of close contact with the infected person.

If the suspected exposure turns out to be negative, the employee may return to work immediately.

- i. The quarantine period can be shortened if the employee tests negative after getting a COVID-19 diagnostic test. COVID-19 has a very long incubation period (the time between being exposed and developing symptoms) so the employee must wait seven (7) after exposure to take the test.
 - ii. If household member(s) test positive, unless able to fully isolate, the employee continues to be exposed to COVID-19 through the entire illness of the household member(s). The 14-day quarantine for the employee referenced in Section 5.A.1 does not start until 14 days after the household member(s) received positive test results. The employee must self-quarantine for 14 days after the 14 days of the household member(s) illness, totaling 28 days of quarantine. If additional household members test positive, the 14-day self-quarantine restarts with each new positive case.
For household member exposure, the employee can shorten the quarantine period to 21 days if the results are negative from a COVID-19 test taken 21 days after the household member(s) positive test (14 days for household member's illness + 7 days after last exposure to the virus).
- 3) Envinity will compensate full time employees for up to 40 hours to remain home and quarantine while waiting to be able to take and/or receive results for a COVID-19 test.

- i. If the employee is positive for COVID-19, they are eligible for a total of 80 hours of paid leave time to quarantine by the Families First Coronavirus Response Act through 12/31/20 (see Section 6 for additional information).

B. Employee exhibits symptoms of or contracts COVID-19

- 1) If an employee exhibits COVID-19 symptoms (fever of 100.4°F plus 1 or more other COVID-19 symptoms), the employee must not come to work and isolate away from others. It is recommended that they get a COVID-19 test to determine if the illness is COVID-19, or the flu, cold, allergies. If experiencing the symptoms of COVID-19, the employee can be tested immediately.
 - i. If tested and COVID-19 positive or unknown (not tested), the employee must isolate for a minimum of 10 days (starting at onset of symptoms) and have no fever for 24 hours without fever-reducing medication (examples: acetaminophen (Tylenol), ibuprofen (Advil, Motrin), aspirin, naproxen (Aleve). If the employee has been hospitalized, they may still be contagious beyond 10 days and should not return to work until directed to do so by their medical provider.⁵
 - ii. If tested and COVID-19 negative, the employee may return to work when feeling better or if they had a fever, are 24 hours with no fever without fever-reducing medication (examples: Acetaminophen (Tylenol), Ibuprofen (Advil, Motrin), Aspirin, naproxen (Aleve).
- 2) If Envinity learns that an employee has tested positive, Envinity will attempt to determine all co-workers that may have had close contact with the confirmed-positive employee in the prior 14 days. Those who have been in close contact will be required to self-quarantine for 14 days from the last date of close contact with the infected person, or self-quarantine for 7 days and get a COVID-19 test 7 days after late date of close contact.
- 3) All employees are expected to comply with requests for contact tracing.

If you or someone in your household has COVID-19, please see this information from the CDC about caring for a sick person (If You Are Sick or Caring for Someone, <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/index.html>. CDC 10/20/2020).

6. The Families First Coronavirus Response Act (FFCRA)

Employer Paid Leave Requirements are still in force through December 31, 2020. We are required to pay for days that employees miss work due to, among other things, “experiencing symptoms and are seeking a medical diagnosis.”

A. Paid Leave

The Act provides that employees of eligible employers can receive two weeks (up to 80 hours) of paid sick leave at 100% of the employee's pay where the employee is unable to work because the employee is quarantined, and/or experiencing COVID-19 symptoms, and seeking a medical diagnosis. An employee who is unable to work because of a need to care for an individual subject to quarantine, to care for a child whose school is closed or child care provider is unavailable for reasons

⁵ <https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html>

related to COVID-19, and/or the employee is experiencing substantially similar conditions as specified by the U.S. Department of Health and Human Services can receive two weeks (up to 80 hours) of paid sick leave at 2/3 the employee's pay. An employee who is unable to work due to a need to care for a child whose school is closed, or child care provider is unavailable for reasons related to COVID-19, may in some instances receive up to an additional ten weeks of expanded paid family and medical leave at 2/3 the employee's pay.

Separate from FFCRA, Envinity is providing 40 hours of paid sick time for the quarantine period between close contact with a COVID-19 case and the ability to test 7 days later. See Section 5.A.2.

B. Paid Sick Leave Credit

For an employee who is unable to work because of Coronavirus quarantine or self-quarantine or has Coronavirus symptoms and is seeking a medical diagnosis, eligible employers may receive a refundable sick leave credit for sick leave at the employee's regular rate of pay, up to \$511 per day and \$5,110 in the aggregate, for a total of 10 days.

