



**Village of Briarcliff Manor**  
**1111 Pleasantville Road**  
**Briarcliff Manor, New York 10510**  
**(914) 941-4800**  
**www.briarcliffmanor.gov**

### **BOARD OF TRUSTEES SPECIAL USE PERMIT APPLICATION**

BOARD ACTION REQUESTED:  Original  Renewal  Amendment

Location of Property (Address): 555 Pleasantville Rd (North & South Building), Briarcliff Manor, NY 10510  
98.20-1-5 (North)

Parcel ID: 98.20-1-6 (South) Zoning District \_\_\_\_\_

Name & Address of Property Owner:

JAM 555 Storage, LLC

Phone #

555 Pleasantville Rd (North Building), Briarcliff Manor, NY 10510

Email: tfisher@dhipgroup.com

Name & Address of Applicant:

Infinity Solar Systems

Phone # (201) 466-5110

575 Corporate Dr; Suite 2200, Mahwah, NJ 07430

Email: permits@infinitysolarsystems.com

Name & Address of Representative:

Infinity Solar Systems

Phone # (201) 466-5110

575 Corporate Dr; Suite 2200, Mahwah, NJ 07430

Email: permits@infinitysolarsystems.com

Waiver(s) Requested: Yes  No

If a waiver is requested, list waivers and reasons why such requirements should be waived (add additional sheets as necessary):

As stated in our cover letter, we are looking to waive:

260-6 (D)(4)-Infrasturcture and Utility Study

260-6(D)(5) Traffic Study

260-6(D)(7) Educational Resources Impact Study

I AFFIRM THAT THE STATEMENTS MADE ON THIS APPLICATION ARE TRUE. THIS AUTHORIZES THE BOARD OF TRUSTEES AND ITS AGENTS TO ENTER UPON THE SUBJECT PROPERTY FOR THE PURPOSE OF PROCESSING THIS APPLICATION REQUEST.

 9/2/25

Signature of Owner

Date



9/2/25

Signature of Applicant (IF NOT OWNER) Date

Village of Briarcliff Manor  
Board of Trustees  
1111 Pleasantville Road  
Briarcliff Manor, NY 10510

**RE: Authorization of Agent for Permit Application and Representation**  
**Property Address: 555 Pleasantville Road, Briarcliff Manor, NY 10510 (North & South**  
**Buildings)**

To Whom It May Concern,

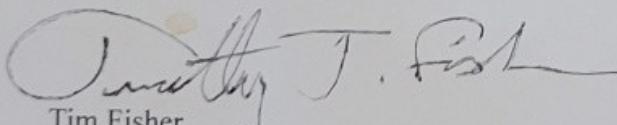
I, Tim Fisher, am acting as the authorized agent on behalf of the owner of the properties located at 555 Pleasantville Road, Briarcliff Manor, NY 10510.

By this letter, I hereby authorize Infinity Solar Systems, located at 575 Corporate Drive, Suite 2200, Mahwah, NJ 07430, to act as our representative for the purpose of applying for all necessary permits, including but not limited to Special Use Permits, and to attend any meetings or hearings before the Village of Briarcliff Manor Board of Trustees or any relevant municipal boards or departments, as may be required for the approval of a proposed rooftop solar energy installation at the above-referenced property.

Infinity Solar Systems is also authorized to submit all required documentation, respond to inquiries, and engage with Village staff and officials throughout the review and permitting process on our behalf.

Should you have any questions regarding this authorization, I can be reached at the email address of [tfisher@dhipgroup.com](mailto:tfisher@dhipgroup.com).

Sincerely,

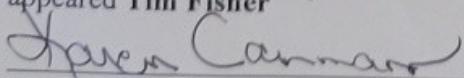


Tim Fisher  
Authorized Agent  
DHIP Group

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State of New York  
County of Westchester.

On this 24<sup>th</sup> day of September, 2025, before me, the undersigned notary public, personally appeared Tim Fisher



Notary Public

My Commission Expires: 7-24-26

KAREN CAMMANN  
NOTARY PUBLIC, STATE OF NEW YORK  
ID NO. 01CA6045250  
QUALIFIED IN WESTCHESTER COUNTY  
My Commission Expires July 24, 2026



**Village of Briarcliff Manor**

Board of Trustees

1111 Pleasantville Road  
Briarcliff Manor, NY 10510

**RE: Special Use Permit Application – Rooftop Solar Installations at 555 Pleasantville Road, Briarcliff Manor, NY 10510 (North Building-SBL: 98.20-1-5 & South Building-SBL: 98.20-1-6)**

Dear Members of the Board,

On behalf of Infinity Solar Systems, we respectfully submit this letter in support of our Special Use Permit Application for the installation of two commercial rooftop solar energy systems located at 555 Pleasantville Road, Briarcliff Manor, NY 10510. These systems will be installed atop the North and South buildings at the site and are designed to significantly offset the facility's energy usage, contributing to both environmental sustainability and long-term operational cost savings.

The **North Building** will feature a photovoltaic (PV) system consisting of **342 modules**, totaling **188.10 kW** (DC). The **South Building** will feature a PV system comprised of **500 modules** totaling **275.00 kW** (DC). Together, these installations represent a substantial investment in clean, renewable energy that aligns with New York State's clean energy goals and the growing momentum toward carbon reduction within our communities.

As required under Village Code Section **220-6(D)**, we have addressed the applicable criteria in detail, with supporting documentation attached:

**1. §260-6(D)(1) – Development Plan**

Detailed site plans for both the North and South buildings have been prepared and are submitted within this application packet. These drawings include the panel layout, mounting details, electrical design, and necessary labeling for safety and emergency response purposes.

**2. §260-6(D)(2)- Stormwater Pollution Prevention Plan (SWPPP)**

A SWPPP is not required for this project as the rooftop installations will not involve land disturbance or changes to the existing drainage infrastructure. A signed letter from our licensed professional engineer is included to confirm this.



**3. §260-6(D)(3)- Marketing Study**

The project has received formal approvals to begin construction from both **Con Edison** and the **New York State Energy Research and Development Authority (NYSERDA)**, indicating full compliance with utility interconnection standards and incentive program requirements. These approvals reflect a thorough review of the system's design and alignment with the goals of New York's Clean Energy Standard.

**4. §260-6(D)(4)- Infrastructure and Utility Study**

No infrastructure modifications or trenching will be required as the solar arrays will be mounted on existing roof structures and will utilize current electrical service points.

**5. §260-6(D)(5)- Traffic Study**

The construction and long-term operation of this rooftop solar system will not impact traffic patterns or generate additional traffic volume. Therefore, a traffic study is not warranted for this project.

**6. §260-6(D)(6)- Municipal Services Impact Study**

Commercial rooftop solar installations like this one are inherently low-impact in terms of municipal services. In the rare event of an emergency, clearly marked and accessible system disconnects will allow first responders to safely shut down the system and isolate it from the utility grid.

**7. §260-6(D)(7)- Educational Resources Impact Study**

As the proposed installations will not impact local population density or create new demand for educational facilities, this study is not required.

**8. §260-6(D)(8)- Fiscal Impact Analysis**

As previously noted, the projects have been approved by Con Edison and NYSERDA and their respective engineering departments. All solar components, materials, and equipment will be procured directly by Infinity Solar Systems. There is no anticipated fiscal impact on the Village's operating budget or resources.

**9. §260-6(D)(9)- Waiver of Non-Applicable Submissions**

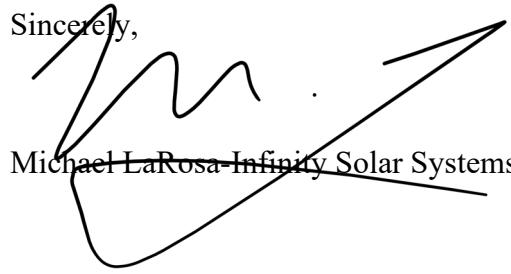
We respectfully request that the Board of Trustees exercise its discretion to waive the submission of studies that are not applicable to a rooftop solar installation, as allowed under Section 220-6(D)(9). We believe this project represents a beneficial, low-impact



improvement to the property and the community and hope the Board will recognize the merits of this clean energy initiative.

We greatly appreciate your time and consideration of our application. We look forward to the opportunity to contribute to the Village of Briarcliff Manor's sustainability goals and are happy to provide any additional information to facilitate the review process.

Sincerely,

  
Michael LaRosa - Infinity Solar Systems

# Michael E. Miele, PE

Licensed Professional Engineer

Licensed In New York, New Jersey, Connecticut & California

New York License # 079676

New Jersey License # 44042

Connecticut License # 23158

California License # 31508

July 10, 2025

Village of Briarcliff Manor Building Department  
The Office of the Building Inspector  
1111 Pleasantville Road  
Briarcliff Manor, NY 10510

Re: 555 Pleasantville Road- South Building – 555 Pleasantville Road, Briarcliff Manor, NY 10510  
Solar Panel Loading Certification  
Village of Briarcliff Manor, County of Westchester, State of New York

Dear Building Department

I am the engineer of record for the above referenced project. I have prepared the attached plans dated June 17, 2025 that consist of the installation of (500) BVM7612M-550-H-HC-BF (550W) solar panels at the above referenced location.

I can hereby certify that the existing roof structure combined with the additional weight of the solar panels and associated ballast blocks, meets the requirements of The 2020 Building Code of New York State, Publication Date, November 2019.

The design loads were as follows,

Roof Design Load: 30psf live load

Wind Design Load: 115mph

No additional structural members were required.

As per the base building structural drawings, the roof is currently framed "W" style steel I-Beams. The roof structural members are in compliance with ASCE 7-16 for deflection and acceptable bending stress.

If you have any questions, please feel free to call me at any time. Thanks in advance.

Sincerely Yours,



Michael E. Miele, PE



## APPENDIX A -

### NEW YORK STATE STANDARDIZED CONTRACT FOR INTERCONNECTION OF NEW DISTRIBUTED GENERATION UNITS AND/OR ENERGY STORAGE SYSTEMS WITH CAPACITY OF 5 MW OR LESS CONNECTED IN PARALLEL WITH UTILITY DISTRIBUTION SYSTEMS

#### **Interconnection Customer Information:**

**Name:**

Tim Fisher

**Address:**

549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY 10510

**Telephone:**

(347) 266-3514

**Fax:****Email:**

tfisher@dhipgroup.com

**Unit Application/File No.:**

LDG-05561

#### **Utility Information:**

**Name:**

Consolidated Edison Company of NY, Inc.

**Address:**

4 Irving Pl., New York, NY 10003

**Telephone:**

1-800-752-6633 (1-800-75-CONED)

**Fax:****Email:**

dgexpert@coned.com

**Utility Account Number:**

67193230009

## DEFINITIONS

**Delivery Service** means the services the Utility may provide to deliver capacity or energy generated by the Interconnection Customer to a buyer to a delivery point(s), including related ancillary services.

**Energy Storage System (ESS)** means a commercially available mechanical, electrical, or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may be stand-alone or paired with a distributed generator at a point of common coupling.

**Interconnection Customer** means the owner of the Unit.

**Interconnection Facilities** means the equipment and facilities on the Utility's system necessary to permit operation of the Unit in parallel with the Utility's system.

**Material Modification** means a Modification to a Unit that may have adverse impacts on the Utility's system, Utility customers, other projects, or applications in the interconnection queue.

**Modification** means a change to the ownership, equipment, equipment ratings, equipment configuration, or operating conditions of the Unit.

**Premises** means the real property where the Unit is located.

**SIR** means the New York State Standardized Interconnection Requirements for new distributed generation units and/or energy storage systems with a nameplate capacity of 5 MW or less connected in parallel with the Utility's distribution system.

**Unit** means the distributed generation, stand-alone ESS, or combined generation and ESS facilities approved by the Utility for operation in parallel with the Utility's system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate generating capacity. The nameplate generating capacity or inverter/converter rating of the Unit shall not exceed 5 MW.

**Utility** means Consolidated Edison of New York, Inc. (Con Edison).

## **I. TERM AND TERMINATION**

**1.1 Term:** This Agreement shall become effective when executed by both Parties and shall continue in effect until terminated.

**1.2 Termination:** This Agreement may be terminated as follows:

- a. The Interconnection Customer may terminate this Agreement at any time, by giving the Utility sixty (60) days' written notice.
- b. Failure by the Interconnection Customer to seek final acceptance by the Utility within twelve (12) months after completion of the utility construction process described in the SIR shall automatically terminate this Agreement.
- c. Either Party may, by giving the other Party at least sixty (60) days' prior written notice, terminate this Agreement in the event that the other Party is in default of any of the material terms and conditions of this Agreement. The terminating Party shall specify in the notice the basis for the termination and shall provide a reasonable opportunity to cure the default.
- d. The Utility may, by giving the Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with an upgrade to the SIR, unless the Interconnection Customer's installation is "grandfathered," shall constitute good cause.

**1.3 Disconnection and Survival of Obligations:** Upon termination of this Agreement the Unit will be disconnected from the Utility's electric system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**1.4 Suspension:** This Agreement will be suspended during any period in which the Interconnection Customer is not eligible for Delivery Service from the Utility

## **II. SCOPE OF AGREEMENT**

**2.1 Scope of Agreement:** This Agreement relates solely to the conditions under which the Utility and the Interconnection Customer agree that the Unit may be interconnected to and operated in parallel with the Utility's system.

**2.2 Electricity Not Covered:** The Utility shall have no duty under this Agreement to account for, pay for, deliver, or return in kind any electricity produced by the Facility and delivered into the Utility's System unless the system is net metered as described in Public Service Law Section 66-l.

## **III. INSTALLATION, OPERATION AND MAINTENANCE OF UNIT**

**3.1 Compliance with SIR:** Subject to the provisions of this Agreement, the Utility shall be required to interconnect the Unit to the Utility's system, for purposes of parallel operation,

if the Utility accepts the Unit as in compliance with the SIR. The Interconnection Customer shall have a continuing obligation to maintain and operate the Unit in compliance with the SIR.

**3.2 Observation of the Unit - Construction Phase:** The Utility may, in its discretion and upon reasonable notice, perform reasonable on-site verifications during the construction of the Unit. Whenever the Utility chooses to exercise its right to perform observations herein it shall specify to the Interconnection Customer its reasons for its decision to perform the observation. For purposes of this paragraph and paragraphs 3.3 through 3.5, the term "on-site verification" shall not include testing of the Unit, and verification tests shall not be required except as provided in paragraphs 3.3 and 3.4.

**3.3 Observation of the Unit - Ten-day Period:** The Utility may perform on-site verifications of the Unit and observe the execution of verification testing within a reasonable period of time, not exceeding ten (10) business days after system installation. The Unit will be allowed to commence parallel operation upon satisfactory completion of the verification test. The Interconnection Customer must have complied with and must continue to comply with all contractual and technical requirements.

**3.4 Observation of the Unit - Post-Ten-day Period:** If the Utility does not perform an on-site verification of the Unit and observe the execution of verification testing within the ten-day period, the Interconnection Customer will send the Utility within five (5) days of the verification testing a written notification certifying that the Unit has been installed and tested in compliance with the SIR, the utility-accepted design and the equipment manufacturer's instructions. The Interconnection Customer may begin to produce energy upon satisfactory completion of the verification test. After receiving the verification test notification, the Utility will either issue to the Interconnection Customer a formal letter of acceptance for interconnection, or may request that the applicant and utility set a date and time to perform an on-site verification of the Unit and make reasonable inquiries of the Interconnection Customer, but only for purposes of determining whether the verification tests were properly performed. The Interconnection Customer shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.

**3.5 Observation of the Unit - Operations:** The Utility may perform on-site verification of the operations of the Unit after it commences operations if the Utility has a reasonable basis for doing so based on its responsibility to provide continuous and reliable utility service or as authorized by the provisions of the Utility's Retail Electric Tariff relating to the verification of Interconnection Customer installations generally.

**3.6 Costs of Interconnection Facilities:** During the term of this Agreement, the Utility shall design, construct and install the Interconnection Facilities. The Interconnection Customer shall be responsible for paying the incremental capital cost of such Interconnection Facilities attributable to the Interconnection Customer's Unit. All costs associated with the operation and

maintenance of the Dedicated Facilities after the Unit first produces energy shall be the responsibility of the Utility.

**3.7 Modifications to the Unit:** The Interconnection Customer may request a Modification at any time after commencement of parallel operation. The Utility shall evaluate the request and determine whether the proposed change is a Material Modification in accordance with the rules for requesting changes to applications in the SIR. A Material Modification will be studied pursuant to the procedures in the SIR for new applications. In the case of a non-material modification that is accepted by the Utility, the parties will execute an amendment to this Agreement describing the Unit changes that have been approved.

#### **IV. DISCONNECTION OF THE UNIT**

**4.1 Emergency Disconnection:** The Utility may disconnect the Unit, without prior notice to the Interconnection Customer (a) to eliminate conditions that constitute a potential hazard to Utility personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Utility system; (c) if a hazardous condition relating to the Unit is observed by a Utility inspection; or (d) if the Interconnection Customer has tampered with any protective device. The Utility shall notify the Interconnection Customer of the emergency if circumstances permit. The Interconnection Customer shall notify the Utility promptly when it becomes aware of an emergency condition that affects the Unit that may reasonably be expected to affect the Utility EPS.

**4.2 Non-Emergency Disconnection Due to Unit Performance:** The Utility may disconnect the Unit, after notice to the responsible party has been provided and a reasonable time to correct, consistent with the conditions, has elapsed, if (a) the Interconnection Customer has failed to make available records of verification tests and maintenance of his protective devices; (b) the Unit system interferes with Utility equipment or equipment belonging to other customers of the Utility; (c) the Unit adversely affects the quality of service of adjoining customers; (d) the ESS does not operate in compliance with the operating parameters and limits described in Attachment 1 to this Agreement.

**4.3 Non-Emergency Disconnection for Utility Work:** The Utility may disconnect the Unit after notice to Interconnection Customer when necessary for routine maintenance, construction, and repairs on the Utility EPS. The Interconnection Customer may request to reconnect its service prior to the completion of the Utility's work. The Utility shall accommodate such requests, provided that the Interconnection Customer shall be responsible for the costs of the Utility's review and any system modifications required to reconnect the Unit ahead of schedule.

**4.4 Disconnection by Interconnection Customer:** The Interconnection Customer may disconnect a Unit with an AC nameplate rating above 300 kW upon 18 hours advance notice to the Utility if the planned shutdown will last 8 hours or more. For non-emergency forced outages lasting 8 hours or more, the Interconnection Customer shall notify the Utility within 24 hours of the commencement of the shutdown.

**4.5 Utility Obligation to Cure Adverse Effect:** If, after the Interconnection Customer meets all interconnection requirements, the operations of the Utility are adversely affecting the performance of the Unit or the Customer's premises, the Utility shall immediately take appropriate action to eliminate the adverse effect. If the Utility determines that it needs to upgrade or reconfigure its system, the Interconnection Customer will not be responsible for the cost of new or additional equipment beyond the point of common coupling between the Interconnection Customer and the Utility.

## **V. ACCESS**

**5.1 Access to Premises:** The Utility shall have access to the disconnect switch of the Unit at all times. At reasonable hours and upon reasonable notice consistent with Section III of this Agreement, or at any time without notice in the event of an emergency (as defined in paragraph 4.1), the Utility shall have access to the Premises.

**5.2 Utility and Interconnection Customer Representatives:** The Utility shall designate, and shall provide to the Interconnection Customer, the name and telephone number of a representative or representatives who can be reached at all times to allow the Interconnection Customer to report an emergency and obtain the assistance of the Utility. For the purpose of allowing access to the premises, the Interconnection Customer shall provide the Utility with the name and telephone number of a person who is responsible for providing access to the Premises.

**5.3 Utility Right to Access Utility-Owned Facilities and Equipment:** If necessary for the purposes of this Agreement, the Interconnection Customer shall allow the Utility access to the Utility's equipment and facilities located on the Premises. To the extent that the Interconnection Customer does not own all or any part of the property on which the Utility is required to locate its equipment or facilities to serve the Interconnection Customer under this Agreement, the Interconnection Customer shall secure and provide in favor of the Utility the necessary rights to obtain access to such equipment or facilities, including easements if the circumstances so require.

## **VI. DISPUTE RESOLUTION**

**6.1 Good Faith Resolution of Disputes:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.

**6.2 Mediation:** If a dispute arises under this Agreement, and if it cannot be resolved by the Parties within ten (10) business days after written notice of the dispute, the parties agree to submit the dispute to mediation by a mutually acceptable mediator, in a mutually convenient location in New York State, in accordance with the then current International Institute for Conflict prevention & Resolution Procedure, or to mediation by a mediator provided by the New York Public Service Commission. The Parties agree to participate in good faith in the mediation for a period of up to 90 days. If the Parties are not successful in resolving their disputes through mediation, then the parties may refer the dispute for resolution to the New York Public Service Commission, which shall maintain continuing jurisdiction over this Agreement.

**6.3 Escrow:** If there are amounts in dispute of more than two thousand dollars(\$2,000), the Interconnection Customer shall either place such disputed amounts into an independent escrow account pending final resolution of the dispute in question, or provide to the Utility an appropriate irrevocable standby letter of credit in lieu thereof.

## **VII. INSURANCE**

**7.1. Commercial General Liability:** The Interconnection Customer shall, at its own expense, procure and maintain throughout the period of this Agreement the following minimum insurance coverage:

**7.1.1.** Commercial general liability insurance with limits not less than:

- 7.1.1.1.** Five million dollars (\$5,000,000) for each occurrence and in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than five (5) MWAC;
- 7.1.1.2.** Two million dollars (\$2,000,000) for each occurrence and five million dollars (\$5,000,000) in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than one (1) MWAC and less than or equal to five (5) MWAC;
- 7.1.1.3.** One million dollars (\$1,000,000) for each occurrence and in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than or equal to 300 (kWAC) and less than or equal to one (1) MWAC

**7.1.2.** Any combination of general liability and umbrella/excess liability policy limits can be used to satisfy the limit requirements of Section 7.1.1 (a).

**7.1.3.** The general liability insurance required to be purchased in Section 7.1 (a) may be purchased for the direct benefit of the Utility and shall respond to third party claims asserted against the Utility (hereinafter known as "Owners Protective Liability"). Should this option be chosen, the requirement of Section 7.3(a) will not apply but the Owners Protective Liability policy will be purchased for the direct benefit of the Utility and the Utility will be designated as the primary and "Named Insured" under the policy.

**7.2. General Commercial Liability Insurance:** The Interconnection Customer is not required to provide general commercial liability insurance for facilities with an AC nameplate rating of 300 kW or less. Due to the risk of incurring damages however, the New York State Public Service Commission ("Commission") recommends that the Interconnection Customer obtain adequate insurance. The inability of the Utility to require the Interconnection Customer to provide general commercial liability insurance coverage for operation of the Unit is not a waiver of any rights the Utility may have to pursue remedies at law against the Interconnection Customer to recover damages.

**7.3. Insurer Requirements and Endorsements:** All required insurance shall be written by reputable insurers authorized to conduct business in New York. In addition, all general liability insurance shall, (a) include the Utility as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that the Utility shall not incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days' written notice to the Utility prior to cancellation or termination of such insurance, with the exception of a ten (10) days' notice in the event of premium non-payment; provided that to the extent the Interconnection Customer is satisfying the requirements of subpart (d) of this paragraph by means of a presently existing insurance policy, the Interconnection Customer shall only be required to make good faith efforts to satisfy that requirement and will assume the responsibility for notifying the Utility as required above.

**7.4. Evidence of Insurance:** Evidence of the insurance required shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Interconnecting Customer. Prior to the Utility commencing work on System Modifications, and annually thereafter, the Interconnection Customer shall have its insurer furnish to the Utility certificates of insurance evidencing the insurance coverage required above.

**7.4.1** If coverage is on a claims-made basis, the Interconnection Customer agrees that the policy effective date or retroactive date shall be no later than the effective date of this agreement, be continuously maintained throughout the life of this agreement, and remain in place for a minimum of three (3) years following the termination of this agreement or if policies are terminated will purchase a three-year extended reporting period. Evidence of such coverage will be provided on an annual basis.

**7.4.2** In the event that an Owners Protective Liability policy is provided, the original policy shall be provided to the Utility.

**7.5. Self-Insurance:** If the Interconnection Customer has a self-insurance program established in accordance with commercially acceptable risk management practices, the Interconnection Customer may comply with the following in lieu of the above requirements as reasonably approved by the Utility:

**7.5.1.** The Interconnection Customer shall provide to the Utility, at least thirty (30) calendar days prior to the Date of Initial Operation, evidence of such program to self-insure to a level of coverage equivalent to that required.

**7.5.2.** If the Interconnection Customer ceases to self-insure to the standards required hereunder, or if the Interconnection Customer is unable to provide continuing evidence of the Interconnection Customer's financial ability to self-insure, the Interconnection Customer agrees to promptly obtain the coverage required under Section 7.1.

**7.6. Utility Obligation to Maintain Insurance:** The Utility agrees to maintain general liability insurance or self-insurance consistent with its existing commercial practice. Such insurance or self-insurance shall not exclude coverage for the Utility's liabilities undertaken pursuant to this Agreement.

**7.7. Notification Obligations:** The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **VIII. LIMITATION OF LIABILITY**

**8.1** Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever. Nothing herein is meant to limit the liability of a Party to an unaffiliated third-party claimant.

## **IX. INDEMNITY**

**9.1** This provision protects each Party from liability incurred to third parties arising from actions taken pursuant to the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Section 7.

**9.2** Each Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Party (the "Indemnified Party") harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, to the extent arising out of or resulting from the Indemnifying Party's action or failure to meet its obligations under this Agreement, except in cases of negligence, gross negligence or intentional wrongdoing by the Indemnified Party.

**9.3** If a Party is obligated to indemnify and hold the Indemnified Party harmless under this section, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual loss, as adjudicated by the Indemnifying Party's insurance carrier, net of any insurance or other recovery.

**9.4** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any unintentional failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

## **X. CONSEQUENTIAL DAMAGES**

**10.1** Other than as expressly provided for in this Agreement or pursuant to the utility tariff, neither Party shall be liable to the other Party under any provision of this Agreement for any losses, damages, costs, or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability;

provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

## **XI. MISCELLANEOUS PROVISIONS**

**11.1 Beneficiaries:** This Agreement is intended solely for the benefit of the Parties hereto, and if a Party is an agent, its principal. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any other person.

**11.2 Severability:** If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such portion or provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

**11.3 Entire Agreement:** This Agreement constitutes the entire Agreement between the Parties and supersedes all prior agreements or understandings, whether verbal or written.

**11.4 Waiver:** No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. In the event that any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

**11.5 Applicable Law:** This Agreement shall be governed by and construed in accordance with the law of the State of New York.

**11.6 Amendments:** This Agreement shall not be amended unless the amendment is in writing and signed by the Utility and the Customer.

