

A PROJECT OF THE
PEORIA PARK DISTRICT
PEORIA, ILLINOIS

ROOFTOP SOLAR PV SYSTEMS

BRADLEY PARK EQUIPMENT SERVICE CENTER

1314 N PARK RD
PEORIA, ILLINOIS
PROJECT #25-090

GOLF LEARNING CENTER

7815 N RADNOR RD
PEORIA, ILLINOIS
PROJECT #25-089



PROJECT MANUAL
MARCH 3, 2026

PACKAGE # _____

PROJECT MANUAL INCLUDING SPECIFICATIONS FOR:

**ROOFTOP SOLAR PV SYSTEMS
BRADLEY PARK EQUIPMENT SERVICE CENTER
GOLF LEARNING CENTER
PEORIA, ILLINOIS**

ENGINEER: GENERAL ENERGY CORP.
400 E STATE PKWY, SUITE 121
SCHAUMBURG, IL 60173

OWNER: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA,
PEORIA, ILLINOIS

TRUSTEES: ROBERT L. JOHNSON, SR., PRESIDENT
MARK SLOVER
STEVE MONTEZ
RON SILVER
JOYCE HARANT
REAGAN LESLIE HILL
ALEX SIERRA

PROJECT MANAGER: TAMMY JOHNSON
PLANNING, DESIGN & CONSTRUCTION DIVISION
BRADLEY PARK EQUIPMENT SERVICE
1314 N. PARK ROAD
PEORIA, ILLINOIS 61604
TELEPHONE: (309) 686-3386

ADMINISTRATIVE STAFF: EMILY CAHILL, EXECUTIVE DIRECTOR
MATT FREEMAN, SUPERINTENDENT OF PARKS
KARRIE ROSS, SUPERINTENDENT OF FINANCE
AND ADMINISTRATIVE SERVICES
BECKY FREDRICKSON, SUPERINTENDENT OF PLANNING,
DESIGN AND CONSTRUCTION
SHALESSE PIE, SUPERINTENDENT OF HUMAN
RESOURCES
SCOTT LOFTUS, SUPERINTENDENT OF RECREATION

Address all communications regarding this work to the Project Manager listed above.

ADVERTISEMENT FOR BIDS

Sealed bids will be received by the Peoria Park District, Peoria, Illinois, hereinafter known as the Owner, for the following project:

ROOFTOP SOLAR PV SYSTEMS
BRADLEY PARK EQUIPMENT SERVICE CENTER
GOLF LEARNING CENTER
PEORIA, ILLINOIS

It is the intent of the Owner to receive Base Bids for the project listed above.

Sealed bids will be received until March 17, 2026 at 1:00 p.m. prevailing time, by the Owner, at the Peoria Park District Administrative Office, 1125 W. Lake Ave., Peoria, Illinois 61614. (The Board Room clock shall be the official time keeping device in respect to the bid submission deadline.)

An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309) 686-3386. A non-refundable plan deposit of \$250 will be charged for each printed set of Bid Documents.

A list of planholders can be obtained upon request. This information will be available up to twenty-four (24) hours prior to the scheduled bid opening time. **After that deadline, no information pertaining to the project will be given.**

A 10% Bid Bond is required, and is to be included with the Bid Proposal. The successful Bidder will be required to furnish a 100% Performance Bond and a 100% Labor and Materials Payment Bond within ten (10) days of formal Award of Contract.

The general prevailing rate of wage for the Peoria area shall be paid for each craft or type of worker needed to execute this contract or perform this work as required by the State of Illinois Department of Labor. Additionally, it is required that provisions of the Illinois Preference Act, the Illinois Drug Free Workplace Act, and the Substance Abuse Prevention on Public Works Act must be adhered to. Bidders are also advised that contract documents for this project include the non-discrimination, equal opportunity and affirmative action provisions in the Human Rights Act and rules and regulations of the Department of Human Rights. The Peoria Park District is an AA/EEO organization and encourages participation by minority and female-owned firms.

The Peoria Park District reserves the right to reject any or all bids, waive technical deficiencies, informalities or irregularities or rebid any project.

PLEASURE DRIVEWAY AND PARK DISTRICT
OF PEORIA, ILLINOIS

BY: ROBERT L. JOHNSON, SR., President

BY: ALICIA WOODWORTH, Secretary

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BASE BID #1 - BRADLEY PARK EQUIPMENT SERVICE CENTER

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SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

1. INSTRUCTIONS TO BIDDERS

- A. "Instructions to Bidders", AIA Document A701, 2018 Editions, published by the American Institute of Architects, including revisions adopted before date of this Project Manual, is hereby made part of these specifications with same force and effect as though set forth in full.
- B. The following modifies, changes, deletes from or adds to the **Instructions to Bidders** (AIA Document A701, 2018 Edition). Where any Article of the Instructions to Bidders is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.
- C. Parenthesis () indicates the appropriate section and Subparagraph of the Instructions to Bidders which each paragraph of the Supplementary Instructions to Bidders modifies or refers to.

2. PROJECT DESCRIPTION

- A. The Project description generally is as follows:
 - 1. **BASE BID #1 – BRADLEY PARK EQUIPMENT SERVICE CENTER**
Furnish and install a turn-key, grid tied, rooftop solar photovoltaic system approximately 145 kW DC. Owner will supply 132 of the 237 required Canadian Solar CS6.2-66TB-615H modules.
 - 2. **BASE BID #2 – GOLF LEARNING CENTER**
Furnish and install a turn-key, grid tied, rooftop solar photovoltaic system approximately 43 kW DC. Owner will supply 42 of the 70 required Canadian Solar CS6.2-66TB-615H modules.
- B. **PRE-BID MEETING :**
 - 1. A pre-bid meeting will be held at the Equipment Service Center located in Bradley Park at 1314 N Park Rd in Peoria, Illinois on Tuesday, March 10, 2026 at 10:00 a.m. Please use the parking lot located outside the security gates. A site visit to the Golf Learning Center at 7815 N Radnor Rd in Peoria, Illinois will immediately follow.

3. CODES AND PERMITS

- A. **COSTS ASSOCIATED WITH REGULATORY COMPLIANCE.** All Work performed in connection with this Project shall be in compliance with the requirements of all applicable local, state, and federal laws, regulations, and rules, as well as the requirements of the Construction Documents. The Bid Price shall reflect all costs of compliance to those requirements, whether or not specifically stated in the Construction Documents or specific sections of the Project Manual.
- B. **PERMITS/FEEES.** Work shall not commence until all required building (and/or other) permits have been secured by the Contractor and copies of these permits submitted to the Owner's Representative. Cost of permits to be included in the Bid Price.

4. BID GUARANTY

The bid must be accompanied by a Bid Guaranty which shall not be less than 10% of the amount of the Bid. At the option of the Bidder, the 10% Guaranty may be a Certified Check, Cashier's Check, or a Bid Bond. The Bid Bond shall be secured by a Guaranty or a Surety Company acceptable to the Owner. No bid will be considered unless it is accompanied by the required Guaranty. Funds must be made payable to the order of the Owner. Cash deposits will not be accepted. The Bid Guaranty shall ensure the execution of the Agreement and the furnishing of the Surety Bond or Bonds by the successful Bidder, all as required by the Contract Documents.

5. AWARD OF CONTRACT/REJECTION OF BIDS:

The Contracts will be awarded on the basis of Paragraph 5.3 of the Instructions to Bidders and Paragraph 16 of the Supplementary Instructions to Bidders. The Bidders to whom the awards are made will be notified at the earliest possible date. The Owner, however, reserves the right to reject any and all Bids, to accept any combination of base bids and alternates and to waive any technical deficiencies, informalities, or irregularities in Bids received whenever such rejection or waiver is in its interest.

No bid shall be withdrawn for a period of sixty (60) days after the opening of bids without the consent of the Owner. The failure of the Bidder to submit a Bid Bond, Certified Check or Cashier's Check in the full amount to cover all proposals bid upon shall be sufficient cause for rejection of his bid. The award will be made contingent upon submittal and evaluation of Contractor's Qualification Statement if requested, Bonds, Certificate of Insurance, Contractor Certifications, including Certification of Compliance of Listed Provisions and Laws, Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors, Workforce Profile, Company Ownership Certification, Minority/Women Owned Contact Sheet, Contractor/Subcontractor Workforce Plan, etc.

6. EXECUTION OF AGREEMENT:

Following the award and within ten (10) days after the prescribed forms are prepared and presented for signature by the Owner's Representative, the successful Bidder shall execute and return to the Owner's Representative the Agreement in the form included in the Contract Documents in such number of copies as the Owner may require. The Owner's Representative will provide Notice to Proceed after all bonds and any other required documents have been received by the Park District.

7. PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND & INSURANCE

- A. **BONDS REQUIRED.** Having satisfied all conditions of award as set forth elsewhere in these Documents, the successful Bidder shall, within ten (10) calendar days after award of contract, furnish Surety Bonds in penal sums, each not less than the amount of the Contract as awarded as security for the faithful performance of the Contract (Performance Bond), and for the payment (Labor and Materials Payment Bond) of all persons, firms or corporations to whom the Contractor may become legally indebted for labor, materials, tools, equipment or services employed or used by him in performing the work.
- B. **FORM OF BONDS.** Such bonds shall be in the same form as the samples included in the Project Manual and shall bear the same date as or a date subsequent to that of the Agreement. The current Power of Attorney for the person who signs for any Surety Company shall be attached to such Bonds. Bonds shall be signed by a Guaranty or Surety Company acceptable to the Owner.
- C. **COST OF PERFORMANCE BOND/LABOR AND MATERIAL PAYMENT BOND.** All costs for the Performance Bond/Labor and Material Payment Bond shall be included in the submitted Bid Price.
- D. **INSURANCE.** Insurance requirements for this project are addressed both in the Supplementary General Conditions and in "Attachment A.6", in the "Exhibits" section of this Project Manual.
 - a) In respect to the property ("builders risk") insurance coverages referenced in the Supplementary General Conditions: the successful Bidder will be required to provide such coverages as the work of the Project will be accomplished by one general/prime contractor(s).
- E. **TIME FRAMES.** The successful Bidder shall, within ten (10) days after award of contract by the Board of Trustees, submit Proof of Insurance coverages/Bonds in the form and amounts required to the Owner's Representative. Should the Bidder be unable to provide the required Proof of Insurance(s)/Bonds within the specified ten-day period the Owner reserves the right, at its sole discretion, to withdraw its award of contract from that Bidder.

8. DEFAULT

- A. The failure of the successful Bidders to execute the Agreement, supply the required Bonds or proof of required insurance coverage(s) within (ten) 10 days after award of contract, or within such extended period as the Owner may grant based upon reasons determined sufficient by the Owner, may constitute a default. In such case, award of contract will be transferred to the second lowest bidder.

9. CONTRACTOR'S QUALIFICATION STATEMENT

- A. Contractor's Qualification Statement (AIA Document 305) shall be submitted by low bidder for evaluation prior to award of contract if so requested by the Owner or his representatives.

10. LIST OF SUBCONTRACTORS/PRODUCT & EQUIPMENT SUBSTITUTIONS

- A. Each Bidder shall submit a "SUBCONTRACTORS LIST" proposed to be used in the execution of the Work. If there will be no subcontractors, the Bidder shall state "No Subcontractors" on this form. The completed form is due with the Bid Proposal.
 - 1) Identify the trade name, address, telephone number, and category of work of each subcontractor.
 - 2) Failure to submit the "Subcontractors List" with the Bid Proposal may result in the rejection of the Bid.
 - 3) Delete Subparagraphs (6.3.1.1) from AIA A701.
- B. The Bidder, by submission of a signed bid form, agrees to install all products and equipment by brand name or names specified in the Technical Specifications sections of this Project Manual. "Or equal" substitutions will be allowed only if approved in writing prior to the bid opening and listed in the "Substitutions" section of the Bid Form.

11. CONTRACT ADMINISTRATION FORMS/COSTS OF FORMS

- A. **REQUIRED FORMS.** The following AIA forms will be used (AIA forms will be supplied by the Owner if requested, and charged to the Contractor at cost) in the administration of the project:
 - 1) **AIA Document A310:** "Bid Bond", February 1970 edition
 - 2) **AIA Document A305:** "Contractor's Qualification Statement", 1986 edition
 - 3) **AIA Document G702:** "Application and Certificate of Payment", May 1992 edition
 - 4) **AIA Document G703:** "Continuation Sheet", May 1992 edition
- B. **OTHER FORMS.** Other contract administration forms (to be provided by the Owner unless otherwise noted) required for use in the Project are:
 - 1) **Subcontractors List**
 - 2) **Contractor's Affidavit**
 - 3) **Performance Bond**
 - 4) **Labor and Material Payment Bond**
 - 5) **Lien Waiver Forms**
 - 6) **Certified Payroll Form**

Please Note: Illinois State Law has changed. As a Contractor on a public works project, Contractor must submit certified payroll directly to the Illinois Department of Labor. See details at <https://www2.illinois.gov/idol/laws-rules/conmed/pages/prevaling-wage-portal.aspx>

The first time submitting certified payroll to this site requires additional set-up time and specialized forms that must be used.

After submitting certified payroll directly to the Illinois Department of Labor, Contractor will receive a PDF proof of submittal. A copy of this PDF proof of submittal is required with pay applications to Owner.

7) **Insurance Forms: As required in Attachment A (at end of Project Manual)** (will not be provided by Owner)

8) **Agreement Between Owner and Contractor**

Examples of these forms are included in the Project Manual.

12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES CLAUSE:

PROJECT COMPLETION. The Agreement will include the following paragraph(s) or language substantially the same, regarding construction time and liquidated damages:

- 1) **LIQUIDATED DAMAGES:** Owner and Contractor recognize that time is of the essence of this Agreement and that Owner will suffer financial loss if the Work is not Substantially Complete within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.
- 2) Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty) Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS (\$250.00) for each calendar day that expires after Two Hundred Eighty (280) calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on March 26, 2026 and be at Substantial Completion by December 31, 2026.
- 3) After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within Fourteen (14) calendar days or any proper extension thereof granted by Owner, Contractor shall pay Owner TWO HUNDRED AND FIFTY DOLLARS (\$250.00) dollars for each day that expires after the time specified.
- 4) Owner and Contractor agree that the per day liquidated damage amounts set forth in subparagraphs "2" and "3" of this section constitute a reasonable forecast of the financial losses, actual costs and increased expenses the Owner may incur as a result of delayed Substantial or Final Completion of the Project.

13. PROJECT MANUAL/PLANS & SITE VISITATION

- A. A set of Bid Documents may be examined, at no charge, at the office of the Owner's Representative.
- B. **PLAN DEPOSIT.** An electronic file including Bid Documents is available at www.peoriaparks-planning.org at no charge. A printed set of Bid Documents, including Plans, Specifications and Interpretations for this project may be obtained at the Planning, Design & Construction Department, Bradley Park Equipment Service, 1314 N. Park Road, Peoria, IL 61604. Telephone (309)686-3386. A non-refundable plan deposit of Two Hundred and Fifty Dollars (\$250.00) will be charged for each printed set of Bid Documents.
- C. **FAMILIARITY WITH BID DOCUMENTS & SITE VISITATION.** Bidders, by submission of their Bids, represent that they have visited the site to acquaint themselves with the local conditions in which the Work is to occur, and that they are familiar with all the requirements of the Project, as defined in the Project Manual and the Plan(s).

14. OTHER MODIFICATIONS TO AIA-701/OTHER CONDITIONS

- A. Add the following sentence to (4.1.7): "Bidder shall submit two (2) completed copies of Bid Form and retain one (1) copy for his files."
- B. Delete (4.2.1)
- C. Delete Section (6.2) - "Owner's Financial Capability"
- D. In reference to (7.2.1), the Peoria Park District reserves the right of final approval of bonding companies. Replace the first Sentence with "The Bidder shall deliver the required bonds to the Owner not later than ten days following the date of execution of the Contract."
- E. Delete paragraph (7.1.3).

15. EQUAL EMPLOYMENT OPPORTUNITY/SEXUAL HARASSMENT

- A. It is a goal of the Peoria Park District to encourage participation of minorities and women on Peoria Park District construction projects through contracts and workforce. Good Faith Effort must be made to encourage the use of minority and women owned businesses as sub-contractors and suppliers on the project.

On all bids \$50,000.00 and over, see requirements listed in **Attachment B "Solicitation and Hiring for Qualifying Construction Contracts & Forms"**.

On all bids less than \$50,000.00, complete and submit the following listed forms (provided in Attachment B) with the Bid. Failure to submit the forms may result in rejection of the bid.

1. **"Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors"** Form
2. **"Workforce Profile"** Form
3. **"Company Ownership Certification"** Form

B. Effective July 1, 1993, every party to a public contract and every party bidding on public contracts is required to have a written **"Sexual Harassment Policy"**. The Sexual Harassment Policy must contain:

- 1) A definition of sexual harassment under state law;
- 2) A description of sexual harassment utilizing examples;
- 3) A formalized complaint procedure;
- 4) A statement of victim's rights;
- 5) Directions on how to contact the Illinois Department of Human Rights - **Illinois companies**. Out-of-State companies must include directions on how to contact the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.
- 6) A recitation that there cannot be any retaliation against employees who elect to file charges.

Recommendation: Your **"Sexual Harassment Policy"** should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the Peoria Park District, you must have a written "Sexual Harassment Policy" that conforms to the Act.

FAILURE TO DO SO WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR.

16. BID SUBMISSION

A. DATE, TIME & PLACE OF RECEIVING BIDS. Bids will be received until the date and time listed in the "Advertisement for Bids", at which time they will be publicly opened, read aloud and recorded. The Bid Opening will be held at the place listed in the "Advertisement for Bids".

B. REQUIRED ITEMS. The following items must be included as part of the "BID":

- 1) Two (2) signed copies of the **BID FORM**. (Retain the third copy for your files.)
- 2) The **SUBCONTRACTORS LIST**. (Submit form and state "No Subcontractors" on the form, if none will be used.)
- 3) The **PEORIA PARK DISTRICT CERTIFICATE OF EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE FOR CONTRACTORS AND VENDORS** form.
- 4) The **WORKFORCE PROFILE** form.
- 5) The **COMPANY OWNERSHIP CERTIFICATION** form.
- 6) The **CERTIFICATION OF COMPLIANCE OF THE LISTED PROVISIONS AND LAWS** form.
- 7) Completed **W-9**.
- 8) The **BID GUARANTY**.
- 9) If the bid is over \$50,000.00, the **MINORITY/WOMEN OWNED CONTACT SHEET** form.
- 10) If the bid is over \$50,000.00, the **CONTRACTOR/SUBCONTRACTOR WORKFORCE PLAN** form.

C. BID SUBMISSION. The "BID" shall be enclosed in envelopes (outer and inner), both of which shall be sealed and clearly labeled with the following information, in order to prevent premature opening of the bid:

- "PROPOSAL"

- NAME OF PROJECT
- NAME OF BIDDER
- DATE/TIME OF BID OPENING

END OF SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Bid From: _____

PROJECT NO. 25-089/25-090
BID FOR: ROOFTOP SOLAR PV SYSTEMS
LOCATION: BRADLEY PARK ESC &
GOLF LEARNING CENTER

BID FORM

BID TO: PEORIA PARK DISTRICT

UNDERSIGNED:

1. Acknowledges receipt of:

A. Project Manual and Drawings for:

ROOFTOP SOLAR PV SYSTEMS
BRADLEY PARK EQUIPMENT SERVICE CENTER
GOLF LEARNING CENTER
PEORIA, ILLINOIS

B. Addenda: No. _____ through No. _____

2. Has examined facility and the bid documents and shall be responsible for performing work specifically required of him by all parts of bidding documents including specifications for entire project, even though such work may be included as related requirements specified in other divisions or sections.

3. And agrees to enter into and execute Contract with Owner, if awarded on basis of this bid, and to:

A. Furnish Bonds and Insurance required by the Bidding & Contract Documents.

B. Accomplish work in accord with Contract.

C. Complete work within specified Contract time.

4. **CONTRACT TIME:** Contractor agrees to Substantially Complete ALL WORK as required by the Contract Documents per the Supplementary General Conditions and Supplementary Instructions to Bidders.

5. **BASE BIDS:**

Base Bid: Bidder may submit any combination of Base Bids as set forth below. Owner reserves the right to reject any and all Bids, to accept any combination of base bids and to waive any technical deficiencies, informalities, or irregularities in Bids received whenever such rejection or waiver is in its interest.

Bidder agrees to perform all building and site work, as set forth in the Project Manual and Drawings for the sum of:

A. BASE BID #1: BRADLEY PARK EQUIPMENT SERVICE CENTER

_____ Dollars (\$_____.____)

B. BASE BID #2: GOLF LEARNING CENTER

_____ Dollars (\$_____.____)

Bid From: _____

PROJECT NO. 25-089/25-090
 BID FOR: ROOFTOP SOLAR PV SYSTEMS
 LOCATION: BRADLEY PARK ESC &
 GOLF LEARNING CENTER

6. **UNIT PRICES:**

A. Bidders submitting prices for the Base Bids shall submit Unit Prices for adding or deleting work. Unit Prices shall include all costs, including but not limited to preparation, labor, equipment, and materials necessary for a complete installation.

<u>ITEM</u>	<u>UNIT</u>	<u>UNIT PRICE</u>
Module: Canadian Solar CS6.2-66TB-615H	Each	\$ _____
Inverter: SolarEdge SE50K-US	Each	\$ _____
Power Optimizer: SolarEdge C651U	Each	\$ _____
Data Acquisition System: SolarEdge ONE Manager	Each	\$ _____

7. **PROPOSED SUBSTITUTION LIST:**

Base Bid(s) and Alternates are understood to include only those product brands, items, and elements which are specified in the Bid Documents. The following is a list of substitute products, equipment or methods of construction which the Bidder proposes to furnish on this project, with difference in price being added or deducted from Base Bid(s).

Bidder understands that acceptance of any proposed substitution which has not been approved as an "equal" to the product brand, item, or element specified prior to bid opening is at Owner's option. Approval or rejection of any substitutions listed below will be indicated before executing Contract.

<u>ITEM</u>	<u>ADD</u>	<u>DEDUCT</u>
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

8. **BIDDERS CHECKLIST:**

Did you visit the site?	Yes	No
Is Bid Security enclosed? (If applicable)	Yes	No
Is Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors enclosed?	Yes	No
Is Workforce Profile enclosed?	Yes	No
Is Company Ownership Certification enclosed?	Yes	No
If the bid is \$50,000.00 or over, the Minority/Women Owned Contact Sheet enclosed?	Yes	No
If the bid is \$50,000.00 or over, the Contractor/Subcontractor Workforce Plan enclosed?	Yes	No

Bid From: _____

PROJECT NO. 25-089/25-090
BID FOR: ROOFTOP SOLAR PV SYSTEMS
LOCATION: BRADLEY PARK ESC &
GOLF LEARNING CENTER

Is Subcontractors List enclosed?	Yes	No
Is Certification of Compliance of the Listed Provisions and Laws form enclosed?	Yes	No
Is a completed W-9 enclosed?	Yes	No

9. **BIDDER INFORMATION:**

NAME OF BIDDER: _____

ADDRESS: _____

CITY, STATE, ZIP: _____

TELEPHONE NO.: _____

BY: _____
(Signature of Authorized Official)

TITLE: _____

BIDDER'S SEAL

WITNESS: _____

END OF BID FORM

SUBCONTRACTORS LIST

The following tabulation of Subcontractors shall be attached and made a condition of the Bid. The Bidder expressly understands and agrees to the following provisions:

- A. If awarded a Contract as a result of this Bid, the subcontractors used in the prosecution of the work will be those listed below.
- B. The following list includes all subcontractors, known at the time of the Bid, who will perform work on this project.
- C. The subcontractors listed below are financially responsible and are qualified to perform the work required.
- D. The subcontractors listed below comply with the requirements of the Contract Documents.
- E. Any substitutions in the subcontractors listed below shall be requested in writing by the Contractor and must be approved in writing by the Owner. No sub-subcontractors will be allowed unless specifically stated on the form. All pertinent financial, performance, insurance and other applicable information shall be submitted with the request for substitution(s). Owner shall respond to such requests within 14 calendar days following the submission of all necessary information to the full satisfaction of the Owner.
- F. Failure to submit the list of Subcontractors as stated herein shall constitute a material variation from the Invitation to Bid; and any such Bid may be rejected by the Owner.

Subcontractor Name	Telephone/Email	Area of Work	Minority/Women Owned Business (Yes/No)	Dollar Amount of Contract

BIDDER: _____

END OF SUBCONTRACTORS LIST

**CERTIFICATION OF COMPLIANCE
OF THE LISTED PROVISIONS AND LAWS**

1) Illinois Drug Free Workplace Act of 1991

2) The Substance Abuse Prevention on Public Works Act Public Act 95-0635:

Prohibits the use of drugs and alcohol while performing work on a public works project.

The Contractor/Subcontractor has signed collective bargaining agreement for all of its employees that deal with the subject matter or the Contractor/Subcontractor has a prevention program that meets or exceeds the requirements of the Public Act for all employees not covered by a collective bargaining agreement.

3) Safety Compliance:

Contractor/Subcontractors will comply with any and all prevailing occupational safety and health standards. Such compliance may include a training component or require a written program of compliance.

4) Illinois Criminal Code, Illinois Compiled Statutes 720 ILCS 5/33E-3 and 5/33E-4:

Contractor/Subcontractor has not been barred from bidding on public contract as a result of bid rigging or bid rotating.

The undersigned representative of the Contractor/Vendor hereby certifies to comply with the laws and provisions listed above.

Contractor/Subcontractor

Name of Authorized Representative (type or print)

Signature of Authorized Representative

Date

Request for Taxpayer Identification Number and Certification

Go to www.irs.gov/FormW9 for instructions and the latest information.

**Give form to the
 requester. Do not
 send to the IRS.**

Before you begin. For guidance related to the purpose of Form W-9, see *Purpose of Form*, below.

Print or type. See Specific Instructions on page 3.	1	Name of entity/individual. An entry is required. (For a sole proprietor or disregarded entity, enter the owner's name on line 1, and enter the business/disregarded entity's name on line 2.)		
	2	Business name/disregarded entity name, if different from above.		
	3a	Check the appropriate box for federal tax classification of the entity/individual whose name is entered on line 1. Check only one of the following seven boxes. <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C corporation <input type="checkbox"/> S corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> LLC. Enter the tax classification (C = C corporation, S = S corporation, P = Partnership) _____ Note: Check the "LLC" box above and, in the entry space, enter the appropriate code (C, S, or P) for the tax classification of the LLC, unless it is a disregarded entity. A disregarded entity should instead check the appropriate box for the tax classification of its owner. <input type="checkbox"/> Other (see instructions) _____	4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3): Exempt payee code (if any) _____ Exemption from Foreign Account Tax Compliance Act (FATCA) reporting code (if any) _____ <i>(Applies to accounts maintained outside the United States.)</i>	
	3b	If on line 3a you checked "Partnership" or "Trust/estate," or checked "LLC" and entered "P" as its tax classification, and you are providing this form to a partnership, trust, or estate in which you have an ownership interest, check this box if you have any foreign partners, owners, or beneficiaries. See instructions _____ <input type="checkbox"/>		
	5	Address (number, street, and apt. or suite no.). See instructions.	Requester's name and address (optional)	
	6	City, state, and ZIP code		
	7	List account number(s) here (optional)		

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

Social security number									
				-					
or									
Employer identification number									

Note: If the account is in more than one name, see the instructions for line 1. See also *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and, generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of U.S. person	Date
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General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

What's New

Line 3a has been modified to clarify how a disregarded entity completes this line. An LLC that is a disregarded entity should check the appropriate box for the tax classification of its owner. Otherwise, it should check the "LLC" box and enter its appropriate tax classification.

New line 3b has been added to this form. A flow-through entity is required to complete this line to indicate that it has direct or indirect foreign partners, owners, or beneficiaries when it provides the Form W-9 to another flow-through entity in which it has an ownership interest. This change is intended to provide a flow-through entity with information regarding the status of its indirect foreign partners, owners, or beneficiaries, so that it can satisfy any applicable reporting requirements. For example, a partnership that has any indirect foreign partners may be required to complete Schedules K-2 and K-3. See the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS is giving you this form because they

must obtain your correct taxpayer identification number (TIN), which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

- Form 1099-INT (interest earned or paid).
- Form 1099-DIV (dividends, including those from stocks or mutual funds).
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds).
- Form 1099-NEC (nonemployee compensation).
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers).
- Form 1099-S (proceeds from real estate transactions).
- Form 1099-K (merchant card and third-party network transactions).
- Form 1098 (home mortgage interest), 1098-E (student loan interest), and 1098-T (tuition).
- Form 1099-C (canceled debt).
- Form 1099-A (acquisition or abandonment of secured property).

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

Caution: If you don't return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding*, later.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued);
2. Certify that you are not subject to backup withholding; or
3. Claim exemption from backup withholding if you are a U.S. exempt payee; and
4. Certify to your non-foreign status for purposes of withholding under chapter 3 or 4 of the Code (if applicable); and
5. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting is correct. See *What Is FATCA Reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien;
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;
- An estate (other than a foreign estate); or
- A domestic trust (as defined in Regulations section 301.7701-7).

Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding. Payments made to foreign persons, including certain distributions, allocations of income, or transfers of sales proceeds, may be subject to withholding under chapter 3 or chapter 4 of the Code (sections 1441–1474). Under those rules, if a Form W-9 or other certification of non-foreign status has not been received, a withholding agent, transferee, or partnership (payor) generally applies presumption rules that may require the payor to withhold applicable tax from the recipient, owner, transferor, or partner (payee). See Pub. 515, *Withholding of Tax on Nonresident Aliens and Foreign Entities*.

The following persons must provide Form W-9 to the payor for purposes of establishing its non-foreign status.

- In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the disregarded entity.
- In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the grantor trust.
- In the case of a U.S. trust (other than a grantor trust), the U.S. trust and not the beneficiaries of the trust.

See Pub. 515 for more information on providing a Form W-9 or a certification of non-foreign status to avoid withholding.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person (under Regulations section 1.1441-1(b)(2)(iv) or other applicable section for chapter 3 or 4 purposes), do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515). If you are a qualified foreign pension fund under Regulations section 1.897(l)-1(d), or a partnership that is wholly owned by qualified foreign pension funds, that is treated as a non-foreign person for purposes of section 1445 withholding, do not use Form W-9. Instead, use Form W-8EXP (or other certification of non-foreign status).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a saving clause. Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
2. The treaty article addressing the income.
3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.
4. The type and amount of income that qualifies for the exemption from tax.
5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if their stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student who qualifies for this exception (under paragraph 2 of the first Protocol) and is relying on this exception to claim an exemption from tax on their scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include, but are not limited to, interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third-party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if:

1. You do not furnish your TIN to the requester;
2. You do not certify your TIN when required (see the instructions for Part II for details);
3. The IRS tells the requester that you furnished an incorrect TIN;
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only); or
5. You do not certify to the requester that you are not subject to backup withholding, as described in item 4 under "*By signing the filled-out form*" above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

See also *Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding*, earlier.

What Is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all U.S. account holders that are specified U.S. persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you are no longer tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account, for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to willful neglect.

Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

- **Individual.** Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note for ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040 you filed with your application.

- **Sole proprietor.** Enter your individual name as shown on your Form 1040 on line 1. Enter your business, trade, or “doing business as” (DBA) name on line 2.

- **Partnership, C corporation, S corporation, or LLC, other than a disregarded entity.** Enter the entity’s name as shown on the entity’s tax return on line 1 and any business, trade, or DBA name on line 2.

- **Other entities.** Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. Enter any business, trade, or DBA name on line 2.

- **Disregarded entity.** In general, a business entity that has a single owner, including an LLC, and is not a corporation, is disregarded as an entity separate from its owner (a disregarded entity). See Regulations section 301.7701-2(c)(2). A disregarded entity should check the appropriate box for the tax classification of its owner. Enter the owner’s name on line 1. The name of the owner entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For

example, if a foreign LLC that is treated as a disregarded entity for U.S. federal tax purposes has a single owner that is a U.S. person, the U.S. owner’s name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded for federal tax purposes. Enter the disregarded entity’s name on line 2. If the owner of the disregarded entity is a foreign person, the owner must complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, enter it on line 2.

Line 3a

Check the appropriate box on line 3a for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3a.

IF the entity/individual on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation.
• Individual or • Sole proprietorship	Individual/sole proprietor.
• LLC classified as a partnership for U.S. federal tax purposes or • LLC that has filed Form 8832 or 2553 electing to be taxed as a corporation	Limited liability company and enter the appropriate tax classification: P = Partnership, C = C corporation, or S = S corporation.
• Partnership	Partnership.
• Trust/estate	Trust/estate.

Line 3b

Check this box if you are a partnership (including an LLC classified as a partnership for U.S. federal tax purposes), trust, or estate that has any foreign partners, owners, or beneficiaries, and you are providing this form to a partnership, trust, or estate, in which you have an ownership interest. You must check the box on line 3b if you receive a Form W-8 (or documentary evidence) from any partner, owner, or beneficiary establishing foreign status or if you receive a Form W-9 from any partner, owner, or beneficiary that has checked the box on line 3b.

Note: A partnership that provides a Form W-9 and checks box 3b may be required to complete Schedules K-2 and K-3 (Form 1065). For more information, see the Partnership Instructions for Schedules K-2 and K-3 (Form 1065).

If you are required to complete line 3b but fail to do so, you may not receive the information necessary to file a correct information return with the IRS or furnish a correct payee statement to your partners or beneficiaries. See, for example, sections 6698, 6722, and 6724 for penalties that may apply.

Line 4 Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

- Generally, individuals (including sole proprietors) are not exempt from backup withholding.
- Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.
- Corporations are not exempt from backup withholding for payments made in settlement of payment card or third-party network transactions.
- Corporations are not exempt from backup withholding with respect to attorneys’ fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space on line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2).

- 2—The United States or any of its agencies or instrumentalities.
- 3—A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.
- 4—A foreign government or any of its political subdivisions, agencies, or instrumentalities.
- 5—A corporation.
- 6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or territory.
- 7—A futures commission merchant registered with the Commodity Futures Trading Commission.
- 8—A real estate investment trust.
- 9—An entity registered at all times during the tax year under the Investment Company Act of 1940.
- 10—A common trust fund operated by a bank under section 584(a).
- 11—A financial institution as defined under section 581.
- 12—A middleman known in the investment community as a nominee or custodian.
- 13—A trust exempt from tax under section 664 or described in section 4947.

The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above, 1 through 13.

IF the payment is for . . .	THEN the payment is exempt for . . .
• Interest and dividend payments	All exempt payees except for 7.
• Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
• Barter exchange transactions and patronage dividends	Exempt payees 1 through 4.
• Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5. ²
• Payments made in settlement of payment card or third-party network transactions	Exempt payees 1 through 4.

¹ See Form 1099-MISC, Miscellaneous Information, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) entered on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37).

B—The United States or any of its agencies or instrumentalities.

C—A state, the District of Columbia, a U.S. commonwealth or territory, or any of their political subdivisions or instrumentalities.

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i).

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i).

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state.

G—A real estate investment trust.

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940.

I—A common trust fund as defined in section 584(a).

J—A bank as defined in section 581.

K—A broker.

L—A trust exempt from tax under section 664 or described in section 4947(a)(1).

M—A tax-exempt trust under a section 403(b) plan or section 457(g) plan.

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, enter "NEW" at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have, and are not eligible to get, an SSN, your TIN is your IRS ITIN. Enter it in the entry space for the Social security number. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/EIN. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or Form SS-4 mailed to you within 15 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and enter "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, you will generally have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon. See also *Establishing U.S. status for purposes of chapter 3 and chapter 4 withholding*, earlier, for when you may instead be subject to withholding under chapter 3 or 4 of the Code.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third-party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor ²
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹
6. Sole proprietorship or disregarded entity owned by an individual	The owner ³
7. Grantor trust filing under Optional Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))**	The grantor*

For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity ⁴
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing Form 1041 or under the Optional Filing Method 2, requiring Form 1099 (see Regulations section 1.671-4(b)(2)(i)(B))**	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name on line 1, and enter your business or DBA name, if any, on line 2. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.)

* **Note:** The grantor must also provide a Form W-9 to the trustee of the trust.

** For more information on optional filing methods for grantor trusts, see the Instructions for Form 1041.

Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information, such as your name, SSN, or other identifying information, without your permission to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

- Protect your SSN,
- Ensure your employer is protecting your SSN, and
- Be careful when choosing a tax return preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity, or a questionable credit report, contact the IRS Identity Theft Hotline at 800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 877-777-4778 or TTY/TDD 800-829-4059.

Protect yourself from suspicious emails or phishing schemes.

Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to phishing@irs.gov. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 800-366-4484. You can forward suspicious emails to the Federal Trade Commission at spam@uce.gov or report them at www.ftc.gov/complaint. You can contact the FTC at www.ftc.gov/idtheft or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see www.IdentityTheft.gov and Pub. 5027.

Go to www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and territories for use in administering their laws. The information may also be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payors must generally withhold a percentage of taxable interest, dividends, and certain other payments to a payee who does not give a TIN to the payor. Certain penalties may also apply for providing false or fraudulent information.

PLEASE BE ADVISED!

Every party to a public contract and every party bidding on public contracts are required to have a written sexual harassment policy that contains:

- (1) a statement that sexual harassment is illegal;
- (2) a definition of sexual harassment under state law;
- (3) a description of sexual harassment utilizing examples;
- (4) an internal formalized complaint process, including penalties;
- (5) the legal recourse, investigative and complaint process available through the Department of Human Rights and the Illinois Human Rights Commission;
- (6) directions on how to contact the Illinois Department of Human Rights and Illinois Human Rights Commission – **Illinois companies. Out-of-State companies must include directions on how to contact the enforcement agency within their state.** Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency.
- (7) a recitation that there cannot be any retaliation against employees who elect to file charges, as provided in Sections 6-101 and 6-101.5 of the Illinois Human Rights Act.

Recommendation: Your sexual harassment policy should be drafted in language easy to understand and any revisions should be reviewed by legal counsel. A copy of your policy should be posted in a prominent and accessible location to assure all employees will be notified of the company's position.

In order to conduct business with the THE PEORIA PARK DISTRICT, you must have a written sexual harassment policy that conforms to the Illinois Human Rights Act and/or the laws of your jurisdiction.

**FAILURE TO DO SO
WILL DISQUALIFY YOU AS AN ELIGIBLE VENDOR!!!**

SAMPLE ADDENDUM

Peoria Park District
Planning, Design and Construction Department
1314 N. Park Road
Peoria, IL 61604
Telephone: (309) 686-3386

ADDENDUM NO. _____

PROJECT TITLE: _____

ISSUANCE DATE: _____

LOCATION: _____

The proposed Contract Documents for this Work are modified as follows:

- I. **GENERAL INFORMATION:**

- II. **DRAWINGS:** (Delete/Change/Modify/Etc.)

- III. **PROJECT MANUAL/SPECIFICATIONS.:**
(Delete/Change/Modify/Etc.)

- IV. **INVITATION TO BID:** (Delete/Change/Modify/Etc.)

END OF ADDENDUM NO. _____

(Addendum may be bound into Project Manual, attached to front cover, faxed, mailed, emailed or delivered to bidders.)

Addendum No. _____
Page 1 of 1



Pleasure Driveway and Park District of Peoria, Illinois
Sample Agreement Between Owner and Contractor

This **AGREEMENT** for

ROOFTOP SOLAR PV SYSTEMS
BRADLEY PARK EQUIPMENT SERVICE CENTER
GOLF LEARNING CENTER
PEORIA, ILLINOIS

is made as of the _____ day of _____ in the year of Two Thousand Twenty-Six (2026)

Between the Owner:

PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, ILLINOIS
1125 W. LAKE AVENUE
PEORIA, IL 61614

And the Contractor:

The Owner's Representative is:

PLANNING, DESIGN AND CONSTRUCTION DEPARTMENT
1314 N. PARK ROAD
PEORIA, IL 61604

The Architect or Engineer is:

GENERAL ENERGY CORP.
400 E STATE PKWY, SUITE 121
SCHAUMBURG, IL 60173

The Owner and Contractor agree as follows:

I. THE CONTRACT DOCUMENTS. The Contract Documents consist of this AGREEMENT, the Plans/Drawings for the Project dated February 17, 2026, January 24, 2026, and January 20, 2026, all sections of the Project Manual dated March 3, 2026, including but not limited to the Instructions and Supplementary Instructions to Bidders, the Bid Form, the General Conditions (2017 AIA Document A201) and Supplementary General Conditions, the General Requirements, the Specifications, and other documents as enumerated in Section 10 and Attachment #1 of this AGREEMENT, and including addenda issued prior to the execution of this AGREEMENT. The Contract Documents form the CONTRACT between the Owner and the Contractor. The CONTRACT represents the entire and integrated contract for the construction of the Work of the Project between the parties hereto and supersedes prior proposals, contracts, negotiations, or representations, either written or oral.

II. THE WORK OF THE CONTRACT. The Contractor shall execute the entire Work described in the Contract Documents, unless modified in Section XI of this AGREEMENT.

III. BASIS OF PAYMENT. The Work of the CONTRACT shall be performed on a Lump Sum basis.

IV. CONTRACT SUM. The Owner shall pay the Contractor the sum of

(and incorporates the acceptance of bid alternates as defined in sub-paragraph "A", below) for the Contractor's performance of the Work required by the Contract Documents, subject to modifications made by Owner approved Change Orders. If this CONTRACT calls for a unit price basis of payment, the contract sum stated above shall be adjusted by Change Order based upon multiplying the unit prices submitted by the Contractor on the Bid Form (and included herein as an Attachment to this CONTRACT) times (x) the actual quantities installed.

A. ACCEPTANCE OF ALTERNATES. The contract sum stated above is based on the acceptance of the following alternates, which are described in the Project Manual:

<u>ITEM</u>	<u>ADD</u>	<u>DEDUCT</u>
N/A		

V. DATES OF COMMENCEMENT AND COMPLETION OF THE WORK. The Owner's Representative will issue a written Notice to Proceed with the Work of the Project after receiving the required Performance Bond, Labor and Material Payment Bond, and Certificate of Insurance (in proper form and providing the required coverages and amounts from a company [or companies] acceptable to the Owner, and naming the Owner as an Additional Insured), and any other pre-construction submittals required by the Contract Documents. The Contractor hereby acknowledges and agrees that failure to provide such submittals in a timely manner shall not be cause to adjust the date(s) for completion of the Work.

- A. LIQUIDATED DAMAGES.** Owner and Contractor recognize that time is of the essence of this CONTRACT and that Owner will suffer financial loss if the Contractor has not achieved Substantial Completion and Final Completion of the Work within the time specified below, plus any extensions thereof allowed in accordance with Article 8 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by Owner if the Work is not completed on time.
- B. SUBSTANTIAL COMPLETION.** Accordingly, instead of requiring any such proof, Owner and Contractor agree that as Liquidated Damages for delay (but not as a penalty), Contractor shall pay Owner Two Hundred Fifty dollars (\$250.00) for each calendar day that expires after Two Hundred Eighty (280) calendar days from Notice of Award until Substantial Completion is attained. The work is tentatively scheduled to begin on March 26, 2026 and be at Substantial Completion by December 31, 2026.
- C. FINAL COMPLETION.** After Substantial Completion if Contractor shall neglect, refuse, or fail to complete the remaining Work necessary to achieve Final Completion within fourteen (14) calendar days or any proper extension thereof granted by Owner, Contractor shall pay Owner Two Hundred Fifty dollars (\$250.00) for each day that expires after the time specified.

VI. PROGRESS PAYMENTS, REDUCTION OF RETAINAGE AND FINAL PAYMENT.

- A.** Unless otherwise specified elsewhere in the Contract Documents, the Contractor may submit monthly applications for progress payments ("Application for Payment") to the Owner's Representative. Each Application for Payment must be certified by the Architect or Engineer (if applicable), or the Owner's Representative if an Architect or Engineer has not been engaged for construction phase services. An Application for Payment shall be for a period of no less than one calendar month ending on the last day of the month, unless otherwise approved in writing by the Owner's Representative. Application forms shall be subject to Owner's approval. Each Application for Payment shall be based upon the Schedule of Values submitted by the Contractor, in accordance with the Contract Documents. The Schedule of Values shall be approved by the Owner's Representative and the Architect or Engineer (if applicable) in advance of the Contractor's first Application for Payment and the approved schedule shall be used by the Contractor as the basis for submitting payment requests. The Owner's Representative and/or Architect/Engineer's (if applicable) approval of the Schedule of Values shall not constitute a complete check for accuracy, and shall not relieve the Contractor from responsibility for errors of any sort.

- B. An Application for Payment (certified by the Architect or Engineer, if applicable) shall be submitted to the Owner's Representative no later than the fifth (5th) day of the month following the period for which the application is being submitted. In such case, the Owner shall make the progress payment to the Contractor not later than the twentieth day of the next month. A progress payment request on an Application for Payment (certified by the Architect or Engineer, if applicable) received by the Owner's Representative after the fifth (5th) day of a month shall be made by the Owner not later than forty-five days after receipt by the Owner's Representative.
- C. Based upon its review of the certified (by the Architect or Engineer, if applicable) Application for Payment, the Owner shall make a progress payment to the Contractor in such amount as the Owner reasonably determines is properly due, subject to a retainage of ten percent (10%) of the value of the Work completed and covered by the Application for Payment, less the aggregate of previous payments in each case. In determining the amount properly due, the Owner shall consider the value of labor, materials and equipment incorporated in the Work, or properly allocable to materials and equipment suitably stored at the site or at some other location previously agreed upon in writing by the parties. The Owner's Representative shall have the sole right to determine that materials or equipment stored off-site have been properly delivered, protected, and/or secured. The Owner's Representative (or the Architect or Engineer, if applicable) may nullify or withhold a Certificate of Payment, in whole or in part, for the reasons set forth in Section 9.5 of the General Conditions. Upon Substantial Completion of the Work, the Owner shall pay the Contractor a sum sufficient to increase the total payments to ninety-five percent (95%) of the Contract Sum, less such amounts as the Owner's Representative shall determine for incomplete work and unsettled claims.

VII. Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner when 1) the Contract has been fully performed by the Contractor except for the Contractor's responsibility to correct nonconforming Work as provided in Subparagraph 12.2.2 of the General Conditions and to satisfy other requirements, if any, which necessarily survive final payment; and 2) a final Certificate of Payment has been issued by the Architect/Engineer or Owner's Representative; such final payment shall be made by the Owner not more than forty-five (45) days after the receipt of the final Certificate of Payment by the Owner.

VIII. CHANGE ORDERS. The Owner and Contractor agree that changes in the Work are sometimes required and necessary, and that timely: **a)** submission of proposed changes in the Work or the scope of Work by the Owner, **b)** pricing by the Contractor, **c)** review by the Owner's Representative and/or Architect/Engineer, and **d)** final approval by the Owner are necessary in order to assure that the Work of the Project is completed on schedule. The Contractor hereby acknowledges and agrees that an increase in the scope of the Work does not grant or imply an increase in the Contract Time, unless specifically so stated on the final approved Change Order. The Contractor also agrees that any and all Work which deviates from the plans and specifications and/or results in additional Work performed by Contractor's forces, including those of his sub-contractor's, will not result in additional expense to the Owner, unless finally approved both by the Owner and the Architect/Engineer (if applicable) prior to the additional Work being performed. No claim for an addition to the Contract Sum shall be valid unless approved by a written Change Order signed by the Owner and the architect/engineer (if applicable) prior to the additional Work being performed.

IX. TERMINATION OR SUSPENSION. The CONTRACT may be terminated by the Owner or the Contractor as provided by Article 14 of the General Conditions. The Work may be suspended by the Owner as provided in Article 14 of the General Conditions.

X. ENUMERATION OF CONTRACT DOCUMENTS. The Contract Documents, except for modifications issued after the execution of this Agreement, consist of:

- A. this Standard Form of Agreement Between Owner and Contractor, of the Pleasure Driveway and Park District of Peoria, Illinois.
- B. the Plans or Drawings titled "PEORIA PARK DISTRICT AT ESC FACILITY (PEORIA, IL) ROOFTOP SOLAR PV PROJECT" dated February 17, 2026 and January 24, 2026 and "PEORIA PARK DISTRICT AT GLC FACILITY (PEORIA, IL) ROOFTOP SOLAR PV PROJECT" dated February 17, 2026 and January 20, 2026, and enumerated in ATTACHMENT #1 - "LIST OF DRAWINGS".
- C. Supplementary and other Conditions of the CONTRACT, and the Specifications, are those found in the Project Manual titled "ROOFTOP SOLAR PV SYSTEMS", dated March 3, 2026, and enumerated as follows:
 - 1) Supplementary Instructions to Bidders
 - 2) Contractor's Proposal, as accepted by the Owner
 - 3) General Conditions of the Contract for Construction, AIA Document A201, 2017 Edition
 - 4) Supplementary General Conditions

- 5) Subcontractor List
- 6) Certification of Compliance for Listed Provisions and Laws
- 7) Company Ownership Certification
- 8) Peoria Park District Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors
- 9) Workforce Profile
- 10) Minority/Women Owned Contact Sheet, if bid is over \$50,000.00
- 11) Contractor/Subcontractor Workforce Plan, if bid is over \$50,000.00
- 12) Performance Bond
- 13) Labor and Material Payment Bond
- 14) Proof of Insurance
- 15) Specifications: Division 010000, "General Requirements"; Divisions 020000-350000 as applicable
- 16) Attachment A.6 - Insurance Requirements
- 17) Attachment B – Solicitation & Hiring for Qualifying Construction Contracts & Forms
- 18) Attachment C – Directory of Minority & Women Owned Business Enterprises
- 19) Attachment D – IDOL Prevailing Wages of Peoria County
- 20) Proof of Certified Payroll Submitted to IDOL per “The Illinois Prevailing Wage Act”

XI. MISCELLANEOUS PROVISIONS. Other Provisions of this Agreement are as follows:

This AGREEMENT is entered into as of the day and year first written above and is executed in at least three original copies of which one is to be delivered to the Contractor, one to the Architect/Engineer (if any) for use in the administration of the CONTRACT, and one to the Owner.

OWNER:

CONTRACTOR:

(Signature)

(Signature)

ROBERT L. JOHNSON, SR., Park Board President

(Printed Name and Title)

ATTEST:

ATTEST:

ATTACHMENT #1 - LIST OF DRAWINGS

<u>NUMBER</u>	<u>TITLE</u>	<u>DATE</u>
<u>BASE BID #1 – BRADLEY PARK EQUIPMENT SERVICE CENTER</u>		
E0.1	COVER PAGE	02/17/2026
E0.2	GENERAL / ELECTRICAL NOTES AND SYMBOLS	02/17/2026
E0.3	MODULE SPECIFICATIONS	02/17/2026
E0.4	INVERTER SPECIFICATIONS	02/17/2026
E0.5	POWER OPTIMIZER SPECIFICATIONS	02/17/2026
E0.6	DATA ACQUISITION SYSTEM	02/17/2026
E0.7	UNIRAC RACKING DETAILS	02/17/2026
E1.1	SOLAR ARRAY ELECTRICAL SITE PLAN	02/17/2026
E1.2 THRU E1.3	ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS	02/17/2026
E1.4 THRU E1.5	ROOFTOP CABLE AND CONDUIT PLAN VIEW	02/17/2026
E2.1	ELECTRICAL ONE LINE DIAGRAM	02/17/2026
E2.2	ELECTRICAL RISER DIAGRAM	02/17/2026
E3.1	ELECTRICAL SCHEDULES	02/17/2026
E3.2	ELECTRICAL LABELS	02/17/2026
E4.1 THRU E4.2	ELECTRICAL DETAILS	02/17/2026
NXT.100	COVER SHEET	01/24/2026
NXT.101	JOINT REACTIONS	01/24/2026
NXT.200	KEY PLAN	01/24/2026
NXT.301- NXT.302	ARRAY LAYOUT ARRAY 1 TO 2	01/24/2026
NXT.400	NXT DETAILS	01/24/2026
NXT.500	ATTACHMENT DETAILS	01/24/2026
<u>BASE BID #2 - GOLF LEARNING CENTER</u>		
E0.1	COVER PAGE	02/17/2026
E0.2	GENERAL / ELECTRICAL NOTES AND SYMBOLS	02/17/2026
E0.3	MODULE SPECIFICATIONS	02/17/2026
E0.4	INVERTER SPECIFICATIONS	02/17/2026
E0.5	POWER OPTIMIZER SPECIFICATIONS	02/17/2026
E0.6	DATA ACQUISITION SYSTEM	02/17/2026
E0.7	PANELCLAW RACKING DETAILS	02/17/2026
E1.1	SOLAR ARRAY ELECTRICAL SITE PLAN	02/17/2026
E1.2	ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS	02/17/2026
E1.3	ROOFTOP CABLE AND CONDUIT PLAN VIEW	02/17/2026
E2.1	ELECTRICAL ONE LINE DIAGRAM	02/17/2026
E2.2	ELECTRICAL RISER DIAGRAM	02/17/2026
E3.1	ELECTRICAL SCHEDULES	02/17/2026
E3.2	ELECTRICAL LABELS	02/17/2026
E4.1 THRU E4.2	ELECTRICAL DETAILS	02/17/2026
PC-1	COVER SHEET	01/20/2026
PC-2	PROJECT SUMMARY	01/20/2026
PC-3	ARRAY SITE MAP	01/20/2026
PC-4	TYPICAL ARRAY DIMENSIONS	01/20/2026
PC-5	ASSEMBLIES	01/20/2026
PC-6	RACKING COMPONENTS	01/20/2026
PC-7	BALLAST LEGEND	01/20/2026
PC-8	BALLAST LAYOUT – 1	01/20/2026
PC-9	MECHANICAL ATTACHMENT DETAIL	01/20/2026
SHEET 10-11	MODULE SPECIFICATIONS	01/20/2026

PERFORMANCE BOND

**TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS**

KNOW ALL MEN BY THESE PRESENTS;

That _____
_____ as Principal, and _____
_____ as
corporation of the State of _____, as Surety, are held and firmly bound unto the
PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Oblige, in the amount of _____
(\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators,
successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____ entered into a contract
with Oblige for _____
_____ in accordance with contract documents prepared by the Architect-Engineer, which Contract is by reference made a part hereof and
is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly and faithfully
perform the Contract and all changes thereof, and during the life of any guaranty or warranty required under the Contract, and, if
Principal shall fully secure and protect the Oblige from all liability and from all loss or expense of any kind, including all court
costs, engineering fees and attorneys' fees made necessary or arising from the failure, refusal or neglect of Principal to comply with
all obligations assumed by Principal in connection with the performance of the Contract and all changes thereof, then this
obligation shall be null and void; otherwise it shall remain in full force and effect.

Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof. Whenever
Principal shall be and is declared to be in default under the Contract, Oblige having performed Oblige's obligations thereunder,
Surety shall, after notice of such default, reserve all rights against all parties, take over and complete the Contract and become
entitled to payment of the balance of any monies due or to become due to such defined Principal in accordance with the progress
of the work.

A condition of this Bond is that the Principal shall faithfully perform in accordance with the prevailing wage clause provided in the
bid specification or Contract pursuant to Illinois Compiled Statutes 820 ILCS 130/1 *et. seq.*

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Oblige named
herein.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR

Contractor Firm Name

By: _____
Signature

Title

SURETY

Surety Name

By: _____
Attorney-in-Fact

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

LABOR & MATERIAL PAYMENT BOND

**TO: PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA
PEORIA, ILLINOIS**

KNOW ALL MEN BY THESE PRESENTS:

That: _____

as Principal, and _____
_____ a corporation of the State of _____ as Surety, are held and firmly bound unto the PLEASURE DRIVEWAY AND PARK DISTRICT OF PEORIA, PEORIA, ILLINOIS, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of _____ Dollars (\$ _____), for the payment whereof Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____, 20 _____, entered into a Contract with Obligee for _____

_____ in accordance with contract documents prepared by the Architect-Engineer which Contract is by reference made a part hereof, and is hereinafter referred to as "the Contract".

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 820 ILCS 130/1 et. seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is defined as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, materialman or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the Contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.
3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between the Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.

5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.

6. The Principal and Surety shall be liable for any attorneys fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this _____ day of _____, 20 _____.

CONTRACTOR

SURETY

Contractor Firm Name:

By: _____
Signature

By: _____
Attorney-in-Fact

_____ Title

_____ Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

FINAL WAIVER OF LIEN

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ ha _____ been employed by THE PEORIA PARK DISTRICT to furnish material and labor for the _____ at the premises commonly known as _____ located in the City of _____, County of Peoria, State of Illinois.

The undersigned, for and in consideration of _____ (\$ _____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do _____ hereby waive and release any and all lien or claim or right of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises and improvements thereon and on the money, funds or other considerations due or become due from the owner on account of labor or services, material, fixtures, apparatus or machinery heretofore furnished or which may be furnished at any time hereafter by the undersigned for the above described premises.

Dated this _____ day of _____ 20 _____.

[Affix corporate seal here.]

(Name of sole owner, corporation or partnership)

ATTEST:

(Signature of secretary of corporation)

(Signature of sole owner or authorized representative of corporation or partnership) (SEAL)

WAIVER OF LIEN

**GENERAL CONTRACTOR'S PARTIAL
TO COVER ONLY CERTAIN PAYMENTS**

STATE OF ILLINOIS)
) SS
COUNTY OF PEORIA)

TO ALL WHOM IT MAY CONCERN:

WHEREAS, the undersigned _____ has been employed
by THE PEORIA PARK DISTRICT to furnish material and labor for the _____ at
the premises commonly known as _____

_____ located in the City of Peoria, County of Peoria, and State of Illinois.

NOW, THEREFORE, the undersigned, for and in consideration of the sum of _____ Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged by the undersigned, does hereby waive and release to the extent only of the aforesaid amount of _____ Dollars, paid simultaneously herewith, any and all lien or right or claim of lien under the statutes of the State of Illinois relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon and on the money, funds, or other consideration due or to become due from the owner on account of labor, services, material, fixtures, apparatus or machinery, furnished by the undersigned, to or on account of the said owner, for the above-described premises, but only to the extent of the payment aforesaid.

Dated this _____ day of _____, 20 _____.

[Affix corporate seal here]

(Name of sole owner, corporation or partnership)

ATTEST:

(Signature of secretary of corporation)

(SEAL)
(Signature of sole owner or authorized representative of corporation or partnership)

A complete copy of AIA Document A201, 2017 Edition, with Supplementary General Conditions incorporated, is available for review in the Peoria Park District's Planning, Design and Construction Office.

SUPPLEMENTARY GENERAL CONDITIONS

1. A. **"GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION"**, AIA Document A201, 2017 Edition, published by the American Institute of Architects, including revisions adopted before the date of the Project Manual, is hereby made part of these Specifications with same force and effect as though set forth in full.
- B. The following modifies, changes, deletes from or adds to the General Conditions of the Contract for Construction (AIA Document A201, Sixteenth Edition, 2017). Where any Article of the General Conditions is modified or any Paragraph, Subparagraph or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph or Clause shall remain in effect.
- C. Parenthesis () indicates the appropriate section and Subparagraph of the General Conditions which each paragraph of the Supplementary General Conditions modifies or refers to.

ARTICLE 1: GENERAL PROVISIONS

1.1 - Basic Definitions

INSERT THE FOLLOWING PHRASE TO PARAGRAPH (1.1.1) AFTER THE WORDS "The Contract Documents consist of the Agreement Between Owner and Contractor (hereinafter the Agreement) and consists of the Agreement,":

“the Contractor's Bid, the Advertisement for Bids, the Instructions to Bidders, sample forms and addenda relating to these,”

DELETE THE LAST SENTENCE OF PARAGRAPH (1.1.1).

PARAGRAPH (1.1.8) IN THE HEADING DELETE “Initial Decision Maker” SUBSTITUTE “Initial Recommendation Maker”

PARAGRAPH (1.1.8) DELETE “Initial Decision Maker” AND SUBSTITUTE “Initial Recommendation Maker”

IN PARAGRAPH (1.1.8) REPLACE “decisions” WITH “recommendations”.

1.2 - Correlations and intent of the Contract Documents

ADD THE FOLLOWING SENTENCES TO END OF PARAGRAPH (1.2.1):

The Contractor shall notify the Owner’s Representative immediately if discrepancies are discovered. Full-size or large-scale details or drawings shall govern small-scale drawings that the former are intended to amplify. Dimensions from drawings shall not be determined by scale or rule. Where the Drawings and Specifications conflict with each other or with themselves, the Owner’s Representative (in consultation with the Architect, if any) will decide which conflicting requirement governs. Should discrepancies or doubt occur, Contractor shall not proceed with the Work without clarification from the Owner. Contractor shall request clarification in a reasonable time to avoid delays and increases in the Contract Sum.

ADD THE FOLLOWING PARAGRAPHS TO SECTION (1.2):

- 1.2.4** If any item or material shown on the Drawings is omitted from the Specifications, or vice-versa (except when the Drawings and Specifications clearly exclude such omitted item), and when such item or material is clearly required to complete the detail shown or specified, the Contractor shall furnish and install such item or material of the type and quality established by the balance of the detail shown and specified at no increase to the Contract Sum.
- 1.2.5** Where a typical or representative detail is shown on the Drawings, this detail shall constitute the standard for workmanship and materials throughout those parts of the Work.
- 1.2.6** Any Summary of Work as outlined in the Specifications shall not be deemed to limit the work required by the Contract Documents. The Contractor and each Subcontractor shall be responsible for carefully examining all Drawings, including all details, plans, elevations, sections, schedules and diagrams for each particular type of work, and for coordinating the Work described in the Drawings, with the related Specifications. The Contractor shall also be responsible for determining the exact scope of work for each type of work per the Contract Documents and Contractor shall endeavor to check cross-references of work excluded from any division. The Contract Sum is deemed to be based on a complete installation. When additional details or instructions are clearly required to complete the work, the Contractor is deemed to have made an allowance in the Contract Sum for completion of such Work consistent with the local standard of care.
- 1.2.7** The Drawings are intended to show the arrangement, design and extent of the Work and are schematic in nature. They are not to be scaled for roughing-in measurements or used as shop drawings.

1.5 – Ownership and Use of Drawings, Specifications, and Other Instruments of Service

ADD THE FOLLOWING PARAGRAPH TO SECTION (1.5):

- 1.5.3** Neither any oral representation by or oral agreement with any officer, agent, or employee of Owner or Architect before execution of this Contract shall affect or modify any of the Contractor's rights or obligations hereunder. Contractor is not aware of any facts that make misleading or inaccurate in any material respect any information Owner or Architect has furnished to Contractor which would have a material adverse affect on the Contract Time or Contract Sum which Contractor has not advised Owner or Architect of, and if, during the course of the performance of the Work, Contractor learns of any such facts it will so advise Owner. Contractor shall not be entitled to any adjustments in the Contract Time or the Contract Sum as a consequence of Contractor's breach of the terms of this Subparagraph.

1.7 – Digital Data use and Transmission

DELETE THE SECOND SENTENCE IN PARAGRAPH (1.7).

1.8 – Building Information Models Use and Reliance

DELETE PARAGRAPH (1.8) IN ITS ENTIRETY.

ARTICLE 2: OWNER

2.3 – Information and Services Required of the Owner

DELETE PARAGRAPH (2.3.4) IN ITS ENTIRETY.

2.4 – Owner’s Right to stop the Work

ADD THE FOLLOWING SENTENCE AT THE END OF PARAGRAPH (2.4):

“The Owner shall not be liable for any extra cost incurred by the Contractor by such an order.”

2.5 – Owner’s Right to Carry Out the Work

IN PARAGRAPH (2.5), IN THE SECOND SENTENCE, DELETE “Such action by the Owner and amounts charged to the Contractor are both subject to prior approval of the Architect and”.

ARTICLE 3: CONTRACTOR

3.2 - Review of Contract Documents and Field Conditions by Contractor

IN PARAGRAPH (3.2.2, 3.2.3, AND (3.2.4) AFTER THE WORD “Architect” ADD THE WORDS “and Owner”.

ADD THE FOLLOWING PARAGRAPH TO SECTION (3.2):

3.2.5 Before starting any work, the Contractor shall examine work performed by others to which his work adjoins or is applied to and report to the Owner's Representative any conditions that will prevent the satisfactory accomplishment of his work. Failure to notify the Owner's Representative of deficiencies or faults in preceding work prior to commencing work shall constitute acceptance thereof and waiver of any claim of its unsuitability.

3.4 – Labor and Materials

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.4):

3.4.4 Before ordering any material or doing any Work, the Contractor shall verify all measurements at the Project site and he shall be responsible for the correctness of same. No extra charge or compensation will be allowed to the Contractor on account of any difference between actual dimensions and the measurements shown on the Project Drawings.

3.4.5 The Contractor shall carefully inspect all materials delivered on and to the Project site and reject defective materials without waiting for the Owner's Representative or other representative of Owner to observe the materials.

3.5 - Warranty

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.5):

3.5.3 The Contractor agrees to assign to the Owner any and all manufacturer’s warranties relating to materials and equipment furnished as part of the Work and further agrees to perform the Work in such manner so as to preserve any and all such manufacturer’s warranties subject to installation directives and other terms of the Contract Documents. The Contractor agrees to deliver to the Owner, upon final payment, such assignments along with or as part of a reference manual, in form and detail reasonably acceptable to Owner, showing all such warranties and guarantees provided by

the Contractor and Subcontractors. Such warranties and guarantees shall commence no sooner than the date of purchase from the supplier.

- 3.5.4** The warranty of Contractor provided in Paragraph 3.5 shall in no way limit or abridge the warranties of the suppliers of equipment and systems which are to comprise a portion of the Work, if they are broader, and all of such warranties shall be in form and substance as required by the Contract Documents. Contractor shall take no action or fail to act in any way which results in the termination or expiration of such third party warranties or which otherwise results in prejudice to the rights of the Owner under such warranties subject to installation directives and other terms of the Contract Documents. Contractor agrees to provide all notices required for the effectiveness of such warranties and shall include provisions in the contracts with the providers and manufacturers of such systems and equipment whereby Owner shall have a direct right of enforcement of such warranty obligations.

3.6 - Taxes

IN PARAGRAPH (3.6), DELETE THE WORD "Sales".

ADD THE FOLLOWING AT THE END OF PARAGRAPH (3.6):

The Peoria Park District is exempt from Federal, State and Local taxes. A certificate of exemption will be furnished upon request.

3.10 - Contractor's Construction and Submittal Schedules

IN PARAGRAPH (3.10.2), IN THE FIRST SENTENCE BEFORE THE WORD "Architect's approval" ADD THE WORDS "Owner's and".

IN PARAGRAPH (3.10.2), IN THE SECOND SENTENCE BEFORE THE WORD "Architect's" ADD THE WORDS "Owner's and".

IN PARAGRAPH (3.10.2), IN THE THIRD SENTENCE BEFORE THE WORD "Architect" ADD THE WORDS "Owner's Representative and".

ADD THE FOLLOWING PARAGRAPHS TO SECTION (3.10):

- 3.10.4** The construction schedule shall provide for the most expeditious and practicable execution of the Work. The Contractor shall also work closely with the Owner to confirm that the construction schedule accurately reflects the status of the Project. The Contractor's construction schedule shall be updated every month by the Contractor and submitted to the Owner.

- .1** Whenever it becomes apparent from the updated construction schedule that any substantial completion previously established by the construction schedule cannot be met, the Contractor shall, at the Owner's request, take any or all of the following actions with no increase to the Contract Sum or Contract Time (unless the delay is caused by an event set forth in paragraph 8.3 of these General Conditions thereby permitting adjustment of the Contract Sum and/or Contract Time:
 - .1.1** Increase construction manpower to substantially return the Project to schedule;
 - .1.2** Increase the number of working hours per shift, shifts per day or the amount of construction equipment or any combination of the foregoing which will substantially return the Project to schedule;

- .1.3** Reschedule activities to concurrently accomplish activities, to the maximum degree practicable, in the time required by the Contract Documents.

If the Contractor fails to take any of these actions Owner shall have the notice and other rights set forth in Paragraph 2.5.

ARTICLE 4: ARCHITECT

4.1 - General

IN PARAGRAPH (4.1.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE THE FOLLOWING:

"The Architect, Owner's Representative, and Owner's Project Manager are defined in Paragraph C of "Section 014200 - General" of "Division 010000 - General Requirements".

4.2 – Administration of the Contract

IN PARAGRAPH (4.2.1) DELETE THE WORDS “and will be an Owner’s Representative”.

IN PARAGRAPH (4.2.5) DELETE THE WORD “Architect’s” AND “Architect”AND SUBSTITUTE THE WORDS “Owner Representative’s” AND “Owner Representative”.

IN PARAGRAPH (4.2.6) IN THE SECOND SENTENCE AFTER THE WORDS “will have authority” INSERT THE WORDS “upon written authorization from the Owner”.

IN PARAGRAPH (4.2.8) DELETE THE WORD “prepare” AND SUBSTITUTE THE WORDS “assist the Owner’s Representative in preparing”.

IN PARAGRAPH (4.2.9) DELETE THE WORD “Architect” AND SUBSTITUTE WORDS “Owner’s Representative, assisted by the Architect”.

IN PARAGRAPH (4.2.11) IN THE FIRST SENTENCE DELETE THE WORDS “and decide”.

IN PARAGRAPH (4.2.12) IN THE FIRST SENTENCE DELETE THE WORD “and decisions”.

IN PARAGRAPH (4.2.12) IN THE SECOND SENTENCE DELETE THE WORDS “and initial decisions” AND “or decisions”.

ADD PARAGRAPH TO SECTION (4.2):

4.2.15 Notwithstanding any other provision of this Agreement to the contrary, the Architect shall have no authority to order or approve any material deviation from the Contract Documents, whether or not such deviation affects the Contract Sum or other Substantial Completion Date (as defined herein). In the event any such deviation is sought, prior written approval from the Owner’s Representative and the Owner must be obtained. The Architect may decide quality issues and may approve non-material deviations from the Contract Documents.

ARTICLE 5: SUBCONTRACTORS

5.2 – Award of Subcontracts and Other Contracts for Portions of the Work

IN PARAGRAPH (5.2.1) DELETE THE FIRST SENTENCE AND SUBSTITUTE:

“The subcontractors/suppliers listed by the Contractor on the Subcontractor/Supplier List (submitted with the Bid) shall not be changed without the written consent of the Owner.”

IN PARAGRAPH (5.2.1) IN THE SECOND SENTENCE DELETE THE WORDS “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

IN PARAGRAPH (5.2.1) IN THE LAST SENTENCE DELETE THE WORDS “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

ARTICLE 6: CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

6.2 – Mutual Responsibility

IN PARAGRAPH (6.2.2) BEFORE THE WORD “Architect” ADD THE WORDS “Owner and”.

6.3 – Owner’s Right to Clean Up

IN PARAGRAPH (6.3) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORD “Owner”.

ARTICLE 7: CHANGES IN THE WORK

7.2 – Change Orders

IN PARAGRAPH (7.2.1) DELETE THE WORDS “the Architect” AND SUBSTITUTE THE WORDS “the Owner’s Representative”.

ADD THE FOLLOWING PARAGRAPHS TO SECTION (7.2):

7.2.2 A Change Order shall include all of the Contractor’s costs associated therewith.

7.2.3 The Contractor shall not accept any request for a Change Order from any person other than the Owner and may not perform any work asserted to constitute a change in the Work until the Owner has approved the Change Order in writing, unless the Owner authorizes the Contractor, in writing, to proceed with a change prior to the Owner’s final approval. Notwithstanding anything to the contrary herein, the Contractor shall not charge for overtime services in the performance of any Change Order Work, unless the Owner has specifically authorized overtime in writing. Owner may competitively bid changes in the Work and Contractor, Subcontractor and suppliers shall provide Owner with all documents Owner requests to facilitate such competitive bidding of changes in the Work.

7.2.4 There shall be no change in the Work, whether an alteration or addition to the Contract Sum or to any amounts due under the Contract Documents or to a change in the Contract Time, unless and until such alteration or addition has been authorized by a written Change Order executed and issued in accordance and compliance with the requirements with this Article 7 or by written authorization to proceed with such change in the Work signed by the Owner or as otherwise provided pursuant to the Contract Documents. The requirements set forth in this Paragraph 7.2.4 are of the essence. No claim that the Owner has been unjustly enriched by any alteration or addition to the Work, whether or not any such unjust enrichment to the Work or to the Owner in fact exists, shall form the basis of any claim for an increase in any amount due under the Contract Documents or a change in the Contract Time, and the terms of a fully-executed Change Order shall be conclusive.

7.3 – Construction Change Directives

IN PARAGRAPH (7.3.1) DELETE THE WORDS “the Architect” AND SUBSTITUTE THE WORDS “the Owner’s Representative”.

IN PARAGRAPH (7.3.4) DELETE THE WORD “determine” AND SUBSTITUTE THE WORD “recommend”.

IN PARAGRAPH (7.3.6) DELETE THE WORD “Architect” ADD SUBSTITUTE THE WORDS “Owner’s Representative”.

IN PARAGRAPH (7.3.8) IN THE FIRST SENTENCE AFTER THE WORD “Architect” ADD THE WORDS “and the Owner’s Representative”.

IN PARAGRAPH (7.3.9) DELETE THE WORDS “Architect” AND “Architect’s” AND SUBSTITUTE THE WORDS “Owner’s Representative” and “Owner’s Representative’s”.

IN PARAGRAPH (7.3.10) DELETE THE WORD “determination” AND SUBSTITUTE THE WORD “recommendation”.

ARTICLE 8: TIME

8.1 - Definitions

IN PARAGRAPH (8.1.3) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

8.2 – Progress and Completion

ADD THE FOLLOWING PARAGRAPHS TO SECTION (8.2) .

8.2.4 All work shall be "Substantially Complete" as required by the **Instructions to Bidders** and the **Agreement Between Owner and Contractor**.

8.2.5 It is further agreed that said completion schedule is reasonable, and the Contractor shall prosecute said work regularly, diligently and continuously at such rate of progress as will insure full completion thereof within the time specified.

8.2.6 Provided, however, the following exceptions:

- .1** Any preference, priority or allocation order duly issued by the United States Government.
- .2** Any unforeseeable cause beyond the control and without the fault or negligence of the Contractor, including acts of God, or of a public enemy, acts of the Owner, acts of another Contractor in performance of a separate contract with the Owner, fire, floods, epidemics, quarantine restrictions, strikes, freight embargoes and unusually severe weather. The criteria on which the unusually severe weather shall be based is the average precipitation/temperatures received in the project area, as recorded over a period of the last five (5) years at the local area United States Weather Station. Any extension of time due to unusually severe weather must be requested by the Contractor on the basis of documented records of the actual precipitation/temperatures during the contract time period, compared with the normal/average for the area. Also, the criteria shall include the number of excessive precipitation or extreme cold days (i.e., days in which the temperature would adversely affect the type of work being

constructed) over the same period and whether or not the Contractor's force worked on said days or stage of construction was affected.

.3 Any delays of subcontractors occasioned by any of the causes specified in this paragraph.

8.2.7 Provided further that the Contractor shall, within seven (7) days from the beginning of any such delay during the performance of the Contract, notify the Owner's Representative in writing of the alleged cause of such delay.

8.3 – Delays and Extensions of Time

IN PARAGRAPH (8.3.1) DELETE THE WORDS “and binding dispute resolution”.

IN PARAGRAPH (8.3.1) DELETE THE WORD “determine” AND SUBSTITUTE THE WORD “recommend”.

ARTICLE 9: PAYMENTS AND COMPLETION

9.2 – Schedule of Values

DELETE PARAGRAPH (9.2) AND SUBSTITUTE THE FOLLOWING UNDER (9.2):

“Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Owner’s Representative before the first Application for Payment, allocating the entire Contract Sum to the Various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Architect and Owner’s Representative. This schedule, unless objected to by the Architect and Owner’s Representative, shall be used as a basis for reviewing the Contractor’s Applications for Payment. Any changes to the schedule of values shall be submitted to the Architect and Owner’s Representative and supported by such data to substantiate its accuracy as the Architect and Owner’s Representative may require, and unless objected to by the Architect and Owner’s Representative, shall be used as a basis for reviewing the Contractor’s subsequent Applications for Payment.”

9.3 – Applications for Payments

IN THE FIRST SENTENCE OF (9.3.1), CHANGE "ten" TO "thirty”.

IN PARAGRAPH (9.3.1) IN THE FIRST AND SECOND SENTENCE DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

ADD THE FOLLOWING TO THE END OF PARAGRAPH (9.3.1):

“Payment requests shall consist of AIA Documents #702 "Application and Certificate for Payment"; AIA #703 "Continuation Sheet"; Contractors Affidavit of Payment to Subcontractors and Suppliers; Certified Payroll Form; EEO Documents; and Waivers of Lien. (Waivers of Lien are required from the general contractor in the full amount of the current payment application, and from all subcontractors, suppliers, or workers who provide more than \$10,000 of project material/labor of the Work. The waiver shall be in the amount(s) listed in the Contractor's Affidavit.) For final payment, the general contractor shall also provide a Waiver of Lien in the full amount of the contract price.

The Waiver of Lien and Contractor Affidavit forms used shall be the Peoria Park District's standard form(s): 1) "Final Waiver of Lien" (for general contractors), 2) "Waiver of Lien - General Contractor's Partial To Cover Only Certain Payments", 3) "Sub-Contractor's Final Waiver of Lien", 4)

"Waiver of Lien - Sub-Contractor's Partial To Cover Only Certain Payments, and 5) "Contractor's Affidavit". (These forms are included in the Project Manual, and are the required Waiver of Lien forms for the project.)

(If the Contractor is unable to provide the required sub-contractor waiver at the time the application for payment is submitted (preferred method) alternatively, it may be provided at the time that payment is delivered by the District. If the sub-contractor waiver(s) still cannot be provided at that time, the District will provide "two-party" checks in which the Contractor and the sub-contractor are named jointly as payees.)

Format of AIA #703 shall follow that of "Schedule of Values". All payment requests shall reflect retainage in the amount of 10% of completed work."

IN PARAGRAPH (9.3.1.1) DELETE THE WORDS "or by interim determination of the Architect, but not yet included in Change Orders".

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.1):

9.3.1.3 Upon Substantial Completion, the Owner will pay 95% percent of the amount due to the Contractor on account.

9.3.1.4 Monthly progress payments will be made by the Owner on projects lasting more than sixty days (from award of the bid to the Substantial Completion date given in the Supplementary Instructions to Bidders).

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (9.3.2):

9.3.2.1 Material stored on site will be considered for payment only when a Schedule of Stored Materials with appropriate values accompany the payment request as an attachment.

9.3.2.2 All material and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of material and work upon which payments have been made or the restoration of any damaged work, or as a waiver of the contract.

9.4 – Certificates for Payment

IN PARAGRAPH (9.4.1) DELETE THE WORDS "Architect" AND "Architect's" AND SUBSTITUTE THE WORDS "Owner's Representative" AND "Owner's Representative's".

IN PARAGRAPH (9.4.1) DELETE THE PHRASE "with a copy to the Contractor".

IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORD "Architect" AND SUBSTITUTE THE WORDS "Owner's Representative".

IN THE FIRST SENTENCE OF PARAGRAPH (9.4.2) AFTER THE WORDS "Architect's" ADD THE WORDS "and Owner's Representative's".

IN THE THIRD SENTENCE OF PARAGRAPH (9.4.2) DELETE THE WORDS "Architect has" AND SUBSTITUTE THE WORDS "Owner's Representative and Architect have".

9.5 – Decisions to Withhold Certification

IN PARAGRAPH (9.5.1) DELETE THE WORDS “Architect” AND “Architect’s” AND SUBSTITUTE THE WORDS “Owner’s Representative AND “Owner’s Representative’s”.

IN PARAGRAPH (9.5.2) DELETE THE WORD “Architect’s” AND SUBSTITUTE THE WORDS “Owner’s Representative’s”.

IN PARAGRAPH (9.5.4) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

9.6 – Progress Payments

IN PARAGRAPHS (9.6.1), (9.6.3), AND (9.6.4) DELETE THE WORDS “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

9.7 – Failure of Payment

IN PARAGRAPH (9.7) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

IN PARAGRAPH (9.7) DELETE THE WORDS “or awarded by binding dispute resolution”.

9.8 – Substantial Completion

IN PARAGRAPH (9.8.2) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

IN THE FIRST SENTENCE OF PARAGRAPH (9.8.3) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative assisted by the Architect”.

IN THE SECOND AND THIRD SENTENCES OF PARAGRAPH (9.8.3) DELETE THE WORDS “Architect’s” and “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative’s” and “Owner’s Representative”.

IN PARAGRAPH (9.8.4) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

9.9 – Partial Occupancy or Use

IN PARAGRAPH (9.9.1) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

9.10 – Final Completion and Final Payment

IN PARAGRAPH (9.10.1) IN THE FIRST AND SECOND SENTENCE AFTER THE FIRST TWO APPEARANCES OF THE WORD ‘Architect’ ADD THE WORDS “and Owner’s Representative”.

IN PARAGRAPH (9.10.1) DELETE THE THIRD AND FOURTH APPEARANCES OF THE WORD “Architect” and “Architect’s” AND SUBSTITUTE THE WORDS “Owner’s Representative” and “Owner’s Representative’s”.

IN PARAGRAPH (9.10.1) AFTER THE FIFTH APPEARANCE OF THE WORD “Architect’s” ADD THE WORDS “and Owner’s Representative’s”.

IN THE LAST SENTENCE OF PARAGRAPH (9.10.1) DELETE THE WORD “Architect’s” AND SUBSTITUTE THE WORDS “Owner’s Representative’s”.

IN PARAGRAPH (9.10.2) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORD “Owner’s Representative”.

ADD THE FOLLOWING SUB-PARAGRAPH TO PARAGRAPH (9.10.2):

9.10.2.1 When all items including items noted within Division 10000 General Requirements are found to be complete and in conformance with the Contract Documents, a final payment will be issued.

IN PARAGRAPH (9.10.3) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

ARTICLE 11: INSURANCE AND BONDS

11.1 – Contractor’s Insurance and Bonds

IN PARAGRAPH (11.1.1) IN THE FIRST SENTENCE DELETE THE WORDS “the Agreement or elsewhere in the Contract Documents” AND SUBSTITUTE THE FOLLOWING WORDS “Attachment A – Project Specific Insurance Requirements” (which is included in the last section of the Project Manual and the requirements therein shall be made part of the Contract Documents). In addition, if any of the work occurs within fifty feet of an active railroad line and the Contractor’s general liability coverages provide for exclusions of coverage when working on or near a railroad, the Contractor shall provide a separate Railroad Protective Liability Insurance Policy naming the railroad as the insured party, with the coverage limits required by that railroad.”