For an employee who is caring for someone with Coronavirus, or is caring for a child because the child's school or child care facility is closed, or the child care provider is unavailable due to the Coronavirus, eligible employers may claim a credit for two-thirds of the employee's regular rate of pay, up to \$200 per day and \$2,000 in the aggregate, for up to 10 days. Eligible employers are entitled to an additional tax credit determined based on costs to maintain health insurance coverage for the eligible employee during the leave period.

<https://www.dol.gov/agencies/whd/pandemic/ffcra-employer-paid-leave>

7. OSHA Recordkeeping

If a confirmed case of COVID-19 is reported, Envinity will determine if it meets the criteria for recordability and reportability under OSHA's recordkeeping rule. OSHA requires construction employers to record work-related injuries and illnesses that meet certain severity criteria on the OSHA 300 Log, as well as complete the OSHA Form 301 (or equivalent) upon the occurrence of these injuries. For purposes of COVID-19, OSHA also requires employers to report to OSHA any work-related illness that (1) results in a fatality, or (2) results in the in-patient hospitalization of one or more employee. "In-patient" hospitalization is defined as a formal admission to the in-patient service of a hospital or clinic for care or treatment.

OSHA has made a determination that COVID-19 should *not* be excluded from coverage of the rule – like the common cold or the seasonal flu – and, thus, OSHA is considering it an "illness." However, OSHA has stated that only confirmed cases of COVID-19 should be considered an illness under the rule. Thus, if an employee simply comes to work with symptoms consistent with COVID-19 (but not a confirmed diagnosis), the recordability analysis would not necessarily be triggered at that time.

If an employee has a confirmed case of COVID-19, Envinity will conduct an assessment of any workplace exposures to determine if the case is work-related. Work-relatedness is presumed for illnesses that result from events or exposures in the work environment unless it meets certain exceptions. One of those exceptions is that the illness involves signs or symptoms that surface at work but result solely from a non-work-related event or exposure that occurs *outside* of the work environment. Thus, if an

employee develops COVID-19 *solely* from an exposure outside of the work environment, it would not be work-related, and thus not recordable.

Envinity's assessment will consider the work environment itself, the type of work performed, risk of person-to-person transmission given the work environment, and other factors such as community spread. Further, if an employee has a confirmed case of COVID-19 that is considered work-related, Envinity will report the case to OSHA if it meets the criteria for recordability and reportability under OSHA's recordkeeping rule.

8. Confidentiality/Privacy

Except for circumstances in which Envinity is legally required to report workplace occurrences of communicable disease, the confidentiality of all medical conditions will be maintained in accordance with applicable law and to the extent practical under the circumstances. When it is required, the number of persons who will be informed of an employee's condition will be kept at the minimum needed, not only to comply with legally-required reporting, but also to assure proper care of the employee and to detect situations where the potential for transmission may increase. Envinity reserves the right to inform other employees that a co-worker (without disclosing the person's name) has been diagnosed with COVID-19, and if they might have been exposed to the disease, so the employees may take measures to protect their own health.

9. General Questions

Given the fast-developing nature of the COVID-19 outbreak, Envinity may modify this plan on a case-by-case basis. If you have any questions concerning this plan, please contact a member of the COVID Response Team.

10. Enforcement

Any employee who fails to observe any safety policy, rule, or procedure outlined in this policy will be subject to the following enforcement plan. Any supervisor or manager, as soon as s/he becomes aware of any such failure, must ensure that the following action is taken:

First Occurrence – The supervisor must give immediate on-the-job instruction to prevent further violations. If, in the supervisor's opinion, the incident is noteworthy, s/he will make a written report of the incident and submit it to the Safety Committee. The Safety Committee shall review the report and file it in the employee's personnel file. If the offense is immediately dangerous to life and health, Envinity reserves the right to proceed as if this were the third occurrence.

Second Occurrence – The supervisor must make a written report of the incident and submit it to the Safety Committee. The Safety Committee shall review the report and file it in the employee's personnel file. At the Safety Committee's discretion, the employee may be required to undergo additional training and may be placed on temporary leave. If the offense is immediately dangerous to life and health, Envinity reserves the right to proceed as if this were the third occurrence.

Third Occurrence – The supervisor must make a written report of the incident and submit it to the Safety Committee. The employee shall be placed on temporary leave and must not return to work until the Safety Committee has reviewed the circumstances and made a determination regarding further action.