**11.7 Force Majeure:** For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.

**11.8 Assignment to Corporate Party:** At any time during the term, the Interconnection Customer may assign this Agreement to a corporation or other entity with limited liability, provided that the Interconnection Customer obtains the consent of the Utility. Such consent will not be withheld unless the Utility can demonstrate that the corporate entity is not reasonably capable of performing the obligations of the assigning Interconnection Customer under this Agreement.

**11.9 Assignment to Individuals:** At any time during the term, the Interconnection Customer may assign this Agreement to another person, other than a corporation or other entity with limited liability, provided that the assignee is the owner, lessee, or is otherwise responsible for the Unit.

**11.10 Permits and Approvals:** Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction and for the operation of the Unit during the term of this Agreement.

**11.11 Limitation of Liability:** Neither by inspection, if any, or non-rejection, nor in any other way, does the Utility give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Unit and any structures, equipment, wires, appliances or devices appurtenant thereto.

**ACCEPTED AND AGREED:**

**Interconnection Customer**

Signature:

A blue ink signature of the name Tim Fisher.

**Printed Name:** Tim Fisher

**Title:**

A blue ink title, possibly 'Manager', written below the signature.

**Date:**

5/15/2025

**Utility Signature:**

A blue ink signature of the name Christopher Jones.

**Printed Name:**

Christopher Jones

**Title:**

Chief Engineer

**Date:**

5/15/2025

Save the Date! 2025 ANNUAL CON EDISON ENERGY STORAGE DAY at the Con Edison Learning Center on Wednesday, November 19, 2025.

# View Communication

**From:**

DoNotReply@PowerClerk.com

**To:**

tfisher@dhipgroup.com

**Cc:**

david.schaffer@infinitysolarsystems.com;will@strobepower.com

**Subject:**

ConEdison Case Number MC-842424 - Finalize Customer Design/Testing Procedures

Tim Fisher  
549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY 10510



**Re : Pre-Construction Design for Interconnection of Distributed Generation – Proceed to Construction**

**Date:** July 7, 2025

**Service At:** 549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY, 10510

**Case Number:** MC-842424

Dear Tim Fisher,

As per the New York State Standardized Interconnection Requirements (SIR), Con Edison has completed the Pre-Construction Design approval for your 161 kW distributed generation project at the above address.

In accordance with the SIR, you have also received a copy of Appendix A - Standardized Contract which has been executed by the utility.

At this time your payment in the amount of \$0 for the utility system or service upgrades directly related to your project at the above address, has been waived. Please note, Con Edison will not allow you to schedule a Verification Test until 100% of the system or service upgrades payment has been received.

Con Edison provides all required final verification testing inspections at no additional cost to you. When you have completed construction and pre-testing of your system and are ready for final

verification testing, please log onto the [Power Clerk](#) web portal and submit the Request Verification Test form.

If you have any further questions or concerns, or feel you are receiving this notice in error, please contact your Con Edison Energy Services representative via the Power Clerk web portal or via the contact information below.

Sincerely,  
Manuel Benzan  
Customer Project Manager A  
Con Edison Company of NY  
Westchester Energy Services  
511 Theodore Fremd Avenue, 2nd Floor  
Rye, NY 10580-1432

[BENZANM@coned.com](mailto:BENZANM@coned.com)  
(W)347-931-6642  
[www.coned.com](http://www.coned.com)



# Michael E. Miele, PE

Licensed Professional Engineer

Licensed In New York, New Jersey, Connecticut & California

New York License # 079676

New Jersey License # 44042

Connecticut License # 23158

California License # 31508

July 10, 2025

Village of Briarcliff Manor Building Department  
The Office of the Building Inspector  
1111 Pleasantville Road  
Briarcliff Manor, NY 10510

Re: 555 Pleasantville Road North Building – 555 Pleasantville Road, Briarcliff Manor, NY 10510  
Solar Panel Loading Certification  
Village of Briarcliff Manor, County of Westchester, State of New York

Dear Building Department

I am the engineer of record for the above referenced project. I have prepared the attached plans dated May 10, 2025 that consist of the installation of (342) BVM7612M-550-H-HC-BF (550W) solar panels at the above referenced location.

I can hereby certify that the existing roof structure combined with the additional weight of the solar panels and associated ballast blocks, meets the requirements of The 2020 Building Code of New York State, Publication Date, November 2019.

The design loads were as follows,

Roof Design Load: 30psf live load

Wind Design Load: 115mph

No additional structural members were required.

As per the base building structural drawings, the roof is currently framed "W" style steel I-Beams. The roof structural members are in compliance with ASCE 7-16 for deflection and acceptable bending stress.

If you have any questions, please feel free to call me at any time. Thanks in advance.

Sincerely Yours,



Michael E. Miele, PE



## **APPENDIX A -**

### **NEW YORK STATE STANDARDIZED CONTRACT FOR INTERCONNECTION OF NEW DISTRIBUTED GENERATION UNITS AND/OR ENERGY STORAGE SYSTEMS WITH CAPACITY OF 5 MW OR LESS CONNECTED IN PARALLEL WITH UTILITY DISTRIBUTION SYSTEMS**

#### **Interconnection Customer Information:**

**Name:**

Tim Fisher

**Address:**

549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY 10510

**Telephone:**

(347) 266-3514

**Fax:****Email:**

tfisher@dhipgroup.com

**Unit Application/File No.:**

LDG-05553

#### **Utility Information:**

**Name:**

Consolidated Edison Company of NY, Inc.

**Address:**

4 Irving Pl., New York, NY 10003

**Telephone:**

1-800-752-6633 (1-800-75-CONED)

**Fax:****Email:**

dgexpert@coned.com

**Utility Account Number:**

16936320007

## DEFINITIONS

**Delivery Service** means the services the Utility may provide to deliver capacity or energy generated by the Interconnection Customer to a buyer to a delivery point(s), including related ancillary services.

**Energy Storage System (ESS)** means a commercially available mechanical, electrical, or electro-chemical means to store and release electrical energy, and its associated electrical inversion device and control functions that may be stand-alone or paired with a distributed generator at a point of common coupling.

**Interconnection Customer** means the owner of the Unit.

**Interconnection Facilities** means the equipment and facilities on the Utility's system necessary to permit operation of the Unit in parallel with the Utility's system.

**Material Modification** means a Modification to a Unit that may have adverse impacts on the Utility's system, Utility customers, other projects, or applications in the interconnection queue.

**Modification** means a change to the ownership, equipment, equipment ratings, equipment configuration, or operating conditions of the Unit.

**Premises** means the real property where the Unit is located.

**SIR** means the New York State Standardized Interconnection Requirements for new distributed generation units and/or energy storage systems with a nameplate capacity of 5 MW or less connected in parallel with the Utility's distribution system.

**Unit** means the distributed generation, stand-alone ESS, or combined generation and ESS facilities approved by the Utility for operation in parallel with the Utility's system. This Agreement relates only to such Unit, but a new agreement shall not be required if the Interconnection Customer makes physical alterations to the Unit that do not result in an increase in its nameplate generating capacity. The nameplate generating capacity or inverter/converter rating of the Unit shall not exceed 5 MW.

**Utility** means Consolidated Edison of New York, Inc. (Con Edison).

## **I. TERM AND TERMINATION**

**1.1 Term:** This Agreement shall become effective when executed by both Parties and shall continue in effect until terminated.

**1.2 Termination:** This Agreement may be terminated as follows:

- a. The Interconnection Customer may terminate this Agreement at any time, by giving the Utility sixty (60) days' written notice.
- b. Failure by the Interconnection Customer to seek final acceptance by the Utility within twelve (12) months after completion of the utility construction process described in the SIR shall automatically terminate this Agreement.
- c. Either Party may, by giving the other Party at least sixty (60) days' prior written notice, terminate this Agreement in the event that the other Party is in default of any of the material terms and conditions of this Agreement. The terminating Party shall specify in the notice the basis for the termination and shall provide a reasonable opportunity to cure the default.
- d. The Utility may, by giving the Interconnection Customer at least sixty (60) days' prior written notice, terminate this Agreement for cause. The Interconnection Customer's non-compliance with an upgrade to the SIR, unless the Interconnection Customer's installation is "grandfathered," shall constitute good cause.

**1.3 Disconnection and Survival of Obligations:** Upon termination of this Agreement the Unit will be disconnected from the Utility's electric system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

**1.4 Suspension:** This Agreement will be suspended during any period in which the Interconnection Customer is not eligible for Delivery Service from the Utility

## **II. SCOPE OF AGREEMENT**

**2.1 Scope of Agreement:** This Agreement relates solely to the conditions under which the Utility and the Interconnection Customer agree that the Unit may be interconnected to and operated in parallel with the Utility's system.

**2.2 Electricity Not Covered:** The Utility shall have no duty under this Agreement to account for, pay for, deliver, or return in kind any electricity produced by the Facility and delivered into the Utility's System unless the system is net metered as described in Public Service Law Section 66-l.

## **III. INSTALLATION, OPERATION AND MAINTENANCE OF UNIT**

**3.1 Compliance with SIR:** Subject to the provisions of this Agreement, the Utility shall be required to interconnect the Unit to the Utility's system, for purposes of parallel operation,

if the Utility accepts the Unit as in compliance with the SIR. The Interconnection Customer shall have a continuing obligation to maintain and operate the Unit in compliance with the SIR.

**3.2 Observation of the Unit - Construction Phase:** The Utility may, in its discretion and upon reasonable notice, perform reasonable on-site verifications during the construction of the Unit. Whenever the Utility chooses to exercise its right to perform observations herein it shall specify to the Interconnection Customer its reasons for its decision to perform the observation. For purposes of this paragraph and paragraphs 3.3 through 3.5, the term "on-site verification" shall not include testing of the Unit, and verification tests shall not be required except as provided in paragraphs 3.3 and 3.4.

**3.3 Observation of the Unit - Ten-day Period:** The Utility may perform on-site verifications of the Unit and observe the execution of verification testing within a reasonable period of time, not exceeding ten (10) business days after system installation. The Unit will be allowed to commence parallel operation upon satisfactory completion of the verification test. The Interconnection Customer must have complied with and must continue to comply with all contractual and technical requirements.

**3.4 Observation of the Unit - Post-Ten-day Period:** If the Utility does not perform an on-site verification of the Unit and observe the execution of verification testing within the ten-day period, the Interconnection Customer will send the Utility within five (5) days of the verification testing a written notification certifying that the Unit has been installed and tested in compliance with the SIR, the utility-accepted design and the equipment manufacturer's instructions. The Interconnection Customer may begin to produce energy upon satisfactory completion of the verification test. After receiving the verification test notification, the Utility will either issue to the Interconnection Customer a formal letter of acceptance for interconnection, or may request that the applicant and utility set a date and time to perform an on-site verification of the Unit and make reasonable inquiries of the Interconnection Customer, but only for purposes of determining whether the verification tests were properly performed. The Interconnection Customer shall not be required to perform the verification tests a second time, unless irregularities appear in the verification test report or there are other objective indications that the tests were not properly performed in the first instance.

**3.5 Observation of the Unit - Operations:** The Utility may perform on-site verification of the operations of the Unit after it commences operations if the Utility has a reasonable basis for doing so based on its responsibility to provide continuous and reliable utility service or as authorized by the provisions of the Utility's Retail Electric Tariff relating to the verification of Interconnection Customer installations generally.

**3.6 Costs of Interconnection Facilities:** During the term of this Agreement, the Utility shall design, construct and install the Interconnection Facilities. The Interconnection Customer shall be responsible for paying the incremental capital cost of such Interconnection Facilities attributable to the Interconnection Customer's Unit. All costs associated with the operation and

maintenance of the Dedicated Facilities after the Unit first produces energy shall be the responsibility of the Utility.

**3.7 Modifications to the Unit:** The Interconnection Customer may request a Modification at any time after commencement of parallel operation. The Utility shall evaluate the request and determine whether the proposed change is a Material Modification in accordance with the rules for requesting changes to applications in the SIR. A Material Modification will be studied pursuant to the procedures in the SIR for new applications. In the case of a non-material modification that is accepted by the Utility, the parties will execute an amendment to this Agreement describing the Unit changes that have been approved.

#### **IV. DISCONNECTION OF THE UNIT**

**4.1 Emergency Disconnection:** The Utility may disconnect the Unit, without prior notice to the Interconnection Customer (a) to eliminate conditions that constitute a potential hazard to Utility personnel or the general public; (b) if pre-emergency or emergency conditions exist on the Utility system; (c) if a hazardous condition relating to the Unit is observed by a Utility inspection; or (d) if the Interconnection Customer has tampered with any protective device. The Utility shall notify the Interconnection Customer of the emergency if circumstances permit. The Interconnection Customer shall notify the Utility promptly when it becomes aware of an emergency condition that affects the Unit that may reasonably be expected to affect the Utility EPS.

**4.2 Non-Emergency Disconnection Due to Unit Performance:** The Utility may disconnect the Unit, after notice to the responsible party has been provided and a reasonable time to correct, consistent with the conditions, has elapsed, if (a) the Interconnection Customer has failed to make available records of verification tests and maintenance of his protective devices; (b) the Unit system interferes with Utility equipment or equipment belonging to other customers of the Utility; (c) the Unit adversely affects the quality of service of adjoining customers; (d) the ESS does not operate in compliance with the operating parameters and limits described in Attachment 1 to this Agreement.

**4.3 Non-Emergency Disconnection for Utility Work:** The Utility may disconnect the Unit after notice to Interconnection Customer when necessary for routine maintenance, construction, and repairs on the Utility EPS. The Interconnection Customer may request to reconnect its service prior to the completion of the Utility's work. The Utility shall accommodate such requests, provided that the Interconnection Customer shall be responsible for the costs of the Utility's review and any system modifications required to reconnect the Unit ahead of schedule.

**4.4 Disconnection by Interconnection Customer:** The Interconnection Customer may disconnect a Unit with an AC nameplate rating above 300 kW upon 18 hours advance notice to the Utility if the planned shutdown will last 8 hours or more. For non-emergency forced outages lasting 8 hours or more, the Interconnection Customer shall notify the Utility within 24 hours of the commencement of the shutdown.

**4.5 Utility Obligation to Cure Adverse Effect:** If, after the Interconnection Customer meets all interconnection requirements, the operations of the Utility are adversely affecting the performance of the Unit or the Customer's premises, the Utility shall immediately take appropriate action to eliminate the adverse effect. If the Utility determines that it needs to upgrade or reconfigure its system, the Interconnection Customer will not be responsible for the cost of new or additional equipment beyond the point of common coupling between the Interconnection Customer and the Utility.

## **V. ACCESS**

**5.1 Access to Premises:** The Utility shall have access to the disconnect switch of the Unit at all times. At reasonable hours and upon reasonable notice consistent with Section III of this Agreement, or at any time without notice in the event of an emergency (as defined in paragraph 4.1), the Utility shall have access to the Premises.

**5.2 Utility and Interconnection Customer Representatives:** The Utility shall designate, and shall provide to the Interconnection Customer, the name and telephone number of a representative or representatives who can be reached at all times to allow the Interconnection Customer to report an emergency and obtain the assistance of the Utility. For the purpose of allowing access to the premises, the Interconnection Customer shall provide the Utility with the name and telephone number of a person who is responsible for providing access to the Premises.

**5.3 Utility Right to Access Utility-Owned Facilities and Equipment:** If necessary for the purposes of this Agreement, the Interconnection Customer shall allow the Utility access to the Utility's equipment and facilities located on the Premises. To the extent that the Interconnection Customer does not own all or any part of the property on which the Utility is required to locate its equipment or facilities to serve the Interconnection Customer under this Agreement, the Interconnection Customer shall secure and provide in favor of the Utility the necessary rights to obtain access to such equipment or facilities, including easements if the circumstances so require.

## **VI. DISPUTE RESOLUTION**

**6.1 Good Faith Resolution of Disputes:** Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.

**6.2 Mediation:** If a dispute arises under this Agreement, and if it cannot be resolved by the Parties within ten (10) business days after written notice of the dispute, the parties agree to submit the dispute to mediation by a mutually acceptable mediator, in a mutually convenient location in New York State, in accordance with the then current International Institute for Conflict prevention & Resolution Procedure, or to mediation by a mediator provided by the New York Public Service Commission. The Parties agree to participate in good faith in the mediation for a period of up to 90 days. If the Parties are not successful in resolving their disputes through mediation, then the parties may refer the dispute for resolution to the New York Public Service Commission, which shall maintain continuing jurisdiction over this Agreement.

**6.3 Escrow:** If there are amounts in dispute of more than two thousand dollars(\$2,000), the Interconnection Customer shall either place such disputed amounts into an independent escrow account pending final resolution of the dispute in question, or provide to the Utility an appropriate irrevocable standby letter of credit in lieu thereof.

## **VII. INSURANCE**

**7.1. Commercial General Liability:** The Interconnection Customer shall, at its own expense, procure and maintain throughout the period of this Agreement the following minimum insurance coverage:

**7.1.1.** Commercial general liability insurance with limits not less than:

- 7.1.1.1.** Five million dollars (\$5,000,000) for each occurrence and in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than five (5) MWAC;
- 7.1.1.2.** Two million dollars (\$2,000,000) for each occurrence and five million dollars (\$5,000,000) in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than one (1) MWAC and less than or equal to five (5) MWAC;
- 7.1.1.3.** One million dollars (\$1,000,000) for each occurrence and in the aggregate if the AC Nameplate rating of the Interconnection Customer's Facility is greater than or equal to 300 (kWAC) and less than or equal to one (1) MWAC

**7.1.2.** Any combination of general liability and umbrella/excess liability policy limits can be used to satisfy the limit requirements of Section 7.1.1 (a).

**7.1.3.** The general liability insurance required to be purchased in Section 7.1 (a) may be purchased for the direct benefit of the Utility and shall respond to third party claims asserted against the Utility (hereinafter known as "Owners Protective Liability"). Should this option be chosen, the requirement of Section 7.3(a) will not apply but the Owners Protective Liability policy will be purchased for the direct benefit of the Utility and the Utility will be designated as the primary and "Named Insured" under the policy.

**7.2. General Commercial Liability Insurance:** The Interconnection Customer is not required to provide general commercial liability insurance for facilities with an AC nameplate rating of 300 kW or less. Due to the risk of incurring damages however, the New York State Public Service Commission ("Commission") recommends that the Interconnection Customer obtain adequate insurance. The inability of the Utility to require the Interconnection Customer to provide general commercial liability insurance coverage for operation of the Unit is not a waiver of any rights the Utility may have to pursue remedies at law against the Interconnection Customer to recover damages.

**7.3. Insurer Requirements and Endorsements:** All required insurance shall be written by reputable insurers authorized to conduct business in New York. In addition, all general liability insurance shall, (a) include the Utility as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that the Utility shall not incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days' written notice to the Utility prior to cancellation or termination of such insurance, with the exception of a ten (10) days' notice in the event of premium non-payment; provided that to the extent the Interconnection Customer is satisfying the requirements of subpart (d) of this paragraph by means of a presently existing insurance policy, the Interconnection Customer shall only be required to make good faith efforts to satisfy that requirement and will assume the responsibility for notifying the Utility as required above.

**7.4. Evidence of Insurance:** Evidence of the insurance required shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Interconnecting Customer. Prior to the Utility commencing work on System Modifications, and annually thereafter, the Interconnection Customer shall have its insurer furnish to the Utility certificates of insurance evidencing the insurance coverage required above.

**7.4.1** If coverage is on a claims-made basis, the Interconnection Customer agrees that the policy effective date or retroactive date shall be no later than the effective date of this agreement, be continuously maintained throughout the life of this agreement, and remain in place for a minimum of three (3) years following the termination of this agreement or if policies are terminated will purchase a three-year extended reporting period. Evidence of such coverage will be provided on an annual basis.

**7.4.2** In the event that an Owners Protective Liability policy is provided, the original policy shall be provided to the Utility.

**7.5. Self-Insurance:** If the Interconnection Customer has a self-insurance program established in accordance with commercially acceptable risk management practices, the Interconnection Customer may comply with the following in lieu of the above requirements as reasonably approved by the Utility:

**7.5.1.** The Interconnection Customer shall provide to the Utility, at least thirty (30) calendar days prior to the Date of Initial Operation, evidence of such program to self-insure to a level of coverage equivalent to that required.

**7.5.2.** If the Interconnection Customer ceases to self-insure to the standards required hereunder, or if the Interconnection Customer is unable to provide continuing evidence of the Interconnection Customer's financial ability to self-insure, the Interconnection Customer agrees to promptly obtain the coverage required under Section 7.1.

**7.6. Utility Obligation to Maintain Insurance:** The Utility agrees to maintain general liability insurance or self-insurance consistent with its existing commercial practice. Such insurance or self-insurance shall not exclude coverage for the Utility's liabilities undertaken pursuant to this Agreement.

**7.7. Notification Obligations:** The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

## **VIII. LIMITATION OF LIABILITY**

**8.1** Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages of any kind whatsoever. Nothing herein is meant to limit the liability of a Party to an unaffiliated third-party claimant.

## **IX. INDEMNITY**

**9.1** This provision protects each Party from liability incurred to third parties arising from actions taken pursuant to the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in Section 7.

**9.2** Each Party (the "Indemnifying Party") shall at all times indemnify, defend, and hold the other Party (the "Indemnified Party") harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, to the extent arising out of or resulting from the Indemnifying Party's action or failure to meet its obligations under this Agreement, except in cases of negligence, gross negligence or intentional wrongdoing by the Indemnified Party.

**9.3** If a Party is obligated to indemnify and hold the Indemnified Party harmless under this section, the amount owing to the Indemnified Party shall be the amount of such Indemnified Party's actual loss, as adjudicated by the Indemnifying Party's insurance carrier, net of any insurance or other recovery.

**9.4** Promptly after receipt by an Indemnified Party of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this section may apply, the Indemnified Party shall notify the Indemnifying Party of such fact. Any unintentional failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

## **X. CONSEQUENTIAL DAMAGES**

**10.1** Other than as expressly provided for in this Agreement or pursuant to the utility tariff, neither Party shall be liable to the other Party under any provision of this Agreement for any losses, damages, costs, or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability;

provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

## **XI. MISCELLANEOUS PROVISIONS**

**11.1 Beneficiaries:** This Agreement is intended solely for the benefit of the Parties hereto, and if a Party is an agent, its principal. Nothing in this Agreement shall be construed to create any duty to, or standard of care with reference to, or any liability to, any other person.

**11.2 Severability:** If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such portion or provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

**11.3 Entire Agreement:** This Agreement constitutes the entire Agreement between the Parties and supersedes all prior agreements or understandings, whether verbal or written.

**11.4 Waiver:** No delay or omission in the exercise of any right under this Agreement shall impair any such right or shall be taken, construed or considered as a waiver or relinquishment thereof, but any such right may be exercised from time to time and as often as may be deemed expedient. In the event that any agreement or covenant herein shall be breached and thereafter waived, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder.

**11.5 Applicable Law:** This Agreement shall be governed by and construed in accordance with the law of the State of New York.

**11.6 Amendments:** This Agreement shall not be amended unless the amendment is in writing and signed by the Utility and the Customer.

**11.7 Force Majeure:** For purposes of this Agreement, "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage. If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.

**11.8 Assignment to Corporate Party:** At any time during the term, the Interconnection Customer may assign this Agreement to a corporation or other entity with limited liability, provided that the Interconnection Customer obtains the consent of the Utility. Such consent will not be withheld unless the Utility can demonstrate that the corporate entity is not reasonably capable of performing the obligations of the assigning Interconnection Customer under this Agreement.

**11.9 Assignment to Individuals:** At any time during the term, the Interconnection Customer may assign this Agreement to another person, other than a corporation or other entity with limited liability, provided that the assignee is the owner, lessee, or is otherwise responsible for the Unit.

**11.10 Permits and Approvals:** Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction and for the operation of the Unit during the term of this Agreement.

**11.11 Limitation of Liability:** Neither by inspection, if any, or non-rejection, nor in any other way, does the Utility give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Unit and any structures, equipment, wires, appliances or devices appurtenant thereto.

**ACCEPTED AND AGREED:**

**Interconnection Customer**

**Signature:** *Timothy J. Fisher*

**Printed Name:** Tim Fisher

**Title:** Manager

**Date:** 5/14/2025

**Utility Signature:**

A handwritten signature in black ink, appearing to read "Jones".

**Printed Name:** Christopher Jones

**Title:** Chief Engineer

**Date:** 5/14/2025

Save the Date! 2025 ANNUAL CON EDISON ENERGY STORAGE DAY at the Con Edison Learning Center on Wednesday, November 19, 2025.

# View Communication

**From:**

DoNotReply@PowerClerk.com

**To:**

tfisher@dhipgroup.com

**Cc:**

david.schaffer@infinitysolarsystems.com;will@strobepower.com

**Subject:**

ConEdison Case Number MC-842059 - Finalize Customer Design/Testing Procedures

Tim Fisher  
549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY 10510



**Re : Pre-Construction Design for Interconnection of Distributed Generation – Proceed to Construction**

**Date:** July 9, 2025

**Service At:** 549 PLEASANTVILLE ROAD  
BRIARCLIFF MANOR, NY, 10510

**Case Number:** MC-842059

Dear Tim Fisher,

As per the New York State Standardized Interconnection Requirements (SIR), Con Edison has completed the Pre-Construction Design approval for your 170 kW distributed generation project at the above address.

In accordance with the SIR, you have also received a copy of Appendix A - Standardized Contract which has been executed by the utility.

At this time your payment in the amount of \$0 for the utility system or service upgrades directly related to your project at the above address, has been waived. Please note, Con Edison will not allow you to schedule a Verification Test until 100% of the system or service upgrades payment has been received.

Con Edison provides all required final verification testing inspections at no additional cost to you. When you have completed construction and pre-testing of your system and are ready for final

verification testing, please log onto the [Power Clerk](#) web portal and submit the Request Verification Test form.

If you have any further questions or concerns, or feel you are receiving this notice in error, please contact your Con Edison Energy Services representative via the Power Clerk web portal or via the contact information below.

Sincerely,

Manuel Benzan

Customer Project Manager A

Con Edison Company of NY

Westchester Energy Services

511 Theodore Fremd Avenue, 2nd Floor

Rye, NY 10580-1432

[BENZANM@coned.com](mailto:BENZANM@coned.com)

(W)347-931-6642

[www.coned.com](http://www.coned.com)



# PHOTOVOLTAIC BALLAST MOUNT SYSTEM

342 MODULES-ROOF MOUNTED - 188.10 kW DC, 160.00 kW AC, 555 PLEASANTVILLE ROAD, BRIARCLIFF MANOR, NY 10510

## PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE:	188.10 kW DC 160.00 kW AC
MODULE TYPE & AMOUNT:	(342) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)
MODULE DIMENSIONS:	(L/W/H) 90.40"/44.65"/1.38"
INVERTER:	(02) SOLAREDGE DBL-SE80KUS [480V]
OPTIMIZER:	(342) SOLAREDGE POWER OPTIMIZERS C651U
INTERCONNECTION METHOD:	LINE SIDE TAP
UTILITY METER#:	ACT1C 9981248
AHJ#:	BRIARCLIFF MANOR VILLAGE

## SCOPE OF WORK:

INSTALLATION OF UTILITY INTERACTIVE PHOTOVOLTAIC SOLAR SYSTEM AND ANY NECESSARY ADDITIONAL WORK NEEDED FOR INSTALLATION.