IN PARAGRAPH (11.1.1) IN THE LAST SENTENCE, DELETE THE WORDS “the Contract Documents” AND ADD THE WORDS “Attachment A”.

AT THE END OF PARAGRAPH (11.1.2) ADD THE FOLLOWING:

“The Contractor shall furnish a Performance Bond and a separate Labor and Material Payment Bond, each for one hundred percent (100%) of the Contract Sum. Form of these bonds shall be as provided by the Owner in the Project Manual and no other form will be accepted. The Surety shall be authorized to do business in the State of Illinois and be acceptable to the Owner.”

ADD THE FOLLOWING SUB-PARAGRAPHS TO PARAGRAPH (11.1)

11.1.5 The Contractor may, at his option, furnish Owner’s Protective Liability Insurance in lieu of naming the Owner Additional Insured on the Contractor’s policy, as required above. This insurance shall protect the Owner from claims as set forth in Paragraph 11.1.1 of the General Conditions, and to the limits required herein, as shown in “Attachment A”.

11.1.6 The Contractor shall furnish two copies of each of the required Certificates or Endorsements for each copy of the Agreement which shall specifically set forth evidence of all coverage required by the Contract Documents. The form of the Certificate(s) or Endorsement(s) shall be those as required in “Attachment A”. The Contractor shall also furnish to the Owner copies of any endorsements which limit coverage, or are subsequently issued amending coverage or limits of coverage.

11.2 – Owner’s Insurance

IN PARAGRAPH (11.2.1) DELETE THE FIRST AND SECOND SENTENCE.

ADD THE FOLLOWING TO PARAGRAPH (11.2.1) “If the work of the Project is being completed by one general or prime contractor rather than multiple prime contractors, the Contractor shall purchase and maintain property insurance upon the entire Work at the site to the full replacement value thereof. Such insurance shall be in a company or companies against which the Owner has no reasonable objection. This insurance shall include the interests of the Owner, the Contractor, Subcontractors and Sub-subcontractors in the Work.”

DELETE PARAGRAPHS (11.2.2) AND (11.2.3) IN THEIR ENTIRETY.

11.3 – Waiver of Subrogation

DELETE PARAGRAPHS (11.3.1) AND (11.3.2) IN THEIR ENTIRETY.

11.4 – Loss of Use, Business Interruption, and Delay in Completion Insurance

DELETE PARAGRAPH (11.4) IN ITS ENTIRETY:

11.5 – Adjustment and Settlement of Insured Loss

DELETE PARAGRAPHS (11.5.1) AND (11.5.2) IN THEIR ENTIRETY.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 – Uncovering of Work

IN PARAGRAPH (12.1.1) DELETE THE WORD “Architect’s” AND SUBSTITUTE WORDS “Owner’s Representative’s and Architect’s”.

IN PARAGRAPH (12.1.1) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

IN PARAGRAPH (12.1.2) AFTER THE WORD “Architect” ADD THE WORDS “and Owner’s Representative”.

12.2 – Correction of Work

IN PARAGRAPH (12.2.1) AFTER THE WORD “Architect” ADD THE WORDS “and Owner’s Representative”.

ARTICLE 13: MISCELLANEOUS PROVISIONS

13.4 – Tests and Inspections

IN PARAGRAPH (13.4.4) AFTER THE WORD “Architect” ADD THE WORDS “and Owner’s Representative”.

ARTICLE 14: TERMINATION OR SUSPENSION OF THE CONTRACT

14.1 – Termination by the Contractor

IN SUB-PARAGRAPH (14.1.1.3) DELETE THE WORD “Architect” AND SUBSTITUTE THE WORDS “Owner’s Representative”.

14.2 – Termination by the Owner for Cause

IN PARAGRAPH (14.2.2) DELETE THE PHRASE “, upon certification by the Architect that sufficient cause exists to justify such action,”.

IN PARAGRAPH (14.2.4) DELETE THE LAST SENTENCE AND ADD THE FOLLOWING “Upon application, the obligation for payment of the amount to be paid to the Contractor or Owner, as the case may be, shall survive termination of the Contract.”

14.4 – Termination by the Owner for Convenience

DELETE PARAGRAPH (14.4.3) IN ITS ENTIRETY AND SUBSTITUTE UNDER (14.4.3):

“In case of such termination for the Owner’s convenience, the Contractor shall be entitled to receive payment for Work executed, and costs incurred by reason of such termination. In no event, however, will such amounts exceed the Contract Sum reduced by the amount of prior payments except for increases pursuant to the claims procedure in the Contract Documents. Subcontracts, subsubcontracts, and purchase orders will contain appropriate provisions for termination for convenience under this Paragraph 14.4.”

ARTICLE 15: CLAIMS AND DISPUTES

15.1 – Claims

IN THE FIRST SENTENCE OF PARAGRAPH (15.1.2) DELETE “requirements of the binding dispute”.

IN PARAGRAPH (15.1.3.1) DELETE “Initial Decision Maker” AND SUBSTITUTE “Initial Recommendation Maker”

DELETE THE SECOND SENTENCE IN PARAGRAPH (15.1.3.2) IN ITS ENTIRETY.

DELETE PARAGRAPH (15.1.4.2) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.1.4.2):

“The contract Sum and Contract Time may be adjusted in accordance with the Initial Recommendation Maker’s recommendation, subject to the right of either party to proceed in accordance with this Article 15. The Owner’s Representative will issue Certificates for Payment.”

DELETE (15.1.7) IN ITS ENTIRETY.

15.2 – Initial Decision

IN PARAGRAPH (15.2) DELETE IN THE HEADING “Initial Decision” AND SUBSTITUTE “Initial Recommendation”.

DELETE PARAGRAPH (15.2.1) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.2.1):

“Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3 10.4, and 11.5, shall be referred to the Initial Recommendation Maker for initial recommendation. The Architect

will serve as the Initial Recommendation Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial recommendation shall be required as a condition precedent to mediation of any Claim. If an initial recommendation has not been rendered within 30 days after the Claim has been referred to the Initial Recommendation Maker, the party asserting the Claim may demand mediation without a decision having been rendered. “

DELETE PARAGRAPH (15.2.2) IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING PARAGRAPH (15.2.2):

“The Initial Recommendation Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) recommend rejecting the Claim in whole or in part, (3) recommend approving the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Recommendation Maker is unable to recommend a resolution of the Claim if the Initial Recommendation Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Recommendation Maker concludes that, in the Initial Recommendation Maker’s sole discretion, it would be inappropriate for the Initial Recommendation Maker to make recommendation on the Claim.”

IN PARAGRAPH (15.2.3) DELETE “Initial Decision Maker” AND SUBSTITUTE “Initial Recommendation Maker”.

IN PARAGRAPH (15.2.3) IN THE FIRST SENTENCE, DELETE “rendering a decision” AND SUBSTITUTE “rendering a recommendation”.

IN PARAGRAPH (15.2.4) DELETE “Initial Decision Maker” AND SUBSTITUTE “Initial Recommendation Maker”.

IN PARAGRAPH (15.2.4) DELETE THE LAST SENTENCE AND SUBSTITUTE THE FOLLOWING “Upon receipt of the response or supporting data, if any, the Initial Recommendation Maker will provide a recommendation regarding the Claim in accordance with Paragraph 15.2.2.”

DELETE PARAGRAPH (15.2.5) IN ITS ENTIRETY.

DELETE PARAGRAPH (15.2.6.1) IN ITS ENTIRETY.

15.3 – Mediation

IN PARAGRAPH (15.3.1) DELETE “as a condition precedent to binding dispute resolution”.

IN PARAGRAPH (15.3.2) DELETE THE THIRD SENTENCE IN ITS ENTIRETY AND SUBSTITUTE THE FOLLOWING SENTENCE “The request may be made concurrently with the filing of legal or equitable proceedings but, in such event, mediation shall proceed in advance of legal or equitable proceedings which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order.”

IN PARAGRAPH (15.3.2) DELETE THE LAST SENTENCE IN ITS ENTIRETY.

DELETE PARAGRAPH (15.3.3) IN ITS ENTIRETY.

IN PARAGRAPH (15.3.4) DELETE THE FIRST SENTENCE IN ITS ENTIRETY.

15.4 – Arbitration

DELETE PARAGRAPHS (15.4.1), (15.4.1.1), (15.4.2), (15.4.3), (15.4.4.1), (15.4.4.2), AND (15.4.4.3) IN THEIR ENTIRETY.

ADD THE FOLLOWING ARTICLE 16: LABOR, SAFETY AND WAGE STANDARDS TO THE GENERAL CONDITIONS OF THE CONTRACT:

**ARTICLE 16
LABOR, WAGE, SAFETY, AND OTHER STANDARDS**

16.1 LABOR STANDARDS. All employers shall comply with the Employment of Illinois Workers on Public Works Act [30 ILCS 570/1 to 570/7].

16.2 WAGE STANDARDS.

16.2.1 PREVAILING WAGE ACT: Wages and benefits to employees shall comply with all Federal and State of Illinois statutes pertaining to public works projects and specifically: Wages of Employees on Public Works [820 ILCS 130/1 - 12].

16.2.2 Not less than the prevailing rate of wages plus benefits as determined by the Department of Labor shall be paid to all laborers, workers and mechanics performing work under this contract. All contractor's bonds shall include a provision as will guarantee the faithful performance of such prevailing wage clause as provided by this bid specification or contract.

16.2.3 The terms "general prevailing rate of hourly wages", "general prevailing rate of wages" or "prevailing rate of wages" when used in this Act mean the hourly cash wages plus fringe benefits for training and apprenticeship programs approved by the U.S. Department of Labor, Bureau of Apprenticeship and Training, health and welfare, insurance, vacations and pensions paid generally, in the locality in which the work is being performed, to employees engaged in work of a similar character on public works.

16.2.4 PREVAILING WAGE ACT/FOIA
Contractors and subcontractors shall submit proof to the Park District of certified payroll submission to the Illinois Department of Labor on a monthly basis in compliance with the Illinois Prevailing Wage Act. These records will be kept by the Park District for three years and may be reviewed by others through the Freedom of Information Act (FOIA). The Park District will exclude employee's address, telephone number, and social security number from public inspection.

16.3 SAFETY STANDARDS.

16.3.1 PROTECTION OF PERSONS AND PROPERTY: The Contractor and his subcontractors shall, at all times, comply with applicable provisions of Federal, State and Local laws.

16.3.1.1 The Contractor and his sub-contractors shall have written programs complying with Occupational Safety and Health Administration standards and/or Illinois Department of Labor requirements including, but not limited to the following: hazardous communications, hearing conservation, respirator use, confined space entry, scaffolding, ladders, ventilation, flammable and combustible liquids, and lockout/tagout. The Contractor shall submit documentation of their programs at the request of the Owner's Representative, or Occupational Safety and Health Administration and/or Illinois Department of Labor officials.

16.4 EQUAL EMPLOYMENT OPPORTUNITY/AFFIRMATIVE ACTION/SEXUAL HARASSMENT

16.4.1 During the performance of the contract, the contractor agrees to the following:

16.4.1.1 That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such under-utilization.

16.4.1.2 That, if it hires additional employees in order to perform his contract or any portion thereof, it will determine the availability (in accordance with the Rules and Regulations of the Illinois Department of Human Rights) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not under-utilized.

16.4.1.3 That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, marital status, national origin or ancestry, age, physical or mental handicap unrelated to ability or an unfavorable discharge from military service.

16.4.1.4 That it will have a written sexual harassment policy to include at the minimum, the following:

16.4.1.4.1 a definition of sexual harassment under the law;

16.4.1.4.2 a description of sexual harassment utilizing examples;

16.4.1.4.3 a formalized complaint procedure;

16.4.1.4.4 a statement of victim's rights;

16.4.1.4.5 directions on how to contact the Illinois Department of Human Rights. Out-of-state companies must provide directions for filing with the enforcement agency within their state. Companies that issue a standard policy for all business locations must prepare an addendum providing directions on how to contact the appropriate enforcement agency; and

16.4.1.4.6 A recitation that there cannot be any retaliation against employees who elect to file charges.

16.4.1.4.7 In addition, it is recommended that the employer post a copy of the sexual harassment policy in a prominent and accessible location and distribute it in a manner to assure notice to all employees on an annual basis.

16.4.1.4.8 The Illinois Human Rights Act specifically provides that all documents may meet, but cannot exceed, the sixth-grade literacy level. Therefore, the employer's sexual harassment policy must be stated in plain language and in "laymen's terms".

- 16.4.1.5** That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 16.4.1.6.** That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 16.4.1.7.** That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 16.4.1.8.** That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply therewith. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.
- 16.4.2** In the event of the contractor's non-compliance with the provisions of the Illinois Human Rights Act, the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporation, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulations.

END OF SUPPLEMENTARY GENERAL CONDITIONS

DIVISION 010000 GENERAL REQUIREMENTS

SECTION 010000 - GENERAL

A. SUMMARY OF THE WORK

1. The Work covered under this Contract consists of that work described by the Invitation to Bid, the Instructions/Supplemental Instructions to Bidders, the Bid/Proposal Form, the General/Supplemental Conditions of the Contract, these General Requirements, the Plans, and the Technical Specifications.
2. The Contractor shall be responsible for all items incidental to the scope of the Work intended by the bidding documents as per A.1 above, including but not limited to, expenses incurred by the requirements of various Sections of Division 010000, unless specifically stated otherwise herein.
3. Changes to the Work as required by approved Change Orders shall be at the expense of the Owner, however, requests for additional payments made after the fact will not be considered.

B. OCCUPANCY BY OWNER.

1. The Owner reserves the right to occupy any portion of the project before it has been entirely completed, with the understanding that such occupancy shall in no way constitute acceptance of the work, in whole or in part, or of any work performed under the Contract, provided that such occupancy does not substantially interfere with completion of the work by the Contractor.

SECTION 012600 - CHANGE ORDERS

A. OWNER'S REPRESENTATIVE'S FIELD ORDERS

1. From time to time during progress of the Work the Owner's Representative may issue an "Owner's Representative's Field Order" which interprets the Contract Documents or orders minor changes in the Work without change in Contract Sum or Contract Time.
2. Should the Contractor consider that a change in Contract Sum or Contract Time is required he shall submit an itemized proposal to the Owner's Representative **immediately and before proceeding with the Work**. If the proposal is found to be satisfactory and in proper order, the Field Order will be superseded by a Change Order.

B. PROPOSAL REQUESTS

1. From time to time during the progress of work the Owner's Representative may issue a "Proposal Request" for an itemized quotation for changes to the Work which may result in a change to the Contract Sum or Contract Time. This document **is not a Change Order** and is not a direction to proceed with the changes described therein.

C. CHANGE ORDERS

1. Change Orders are written documents describing changes in the Work, in the Contract Sum, in the Contract Time of Completion, or any combination thereof. Change Orders must be signed by both the Owner and the Architect/Owner's Representative prior to proceeding with the Work subject to the Change Order. **REQUESTS FOR "EXTRA'S" OR OTHER ADDITIONAL PAYMENTS OVER AND ABOVE THE CURRENT CONTRACT SUM WILL NOT BE CONSIDERED WITHOUT THE PRIOR, WRITTEN APPROVAL OF BOTH THE OWNER AND THE OWNER'S REPRESENTATIVE.**
 - a) INITIATION. Change Orders may be initiated by a "Field Order" or "Proposal Request" per paragraphs "A" and "B" above. In addition, either the Contractor or Owner (or Owner's Representative) may initiate a Change Order through:
 - 1) Discovery of a discrepancy in the Contract Documents,
 - 2) Discovery of concealed conditions or,
 - 3) Discovery, during the course of the Work, of methods of accomplishing the Work in a better or more economical manner.
 - b) PROCESSING CHANGE ORDERS.
 - 1) Change Orders will be dated and will be numbered in sequence.
 - 2) The Change Order will describe the change or changes, or will refer to the Proposal Requests or Field Orders involved.
 - 3) The Owner's Representative will issue three copies of each Change Order to the Contractor.
 - 4) The Contractor promptly shall sign all three copies and return them to the Owner's Representative.
 - 5) The Owner and Owner's Representative will retain two signed copies in their files, and will forward one signed copy to the Contractor.
 - 6) Should the Contractor disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:
 - i) The Contractor promptly shall return all three of the Change Orders, unsigned by him, to the Owner's Representative with a letter signed by the Contractor stating the reason or reasons for the Contractor's disagreement.
 - ii) The Contractor's disagreement with the Change Order shall not in any way relieve the Contractor of his responsibility to proceed with the change as ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

SECTION 012900 - PAYMENT PROCEDURES

A. SCHEDULE OF VALUES

1. Prior to the start of construction, submit a proposed Schedule of Values to the Owner's Representative which shows a detailed breakdown of the agreed Contract Sum showing values allocated to each of the various parts of the Work, as specified herein and in other provisions of the Contract Documents.
 - a) The Schedule of Values is required to be compatible (in the same format) with the Application for Payment "Continuation Sheet", AIA G703.
2. If not requested to submit additional data or to modify the submitted Schedule of Values within ten (10) days of submittal, the initially submitted Schedule shall be deemed approved.

B. APPLICATIONS FOR PAYMENT

1. Progress payments will be made only if specifically called for in the Agreement. In all other cases, the Contractor may submit an Application for Payment (3 copies) upon Substantial Completion (95% of the Contract Sum), with the balance of the Contract Sum to be paid at Final Completion.
 - a) **Article 9 of the Supplementary General Conditions defines the documentation required for each payment request.**
 - b) Applications for payment shall be delivered to the Owner's Project Manager at:

Department of Planning, Design, and Construction
 Peoria Park District
 Bradley Park Equipment Service
 1314 N. Park Road
 Peoria, Illinois 61604

SECTION 013100 - PROJECT MEETINGS

A. PRECONSTRUCTION CONFERENCE

1. Conduct a preconstruction conference prior to the start of the Work, at the location of the Work. Provide attendance by the designated personnel of the Contractor, including Sub-contractor's and/or suppliers of major components of the Work, if requested by the Owner's Representative.
 - a) **AGENDA.** Discuss items of significance that could affect progress including such topics as:
 - 1) Tentative construction schedule.
 - 2) Critical Work sequencing.
 - 3) Designation of responsible personnel.
 - 4) Procedures for processing field decisions and Change Orders.
 - 5) Procedures for processing Applications for Payment.
 - 6) Distribution of Contract Documents.
 - 7) Submittal of Shop Drawings, Product Data and Samples.
 - 8) Preparation of record documents.
 - 9) Use of the premises.
 - 10) Office, Work and storage areas.
 - 11) Equipment deliveries and priorities.
 - 12) Safety procedures.
 - 13) First aid.
 - 14) Security.
 - 15) Housekeeping.
 - 16) Working hours.
 - 17) Permits and Permitting Agency Requirements

B. PROJECT MEETINGS

1. Project Meetings will be held per the schedule determined at the Preconstruction Conference, or as needed for proper coordination and administration of the project.
 - a) **AGENDA**
 - 1) Review and correct or approve minutes of the previous progress meeting.
 - 2) Review progress of the Work since last meeting, including status of submittals for approval.
 - 3) Identify problems which impede planned progress.
 - 4) Develop corrective measures and procedures to regain planned schedule.
 - 5) Complete other current business.

C. REPORTING

1. Distribute copies of the minutes of each meeting to each party present, and to other parties who should have been present, no later than three business days after each meeting.

SECTION 013300 - SUBMITTALS

- A. Requirements for shop drawings, samples, mock-ups, product data, etc., relative to specific elements or components of the work are called out in the various sections of the Technical Specifications.
 1. Submit items to allow for Owner's Representative's review and approval, potential re-submission if full approval is not given, ordering, delivery, fabrication time, etc., so as to allow the Work to proceed in a timely manner and in conformance with the project schedule.
- B. **OTHER CONTRACTOR SUBMITTALS**
 1. Unless otherwise modified the Contractor shall also submit:
 - a) A "bar chart" type proposed construction schedule, within ten days after award of the Bid.
 - b) Other submittals as required by other section of Division 010000.
- C. Submission of the required Bonds and Certificate of Insurance are to be made prior to the Owner's issuance of a Notice to Proceed.

SECTION 014000 – QUALITY/REGULATORY REQUIREMENTS

- A. **GENERAL:** Contractors shall comply with all laws, rules and regulations governing the work.
 1. When Contractor observes that contract documents are at variance with specified codes, notify Owner's Representative in writing immediately. Owner's Representative will issue all changes in accord with General Conditions.
 2. When Contractor performs any work knowing or having reason to know that the work is contrary to such laws, rules and regulations and fails to so notify the Owner's Representative, Contractor shall pay all costs arising therefrom. However, it will not be the Contractor's primary responsibility to make certain that the contract documents are in accord with such laws, rules and regulations.
- B. **SAFETY:**
 1. Comply with all federal, state, and local laws, rules and regulations governing the installation/construction of the work.

2. Develop and utilize safety program and training for workmen and sub-contractor employees.

C. TESTING

1. TESTS AND INSPECTIONS REQUIRED

- a) Provide all tests and inspections required by governmental agencies having jurisdiction, as required by provisions of the Contract Documents and/or as specifically required by sections of the Technical Specifications.

2. PAYMENT FOR TESTING

- a) Include within the Contract Sum an amount sufficient to cover all testing, re-testing, and inspections required by the Contract documents and/or the Technical Specifications. Additionally pay for all testing and inspections required by all governmental agencies having jurisdiction.
 - 1) The Owner will pay for any testing and inspecting specifically requested by the Owner's Representative which are over and above those described in Paragraph 1.a) above.
 - 2) When initial tests (over and above those defined by 1.a) above) requested by the Owner's Representative indicate non-compliance with the Contract Documents, costs of initial tests associated with that non-compliance will be deducted by the Owner from the Contract Sum, and subsequent retesting occasioned by the non-compliance shall be performed by the same testing laboratory and the costs thereof shall be paid by the Contractor.

3. WAIVER OF INSPECTION AND/OR TESTS

- a) Specified inspections and/or tests may be waived only by the specific written approval of the Owner's Representative, and **such waivers will be expected to result in credit to the Owner equal to normal cost of such inspection and/or test.**

SECTION 014200 - REFERENCE STANDARDS AND DEFINITIONS

- A. Copies of Standards: Each entity engaged in construction on the Project is required to be familiar with industry standards applicable to that entity's construction activity. Copies of applicable standards are not bound with the Contract Documents.
1. Where copies of standards are needed for performance of a required construction activity the Contractor shall obtain copies directly from the publication source.
 2. Although copies of standards needed for enforcement of requirements may be included as part of required submittals the Architect reserves the right to require the Contractor to submit additional copies as necessary for enforcement of requirements.
- B. Abbreviations and Names: Trade association names and titles of general standards are frequently abbreviated. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents they mean the recognized name of the trade association standards generating organization authority having jurisdiction or other entity applicable to the context of the text provision. Refer to the Encyclopedia of Associations, published by Gale Research Co. available in most libraries.
- C. Definitions: Architect, Owner's Representative, and Owner's Project Manager
1. **ARCHITECT:** The Architect shall be the person or entity designated by the Owner as the Owner's Representative and shall be identified as such in the Agreement Between Owner and Contractor, and is referred to throughout the Contract Documents as if singular in number and masculine in gender.
 2. **OWNER'S REPRESENTATIVE:** The duties of the Owner's Representative as listed in the Project Manual, include but are not limited to, construction phase observation and technical administration services.
 - a) **LIMITS OF AUTHORITY:** The Owner's Representative shall be authorized to provide approvals and interpretations concerning the plans, specifications and progress of the Work as bid, but is not authorized to change the scope of the Work on behalf of the Owner.
 3. **OWNER'S PROJECT MANAGER:** The Owner's Project Manager will represent, act on behalf of, and provide interface between the Owner and the Contractor in respect to contract administration and/or other matters which affect the scope of the Work.
 - a) Unless defined otherwise in the Project Manual, the Owner's Project Manager shall be a designated member of the Planning, Design, and Construction Division of the Peoria Park District.
 - b) The Owner's Project Manager will also be the Owner's Representative and will provide construction phase observation and technical administration services, if a consultant Architect has not been engaged to do so, by the Owner.

SECTION 015000 – TEMPORARY FACILITIES & CONTROLS

A. MOBILIZATION

1. Furnish all labor, tools, materials, equipment, and incidentals necessary for preparatory work.
2. Provide and establish personnel, equipment, supplies, materials, offices or buildings, and other facilities necessary to work on the project.
3. Demobilize all of the above and remove temporary facilities at the completion of the project.

B. BARRIERS, PROTECTION OF SITE AND PROPERTY

1. GENERAL

- a) Owner's improvements to remain, existing utilities, as well as adjacent site improvements shall be protected from damage by barriers, guards and coverings. Damaged work shall be replaced or repaired to condition prevailing at time of signing of contract, at no additional cost to Owner.
- b) **Provide 6' high, continuous chain link or orange plastic (used materials acceptable) construction fence to prohibit unauthorized personnel or public entry from the site of the Work.** (Substitutions may be considered; submit request in writing to the Owner's Representative.)
- c) Contractor shall provide, erect and maintain additional planking, fences, protective canopies, railings, shoring, lights, warning signs, etc., as needed for the protection of adjacent property and the public.

2. LANDSCAPE PROTECTION

- a) All live, healthy trees, shrubs, etc. on the site or on the street fronts of the site, not specified to be removed and not interfering with installation of new work required hereunder, shall be protected against injury from construction operations.
- b) All shade trees which are to remain and which are liable to damage during the building operations, shall be properly boxed and protected from damage during the course of construction work as directed by the Park District. **No site-related work shall occur until the required tree protection (fencing, boxing, etc.) has been installed and approved by the Owner or his representative.**
 - 1) LIQUIDATED DAMAGES: The Owner reserves the right to charge the Contractor for damage to existing trees, and to deduct the charges from the amounts due the Contractor, based on the following schedule:
 - aa) Broken limbs 1" or over in diameter: \$50 per caliper inch of limb

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- bb) Trenching or grading within the tree dripline or 20' from the trunk, whichever is less, of trees 4" or over in caliper diameter: \$100 per tree/per foot within dripline, or within 20' minimum if applicable
 - cc) Damage to tree trunks, including "barking", nicking, gouging, etc. \$150 per caliper inch of tree, per each injury
 - 3. BARRIERS/CONSTRUCTION FENCE MATERIALS
 - a) 2" open mesh chain link fence, 72" high minimum, galvanized, with appropriately sized posts; gates where indicated.
 - b) Alternate barrier fencing materials may be acceptable, however, no additional payments will be made on account of approval of alternate barrier/safety fencing materials.
 - c) Materials may be new or used, if in serviceable condition.
 - 4. WATCHMAN SERVICE
 - a) The Owner will not be responsible for loss due to theft or other damage which is not covered under Property Insurance. The Contractor shall make such arrangements for watchman service as he considers necessary and he shall be responsible for all loss or damage of his property, equipment, material, etc., at the site, and he shall make good such damage or loss without any additional cost to the Owner.
 - 5. EXISTING IMPROVEMENTS - PROTECTION
 - a) The Contractor shall be entirely responsible for all injuries to water pipes, electric conduits or cables, drains, sewers, gas mains, poles, telephones and telegraph lines, streets, pavements, sidewalks, curbs, culverts, retaining walls, building walls, foundation walls, or other structures of any kind met with during the progress of the Work, and shall be liable for damages to public or private property resulting therefrom.
- C. CONSTRUCTION ACCESS, ROADS, AND PARKING AREAS
- 1. CONTRACTOR'S USE OF PREMISES
 - a) The Contractor shall require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this Section.
 - 2. CONSTRUCTION ACCESS
 - a) To avoid traffic conflict with vehicles of the Owner's employees and customers, and to avoid over-loading of streets and driveways elsewhere on the Owner's property, limit the access of trucks and equipment to the route shown (IF SHOWN) on the Drawings as "Access Route". If access route is not shown on the Drawings, coordinate construction access and routes with the Owner's Project Manager.
 - b) Do not permit such vehicles to park on any street or other area of the Owner's property except in the area shown on the Drawings as "Contractor's Parking Area". If not shown on the drawings, the Contractor's Parking Area shall be as designated by the Owner's Project Manager.
 - c) Provide adequate protection for curbs and sidewalks over which trucks and equipment pass to reach the job site.
 - 3. SECURITY
 - a) Restrict the access of all persons entering upon the Owner's property in connection with the Work to the Access Route and to the actual site of the Work.
- D. TEMPORARY ENVIRONMENTAL CONTROLS
- 1. GENERAL
 - a) Provide temporary environmental controls at the site of the Work to ensure that construction operations have no harmful effects on adjacent properties and on members of the public who may come in proximity to the Work, and/or the employees of the Owner who are engaged in regular daily tasks and operations and are unable to be relocated to another work site during construction operations.
 - b) Owner reserves the right to stop the Work, at the Contractor's expense, until the Contractor provides necessary control measures for the conditions listed below; additionally, the Owner reserves the right to perform or have performed necessary control measures, should the Contractor refuse to do so at the time requested and to deduct the cost of those expenses from the amount due the Contractor.
 - 2. DUST CONTROL
 - a) Provide dust control materials to minimize dust from construction operations. Prevent air-borne dust from dispersing into the atmosphere.
 - 3. WATER CONTROL
 - a). Control surface water to prevent damage to the project, the site and adjoining properties.
 - 1) Control fill, grading, and ditching to direct surface drainage away from excavations, pits, tunnels, and other construction areas; direct drainage to proper runoff channels or storm drainage utilities.
 - b) Provide, operate and maintain hydraulic equipment of adequate capacity to control surface water.
 - c) Dispose of drainage water in a manner to prevent flooding, erosion silting, or runoff of silt or sediment or other damage to all portions of the site or to adjoining properties.
 - 4. RODENT CONTROL
 - a) Provide rodent control to prevent infestation of construction or storage areas.
 - 1) Use methods and materials which will not adversely affect conditions at the site or on adjoining properties.
 - 5. DEBRIS CONTROL
 - a) Maintain all areas free of extraneous debris, waste, and rubbish.
 - 6. POLLUTION CONTROL
 - a) Prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.
 - b) Provide equipment and personnel, perform emergency measures to contain all spillages, and to remove contaminated soils or liquids.
 - 1) Excavate and dispose of all contaminated earth off-site. Replace with suitable compacted fill and topsoil.
 - c) Take special measures, as necessary, to prevent harmful substances from entering public waters, including lakes, streams, intermittent drainage channels, and storm or sanitary sewers.
 - 7. EROSION CONTROL
 - a) Plan and execute construction and earthwork in a manner to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
 - 1) Schedule the Work to minimize the areas of bare soil exposed at one time, if possible.
 - 2) Provide temporary control measures such as berms, dikes, and drains to prevent runoff of silt or sediment from the site.
 - 3) Comply with Section 015713.
- E. PROJECT IDENTIFICATION AND SIGNAGE
- 1. GENERAL
 - a) Provide and install project identification sign, if located and/or called out on the Drawings.

2. SUBMITTALS
 - a) Provide shop drawing(s) of proposed sign/sign installation to Owner's Representative for approval, prior to installation
3. INSTALLATION
 - a) Provide project sign as detailed on Drawings
 - b) If not detailed on Drawings provide project identification sign per the following minimum requirement:
 - 1) Content
 - aa) Name of project
 - bb) Name of Owner
 - cc) Name of Architect(s) and major consultants
 - dd) Names of Contractor and major subcontractors
 - ee) Allow additional 200 characters of text explaining the project
 - 2) Construction
 - aa) Size: 4' x 8'
 - bb) Materials: Min. 5/8" AC DFPA Exterior Plywood, with (2) 4" x 4" x 12' long pressure treated post supports
 - cc) Paint: paint front and back, seal edges, provide content as approved by Owner's Representative. Conform to recognized sign painting standards in selection of paint materials. Use only professional sign painter with three years minimum experience to apply sign graphics and lettering.
 - 3) Install sign in a manner consistent with length of time of construction operations. Remove sign and fill post holes at project completion.

F. FIELD OFFICES

1. TEMPORARY FACILITIES

Provide and pay for temporary (new, or used if in serviceable condition) facilities and controls needed for the Work, if called out on the Drawings, which may include, but are not necessarily limited to:

 - a) Temporary utilities such as heat, water, electricity, and telephone;
 - b) Field office for the Contractor's personnel (required if shown on the Drawings; otherwise at the Contractor's option and expense).
 - 1) Conform with requirements for Engineer's Field Office Type B, as defined in Article 646.04 of the Standard Specifications for Road and Bridge Construction - Illinois Department of Transportation.
 - c) Sanitary facilities;
 - d) Enclosures such as tarpaulins, barricades, and canopies;
 - e) Temporary fencing of the construction site;
 - f) Project sign.
2. Comply with Federal, State, and local codes and regulations.
 - a) Maintain temporary facilities and controls in proper and safe condition throughout the progress of the work. The Contractor is responsible for conformance with all safety codes and regulations for all Work under his jurisdiction, including that of Sub-Contractors.
3. Locate temporary facilities as shown on the Drawings, or as approved by the Owner's Representative if not shown on the Drawings.

SECTION 015713 – EROSION & SEDIMENT CONTROL

A. RELATED DOCUMENTS

1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

B. SUMMARY

1. This Section includes the following:
 - a) Site erosion and sediment control
 - b) Silt fencing
 - c) Ditch checks
 - d) Erosion control blankets
 - e) Culvert and inlet protection
 - f) Stabilized entrance
2. Related Sections include the following:
 - a) Division 31 – Earthwork.
 - b) Division 32 – Exterior Improvements.
3. Erosion and Sediment Control Statement: The Peoria Park District takes the issue of construction related erosion and sediment control extremely seriously. The Peoria Park District is a community leader in the conservation and protection of our area's natural resources. This project will be watched closely by both staff and citizens for compliance with erosion and sediment control regulations and specifications.

C. QUALITY ASSURANCE

1. Materials and methods of construction shall comply with the following standards:
 - a) Illinois Department of Transportation
 - b) City of Peoria

D. PRODUCTS

1. Silt Fencing
 - a) Fabric for silt fencing shall consist of woven or nonwoven filaments of polypropylene, polyester, or polyethylene. Fabric shall be resistant to degradation by ultraviolet light and heat exposure. Fabric shall be rot, insect, and mildew proof, and have a high resistance to tearing.
 - 1) Fabric shall comply with the following physical properties:

aa) Grab tensile strength (lb) – ASTM D4632	200 (min)
bb) Grab elongation @ break (%) – ASTM D4632	12
cc) Burst strength (psi) – ASTM D751	250 (min)

- | | | | |
|--|-----|---------------------------------------------|---------------|
| | dd) | Trapezoidal tear strength (lb) – ASTM D4533 | 75 |
| | ee) | Width (ft) | 3.5 (min) |
| | ff) | Weight (oz/sq. yd) – ASTM D3776 | 4.0 |
| | gg) | Equivalent opening size | 30 (nonwoven) |
| | hh) | (EOS) sieve no. – Corps of Engrs. CS-02215 | 50 (woven) |
2. Ditch Checks
 - a) Ditch checks will consist of silt fencing with the addition of wire reinforcement.
 - b) Wire shall be 9 gauge.
 - c) Alternate: Straw bales may be used in lieu of silt fencing
 3. Posts
 - a) Posts shall be standard “T” or “U” steel posts or wood with a minimum cross section of 3 square inches. Posts shall be a minimum of 60” in length. Posts shall be driven a minimum of 24” into the ground.
 4. Erosion Control Blankets
 - a) Excelsior Blanket: Excelsior blanket shall consist of a machine produced mat of wood excelsior of 80% 6” or longer fiber length. The wood from which the excelsior blanket is cut shall be properly cured to achieve adequately curled and barbed fibers.
 - 1) The blanket shall be of consistent thickness, with the fiber evenly distributed over the entire area of the blanket. The excelsior blanket shall be covered on the top side with a 90-day biodegradable extruded plastic mesh netting having an approximate minimum opening of 16 x 16 mm (5/8 x 5/8 in.) to an approximate maximum opening of 50 x 25 mm (2 x 1 in.). The netting shall be substantially adhered to the excelsior blanket by a knitting process using biodegradable thread or by an applied degradable adhesive. The netting shall be substantially adhered to the excelsior by a knitting process using biodegradable thread. The netting shall be entwined with the excelsior blanket for maximum strength and ease of handling.
 - 2) The excelsior blanket shall comply with the following:

aa)	Minimum width, ± 25 mm (1 in.)	600 mm (24 in.)
bb)	Minimum mass ± 10%	0.34 kg/sm (0.63 lb/sq yd)
cc)	Minimum length of roll, approximately	45 m (150 ft)
 - 3) The excelsior blanket shall be smolder resistant.
 5. Culvert And Inlet Protection
 - a) Culvert protection shall consist of a ditch check immediately upstream of every culvert entrance. Ditch check shall be installed to protect culvert interior from sedimentation.
 - b) Inlet protection shall consist of purpose made devices by:

Dandy Products, Inc.
P. O. Box 1980
Westerville, Ohio 43086-1980
Phone: 1-800-591-2284
Fax: 740-881-2791
www.dandyproducts.com
dlc@dandyproducts.com

or

NILEX, Inc.
15171 E. Fremont Drive
Centennial, CO 80112
Phone: 1-800-537-4241
Fax: 303-766-1110
www.nilex.com
denver@nilex.com
 - c) “Or Equal” substitutions may be made with prior approval of Owner’s Representative.
 6. Stabilized Entrance
 - a) Stabilized entrance shall consist of coarse aggregate laid over geotextile fabric.
 - b) Dimensions: 70’ long by 14’ wide.
 - c) Geotextile Fabric: as per requirements of “silt fencing”.
 - d) Aggregate: IDOT Class CA-1, CA-2, cA-3, or CA-4.

E. EXECUTION

1. Site Erosion And Sediment Control
 - a) Contractor is responsible for fulfilling terms of City of Peoria Erosion Control Permit and all applicable portions of the “Erosion, Sediment, and Stormwater Control Ordinance of the City of Peoria”.
 - b) Install control devices as shown on erosion control plan.
 - c) Install additional measures as needed to control erosion and sedimentation on the site.
2. Silt Fencing Installation
 - a) Install silt fencing according to details in plans. The silt fence shall be entrenched to a minimum depth of 8”.
 - b) The silt fence shall be installed on the contour, with the ends extending up-slope.
 - c) Install silt fencing before commencing site clearing work.
3. Ditch Check Installation
 - a) Install ditch checks according to details in plans.
 - b) Install ditch checks at locations shown on plans.
 - c) Install additional ditch checks as needed to control erosion within drainage swales as site conditions and weather dictate.
 - d) Install ditch checks immediately after swales are graded.
4. Erosion Control Blankets Installation
 - a) Install erosion control blankets as needed to control erosion in drainage swales and at the direction of the Owner’s Representative.
 - b) Anchor stakes shall be driven at a spacing of 2 feet on center.
5. Culvert And Inlet Protection Installation
 - a) Install culvert protection at upstream entrances to all culverts.
 - b) Install culvert protection to intercept waterborne silt and sediment and prevent it from entering culvert pipes.
 - c) Install immediately after culvert installation.

- d) Install inlet protection according to manufacturer's written instructions at each inlet immediately after inlet construction.
- 6. Stabilized Construction Entrance Installation
 - a) Install stabilized construction entrance and other approved measures as necessary to limit tracking of soil on to all paved surfaces.
 - b) Comply with all City of Peoria codes limiting tracking of soil on to City streets.
- 7. Maintenance
 - a) Inspect silt fences after each rainfall. Repair fencing, failures, end runs, and erosion cuts immediately.
 - b) Remove soil from silt fencing after each rainfall.
 - c) Erosion control maintenance and repair shall be considered incidental to the contract.
 - d) Tracked soil and sediment shall be removed from all paved surfaces on a daily basis.
 - e) Replace or provide new erosion and sediment control measures as needed during construction to provide protection to site and surrounding property for the entire time of construction, or until project is complete.
- 8. Close-Out
 - a) Remove silt fencing and other erosion and sediment control devices after lawn or seeding has been established.
 - b) Soil deposits remaining in place after silt fence is no longer required shall be dressed to conform to existing grade, and seeded with appropriate seed material.

SECTION 016000 – PRODUCT REQUIREMENTS

A. MATERIALS AND EQUIPMENT

- 1. STANDARD SPECIFICATIONS
 - a) Reference herein to known standard specifications of governmental agencies or technical societies shall refer to the latest edition of such specifications, adopted and published at date of these Specifications.
- 2. MANUFACTURED ARTICLES
 - a) All manufactured articles, materials and equipment to be incorporated in the work shall be new (unless otherwise specified) and of the quality specified and shall be used, erected, installed, connected, cleaned and conditioned as directed by and in conformity with job conditions to produce the best results obtainable.
 - 1) Field measurements for all special products and materials which requires close tolerances or fitting into other items or components of the Work shall be taken on the job by the party furnishing the materials.
- 3. QUALITY ASSURANCE
 - a) Per the Supplementary Instructions to Bidders, the Bidder by submission of a signed bid form, agrees to install products and equipment by brand and model name or names specified in the Technical Specifications, Divisions 02-35. Substitutions are allowed only in conformance to the following:
 - 1) Proprietary Specification Requirement: Where only a single product or manufacturer is named, provide the product indicated. No substitutions will be permitted.
 - 2) Semiproprietary Specification Requirement: Where two or more products or manufacturers are named, provide one of the products indicated. No substitutions will be permitted
 - aa) Where either of the two cases above prevail, and the named product is accompanied by "or approved equal" substitutions will be allowed only upon written approval of the Owner's Representative prior to submission of bids.
 - 3) Non-Proprietary Specification Requirement: When the Specifications lists products or manufacturers that are available and are accompanied by "or equal", the Contractor may propose any available product that complies with the Specifications' requirements; however, the Owner's Representative shall determine if the produced item complies with those requirements.
 - 4) Descriptive Specification Requirement: Where Specifications describe a product or assembly listing exact characteristics required, with or without use of a brand, trade, or model name, provide a product or assembly that provides the characteristics and otherwise complies with the Contract Documents.
 - 5) Performance Specification Requirement: Where Specifications require compliance with performance requirements, provide products or assembly that comply with these requirements and are recommended by the manufacturer for the application indicated.
 - 6) Compliance with Standards, Codes, and Regulations: Where the Specifications only require compliance with an imposed code, standard, or regulation, select a product that complies with the standard, code, or regulation specified.
 - b) VISUAL MATCHING AND SELECTION. Where the Specifications require matching an established sample or call for "as selected", the Owner's Representative's decision will be final on whether a proposed product matches satisfactorily.

B. STORAGE AND PROTECTION

- 1. GENERAL
 - a) Contractor shall provide and maintain:
 - 1) Storage for materials and equipment to be installed in Project.
 - 2) Protection and security for stored materials and equipment, on and off site.
 - 3) Protection of existing on-site elements to remain.
 - 4) Protection of adjacent properties improvements
- 2. METHODS
 - a) Store off grade and cover with impervious material all moisture or water vulnerable materials.
 - b) Store finished products and equipment in an enclosed building, on or off site.
 - c) Maintain integrity of shipping cartons until ready for installation.
 - d) Provide separate storage for combustible and non-combustible products.
 - e) Follow storage recommendations of product and equipment manufacturers.
 - f) Other methods shall be subject to Owner's prior written approval.
- 3. The Contractor shall maintain an emergency phone number where a contact person can be notified at any time, Sundays and holidays included, of an emergency condition due to the work which requires immediate repair or protection.

C. SUBSTITUTIONS

- 1. See "SECTION 016000 – A. MATERIALS AND EQUIPMENT" for requirements pertaining to substitution of specified materials, products, equipment, etc.

2. Contractor may propose substitute materials, products, equipment, etc., after award of the Bid; however, such proposals are expected to result in a cost savings to the Owner and/or higher quality Work at no additional cost to the Owner.

D. WARRANTIES AND BONDS

1. GENERAL

- a) This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
- b) Warranties for the Work and products and installations of each Contractor shall be one (1) year unless specified otherwise in the individual Sections of Divisions 02 through 35.
- c) Disclaimers and Limitations:
 - 1) Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and Contractors required to countersign special warranties with the Contractor.
 - 2) The responsibility of the Contractor in respect to the required warranties shall not be relieved or limited in any way by the failure of installed components, equipment, materials, etc., due to naturally occurring and/or re-occurring conditions at the site or area of the Work including, but not limited to:
 - aa) ground and soil conditions, especially as related to frost heave;
 - bb) high wind velocities (except those exceeding velocities normally used for calculating wind loading at the site of the Work);
 - cc) rain and water damage (unless caused by winds exceeding normal design limits);
 - dd) ice/snow loading on structures
 - ee) and other naturally occurring or re-occurring site conditions
 - 3) The Contractor shall notify the Owner's Representative, prior to the award of the contract, of any part or component of the Work that is, in his opinion, not designed to accommodate the existing, naturally occurring, or re-occurring conditions of the site, and whether or not a change in the proposed methods of construction, types of equipment, etc., will affect the bid price.
 - aa) Should the proposed change in construction methods, equipment type, etc., result in additional expense, the Owner reserves the right to request proposals from the other bidders and to make award the contract based on the bid amount which includes the proposed change.

2. WARRANTY REQUIREMENTS

- a) Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- b) Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- c) Replacement cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.
- d) Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights or remedies.
 - aa) Rejection of Warranties: The Owner reserves the rights to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- e) The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.
- f) For specific warranty requirements related to landscape materials, refer to the applicable Section.

3. SUBMITTALS

- a) Submit written warranties to the Owner's Representative prior to the date certified for Substantial Completion. If the Owner's Representative's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner's Representative.
 - 1) When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner's Representative within fifteen days of completion of that designated portion of the Work.
- b) Form of Submittal: At Final Completion, compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, Subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- c) Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.
- d) Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.
- e) Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS", the project title or name, and the name of the Contractor.
- f) When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

SECTION 017300 – EXECUTION

A. GEOTECHNICAL DATA

1. If the Owner has caused borings or other subsurface investigations to be made, the data or report pursuant to these investigations will be included in the Project Manual, as an Appendix, and labeled as such.

2. The Owner and Owner's Representative do not guarantee the accuracy or validity of the data, nor do they assume any responsibility for the Contractor's interpretation of the data.
 3. The Contractor's may, at his option, perform additional subsurface investigation, however, it shall be at the Contractor's sole expense.
- B. FIELD ENGINEERING**
Provide such field engineering services as are required for proper completion of the Work including, but not limited to:
1. Establishing and maintaining lines and levels
 2. Structural design of shores, forms, and similar items provided by the Contractor as part of his means and methods of construction.
 3. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks and control points. Preserve permanent reference points during construction.
- C. COORDINATION OF TRADES AND SUB-CONTRACTORS**
1. The Contractor shall be responsible for the proper fitting of all work and for the coordination of the operation of all trades, sub-contractors, or materials and men engaged upon the work. He shall be prepared to guarantee to each of his subcontractors the dimensions which may be required for fitting of their work to all surrounding work and shall do, or cause his agents to do, all cutting, fitting, adjusting and patching necessary to make the several parts of the work come together properly and fit the work to receive, or be received by that of other contractors.
 2. When two or more prime contracts are being executed at one time in such manner that the work on one contract may interfere with the work of another, the Owner's Representative shall decide which contractor shall cease work and which shall continue, or whether the work on both contracts may progress at the same time and in what manner.
 - a) The Contractor shall not cause any unnecessary hindrance or delay to any other contractors on the premises, and shall be responsible for all damages done to the work of other contractors caused by him or by his employees.
- D. REFERENCE AND CONTROL POINTS PROVIDED BY OWNER**
In addition to layout procedures provided by the Contractor for proper performance of the Contractor's responsibilities:
1. Locate and protect existing control points before starting work on the site.
 2. Preserve permanent reference points during progress of the Work.
 3. Do not change or relocate reference points or items of the Work without specific approval from the Owner's Representative.
 4. Promptly advise the Owner's Representative when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
 5. Upon direction of the Owner's Representative, require the field engineer to replace reference stakes or markers.
 6. Locate such replacement according to the original survey control.
- E. REFERENCE AND CONTROL POINTS PROVIDED BY THE CONTRACTOR**
1. If not provided by the Owner (and defined as the responsibility of the Owner in the Contract Documents) establish sufficient general reference points in the form of permanent bench marks, grade stakes or other markers as will enable the Contractor to proceed with the Work.
 2. The Contractor may lay out his own work, or cause the Work to be laid out by a qualified party such as a Registered Land Surveyor or a Professional Engineer, as necessary.
 3. The Contractor shall establish and be responsible for all lines, elevations and measurements of the structure utilities, installations, and other Work executed by him under the contract.
 - a) Exercise proper precautions to verify the figures and dimensions shown on the drawings before laying out the work; be responsible for any error resulting from failure to exercise such precaution.

SECTION 017329 - CUTTING AND PATCHING

- A. CHASES AND OPENINGS**
1. The Contractor is responsible for the provision and/or coordination of all chases, openings and recesses required by work of his own forces, subcontractors or separate contractors.
 - a) Each subcontractor or separate contractor shall be responsible for furnishing advance information to the General Contractor as to exact dimensions and locations of such chases and openings, and shall provide and set in place all necessary sleeves, inserts and forms.
 - b) Openings shall be accurately located, neatly cut, and no larger than necessary. Provide all rebuilding, patching, refinishing and painting required to restore the construction to original condition.
 2. Provide shoring, bracing, and support as required to maintain structural integrity of the project.
 3. Provide protection from cutting and patching operations as required for other portions of the project; protect the Work and existing improvements in proximity to the cutting and patching operations from the elements.

SECTION 017419 – CONSTRUCTION WASTE MANAGEMENT & DISPOSAL

- A. PERIODIC CLEANING**
1. Each Contractor shall clean up after his own work as needed and/or ensure that sub-contractors clean up after their work and remove accumulations of waste, debris, and rubbish caused by construction operations.
 - a) Remove all waste, rubbish and debris on a daily basis (if needed), as they accumulate, and after completion of the Work.
- B. PROJECT COMPLETION**
1. On completion of the project, the entire job shall be cleaned up and left in perfect condition, including adjacent areas.
 - a) Marred surfaces shall be patched or repaired and touched up to match adjoining surfaces.
 - b) All rubbish shall be removed from the site before acceptance.
 - c) New surfaces and/or exposed elements of the Work shall be protected from stain and marring. These surfaces shall be cleaned to the satisfaction of the Owner's Representative or replaced if said stains or mars are unable to be completely removed
- C. GOVERNMENTAL REGULATIONS**
1. Conduct cleaning and disposal operations in compliance with Federal, State and local ordinances and anti-pollution laws and regulations.

SECTION 017700 - PROJECT CLOSEOUT

- A. GENERAL
Work includes:
1. Substantial Completion.
 2. Final Completion
 3. Closeout submittals.
 4. Instruction
- B. SUBSTANTIAL COMPLETION
1. Prepare and submit the list ("punch-list") required by the first sentence of Paragraph 9.8.2 of the General Conditions.
 - a) Within a reasonable time after receipt of the list the Owner's Representative will inspect to determine status of completion. Should the Owner's Representative determine that the Work is not Substantially Complete:
 - 1) The Owner's Representative will so notify the Contractor, in writing, giving the reasons therefore.
 - 2) Remedy the deficiencies and notify the Owner's Representative when ready for reinspection.
 - 3) The Owner's Representative will reinspect the Work.
 - b) When the Owner's Representative concurs that the Work is Substantially Complete:
 - 1) The Owner's Representative will prepare a "Certificate of Substantial Completion" on AIA form G704, accompanied by the Contractor's list of items to be completed or corrected, as verified and approved by the Owner's Representative.
 - 2) The Owner's Representative will submit the Certificate to the Owner and to the Contractor for their written acceptance of the responsibilities assigned to them in the Certificate.
- C. FINAL COMPLETION
1. Prepare and submit the notice required by the first sentence of Paragraph 9.10.1 of the General Conditions.
 - a) Verify that the Work is complete including, but not necessarily limited to, the items mentioned in Paragraph 9.8.2 of the General Conditions. Certify that:
 - 1) the Contract Documents have been reviewed;
 - 2) the Work has been inspected for compliance with the Contract Documents;
 - 3) the Work has been completed in accordance with the Contract Documents;
 - 4) equipment and systems have been tested as required, and are operational;
 - 5) the Work is completed and ready for final inspection.
 - b) The Owner's Representative will make a final inspection to verify status of completion and if all "punch-list" items have been completed, and upon receipt of the Contractor's Final Application for Payment, issue a Certificate of Final Completion. Should the Owner's Representative determine that the Work is incomplete or defective:
 - 1) The Owner's Representative will so notify the Contractor, in writing, listing the incomplete or defective work.
 - 2) Remedy the deficiencies promptly, and notify the Owner's Representative when ready for reinspection.
 - c) FINAL APPLICATION FOR PAYMENT
 - 1) Submit a final Application for Payment to the Owner's Representative, showing all adjustments to the Contract Sum.
 - 2) If needed, the Owner's Representative will prepare a final Change Order showing adjustments to the Contract Sum which were not made previously by Change Orders.
 - 3) Include final waivers of lien from the Contractor, sub-contractors, and major suppliers.
 - 4) Final payment will not be released until all close-out submittals have been made, final cleaning has been performed, and required instruction(s) to Owner's personnel have been accomplished.
- D. CLOSEOUT SUBMITTALS
1. When the Owner's Representative determines that the Work is acceptable under the Contract Documents, he will request the Contractor to make closeout submittals. Closeout submittals include, but are not necessarily limited to:
 - a) Project record documents described in "Section 017839".
 - b) Operation and maintenance manuals/data as described in "Section 017823".
 - c) Warranties and bonds as described in "Section 016000".
 - d) Keys and keying schedule;
 - e) Spare parts and materials extra stock;
 - f) Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to:
 - 1) Certificates of Inspection, as required
 - 2) Certificate(s) of Occupancy
 - g) Certificates of Insurance for products and completed operations;
 - h) Evidence of payment and release of liens.
 - 1) Consent of Surety to Final Payment
 - 2) Contractor's Final Waiver of Lien
 - 3) Separate releases or Waivers of Lien for sub-contractors, suppliers and others with lien rights against the Owner, together with a list of those parties.
 - i) List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.

SECTION 017823 - OPERATING/MAINTENANCE MANUALS & INSTRUCTION

- A. GENERAL
1. Compile operating/product data and related information appropriate for Owner's maintenance and operation of products and equipment provided under the Contract.
 2. Instruct Owner's personnel in operation and maintenance of products, equipment and systems.
 3. OPERATIONS AND MAINTENANCE DATA REQUIRED:
 - a) Operating and maintenance manuals are required for each area of Work which is listed below, if that area of Work is included within the scope of Work of the project:
 - 1) HVAC
 - 2) Plumbing – including water supply, sewage and waste disposal
 - 3) Electrical

- 4) Landscape irrigation system
- 5) Fire sprinkler system
- 6) Communications equipment and systems
- 7) Materials and finishes

B. OPERATIONS/MAINTENANCE MANUALS - FORM OF SUBMITTAL

1. Prepare operating and maintenance manuals in the form of an instructional manual, utilizing heavy-duty, durable 3-ring vinyl covered loose-leaf binders, for use by the Owner's operating personnel. Organize into suitable sets of manageable size. Where possible, assemble instructions for similar equipment into a single binder. Provide when drawings or diagrams are required as part of the manual.
2. Provide sturdy manila or kraft envelope, accordion type file folder, or cardboard file boxes, properly labeled, of sufficient size to contain all submittals.
3. Submit one copy of data in final form at least fifteen days before final inspection. This copy will be returned within fifteen days after final inspection, with comments. After final inspection make corrections or modifications to comply with the Owner's Representative's comments and submit three copies of each approved manual to the Owner's Representative
4. **WARRANTIES, BONDS AND SERVICE CONTRACTS**
 - a) Provide a copy of each warranty, bond or service contract in the appropriate manual for the information of the Owner's operating personnel. Provide written data outlining procedures to be followed in the event of product failure. List circumstances and conditions that would affect validity of the warranty or bond. Provide list for each product containing name, address, and phone number of:
 - 1) Contractor.
 - 2) Subcontractor.
 - 3) Maintenance contractor, as appropriate.
 - 4) Local supply source for parts and replacement.
 - b) Identify area of responsibility of each contractor.

C. MANUAL FOR MATERIALS AND FINISHES

1. Submit two (2) copies of complete manual in final form.
2. Refer to individual Specification Sections for additional requirements on care and maintenance of materials and finishes.
3. Content for products, applied materials and finishes:
 - a) Manufacturer's data, giving full information on products.
 - 1) Catalog number, size, composition.
 - 2) Color and texture designations.
 - 3) Information for re-ordering special-manufactured products.
4. Instructions for care and maintenance.
 - a) Manufacturer's recommendations for types of cleaning agents and methods.
 - b) Cautions against cleaning agents and methods detrimental to product.
 - c) Recommended cleaning and maintenance schedule.
5. Moisture-Protection and Weather-Exposed Products: Provide complete manufacturer's data with instructions on inspection, maintenance and repair of products exposed to the weather or designed for moisture-protection purposes.
6. Manufacturer's Data: Provide manufacturer's data giving detailed information, including the following, as applicable:
 - a) Applicable standards.
 - b) Chemical composition.
 - c) Installation details.
 - d) Inspection procedures.
 - e) Maintenance information.
 - f) Repair procedures.

D. INSTRUCTION

1. Instruct the Owner's personnel in proper operation and maintenance of systems, equipment, and similar items which were provided as part of the Work including, but not limited to;
 - a) Mechanical
 - b) Water supply
 - c) Electrical service/distribution and lighting
 - d) Other items or systems as required in individual sections of the Technical Specifications
2. Instructions for the Owner's Personnel: For instruction of the Owner's operating and maintenance personnel, use experienced instructors thoroughly trained and experienced in the operation and maintenance of the equipment or system involved.

SECTION 017839 - PROJECT RECORD DOCUMENTS (AS-BUILTS)

A. DOCUMENTS REQUIRED AT SITE

1. The Contractor shall maintain at the job site one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other Contract modifications.
 - a) Each of these project record documents shall be clearly marked "**Project Record Copy**"
 - b) Shall be maintained in good condition
 - c) shall be available at all times for inspection by the Park District, and shall not be used for construction purposes.

B. Project-record drawings shall be marked up to show significant changes made during construction progress, referenced to visible and accessible features of the structures. Project-record drawings shall be kept current and no work shall be concealed until required information has been recorded.

C. Record-documents shall be submitted in satisfactory condition to the Park District at the completion of the project. **FINAL COMPLETION OF THE PROJECT WILL NOT BE ATTAINED, AND FINAL PAYMENT WILL BE WITHHELD, UNTIL PROJECT "AS-BUILTS" ARE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.**

END OF GENERAL REQUIREMENTS

PROJECT MANUAL – ROOFTOP SOLAR PV SYSTEMS

DESIGN PROGRAM

SYSTEM OWNERSHIP INFORMATION

The Peoria Park District (“Owner”) will own the solar PV system(s) at the completion of the project.

INCENTIVE AND REBATE INFORMATION

Contractor shall support the Owner in securing rebates and other financial incentives available for the project, including but not limited to the following. Estimated or anticipated financial rebates and incentives shall not be included in the Bid Price.

1. Ameren DG/inverter rebates. Contractor shall apply for and comply with all requirements to obtain available Ameren rebates and remit rebates obtained back to Owner.
2. Illinois Adjustable Block Program (referred to as Illinois Shines). Owner has not made a determination regarding participation in the Illinois Shines incentive program. In the event the Owner elects to participate:
 - a. Successful Bidder shall be required to negotiate in good faith an SREC contract within Forty-Five (45) days from the Notice of Award. Should the successful Bidder fail or refuse to negotiate or execute an agreement, Owner reserves the right, in its sole discretion, to transfer award of contract to the second lowest bidder.
 - b. Contractor shall apply for and comply with all requirements to obtain and administer the Illinois Shines program on behalf of the Owner.
 - c. Owner shall be responsible for application fees and collateral required by Illinois Shines. Collateral shall be remitted back to Owner at the end of the term. Contractor shall pass 95% of any incentive payment on to Owner and retain 5% for management and administration of the program. No other fees may be charged to Owner.
3. Inflation Reduction Act (IRA) Direct Pay incentive. Owner shall file and apply for IRA Direct Pay incentives. Contractor shall assist Owner and expeditiously provide any information/documentation required in its application.

CONTRACTOR QUALIFICATIONS

Contractor shall be registered as an Illinois Shines Approved Vendor or Designee.

Consistent with the specifications, Contractor shall have seven years demonstrated experience designing, planning, scheduling, permitting, and constructing complete solar photovoltaic systems, have experience interconnecting with local utility, providing rebate support, providing system monitoring, and have established onsite safety standards. Contractor shall have successfully completed five or more projects of similar size and scope and provide references upon request.

OWNER SUPPLIED PV MODULES

Owner shall supply the following equipment. The owner-supplied solar panels are stored at the Bradley Park Equipment Service Center. Contractor shall be responsible for transport of panels from the Bradley Park Equipment Service Center to the Golf Learning Center.

1. Base Bid #1 – Bradley Park Equipment Service Center: 132 Canadian Solar CS6.2-66TB-615H modules
2. Base Bid #2 - Golf Learning Center: 42 Canadian Solar CS6.2-66TB-615H modules

CELLULAR BASED MODEMS

Contractor will be required to provide cellular based modems for remote monitoring of inverters with 5-year pre-paid plan(s). Cost of modems and 5-year plan(s) shall be included in Bid Price. Contractor to coordinate installation with Owner’s IT Director.

ROOF WARRANTY

1. Base Bid #1 - Equipment Service Center: Not Applicable
2. Base Bid #2 - Golf Learning Center: All equipment to be installed, and any roof penetrations made, shall not void any existing roof warranties. Notify warrantor of existing roofing system prior to beginning work and on completion of work, and obtain documentation verifying that existing roofing system has been inspected and warranty remains in effect. Submit documentation at project closeout.



February 10, 2026

Attn: Mr. Jesie Palicpic
General Energy Corporation
400 E State Pkwy, Suite 121
Schaumburg, IL 60173

RE: Peoria Park District Rooftop Solar at ESC Facilities
Roof Framing Analysis
1314 N Park Rd.
Peoria, IL 61604

SEI Project No.: 251170.00

Dear Mr. Palicpic,

Structural Enginuity Inc. (SEI) has analyzed the existing building for a new roof solar array on the Peoria Park District ESC facility using the International Building Code 2018 (ASCE 7-16). Based on SEI's site observations, the roof framing in this building is understood to consist of an exposed fastened metal deck on light gauge Z purlins spaced at a maximum of 5'-0" apart and spanning between prefabricated steel frames.

The proposed solar system in this building will consist of panels in portrait orientation mounted to Unirac NXT UMount rails. These rails will be attached to the existing roof using S-5! Clamps such as ProteaBracket clamps for trapezoidal metal deck. The existing roof is composed of 24 gauge, R-Panel roof panels with ribs spaced at 12" o.c. **The rails would need to be fastened to the roof with maximum spacings as shown below:**

All Building Sections, w/ exposed fastened metal deck, ProteaBracket clamps:

- Modules in Roof Zone 1, 2, 2', 3 and 3': 2'-0" typical maximum attachment spacing.
- Modules in Roof Zone 1, 2, 2' and 3 (Edge Panels): 2'-0" typical maximum attachment spacing.
- Modules in Roof Zone 3' (Edge Panels): 1'-0" typical maximum attachment spacing

The attachments are required to connect to the ribs in the deck and should be placed in a staggered pattern. The proposed system was determined to add approximately an additional 4 psf of dead load to the roof. These proposed loads and the analysis of the existing members can be seen in SEI's attached calculations. Therefore, it is SEI's professional opinion that the existing roof framing is structurally adequate to support the proposed solar array system when attached as specified.

Please contact our office, at your convenience, should you have any further questions relating to this matter.

Sincerely,

Michael McLaughlin, E.I.T.
Engineer I
mmclaughlin@structuralenginuityinc.com
Structural Enginuity Inc.

Allan T. Myket, S.E.
President / Founder
amyket@structuralenginuityinc.com



02/17/2026
Exp: 11/30/2026
SEI COA Number:184.006994



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Appendix A: References

Appendix B: Technical Data



Project Information



Structural Enginuity, Inc.
1815 W. Diehl Rd, Ste 100
Naperville, IL 60563
(630) 219-1997
www.structuralenginuityinc.com

Project Name:	Peoria PD ESC
Project No.:	251170.00
Client Name:	General Energy Corporation
Date:	1/30/2026

Rev'd by: AP
Date: 2/2/26

Project Name: Peoria PD ESC
Roof Solar Array Installations
1314 N Park Rd.
Peoria, IL 61604

SEI Project Number: 251170.00

Project Client: General Energy Corporation
400 E State Pkwy, Suite 121
Schaumburg, IL 60173

Client Contact: Jesie Palicpic
jesiep@generalenergycorp.com

Design References: 2018 International Building Code
ASCE 7-16
AISC Steel Construction Manual, 15th Edition

Scope of Work:

Provide structural engineering services required in the preparation of construction contract documents for the installation of solar panels at the address listed above. The racking system and proposed array layout, provided by client, will be used in conformance with the 2018 International Building Code to determine if the existing structure has the capacity to support the addition of the arrays.

Existing Structure:

The existing structure is made up of (3) sections: section 1 will be noted as the southmost area which was measured to be approximately 100'x40'. Section 2 is where the building becomes wider and was measured to be approximately 150'x60'. Section 3 is the northmost area which was measured to be 100'x40'. Array to be installed on roof area consisting of prefabricated steel beams and posts with light gauge Z purlins supporting a 6 deg sloped metal deck. The mean height of the sloped roof is approximately 17'-10" in building sections 1 and 3 and 18'-9" in building section 2.



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Building Information

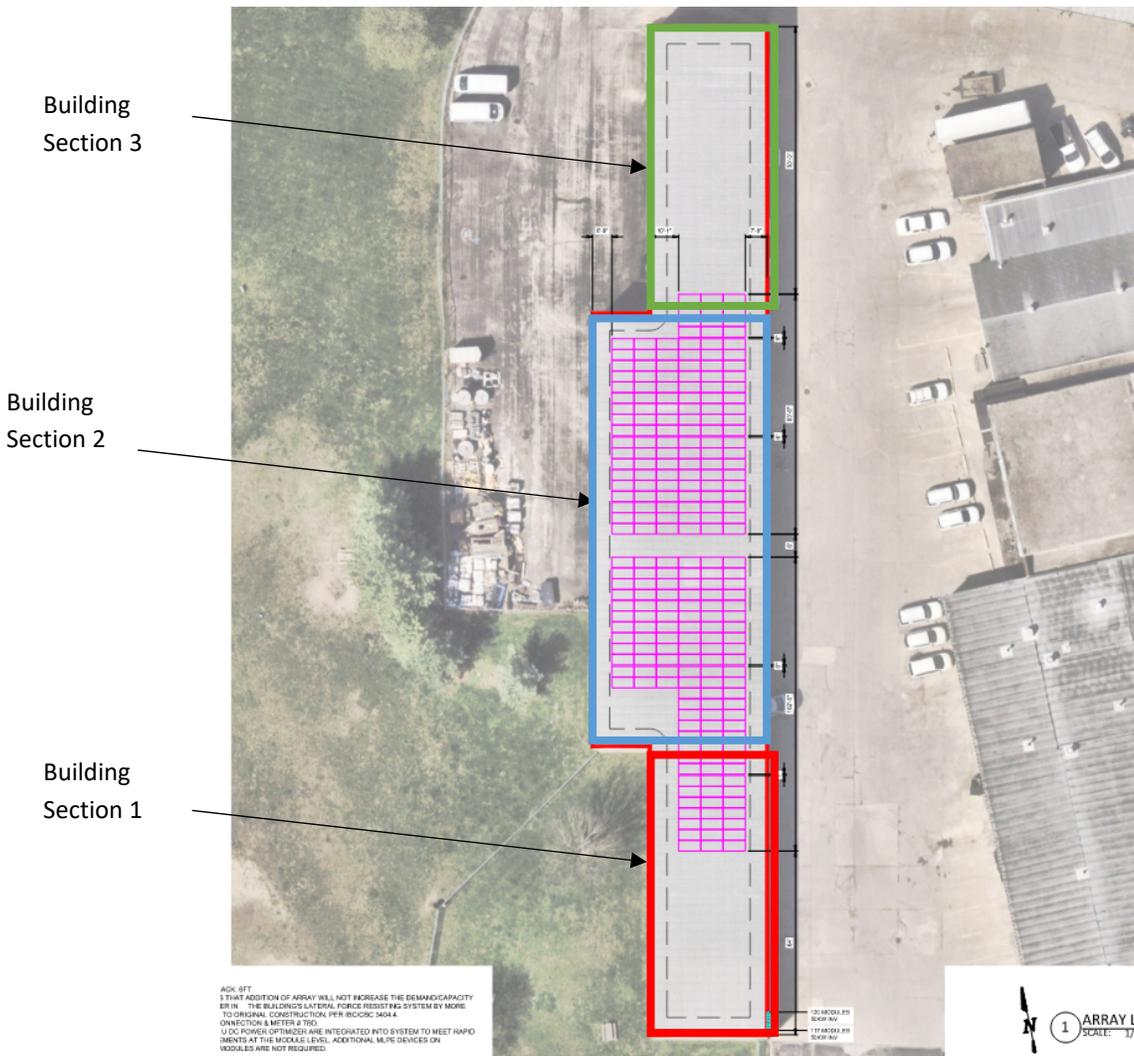
Building Section Description: The roof consists of an exposed fastened metal deck in Building Section 1. The metal deck is supported by light gauge Z purlins. Solar PV panels are to be mounted on the roof by S-5! attachments.

Building Section 1 and 3:

Building Length = 100 ft
 Building Width = 40 ft
 Building Roof Mean Height = 17.83 ft
 Building Roof Slope = 6 degrees

Building Section 2:

Building Length = 150 ft
 Building Width = 60 ft
 Building Roof Mean Height = 18.75 ft
 Building Roof Slope = 6 degrees





Loads



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DEAD LOAD

Existing Dead Loads

Load Applied at Roof Deck
 Trapezoidal Metal Deck

1.1	psf
1.1	psf

Load Applied at Secondary Steel Framing

Load Applied at Roof Deck
 Steel Framing Members
 Mechanical & Lighting

1.1	psf
2	psf
2	psf
5.1	psf

See above breakdown

Proposed Dead Loads

Proposed Solar System

Module Weight
 Rail Weight
 Hardware and Attachments

2.53	psf
0.41	psf
0.1	psf
3.04	psf
4.00	psf

Assumed

LIVE LOAD

Live Loads

Roofs - Ordinary flat, pitched, and curved roofs¹

20	psf
-----------	-----

ASCE Table 4.3-1

Note 1: Per IBC 1607.14.4.1: Roof live loads need not be applied to the area covered by photovoltaic panels where the clear space between the panels and the roof surface is 24 inches or less.

SNOW LOAD

All Building Sections

Snow Loads on Flat Roof

Flat roof snow load, $p_f = 0.7C_eC_tI_s p_g$
 Ground snow load, p_g
 Exposure Factor, C_e
 Thermal Factor, C_t
 Importance Factor, I_s

16.8	psf
20	psf
1	
1.2	
1	

ASCE Equation 7.3-1
ASCE Fig 7-1
ASCE Table 7.3-12
ASCE Table 7.3-2
ASCE Table 1.5-2

Minimum snow load for roofs with slopes less than 15 degrees

$p_m = 20I_s$

20	psf
----	-----

ASCE 7.3.4

Controlling snow load

20.0	psf
-------------	------------



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WIND LOAD - All Building Sections

Components and Cladding Velocity Pressure

Velocity Pressure, $q_z = 0.00256 * K_z * K_{zt} * K_d * K_e * V^2 =$	25.06 psf	ASCE Equation 30.3-1
Mean Roof Height	18.75 ft	Varies
Exposure Category	C	
Design Risk Category	II	
V=	115 mph	ASCE Hazards
Velocity Pressure Coefficient, K_z	0.89	ASCE Sect 26.10-1
Topographic Factor, K_{zt}	1	ASCE Sect 26.8-1
Wind Directionality Factor, K_d	0.85	ASCE Table 26.6-1
Ground Elevation Factor, K_e (Site elevation=529 ft)	0.98	ASCE Table 26.9-1

Components and Cladding for Enclosed and Partially Enclosed Buildings-Monoslope Roofs, 3deg < Roof Angle <= 10 degrees

Existing Wind Load On Roof Purlins¹

For all cases, $GCP_i =$	0.18
Roof Zone 1, $P = q(GC_p + Gc_{pi}) =$	16.0 / -32.1 psf
GCP =	0.2 -1.10
Roof Zone 2, $P = q(GC_p + Gc_{pi}) =$	16.0 / -34.6 psf
GCP =	0.2 -1.20
Roof Zone 2', $P = q(GC_p + Gc_{pi}) =$	16.0 / -42.1 psf
GCP =	0.2 -1.50
Roof Zone 3, $P = q(GC_p + Gc_{pi}) =$	16.0 / -34.6 psf
GCP =	0.2 -1.20
Roof Zone 3', $P = q(GC_p + Gc_{pi}) =$	16.0 / -44.6 psf
GCP =	0.2 -1.60

Note 1: Roof purlins are spaced at 5'-0" on center and MAX span 26'. Effective Wind Area is taken as 225 ft² when determining GC_p .

Note 2: Effective Wind Area is taken as 10 ft² when determining GC_p for calculating load at solar array attachments.

Note 3: 0.5" minimum gaps are required between individual solar modules, GC_{pi} is taken as 0 when calculating loads on solar panels.

Note 4: Work is being done within All Roof Zones.

Note 5: The design wind pressure shall not be less than 16 psf acting in either direction normal to the surface per ASCE 7-16 30.2.2.



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Design Wind Load On Roof Purlins From Solar System¹

For all cases, $\gamma_a =$	1		
For all downward loads and uplift on interior panels, $\gamma_E =$	1		
For uplift on exposed edge panels, $\gamma_E =$	1.5		
Roof Zone 1, $P = q(GC_p + Gc_{pi}) =$	<table border="1"><tr><td>16.0 /</td><td>-27.6</td></tr></table> psf	16.0 /	-27.6
16.0 /	-27.6		
Roof Zone 1, Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-41.4</td></tr></table> psf	16.0 /	-41.4
16.0 /	-41.4		
GCP =	0.2 -1.10		
Wind Load on Solar Array, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-30.1</td></tr></table> psf	16.0 /	-30.1
16.0 /	-30.1		
Roof Zone 2, $P = q(GC_p + Gc_{pi}) =$	<table border="1"><tr><td>16.0 /</td><td>-45.1</td></tr></table> psf	16.0 /	-45.1
16.0 /	-45.1		
GCP =	0.2 -1.20		
Wind Load on Solar Array, $P = q*GC_p =$	<table border="1"><tr><td>23.0 /</td><td>-172.5</td></tr></table> psf	23.0 /	-172.5
23.0 /	-172.5		
Roof Zone 2', $P = q(GC_p + Gc_{pi}) =$	<table border="1"><tr><td>23.0 /</td><td>-258.8</td></tr></table> psf	23.0 /	-258.8
23.0 /	-258.8		
GCP =	0.2 -1.50		
Wind Load on Solar Array, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-30.1</td></tr></table> psf	16.0 /	-30.1
16.0 /	-30.1		
Roof Zone 3, $P = q(GC_p + Gc_{pi}) =$	<table border="1"><tr><td>16.0 /</td><td>-45.1</td></tr></table> psf	16.0 /	-45.1
16.0 /	-45.1		
GCP =	0.2 -1.20		
Wind Load on Solar Array, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-40.1</td></tr></table> psf	16.0 /	-40.1
16.0 /	-40.1		
Roof Zone 3', $P = q(GC_p + Gc_{pi}) =$	<table border="1"><tr><td>16.0 /</td><td>-60.1</td></tr></table> psf	16.0 /	-60.1
16.0 /	-60.1		
GCP =	0.2 -1.60		

Design Wind Load On Solar Attachments From Solar System²

For all cases, $\gamma_a =$	1		
For all downward loads and uplift on interior panels, $\gamma_E =$	1		
For uplift on exposed edge panels, $\gamma_E =$	1.5		
Roof Zone 1, Interior Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-27.6</td></tr></table> psf	16.0 /	-27.6
16.0 /	-27.6		
Roof Zone 1, Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-41.4</td></tr></table> psf	16.0 /	-41.4
16.0 /	-41.4		
GCP =	0.3 -1.1		
Roof Zone 2, Interior Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-32.6</td></tr></table> psf	16.0 /	-32.6
16.0 /	-32.6		
Roof Zone 2, Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-48.9</td></tr></table> psf	16.0 /	-48.9
16.0 /	-48.9		
GCP =	0.3 -1.3		
Roof Zone 2', Interior Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-40.1</td></tr></table> psf	16.0 /	-40.1
16.0 /	-40.1		
Roof Zone 2', Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-60.1</td></tr></table> psf	16.0 /	-60.1
16.0 /	-60.1		
GCP =	0.3 -1.6		
Roof Zone 3, Interior Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-45.1</td></tr></table> psf	16.0 /	-45.1
16.0 /	-45.1		
Roof Zone 3, Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-67.7</td></tr></table> psf	16.0 /	-67.7
16.0 /	-67.7		
GCP =	0.3 -1.8		
Roof Zone 3', Interior Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-65.2</td></tr></table> psf	16.0 /	-65.2
16.0 /	-65.2		
Roof Zone 3', Exposed Edge Panel, $P = q*GC_p =$	<table border="1"><tr><td>16.0 /</td><td>-97.7</td></tr></table> psf	16.0 /	-97.7
16.0 /	-97.7		
GCP =	0.3 -2.6		

Note 1: Roof purlins are spaced at 5'-0" on center and MAX span 26'. Effective Wind Area is taken as 225 ft² when determining GC_p .

Note 2: Effective Wind Area is taken as 10 ft² when determining GC_p for calculating load at solar array attachments.

Note 3: 0.5" minimum gaps are required between individual solar modules, GC_{pi} is taken as 0 when calculating loads on solar panels.

Note 4: Work is being done within All Roof Zones.

Note 5: The design wind pressure shall not be less than 16 psf acting in either direction normal to the surface per ASCE 7-16 30.2.2.