Appendix A. COVID Response Team Members

Team Member	Phone Number	Email Address
Brian Henderson	814-933-6771	bhenderson@envinity.com
Chad Owens	814-308-3603	cowens@envinity.com
Charlene Greenland	814-883-2363	cgreenland@envinity.com
Jason Grottini	814-360-4984	jason@envinity.com
Katie Blansett	724-822-5978	kblansett@envinity.com
Shaun Pardi	814-574-7351	stpardi@envinity.com

Appendix B – Job Site Protective Measures

Envinity has instituted the following protective measures at all job sites. In addition, all commercial client site measures must be followed.

- 1) Any employee/contractor/visitor that develops a fever of 100.4°F or higher and is showing symptoms of COVID-19 will be asked to leave the job site and return home.
- 2) It is the responsibility of the site supervisor to communicate to sub-contractors when on Envinity job sites the expectation to maintain social distancing and wear a facial mask when not able to social distance.
- 3) All employees are required to wear the following PPE while on a job site:
 - a. Indoors – KN95, N95, Surgical, two-layer cotton or equivalent masks (masks should be washed or replaced after each day and if the mask has been contaminated)
 - b. Outdoors – Face coverings such as neck gaiters are permitted
 - c. In the event that required PPE has been deemed more of a hazard and cannot be worn or if an employee has a health condition, a Job Hazard Analysis must be completed and signed by the employee, their supervisor, and a member of the safety committee
- 4) All employees are encouraged to wear the following PPE at all times while on a job site:
 - a. Eye protection (prescription eyeglasses are acceptable when safety eyewear is not required per the PPE policy)
 - b. Task specific gloves
 - c. More stringent PPE shall be worn when appropriate or required by OSHA standards
- 5) All in-person meetings shall be limited. Meetings shall be by tele-conferencing, videoconferencing, or outdoors if possible. If meetings are conducted in-person, attendance shall be collected verbally. Attendance shall not be tracked through passed-around sign-in sheets or mobile devices. During any in-person meetings, avoid gathering in groups of more than ten (10) people and participants must remain at least six (6) feet apart.
- 6) Employees must avoid physical contact with others and direct employees, contractors, and visitors to increase personal space to at least six (6) feet, where possible. Where work trailers are used, only one employee may be in the trailer at a time unless this creates other hazards such as good lifting practices.
- 7) Envinity will provide a handwashing station for employees use. Employees are encouraged to sanitize or wash hands at least once per hour, and required to do so before and after using the restroom, and before and after eating.
- 8) Employees should limit the use of coworkers' tools and equipment. To the extent tools or equipment must be shared, Envinity will provide sanitizing wipes to clean tools before and after each use. When cleaning tools and equipment, consult manufacturer's recommendations for proper cleaning techniques and restrictions.
- 9) Employees are encouraged to minimize ridesharing. Employees are permitted to have two occupants per vehicle and must wear masks while ridesharing. Masks are not required in a vehicle where there is only one occupant.

- 10) If practicable, employees should use/drive the same truck or piece of equipment every shift.
- 11) Employees are to wipe and disinfect all vehicles and equipment after each shift.
- 12) All site small refuse containers are required to have liners and be emptied when full by an employee wearing nitrile or equivalent gloves.
- 13) Employees are to disinfect portable toilets at the end of each workday in between rental company regular cleanings.
- 14) In lieu of using a common source of drinking water, such as a cooler, employees should use individual water bottles.

ATTACHMENT F: A NOTE ABOUT THE PAPER THIS PROPOSAL IS PRINTED

ON...

Congratulations, you have made it to the end of our proposal. We bet this whole time you were wondering, “What type of paper does Envinity print on?” or, “Did they notice the RFP requirement to print on recycled paper?” Well, the answer is that we have always printed on 100% post-consumer recycled paper manufactured by American Eagle Paper Mills in Tyrone, PA. We do not want to get all righteous and tell you where to get your paper from, but we have been really happy for a really long time with the quality and service from American Eagle Paper Mills and would encourage Ferguson Township to give them the opportunity to win your business in the future. While we do not hit “Print” all that often, when we do, it’s on American Eagle paper.

In the words of the greatest paper salesman in American history: *“I don’t have a lot of experience with vampires, but I have hunted werewolves. I shot one once, but by the time I got to it, it had turned back into the form of my neighbor’s dog.”* – Dwight Schrute.

To learn more about American Eagle Paper Mills, please visit their website: <https://aepaper.com/>