## GOVERNING CODES

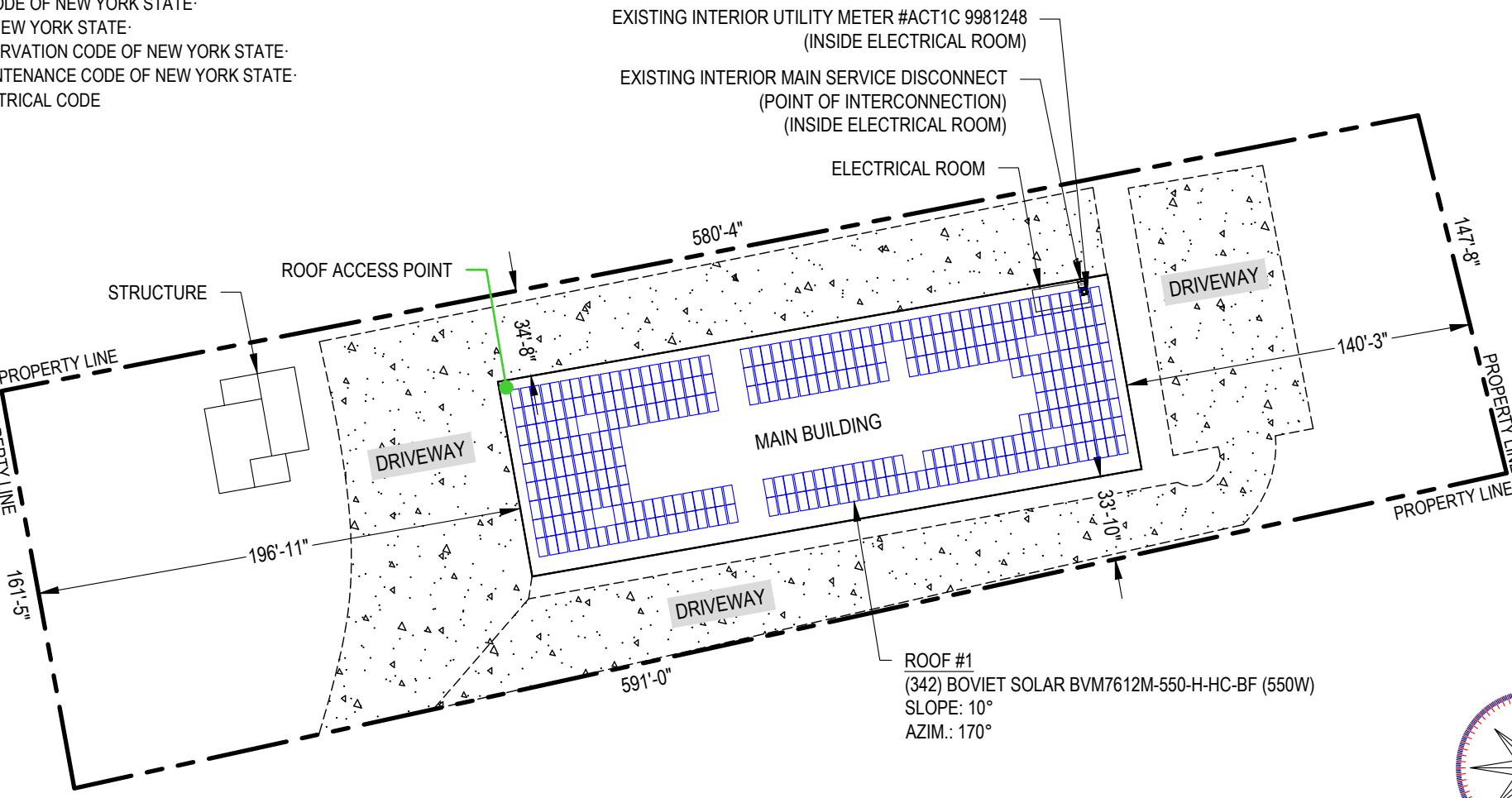
### ADOPTED CONSTRUCTION CODES

- 2020 BUILDING CODE OF NEW YORK STATE
- 2020 PLUMBING CODE OF NEW YORK STATE
- 2020 MECHANICAL CODE OF NEW YORK STATE
- 2020 FUEL GAS CODE OF NEW YORK STATE
- 2020 RESIDENTIAL CODE OF NEW YORK STATE
- 2020 FIRE CODE OF NEW YORK STATE
- 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE
- 2020 PROPERTY MAINTENANCE CODE OF NEW YORK STATE
- 2017 NATIONAL ELECTRICAL CODE

## GENERAL NOTES

1. A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
2. THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM.
3. THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
4. ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE.
5. MODULE CERTIFICATIONS WILL INCLUDE UL1703, IEC61646, IEC61730.
6. IF APPLICABLE, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE MARKED GROUNDING LUG HOLES PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
7. AS INDICATED BY DESIGN, OTHER NRTL LISTED MODULE GROUNDING DEVICES MAY BE USED IN PLACE OF STANDARD GROUNDING LUGS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ.
8. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING AS REQUIRED BY FIELD CONDITIONS.
9. ALL INVERTERS, MOTOR GENERATORS, PHOTOVOLTAIC MODULES, PHOTOVOLTAIC PANELS, AC PHOTOVOLTAIC MODULES, DC COMBINERS, DC-TO-DC CONVERTERS, SOURCE CIRCUIT COMBINERS, AND CHARGE CONTROLLERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER NEC 690.4(B).

555 PLEASANTVILLE ROAD



NOTE:- PV MODULES WILL BE MOUNTED TO AN EXISTING TPO ROOF USING PANELCLAW - CLAWFRPLUS 10 DEGREE DUAL TILT SYSTEM

1 PLOT PLAN

SCALE: 1/64" = 1'-0"

PV 0.0

## SHEET INDEX:

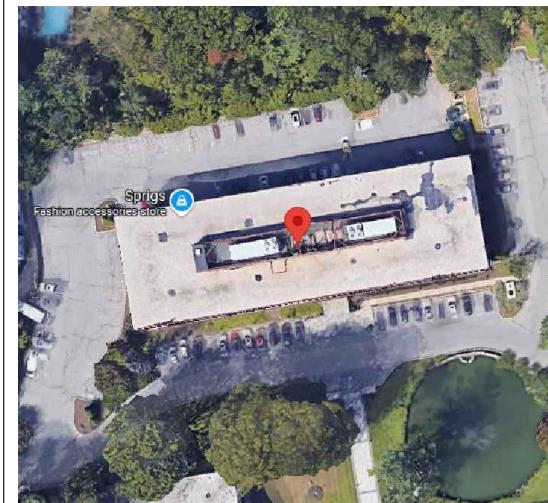
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PV 1.0:	SITE PLAN
PC-1:	COVER SHEET
PC-2:	PROJECT SUMMARY
PC-3:	ARRAY SITE MAP
PC-4:	TYPICAL ARRAY DIMENSIONS
PC-5:	ASSEMBLIES
PC-6:	RACKING COMPONENTS
PC-7:	BALLAST LEGEND
PC-7 TO PC-9:	BALLAST LAYOUT -1 TO 2
E 1.1:	3-LINE DIAGRAM
E 1.2:	WIRE CALCULATION
E 1.3:	NOTES
E 1.4:	WARNING LABELS
SS+	EQUIPMENT SPEC SHEET

InfinityEnergy  
INFINITY ENERGY  
575 CORPORATE DR. SUITE 2200,  
MAHWAH, NJ 07430  
PH: 1 (845) 200-3700

REVISIONS		
Description	Date	Rev
Revision	5/10/2025	02

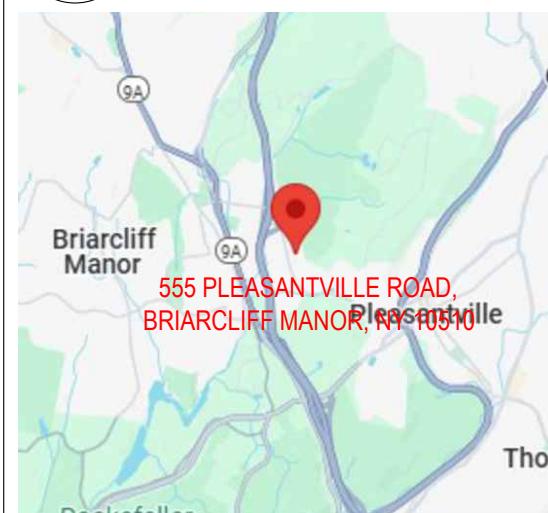


Project Name & Address



2 SATELLITE VIEW

SCALE: NTS



3 VICINITY MAP

SCALE: NTS

PV 0.0

555 PLEASANTVILLE RD.  
NORTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN # 098-02000-010050000000

Sheet Name

COVER SHEET

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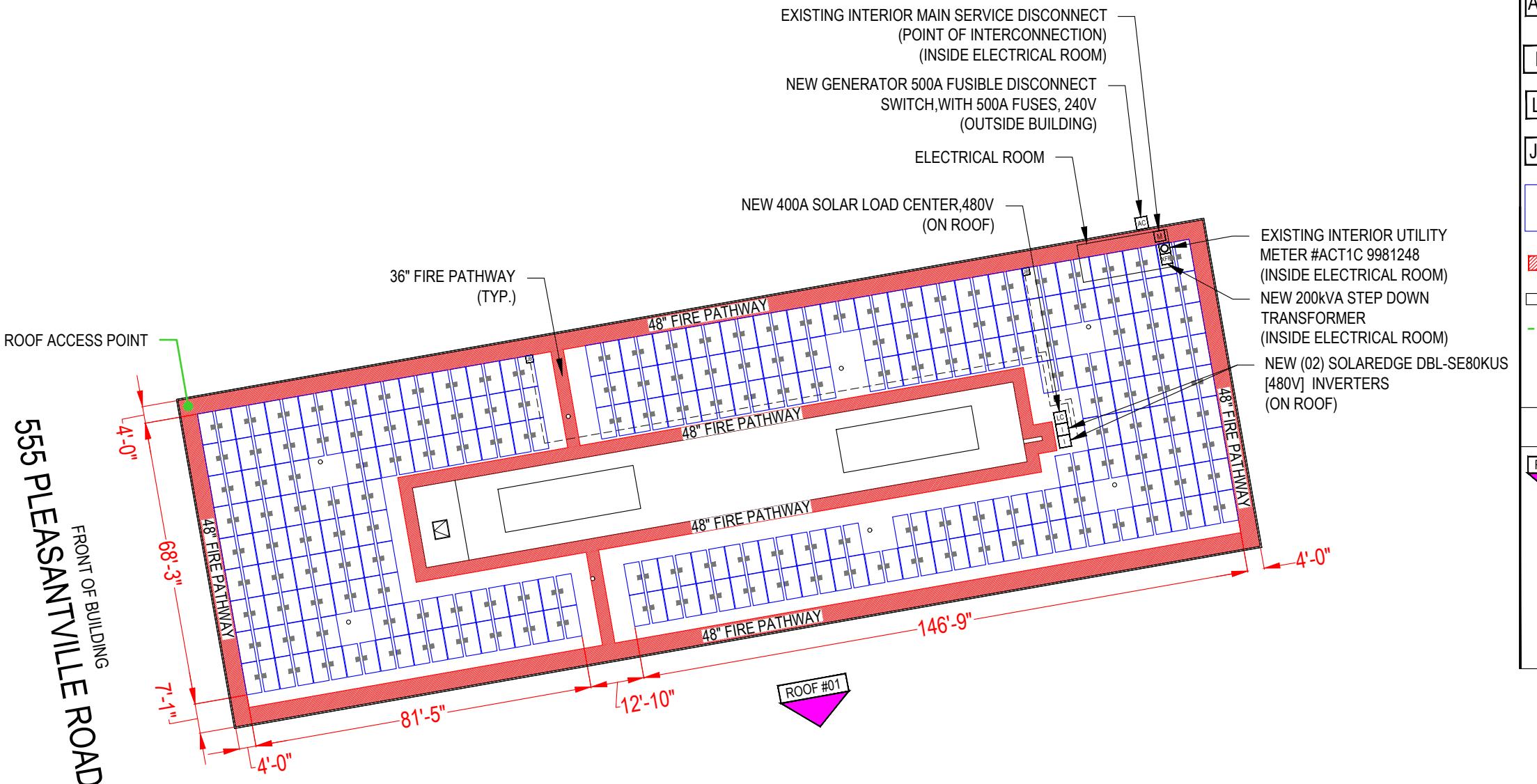
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PremiumCAD

## PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE: 188.10 kW DC  
160.00 kW AC  
MODULE TYPE & AMOUNT: (342) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)  
MODULE DIMENSIONS: (L/W/H) 90.40"/44.65"/1.38"  
INVERTER: (02) SOLAREDGE DBL-SE80KUS [480V]  
OPTIMIZER: (342) SOLAREDGE POWER OPTIMIZERS C651U



## SYSTEM LEGEND

- EXISTING INTERIOR UTILITY METER #ACT1C 9981248 (INSIDE ELECTRICAL ROOM)
- EXISTING INTERIOR MAIN SERVICE DISCONNECT (POINT OF INTERCONNECTION) (INSIDE ELECTRICAL ROOM)
- XFR NEW 200kVA STEP DOWN TRANSFORMER (INSIDE ELECTRICAL ROOM)
- AC NEW GENERATOR 500A FUSIBLE DISCONNECT SWITCH, WITH 500A FUSES, 240V (OUTSIDE BUILDING)
- I NEW (02) SOLAREDGE DBL-SE80KUS [480V] INVERTERS (ON ROOF)
- LC NEW 400A SOLAR LOAD CENTER, 480V (ON ROOF)
- JB NEW JUNCTION BOX
- (342) NEW BOVIET SOLAR BVM7612M-550-H-HC-BF (550W) MODULES WITH (342) SOLAREDGE POWER OPTIMIZERS C651U MOUNTED ON THE BACK OF EACH MODULES.
- = FIRE PATHWAY
- = ROOF OBSTRUCTIONS
- = CONDUIT RUN

## ROOF SECTIONS

ROOF #01 MODULE - 342  
SLOPE - 10°  
AZIMUTH - 170°  
MATERIAL - TPO

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## REVISIONS

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Revision	5/10/2025	02



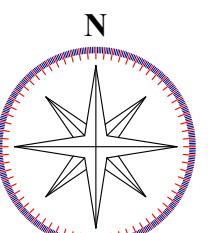
Project Name & Address

**555 PLEASANTVILLE RD.**  
**NORTH BUILDING**  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 098-02000-010050000000

Sheet Name  
SITE PLAN

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PremiumCAD





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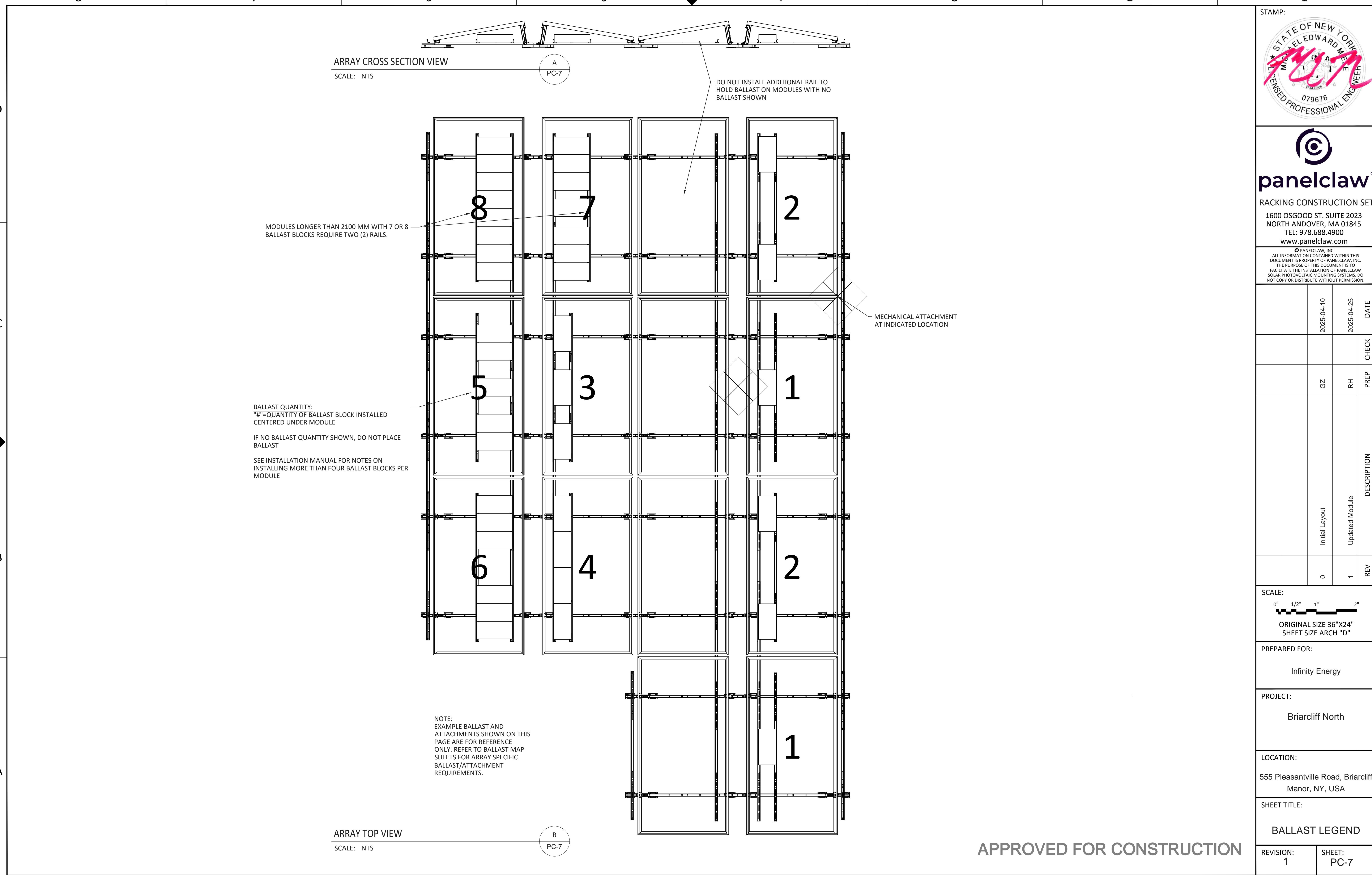

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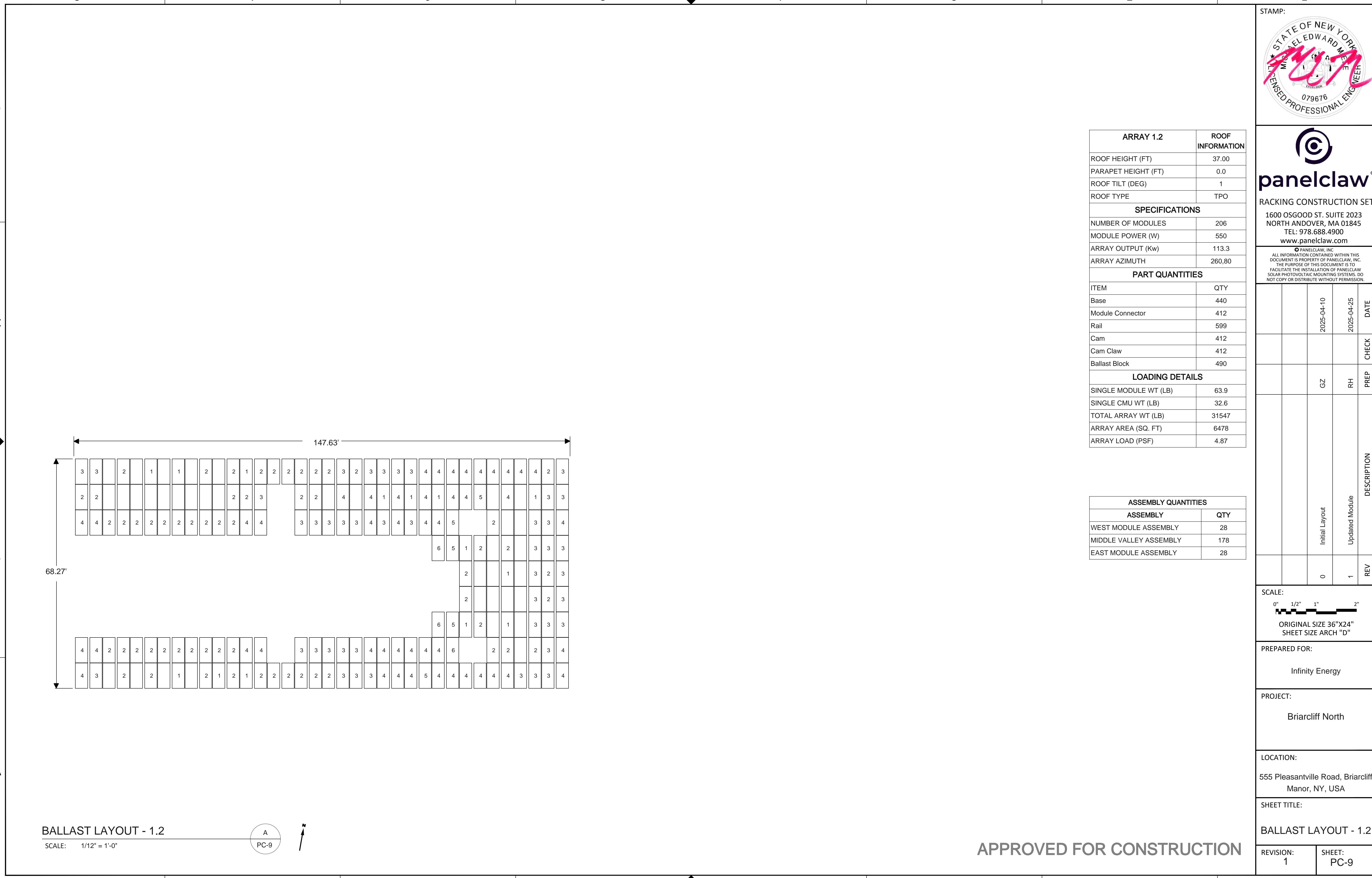






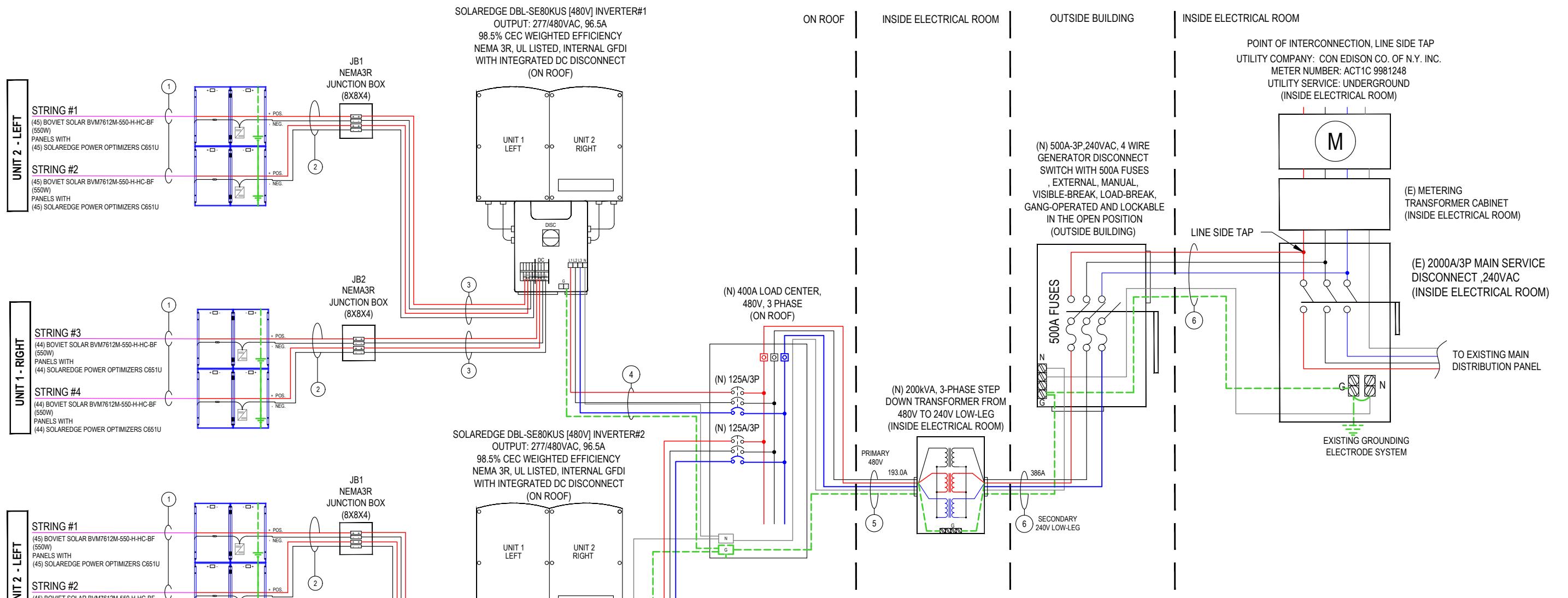
APPROVED FOR CONSTRUCTION





### SYSTEM SUMMARY

SYSTEM SIZE: 188.10 kW DC  
160.00 kW AC  
MODULE TYPE & AMOUNT: (342) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)  
INVERTER: (02) SOLAREDGE DBL-SE80KUS [480V]  
OPTIMIZER: (342) SOLAREDGE POWER OPTIMIZERS C651U



VOLTAGE TRIP SETTINGS		FREQUENCY TRIP SETTINGS			
SHALL TRIP FUNCTION	REQUIRED SETTINGS		SHALL TRIP FUNCTION	REQUIRED SETTINGS	
	VOLTAGE	CLEARING TIME (S)		FREQUENCY (HZ)	CLEARING TIME (S)
OV1	1.10	2.00	OF2	62.00	0.16
OV2	1.20	0.16	OF1	61.20	300.00
UV1	0.88	3.00	UF1	58.50	300.00
UV2	0.50	1.10	UF2	56.50	0.16

DC CIRCUIT		AC CIRCUIT	
POSITIVE (+)	NEGATIVE (-)	L1	L2
PE (GROUND)	PE (GROUND)	L3	N

STRING CONFIGURATION (INVERTER #1)														
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT							
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#1	45	45	60.66V	17.30A	24A	80V	1000V	24.75 kW	850V	1000V	24A	49.50 kW	JB1	#1
#2	45	45	60.66V	17.30A	24A	80V	1000V	24.75 kW	24A	49.50 kW	JB1	#1		