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SEISMIC LOAD

Seismic Design Values

Site Class:	D	
Seismic Design Category:	B	
Short Period Spectral Response, $S_s =$	0.132	
1s Spectral Response, $S_1 =$	0.077	
Building Seismic Importance Factor, $I =$	1	ASCE Table 1.5-2
Site Coefficient, $F_a =$	1.6	ASCE Table 11.4-1
Site Coefficient $F_v =$	2.4	ASCE Table 11.4-2
MCE Short Period Spectral Response, $S_{ms} =$	0.212	ASCE Equation 11.4-1
MCE 1s Spectral Response, $S_{m1} =$	0.184	ASCE Equation 11.4-2
Design Short Period Spectral Response, $S_{ds} =$	0.141	ASCE Equation 11.4-3
Design 1s Spectral Response, $S_{d1} =$	0.122	ASCE Equation 11.4-4
Seismic Design Force:		
$R_p =$	1.5	
$I_p =$	1.00	(Sec. 13.1.3)
$a_p =$	1.0	
$z =$	18.8 ft	(Sec. 13.3.1)
$z/h =$	1.0	

Lateral Seismic Load

Weight of Solar System, $W_p =$	4.0 psf		
$F_p = [(0.4a_p S_{DS} W_p) / (R_p / I_p)] (1 + 2z/h) =$	0.113	*W_p	(Eq.13.3-1) Controls
F_p is not required to be taken as greater than,			
$F_p = 1.6 S_{DS} I_p W_p =$	0.226	* W_p	(Eq.13.3-2)
F_p shall not be taken as less than,			
$F_p = 0.3 S_{DS} I_p W_p =$	0.042	* W_p	(Eq.13.3-3)
Controlling Lateral Seismic Load, $F_p =$	0.5	psf	

Vertical Seismic Load

$E_v = 0.2 S_{DS} W_p =$	0.028	*W_p
Vertical Seismic Load, $E_v =$	0.1	psf



Attachment Check



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LOADS APPLIED @ SOLAR ATTACHMENTS - ALL BUILDING SECTIONS

Proposed Module	Canadian Solar, CS6.2-66TB-H
Module Length	93.80 in
Module Width	44.60 in
Module Orientation	Portrait
Rail Trib Width (2 Rails per Module) =	3.91 ft

Allowable Loads

Attachment Bracket:
 Allowable Uplift Load
 Allowable Shear Load

ProteaBracket Clamps

466.67	lb	ProteaBracket, for 24ga steel
185.67	lb	ProteaBracket, for 24ga steel

Loads Applied Normal To Solar Attachments

Dead Load
 Snow Load
 Wind Load (+) (All Roof Zones)
 Wind Load (-) (Zone 1)
 Wind Load (-) (Zone 1, Array Edge)
 Wind Load (-) (Zone 2)
 Wind Load (-) (Zone 2, Array Edge)
 Wind Load (-) (Zone 2')
 Wind Load (-) (Zone 2', Array Edge)
 Wind Load (-) (Zone 3)
 Wind Load (-) (Zone 3, Array Edge)
 Wind Load (-) (Zone 3')
 Wind Load (-) (Zone 3', Array Edge)
 Vertical Seismic Load

Area Load		Per ft of Rail	
4.00	psf	15.63	plf
20.00	psf	78.17	plf
16.00	psf	62.53	plf
-27.57	psf	-107.75	plf
-41.35	psf	-161.62	plf
-32.58	psf	-127.34	plf
-48.87	psf	-191.00	plf
-40.10	psf	-156.72	plf
-60.15	psf	-235.08	plf
-45.11	psf	-176.31	plf
-67.67	psf	-264.47	plf
-65.16	psf	-254.67	plf
-97.74	psf	-382.01	plf
±0.11	psf	±0.44	plf

Applicable Load Combinations

D
 D+S
 D+0.6W(+)
 D+0.75*0.6W(+)+0.75*S
 D+0.7E(+)
 0.6D+0.6W (Roof Wind Zone 1)
 0.6D+0.6W (Roof Wind Zone 1, Edge Panel)
 0.6D+0.6W (Roof Wind Zone 2)
 0.6D+0.6W (Roof Wind Zone 2, Edge Panel)
 0.6D+0.6W (Roof Wind Zone 2')
 0.6D+0.6W (Roof Wind Zone 2', Edge Panel)
 0.6D+0.6W (Roof Wind Zone 3)
 0.6D+0.6W (Roof Wind Zone 3, Edge Panel)
 0.6D+0.6W (Roof Wind Zone 3')
 0.6D+0.6W (Roof Wind Zone 3', Edge Panel)
 0.6D+0.7E(-)

Area Load		Per ft of Rail	
4.00	psf	15.63	plf
24.00	psf	93.80	plf
13.60	psf	53.15	plf
26.20	psf	102.40	plf
4.08	psf	15.94	plf
-14.14	psf	-55.27	plf
-22.41	psf	-87.59	plf
-17.15	psf	-67.02	plf
-26.92	psf	-105.22	plf
-21.66	psf	-84.65	plf
-33.69	psf	-131.67	plf
-24.67	psf	-96.41	plf
-28.60	psf	-111.78	plf
-29.50	psf	-115.28	plf
-75.19	psf	-293.85	plf
2.33	psf	9.12	plf



Structural Enginuity, Inc.
 1815 W. Diehl Rd, Ste 100
 Naperville, IL 60563
 (630) 219-1997
www.structuralenginuityinc.com

Project Name:	Peoria PD ESC
Project No.:	251170.00
Client Name:	General Energy Corporation
Date:	1/30/2026

Rev'd by: AP
Date: 2/2/26

Loads Applied Laterally To Solar Attachments
 Lateral Seismic Load

Area Load	Per ft of Rail
<input type="text" value="0.45"/> psf	<input type="text" value="1.76"/> plf

Applicable Load Combinations
 0.7E

Area Load	Per ft of Rail
<input type="text" value="0.32"/> psf	<input type="text" value="1.23"/> plf

Note 1: Attachment spacing is limited by the rib spacing of the deck of 12"

Proposed Attachment Spacing

Roof Zone 1	<input type="text" value="2.00"/> ft
Roof Zone 1, Edge Panels	<input type="text" value="2.00"/> ft
Roof Zone 2	<input type="text" value="2.00"/> ft
Roof Zone 2, Edge Panels	<input type="text" value="2.00"/> ft
Roof Zone 2'	<input type="text" value="2.00"/> ft
Roof Zone 2', Edge Panels	<input type="text" value="2.00"/> ft
Roof Zone 3	<input type="text" value="2.00"/> ft
Roof Zone 3, Edge Panels	<input type="text" value="2.00"/> ft
Roof Zone 3'	<input type="text" value="2.00"/> ft
Roof Zone 3', Edge Panels	<input type="text" value="1.00"/> ft

Factored Worst Case Reactions @ Attachments

	Downward	Upward
Roof Zone 1	<input type="text" value="204.80"/> lb	<input type="text" value="-110.54"/> lb
Roof Zone 1, Edge Panels	<input type="text" value="204.80"/> lb	<input type="text" value="-175.18"/> lb
Roof Zone 2	<input type="text" value="204.80"/> lb	<input type="text" value="-134.04"/> lb
Roof Zone 2, Edge Panels	<input type="text" value="204.80"/> lb	<input type="text" value="-210.45"/> lb
Roof Zone 2'	<input type="text" value="204.80"/> lb	<input type="text" value="-169.31"/> lb
Roof Zone 2', Edge Panels	<input type="text" value="204.80"/> lb	<input type="text" value="-263.34"/> lb
Roof Zone 3	<input type="text" value="204.80"/> lb	<input type="text" value="-192.81"/> lb
Roof Zone 3, Edge Panels	<input type="text" value="204.80"/> lb	<input type="text" value="-223.56"/> lb
Roof Zone 3'	<input type="text" value="204.80"/> lb	<input type="text" value="-230.57"/> lb
Roof Zone 3', Edge Panels	<input type="text" value="102.40"/> lb	<input type="text" value="-293.85"/> lb



Decking Check



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Project Name:	Peoria PD ESC
Project No.:	251170.00
Client Name:	General Energy Corporation
Date:	1/30/2026

Rev'd by: AP
Date: 2/2/26

ROOF DECK ANALYSIS - ALL BUILDING SECTIONS

Panel Metal Deck, 24 Gauge, McElroy R-Panel Roof Panel

3 span condition

Max Span Length, l =

5.00	ft
------	----

Deck Panel Width

1.00	ft
------	----

Fy

50	ksi
----	-----

Section properties for negative bending

Sxe

0.0789	in^3
--------	------

Maxo =

1.776	kip-in
-------	--------

Section properties for positive bending

Sxe

0.0570	in^3
--------	------

Maxo =

1.707	kip-in
-------	--------

Check Positive Bending

Applied Roof Loading (Array Loads are applied as a point load at center span)

Effective Width, be =

2.00	ft
------	----

Allowable Bending Moment =

3.41	kip-in
------	--------

Dead Load Applied at Deck, w =

1.1 psf

Worst Case Solar Array Reaction, P =

204.8 lb

Worst Case Moment, Check as Triple Span

$$M = 0.08 * w * l^2 + 0.175 * P * l =$$

2.20 kip-in

OK

Applied Roof Loading (Array Loads are applied as a point load at quarter span)

Effective Width, be =

2.00	ft
------	----

Allowable Bending Moment =

3.41	kip-in
------	--------

Dead Load Applied at Deck, w =

1.1 psf

Worst Case Solar Array Reaction, P =

204.8 lb

Worst Case Moment, Conservatively Check as Simple Span

$$M = (w * l^2 / 8 + P * (l/4) * (3l/4) / l) =$$

2.39 kip-in

OK



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 (630) 219-1997
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Project Name:	Peoria PD ESC
Project No.:	251170.00
Client Name:	General Energy Corporation
Date:	1/30/2026

Rev'd by:	AP
Date:	2/2/26

ROOF DECK ANALYSIS (CONTINUED)

Check Negative Bending

Applied Roof Loading (Array Loads are applied as a point load at center span)

Effective Width, be =	2.00	ft
Allowable Bending Moment =	3.55	kip-in
Dead Load Applied at Deck, w =	1.1	psf
Worst Case Solar Array Reaction, P =	-293.9	lb

Worst Case Moment, Check as Triple Simple Span

$M = 0.08 * 0.6 * w * l^2 + 0.175 * P * l =$	3.05	kip-in	OK
----------------------------------------------	------	--------	-----------

Applied Roof Loading (Array Loads are applied as a point load at quarter span)

Effective Width, be =	2.00	ft
Allowable Bending Moment =	3.55	kip-in
Dead Load Applied at Deck, w =	2.5	plf
Worst Case Solar Array Reaction, P =	-293.9	lb

Worst Case Moment, Conservatively Check as Simple Span

$M = (w * l^2 / 8 + P * (l/4) * (3l/4) / l) =$	3.12	kip-in	OK
------------------------------------------------	------	--------	-----------



Framing Check



Structural Enginuity, Inc.
 1815 W. Diehl Rd, Ste 100
 Naperville, IL 60563
 (630) 219-1997
www.structuralenginuityinc.com

Project Name:	Peoria PD ESC
Project No.:	251170.00
Client Name:	General Energy Corporation
Date:	1/30/2026

Rev'd by: AP
Date: 2/2/26

FRAMING ANALYSIS - PURLIN P1 - 5' SPACING - 26' SPAN

Z - 40ksi, 12ga, 8" height

Solar Panels

4.00 psf

4 span condition

Z spacing, s =

5.00 ft

Z Length, l =

26.00 ft

Allowable moment

90.063 kip-in

Ix= 15.146 in⁴

Applied Roof Loading (Array Loads are applied as a point load at center span)

Dead Load Applied at Z = DL*s 25.5 plf

Snow Load Applied at Deck, SL*s = 100.0 plf

w=DL+SN 125.5 plf

Dead Load Applied at Z = DL*s + Solar Panels * s 45.5 plf

Snow Load Applied at Deck = SL*s = 100.0 plf

w=DL+Solar+SN 145.5 plf

Worst Case Moment, Conservatively Check as 4-Span - Positive Bending - Existing Loads

M = w*I²*0.077 = 78.39 kip-in

OK

Worst Case Moment, Conservatively Check as 4-Span - Negative Bending - Existing Loads

M = w*I²*0.107 = 108.93 kip-in

OK

Worst Case Deflection, Conservatively Check as 4-Span - Existing Loads

1.47 in

L/213

Allowable moment is higher at negative moment areas because the purlins are overlapped where negative moment occurs

Worst Case Moment, Conservatively Check as 4-Span - Positive Bending with Solar Loads

M = w*I²*0.077 = 90.88 kip-in

<1.05 OK per engineering judgement

Worst Case Moment, Conservatively Check as 4-Span - Negative Bending with Solar Loads

M = w*I²*0.107 = 126.29 kip-in

OK

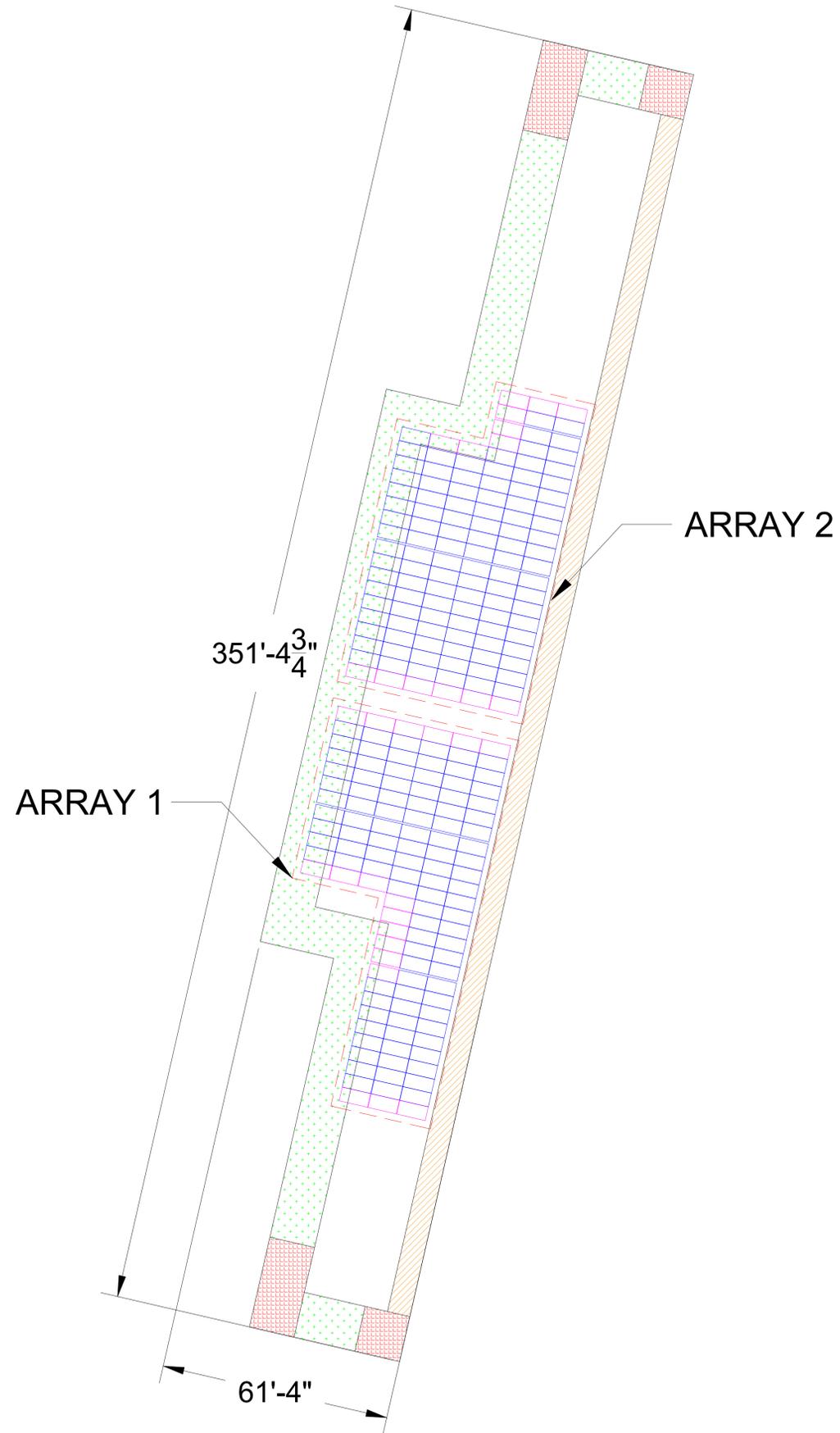
Allowable moment is higher at negative moment areas because the purlins are overlapped where negative moment occurs



Appendix A: References

-  - ZONE 1
-  - ZONE 2
-  - ZONE 2'
-  - ZONE 3,3'

-  - NON- EXPOSED MODULES
-  - EXPOSED MODULES



UNIRAC
 1411 BROADWAY BOULEVARD NE
 ALBUQUERQUE, NEW MEXICO, USA, 87102
 WWW.UNIRAC.COM

ENGINEER'S STAMP

REVISIONS		DATE	DESCRIPTION	DRW	CHK
0		01/20/2026	INITIAL RELEASE	AB	NT
A		01/21/2026	UPDATED ATTACHMENT, SPACING	AB	NT
B		01/24/2026	UPDATED ROOF HEIGHT	NH	NT

FOR
GENERAL ENERGY CORPORATION

PROJECT
 PEORIA PD ESC

1314 N PARK RD
 PEORIA, IL 61604

TITLE
KEY PLAN

SHEET
NXT.200


 NORTH
 NOT TO SCALE



The City of Peoria has adopted the following codes with amendments for the safety and wellbeing of its citizens:

- ✓ 2018 International Building Code (2018 IBC)
- ✓ 2018 International Residential Code (2018 IRC)
- ✓ 2018 International Existing Building Code (2018 IEBC)
- ✓ 2021 Illinois Energy Conservation Code (2021 IECC)
- ✓ 2018 International Mechanical Code (2018 IMC)
- ✓ 2018 International Fuel Gas Code (2018 IFGC)
- ✓ 2018 International Fire Code (2018 IFC)
- ✓ 2018 International Property Maintenance Code (2018 IPMC)
- ✓ 2017 National Electrical Code (2017 NEC)
- ✓ 2018 Illinois Accessibility Code
- ✓ The current State of Illinois Plumbing Code, Part 890 Illinois Administrative Code
- ✓ **Amendments can be found here:**
https://library.municode.com/il/peoria/codes/code_of_ordinances?nodeId=CO_CH5BUBURE_ARTI_IBUCOPRMACO

The local design criteria for the City of Peoria is the following:

- ✓ Ice barrier roofing underlayment is required to be installed in accordance with the current building codes.
- ✓ Frost line minimum (footing) depth: 36 inches
- ✓ **Ground snow load: 20 lbs. per ft²**
- ✓ Wind Speed: 90 mph
- ✓ Wind Speed for Commercial Risk category:
 - #1 is 105 mph
 - #2 is 115 mph**
 - #3 is 120 mph
 - #4 is 120 mph
- ✓ **Seismic Design Category: A**
- ✓ Termite: moderate to heavy
- ✓ Concrete weathering: severe
- ✓ Winter design temperatures: -10°F to 0°F
- ✓ Soil Load-Bearing Pressures: Assumed 1500 lbs. per ft² unless tested

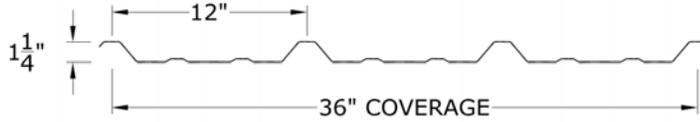


Appendix B: Technical Data



R-Panel

(Bare Galvalume & Painted Galvalume)



SECTION PROPERTIES						TOP IN COMPRESSION			BOTTOM IN COMPRESSION		
GAUGE	F _y (KSI)	WEIGHT (PSF)	V _a kip/ft.	P _{a,end} lbs/ft.	P _{a,int} lbs/ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.	I _x (in. ⁴ /ft.)	S _e (in. ³ /ft.)	M _a kip-in./ft.
24	50.0	1.10	0.8090	218.90	338.30	0.0550	0.0570	1.7070	0.0430	0.0789	1.7760

- Section properties are calculated in accordance with the 2004 AISI North American Specification for the Design of Cold-Formed Steel Structural Members.
- V_a is the allowable shear.
- P_a is the allowable load for web crippling on end & interior supports.
- I_x is for deflection determination.
- S_e is for bending.
- M_a is the allowable bending moment.
- All values are for one foot of panel width.

Allowable Uniform Loads (PSF)

Span Type	Load Type	Span in Feet															
		1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50	8.00	8.50	9.00
Single	Positive Wind	500	284	182	126	92	71	56	45	37	31	26	23	20	17	15	14
	Negative Wind	500	296	189	131	96	74	58	47	39	32	28	24	21	18	16	14
	Live	500	284	182	126	92	71	56	45	37	31	26	23	20	17	15	14
	Deflection (L/180)	500	500	307	178	112	75	52	38	28	22	17	14	11	9	7	6
	Deflection (L/240)	500	450	230	133	84	56	39	28	21	16	13	10	8	7	5	4
2 Span	Positive Wind	449	269	177	125	93	72	57	46	38	32	27	23	20	18	16	14
	Negative Wind	436	260	171	121	90	69	55	44	37	31	26	23	20	17	15	13
	Live	449	269	177	125	93	72	57	46	38	32	27	23	20	18	16	14
	Deflection (L/180)	500	500	500	382	240	161	113	82	62	47	37	30	24	20	16	14
	Deflection (L/240)	500	500	495	286	180	120	84	61	46	35	28	22	18	15	12	10
3 Span	Positive Wind	500	324	216	154	115	89	71	57	47	40	34	29	26	22	20	18
	Negative Wind	500	314	209	149	111	85	68	55	46	38	33	28	25	22	19	17
	Live	500	324	216	154	115	89	71	57	47	40	34	29	26	22	20	18
	Deflection (L/180)	500	500	500	299	188	126	88	64	48	37	29	23	19	15	13	11
	Deflection (L/240)	500	500	387	224	141	94	66	48	36	28	22	17	14	11	9	8
4 Span	Positive Wind	500	306	204	145	108	83	66	54	44	37	32	27	24	21	18	16
	Negative Wind	491	297	197	140	104	80	64	52	43	36	31	26	23	20	18	16
	Live	500	306	204	145	108	83	66	54	44	37	32	27	24	21	18	16
	Deflection (L/180)	500	500	500	317	200	134	94	68	51	39	31	25	20	16	13	11
	Deflection (L/240)	500	500	411	238	150	100	70	51	38	29	23	18	15	12	10	8

Notes:

- Allowable uniform loads are based upon equal span lengths.
- Positive Wind is wind pressure and is **NOT** increased by 33 1/3 %.
- Negative Wind is wind suction or uplift and is **NOT** increased by 33 1/3%.
- Live is the allowable live or snow load.
- Deflection (L/180) is the allowable load that limits the panel's deflection to L/180 while under positive or live load.
- Deflection (L/240) is the allowable load that limits the panel's deflection to L/240 while under positive or live load.
- The weight of the panel has **NOT** been deducted from the allowable loads.
- Positive Wind, Negative Wind, and Live Load values are limited to combined shear & bending using Eq. C3.3.1-1 of the AISI Specification.
- Positive Wind and Live Load values are limited by web crippling using a bearing length of 2".
- Web crippling values are determined using a ratio of the uniform load **actually** supported by the top flanges of the section.
- Load Tables are limited to a maximum allowable load of 500 psf.



Project Summary

Name:	Peoria PD ESC
Address:	1314 N Park Rd
Created By:	mmclaughlin@structuralengenuityinc.com

System Overview

System Size:	0 kW	Module Name:	Canadian Solar,CS6.2-66TB-H
Product:	Protea™ Bracket	Module Quantity:	0
Module Dimensions:	93.8 in x 44.6 in x 1.57 in	Module Weight:	73.6 lbs

Design Criteria

Wind Exposure:	C	Soil Site Class:	D
Wind Speed:	115 mph	ASCE 7 Version:	2016
Ground Snow Load:	20 psf	Risk Category	II
Elevation:	529 ft		

Materials

Part	Description	Quantity
------	-------------	----------



Roof 1 Details

Roof Style	Single Slope	Roof Type	Exposed Fastened
Roof Manufacturer	--	Roof Material	Trapezoidal
Eave Height	16 ft	Rib Spacing	12 in
Mean Roof Height	18.75 ft	Roof Product	Canadian Solar,CS6.2-66TB-H
Inter-row Spacing	1.1 in	Column Spacing	1 in
Array Setback:	60 ft	LHD:	60 ft
Max X Press:	3.21 psf	Max Z Press:	0 psf
Max Y Press Up Exp Z1:	-37.7 psf	Max Y Press Up Z1:	-24.35 psf
Max Y Press Up Exp Z2:	-43.3 psf	Max Y Press Up Z2:	-28.08 psf
Max Y Press Up Exp Z2':	-54.23 psf	Max Y Press Up Z2':	-35.37 psf
Max Y Press Up Exp Z3:	-53.08 psf	Max Y Press Up Z3:	-34.6 psf
Max Y Press Up Exp Z3':	-75.47 psf	Max Y Press Up Z3':	-49.53 psf
Max Y Press Down:	38.09 psf		

Roof 1 Clamp Loads

Parallel Safety Factor X:	3	Parallel Safety Factor Z:	3
Perpendicular Safety Factor:	3	Allowable Clamp Force X:	185.67
Allowable Clamp Force Y Down:	466.67	Allowable Clamp Force Y Up:	466.67
Allowable Clamp Force Z:	185.67		

Roof 1 Array

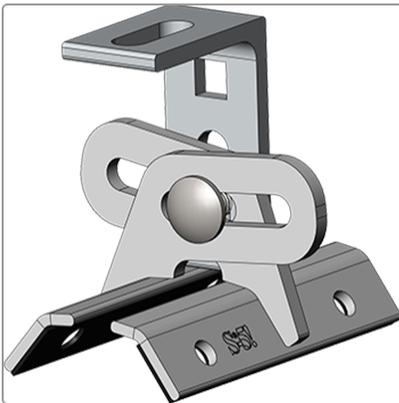
Array Specifications

Height:	--	Array Area	0 ft ²
Bracket:	Protea™ Bracket	Array Weight	0 lbs
Modules:	0	Array Pressure:	--

Array Specifications

Part	Description	Quantity
------	-------------	----------

System Components



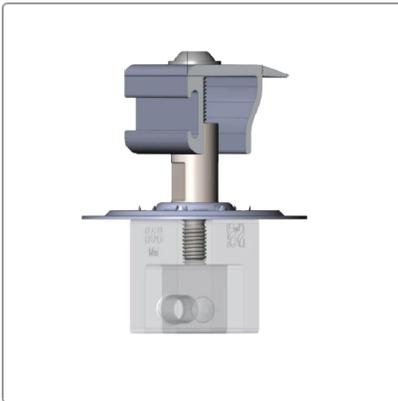
Protea™ Bracket

- Top-fix bracket for corrugated roofing
- Attaches out of the water plane
- The "500" refers to metric dimensioning
- Added height for ease of installation and airflow beneath modules when used with the S-5-PVKIT
- Sheeting-only attachment allows for placement of bracket anywhere along the corrugations
- Pre-applied EPDM seal in base of bracket, protects from UV degradation



PVKIT[®] Mid Grab

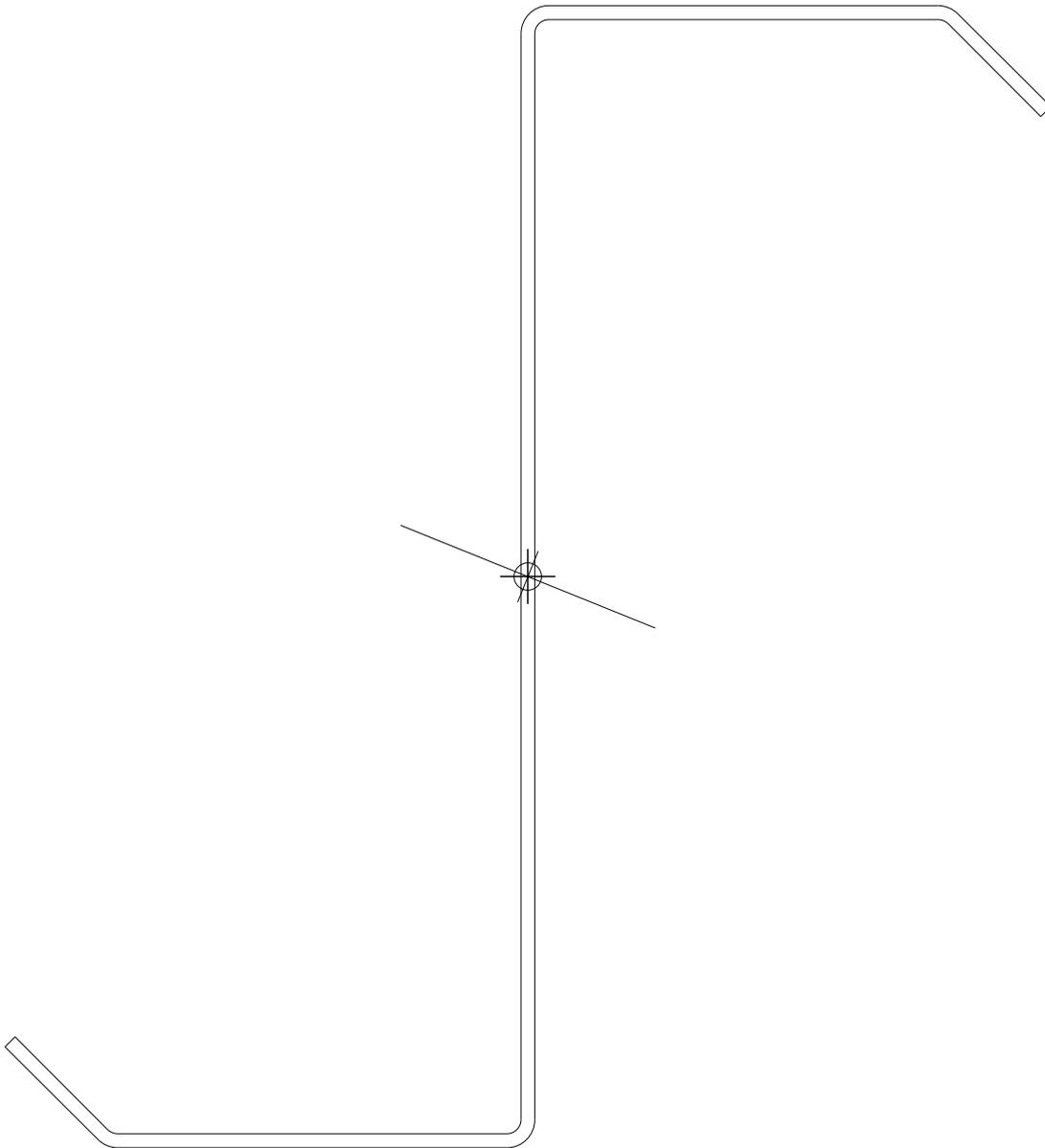
- Most affordable method for mounting solar PV
- Up to 50% savings compared to rail mounting
- Reduced freight, logistics and labor costs
- Faster install time
- Used with brackets or clamps



PVKIT[®] Edge Grab

- Most affordable method for mounting solar PV
- Up to 50% savings compared to rail mounting
- Reduced freight, logistics and labor costs
- Faster install time
- Used with brackets or clamps

Rev. Date: 1/8/2026 7:53:31 AM
By: mmclaughlin
Printed: 1/8/2026 9:09:15 AM



Rev. Date: 1/8/2026 7:53:31 AM
 By: mmclaughlin
 Printed: 1/8/2026 9:09:15 AM

Section Inputs

Material: A653 SS Grade 40
 No cold work of forming strength increase.
 No inelastic reserve strength increase.
 Modulus of Elasticity, E 29500 ksi
 Yield Strength, Fy 40 ksi
 Tensile Strength, Fu 55 ksi
 Min Elongation in 2 inches 16 %
 Torsion Constant Override, J 0 in⁴
 Warping Constant Override, Cw 0 in⁶

Stiffened Zee, Thickness 0.098 in
 Placement of Part from Origin:
 X to center of gravity 0 in
 Y to center of gravity 0 in

Outside dimensions, Open shape

	Length (in)	Angle (deg)	Radius (in)	Web	k Coef.	Hole Size (in)	Distance (in)
1	1.0000	-45.000	0.098000	None	0.000	0.0000	0.5000
2	3.0000	0.000	0.098000	Single	0.000	0.0000	1.5000
3	8.0000	90.000	0.098000	Zee	0.000	0.0000	4.0000
4	3.0000	0.000	0.098000	Single	0.000	0.0000	1.5000
5	1.0000	-45.000	0.098000	None	0.000	0.0000	0.5000

Fully Braced Strength - AISI S100-24, US, ASD

Material Type: A653 SS Grade 40, Fy=40 ksi

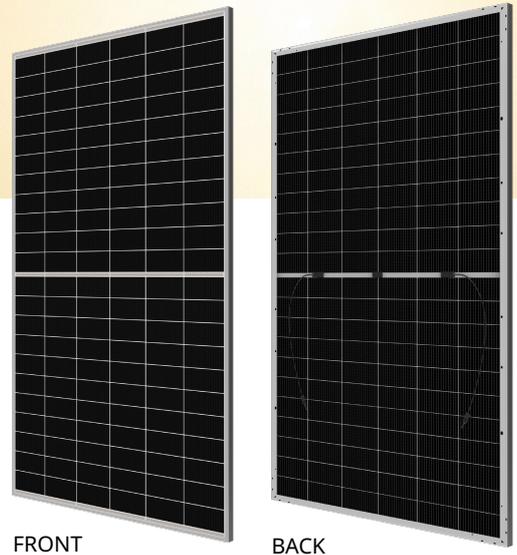
Axial		Positive Bending		Positive Bending	
Pao	26.103 k	Maxo	90.063 k-in	Mayo	24.256 k-in
Ae	1.1747 in ²	Ixe	15.146 in ⁴	Iye	3.705 in ⁴
Ta	36.580 k	Sxe(t)	3.7601 in ³	Sye(l)	1.0127 in ³
		Sxe(b)	3.8130 in ³	Sye(r)	1.0127 in ³
Shear		Negative Bending		Negative Bending	
Vay	8.143 k	Maxo	90.063 k-in	Mayo	24.256 k-in
Vax	7.670 k	Ixe	15.146 in ⁴	Iye	3.705 in ⁴
		Sxe(t)	3.8130 in ³	Sye(l)	1.0127 in ³
Torsion		Sxe(b)	3.7601 in ³	Sye(r)	1.0127 in ³
Ba	76.635 k-in ²				

Rev. Date: 1/8/2026 7:45:10 AM
 By: mmclaughlin
 Printed: 1/8/2026 9:09:15 AM

Fully Braced Strength - AISI S100-24, US, ASD

Material Type: A653 SS Grade 33, Fy=33 ksi

Axial		Positive Bending		Positive Bending	
Pao	22.727 k	Maxo	75.517 k-in	Mayo	20.011 k-in
Ae	1.2397 in ²	Ixe	15.286 in ⁴	Iye	3.705 in ⁴
Ta	30.179 k	Sxe(t)	3.8216 in ³	Sye(l)	1.0127 in ³
		Sxe(b)	3.8216 in ³	Sye(r)	1.0127 in ³
Shear		Negative Bending		Negative Bending	
Vay	7.178 k	Maxo	75.517 k-in	Mayo	20.011 k-in
Vax	6.327 k	Ixe	15.286 in ⁴	Iye	3.705 in ⁴
		Sxe(t)	3.8216 in ³	Sye(l)	1.0127 in ³
Torsion		Sxe(b)	3.8216 in ³	Sye(r)	1.0127 in ³
Ba	63.224 k-in ²				



FRONT

BACK

TOPBiHiKu6

N-type Bifacial TOPCon Technology

600 W ~ 630 W

CS6.2-66TB-600 | 605 | 610 | 615 | 620 | 625 | 630H

MORE POWER



Module power up to 630 W
Module efficiency up to 23.3 %



Up to 85% Power Bifaciality,
more power from the back side



Excellent anti-LeTID & anti-PID performance.
Low power degradation, high energy yield



Lower temperature coefficient (Pmax): -0.29%/°C,
increases energy yield in hot climate



Lower LCOE & system cost

MORE RELIABLE



Tested up to ice ball of 35 mm diameter
according to IEC 61215 standard



Minimizes micro-crack impacts



Heavy snow load up to 5400 Pa,
wind load up to 4000 Pa*

TRACEABLE SUPPLY CHAIN



Independently audited by ST5

* For detailed information, please refer to the Installation Manual.



Enhanced Product Warranty on Materials
and Workmanship*



Linear Power Performance Warranty*

1st year power degradation no more than 1%
Subsequent annual power degradation no more than 0.4%

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system
ISO 14001: 2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health & safety
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730
UL 61730 / IEC 61701 / IEC 62716
Take-e-way

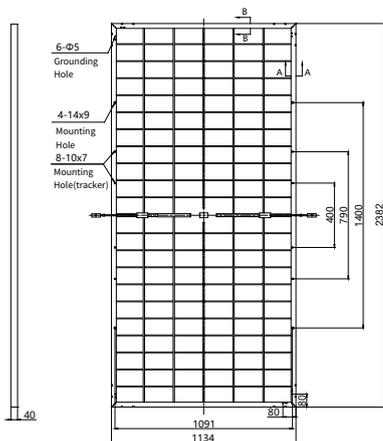


* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

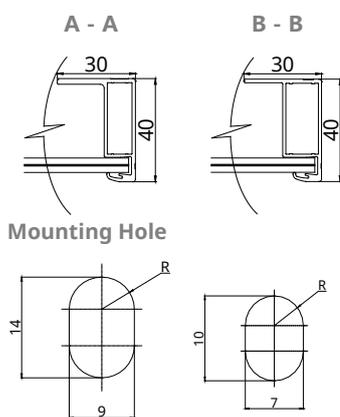
Canadian Solar (USA) Inc. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 23 years, it has successfully delivered over 133 GW of premium-quality solar modules across the world.

ENGINEERING DRAWING (mm)

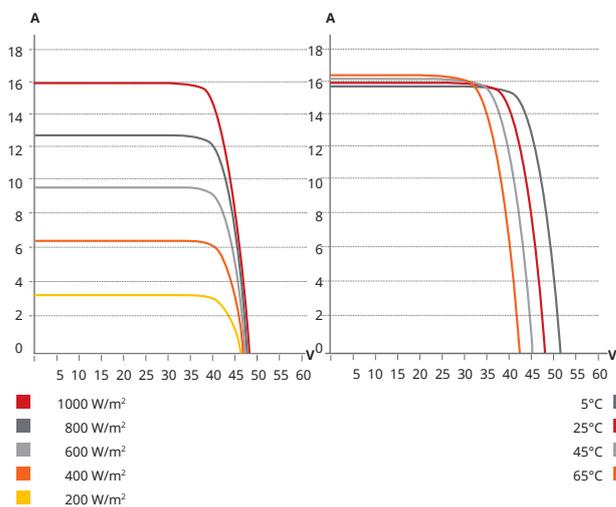
Rear View



Frame Cross Section



CS6.2-66TB-610H / I-V CURVES



ELECTRICAL DATA | STC*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Module Efficiency	
CS6.2-66TB-600H	600 W	40.4 V	14.86 A	47.6 V	15.85 A	22.2%	
	5% Bifacial Gain**	630 W	40.4 V	15.60 A	47.6 V	16.64 A	23.3%
	10% Bifacial Gain**	660 W	40.4 V	16.35 A	47.6 V	17.44 A	24.4%
	20% Bifacial Gain**	720 W	40.4 V	17.83 A	47.6 V	19.02 A	26.7%
CS6.2-66TB-605H	605 W	40.6 V	14.91 A	47.8 V	15.91 A	22.4%	
	5% Bifacial Gain**	635 W	40.6 V	15.66 A	47.8 V	16.71 A	23.5%
	10% Bifacial Gain**	666 W	40.6 V	16.40 A	47.8 V	17.50 A	24.7%
	20% Bifacial Gain**	726 W	40.6 V	17.89 A	47.8 V	19.09 A	26.9%
CS6.2-66TB-610H	610 W	40.8 V	14.96 A	48.0 V	15.97 A	22.6%	
	5% Bifacial Gain**	641 W	40.8 V	15.71 A	48.0 V	16.77 A	23.7%
	10% Bifacial Gain**	671 W	40.8 V	16.46 A	48.0 V	17.57 A	24.8%
	20% Bifacial Gain**	732 W	40.8 V	17.95 A	48.0 V	19.16 A	27.1%
CS6.2-66TB-615H	615 W	41.0 V	15.01 A	48.2 V	16.02 A	22.8%	
	5% Bifacial Gain**	646 W	41.0 V	15.76 A	48.2 V	16.82 A	23.9%
	10% Bifacial Gain**	677 W	41.0 V	16.51 A	48.2 V	17.62 A	25.1%
	20% Bifacial Gain**	738 W	41.0 V	18.01 A	48.2 V	19.22 A	27.3%
CS6.2-66TB-620H	620 W	41.2 V	15.06 A	48.4 V	16.08 A	23.0%	
	5% Bifacial Gain**	651 W	41.2 V	15.81 A	48.4 V	16.88 A	24.1%
	10% Bifacial Gain**	682 W	41.2 V	16.57 A	48.4 V	17.69 A	25.2%
	20% Bifacial Gain**	744 W	41.2 V	18.07 A	48.4 V	19.30 A	27.5%
CS6.2-66TB-625H	625 W	41.4 V	15.11 A	48.6 V	16.14 A	23.1%	
	5% Bifacial Gain**	656 W	41.4 V	15.87 A	48.6 V	16.95 A	24.3%
	10% Bifacial Gain**	688 W	41.4 V	16.62 A	48.6 V	17.75 A	25.5%
	20% Bifacial Gain**	750 W	41.4 V	18.13 A	48.6 V	19.37 A	27.8%
CS6.2-66TB-630H	630 W	41.6 V	15.16 A	48.8 V	16.20 A	23.3%	
	5% Bifacial Gain**	662 W	41.6 V	15.92 A	48.8 V	17.01 A	24.5%
	10% Bifacial Gain**	693 W	41.6 V	16.68 A	48.8 V	17.82 A	25.7%
	20% Bifacial Gain**	756 W	41.6 V	18.19 A	48.8 V	19.44 A	28.0%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

** Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL)
Module Fire Performance	TYPE 29 (UL 61730) or CLASS C (IEC61730)
Max. Series Fuse Rating	35 A
Protection Class	Class II
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	80 %

* Power Bifaciality = $P_{max_{rear}} / P_{max_{front}}$, both $P_{max_{rear}}$ and $P_{max_{front}}$ are tested under STC, Bifaciality Tolerance: ± 5 %

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice.

Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

Canadian Solar (USA) Inc.

1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com

ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS6.2-66TB-600H	454 W	38.2 V	11.88 A	45.1 V	12.77 A
CS6.2-66TB-605H	458 W	38.4 V	11.92 A	45.3 V	12.82 A
CS6.2-66TB-610H	461 W	38.6 V	11.96 A	45.4 V	12.87 A
CS6.2-66TB-615H	465 W	38.8 V	12.00 A	45.6 V	12.91 A
CS6.2-66TB-620H	469 W	38.9 V	12.04 A	45.8 V	12.96 A
CS6.2-66TB-625H	473 W	39.1 V	12.08 A	46.0 V	13.00 A
CS6.2-66TB-630H	477 W	39.3 V	12.12 A	46.2 V	13.05 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2382 × 1134 × 40 mm (93.8 × 44.6 × 1.57 in)
Weight	33.4 kg (73.6 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	T6 or MC4-EVO2 or MC4-EVO2A
Per Pallet	27 pieces
Per Container (40' HQ)	540 pieces or 486 pieces (only for US & Canada)

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION





Jan 30, 2026

Attn: Mr. Jesie Palicpic
General Energy Corporation
400 E State Pkwy, Suite 121,
Schaumburg, IL 60173

RE: Peoria PD GLC
Roof Structural Analysis
7815 N Radnor Rd
Peoria, IL 61615

SEI Project No.: 251170.00

Dear Mr. Palicpic,

Structural Enginuity Inc. (SEI) has analyzed the existing building at the address noted above using the 2018 International Building Code (ASCE 7-16). Based on information from construction drawings provided, the existing roof framing is understood to consist of 3N 20 gauge metal deck supported by wide flange beams spanning to wide flange girders over steel column.

The existing roof has been analyzed to support the new solar PV system. The proposed solar array is designed by Panel Claw and has a maximum average load of 6.13psf which can be seen in the appendix of SEI's attached calculations. The layout of the array on the roof can also be seen in the drawings by Panel Claw. SEI has reviewed Panel Claw's assumptions to ensure the design meets the building site criteria including wind speed and exposure category. The building construction can support a new solar PV array with proposed loads as shown in the Panel Claw drawings. These proposed loads and the analysis of the existing members can be seen in SEI's attached calculations. Therefore, it is SEI's professional opinion that the existing roof framing is structurally adequate to support the proposed solar array system.

The building structure is assumed to have been properly maintained and in good condition with no structural defects and no deterioration of its member capacities. All connections are assumed to be sound. On-site observations were made, but no testing was conducted to confirm this assumption. It shall remain the responsibility of the building owner to ensure that the structure is and remains in good condition. SEI makes no warranties, expressed or implied in connection with this letter and disclaims any liability arising from original design, material, fabrication, and erection deficiencies or the condition of the building structure. Client and building owner should be fully advised that any additional equipment placed on the roof (HVAC, telecommunications, solar, signage, etc..) utilizes existing residual structural capacity that would otherwise be available to withstand a greater-than-code-prescribed snow event. The uniform load budgets provided within this report assume a code-prescribed snow or rain event and code-prescribed member capacities.



Please contact our office, at your convenience, should you have any further questions relating to this matter.

Sincerely,

Michael McLaughlin, E.I.T
Engineer I
mmclaughlin@structuralenginuityinc.com
Structural Enginuity Inc.

Allan T. Myket, S.E.
President/Founder
amyket@structuralenginuityinc.com



01/30/2026
Exp: 11/30/2026
SEI COA Number:184.006994



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Appendix A: References

Appendix B: Technical Data



Project Information



Structural Enginuity, Inc.
1815 W. Diehl Rd, Ste 100
Naperville, IL 60563
(630) 219-1997
www.structuralenginuityinc.com

Project Name: Peoria PD GLC
Project No.: 251170.00
Client Name: General Energy Corporation
Date: 1/30/2026

Rev'd by: AP
Date: 1/30/26

Project Name: Peoria PD GLC
Roof Solar Array Installations
7815 N Radnor Rd
Peoria, IL 61615

SEI Project Number: 251170.00

Project Client: General Energy Corporation
400 E State Pkwy, Suite 121
Schaumburg, IL 60173

Client Contact: Jesie Palicpic
jesiep@generalenergycorp.com

Design References: 2018 International Building Code
ASCE 7-16
AISC Steel Construction Manual, 15th Edition

Scope of Work:

Provide structural engineering services required in the preparation of construction contract documents for the installation of solar panels at the address listed above. The racking system and proposed array layout, provided by client, will be used in conformance with the 2018 International Building Code to determine if the existing structure has the capacity to support the addition of the arrays.

Existing Structure:

The existing Building is approximately 125' x 35'. Array to be installed on roof area consisting steel columns and steel beams supporting steel decking. The height of the roof is approximately 30'-2".



Structural Engenuity, Inc.
1815 W. Diehl Rd, Ste 100
Naperville, IL 60563
(630) 219-1997
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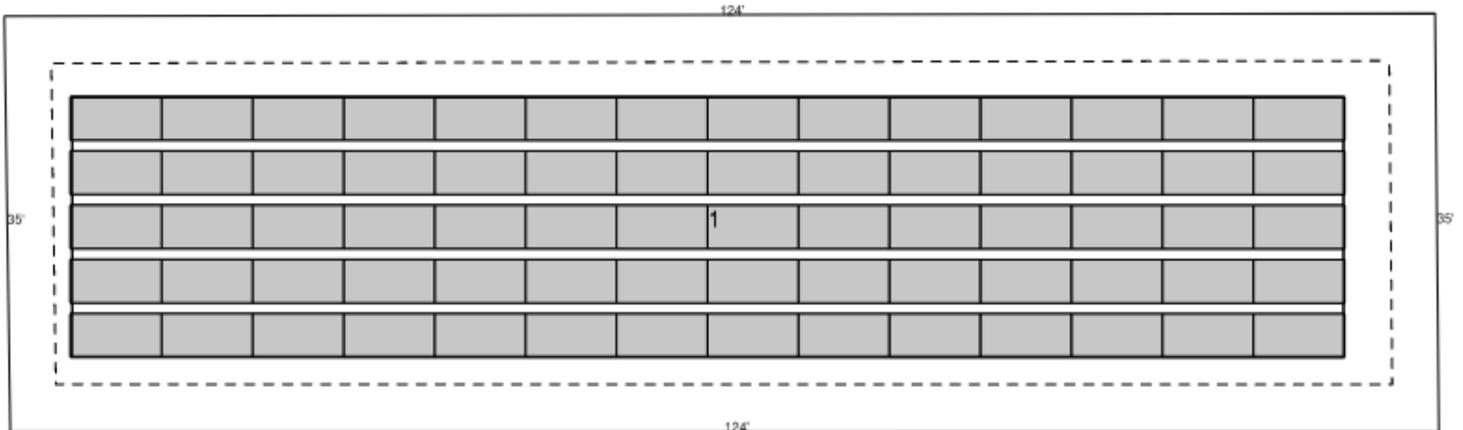
Project Name: Peoria PD GLC
Project No.: 251170.00
Client Name: General Energy Corporation
Date: 1/30/2026

Rev'd by: AP
Date: 1/30/26

Building Information

Building Description: The roof consists of a metal deck supported by steel beams. Solar PV panels are to be mounted on a ballasted racking system.

Building Length = 124.17 ft
Building Width = 34.67 ft
Building Roof Mean Height = 30.17 ft
Building Roof Slope = 2 degrees



ARRAY SITE MAP
SCALE: NTS



NOTES:

1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.



Loads



Structural Enginuity, Inc.
 1815 W. Diehl Rd, Ste 100
 Naperville, IL 60563
 (630) 219-1997
www.structuralenginuityinc.com

Project Name: Peoria PD GLC
 Project No.: 251170.00
 Client Name: General Energy Corporation
 Date: 1/30/2026

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DEAD LOAD

Existing Dead Loads @ Roof

Load Applied at Roof Deck

EPDM Membrane	1.5	psf
2" Rigid Insulation	3	psf
3/4" Cover Board - Fiberboard	1.5	psf
3" N20 Metal Deck	3	psf
	9	psf

Load Applied at Secondary Steel Framing

Load Applied at Roof Deck	9	psf
Steel Framing Members	self weight	psf
Ceiling & Mechanical & Lighting	5	psf
	14	psf

See above breakdown

Proposed Dead Loads

Proposed Solar System	6.13	psf
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See PC Drawings - Sht. PC-8

LIVE LOAD

Live Loads All Building Sections

Roofs - Ordinary flat, pitched, and curved roofs ¹	20	psf
---------------------------------------------------------------	-----------	-----

ASCE Table 4-1

Note 1: Per IBC 2021 1607.14.4.15: Roof live loads need not be applied to the area covered by photovoltaic panels where the clear space between the panels and the roof surface is 24 inches or less.

SNOW LOAD

All Building Sections

Snow Loads on Flat Roof

Flat roof snow load, $p_f = 0.7C_e C_t I_s p_g$	16.8	psf	<i>ASCE Equation 7.3-1</i>
Ground snow load, p_g	20	psf	<i>ASCE Fig 7-1</i>
Exposure Factor, C_e	1		<i>ASCE Table 7.3-12</i>
Thermal Factor, C_t	1.2		<i>ASCE Table 7.3-2</i>
Importance Factor, I_s	1		<i>ASCE Table 1.5-2</i>

Minimum snow load for roofs with slopes less than 15 degrees

$p_m = 20I_s$	20	psf
Controlling snow load	20.0	psf

ASCE 7.3.4



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 Date: 1/30/2026

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WIND LOAD

All Building Sections

Components and Cladding Velocity Pressure @ Roof

Velocity Pressure, $q_z = 0.00256 * K_z * K_{zt} * K_d * V^2 =$	28.3	psf	<i>ASCE Equation 30.3-1</i>
Mean Roof Height	30.17	ft	
Exposure Category	C		
Design Risk Category	II		
V=	115	mph	<i>ASCE Fig 26.5-1B</i>
Velocity Pressure Coefficient, C_z	0.98		<i>ASCE Sect 30.3.1</i>
Topographic Factor, K_{zt}	1		<i>ASCE Sect 26.8.2</i>
Wind Directionality Factor, K_d	0.85		<i>ASCE Table 26.6-1</i>

Note 1: Wind Load applied to Solar PV Modules is based on wind tunnel testing per ASCE Section 31.6. See Ballast Design Calculations for wind loading on solar modules.

SEISMIC LOAD

All Building Sections

Seismic Design Values

Site Class:	D	
Seismic Design Category:	B	
Short Period Spectral Response, $S_s =$	0.132	
1s Spectral Response, $S_1 =$	0.077	
Building Seismic Importance Factor, $I =$	1.00	<i>ASCE Table 1.5-2</i>
Site Coefficient, $F_a =$	1.6	<i>ASCE Table 11.4-1</i>
Site Coefficient $F_v =$	2.4	<i>ASCE Table 11.4-2</i>
MCE Short Period Spectral Response, $S_{ms} =$	0.212	<i>ASCE Equation 11.4-1</i>
MCE 1s Spectral Response, $S_{m1} =$	0.184	<i>ASCE Equation 11.4-2</i>
Design Short Period Spectral Response, $S_{ds} =$	0.141	<i>ASCE Equation 11.4-3</i>
Design 1s Spectral Response, $S_{d1} =$	0.123	<i>ASCE Equation 11.4-4</i>

Note 1: Wind Load controls for ballasted solar system. For more sliding information see ballast design calculations.



Deck and Framing Analysis



Structural Enginuity, Inc.
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DECK ANALYSIS

3" N20 Metal Deck

8' max spacing

Allowable loading	90	psf	per Vulcraft Steel Deck Manual
Applied Roof loading			
Dead Load Applied at Deck	9	psf	
Solar Array Load	6.13	psf	
Snow Load	20.0	psf	
	35.13	psf	< 90 psf OK

FRAMING ANALYSIS

Framing Member: Beam 4

Determine Allowable Uniform Loading

Member Properties:

Beam Designation:	W12x16	
Span Length, L =	23.00 ft	-governing span
Tributary Width, trib =	8.00 ft	

Determine Applied Uniform Loading

Uniform Distributed Total Roof Load

Dead Load Applied at Framing	14.0 psf	* trib =	112.0 plf
Beam Self Weight			Included in Model
Solar Array Load	6.1 psf	* trib =	49.0 plf
Snow Load	20.0 psf	* trib =	160.0 plf

Uniform Distributed Live Roof Load

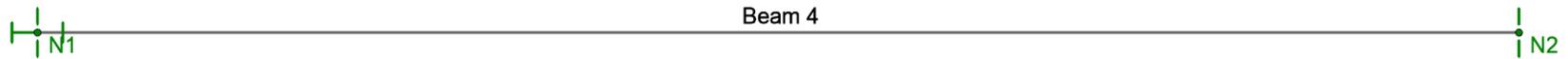
Snow Load	20.0 psf	* trib =	160.0 plf
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W12x16 Beam is adequate. See following pages for RISA 3D results



REFER TO PDF PG. 46 FOR
MEMBER DESIGNATION

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Peoria PD GLC Roof Solar Addition

Nodes and Member Labels

SK-2

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Peoria PD GLC - Roof Solar Addition.r3d



Member Material Sets
■ A992

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W12X16



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Peoria PD GLC Roof Solar Addition

Member Shapes

SK-3

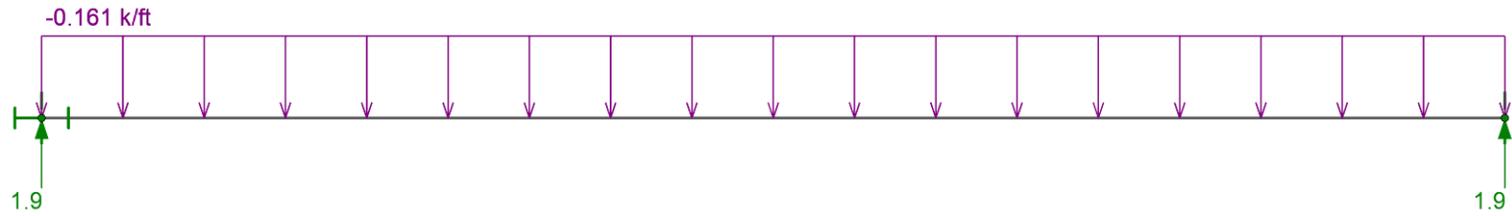
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INCLUDES SOLAR LOAD

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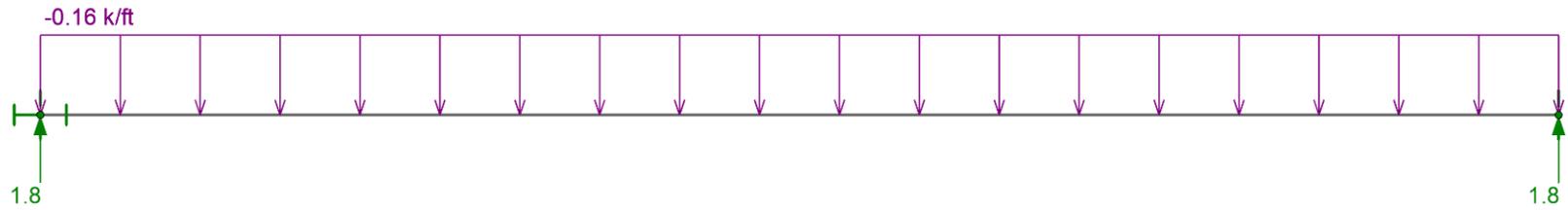


Loads: LC 1, DL (Including Solar)
Results for LC 1, DL (Including Solar)
Y-direction Reaction Units are kips and kip-ft

 IRISA A NEMETSCHKE COMPANY	SEI	Peoria PD GLC Roof Solar Addition	SK-1
	MM		Jan 30, 2026 at 01:52 PM
	251170.00	Dead Load and Reactions	Peoria PD GLC - Roof Solar Addition.r3d



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Date: 1/30/26



Loads: LC 2, LL
Results for LC 2, LL
Y-direction Reaction Units are kips and kip-ft



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Peoria PD GLC Roof Solar Addition

Live Load and Reactions

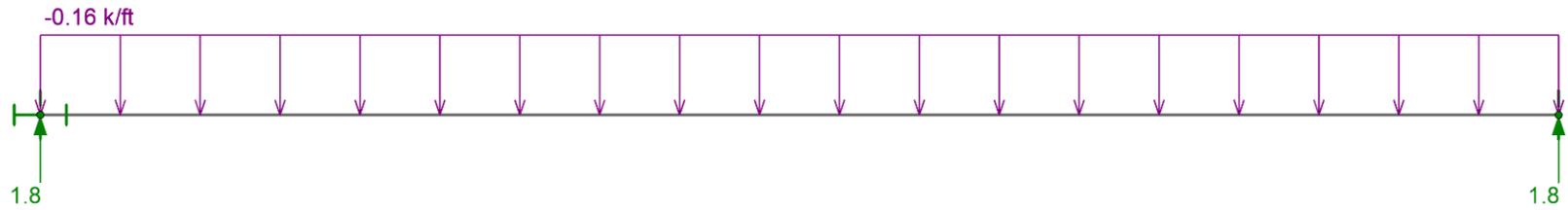
SK-5

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Peoria PD GLC - Roof Solar Addition.r3d



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Loads: LC 3, SL
Results for LC 3, SL
Y-direction Reaction Units are kips and kip-ft



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Peoria PD GLC Roof Solar Addition

Snow Load and Reactions

SK-6

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Peoria PD GLC - Roof Solar Addition.r3d



Code Check (Env)	
■	No Calc
■	> 1.0
■	.90-1.0
■	.75-.90
■	.50-.75
■	0-.50

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Member Code Checks Displayed (Enveloped)



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Peoria PD GLC Roof Solar Addition

Unity Check

SK-7

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Peoria PD GLC - Roof Solar Addition.r3d



Shear Check (Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0-.50

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Member Shear Checks Displayed (Enveloped)



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Peoria PD GLC Roof Solar Addition

Shear Check

SK-8

Jan 08, 2026 at 03:39 PM

Peoria PD GLC - Roof Solar Addition.r3d



L/y Ratio (LC 2)	
■	No Calc
■	< 120
■	120 - 240
■	240 - 360
■	360 - 480
■	480 - 640
■	> 640

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655

L/y Deflection Ratio
Results for LC 2, LL

	SEI	Peoria PD GLC Roof Solar Addition	SK-9
	MM		Jan 08, 2026 at 03:42 PM
	251170.00		Peoria PD GLC - Roof Solar Addition.r3d

Deflection Ratio



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Project Name: Peoria PD GLC
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 Client Name: General Energy Corporation
 Date: 1/30/2026

Rev'd by: AP
 Date: 1/30/26

FRAMING ANALYSIS

Framing Member: Girder 1

Member Properties:

Member Type: Wide Flange Steel Beam
 Member Size: W18x35
 MAX Unbraced Length, Lb = 8.00 ft

Material Properties:

Material: A992 Steel
 Modulus of Elasticity, E = 29,000 ksi
 Yield Stress, Fy = 50 ksi

Determine Applied Loading

Total Uniform Roof Load = DL + SL + Solar = 42.1 psf
 Beam Framing Selfweight 2.0 psf
 Girder Self Weight Included in Model

End Reactions @ Beam 1 per associated Tributary Width: $R_{MAX} = \frac{wl}{2}$

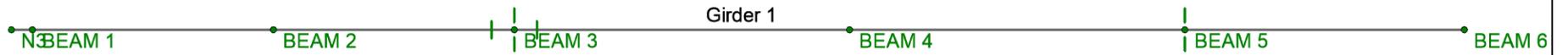
	Tributary Width		Associated Distributed Load		MAX End Reaction
Beam 1	2.88 ft	=>	121.12 plf	=>	1.39 k
Beam 2	5.75 ft	=>	242.25 plf	=>	2.79 k
Beam 3	6.88 ft	=>	289.64 plf	=>	3.33 k
Beam 4	8.00 ft	=>	337.04 plf	=>	3.88 k
Beam 5	7.34 ft	=>	309.02 plf	=>	3.55 k
Beam 6	3.34 ft	=>	140.50 plf	=>	1.62 k

W18x35 Girder is adequate. See following pages for RISA 3D results



REFER TO PDF PG. 46 FOR
MEMBER DESIGNATION

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Peoria PD GLC Roof Solar Addition

Nodes and Member Labels

SK-11

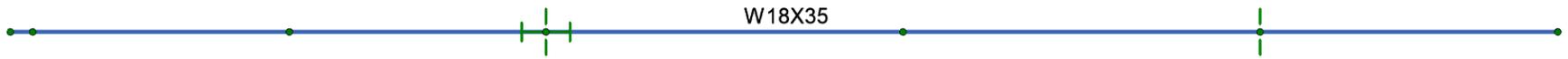
Jan 08, 2026 at 03:44 PM

Peoria PD GLC - Roof Solar Addition.r3d



Member Material Sets
■ A992

Rev'd by: AP
Date: 1/30/26



W18X35



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

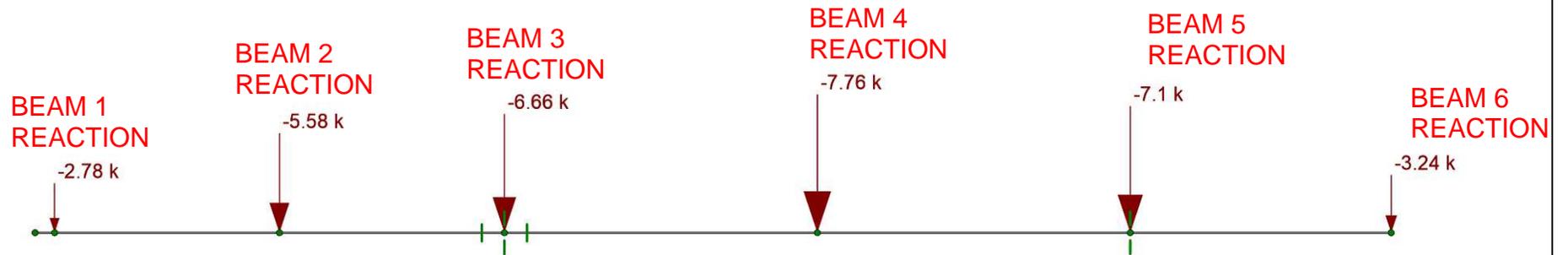
Member Shapes

SK-12
Jan 08, 2026 at 03:44 PM
Peoria PD GLC - Roof Solar Addition.r3d



NOTE: ALL REACTIONS DOUBLED
DUE TO (2) BEAMS BEING
SUPPORTED @ EACH NODE

Rev'd by: AP
Date: 1/30/26



Loads: LC 5, Beam Reactions



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Loads from Beams

SK-5

Jan 30, 2026 at 01:58 PM

Peoria PD GLC - Roof Solar Addition.r3d



Code Check
(Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0-.50

Rev'd by: AP
Date: 1/30/26



Member Code Checks Displayed (Enveloped)



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Unity Check

SK-6

Jan 30, 2026 at 02:00 PM

Peoria PD GLC - Roof Solar Addition.r3d



Shear Check (Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0-.50

Rev'd by: AP
Date: 1/30/26



Member Shear Checks Displayed (Enveloped)



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Shear Check

SK-7

Jan 30, 2026 at 02:00 PM

Peoria PD GLC - Roof Solar Addition.r3d



L/y Ratio
(LC 5)

- No Calc
- < 120
- 120 - 240
- 240 - 360
- 360 - 480
- 480 - 640
- > 640

Rev'd by: AP
Date: 1/30/26



L/y Deflection Ratio
Results for LC 5, Beam Reactions



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Deflection Ratio

SK-8

Jan 30, 2026 at 02:02 PM

Peoria PD GLC - Roof Solar Addition.r3d



Structural Enginuity, Inc.
 1815 W. Diehl Rd, Ste 100
 Naperville, IL 60563
 (630) 219-1997
www.structuralenginuityinc.com

Project Name: Peoria PD GLC
 Project No.: 251170.00
 Client Name: General Energy Corporation
 Date: 1/30/2026

Rev'd by: AP
 Date: 1/30/26

FRAMING ANALYSIS

Framing Member: Girder 2

Member Properties:

Member Type: Wide Flange Steel Beam
 Member Size: W36x135
 MAX Unbraced Length, Lb = 8.00 ft

Material Properties:

Material: A992 Steel
 Modulus of Elasticity, E = 29,000 ksi
 Yield Stress, Fy = 50 ksi

Determine Applied Loading

Total Uniform Roof Load = DL + SL + Solar = 42.1 psf
 Girder Self Weight Included in Model

End Reactions @ Beam 1 per associated Tributary Width: $R_{MAX} = \frac{wl}{2}$

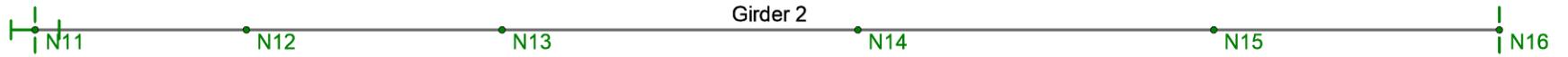
	Tributary Width		Associated Distributed Load		MAX End Reaction
Beam 1	2.88 ft	=>	121.12 plf	=>	1.39 k
Beam 2	5.75 ft	=>	242.25 plf	=>	2.79 k
Beam 3	6.88 ft	=>	289.64 plf	=>	3.33 k
Beam 4	8.00 ft	=>	337.04 plf	=>	3.88 k
Beam 5	7.34 ft	=>	309.02 plf	=>	3.55 k
Beam 6	3.34 ft	=>	140.50 plf	=>	1.62 k

W36x135 Girder is adequate. See following pages for RISA 3D results



REFER TO PDF PG. 46 FOR
MEMBER DESIGNATION

Rev'd by: AP
Date: 1/30/26



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Nodes and Member Labels

SK-17

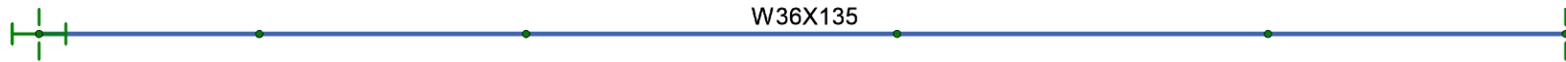
Jan 08, 2026 at 03:48 PM

Peoria PD GLC - Roof Solar Addition.r3d



Member Material Sets
■ A992

Rev'd by: AP
Date: 1/30/26



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Member Shapes

SK-10

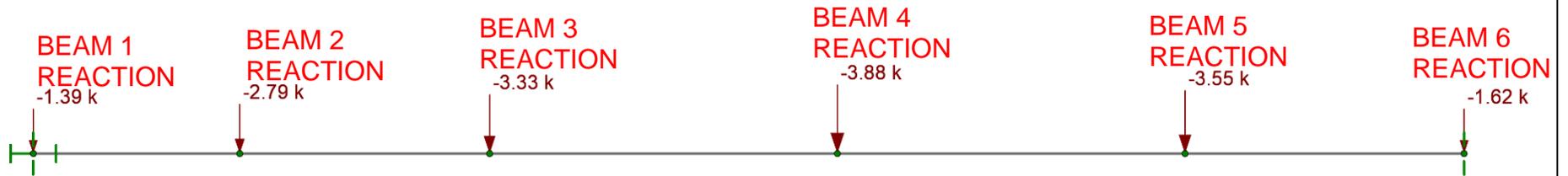
Jan 30, 2026 at 02:04 PM

Peoria PD GLC - Roof Solar Addition.r3d



NOTE: GIRDER @ EDGE OF BUILDING - REACTIONS DUE TO (1) BEAM BEING SUPPORTED @ EACH NODE

Rev'd by: AP
Date: 1/30/26



Loads: LC 5, Beam Reactions



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Loads from Beams

SK-11

Jan 30, 2026 at 02:06 PM

Peoria PD GLC - Roof Solar Addition.r3d



Code Check (Env)	
Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50

Rev'd by: AP
Date: 1/30/26



Member Code Checks Displayed (Enveloped)



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Unity Check

SK-12

Jan 30, 2026 at 02:08 PM

Peoria PD GLC - Roof Solar Addition.r3d



Shear Check
(Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0-.50

Rev'd by: AP
Date: 1/30/26



Member Shear Checks Displayed (Enveloped)



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Shear Check

SK-13

Jan 30, 2026 at 02:09 PM

Peoria PD GLC - Roof Solar Addition.r3d



L/y Ratio (Env)	
■	No Calc
■	< 120
■	120 - 240
■	240 - 360
■	360 - 480
■	480 - 640
■	> 640

Rev'd by: AP
Date: 1/30/26



L/y Deflection Ratio (Enveloped)



SEI
MM
251170.00

Peoria PD GLC Roof Solar Addition

Deflection Ratio

SK-14

Jan 30, 2026 at 02:12 PM

Peoria PD GLC - Roof Solar Addition.r3d

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	0	0	0	
2	N2	23	0	0	
3	N3	0	15	0	
4	BEAM 1	0.5	15	0	
5	BEAM 2	6.25	15	0	
6	BEAM 3	12	15	0	
7	BEAM 4	20	15	0	
8	BEAM 5	28	15	0	
9	BEAM 6	34.67	15	0	
10	N11	1.5	30	0	
11	N12	6.25	30	0	
12	N13	12	30	0	
13	N14	20	30	0	
14	N15	28	30	0	
15	N16	34.42	30	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N16		Reaction	Reaction	
2	N15			Reaction	
3	N13			Reaction	
4	BEAM 1			Reaction	
5	BEAM 3	Reaction	Reaction	Reaction	Reaction
6	BEAM 2			Reaction	
7	BEAM 4			Reaction	
8	N1	Reaction	Reaction	Reaction	Reaction
9	N2		Reaction	Reaction	
10	BEAM 5		Reaction	Reaction	
11	BEAM 6			Reaction	
12	N11	Reaction	Reaction	Reaction	Reaction
13	N12			Reaction	
14	N14			Reaction	

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [$1e^{-5}F^{-1}$]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
5	A500 Gr.C	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	Beam 4	W12X16	Beam	Wide Flange	A992	Typical	4.71	2.82	103	0.103
2	Girder 1	W18X35	Beam	Wide Flange	A992	Typical	10.3	15.3	510	0.506
3	Girder 2	W36X135	Beam	Wide Flange	A992	Typical	39.9	225	7800	7

Member Primary Data

	Label	I Node	J Node	Section/Shape	Type	Design List	Material	Design Rule
1	Beam 4	N1	N2	Beam 4	Beam	Wide Flange	A992	Typical
2	Girder 1	N3	BEAM 6	Girder 1	Beam	Wide Flange	A992	Typical
3	Girder 2	N11	N16	Girder 2	Beam	Wide Flange	A992	Typical

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lcomp top [ft]	Lcomp bot [ft]	Channel Conn.	a [ft]	Function
1	Beam 4	Beam 4	23	1		N/A	N/A	Lateral
2	Girder 1	Girder 1	34.67	8	16	N/A	N/A	Lateral
3	Girder 2	Girder 2	32.92	8	32.92	N/A	N/A	Lateral

Node Loads and Enforced Displacements (BLC 5 : Beam Reactions)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s ² /ft, k*s ² *ft)]
1	BEAM 1	L	Y	-1.39
2	BEAM 2	L	Y	-2.79
3	BEAM 3	L	Y	-3.33
4	BEAM 4	L	Y	-3.88
5	BEAM 5	L	Y	-3.55
6	BEAM 6	L	Y	-1.62
7	BEAM 1	L	Y	-1.39
8	BEAM 2	L	Y	-2.79
9	BEAM 3	L	Y	-3.33
10	BEAM 4	L	Y	-3.88
11	BEAM 5	L	Y	-3.55
12	BEAM 6	L	Y	-1.62
13	N11	L	Y	-1.39
14	N12	L	Y	-2.79
15	N13	L	Y	-3.33
16	N14	L	Y	-3.88
17	N15	L	Y	-3.55
18	N16	L	Y	-1.62

Member Distributed Loads (BLC 1 : DL)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	Beam 4	Y	-0.112	-0.112	0	%100

Member Distributed Loads (BLC 2 : LL)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	Beam 4	Y	-0.16	-0.16	0	%100

Member Distributed Loads (BLC 3 : SL)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	Beam 4	Y	-0.16	-0.16	0	%100



Member Distributed Loads (BLC 4 : DL (Solar))

Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	Beam 4	Y	-0.049	-0.049	0 %100

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor
1	DL (Including Solar)	Yes	Y	DL	1		
2	LL	Yes	Y	LL	1		
3	SL	Yes	Y	SL	1		
4	DL+SL	Yes	Y	DL	1	SL	1
5	Beam Reactions	Yes	Y	OL1	1		

Node Reactions

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N16	0	0	0	0	0	0
2	1	N15	0	0	0	0	0	0
3	1	N13	0	0	0	0	0	0
4	1	BEAM 1	0	0	0	0	0	0
5	1	BEAM 3	0	0	0	0	0	0
6	1	BEAM 2	0	0	0	0	0	0
7	1	BEAM 4	0	0	0	0	0	0
8	1	N1	0	1.851	0	0	0	0
9	1	N2	0	1.851	0	0	0	0
10	1	BEAM 5	0	0	0	0	0	0
11	1	BEAM 6	0	0	0	0	0	0
12	1	N11	0	0	0	0	0	0
13	1	N12	0	0	0	0	0	0
14	1	N14	0	0	0	0	0	0
15	1	Totals:	0	3.703	0			
16	1	COG (ft):	X: 11.5	Y: 0	Z: 0			
17	2	N16	0	0	0	0	0	0
18	2	N15	0	0	0	0	0	0
19	2	N13	0	0	0	0	0	0
20	2	BEAM 1	0	0	0	0	0	0
21	2	BEAM 3	0	0	0	0	0	0
22	2	BEAM 2	0	0	0	0	0	0
23	2	BEAM 4	0	0	0	0	0	0
24	2	N1	0	1.84	0	0	0	0
25	2	N2	0	1.84	0	0	0	0
26	2	BEAM 5	0	0	0	0	0	0
27	2	BEAM 6	0	0	0	0	0	0
28	2	N11	0	0	0	0	0	0
29	2	N12	0	0	0	0	0	0
30	2	N14	0	0	0	0	0	0
31	2	Totals:	0	3.68	0			
32	2	COG (ft):	X: 11.5	Y: 0	Z: 0			
33	3	N16	0	0	0	0	0	0
34	3	N15	0	0	0	0	0	0
35	3	N13	0	0	0	0	0	0
36	3	BEAM 1	0	0	0	0	0	0
37	3	BEAM 3	0	0	0	0	0	0
38	3	BEAM 2	0	0	0	0	0	0
39	3	BEAM 4	0	0	0	0	0	0
40	3	N1	0	1.84	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
41	3	N2	0	1.84	0	0	0	0
42	3	BEAM 5	0	0	0	0	0	0
43	3	BEAM 6	0	0	0	0	0	0
44	3	N11	0	0	0	0	0	0
45	3	N12	0	0	0	0	0	0
46	3	N14	0	0	0	0	0	0
47	3	Totals:	0	3.68	0			
48	3	COG (ft):	X: 11.5	Y: 0	Z: 0			
49	4	N16	0	0	0	0	0	0
50	4	N15	0	0	0	0	0	0
51	4	N13	0	0	0	0	0	0
52	4	BEAM 1	0	0	0	0	0	0
53	4	BEAM 3	0	0	0	0	0	0
54	4	BEAM 2	0	0	0	0	0	0
55	4	BEAM 4	0	0	0	0	0	0
56	4	N1	0	3.691	0	0	0	0
57	4	N2	0	3.691	0	0	0	0
58	4	BEAM 5	0	0	0	0	0	0
59	4	BEAM 6	0	0	0	0	0	0
60	4	N11	0	0	0	0	0	0
61	4	N12	0	0	0	0	0	0
62	4	N14	0	0	0	0	0	0
63	4	Totals:	0	7.383	0			
64	4	COG (ft):	X: 11.5	Y: 0	Z: 0			
65	5	N16	0	8.123	0	0	0	0
66	5	N15	0	0	0	0	0	0
67	5	N13	0	0	0	0	0	0
68	5	BEAM 1	0	0	0	0	0	0
69	5	BEAM 3	0	21.553	0	0	0	0
70	5	BEAM 2	0	0	0	0	0	0
71	5	BEAM 4	0	0	0	0	0	0
72	5	N1	0	0	0	0	0	0
73	5	N2	0	0	0	0	0	0
74	5	BEAM 5	0	11.567	0	0	0	0
75	5	BEAM 6	0	0	0	0	0	0
76	5	N11	0	8.437	0	0	0	0
77	5	N12	0	0	0	0	0	0
78	5	N14	0	0	0	0	0	0
79	5	Totals:	0	49.68	0			
80	5	COG (ft):	X: 17.608	Y: 20	Z: 0			

Beam Deflection Checks

	Beam	Design Rule	Span	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC
1	Beam 4	Typical	1	-0.424	650	1(DL)	-0.422	654	2(LL)	-0.422	654	3(SL)
2	Girder 1	Typical	1	0	NC	1(DL)	0	NC	2(LL)	0	NC	3(SL)
3			2	0	NC	1(DL)	0	NC	2(LL)	0	NC	3(SL)
4			3	0	NC	1(DL)	0	NC	2(LL)	0	NC	3(SL)
5	Girder 2	Typical	1	0	NC	1(DL)	0	NC	2(LL)	0	NC	3(SL)

AISC 16TH (360-22): ASD Member Steel Code Checks

	LC	Member	Shape	UC Max	Loc[ft]	Shear UC	Loc[ft]	Dir	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
1	1	Beam 4	W12X16	0.212	11.5	0.035	23	y	5.564	141.018	5.639	50.15	1	H1-1b
2	1	Girder 1	W18X35	0	34.67	0	34.67	y	13.286	308.383	20.11	136.039	1	H1-1b*

AISC 16TH (360-22): ASD Member Steel Code Checks (Continued)

	LC	Member	Shape	UC Max	Loc[ft]	Shear	UC	Loc[ft]	Dir	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
3	1	Girder 2	W36X135	0	32.92	0	32.92		y	216.711	1194.611	148.952	1269.96	1	H1-1b*
4	2	Beam 4	W12X16	0.211	11.5	0.035	23		y	5.564	141.018	5.639	50.15	1	H1-1b
5	2	Girder 1	W18X35	0	34.67	0	34.67		y	13.286	308.383	20.11	136.039	1	H1-1b*
6	2	Girder 2	W36X135	0	32.92	0	32.92		y	216.711	1194.611	148.952	1269.96	1	H1-1b*
7	3	Beam 4	W12X16	0.211	11.5	0.035	23		y	5.564	141.018	5.639	50.15	1	H1-1b
8	3	Girder 1	W18X35	0	34.67	0	34.67		y	13.286	308.383	20.11	136.039	1	H1-1b*
9	3	Girder 2	W36X135	0	32.92	0	32.92		y	216.711	1194.611	148.952	1269.96	1	H1-1b*
10	4	Beam 4	W12X16	0.423	11.5	0.07	23		y	5.564	141.018	5.639	50.15	1	H1-1b
11	4	Girder 1	W18X35	0	34.67	0	34.67		y	13.286	308.383	20.11	136.039	1	H1-1b*
12	4	Girder 2	W36X135	0	32.92	0	32.92		y	216.711	1194.611	148.952	1269.96	1	H1-1b*
13	5	Beam 4	W12X16	0	23	0	23		y	5.564	141.018	5.639	50.15	1	H1-1b*
14	5	Girder 1	W18X35	0.968	11.918	0.079	11.918		y	13.286	308.383	20.11	65.481	1	H1-1b
15	5	Girder 2	W36X135	0.051	18.518	0.018	4.458		y	216.711	1194.611	148.952	1269.96	1	H1-1b

Envelope AISC 16TH (360-22): ASD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear	Check	Loc[ft]	Dir	LC	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
1	Beam 4	W12X16	0.423	11.5	4	0.07	23		y	4	5.564	141.018	5.639	50.15	1	H1-1b
2	Girder 1	W18X35	0.968	11.918	5	0.079	11.918		y	5	13.286	308.383	20.11	65.481	1	H1-1b
3	Girder 2	W36X135	0.051	18.518	5	0.018	4.458		y	5	216.711	1194.611	148.952	1269.96	1	H1-1b



Appendix A: References



The City of Peoria has adopted the following codes with amendments for the safety and wellbeing of its citizens:

- ✓ 2018 International Building Code (2018 IBC)
- ✓ 2018 International Residential Code (2018 IRC)
- ✓ 2018 International Existing Building Code (2018 IEBC)
- ✓ 2021 Illinois Energy Conservation Code (2021 IECC)
- ✓ 2018 International Mechanical Code (2018 IMC)
- ✓ 2018 International Fuel Gas Code (2018 IFGC)
- ✓ 2018 International Fire Code (2018 IFC)
- ✓ 2018 International Property Maintenance Code (2018 IPMC)
- ✓ 2017 National Electrical Code (2017 NEC)
- ✓ 2018 Illinois Accessibility Code
- ✓ The current State of Illinois Plumbing Code, Part 890 Illinois Administrative Code
- ✓ **Amendments can be found here:**
https://library.municode.com/il/peoria/codes/code_of_ordinances?nodeId=CO_CH5BUBURE_ARTI_IBUCOPRMACO

The local design criteria for the City of Peoria is the following:

- ✓ Ice barrier roofing underlayment is required to be installed in accordance with the current building codes.
- ✓ Frost line minimum (footing) depth: 36 inches
- ✓ **Ground snow load: 20 lbs. per ft²**
- ✓ Wind Speed: 90 mph
- ✓ Wind Speed for Commercial Risk category:
 - #1 is 105 mph
 - #2 is 115 mph**
 - #3 is 120 mph
 - #4 is 120 mph
- ✓ **Seismic Design Category: A**
- ✓ Termite: moderate to heavy
- ✓ Concrete weathering: severe
- ✓ Winter design temperatures: -10°F to 0°F
- ✓ Soil Load-Bearing Pressures: Assumed 1500 lbs. per ft² unless tested

Site Design Criteria - Flat Roof PV System Basis of Design	
Roof Live Load (psf)	20(see footnote 1)
Ground Snow Pg (psf)	20
Flat Roof Snow (psf)	20
Snow Importance Factor (Is)	1.0
Wind Design Data	
Basic Wind Speed (mph)	115
Risk Category	II
Wind Exposure	C
Earthquake Design Data	
Risk Category	II
Importance Factor (Ie)	1.00
Component Importance Factor (Ip)	1.0
Mapped Acceleration Parameter (Ss)	0.130
Mapped Acceleration Parameter (S1)	0.076
Seismic Site Class	D
Design Spectral Acceleration Parameter (Sds)	0.139
Design Spectral Acceleration Parameter (Sd1)	0.122
Seismic Design Category (SDC)	B
Basic seismic-force-resisting system(s)	N/A (see footnote 2)
Base Design Shear = Fp x 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)	IBC 2018
-	ASCE 7 - 16
ALTERNATE DESIGN METHOD	
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.	

GENERAL NOTES:

- 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.
- 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.
- 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.
- REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION.
- 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.
- 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.
- 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.
- BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.
- 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.
- 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.