STRING CONFIGURATION (INVERTER #1)														
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT							
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#3	44	44	60.66V	17.30A	24A	80V	1000V	24.20 kW	850V	1000V	24A	48.40 kW	JB2	#1
#4	44	44	60.66V	17.30A	24A	80V	1000V	24.20 kW	24A	48.40 kW	JB2	#1		

STRING CONFIGURATION (INVERTER #2)														
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT							
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#1	45	45	60.66V	17.30A	24A	80V	1000V	24.75 kW	850V	1000V	24A	49.50 kW	JB1	#2
#2	45	45	60.66V	17.30A	24A	80V	1000V	24.75 kW	24A	49.50 kW	JB1	#2		

STRING CONFIGURATION (INVERTER #2)														
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT							
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#3	38	38	60.66V	17.30A	24A	80V	1000V	20.90 kW	850V	1000V	24A	40.70 kW	JB2	#2
#4	36	36	60.66V	17.30A	24A	80V	1000V	19.80 kW	24A	40.70 kW	JB2	#2		

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REVISIONS  
Description Date Rev  
Revision 5/10/2025 02

Signature with Seal  
STATE OF NEW YORK  
MICHAEL EDWARD MAYER  
079676  
LICENSED PROFESSIONAL ENGINEER

Project Name & Address  
555 PLEASANTVILLE RD.  
NORTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 0980200001005000000000

Sheet Name  
3-LINE  
DIAGRAM

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PremiumCAD

Rooftop conductor ampacities designed in compliance with art. 690.8, Tables 310.15(B)(2)(a), 310.15(B)(3)(a), 310.15(B)(3)(c), 310.15(B)(16), Chapter 9 Table 4, 5, & 9. Location specific temperature obtained from ASHRAE 2017 data tables	
RECORD LOW TEMP	-17°C
AMBIENT TEMP (HIGH TEMP 2%)	32°C
CONDUIT HEIGHT	0.5"
ROOF TOP TEMP	54°C
CONDUCTOR TEMPERATURE RATE	90°C

PV MODULE RATING @ STC	
MANUFACTURER	BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)
MAX. POWER-POINT CURRENT (IMP)	12.88 AMPS
MAX. POWER-POINT VOLTAGE (VMP)	42.76 VOLTS
OPEN-CIRCUIT VOLTAGE (VOC)	50.13 VOLTS
SHORT-CIRCUIT CURRENT (ISC)	13.84 AMPS
NOM. MAX. POWER AT STC (PMAX)	550 WATT
MAX. SYSTEM VOLTAGE	1500V
VOC TEMPERATURE COEFFICIENT	-0.285° %/°C

INVERTER SPECIFICATIONS [SOLAREDGE DBL-SE80KUS [480V]]	
MANUFACTURER	SOLAREDGE DBL-SE80KUS [480V]
MAXIMUM AC OUTPUT POWER	80000W
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-N)	244 VAC
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-L)	422.5 VAC
MAXIMUM CONTINUOUS OUTPUT CURRENT	96.5 AMPS
MAXIMUM INPUT VOLTAGE	1000 VDC
OPERATING VOLTAGE RANGE	850-1000 VDC
MAXIMUM INPUT CURRENT	2 X 48.25 A

OPTIMIZER SPECS: SOLAREDGE POWER OPTIMIZERS C651U	
MANUFACTURER	SOLAREDGE C651U
MAXIMUM INPUT VOLTAGE	80 VDC
MPPT OPERATING RANGE	12.5 – 80 VDC
MAXIMUM SHORT CIRCUIT CURRENT (ISC)	20 ADC
MAXIMUM OUTPUT CURRENT	24 ADC
MAXIMUM OUTPUT VOLTAGE	60 VDC
MAXIMUM ALLOWED SYSTEM VOLTAGE	1000 VDC



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555 PLEASANTVILLE RD.  
NORTH BUILDING  
555 PLEASANTVILLE ROAD,  
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APN #: 09802000010050000000

DC WIRES & CONDUIT	WIRE TAG #	WIRE FROM --	CONDUIT	WIRE QTY	WIRE GAUGE:	WIRE TYPE	TEMP RATING:	WIRE AMP	TEMP DE-RATE:	CONDUIT FILL:	WIRE OCP:	TERMINAL 75°C RATING:	CIRCUIT CURRENT (ISC)	x	NEC:	=	MAX CIRCUIT CURRENT	MAX SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE		
	1	PV SOURCE CIRCUIT																				
	2	ARRAY TO JUNCTION BOX	IN AIR	4	#10	PV WIRE	90°	40A	x 0.96	x N/A	= 38.40A	35A	24A	x 1.25	=	30.00A	1000V	#6	SBC			
	3	JUNCTION BOX TO INVERTER	1-1/4" EMT	4	#10	THWN-2	90°	40A	x 0.96	x 0.80	= 30.72A	35A	24A	x 1.25	=	30.00A	1000V	#8	THWN-2			
AC WIRES & CONDUIT	WIRE TAG #	WIRE FROM --	CONDUIT	WIRE QTY	WIRE GAUGE:	WIRE TYPE	TEMP RATING:	WIRE AMP	TEMP DE-RATE:	CONDUIT FILL:	WIRE OCP:	TERMINAL 75°C RATING:	# OF INVERTER	x	INVERTER OUTPUT CURRENT	x	NEC:	=	MAX AMPS	MAX SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE
	4	INVERTER TO LOAD CENTER	1-1/2" EMT	4	1/0 AWG	THWN-2	90°	170A	x 0.96	x 0.80	= 130.56A	170A	01	x 96.5A	x 1.25	= 120.63A	480V	#6	THWN-2			
	5	LOAD CENTER TO TRANSFORMER	3"EMT	4	400 KCMIL	THWN-2	75°	335A	x 0.94	x 0.80	= 251.92A	335A	02	x 96.5A	x 1.25	= 241.25A	480V	#4	THWN-2			
	6	TRANSFORMER TO POI	(02) SETS OF 3" EMT	4	(02) SETS OF 400 KCMIL	THWN-2	75°	(2X335A)	x 0.94	x 0.80	= 503.84A	670.00A					386A	x 1.25	= 482.50A	240V	#2	THWN-2

Sheet Name  
WIRE CALCULATION

Sheet Size  
ANSI B 11" X 17"

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PremiumCAD

**EQUIPMENT LOCATIONS:**

1. ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC 110.26.
2. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC 690.31 (A),(C) AND NEC TABLES 310.15 (B)(2)(A) AND 310.15 (B)(3)(C).
3. JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES ACCORDING TO NEC 690.34.
4. ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT. 2.2.6 ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES.
5. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

**STRUCTURAL NOTES:**

1. RACKING SYSTEM & PV ARRAY WILL BE INSTALLED ACCORDING TO CODE-COMPLIANT INSTALLATION MANUAL. TOP CLAMPS REQUIRE A DESIGNATED SPACE BETWEEN MODULES, AND RAILS MUST ALSO EXTEND A MINIMUM DISTANCE BEYOND EITHER EDGE OF THE ARRAY/SUBARRAY, ACCORDING TO RAI MANUFACTURER'S INSTRUCTIONS.
2. JUNCTION BOX WILL BE INSTALLED PER MANUFACTURERS' SPECIFICATIONS. IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.
3. ROOFTOP PENETRATIONS FOR PV RACEWAY WILL BE COMPLETED AND SEALED W/ APPROVED CHEMICAL SEALANT PER CODE BY A LICENSED CONTRACTOR.
4. ALL PV RELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER. 2.3.6 WHEN POSSIBLE, ALL PV RELATED RACKING ATTACHMENTS WILL BE STAGGERED AMONGST THE ROOF FRAMING MEMBERS.

**WIRING & CONDUIT NOTES:**

1. ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
2. CONDUCTORS SIZED ACCORDING TO NEC 690.8, NEC 690.7.
3. VOLTAGE DROP LIMITED TO 1.5%.
4. DC WIRING LIMITED TO MODULE FOOTPRINT. MICROINVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY W/ SUITABLE WIRING CLIPS.
5. AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1- BLACK PHASE B OR L2- RED, OR OTHER CONVENTION IF THREE PHASE PHASE C OR L3- BLUE, YELLOW, ORANGE\*\*, OR OTHER CONVENTION NEUTRAL- WHITE OR GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH HIGHER VOLTAGE TO BE MARKED ORANGE [NEC 110.15].

**GROUNDING NOTES:**

1. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.
2. PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC 690.43 AND MINIMUM NEC TABLE 250.122.
3. METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES CONSIDERED GROUNDED IN ACCORD WITH 250.134 AND 250.136(A).
4. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45 AND MICROINVERTER MANUFACTURERS' INSTRUCTIONS.
5. EACH MODULE WILL BE GROUNDED USING WEEB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ. IF WEEBS ARE NOT USED, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE SPECIFIED GROUNDING LUG HOLES PER THE MANUFACTURERS' INSTALLATION REQUIREMENTS.
6. THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.
7. GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [NEC 250.119]
8. THE GROUNDING ELECTRODE SYSTEM COMPLIES WITH NEC 690.47 AND NEC 250.50 THROUGH 250.106. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED ACCORDING TO NEC 250, NEC 690.47 AND AHJ.
9. GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690.41(B)(1) AND (2) TO REDUCE FIRE HAZARDS

**DISCONNECTION AND OVER-CURRENT PROTECTION NOTES:**

1. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE RECONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).
2. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH
3. PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS IN ACCORDANCE WITH 690.12(A) THROUGH (D).
4. ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC 690.8, 690.9, AND 240.
5. MICROINVERTER BRANCHES CONNECTED TO A SINGLE BREAKER OR GROUPED FUSES IN ACCORDANCE WITH NEC 110.3(B).
6. IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION ACCORDING TO NEC 690.11 AND UL1699B.

**INTERCONNECTION NOTES:**

1. LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH [NEC 705.12 (B)]
2. THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS OUTPUT MAY NOT EXCEED 120% OF BUSBAR RATING [NEC 705.12(D)(2)(3)].
3. THE SUM OF 125 PERCENT OF THE POWER SOURCE(S) OUTPUT CIRCUIT CURRENT AND THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED 120 PERCENT OF THE AMPACITY OF THE BUSBAR, PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD [NEC 705.12(B)(2)(3)].
4. AT MULTIPLE ELECTRIC POWER SOURCES OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVERCURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE EXCLUDED ACCORDING TO NEC 705.12 (B)(2)(3)(C).
5. FEEDER TAP INTERCONNECTION (LOADSIDE) ACCORDING TO NEC 705.12 (B)(2)(1)
6. SUPPLY SIDE / LINE SIDE TAP INTERCONNECTION ACCORDING TO NEC 705.12 (A) WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC 230.42 2.7.8 BACKFEEDING BREAKER FOR ELECTRIC POWER SOURCES OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING [NEC 705.12 (B)(5)].



REVISIONS		
Description	Date	Rev
	5/10/2025	02



Project Name &  
Address

555 PLEASANTVILLE RD.  
NORTH BUILDING

555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN # 098-02000-100500000000

Sheet Name

NOTES

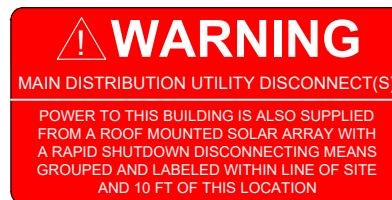
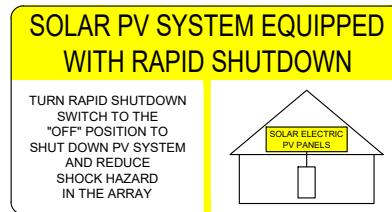
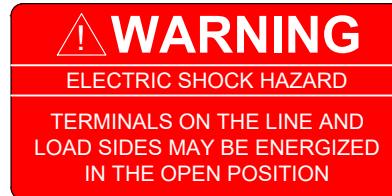
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11" X 17"

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Drawn By  
PremiumCAD



**LABEL 1**  
 FOR PV SYSTEM DISCONNECTING MEANS WHERE THE  
 LINE AND LOAD TERMINALS MAY BE ENERGIZED IN THE  
 OPEN POSITION.  
 [2017 NEC 690.13(B)]

**LABEL 2**  
 SHALL BE MARKED AT AN ACCESSIBLE LOCATION AT  
 THE DISCONNECTING MEANS AS A POWER SOURCE  
 AND WITH THE RATED AC OUTPUT CURRENT AND  
 THE NOMINAL OPERATING AC VOLTAGE.  
 [2017 NEC 690.54]

**LABEL 3**  
 IF INTERCONNECTING LOAD SIDE, INSTALL THIS  
 LABEL ANYWHERE THAT IS POWERED BY BOTH THE  
 UTILITY AND THE SOLAR PV SYSTEM, IE. MAIN  
 SERVICE PANEL AND SUBPANELS.  
 [2017 NEC 705.12(B)(3)]

**LABEL 4**  
 APPLY TO THE DISTRIBUTION EQUIPMENT  
 ADJACENT TO THE BACK-FED BREAKER FROM THE  
 POWER SOURCE.  
 [2017 NEC 705.12(B)(2)(3)(b)]

**LABEL 5**  
 APPLY TO THE PV COMBINER BOX  
 [2017 NEC 705.12(B)(2)(3)(c)]

**LABEL 6**  
 BUILDINGS WITH PV SYSTEMS SHALL HAVE A  
 PERMANENT LABEL LOCATED AT EACH SERVICE  
 EQUIPMENT LOCATION TO WHICH THE PV SYSTEMS  
 ARE CONNECTED OR AT AN APPROVED READILY  
 VISIBLE LOCATION AND SHALL INDICATE THE  
 LOCATION OF RAPID SHUTDOWN INITIATION  
 DEVICES.  
 [2017 NEC 690.56(C)(1)(a)]

**LABEL 7**  
 SIGN LOCATED AT RAPID SHUT DOWN DISCONNECT  
 SWITCH  
 [2017 NEC 690.56(C)(3)]

**LABEL 8**  
 PERMANENT PLAQUE OR DIRECTORY DENOTING THE  
 LOCATION OF ALL ELECTRIC POWER SOURCE  
 DISCONNECTING MEANS ON OR IN THE PREMISES SHALL BE  
 INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT  
 THE LOCATION(S) OF THE SYSTEM DISCONNECT(S) FOR ALL  
 ELECTRIC POWER PRODUCTION SOURCES CAPABLE OF  
 BEING INTERCONNECTED.  
 [2017 NEC 705.10]

**LABEL 9**  
 PERMANENT PLAQUE OR DIRECTORY DENOTING  
 THE LOCATION OF ALL ELECTRIC POWER SOURCE  
 DISCONNECTING MEANS ON OR IN THE PREMISES  
 SHALL BE INSTALLED AT EACH SERVICE  
 EQUIPMENT LOCATION AND AT THE LOCATION(S)  
 OF THE SYSTEM DISCONNECT(S) FOR ALL  
 ELECTRIC POWER PRODUCTION SOURCES  
 CAPABLE OF BEING INTERCONNECTED.  
 [2017 NEC 705.10]

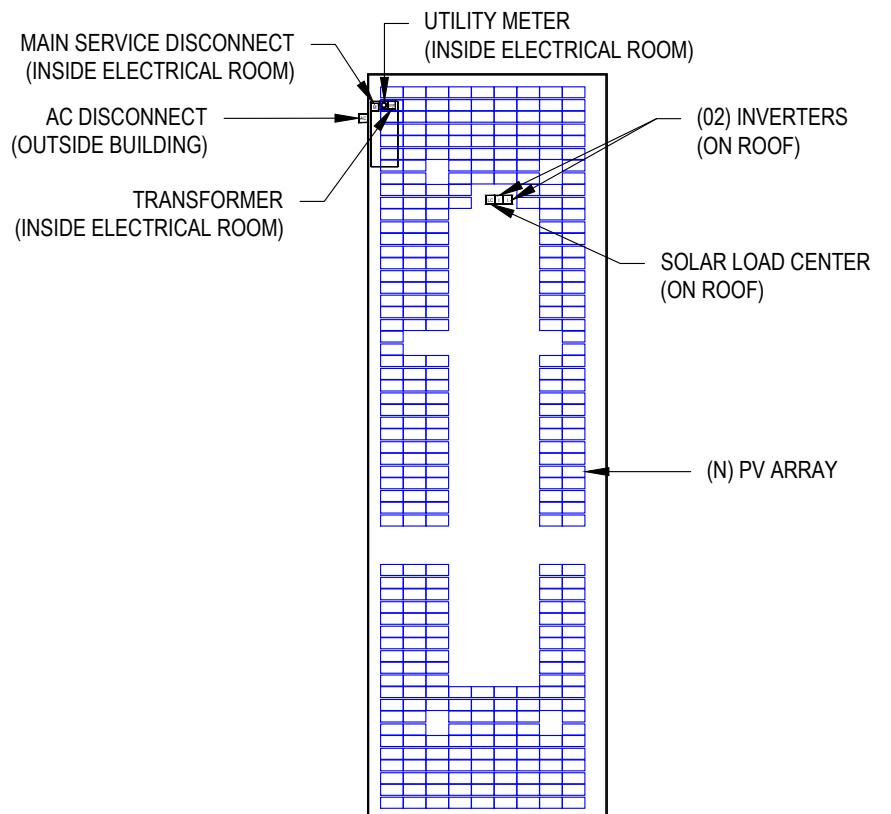
**LABEL 10**  
 PERMANENT PLAQUE OR DIRECTORY TO BE  
 LOCATED AT MAIN SERVICE EQUIPMENT  
 DENOTING THE LOCATION OF THE RAPID  
 SHUTDOWN SYSTEM DISCONNECTING MEANS IF  
 SOLAR ARRAY RAPID SHUTDOWN  
 DISCONNECTING SWITCH IS NOT GROUPED AND  
 WITHIN LINE OF SITE OF MAIN SERVICE  
 DISCONNECTING MEANS.  
 [2017 NEC 705.10 AND 690.56(C)(1)(a)]

**LABEL 11**  
 PERMANENT PLAQUE OR DIRECTORY TO BE  
 LOCATED AT AC COMBINER PANEL.  
 [2017 NEC 110.21(B)]

## LABELING NOTES

1. LABELS CALLED OUT ACCORDING TO ALL COMMON CONFIGURATIONS. ELECTRICIAN TO DETERMINE EXACT REQUIREMENTS IN THE FIELD PER CURRENT NEC AND LOCAL CODES AND MAKE APPROPRIATE ADJUSTMENTS.
2. LABELING REQUIREMENTS BASED ON THE 2017 & 2020 NEC CODE, OSHA STANDARD 19010.145, ANSIZ535.
3. MATERIAL BASED ON THE REQUIREMENTS OF THE AHJ.
4. LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED AND SHALL NOT BE HANDWRITTEN [NEC 110.21]

**CAUTION:**  
 POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE  
 FOLLOWING SOURCES WITH DISCONNECT(S) LOCATED AS SHOWN.  
 DANGEROUS VOLTAGE MAY BE PRESENT AT ALL TIMES



555 PLEASANTVILLE ROAD

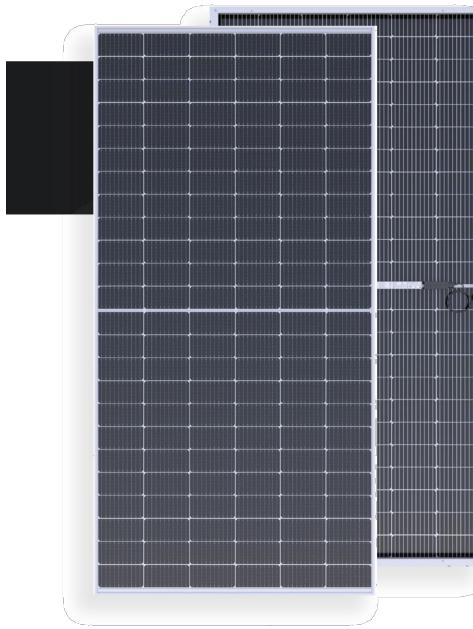
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**NORTH BUILDING**  
 555 PLEASANTVILLE ROAD,  
 BRIARCLIFF MANOR, NY 10510  
 APN # 098-02000-100500000000

Sheet Name  
**WARNING  
 LABELS**

Sheet Size  
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 11" X 17"**

Sheet Number  
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**PremiumCAD**



## VEGA SERIES™

### UTILITY SCALE SOLAR MONO | BIFACIAL | PERC | PV MODULE

**Power Range:**

525W | 530W | 535W | 540W | 545W | 550W

**Technology:** PERC SE | Half cut cell | 10 Busbar | 144 cells**Design:** Single Glass | Silver Frame | Transparent Back**Module Efficiency:** 21.1%**Cell Efficiency:** 22.5%~23.3%**Power Tolerance:** 0~+5W**System Voltage:** 1000/1500 V DC**Module Size:** 90.40 x 44.65 x 1.38 inch**Module Weight:** 63.94 lb.**Module Code:** BVM7612M-XXX-H-HC-BF**DESIGNED TO PERFORM AND BUILT TO LAST**

Our PV modules are designed with better technology in mind, made from robust product components, under stringent quality control steps and high-tech manufacturing processes.

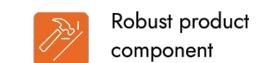
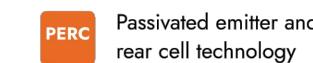
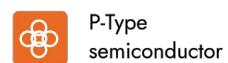
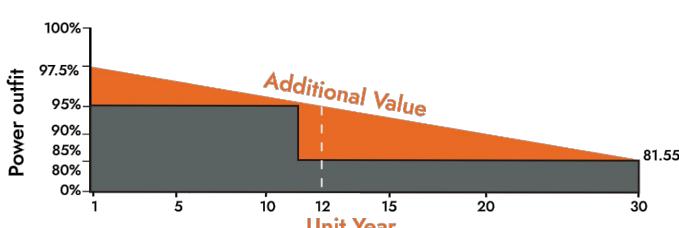
PERC, half-cut, multi-busbar, and large cell designs enables our PV modules to pack more power per module, capture more

photons, produce more energy, and provide reliable, dependable system performance under different installations requirements, difficult weather, or environmental conditions. Whether you are EPC, installer, contractor, or project developer, we have the right and better PV module for your residential, commercial, industrial, and utility scale solar projects.

**WARRANTY**

30 - Year linear power warranty

12 - Year product warranty

**CERTIFICATES**

UL 61730 | IEC 61215 | IEC 61730 | CEC Listed | CE

ISO 9001 Quality Management System

ISO 14001 Environmental Management System

ISO 45001 Occupational Health and Safety Management System

\*Please contact with Boviet Solar representatives for full list of certificates according to local requirements and product type

**ELECTRICAL CHARACTERISTICS | STC**

Maximum Power (Pmax)	525W	530W	535W	540W	545W	550W
Maximum Power Current (Imp)	12.60A	12.66A	12.71A	12.76A	12.82A	12.88A
Maximum Power Voltage (Vmp)	41.74V	41.94V	42.17V	42.40V	42.58V	42.76V
Short Circuit Current (Isc)	13.37A	13.43A	13.48A	13.55A	13.72A	13.84A
Open Circuit Voltage (Voc)	49.52V	49.71V	49.80V	49.89V	49.98V	50.13V
Module Efficiency	20.2%	20.4%	20.5%	20.7%	20.9%	21.1%
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W

STC: AM1.5 Irradiance 1000W/m<sup>2</sup>, 25° C**ELECTRICAL CHARACTERISTICS | NOCT**

Maximum Power (Pmax)	525W	530W	535W	540W	545W	550W
Maximum Power (Pmax)	395.10W	401.48W	405.27W	409.09W	412.75W	416.44W
Maximum Power Current (Imp)	10.22A	10.27A	10.31A	10.35A	10.40A	10.45A
Maximum Power Voltage (Vmp)	38.66V	39.10V	39.31V	39.53V	39.69V	39.86V
Short Circuit Current (Isc)	10.74A	10.79A	10.83A	10.89A	11.03A	11.12A
Open Circuit Voltage (Voc)	46.40V	46.57V	46.66V	46.74V	46.83V	46.97V

NOCT: AM 1.5 Irradiance 800W/m<sup>2</sup>, 20° C, Wind speed 1m/s**MECHANICAL CHARACTERISTICS**

Solar Cell	Monocrystalline   PERC PV Cells 182mm Cell   Half-cut   10 Busbar   144 (6x24) pcs in series
Solar Modules	Bifacial   90.40 x 44.65 x 1.38 inch.   Weight: 63.94 lb.
Module Glass	3.2 mm (0.13 inch) High transparency, low iron, AR-coated tempered glass
Module Frame	Frame 35 mm Ultra-strong anodized aluminum alloy frame
Module Junction Box	IP68 rated   3 bypass diodes
Module Output Cable	4mm <sup>2</sup> (EU)   12 AWG (US) 39.38 inch
Module Connector	Multi contact (MC4) compatible connectors
Module Encapsulant	POE
Module Backsheet	Transparent with grid, FFC/PET/FFC material 0.315mm thickness for transparent area, 0.335mm included grid layer.
Module Fire Type	Type 1 Fire rated

**PACKING INFORMATION**

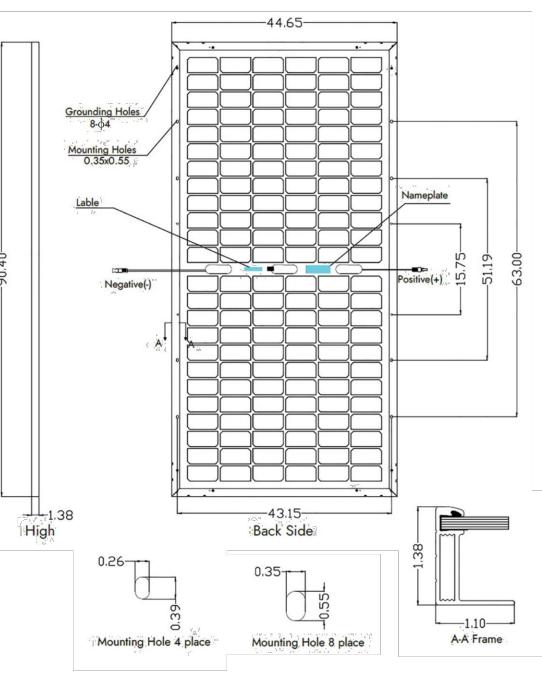
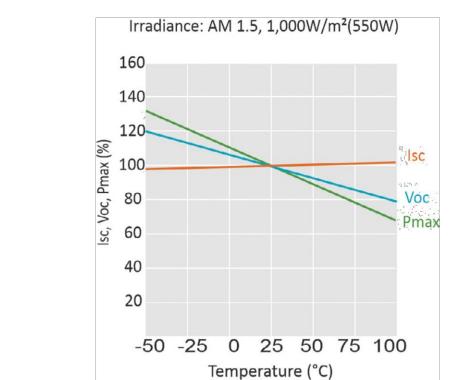
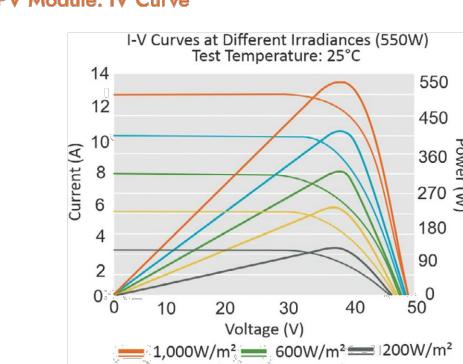
Pieces per pallet:	31
Pallets per container (40HQ):	20
Pieces per container (40HQ):	620
Pallet Weight:	2142.89 lb.
Pallet Dimension:	91.37 x 44.69 x 49.49 inch

**MAXIMUM RATING**

Operating Temperature	-40°F~185°F
Maximum Series Fuse Rating	30A
Isc Temperature Coefficient	1000/1500V DC
NOCT	113±35.6°F
Voc Temperature Coefficient	-0.285%/K
Isc Temperature Coefficient	+0.05%/K

**BIFACIAL OUTPUT-BACKSIDE POWER GAIN**

10%	Pmax(W)	578	583	589	594	600	605
20%	Module efficiency (%)	22.18	22.39	22.60	22.81	23.03	23.24
10%	Pmax(W)	630	636	642	648	654	660
20%	Module efficiency (%)	24.20	24.43	24.66	24.89	25.12	25.35

**PV Module: Mechanical Drawing****PV Module: IV Curve****PV Module: IV Curve****555 PLEASANTVILLE RD.  
NORTH BUILDING**

555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN # 098-02000-010050000000

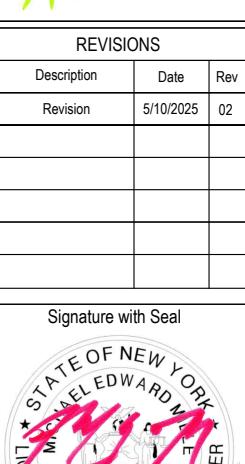
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PremiumCAD

InfinityEnergy  
INFINITY ENERGY  
575 CORPORATE DR. SUITE 2200,  
MAHWAH, NJ 07430  
PH: 1 (845) 200-3700



# Commercial Power Optimizer

## USA Domestic Content Eligible\*

C651U



# POWER OPTIMIZER



SolarEdge's USA-manufactured offering for C&I rooftops, for power optimization at the module level

### Eligible for Domestic Content\*

- SolarEdge USA-manufactured power optimizers, when paired with certain SolarEdge USA-manufactured inverters, are intended to be eligible for the enhanced federal income tax credit for domestic content

### Higher Energy Yields

- Generates maximum power from each PV module
- High efficiency (99.5%)
- Supports high power and bifacial PV modules, including G12 modules

### Enhanced Monitoring and Visibility

- Maximum system visibility up to the individual module level
- Pinpointed fault detection and remote troubleshooting

### Maximum Protection with Built-in Safety

- Designed to automatically reduce high DC voltage to touch-safe levels, upon grid/inverter shutdown, with SafeDC™
- Includes SolarEdge Sense Connect, designed to prevent arcs by monitoring Power Optimizer connectors for overheating
- Certified to Photovoltaic Rapid Shutdown, according to NEC 2014 – 2023

\* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

[solaredge.com](http://solaredge.com)



# Power Optimizer

## USA Domestic Content Eligible for North America

### C651U

Power Optimizer Model	C651U
<b>INPUT</b>	
Rated Input DC Power <sup>(1)</sup>	650
Absolute Maximum Input Voltage (Voc)	80
MPPT Operating Range	12.5 – 80
Maximum Short Circuit Current (Isc) of Connected PV Module <sup>(2)</sup>	20
Maximum Adjusted Short Circuit Current (with Safety Factor) <sup>(3)</sup>	25
Maximum Efficiency	99.5
Weighted Efficiency	98.8
Overvoltage Category	II
<b>OUTPUT DURING OPERATION</b>	
Maximum Output Power	650
Maximum Output Current	24
Maximum Output Voltage	60
<b>SAFETY FEATURES</b>	
SafeDC™	Yes
Safety Output Voltage per Power Optimizer	0.5 ± 0.075
Sense Connect	Yes
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023
<b>STANDARD COMPLIANCE</b>	
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3
Safety	IEC62109-1 (class II safety); UL 1741; UL 3741; CSA C22.2#107.1
Material	UL94 V-0, UV Resistant
RoHS	Yes
Fire Safety	VDE-AR-E 2100-712:2013-05
<b>INSTALLATION SPECIFICATIONS</b>	
Compatible SolarEdge Inverters <sup>(4)</sup>	Commercial Three Phase Inverters with one of the following part number structures: USE-SIN-USxxlxxxx SE-DBL-USxxlxxxx SE-TRI-USxxlxxxx
Maximum Allowed System Voltage	1000
Dimensions (W x L x H)	128 x 155 x 52 / 5.03 x 6.10 x 2.05
Weight	1080 / 2.38
Input Connector	MC4 <sup>(5)</sup>
Input Wire Length	(+) 1.4, (-) 1.4 / (+) 4.59 <sup>(6)</sup>
Output Connector	MC4
Output Wire Length	(+) 3.0 (-) 0.10 / (+) 9.84, (-) 0.32
Operating Temperature Range <sup>(7)</sup>	-40 to +85 / -40 to +185
Protection Rating	IP68 / NEMA6P
Relative Humidity	0 – 100

(1) Modules with a front side maximum power of up to 715W at STC are allowed. Up to +5% power tolerance is allowed.

(2) When using bifacial modules, consider only the front side Isc at STC (0% back side gain). For details, see [here](#).

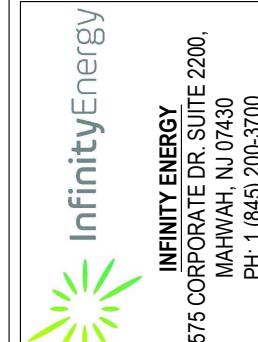
(3) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.

(4) For detailed inverter compatibility information, see [here](#).

(5) For other connector types please contact SolarEdge.

(6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [here](#).

(7) For ambient temperatures above +65°C / +149°F, power derating is applied. For details, see [here](#).



REVISIONS		
Description	Date	Rev
Revision	5/10/2025	02



Project Name & Address

555 PLEASANTVILLE RD.	NORTH BUILDING
555 PLEASANTVILLE ROAD, BRIARCLIFF MANOR, NY 10510 APN # 098-02000-100500000000	

Sheet Name
SPECIFICATION SHEET

Sheet Size
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Sheet Number
SS2

Drawn By
PremiumCAD

# Three Phase Inverter with Synergy Technology

## USA Domestic Content Eligible\*

For North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS



12-20  
YEAR  
WARRANTY



### SOLAREDGE'S USA-MANUFACTURED OFFERING FOR C&I ROOFTOPS AND CARPORTS

- Eligible for domestic content\*: SolarEdge USA-manufactured inverters, when paired with certain SolarEdge USA-manufactured power optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content
- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy two-person installation with lightweight, modular design (each inverter consists of two or three Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring, ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored\*\* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

\* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

\*\* Applicable only for DC and AC SPDs.

[solaredge.com](http://solaredge.com)

**solar**edge

## / Three Phase Inverter with Synergy Technology USA Domestic Content Eligible for North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers	SE-DBL-USxxIBNxx	SE-TRI-USxxIBNxx				UNITS
Model Number	SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	
<b>OUTPUT</b>						
Total Rated AC Output Capacity	80,000		120,000			W
Rated AC Active Output Power	80,000	50,000	100,000	110,000	120,000	W
Maximum AC Apparent Output Power	80,000	50,000	100,000	120,000	120,000	VA
AC Output Line Connections			3W + PE, 4W + PE			
Supported Grids			WYE: TN-C; TN-S; TN-C-S; TT, IT; Delta: IT			
AC Output Voltage Minimum-Nominal-Maximum <sup>(1)</sup> (L-N)	244 – 277 – 305	105 – 120 – 132.5		244 – 277 – 305		Vac
AC Output Voltage Minimum-Nominal-Maximum <sup>(1)</sup> (L-L)	422.5 – 480 – 529	183 – 208 – 229		422.5 – 480 – 529		Vac
AC Frequency Minimum-Nominal-Maximum <sup>(1)</sup>			59.5 – 60 – 60.5			Hz
Maximum Continuous Output Current (per phase, PF=1)	96.5	139.5	120	144.3		Aac
GFDI Threshold			1			A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds			Yes			
Total Harmonic Distortion			≤ 3			%
Power Factor Range			±0.85 to 1			
<b>INPUT</b>						
Maximum DC Power (Module STC) Inverter / Synergy Unit	140,000 / 70,000	87,500 / 29,165	175,000 / 58,300	210,000 / 70,000		W
Transformer-less, Ungrounded			Yes			
Maximum Input Voltage DC+ to DC-	1000	600		1000		Vdc
Operating Voltage Range	850 – 1000	370 – 600		850 – 1000		Vdc
Maximum Input Current	2 x 48.25	3 x 46.5	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection			Yes			
Ground-Fault Isolation Detection			167kΩ sensitivity per Synergy Unit <sup>(3)</sup>			
CEC Weighted Efficiency	98.5	97		98.5		%
Nighttime Power Consumption	< 8		< 12			W
<b>ADDITIONAL FEATURES</b>						
Supported Communication Interfaces <sup>(4)</sup>	2 x RS485; Ethernet; Wi-Fi (optional); Cellular (optional)					
Smart Energy Management	Export Limitation					
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection					
Arc Fault Protection	Built-in, user configurable (according to UL 1699B)					
Photovoltaic Rapid Shutdown System	NEC 2014 – 2023, built-in, if paired with C651U					
PID Rectifier	Nighttime, built-in					
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, integrated					
AC, DC Surge Protection	Type II, field replaceable, integrated					
<b>DC SAFETY SWITCH</b>						
DC Disconnect	Built-in					
<b>STANDARD COMPLIANCE</b>						
Safety	UL 1699B; UL 1741; UL 1741 SA; UL 1741 SB; UL 1998; CSA C22.2#107.1; Canadian AFCI according to T.I.L. M-07					
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (HI)					
Emissions	FCC Part 15 Class A					

(1) For other regional settings please contact SolarEdge support.

(2) For compatibility of inverters and power optimizers, see this [technical note](#).

(3) Where permitted by local regulations.

(4) For specifications of the optional communication options, visit the [Communication product page](#) or the [Knowledge Center](#) to download the relevant product datasheet.

infinityenergy		
INFINITY ENERGY 575 CORPORATE DR. SUITE 220, MAHWAH, NJ 07430 PH: 1(845) 200-3700		
REVISIONS		
Description	Date	Rev
Revision	5/10/2025	02
Signature with Seal		
Project Name & Address		
555 PLEASANTVILLE RD. NORTH BUILDING		
555 PLEASANTVILLE ROAD, BRIARCLIFF MANOR, NY 10510 APN #: 0980200001005000000000		
Sheet Name		
SPECIFICATION SHEET		
Sheet Size		
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Sheet Number		
SS3		
Drawn By PremiumCAD		

# / Three Phase Inverter with Synergy Technology

## USA Domestic Content Eligible for North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers	SE-DBL-USxxIBNxx	SE-TRI-USxxIBNxx				UNITS
Model Number	SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	
<b>INSTALLATION SPECIFICATIONS</b>						
Number of Synergy Units per Inverter	2	3				
AC Maximum Conduit Size		2 1/2"				in
AC Maximum Conductor Size Line / PE		4/0 AWG / 1/0 AWG				
DC Maximum Conduit Size		1 x 3"; 2 x 2"				in
Inverter Unit / Synergy Manager	Multi-input (fuse-less) <sup>(5)</sup> (SE-xxx-USxxlxSx)	6 / 3 pairs; 6 – 12 AWG	9 / 3 pairs; 6 – 12 AWG			
	Combined input (fuse-less) (SE-xxx-USxxlxWx)	2 pairs / 1 pair, 2 – 4 AWG; copper or aluminum	3 pairs / 1 pair, 2 – 4 AWG; copper or aluminum			
Dimensions (H x W x D)		Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295				in / mm
Weight		Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18				lb / kg
Operating Temperature Range		-40 to +140 / -40 to +60 <sup>(6)</sup>				°F / °C
Cooling		Fan (user replaceable)				
Noise		< 67				dBA
Protection Rating		NEMA 3R				
Mounting		Brackets provided				

(5) Fusing is not included with the multi-input version of the Synergy Manager.

(6) For power derating information, see the [Temperature Derating](#) technical note for North America.



REVISIONS		
Description	Date	Rev
Revision	5/10/2025	02

Signature with Seal



Project Name &  
Address

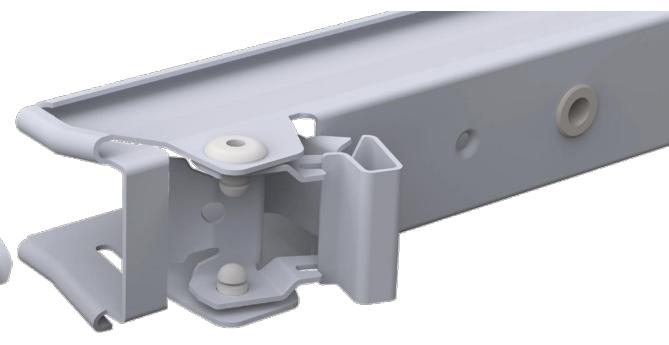
555 PLEASANTVILLE RD.  
NORTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 09802000100500000000

Sheet Name  
**SPECIFICATION SHEET**

Sheet Size  
**ANSI B  
11" X 17"**

Sheet Number  
**SS4**

Drawn By  
**PremiumCAD**

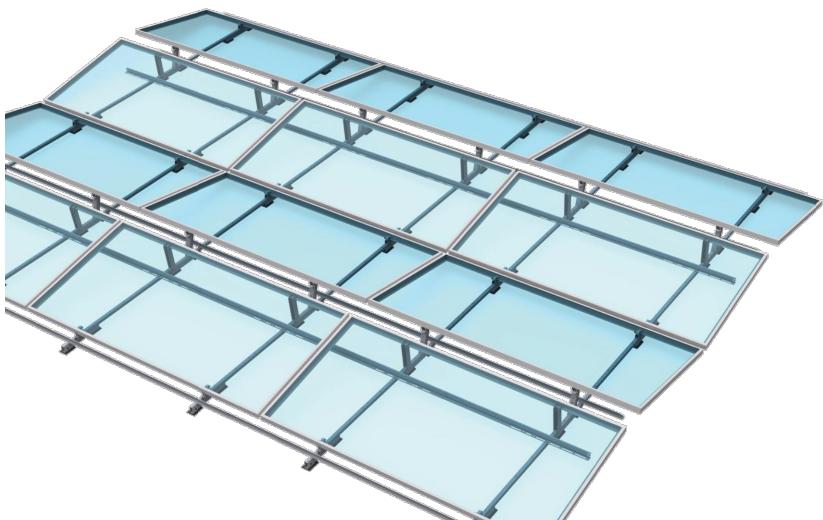


# clawFR plus™

## 10° DUAL TILT

# FLAT ROOF RACKING SPECIALISTS

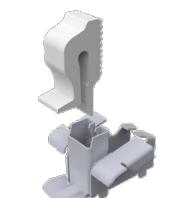
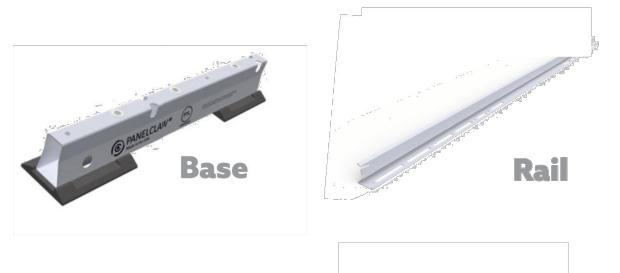
PanelClaw is the only major racking provider in North America focused exclusively on flat roofs. This specialization provides a competitive advantage for our partners. No one knows more about flat roof racking than PanelClaw; no one delivers a more thoroughly tested and reliable platform; and no one matches our level of service. Our mission is to accelerate the deployment of flat roof PV by continually lowering its life-cycle cost while maintaining the highest levels of reliability. The clawFRplus platform is the result of a 15+ year commitment to flat roof.



## ENGINEERED FOR SPEED

- Single M6 bolt hardware kit
- No-tool module attachment
- 7.8" high side module access gap
- 90 degree single-module tilt-up
- Flexible order of operations  
installation process allows for  
optimized coordination of building  
trades on the roof
- Integrated roof protection pads
- One ground lug required per array

## SYSTEM COMPONENTS



## **Cam Bracket w/ Cam Claw**

## TOOL-LESS MODULE CONNECTIONS

**clawFRplus™** improves on the industry leading clawFR platform. Upgraded high and low side module connections increase system performance and eliminate module adaptor accessories while maintaining clawFR's easy to install architecture.

## O&M FEATURES

- Optimizers mount on the Module Connector Tilt Arm, under the module and near the gap between two modules
- ZAM® coating with 3x better corrosion resistance than G90
- Mechanical roof attachments, when needed, are placed in the module row gaps for easy O&M inspection

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(978) 688.4900 | [SALES@PANELCLAW.COM](mailto:SALES@PANELCLAW.COM) | [PANELCLAW.COM](http://PANELCLAW.COM)



The logo consists of the American flag's stars and stripes on the left, followed by the text "MADE IN THE USA" in a bold, sans-serif font.

# clawFR plus™

5555 PLEASANTVILLE RD.  
NORTH BUILDING

---

555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 0980240000100500000000

Sheet Name

Sheet Size  
**ANSI B**  
**11" X 17"**

Sheet Number

Drawn By  
**PremiumCAD**

# PHOTOVOLTAIC BALLAST MOUNT SYSTEM

500 MODULES-ROOF MOUNTED - 275.00 kW DC, 170.00 kW AC, 555 PLEASANTVILLE ROAD, BRIARCLIFF MANOR, NY 10510

## PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE: 275.00 kW DC  
170.00 kW AC  
MODULE TYPE & AMOUNT: (500) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)  
MODULE DIMENSIONS: (L/W/H) 90.40"/44.65"/1.38"  
INVERTER: (01) SOLAREDGE TRI-SE120KUS [480V] &  
(01) SOLAREDGE DBL-SE80KUS [480V] [DERATED TO 50KW AC]  
OPTIMIZER: (500) SOLAREDGE POWER OPTIMIZERS C651U  
INTERCONNECTION METHOD: LINE SIDE TAP  
UTILITY METER#: ACT1C 14401176  
AHJ#: BRIARCLIFF MANOR VILLAGE

## SCOPE OF WORK:

INSTALLATION OF UTILITY INTERACTIVE PHOTOVOLTAIC SOLAR SYSTEM AND ANY NECESSARY ADDITIONAL WORK NEEDED FOR INSTALLATION.

## GOVERNING CODES

ADOPTED CONSTRUCTION CODES

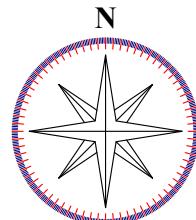
- 2020 BUILDING CODE OF NEW YORK STATE
- 2020 PLUMBING CODE OF NEW YORK STATE
- 2020 MECHANICAL CODE OF NEW YORK STATE
- 2020 FUEL GAS CODE OF NEW YORK STATE
- 2020 RESIDENTIAL CODE OF NEW YORK STATE
- 2020 FIRE CODE OF NEW YORK STATE
- 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE
- 2020 PROPERTY MAINTENANCE CODE OF NEW YORK STATE
- 2017 NATIONAL ELECTRICAL CODE

## GENERAL NOTES

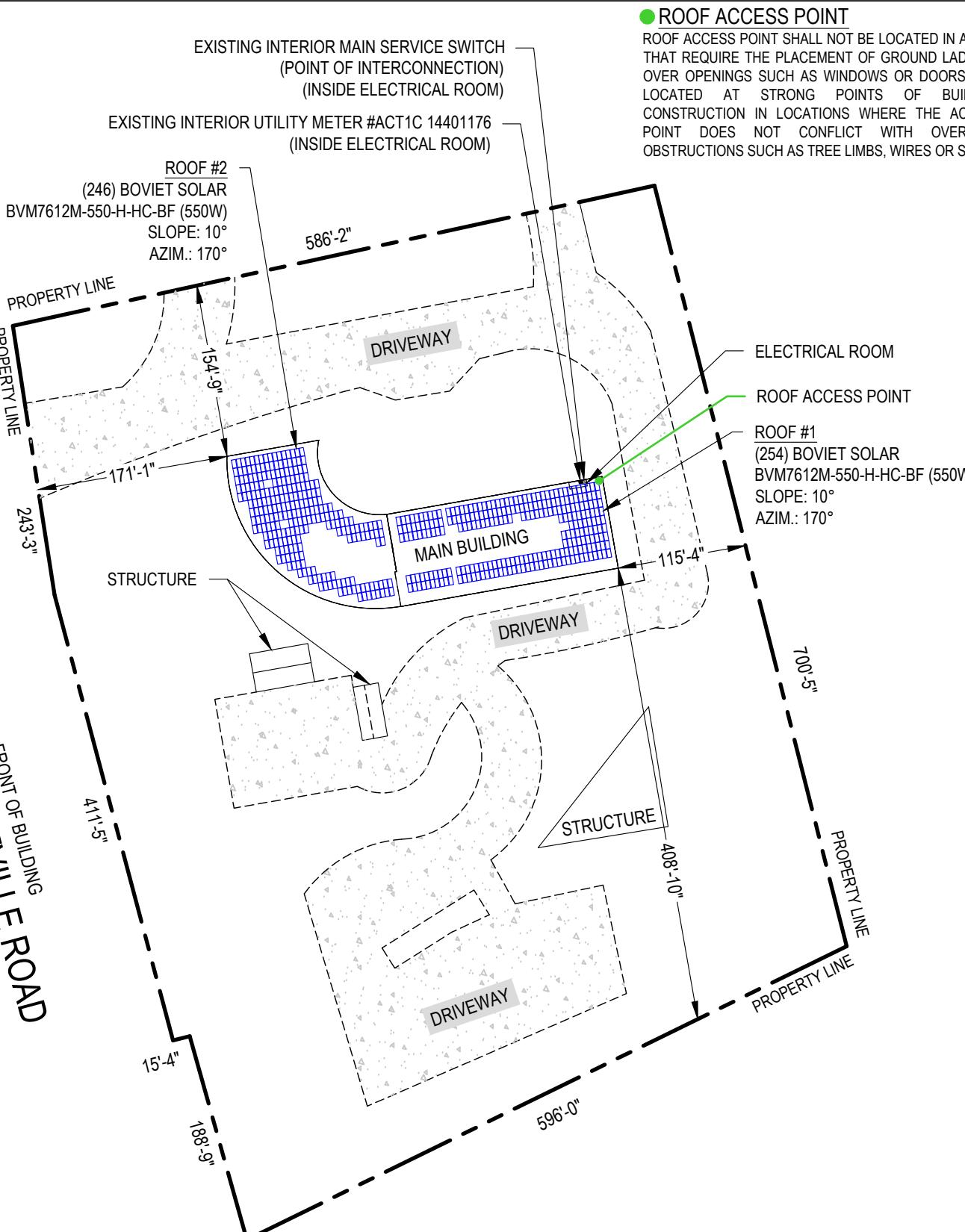
1. A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.
2. THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM.
3. THE SOLAR PV INSTALLATION SHALL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
4. ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SHALL SERVE TO PROTECT THE BUILDING OR STRUCTURE.
5. MODULE CERTIFICATIONS WILL INCLUDE UL1703, IEC61646, IEC61730.
6. IF APPLICABLE, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE MARKED GROUNDING LUG HOLES PER THE MANUFACTURER'S INSTALLATION REQUIREMENTS.
7. AS INDICATED BY DESIGN, OTHER NRTL LISTED MODULE GROUNDING DEVICES MAY BE USED IN PLACE OF STANDARD GROUNDING LUGS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ.
8. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING AS REQUIRED BY FIELD CONDITIONS.
9. ALL INVERTERS, MOTOR GENERATORS, PHOTOVOLTAIC MODULES, PHOTOVOLTAIC PANELS, AC PHOTOVOLTAIC MODULES, DC COMBINERS, DC-TO-DC CONVERTERS, SOURCE CIRCUIT COMBINERS, AND CHARGE CONTROLLERS INTENDED FOR USE IN A PHOTOVOLTAIC POWER SYSTEM WILL BE IDENTIFIED AND LISTED FOR THE APPLICATION PER NEC 690.4(B).