SHEET INDEX	
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	BALLAST LAYOUT - 1
PC-9	MECHANICAL ATTACHMENT DETAIL

STAMP:



panelclaw[®]

RACKING CONSTRUCTION SET

1600 OSGOOD ST. SUITE 2023
NORTH ANDOVER, MA 01845
TEL: 978.688.4900
www.panelclaw.com

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REV	DESCRIPTION	DATE	CHECK	PREP
0	Initial Layout	2026-01-20		CY

SCALE:
0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
General Energy Corp

PROJECT:
Peoria PD GLC

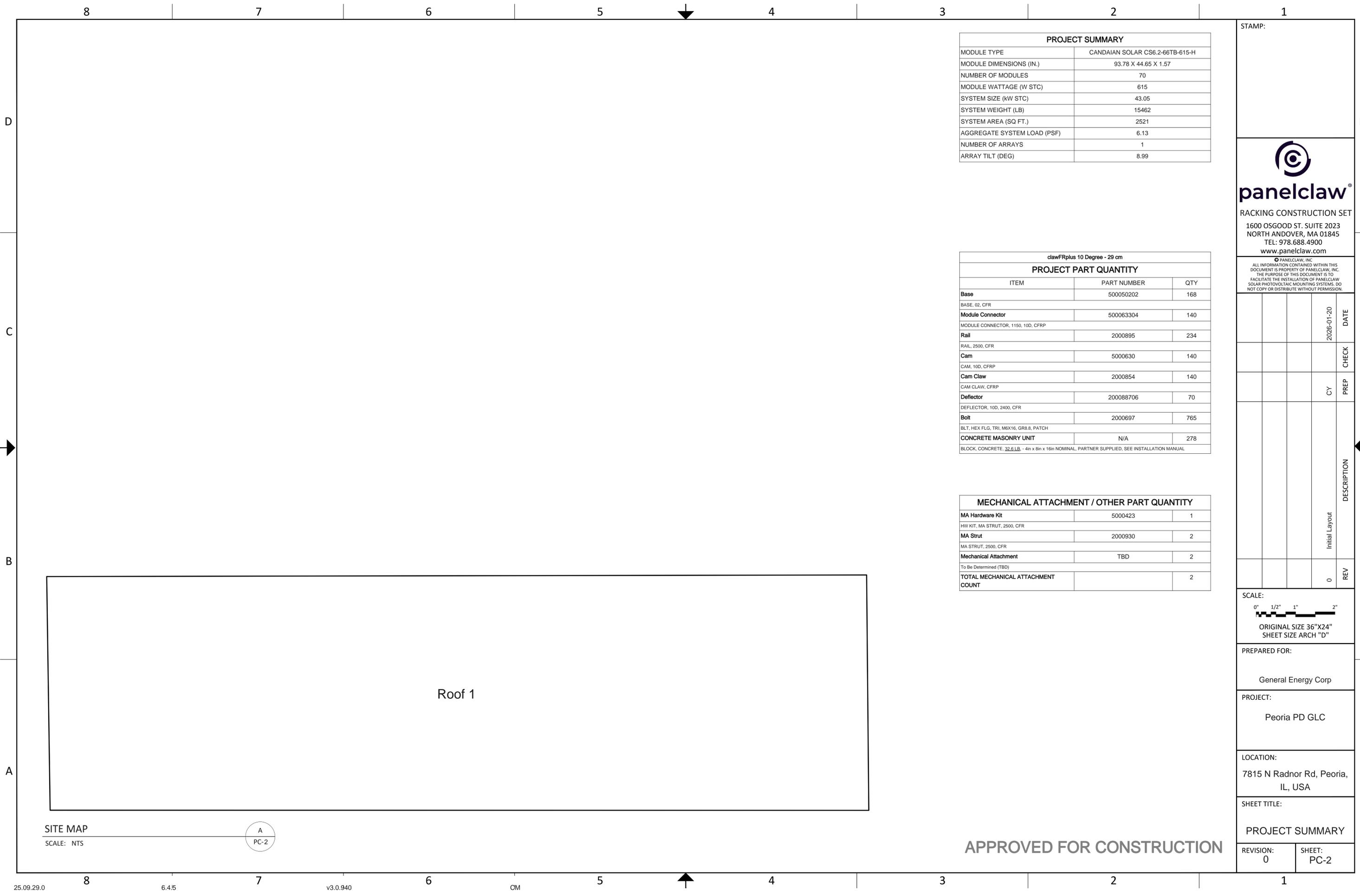
LOCATION:
7815 N Radnor Rd, Peoria, IL, USA

SHEET TITLE:
COVER SHEET

REVISION: 0 SHEET: PC-1

THIS CONSTRUCTION SET PROVIDES THE RACKING LAYOUT FOR ALL ARRAYS WITH NUMBER OF BALLAST BLOCKS AND/OR MECHANICAL ATTACHMENTS BASED ON THE APPROVED STRUCTURAL CALCULATIONS FOR THE COMPLETED INSTALLED CONDITION OF THE SOLAR ARRAY. THE INSTALLER IS RESPONSIBLE FOR THE SAFETY AND CARE OF THE ARRAY DURING ALL PHASES OF INSTALLATION. THEREFORE, THE INSTALLER MUST MONITOR THE WEATHER FORECAST AND TAKE NECESSARY PRECAUTIONS (SEE GENERAL NOTE #10) TO TEMPORARILY SHORE/BRACE ALL ARRAYS DURING CONSTRUCTION UNTIL INSTALLATION IS COMPLETED IN CONFORMANCE WITH THIS APPROVED CONSTRUCTION SET AND THE PRODUCT INSTALLATION MANUAL (SEE GENERAL NOTE #2). THE INSTALLER HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE SOLAR ARRAY FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.

APPROVED FOR CONSTRUCTION



SITE MAP
SCALE: NTS

PROJECT SUMMARY	
MODULE TYPE	CANDAIAN SOLAR CS6.2-66TB-615-H
MODULE DIMENSIONS (IN.)	93.78 X 44.65 X 1.57
NUMBER OF MODULES	70
MODULE WATTAGE (W STC)	615
SYSTEM SIZE (kW STC)	43.05
SYSTEM WEIGHT (LB)	15462
SYSTEM AREA (SQ FT.)	2521
AGGREGATE SYSTEM LOAD (PSF)	6.13
NUMBER OF ARRAYS	1
ARRAY TILT (DEG)	8.99

clawFRplus 10 Degree - 29 cm		
PROJECT PART QUANTITY		
ITEM	PART NUMBER	QTY
Base	500050202	168
BASE, 02, CFR		
Module Connector	500063304	140
MODULE CONNECTOR, 1150, 10D, CFRP		
Rail	2000895	234
RAIL, 2500, CFR		
Cam	5000630	140
CAM, 10D, CFRP		
Cam Claw	2000854	140
CAM CLAW, CFRP		
Deflector	200088706	70
DEFLECTOR, 10D, 2400, CFR		
Bolt	2000697	765
BLT, HEX FLG, TRI, M6X16, GR8.8, PATCH		
CONCRETE MASONRY UNIT	N/A	278
BLOCK, CONCRETE, 32.6 LB - 4in x 8in x 16in NOMINAL, PARTNER SUPPLIED, SEE INSTALLATION MANUAL		

MECHANICAL ATTACHMENT / OTHER PART QUANTITY		
MA Hardware Kit	5000423	1
HW KIT, MA STRUT, 2500, CFR		
MA Strut	2000930	2
MA STRUT, 2500, CFR		
Mechanical Attachment	TBD	2
To Be Determined (TBD)		
TOTAL MECHANICAL ATTACHMENT COUNT		2

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			Initial Layout
		0	REV

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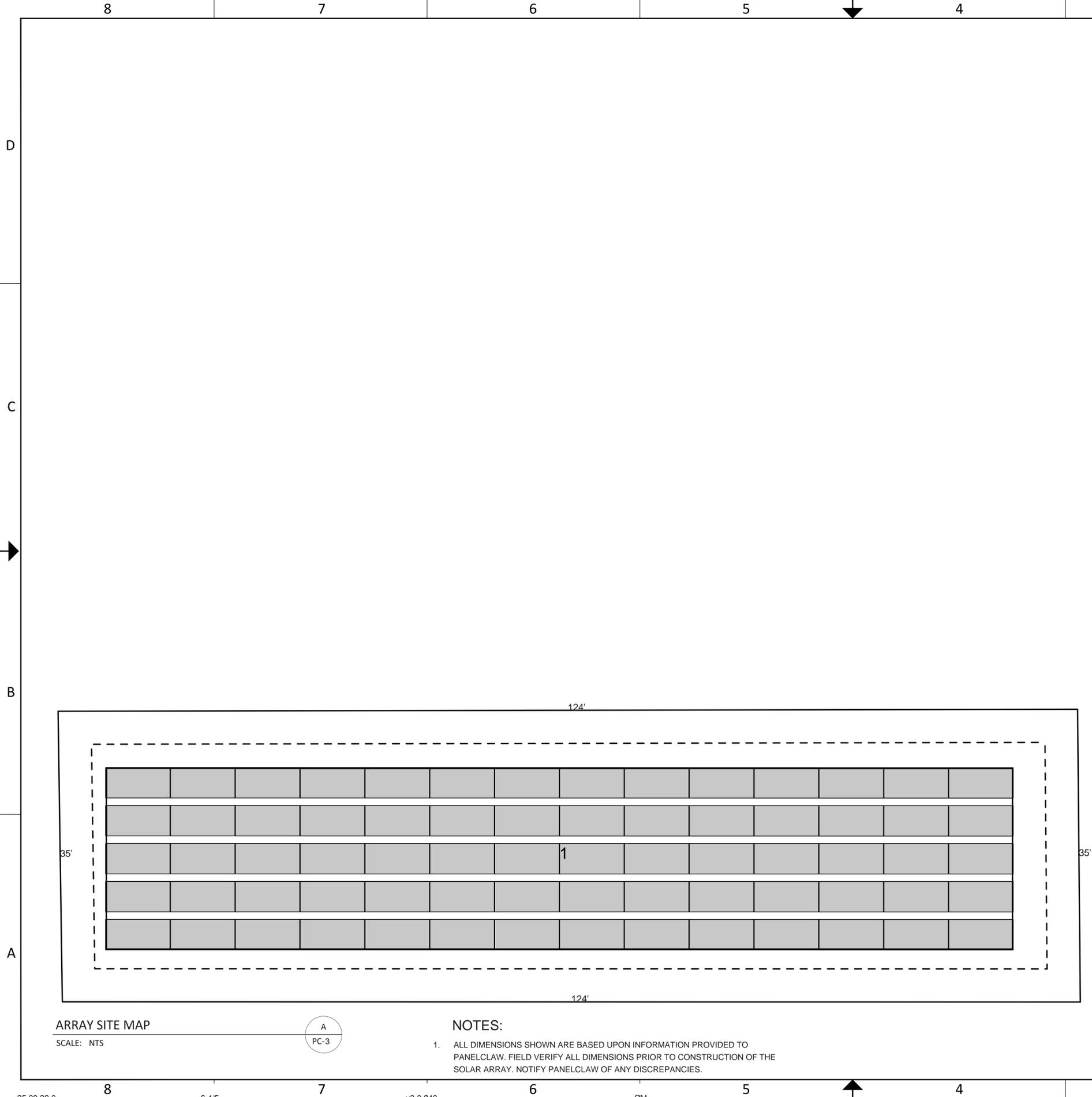
PROJECT:
 Peoria PD GLC

LOCATION:
 7815 N Radnor Rd, Peoria,
 IL, USA

SHEET TITLE:
 PROJECT SUMMARY

REVISION: 0 SHEET: PC-2

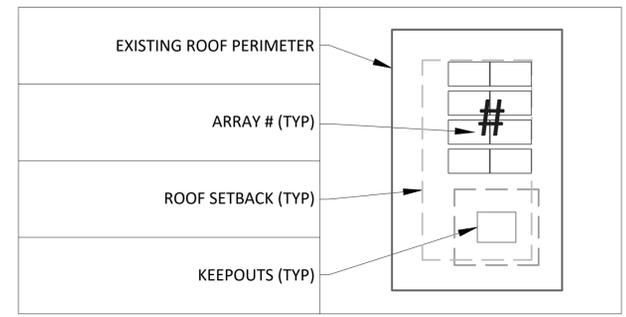
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ARRAY SITE MAP
SCALE: NTS



NOTES:
1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.



ROOF NAME	ROOF SETBACK (FT.)	ROOF HEIGHT (FT)	PARAPET HEIGHT (FT)	ROOF TILT (DEG)
Roof 1	4.00	30.00	0.0	1

STAMP:

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0	Initial Layout	CY		2025-01-20

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0" 1/2" 1" 2"
ORIGINAL SIZE 36"X24"
SHEET SIZE ARCH "D"

PREPARED FOR:
General Energy Corp

PROJECT:
Peoria PD GLC

LOCATION:
7815 N Radnor Rd, Peoria, IL, USA

SHEET TITLE:
ARRAY SITE MAP

REVISION: 0 SHEET: PC-3

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 GOLF ENTERTAINMENT FACILITY
 ADDITION AND RENOVATION**
 7815 N. RADNOR ROAD, PEORIA ILLINOIS 61615
 DKA PROJECT NO: 22-051



KEY PLAN:

SHEET STATUS: APRIL 9, 2024

BIDDING AND PERMIT SET

NO.	DESCRIPTION:	DATE:

SHEET TITLE:
ROOF PLAN

SHEET NUMBER:
A3.11

ROOF PLAN LEGEND:

NOTE: REFER TO M.E.P.F.P. DRAWINGS FOR ADDITIONAL INFORMATION ON MECHANICAL, ELECTRICAL, AND FIRE PROTECTION SYSTEMS

- ROOF AREA BOUNDARY LINE
- ◇ XX ROOF AREA LETTER
- RD ROOF DRAIN
- ORD OVERFLOW ROOF DRAIN
- EF EXHAUST FAN
- ▭ SPLASH PAD
- SLOPE DIRECTION
- ▨ TAPERED INSULATION SADDLE WITH A SURFACE SLOPE OF 1/4" PER 1'-0" (1/2" PER FOOT PANEL SLOPE)
- ▩ ASPHALT SHINGLE TO MATCH EXISTING ADJACENT

ROOF SYSTEM TYPES:

ROOF TYPE A: STRUCTURALLY SLOPED METAL ROOF DECK OF 1/4" PER FOOT SLOPE.

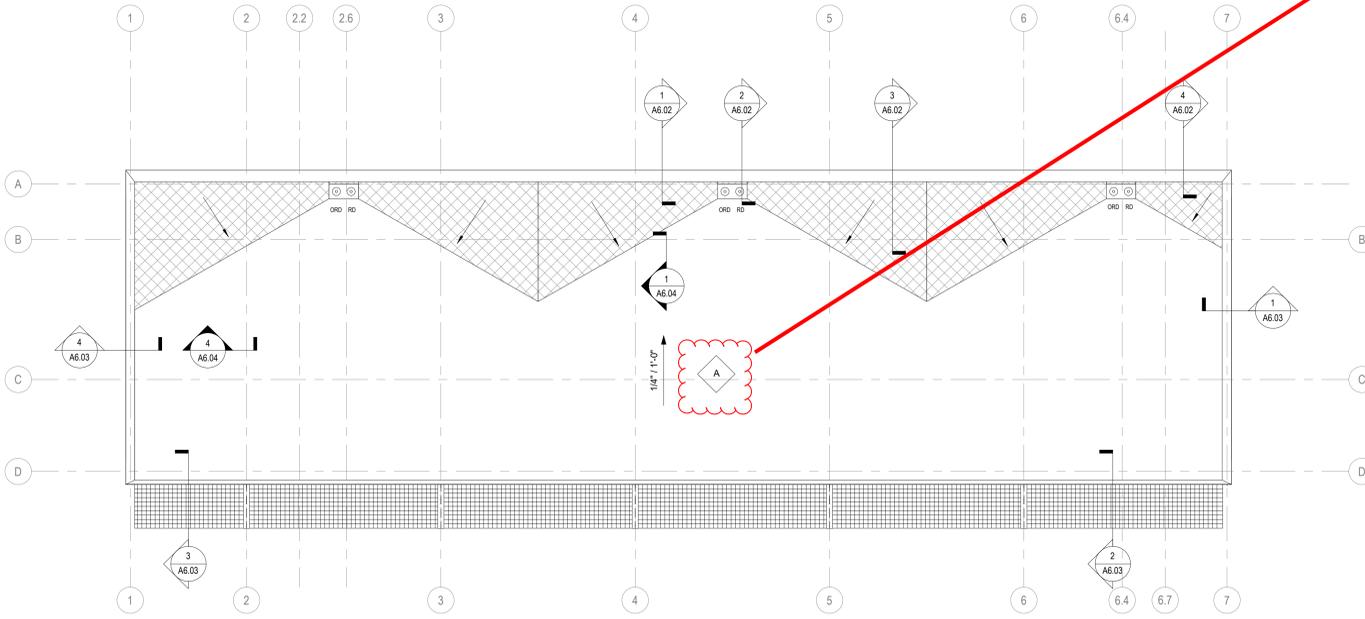
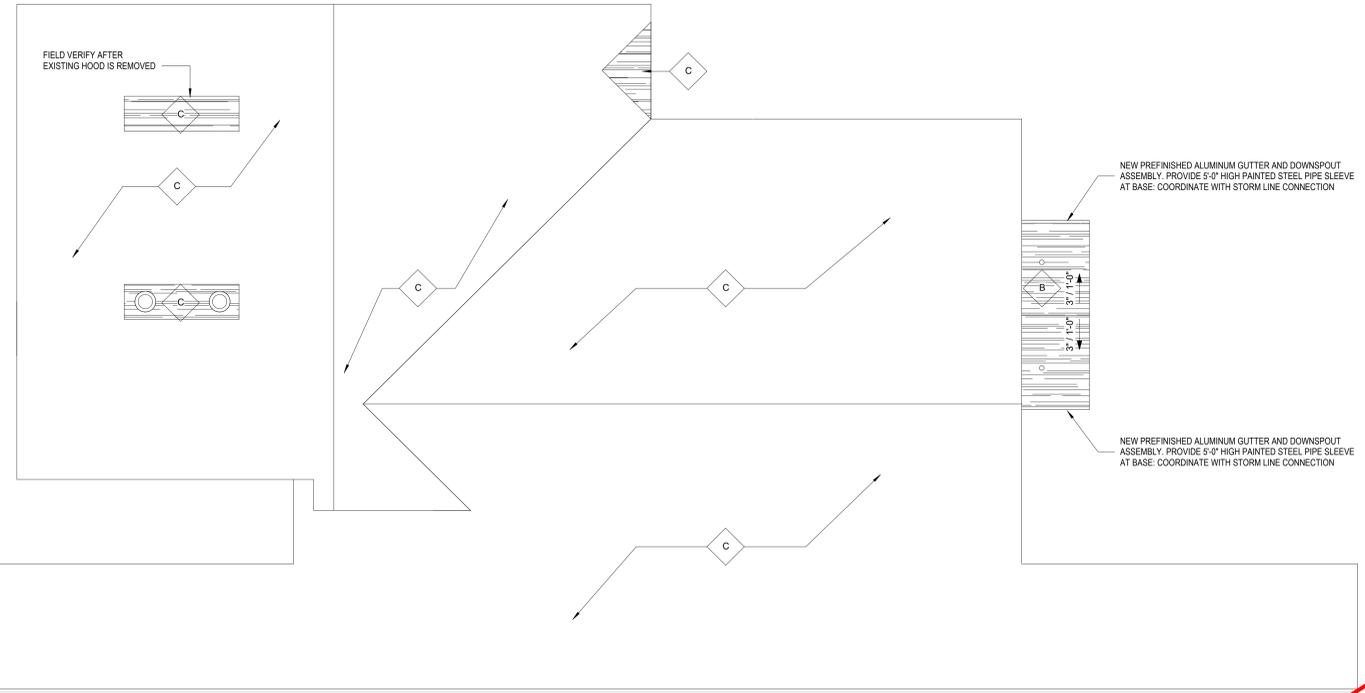
1. VAPOR RETARDER - TAPE ALL JOINTS AND PERIMETER CONDITIONS.
2. 3/4" COVER BOARD
3. TAPERED ROOF INSULATION TO FORM CRICKETS WITH 1/4" PER FOOT SURFACE SLOPE.
4. EPDM MEMBRANE
5. EPDM SHEET FLASHING.
6. PREFINISHED METAL COPINGS, END WALL FLASHING, COUNTERFLASHING, ETC.

ROOF TYPE B: SHINGLES OVER FELT PAPER OVER ROOF DECKING. SHINGLES TO MATCH EXISTING

ROOF TYPE C: PATCH AND REPAIR EXISTING ROOF AS REQUIRED FOR NEW CONSTRUCTION. SUCH AS BUT NOT LIMITED TO, ROOF VENTING, DUCT WORK, PIPE PENETRATIONS, ETC. MATCH EXISTING ADJACENT

ROOF PLAN GENERAL NOTES:

1. SEE MEP DRAWINGS FOR PENETRATIONS AND EQUIPMENT CURB LOCATIONS.



1 ROOF PLAN
 1/8" = 1'-0"





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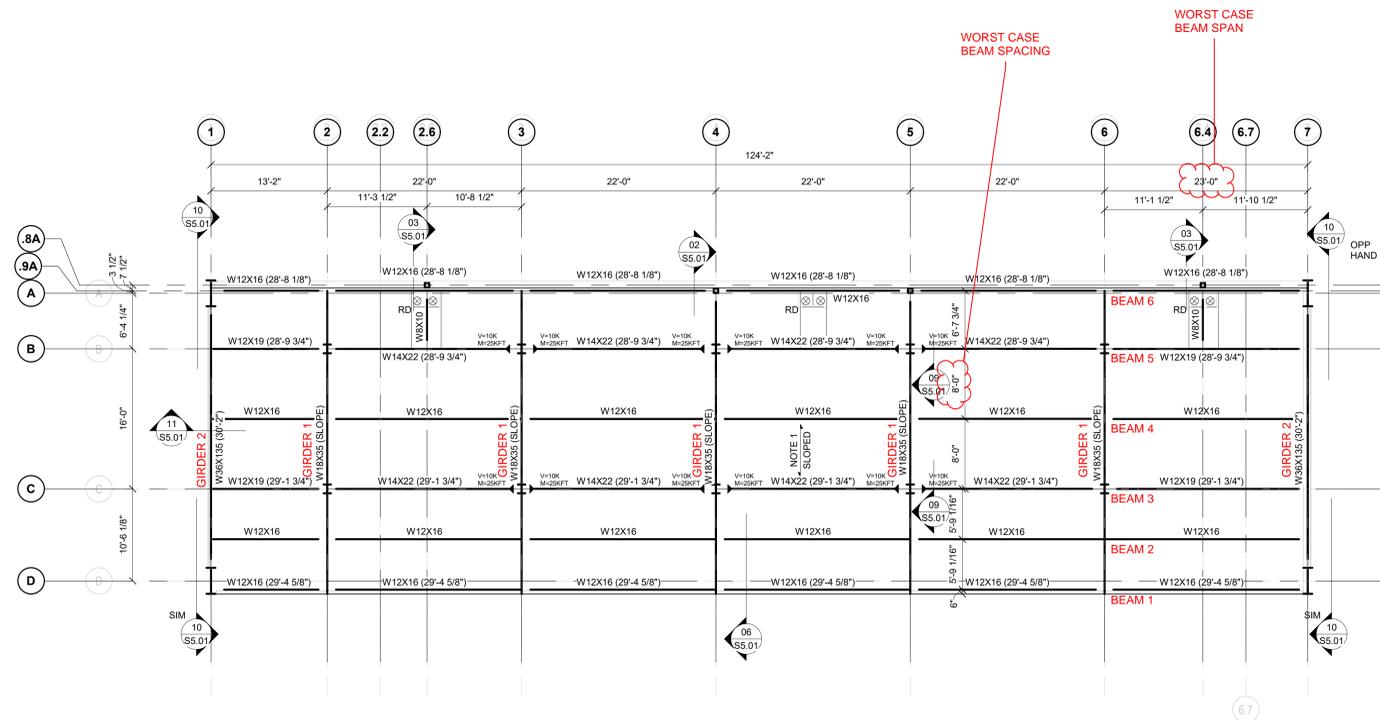
NO.	DESCRIPTION:	DATE:

SHEET TITLE:

ROOF FRAMING PLAN

SHEET NUMBER:

S1.30



01 ROOF FRAMING PLAN
 1/8" = 1'-0"

PLAN NOTES

- 3" N, 20 ga. GALVANIZED METAL DECK. SEE GENERAL STRUCTURAL NOTES FOR DECK ANCHORAGE.
 T/STEEL = DECK = SEE PLAN (UNO).
- STEEL BEAMS INDICATED ON PLAN THUS: BEAM SIZE/TOP OF BEAM ELEVATION. SLOPE BEAMS AND JOISTS UNIFORMLY BETWEEN ELEVATIONS AS REQUIRED.
- INDICATES ARCHITECTURAL OR MECHANICAL OPENINGS. SEE ARCHITECTURAL AND MECHANICAL FOR SIZE, LOCATION, & QUANTITY. COORDINATE WITH ALL APPROPRIATE SUB-CONTRACTORS. UNLESS OTHERWISE NOTED OR SHOWN, PROVIDE FRAMING AROUND OPENING PER STANDARD DETAILS 8.9, 10, 11/S3.02
- BEAMS OR JOISTS SHALL BE LOCATED AS TO CREATE UNIFORM SPACING BETWEEN COLUMN CENTERLINES UNLESS DIMENSIONED OTHERWISE.
- INDICATES MOMENT CONNECTION. SEE STANDARD DETAILS ON SHEET S3.02.
- * - INDICATES DIMENSION TO BE COORDINATED WITH ARCHITECTURAL OR MECHANICAL DRAWINGS.
- RD - SEE PLUMBING AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF ROOF DRAINS (UNO). PROVIDE FRAMING AROUND ROOF DRAIN OPENING PER STANDARD DETAIL 10 & 11/S3.02

FOR EXTERIOR EXPOSED BEAMS TO BE GALVANIZED AND PAINTED SEE ARCH FOR MORE INFORMATION



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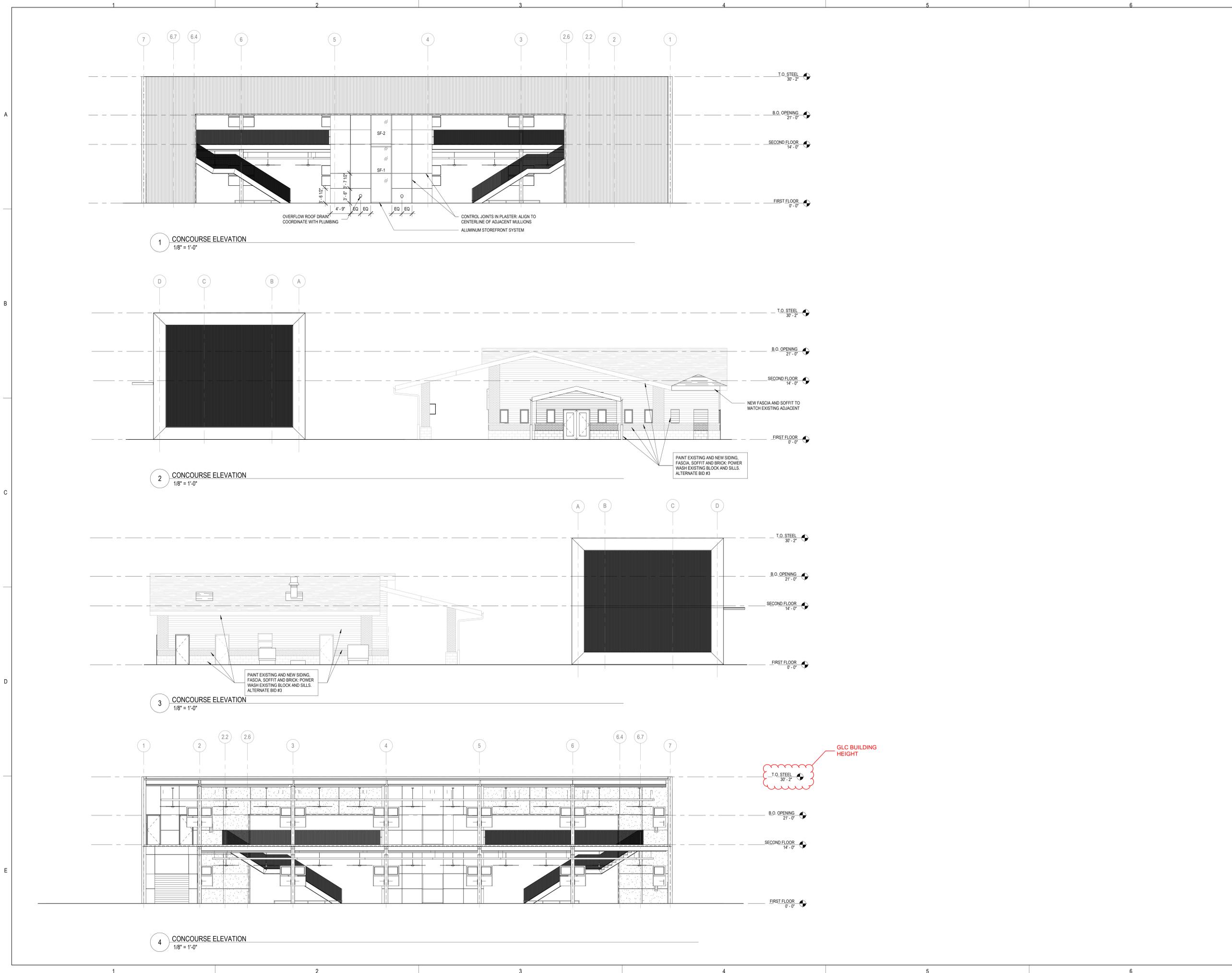
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NO.	DESCRIPTION:	DATE:

SHEET TITLE:
**EXTERIOR
 ELEVATIONS -
 CONCOURSE**

SHEET NUMBER:

A4.01





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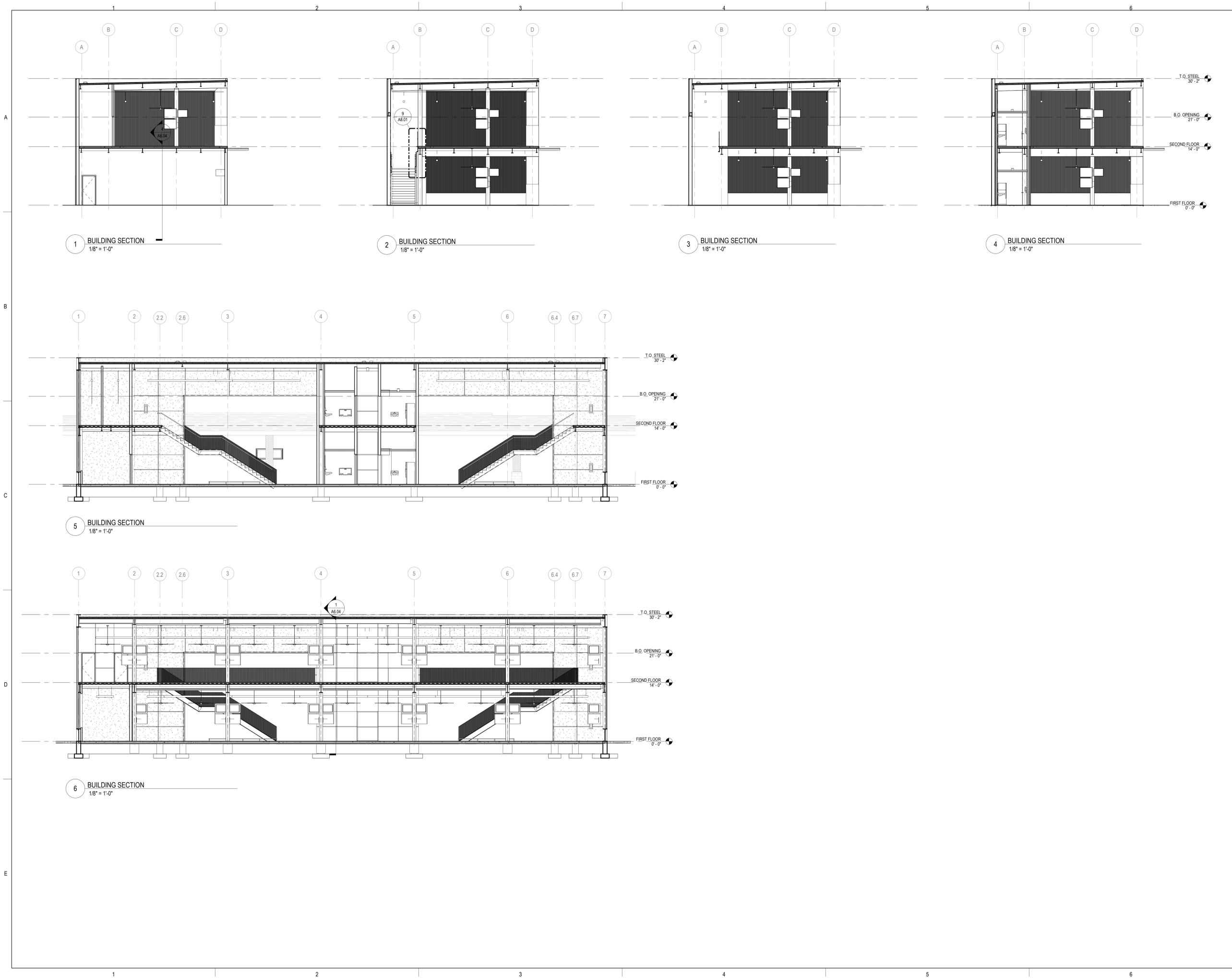
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NO.	DESCRIPTION:	DATE:

SHEET TITLE:
BUILDING SECTIONS

SHEET NUMBER:

A5.01



1 BUILDING SECTION
 1/8" = 1'-0"

2 BUILDING SECTION
 1/8" = 1'-0"

3 BUILDING SECTION
 1/8" = 1'-0"

4 BUILDING SECTION
 1/8" = 1'-0"

5 BUILDING SECTION
 1/8" = 1'-0"

6 BUILDING SECTION
 1/8" = 1'-0"



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KEY PLAN:

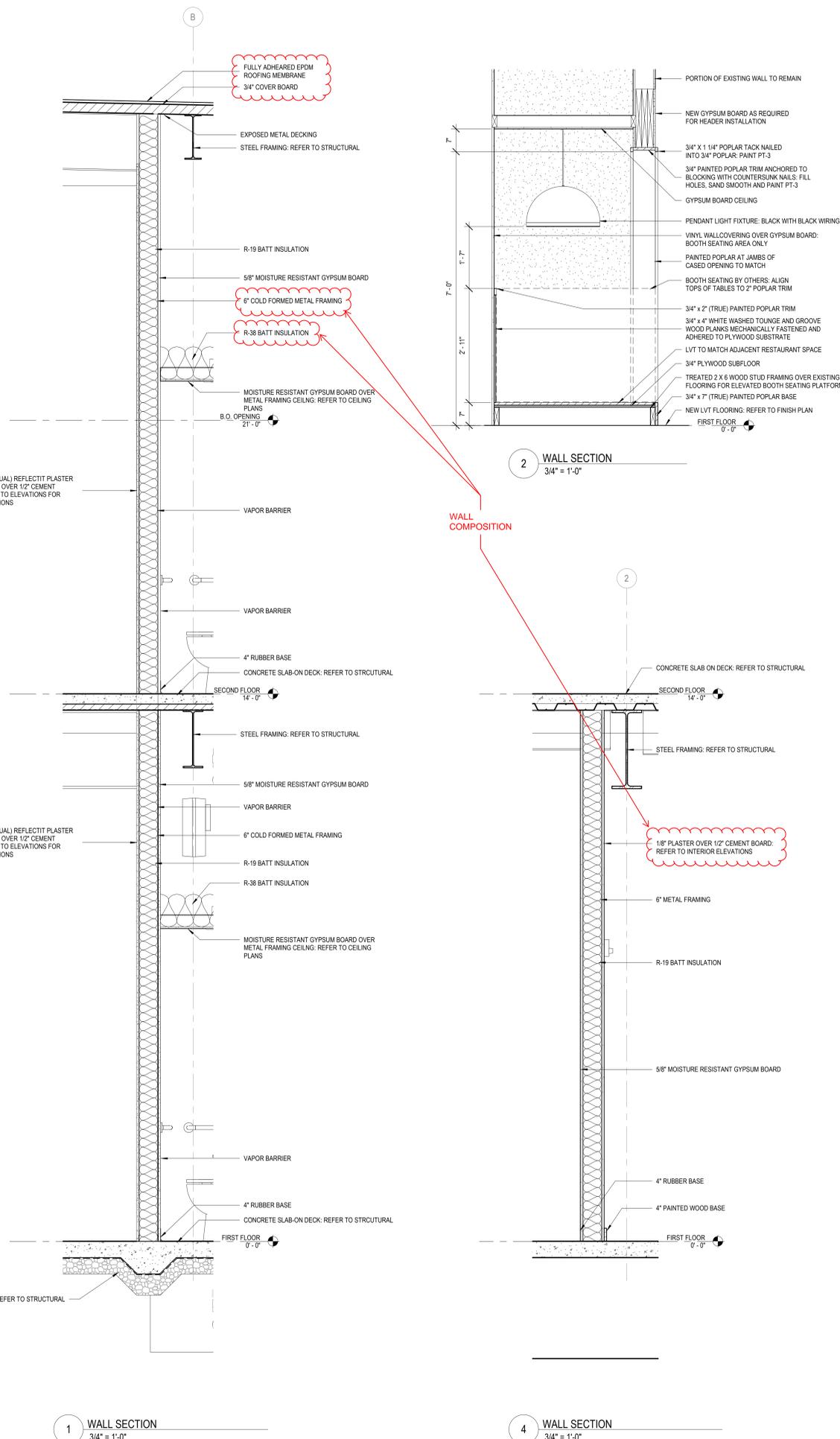
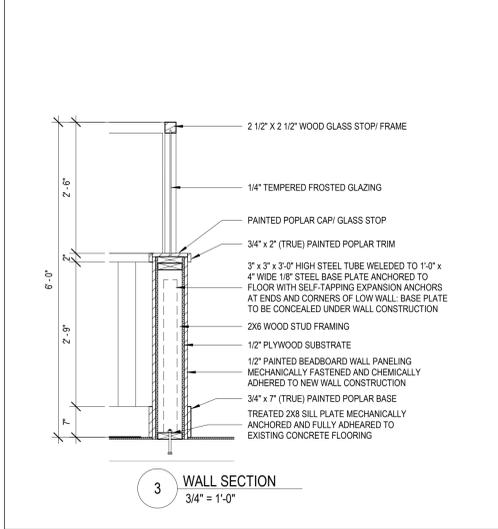
SHEET STATUS: APRIL 9, 2024
BIDDING AND PERMIT SET

NO.	DESCRIPTION:	DATE:

SHEET TITLE:
WALL SECTIONS

SHEET NUMBER:
A6.04

LOBBY SCREEN WALL - ADD ALTERNATE #1



WALL COMPOSITION

1 WALL SECTION
 3/4" = 1'-0"

4 WALL SECTION
 3/4" = 1'-0"

A
B
C
D
E

1 2 3 4 5 6

STRUCTURAL STEEL NOTES

- 1. STRUCTURAL STEEL SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS," ANSIAISC 360, LATEST EDITION.
2. BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS," APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS, LATEST EDITION.
3. ALL W SHAPES SHALL CONFORM TO ASTM A992.
4. ALL OTHER STRUCTURAL STEEL SHAPES, PLATES, ETC., SHALL CONFORM TO ASTM A36, UNLESS NOTED OTHERWISE.
5. ALL STRUCTURAL STEEL TUBE MEMBERS SHALL CONFORM TO ASTM A500, GRADE B.
6. ALL STRUCTURAL STEEL PIPE SHALL CONFORM TO ASTM A53, GRADE B.
7. GALVANIZING OF STEEL MEMBERS SHALL CONFORM TO ASTM A123/A123M. ALL STEEL FRAMING THAT COMES IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE COATED TO A 600 THICKNESS AND ALL BOLTS, HEADED STUDS AND CONNECTORS SHALL BE COATED TO A 618 THICKNESS.
8. ALL STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE STANDARDS OF THE AISC.
9. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT WHERE SHOWN ON THE DRAWINGS.
10. ALL STEEL BEAMS SHALL BE ERRECTED WITH NATURAL CAMBER UP.
11. NON-COMPOSITE: THE BEAM-TO-BEAM AND BEAM-TO-COLUMN CONNECTIONS SHALL DEVELOP THE END REACTION OF THE CONNECTED BEAM. THE END REACTION OF THE CONNECTED BEAM CAN BE OBTAINED FROM THE LOAD CARRYING CAPACITY OF THE BEAM ON THE BASIS OF EQUIVALENT UNIFORM LOADS GIVEN IN PART 3 (FLEXURAL MEMBERS) OF THE AISC MANUAL. THE MINIMUM SHEAR CAPACITY OF THE 12 KIPS SHALL BE PROVIDED FOR ALL BEAMS 8" TO 10" DEEP WITH 8 KIPS FOR BEAMS OF DEPTH LESS THAN 8". ANY REDUCTION IN LOADS AND POSITIONS OF LOADS COMPARED TO THE BUILDING STRUCTURE, AND COMPATIBILITY OF CONNECTIONS WITH THE BUILDING STRUCTURE, THE MANUFACTURER/SUPPLIER AND ITS SPECIALTY STRUCTURAL ENGINEER RESPONSIBLE FOR THE DESIGN OF THE ITEMS/SYSTEM WILL RETAIN ALL RIGHTS AND RESPONSIBILITIES FOR THE DESIGN OF THE CONNECTIONS AND CONNECTIONS TO THE BUILDING STRUCTURE.
12. WELDED CONSTRUCTION SHALL CONFORM TO THE AMERICAN WELDING SOCIETY "STRUCTURAL WELDING CODE," D1.1. ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE E70XX, UNLESS NOTED OTHERWISE.
13. ALL WELDING SHALL BE PERFORMED BY CERTIFIED WELDERS.
14. FULL AND PARTIAL PENETRATION WELDS PERFORMED IN THE FIELD SHALL BE ULTRASONICALLY TESTED.
15. WHEN WELDS ARE NOT CALLED-OUT ON DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1.
16. THE STEEL FABRICATOR IS RESPONSIBLE FOR COORDINATION WITH THE MANUFACTURER OF STEEL JOISTS AND JOIST GIRDERS.
17. TEMPORARY SUPPORTS, SUCH AS TEMPORARY GUYS, BRACES, FALSEWORK, CRIBBING OR OTHER ELEMENTS REQUIRED FOR THE ERECTION OPERATION SHALL BE DETERMINED, FURNISHED, AND INSTALLED BY THE ERECTOR. THESE TEMPORARY SUPPORTS SHALL BE CAPABLE OF SECURING THE STEEL FRAMING, OR ANY PARTIALLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED, RESULTING FROM WIND, SEISMIC FORCES AND ERECTION OPERATIONS.
18. THE LIFTING AND ERECTION OF PRE-ASSEMBLED ELEMENTS SUCH AS TRUSSES OR PRE-FABRICATED FRAMING ARE CONSIDERED SPECIAL ERECTION CONDITIONS. THE SELECTION OF LIFT POINTS AND ERECTION TECHNIQUES ARE THE RESPONSIBILITY OF THE CONTRACTOR. LOCATE AND PROVIDE SUFFICIENT LIFT POINTS TO PREVENT OVERSTRESS AND/OR OVERLOADING OF COMPONENTS WITHIN THE ASSEMBLY. PROVIDE TEMPORARY STRONG-BACKS, STIFFENERS AND/OR LIFTING DEVICES AS REQUIRED.
19. THE CONTRACTOR SHALL COMPLY WITH OSHA REQUIREMENTS FOR STEEL ERECTION.
A. WHERE PERIMETER SAFETY CABLES ARE REQUIRED:
(i) CABLES MAY BE ATTACHED TO PERIMETER TUBE AND PIPE COLUMNS WITH STEEL DEVICES (PLATES, CLIPS, ETC.) WELDED TO THE COLUMNS.
(ii) AT WIDE FLANGE COLUMNS, HOLES, UP TO 1" DIAMETER, MAY BE DRILLED IN THE WEB OR FLANGE AT 42" TO 45" ABOVE THE FINISHED FLOOR AND AT THE MIDPOINT BETWEEN THE FINISHED FLOOR AND THE TOP CABLE, TO PERMIT INSTALLATION OF THE PERIMETER CABLE SYSTEM.
(iii) THE DESIGN OF ATTACHMENTS, THE PERIMETER CABLE SYSTEM AND ANCHORAGE TO THE STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR.
B. PRIOR TO ERECTION OF STEEL, THE CONTRACTOR SHALL PROVIDE TO THE STEEL ERECTOR, ON THE BASIS OF APPROPRIATE ASTM STANDARD TEST METHODS OF FIELD CURED SAMPLES, VERIFICATION THAT THE FOUNDATIONS, PIERS, WALLS AND MASONRY HAVE ACHIEVED SUFFICIENT STRENGTH PER OSHA REQUIREMENTS.

WOOD FRAMING NOTES

- 1. WOOD SPECIES AND GRADES SHALL BE AS FOLLOWS:
A. HORIZONTAL FRAMING (JOISTS, RAFTERS, BEAMS):
a. #2 SYP OR DFL OR BETTER.
B. STUDS:
a. STUD GRADE SYP OR DFL OR BETTER.
C. TOP PLATES:
a. #2 SYP OR DFL OR BETTER.
D. BOTTOM PLATES:
a. #3 SYP OR DFL OR BETTER.
E. IN CONTACT WITH CONCRETE: PRESSURE TREATED (PT) LSL; WEYERHAEUSER STRAND-GUARD TIMBERSTRAND LSL OR EQUIVALENT.
2. ALL WOOD SHALL HAVE A MOISTURE CONTENT OF 19% MAXIMUM. SILL PLATES AND ANY OTHER MEMBER BEARING ON CONCRETE SHALL BE PRESSURE TREATED WITH DOT SODIUM BORATE (SBX). THE CONTRACTOR SHALL TAKE SPECIAL CARE TO ENSURE THAT PRESSURE TREATED WOOD IS COVERED DURING TRANSPORT AND STORAGE AT THE JOB SITE.
3. ALL MEMBERS DESIGNATED LVL SHALL BE MICRO-LAM 2.0E BEAMS AS MANUFACTURED BY WEYERHAEUSER, OR MEMBERS WITH EQUIVALENT LOAD CARRY PROPERTIES.
4. ALL MEMBERS DESIGNATED PSL SHALL BE PARALLAM 2.0E BEAMS AND 1.8E COLUMNS AS MANUFACTURED BY WEYERHAEUSER, OR MEMBERS WITH EQUIVALENT LOAD CARRY PROPERTIES.
5. ALL MEMERS DESIGNATED LSL SHALL BE TIMBERSTRAND 1.3E BEAMS AS MANUFACTURED BY WEYERHAEUSER, OR MEMBERS WITH EQUIVALENT LOAD CARRY PROPERTIES.
6. ALL GLUE LAMINATED MEMBERS SHALL BE AS FOLLOWS:
A. DOUGLAS FIR: 24FV8, FB = 2400 psi, E = 1,800,000 psi
B. SOUTHERN PINE: 24FV5, FB = 2400 psi, E = 1,700,000 psi
7. PROVIDE BLOCKING OR A BAND BOARD AT ALL JOIST AND RAFTER BEARING LOCATIONS AND IN THE CENTER OF ALL SPANS OVER 8'-0". MAXIMUM DISTANCE BETWEEN BRIDGING AND BEARING SHALL BE 8'-0".
8. PLACE A SINGLE 2X PLATE AT THE BOTTOM AND A DOUBLE 2X PLATE AT THE TOP OF ALL STUD WALLS. NON-SHEARWALL SILL PLATES SHALL BE BOLTED TO FOUNDATION BEAM WITH 1/2" DIAMETER ANCHOR BOLTS EMBEDDED SEVEN INCHES MINIMUM AT A MAXIMUM SPACING OF 48" O.C. PROVIDE A MINIMUM OF TWO BOLTS PER PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12" OR LESS THAN FOUR INCHES FROM EACH END OF PIECE. ANCHOR BOLTS SHALL BE HOT DIP GALVANIZED PER ASTM A653, G185. REFERENCE THE SHEAR WALL SCHEDULE FOR SILL PLATE TO FOUNDATION ANCHORS AND SPACING.
ALTERNATELY NON-SHEARWALL SILL PLATES MAY BE SHOT TO THE FOUNDATION WITH HILTI X-CP 72 PP S23 PINS AT 18" O.C. REFERENCE THE SHEAR WALL SCHEDULE FOR ALTERNATE SILL PLATE TO FOUNDATION ANCHORS AND SPACING.
9. AS A MINIMUM STUDS SHALL BE DOUBLED AT ALL ANGLES, CORNERS AND AROUND ALL OPENINGS.
10. UNLESS OTHERWISE SHOWN ON PLANS, WOOD HEADERS SHALL BE PER THE HEADER SCHEDULE, SHEET S5.01.
11. ALL HEADERS SHALL HAVE A 1/2" PLYWOOD SPACER FULL LENGTH BETWEEN PLYS. DOUBLE HEADERS SHALL BE NAILED TOGETHER PER NAILING INTERNATIONAL CODING CODE, TABLE 2304.10.1 OF THE IBC 2018.
12. AT HEADERS, PROVIDE JACK AND KING STUDS PER HEADER SCHEDULE, SHEET S5.01.
13. UNLESS OTHERWISE DETAILED, FLOOR AND ROOF JOIST FLUSH TYPE CONNECTIONS SHALL USE TYPE LU JOIST HANGERS AS MANUFACTURED BY THE SIMPSON COMPANY OR EQUIVALENT. THE TYPE HANGER USED SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR THE SIZE JOIST SUPPORTED.
14. ALL EXTERIOR LOAD BEARING WALLS SHALL BE PER THE STUD WALL SCHEDULE, THIS SHEET.
15. PROVIDE ALL BLOCKING AND FIRE STOPS REQUIRED BY THE BUILDING OFFICIAL, TRUSS MANUFACTURER, AND/OR ARCHITECT OF RECORD.
16. PROVIDE FRAMING AND BLOCKING TO SUPPORT ALL EDGES OF OPENINGS IN THE PLYWOOD ROOF DECK.
17. UNLESS OTHERWISE NOTED, ALL TIMBER CONNECTIONS SHALL BE NAILED IN CONFORMANCE WITH THE INTERNATIONAL BUILDING CODE, TABLE 2304.10.1 OF THE 2018 IBC.
18. UNO ON PLAN FOR BEAMS AND GIRDERS PERPENDICULAR TO WALLS, PROVIDE ONE STUD FOR EACH 1 1/2" OF BEAM WIDTH.
19. ALL MEMBERS EXPOSED TO DIRECT SUNLIGHT AND/OR RAIN SHALL BE PRESSURE TREATED ACCORDING TO A.N.P.A. STANDARDS, AND A.I.T.C. STANDARD 109.
20. EXTERIOR MEMBERS NOT EXPOSED TO DIRECT SUNLIGHT OR RAIN, AND NOT PRESSURED TREATED SHALL BE PROTECTED WITH A WATER RESISTANT PAINT OR SEALER THAT IS COMPATIBLE WITH ARCHITECT'S SPECIFIED APPEARANCE. SUBMIT PROPOSED PAINT AND/OR SEALANT TO ARCHITECT FOR REVIEW AND APPROVAL. UPON COMPLETION OF THE PROJECT, CONTRACTOR SHALL PROVIDE OWNER WITH PAINT AND/OR SEALANT MANUFACTURER'S RECOMMENDATION FOR PERIODIC MAINTENANCE AND RECOMMENDED SCHEDULE FOR REAPPLICATION.
21. NO CORING OR NOTCHING OF BEAMS, HEADERS, OR COLUMNS IS ALLOWED.
22. NO MORE THAN TWO CONSECUTIVE STUDS SHALL BE HORIZONTALLY CORED/NOTCHED MORE THAN 2" FOR PLUMBING/ELECTRICAL ETC., WHERE 50% OR MORE OF A STUD IS CORED/NOTCHED PROVIDE AN ADDITIONAL "MAKE UP" STUD AS CLOSE TO THE DAMAGED STUD AS IS PRACTICAL.

SLAB-ON-GRADE NOTES

- 1. FLOOR SLAB SHALL BE 5" THICK CONCRETE SLAB OVER A 15 MIL VAPOR RETARDER, OVER SUBGRADE PREPARED PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. TAPE ALL SEAMS, PENETRATIONS AND TEARS IN THE VAPOR RETARDER WITH A COMPATIBLE WATERPROOF TAPE.
2. REINFORCE SLAB AS SHOWN ON PLANS.
3. PROVIDE ONE OF THE FOLLOWING JOINTS ON THE CENTERLINE OF ALL COLUMNS, AND @ 15' O.C. MAXIMUM.
A. CONSTRUCTION JOINTS WHERE DETAILED ON DRAWINGS.
B. SAW CUT CONTROL JOINTS ELSEWHERE 1" DEEP OR ONE QUARTER OF THE SLAB DEPTH DEEP, WHICHEVER IS GREATER.
4. A METAL CONTROL JOINT FORM MAY BE USED IN LIEU OF EITHER OF THE ABOVE.
5. CUT SAW CUT JOINTS WITHIN 8 HOURS OF POURING CONCRETE.

CONCRETE NOTES

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318- PER GOVERNING BUILDING CODE.
2. CONCRETE IN THE FOLLOWING AREAS SHALL HAVE SAND AND GRAVEL OR CRUSHED STONE AGGREGATES AND THE DESIGNATED COMPRESSIVE STRENGTH IN 28 DAYS UNLESS NOTED OTHERWISE. NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C33.
GRADE BEAMS/FOUNDATION WALL: FC=4500 PSI
SLABS ON GRADE: FC=4500 PSI
CONCRETE FILL OVER METAL DECK: FC=3000 PSI
ALL OTHER CONCRETE: FC=3000 PSI
3. CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS FOLLOWS: REFER TO ACI 318 - SECTION 7.7 FOR CONDITIONS NOT NOTED.
SLABS-ON-GRADE: TOP THIRD
SLABS-ON-METAL DECK: 1" TOP
GRADE BEAMS: 1 1/2" TOP, 2" SIDES, 3" BOTTOM
4. MAXIMUM NOMINAL COARSE AGGREGATE SIZE SHALL BE 1 1/2" MAX FOR PIERS AND 1" MAX TYPICAL UNLESS NOTED OTHERWISE.
5. CONCRETE SLUMPS SHALL BE AS FOLLOWS:
SLAB ON METAL DECK: 4" MAX, 2" MIN
PIERS: 7" MAX, 5" MIN
CONCRETE CONTAINING HRWR: 10" MAX
ALL OTHER CONCRETE: 5" MAX, 2" MIN
6. CONCRETE EXPOSED TO WEATHER SHALL BE AIR-ENTRAINED AS FOLLOWS:
3/4" NOMINAL AGGREGATE SIZE: 4% TO 6%
1" NOMINAL AGGREGATE SIZE: 3.5% TO 6.5%
1 1/2" NOMINAL AGGREGATE SIZE: 3% TO 6%

- 7. ALL GRADE BEAMS, CAST IN PLACE WALLS AND PIER CAPS SHALL BE FORMED ON SIDES. ALL ELEMENTS OF THE FORMS, FORMWORK, BRACING AND SHORING SHALL CONSIST OF WOOD, METAL OR OTHER MANUFACTURED PRODUCTS AS SPECIFIED. EARTH MAY NOT BE USED AS A FORM, EITHER DIRECTLY OR INDIRECTLY. NEITHER EARTH TRENCHES NOR EARTH TRENCHES LINED WITH ANOTHER MATERIAL ARE ACCEPTABLE.
8. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS. ALL CONSTRUCTION JOINTS SHALL BE MADE IN THE CENTER OF SPANS WITH VERTICAL BULK HEADS. THE LOCATION OF CONSTRUCTION JOINTS SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.

- 9. GENERAL CONTRACTOR SHALL PRE-CHECK ALL SHOP DRAWINGS BEFORE SUBMISSION TO THE ENGINEER FOR REVIEW. ALL SUBMITTALS MATERIALS MUST BEAR AN INITIALED REVIEW STAMP OF THE GENERAL CONTRACTOR. SUBMITTALS WITHOUT THE REVIEW STAMP OF THE GENERAL CONTRACTOR WILL BE RETURNED WITHOUT REVIEW AND SHALL NOT BE CAUSE FOR CLAIMS OF DELAY.
10. GENERAL CONTRACTOR SHALL SCHEDULE SUBMITTALS SUFFICIENTLY IN ADVANCE OF THE DATE REQUIRED TO ALLOW REASONABLE TIME FOR DELIVERY, PROCESSING AND REVIEW BY THE DESIGN TEAM. THIS SHALL INCLUDE A MINIMUM OF TEN WORKING DAYS, EXCLUDING DELIVERY TIME, FOR ENGINEER'S PROCESSING AND REVIEW OF SHOP DRAWINGS. INCLUDE TIME FOR CONTRACTOR'S SUBMISSION AND SUBSEQUENT REVIEW IF NECESSARY.
SHORTER REVIEW PERIODS WILL ONLY BE HONORED WITH PRIOR WRITTEN CONSENT FROM THE ENGINEER, THESE ACCELERATED SERVICES, AND APPROPRIATE COMPENSATION, MUST BE NEGOTIATED WITH THE ENGINEER AND ARCHITECT IN ADVANCE.
TEN DAY REVIEW PERIODS CAN NOT BE HONORED WHEN LARGE QUANTITIES OF SHOP DRAWINGS ARE SUBMITTED AT ONE TIME, WHEN THIS HAPPENS, THE CONTRACTOR SHALL SUBMIT AN ITEMIZED LIST INDICATING PRIORITIES AND REASONABLE RETURN DATE.
11. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS, INCLUDING THE USE OF ELECTRONIC FILES BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF THE INDEPENDENT PREPARATION OF SHOP DRAWINGS, SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON. SUCH USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS WILL NOT BE ALLOWED WITHOUT PRIOR CONSENT FROM THE ENGINEER.
12. WHEN USING ELECTRONIC FORMAT FOR SUBMITTALS, THE CONTRACTOR SHALL PROVIDE ONE PRINTED HARD COPY FOR ENGINEER REVIEW OR EXECUTE AN AGREEMENT FOR REIMBURSING THE ENGINEER FOR PRINTING COSTS FOR ONE COPY.
13. STRUCTURAL FRAMING WAS BASED ON PRELIMINARY CRITERIA FROM ONE ELEVATOR MANUFACTURER AS NOTED ON PLAN. ALTERNATIVE ELEVATOR MANUFACTURER IS SELECTED OR IF DIFFERENT REQUIREMENTS ARE PROVIDED IN THE ELEVATOR SUBMITTAL, BASED ON THE EXTENT OF THE CHANGES, ADDITIONAL SERVICES FOR STRUCTURAL REDESIGN AND COSTS OF ADDITIONAL OR MODIFIED FRAMING MAY BE REQUIRED. DURING SELECTION OF ELEVATOR SYSTEMS, GENERAL CONTRACTOR SHALL INCLUDE A CONTINGENCY TO COVER THESE FEES AND COSTS. COSTS OF THE DESIGN AND CONSTRUCTION REVISIONS SHALL BE BORNE BY THE CONTRACTOR.
14. STRUCTURAL FRAMING WAS BASED ON PRELIMINARY MEP EQUIPMENT AS NOTED ON PLAN. IT IS ANTICIPATED THAT COMPETITIVE BIDS ON MEP EQUIPMENT WILL BE TAKEN AND THAT STRUCTURAL MODIFICATIONS MAY BE NECESSARY IF ALTERNATE MEP EQUIPMENT IS SELECTED, OR IF EQUIPMENT IS RELOCATED, SHAFT SIZES ARE CHANGED, OR DIFFERENT REQUIREMENTS ARE PROVIDED IN THE EQUIPMENT SUBMITTAL, BASED ON THE EXTENT OF THE CHANGES, ADDITIONAL SERVICES FOR STRUCTURAL REDESIGN AND COSTS OF ADDITIONAL OR MODIFIED FRAMING MAY BE REQUIRED. DURING SELECTION OF MEP SYSTEMS, GENERAL CONTRACTOR SHALL INCLUDE A CONTINGENCY FOR THIS REVISED DESIGN AND CONSTRUCTION WORK. COSTS OF THE DESIGN AND CONSTRUCTION REVISIONS SHALL BE BORNE BY THE CONTRACTOR.

- 15. GENERAL CONTRACTOR SHALL SCHEDULE SUBMITTALS SUFFICIENTLY IN ADVANCE OF THE DATE REQUIRED TO ALLOW REASONABLE TIME FOR DELIVERY, PROCESSING AND REVIEW BY THE DESIGN TEAM. THIS SHALL INCLUDE A MINIMUM OF TEN WORKING DAYS, EXCLUDING DELIVERY TIME, FOR ENGINEER'S PROCESSING AND REVIEW OF SHOP DRAWINGS. INCLUDE TIME FOR CONTRACTOR'S SUBMISSION AND SUBSEQUENT REVIEW IF NECESSARY.
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TEN DAY REVIEW PERIODS CAN NOT BE HONORED WHEN LARGE QUANTITIES OF SHOP DRAWINGS ARE SUBMITTED AT ONE TIME, WHEN THIS HAPPENS, THE CONTRACTOR SHALL SUBMIT AN ITEMIZED LIST INDICATING PRIORITIES AND REASONABLE RETURN DATE.
16. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS, INCLUDING THE USE OF ELECTRONIC FILES BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF THE INDEPENDENT PREPARATION OF SHOP DRAWINGS, SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREON AS CORRECT AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HEREON. SUCH USE OF REPRODUCTIONS OF THESE CONTRACT DOCUMENTS WILL NOT BE ALLOWED WITHOUT PRIOR CONSENT FROM THE ENGINEER.
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18. STRUCTURAL FRAMING WAS BASED ON PRELIMINARY CRITERIA FROM ONE ELEVATOR MANUFACTURER AS NOTED ON PLAN. ALTERNATIVE ELEVATOR MANUFACTURER IS SELECTED OR IF DIFFERENT REQUIREMENTS ARE PROVIDED IN THE ELEVATOR SUBMITTAL, BASED ON THE EXTENT OF THE CHANGES, ADDITIONAL SERVICES FOR STRUCTURAL REDESIGN AND COSTS OF ADDITIONAL OR MODIFIED FRAMING MAY BE REQUIRED. DURING SELECTION OF ELEVATOR SYSTEMS, GENERAL CONTRACTOR SHALL INCLUDE A CONTINGENCY TO COVER THESE FEES AND COSTS. COSTS OF THE DESIGN AND CONSTRUCTION REVISIONS SHALL BE BORNE BY THE CONTRACTOR.
19. STRUCTURAL FRAMING WAS BASED ON PRELIMINARY MEP EQUIPMENT AS NOTED ON PLAN. IT IS ANTICIPATED THAT COMPETITIVE BIDS ON MEP EQUIPMENT WILL BE TAKEN AND THAT STRUCTURAL MODIFICATIONS MAY BE NECESSARY IF ALTERNATE MEP EQUIPMENT IS SELECTED, OR IF EQUIPMENT IS RELOCATED, SHAFT SIZES ARE CHANGED, OR DIFFERENT REQUIREMENTS ARE PROVIDED IN THE EQUIPMENT SUBMITTAL, BASED ON THE EXTENT OF THE CHANGES, ADDITIONAL SERVICES FOR STRUCTURAL REDESIGN AND COSTS OF ADDITIONAL OR MODIFIED FRAMING MAY BE REQUIRED. DURING SELECTION OF MEP SYSTEMS, GENERAL CONTRACTOR SHALL INCLUDE A CONTINGENCY FOR THIS REVISED DESIGN AND CONSTRUCTION WORK. COSTS OF THE DESIGN AND CONSTRUCTION REVISIONS SHALL BE BORNE BY THE CONTRACTOR.

- 20. DIMENSIONS TO EXISTING OR ADJACENT CONSTRUCTION ARE BASED ON THE ORIGINAL CONSTRUCTION DOCUMENTS AND/OR APPROXIMATE FIELD MEASUREMENTS. THEY ARE TO BE USED FOR BID PURPOSES ONLY AND NOT FOR SHOP DRAWING PREPARATION OR CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL FIELD MEASUREMENTS REQUIRED FOR PROPER FIT UP OF MEMBERS FRAMING TO AND AROUND EXISTING CONSTRUCTION.
21. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS SUBGRADE PREPARATION, FOUNDATION CONSTRUCTION, WALL BACKFILL, VOID FORM SYSTEMS, CONCRETE FORMING AND TESTING AND INSPECTION REQUIREMENTS, REFER TO SPECIFICATIONS FOR REQUIREMENTS.
22. DIMENSIONS SHOWN FOR, OR TO, THE EXISTING STRUCTURE ARE BASED ON EITHER THE ORIGINAL CONSTRUCTION DOCUMENTS PREPARED FOR THE EXISTING STRUCTURE OR ON APPROXIMATE FIELD MEASUREMENTS. THEY ARE TO BE USED FOR BID PURPOSES ONLY AND NOT FOR SHOP DRAWING PREPARATION OR CONSTRUCTION. ACTUAL CONDITIONS MAY VARY. THE CONTRACTOR SHALL PROVIDE ALL FIELD MEASUREMENTS REQUIRED FOR PROPER FIT UP OF MEMBERS FRAMING TO AND AROUND EXISTING CONSTRUCTION.
23. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE ADEQUACY OF ALL SHORING (TEMPORARY SUPPORTS) OF THE EXISTING STRUCTURE NECESSARY TO COMPLETE THE CONSTRUCTION AS OUTLINED IN THE STRUCTURAL DRAWINGS. PROVIDE SHORING, BRACES, JACKS, ETC., AS REQUIRED TO COMPLETE THE WORK. ENGINEERING AND DESIGN OF THE TEMPORARY SUPPORTS SHALL BE THE RESPONSIBILITY OF A PROFESSIONAL ENGINEER, ENGAGED BY THE CONTRACTOR, AND REGISTERED IN THE STATE OF THE PROJECT, WITH EXPERIENCE IN THE DESIGN OF THESE ELEMENTS.
24. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR CONSTRUCTION TESTING AND INSPECTION AS OUTLINED IN THE STATEMENT OF SPECIAL INSPECTIONS THAT CAN BE FOUND FOLLOWING THE GENERAL NOTES PORTION OF THE STRUCTURAL CONSTRUCTION DOCUMENTS.
25. THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING LAB WITH ONE OR MORE SPECIAL INSPECTORS TO PROVIDE SPECIAL INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS.
26. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE THE TESTING LABORATORY A COMPLETE SET OF CONSTRUCTION DOCUMENTS, AND SHALL CONDUCT A PRE-CONSTRUCTION MEETING REGARDING TESTING AND INSPECTION REQUIREMENTS.
27. THE CONTRACTOR SHALL PAY FOR ENGINEERING AND ARCHITECTURAL SERVICES REQUIRED TO INVESTIGATE AND CORRECT WORK THAT DOES NOT CONFORM TO THE PROJECT DOCUMENTS OR IS FOUND DEFICIENT OR DEFECTIVE.

- 28. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR CONSTRUCTION TESTING AND INSPECTION AS OUTLINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
29. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE, WEIGHT, LOCATION, AND SUPPORT CONDITIONS OF ALL MECHANICAL EQUIPMENT SUPPORTED ON OR SUSPENDED FROM THE ROOF OR SUSPENDED FLOORS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
30. PRINCIPAL OPENINGS ARE SHOWN ON THESE DRAWINGS. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. IF OPENINGS MUST PENETRATE A STRUCTURAL ELEMENT, THE GENERAL CONTRACTOR SHALL VERIFY THE ADEQUACY OF SUCH MEMBERS PRIOR TO CONSTRUCTION.
31. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL SLAB DEPRESSIONS AND CURBS.
32. THE CONTRACTOR SHALL COMPARE STRUCTURAL DIMENSIONS AND SECTIONS WITH ARCHITECTURAL DIMENSIONS AND SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
33. THE PROJECT SPECIFICATIONS SHALL BE CONSIDERED AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL REVIEW THE SPECIFICATIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
34. ALL TEMPORARY SHORING AND BRACING OF WALLS AND GRADE BEAMS DURING CONSTRUCTION, PRIOR TO THE COMPLETION OF ALL BRACING ELEMENTS, IS THE RESPONSIBILITY OF THE CONTRACTOR. SHORE ALL WALLS AND GRADE BEAMS DURING THE BACKFILLING AND COMPACTION PROCESS.
35. THE GENERAL CONTRACTOR SHALL COORDINATE CONSTRUCTION WITH THE CONSTRUCTION OF ADJACENT STRUCTURES. NOTIFY THE ARCHITECT OF ANY CONFLICTING REQUIREMENTS PRIOR TO CONSTRUCTION.
36. SELECTION OF CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND/OR PROCEDURES, AS WELL AS SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK, ARE SOLELY THE CONTRACTOR'S RIGHTS AND RESPONSIBILITIES. AS SUCH, ANY REQUIRED CONSTRUCTION ENGINEERING AND/OR DESIGN RESULTING FROM THESE SELECTIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.
37. EXAMPLES OF THIS WORK INCLUDE, BUT ARE NOT LIMITED TO, ENGINEERING OF SHORING AND SCAFFOLDING SYSTEMS, LOAD CHECKS AND STRUCTURAL MODIFICATIONS FOR STORAGE, STAGING, AND CONSTRUCTION EQUIPMENT LOADING; MEANS OF EGRESS FOR HEAVY EQUIPMENT; CRANE SELECTION, LOCATION, SUPPORT AND BRACING; TEMPORARY HOISTS, LIFTS AND PLATFORMS, ETC.
38. THE CONTRACTOR SHALL ENSURE THAT APPROPRIATE ENGINEERING IS PERFORMED AND AS NECESSARY, SHALL ENGAGE OR CAUSE TO BE ENGAGED BY APPROPRIATE SUB CONTRACTORS, A LICENSED PROFESSIONAL ENGINEER TO PERFORM THE ENGINEERING, CONSULT ON FIELD MODIFICATIONS, SPECIFY APPROPRIATE FEES LEVELS OF INSPECTION OF THE WORK, AND TO REVIEW INSPECTION REPORTS.
39. CONSTRUCTION ENGINEERING FEES HAVE NOT BEEN INCLUDED IN THE BASE FEE TO THE OWNER/ARCHITECT. IF REQUESTED, THE EOR MAY CONSIDER PERFORMING CONSTRUCTION ENGINEERING SERVICES AS AN ADDITIONAL SERVICE PAID BY THE CONTRACTOR.
40. DIMENSIONS TO EXISTING OR ADJACENT CONSTRUCTION ARE BASED ON THE ORIGINAL CONSTRUCTION DOCUMENTS AND/OR APPROXIMATE FIELD MEASUREMENTS. THEY ARE TO BE USED FOR BID PURPOSES ONLY AND NOT FOR SHOP DRAWING PREPARATION OR CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL FIELD MEASUREMENTS REQUIRED FOR PROPER FIT UP OF MEMBERS FRAMING TO AND AROUND EXISTING CONSTRUCTION.
41. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS SUBGRADE PREPARATION, FOUNDATION CONSTRUCTION, WALL BACKFILL, VOID FORM SYSTEMS, CONCRETE FORMING AND TESTING AND INSPECTION REQUIREMENTS, REFER TO SPECIFICATIONS FOR REQUIREMENTS.
42. DIMENSIONS SHOWN FOR, OR TO, THE EXISTING STRUCTURE ARE BASED ON EITHER THE ORIGINAL CONSTRUCTION DOCUMENTS PREPARED FOR THE EXISTING STRUCTURE OR ON APPROXIMATE FIELD MEASUREMENTS. THEY ARE TO BE USED FOR BID PURPOSES ONLY AND NOT FOR SHOP DRAWING PREPARATION OR CONSTRUCTION. ACTUAL CONDITIONS MAY VARY. THE CONTRACTOR SHALL PROVIDE ALL FIELD MEASUREMENTS REQUIRED FOR PROPER FIT UP OF MEMBERS FRAMING TO AND AROUND EXISTING CONSTRUCTION.
43. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE ADEQUACY OF ALL SHORING (TEMPORARY SUPPORTS) OF THE EXISTING STRUCTURE NECESSARY TO COMPLETE THE CONSTRUCTION AS OUTLINED IN THE STRUCTURAL DRAWINGS. PROVIDE SHORING, BRACES, JACKS, ETC., AS REQUIRED TO COMPLETE THE WORK. ENGINEERING AND DESIGN OF THE TEMPORARY SUPPORTS SHALL BE THE RESPONSIBILITY OF A PROFESSIONAL ENGINEER, ENGAGED BY THE CONTRACTOR, AND REGISTERED IN THE STATE OF THE PROJECT, WITH EXPERIENCE IN THE DESIGN OF THESE ELEMENTS.
44. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR CONSTRUCTION TESTING AND INSPECTION AS OUTLINED IN THE STATEMENT OF SPECIAL INSPECTIONS THAT CAN BE FOUND FOLLOWING THE GENERAL NOTES PORTION OF THE STRUCTURAL CONSTRUCTION DOCUMENTS.
45. THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING LAB WITH ONE OR MORE SPECIAL INSPECTORS TO PROVIDE SPECIAL INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS.
46. PRIOR TO START OF CONSTRUCTION THE CONTRACTOR SHALL PROVIDE THE TESTING LABORATORY A COMPLETE SET OF CONSTRUCTION DOCUMENTS, AND SHALL CONDUCT A PRE-CONSTRUCTION MEETING REGARDING TESTING AND INSPECTION REQUIREMENTS.
47. THE CONTRACTOR SHALL PAY FOR ENGINEERING AND ARCHITECTURAL SERVICES REQUIRED TO INVESTIGATE AND CORRECT WORK THAT DOES NOT CONFORM TO THE PROJECT DOCUMENTS OR IS FOUND DEFICIENT OR DEFECTIVE.

- 48. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR CONSTRUCTION TESTING AND INSPECTION AS OUTLINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
49. THE GENERAL CONTRACTOR SHALL VERIFY THE SIZE, WEIGHT, LOCATION, AND SUPPORT CONDITIONS OF ALL MECHANICAL EQUIPMENT SUPPORTED ON OR SUSPENDED FROM THE ROOF OR SUSPENDED FLOORS. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.
50. PRINCIPAL OPENINGS ARE SHOWN ON THESE DRAWINGS. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. IF OPENINGS MUST PENETRATE A STRUCTURAL ELEMENT, THE GENERAL CONTRACTOR SHALL VERIFY THE ADEQUACY OF SUCH MEMBERS PRIOR TO CONSTRUCTION.
51. SEE ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL SLAB DEPRESSIONS AND CURBS.
52. THE CONTRACTOR SHALL COMPARE STRUCTURAL DIMENSIONS AND SECTIONS WITH ARCHITECTURAL DIMENSIONS AND SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS.
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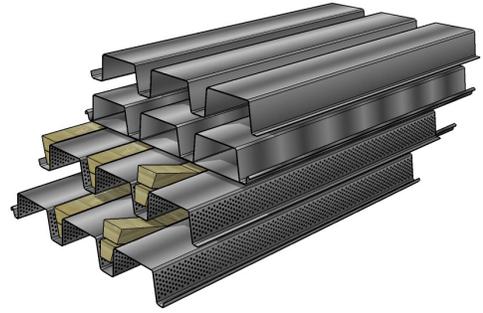
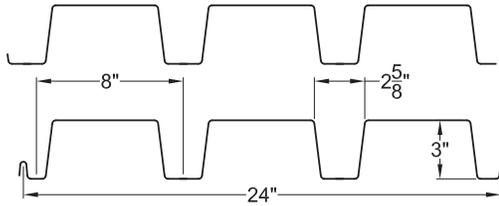


Appendix B: Technical Data

3N / 3NI / 3NA / 3NIA ROOF DECK

- Maximum Sheet Length 42'-0"
- Extra charge for lengths under 6'-0"
- ICC ESR-1227
- FM Global Approved

DIMENSIONS



ROOF

SECTION PROPERTIES

Deck Type	Design Thickness (in.)	Deck Weight (psf)	Section Properties					
			I_p (in ⁴ /ft)	S_p (in ³ /ft)	I_n (in ⁴ /ft)	S_n (in ³ /ft)	V_a (lbs/ft)	F_y (ksi)
N22	0.0295	2.26	0.659	0.382	0.884	0.433	2232	33
N20	0.0358	2.71	0.848	0.501	1.079	0.552	3287	33
N19	0.0418	3.15	1.045	0.597	1.260	0.659	4217	33
N18	0.0474	3.56	1.238	0.688	1.430	0.749	4771	33
N16	0.0598	4.46	1.683	0.893	1.807	0.944	5988	33

VERTICAL LOADS FOR TYPE 3N

No. of Spans	Deck Type	Max. SDI Const. Span	Allowable Total Load (psf) / Load Causing Deflection of L/240 or 1 inch (psf)										
			Span (ft-in.) ctr to ctr of supports										
			10-0	10-6	11-0	11-6	12-0	12-6	13-0	13-6	14-0	14-6	15-0
1	N22	11'-7"	50 / 43	46 / 37	42 / 32	38 / 28	35 / 25	32 / 22	30 / 20	28 / 18	26 / 16	24 / 14	22 / 13
	N20	13'-2"	66 / 56	60 / 48	55 / 42	50 / 37	46 / 32	42 / 28	39 / 25	36 / 23	34 / 20	31 / 18	29 / 16
	N19	14'-7"	79 / 69	71 / 59	65 / 51	59 / 45	55 / 40	50 / 35	47 / 31	43 / 28	40 / 25	37 / 22	35 / 20
	N18	15'-11"	91 / 81	82 / 70	75 / 61	69 / 53	63 / 47	58 / 42	54 / 37	50 / 33	46 / 30	43 / 27	40 / 24
	N16	18'-6"	118 / 110	107 / 95	97 / 83	89 / 73	82 / 64	75 / 56	70 / 50	65 / 45	60 / 40	56 / 36	52 / 33
2	N22	13'-8"	56 / 122	51 / 105	47 / 92	43 / 80	39 / 71	36 / 62	34 / 55	31 / 50	29 / 44	27 / 40	25 / 36
	N20	15'-6"	72 / 152	65 / 131	60 / 114	55 / 100	50 / 88	46 / 78	43 / 69	40 / 62	37 / 55	34 / 50	32 / 45
	N19	16'-11"	86 / 182	78 / 157	71 / 137	65 / 120	60 / 105	55 / 93	51 / 83	47 / 74	44 / 66	41 / 60	38 / 54
	N18	18'-1"	98 / 211	89 / 182	81 / 158	74 / 139	68 / 122	63 / 108	58 / 96	54 / 86	50 / 77	47 / 69	44 / 62
	N16	20'-4"	123 / 276	112 / 238	102 / 207	93 / 181	86 / 159	79 / 141	73 / 125	68 / 112	63 / 100	59 / 90	55 / 82
3	N22	13'-8"	69 / 95	64 / 82	58 / 72	53 / 63	49 / 55	45 / 49	42 / 43	39 / 39	36 / 35	34 / 31	31 / 28
	N20	15'-6"	90 / 119	81 / 103	74 / 90	68 / 78	63 / 69	58 / 61	53 / 54	50 / 48	46 / 43	43 / 39	40 / 35
	N19	16'-11"	107 / 143	97 / 123	89 / 107	81 / 94	75 / 83	69 / 73	64 / 65	59 / 58	55 / 52	51 / 47	48 / 42
	N18	18'-1"	122 / 165	111 / 143	101 / 124	92 / 109	85 / 96	78 / 84	72 / 75	67 / 67	63 / 60	58 / 54	55 / 49
	N16	20'-4"	154 / 216	139 / 186	127 / 162	116 / 142	107 / 125	99 / 111	91 / 98	85 / 88	79 / 79	74 / 71	69 / 64

Notes:
 1) Minimum exterior bearing length required is 1.50 inches. Minimum interior bearing length is 3.00 inches. If these minimum lengths are not provided, web crippling must be checked.
 2) FM Global approved spans available on page 23.

DIVISION 26

ELECTRICAL

Project: Peoria Park District Rooftop Solar at Golf Learning Center (GLC) and Equipment Service Center (ESC) Facilities

Location: Peoria, IL

Issue Date: 02/18/2026

Prepared By: General Energy Corporation

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26 05 00	Common Work Results for Electrical
26 05 19	Low-Voltage Electrical Power Conductors and Cables
26 05 26	Grounding and Bonding for Electrical Systems
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26 05 43	Underground Ductbanks and Handholes (If Required)
26 05 53	Identification for Electrical Systems
26 08 00	Commissioning of Electrical Systems
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SECTION 26 00 00

ELECTRICAL GENERAL REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

- Work includes general administrative and technical requirements for Division 26 electrical work associated with the rooftop solar PV system and interconnection.
- Provide a complete, code-compliant electrical installation, including all required labeling, testing, documentation, and commissioning to ensure safe and reliable operation once the system is placed in commercial operation.
- Coordinate with existing electrical distribution, utility requirements, roofing warranty constraints, and site operations.

1.2 REFERENCES

- NFPA 70 (NEC), edition adopted by Authority Having Jurisdiction (AHJ).
- NEC 2020 for electrical design
- NFPA 70E for electrical safety in the workplace.
- IEEE 1547 and UL 1741 for interconnection and inverter listing (as applicable to selected equipment).
- NEMA and UL standards for enclosures, wiring devices, and equipment.

1.3 SUBMITTALS

- Bill of Materials (BOM) Submittal: Provide a complete BOM including, but not limited to, concrete masonry units; mechanical attachments; DC power optimizers; raceways; expansion fittings; racking manufacturer submittals summarizing order details (including required wire management accessories); conduit; conductors; equipment labels; grounding and bonding components; network cables for the data acquisition system (DAS) panelboard; MC4 connectors; pipe pier supports; fused disconnect panelboards; inverters; AC combiner panelboards; data acquisition system with cellular plan for monitoring and maintenance; fused disconnect switches; and any other miscellaneous components required per the electrical plans.
- Product Data Submittals: Provide product data specifications for all listed BOM items, including shop drawings where applicable, prior to procurement for owner review and approval.
- Test reports:
 - DAS setup

- Grounding inspection
- DC & AC conductors insulation resistance testing
- DC string Voc and polarity testing
- Torque testing (all terminations must be torque-marked with appropriate outdoor rated maker including mechanical and electrical)
- Infrared scan post-energization for all electrical terminations
- Moisture intrusion inspection post-energization for all electrical enclosures including DAS panelboard.
- Closeout Requirements: Provide a complete closeout package including: as-built drawings; full access to the DAS; aerial photos; AHJ-issued permit and inspection waiver/approval; test and commissioning reports; product data submittals and specifications; roof warranty reinstatement (if applicable); certified payrolls compliant with prevailing wage requirements; Ameren Illinois certificate of completion and permission to energize the system; confirmation that the contractor has submitted the required documentation to claim the DG rebate for the Park District; and clear photos of equipment nameplates (including inverters, DAS enclosure, revenue-grade meter, and CTs used for revenue metering). Also include warranty transfer documentation for the following BOM items: mechanical racking, inverters, DC optimizers, concrete masonry units, and electrical panelboards.

1.4 QUALITY ASSURANCE

- Installer qualifications: licensed electrical contractor; personnel trained for PV and energized work procedures.
- Comply with all applicable codes, regulations, ordinances and requirements of authorities having jurisdiction.
- Products: listed/labeled by UL/ETL for intended use; compatible materials (galvanic compatibility, UV resistance, rooftop suitability).
- Pre-installation meeting: review interconnection point, shutdown procedures, roof routing constraints, and inspection/utility witness requirements.

1.5 COORDINATION

- It is essential that Owner's full services and functions are maintained throughout construction period, with minimum disturbance and disruption to operations.
- Coordinate outages and switching with Owner and utility; obtain approvals at least five (5) business days prior to any planned shutdown. Note: The owner has confirmed that weekday power outages are acceptable, as the utility does not charge for outage support during weekdays.
- Verify existing electrical equipment ratings (bus, main breaker, available space) prior to fabrication and mobilization.
- Coordinate roof penetrations, flashing, and firestopping with responsible trades and roof manufacturer requirements.

1.6 CLOSEOUT

- Provide and install final equipment directories, placards, and required NEC labels at service equipment and PV equipment.
- Deliver O&M manuals including inverter manuals, monitoring instructions, shutdown sequence, and spare parts list.
- Provide training for Owner on normal operation, alarms, emergency shutdown, and monitoring portal use.

PART 2 - PRODUCTS

2.1 GENERAL

- Provide products suitable for the environment (rooftop, UV exposure, temperature extremes) and compatible with the PV equipment selections.
- Where a manufacturer is named, provide that basis-of-design product or approved equal meeting the stated performance requirements.

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- Install per NEC, manufacturer instructions, and project drawings; do not conceal work until inspected.
- Maintain clearances for service access and required working space at electrical equipment.
- Provide neat and workmanlike installation: straight raceways, consistent supports, and sealed penetrations.
- Install necessary grounding in accordance with NEC standards.
- Ensure all outdoor enclosures (DC and AC combiner panelboards, disconnect switches, junction boxes) are NEMA 3R, 4, or 4X rated, with wall or rack-mounted enclosures having a minimum 2-foot clearance above grade.
- Use Myers-type hubs with ground screws for conduit terminations in outdoor enclosures, and rain-tight fittings for all cable entries.
- Avoid penetrations or cable entries in the top of outdoor enclosures; enter from the bottom or side.

3.2 FIELD QUALITY CONTROL

- Perform continuity and grounding verification for all equipment grounding conductors and bonding jumpers.
- Perform insulation resistance testing on feeders and PV home runs where required by AHJ/Owner.
- Verify torque of terminations using calibrated tools; record values and report deviations.

SECTION 26 05 00

COMMON WORK RESULTS FOR ELECTRICAL

PART 1 - GENERAL

1.1 SUMMARY

- Common requirements for electrical work, including coordination, submittals, material handling, labeling, and execution practices applicable to all Division 26 work.
- Work is supplementary to project drawings, other Division 26 sections, applicable codes, and AHJ requirements.

1.2 RELATED DOCUMENTS

- Division 01 - General Requirements.
- Other Division 26 sections (raceways, conductors, grounding and bonding, identification, commissioning, etc.).
- Division 07 requirements for roof penetrations, flashing, and firestopping (where applicable).

1.3 REFERENCES

- NFPA 70 (NEC), edition adopted by the AHJ.
- NFPA 70E for electrical safety in the workplace.
- NEMA standards as applicable (enclosures, fittings, and equipment).
- UL/ETL listing requirements for installed electrical products.

1.4 ADMINISTRATIVE REQUIREMENTS

- Coordinate work with roofing, structural, and firestopping trades. Maintain roof warranties and comply with roof manufacturer requirements for penetrations or attachments.
- Verify equipment locations, mounting heights, and clearances prior to rough-in and installation.
- Provide temporary protection to prevent water intrusion during and after work.

1.5 SUBMITTALS

- Provide submittals in accordance with Division 01, including product data, shop drawings, and closeout documentation for each Division 26 section.
- Submit a project-specific label schedule including required NEC PV labels and directory plaques.
- Submit test reports and commissioning documentation prior to final acceptance.

1.6 DELIVERY, STORAGE, AND HANDLING

- Store materials in dry, protected locations; protect conductors from moisture and physical damage.
- Handle electronic equipment (inverters, monitoring) per manufacturer material handling requirements and storage requirements.
- Do not install damaged or corroded components.

1.7 WARRANTY

- Provide manufacturers' standard warranties; coordinate and deliver start-date documentation at project closeout.
- Warranty does not relieve Contractor from responsibility for correcting nonconforming work.

PART 2 - PRODUCTS

2.1 GENERAL

- Provide new materials and equipment; substitutions only with documented equivalency and approval.
- Use listed and labeled products for the intended application and environment.

PART 3 - EXECUTION

3.1 EXAMINATION

- Verify field conditions, dimensions, and existing equipment ratings prior to installation.
- Report discrepancies or unsuitable conditions before proceeding.

3.2 INSTALLATION

- Install electrical work plumb, level, and aligned; provide supports and fasteners suitable for substrate and corrosion environment.
- Seal rooftop penetrations and maintain water-tightness; coordinate flashings and sealants with roof manufacturer requirements.
- Provide identification and labeling as specified; do not energize circuits without required labels and directories.

3.3 CLEANING AND PROTECTION

- Remove debris and unused materials daily; keep roof drains and pathways clear.
- Protect installed work from damage; replace damaged labels or equipment.

SECTION 26 05 19

LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 SUMMARY

- Provide low-voltage power conductors and cables for PV AC circuits, control/communication power as required, and associated terminations.
- Includes conductor identification, pulling, splicing, testing, and documentation.

1.2 REFERENCES

- NEC Articles 110, 200, 210, 240, 250, 300, 310, 690, and 705 as applicable.
- ICEA/NEMA standards for conductor construction and performance.

1.3 SUBMITTALS

- Product data and cut sheets for each conductor type.
- Pulling/tension calculations if requested for long or congested pulls.
- Test reports where required.

PART 2 - PRODUCTS

2.1 AC Conductors

- Copper conductors unless noted otherwise.
- Temperature rating and ampacity per NEC; size conductors for 125% continuous current where applicable. Reference electrical plan feeder schedule for additional details.

2.2 PV DC CONDUCTORS

- Refer to the electrical plan feeder schedule for additional details on the required 10 AWG, 2 kV-rated PV conductors for this project.
- Use listed connectors that are compatible with the module manufacturer, DC optimizers, inverters, and the specified PV wire type.

2.3 TERMINATIONS

- Use listed compression lugs or mechanical lugs rated for conductor material and temperature.

PART 3 - EXECUTION

3.1 INSTALLATION

- Do not exceed manufacturer pulling tension and bend radius; use manufacturer-approved pulling lubricant compatible with insulation.
- Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.
- No splices in raceways unless specifically allowed and accessible in boxes.
- Segregate power and communication conductors per code and manufacturer requirements.
- Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.
- Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.
- Identify conductors at both ends and at pull points; maintain consistent phase/color coding.

3.2 FIELD QUALITY CONTROL

- Perform continuity checks for all feeders and circuits prior to energization.
- Perform insulation resistance testing where specified by Owner/AHJ; document results and corrective actions.
- Verify torque for all lugs and terminations using calibrated torque tools; record and submit.

SECTION 26 05 26

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- Provide grounding and bonding for PV AC and DC equipment as required by NEC and equipment listings.
- Includes equipment grounding conductors (EGCs), bonding jumpers, grounding electrode conductor (GEC) connections, and labeling.

1.2 REFERENCES

- NEC Article 250 (Grounding and Bonding).
- NEC Articles 690 and 705 for PV-specific grounding/bonding requirements.
- UL 2703 for PV module mounting system bonding/listing (where applicable).

1.3 SUBMITTALS

- Product data for grounding/bonding lugs, clamps, bonding jumpers, and grounding electrodes (if provided).
- Grounding and bonding details on shop drawings including connection points to existing grounding electrode system.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CONNECTORS

- Copper conductors for grounding and bonding unless otherwise indicated; sized per NEC.
- Bonding jumpers: copper, green insulation or bare as permitted; flexible where vibration/movement expected.
- Connectors: listed for grounding/bonding, suitable for the environment (wet/corrosive/rooftop).

2.2 PV ARRAY BONDING

- Provide bonding per racking system listing (UL 2703) including approved bonding hardware and installation sequence.
- Where required, provide equipment grounding conductor in array raceways and bond metallic raceways and boxes.

PART 3 - EXECUTION

3.1 INSTALLATION

- Install grounding and bonding conductors concealed from view.
- Bond all non-current-carrying metallic parts including enclosures, raceways, supports, and equipment frames.
- Connect PV equipment grounding to facility grounding electrode system at the interconnection point or as shown on drawings.
- Clean metal-to-metal contact surfaces; use approved bonding hardware; protect against galvanic corrosion.
- Provide accessible test points where required.

3.2 FIELD QUALITY CONTROL

- Verify continuity of grounding/bonding paths from PV equipment to grounding electrode system.
- Verify bonding hardware installation torque and sequence per racking manufacturer instructions.
- Correct any high-resistance or discontinuous bonds prior to energization.

SECTION 26 05 33

RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- Provide raceways, fittings, supports, and boxes for PV AC/DC circuits and monitoring/control wiring as required.
- Includes rooftop routing, penetrations, supports, and sealing.

1.2 REFERENCES

- NEC Chapter 3 wiring methods (as applicable).
- NEMA and UL standards for raceways and fittings.

PART 2 - PRODUCTS

2.1 RACEWAY TYPES

- Exterior/rooftop/Interior/Underground: Refer to the electrical plan feeder scheduled for raceway types for this project and provide corrosion-resistant supports as needed.
- Use corrosion-resistant, hot-dip galvanized or coated finishes for all structural and miscellaneous exterior steel, including strut channels like Unistrut or Kindorf.
- Flexible connections to vibrating equipment: liquidtight flexible metal conduit (LFMC) or liquidtight flexible nonmetallic conduit (LFNC) where permitted.
- Metal Conduit and Tubing
 - Rigid Steel Conduit: ANSI C80.1.
 - IMC: ANSI C80.6.
 - EMT: ANSI C80.3.
 - FMC: Zinc-coated steel or aluminum.
 - LFMC: Flexible steel conduit with PVC jacket.
 - Fittings for conduit (including all types and flexible and liquidtight), EMT, and cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed.
 - Conduit Fittings for Hazardous (Classified) Locations: Comply with UL 886.
 - Fittings for EMT: Steel, set-screw or compression type.
- Nonmetallic Conduit and Tubing

- RNC: NEMA TC2, Type EPC-40-PVC, unless otherwise indicated.
- Fittings for RNC: NEMA TC 3; match to conduit or tubing type and material.
- Metal Wireways
 - Sheet metal sized and shaped as indicated, NEMA 250, Type 1, unless otherwise indicated.
 - Fittings and Accessories: Include couplings, offsets, elbows, expansion joints, adapters, holddown straps, end caps, and other fittings to match and mate with wireways as required for complete system.
 - Wireway Covers: Screw-cover.
 - Finish: Manufacturer's standard enamel finish.

2.2 BOXES, FITTINGS, AND ACCESSORIES

- Provide NEMA 3R/4X enclosures as required for outdoor locations; gasketed covers where needed.
- Use raintight hubs/fittings for rooftop and exterior boxes.
- Provide expansion fittings where thermal movement is expected on long rooftop runs.
- Outlet and Device Boxes: Sheet Metal; NEMA OS 1.
- Pull and Junction Boxes: Small Sheet Metal; NEMA OS 1.
- Hinged-Cover Enclosures: NEMA 250, Type 1, with continuous-hinge cover with flush latch, unless otherwise indicated.
 - Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.

2.3 SUPPORTS AND ROOFTOP PRACTICES

- Use listed rooftop conduit supports/blocks compatible with roof membrane; do not mechanically fasten unless approved by roof manufacturer.
- Maintain roof drainage and walkway clearances; coordinate with PV racking layout.
- Provide watertight flashing assemblies for penetrations; coordinate with roofing trade.

PART 3 - EXECUTION

3.1 INSTALLATION

- Comply with NECA 1 and NECA 101 for installation requirements except where requirements on drawings or in this section are stricter.
- Install raceways parallel or perpendicular to building lines; provide uniform elevation on rooftop supports.
- Provide expansion fittings with bonding jumpers every 100 feet of straight metal conduit run.
- Use conduit expansion and deflection fittings with bonding jumpers when crossing building expansion and seismic separation joints.
- Maintain clearance between raceway and piping for maintenance purposes.
- Deburr conduit ends and protect conductors from abrasion.
- Seal raceways entering conditioned spaces to prevent moisture migration; provide drip loops as needed.

- Provide accessible junction/pull points per code and industry best practice; do not exceed allowable conduit fill.
- Size junction and pull boxes in accordance with NEC guidelines.
- Where applicable, use slip sheets under pull boxes and conduit pipe pier supports to protect the roof membrane and maintain roof warranty.
- Ground all conduit bushings to a ground bus in the pull box.
- Ensure no more than three 90-degree bends in the conduit; provide a pull box or junction box if more bends are necessary.
- Seal all conduit entering enclosures with approved sealants.
- Use matching conduit elbows of the same make, quality, and finish for consistent installation quality.
- Properly seal all penetrations through walls, floors, and ceilings to prevent fire spread.

3.2 FIELD QUALITY CONTROL

- Verify mechanical tightness of fittings and supports; replace cracked fittings or damaged conduit.
- Verify rooftop supports are stable, level, and do not compromise roof membrane.

SECTION 26 05 43

UNDERGROUND DUCTBANKS AND HANDHOLES

PART 1 - GENERAL

1.1 SUMMARY

- Applies only where underground routing is required for PV feeders or monitoring circuits.
- Includes conduits, ductbanks, handholes, warning tape, and restoration.

1.2 SUBMITTALS

- Shop drawings showing routing, depths, crossings, and handhole locations.
- Product data for conduits, handholes, and concrete encasement materials (if used).

PART 2 - PRODUCTS

2.1 CONDUITS

- PVC Schedule 40 for direct burial; Schedule 80 for risers, exposed locations, or where required by code/utility.
- Provide sweeps with long radius; provide pull tape in each conduit.

2.2 HANDHOLES

- Polymer concrete or fiberglass handholes rated for anticipated traffic loads; size for conductor bending radius and splicing.
- Provide covers marked 'ELECTRIC' and lockable where required.

PART 3 - EXECUTION

3.1 TRENCHING AND BACKFILL

- Verify underground utilities prior to excavation; coordinate with Owner and utility locate services.
- Install conduits to required depth; provide sand bedding where needed; maintain separation from other utilities.
- Install detectable warning tape above conduits; provide tracer wire for nonmetallic conduits as required.

3.2 RESTORATION

- Restore paving, landscaping, and finishes to original condition or better.
- Provide as-built routing with measurements from permanent landmarks.

SECTION 26 05 53

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- Provide identification for electrical equipment, raceways, conductors, and PV system labels required by NEC and project requirements.
- Labels include equipment nameplates, circuit directories, conduit markers, warning signs, and PV-specific placards.
- Refer to the electrical plan for project specific required labels.

1.2 REFERENCES

- NEC Articles 110, 230, 250, 690, and 705 labeling requirements (as applicable).
- ANSI Z535 safety sign conventions

1.3 SUBMITTALS

- Label schedule and location plan, including PV rapid shutdown labels (if applicable), shutdown procedures, and directory plaques.
- Sample labels showing material, colors, font size, and adhesive/fastening method.

PART 2 - PRODUCTS

2.1 LABEL MATERIALS

- Engraved laminated phenolic plates or UV-stable printed labels suitable for indoor/outdoor environment.
- Adhesives rated for temperature and UV exposure; stainless steel fasteners for exterior nameplates where required.

2.2 MINIMUM INFORMATION

- Equipment name, voltage, source, and destination (where applicable).
- Panel schedules: typed circuit directories; identify PV backfed breakers and interconnection sources.
- Conduit markers: circuit identification and destination at intervals and at changes in direction.
- PV placards at service equipment indicating PV power source locations and shutdown procedure as required by NEC and utility.

PART 3 - EXECUTION

3.1 INSTALLATION

- Install labels after painting/finishing; surfaces clean and dry.
- Install labels consistently oriented and readable; do not place labels on removable covers unless they remain with the equipment.
- Provide required PV labels at inverters, disconnects, combiner boxes, rapid shutdown initiation device (if present), and service equipment.

3.2 VERIFICATION

- Verify label text matches as-built one-line and panel schedules.
- Replace any mislabeled, illegible, or damaged labels prior to acceptance.

SECTION 26 08 00

COMMISSIONING OF ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- Provide commissioning for PV electrical systems including prefunctional checks, startup, functional performance tests, and documentation.
- Coordinate with Owner, AHJ, and utility witness testing as required.

1.2 DELIVERABLES

- Commissioning plan or checklist package tailored to installed equipment.
- Prefunctional checklists for raceways, conductors, grounding/bonding, labeling, and equipment settings.
- Functional test procedures and results including inverter startup/anti-islanding verification (as applicable).

1.3 TRAINING

- Provide training session covering normal operation, shutdown sequence, alarms, monitoring portal, and basic troubleshooting.
- Provide attendance record and training materials.

PART 2 - PRODUCTS

2.1 TEST INSTRUMENTS

- Provide calibrated test instruments suitable for voltage, current, insulation resistance, and communications verification.
- Provide torque tools with calibration evidence.

PART 3 - EXECUTION

3.1 PREFUNCTIONAL CHECKS

- Verify equipment installation, clearances, labeling, and access.
- Verify conductor continuity, polarity, phase rotation (where applicable), and grounding continuity.
- Verify inverter and monitoring network addressing, time sync, and communications health.

3.2 FUNCTIONAL TESTING

- Perform inverter startup and confirm compliance with utility interconnection requirements and settings.
- Verify PV production reporting and meter readings.
- Verify shutdown sequence, including emergency shutdown and rapid shutdown function (if applicable).

3.3 ACCEPTANCE

- Provide complete commissioning record package prior to final acceptance.
- Correct deficiencies and re-test affected items.

SECTION 26 24 16

PANELBOARDS

PART 1 - GENERAL

1.1 SUMMARY

- Provide panelboards associated with PV interconnection, AC collection, or monitoring power distribution as shown on drawings.
- Includes breakers, enclosures, bus, directories, and accessories.

1.2 SUBMITTALS

- Product data and shop drawings including bus rating, enclosure type, breaker schedule, and available fault current rating.
- Short-circuit/available fault current coordination documentation where required.

1.3 QUALITY ASSURANCE

- Source Limitations: Obtain panelboards, overcurrent protective devices, components, and accessories from single source from single manufacturer.
- Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.
- Comply with NEMA PB 1.
- Comply with NFPA 70.

1.4 EXTRA MATERIALS

- Furnish two of each panelboard key. Panelboards keyed alike to Owner's current keying system if applicable.

PART 2 - PRODUCTS

2.1 RATINGS

- Voltage and phase: match existing system (e.g., 120/208V, 120/240V, 277/480V) as indicated.
- Interrupting rating (AIC): not less than available fault current at the panel location.
- Bus rating: not less than required by connected loads and backfeed calculations.

2.2 BREAKERS

- Molded case circuit breakers listed for panelboard; provide backfed breaker hardware/retention as required.
- Provide handle ties or common-trip as required for multi-pole circuits.
- Provide provisions for lockout/tagout where required.

2.3 DIRECTORY AND LABELS

- Provide typed circuit directory; identify PV circuits and interconnection clearly.
- Provide NEC-required labeling for backfed PV supply connection and shutdown procedure where applicable.

PART 3 - EXECUTION

3.1 INSTALLATION

- Mount plumb and level; maintain required working clearances.
- Maintain a 4-foot clearance in front of AC combiner panelboards and fused AC disconnect switches. Torque mark all terminations.
- Verify torque for breaker lugs and bus connections; document.
- Update directories based on as-built circuits.

3.2 FIELD QUALITY CONTROL

- Verify breaker sizes match design and utility interconnection approval.
- Verify phase balance and correct phasing for PV interconnection.

SECTION 26 33 00

PHOTOVOLTAIC POWER GENERATION SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- Provide a complete, grid-tied PV power generation system including, but not limited to, materials, equipment, labor, installation, solar panels, racking, inverters, DC collection, AC interconnection, disconnects, monitoring, grounding/bonding, labeling, testing, and commissioning in accordance with ASTM, IEEE, NEMA, NFPA, and UL, as specified in this section, and as shown on drawings and the Project Manual.
- This Division 26 package covers electrical scope; mechanical racking and structural attachments may be specified elsewhere.

1.2 PERFORMANCE REQUIREMENTS

- System shall operate continuously under site conditions within equipment ratings and listing limitations.
- Provide equipment and settings compliant with utility interconnection requirements and AHJ approvals.
- Provide monitoring capable of reporting real-time power, energy, inverter status, and alarms.

1.3 SUBMITTALS

- System one-line diagram and equipment schedule including ratings and listings.
- Utility interconnection documentation package (as required by utility) including protective function settings.
- Monitoring architecture diagram and data points list.
- Commissioning procedures and acceptance test plan.
- Bill of Materials (BOM) Submittal: Provide a complete BOM including, but not limited to, concrete masonry units; mechanical attachments; DC power optimizers; raceways; expansion fittings; racking manufacturer submittals summarizing order details (including required wire management accessories); conduit; conductors; equipment labels; grounding and bonding components; network cables for the data acquisition system (DAS) panelboard; MC4 connectors; pipe pier supports; fused disconnect panelboards; inverters; AC combiner panelboards; data acquisition system with cellular plan for monitoring and maintenance; fused disconnect switches; and any other miscellaneous components required per the electrical plans.

- Product Data Submittals: Provide product data specifications for all listed BOM items, including shop drawings where applicable, prior to procurement for owner review and approval.
- It is the Contractor's responsibility to highlight differences/exceptions, if any, between the submitted products and the requirements in the Contract Documents.

1.4 WARRANTIES

- Provide inverter and monitoring warranties per manufacturer; provide documentation of warranty start conditions.
- Provide two-year workmanship warranty for installation; warranty period shall begin from date of Substantial Completion.

1.5 UTILITY COORDINATION

- Contractor shall coordinate metering and interconnection agreements with the electric utility. All utility charges for permitting, applications, coordination, interconnection, and commissioning of the PV systems shall be included in the lump sum Bid Price.
- Contractor is responsible for verifying that all components furnished or installed under the Contract are compatible with the utility's Distributed Generation requirements.
- Owner will occupy the premises during the entire period of construction for the conduct of normal operations. All shutdowns must be coordinated with the Owner a minimum of five (5) business days prior.
- Connect the solar photovoltaic electrical power generation system to the serving electric utility grid only after receiving prior approval from the utility company.

PART 2 - PRODUCTS

2.1 GENERAL

- Provide all materials (as applicable) to fabricate a functioning photovoltaic system in accordance with ASTM, IEEE, NEMA, NFPA, and UL, as specified in this section, and as shown on the drawings.
- The manufacturer(s) of cabling and connectivity components shall be a company specializing in and having a minimum of five years documented experience in producing products similar to those specified in this and related sections.

2.2 SYSTEM COMPONENTS

- Solar Panel Module: Canadian Solar CS6.2-66TB-615H. No substitutions.
 - Owner shall supply:
 - Base Bid #1 - Equipment Service Center: 132 of the 237 required Canadian Solar CS6.2-66TB-615H modules
 - Base Bid #2 - Golf Learning Center: 42 of the 70 required Canadian Solar CS6.2-66TB-615H modules
- Inverters: per Section 26 33 13 and as shown on the drawings.
- DC collection equipment: per Section 26 33 23 and as shown on the drawings.

- Disconnect switches: per Section 26 33 33 and as shown on the drawings.
- Monitoring and data acquisition: per Section 26 33 53 and as shown on the drawings.
- Raceways, conductors, grounding/bonding, and identification: per related Division 26 sections and as shown on the drawings.

PART 3 - EXECUTION

3.1 EXAMINATION

- Examine installation areas, supports, supporting structures, and conditions for compliance with requirements for installation and other conditions affecting performance of the Work.
- Do not begin installation until mounting surfaces have been properly prepared.
- Examine all equipment (including PV modules and inverters) and materials before installation. Reject any equipment and materials that are physically damaged in any way, including scratched, dented, bent, wet, moisture damaged, or mold damaged.
- Examine roughing-in of electrical connections. Verify actual locations of connections before panel installation.
- Proceed with installation only after unsatisfactory conditions have been corrected.
- Protect all new and existing site conditions during the duration of construction of the PV installation.

3.2 INSTALLATION

- Install the solar photovoltaic system according to all code requirements, all related sections of the Project Manual, any applicable local regulatory agencies and their designated AHJ(s), and per listing and manufacturer instructions; maintain required clearances and working space.
- The entire DC electrical system between the PV panels and inverters, including all wiring, grounding, conduits and raceways, combiner boxes, disconnects, overcurrent protection, and penetrations shall be constructed by the Contractor in accordance with industry best practices, NFPA 70 requirements, all related sections within Division 26, all electrical Designer of Record direction, and all manufacturer's requirements.
- Exposed DC string conductors and grounding between the PV modules and combiner boxes shall be installed in a neat and workmanlike manner consistent with the highest industry standards with respect to safety, longevity, and aesthetics.
- Solar module positive and negative leads shall be secured in a neat, workmanlike manner to prevent chafing, swinging, environmental degradation, and exceeding the minimum bend radius per the manufacturer. Proper mechanical sunlight-resistant securing methods shall be used, and all leads shall be routed beneath the modules to minimize direct exposure to sunlight.
- The entire structure and PV arrays shall be installed according to all code requirements, all related sections in the Project Manual, all direction provided by the Owner, and all manufacturer's requirements.
- Coordinate with roofing and structural trades; maintain roof warranty requirements for penetrations and supports.

- Remove, replace, patch, and repair existing roofing materials and surfaces cut or damaged during installation of the solar energy electrical power generation system, by methods and with materials so as not to void existing roofing system warranty. Notify roof warrantor before proceeding.
- Contractor shall provide slip-sheets (sacrificial sheets) between the contact areas of the ballasted PV racking and the roof. Coordinate this requirement with the roof warrantor. The slip-sheets shall be at least 2" wider than the contact surface area of the rack base mount footprint on all sides.
- Provide complete labeling and directories prior to energization.

3.3 STARTUP AND ACCEPTANCE/FIELD QUALITY CONTROL

- Perform startup, tests, and inspections:
 - Visually inspect all electrical connections.
 - Verify correct operation of complete system.
 - Test all disconnect switches and operation modes.
 - Verify overcurrent protection devices do not trip under normal operation conditions.
 - Perform insulation resistance (Megger) testing on DC conductors prior to terminating homeruns at inverter or modules.
 - Conduct DC string open-circuit voltage (Voc) & polarity testing.
 - Conduct insulation resistance (Megger) testing for AC conductors.
 - Test and torque mark, per manufacturer's specifications, all electrical terminations (including wire terminations, breaker mounting, busbar connection, etc).
 - Conduct grounding system inspection.
 - Conduct electrical infrared thermographic survey no sooner than 48 hours after the system energization and no later than one week thereafter.
 - Provide inverter startup and commissioning documentation; coordinate utility witness tests as required. Complete manufacturer's startup checklists and ensure no alarms and shutdowns occur.
- Verify monitoring is operational and accessible by Owner; provide final login credentials per Owner requirements.
- Contractor shall fully investigate, troubleshoot, and correct all deficiencies.
- Provide as-built one-line reflecting installed equipment and field routing.

3.4 TRAINING

- Provide Owner's maintenance personnel with training, including:
 - Function and operation of each piece of equipment.
 - Maintaining the system.
 - Means of disconnecting and re-energizing the system.
 - Principles of operation, troubleshooting, and safety.

3.5 CLOSEOUT SUBMITTALS

- Provide a complete closeout package including: as-built drawings; full access to the DAS; aerial photos; AHJ-issued permit and inspection waiver/approval; product data submittals and

specifications; roof warranty reinstatement (if applicable); certified payrolls compliant with prevailing wage requirements; Ameren Illinois certificate of completion and permission to energize the system; confirmation that the contractor has submitted the required documentation to claim the DG rebate for the Park District; and clear photos of equipment nameplates (including inverters, DAS enclosure, revenue-grade meter, and CTs used for revenue metering).

- Warranty transfer documentation for the following BOM items: mechanical racking, inverters, DC optimizers, concrete masonry units, and electrical panelboards.
- Test and commissioning reports:
 - DAS setup
 - Grounding inspection
 - DC & AC conductors insulation resistance testing
 - DC string Voc and polarity testing
 - Torque testing (all terminations must be torque-marked with appropriate outdoor rated maker including mechanical and electrical)
 - Infrared scan post-energization for all electrical terminations
 - Moisture intrusion inspection post-energization for all electrical enclosures including DAS panelboard.
- Operation and Maintenance Data: Include the following for panels, inverters, electrical distribution, metering, and monitoring.
 - Instructions for operating and maintaining equipment, including system startup and shut down procedures, troubleshooting, and a routine maintenance schedule.
 - Identification of operating limits which may result in hazardous or unsafe conditions.
 - Document ratings of equipment and each major component.
 - Technical Data Sheets.
 - Wiring Diagrams.
 - Parts list.

SECTION 26 33 13

PHOTOVOLTAIC INVERTERS

PART 1 - GENERAL

1.1 SUMMARY

- Provide grid-interactive inverters for PV system as shown on drawings, including controls, communications, and required protective functions.
- Includes installation accessories and startup support.

1.2 REFERENCES

- UL 1741 (including applicable supplements) for inverter listing.
- IEEE 1547 interconnection requirements as adopted by the utility/regulator.
- NEC Articles 690 and 705.

1.3 SUBMITTALS

- Product data including efficiency curves, environmental ratings, and communications capabilities.
- Certificate of listing (UL/ETL) and compliance documentation required by utility.
- Proposed settings for protective functions if adjustable (voltage/frequency ride-through, trip settings).

PART 2 - PRODUCTS

2.1 RATINGS

- AC output voltage, phase, and frequency: as required for interconnection.
- DC input: compatible with PV string configuration; max system voltage per design.
- Enclosure rating: NEMA 3R minimum outdoors; NEMA 4X where exposed to corrosive conditions or washdown.
- Operating temperature range suitable for location.

2.2 COMMUNICATIONS AND INTERFACES

- Provide RS-485 interfaces as required by monitoring system including five-year pre-paid cellular plan.
- Provide data points for power, energy, voltage, current, frequency, status, faults, and alarms.
- Provide secure access features consistent with Owner IT requirements.

2.3 ACCESSORIES

- Provide required DC/AC disconnect interfaces as listed with inverter or as separate equipment per Section 26 33 33.
- Provide mounting hardware and vibration isolation where required.
- Provide arc-fault and ground-fault protection features as required by code and listing.

PART 3 - EXECUTION

3.1 INSTALLATION

- Install in accordance with the Project Drawings, Project Manual, the NEC, applicable code, applicable local regulatory agencies and their designated AHJ(s), and manufacturer specifications and recommendations.
- Mount per manufacturer clearances and specifications; provide working space and service access.
- Provide dedicated circuits for controls/aux power if required by inverter.
- Coordinate communications wiring and network configuration with monitoring system.

3.2 STARTUP

- Perform manufacturer startup procedure; record firmware versions and final settings.
- Verify anti-islanding and protective functions per utility requirements and commissioning plan.
- Provide commissioning report and alarm/status verification.

SECTION 26 33 33

PHOTOVOLTAIC DISCONNECT SWITCHES

PART 1 - GENERAL

1.1 SUMMARY

- Provide fused AC disconnect switches required for PV system, including utility-required visible open points and lockable disconnects.
- Includes enclosures, accessories, and labeling.

1.2 SUBMITTALS

- Product data including voltage/current ratings, utilization category, enclosure rating, and listing for intended use.

PART 2 - PRODUCTS

2.1 AC DISCONNECTS

- Listed safety switch, horsepower-rated as applicable; lockable in OPEN position.
- Provide visible blade type where required by utility; provide enclosure suitable for location (NEMA 3R/4X).

PART 3 - EXECUTION

3.1 INSTALLATION

- Install in accordance with the Project Drawings, Project Manual, the NEC, applicable code, applicable local regulatory agencies and their designated AHJ(s), and manufacturer specifications and recommendations.
- Install within sight of equipment where required; maintain working clearances.
- Maintain a 4-foot clearance in front of AC combiner panelboards and fused AC disconnect switches. Torque mark all terminations.
- Provide coordinated labeling: 'PV AC DISCONNECT', 'PV DC DISCONNECT', and shutdown placards as required.
- Verify direction of operation and handle travel; verify lockout provisions function properly.

3.2 FIELD QUALITY CONTROL

- Verify voltage absence on load side when open during commissioning checks.
- Verify correct equipment identification at each disconnect.

SECTION 26 33 53

PHOTOVOLTAIC MONITORING AND DATA ACQUISITION

PART 1 - GENERAL

1.1 SUMMARY

- Provide monitoring system to collect, store, and report PV performance and equipment status.
- Includes revenue-grade or production metering, data logger/gateway, communications, sensors, and software portal access.

1.2 SUBMITTALS

- Architecture diagram showing communications pathways (cellular with RS-485 network cables) and device addressing.
- Data points list and alarm matrix.
- Cybersecurity baseline: password policy, user roles, and remote access method.

PART 2 - PRODUCTS

2.1 MONITORING HARDWARE

- Gateway/data logger compatible with inverter protocol(s); provide local buffering for at least 7 days of data.
- Provide CTs and PTs as required for production metering; accuracy class per project requirements.
- Environmental sensors are not required for this project.

2.2 SOFTWARE

- Web-based portal with dashboards for power, energy, performance ratio (if supported), and alarms.
- Export capability (CSV) and API access if required by Owner.
- User management with role-based access.

2.3 COMMUNICATIONS

- Provide communications cabling and protection.
- Provide five-year prepaid cellular connectivity.

PART 3 - EXECUTION

3.1 INSTALLATION AND CONFIGURATION

- Install in accordance with the Project Drawings, Project Manual, the NEC, applicable code, applicable local regulatory agencies and their designated AHJ(s), and manufacturer specifications and recommendations.
- Configure device addressing, time synchronization, and data sampling intervals per Owner requirements.
- Verify end-to-end data flow from inverter to portal; verify alarms and notifications (if enabled).
- Provide Owner with admin credentials and documentation for portal access and basic configuration.

3.2 ACCEPTANCE

- Demonstrate live data, historical trends, and alarm/event logs.
- Provide commissioning screenshots or exported reports confirming functionality.

**ATTACHMENT A –
INSURANCE REQUIREMENTS**

ATTACHMENT A.6
INSURANCE REQUIREMENTS
ROUTINE CONSTRUCTION, MAINTENANCE AND REPAIR PROJECTS

Contractor shall obtain insurance of the types and in the amounts listed below.

A. COMMERCIAL GENERAL AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella insurance with a limit of not less than \$1,000,000 each occurrence. If such CGL insurance contains a general aggregate limit, it shall apply separately to this project/location.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence form CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Owner shall be included as an insured under the CGL, using ISO additional insured endorsement CG 20 10 or a substitute providing equivalent coverage, and under the commercial umbrella, if any. This insurance shall apply as primary insurance with respect to any other insurance or self-insurance afforded to Owner.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from pollution, explosion, collapse, or underground property damage.

B. CONTINUING COMPLETED OPERATIONS LIABILITY INSURANCE

Contractor shall maintain commercial general liability (CGL) and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each occurrence for at least one (1) year following substantial completion of the work.

Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 10 93, or substitute form providing equivalent coverage, and shall, at minimum, cover liability arising from products-completed operations and liability assumed under an insured contract.

Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.

Continuing commercial umbrella coverage, if any, shall include liability coverage for damage to the insured's completed work equivalent to that provided under ISO form CG 00 01.

C. BUSINESS AUTO AND UMBRELLA LIABILITY INSURANCE

Contractor shall maintain business auto liability and, if necessary, commercial umbrella liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of any auto including owned, hired and non-owned autos.

Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

D. WORKERS COMPENSATION INSURANCE

Contractor shall maintain workers compensation as required by statute and employers liability insurance. The commercial umbrella and/or employers liability limits shall not be less than \$1,000,000 each accident for bodily injury by accident or \$1,000,000 each employee for bodily injury by disease.

If Owner has not been included as an insured under the CGL using ISO additional insured endorsement CG 20 10 under the Commercial General and Umbrella Liability Insurance required in this Contract, the Contractor waives all rights against Owner and its officers, officials, employees, volunteers and agents for recovery of damages arising out of or incident to the Contractor's work.

E. GENERAL INSURANCE PROVISIONS

- 1. Evidence of Insurance.** Prior to beginning work, Contractor shall furnish Owner with a certificate(s) of insurance and applicable policy endorsement(s), executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.

All certificates shall provide for 30 days written notice to Owner prior to the cancellation or material change of any insurance referred to therein. Written notice to Owner shall be by certified mail, return receipt requested.

Failure of Owner to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

Owner shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor from entering the project site until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by Owner.

Failure to maintain the required insurance may result in termination of this Contract at Owner's option.

With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to Owner whenever requested.

Contractor shall provide certified copies of all insurance policies required above within 10 days of Owner's written request for said copies.

- 2. Acceptability of Insurers.** For insurance companies which obtain a rating from A.M. Best, that rating should be no less than A VII using the most recent edition of the A.M. Best's Key Rating Guide. If the Best's rating is less than A VII or a Best's rating is not obtained, the Owner has the right to reject insurance written by an insurer it deems unacceptable.
- 3. Cross-Liability Coverage.** If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.
- 4. Deductibles and Self-Insured Retentions.** Any deductibles or self-insured retentions must be declared to the Owner. At the option of the Owner, the Contractor may be asked to eliminate such deductibles or self insured retentions as respects the Owner, its officers, officials, employees, volunteers and agents or required to procure a bond guaranteeing payment of losses and other related costs including but not limited to investigations, claim administration and defense expenses.
- 5. Subcontractors.** Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of the type specified above. When requested by the Owner, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

F. INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their officers, officials, employees, volunteers and agents from and against all claims, damages, losses and expenses including but not limited legal fees (attorney's and paralegal's fees and court costs), arising

out of or resulting from the performance of the Contractor's work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or injury to or destruction of tangible property, other than the work itself, including the loss of use resulting therefrom and (2) is caused in whole or in part by any wrongful or negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, except to the extent it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this Paragraph. Contractor shall similarly protect, indemnify and hold and save harmless the Owner, its officers, officials, employees, volunteers and agents against and from any and all claims, costs, causes, actions and expenses including but not limited to legal fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Contract.

SAMPLE LIABILITY INSURANCE ENDORSEMENT

The following spaces preceded by an asterisk (*) need not be completed if this endorsement and policy have the same inception date.

ATTACHED TO AND FORMING PART OF POLICY NUMBER	*EFFECTIVE DATE OF ENDORSEMENT	*ISSUED TO
--------------------------------------------------	-----------------------------------	------------

This endorsement changes the policy. Please read it carefully.

AUTOMATIC ADDITIONAL INSURED

The following provision is added to (SECTION II), Who Is An Insured.

5. Any entity you are required in a written contract (hereinafter called Additional Insured) to name as an insured is an insured but only with respect to liability arising out of your premises, "your work" for the Additional Insured, or acts or omissions of the Additional Insured in connection with the general supervision of "your work" to the extent set forth below.
 - a. The Limits of Insurance provided on behalf of the Additional Insured are not greater than those required by such contract.
 - b. The coverage provided to the Additional Insured(s) is not greater than that customarily provided by the policy forms specified in and required by the contract.
 - c. All insuring agreements, exclusions and conditions of this policy apply.
 - d. In no event shall the coverages or Limits of Insurance in this Coverage Form be increased by such contract.

Except when required otherwise by contract, this insurance does not apply to:

- 1) "Bodily injury" or "property damage" occurring after
 - a) All work on the project (other than service, maintenance or repairs) to be performed by or on behalf of the Additional Insured(s) at the site of the covered operations has been completed; or
 - b) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
- 2) "Bodily injury" or "property damage" arising out of any act or omission of the Additional Insured(s) or any of their employees, other than the general supervision of work performed for the Additional Insured(s) by you.
- 3) "Property damage" to
 - a) Property owned, used or occupied by or rented to the Additional Insured(s);
 - b) Property in the care, custody or control of the Additional Insured(s) or over which the Additional Insured(s) is for any purpose exercising physical control; or

- c) “Your work” for the Additional Insured(s).

With respect to Additional Insureds who are architects, engineers or surveyors, this insurance does not apply “bodily injury”, “property damage”, “personal injury” or “advertising injury” arising out of the rendering of or the failure to render any professional services by or for you, including:

- a) The preparing, approving, or failing to prepare or approve maps, drawings, opinions, reports, surveys, change orders, designs or specifications; and
- b) Supervisory, inspection or engineering services.

Any coverages provided hereunder shall be excess over any other valid and collectible insurance available to the Additional Insured(s) whether primary, excess, contingent or on any other basis unless a contract specifically requires that this insurance be primary or you request that it apply on a primary basis.

No person or organization is an Additional Insured with respect to the conduct of any current or past partnership or joint venture that is not shown as a Named Insured in the Declarations.

END OF ATTACHMENT A.6

**ATTACHMENT B –
SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS & FORMS**

- QUALIFYING CONSTRUCTION CONTRACTS POLICY
- SUMMARY SHEET
- CERTIFICATE OF EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE FOR CONTRACTORS & VENDORS
- WORKFORCE PROFILE AND INSTRUCTIONS
- COMPANY OWNERSHIP CERTIFICATION
- MINORITY/WOMEN OWNED CONTACT SHEET
- CONTRACTOR/SUBCONTRACTOR WORKFORCE PLAN
- APPENDIX A OF 44 ILL ADMIN CODE 750

SECTION III BUSINESS

5.00 SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS

.01 OBJECTIVE

The Peoria Park District Staff and Board believe that diversity and equity are central to our mission. Diversity of race, color, gender, disability, age, and culture in our employees and those we work with is important to fairly represent the same diversity in our community. The differing perspectives available from a diverse workforce are important to solving the complex problems of our community.

As one of the four pillars of the **Peoria Park District's 4-Pronged Approach to Equity** document, **Pillar #3** is to **Actively Promote and Encourage the Diversity, Equity and Inclusiveness of Peoria Park District funded Contractors and Suppliers.**

The Peoria Park District actively promotes and encourages maximum participation of minorities and women on Peoria Park District construction, procurement, and maintenance contracts to ensure that those we serve and those we work with look like the residents of our community.

This goal is established with the following objectives in mind:

- (A) To ensure that construction contracts are awarded and administered in a nondiscriminatory manner;
- (B) To meet the goals and requirements of the Illinois Human Rights Act ("Act") which requires that every party to a public contract and every eligible bidder shall refrain from unlawful discrimination and undertake affirmative action to assure equality of employment opportunity and eliminate the effects of past discrimination (775 ILCS 5/2-105(A)(1) and of the Illinois Administrative Code ("Code") which requires public contractors and subcontractors to determine if minority persons or women are underutilized in any job classification and, if such underutilization exists, to take appropriate affirmative action to rectify underutilization (44 Ill Admin Code 750.110 and 750.120);
- (C) To promote the District's use of Minority-Owned and Women-Owned Businesses by removing barriers and encouraging a level playing field on which such businesses can compete fairly for construction contracts;
- (D) To strive to increase capacity and participation of minority and women labor as well as Minority- Owned and Women-Owned Businesses for Peoria Park District construction projects; and
- (E) To ensure that goals for Minority-Owned and Women-Owned Businesses are narrowly tailored in accordance with applicable law.

The Park Board recognizes that it is required to comply with applicable bidding laws, federal and state constitutions, statutes, and rules and regulations, as well as any applicable local ordinances.

.02 DEFINITIONS

For the purpose of this Policy, the terms set forth below shall have the following definitions:

"Minority Person" shall mean a person who is a citizen or lawful permanent resident of the United States and who is any of the following: (a) American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America, including Central America, and who maintains tribal affiliation or community attachment); (b) Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, but not limited to, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam); (c) Black or African American (a person having origins in any of the black racial groups of Africa); (d) Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race); and (e) Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands).

"Woman" shall mean a person who is a citizen or lawful permanent resident of the United States and who is of the female gender.

"Minority-Owned Business" means a business which is at least 51% owned by one or more minority persons, or in the case of a corporation, at least 51% of the stock in which is owned by one or more minority persons; and the management and daily operations of which are controlled by one or more of the minority individuals who own it.

"Women-Owned Business" means a business which is at least 51% owned by one or more women, or in the case of a corporation, at least 51% of the stock in which is owned by one or more women; and the management and daily operations of which are controlled by one or more of the women who own it.

"Qualifying Construction Contract" or "Qualifying Construction Contracts" means any any or all construction projects with an estimated total base cost of \$50,000 or more.

"Responsible Bidder" means a person who has the capability in all respects to perform fully the contract requirements and who has the integrity and reliability that will assure good faith performance. Past performance may be considered as a part of this analysis. This further requires that the bidder is in compliance with the Act and Code.

"Responsive Bidder" means a person who has submitted a bid that conforms in all material respects to the invitation for bids.

"Subcontractor" includes any sub-subcontractors or any more remote contractors on the job.

Any definition above or herein that is not consistent with existing or subsequently added or amended provisions of the Act or Code shall be deemed modified to be consistent with the Act or Code. Any term used herein but not explicitly defined shall have the same meaning as in the Act or Code.

.03 PARTICIPATION GOALS AND AFFIRMATIVE STEPS

(A) Goals:

It is a goal of the Peoria Park District to ensure that the goals and provisions of the Act and Code are met and to encourage participation of minorities and women on Park District Qualifying Construction Projects.

Peoria Park District shall as permitted by law:

(1) endeavor to award not less than 20% of the total dollar amount of the Park District's Qualifying Construction Contracts to Minority-owned Businesses and not less than 5% of the total dollar amount of the Park District's Qualifying Construction Contracts to Women-owned Businesses ("Participation Goals"); and

(2) endeavor to ensure that a minimum of 20% of the total hours worked on any Qualifying Construction Contract are performed by Minority Persons and a minimum of 5% of the total hours worked are performed by Women ("Workforce Goals").

(B) Affirmative Steps:

Peoria Park District shall take the following affirmative steps to ensure that the aforesaid goals are met in respect to Qualifying Construction Projects:

1) Require that all contractors and subcontractors, as a part of their bid submission documents, provide information demonstrating that the contractor or subcontractor has examined all of its job classifications to determine if minority persons or women are underutilized in any classification, and if so, what affirmative action was taken to rectify that underutilization. (44 Ill Admin Code 750.110 (b) and 750.120);

2) Require that if a contractor or subcontractor hires additional employees in order to perform the contract or portion of the contract, it will determine the availability of minorities and women in the areas from which it might reasonably recruit and will hire for each job classification in a way that minorities and women are not underutilized (44 Ill Admin Code 750.110(c) and 120);

3) Include as a part of all contracts, and require as a part of all subcontracts, the Equal Opportunity Clause set forth in Appendix A of 44 Ill Admin Code 750;

4) Place qualified Minority-Owned and Women-Owned Businesses on solicitation lists;

5) Require that Minority-Owned and Women-Owned Businesses are solicited whenever they are potential sources, at varying sizes of projects;

6) Include in all advertisements for bid (legal notice in the Peoria Journal Star), "Bidders are also advised that contract documents for this project include the non-discrimination, equal opportunity and affirmative action provisions in the Human Rights Act and rules and regulations of

the Department of Human Rights. The Peoria Park District is an EEO organization and encourages participation by minority and female-owned firms.”

- 7) Notify applicable plan rooms and diverse agencies which have specific outreach and contacts with local Minority-Owned Businesses or Women-Owned Businesses of current projects out for bid to encourage the broadest notification to Minority-Owned Businesses and Women-Owned Businesses;
- 8) Include in all bid documents, a current list of Minority-Owned and Women-Owned Businesses for general contractors to be able to contact;
- 9) Provide access to a website for free download ability of bid documents for all contractors, including Minority-Owned Businesses and Women-Owned Business;
- 10) When economically feasible and legally permissible, divide construction projects into smaller tasks or quantities to permit maximum participation by Minority-Owned and Women-Owned Businesses;
- 11) Establish project and delivery schedules, when feasible, that encourage participation by Minority-Owned and Women-Owned Businesses;
- 12) Provide the following documentation in staff recommendations to the Park Board: all contractors and agencies notified of the work, all contractors known to download the bid documents, all contractors that bid on the work, which contractors and subcontractors are minority or women owned; the racial, ethnic, and gender breakdown of the contractor and subcontractor workforce on the form provided by PPD; and whether the contractor or subcontractor has violated any law or ordinance, failed to follow any PPD policies, or breached any contract with the PPD in the past;
- 13) Track final statistics of Peoria Park District construction projects for Minority-Owned Businesses and Women-Owned Businesses and workforce participation numbers quarterly and annually;
- 14) Require the general contractor on Qualifying Construction Contracts, if subcontracts are to be let, to follow the Good Faith Effort requirements defined below.

Good Faith Effort is defined as follows:

A good faith effort means the contractor actively and aggressively sought participation by Minority-Owned and Women-Owned Businesses and/or employment of Minority Persons and Women and to meet all requirements of the Act and Code.

Evidence of good faith effort includes, as appropriate:

- Meeting the requirements of the Act and Code as set forth above on an ongoing basis
- Based on the trades and availability of contractors required to complete the project, a

minimum of three minority/women owned firms must be contacted. The Park District's list of minority/women owned firms will be included in all bid documents.

- The bidder shall negotiate in good faith with the potential minority/women owned firms by not imposing any conditions which are not similarly imposed on all other subcontractors and suppliers, or by denying benefits ordinarily conferred on subcontractors or suppliers for the type of work for which bids were solicited. Minority and women owned businesses must be notified at least 3 business days prior to bid opening to allow adequate time to review and provide bid.
- On all Qualifying Construction Contracts, the bidder must complete and include in the bid, the **Minority/Women Owned Contact Sheet** form. This form will include name of companies contacted, the time and date companies were contacted, the method by which the companies were contacted, the response by the companies contacted, the area of work the companies were contacted about, and bid amounts received from the companies along with other comments.
- The low bidder shall provide to the Park District upon request, copies of all correspondence including without limitation, faxes, letters, text messages, and emails sent to minority/women owned firms.
- Assisting interested Minority-owned and Women-owned Businesses in obtaining bonding, lines of credit and insurance;
- Seeking services from available minority and women community organizations, contractors' groups, business assistance offices and other organizations, as appropriate, to provide assistance in recruiting Minority owned and Women-owned Businesses;
- Providing payroll records or other evidence showing the percentage of Minority Persons and Women employees;
- If a Minority-owned or Women-owned Business is rejected, providing sound reasons for rejection;
- Assisting interested Minority-owned and Women-owned Businesses in obtaining necessary equipment, supplies or materials;
- Placing qualified Minority-Owned and Women-Owned Businesses on solicitation lists;
- Ensuring that Minority-Owned and Women-Owned Businesses are solicited whenever they are potential sources, at varying sizes of projects; and
- When economically feasible and legally permissible, dividing construction projects into smaller tasks or quantities to permit maximum participation by Minority-Owned and Women-Owned Businesses

- All other good faith efforts or evidence of due diligence to meet the Park District's Workforce Goals;

.04 CONTRACT BID DOCUMENTS AND AWARD

The Park District shall include within the bid documents for each Qualifying Construction Contract:

- (A) A copy of this policy (Section 5.00);
- (B) An identification of what documents are required to be submitted as a part of the bid under this policy;
- (C) Such documents as will assist in determining compliance with this policy (including without limitation, Company Ownership Form, EEO Form, Workforce Profile, Minority/Women Owned Contact Sheet, Contractor/Subcontractor Workforce Plan);
- (D) A requirement that the contractor meet the Park District's Workforce Goals or provide evidence of a good faith effort toward meeting the goals;
- (E) Appendix A of 44 Ill Admin Code 750;
- (F) Notice that all subcontracts must make reference to and incorporate the provisions of this policy. To the extent a subcontract does not reference and incorporate the provisions of this policy, the contractor will be deemed in breach of contract and in violation of this policy, and shall be subject to the provisions of Section .05. below; and
- (G) Such other documents as deemed appropriate.

Contracts will be awarded to the lowest Responsible and Responsive Bidder. Bids or proposals submitted without the required documentation identified in this policy are considered unresponsive and will be rejected.

.05 PROGRAM ADMINISTRATION

- (A) The Executive Director or designee shall administer and enforce the provisions of this policy;
- (B) The Park District Board, prior to voting on an applicable contract award, shall be provided information showing the bidder's compliance with this policy;
- (C) The Executive Director or designee shall monitor, track, and report contractors' compliance with this policy over the contract duration to ensure compliance with this policy, including prompt reporting of potential violations to the DEIA Committee and Park District Board. The Park District Board, after five (5) days' notice to the contractor and allowing the

contractor to make a presentation to the Park District Board, shall make a final determination of whether a violation has occurred and what penalty or remedy should be imposed for such violation. Potential penalties or remedies include, but are not limited to, termination of any contract or subcontract, corrective action steps, PPD's contractual remedies, or that the PPD will not consider that contractor to be a responsible bidder, in accordance with Section 8-1(c) of the Park District Code, 70 ILCS 1205/8-1(c), until that contractor provides evidence of making a good faith effort toward meeting these goals, or any combination of penalties and remedies that the Board deems appropriate. The decision of the Park Board is final. The Park Board shall promptly report its decision to the DEIA Committee.

- (D) The Executive Director or designee shall submit a quarterly report with statistics of Peoria Park District construction projects for Minority- Owned Businesses and Women-Owned Businesses and workforce participation numbers to DEIA Committee and to the Park Board for review; and
- (E) The Executive Director or designee shall submit an annual report to the DEIA Committee and Park Board of final statistics of Peoria Park District construction projects for Minority-Owned Businesses and Women-Owned Businesses and workforce participation numbers.

SUMMARY SHEET

SOLICITATION AND HIRING FOR QUALIFYING CONSTRUCTION CONTRACTS

(Construction Projects of \$50,000.00 or more)

1. Goals

Bidder must meet Park District's goals stated below or provide evidence of good faith effort toward meeting the goals to be considered a Responsible and Responsive Bidder.

- Not less than 20% of the total dollar amount of the Contract awarded to go to Minority-owned Businesses
- Not less than 5% of the total dollar amount of the Contract awarded to go to Women-owned Businesses
- Not less than 20% of total hours worked on the job to be by Minority Persons
- Not less than 5% of total hours worked on the job to be by Women

Prior to award, Bidder may be asked to attend a Park Board meeting to review goals and good faith efforts.

2. Required bid documents

The following forms are required with each bid submission. Failing to submit the forms may result in the bid being non-responsive.

- Bid Form
- Subcontractors List
- Certification of Compliance of Listed Provisions and Laws
- W-9
- Bid Bond
- Company Ownership Certification
- Certificate of Equal Employment Opportunity Compliance for Contractors and Vendors
- Workforce Profile
- Minority/Women Owned Contact Sheet
- Contractor/Subcontractor Workforce Plan

3. Required project administrative documents

- Signed Agreement Between Owner & Contractor
- Labor & Material Bond and Performance Bond
- Insurance
- Proof of Certified Payroll submitted to IDOL
- Lien Waivers
- Contractor Affidavit
- Contractor/Subcontractor Workforce Plan

4. Notice to Subcontractors

All subcontracts must make reference to and incorporate the provisions of this Qualifying Construction Contracts Policy. To the extent a subcontract does not reference and incorporate the provisions of the policy, the contractor will be deemed in breach of contract and in violation of this policy, and shall be subject to penalties or remedies stated below.

5. Violation & Penalties

During construction, not meeting self-stated goals listed on "Contractor/Subcontractor Workforce Plan" or "Minority/Women Owned Contact Sheet" shall appear to be a violation. This will result in the following:

- Staff will notify contractor and request additional information and corrective action steps

- Staff will give notice to the Diversity, Equity, Inclusion, & Accessibility (DEIA) Committee and the Park District Board
- The Park District Board, after 5 days' notice to the contractor and allowing the contractor to make a presentation to the Park District Board, shall make a final determination of whether a violation has occurred and what penalty or remedy should be imposed for such violations
- Potential penalties or remedies include:
 - Corrective action steps
 - Termination of any contract or subcontract
 - PPD's contractual remedies
 - PPD will not consider that contractor to be a responsible bidder on future projects until contractor provides evidence of making a good faith effort toward meeting these goals, or any combination of penalties and remedies that the Board deems appropriate.

The decision of the Park Board is final.



Peoria Park District
Certificate of Equal Employment Opportunity Compliance for Contractors & Vendors

The Peoria Park District is an Equal Opportunity Employer and it agrees with each of the provisions below and requires that all suppliers, contractors, subcontractors, and vendors doing business with the Park District be Certified Equal Employment Opportunity Employers in compliance with the Illinois Human Rights Act and such regulations promulgated thereunder, and, that any and all suppliers, contractors, subcontractors or vendors who are found to be in non-compliance with the Illinois Human Rights Act or said regulations may be declared ineligible for future contracts with this Park District; and, that each and every supplier, contractor, subcontractor or vendor does at all times in connection with any dealings with this Park District agree as follows:

- 1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and,

further, that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any underutilization [44 Ill Admin Code 750.110(b)].

- 2) That, if it hires additional employees in order to perform this contract or any portion of this contract, it will determine the availability (in accordance with the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the areas from which it may reasonably recruit and it will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
- 3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- 4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising the labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in its efforts to comply with such Act and Rules and Regulations, the contractor will promptly notify the Peoria Park District and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
- 5) That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the Peoria Park District, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 6) That it will permit access to all relevant books, records, accounts and work sites by personnel of the Peoria Park District and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
- 7) That it will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify the Peoria Park District and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

Failure to properly complete and sign this form, certifying that the Company will agree to the above provisions of the Illinois Human Rights Act as well as the items below will result in it being returned unprocessed thereby resulting in a delay or denial of eligibility to be awarded work with the Peoria Park District.

The Company certifies that it has a written sexual harassment policy meeting the Illinois Human Rights Act and Illinois Department of Human Rights requirements.

 Company Name

 Company Address

 Signature of Company Official

 Name / Title

 Telephone Number & Fax Number

 Email Address

WORKFORCE PROFILE

IMPORTANT: Please complete the company workforce analysis below. Employment data must include ALL full-time company employees who were employed as of the most recent payroll period.

Job Classifications	Black Employees		White Employees		Hispanic Employees		Native American Employees		Asian Employees		Other Employees		TOTAL EMPLOYEES	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Officials, Managers, Supervisors														
2. Professionals														
3. Technicians														
4. Sales														
5. Office/Clerical														
6. White Collar Trainees:														
7. Skilled Crafts:														
8. Apprentices:														
9. On-the-job Trainees:														
10. Semi-skilled														
11. Service Workers														
12. Unskilled														
TOTALS														

Company Name: _____

WORKFORCE PROFILE INSTRUCTIONS

RACE/ETHNIC IDENTIFICATION

WHITE (not of Hispanic origin): All persons having origins in any of the original peoples of Europe, North Africa, or the Middle East.

BLACK (not of Hispanic origin): All persons having origins in any of the Black racial groups of Africa.

HISPANIC: All persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.

ASIAN or PACIFIC ISLANDER: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands. This area includes, for example, China, India, Japan, Korea, the Philippine Islands, and Samoa.

NATIVE AMERICAN or ALASKAN NATIVE: All persons having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.

DESCRIPTION OF JOB CLASSIFICATIONS

OFFICIALS, MANAGERS, AND SUPERVISORS - Occupations requiring administrative personnel who set broad policies, and exercise over-all responsibility for the execution of these policies, and direct individual departments or special phases of a firm's operations. Includes: officials, executives, middle management, plant managers, department managers/superintendents, salaried foremen who are members of management, purchasing agents and buyers, and kindred workers.

PROFESSIONALS - Occupations requiring either college graduation or experience of such kind and amount as to provide a comparable background. Includes: accountants/auditors, airplane pilots and navigators, architects, artists, chemists, designers, dietitians, editors, engineers, lawyers, librarians, mathematicians, natural scientists, personnel and labor relations workers, physical scientists, physicians, social scientists, teachers, and kindred workers.

TECHNICIANS - Occupations requiring combination of basic scientific knowledge and manual skill which can be obtained through about 2 years of post high school education, such as is offered in many technical institutes and junior colleges, or through equivalent on-the-job training. Includes: drafters, engineering aids, junior engineers, scientific assistants, surveyors, technical illustrators, technicians (medical, dental, electronic physical sciences), and kindred workers.

SALES WORKERS - Occupations engaging wholly or primarily in direct selling. Includes: advertising agents/salespersons, insurance agents/brokers, real estate agents/brokers, stock and bond salespersons, demonstrators, salespersons and sales clerks, and kindred workers.

OFFICE AND CLERICAL WORKERS - Includes all clerical type work regardless of level of difficulty, where the activities are predominantly non-manual though some manual work not directly involved with altering or transporting the products is included. Includes: bookkeepers, cashiers, collectors (bills and accounts), messengers and office couriers, office machine operators, shipping and receiving clerks, stenographers, typist and secretaries, telegraph and telephone operators, and kindred workers.

WHITE COLLAR TRAINEES - Persons engaged in formal training for official, managerial, professional, technical, sales, office and clerical occupations.

SKILLED CRAFTS - Manual worker of relatively high skill level having a thorough and comprehensive knowledge of the processes involved in their work. Exercise considerable independent judgement and usually receive an extensive period of training. Includes: the building trades hourly paid foremen and leadmen who are not members of management, mechanics and repairmen, skilled machining occupations, compositors and typesetters, electricians, engravers, job setters (metal), motion picture projectionists, pattern and model makers, stationary engineers, tailors and tailoresses, and kindred workers.

APPRENTICES - Persons employed in a program including work training and related instruction to learn a trade or craft which is traditionally considered an apprenticeship, regardless of whether the program is registered with a Federal or State agency.

ON-THE-JOB TRAINEES - Persons engaged in formal training for craftsmen when not trained under apprentice programs; semi-skilled, unskilled and service occupations.

SEMI-SKILLED WORKERS - Workers who operate machine or processing equipment or perform other factory-type duties of intermediate skill level which can be mastered in a few weeks and require only limited training.

SERVICE WORKERS - Workers in both protective and non-protective service occupations. Includes: attendants (hospital and other institution, professional and personal service), barbers, charwomen and cleaners, cooks (except household), counter and fountain workers, elevator operators, fire fighters, guards, watchmen and doorkeepers, stewards, janitors, police officers and detectives, porters, waiters and waitresses, and kindred workers.

UNSKILLED WORKERS - Workers in manual occupations which generally require no special training. Perform elementary duties that may be learned in a few days and require the application of little or no independent judgement. Includes: garage laborers, car washers and greasers, gardeners (except farm) and groundskeepers, longshoremen and stevedores, lumbermen, craftsmen and wood choppers, laborers performing lifting, digging, mixing loading and pulling operations, and kindred workers.



PEORIA PARK DISTRICT

Company Ownership Certification

In compliance with Illinois Public Act 102-265, and Peoria Park District policy, disclosure of the information requested in this form is required by the Peoria Park District. Failure to properly complete and sign this form will result in it being returned unprocessed thereby resulting in a delay or denial of Company's eligibility to transact business with Peoria Park District.

Please answer all questions. Note, Company may answer "Yes" to more than one category.

- **Is the Company a Minority Owned Business?** YES NO

Check One:

Company holds Certification for this classification, or

Company is self-certifying

- **Is the Company a Woman Owned Business?** YES NO

Check One:

Company holds Certification for this classification, or

Company is self-certifying

- **Is the Company a Disability-Owned Business?** YES NO

Check One:

Company holds Certification for this classification, or

Company is self-certifying

- **Is the Company a Veteran Owned Business?** YES NO

Check One:

Company holds Certification for this classification, or

Company is self-certifying

- **Is the Company a Service Disabled Veteran Owned Business?** YES NO

Check One:

Company holds Certification for this classification, or

Company is self-certifying

Does Company qualify as a small business under federal Small Business Administration? YES NO

<https://www.sba.gov/document/support-table-size-standards>

Please list the name(s) of the Company majority owner(s): _____

Does Company have any parent and/or subsidiary companies? YES NO

If yes, please list all companies: _____

By signing this form, the Company and the individual signing below attest that the above questions have been answered truthfully, to the best of their knowledge.

Company Name

Company Address

Signature of Company Official

Name / Title

Telephone Number & Fax Number

Email Address



PEORIA PARK DISTRICT

Definitions for Company Ownership Certification

- Selected Classification of Owned Business means a business which is at least 51% owned by one or more persons of the selected ownership classification (i.e. minority, women, veteran, etc.), or in the case of a corporation, at least 51% of the stock in which is owned by one or more persons of the selected ownership classification; and the management and daily operations of which are controlled by one or more of the selected ownership classification individuals who own it.
- Control means the exclusive or ultimate and sole control of the business including, but not limited to, capital investment and all other financial matters, property, acquisitions, contract negotiations, legal matters, officer-director-employee selection and comprehensive hiring, operating responsibilities, cost-control matters, income and dividend matters, financial transactions and rights of other shareholders or joint partners. Control shall be real, substantial and continuing, no pro forma. Control shall include the power to direct or cause the direction of the management and policies of the business and to make the day-to-day as well as major decisions in matters of policy, management and operations. Control shall be exemplified by possessing the requisite knowledge and expertise to run the particular business and control shall not include simple majority or absentee ownership.
- Minority person shall mean a person who is a citizen or lawful permanent resident of the United States and who is any of the following:
 - a) American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America, including Central America, and who maintains tribal affiliation or community attachment).
 - b) Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, but not limited to, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam).
 - c) Black or African American (a person having origins in any of the black racial groups of Africa).
 - d) Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race).
 - e) Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands).
- Woman shall mean a person who is a citizen or lawful permanent resident of the United States and who is of the female gender.
- Veteran means a person who (i) has been a member of the armed forces of the United States or, while a citizen of the United States, was a member of the armed forces of allies of the United States in time of hostilities with a foreign country and (ii) has served under one or more of the following conditions: (a) the veteran served a total of at least 6 months; (b) the veteran served for the duration of hostilities regardless of the length of the engagement; (c) the veteran was discharged on the basis of hardship; or (d) the veteran was released from active duty because of a service connected disability and was discharged under honorable conditions.
- Service-Disabled Veteran means a veteran who has been found to have 10% or more service-connected disability by the United States Department of Veterans Affairs or the United States Department of Defense.
- A Person with a Disability means a person who is a citizen or lawful resident of the United States and is a person qualifying as being disabled, meaning a person with a severe physical or mental disability that:
 - a) results from: amputation, arthritis, autism, blindness, burn injury, cancer, cerebral palsy, Crohn's disease, cystic fibrosis, deafness, head injury, heart disease, hemiplegia, hemophilia, respiratory or pulmonary dysfunction, an intellectual disability, mental illness, multiple sclerosis, muscular dystrophy, musculoskeletal disorders, neurological disorders, including stroke and epilepsy, paraplegia, quadriplegia and other spinal cord conditions, sickle cell anemia, ulcerative colitis, specific learning disabilities, or end stage renal failure disease; and
 - b) substantially limits one or more of the person's major life activities.Another disability or combination of disabilities may also be considered as a severe disability for the purposes of item (a) of this subdivision if it is determined by an evaluation of the rehabilitation potential to cause a comparable degree of substantial functional limitation similar to the specific list of disabilities listed in item (a) of this subdivision.
- Certification means a determination made by the Business Enterprise Council for Minorities, Women, and Persons with Disabilities, or by one delegated authority from the Council to make certifications, or by a State agency with statutory authority to make such a certification, that a business entity is a business owned by a minority, woman, or person with a disability for whatever purpose.

Contractor/Subcontractor Workforce Plan

Initial Bid/Estimating Date: _____

Progress Reporting Date: _____

Check appropriate status:

Contractor

Subcontractor

Company Name: _____

Address: _____

Contact Person: _____ Phone: _____

Project: _____

Date Work Started: _____ Percent Complete: _____ %

Job Categories (by Trade)	Total Est. Hrs. (Bid)	# Crew (Head Ct.)	# Minority (Head Ct.)	# Female (Head Ct.)	Planned Minority Hrs.	Planned Female Hrs.	Actual Minority Hrs. to date	Actual Female Hrs. to date
Example: Carpenter	1,000	4	1	0	250	0		
Example: Painter	300	3	1	1	100	100		
Total								

Document Purpose:

This document is a tool to estimate the number and areas of work concerning minority and female labor hours anticipated on this job.

The apparent low bidder and their subcontractors listed on the bid documents shall submit this form within one week after bid opening to the Peoria Park District.

This tool is also a means of tracking the minority and female hours on this job. This document shall be attached to each invoice to show actual minority and female hours on this job.

<i>Job Categories (by Trade)</i>	<i>List of Workers Trade Name</i>
<i>Total Est. Hrs. (Bid)</i>	<i>Total hours of each of the trade listed</i>
<i># Crew (Head Ct.)</i>	<i>Total crew head count of each of the trade listed</i>
<i># Minority (Head Ct.)</i>	<i>Total Minority head count (it is subset of Total Crew #)</i>
<i># Females (Head Ct.)</i>	<i>Total Female head count (it is subset of Total Crew #)</i>
<i>Planned Minority Hrs.</i>	<i>Planned Minority hours of each of the trade listed</i>
<i>Planned Female Hrs.</i>	<i>Planned Female hours of each of the trade listed</i>

APPENDIX A OF 44 IL ADMIN CODE 750
EQUAL EMPLOYMENT OPPORTUNITY

In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause or the Act, the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance of this contract, the contractor agrees as follows:

- 1) That he or she will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service; and, further, that he or she will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any underutilization.
- 2) That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with this Part) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
- 3) That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- 4) That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising the labor organization or representative of the contractor's obligations under the Act and this Part. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply

with the Act and this Part, the contractor will promptly notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.

- 5) That he or she will submit reports as required by this Part, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Act and this Part.
- 6) That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Act and the Department's Rules and Regulations.
- 7) That he or she will include verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

**ATTACHMENT C –
DIRECTORY OF MINORITY & WOMEN OWNED BUSINESS ENTERPRISES**

Directory of Minority & Women Owned Business Enterprises Peoria Park District

MBE-Minority Owned Business Enterprise • WBE-Women Owned Business Enterprise • DOB-Persons with Disability Owned Business Enterprise
VOB-Veteran Owned Business Enterprise • SDV-Service Disabled Veteran Owned Business Enterprise

3 Keys Construction (MBE) Tray Keys	Construction Management 2314 Lehman Rd, Peoria, IL 61604	309-472-2721 traykeys@gmail.com
4th Distribution LLC, The (MBE) Samuel Stidwell	Commercial Building Materials 206 N Randolph St, 2nd Floor, Champaign, Illinois 61822	217-655-4174 info@the4thdistribution.com
A. Lucas & Sons Steel (WBE) Margaret Hanley	Structural Steel Fabrication 1328 SW Washington, Peoria, IL 61602	309-673-8547 Margaret@alucasiron.com
Ace In The Hole (WBE) Willa Warnkes-Sipp	Asphalt 15820 McDonald Rd, Hanna City, IL 61536	309-231-4556 patchem1@yahoo.com
AFE Construction LLC (MBE/WBE) Tommy and Monica Arbuckle	General Contractor 2216 W Altorfer Dr, Suite #2, Peoria, IL 61615	309-473-8688 309-208-3092 Cell admin@afeconstruction.net tommy@afeconstruction.net
Agile Supply Company (MBE)	Commercial Building Materials 706 West Bradley Ave, Urbana, IL 61801	217-729-2686 sales@agilesupplycompany.com
Alexander Brothers Construction Co (MBE) Arielle Alexander	Concrete, Demolition, Excavation, Landscaping PO Box 1508, Peoria, IL 61605 alexanderbrothers1997@gmail.com	309-713-3010
Alexander & Sons Construction (MBE) Leonard Alexander	Driveways, Curbs, Foundations, Layouts, Sidewalks, etc. 2415 N. Linn Street, Peoria, IL 61604 Leonardalexander1467@yahoo.com	773-628-9064 Cell
Allworld Project Management LLC (MBE) Ronnie Foster Jr	Highway, Street & Bridge Construction, Water & Sewer Line and Related Construction, Landscaping, Civil Engineering 415 South Front Street, Suite 121, Memphis, TN 38103	901-881-2985 info@allworldmail.com
Architectural Design Group, Inc (WBE) Deborah Jean Baker	Architect Services 800 SW Adams St, Peoria, IL 61602	309-672-6498 dbaker@archdesigngrp.com
Bautista Electric Enterprises Inc (MBE)	Electrical 1204 W Eads St, Urbana, IL 61801	217-637-0659 Bautistaelectricinc@gmail.com
Ben Hendricks Trucking Inc (WBE) Miranda Hendricks	Trucking, Freight 460 W Vine St, Canton, IL 61520 benhendrickstrucking@gmail.com	815-289-7994 309-647-6878
Black Squirrel Contracting (MBE) Joshua Wessels	Concrete, Painting 2037 N Aspen Road, Peoria, IL 61604	309-369-7817 blackssquirrel@yahoo.com
BMI Contractors & Assoc (MBE) Sammy Hobson	Excavation, Concrete, Demolition 1123 MacQueen, Peoria, IL 61604	309-657-4469 bmicontractors@yahoo.com
BOWA Group, The (MBE) Lee Fantroy	General 7050 S Stony Island Ave, Chicago, IL 60649	312-238-9899 lfantroy@thebowagroup.com
BPI Testing LLC (WBE)	HVAC Building Testing Services 2911 Gill Street, Ste 1A, Bloomington, IL 61704	309-663-1500 bpi@bpitestingllc.com
Buddy's Grounds Maintenance Inc (MBE) Dexter Davis	Landscaping PO Box 1125, Bloomington, IL 61702	309-824-9211 Dexterdavis2@aol.com
Built United (MBE) John Sutherland	General Contractor, Carpentry 921 S. Bosch Rd, Unit B, Peoria, IL 61607	309-699-9191 john@builtunited.com
Burnside Brothers Construction (MBE) Terry Burnside	Landscaping, General Construction 3563 SW Adams, Peoria, IL 61605	309-922-9390 terryburnside@hotmail.com
C Lindsay Sealcoating (MBE)	Paving & Asphalt Serving Peoria & Surrounding Areas	309-291-9352 309-453-8162 clindsay44@yahoo.com

C & G Concrete Construction Co Inc (WBE) Patricia Slusher	Concrete East Peoria, IL 61611	309-699-0384 309-208-4601 Cell Rodney@cngconcrete.com tricia@cngconcrete.com
CAD Construction (WBE) Kerry Keller	General Contractor 150 S Baer Rd, Tremont, IL 61568 admin@cadconstructioninc.com	309-925-2092
Central IL Consulting (WBE) Jessica Youngman	Land Surveying 531 Parkside Drive, Washburn, IL 61570	309-383-3156 youngman@mtco.com
Central Landscaping (WBE) Donna Brandenburg	Seeding, Landscaping 12512 Mendell Rd, Princeville, IL 61559	309-385-4832 cntrland@frontier.com
CJL Landscaping Inc (WBE) Rebecca Kelch	Landscaping 10902 W US Highway 150, Brimfield, IL 61517	309-691-9200 Meinders_81@yahoo.com jrdoering@att.net
Clevenger Contractors Inc (WBE) Verlee Clevenger, Misty L. Daham	Guardrail, Bridge Rail, Seeding, Fencing 355 Naples Rd, PO Box 19, Bluffs, IL 62621	217-754-3411 clever@irtc.net
CNS Forestry & Landscaping (WBE)	Forestry & Landscaping 1813 1000 th St, Lincoln, IL 62656	217-792-3808
Concrete to Perfection (MBE/WBE) Elonda Whitfield	Concrete (Repair, Design, Protect, Patching) and Counter Tops 3510 N Kingston Dr Unit 21, Peoria, IL 61604 concretetoperfection@gmail.com	309-681-9508 309-472-0215 Cell
Cook Fasser (WBE)	Roofing Supplies 5835 N Galena Road, #201, Peoria, IL 61614	309-682-1600 manderson@cookfasser.com
Cordova Construction (WBE) Tina Christopher	Landscaping, Dirt Work, Concrete Removal, Curb & Gutter Removal, Sidewalk Removal 2424 N Ellory Road, Peoria, IL 61615	309-208-3448 Cell tinac18827@yahoo.com
Cranford Plumbing (WBE)	Plumbing PO Box 755, Dunlap, IL 61525	309-697-3484
Cronkhite Painting & Decorating Inc (WBE) Amy Cronkhite	Painting 1925 Woodland Knolls Rd, Metamora, IL 61548	309-208-6237 amy@cronkhitepainting.com
CSS (Construction Specialties & Services) (MBE) Dave Suzuki	Building Specialties, Design, Engineering, Estimating PO Box 120703, Peoria, IL 61614	309-685-8453 css@sai-x.com cssco@sai-x.com
Custom Underground Inc (WBE) Diane Feuchter	Directional Boring, Fiber Optic Splicing, Utility Construction 9907 W US Highway 150, Edwards, IL 61528	309-683-3677 mail@customug.com
CWG Inc (WBE) Teresa Gustafson	Demolition, Excavation, Trucking 24635 Cooper Rd, Morton, IL 61550	309-208-5461 Cell 309-208-8899 Cell
Dashco, Inc (WBE)	Insulation, siding, windows, soffits, gutters, rain/gutter guard 4901 S Becker Dr, Bartonville, IL 61607	309-633-1383 debbie@dashco.site
DECA Realty & DECA Properties (MBE) Eddie J. Washington	Real Estate Broker, Appraiser & Properties 417 W Main, Peoria, IL 61606	309-637-3322 washingtoned48@gmail.com
Design Air Inc (MBE) Christopher Eston	Commercial Air Duct Cleaning 6625 N Big Hollow Rd # 312, Peoria, IL 61615	309-693-8632 cle@designair-inc.com
Drummond Construction LLC (MBE) Charles Drummond	Sewage and stormwater treatment works or nonpoint source projects 1609 S Griswold, Peoria IL 61605	309-643-2757 drummondcharles9@gmail.com
Earth Care Unlimited Inc (WBE) Monica Thornley	Landscaping, Seeding, Sodding 3108 Panther Grove Rd, Ashland, IL 62612 earthcareunlimited@yahoo.com	217-452-7370 217-414-4321
EB Home Improvement LLC (MBE) Elbert Billups	Painting Peoria, IL	309-420-2846 billupselbert@gmail.com
Elite Armour Roofing (MBE)	Roofing, Siding, Gutters, Fascia, Soffits Dunlap, IL	800-327-4987 elitearmourroofing@gmail.com
Foster-Jacob Electric (WBE) Emily Rudesill	Electrical 826 W Main St, Peoria, IL 61606	309-674-8129 emilyj@fosterjacob.com

Fosters Custom Painting (WBE)	Painter Peoria, IL fosterscustompainting@yahoo.com	309-208-7538
Fritch Heating & Cooling (WBE)	HVAC 1004 NE Adams, Peoria, IL 61603	309-671-5360
G.A. Rich & Sons (WBE)	Mechanical and Utility Contractor, Commercial Plumbing 204 S Perry, Deer Creek, IL 61733	309-447-6231 info@garich.com
Garza Heating & Cooling (MBE)	HVAC 1304 S Western Ave, Peoria, IL 61605	309-645-6294 carlosgarza@gmail.com
Horowitz Concrete (WBE)	Concrete 128 Legion Lane, East Peoria, IL 61611	309-208-4757
Ronald A. Givens & Associates (MBE) Ronald A. Givens	Insurance & Investments 2616 N Lehman, Peoria, IL 61602	309-685-4588
GIVSCO Construction (MBE) Ronald Givens	General Contractor 2323 Lakeshore Dr, Suite B, Pekin, IL 61554	309-620-9127 info@givSCO.com
Gutters & More (WBE) Kris Rainey	Gutters 157 Thunderbird Ln, East Peoria, IL 61611	309-694-4000 ksr@gutters-more.com
H & S Mechanical Inc (WBE) Tara Howard	Mechanical, Structural Steel and Electrical Contractor 5607 S Washington St, Bartonville, IL 61607	309-696-7066 tara@hsmmechanicalinc.com
Hanley Industrial Services (VOB) Jim Hanley	Drafting & Design, Metal Supplies (Incl. Fabricated Steel), Highway Products, Consulting 8811 N. Industrial Road, Suite A, Peoria, IL 61615 jim@hanleyindustrialservices.com	309-261-9941
Hermann & Associates (WBE) Alisha Hermann	Consultant Engineering 4603 N Galena Rd, Peoria Heights, IL 61616 ahermann@hermannassoc.com	309-687-5566
Illinois Mechanical Service & Design (WBE) Beth Ward	HVAC PO Box 10494, Peoria, IL 61612	309-713-3640 309-713-2995 Fax service@illmsd.com
Infrastructure Engineering (MBE)	Civil Engineering 456 Fulton St, Suite 256, Peoria, IL 61602 eandrews@infrastructure-eng.com	309-637-9200 309-637-9210
Intech Innovations (SDV) John McCrary	Audio/Video Design and Integration Washington, IL 61571 jmccrary@intechinnovations.com	309-481-4361
Interlock Brick Paving (WBE) Chris Joos	Hardscaping, Landscaping, Excavating PO Box 6, Morton, IL 61550	309-696-9264
JC Construction (MBE) Frank Coates	General 1810 Stever, Peoria, IL 61605	309-303-3919 Cell
JD Traffic Inc (WBE)	Traffic Control Equipment 4200 S Ricketts Ave, Bartonville, IL	309-966-4494 Jordan@JD-Traffic.com
JM Industrial Supply (MBE/VOB) Ron Given	Maintenance Items, Tools, Soaps 2323 Lakeshore, Pekin, IL 61554	309-346-5796 sales@jmindsupply.com
Jones Electrical Contractors Inc (MBE/VOB) Ronald Jones	Electrical 5611 W Rachael Dr, Peoria, IL 61615	309-339-7690
Kadilex Construction Inc (MBE)	Rebar Installation P.O. Box 348 Wood River, IL 62095	618-216-2621 info@kadilexconstruction.com
Kelley Ironworks (WBE) Tania Hoerr	Fencing, Railings and Ironwork 4303 N Main St, East Peoria, IL 61611	309-697-9870 309-208-5207 Cell tania@kelleyiron.com
Kemper Construction (WBE)	General Contractor 423 Enterprise Dr, Canton, IL 61520	309-647-3836