## 1 PLOT PLAN

SCALE: 1/128" = 1'-0"



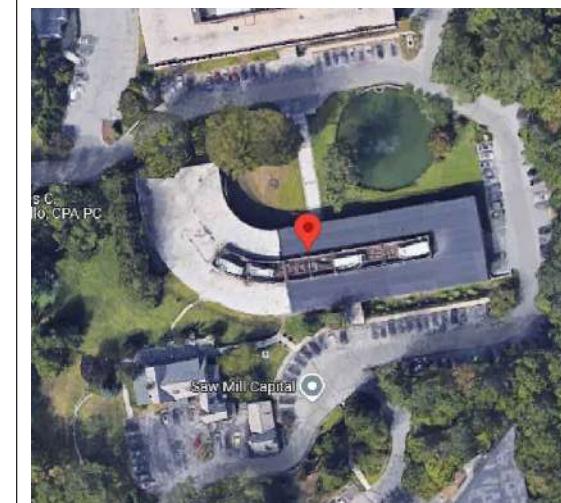
555 PLEASANTVILLE ROAD  
FRONT OF BUILDING



NOTE:- PV MODULES WILL BE MOUNTED TO AN EXISTING TPO ROOF  
USING PANELCLAW - CLAWFRPLUS 10 DEGREE DUAL TILT SYSTEM

## SHEET INDEX:

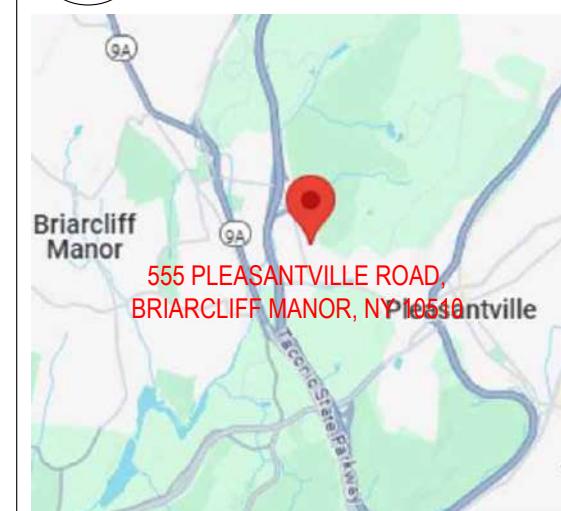
PV 0.0:	COVER SHEET
PV 1.0:	SITE PLAN
PC-1:	COVER SHEET
PC-2:	PROJECT SUMMARY
PC-3:	ARRAY SITE MAP
PC-4:	TYPICAL ARRAY DIMENSIONS
PC-5:	ASSEMBLIES
PC-6:	RACKING COMPONENTS
PC-7:	BALLAST LEGEND
PC-7 TO PC-11:	BALLAST LAYOUT -1 TO 4
E 1.1:	3-LINE DIAGRAM
E 1.2:	WIRE CALCULATION
E 1.3:	NOTES
E 1.4:	WARNING LABELS
SS+:	EQUIPMENT SPEC SHEET



## 2 SATELLITE VIEW

PV 0.0

SCALE: NTS



## 3 VICINITY MAP

PV 0.0

SCALE: NTS

InfinityEnergy  
INFINITY ENERGY  
575 CORPORATE DR. SUITE 2200,  
MAHWAH, NJ 07430  
PH: 1 (845) 200-3700

REVISIONS		
Description	Date	Rev
Revision	5/10/2025	01
Revision	6/4/2025	02
Revision	6/17/2025	03



Project Name & Address

555 PLEASANTVILLE RD.  
SOUTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN # 098-02000-100600000000

Sheet Name

COVER SHEET

Sheet Size

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11" X 17"

Sheet Number

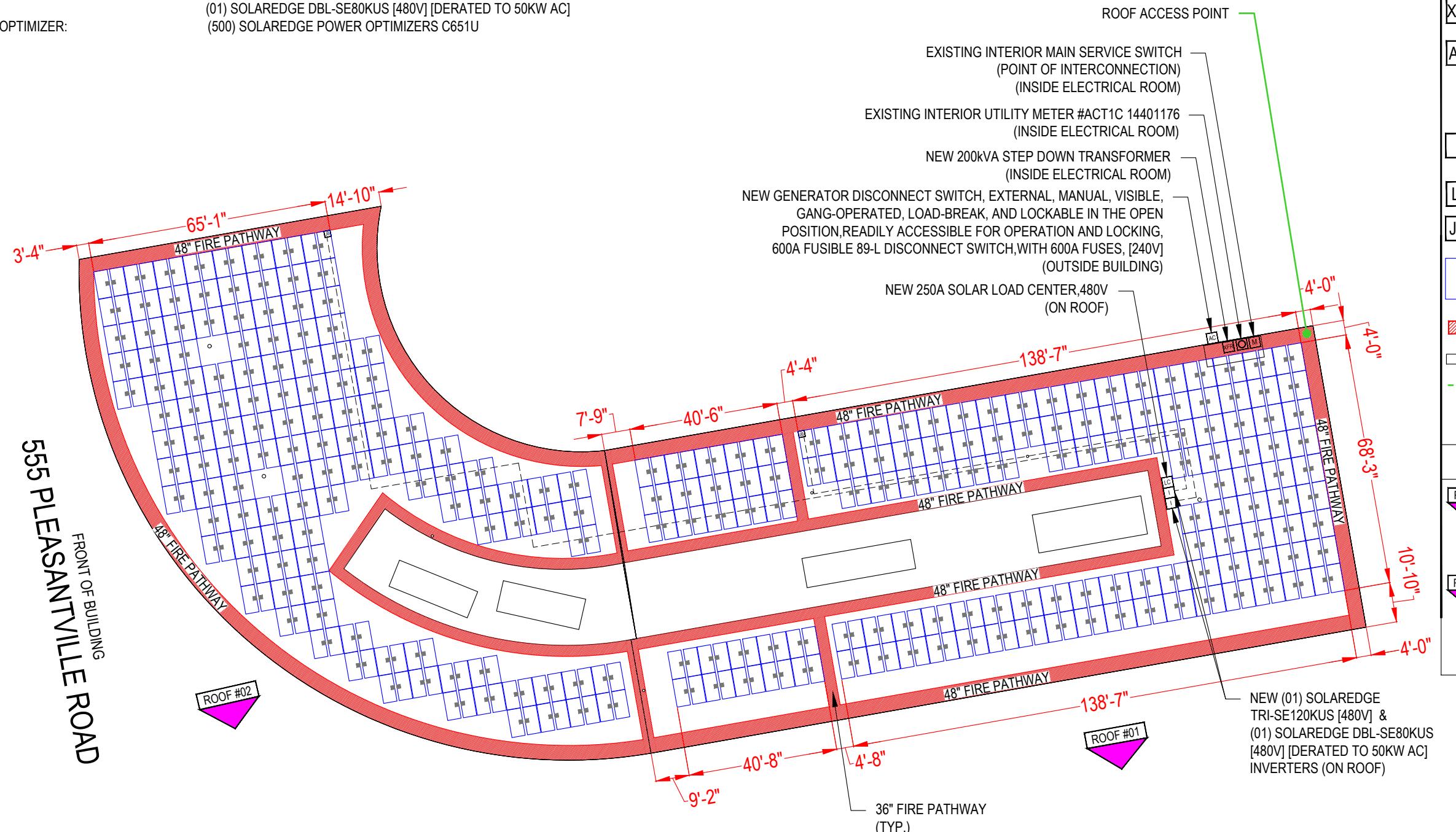
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Drawn By

PremiumCAD

## PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE:	275.00 kW DC 170.00 kW AC
MODULE TYPE & AMOUNT:	(500) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)
MODULE DIMENSIONS:	(L/W/H) 90.40"/44.65"/1.38"
INVERTER:	(01) SOLAREDGE TRI-SE120KUS [480V] & (01) SOLAREDGE DBL-SE80KUS [480V] [DERATED TO 50KW AC]
OPTIMIZER:	(500) SOLAREDGE POWER OPTIMIZERS C651U



## SYSTEM LEGEND

EXISTING INTERIOR UTILITY METER #ACT1C 14401176  
(INSIDE ELECTRICAL ROOM)

EXISTING INTERIOR MAIN SERVICE SWITCH  
(POINT OF INTERCONNECTION)  
(INSIDE ELECTRICAL ROOM)

NEW 200kVA STEP DOWN TRANSFORMER  
(INSIDE ELECTRICAL ROOM)

NEW GENERATOR DISCONNECT SWITCH, EXTERNAL,  
MANUAL, VISIBLE, GANG-OPERATED, LOAD-BREAK,  
AND LOCKABLE IN THE OPEN POSITION, READILY  
ACCESSIBLE FOR OPERATION AND LOCKING,  
600A FUSIBLE 89-L DISCONNECT SWITCH, WITH 600A  
FUSES, [240V] (OUTSIDE BUILDING)

NEW (01) - SOLAREDGE TRI-SE120KUS [480V]  
INVERTER & (01) SOLAREDGE DBL-SE80KUS [480V]  
[DERATED TO 50kW AC] (ON ROOF)

NEW 250A SOLAR LOAD CENTER, 480V  
(ON ROOF)

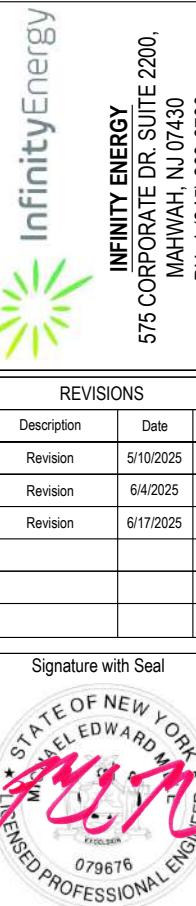
NEW JUNCTION BOX

(500) NEW BOVIET SOLAR BVM7612M-550-H-HC-BF  
(550W) MODULES WITH (500) SOLAREDGE POWER  
OPTIMIZERS C651U MOUNTED ON THE BACK OF  
EACH MODULES.

 = FIRE PATHWAY

 = ROOF OBSTRUCTIONS

 = CONDUIT RUN



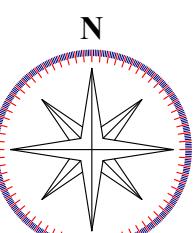
Project Name &  
Address  
SOUTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 09802000010060000000

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**11" X 17"**

Sheet Number

FV 1.0  
Drawn By  
**PremiumCAD**

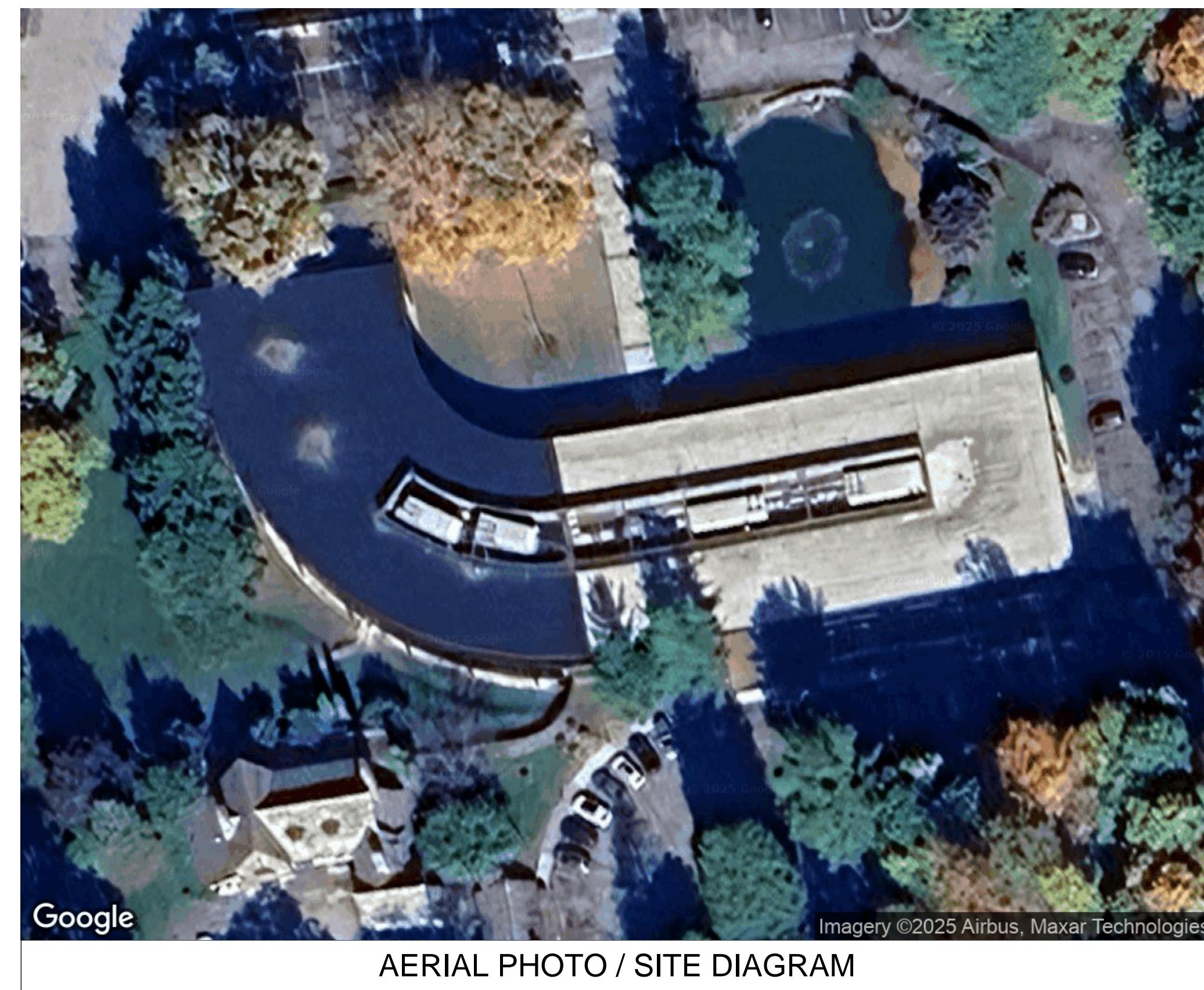


**1 SITE PLAN**  
PV 1.0 SCALE: 1/32" = 1'-0"

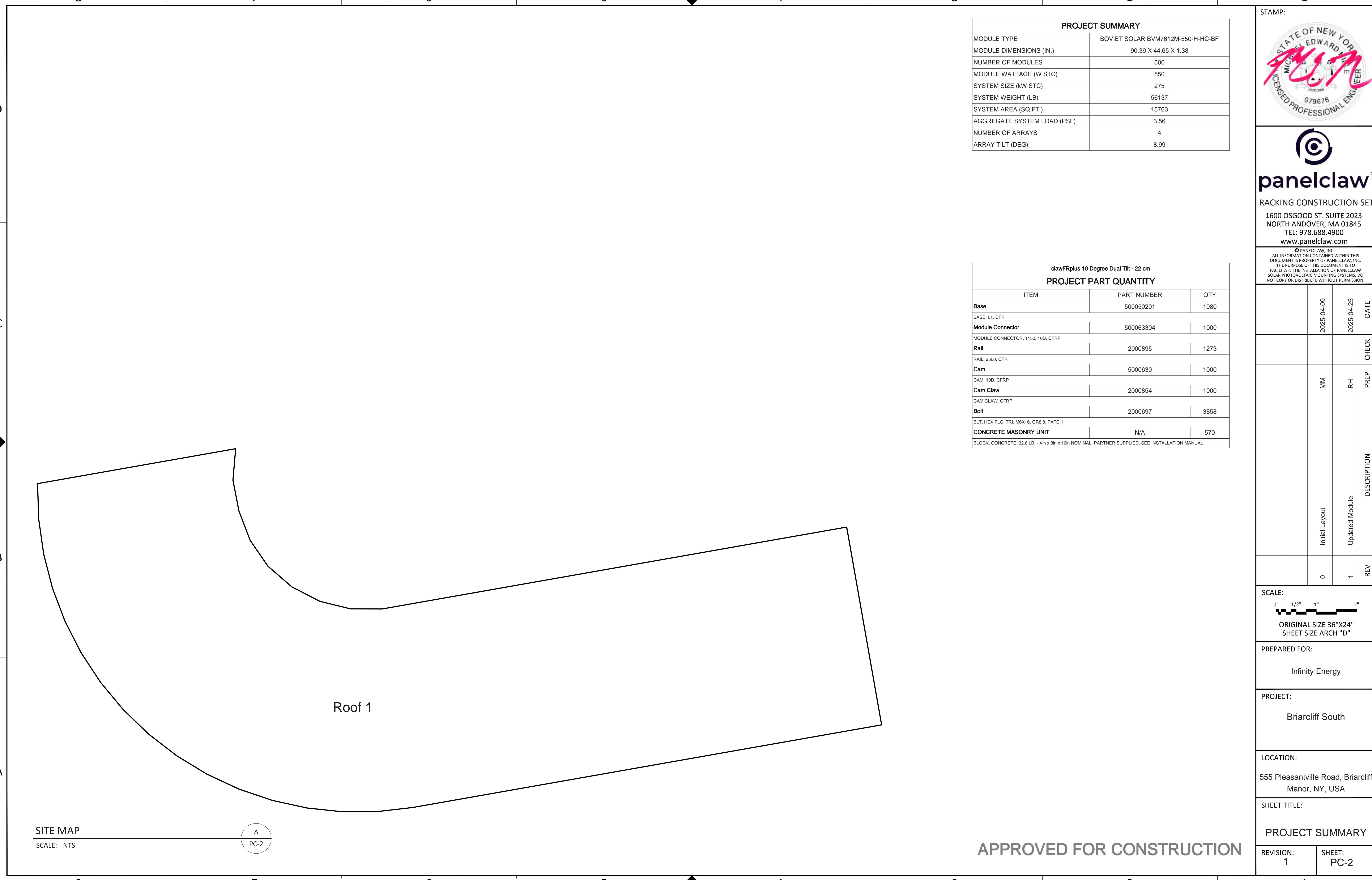
SCALE: 1/32" = 1'-0"

SCALE: 1/32" = 1'-0"

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Site Design Criteria - Flat Roof PV System Basis of Design</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Roof Live Load (psf)</td><td>20 (see footnote 1)</td></tr> <tr><td>Ground Snow Pg (psf)</td><td>30</td></tr> <tr><td>Flat Roof Snow (psf)</td><td>25.2</td></tr> <tr><td>Snow Importance Factor (Is)</td><td>1.0</td></tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Wind Design Data</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Basic Wind Speed (mph)</td><td>115</td></tr> <tr><td>Risk Category</td><td>II</td></tr> <tr><td>Wind Exposure</td><td>C</td></tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>Earthquake Design Data</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Risk Category</td><td>II</td></tr> <tr><td>Importance Factor (Ie)</td><td>1.00</td></tr> <tr><td>Component Importance Factor (Ip)</td><td>1.0</td></tr> <tr><td>Mapped Acceleration Parameter (Ss)</td><td>0.292</td></tr> <tr><td>Mapped Acceleration Parameter (S1)</td><td>0.061</td></tr> <tr><td>Seismic Site Class</td><td>D</td></tr> <tr><td>Design Spectral Acceleration Parameter (Sds)</td><td>0.305</td></tr> <tr><td>Design Spectral Acceleration Parameter (Sd1)</td><td>0.098</td></tr> <tr><td>Seismic Design Category (SDC)</td><td>B</td></tr> <tr><td>Basic seismic-force-resisting system(s)</td><td>N/A (see footnote 2)</td></tr> <tr><td>Base Design Shear = <math>F_p \times W</math></td><td>N/A (see footnote 2)</td></tr> <tr><td>Response Modification Factor (Rp)</td><td>N/A (see footnote 2)</td></tr> <tr><td>Analysis Procedure</td><td>N/A (see footnote 2)</td></tr> <tr><td>Design Code (with local amendments)</td><td>2020 NY ST BC</td></tr> <tr><td>-</td><td>ASCE 7 - 16</td></tr> </table> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <b>ALTERNATE DESIGN METHOD</b> <p>1. Roof Live Load only applicable to areas not covered by PV modules. Reference SEAOC Design Guidelines  2. Per ASCE 7-16 Section 11.7, nonstructural components in seismic design category (SDC) A are exempt from seismic design requirements. Per Section 13.1.4, mechanical and electrical components in SDC B are exempt from the requirements of Chapter 13 - Seismic Design Requirements for Nonstructural Components.</p> </div>	Roof Live Load (psf)	20 (see footnote 1)	Ground Snow Pg (psf)	30	Flat Roof Snow (psf)	25.2	Snow Importance Factor (Is)	1.0	Basic Wind Speed (mph)	115	Risk Category	II	Wind Exposure	C	Risk Category	II	Importance Factor (Ie)	1.00	Component Importance Factor (Ip)	1.0	Mapped Acceleration Parameter (Ss)	0.292	Mapped Acceleration Parameter (S1)	0.061	Seismic Site Class	D	Design Spectral Acceleration Parameter (Sds)	0.305	Design Spectral Acceleration Parameter (Sd1)	0.098	Seismic Design Category (SDC)	B	Basic seismic-force-resisting system(s)	N/A (see footnote 2)	Base Design Shear = $F_p \times W$	N/A (see footnote 2)	Response Modification Factor (Rp)	N/A (see footnote 2)	Analysis Procedure	N/A (see footnote 2)	Design Code (with local amendments)	2020 NY ST BC	-	ASCE 7 - 16	<p><b>GENERAL NOTES:</b></p> <ol style="list-style-type: none"> <li>1. ALL SITE, PROJECT, AND BUILDING DETAILS ARE PROVIDED BY CUSTOMER OR GENERATED VIA SATELLITE IMAGERY FROM INFORMATION PROVIDED BY CUSTOMER. PANELCLAW IS NOT RESPONSIBLE FOR SITE INACCURACIES THAT COULD LEAD TO CHANGES TO THESE DRAWING DETAILS AND ARRAY LAYOUT CONFIGURATIONS. ALL INFORMATION CONTAINED WITHIN THESE DOCUMENTS ARE TO BE FIELD VERIFIED BY CUSTOMER AND INSTALLER. ANY CHANGES OR MODIFICATIONS TO THESE DOCUMENTS, CONTAINED INFORMATION, OR FINAL ARRAY AND MOUNTING SYSTEM INSTALLATIONS MUST BE SUBMITTED TO PANELCLAW AND OTHER PROJECT AUTHORITIES FOR APPROVAL.</li> <li>2. REFER TO AND FOLLOW THE APPROPRIATE PANELCLAW INSTALLATION MANUALS AND PROCEDURES DURING THE INSTALLATION PROCESS. NOT FOLLOWING SUCH PROCEDURES AND METHODS COULD RESULT IN DAMAGE TO THE COMPONENTS OR MAY VOID THE PRODUCT WARRANTY.</li> <li>3. ARRAY SETBACKS: ALL ARRAYS ARE REQUIRED TO BE SETBACK 4-FEET FROM ALL ROOF EDGES UNLESS OTHERWISE SPECIFIED AND CALLED OUT ON THE ARRAY DIAGRAMS ON THIS PAGE OR ON ADDITIONAL ARRAY BALLAST PAGES.</li> <li>4. REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION.</li> <li>5. SYSTEM PSF INCLUDES ALL PANELCLAW RACKING COMPONENTS, MECHANICAL ATTACHMENTS (IF APPLICABLE), PV MODULE AND BALLAST BLOCKS. FOR MAXIMUM SYSTEM POINT LOAD SUMMARY (PLS), REFER TO CALCULATIONS.</li> <li>6. PANELCLAW AND/OR PANELCLAW CONSULTING ENGINEERS ARE NOT RESPONSIBLE FOR DETERMINING THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS IMPOSED BY THE ARRAY AND MOUNTING SYSTEM. SUPPORT STRUCTURE TO BE CHECKED BY OTHERS.</li> <li>7. ALWAYS ALLOW A MINIMUM OF 6" CLEARANCE BETWEEN NEIGHBORING SUBARRAYS, 6" BETWEEN SUBARRAYS AND ALL FIXED ROOF OBJECTS AND 4' BETWEEN SUBARRAYS AND ROOF EDGES. REFER TO LOCAL FIRE CODES AND ELECTRICAL CODES FOR ADDITIONAL REQUIREMENTS WHICH MAY GOVERN DESIGN. SUBARRAYS THAT USE A SEISMIC ANALYSIS METHOD OF DELTA MPV PREDICTED MOVEMENT HAVE THEIR OWN CLEARANCE REQUIREMENTS. REFER TO THE BALLAST LAYOUT SHEETS WITHIN THIS DOCUMENT FOR DETAILS.</li> <li>8. BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" <math>\pm</math> 1/8" WIDTH, 15-5/8" <math>\pm</math> 1/8" LENGTH.</li> <li>9. IF AN ARRAY CLEARANCES TABLE APPEARS BELOW ON THIS PAGE, THE DESIGN UTILIZES THIRD PARTY SEISMIC NON-LINEAR RESPONSE ANALYSIS TO ESTIMATE MAXIMUM ARRAY SEISMIC DISPLACEMENT. THE PREDICTED MOVEMENT IS ONLY AN ESTIMATE. PANELCLAW IS NOT RESPONSIBLE OR LIABLE FOR ANY DAMAGES OR COSTS ASSOCIATED WITH PV ARRAY MOVEMENT INCLUDING MOVEMENT IN EXCESS OF THE CLEARANCES NOTED IN THIS DOCUMENT OR ANY REQUIREMENT TO REPOSITION THE ARRAYS IF MOVEMENT OCCURS.</li> <li>10. DEFLECTORS MUST BE INSTALLED WHEN WINDS ARE EXPECTED TO EXCEED APPROX. 25% OF WIND SPEED DOCUMENTED IN SITE DESIGN CRITERIA TABLE. DEFLECTORS ARE REQUIRED ON ALL MODULES UNLESS OTHERWISE NOTED ON BALLAST LAYOUT PAGES.</li> </ol>	<p><b>SHEET INDEX</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td>PC-1</td><td>COVER SHEET</td></tr> <tr><td>PC-2</td><td>PROJECT SUMMARY</td></tr> <tr><td>PC-3</td><td>ARRAY SITE MAP</td></tr> <tr><td>PC-4</td><td>TYPICAL ARRAY DIMENSIONS</td></tr> <tr><td>PC-5</td><td>ASSEMBLIES</td></tr> <tr><td>PC-6</td><td>RACKING COMPONENTS</td></tr> <tr><td>PC-7</td><td>BALLAST LEGEND</td></tr> <tr><td>PC-8 TO PC-11</td><td>BALLAST LAYOUT - 1 TO 4</td></tr> </tbody> </table>	NO.	DESCRIPTION	PC-1	COVER SHEET	PC-2	PROJECT SUMMARY	PC-3	ARRAY SITE MAP	PC-4	TYPICAL ARRAY DIMENSIONS	PC-5	ASSEMBLIES	PC-6	RACKING COMPONENTS	PC-7	BALLAST LEGEND	PC-8 TO PC-11	BALLAST LAYOUT - 1 TO 4	<p><b>panelclaw®</b> RACKING CONSTRUCTION SET 1600 OSGOOD ST. SUITE 2023 NORTH ANDOVER, MA 01845 TEL: 978.688.4900 www.panelclaw.com</p> <p><small>© PANELCLAW, INC. ALL INFORMATION CONTAINED WITHIN THIS DOCUMENT IS PROPERTY OF PANELCLAW, INC. THE PURPOSE OF THIS DOCUMENT IS TO FACILITATE THE INSTALLATION OF PANELCLAW SOLAR RACKING SYSTEMS. DO NOT COPY OR DISTRIBUTE WITHOUT PERMISSION.</small></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>2025-04-09</td><td>2025-04-25</td><td>DATE</td></tr> <tr><td>MM</td><td>RH</td><td>PREP</td></tr> <tr><td>0</td><td>REV</td><td>CHECK</td></tr> </table> <p><b>DESCRIPTION</b></p> <p><b>SCALE:</b> 0" 1/2" 1" 2" ORIGINAL SIZE 36"X24" SHEET SIZE ARCH "D"</p> <p><b>PREPARED FOR:</b> Infinity Energy</p> <p><b>PROJECT:</b> Briarcliff South</p> <p><b>LOCATION:</b> 555 Pleasantville Road, Briarcliff Manor, NY, USA</p> <p><b>SHEET TITLE:</b> COVER SHEET</p> <p><b>REVISION:</b> 1    <b> SHEET:</b> PC-1</p>	2025-04-09	2025-04-25	DATE	MM	RH	PREP	0	REV	CHECK
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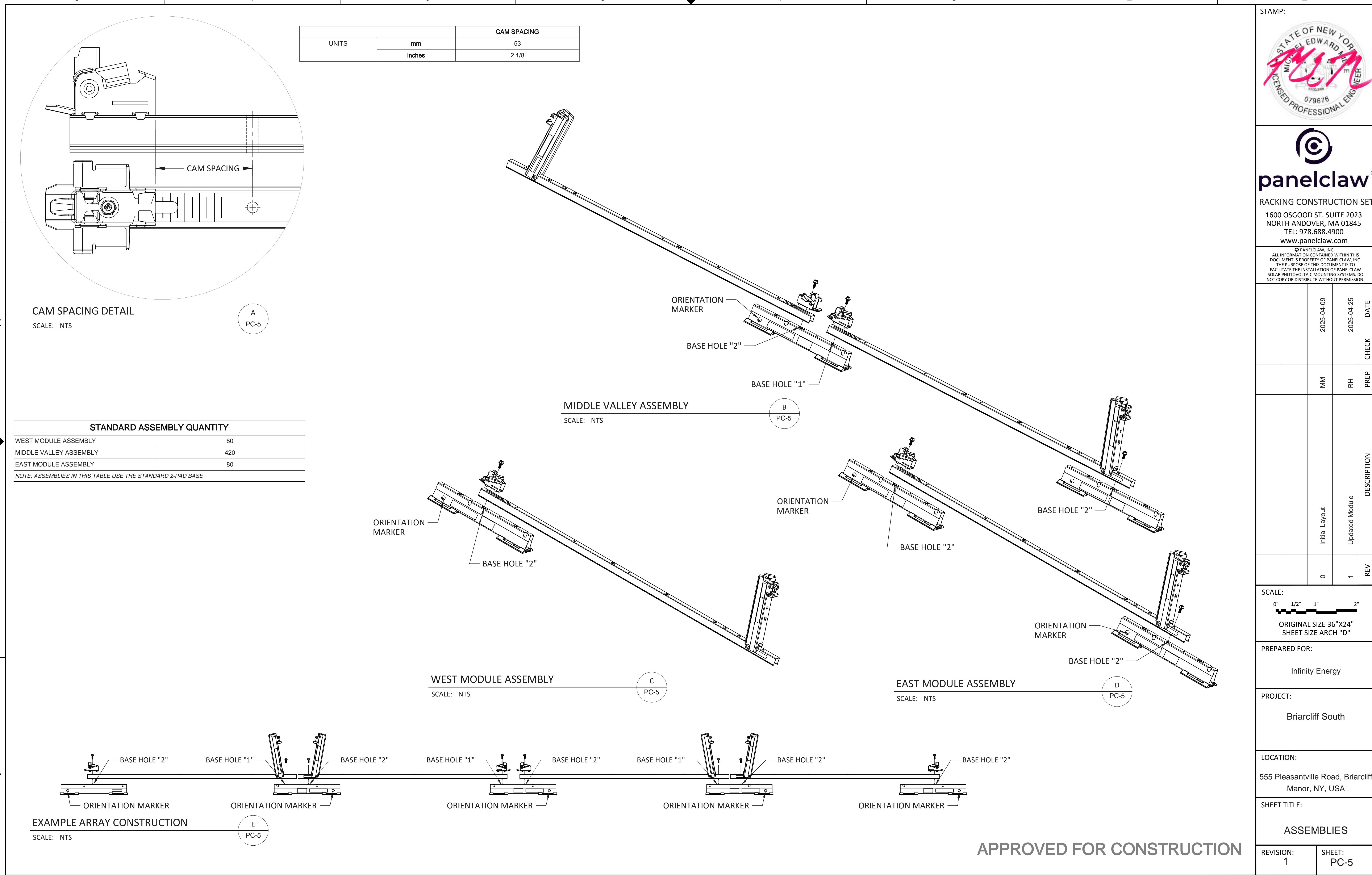