Kerry Brown Trucking (MBE) Leo K. Brown	Tandem, Semi Dump, General Hauling Peoria, IL	309-251-6089 Cell leok.brown1957@gmail.com
Kreiling Roofing Co (WBE)	Residential & Commercial single ply, BUR, coatings, metal roofing, shingles, tile, slate, wood shake, with custom sheet metal details and copper work 2335 W Altorfer Dr, Peoria, IL 61615	309-673-3649 kdimler@kreiling.com
Lewis Michael Construction (MBE/WBE) Andre McKnight	Janitorial & Construction Clean-Up 2000 W Pioneer Parkway, Ste 7, Peoria, IL61615	309-686-7107 lmcm2@comcast.net
LIZZ Trucking & Hauling (MBE) Brandon Hines	Trucking/Hauling Peoria, IL 61604	309-208-5942 lizztrucking@yahoo.com
Los Amigos Concrete Construction (MBE)	Concrete Peoria, IL	309-863-6495 Eddievega599@yahoo.com
LNR Construction (MBE) Lavael Randle Sr	General Construction 2200 N Linsley St, Peoria, IL 61605	309-678-3314 Cell
M & A Plumbing (MBE) Michael Abner	Plumbing 6216 N Devonshire Avenue, Peoria, IL 61615	309-689-0133 mabner1953@icloud.com
McGinnis Transportation (WBE) Beth McGinnis	Trucking, Tandem, 24" Box Truck 336 Riverview Drive, Creve Coeur, IL 61610	309-369-4465
Millennia Professional Services of IL (MBE) Thomas Ngo	Civil Engineering, Surveying, Materials Testing 850 N Main St., Morton, IL 61550	309-321-8141 tngo@millennia.pro
Molleck Electric (WBE)	Electrical 14926 W Winchester Dr, Brimfield, IL 61517	309-446-3483 dmolleck@yahoo.com
Montefusco HVAC (WBE) Lisa Rhoades	HVAC 2400 W Park 74 Drive, Peoria, IL 61615	309-691-7400 309-208-6233 lisa@montefuscohvac.com
Murillo Concrete (MBE) Javier Murillo	Concrete Dunlap, IL	309-397-6852 murilloconcrete@gmail.com
Oberlander Electric (MBE) Chad Gardner	Electrical 1300 E Gardner Drive, Mossville, IL 61552	309-657-0259 309-694-1468 cgardner@obie.biz 309-745-5763
Ogborn Plumbing (WBE)	Plumbing 311 Peach, Washington, IL 61571	
Peoria Brick Company (WBE)	Brick and Stone Supply 501 Cole Street, East Peoria, IL 61611	309-699-1116 info@peoriabrick.com
Peoria Metro Construction Inc (WBE) Courtney Meischner	General Contractor, Concrete Contractor 1925 S Darst St, Peoria, IL 61607	309-671-1466 info@peoriametro.com
Phoenix Corporation (WBE)	Trucking and Excavating 1006 Rosehill Rd. Port Byron IL 61275	309-523-3687 estimating@phoenixcorp.org
Pizano Electric Inc (MBE)	Electrical 716 24th St. Rock Island, IL 61201	309-373-7808 pizanoelectrical@gmail.com
Point Construction Company (MBE) Juan Madrigal	Roofing, Siding, Carpentry Peoria, IL 61614	309-635-9074 jjm025@gmail.com
Prairie Engineers of Illinois PC (WBE) Colleen Ayars	Civil Engineering, Surveying, Environmental Consulting 926 SW Adams Street, Suite 120, Peoria, IL 61602 www.prairieengineers.com	309-839-2642
Quick Electrical Contractors Inc (WBE) Lisa Quick	Electrical 445 Carter St, PO Box 49, Fairview, IL 61432	309-778-2000 lq@quickelectric.net
Rainforcing Roofing and Exteriors (MBE/WBE)	Roofing, Siding, Gutters 2617 N Sheridan Rd, Peoria, IL	309-989-3279 rainforcing.roof2022@gmail.com
Reign Construction (MBE/WBE) Bridget Booker	Iron Worker, Structural, Bridges, Rebar, Fabrication, Welding, Rigging, and Ornamental 801 W Main St, Suite A118, Peoria, IL 61606 bridget@reignconstructioninc.com	309-495-7284 309-750-4846 Cell

R.J. Rhodes Electric (MBE) Richard Joseph Rhodes	Electrical 4210 N Northbrook Ct, Peoria, IL 61614 Richard_rhodes2001@yahoo.com	309-989-7931
RNS Electric Inc (WBE) Regina Slonneger	Electrical 28558 Irish Lane, Washington, IL 61571	309-444-5200 gina@rnselectricinc.com ty@rnselectricinc.com
Rob Johnson Trucking (WBE) Jessica Johnson	Trucking East Peoria, IL 61611	309-251-2756 jessicamjohnson_80@yahoo.com
Rustic Oaks Lawn & Landscaping (MBE) Kameron Velasquez	Concrete, Landscape Design, Installation, and Maintenance East Peoria, IL 61611 office@rusticoakslandscaping.com	309-966-0689
Searle Trucking Inc (WBE) Debbie Searle	Trucking/Hauling, Trailors, Flat Dump PO Box 1084, Peoria, IL 61653	309-686-0708 searletrkn@comcast.net
Serenity Electric (MBE)	Electrical PO Box 6521, Peoria, IL 61601 jamesltaylor1955@yahoo.com	309-363-5067 Cell
Sheridan Road Lumber (WBE)	Lumber and Materials Provider 6600 N Sheridan Road, Peoria, IL 61614	309-691-0858 info@srlco.com
Sierra Glass Company (MBE)	Glass Supply 301 N. Neil Street Suite 400, Champaign, IL 61820 antwuan@sierraglasscompany.com	217-239-0644
Standard Heating & Cooling (WBE)	HVAC 906 SW Adams, Peoria, IL 61602	309-671-5417 bewalt@standardheat.com
Stoops Plumbing (WBE) Jennifer Stoops	Plumbing PO Box 320, Mackinaw, IL 61755	309-494-9500 jennifer@stoopsplumbing.com
Tabitha Ventures Inc (MBE) Edward O Taiwo	General Construction & Management 2217 N Woodcrest Dr #3E, Dunlap, IL 61525	309-692-1473 info@tabithainc.com
Thompson Brothers Inc (MBE) Todd Thompson	General Carpentry and Construction, Interior Finish Work, Millwork PO Box 313, Pekin, IL 61555	309-613-0254 office@tbrosinc.com
Tiles in Style LLC (MBE/WBE) dba Taza Supplies dba Taza Construction	Flooring Solutions Construction Materials General Construction 16940 Vincennes Ave, South Holland, IL	sales@tilesinstyle.com sales@tazasupplies.com sales@tazaconstruction.com 877-817-2841
Titan Industries (WBE)	Steel Fabrication 100 Prospect Dr, Deer Creek, IL 61733	309-440-1010
TSI Commercial Floor Covering (WBE)	Flooring 3611 N Staley Rd, Suite #1, Champaign, IL 61822	217-328-7321 marci.smith@tsicfcacr.com
Universal Paintings and Coatings (WBE)	Painting & Wallpapering 390 Wildwood Dr, Groveland, IL 61535	309-253-1569 universalcoatingsllc@gmail.com
Veya Inc (MBE)	Concrete, Curbs & Gutters, Excavation 601 S. Country Fair Drive, Champaign, IL 61821	217-607-1500 patrick@veyainc.com
Western Asphalt Inc (WBE)	Environmental Remediation & Restoration, Excavation, Demolition 2665 Prairie College Rd. Jacksonville, IL 62650	217-243-3822 info@workwithwestern.com
Will Heating & Cooling (MBE)	HVAC 2825 Humboldt, Peoria IL 61605	309-839-5280 dallaswilliams73@gmail.com
Willis Electric (WBE) Phyllis Willis	Electrical PO Box 545, Chillicothe, IL 61523	309-579-2926 309-208-3415 Cell

**ATTACHMENT D –
PREVAILING WAGES FOR PEORIA COUNTY – ILLINOIS DEPARTMENT OF LABOR**

Peoria County Prevailing Wage Rates posted on 3/2/2026

Trade Title	Rg	Type	C	Base	Foreman	Overtime					Pension	Vac	Trng	Other Ins	Add OT 1.5x owed	Add OT 2.0x owed
						M-F	Sa	Su	Hol	H/W						
ASBESTOS ABT-GEN	All	BLD		36.00	37.50	1.5	1.5	2.0	2.0	8.90	23.58	0.00	0.80	0.00	2.51	5.02
ASBESTOS ABT-GEN	All	HWY		38.07	39.57	1.5	1.5	2.0	2.0	8.90	28.44	0.00	0.80	0.00	4.20	8.39
ASBESTOS ABT-MEC	All	BLD		35.18	38.00	1.5	1.5	2.0	2.0	16.44	14.75	0.00	0.92		2.43	4.84
BOILERMAKER	All	BLD		50.46	54.46	1.5	1.5	2.0	2.0	7.07	24.29	0.00	2.34	0.00	16.38	32.76
BRICK MASON	All	BLD		39.50	41.87	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.25		0.00	0.00
CARPENTER	All	BLD		39.06	41.81	1.5	1.5	2.0	2.0	9.95	23.19	0.00	0.81	0.00	16.57	33.14
CARPENTER	All	HWY		40.96	43.21	1.5	1.5	2.0	2.0	9.95	24.87	0.00	0.78	0.00	0.00	0.00
CEMENT MASON	All	BLD		35.96	38.71	1.5	1.5	2.0	2.0	9.00	24.00	0.00	0.86	0.00	0.00	0.00
CEMENT MASON	All	HWY		39.43	41.93	1.5	1.5	2.0	2.0	9.00	23.67	0.00	0.80	0.00	0.00	0.00
CERAMIC TILE FINISHER	All	BLD		36.21		1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.24		0.00	0.00
ELECTRIC PWR EQMT OP	All	ALL		59.91	71.10	1.5	1.5	2.0	2.0	9.30	16.78	0.00	0.60	0.00	0.00	0.00
ELECTRIC PWR GRNDMAN	All	ALL		40.71	71.10	1.5	1.5	2.0	2.0	8.72	11.40	0.00	0.41	0.00	0.00	0.00
ELECTRIC PWR LINEMAN	All	ALL		66.69	71.10	1.5	1.5	2.0	2.0	9.50	18.67	0.00	0.67	0.00	0.00	0.00
ELECTRIC PWR TRK DRV	All	ALL		45.45	71.10	1.5	1.5	2.0	2.0	8.86	12.72	0.00	0.45	0.00	0.00	0.00
ELECTRICIAN	All	BLD		46.70	50.20	1.5	1.5	2.0	2.0	10.00	16.45	0.00	0.90	0.00	0.00	0.00
ELECTRONIC SYSTEM TECH	All	BLD		37.70	40.70	1.5	1.5	2.0	2.0	8.85	14.15	0.00	0.40	0.00	0.00	0.00
ELEVATOR CONSTRUCTOR	All	BLD		60.52	68.09	2.0	2.0	2.0	2.0	16.37	21.76	4.84	0.85		0.00	0.00
GLAZIER	All	BLD		41.24	43.24	1.5	1.5	1.5	2.0	15.87	11.51	0.00	1.40	0.00	0.00	0.00
HEAT/FROST INSULATOR	All	BLD		46.91	49.72	1.5	1.5	2.0	2.0	16.44	17.08	0.00	0.92		3.59	7.17
IRON WORKER	All	BLD		39.24	41.14	1.5	1.5	2.0	2.0	12.71	20.26	0.00	0.91	0.00	0.00	0.00
IRON WORKER	All	HWY		45.48	47.48	1.5	1.5	2.0	2.0	12.71	20.26	0.00	1.16	0.00	0.00	0.00
LABORER	All	BLD		34.00	35.50	1.5	1.5	2.0	2.0	8.90	23.58	0.00	0.80	0.00	2.51	5.02
LABORER	All	HWY		37.32	38.82	1.5	1.5	2.0	2.0	8.90	28.44	0.00	0.80	0.00	4.20	8.39
LABORER, SKILLED	All	BLD		34.40	35.90	1.5	1.5	2.0	2.0	8.90	23.58	0.00	0.80	0.00	2.51	5.02
LABORER, SKILLED	All	HWY		37.62	39.12	1.5	1.5	2.0	2.0	8.90	28.44	0.00	0.80	0.00	4.20	8.39
LATHER	All	BLD		39.06	41.81	1.5	1.5	2.0	2.0	9.95	23.19	0.00	0.81	0.00	16.57	33.14
MACHINERY MOVER	All	HWY		45.48	47.48	1.5	1.5	2.0	2.0	12.71	20.26	0.00	1.16	0.00	0.00	0.00

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MACHINIST	All	BLD		60.39	64.39	1.5	1.5	2.0	2.0	11.43	9.95	1.85	1.47	0.00	0.00	0.00
MARBLE FINISHER	All	BLD		36.21		1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.24		0.00	0.00
MARBLE MASON	All	BLD		39.92	42.32	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.26		0.00	0.00
MILLWRIGHT	All	BLD		39.10	41.85	1.5	1.5	2.0	2.0	9.95	23.53	0.00	0.81	0.00	16.74	33.48
MILLWRIGHT	All	HWY		42.00	44.25	1.5	1.5	2.0	2.0	9.95	24.50	0.00	0.78	0.00	0.00	0.00
OPERATING ENGINEER	All	BLD	1	47.79	50.79	1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
OPERATING ENGINEER	All	BLD	2	44.09		1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
OPERATING ENGINEER	All	BLD	3	38.03		1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
OPERATING ENGINEER	All	HWY	1	47.79	51.29	1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
OPERATING ENGINEER	All	HWY	2	44.09		1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
OPERATING ENGINEER	All	HWY	3	38.03		1.5	1.5	2.0	2.0	12.85	26.97	0.00	3.60		0.00	0.00
PAINTER	All	ALL		42.40	44.40	1.5	1.5	1.5	2.0	15.13	12.32	0.00	1.50	0.00	0.00	0.00
PAINTER - SIGNS	All	BLD		48.16	54.11	1.5	1.5	2.0	2.0	8.20	16.81	0.00	0.00	0.00	0.00	0.00
PILEDRIVER	All	BLD		41.06	43.81	1.5	1.5	2.0	2.0	9.95	23.19	0.00	0.81	0.00	16.57	33.14
PILEDRIVER	All	HWY		41.96	44.21	1.5	1.5	2.0	2.0	9.95	24.87	0.00	0.78	0.00	0.00	0.00
PIPEFITTER	All	BLD		46.60	51.73	1.5	1.5	2.0	2.0	9.95	17.49	0.00	1.65	0.00	0.00	0.00
PLASTERER	All	BLD		34.25	36.25	1.5	1.5	2.0	2.0	9.00	25.10	0.00	0.99		0.00	0.00
PLUMBER	All	BLD		42.70	47.40	1.5	1.5	2.0	2.0	9.95	19.33	0.00	1.70	0.00	0.00	0.00
ROOFER	All	BLD		38.05	40.90	1.5	1.5	2.0	2.0	10.75	13.26	0.00	0.50	0.00	0.00	0.00
SHEETMETAL WORKER	All	BLD		40.48	42.50	1.5	1.5	2.0	2.0	12.42	20.68	0.00	1.29	0.00	0.00	0.00
SIGN HANGER	All	HWY		45.48	47.48	1.5	1.5	2.0	2.0	12.71	20.26	0.00	1.16	0.00	0.00	0.00
SPRINKLER FITTER	All	BLD		50.51	53.76	1.5	1.5	2.0	2.0	12.40	17.31	0.00	0.54	0.00	0.00	0.00
STEEL ERECTOR	All	HWY		45.48	47.48	1.5	1.5	2.0	2.0	12.71	20.26	0.00	1.16	0.00	0.00	0.00
STONE MASON	All	BLD		39.50	41.87	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.25		0.00	0.00
TERRAZZO FINISHER	All	BLD		36.21		1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.24		0.00	0.00
TERRAZZO MASON	All	BLD		39.92	42.32	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.26		0.00	0.00
TILE MASON	All	BLD		39.92	42.32	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.26		0.00	0.00
TRUCK DRIVER	All	ALL	1	45.29	49.65	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	2	45.88	49.65	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	3	46.15	49.65	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00

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TRUCK DRIVER	All	ALL	4	46.54	49.65	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	ALL	5	47.64	49.65	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	1	36.23	39.72	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	2	36.70	39.72	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	3	36.92	39.72	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	4	37.23	39.72	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TRUCK DRIVER	All	O&C	5	38.11	39.72	1.5	1.5	2.0	2.0	17.11	8.06	0.00	0.25	0.00	0.00	0.00
TUCK POINTER	All	BLD		39.50	41.87	1.5	1.5	2.0	2.0	12.45	16.63	0.00	1.25		0.00	0.00

Legend

Rg Region

Type Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers

C Class

Base Base Wage Rate

OT M-F Unless otherwise noted, OT pay is required for any hour greater than 8 worked each day, Mon through Fri. The number listed is the multiple of the base wage.

OT Sa Overtime pay required for every hour worked on Saturdays

OT Su Overtime pay required for every hour worked on Sundays

OT Hol Overtime pay required for every hour worked on Holidays

H/W Health/Welfare benefit

Vac Vacation

Trng Training

Other Ins Employer hourly cost for any other type(s) of insurance provided for benefit of worker.

Explanations PEORIA COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

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ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

LABORER, SKILLED - BUILDING

The skilled laborer building (BLD) classification shall encompass the following types of work, irrespective of the site of the work: cutting & acetylene torch, gunnite nozzlemen, gunnite pump men & pots, kettlemen & carriers of men handling hot stuff, sandblaster nozzle men, sandblasting pump men & pots, setting up and using concrete burning bars, wood block setters, underpinning & shoring of existing buildings, and the unload-ing and handling of all material coated with creosote.

LABORER, SKILLED - HIGHWAY

The skilled laborer heavy & highway (HWY) classification shall encompass the following types of work,irrespective of the site of the work: jackhammer & drill operator, gunite pump & pot man, puddlers, vibrator men, wire fabric placer, sandblast pump & pot man, strike off concrete, unloading, handling & carrying of all creosoted piles, ties or timber, concrete burning bars, power wheelbarrows or buggies, asphalt raker, brickset-ters, cutting torchman (electric & acetylene), men setting lines to level forms, form setters, gunite nozzle man & sandblasting nozzle man, power man, and rip-rapping by hand.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air

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compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

OPERATING ENGINEERS - BUILDING

Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E - Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump - Operator will clean; Formless Finishing Machine; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.

Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2) Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick

Peoria County Prevailing Wage Rates posted on 3/2/2026

Macadem; Concrete Breakers; Concrete Spreaders; Mule Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.

Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators - permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) - Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

CLASS 1. Cranes; Hydro Cranes; Shovels; Crane Type Backfiller; Tower, Mobile, Crawler, & Stationary Cranes; Derricks; Hoists (3 Drum); Draglines; Drott Yumbo & Similar Types considered as Cranes; 360 Degree Swing Excavator (Shears, Grapples, Movacs, etc.); Back Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive - Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plant Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop - Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls - all and similar types; Operation of Concrete and all Recycle Machines; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Operation of Material Crusher, Screening Plants, and Tunnel Boring Machine; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and Similar Types; Side Booms; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with Dozer, Hoe or Endloader Attachments); CAT Earthwork Compactors and Similar Types; Blaw Knox Spreader and Similar Types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - Screw Type Pumps and Gypsum (operator will clean); Creter Crane; Operation of Concrete Pump Truck; Formless Finishing Machines; Flaherty Spreader or Similar Types; Screed Man on Laydown Machine; Vermeer Concrete Saw; Operation of Laser Screed; Span Saw; Dredge Leverman; Dredge Engineer; Lull or Similar Type; Hydro-Boom Truck; Operation of Guard Rail Machine; and Starting Engineer on Pipeline or Construction (11 or more pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc, and Ground Heater (Trailer Mounted).

CLASS 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jacking Machine; Dinkeys; Operation of Carts, Powered Haul Unit for a Boring Machine; P & H One Pass Soil Cement Machines and Similar Types; Wheel Tractors (Industry or Farm Type - Other); Back Fillers; Euclid Loader; Fork Lifts; Jeep w/Ditching Machine or Other Attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and Similar Types; Pugmill with Pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (Track-Type) without Power Units Pulling Rollers; Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Vibro-Tampers (All Similar Types Self-Propelled); Mechanical Bull Floats; Self-Propelled Concrete Saws; Truck Mounted Power Saws; Operation of Curb Cutters; Mixers - Over Three (3) Bags; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail;

Peoria County Prevailing Wage Rates posted on 3/2/2026

Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or Similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Sweepers; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional Boring Machine; Horizontal Directional Drill; Articulating End Dump Vehicles; Starting Engineer on Pipeline or Construction (6 -10 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

CLASS 3. Straight Framed Truck Mounted Vac Unit (separately powered); Trac Air Machine (without attachments); Rollers - Five Ton and Under on Earth and Gravel; Form Graders; Bulk Cement Plant; Oilers; and Starting Engineer on Pipeline or Construction (3 - 5 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

PEORIA PARK DISTRICT AT ESC FACILITY (PEORIA, IL) ROOFTOP SOLAR PV PROJECT



PROJECT INFORMATION

SCOPE OF WORK: THIS PROJECT INVOLVES THE INSTALLATION OF A ROOFTOP SOLAR PHOTOVOLTAIC SYSTEM DESIGNED FOR ONSITE ELECTRICITY GENERATION. PLEASE NOTE THAT THE SOLAR SYSTEM DOES NOT INCLUDE A BATTERY FOR ENERGY STORAGE AND WILL AUTOMATICALLY SHUT OFF DURING A POWER OUTAGE.

DC: 145.755 KW

AC: 100.000 KW

SOLAR MODULES: (237) CS6.2-66TB-615H

DC POWER OPTIMIZER: (237) C651U

INVERTERS: (2) SE50KUS

AZIMUTH: 103°

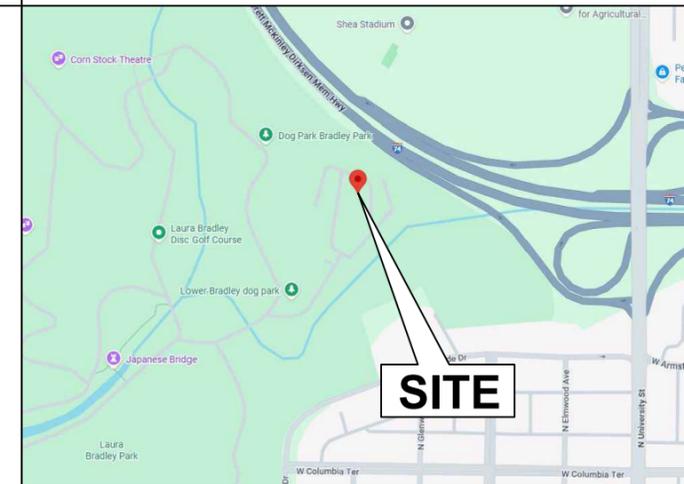
SOLAR MODULES TILT ANGLE: 0°

ROW SPACING: 0.5 INCHES

MAIN DISTRIBUTION PANEL UPGRADE REQUIRED: NO

INTERCONNECTION METHOD: LINE SIDE CONNECTION

VICINITY MAP



AERIAL MAP



PEORIA PARK DISTRICT AT ESC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
1314 N PARK RD,
PEORIA IL 61604

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APPLICABLE CODES & STANDARDS

BUILDING:	2021 INTERNATIONAL BUILDING CODE
ELECTRICAL:	2020 NATIONAL ELECTRICAL CODE
FIRE CODE:	2021 INTERNATIONAL FIRE CODE

JOBSITE ADDRESS

1314 N PARK ROAD PEORIA, IL 61604

OWNER

PEORIA PARK DISTRICT

GENERAL CONTRACTOR

TBD

FACILITY TYPE

COMMERCIAL

ELECTRIC DISTRIBUTION COMPANY (EDC)

AMEREN

AUTHORITY HAVING JURISDICTION (AHJ)

CITY OF PEORIA, IL

0.0	02/17/26	ISSUED FOR PERMIT
REV.	DATE	DESCRIPTION

CERTIFICATION:

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:



LICENSE NO: 062.051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

COVER PAGE

DRAWING NO. E0.1



GENERAL NOTES

- MANUFACTURERS OF MAJOR BILL OF MATERIALS;
SOLAR MODULES: CANADIAN SOLAR
RACKING: UNIRAC
INVERTERS: SOLAREEDGE
POWER OPTIMIZER: SOLAREEDGE
REVENUE GRADE METER: SOLAREEDGE
- THE SOLAR PHOTOVOLTAIC (PV) SYSTEM SHALL NOT OBSTRUCT ANY EXISTING MECHANICAL OR PLUMBING EQUIPMENT, INCLUDING BUT NOT LIMITED TO ROOFTOP UNITS, PLUMBING VENTS, SKYLIGHTS, AND EXHAUST VENTS.
- THE SELECTED SOLAR MODULES CONFORM TO THE UL 1703 STANDARDS.
- THE SELECTED INVERTERS CONFORM TO THE UL 1741 STANDARDS.
- THE SELECTED RACKING CONFORM TO THE UL 3741 STANDARDS.
- ALL OUTDOOR EQUIPMENT, INCLUDING AC COMBINER PANEL BOARDS, FUSED DISCONNECT SWITCHES, PULL BOXES AND JUNCTION BOXES, SHALL HAVE A RATING OF **NEMA 3R, NEMA 4 OR NEMA 4X RATED**.
- PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE WITH NEC 110.26.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ELECTRICAL LABELS SHEET IN THE ELECTRICAL PLAN AND ENSURE THAT ALL REQUIRED LABELS ARE PROPERLY INSTALLED ON THE DESIGNATED EQUIPMENT.
- ALL ELECTRICAL WORK SHALL BE INSTALLED BY A QUALIFIED AND LICENSED ELECTRICAL CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE AND SATISFACTORY ELECTRIC INSTALLATION IN ACCORDANCE WITH THE TRUE INTENT OF THE DRAWINGS AND MANUFACTURER SPECIFICATIONS. ALL WORK SHALL COMPLY THE CITY OF NATIONAL ELECTRICAL CODE AND NATIONAL FIRE PROTECTION ASSOCIATION CODES.
- ELECTRICAL CONTRACTOR SHALL REFER TO THE **ELECTRICAL SCHEDULES DRAWING SHEET** OF THE ELECTRICAL PLAN FOR CONDUCTORS MATERIALS TYPE, CONDUIT TYPE, CONDUIT SPECIFICATIONS AND OTHER DETAILS.
- THE SYSTEM IS **INTENDED TO OPERATE IN PARALLEL** WITH THE **UTILITY SERVICE PROVIDER** AND IS **CONNECTED BEHIND THE METER**. ANTI-ISLANDING PROTECTION IS A REQUIREMENT OF UL 1741 AND IS DESIGNED TO PREVENT THE PV SYSTEM FROM OPERATING WHEN THE UTILITY GRID IS NOT OPERATIONAL.
- DRAWINGS ARE DIAGRAMMATIC BASED ON THE SATELLITE IMAGERY PROVIDED BY THE SOLAR MODELING SOFTWARE AND ACTUAL SITE CONDITIONS MAY VARY. ALL DIMENSIONS ARE SHOWN TO THE NEAREST 1 INCH, UNLESS OTHERWISE NOTED.
- SOLAR MODULE-LEVEL POWER ELECTRONICS (MLPE) ARE PROVIDED VIA SOLAREEDGE DC POWER OPTIMIZER TO ACHIEVE COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN REQUIREMENTS.
- A MINIMUM 6FT WIDE CLEAR PERIMETER PATHWAY SHALL BE MAINTAINED AROUND THE ROOF EDGES. IF EITHER AXIS OF THE BUILDING IS 250FT OR LESS A MINIMUM 4FT PERIMETER PATHWAY IS PERMITTED.
- ALL CONDUITS SHALL BE BONDED AND SHALL NOT BE CONSIDERED AN EQUIPMENT GROUNDING CONDUCTOR (EGC).
- UV RATED CABLE TIES MAY ONLY BE USED FOR CONDUCTOR GROUPING. FOR SUPPORT, PVC COATED STAINLESS STEEL CABLE TIES SHALL BE USED.
- CONDUIT BODIES SHALL NOT BE USED FOR HORIZONTAL TO VERTICAL CONDUIT TRANSITIONS. INSTEAD, PROPERLY SIZED PULL BOXES, IN ACCORDANCE WITH NEC SHALL BE USED.
- THE **ELECTRICAL CONTRACTOR** IS ADVISED THAT ALL DRAWINGS AND COMPONENT MANUALS SHALL BE RECEIVED AND UNDERSTOOD PRIOR TO INSTALLATION. ADDITIONALLY, THE CONTRACTOR SHALL ENSURE THAT ALL SWITCHES ARE IN THE "OFF" POSITION AND FUSES ARE REMOVED BEFORE INSTALLING FUSE-BEARING COMPONENTS.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UNDAMAGED, AND BEAR THE UL LABEL WHERE APPLICABLE. THEY MUST BE SPECIFIED FOR USE IN EACH SPECIFIC LOCATION AS REQUIRED.**

ELECTRICAL CODE REFERENCES

CODE BOOK:	2020 NEC®
BREAKER SIZES:	NEC 240.6
WIRE AMPACITY TABLE:	TABLE NEC 310.15 (B)(16)
MAX SYSTEM VOLTAGE CORRECTION:	TABLE NEC 690.7
NUMBER OF CONDUCTORS CORRECTION:	TABLE NEC 310.15 (B)(3)(A)
AMBIENT TEMPERATURE CORRECTION:	TABLE NEC 310.15 (B)(2)(A)
AMBIENT TEMPERATURE ADJUSTMENT:	TABLE NEC 310.15 (B)(3)(C)
DC GROUNDING ELECTRODE CONDUCTOR:	UNGROUND DC SYSTEM
AC GROUNDING ELECTRODE CONDUCTOR:	TABLE NEC 250.66
RACK GROUNDING ELECTRODE CONDUCTOR:	NEC 690.47(D)
MAXIMUM OCPD (120% RULE):	NEC 705.12 (D)(2)

EQUIPMENT LOCATION

- SOLAR SYSTEM EQUIPMENT SHALL COMPLY WITH MINIMUM SETBACKS REQUIREMENTS AS SPECIFIED IN THE **OVERALL SOLAR ARRAY ELECTRICAL PLAN** DRAWING SHEET.
- ALL INSTALLED EQUIPMENT SHALL BE EASILY ACCESSIBLE TO QUALIFIED PERSONNEL.

WIRING AND CONDUIT NOTES

- DC AND AC CONDUCTORS** SHALL BE MARKED ON EACH END FOR UNIQUE IDENTIFICATION.
- ALL **CONDUIT AND CONDUCTORS** SHALL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND CONDUCTORS' SPECIFICATIONS SHALL BE BASED ON THE CODE REQUIREMENTS.
- THE USE OF WIRE LUBE IS REQUIRED FOR ALL WIRE PULLS**. THROUGH CONDUIT RUNS THAT ARE **20FT OR LONGER** OR HAVE **BENDS TOTALING 180 DEGREES OR MORE**. **WIRE LUBE IS MANDATORY**, EVEN WHEN USING **SELF-LUBRICATING** CABLES FROM VARIOUS MANUFACTURERS.
- SOLAR MODULE POSITIVE AND NEGATIVE LEADS** SHALL BE SECURED IN A NEAT, WORKMANLIKE MANNER TO PREVENT CHAFING, SWINGING AND EXCEEDING THE MINIMUM BEND RADIUS, PROPER MECHANICAL, SUNLIGHT-RESISTANT SECURING METHODS SHALL BE USED, AND **ALL LEADS SHALL BE ROUTED BENEATH THE MODULES TO MINIMIZE DIRECT EXPOSURE TO SUNLIGHT AT ALL TIMES**.
- FURNISH AND INSTALL ALL FITTINGS AND SPECIAL DEVICES NECESSARY FOR THE PROPER INSTALLATION OF THE SYSTEM**. **CONDUIT ELBOWS** SHALL BE OF THE **SAME MAKE, QUALITY AND FINISH** AS THE CONDUIT USED.
- FURNISH AND INSTALL EXPANSION FITTINGS WITH BONDING JUMPERS FOR EVERY 100FT OF STRAIGHT METAL CONDUIT RUN**.
- SPLIT BOLTS, SPLICES AND CONNECTORS ARE PERMITTED ON AC CONDUCTORS** AND SHALL BE **INSULATED USING AN APPROVED METHOD AND MEANS** IN ACCORDANCE WITH **NEC ARTICLES 110.14 (B), 300.5 (E), AND 300.4**. HOWEVER, **SPLICES ON DC CONDUCTORS ARE STRICTLY PROHIBITED IN ANY LOCATION**. IF **SPLICES ARE MADE IN EXPOSED LOCATIONS** (E.G., ROOFTOPS, OUTDOOR AREAS), THEY SHALL BE **ENCLOSED IN A WEATHERPROOF JUNCTION BOX AND PROPERLY SEALED**. ADDITIONALLY, **EXPANSION FITTINGS SHALL BE USED FOR SPLICES IN RACEWAYS SUBJECT TO THERMAL EXPANSION AND CONTRACTION**.
- ALL TERMINATIONS** SHALL BE **TREATED WITH AN ANTI-OXIDANT COMPOUND AND TORQUED** ACCORDING TO THE DEVICE LISTING OR THE MANUFACTURER'S RECOMMENDATIONS.
- MYERS HUBS** SHALL BE USED FOR ALL **IMC OUTDOOR TERMINATIONS** OF EQUIPMENT ENCLOSURES WITH CABLE TERMINATIONS.
- IMC CONDUIT** SHALL BE EQUIPPED WITH A **PULL BUSHING** TO PROTECT WIRES.
- DC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
POSITIVE (UNGROUND): RED
NEGATIVE (UNGROUND): BLACK
- 277/480V AC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BROWN, PHASE L2: ORANGE, PHASE L3: YELLOW, NEUTRAL: GREY, GROUND: GREEN OR BARE COPPER OR GREEN WITH A YELLOW STRIPE.
- 120/208V OR 240V AC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BLACK, PHASE L2: RED, PHASE L3: BLUE, NEUTRAL: WHITE, GROUND: GREEN OR GREEN WITH A YELLOW STRIPE.
- 347/600V AC CONDUCTORS SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BROWN, PHASE L2: ORANGE, PHASE L3: YELLOW, NEUTRAL: WHITE OR GREY, GROUND: GREEN OR BARE COPPER

INTERCONNECTION NOTES

- WHEN SUM OF THE PV SOURCE IS GREATER THAN 100% OF BUSBAR RATING, PV DEDICATED BACK FEED BREAKERS SHALL BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD.
- SUPPLY LINE (LINE SIDE) TAP INTERCONNECTION WITH SERVICE ENTRANCE CONDUCTORS SHALL BE IN ACCORDANCE WITH NEC 230.42.
- BACK FEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT SHALL BE EXEMPT FROM ADDITIONAL FASTENING REFER TO NEC 705.12 (D)(5).

GROUNDING NOTES

- GROUNDING ELECTRODE CONDUCTORS** SHALL BE INSTALLED IN ONE CONTINUOUS LENGTH WITHOUT SPLICES OR JOINTS. IF SPLICES OR CONNECTIONS ARE NECESSARY, THEY SHALL BE MADE AS PERMITTED BY NEC 250.64 (C).
- THE **INVERTERS** SELECTED FOR THIS PROJECT ARE EQUIPPED WITH DC GROUND FAULT PROTECTION AND ANTI-ISLANDING CIRCUITRY.
- EQUIPMENT GROUNDING CONDUCTORS AND SYSTEM GROUNDING CONDUCTORS SHALL HAVE THE SHORTEST POSSIBLE DISTANCE TO GROUND WITH A MINIMUM NUMBER OF TURNS TO ENSURE EFFECTIVE GROUNDING.

STRUCTURAL NOTES

- RACKING SYSTEM FOR THE SOLAR PV ARRAY SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION GUIDELINES AND BEST PRACTICES.

DISCONNECT & OCPD NOTES

- THE COMBINED OUTPUT OF INVERTERS** IN A SOLAR SYSTEM OPERATING IN PARALLEL WITH THE UTILITY GRID SHALL BE CONNECTED THROUGH A **SINGLE FUSED DISCONNECT SWITCH**. REFER TO THE ELECTRICAL PLAN DRAWING SHEETS, INCLUDING THE **ELECTRICAL RISER DIAGRAM AND ROOFTOP CABLE & CONDUIT PLAN VIEW**, FOR THE **DISCONNECT LOCATION ON THE EXTERIOR WALL**.
- DISCONNECTING SWITCH** SHALL BE WIRED SO THAT WHEN THE **SWITCH IS OPENED, THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE"**.

ELECTRICAL SYMBOL AND LEGEND

	DC CONDUIT RUN
	CIRCUIT BREAKER
	FUSED DISCONNECT SWITCH
	GROUNDING
	PULL BOX
	DATA ACQUISITION SYSTEM
	METER
	INVERTER
	SOLAR MODULES
	ROOF LINE
	OBSTRUCTION
	OBSTRUCTION SETBACK
	SAFETY BOLLARD

1

GENERAL / ELECTRICAL NOTES AND SYMBOLS
SCALE: NONE



PEORIA PARK DISTRICT AT ESC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
1314 N PARK RD,
PEORIA IL 61604

0.0	02/17/26	ISSUED FOR PERMIT
REV.	DATE	DESCRIPTION

CERTIFICATION:
I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:

ANAND MALHOTRA
062 051711
ELECTRICAL ENGINEER
EXPIRES 11/2027
SEAL: SIGNED 02/17/2026

LICENSE NO: 062 051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
GENERAL / ELECTRICAL NOTES AND SYMBOLS

DRAWING NO.
E 0.2



TOPBiHiKu6

N-type Bifacial TOPCon Technology

600 W ~ 630 W

CS6.2-66TB-600 | 605 | 610 | 615 | 620 | 625 | 630H

MORE POWER

- 630 W** Module power up to 630 W
Module efficiency up to 23.3 %
- EXTRA POWER** Up to 85% Power Bifaciality, more power from the back side
- Excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield
- Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate
- Lower LCOE & system cost

MORE RELIABLE

- Tested up to ice ball of 35 mm diameter according to IEC 61215 standard
- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, wind load up to 4000 Pa*

TRACEABLE SUPPLY CHAIN

Independently audited by STS

* For detailed information, please refer to the Installation Manual.

Canadian Solar (USA) Inc. 1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com



12 Years Enhanced Product Warranty on Materials and Workmanship*

30 Years Linear Power Performance Warranty*

1st year power degradation no more than 1% Subsequent annual power degradation no more than 0.4%

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system
ISO 14001: 2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health & safety
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

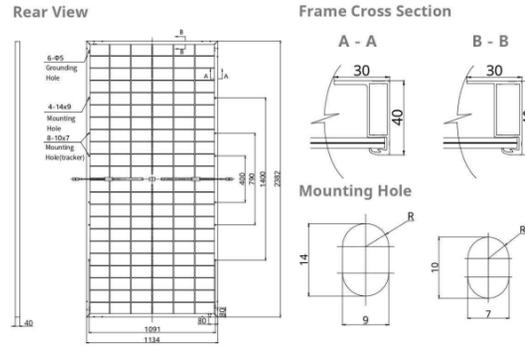
IEC 61215 / IEC 61730
UL 61730 / IEC 61701 / IEC 62716
Take-e-way



* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

Canadian Solar (USA) Inc. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 23 years, it has successfully delivered over 133 GW of premium-quality solar modules across the world.

ENGINEERING DRAWING (mm)



ELECTRICAL DATA | STC*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Module Efficiency	
CS6.2-66TB-600H	600 W	40.4 V	14.86 A	47.6 V	15.85 A	22.2%	
Bifacial Gain**	5%	630 W	40.4 V	15.60 A	47.6 V	16.64 A	23.3%
	10%	660 W	40.4 V	16.35 A	47.6 V	17.44 A	24.4%
	20%	720 W	40.4 V	17.83 A	47.6 V	19.02 A	26.7%
CS6.2-66TB-605H	605 W	40.6 V	14.91 A	47.8 V	15.91 A	22.4%	
Bifacial Gain**	5%	635 W	40.6 V	15.66 A	47.8 V	16.71 A	23.5%
	10%	666 W	40.6 V	16.40 A	47.8 V	17.50 A	24.7%
	20%	726 W	40.6 V	17.89 A	47.8 V	19.09 A	26.9%
CS6.2-66TB-610H	610 W	40.8 V	14.96 A	48.0 V	15.97 A	22.6%	
Bifacial Gain**	5%	641 W	40.8 V	15.71 A	48.0 V	16.77 A	23.7%
	10%	671 W	40.8 V	16.46 A	48.0 V	17.57 A	24.8%
	20%	732 W	40.8 V	17.95 A	48.0 V	19.16 A	27.1%
CS6.2-66TB-615H	615 W	41.0 V	15.01 A	48.2 V	16.02 A	22.8%	
Bifacial Gain**	5%	646 W	41.0 V	15.76 A	48.2 V	16.82 A	23.9%
	10%	677 W	41.0 V	16.51 A	48.2 V	17.62 A	25.1%
	20%	738 W	41.0 V	18.01 A	48.2 V	19.22 A	27.3%
CS6.2-66TB-620H	620 W	41.2 V	15.06 A	48.4 V	16.08 A	23.0%	
Bifacial Gain**	5%	651 W	41.2 V	15.81 A	48.4 V	16.88 A	24.1%
	10%	682 W	41.2 V	16.57 A	48.4 V	17.69 A	25.2%
	20%	744 W	41.2 V	18.07 A	48.4 V	19.30 A	27.5%
CS6.2-66TB-625H	625 W	41.4 V	15.11 A	48.6 V	16.14 A	23.1%	
Bifacial Gain**	5%	656 W	41.4 V	15.87 A	48.6 V	16.95 A	24.3%
	10%	688 W	41.4 V	16.62 A	48.6 V	17.75 A	25.5%
	20%	750 W	41.4 V	18.13 A	48.6 V	19.37 A	27.8%
CS6.2-66TB-630H	630 W	41.6 V	15.16 A	48.8 V	16.20 A	23.3%	
Bifacial Gain**	5%	662 W	41.6 V	15.92 A	48.8 V	17.01 A	24.5%
	10%	693 W	41.6 V	16.68 A	48.8 V	17.82 A	25.7%
	20%	756 W	41.6 V	18.19 A	48.8 V	19.44 A	28.0%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.
** Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA

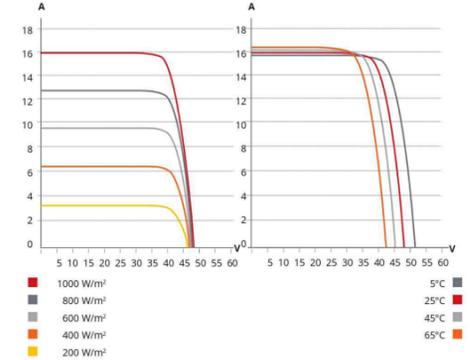
Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL)
Module Fire Performance	TYPE 29 (UL 61730) or CLASS C (IEC61730)
Max. Series Fuse Rating	35 A
Protection Class	Class II
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	80 %

* Power Bifaciality = Pmax_{rear} / Pmax_{total} or Pmax_{rear} / Pmax_{total} are tested under STC, Bifaciality Tolerance: ± 5 %

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

Canadian Solar (USA) Inc. 1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com

CS6.2-66TB-610H / I-V CURVES



ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS6.2-66TB-600H	454 W	38.2 V	11.88 A	45.1 V	12.77 A
CS6.2-66TB-605H	458 W	38.4 V	11.92 A	45.3 V	12.82 A
CS6.2-66TB-610H	461 W	38.6 V	11.96 A	45.4 V	12.87 A
CS6.2-66TB-615H	465 W	38.8 V	12.00 A	45.6 V	12.91 A
CS6.2-66TB-620H	469 W	38.9 V	12.04 A	45.8 V	12.96 A
CS6.2-66TB-625H	473 W	39.1 V	12.08 A	46.0 V	13.00 A
CS6.2-66TB-630H	477 W	39.3 V	12.12 A	46.2 V	13.05 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2382 x 1134 x 40 mm (93.8" x 44.6" x 1.57 in)
Weight	33.4 kg (73.6 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	T6 or MC4-EVO2 or MC4-EVO2A
Per Pallet	27 pieces
Per Container (40' HQ)	540 pieces or 486 pieces (only for US & Canada)

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION



October 2024. All rights reserved, PV Module Product Datasheet V1.1_D2_NA

MODULE SPECIFICATIONS

237 x CS6.2-66TB-615H

STC Rating	615 W
PTC Rating	585 W
Vmp	41.00 V
Imp	15.01 A
Voc	48.20 V
Isc	16.02 A

1 MODULE SPECIFICATIONS SCALE: NONE



PEORIA PARK DISTRICT AT ESC FACILITY (PEORIA, IL) ROOFTOP SOLAR PV PROJECT 1314 N PARK RD, PEORIA IL 61604

0.0	02/17/26	ISSUED FOR PERMIT
REV.	DATE	DESCRIPTION

CERTIFICATION:

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:



LICENSE NO:	062 051711
EXPIRATION DATE:	11/30/2027
DRAWN BY:	JP
CHECKED BY:	AM
SHEET TITLE:	PROJECT NO.: GEC-4293

SEAL: SIGNED 02/17/2026

MODULE SPECIFICATIONS

DRAWING NO. E 0.3

Three Phase Inverter with Synergy Technology

USA Domestic Content Eligible

For North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS

INVERTER



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

* For more details, see Eligibility for Domestic Content on the last page.
** Applicable only for DC and AC SPDs.

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INVERTER SPECIFICATIONS	
2 x SE50K-US	
Max Output Current	139.5A
Safety Rating	(139.5A x 1.25) = 174.38A
Minimum OCPD	175A
Number of DC Inputs	9
Maximum Input Voltage	600 V

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	
OUTPUT						
Total Rated AC Output Capacity	80,000		100,000			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 ⁽¹⁾ (L-N)	244 – 277 – 305	105 – 170 – 192.5	244 – 277 – 305			Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	422.5 – 480 – 529	183 – 208 – 229	422.5 – 480 – 529			Vac
AC Frequency Minimum-Nominal-Maximum ⁽²⁾	59.5 – 60 – 60.5					Hz
Maximum Continuous Output Current (per phase, PF=1)	96.5	139.5	120	144.3		Aac
GFD 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					
INPUT⁽²⁾						
Maximum DC Power (Module STC) Inverter / Synergy Unit	140,000 / 70,000	87,500 / 25,165	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	650 – 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	16/rkO sensitivity per Synergy Unit ⁽³⁾					
CCC Weighted Efficiency	98.5	97	98.5			%
Nighttime Power Consumption	< 8		< 12			W
ADDITIONAL FEATURES						
Supported Communication Interfaces ⁽⁴⁾	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 C65IU					
PID Rectifier	Nighttime, built-in					
RS485 Surge Protection (ports 1+2)	Type I, field replaceable, integrated					
AC, DC Surge Protection	Type II, field replaceable, integrated					
DC SAFETY SWITCH						
DC Disconnect	Built-in					
STANDARD COMPLIANCE						
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 71, 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 refer to [Compatibility Matrix](#).
(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.

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	
INSTALLATION SPECIFICATIONS						
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) ⁽⁵⁾ (SE-xxx-USxxoSw)	6 / 3 pairs, 6 – 12 AWG	9 / 3 pairs, 6 – 12 AWG			
	Combined input: (fuse-less) (SE-xxx-USxxoWx)	N/A	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: 33.5 / 18					lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁶⁾					°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.

*Eligibility for Domestic Content

As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Content Percentage under the "rooftop (M-PT)" category (unless otherwise noted as 2024-41 and 2025-08, depending on the PN used - see chart below). Eligibility is subject to the installation of qualified USA-manufactured inverters and Power Optimizers (C65IU) in the same project. 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 project. The forward-looking statements in this document are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USESIJK-USR0NNN6, when paired with C65IU	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESIJK-USR0NNN8, when paired with C65IU	Printed Circuit Board Assemblies, Enclosure (7.8%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)



PEORIA PARK DISTRICT AT ESC FACILITY
 (PEORIA, IL)
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 1314 N PARK RD,
 PEORIA IL 61604

REV.	DATE	DESCRIPTION
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CERTIFICATION:
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SIGNATURE:

 ANAND MALHOTRA
 062 051711
 EIT, P.E. 11/2027
 SEAL: SIGNED 02/17/2026
 LICENSE NO: 062 051711
 EXPIRATION DATE: 11/30/2027
 DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
INVERTER SPECIFICATIONS

1 INVERTER SPECIFICATIONS
 SCALE: NONE

DRAWING NO.
 E 0.4

Commercial Power Optimizer

USA Domestic Content Eligible

C651U

POWER OPTIMIZER



SolarEdge's USA-manufactured offering for C&I projects, 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
- Enhanced Monitoring and Visibility**
 - Maximum system visibility up to the individual module level
 - Pinpointed fault detection and remote troubleshooting
- Higher Energy Yields**
 - Generates maximum power from each PV module
 - High efficiency (99.5%)
 - Supports high power and bifacial PV modules, including G12 modules
- 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

* For more information, refer to the last page of this document

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/ Power Optimizer

USA Domestic Content Eligible for North America

C651U

Power Optimizer Model	C651U	
INPUT		
Rated Input DC Power ⁽¹⁾	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 ⁽²⁾	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor) ⁽³⁾	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overtorque Category	II	
OUTPUT DURING OPERATION		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
SAFETY FEATURES		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 ± 0.075	Vdc
Sense Connect	Yes	
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023	
STANDARD COMPLIANCE		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC 62109-1 (class I 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	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters ⁽⁴⁾	Commercial Three Phase Inverters with one of the following part number structures: xSF-S1N-USxxxxxx SE-2BL-USxxxxxx SE-TR-USxxxxxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.02 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4 ⁽⁵⁾	
Input Wire Length	(+) 14. (-) 14 / (+) 4.59 ⁽⁶⁾ / (-) 4.59 ⁽⁶⁾	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0 (-) 0.10 / (+) 9.84, (-) 0.32	m / ft
Operating Temperature Range ⁽⁷⁾	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA4P	
Relative Humidity	0 – 100	%

(1) Modules with a front side maximum power of up to 750W at STC are allowed. Up to +5% power tolerance is allowed.
 (2) When using bifacial modules, consider only the front side Isc at STC (8% backside gain). For details, see [table 1](#).
 (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 [table 2](#).
 (5) For other connector types, please contact SolarEdge.
 (6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [table 3](#).
 (7) For ambient temperatures above +55°C / +133°F, power derating is applied. For details, see [table 4](#).

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/ Power Optimizer

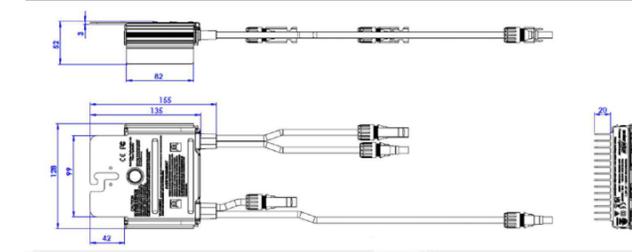
USA Domestic Content Eligible for North America

C651U

PV System Design Using a SolarEdge Inverter ⁽¹⁾	C651U			
	208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K, SE33.3K*	277/480V Grid SE40K*
Compatible Power Optimizers	C651U			
Minimum String Length	Power Optimizers: 13 PV Modules: 13	13	18	18
Maximum String Length	Power Optimizers: 57 PV Modules: 57	57	57	57
Maximum Continuous Power per String	10,000	9600	20,400	20,400
Maximum Allowed Connected Power per String ⁽²⁾	1 string or more – 15,000	1 string – 11,400 2 strings or more – 15,600	1 string – 22,650 2 strings or more – 30,400	1 string – 22,650 2 strings or more – 30,400
Parallel Strings of Different Lengths or Orientations	Yes			
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit	5 Power Optimizers			

⁽¹⁾ The same rules apply for String units of registered power ratings that are part of the modular String Technology inverter.
⁽²⁾ C651U cannot be mixed with any other Power Optimizer models in the same string.
⁽³⁾ To connect more STC power per string, design your project using SolarEdge Designer.

C651U Mechanical Drawing



Eligibility for Domestic Content

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PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USE-SIN-USR01BNS6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.5%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR01NN6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.5%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), enclosure, Production (24.8%)
USE-SIN-USR01BNS8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR01NN8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

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SIGNATURE:



LICENSE NO: 062 051711
 EXPIRATION DATE: 11/30/2027
 SEAL: SIGNED 02/17/2026

DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

POWER OPTIMIZER SPECIFICATIONS

DRAWING NO.
E 0.5

NOTES:

- INSTALL ONE (1) POWER OPTIMIZER PER MODULE.** POWER OPTIMIZER SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND PROJECT SPECIFICATIONS.

1 POWER OPTIMIZER SPECIFICATIONS

SCALE: NONE

SolarEdge ONE Manager

For North America¹

Datasheet



5 YEAR WARRANTY

COMMUNICATION

The ONE Manager is the hardware component of SolarEdge ONE for C&I—a fully wired outdoor communication gateway that seamlessly integrates the site's sensors, meters, and energy infrastructure for centralized monitoring and control.

- All-in-one, easily installed solution including the SolarEdge ONE Controller, production meter, cellular modem, and field terminal blocks
- Supports both 208VAC and 480VAC voltage levels
- Offers improved telemetry for tracking performance ratio and system availability using local sensors.
- Acts as a cyber-secured gateway for external communication, designed to protect against unauthorized access
- Supports integration of additional meters and sensors, including consumption monitoring

⁽¹⁾ Assembled and warranted by Continental Control Systems, (excluding the SolarEdge ONE Controller and software features)

solaredge.com



SolarEdge ONE Manager

For North America

Specifications²

		Units
ELECTRICAL AND METER		
Nominal Input Voltage	208 / 480	L-L VAC (3 Phase)
Surge Protection	Surge protection devices for input circuit and low-voltage communication circuits	
Short-Circuit Current Rating (SCCR)	10	kA
Measurement Circuit (CT Rating)	0.33Vac at full scale (split-core or Rogowski coils)	
Meter Voltage Range	100 – 500	L-L VAC (3 Phase)
Meter Frequency Range	48 – 62	Hz
Meter Accuracy	± 0.5% revenue grade accuracy	
ENCLOSURE SPECIFICATIONS		
Dimensions (W x H x D)	15 x 18 x 10 / 406 x 457 x 254	in / mm
Weight	22 / 10	lb / kg
Mounting	Mounting brackets with four bolt holes	
Sensor Connections	Terminal blocks for easy connection of external sensors like meteorological sensors and consumption power meters	
Ambient Operating Temperature	-4 to +113 / -20 to +45	°F / °C
Weather Rating	NEMA 4X	
STANDARD COMPLIANCE		
Certification	UL 508A Listed	
COMPONENTS		
Cellular Modem	4G / 3G / 2G / LTE Cellular Router and 2.4 GHz WiFi for the North American market (SIM cards with data plan optional and ordered separately)	
Networking Switch	Industrial Unmanaged Ethernet Switch with 2 x RJ45 available ports @ 10/100Mbps Tx, 1 x SFP available port @ 100 Mbps (full duplex)	
Power Production Meter	WND-WR-MB: Used for production, consumption or import/export monitoring, and for Export Limitation. Option for installation of additional WND-WR-MB meters in RS-485-1 channel	
Data Logger and Controller	Ruggedized, industrial computer for plant controls and data logger capabilities	
COMMUNICATION I/O		
RS485	2 x isolated, terminal block connectors	
Digital I/O (for future use)	2 x digital outputs (DO) + 3 x digital inputs (DI) Isolated, 24V compliant with EN 6131-2, terminal-block connector	
SENSOR INTERFACE		
Weather Sensor Connection	Standard Weather Sensors: • IMT SI-RS485TC-31-MB (POA, BOM, T _{amb}) • IMT SI-RS485TC-2T-y-MB (POA, Wind, BOM) + IMT Ta-ext-RS485-MB (T _{amb}) For the integration of other weather sensors, please consult SolarEdge. 100W @ 24VDC available for weather sensor power supply.	
Energy Meter Connection	Modbus RTU	
Rogowski coils	Connection of up to 3 Rogowski coils with integrated 12VDC power supply	
COMMUNICATION		
RS485	Modbus RTU	
LAN	Modbus TCP/IP	
Internet Connectivity	Wired Ethernet, Cellular	

⁽²⁾ Specifications and information presented in this preliminary specification are subject to extended validation and change. This preliminary specification specifies features but cannot promise to deliver any specific characteristics. No warranty, implicit or explicit, is given regarding the very accuracy, fitness or performance. SolarEdge reserves the right to modify its technical information and product specifications at any time without notice.

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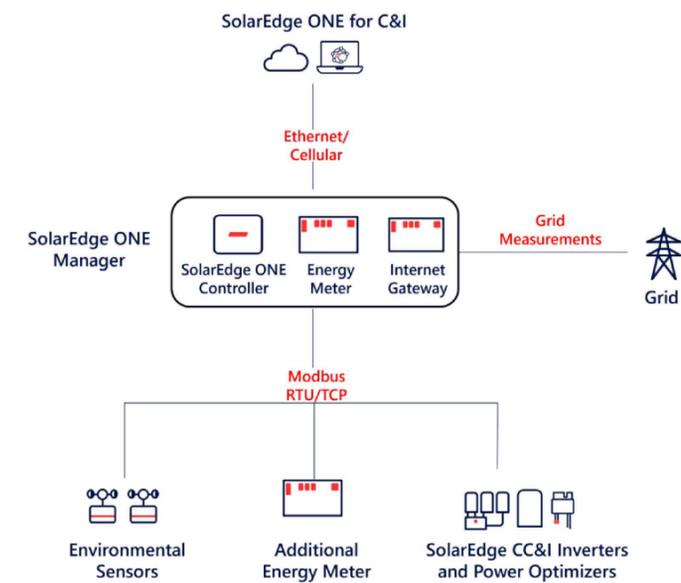
CC RoHS

SolarEdge ONE Manager

For North America

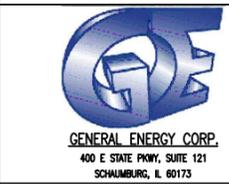
Connection Scenarios

The following diagram shows a typical system architecture that includes the cloud-based SolarEdge ONE for C&I optimization platform, the local SolarEdge ONE Controller and the connection with additional devices, including SolarEdge inverters, energy meters, and environmental sensors.



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(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
1314 N PARK RD,
PEORIA IL 61604

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SIGNATURE:

LICENSE NO.: 062 051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
CHECKED BY: AM
PROJECT NO.: GEC-4293

SHEET TITLE:
DATA ACQUISITION SYSTEM (DAS)

DRAWING NO.: E 0.6

NOTES:

- THE CONTRACTOR SHALL FURNISH AND INSTALL A SOLAREGE MANUFACTURED DATA ACQUISITION SYSTEM (DAS), COMPLETE WITH THE APPROPRIATE HARDWARE AND SOFTWARE. THE SYSTEM SHALL INCLUDE A FIVE-YEAR CELLULAR DATA PLAN TO ALLOW THE OWNER REMOTE ACCESS FOR SYSTEM MONITORING PURPOSES.

1 DATA ACQUISITION SYSTEM (DAS)
SCALE: NONE



OPEN CHANNEL RACKING SYSTEM FOR RESIDENTIAL AND COMMERCIAL INSTALLATIONS

STREAMLINED INSTALLATION

- Easy-to-engage rails and clamps speed up installation, cutting labor time on the roof.
- A truly structural internal splice reduces attachment points and supports cantilever designs.
- Combo clamp functions as both a mid clamp and end clamp, reducing the number of components needed.
- This new MLPE mount is the first single SKU solution from any racking manufacturer which combines the MLPE mount and Ground Lug. Twist-in design with a full size 1/2" bolt head ensures a fast and secure installation.

SMART, INTEGRATED DESIGN

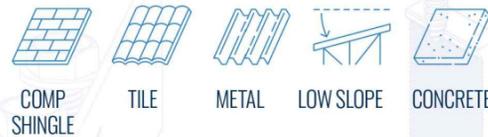
- Fewer SKUs with multifunctional components = simplified inventory and logistics.
- Built-in wire management within the open-channel rail keeps arrays clean and efficient.
- Truly structural splice allows you to seamlessly extend rail lengths with confidence, even within the cantilever.
- Sleek accessories and optional hidden end clamps deliver a polished, finished look.
- Meets the UL 2703 standard.
- UL 3741 compliant system for residential & commercial applications.

MAXIMUM VERSATILITY

- Two rail profiles meet every project's structural and span requirements. The Standard Rail delivers reliable performance for most installations, while the HD Rail provides heavy-duty strength with simplicity—supporting spans up to 10½ ft. in nearly all wind zones.
- Cross-compatible with a variety of Unirac attachments for flexible designs.
- Fully compatible with S-5! metal roof attachments that meet the UL 2703 standard.



WORKS ON:



FOR QUESTIONS OR CUSTOMER SERVICE CONTACT:
505-242-6411 | SALES@UNIRAC.COM | WWW.UNIRAC.COM
PUB2025NOV18-V1



OPEN CHANNEL RACKING SYSTEM FOR RESIDENTIAL AND COMMERCIAL INSTALLATIONS

RAILS



NXT UMOUNT® RAIL

Our standard rail supports up to 6.5' spans while featuring an open-channel design for simplified wire management. The hassle-free, click-in functionality speeds up installation.



NXT UMOUNT® HD RAILS

The new HD Rail delivers heavy-duty performance without the added complexity. Engineered for demanding conditions with industry-leading spans up to 10 ½'. Enables 2-rail installs in nearly all wind zones. Rail-specific splice and end caps are sold separately.



NXT UMOUNT® TRULY STRUCTURAL SPLICE

Supports splicing at both midspan and cantilever points. Simplifies installation without compromising strength, ensures smooth installation and a refined aesthetic.

CLAMPS



NXT UMOUNT® COMBO CLAMP

A single universal clamp that serves as both the mid and end clamp. Designed to fit module frames from 30–40 mm, it features an integrated bonding pin to ensure a secure electrical bond between the module and rail. Finishes: Dark and Mill.



NXT UMOUNT® HIDDEN END CLAMP

For a clean, finished look, this optional end clamp securely bonds modules to the rail at the array edges. Designed for 30–40 mm module frames, it comes pre-assembled with a sleek black end cap for enhanced system aesthetics. Finish: Mill only.

ATTACHMENTS



STRONGHOLD® BUTYL

Install it fast—with no mess! This mount comes with a pre-applied butyl pad, so there's no need for sealants or flashing. Just peel, place, and fasten for a quick, clean, and reliable installation every time. *Product is approved for High Velocity Hurricane Zone of the Florida Building Code. NOA No. 24-0129.06.*

OTHERS



E-BOSS AND ACCESSORIES

Complete line of E-BOSS accessories for wire management, bonding, and grounding. Includes the new NXT MLPE Mount + Ground Lug—domestic SKU. Optional adjustable tilt legs support 10°–30° angles for flexible system layouts.

FOR QUESTIONS OR CUSTOMER SERVICE CONTACT:
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PUB2025NOV18-V1



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ROOFTOP SOLAR PV PROJECT
1314 N PARK RD,
PEORIA IL 61604

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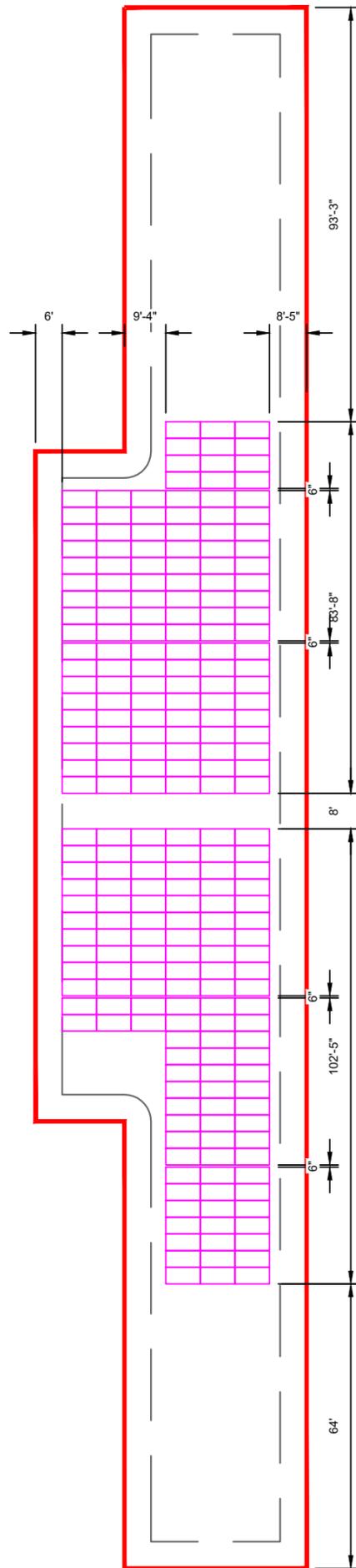
LICENSE NO: 062.051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

UNIRAC RACKING DETAILS

DRAWING NO.
E 0.7



SCOPE OF WORK: THIS PROJECT INVOLVES THE INSTALLATION OF ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEM DESIGNED FOR ONSITE ELECTRICITY GENERATION. THE PLANNED SOLAR SYSTEM DOES NOT INCLUDE BATTERY STORAGE AND WILL AUTOMATICALLY SHUT OFF DURING A POWER OUTAGE.

DRAWING NOTES:

1. ALL DIMENSIONS SHALL BE FIELD VERIFIED, AND ALL INTER-ROWS AND CONDUIT RUNS SHALL BE MARKED USING A CHALK REEL KIT. LOCATIONS SHOWN ARE BASED ON RACKING DIMENSIONS AND SYSTEM DESIGN, PREPARED USING NEARMAP AND HELIOSCOPE SOFTWARE.
2. INVERTERS SHALL BE INSTALLED IN ACCORDANCE WITH THE INVERTER INSTALLATION MANUAL.
3. INVERTERS SHALL BE FULLY SUPPORTED AND ANCHORED PER MANUFACTURER SPECIFICATIONS. THE INSTALLER SHALL INSTALL ALL MANUFACTURER-PROVIDED ACCESSORIES.
4. THIS SYSTEM IS INSTALLED IN COMPLIANCE WITH NEC 690.12 (B) (2) (1) "PHOTOVOLTAIC HAZARD CONTROL". THE PV EQUIPMENT, INCLUDING SOLAREEDGE DC POWER OPTIMIZER, PROVIDES RAPID SHUTDOWN CAPABILITY TO REDUCE ELECTRIC SHOCK HAZARDS WITHIN A DAMAGED PV ARRAY.

ROOFTOP SOLAR ARRAY DETAILS	
DC SYSTEM SIZE	145.755 kW
AC SYSTEM SIZE	100.000 kW
SOLAR MODULES	CS6.2-66TB-615H
TOTAL QTY. OF MODULES	237
STRING INVERTER MAKE	SOLAREEDGE
QTY & STRING INVERTER MODEL	(2) SE50KUS
QTY & POWER OPTIMIZER	(237) SOLAREEDGE C651U
ESTIMATED YEAR 1 ENERGY OUTPUT	172,174.5 kWh
RACKING MAKE	UNIRAC
SOLAR MODULES TILT	0°
INTER-ROW SPACING	1/2 INCHES
SPACING BETWEEN MODULES	1/2 INCHES
SYSTEM AZIMUTH	103°
ROOF HEIGHT	21.5 FT
ROOF PITCHED	5°
DATA ACQUISITION SYSTEM (DAS)	SOLAREEDGE



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SIGNATURE:



LICENSE NO: 062.051711
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 DRAWN BY: JP
 SEAL: SIGNED 02/17/2027

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

OVERALL SOLAR
 ARRAY ELECTRICAL
 SITE PLAN

DRAWING NO.
 E1.1

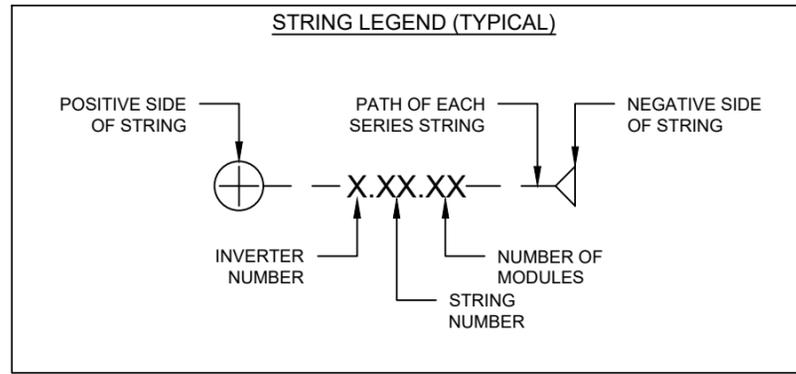


1

OVERALL SOLAR ARRAY ELECTRICAL SITE PLAN
 SCALE: 5/64" = 1'-0"

DRAWING NOTES:

- ALL STRINGS FEEDS SHALL BE 2 # 8 AWG PV WIRE (2000V):
 - RED: POSITIVE
 - BLACK: NEGATIVE
 - 1 # 6 CU GROUND: BARE, GREEN
- THE CONTRACTOR SHALL USE CONNECTORS FROM THE SAME MANUFACTURER FOR ALL MODULES AND EXTENSIONS IN THE HOMERUN. FIELD-MADE CONNECTORS FOR PV QUICK CONNECTS SHALL BE THE SAME TYPE AND MANUFACTURER AS THE PV MODULES AND SHALL BE CRIMPED USING THE MANUFACTURER - SPECIFIED CRIMPING TOOL.
- DC STRING CONDUCTORS SHALL BE GROUPED BY CIRCUIT INTO THE SAME CONDUIT.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD (EOR) FOR APPROVAL OF ANY CHANGES TO THE STRING PLAN.
- SOLAR MODULE-LEVEL POWER ELECTRONICS (MLPE) ARE PROVIDED VIA SOLAREEDGE DC POWER OPTIMIZER TO ACHIEVE COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN REQUIREMENTS.
- CONNECT POWER OPTIMIZER INPUT WIRE TO PV MODULES.
- CONNECT POWER OPTIMIZER OUTPUT WIRE TO FORM A STRING. WHILE CONNECTING MAKE SURE THAT ALL CONNECTORS ARE FIRMLY INSERTED AND LOCKED.
- OPTIMIZERS SHALL BE INSTALLED ACCORDING TO SOLAREEDGE C651U INSTALLATION GUIDE AND ALL MANUFACTURER INSTRUCTIONS. DO NOT EXCEED THE MAXIMUM NUMBER OF OPTIMIZERS PER STRING AS SPECIFIED BY THE INVERTER AND OPTIMIZER LISTING.



NEC 690.12 RAPID SHUTDOWN

GOAL OF "RAPID SHUTDOWN" FOR PV SYSTEMS ON BUILDINGS: IN THE EVENT OF AN EMERGENCY, EMERGENCY RESPONDERS CAN INITIATE THE RAPID SHUTDOWN DEVICE AND SAFELY MOVE AROUND THE ROOF. THEY MUST BE AWARE THAT:

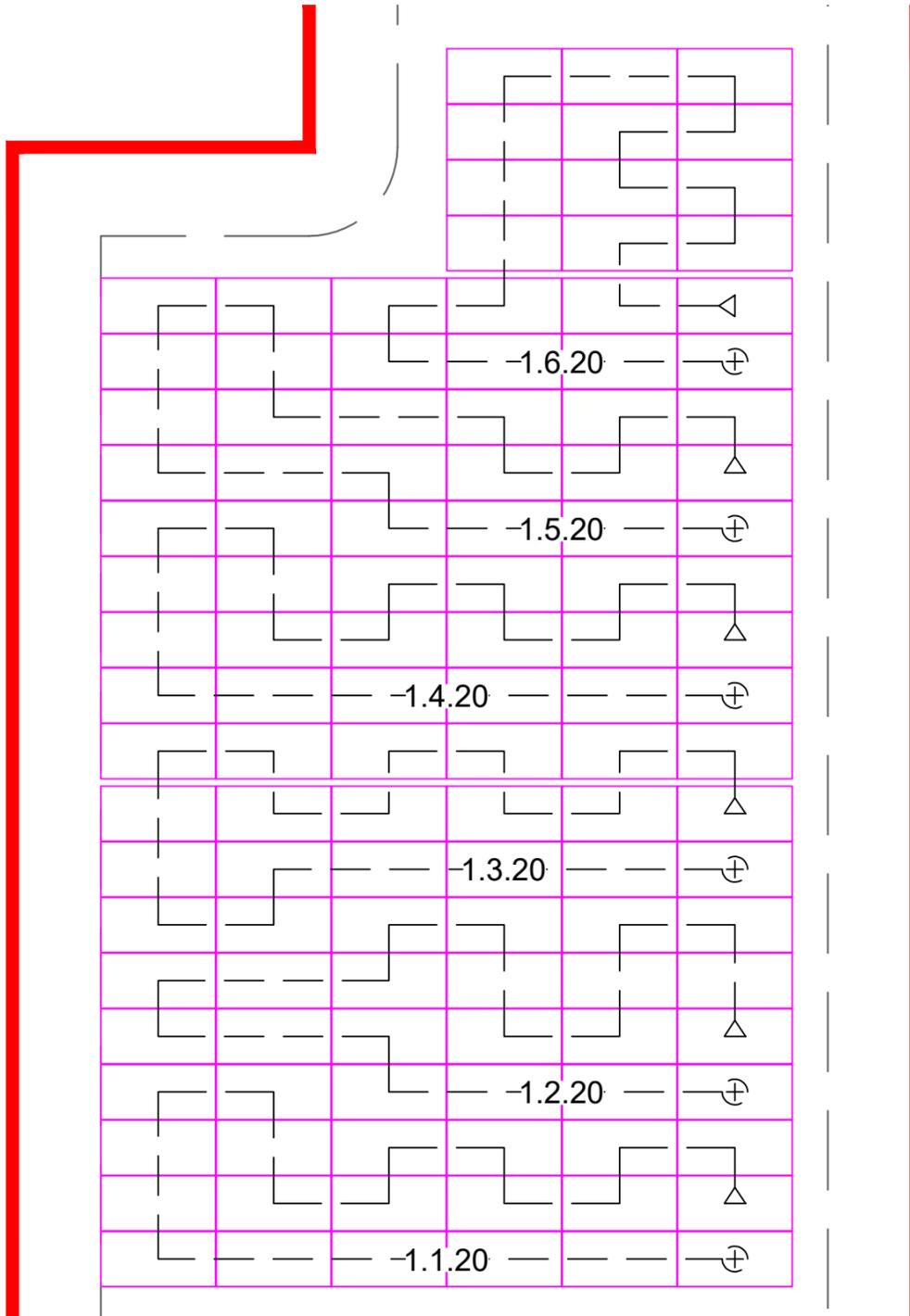
- ANY AREAS WITHIN 1 FOOT OF A PV ARRAY MAY STILL BE ENERGIZED.
- ALL PV SOURCE CIRCUITS OUTSIDE THE ARRAY BOUNDARY WILL BE REDUCED TO <30 VDC WITHIN 30 SECONDS UPON ACTIVATION OF RAPID SHUTDOWN FUNCTION.

NEC 690.12 RAPID SHUTDOWN DETAILS:

- RAPID SHUTDOWN ACTIVATION
 - RAPID SHUTDOWN IS INITIATED VIA SOLAREEDGE INVERTER AC DISCONNECT OR THE DEDICATED RAPID SHUTDOWN SWITCH.
- EACH MODULE IS EQUIPPED WITH A SOLAREEDGE C651U DC POWER OPTIMIZER, WHICH ACTIVELY LIMITS VOLTAGE AND CURRENT DURING SHUTDOWN.
- RAPID SHUTDOWN LABELING REQUIREMENTS
 - ALL LABELING AND SIGNAGE FOR RAPID SHUTDOWN ARE INSTALLED PER NEC 690.56(C)



INVERTER SUMMARY						
ROOF	INVERTER TYPE	INVERTER QTY	QTY MODULES PER INVERTER	TOTAL QTY OF MODULES	DC/AC RATIO	STRING CONFIGURATION
1	SE50KUS (TYPE-1)	1	120	120	1.476	INPUT 1: 20 MODULES, 1 STRING
						INPUT 2: 20 MODULES, 1 STRING
						INPUT 3: 20 MODULES, 1 STRING
						INPUT 4: 20 MODULES, 1 STRING
						INPUT 5: 20 MODULES, 1 STRING
TOTAL		1		120		



PEORIA PARK DISTRICT AT ESC FACILITY
 (PEORIA, IL)
 ROOFTOP SOLAR PV PROJECT
 1314 N PARK RD,
 PEORIA IL 61604



ROOFTOP PV-ARRAY & INVERTER INTERNAL WIRINGS
 SCALE: 3/32" = 1'-0"

0.0	02/17/26	ISSUED FOR PERMIT
NO.	DATE	DESCRIPTION

CERTIFICATION:
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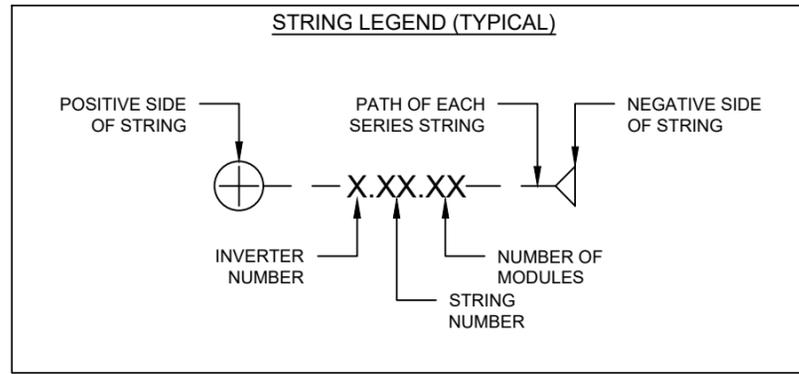
CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS

DRAWING NO:
 E1.2

DRAWING NOTES:

- ALL STRINGS FEEDS SHALL BE 2 # 8 AWG PV WIRE (2000V):
 - RED: POSITIVE
 - BLACK: NEGATIVE
 - 1 # 6 CU GROUND: BARE, GREEN
- THE CONTRACTOR SHALL USE CONNECTORS FROM THE SAME MANUFACTURER FOR ALL MODULES AND EXTENSIONS IN THE HOMERUN. FIELD-MADE CONNECTORS FOR PV QUICK CONNECTS SHALL BE THE SAME TYPE AND MANUFACTURER AS THE PV MODULES AND SHALL BE CRIMPED USING THE MANUFACTURER - SPECIFIED CRIMPING TOOL.
- DC STRING CONDUCTORS SHALL BE GROUPED BY CIRCUIT INTO THE SAME CONDUIT.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD (EOR) FOR APPROVAL OF ANY CHANGES TO THE STRING PLAN.
- SOLAR MODULE-LEVEL POWER ELECTRONICS (MLPE) ARE PROVIDED VIA SOLAREEDGE DC POWER OPTIMIZER TO ACHIEVE COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN REQUIREMENTS.
- CONNECT POWER OPTIMIZER INPUT WIRE TO PV MODULES.
- CONNECT POWER OPTIMIZER OUTPUT WIRE TO FORM A STRING. WHILE CONNECTING MAKE SURE THAT ALL CONNECTORS ARE FIRMLY INSERTED AND LOCKED.
- OPTIMIZERS SHALL BE INSTALLED ACCORDING TO SOLAREEDGE C651U INSTALLATION GUIDE AND ALL MANUFACTURER INSTRUCTIONS. DO NOT EXCEED THE MAXIMUM NUMBER OF OPTIMIZERS PER STRING AS SPECIFIED BY THE INVERTER AND OPTIMIZER LISTING.



NEC 690.12 RAPID SHUTDOWN

GOAL OF "RAPID SHUTDOWN" FOR PV SYSTEMS ON BUILDINGS: IN THE EVENT OF AN EMERGENCY, EMERGENCY RESPONDERS CAN INITIATE THE RAPID SHUTDOWN DEVICE AND SAFELY MOVE AROUND THE ROOF. THEY MUST BE AWARE THAT:

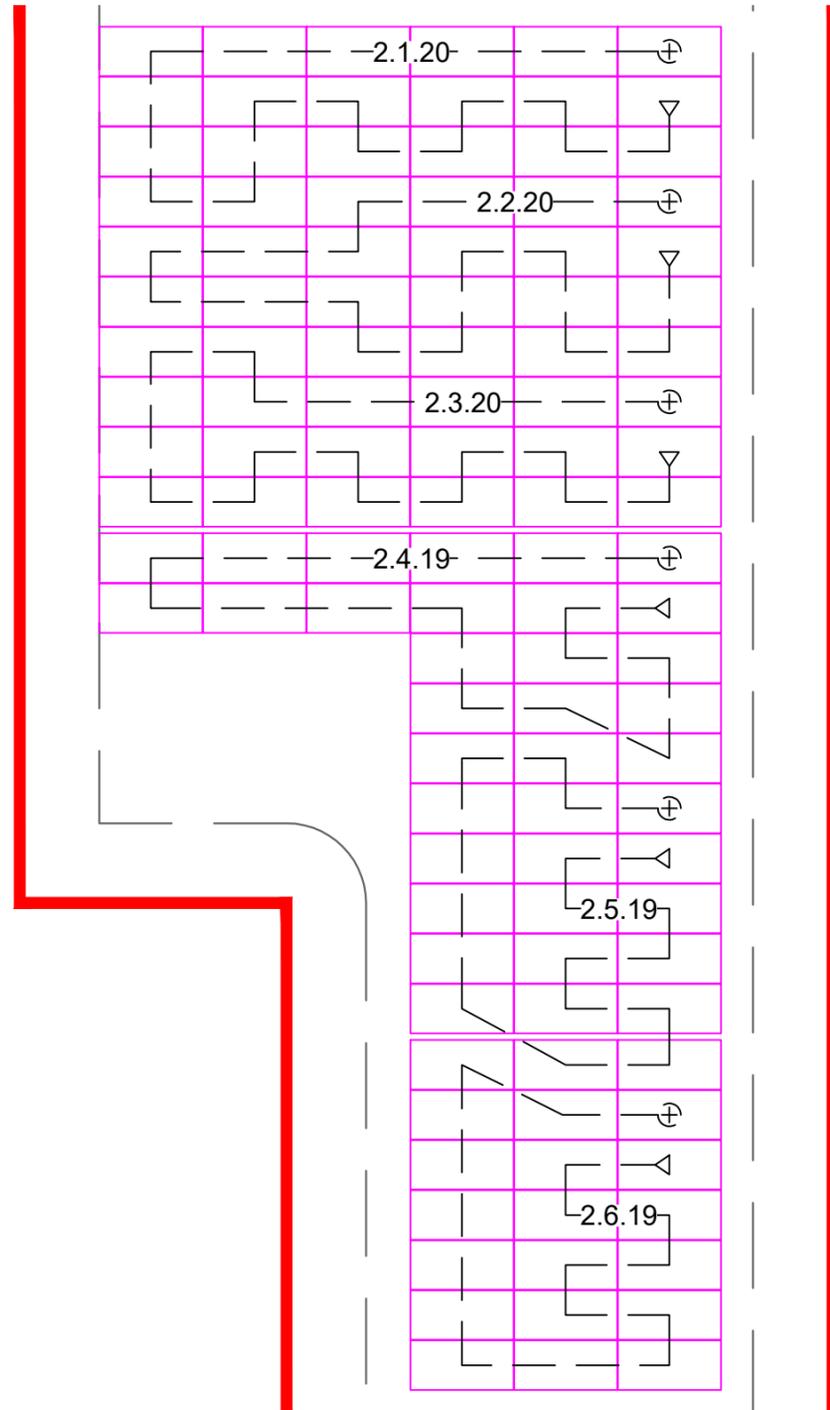
- ANY AREAS WITHIN 1 FOOT OF A PV ARRAY MAY STILL BE ENERGIZED.
- ALL PV SOURCE CIRCUITS OUTSIDE THE ARRAY BOUNDARY WILL BE REDUCED TO <30 VDC WITHIN 30 SECONDS UPON ACTIVATION OF RAPID SHUTDOWN FUNCTION.

NEC 690.12 RAPID SHUTDOWN DETAILS:

- RAPID SHUTDOWN ACTIVATION
 - RAPID SHUTDOWN IS INITIATED VIA SOLAREEDGE INVERTER AC DISCONNECT OR THE DEDICATED RAPID SHUTDOWN SWITCH.
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- RAPID SHUTDOWN LABELING REQUIREMENTS
 - ALL LABELING AND SIGNAGE FOR RAPID SHUTDOWN ARE INSTALLED PER NEC 690.56(C)



INVERTER SUMMARY						
ROOF	INVERTER TYPE	INVERTER QTY	QTY MODULES PER INVERTER	TOTAL QTY OF MODULES	DC/AC RATIO	STRING CONFIGURATION
1	SE50KUS (TYPE-1)	1	117	117	1.439	INPUT 1: 20 MODULES, 1 STRING
						INPUT 2: 20 MODULES, 1 STRING
						INPUT 3: 20 MODULES, 1 STRING
						INPUT 4: 19 MODULES, 1 STRING
						INPUT 5: 19 MODULES, 1 STRING
						INPUT 6: 19 MODULES, 1 STRING
TOTAL		1		117		



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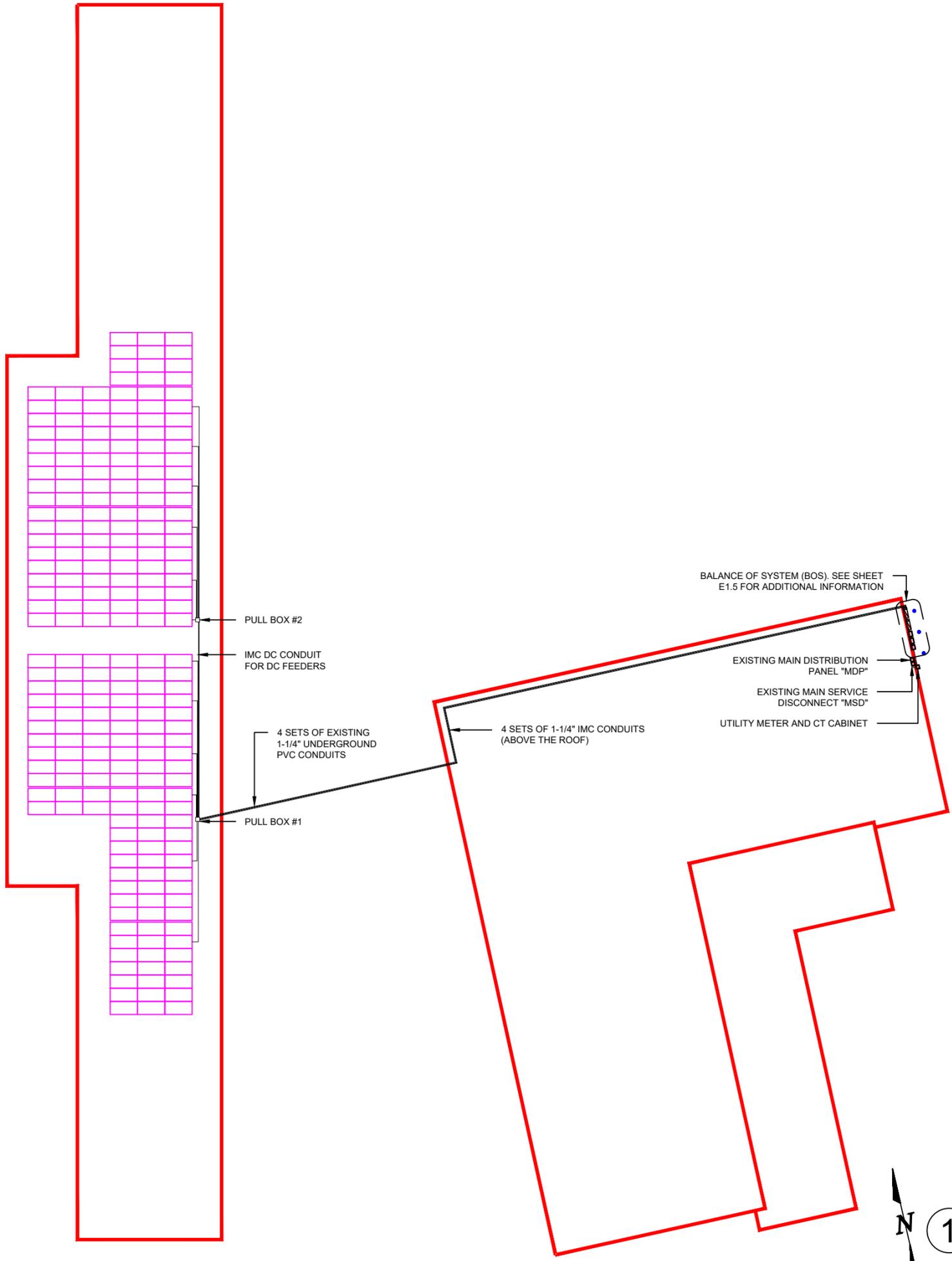
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SIGNATURE: 
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 DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS


1
ROOFTOP PV-ARRAY & INVERTER INTERNAL WIRINGS
 SCALE: 5/64" = 1'-0"



DRAWING NOTES:

- CONDUIT LOCATIONS** ARE SHOWN DIAGRAMMATICALLY. THE CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD LOCATIONS. ANY CHANGES TO PROPOSED ROUTING SHALL BE SUBMITTED TO ENGINEERING OF RECORD (EOR) FOR REVIEW AND APPROVAL.
- SEAL CONDUIT PENETRATIONS** THROUGH BUILDING WALL TO PREVENT MOISTURE FROM ENTERING BUILDING WITH POLYWATER FST OR EQUIVALENT. USE PULL BOX AS NECESSARY.
- CONDUIT AND RACEWAY SHALL NOT INTERFERE WITH FIRE ACCESS WALKWAYS
- ALL CABLE ENTRIES IN EQUIPMENT** SHALL BE **BOTTOM OR SIDE ENTRY** TO **MAINTAIN** THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES.
- CABLE SPACING** SHALL NOT BE LESS THAN 100% OF THE LARGER CABLE DIAMETER.
- PROVIDE EXPANSION FITTING WITH BONDING JUMPER FOR EVERY 100FT OF CONDUIT RUN.**
- INSTALL HAND HOLES, PULL BOXES, OR CONDUIT BODIES** (WHETHER OR NOT SHOWN ON DRAWINGS) WHEN THE RACEWAY HAS MORE THAN 360 DEGREES OF BENDS OR AS NEEDED TO AVOID EXCEEDING THE MANUFACTURERS'S MAXIMUM CABLE PULLING TENSION.
- MAINTAINED THE MAXIMUM 10FT DISTANCE BETWEEN SUPPORTS** FOR ALL ROOF-MOUNTED CONDUIT AND THE MAXIMUM 3FT DISTANCE FROM EVERY PULL BOX PER NEC REQUIREMENTS.
- ALL OUTDOOR ENCLOSURES** (E.G., **COMBINER BOXES, AC DISCONNECTS, PULL BOXES**) ENCLOSURES SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET ABOVE GRADE.
- REFER TO THE ELECTRICAL SCHEDULES DRAWING SHEET** FOR ADDITIONAL DETAILS ON APPROPRIATE CONDUCTOR AND CONDUIT TYPES AND SIZES.
- INSTALLATION OF THE REQUIRED BOLLARDS SHALL BE BY THE CONTRACTOR
- THE OWNER WILL PROVIDE THE UNDERGROUND CONDUIT INSTALLATION, EXCLUDING THE CONDUCTORS. THE CONTRACTOR SHOULD NOT INCLUDE THE COST OF TRENCHING OR CONDUIT IN THEIR BID ESTIMATE.
- WHERE THE DC CONDUIT IS NOT ATTACHED TO THE WIND DEFLECTOR, EXTEND THE IMC CONDUIT A MINIMUM OF 10" UNDERNEATH THE MODULE.



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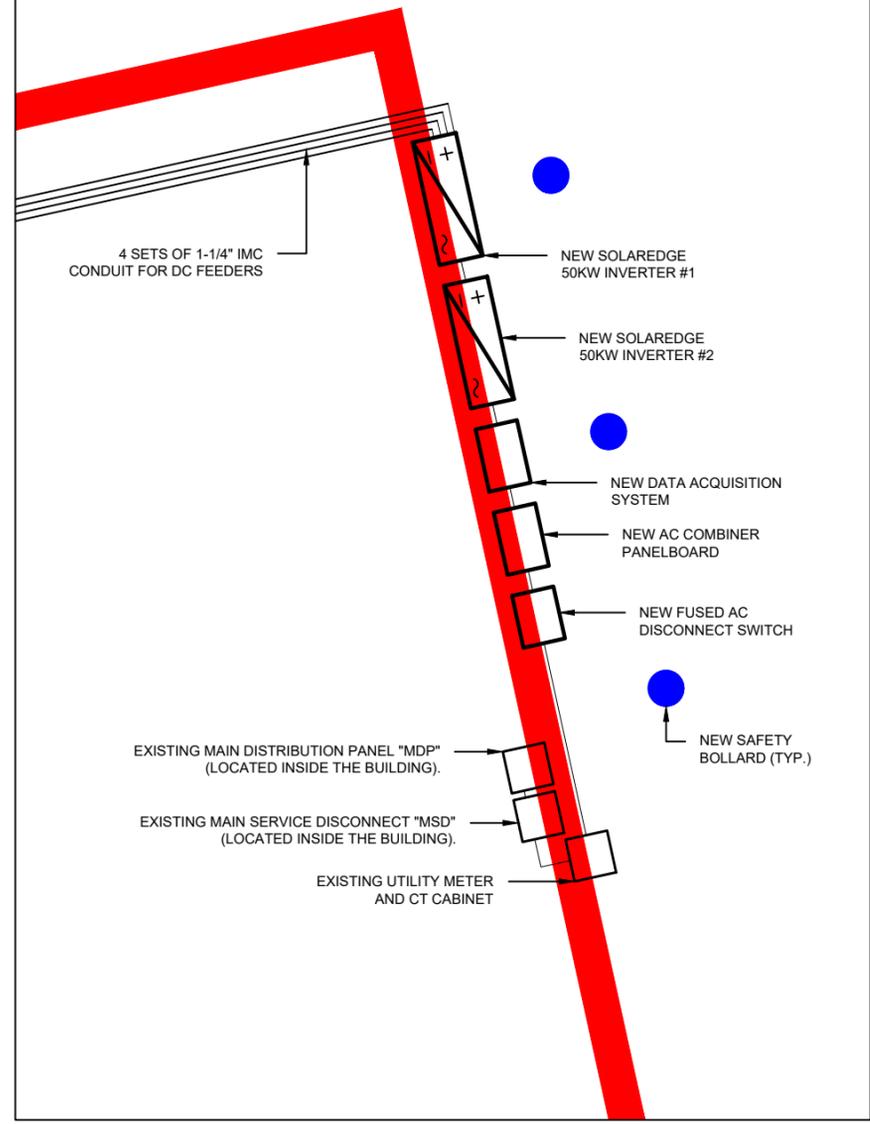
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 CHECKED BY: AM
 PROJECT NO.: GEC-4293

1 ROOFTOP CABLE & CONDUITS PLAN VIEW
 SCALE: 7/100" = 1'-0"

SHEET TITLE:
ROOFTOP CABLE AND CONDUITS PLAN VIEW

DRAWING NO.
E1.4



BALANCE OF SYSTEM DETAILS

DRAWING NOTES:

1. **CONDUIT LOCATIONS** ARE SHOWN DIAGRAMMATICALLY. THE CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD LOCATIONS. ANY CHANGES TO PROPOSED ROUTING SHALL BE SUBMITTED TO ENGINEERING OF RECORD (EOR) FOR REVIEW AND APPROVAL.
2. **SEAL CONDUIT PENETRATIONS** THROUGH BUILDING WALL TO PREVENT MOISTURE FROM ENTERING BUILDING WITH POLYWATER FST OR EQUIVALENT. USE PULL BOX AS NECESSARY.
3. CONDUIT AND RACEWAY SHALL NOT INTERFERE WITH FIRE ACCESS WALKWAYS
4. **ALL CABLE ENTRIES IN EQUIPMENT** SHALL BE **BOTTOM OR SIDE ENTRY** TO **MAINTAIN** THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES.
5. **CABLE SPACING** SHALL NOT BE LESS THAN 100% OF THE LARGER CABLE DIAMETER.
6. **PROVIDE EXPANSION FITTING WITH BONDING JUMPER FOR EVERY 100FT OF CONDUIT RUN.**
7. **INSTALL HAND HOLES, PULL BOXES, OR CONDUIT BODIES** (WHETHER OR NOT SHOWN ON DRAWINGS) WHEN THE RACEWAY HAS MORE THAN 360 DEGREES OF BENDS OR AS NEEDED TO AVOID EXCEEDING THE MANUFACTURER'S MAXIMUM CABLE PULLING TENSION.
8. **MAINTAINED THE MAXIMUM 10FT DISTANCE BETWEEN SUPPORTS** FOR ALL ROOF-MOUNTED CONDUIT AND THE MAXIMUM 3FT DISTANCE FROM EVERY PULL BOX PER NEC REQUIREMENTS.
9. **ALL OUTDOOR ENCLOSURES** (E.G., **COMBINER BOXES, AC DISCONNECTS, PULL BOXES**) ENCLOSURES SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET ABOVE GRADE.
10. **REFER TO THE ELECTRICAL SCHEDULES DRAWING SHEET** FOR ADDITIONAL DETAILS ON APPROPRIATE CONDUCTOR AND CONDUIT TYPES AND SIZES.
11. INSTALLATION OF THE REQUIRED BOLLARDS SHALL BE BY THE CONTRACTOR
12. THE OWNER WILL PROVIDE THE UNDERGROUND CONDUIT INSTALLATION, EXCLUDING THE CONDUCTORS. THE CONTRACTOR SHOULD NOT INCLUDE THE COST OF TRENCHING OR CONDUIT IN THEIR BID ESTIMATE.
13. WHERE THE DC CONDUIT IS NOT ATTACHED TO THE WIND DEFLECTOR, EXTEND THE IMC CONDUIT A MINIMUM OF 10" UNDERNEATH THE MODULE.



**PEORIA PARK DISTRICT AT ESC FACILITY
 (PEORIA, IL)
 ROOFTOP SOLAR PV PROJECT
 1314 N PARK RD,
 PEORIA IL 61604**

NO.	DATE	DESCRIPTION
0.0	02/17/26	ISSUED FOR PERMIT

CERTIFICATION:
 I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

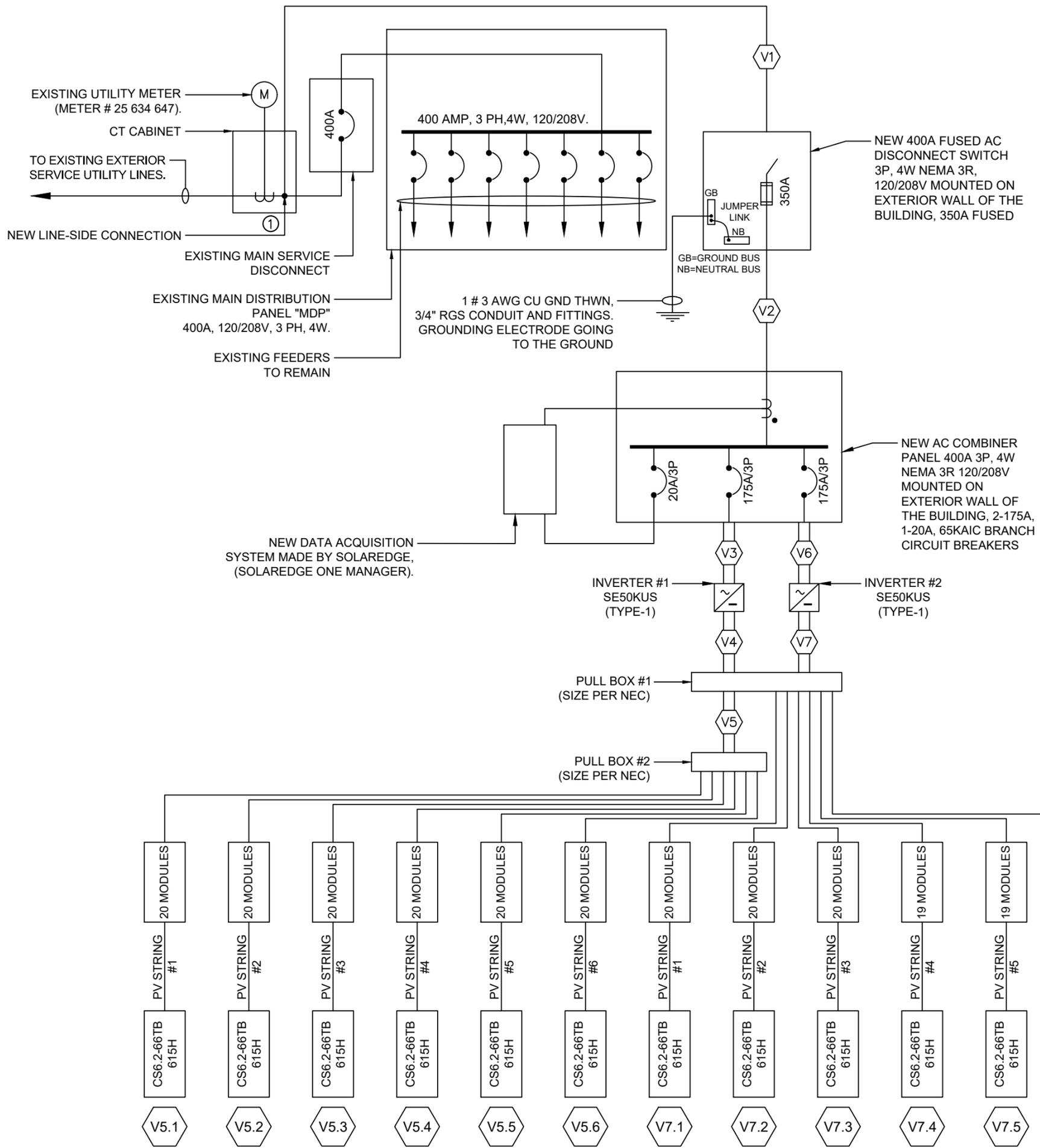
SIGNATURE: 
 LICENSE NO: 062.051711
 EXPIRATION DATE: 11/30/2027
 DRAWN BY: JP
 CHECKED BY: AM
 PROJECT NO.: GEC-4293


1 **ROOFTOP CABLE & CONDUITS PLAN VIEW**
 SCALE: 7/100" = 1'-0"

SHEET TITLE:
ROOFTOP CABLE AND CONDUITS PLAN VIEW
 DRAWING NO:
E1.5



**PEORIA PARK DISTRICT AT ESC FACILITY
 (PEORIA, IL)
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DRAWING NOTES:

1. **ALL CABLE ENTRIES IN EQUIPMENT SHALL BE BOTTOM OR SIDE ENTRY TO MAINTAIN THE NEMA RATING.** NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES. SEAL CONDUIT PENETRATIONS THROUGH BUILDING WALLS TO PREVENT MOISTURE ENTRY USING POLYWATER FST OR AN EQUIVALENT SEALANT. USE PULL BOXES AS NECESSARY.
2. **LB CONDUIT BODIES** SHALL NOT BE USED FOR ANY CONDUITS DOWNSTREAM OF THE INVERTERS. IF A JUNCTION OR DIRECTIONAL CHANGE IS NECESSARY, PULL BOXES SHALL BE INSTALLED TO MAINTAIN COMPLIANCE WITH BEST PRACTICES AND SYSTEM INTEGRITY. THE CONTRACTOR SHALL SIZE ALL PULL BOX IN COMPLIANCE WITH THE NEC.
3. **THE CONTRACTOR SHALL FIELD VERIFY THE INTERCONNECTION MEANS AND METHOD** PRIOR TO INSTALLATION. **AN EDC-SUPPORTED POWER OUTAGE** WILL BE REQUIRED.
4. **TORQUE ALL DC AND AC TERMINALS** AS SPECIFIED IN THE **INSTALLATION MANUAL**. APPLY **TORQUE MARKS** TO VERIFY PROPER TIGHTENING.

KEYS NOTES:

- ① PROVIDE NECESSARY LUGS AND ACCESSORIES FOR SOLAR ARRAY TIE-IN, INSIDE CT CABINET LOCATED OUTSIDE. POINT OF INTERCONNECTION SHALL BE VERIFIED WITH UTILITY COMPANY PRIOR TO START OF WORK.

CONDUCTOR SCHEDULE

TAG	CONDUCTOR	CONDUIT
V1	(8) # 3/0 AWG CU THWN, (2) # 3 AWG CU GND	(2) 2" IMC CONDUIT AND FITTINGS
V2	(8) # 3/0 AWG CU THWN, (2) # 3 AWG CU GND	(2) 2" IMC CONDUIT AND FITTINGS
V3	(3) # 3/0 AWG CU THWN, (1) # 6 AWG CU GND	(1) 2" IMC CONDUIT AND FITTINGS
V4	(12) # 8 AWG CU - PV (2000V), (2) # 6 AWG CU GND	(2) 1-1/4" IMC & PVC CONDUIT AND FITTINGS
V5	(12) # 8 AWG CU - PV (2000V), (2) # 6 AWG CU GND	(2) 1-1/4" IMC CONDUIT AND FITTINGS
V5.1-V5.6	(2) # 8 AWG CU - PV (2000V), (1) # 6 AWG CU GND	(1) 3/4" IMC CONDUIT AND FITTINGS
V6	(3) # 3/0 AWG CU THWN, (1) # 6 AWG CU GND	(1) 2" IMC CONDUIT AND FITTINGS
V7	(12) # 8 AWG CU - PV (2000V), (2) # 6 AWG CU GND	(2) 1-1/4" IMC & PVC CONDUIT AND FITTINGS
V7.1-V7.6	(2) # 8 AWG CU - PV (2000V), (1) # 6 AWG CU GND	(1) 3/4" IMC CONDUIT AND FITTINGS

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**1 ELECTRICAL ONE LINE DIAGRAM
 SCALE: N.T.S.**

ELECTRICAL ONE LINE DIAGRAM

DRAWING NO. E2.1

DRAWING NOTES:

1. ALL CABLE ENTRIES IN EQUIPMENT SHALL BE BOTTOM OR SIDE ENTRY TO MAINTAIN THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES. SEAL CONDUIT PENETRATIONS THROUGH BUILDING WALLS TO PREVENT MOISTURE ENTRY USING POLYURETHANE FST OR AN EQUIVALENT SEALANT. USE PULL BOXES AS NECESSARY. REFER TO THE ELECTRICAL ONE-LINE DIAGRAM DRAWING SHEET FOR MORE INFORMATION.
2. THE RISER DIAGRAM IS FOR REFERENCE ONLY AND REPRESENTS THE EXISTING ELECTRICAL SYSTEM. THE DIAGRAM ILLUSTRATES THE SCOPE OF WORK FOR THE ADDITION OF THE SOLAR PROJECT.
3. LB CONDUIT BODIES SHALL NOT BE USED FOR ANY CONDUITS DOWNSTREAM OF THE INVERTERS. IF A JUNCTION OR DIRECTIONAL CHANGE IS NECESSARY, PULL BOXES SHALL BE INSTALLED TO MAINTAIN COMPLIANCE WITH BEST PRACTICES AND SYSTEM INTEGRITY.
4. INSTALLATION OF REQUIRED BOLLARDS SHALL BE BY CONTRACTOR.

KEYS NOTES:

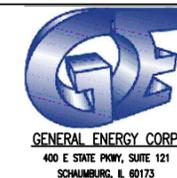
- ① PROVIDE NECESSARY LUGS AND ACCESSORIES FOR SOLAR ARRAY TIE-IN, INSIDE CT CABINET LOCATED OUTSIDE THE ELECTRICAL ROOM. POINT OF INTERCONNECTION SHALL BE VERIFIED WITH UTILITY COMPANY PRIOR TO START OF WORK.

2 # 8 AWG CU PV WIRE,
1 # 6 CU GROUND (TYP.)

CANADIAN SOLAR

MODULES
237

CS6.2-66TB-615H

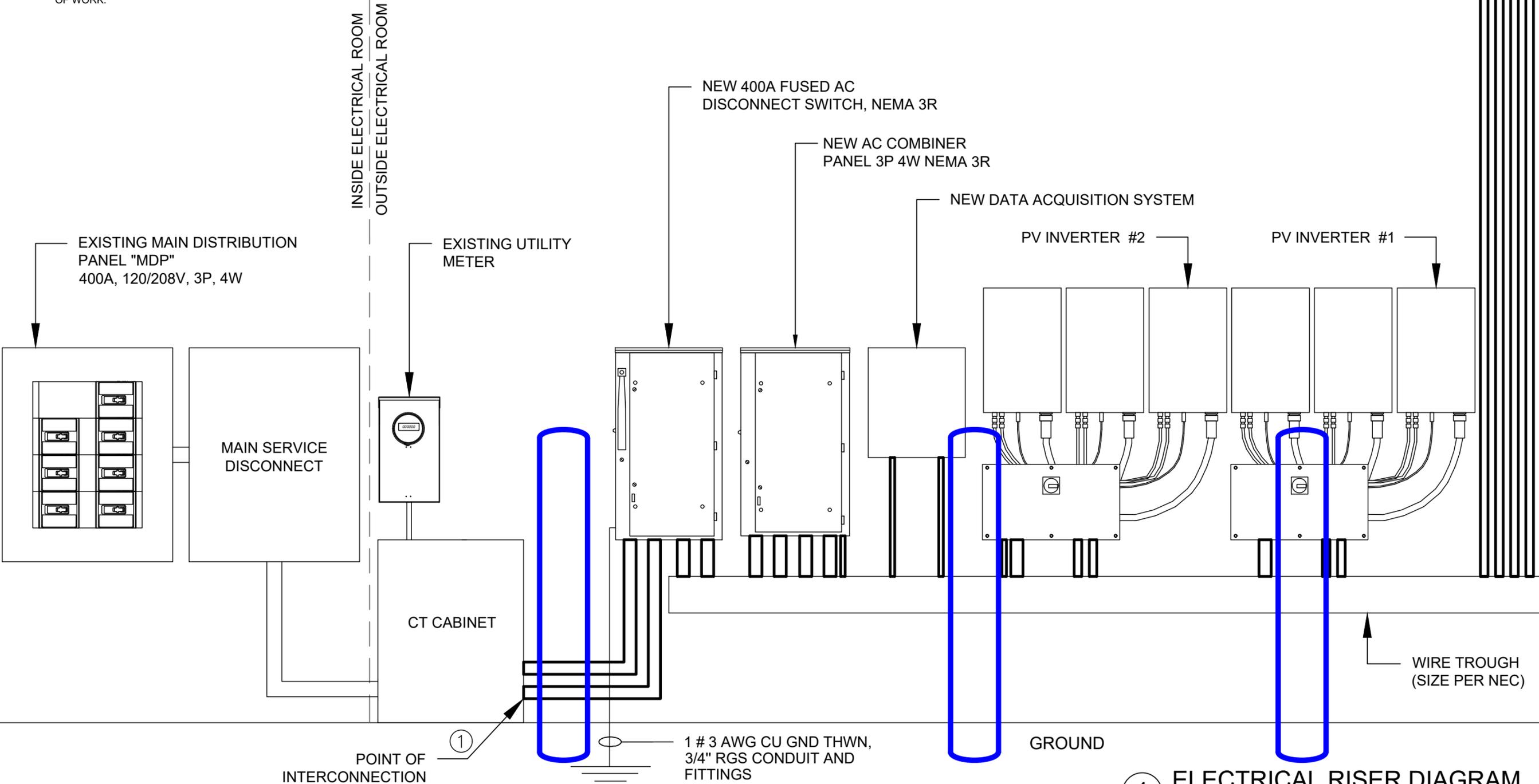


PEORIA PARK DISTRICT AT ESC FACILITY
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ROOF TOP

PULL BOX # 1 & # 2 (TYP.)
SIZE PER NEC.

DC CABLES AND
CONDUITS



POINT OF
INTERCONNECTION

1 # 3 AWG CU GND THWN,
3/4" RGS CONDUIT AND
FITTINGS

GROUND

WIRE TROUGH
(SIZE PER NEC)

① **ELECTRICAL RISER DIAGRAM**
SCALE: N.T.S.

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SIGNATURE:

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DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
ELECTRICAL RISER DIAGRAM

DRAWING NO:
E2.2

1. SOLAR RACEWAYS

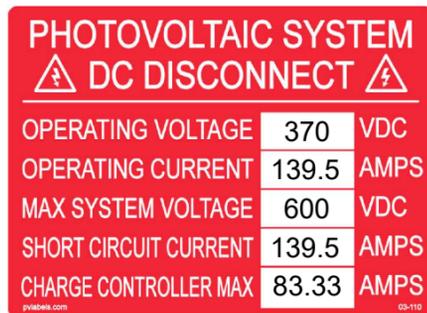


QUANTITY REQUIRED: POSSIBLY 30.

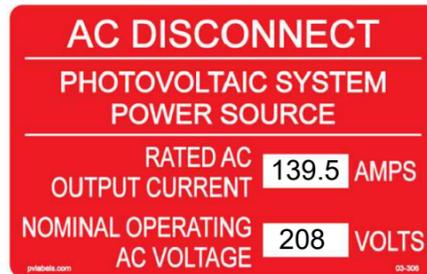
LABELLING REQUIREMENTS: SHALL BE PERMANENTLY AFFIXED ON:

- DC CONDUCTORS LOCATED INSIDE IMC/EMT CONDUIT ONLY
- DC CONDUCTORS LOCATED INSIDE CABLE TRAYS
- AC WIRES LOCATED INSIDE PULL BOXES AND JUNCTION BOXES

2. INVERTERS MOUNTED ON EXTERIOR WALL OF THE BUILDING



NOTE: (2 QTY), APPLICABLE ON PV INVERTER #1 & #2.



NOTE: (2 QTY), APPLICABLE ON PV INVERTER #1 & #2.

3. NEW AC COMBINER PANEL BOARD MOUNTED ON EXTERIOR WALL OF THE BUILDING

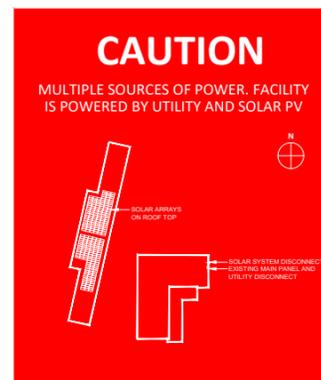


NOTE: (1 QTY), APPLICABLE ON AC COMBINER PANELBOARD LOCATED ON ROOFTOP.

4. NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING



NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING

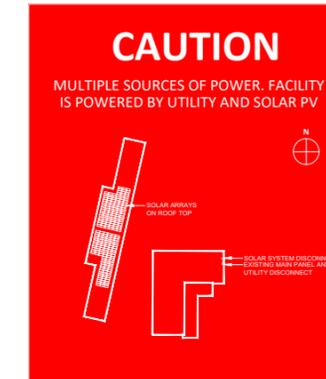


NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING



NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING

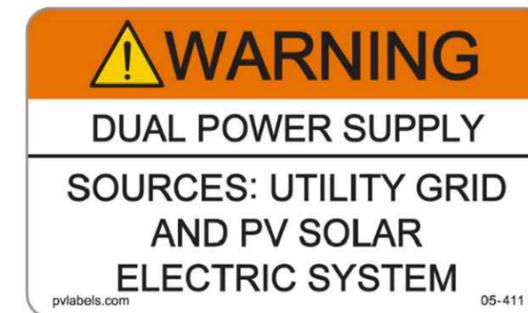
5. MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



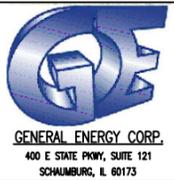
NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



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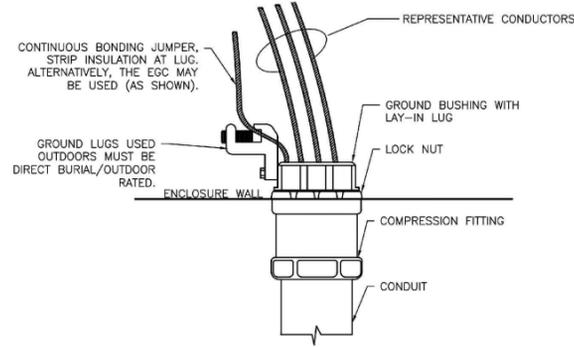
SIGNATURE:

 ANAND MALHOTRA
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 EXPIRATION DATE: 11/30/2027
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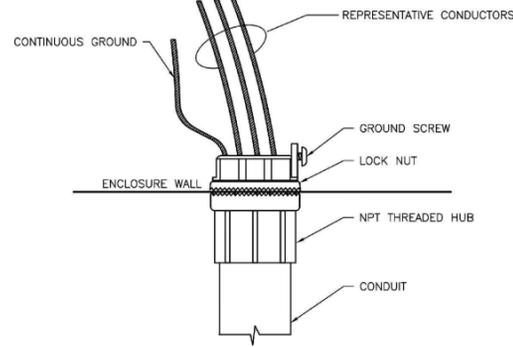
SHEET TITLE:
 ELECTRICAL LABELS

1 ELECTRICAL LABELS
 SCALE: N.T.S.

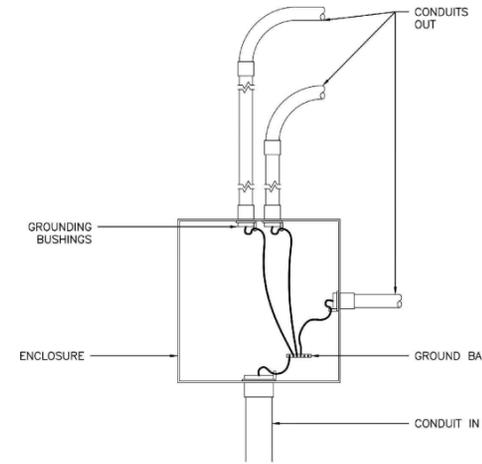
**PEORIA PARK DISTRICT AT ESC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
1314 N PARK RD,
PEORIA IL 61604**



1 CONDUIT BUSHING GROUNDING
SCALE: NONE



2 MYERS HUB GROUNDING
SCALE: NONE



3 PULL BOX/TROUGH GROUNDING
SCALE: NONE

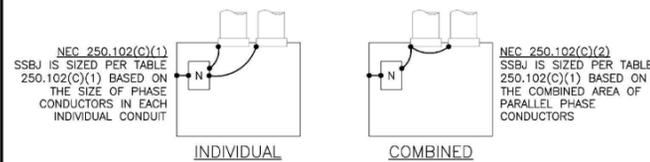


TABLE 250.102(C)(1)

SIZE OF LARGEST UNGROUNDED CONDUCTOR OR EQUIVALENT AREA FOR PARALLEL CONDUCTORS (AWG/KCMIL)		SIZE OF GROUNDED CONDUCTOR OR BONDING JUMPER (AWG/KCMIL)	
COPPER	ALUMINUM OR COPPER CLAD ALUMINUM	COPPER	ALUMINUM OR COPPER CLAD ALUMINUM
2 OR SMALLER	1/0 OR SMALLER	8	6
1 OR 1/0	2/0 OR 3/0	6	4
2 OR 2/0	4/0 OR 250	4	2
OVER 3/0 THROUGH 350	OVER 250 THROUGH 500	2	1/0
OVER 350 THROUGH 600	OVER 500 THROUGH 900	1/0	3/0
OVER 600 THROUGH 1100	OVER 900 THROUGH 1750	2/0	4/0
OVER 1100	OVER 1750	REFER TO NOTES IN NEC TABLE 250.102(C)(1)	

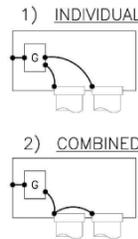
4 SUPPLY SIDE BONDING JUMPERS (SSBJ)
SCALE: NONE

A) FOR CONCENTRIC KNOCKOUTS, USE BONDING JUMPERS AS FOLLOWS:

TABLE 250.122

OVERCURRENT DEVICE CIRCUIT NOT EXCEEDING (AMPERES)	SIZE (AWG OR KCMIL)	
	COPPER	ALUMINUM
15	14	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600
3000	400	600
4000	500	750

FOR PARALLEL FEEDERS - NEC 250.102(D) EQUIPMENT BONDING JUMPER IS SIZED PER TABLE 250.122, REGARDLESS IF COMBINED OR INDIVIDUAL BONDING JUMPERS ARE USED

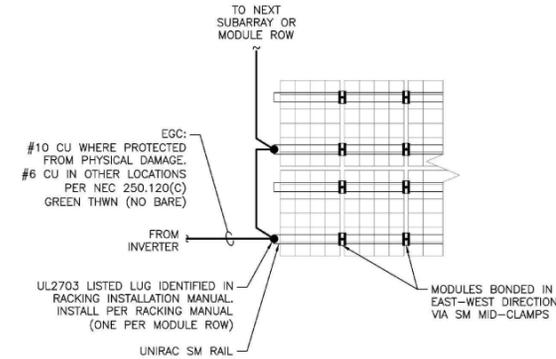


B) FOR NON-CONCENTRIC KNOCKOUTS, THE FOLLOWING METHODS SHALL BE PERMITTED (PER NEC 250.97)

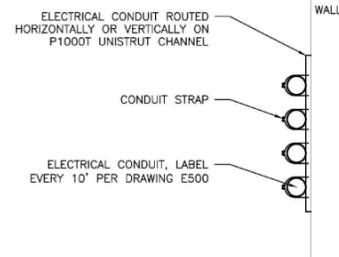
- 1) THREADLESS COUPLINGS AND CONNECTORS FOR CABLES WITH METAL SHEATHS
- 2) TWO LOCKNUTS, ON RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT, ONE INSIDE AND ONE OUTSIDE OF BOXES AND CABINETS
- 3) FITTINGS WITH SHOULDERS THAT SEAT FIRMLY AGAINST THE BOX OR CABINET, SUCH AS ELECTRICAL METALLIC TUBING CONNECTORS, FLEXIBLE METAL CONDUIT CONNECTORS, AND CABLE CONNECTORS, WITH ONE LOCKNUT ON THE INSIDE OF BOXES AND CABINETS
- 4) LISTED FITTINGS (SUCH AS MYERS HUB)

5 LOAD SIDE EQUIPMENT BONDING JUMPER
SCALE: NONE

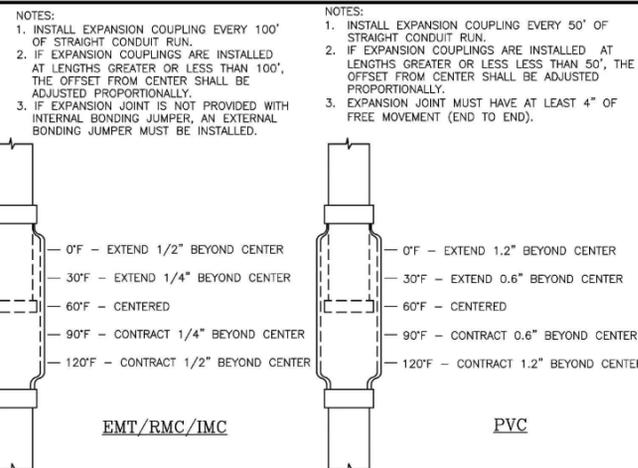
- NOTES:
1. EACH SUBARRAY CONNECTED TO AN INVERTER SHALL HAVE AN EGC RUN TO THAT INVERTER
 2. PV MODULES AND RAILS GROUNDED PER NEC 690.43



6 ARRAY GROUNDING - FLUSH MOUNT
SCALE: NONE



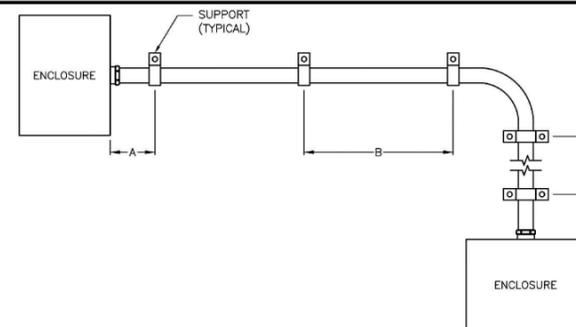
7 CONDUIT WALL ANCHORING
SCALE: NONE



NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN STEEL CONDUIT= 0.65 X 10⁻⁶IN./IN./°F FOR EVERY 120°F CHANGE IN TEMPERATURE, THE LENGTH CHANGE IS 0.94 INCHES PER 100 FEET OF CONDUIT RUN.

NOTE: THE COEFFICIENT OF THERMAL EXPANSION IN PVC CONDUIT= 3.38 X 10⁻⁶IN./IN./°F FOR EVERY 30°F CHANGE IN TEMPERATURE, THE CHANGE IN LENGTH IS 0.6 INCHES PER 50 FEET OF CONDUIT RUN.

8 EXPANSION COUPLING
SCALE: NONE



MAXIMUM CONDUIT HARDWARE SPACING

CONDUIT TYPE	ENCLOSURE TO SUPPORT (A)	SUPPORT TO SUPPORT (B)	NEC ARTICLE
ELECTRICAL METALLIC TUBING (EMT)	3'	10'	358
INTERMEDIATE METAL CONDUIT (IMC)	3'	10'	342
RIGID METAL CONDUIT (RMC)	3'	10'	344
LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)	1'	4.5'	350
PVC (SCH40 & 80) [0.5" - 1"]	3'	3'	352
PVC (SCH40 & 80) [1.25" - 2"]	3'	5'	352
PVC (SCH40 & 80) [2.5" - 3"]	3'	6'	352
PVC (SCH40 & 80) [3.5" - 5"]	3'	7'	352
PVC (SCH40 & 80) [6"]	3'	8'	352

9 CONDUIT SUPPORT SPACING
SCALE: NONE

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SIGNATURE:


 ANAND MALHOTRA
 062 051711
 ELEC. ENGR. ILL. 02/17/2027
 SEAL: SIGNED 02/17/2026

LICENSE NO: 062.051711

EXPIRATION DATE: 11/30/2027

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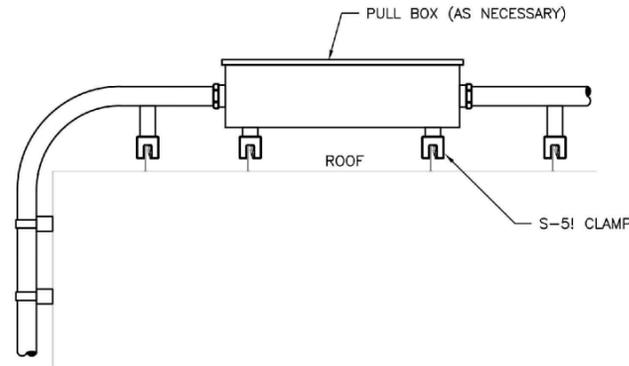
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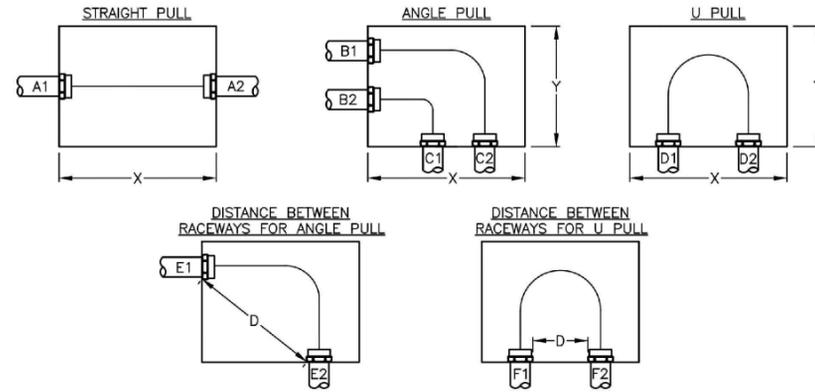
SHEET TITLE:

ELECTRICAL DETAILS

- NOTES:
- DO NOT USE CONDUIT BODIES ON ROOF EDGE FOR POWER CONDUITS.
 - CONDUCTORS IN A VERTICAL RACEWAY SHALL BE SUPPORTED IN COMPLIANCE WITH NEC TABLE 300.19(A). USE OZ GEDNEY WEDGES OR EQUIV.



1 ROOF EDGE CONDUIT RISER WITHOUT PARAPET
SCALE: NONE

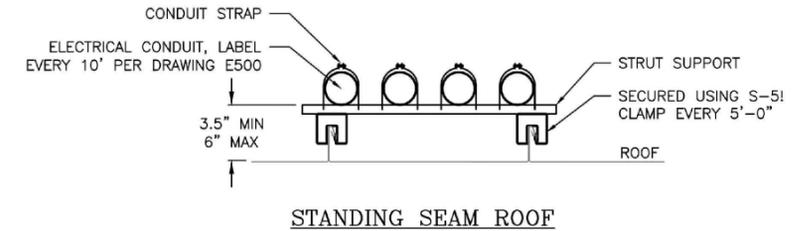


NEC 314.28(A)(1)-(3) PULL BOX SIZING (UP TO 1000V)

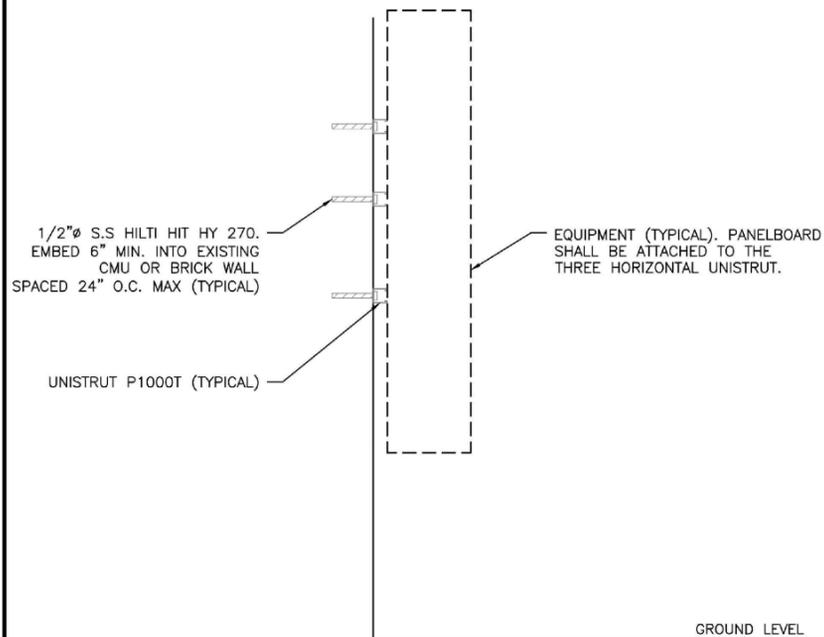
BOX TYPE	LENGTH (X)	HEIGHT (Y)	DISTANCE (D)
STRAIGHT PULL	8 X LARGEST OF A1 & A2	AS NEEDED	N/A
ANGLE PULL	6 X (LARGEST OF B1 & B2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X (LARGEST OF C1 & C2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF E1 & E2
U PULL	AS NEEDED	6 X (LARGEST OF D1 & D2) + SUM OF OTHER CONDUIT ENTERING THE SAME WALL	6 X LARGEST OF F1 & F2

- NOTES:
- REFER TO NEC 314.28 FOR ADDITIONAL REQUIREMENTS.
 - ENSURE CONDUCTOR BEND RADIUS MINIMUMS ARE MET. REFER TO NEC 312.6 FOR ADDITIONAL REQUIREMENTS.

2 PULL BOX & JUNCTION BOX SIZING
SCALE: NONE

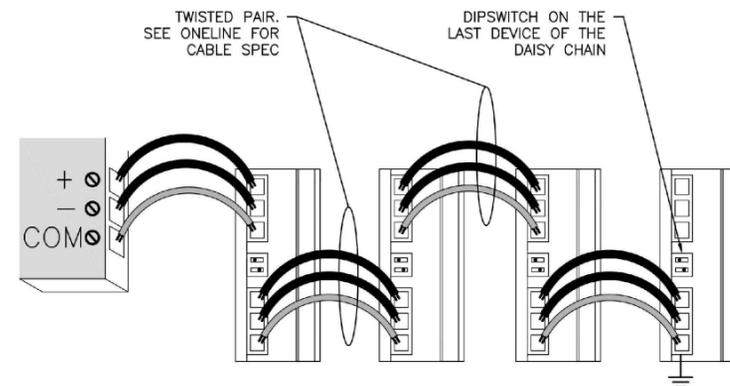


3 ROOF CONDUIT SUPPORT
SCALE: NONE

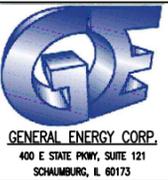


4 EQUIPMENT WALL MOUNTING
SCALE: NONE

- MONITORING NOTES:
- REFER TO MONITORING SYSTEM INSTALLATION MANUAL FOR DETAILS ON TERMINAL BLOCKS, CABLE TERMINATIONS, AND SYSTEM CONFIGURATION.
 - WIRELESS TRANSCEIVERS MUST HAVE LINE-OF-SIGHT BETWEEN EACH OTHER.
 - PYRANOMETER MUST BE INSTALLED IN UNSHADED LOCATION.



5 MODBUS COMMUNICATIONS
SCALE: NONE



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CERTIFICATION:

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:



LICENSE NO: 062.051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

ELECTRICAL DETAILS

DRAWING NO.
E4.2

GENERAL NOTES:

- ALL CONSTRUCTION FOR UNIRAC'S 'ROOF MOUNT' (RM) RACKING SYSTEM SHALL CONFORM TO THE CODES SHOWN IN THE RM DESIGN CRITERIA TABLE BELOW. LOCAL JURISDICTION AMENDMENTS TO THE CODE MUST BE TAKEN INTO CONSIDERATION.
- WHENEVER THE TERM "CONTRACTOR" IS USED IN THE CONSTRUCTION DOCUMENT, IT SHALL BE DEFINED TO MEAN THE GENERAL CONTRACTOR AND ANY SUB-CONTRACTOR COLLECTIVELY AS APPLICABLE AND AS REQUIRED.
- THE CONTRACT "STRUCTURAL RACKING" DRAWINGS REPRESENT THE FINISHED STRUCTURE. UNIRAC AND THE ENGINEER OF RECORD WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION.
- UNIRAC AND THE ENGINEER OF RECORD WILL NOT BE RESPONSIBLE FOR CONSTRUCTION SITE SAFETY OR SAFETY PRECAUTIONS AND PROGRAMS INCIDENT HERETO.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT AND ENSURE THAT ALL WORK IS IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. ANY STRUCTURAL INSPECTION/OBSERVATION PROVIDED BY OTHERS (INCLUDING UNIRAC AND THE ENGINEER OF RECORD) DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY. ANY DEVIATION FROM THE CONTRACT DOCUMENTS THAT IS ENCOUNTERED AT A LATER DATE AND IS DECLARED TO BE SIGNIFICANT BY UNIRAC AND THE ENGINEER OF RECORD SHALL BE CORRECTED BY THE CONTRACTOR (AT THE CONTRACTOR'S EXPENSE). ANY INDIVIDUALS FROM UNIRAC OR THE ENGINEER OF RECORD'S OFFICE PERFORMING SITE VISITS OR STRUCTURAL OBSERVATIONS ARE NOT AUTHORIZED TO DIRECT OR APPROVE ANY CHANGES FROM THE CONTRACT DOCUMENTS OR STOP AND/OR DELAY THE WORK.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND COORDINATE SITE CONDITIONS WITH THE DRAWING PRIOR TO BIDDING AND THE START OF CONSTRUCTION. ANY CONFLICTS, DISCREPANCIES, OR OMISSIONS SHALL BE RESOLVED WITH UNIRAC AND THE ENGINEER OF RECORD PRIOR TO PROCEEDING. DO NOT SCALE DIMENSIONS FROM DRAWINGS. WRITTEN DIMENSIONS SHALL BE USED OR WHERE NO DIMENSION IS PROVIDED. CONSULT WITH UNIRAC FOR CLARIFICATION BEFORE PROCEEDING.
- WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, STRUCTURAL NOTES AND SPECIFICATIONS, THE GREATER (MOST CONSERVATIVE) REQUIREMENTS SHALL GOVERN. WHERE NO SPECIFIC DETAIL IS SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT. IF THERE IS NO SIMILAR WORK CONSTRUCTION SHALL CONFORM TO INDUSTRY STANDARDS. CONTRACTOR MUST INFORM UNIRAC OF ANY DISCREPANCIES.
- ANY EQUIPMENT OR CONDUIT BEING SUPPORTED BY OR SUSPENDED FROM THE RACKING STRUCTURE SHALL BE COORDINATED WITH UNIRAC AND THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO PURCHASE AND INSTALLATION OF EQUIPMENT OR CONDUIT.
- ASTM SPECIFICATIONS ON THE DRAWINGS SHALL BE OF THE LATEST ASTM STANDARD SPECIFICATION OR ASTM STANDARD ADOPTED BY THE SITE JURISDICTION.

- ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL OF A PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF THE LOCAL JURISDICTION.
- THE FOLLOWING DESIGN CRITERIA IS EXCLUDED FROM DESIGN: FLOOD LOADING, DEBRIS LOADING, DYNAMIC ANALYSIS, ACTS OF GOD (TORNADO, HURRICANE, WATER INUNDATION LOADING, ETC.), AND DYNAMIC LOADING FROM SEISMIC EVENTS AND CONDITIONS.
- THE MINIMUM DISTANCE BETWEEN ROOF EDGE AND MODULES OR RM RACKING SYSTEM MUST BE 4 FT UNLESS NOTED OTHERWISE IN THE UNIRAC ENGINEERING REPORT.
- UNIRAC IS NOT RESPONSIBLE FOR THE ORIGINAL BUILDING STRUCTURE. CONSULT WITH A LICENSED PROFESSIONAL ENGINEER IN THE JURISDICTION OF THE PROJECT TO ENSURE THE EXISTING BUILDING IS CAPABLE OF HANDLING ADDITIONAL LOAD FROM THE RM STRUCTURE.
- IN THE EVENT THAT THE ARRAY IS DISPLACED FOR ANY REASON, THE ARRAY SHALL BE REPOSITIONED INTO ITS ORIGINAL DESIGN LOCATION SO AS TO ENSURE THAT PROPER SEISMIC AND FIREFIGHTING ACCESS CLEARANCES AND SEPARATIONS ARE MAINTAINED, IN ADDITION TO ELECTRICAL WIRING SEISMIC SLACK REQUIREMENTS.
- THESE GENERAL NOTES APPLY TO ALL SHEETS IN THIS PACKAGE.

SOLAR DESIGN:

UNIRAC IS NOT THE SOLAR DESIGN ENGINEER OF RECORD AND IS NOT RESPONSIBLE FOR ANY SOLAR DESIGN, OUTPUT EFFICIENCIES, SHADING, ETC. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO CONFIRM THAT THE LOCATION OF THE RACKING/MODULES DOES NOT INTERFERE WITH OR BECOME SHADED BY OBSTRUCTIONS.

ELECTRICAL DESIGN:

UNIRAC IS NOT THE ELECTRICAL ENGINEER OF RECORD AND IS NOT RESPONSIBLE FOR THE ELECTRICAL DESIGN FOR THIS PROJECT. THE UNIRAC SYSTEM IS CERTIFIED TO UL-2703 WHEN PROPERLY INSTALLED. SEE THE RM INSTALLATION GUIDE FOR MORE DETAIL.

MATERIAL MANAGEMENT:

- PRIOR TO INSTALLATION, ALL MATERIALS MUST BE STORED PROPERLY. THIS MEANS MATERIALS REMAINING IN ONE PLACE FOR MORE THAN ONE WEEK MUST BE IN OPEN AIR CONDITIONS (I.E. UP AND ABOVE THE GROUND AND WATER TABLE). IF TARPS OR OTHER PROTECTIVE COVERS ARE USED, THEN ENDS SHALL BE LEFT OPEN FOR VENTILATION. TIGHT FITTING COVERINGS ARE NOT RECOMMENDED SINCE THEY CAN TRAP MOISTURE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PROVIDE ALL MEASURES NECESSARY TO PROTECT THE RACKING SYSTEM FROM THE POINT OF UNIRAC DELIVERY THROUGHOUT THE COMPLETION OF CONSTRUCTION.

RM ALUMINUM COMPONENTS:

- ALL ALUMINUM RM BAY MEMBERS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE "2010 ALUMINUM DESIGN MANUAL" BY THE ALUMINUM DESIGN ASSOCIATION.
- ALL ALUMINUM BAY MEMBERS SHALL CONFORM TO ONE OF THE FOLLOWING:
SKI MATERIAL: ALLOY: 6063 TEMPER 5 (Ftu = 38 KSI, Fcy = 35 KSI)
SKI MATERIAL: ALLOY: 6105 TEMPER 52 (Ftu = 38 KSI, Fcy = 35 KSI)
DOWEL MATERIAL: ALLOY: 6063 TEMPER 5 (Ftu = 38 KSI, Fcy = 35 KSI)
CLAMP MATERIAL: ALLOY: 6005A TEMPER 61 (Ftu = 38 KSI, Fcy = 35 KSI)

HARDWARE:

- 3/8"-16 X 1-3/4" UNC 2A HARDWARE SHALL CONFORM TO 18/8 STAINLESS STEEL (AISI 300 SERIES), DIMENSIONS PER ASME B18.2.1.

TORQUE REQUIREMENTS
3/8"Ø HARDWARE = 8 +/-1 FT-LBS
SINGLE USE ONLY- DO NOT RE-TORQUE ONCE FULLY SEATED

DESIGN CRITERIA	
BUILDING CODE	ASCE 7-16
OCCUPANCY/RISK CATEGORY	II
WIND SPEED (MPH)	115
WIND EXPOSURE	C
GROUND SNOW LOAD (PSF)	20
ROOF HEIGHT (FT)	21.5
ROOF PITCH	6°
SEISMIC S _s	0.132
SEISMIC S _i	0.077
SEISMIC S _{DS}	0.141
SEISMIC S _{D1}	0.122
SITE CLASS	D - DEFAULT
SEISMIC DESIGN CATERGORY	B

PROJECT OVERVIEW	
PROJECT SIZE (KW DC)	145.76
MODULE QUANTITY	237

MODULE SPECIFICATIONS	
MANUFACTURER	CANADIAN SOLAR
MODEL	CS6.2-66TB-615H
LENGTH (IN)	93.80
WIDTH (IN)	44.60
FRAME THICKNESS (IN)	1.57
WEIGHT (LBS)	73.60
OUTPUT (W)	615

ENGINEERING OUTPUT - NXT UMount	
PRODUCT LINE	NXT UMount
CLAMP TYPE	NXT UMount COMBO CLAMP
RAIL DIRECTION	EW
ROOF TYPE	R PANEL
TOTAL WEIGHT (LBS)	17579.96

ARRAY PARTS LIST - NXT UMount		
PART NUMBER	DESCRIPTION	QUANTITY
185RLM1	NXT UMount RAIL - 185" MILL	122
RLSPLCM2	NXT UMount RAIL SPLICE	84
CCLAMP1	NXT UMount COMBO CLAMP - MILL	534
NUMTLCLMPM	NXT-METAL ROOF RAIL CLAMP ASSEMBLY	966
NULGMLP1	NXT UMount MLPE & LUG CLAMP	239
ENDCAPD1	NXT UMount RL & CLMP CAP KIT	120
WRMCLPD1	NXT UMount WIRE MGMT CLIP	474
USER SUPPLIED	S5! PROTEA BRACKET	966

SHEET INDEX	
NXT.100	COVER SHEET
NXT.101	JOINT REACTIONS
NXT.200	KEY PLAN
NXT.301 - NXT.302	ARRAY LAYOUT ARRAY 1 TO 2
NXT.400	NXT DETAILS
NXT.500	ATTACHMENT DETAILS



1314 N PARK RD
PEORIA, IL 61604



ENGINEER'S STAMP



03-FEB-2026
FOR PV RACKING ONLY

REV	DATE	DESCRIPTION	REVISIONS			
			CHK	DRW	INITIAL RELEASE	UPDATED ATTACHMENT, SPACING
0	01/20/2026	INITIAL RELEASE	NT	AB	NT	NT
A	01/21/2026	UPDATED ATTACHMENT, SPACING	NT	AB	NT	NT
B	01/24/2026	UPDATED ROOF HEIGHT	NT	NH	NT	NT

FOR

GENERAL ENERGY CORPORATION

PROJECT
PEORIA PD ESC

1314 N PARK RD
PEORIA, IL 61604

TITLE

COVER SHEET

SHEET

NXT.100

ENGINEER'S STAMP



21.5FT ROOF								
MAXIMUM JOINT REACTION (LB) - FACTORED LOADS ASD-ASCE-ASCE 7-16								
PORTRAIT	NON - EXPOSED				EXPOSED			
	1	2	2'	(3, 3')	1	2	2'	(3, 3')
NO OF RAILS	2	2	2	2	2	2	2	2
DESIGN SPAN (IN):	24	24	24	24	24	24	24	24
UPLIFT POINT LOADS (LBS):	149.9	180.2	225.5	376.7	233.1	278.4	346.5	573.3
DOWN POINT LOAD (LBS):	243.5	243.5	243.5	243.5	243.5	243.5	243.5	243.5
MAX ALLOWABLE SPAN (IN):	51	51	51	48	51	51	49	29
CANTILIVER (IN)	8	8	8	8	8	8	8	8

REV	DATE	DESCRIPTION	DRW		CHK	
			AB	NH	NT	NT
0	01/20/2026	INITIAL RELEASE				
A	01/21/2026	UPDATED ATTACHMENT SPACING				
B	01/24/2026	UPDATED ROOF HEIGHT				

FOR
 GENERAL ENERGY CORPORATION

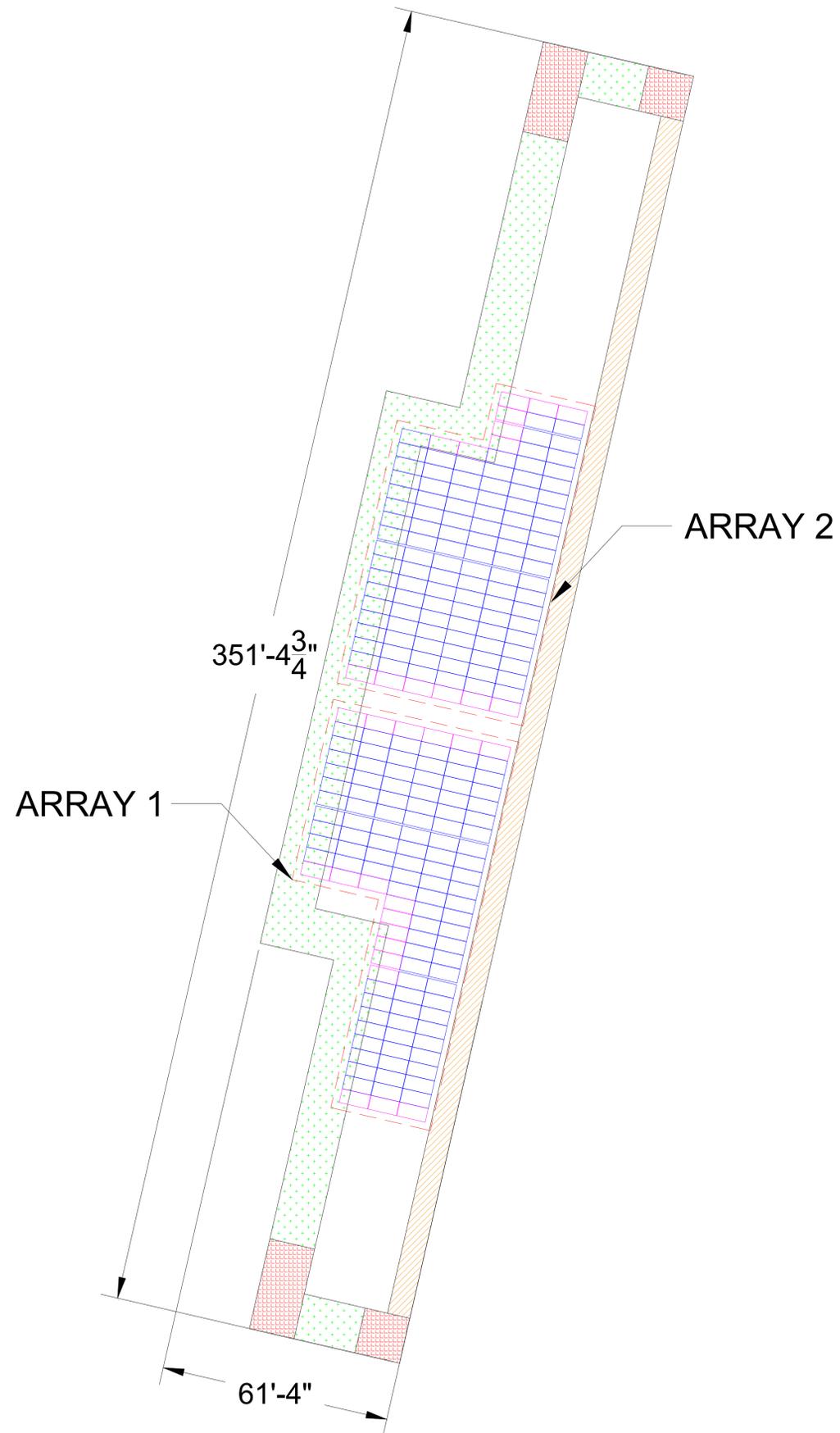
PROJECT
 PEORIA PD ESC
 1314 N PARK RD
 PEORIA, IL 61604

TITLE
 JOINT REACTIONS

SHEET
 NXT.101

-  - ZONE 1
-  - ZONE 2
-  - ZONE 2'
-  - ZONE 3,3'

-  - NON- EXPOSED MODULES
-  - EXPOSED MODULES



UNIRAC
 1411 BROADWAY BOULEVARD NE
 ALBUQUERQUE, NEW MEXICO, USA, 87102
 WWW.UNIRAC.COM

ENGINEER'S STAMP



03-FEB-2026
 FOR PV RACKING ONLY

REV	DATE	DESCRIPTION	REVISIONS		CHK
			DRW	CHK	
0	01/20/2026	INITIAL RELEASE	AB	NT	NT
A	01/21/2026	UPDATED ATTACHMENT, SPACING	AB	NT	NT
B	01/24/2026	UPDATED ROOF HEIGHT	NH	NT	NT

FOR
GENERAL ENERGY CORPORATION

PROJECT
PEORIA PD ESC
 1314 N PARK RD
 PEORIA, IL 61604

TITLE
KEY PLAN

SHEET
NXT.200

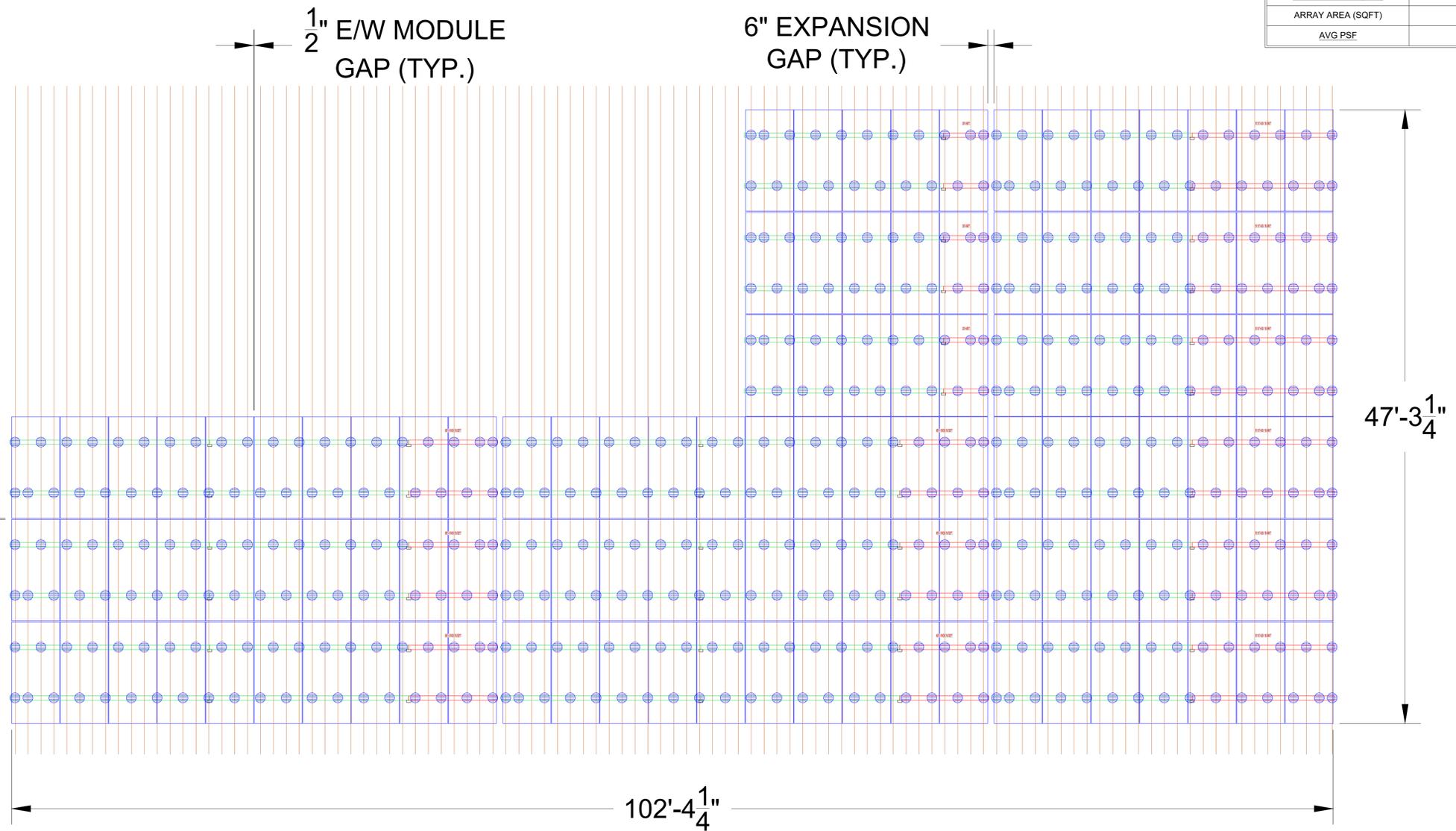
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 NORTH
 NOT TO SCALE

-  - 185" RAIL
-  - CUT-ONSITE RAIL
-  - CUT-ONSITE RAIL LENGTH
-  - REGULAR ATTACHMENT
-  - SEAM @12" O.C.
-  - SPLICE BAR (TYP.)

ARRAY 1 - AVERAGE PSF			
ITEM	QTY	LBS	TOTAL WEIGHT (LBS)
MODULES	117	73.6	8611.200
NXT RAIL	61.50	6.198	381.147
NXT RAIL SPLICE	42	0.1	4.200
GFT RAIL	0	14.40	0.000
GFT SPLICE	0	1.1760	0.000
UNIVERSAL AF END CLAMPS	0	0.147	0.000
NXT COMBO CLAMPS	264	1.149	303.336
METAL ROOF RAIL CLAMP	477	0.170	81.090
L-FOOTS	0	0.215	0.000
SSI PROTEA BRACKET	477	0.450	214.650
TOTAL WEIGHT (LBS)			3494.26
ARRAY AREA (SQFT)			1797.93
AVG PSF			1.94

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 1411 BROADWAY BOULEVARD NE
 ALBUQUERQUE, NEW MEXICO, USA, 87102
 WWW.UNIRAC.COM

ENGINEER'S STAMP



1" N/S MODULE GAP (TYP.)

1 1/2" E/W MODULE GAP (TYP.)

6" EXPANSION GAP (TYP.)

47'-3 1/4"

102'-4 1/4"



KEY PLAN
NOT TO SCALE



NOT TO SCALE

REV	DATE	DESCRIPTION	DRW	CHK
0	01/20/2026	INITIAL RELEASE	AB	NT
A	01/21/2026	UPDATED ATTACHMENT, SPACING	AB	NT
B	01/24/2026	UPDATED ROOF HEIGHT	NH	NT

FOR
GENERAL ENERGY CORPORATION

PROJECT
PEORIA PD ESC

1314 N PARK RD
PEORIA, IL 61604

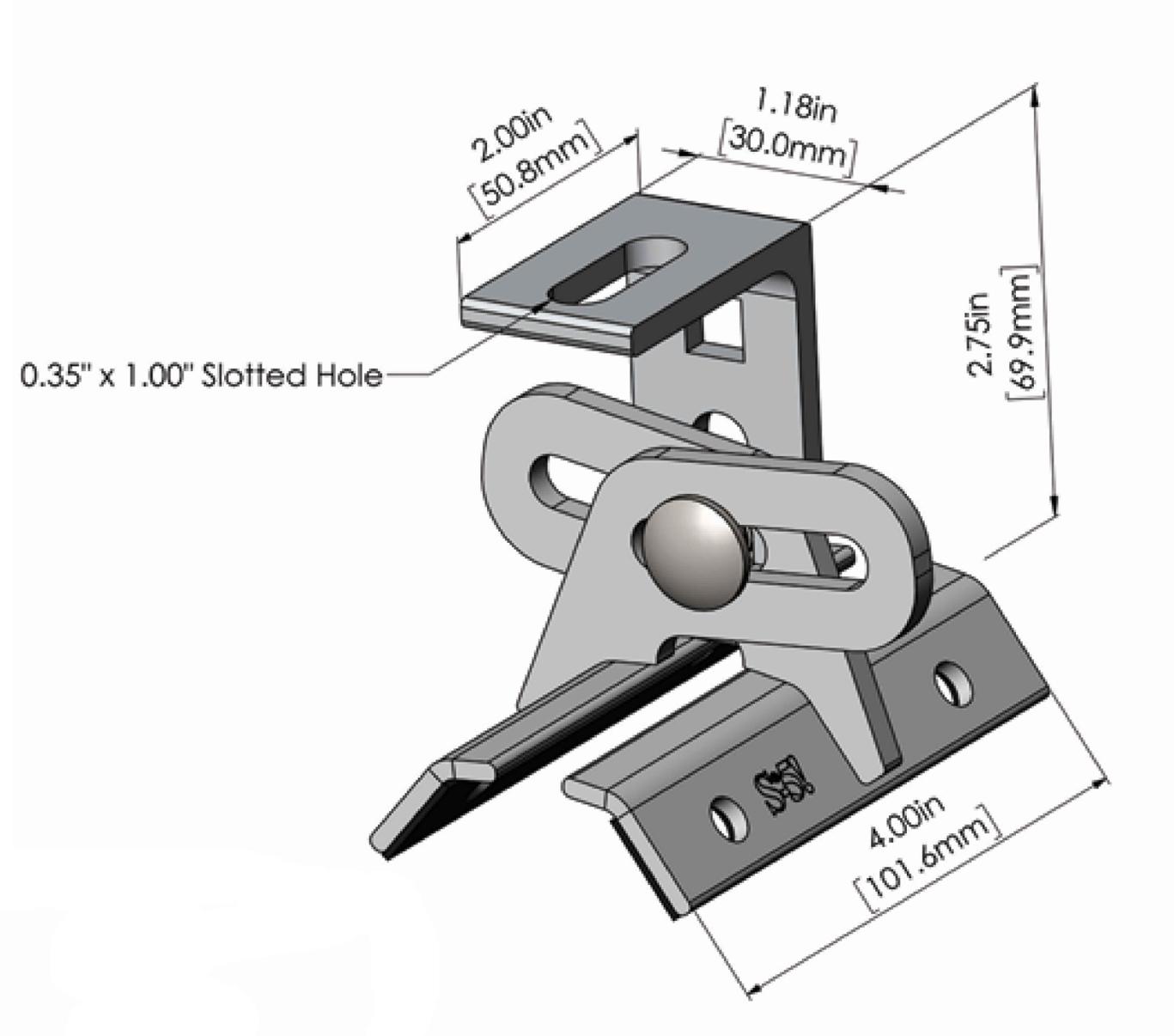
TITLE
ARRAY LAYOUT
ROOF AREA 1
ARRAY 1

SHEET
NXT.301



Protea™ Bracket

Protea™ Bracket



ENGINEER'S STAMP



REVISIONS		DATE	DESCRIPTION	DRW	CHK
0		01/20/2026	INITIAL RELEASE	AB	NT
A		01/21/2026	UPDATED ATTACHMENT, SPACING	AB	NT
B		01/24/2026	UPDATED ROOF HEIGHT	NH	NT

FOR
 GENERAL ENERGY CORPORATION

PROJECT
 PEORIA PD ESC

1314 N PARK RD
 PEORIA, IL 61604

TITLE
 ATTACHMENT DETAILS

SHEET
 NXT.500

PEORIA PARK DISTRICT AT GLC FACILITY (PEORIA, IL) ROOFTOP SOLAR PV PROJECT



PROJECT INFORMATION

SCOPE OF WORK: THIS PROJECT INVOLVES THE INSTALLATION OF A ROOFTOP SOLAR PHOTOVOLTAIC SYSTEM DESIGNED FOR ONSITE ELECTRICITY GENERATION. PLEASE NOTE THAT THE SOLAR SYSTEM DOES NOT INCLUDE A BATTERY FOR ENERGY STORAGE AND WILL AUTOMATICALLY SHUT OFF DURING A POWER OUTAGE.