APPROVED FOR CONSTRUCTION









# APPROVED FOR CONSTRUCTION















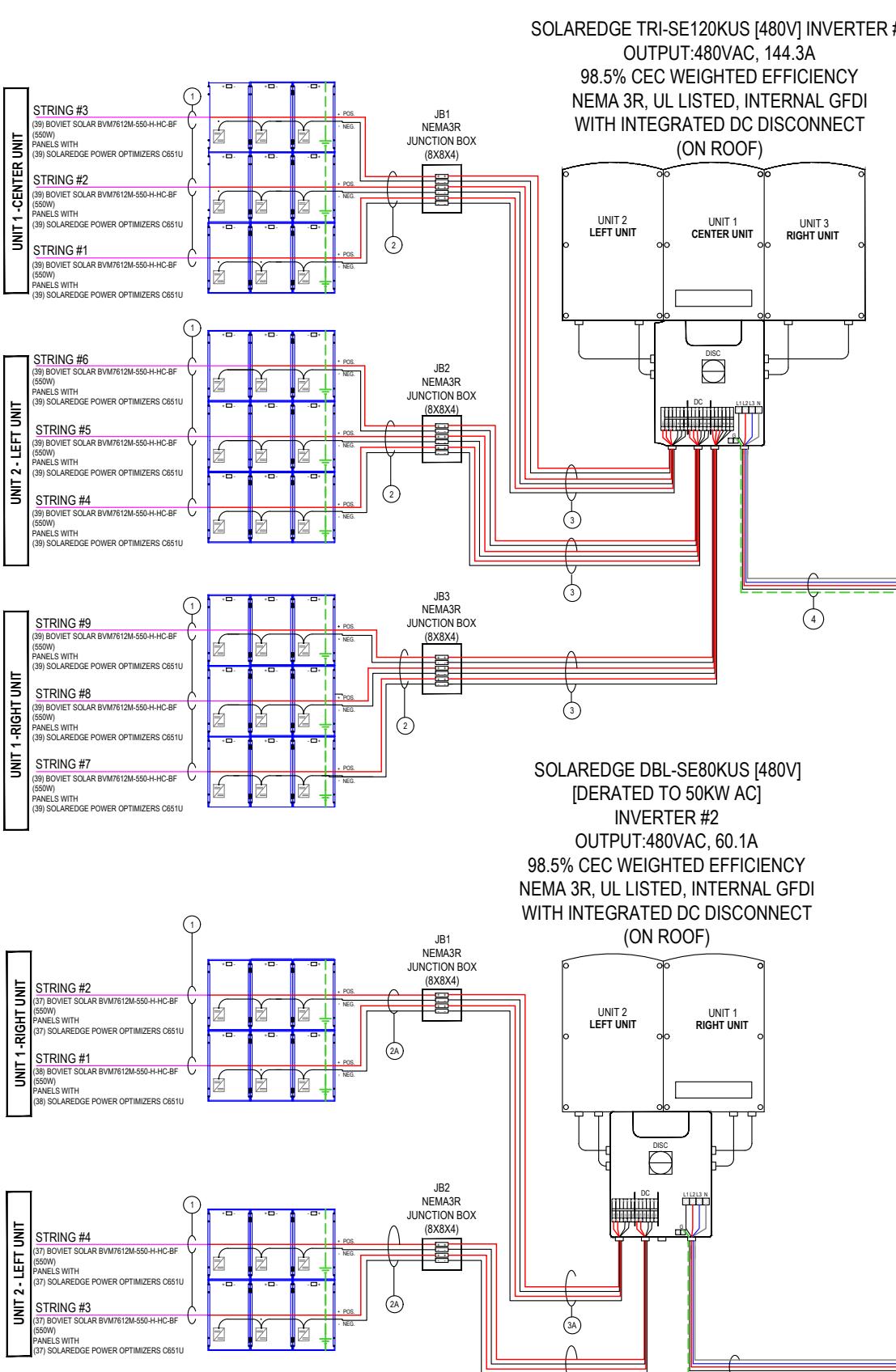
REVISIONS		
Description	Date	Rev
Revision	5/10/2025	01
Revision	6/4/2025	02
Revision	6/17/2025	03

Signature with Seal



Project Name & Address

555 PLEASANTVILLE RD.  
SOUTH BUILDING  
555 PLEASANTVILLE ROAD,  
BRIARCLIFF MANOR, NY 10510  
APN #: 09802000010060000000

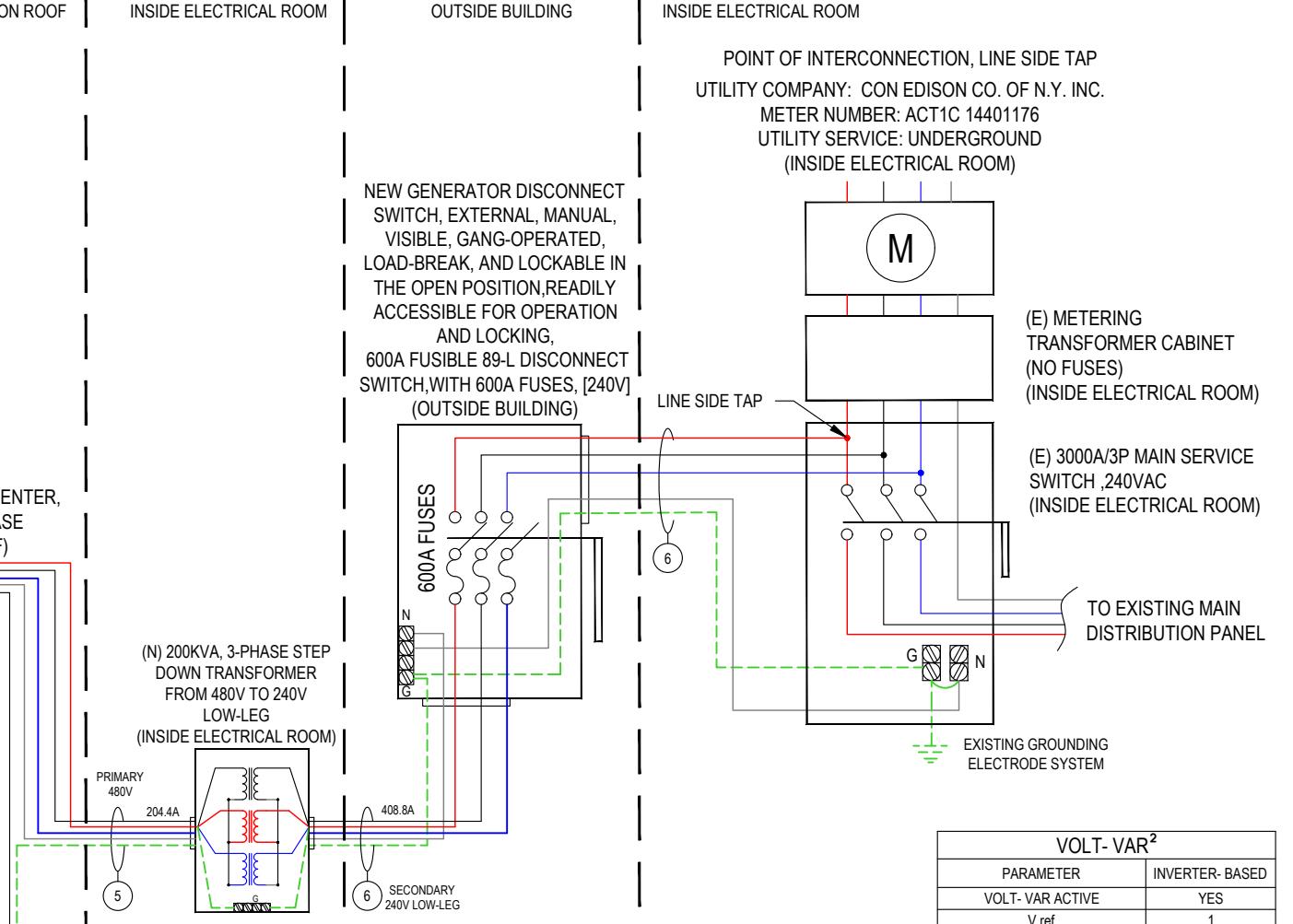


DC CIRCUIT	AC CIRCUIT
POSITIVE (+)	L1
NEGATIVE (-)	L2
PE (GROUND)	L3
	N
	PE (GROUND)

FREQUENCY TRIP SETTINGS		
SHALL TRIP FUNCTION	REQUIRED SETTINGS	
	FREQUENCY (Hz)	CLEARING TIME (S)
OF2	62	0.16
OF1	61.2	300
UF1	58.5	300
UF2	56.5	0.16

VOLTAGE TRIP SETTINGS		
SHALL TRIP FUNCTION	REQUIRED SETTINGS	
	VOLTAGE (P.U. OF NOMINAL VOLTAGE)	CLEARING TIME (S)
OV1	1.1	2
OV2	1.2	0.16
UV1	0.8	3
UV2	0.5	1.1

SYSTEM SUMMARY										
SYSTEM SIZE:	275.00 kW DC									
	170.00 kW AC									
MODULE TYPE & AMOUNT:	(500) BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)									
INVERTER:	(01) SOLAREDGE TRI-SE120KUS [480V] &									
OPTIMIZER:	(01) SOLAREDGE DBL-SE80KUS [480V] [DERATED TO 50KW AC]									
	(500) SOLAREDGE POWER OPTIMIZERS C651U									



VOLT- VAR <sup>2</sup>	
PARAMETER	INVERTER-BASED
VOLT- VAR ACTIVE	YES
V ref	1
V1 (p.u.)/ Q1	0.93 / 44%
V2 (p.u.)/ Q2	0.97 / 0%
V3 (p.u.)/ Q3	1.03 / 0%
V4 (p.u.)/ Q4	1.07 / -44%
OPEN LOOP RESPONSE TIME (S)	5
ENABLE AUTONOMOUS VREF	NO

STRING CONFIGURATION (INVERTER #1)										
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT			PV OUTPUT CIRCUIT				
117 MODULES	String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM
	#1	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	850V
	#2	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A
	#3	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A

STRING CONFIGURATION (INVERTER #2)										
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT			PV OUTPUT CIRCUIT				
117 MODULES	String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM
	#4	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	850V
	#5	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A
	#6	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A

STRING CONFIGURATION (INVERTER #3)										
PV SOURCE CIRCUIT			OPTIMIZER OUTPUT CIRCUIT			PV OUTPUT CIRCUIT				
117 MODULES	String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM
	#7	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	850V
	#8	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A
	#9	39	39	60.66V	17.30A	24A	80V	1000V	21.45 kW	24A

Sheet Name  
3-LINE  
DIAGRAM

Sheet Size  
ANSI B  
11" X 17"

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Drawn By  
PremiumCAD

Rooftop conductor ampacities designed in compliance with art. 690.8, Tables 310.15(B)(2)(a), 310.15(B)(3)(a), 310.15(B)(3)(c), 310.15(B)(16), Chapter 9 Table 4, 5, & 9. Location specific temperature obtained from ASHRAE 2017 data tables

RECORD LOW TEMP	-17°C
AMBIENT TEMP (HIGH TEMP 2%)	32°C
CONDUIT HEIGHT	0.5"
ROOF TOP TEMP	54°C
CONDUCTOR TEMPERATURE RATE	90°C

PV MODULE RATING @ STC	
MANUFACTURER	BOVIET SOLAR BVM7612M-550-H-HC-BF (550W)
MAX. POWER-POINT CURRENT (IMP)	12.88 AMPS
MAX. POWER-POINT VOLTAGE (VMP)	42.76 VOLTS
OPEN-CIRCUIT VOLTAGE (VOC)	50.13 VOLTS
SHORT-CIRCUIT CURRENT (ISC)	13.84 AMPS
NOM. MAX. POWER AT STC (PMAX)	550 WATT
MAX. SYSTEM VOLTAGE	1500V
VOC TEMPERATURE COEFFICIENT	-0.285° %/°C

INVERTER SPECIFICATIONS [SOLAREDGE TRI-SE120KUS [480V]]	
MANUFACTURER	SOLAREDGE TRI-SE120KUS [480V]
MAXIMUM AC OUTPUT POWER	120000W
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-N)	244 VAC
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-L)	422.5 VAC
MAXIMUM CONTINUOUS OUTPUT CURRENT	144.3 AMPS
MAXIMUM INPUT VOLTAGE	1000 VDC
OPERATING VOLTAGE RANGE	850-1000 VDC
MAXIMUM INPUT CURRENT	3 X 48.25 A

OPTIMIZER SPECS: SOLAREDGE POWER OPTIMIZERS C651U	
MANUFACTURER	SOLAREDGE C651U
MAXIMUM INPUT VOLTAGE	80 VDC
MPPT OPERATING RANGE	12.5 – 80 VDC
MAXIMUM SHORT CIRCUIT CURRENT (ISC)	20 ADC
MAXIMUM OUTPUT CURRENT	24 ADC
MAXIMUM OUTPUT VOLTAGE	60 VDC
MAXIMUM ALLOWED SYSTEM VOLTAGE	1000 VDC



REVISIONS		
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Project Name &  
Address

INVERTER SPECIFICATIONS [SOLAREDGE DBL-SE80KUS [480V]]	
MANUFACTURER	SOLAREDGE DBL-SE80KUS [480V]
DERATED - POWER	50000W
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-N)	244 VAC
AC OUTPUT VOLTAGE MIN.-NOMINAL-MAX. (L-L)	422.5 VAC
MAXIMUM CONTINUOUS OUTPUT CURRENT	96.5 AMPS
MAXIMUM INPUT VOLTAGE	1000 VDC
OPERATING VOLTAGE RANGE	850-1000 VDC
DERATED -MAXIMUM INPUT CURRENT	2 X 48.25 A

STRING CONFIGURATION (INVERTER #2)														
UNIT #1 - RIGHT														
75 MODULES	PV SOURCE CIRCUIT				OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT					
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#1	38	38	60.66V	17.30A	24A	80V	1000V	20.90 kW	850V	1000V	24A	41.25 kW	JB1	#2
#2	37	37	60.66V	17.30A	24A	80V	1000V	20.35 kW			24A			

STRING CONFIGURATION (INVERTER #2)														
UNIT #2 - LEFT														
74 MODULES	PV SOURCE CIRCUIT				OPTIMIZER OUTPUT CIRCUIT				PV OUTPUT CIRCUIT					
String	Modules	Optimizer	NEC 690.7	NEC 690.8A	I-MAX	V-MAX	V-RATED	P-MAX	V-NOM	V-MAX	I-MAX	P-MAX	J. BOX	INVERTER
#3	37	37	60.66V	17.30A	24A	80V	1000V	27.50 kW	850V	1000V	24A	40.70 kW	JB2	#2
#4	37	37	60.66V	17.30A	24A	80V	1000V	27.50 kW			24A			

DC WIRES & CONDUIT	WIRE TAG #	WIRE FROM --	CONDUIT	WIRE QTY	WIRE GAUGE:	WIRE TYPE	TEMP RATING:	WIRE AMP	TEMP DE-RATE:	CONDUIT FILL:	WIRE OCP:	TERMINAL 75°C RATING:	CIRCUIT CURRENT (ISC) x NEC:	= MAX CIRCUIT CURRENT	MAX SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE		
														#	OF INVERTER	X INVERTER OUTPUT CURRENT	X NEC:	= MAX AMPS	
	1	PV SOURCE CIRCUIT																	
	2	ARRAY TO JUNCTION BOX	IN AIR	6	#10	PV WIRE	90°	40A	x 0.96	x N/A	= 38.40A	35A	24A	x 1.25	= 30.00A	1000V	#6	SBC	
	3	JUNCTION BOX TO INVERTER	1-1/4" EMT	6	#10	THWN-2	90°	40A	x 0.96	x 0.80	= 30.72A	35A	24A	x 1.25	= 30.00A	1000V	#8	THWN-2	
	2A	ARRAY TO JUNCTION BOX	IN AIR	4	#10	PV WIRE	90°	40A	x 0.96	x N/A	= 38.40A	35A	24A	x 1.25	= 30.00A	1000V	#6	SBC	
	3A	JUNCTION BOX TO INVERTER	1-1/4" EMT	4	#10	THWN-2	90°	40A	x 0.96	x 0.80	= 30.72A	35A	24A	x 1.25	= 30.00A	1000V	#8	THWN-2	
	4	WIRE FROM --	CONDUIT	WIRE QTY	WIRE GAUGE:	WIRE TYPE	TEMP RATING:	WIRE AMP	TEMP DE-RATE:	CONDUIT FILL:	WIRE OCP:	TERMINAL 75°C RATING:	# OF INVERTER	X INVERTER OUTPUT CURRENT	X NEC:	= MAX AMPS	MAX SYSTEM VOLTAGE	GRND SIZE	GRND WIRE TYPE
	4A	INVERTER TO LOAD CENTER	2-1/2" EMT	4	4/0 AWG	THWN-2	90°	260A	x N/A	x 0.80	= 208.00A	260A	01	x 1.25	= 180.38A	4			

**EQUIPMENT LOCATIONS:**

1. ALL EQUIPMENT SHALL MEET MINIMUM SETBACKS AS REQUIRED BY NEC 110.26.
2. WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY NEC 690.31 (A),(C) AND NEC TABLES 310.15 (B)(2)(A) AND 310.15 (B)(3)(C).
3. JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES ACCORDING TO NEC 690.34.
4. ADDITIONAL AC DISCONNECT(S) SHALL BE PROVIDED WHERE THE INVERTER IS NOT WITHIN SIGHT OF THE AC SERVICING DISCONNECT. 2.2.6 ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL ACCORDING TO NEC APPLICABLE CODES.
5. ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

**STRUCTURAL NOTES:**

1. RACKING SYSTEM & PV ARRAY WILL BE INSTALLED ACCORDING TO CODE-COMPLIANT INSTALLATION MANUAL. TOP CLAMPS REQUIRE A DESIGNATED SPACE BETWEEN MODULES, AND RAILS MUST ALSO EXTEND A MINIMUM DISTANCE BEYOND EITHER EDGE OF THE ARRAY/SUBARRAY, ACCORDING TO RAI MANUFACTURER'S INSTRUCTIONS.
2. JUNCTION BOX WILL BE INSTALLED PER MANUFACTURERS' SPECIFICATIONS. IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.
3. ROOFTOP PENETRATIONS FOR PV RACEWAY WILL BE COMPLETED AND SEALED W/ APPROVED CHEMICAL SEALANT PER CODE BY A LICENSED CONTRACTOR.
4. ALL PV RELATED ROOF ATTACHMENTS TO BE SPACED NO GREATER THAN THE SPAN DISTANCE SPECIFIED BY THE RACKING MANUFACTURER. 2.3.6 WHEN POSSIBLE, ALL PV RELATED RACKING ATTACHMENTS WILL BE STAGGERED AMONGST THE ROOF FRAMING MEMBERS.

**WIRING & CONDUIT NOTES:**

1. ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
2. CONDUCTORS SIZED ACCORDING TO NEC 690.8, NEC 690.7.
3. VOLTAGE DROP LIMITED TO 1.5%.
4. DC WIRING LIMITED TO MODULE FOOTPRINT. MICROINVERTER WIRING SYSTEMS SHALL BE LOCATED AND SECURED UNDER THE ARRAY W/ SUITABLE WIRING CLIPS.
5. AC CONDUCTORS COLORED OR MARKED AS FOLLOWS: PHASE A OR L1- BLACK PHASE B OR L2- RED, OR OTHER CONVENTION IF THREE PHASE PHASE C OR L3- BLUE, YELLOW, ORANGE\*\*, OR OTHER CONVENTION NEUTRAL- WHITE OR GREY IN 4-WIRE DELTA CONNECTED SYSTEMS THE PHASE WITH HIGHER VOLTAGE TO BE MARKED ORANGE [NEC 110.15].

**GROUNDING NOTES:**

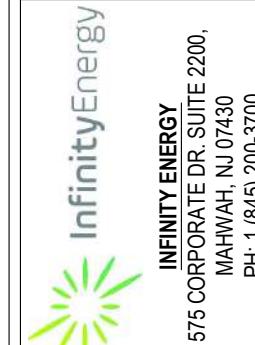
1. GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.
2. PV EQUIPMENT SHALL BE GROUNDED ACCORDING TO NEC 690.43 AND MINIMUM NEC TABLE 250.122.
3. METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES CONSIDERED GROUNDED IN ACCORD WITH 250.134 AND 250.136(A).
4. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED ACCORDING TO NEC 690.45 AND MICROINVERTER MANUFACTURERS' INSTRUCTIONS.
5. EACH MODULE WILL BE GROUNDED USING WEEB GROUNDING CLIPS AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ. IF WEEBS ARE NOT USED, MODULE GROUNDING LUGS MUST BE INSTALLED AT THE SPECIFIED GROUNDING LUG HOLES PER THE MANUFACTURERS' INSTALLATION REQUIREMENTS.
6. THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.
7. GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER [NEC 250.119]
8. THE GROUNDING ELECTRODE SYSTEM COMPLIES WITH NEC 690.47 AND NEC 250.50 THROUGH 250.106. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED ACCORDING TO NEC 250, NEC 690.47 AND AHJ.
9. GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690.41(B)(1) AND (2) TO REDUCE FIRE HAZARDS

**DISCONNECTION AND OVER-CURRENT PROTECTION NOTES:**

1. DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE RECONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).
2. DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH
3. PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS IN ACCORDANCE WITH 690.12(A) THROUGH (D).
4. ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC 690.8, 690.9, AND 240.
5. MICROINVERTER BRANCHES CONNECTED TO A SINGLE BREAKER OR GROUPED FUSES IN ACCORDANCE WITH NEC 110.3(B).
6. IF REQUIRED BY AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION ACCORDING TO NEC 690.11 AND UL1699B.

**INTERCONNECTION NOTES:**

1. LOAD-SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH [NEC 705.12 (B)]
2. THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS OUTPUT MAY NOT EXCEED 120% OF BUSBAR RATING [NEC 705.12(D)(2)(3)].
3. THE SUM OF 125 PERCENT OF THE POWER SOURCE(S) OUTPUT CIRCUIT CURRENT AND THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED 120 PERCENT OF THE AMPACITY OF THE BUSBAR, PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD [NEC 705.12(B)(2)(3)].
4. AT MULTIPLE ELECTRIC POWER SOURCES OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVERCURRENT DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR. HOWEVER, THE COMBINED OVERCURRENT DEVICE MAY BE EXCLUDED ACCORDING TO NEC 705.12 (B)(2)(3)(C).
5. FEEDER TAP INTERCONNECTION (LOADSIDE) ACCORDING TO NEC 705.12 (B)(2)(1)
6. SUPPLY SIDE / LINE SIDE TAP INTERCONNECTION ACCORDING TO NEC 705.12 (A) WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC 230.42 2.7.8 BACKFEEDING BREAKER FOR ELECTRIC POWER SOURCES OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING [NEC 705.12 (B)(5)].

**REVISIONS**

Description	Date	Rev
Revision	5/10/2025	01
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Signature with Seal



Project Name &amp; Address

**555 PLEASANTVILLE RD.**  
**SOUTH BUILDING**  
 555 PLEASANTVILLE ROAD,  
 BRIARCLIFF MANOR, NY 10510  
 APN # 098-02000-010060000000

Sheet Name

NOTES

Sheet Size

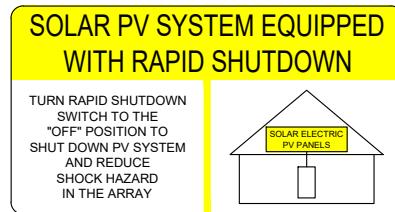
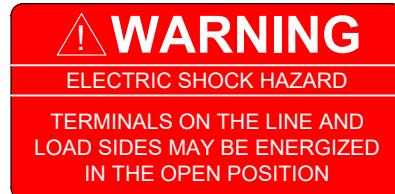
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PremiumCAD



**LABEL 1**  
 FOR PV SYSTEM DISCONNECTING MEANS WHERE THE  
 LINE AND LOAD TERMINALS MAY BE ENERGIZED IN THE  
 OPEN POSITION.  
 [2017 NEC 690.13(B)]

**LABEL 2**  
 SHALL BE MARKED AT AN ACCESSIBLE LOCATION AT  
 THE DISCONNECTING MEANS AS A POWER SOURCE  
 AND WITH THE RATED AC OUTPUT CURRENT AND  
 THE NOMINAL OPERATING AC VOLTAGE.  
 [2017 NEC 690.54]

**LABEL 3**  
 IF INTERCONNECTING LOAD SIDE, INSTALL THIS  
 LABEL ANYWHERE THAT IS POWERED BY BOTH THE  
 UTILITY AND THE SOLAR PV SYSTEM, IE. MAIN  
 SERVICE PANEL AND SUBPANELS.  
 [2017 NEC 705.12(B)(3)]

**LABEL 4**  
 APPLY TO THE DISTRIBUTION EQUIPMENT  
 ADJACENT TO THE BACK-FED BREAKER FROM THE  
 POWER SOURCE.  
 [2017 NEC 705.12(B)(2)(3)(b)]

**LABEL 5**  
 APPLY TO THE PV COMBINER BOX  
 [2017 NEC 705.12(B)(2)(3)(c)]

**LABEL 6**  
 BUILDINGS WITH PV SYSTEMS SHALL HAVE A  
 PERMANENT LABEL LOCATED AT EACH SERVICE  
 EQUIPMENT LOCATION TO WHICH THE PV SYSTEMS  
 ARE CONNECTED OR AT AN APPROVED READILY  
 VISIBLE LOCATION AND SHALL INDICATE THE  
 LOCATION OF RAPID SHUTDOWN INITIATION  
 DEVICES.  
 [2017 NEC 690.56(C)(1)(a)]

**LABEL 7**  
 SIGN LOCATED AT RAPID SHUT DOWN DISCONNECT  
 SWITCH  
 [2017 NEC 690.56(C)(3)]

**LABEL 8**  
 PERMANENT PLAQUE OR DIRECTORY DENOTING THE  
 LOCATION OF ALL ELECTRIC POWER SOURCE  
 DISCONNECTING MEANS ON OR IN THE PREMISES SHALL BE  
 INSTALLED AT EACH SERVICE EQUIPMENT LOCATION AND AT  
 THE LOCATION(S) OF THE SYSTEM DISCONNECT(S) FOR ALL  
 ELECTRIC POWER PRODUCTION SOURCES CAPABLE OF  
 BEING INTERCONNECTED.  
 [2017 NEC 705.10]

**LABEL 9**  
 PERMANENT PLAQUE OR DIRECTORY DENOTING  
 THE LOCATION OF ALL ELECTRIC POWER SOURCE  
 DISCONNECTING MEANS ON OR IN THE PREMISES  
 SHALL BE INSTALLED AT EACH SERVICE  
 EQUIPMENT LOCATION AND AT THE LOCATION(S)  
 OF THE SYSTEM DISCONNECT(S) FOR ALL  
 ELECTRIC POWER PRODUCTION SOURCES  
 CAPABLE OF BEING INTERCONNECTED.  
 [2017 NEC 705.10]

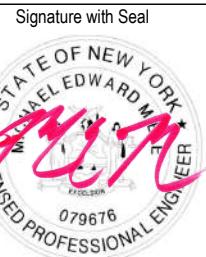
**LABEL 10**  
 PERMANENT PLAQUE OR DIRECTORY TO BE  
 LOCATED AT MAIN SERVICE EQUIPMENT  
 DENOTING THE LOCATION OF THE RAPID  
 SHUTDOWN SYSTEM DISCONNECTING MEANS IF  
 SOLAR ARRAY RAPID SHUTDOWN  
 DISCONNECTING SWITCH IS NOT GROUPED AND  
 WITHIN LINE OF SITE OF MAIN SERVICE  
 DISCONNECTING MEANS.  
 [2017 NEC 705.10 AND 690.56(C)(1)(a)]

**LABEL 11**  
 PERMANENT PLAQUE OR DIRECTORY TO BE  
 LOCATED AT AC COMBINER PANEL.  
 [2017 NEC 110.21(B)]

## LABELING NOTES

1. LABELS CALLED OUT ACCORDING TO ALL COMMON CONFIGURATIONS. ELECTRICIAN TO DETERMINE EXACT REQUIREMENTS IN THE FIELD PER CURRENT NEC AND LOCAL CODES AND MAKE APPROPRIATE ADJUSTMENTS.
2. LABELING REQUIREMENTS BASED ON THE 2017 & 2020 NEC CODE, OSHA STANDARD 19010.145, ANSIZ535.
3. MATERIAL BASED ON THE REQUIREMENTS OF THE AHJ.
4. LABELS TO BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED AND SHALL NOT BE HANDWRITTEN [NEC 110.21]

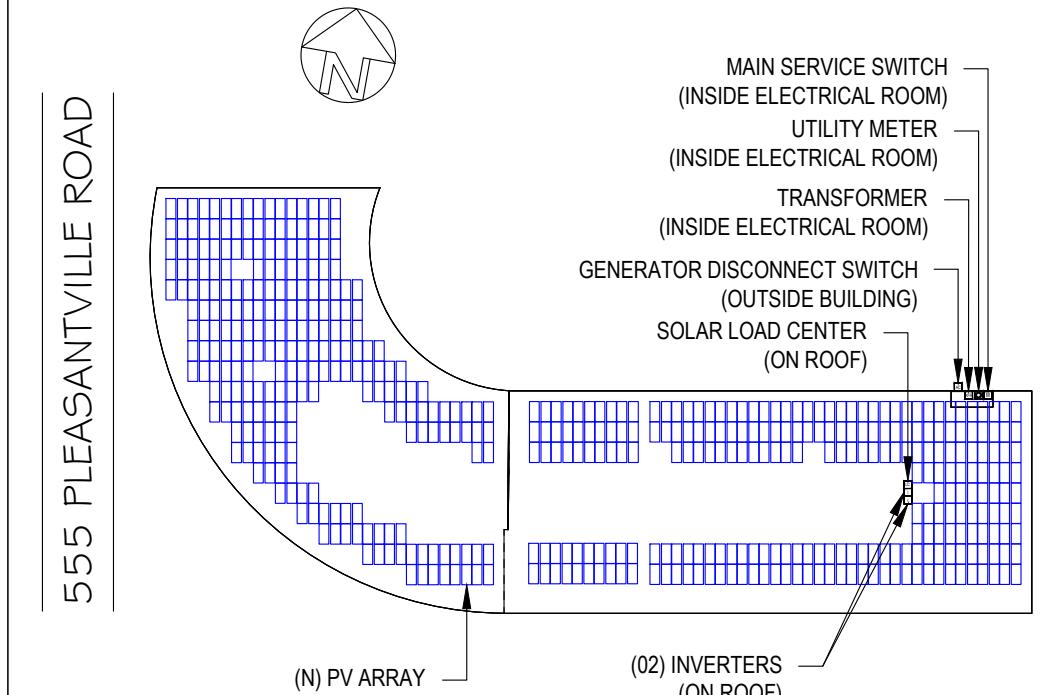
REVISIONS		
Description	Date	Rev
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Project Name &  
 Address

**555 PLEASANTVILLE RD.**  
**SOUTH BUILDING**  
 555 PLEASANTVILLE ROAD,  
 BRIARCLIFF MANOR, NY 10510  
 APN # 098-02000-100-0600000000

**CAUTION:**  
 POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE  
 FOLLOWING SOURCES WITH DISCONNECT(S) LOCATED AS SHOWN.  
 DANGEROUS VOLTAGE MAY BE PRESENT AT ALL TIMES



Sheet Name  
**WARNING  
 LABELS**

Sheet Size  
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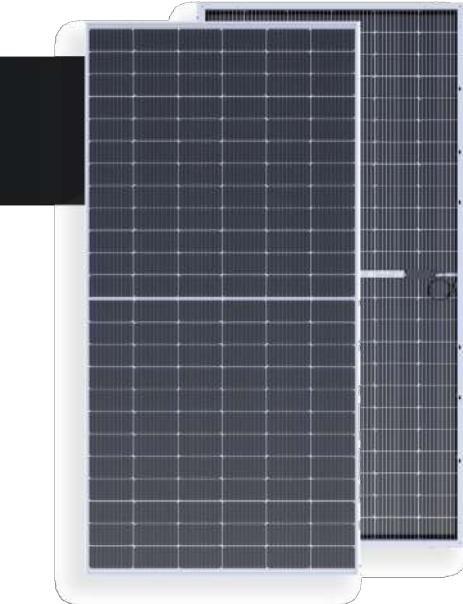
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Drawn By  
**PremiumCAD**



## VEGA SERIES™

### UTILITY SCALE SOLAR MONO | BIFACIAL | PERC | PV MODULE

**Power Range:**

525W | 530W | 535W | 540W | 545W | 550W

PERC SE | Half cut cell | 10 Busbar | 144 cells

Single Glass | Silver Frame | Transparent Back

**Module Efficiency:**

21.1%

**Cell Efficiency:** 22.5%~23.3%**Power Tolerance:**

0~+5W

**System Voltage:** 1000/1500 V DC**Module Size:**

90.40 x 44.65 x 1.38 inch

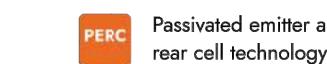
**Module Weight:** 63.94 lb.**Module Code:** BVM7612M-XXX-H-HC-BF

#### DESIGNED TO PERFORM AND BUILT TO LAST

Our PV modules are designed with better technology in mind, made from robust product components, under stringent quality control steps and high-tech manufacturing processes.

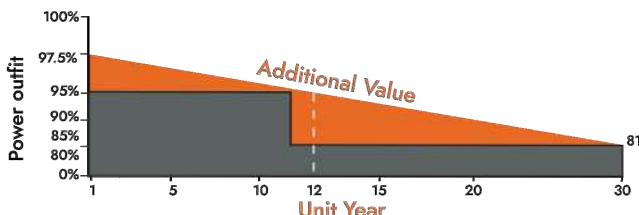
PERC, half-cut, multi-busbar, and large cell designs enables our PV modules to pack more power per module, capture more

photons, produce more energy, and provide reliable, dependable system performance under different installations requirements, difficult weather, or environmental conditions. Whether you are EPC, installer, contractor, or project developer, we have the right and better PV module for your residential, commercial, industrial, and utility scale solar projects.



#### WARRANTY

30 - Year linear power warranty  
12 - Year product warranty



#### CERTIFICATES

UL 61730 | IEC 61215 | IEC 61730 | CEC Listed | CE  
ISO 9001 Quality Management System  
ISO 14001 Environmental Management System  
ISO 45001 Occupational Health and Safety Management System

\*Please contact with Boviet Solar representatives for full list of certificates according to local requirements and product type

**ELECTRICAL CHARACTERISTICS | STC**

Maximum Power (Pmax)	525W	530W	535W	540W	545W	550W
Maximum Power Current (Imp)	12.60A	12.66A	12.71A	12.76A	12.82A	12.88A
Maximum Power Voltage (Vmp)	41.74V	41.94V	42.17V	42.40V	42.58V	42.76V
Short Circuit Current (Isc)	13.37A	13.43A	13.48A	13.55A	13.72A	13.84A
Open Circuit Voltage (Voc)	49.52V	49.71V	49.80V	49.89V	49.98V	50.13V
Module Efficiency	20.2%	20.4%	20.5%	20.7%	20.9%	21.1%
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W

STC: AM1.5 Irradiance 1000W/m<sup>2</sup>, 25° C**ELECTRICAL CHARACTERISTICS | NOCT**

Maximum Power (Pmax)	525W	530W	535W	540W	545W	550W
Maximum Power (Pmax)	395.10W	401.48W	405.27W	409.09W	412.75W	416.44W
Maximum Power Current (Imp)	10.22A	10.27A	10.31A	10.35A	10.40A	10.45A
Maximum Power Voltage (Vmp)	38.66V	39.10V	39.31V	39.53V	39.69V	39.86V
Short Circuit Current (Isc)	10.74A	10.79A	10.83A	10.89A	11.03A	11.12A
Open Circuit Voltage (Voc)	46.40V	46.57V	46.66V	46.74V	46.83V	46.97V

NOCT: AM 1.5 Irradiance 800W/m<sup>2</sup>, 20° C, Wind speed 1m/s**MECHANICAL CHARACTERISTICS**

Solar Cell	Monocrystalline   PERC PV Cells 182mm Cell   Half-cut   10 Busbar   144 (6x24) pcs in series
Solar Modules	Bifacial   90.40 x 44.65 x 1.38 inch.   Weight: 63.94 lb.
Module Glass	3.2 mm (0.13 inch) High transparency, low iron, AR-coated tempered glass
Module Frame	Frame 35 mm Ultra-strong anodized aluminum alloy frame
Module Junction Box	IP68 rated   3 bypass diodes
Module Output Cable	4mm <sup>2</sup> (EU)   12 AWG (US) 39.38 inch
Module Connector	Multi contact (MC4) compatible connectors
Module Encapsulant	POE
Module Backsheet	Transparent with grid, FFC/PET/FFC material 0.315mm thickness for transparent area, 0.335mm included grid layer.
Module Fire Type	Type 1 Fire rated

**PACKING INFORMATION**

Pieces per pallet:	31
Pallets per container (40HQ):	20
Pieces per container (40HQ):	620
Pallet Weight:	2142.89 lb.
Pallet Dimension:	91.37 x 44.69 x 49.49 inch

**MAXIMUM RATING**

Operating Temperature	-40°F~185°F
Maximum Series Fuse Rating	30A
Isc Temperature Coefficient	1000/1500V DC

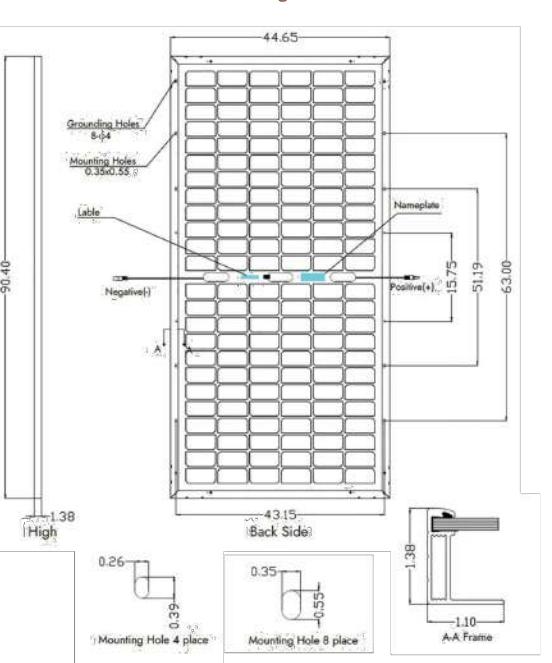
**THERMAL CHARACTERISTICS**

Pmax Temperature Coefficient	-0.35%/K
Voc Temperature Coefficient	-0.285%/K
Isc Temperature Coefficient	+0.05%/K

NOCT 113±35.6°F

**BIFACIAL OUTPUT-BACKSIDE POWER GAIN**

10%	Pmax[W]	578	583	589	594	600	605
Module efficiency (%)	22.18	22.39	22.60	22.81	23.03	23.24	
20%	Pmax[W]	630	636	642	648	654	660
Module efficiency (%)	24.20	24.43	24.66	24.89	25.12	25.35	

**PV Module: Mechanical Drawing**

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**SOUTH BUILDING**  
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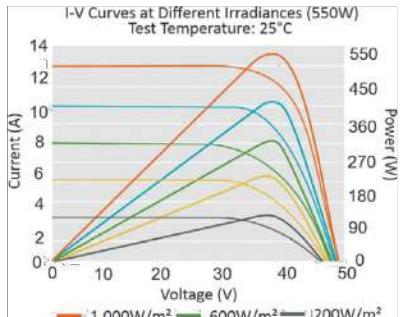
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**SOUTH BUILDING**  
I-V Curves at Different Irradiances (550W)  
Test Temperature: 25°C



Disclaimer: The information included in this PV module datasheet is subject to change without any notice and is provided for informational purposes only. No contractual rights are established or should be inferred because of the user's reliance on the information contained in this PV module datasheet. Please contact Boviet Solar's local offices for updated product information. Thank you.

# Commercial Power Optimizer

## USA Domestic Content Eligible\*

C651U



25  
YEAR  
WARRANTY

Made in the **USA**  
from imported parts

POWER OPTIMIZER

SolarEdge's USA-manufactured offering for C&I rooftops, for power optimization at the module level

### Eligible for Domestic Content\*

- SolarEdge USA-manufactured power optimizers, when paired with certain SolarEdge USA-manufactured inverters, are intended to be eligible for the enhanced federal income tax credit for domestic content

### Higher Energy Yields

- Generates maximum power from each PV module
- High efficiency (99.5%)
- Supports high power and bifacial PV modules, including G12 modules

### Enhanced Monitoring and Visibility

- Maximum system visibility up to the individual module level
- Pinpointed fault detection and remote troubleshooting

### Maximum Protection with Built-in Safety

- Designed to automatically reduce high DC voltage to touch-safe levels, upon grid/inverter shutdown, with SafeDC™
- Includes SolarEdge Sense Connect, designed to prevent arcs by monitoring Power Optimizer connectors for overheating
- Certified to Photovoltaic Rapid Shutdown, according to NEC 2014 – 2023

\* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

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**solar**edge

# Power Optimizer

## USA Domestic Content Eligible for North America

### C651U

Power Optimizer Model	C651U	
<b>INPUT</b>		
Rated Input DC Power <sup>(1)</sup>	650	W
Absolute Maximum Input Voltage (Voc)	80	Vdc
MPPT Operating Range	12.5 – 80	Vdc
Maximum Short Circuit Current (Isc) of Connected PV Module <sup>(2)</sup>	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor) <sup>(3)</sup>	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overvoltage Category	II	
<b>OUTPUT DURING OPERATION</b>		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
<b>SAFETY FEATURES</b>		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 ± 0.075	Vdc
Sense Connect	Yes	
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023	
<b>STANDARD COMPLIANCE</b>		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC62109-1 (class II safety); UL 1741; UL 3741; CSA C22.2#107.1	
Material	UL94 V-0, UV Resistant	
RoHS	Yes	
Fire Safety	VDE-AR-E 2100-712:2013-05	
<b>INSTALLATION SPECIFICATIONS</b>		
Compatible SolarEdge Inverters <sup>(4)</sup>	Commercial Three Phase Inverters with one of the following part number structures: USE-SIN-USxxlxxxx SE-DBL-USxxlxxxx SE-TRI-USxxlxxxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.03 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4 <sup>(5)</sup>	
Input Wire Length	(+) 1.4, (-) 1.4 / (+) 4.59 <sup>(6)</sup>	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0 (-) 0.10 / (+) 9.84, (-) 0.32	m / ft
Operating Temperature Range <sup>(7)</sup>	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA6P	
Relative Humidity	0 – 100	%

(1) Modules with a front side maximum power of up to 715W at STC are allowed. Up to +5% power tolerance is allowed.

(2) When using bifacial modules, consider only the front side Isc at STC (0% back side gain). For details, see [here](#).

(3) Adjusted for ambient temperature, irradiance, bifacial gain, safety factor, and so on, in accordance with NEC and CSA.

(4) For detailed inverter compatibility information, see [here](#).

(5) For other connector types please contact SolarEdge.

(6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [here](#).

(7) For ambient temperatures above +65°C / +149°F, power derating is applied. For details, see [here](#).

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# Three Phase Inverter with Synergy Technology

## USA Domestic Content Eligible\*

For North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS



12-20  
YEAR  
WARRANTY



### SOLAREDGE'S USA-MANUFACTURED OFFERING FOR C&I ROOFTOPS AND CARPORTS

- Eligible for domestic content\*: SolarEdge USA-manufactured inverters, when paired with certain SolarEdge USA-manufactured power optimizers, are intended to be eligible for the enhanced federal income tax credit for domestic content
- Pre-commissioning feature for automated validation of system components and wiring during the site installation process and prior to grid connection
- Easy two-person installation with lightweight, modular design (each inverter consists of two or three Synergy units and one Synergy Manager)
- Independent operation of each Synergy unit enables higher uptime and easy serviceability
- Built-in thermal sensors detect faulty wiring, ensuring enhanced protection and safety
- Built-in arc fault protection and rapid shutdown
- Built-in PID mitigation for maximized system performance
- Monitored\*\* and field-replaceable surge protection devices, to better withstand surges caused by lightning or other events
- Built-in module-level monitoring with Ethernet or cellular communication for full system visibility

\* Manufactured by SolarEdge with the intent to be eligible for inclusion under the elective safe harbor in calculating the Domestic Cost Percentage under the "Rooftop (MLPE)" category (under IRS Notice 2024-41). The PCBA, Electrical Parts, and Enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder. SolarEdge does not provide tax and/or legal advice. You should consult with your own legal and/or tax advisor(s) regarding the eligibility of your project for the ITC or PTC, including the 10% domestic content bonus, to determine how the applicable rules apply to your particular project. The forward-looking statements in this datasheet are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

\*\* Applicable only for DC and AC SPDs.

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## / Three Phase Inverter with Synergy Technology USA Domestic Content Eligible for North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers	SE-DBL-USxxIBNxx	SE-TRI-USxxIBNxx				
Model Number	SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	UNITS
<b>OUTPUT</b>						
Total Rated AC Output Capacity	80,000		120,000			W
Rated AC Active Output Power	80,000	50,000	100,000	110,000	120,000	W
Maximum AC Apparent Output Power	80,000	50,000	100,000	120,000	120,000	VA
AC Output Line Connections		3W + PE, 4W + PE				
Supported Grids		WYE: TN-C; TN-S; TN-C-S; TT, IT; Delta: IT				
AC Output Voltage Minimum-Nominal-Maximum <sup>(1)</sup> (L-N)	244 – 277 – 305	105 – 120 – 132.5		244 – 277 – 305		Vac
AC Output Voltage Minimum-Nominal-Maximum <sup>(1)</sup> (L-L)	422.5 – 480 – 529	183 – 208 – 229		422.5 – 480 – 529		Vac
AC Frequency Minimum-Nominal-Maximum <sup>(1)</sup>			59.5 – 60 – 60.5			Hz
Maximum Continuous Output Current (per phase, PF=1)	96.5	139.5	120	144.3		Aac
GFDI Threshold			1			A
Utility Monitoring, Islanding Protection, Configurable Power Factor, Country Configurable Thresholds			Yes			
Total Harmonic Distortion			≤ 3			%
Power Factor Range			±0.85 to 1			
<b>INPUT</b>						
Maximum DC Power (Module STC) Inverter / Synergy Unit	140,000 / 70,000	87,500 / 29,165	175,000 / 58,300	210,000 / 70,000		W
Transformer-less, Ungrounded			Yes			
Maximum Input Voltage DC+ to DC-	1000	600		1000		Vdc
Operating Voltage Range	850 – 1000	370 – 600		850 – 1000		Vdc
Maximum Input Current	2 x 48.25	3 x 46.5	3 x 40	3 x 48.25		Adc
Reverse-Polarity Protection			Yes			
Ground-Fault Isolation Detection			167kΩ sensitivity per Synergy Unit <sup>(3)</sup>			
CEC Weighted Efficiency	98.5	97		98.5		%
Nighttime Power Consumption	< 8		< 12			W
<b>ADDITIONAL FEATURES</b>						
Supported Communication Interfaces <sup>(4)</sup>	2 x RS485; Ethernet; Wi-Fi (optional); Cellular (optional)					
Smart Energy Management	Export Limitation					
Inverter Commissioning	With the SetApp mobile application using built-in Wi-Fi access point for local connection					
Arc Fault Protection	Built-in, user configurable (according to UL 1699B)					
Photovoltaic Rapid Shutdown System	NEC 2014 – 2023, built-in, if paired with C651U					
PID Rectifier	Nighttime, built-in					
RS485 Surge Protection (ports 1+2)	Type II, field replaceable, integrated					
AC, DC Surge Protection	Type II, field replaceable, integrated					
<b>DC SAFETY SWITCH</b>						
DC Disconnect	Built-in					
<b>STANDARD COMPLIANCE</b>						
Safety	UL 1699B; UL 1741; UL 1741 SA; UL 1741 SB; UL 1998; CSA C22.2#107.1; Canadian AFCI according to T.I.L. M-07					
Grid Connection Standards	IEEE 1547-2018, Rule 21, Rule 14 (H)					
Emissions	FCC Part 15 Class A					

(1) For other regional settings please contact SolarEdge support.

(2) For compatibility of inverters and power optimizers, see this [technical note](#).

(3) Where permitted by local regulations.

(4) For specifications of the optional communication options, visit the [Communication product page](#) or the [Knowledge Center](#) to download the relevant product datasheet.

infinityenergy		
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REVISIONS		
Description	Date	Rev
Revision	5/10/2025	01
Revision	6/4/2025	02
Revision	6/17/2025	03
Signature with Seal		
Project Name & Address		
555 PLEASANTVILLE RD. SOUTH BUILDING 555 PLEASANTVILLE ROAD, BRIARCLIFF MANOR, NY 10510 APN # 0980200001006000000000		
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SPECIFICATION SHEET		
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# / Three Phase Inverter with Synergy Technology

## USA Domestic Content Eligible for North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

Applicable to inverters with part numbers	SE-DBL-USxxIBNxx	SE-TRI-USxxIBNxx				
Model Number	SE80KUS	SE50KUS	SE100KUS	SE110KUS	SE120KUS	UNITS
<b>INSTALLATION SPECIFICATIONS</b>						
Number of Synergy Units per Inverter	2	3				
AC Maximum Conduit Size		2 1/2"			in	
AC Maximum Conductor Size Line / PE		4/0 AWG / 1/0 AWG				
DC Maximum Conduit Size		1 x 3"; 2 x 2"			in	
Inverter Unit / Synergy Manager	Multi-input (fuse-less) <sup>(5)</sup> (SE-xxx-USxxlxSx)	6 / 3 pairs; 6 – 12 AWG	9 / 3 pairs; 6 – 12 AWG			
	Combined input (fuse-less) (SE-xxx-USxxlxWx)	2 pairs / 1 pair, 2 – 4 AWG; copper or aluminum	3 pairs / 1 pair, 2 – 4 AWG; copper or aluminum			
Dimensions (H x W x D)		Synergy Unit: 22 x 12.9 x 10.75 / 558 x 328 x 273 Synergy Manager: 14.17 x 22.4 x 11.6 / 360 x 560 x 295	in / mm			
Weight		Synergy Unit: 70.4 / 32 Synergy Manager: 39.6 / 18	lb / kg			
Operating Temperature Range		-40 to +140 / -40 to +60 <sup>(6)</sup>	°F / °C			
Cooling		Fan (user replaceable)				
Noise		< 67	dBA			
Protection Rating		NEMA 3R				
Mounting		Brackets provided				

(5) Fusing is not included with the multi-input version of the Synergy Manager.

(6) For power derating information, see the [Temperature Derating](#) technical note for North America.

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