DC: 43.050 KW

AC: 50.000 KW

SOLAR MODULES: (70) CS6.2-66TB-615H

DC POWER OPTIMIZER: (70) C651U

INVERTERS: (1) SE50KUS

AZIMUTH: 195°

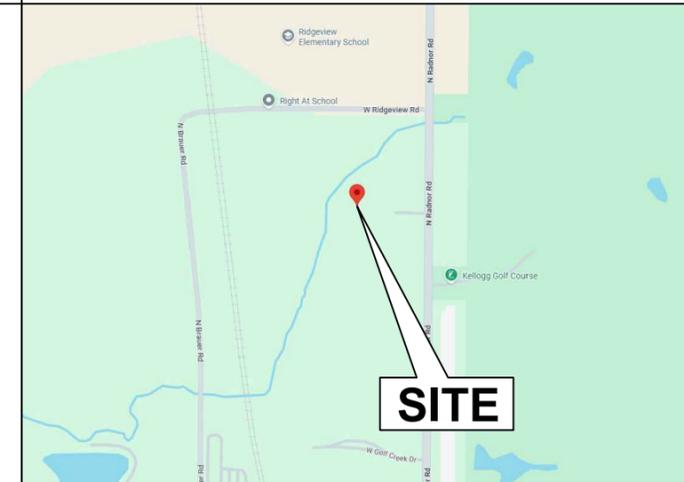
SOLAR MODULES TILT ANGLE: 9°

ROW SPACING: 11 INCHES

MAIN DISTRIBUTION PANEL UPGRADE REQUIRED: NO

INTERCONNECTION METHOD: LINE SIDE CONNECTION

VICINITY MAP



SITE

AERIAL MAP



PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
7815 N RADNOR RD UNIT GOLF,
PEORIA IL 60487

SHEET INDEX

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E0.4	INVERTER SPECIFICATIONS
E0.5	POWER OPTIMIZER SPECIFICATIONS
E0.6	DATA ACQUISITION SYSTEM
E0.7	PANELCLAW RACKING DETAILS
E1.1	SOLAR ARRAY ELECTRICAL SITE PLAN
E1.2	ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS
E1.3	ROOFTOP CABLE AND CONDUIT PLAN VIEW
E2.1	ELECTRICAL ONE LINE DIAGRAM
E2.2	ELECTRICAL RISER DIAGRAM
E3.1	ELECTRICAL SCHEDULES
E3.2	ELECTRICAL LABELS
E4.1 THRU E4.2	ELECTRICAL DETAILS

APPLICABLE CODES & STANDARDS

BUILDING:	2021 INTERNATIONAL BUILDING CODE
ELECTRICAL:	2020 NATIONAL ELECTRICAL CODE
FIRE CODE:	2021 INTERNATIONAL FIRE CODE

JOBSITE ADDRESS

7815 N RADNOR RD UNIT GOLF
PEORIA, IL 61615

OWNER

PEORIA PARK DISTRICT

GENERAL CONTRACTOR

TBD

FACILITY TYPE

COMMERCIAL

ELECTRIC DISTRIBUTION COMPANY (EDC)

AMEREN

AUTHORITY HAVING JURISDICTION (AHJ)

CITY OF PEORIA, IL

REV.	DATE	DESCRIPTION
0.0	02/17/26	ISSUED FOR PERMIT

CERTIFICATION:

I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:



LICENSE NO.: 062.051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

COVER PAGE

DRAWING NO.
E0.1



GENERAL NOTES

- MANUFACTURERS OF MAJOR BILL OF MATERIALS;
SOLAR MODULES: CANADIAN SOLAR
RACKING: PANELCLAW
INVERTERS: SOLAREEDGE
POWER OPTIMIZER: SOLAREEDGE
REVENUE GRADE METER: SOLAREEDGE
CONCRETE MASONRY UNITS: TBD
- THE SOLAR PHOTOVOLTAIC (PV) SYSTEM SHALL NOT OBSTRUCT ANY EXISTING MECHANICAL OR PLUMBING EQUIPMENT, INCLUDING BUT NOT LIMITED TO ROOFTOP UNITS, PLUMBING VENTS, SKYLIGHTS, AND EXHAUST VENTS.
- THE SELECTED SOLAR MODULES CONFORM TO THE UL 1703 STANDARDS.
- THE SELECTED INVERTERS CONFORM TO THE UL 1741 STANDARDS.
- THE SELECTED RACKING CONFORM TO THE UL 3741 STANDARDS.
- ALL OUTDOOR EQUIPMENT, INCLUDING AC COMBINER PANEL BOARDS, FUSED DISCONNECT SWITCHES, PULL BOXES AND JUNCTION BOXES, SHALL HAVE A RATING OF **NEMA 3R, NEMA 4 OR NEMA 4X RATED**.
- PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE WITH NEC 110.26.
- THE ELECTRICAL CONTRACTOR SHALL REFER TO THE ELECTRICAL LABELS SHEET IN THE ELECTRICAL PLAN AND ENSURE THAT ALL REQUIRED LABELS ARE PROPERLY INSTALLED ON THE DESIGNATED EQUIPMENT.
- ALL ELECTRICAL WORK SHALL BE INSTALLED BY A QUALIFIED AND LICENSED ELECTRICAL CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE AND SATISFACTORY ELECTRIC INSTALLATION IN ACCORDANCE WITH THE TRUE INTENT OF THE DRAWINGS AND MANUFACTURER SPECIFICATIONS. ALL WORK SHALL COMPLY THE CITY OF NATIONAL ELECTRICAL CODE AND NATIONAL FIRE PROTECTION ASSOCIATION CODES.
- ELECTRICAL CONTRACTOR SHALL REFER TO THE **ELECTRICAL SCHEDULES DRAWING SHEET** OF THE ELECTRICAL PLAN FOR CONDUCTORS MATERIALS TYPE, CONDUIT TYPE, CONDUIT SPECIFICATIONS AND OTHER DETAILS.
- THE SYSTEM IS **INTENDED TO OPERATE IN PARALLEL** WITH THE **UTILITY SERVICE PROVIDER** AND IS **CONNECTED BEHIND THE METER**. ANTI-ISLANDING PROTECTION IS A REQUIREMENT OF UL 1741 AND IS DESIGNED TO PREVENT THE PV SYSTEM FROM OPERATING WHEN THE UTILITY GRID IS NOT OPERATIONAL.
- DRAWINGS ARE DIAGRAMMATIC BASED ON THE SATELLITE IMAGERY PROVIDED BY THE SOLAR MODELING SOFTWARE AND ACTUAL SITE CONDITIONS MAY VARY. ALL DIMENSIONS ARE SHOWN TO THE NEAREST 1 INCH, UNLESS OTHERWISE NOTED.
- SOLAR MODULE-LEVEL POWER ELECTRONICS (MLPE) ARE PROVIDED VIA SOLAREEDGE DC POWER OPTIMIZER TO ACHIEVE COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN REQUIREMENTS.
- A MINIMUM 6FT WIDE CLEAR PERIMETER PATHWAY SHALL BE MAINTAINED AROUND THE ROOF EDGES. IF EITHER AXIS OF THE BUILDING IS 250FT OR LESS A MINIMUM 4FT PERIMETER PATHWAY IS PERMITTED.
- ALL CONDUITS SHALL BE BONDED AND SHALL NOT BE CONSIDERED AN EQUIPMENT GROUNDING CONDUCTOR (EGC).
- UV RATED CABLE TIES MAY ONLY BE USED FOR CONDUCTOR GROUPING. FOR SUPPORT, PVC COATED STAINLESS STEEL CABLE TIES SHALL BE USED.
- CONDUIT BODIES SHALL NOT BE USED FOR HORIZONTAL TO VERTICAL CONDUIT TRANSITIONS. INSTEAD, PROPERLY SIZED PULL BOXES, IN ACCORDANCE WITH NEC SHALL BE USED.
- THE **ELECTRICAL CONTRACTOR** IS ADVISED THAT ALL DRAWINGS AND COMPONENT MANUALS SHALL BE RECEIVED AND UNDERSTOOD PRIOR TO INSTALLATION. ADDITIONALLY, THE CONTRACTOR SHALL ENSURE THAT ALL SWITCHES ARE IN THE "OFF" POSITION AND FUSES ARE REMOVED BEFORE INSTALLING FUSE-BEARING COMPONENTS.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UNDAMAGED, AND BEAR THE UL LABEL WHERE APPLICABLE. THEY MUST BE SPECIFIED FOR USE IN EACH SPECIFIC LOCATION AS REQUIRED.**

ELECTRICAL CODE REFERENCES

CODE BOOK:	2020 NEC®
BREAKER SIZES:	NEC 240.6
WIRE AMPACITY TABLE:	TABLE NEC 310.15 (B)(16)
MAX SYSTEM VOLTAGE CORRECTION:	TABLE NEC 690.7
NUMBER OF CONDUCTORS CORRECTION:	TABLE NEC 310.15 (B)(3)(A)
AMBIENT TEMPERATURE CORRECTION:	TABLE NEC 310.15 (B)(2)(A)
AMBIENT TEMPERATURE ADJUSTMENT:	TABLE NEC 310.15 (B)(3)(C)
DC GROUNDING ELECTRODE CONDUCTOR:	UNGROUND DC SYSTEM
AC GROUNDING ELECTRODE CONDUCTOR:	TABLE NEC 250.66
RACK GROUNDING ELECTRODE CONDUCTOR:	NEC 690.47(D)
MAXIMUM OCPD (120% RULE):	NEC 705.12 (D)(2)

EQUIPMENT LOCATION

- SOLAR SYSTEM EQUIPMENT SHALL COMPLY WITH MINIMUM SETBACKS REQUIREMENTS AS SPECIFIED IN THE **OVERALL SOLAR ARRAY ELECTRICAL PLAN** DRAWING SHEET.
- ALL INSTALLED EQUIPMENT SHALL BE EASILY ACCESSIBLE TO QUALIFIED PERSONNEL.

WIRING AND CONDUIT NOTES

- DC AND AC CONDUCTORS** SHALL BE MARKED ON EACH END FOR UNIQUE IDENTIFICATION.
- ALL **CONDUIT AND CONDUCTORS** SHALL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND CONDUCTORS' SPECIFICATIONS SHALL BE BASED ON THE CODE REQUIREMENTS.
- THE USE OF WIRE LUBE IS REQUIRED FOR ALL WIRE PULLS**. THROUGH CONDUIT RUNS THAT ARE **20FT OR LONGER** OR HAVE **BENDS TOTALING 180 DEGREES OR MORE**. **WIRE LUBE IS MANDATORY**, EVEN WHEN USING **SELF-LUBRICATING** CABLES FROM VARIOUS MANUFACTURERS.
- SOLAR MODULE POSITIVE AND NEGATIVE LEADS** SHALL BE SECURED IN A NEAT, WORKMANLIKE MANNER TO PREVENT CHAFING, SWINGING AND EXCEEDING THE MINIMUM BEND RADIUS. PROPER MECHANICAL, SUNLIGHT-RESISTANT SECURING METHODS SHALL BE USED, AND **ALL LEADS SHALL BE ROUTED BENEATH THE MODULES TO MINIMIZE DIRECT EXPOSURE TO SUNLIGHT AT ALL TIMES**.
- FURNISH AND INSTALL ALL FITTINGS AND SPECIAL DEVICES NECESSARY FOR THE PROPER INSTALLATION OF THE SYSTEM**. **CONDUIT ELBOWS** SHALL BE OF THE **SAME MAKE, QUALITY AND FINISH** AS THE CONDUIT USED.
- FURNISH AND INSTALL EXPANSION FITTINGS WITH BONDING JUMPERS FOR EVERY 100FT OF STRAIGHT METAL CONDUIT RUN**.
- SPLIT BOLTS, SPLICES AND CONNECTORS ARE PERMITTED ON AC CONDUCTORS** AND SHALL BE **INSULATED USING AN APPROVED METHOD AND MEANS** IN ACCORDANCE WITH **NEC ARTICLES 110.14 (B), 300.5 (E), AND 300.4**. HOWEVER, **SPLICES ON DC CONDUCTORS ARE STRICTLY PROHIBITED IN ANY LOCATION**. IF **SPLICES ARE MADE IN EXPOSED LOCATIONS** (E.G., ROOFTOPS, OUTDOOR AREAS), THEY SHALL BE **ENCLOSED IN A WEATHERPROOF JUNCTION BOX AND PROPERLY SEALED**. **ADDITIONALLY, EXPANSION FITTINGS SHALL BE USED FOR SPLICES IN RACEWAYS SUBJECT TO THERMAL EXPANSION AND CONTRACTION**.
- ALL TERMINATIONS** SHALL BE **TREATED WITH AN ANTI-OXIDANT COMPOUND AND TORQUED** ACCORDING TO THE DEVICE LISTING OR THE MANUFACTURER'S RECOMMENDATIONS.
- MYERS HUBS** SHALL BE USED FOR ALL **IMC OUTDOOR TERMINATIONS** OF EQUIPMENT ENCLOSURES WITH CABLE TERMINATIONS.
- IMC CONDUIT** SHALL BE EQUIPPED WITH A **PULL BUSHING** TO PROTECT WIRES.
- DC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
POSITIVE (UNGROUND): RED
NEGATIVE (UNGROUND): BLACK
- 277/480V AC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BROWN, PHASE L2: ORANGE, PHASE L3: YELLOW, NEUTRAL: GREY, GROUND: GREEN OR BARE COPPER OR GREEN WITH A YELLOW STRIPE.
- 120/208V OR 240V AC CONDUCTORS** SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BLACK, PHASE L2: RED, PHASE L3: BLUE, NEUTRAL: WHITE, GROUND: GREEN OR GREEN WITH A YELLOW STRIPE.
- 347/600V AC CONDUCTORS SHALL BE COLOR-CODED OR MARKED AS FOLLOWS:
PHASE L1: BROWN, PHASE L2: ORANGE, PHASE L3: YELLOW, NEUTRAL: WHITE OR GREY, GROUND: GREEN OR BARE COPPER

INTERCONNECTION NOTES

- WHEN SUM OF THE PV SOURCE IS GREATER THAN 100% OF BUSBAR RATING, PV DEDICATED BACK FEED BREAKERS SHALL BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD.
- SUPPLY LINE (LINE SIDE) TAP INTERCONNECTION WITH SERVICE ENTRANCE CONDUCTORS SHALL BE IN ACCORDANCE WITH NEC 230.42.
- BACK FEEDING BREAKER FOR UTILITY-INTERACTIVE INVERTER OUTPUT SHALL BE EXEMPT FROM ADDITIONAL FASTENING REFER TO NEC 705.12 (D)(5).

GROUNDING NOTES

- GROUNDING ELECTRODE CONDUCTORS** SHALL BE INSTALLED IN ONE CONTINUOUS LENGTH WITHOUT SPLICES OR JOINTS. IF SPLICES OR CONNECTIONS ARE NECESSARY, THEY SHALL BE MADE AS PERMITTED BY NEC 250.64 (C).
- THE **INVERTERS** SELECTED FOR THIS PROJECT ARE EQUIPPED WITH DC GROUND FAULT PROTECTION AND ANTI-ISLANDING CIRCUITRY.
- EQUIPMENT GROUNDING CONDUCTORS AND SYSTEM GROUNDING CONDUCTORS SHALL HAVE THE SHORTEST POSSIBLE DISTANCE TO GROUND WITH A MINIMUM NUMBER OF TURNS TO ENSURE EFFECTIVE GROUNDING.

STRUCTURAL NOTES

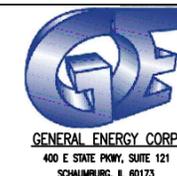
- RACKING SYSTEM FOR THE SOLAR PV ARRAY SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION GUIDELINES AND BEST PRACTICES.
- FOLLOW **RACKING CONSTRUCTION PLAN SET FOR BALLAST BLOCKS DISTRIBUTION** UNDER THE SOLAR PV ARRAY. IF THE SYSTEM REQUIRES ROOF PENETRATING TYPE ATTACHMENTS, FOLLOW THE RACKING MANUFACTURER'S GUIDELINES AND SEAL THE PENETRATIONS WITH THE MANUFACTURER RECOMMENDED CHEMICAL SEALANT.

DISCONNECT & OCPD NOTES

- THE COMBINED OUTPUT OF INVERTERS** IN A SOLAR SYSTEM OPERATING IN PARALLEL WITH THE UTILITY GRID SHALL BE CONNECTED THROUGH A **SINGLE FUSED DISCONNECT SWITCH**. REFER TO THE ELECTRICAL PLAN DRAWING SHEETS, INCLUDING THE **ELECTRICAL RISER DIAGRAM AND ROOFTOP CABLE & CONDUIT PLAN VIEW**, FOR THE **DISCONNECT LOCATION ON THE EXTERIOR WALL**.
- DISCONNECTING SWITCH** SHALL BE WIRED SO THAT WHEN THE **SWITCH IS OPENED, THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE"**.

ELECTRICAL SYMBOL AND LEGEND

	DC CONDUIT RUN
	CIRCUIT BREAKER
	FUSED DISCONNECT SWITCH
	GROUNDING
	PULL BOX
	DATA ACQUISITION SYSTEM
	METER
	INVERTER
	SOLAR MODULES
	ROOF LINE
	OBSTRUCTION
	OBSTRUCTION SETBACK
	SAFETY BOLLARD



**PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
7815 N RADNOR RD UNIT GOLF,
PEORIA IL 60487**

REV.	DATE	DESCRIPTION
0.0	02/17/26	ISSUED FOR PERMIT

CERTIFICATION:
I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:

ANAND MAHOTRA
062 051711
ELECTRICAL ENGINEER
EXPIRES 11/2027
SEAL: SIGNED 02/17/2026

LICENSE NO: 062 051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
GENERAL / ELECTRICAL NOTES AND SYMBOLS



TOPBiHiKu6

N-type Bifacial TOPCon Technology

600 W ~ 630 W

CS6.2-66TB-600 | 605 | 610 | 615 | 620 | 625 | 630H

MORE POWER

- 630 W** Module power up to 630 W
Module efficiency up to 23.3 %
- EXTRA POWER** Up to 85% Power Bifaciality, more power from the back side
- Excellent anti-LeTID & anti-PID performance. Low power degradation, high energy yield
- Lower temperature coefficient (Pmax): -0.29%/°C, increases energy yield in hot climate
- Lower LCOE & system cost

MORE RELIABLE

- Tested up to ice ball of 35 mm diameter according to IEC 61215 standard
- Minimizes micro-crack impacts
- Heavy snow load up to 5400 Pa, wind load up to 4000 Pa*

TRACEABLE SUPPLY CHAIN

Independently audited by STS

* For detailed information, please refer to the Installation Manual.

Canadian Solar (USA) Inc. 1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com



12 Years Enhanced Product Warranty on Materials and Workmanship*

30 Years Linear Power Performance Warranty*

1st year power degradation no more than 1%
Subsequent annual power degradation no more than 0.4%

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system
ISO 14001: 2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health & safety
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

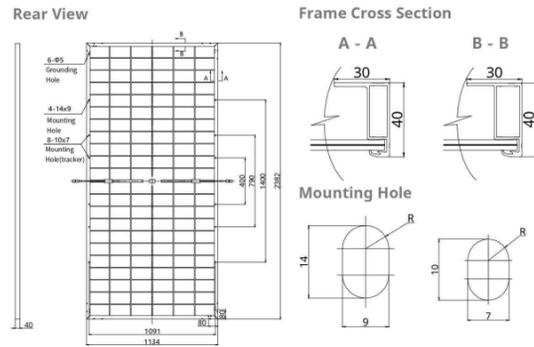
IEC 61215 / IEC 61730
UL 61730 / IEC 61701 / IEC 62716
Take-e-way



* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

Canadian Solar (USA) Inc. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 23 years, it has successfully delivered over 133 GW of premium-quality solar modules across the world.

ENGINEERING DRAWING (mm)



ELECTRICAL DATA | STC*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Module Efficiency	
CS6.2-66TB-600H	600 W	40.4 V	14.86 A	47.6 V	15.85 A	22.2%	
Bifacial Gain**	5%	630 W	40.4 V	15.60 A	47.6 V	16.64 A	23.3%
	10%	660 W	40.4 V	16.35 A	47.6 V	17.44 A	24.4%
	20%	720 W	40.4 V	17.83 A	47.6 V	19.02 A	26.7%
CS6.2-66TB-605H	605 W	40.6 V	14.91 A	47.8 V	15.91 A	22.4%	
Bifacial Gain**	5%	635 W	40.6 V	15.66 A	47.8 V	16.71 A	23.5%
	10%	666 W	40.6 V	16.40 A	47.8 V	17.50 A	24.7%
	20%	726 W	40.6 V	17.89 A	47.8 V	19.09 A	26.9%
CS6.2-66TB-610H	610 W	40.8 V	14.96 A	48.0 V	15.97 A	22.6%	
Bifacial Gain**	5%	641 W	40.8 V	15.71 A	48.0 V	16.77 A	23.7%
	10%	671 W	40.8 V	16.46 A	48.0 V	17.57 A	24.8%
	20%	732 W	40.8 V	17.95 A	48.0 V	19.16 A	27.1%
CS6.2-66TB-615H	615 W	41.0 V	15.01 A	48.2 V	16.02 A	22.8%	
Bifacial Gain**	5%	646 W	41.0 V	15.76 A	48.2 V	16.82 A	23.9%
	10%	677 W	41.0 V	16.51 A	48.2 V	17.62 A	25.1%
	20%	738 W	41.0 V	18.01 A	48.2 V	19.22 A	27.3%
CS6.2-66TB-620H	620 W	41.2 V	15.06 A	48.4 V	16.08 A	23.0%	
Bifacial Gain**	5%	651 W	41.2 V	15.81 A	48.4 V	16.88 A	24.1%
	10%	682 W	41.2 V	16.57 A	48.4 V	17.69 A	25.2%
	20%	744 W	41.2 V	18.07 A	48.4 V	19.30 A	27.5%
CS6.2-66TB-625H	625 W	41.4 V	15.11 A	48.6 V	16.14 A	23.1%	
Bifacial Gain**	5%	656 W	41.4 V	15.87 A	48.6 V	16.95 A	24.3%
	10%	688 W	41.4 V	16.62 A	48.6 V	17.75 A	25.5%
	20%	750 W	41.4 V	18.13 A	48.6 V	19.37 A	27.8%
CS6.2-66TB-630H	630 W	41.6 V	15.16 A	48.8 V	16.20 A	23.3%	
Bifacial Gain**	5%	662 W	41.6 V	15.92 A	48.8 V	17.01 A	24.5%
	10%	693 W	41.6 V	16.68 A	48.8 V	17.82 A	25.7%
	20%	756 W	41.6 V	18.19 A	48.8 V	19.44 A	28.0%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.
** Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA

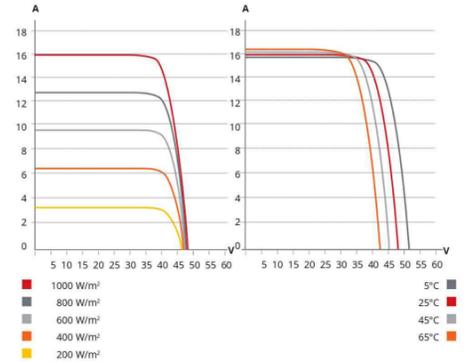
Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL)
Module Fire Performance	TYPE 29 (UL 61730) or CLASS C (IEC61730)
Max. Series Fuse Rating	35 A
Protection Class	Class II
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	80 %

* Power Bifaciality = Pmax_{rear} / Pmax_{total} or Pmax_{rear} / Pmax_{total} both Pmax_{rear} and Pmax_{total} are tested under STC, Bifaciality Tolerance: ± 5 %

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

Canadian Solar (USA) Inc. 1350 Treat Blvd. Suite 500, Walnut Creek, CA 94597 | www.csisolar.com/na | service.ca@csisolar.com

CS6.2-66TB-610H / I-V CURVES



ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS6.2-66TB-600H	454 W	38.2 V	11.88 A	45.1 V	12.77 A
CS6.2-66TB-605H	458 W	38.4 V	11.92 A	45.3 V	12.82 A
CS6.2-66TB-610H	461 W	38.6 V	11.96 A	45.4 V	12.87 A
CS6.2-66TB-615H	465 W	38.8 V	12.00 A	45.6 V	12.91 A
CS6.2-66TB-620H	469 W	38.9 V	12.04 A	45.8 V	12.96 A
CS6.2-66TB-625H	473 W	39.1 V	12.08 A	46.0 V	13.00 A
CS6.2-66TB-630H	477 W	39.3 V	12.12 A	46.2 V	13.05 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2382 x 1134 x 40 mm (93.8" x 44.6" x 1.57 in)
Weight	33.4 kg (73.6 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	T6 or MC4-EVO2 or MC4-EVO2A
Per Pallet	27 pieces
Per Container (40' HQ)	540 pieces or 486 pieces (only for US & Canada)

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION



October 2024. All rights reserved, PV Module Product Datasheet V1.1_D2_NA

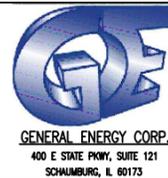
MODULE SPECIFICATIONS

70 x CS6.2-66TB-615H

STC Rating	615 W
PTC Rating	585 W
Vmp	41.00 V
Imp	15.01 A
Voc	48.20 V
Isc	16.02 A

1 MODULE SPECIFICATIONS

SCALE: NONE



PEORIA PARK DISTRICT AT GLC FACILITY (PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
7815 N RADNOR RD UNIT GOLF,
PEORIA IL 60487

0.0	02/17/26	ISSUED FOR PERMIT
REV.	DATE	DESCRIPTION

CERTIFICATION:

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SIGNATURE:



LICENSE NO: 062 051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

MODULE SPECIFICATIONS

DRAWING NO. E 0.3

Three Phase Inverter with Synergy Technology

USA Domestic Content Eligible

For North America

SE50KUS / SE80KUS / SE100KUS / SE110KUS / SE120KUS



INVERTER

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

* For more details, see Eligibility for Domestic Content on the last page.
** Applicable only for DC and AC SCs.

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INVERTER SPECIFICATIONS	
1 x SE50K-US	
Max Output Current	139.5A
Safety Rating	(139.5A x 1.25) = 174.38A
Minimum OCPD	175A
Number of DC Inputs	9
Maximum Input Voltage	600 V

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	
OUTPUT						
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 ⁽¹⁾ (L-N)	244 - 277 - 305	105 - 170 - 192.5	244 - 277 - 305			Vac
AC Output Voltage Minimum-Nominal-Maximum ⁽¹⁾ (L-L)	422.5 - 480 - 529	183 - 208 - 229	422.5 - 480 - 529			Vac
AC Frequency Minimum-Nominal-Maximum ⁽²⁾	59.5 - 60 - 60.5					Hz
Maximum Continuous Output Current (per phase, PF=1)	96.5	139.5	120	144.3		Aac
GFD 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					
INPUT⁽²⁾						
Maximum DC Power (Module STC) Inverter / Synergy Unit	140,000 / 70,000	87,500 / 25,165	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	650 - 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	16/rkO sensitivity per Synergy Unit ⁽³⁾					
CCC Weighted Efficiency	98.5	97	98.5			%
Nighttime Power Consumption	< 8		< 12			W
ADDITIONAL FEATURES						
Supported Communication Interfaces ⁽⁴⁾	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 C65IU					
PID Rectifier	Nighttime, built-in					
RS485 Surge Protection (ports 1+2)	Type I, field replaceable, integrated					
AC, DC Surge Protection	Type II, field replaceable, integrated					
DC SAFETY SWITCH						
DC Disconnect	Built-in					
STANDARD COMPLIANCE						
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 71, 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 refer to [Compatibility Matrix](#).
(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.

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	
INSTALLATION SPECIFICATIONS						
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) ⁽⁵⁾ (SE-xxx-USxxoSw)	6 / 3 pairs, 6 - 12 AWG	9 / 3 pairs, 6 - 12 AWG			
	Combined input: (fuse-less) (SE-xxx-USxxoWx)	N/A	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: 33.5 / 18					lb / kg
Operating Temperature Range	-40 to +140 / -40 to +60 ⁽⁶⁾					°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.

*Eligibility for Domestic Content

As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Content Percentage under the "micro-PPA" category (under IRS Notice 2024-41 and 2025-08, depending on the PPA used - see chart below). Eligibility is subject to the installation of qualified USA-manufactured inverters and Power Optimizers (C65IU) in the same project. 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 project. The forward-looking statements in this document are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USESIK-USR0NBNB, when paired with C65IU	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESIK-USR0NBNB, when paired with C65IU	Printed Circuit Board Assemblies, Enclosure (7.8%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

1 INVERTER SPECIFICATIONS

SCALE: NONE



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SIGNATURE:

 ANAND MALHOTRA
 062 051711
 E.Y.P. 11/2027
 SEAL: SIGNED 02/17/2026
 LICENSE NO: 062 051711
 EXPIRATION DATE: 11/30/2027
 DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
INVERTER SPECIFICATIONS
 DRAWING NO:
 E 0.4

Commercial Power Optimizer

USA Domestic Content Eligible

C651U

POWER OPTIMIZER



SolarEdge's USA-manufactured offering for C&I projects, 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
- Enhanced Monitoring and Visibility**
 - Maximum system visibility up to the individual module level
 - Pinpointed fault detection and remote troubleshooting
- Higher Energy Yields**
 - Generates maximum power from each PV module
 - High efficiency (99.5%)
 - Supports high power and bifacial PV modules, including G12 modules
- 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

* For more information, refer to the last page of this document

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Power Optimizer

USA Domestic Content Eligible for North America

C651U

Power Optimizer Model	C651U	
INPUT		
Rated Input DC Power ⁽¹⁾	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 ⁽²⁾	20	Adc
Maximum Adjusted Short Circuit Current (with Safety Factor) ⁽³⁾	25	Adc
Maximum Efficiency	99.5	%
Weighted Efficiency	98.8	%
Overtorque Category	II	
OUTPUT DURING OPERATION		
Maximum Output Power	650	Wdc
Maximum Output Current	24	Adc
Maximum Output Voltage	60	Vdc
SAFETY FEATURES		
SafeDC™	Yes	
Safety Output Voltage per Power Optimizer	0.5 ± 0.075	Vdc
Sense Connect	Yes	
Photovoltaic Rapid Shutdown System	Yes, NEC 2014 – 2023	
STANDARD COMPLIANCE		
EMC	FCC Part 15; IEC 61000-6-2; IEC 61000-6-3	
Safety	IEC 62109-1 (class I 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	
INSTALLATION SPECIFICATIONS		
Compatible SolarEdge Inverters ⁽⁴⁾	Commercial Three Phase Inverters with one of the following part number structures: xSF-S1N-USxxxxxx SE-DBL-USxxxxxx SE-TR-USxxxxxx	
Maximum Allowed System Voltage	1000	Vdc
Dimensions (W x L x H)	128 x 155 x 52 / 5.02 x 6.10 x 2.05	mm / in
Weight	1080 / 2.38	gr / lb
Input Connector	MC4 ⁽⁵⁾	
Input Wire Length	(+) 14 / (-) 14 / (+) 4.59 ⁽⁶⁾ / (-) 4.59 ⁽⁶⁾	m / ft
Output Connector	MC4	
Output Wire Length	(+) 3.0 / (-) 0.10 / (+) 9.84 / (-) 0.32	m / ft
Operating Temperature Range ⁽⁷⁾	-40 to +85 / -40 to +185	°C / °F
Protection Rating	IP68 / NEMA4P	
Relative Humidity	0 – 100	%

(1) Modules with a front side maximum power of up to 750W at STC are allowed. Up to +5% power tolerance is allowed.
 (2) When using bifacial modules, consider only the front side Isc at STC (8% backside gain). For details, see [app](#).
 (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 [table](#).
 (5) For other connector types, please contact SolarEdge.
 (6) The Sense Connect feature is only enabled on the output wire connectors. For details, see [table](#).
 (7) For ambient temperatures above +55°C / +133°F, power derating is applied. For details, see [table](#).

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Power Optimizer

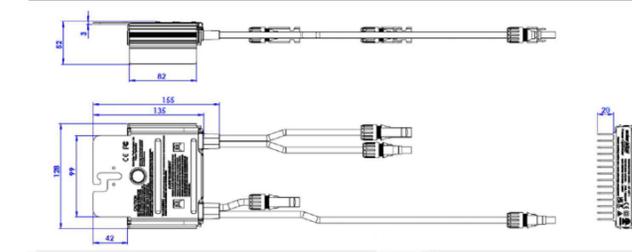
USA Domestic Content Eligible for North America

C651U

PV System Design Using a SolarEdge Inverter ⁽¹⁾	C651U			
	208V Grid SE10K	208V Grid SE17.3K*	277/480V Grid SE30K, SE33.3K*	277/480V Grid SE40K*
Compatible Power Optimizers	C651U			
Minimum String Length	Power Optimizers: 13 PV Modules: 13	13	18	18
Maximum String Length	Power Optimizers: 57 PV Modules: 57	57	57	57
Maximum Continuous Power per String	10,000	9600	20,400	20,400
Maximum Allowed Connected Power per String ⁽²⁾	1 string or more – 15,000	1 string – 11,400 2 strings or more – 15,600	1 string – 22,650 2 strings or more – 30,400	1 string – 22,650 2 strings or more – 30,400
Parallel Strings of Different Lengths or Orientations	Yes			
Maximum Difference in Number of Power Optimizers Allowed Between the Shortest and Longest String Connected to the Same Inverter Unit	5 Power Optimizers			

(1) The same rules apply for String units of registered power ratings that are part of the modular String Technology inverter.
 (2) C651U cannot be mixed with any other Power Optimizer models in the same string.
 (3) To connect more STC power per string, design your project using SolarEdge Designer.

C651U Mechanical Drawing



Eligibility for Domestic Content

As it relates to the domestic content rules, the U.S. Department of Treasury and the IRS have not yet issued proposed or final regulations. Rather, the IRS has issued three notices - Notice 2023-38, Notice 2024-41 and Notice 2025-08. These notices provide guidance regarding the domestic content rules. SolarEdge products referenced herein are manufactured with the intent to be eligible for inclusion under the elective safe harbor table in calculating the Domestic Content Percentage under the "Rooftop (MLPE)" category (under IRS Notices 2024-41 and 2025-08, depending on the PN used - see chart below). Eligibility is subject to the installation of qualified USA Manufactured inverters and Power Optimizers (C651U) in the same project. SolarEdge does not provide law 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 project. The forward-looking statements in this document are accurate as of the date herein and are subject to change. For more information, please contact your local SolarEdge sales representative.

PN	Domestically produced MPCs per notice 2024-41*	Domestically produced MPCs per notice 2025-08*
USE-SIN-USR01BNS6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR01NN6, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (35.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USE-SIN-USR01BNS8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)
USESUK-USR01NN8, when paired with C651U	Printed Circuit Board Assemblies, Electrical Parts, Enclosure (17.6%)	Printed Circuit Board Assemblies (DC-DC) and (AC-AC), Enclosure, Production (24.8%)

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PEORIA PARK DISTRICT AT GLC FACILITY

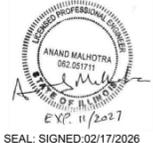
(PEORIA, IL)
 ROOFTOP SOLAR PV PROJECT
 7815 N RADNOR RD UNIT GOLF,
 PEORIA IL 60487

REV.	DATE	DESCRIPTION
0.0	02/17/26	ISSUED FOR PERMIT

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SIGNATURE:



LICENSE NO: 062 051711
 EXPIRATION DATE: 11/30/2027
 SEAL: SIGNED 02/17/2026

DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
POWER OPTIMIZER SPECIFICATIONS

DRAWING NO.
 E 0.5

NOTES:

- INSTALL ONE (1) POWER OPTIMIZER PER MODULE.** POWER OPTIMIZER SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND PROJECT SPECIFICATIONS.

1 POWER OPTIMIZER SPECIFICATIONS

SCALE: NONE

SolarEdge ONE Manager

For North America¹

Datasheet



5 YEAR WARRANTY

COMMUNICATION

The ONE Manager is the hardware component of SolarEdge ONE for C&I—a fully wired outdoor communication gateway that seamlessly integrates the site's sensors, meters, and energy infrastructure for centralized monitoring and control.

- All-in-one, easily installed solution including the SolarEdge ONE Controller, production meter, cellular modem, and field terminal blocks
- Supports both 208VAC and 480VAC voltage levels
- Offers improved telemetry for tracking performance ratio and system availability using local sensors.
- Acts as a cyber-secured gateway for external communication, designed to protect against unauthorized access
- Supports integration of additional meters and sensors, including consumption monitoring

⁽¹⁾ Assembled and warranted by Continental Control Systems, (excluding the SolarEdge ONE Controller and software features)

solaredge.com



SolarEdge ONE Manager

For North America

Specifications²

		Units
ELECTRICAL AND METER		
Nominal Input Voltage	208 / 480	L-L VAC (3 Phase)
Surge Protection	Surge protection devices for input circuit and low-voltage communication circuits	
Short-Circuit Current Rating (SCCR)	10	kA
Measurement Circuit (CT Rating)	0.33Vac at full scale (split-core or Rogowski coils)	
Meter Voltage Range	100 – 500	L-L VAC (3 Phase)
Meter Frequency Range	48 – 62	Hz
Meter Accuracy	± 0.5% revenue grade accuracy	
ENCLOSURE SPECIFICATIONS		
Dimensions (W x H x D)	15 x 18 x 10 / 406 x 457 x 254	in / mm
Weight	22 / 10	lb / kg
Mounting	Mounting brackets with four bolt holes	
Sensor Connections	Terminal blocks for easy connection of external sensors like meteorological sensors and consumption power meters	
Ambient Operating Temperature	-4 to +113 / -20 to +45	°F / °C
Weather Rating	NEMA 4X	
STANDARD COMPLIANCE		
Certification	UL 508A Listed	
COMPONENTS		
Cellular Modem	4G / 3G / 2G / LTE Cellular Router and 2.4 GHz WiFi for the North American market (SIM cards with data plan optional and ordered separately)	
Networking Switch	Industrial Unmanaged Ethernet Switch with 2 x RJ45 available ports @ 10/100Mbps Tx, 1 x SFP available port @ 100 Mbps (full duplex)	
Power Production Meter	WND-WR-M3: Used for production, consumption or import/export monitoring, and for Export Limitation. Option for installation of additional WND-WR-MB meters in RS-485-1 channel	
Data Logger and Controller	Ruggedized, industrial computer for plant controls and data logger capabilities	
COMMUNICATION I/O		
RS485	2 x isolated, terminal block connectors	
Digital I/O (for future use)	2 x digital outputs (DO) + 3 x digital inputs (DI) Isolated, 24V compliant with EN 6131-2, terminal-block connector	
SENSOR INTERFACE		
Weather Sensor Connection	Standard Weather Sensors: • IMT SI-RS485TC-31-MB (POA, BOM, T _{amb}) • IMT SI-RS485TC-2T-y-MB (POA, Wind, BOM) + IMT Ta-ext-RS485-MB (T _{amb}) <i>For the integration of other weather sensors, please consult SolarEdge. 100W @ 24VDC available for weather sensor power supply.</i>	
Energy Meter Connection	Modbus RTU	
Rogowski coils	Connection of up to 3 Rogowski coils with integrated 12VDC power supply	
COMMUNICATION		
RS485	Modbus RTU	
LAN	Modbus TCP/IP	
Internet Connectivity	Wired Ethernet, Cellular	

⁽²⁾ Specifications and information presented in this preliminary specification are subject to extended validation and change. This preliminary specification specifies features but cannot promise to deliver any specific characteristics. No warranty, implicit or explicit, is given regarding the very accuracy, fitness or performance. SolarEdge reserves the right to modify its technical information and product specifications at any time without notice.

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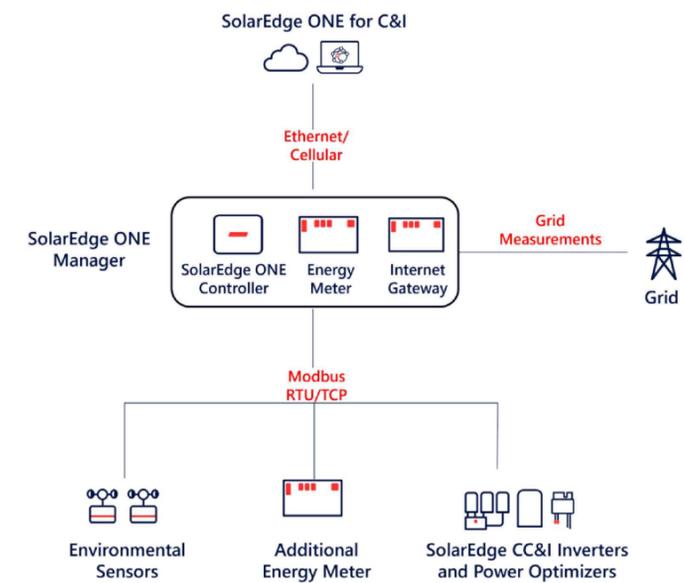
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SolarEdge ONE Manager

For North America

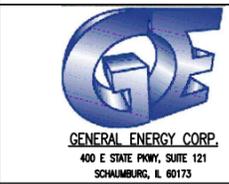
Connection Scenarios

The following diagram shows a typical system architecture that includes the cloud-based SolarEdge ONE for C&I optimization platform, the local SolarEdge ONE Controller and the connection with additional devices, including SolarEdge inverters, energy meters, and environmental sensors.



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PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
7815 N RADNOR RD UNIT GOLF,
PEORIA IL 60487

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SIGNATURE:

LICENSE NO.: 062 051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
CHECKED BY: AM
PROJECT NO.: GEC-4293

SHEET TITLE:
DATA ACQUISITION SYSTEM (DAS)

DRAWING NO.: E 0.6

NOTES:

- THE CONTRACTOR SHALL FURNISH AND INSTALL A SOLAREGE MANUFACTURED DATA ACQUISITION SYSTEM (DAS), COMPLETE WITH THE APPROPRIATE HARDWARE AND SOFTWARE. THE SYSTEM SHALL INCLUDE A FIVE-YEAR CELLULAR DATA PLAN TO ALLOW THE OWNER REMOTE ACCESS FOR SYSTEM MONITORING PURPOSES.

1 DATA ACQUISITION SYSTEM (DAS)
SCALE: NONE

clawFR® 10



Flat Roof Racking Specialists

PanelClaw® is the only major racking provider in North America focused exclusively on flat roof racking. Our 11+ years of focus on flat roof result in 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 and the best way to do this is to continue to lower its life-cycle cost while maintaining the highest levels of reliability. The clawFR platform is the result of this experience and commitment to flat roof.



Engineered for Speed

- Single M6 bolt hardware kit
- No tool module attachment method
- 90 degree single-module tilt-up feature
- Flexible order of operations installation process allows for optimized coordination of building trades on the roof
- Integrated roof protection pads
- 10" plus access ways between modules
- Only 1 ground lug required per array

SYSTEM COMPONENTS

Base



Rail



M6 Bolt



Module Connector



Wind Deflector



Cam Bracket w/ Cam Claw



Applications

< 5° slope flat roofs (up to 7° possible w/engineering review)

Roof Type Compatibility

Membrane, tar and gravel, ballasted, BUR, concrete, asphalt (not compatible with metal roofs)

3 Shade Ratio Options

1.7:1 | 2.0:1 | 2.5:1

Platform Load

~ 2.0 - ~ 12.0 psf

Module Orientation

Landscape

Module Attachment

Airy point flange mounted

Basic Wind Speed

Up to 190 mph
(>190 mph by approval)

Wind Exposure Category

B and C (D required engineering review)

USGS Seismic Categories

A, B, C, D (others require engineering review)

Building Height

No building height limitations

Corrosion Resistance

ZAM coating provides 5x better resistance than G90

Warranty and Certifications

25 year warranty

ANSI/UL 2703-2015 Listed

System Fire Rating
Class A with Type 1 and Type 2 modules

Intelligent Component Design

- A single Ballast Rail part number covers all compatible 60 and 72 cell modules
- The Base does not change with module changes
- The wind deflector has 2 part numbers that cover all 72 cell module lengths
- The Module Connector and Deflector each have 2 part numbers have cover all compatible 72 cell modules

Safety and Reliability

clawFR has been tested well beyond code requirements in the US. In addition to wind tunnel testing and ANSI/UL 2703-2015 listing, we have completed a battery of reliability and performance tests which can all be found at panelclaw.com.

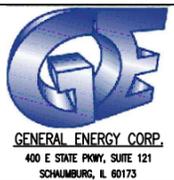

PANELCLAW®
 (978) 688.4900 | sales@panelclaw.com
 panelclaw.com  Made in USA

O&M Features

- Construction designed specifically for O&M, and to assist providers
- Recessed Deflector allows for easy access to module connections and optimizer equipment
 - ZAM coating with 5x better corrosion resistance than G90
 - If mechanical roof attachments are needed, they are always placed in the North/South module gaps for easy O&M inspection



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PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)

ROOFTOP SOLAR PV PROJECT
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CHECKED BY: AM PROJECT NO.: GEC-4293

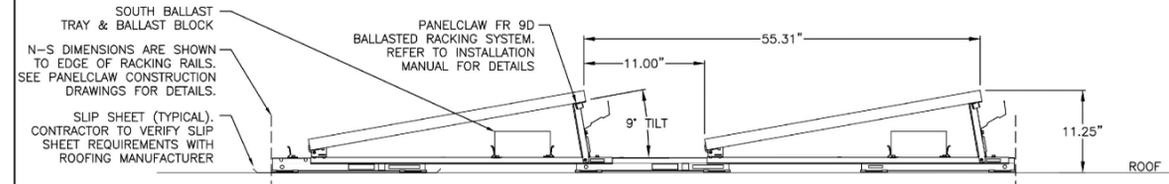
SEAL: SIGNED 02/17/2027

SHEET TITLE:
PANELCLAW RACKING DETAILS

DRAWING NO.:
E 0.7



RACKING DETAILS



SCOPE OF WORK: THIS PROJECT INVOLVES THE INSTALLATION OF **ROOFTOP SOLAR PHOTOVOLTAIC (PV) SYSTEM** DESIGNED FOR **ONSITE ELECTRICITY GENERATION**. THE PLANNED SOLAR SYSTEM **DOES NOT INCLUDE BATTERY STORAGE** AND WILL **AUTOMATICALLY SHUT OFF DURING A POWER OUTAGE**.

DRAWING NOTES:

1. **ALL DIMENSIONS SHALL BE FIELD VERIFIED, AND ALL INTER-ROWS AND CONDUIT RUNS SHALL BE MARKED USING A CHALK REEL KIT.** LOCATIONS SHOWN ARE BASED ON **RACKING DIMENSIONS AND SYSTEM DESIGN, PREPARED USING NEARMAP AND HELIOSCOPE SOFTWARE.**
2. **INVERTERS SHALL BE INSTALLED IN ACCORDANCE WITH THE INVERTER INSTALLATION MANUAL.**
3. **INVERTERS SHALL BE FULLY SUPPORTED AND ANCHORED PER MANUFACTURER SPECIFICATIONS.** THE INSTALLER SHALL INSTALL ALL **MANUFACTURER-PROVIDED ACCESSORIES.**
4. THIS SYSTEM IS INSTALLED IN **COMPLIANCE WITH NEC 690.12 (B) (2) (1) "PHOTOVOLTAIC HAZARD CONTROL".** THE **PV EQUIPMENT, INCLUDING SOLAREEDGE DC POWER OPTIMIZER,** PROVIDES RAPID SHUTDOWN CAPABILITY TO REDUCE ELECTRIC SHOCK HAZARDS WITHIN A DAMAGED PV ARRAY.



ROOFTOP SOLAR ARRAY DETAILS	
DC SYSTEM SIZE	43.050 kW
AC SYSTEM SIZE	50.000 kW
SOLAR MODULES	CS6.2-66TB-615H
TOTAL QTY. OF MODULES	70
STRING INVERTER MAKE	SOLAREEDGE
QTY & STRING INVERTER MODEL	(1) SE50KUS
QTY & POWER OPTIMIZER	(70) SOLAREEDGE C651U
ESTIMATED YEAR 1 ENERGY OUTPUT	53,979.7 kWh
RACKING MAKE	PANELCLAW
SOLAR MODULES TILT	9°
INTER-ROW SPACING	11 INCHES
SPACING BETWEEN MODULES	3/4 INCHES
SYSTEM AZIMUTH	195°
ROOF HEIGHT	30 FT
ROOF PITCHED	1°
DATA ACQUISITION SYSTEM (DAS)	SOLAREEDGE

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CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

OVERALL SOLAR ARRAY ELECTRICAL SITE PLAN

DRAWING NO. E1.1

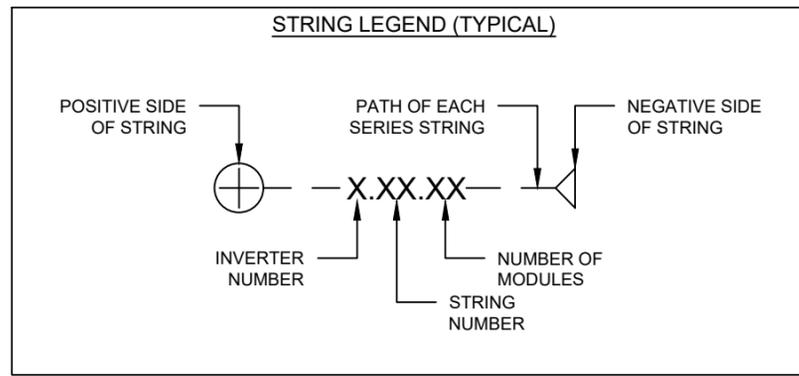


1

OVERALL SOLAR ARRAY ELECTRICAL SITE PLAN
SCALE: 5/64" = 1'-0"

DRAWING NOTES:

1. **ALL STRINGS FEEDS SHALL BE 2 # 10 AWG PV WIRE (2000V):**
 - RED: POSITIVE
 - BLACK: NEGATIVE
 - 1 # 6 CU GROUND: BARE, GREEN
2. THE CONTRACTOR SHALL USE CONNECTORS FROM THE SAME MANUFACTURER FOR ALL MODULES AND EXTENSIONS IN THE HOMERUN. FIELD-MADE CONNECTORS FOR PV QUICK CONNECTS SHALL BE THE SAME TYPE AND MANUFACTURER AS THE PV MODULES AND SHALL BE CRIMPED USING THE MANUFACTURER - SPECIFIED CRIMPING TOOL.
3. DC STRING CONDUCTORS SHALL BE GROUPED BY CIRCUIT INTO THE SAME CONDUIT.
4. THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD (EOR) FOR APPROVAL OF ANY CHANGES TO THE STRING PLAN.
4. SOLAR MODULE-LEVEL POWER ELECTRONICS (MLPE) ARE PROVIDED VIA SOLAREEDGE DC POWER OPTIMIZER TO ACHIEVE COMPLIANCE WITH NEC 690.12 RAPID SHUTDOWN REQUIREMENTS.
5. CONNECT POWER OPTIMIZER INPUT WIRE TO PV MODULES.
6. CONNECT POWER OPTIMIZER OUTPUT WIRE TO FORM A STRING. WHILE CONNECTING MAKE SURE THAT ALL CONNECTORS ARE FIRMLY INSERTED AND LOCKED.
7. OPTIMIZERS SHALL BE INSTALLED ACCORDING TO SOLAREEDGE C651U INSTALLATION GUIDE AND ALL MANUFACTURER INSTRUCTIONS. DO NOT EXCEED THE MAXIMUM NUMBER OF OPTIMIZERS PER STRING AS SPECIFIED BY THE INVERTER AND OPTIMIZER LISTING.



NEC 690.12 RAPID SHUTDOWN

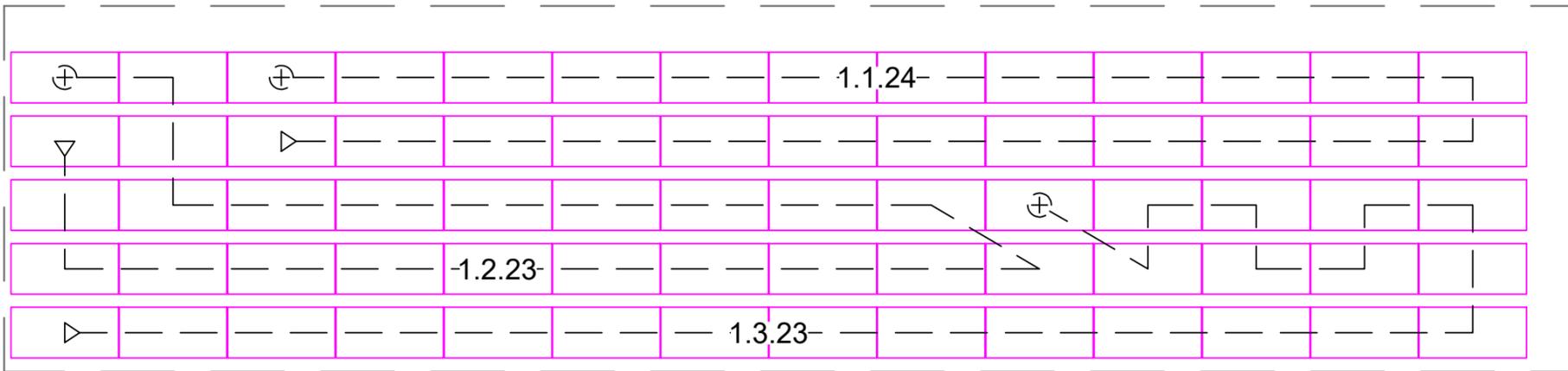
GOAL OF "RAPID SHUTDOWN" FOR PV SYSTEMS ON BUILDINGS: IN THE EVENT OF AN EMERGENCY, EMERGENCY RESPONDERS CAN INITIATE THE RAPID SHUTDOWN DEVICE AND SAFELY MOVE AROUND THE ROOF. THEY MUST BE AWARE THAT:

- ANY AREAS WITHIN 1 FOOT OF A PV ARRAY MAY STILL BE ENERGIZED.
- ALL PV SOURCE CIRCUITS OUTSIDE THE ARRAY BOUNDARY WILL BE REDUCED TO <30 VDC WITHIN 30 SECONDS UPON ACTIVATION OF RAPID SHUTDOWN FUNCTION.

NEC 690.12 RAPID SHUTDOWN DETAILS:

1. RAPID SHUTDOWN ACTIVATION
 - RAPID SHUTDOWN IS INITIATED VIA SOLAREEDGE INVERTER AC DISCONNECT OR THE DEDICATED RAPID SHUTDOWN SWITCH.
2. EACH MODULE IS EQUIPPED WITH A SOLAREEDGE C651U DC POWER OPTIMIZER, WHICH ACTIVELY LIMITS VOLTAGE AND CURRENT DURING SHUTDOWN.
3. RAPID SHUTDOWN LABELING REQUIREMENTS
 - ALL LABELING AND SIGNAGE FOR RAPID SHUTDOWN ARE INSTALLED PER NEC 690.56(C)

INVERTER SUMMARY						
ROOF	INVERTER TYPE	INVERTER QTY	QTY MODULES PER INVERTER	TOTAL QTY OF MODULES	DC/AC RATIO	STRING CONFIGURATION
1	SE50KUS (TYPE-1)	1	70	70	0.861	INPUT 1: 24 MODULES, 1 STRING
						INPUT 2: 23 MODULES, 1 STRING
						INPUT 3: 23 MODULES, 1 STRING
TOTAL		1		70		



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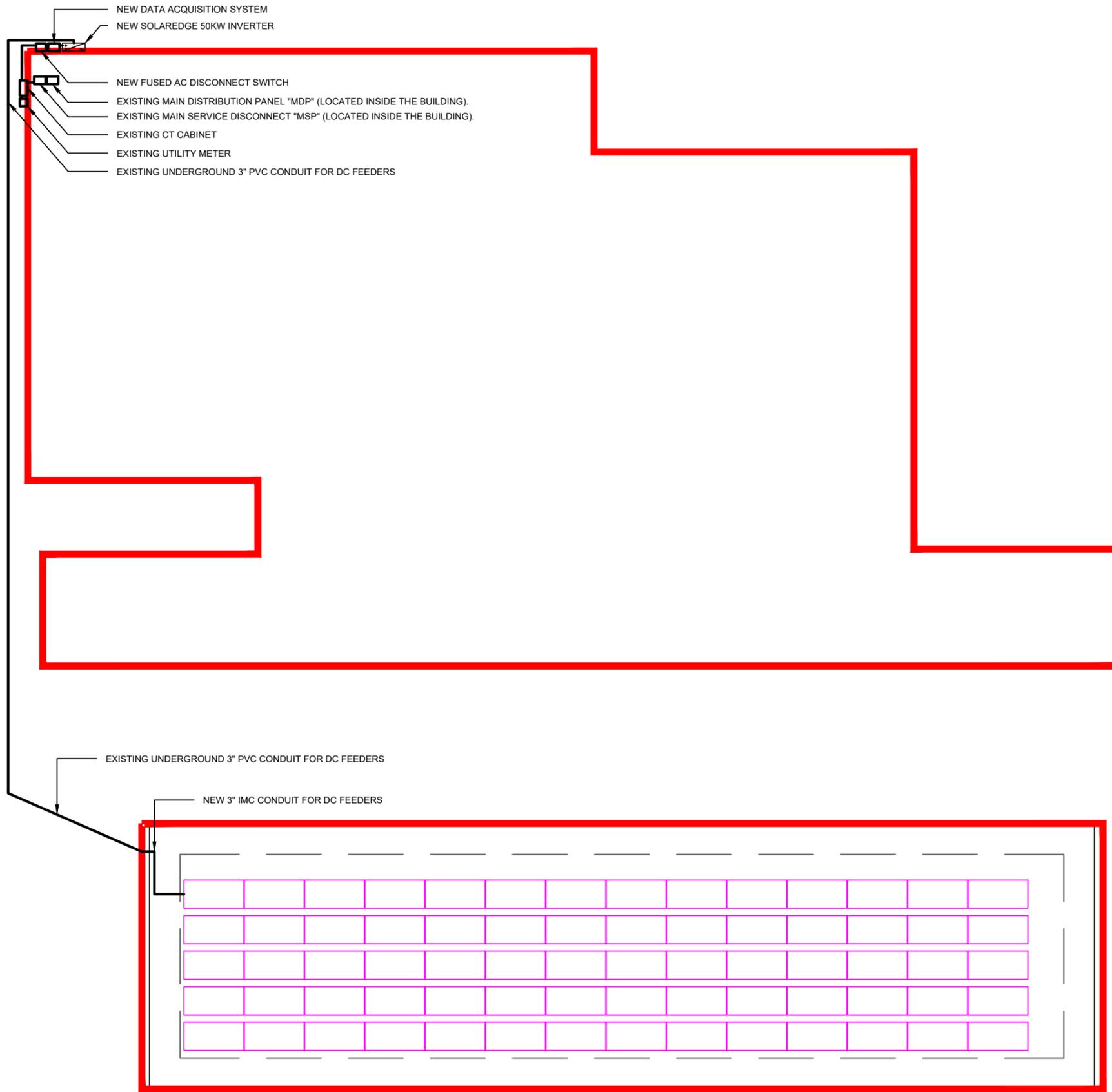
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SIGNATURE:

 ANAND MALHOTRA
 062.051711
 LICENSE NO:
 062.051711
 EXPIRATION DATE:
 11/30/2027
 DRAWN BY: JP
 CHECKED BY: AM
 PROJECT NO.: GEC-4293

SHEET TITLE:
ROOFTOP PV-ARRAY AND INVERTER INTERNAL WIRINGS
 DRAWING NO.
E1.2



ROOFTOP CABLE & CONDUITS PLAN VIEW
SCALE: 7/100" = 1'-0"

DRAWING NOTES:

1. **CONDUIT LOCATIONS** ARE SHOWN DIAGRAMMATICALLY. THE CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD LOCATIONS. ANY CHANGES TO PROPOSED ROUTING SHALL BE SUBMITTED TO ENGINEERING OF RECORD (EOR) FOR REVIEW AND APPROVAL.
2. **SEAL CONDUIT PENETRATIONS** THROUGH BUILDING WALL TO PREVENT MOISTURE FROM ENTERING BUILDING WITH POLYWATER FST OR EQUIVALENT. USE PULL BOX AS NECESSARY.
3. CONDUIT AND RACEWAY SHALL NOT INTERFERE WITH FIRE ACCESS WALKWAYS
4. **ALL CABLE ENTRIES IN EQUIPMENT** SHALL BE **BOTTOM OR SIDE ENTRY** TO **MAINTAIN** THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES.
5. **CABLE SPACING** SHALL NOT BE LESS THAN 100% OF THE LARGER CABLE DIAMETER.
6. **PROVIDE EXPANSION FITTING WITH BONDING JUMPER FOR EVERY 100FT OF CONDUIT RUN.**
7. **INSTALL HAND HOLES, PULL BOXES, OR CONDUIT BODIES** (WHETHER OR NOT SHOWN ON DRAWINGS) WHEN THE RACEWAY HAS MORE THAN 360 DEGREES OF BENDS OR AS NEEDED TO AVOID EXCEEDING THE MANUFACTURERS'S MAXIMUM CABLE PULLING TENSION.
8. **MAINTAINED THE MAXIMUM 10FT DISTANCE BETWEEN SUPPORTS** FOR ALL ROOF-MOUNTED CONDUIT AND THE MAXIMUM 3FT DISTANCE FROM EVERY PULL BOX PER NEC REQUIREMENTS.
9. **ALL OUTDOOR ENCLOSURES** (E.G., **COMBINER BOXES, AC DISCONNECTS, PULL BOXES**) ENCLOSURES SHALL HAVE A MINIMUM CLEARANCE OF 2 FEET ABOVE GRADE.
10. **REFER TO THE ELECTRICAL SCHEDULES DRAWING SHEET** FOR ADDITIONAL DETAILS ON APPROPRIATE CONDUCTOR AND CONDUIT TYPES AND SIZES.
11. THE OWNER WILL PROVIDE THE UNDERGROUND CONDUIT INSTALLATION, EXCLUDING THE CONDUCTORS. THE CONTRACTOR SHOULD NOT INCLUDE THE COST OF TRENCHING OR CONDUIT IN THEIR BID ESTIMATE.
12. DC HOMERUNS SHALL ENTER / TRANSITION TO IMC CONDUIT AT THE WIND DEFLECTOR, WITH CONDUIT SIZE DETERMINED BY CONDUCTOR FILL AND PULLING REQUIREMENTS.



13. WHERE THE DC CONDUIT IS NOT ATTACHED TO THE WIND DEFLECTOR, EXTEND THE IMC CONDUIT A MINIMUM OF 10" UNDERNEATH THE MODULE.



PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
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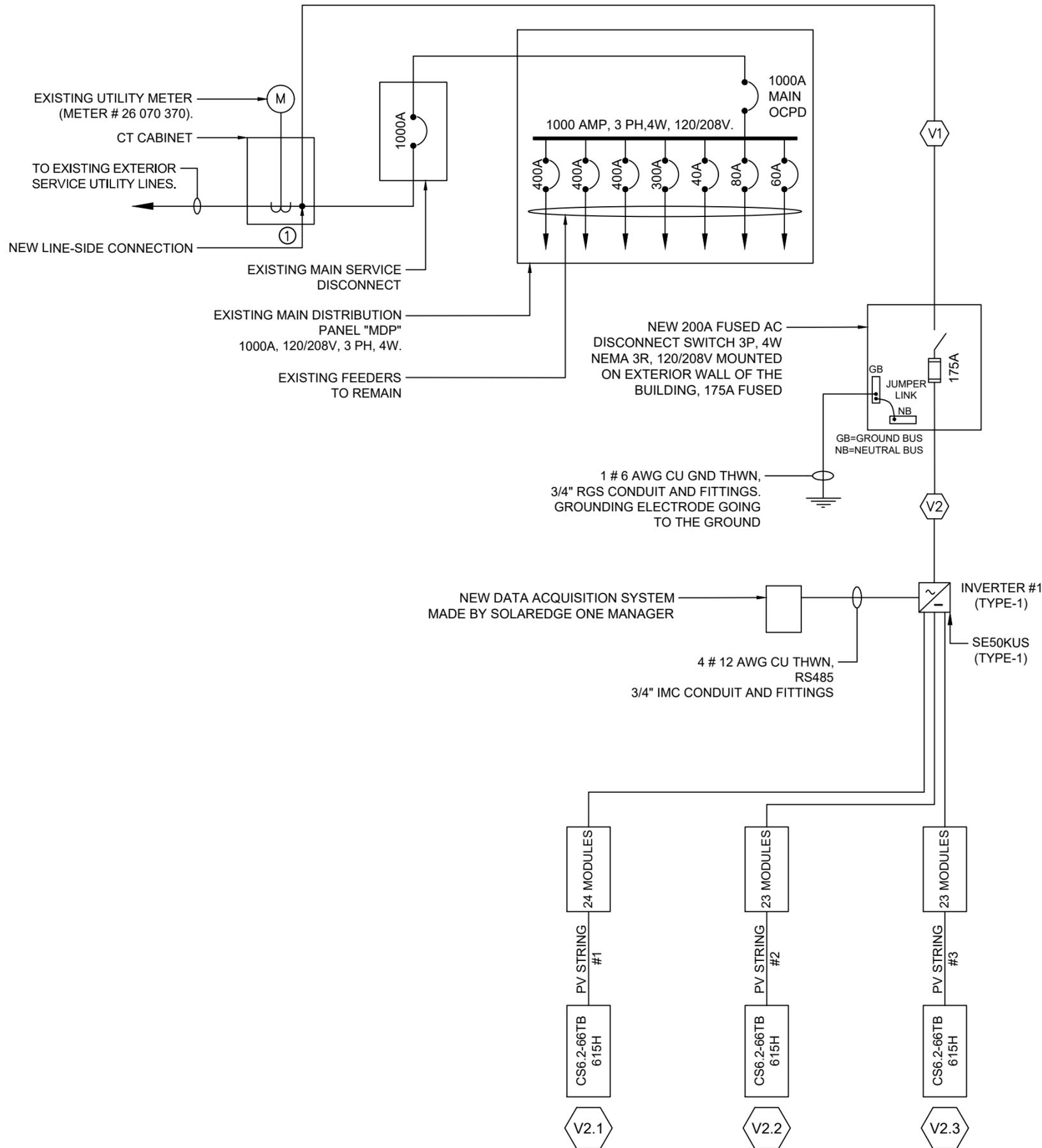
NO.	DATE	DESCRIPTION
0.0	02/17/26	ISSUED FOR PERMIT

CERTIFICATION:
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SIGNATURE: 
 LICENSE NO: 062.051711
 EXPIRATION DATE: 11/30/2027
 DRAWN BY: JP
 CHECKED BY: AM
 PROJECT NO.: GEC-4293

SHEET TITLE:
ROOFTOP CABLE AND CONDUITS PLAN VIEW

DRAWING NO:
E1.3



DRAWING NOTES:

1. ALL CABLE ENTRIES IN EQUIPMENT SHALL BE BOTTOM OR SIDE ENTRY TO MAINTAIN THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES. SEAL CONDUIT PENETRATIONS THROUGH BUILDING WALLS TO PREVENT MOISTURE ENTRY USING POLYWATER FST OR AN EQUIVALENT SEALANT. USE PULL BOXES AS NECESSARY.
2. LB CONDUIT BODIES SHALL NOT BE USED FOR ANY CONDUITS DOWNSTREAM OF THE INVERTERS. IF A JUNCTION OR DIRECTIONAL CHANGE IS NECESSARY, PULL BOXES SHALL BE INSTALLED TO MAINTAIN COMPLIANCE WITH BEST PRACTICES AND SYSTEM INTEGRITY. THE CONTRACTOR SHALL SIZE ALL PULL BOX IN COMPLIANCE WITH THE NEC.
3. THE CONTRACTOR SHALL FIELD VERIFY THE INTERCONNECTION MEANS AND METHOD PRIOR TO INSTALLATION. AN EDC-SUPPORTED POWER OUTAGE WILL BE REQUIRED.
4. TORQUE ALL DC AND AC TERMINALS AS SPECIFIED IN THE INSTALLATION MANUAL. APPLY TORQUE MARKS TO VERIFY PROPER TIGHTENING.
5. CONTRACTOR TO PROVIDE POWER SOURCE FOR DAS VIA AN EXISTING POWER OUTLET OR AN AVAILABLE CIRCUIT BREAKER FROM A PANEL BOARD LOCATED WITHIN THE FACILITY.

KEYS NOTES:

1. PROVIDE NECESSARY LUGS AND ACCESSORIES FOR SOLAR ARRAY TIE-IN, INSIDE CT CABINET LOCATED OUTSIDE. POINT OF INTERCONNECTION SHALL BE VERIFIED WITH UTILITY COMPANY PRIOR TO START OF WORK.

CONDUCTOR SCHEDULE		
TAG	CONDUCTOR	CONDUIT
V1	(4) # 3/0 AWG CU THWN, (1) # 6 AWG CU GND	(1) 2" IMC CONDUIT AND FITTINGS
V2	(3) # 3/0 AWG CU THWN, (1) # 6 AWG CU GND	(1) 2" IMC CONDUIT AND FITTINGS
V2.1-V2.3	(6) # 10 AWG CU - PV (2000V), (1) # 6 AWG CU GND	(1) 3" IMC & PVC CONDUIT AND FITTINGS



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SIGNATURE:

 ANAND MALHOTRA
 062 051711
 LICENSE NO:
 062.051711
 EXPIRATION DATE:
 11/30/2027
 SEAL: SIGNED 02/17/2026
 DRAWN BY: JP
 CHECKED BY: AM PROJECT NO.: GEC-4293

1 ELECTRICAL ONE LINE DIAGRAM
SCALE: N.T.S.

ELECTRICAL ONE LINE DIAGRAM

2 #10 AWG CU PV WIRE,
1 # 6 CU GROUND (TYP.)

CANADIAN SOLAR

CS6.2-66TB-615H # MODULES
70

ROOF TOP

DC CABLES AND
CONDUIT

NORTH SIDE WALL
WEST SIDE WALL

OUTSIDE ELECTRICAL ROOM
INSIDE ELECTRICAL ROOM

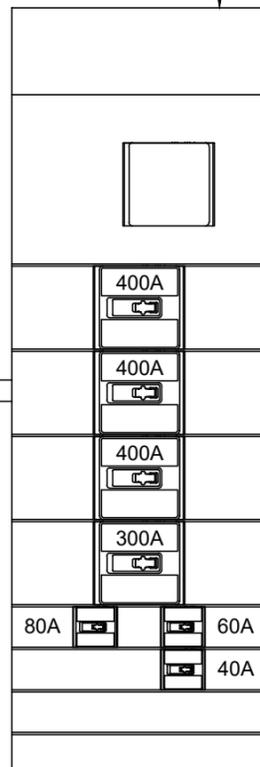
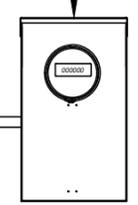
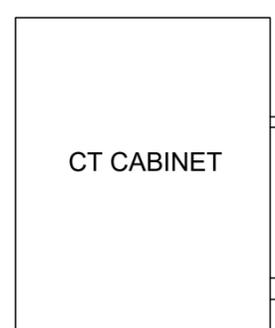
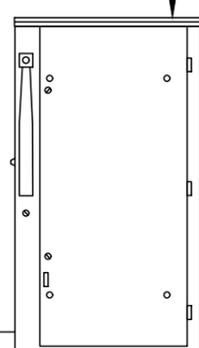
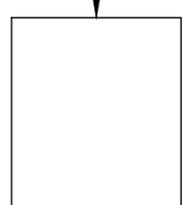
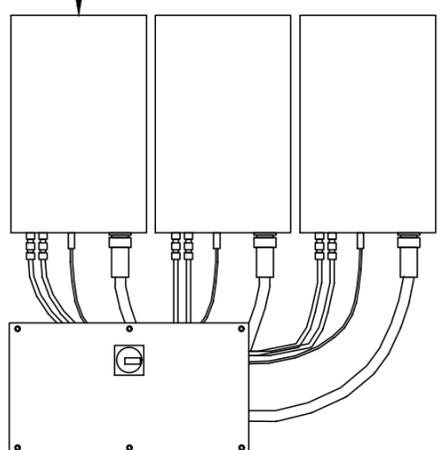
PV INVERTER
(FOR INV #1)

NEW 200A FUSED
AC DISCONNECT
SWITCH, NEMA 3R

NEW DATA ACQUISITION
SYSTEM

EXISTING UTILITY
METER

EXISTING MAIN DISTRIBUTION
PANEL "MDP"
1000A, 120/208V, 3P, 4W



GROUND

1 # 6 AWG CU GND THWN,
3/4" RGS CONDUIT AND
FITTINGS

DRAWING NOTES:

1. ALL CABLE ENTRIES IN EQUIPMENT SHALL BE BOTTOM OR SIDE ENTRY TO MAINTAIN THE NEMA RATING. NO PENETRATIONS OR CABLE ENTRIES SHALL BE MADE IN THE TOP OF OUTDOOR ELECTRICAL ENCLOSURES. SEAL CONDUIT PENETRATIONS THROUGH BUILDING WALLS TO PREVENT MOISTURE ENTRY USING POLYWATER FST OR AN EQUIVALENT SEALANT. USE PULL BOXES AS NECESSARY.
2. REFER TO THE ELECTRICAL ONE-LINE DIAGRAM DRAWING SHEET FOR MORE INFORMATION.
3. THE RISER DIAGRAM IS FOR REFERENCE ONLY AND REPRESENTS THE EXISTING ELECTRICAL SYSTEM. THE DIAGRAM ILLUSTRATES THE SCOPE OF WORK FOR THE ADDITION OF THE SOLAR PROJECT.
4. LB CONDUIT BODIES SHALL NOT BE USED FOR ANY CONDUITS DOWNSTREAM OF THE INVERTERS. IF A JUNCTION OR DIRECTIONAL CHANGE IS NECESSARY, PULL BOXES SHALL BE INSTALLED TO MAINTAIN COMPLIANCE WITH BEST PRACTICES AND SYSTEM INTEGRITY.

KEYS NOTES:

- ① PROVIDE NECESSARY LUGS AND ACCESSORIES FOR SOLAR ARRAY TIE-IN, INSIDE CT CABINET LOCATED OUTSIDE THE ELECTRICAL ROOM. POINT OF INTERCONNECTION SHALL BE VERIFIED WITH UTILITY COMPANY PRIOR TO START OF WORK.

1 ELECTRICAL RISER DIAGRAM
SCALE: N.T.S.



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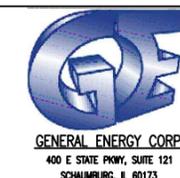
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EXPIRATION DATE: 11/30/2027
DRAWN BY: JP
CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:
ELECTRICAL RISER DIAGRAM

DRAWING NO.:
E2.2



GENERAL ENERGY CORP.
400 E. STATE PKWY, SUITE 121
SCHUMBERG, IL 60173

PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
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SCHEDULES:-

GENERAL INFORMATION					CONDUCTOR SCHEDULE								CONDUIT SIZE		VOLTAGE DROP		RACEWAY LOCATION	RACEWAY HEIGHT ABOVE THE ROOF	CONDUIT FILL %			
CABLE TAG	VOLTS	RUN		TOTAL LENGTH (FEET)	KW	FULL LOAD AMP (FLA)	FLA X 1.25 (AMP)	WIRE DE-RATE CALCULATION				WIRE NO. & SIZE			CURRENT-CARRYING CONDUCTOR IN CONDUIT	QTY. & SIZE				TYPE	(V)	%
		FROM	TO					WIRE RATING	DERATE	SET OF CONDUCTOR	FINAL AMPACITY	CONDUCTOR QTY. SIZE & TYPE	NEUTRAL QTY. SIZE & TYPE	GROUND QTY. SIZE & TYPE								
V1	208	EXISTING CT CABINET	NEW AC DISCONNECT SWITCH	20	100	139.5	174.38	200 X 0.94 X 1 = 188				(3) # 3/0 AWG CU THWN (600V) - 75°C	(1) # 3/0 AWG CU THWN (600V) - 75°C	(1) # 6 AWG CU GND	3 + N	(1) # 2 INCHES	IMC	0.48	0.10	EXTERIOR	N/A	29.26
V2	208	NEW AC DISCONNECT SWITCH	INVERTER POWER # 1	5	100	139.5	174.38	200 X 0.94 X 1 = 188				(3) # 3/0 AWG CU THWN (600V) - 75°C	INVERTER TO AC DISCONNECT CIRCUITS DO NOT REQUIRE A NEUTRAL PER MANUFACTURER SPECIFICATION	(1) # 6 AWG CU GND	3	(1) # 2 INCHES	IMC	0.10	0.02	EXTERIOR	N/A	22.28
V2.1	600	INVERTER POWER # 1	STRING 1.1	205	14.76	24	30	40 X .96 X .80 = 30.7				1-SET OF (2) # 10 AWG CU - PV (2000V) - 90°C	N/A	(1) # 6 AWG CU GND	6	(1) # 3 INCHES	IMC & PVC	12.78	2.13	EXTERIOR	N/A	5.82
V2.2	600	INVERTER POWER # 1	STRING 1.2	185	14.15	24	30	40 X .96 X .80 = 30.7				1-SET OF (2) # 10 AWG CU - PV (2000V) - 90°C	N/A					11.52	1.92			
V2.3	600	INVERTER POWER # 1	STRING 1.3	230	14.15	24	30	40 X .96 X .80 = 30.7				1-SET OF (2) # 10 AWG CU - PV (2000V) - 90°C	N/A					14.34	2.39			

- NOTES:
 • ALL DC CONDUCTOR FEEDERS SHALL CONSIST OF (2) #10AWG CU PV CONDUCTORS RATED 2000V.

STRING ISC (AMPS)	16.02
MAXIMUM CIRCUIT CURRENT (AMPS)	20.025
1.25x MAX CIRCUIT CURRENT (AMPS)	25.03
MAX # OF WIRES PER CONDUIT	9
CONDUIT FILL DERATE	0.70
MAX AMBIENT TEMPERATURE (C)	35
TEMPERATURE DERATE	0.94
WIRE GAUGE	CU #10
75 DEG AMPACITY WITHOUT COU ADJUSTMENT (AMPS)	35
IS 75 DEG AMPACITY WITHOUT COU ADJUSTMENT >= 1.25x MAX CIRCUIT CURRENT?	YES, COMPLIES WITH 690.8(B)(1)
75 DEG AMPACITY WITH COU ADJUSTMENT (AMPS)	32.9
IS 90 DEG AMPACITY WITHOUT COU ADJUSTMENT >= 1.0x MAX CIRCUIT CURRENT?	YES, COMPLIES WITH 690.8(B)(2)
PV SOURCE CIRCUIT FUSE RATING (AMPS)	30A
AVAILABLE FAULT CURRENT FROM ALL PARALLEL SOURCES (AMP)	25.03
IS 90 DEG AMPACITY WITHOUT COU ADJUSTMENT >= AVAILABLE FAULT CURRENT?	YES, COMPLIES WITH 690.9(A) EXCEPTION

HIGH (C°) SEE FOOT NOTE 1	35	
LOW (C°) SEE FOOT NOTE 1	-18	
STRING SPECIFICATIONS AT STC		
MODULES/STRING	24	23
POWER (W)	14760	14145
STRING ISC (A)	16.02	
STRING IMP (A)	15.01	
STRING VMP (V)	41.00	

WIRE COLOR CODE CHART STANDARDS:

Phase Supply	Wire & Cable	Color, Common	
		(120, 208 & 240V)	(277 & 480V)
Line, Single Phase	L	Black or Red, Blue (2nd Hot)	
Line, 3-Phase	L1	Black	Brown
Line, 3-Phase	L2	Red	Orange
Line, 3-Phase	L3	Blue	Yellow
Neutral	N	White	Grey
Protective Ground	PG	Bare, Green or Green-Yellow	

*FOOT NOTE 1:
 SOURCE: 2021 ASHRAE FUNDAMENTALS SECTION 14.9
 WEATHER STATION : PEORIA, IL (40.668N LATITUDE 89.684W LONGITUDE)

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ELECTRICAL SCHEDULES

1 ELECTRICAL SCHEDULES
 SCALE: N.T.S.

1. SOLAR RACEWAYS



QUANTITY REQUIRED: POSSIBLY 20.

LABELLING REQUIREMENTS: SHALL BE PERMANENTLY AFFIXED ON:

- DC CONDUCTORS LOCATED INSIDE IMC/EMT CONDUIT ONLY
- DC CONDUCTORS LOCATED INSIDE CABLE TRAYS
- AC WIRES LOCATED INSIDE PULL BOXES AND JUNCTION BOXES

2. INVERTERS MOUNTED ON EXTERIOR WALL OF THE BUILDING

PHOTOVOLTAIC SYSTEM ⚠ DC DISCONNECT ⚠		
OPERATING VOLTAGE	370	VDC
OPERATING CURRENT	139.5	AMPS
MAX SYSTEM VOLTAGE	600	VDC
SHORT CIRCUIT CURRENT	139.5	AMPS
CHARGE CONTROLLER MAX	83.33	AMPS

NOTE: (1 QTY), APPLICABLE ON PV INVERTER #1.

AC DISCONNECT PHOTOVOLTAIC SYSTEM POWER SOURCE	
RATED AC OUTPUT CURRENT	139.5 AMPS
NOMINAL OPERATING AC VOLTAGE	208 VOLTS

NOTE: (1 QTY), APPLICABLE ON PV INVERTER #1.

3. NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING



NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING

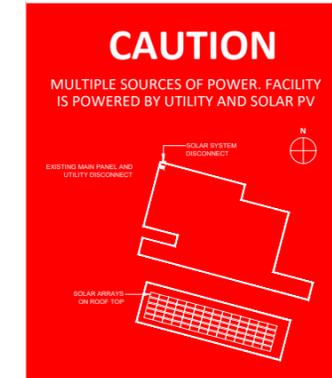


NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING

PHOTOVOLTAIC AC DISCONNECT	
RATED AC OUTPUT CURRENT:	139.5
NOMINAL OPERATING AC VOLTAGE	208

NOTE: (1 QTY), APPLICABLE ON NEW FUSED AC DISCONNECT SWITCH MOUNTED ON EXTERIOR WALL OF THE BUILDING

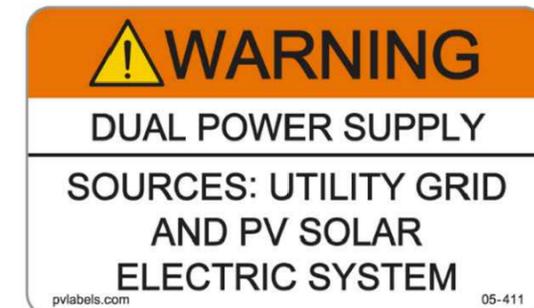
4. MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY



NOTE: (1 QTY), APPLICABLE ON MAIN SERVICE PANEL LOCATED INSIDE THE FACILITY

1 ELECTRICAL LABELS
SCALE: N.T.S.



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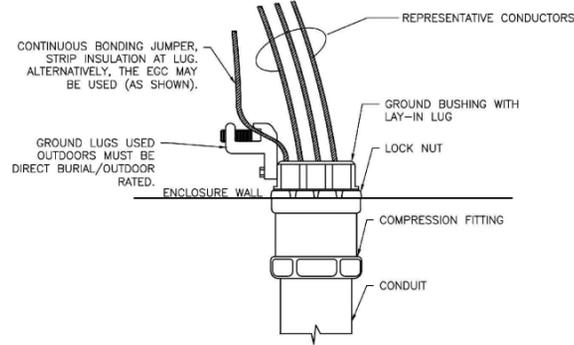
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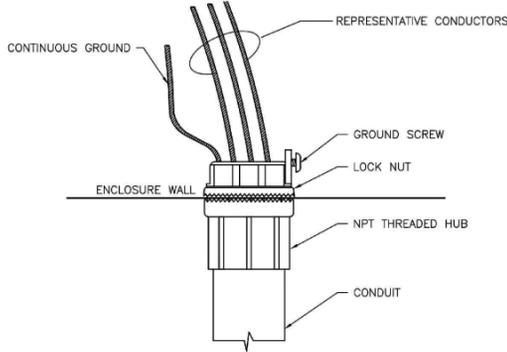
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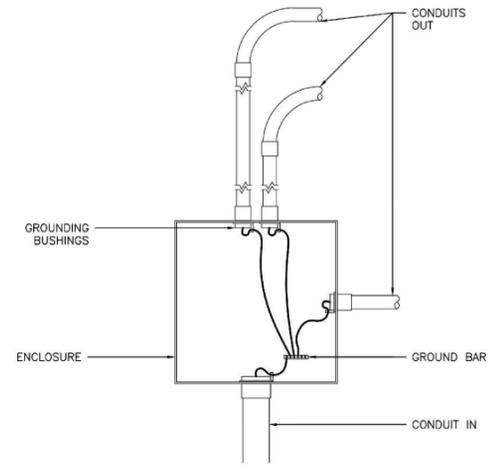
DRAWING NO:
E3.2



1 CONDUIT BUSHING GROUNDING
SCALE: NONE



2 MYERS HUB GROUNDING
SCALE: NONE



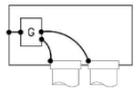
3 PULL BOX/TROUGH GROUNDING
SCALE: NONE

A) FOR CONCENTRIC KNOCKOUTS, USE BONDING JUMPERS AS FOLLOWS:

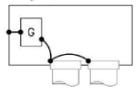
OVERCURRENT DEVICE CIRCUIT NOT EXCEEDING (AMPERES)	TABLE 250.122 SIZE (AWG OR KCMIL)	
	COPPER	ALUMINUM
15	14	12
20	12	10
60	10	8
100	8	6
200	6	4
300	4	2
400	3	1
500	2	1/0
600	1	2/0
800	1/0	3/0
1000	2/0	4/0
1200	3/0	250
1600	4/0	350
2000	250	400
2500	350	600
3000	400	600
4000	500	750

FOR PARALLEL FEEDERS - NEC 250.102(D)
EQUIPMENT BONDING JUMPER IS SIZED PER
TABLE 250.122, REGARDLESS IF COMBINED
OR INDIVIDUAL BONDING JUMPERS ARE USED

1) INDIVIDUAL



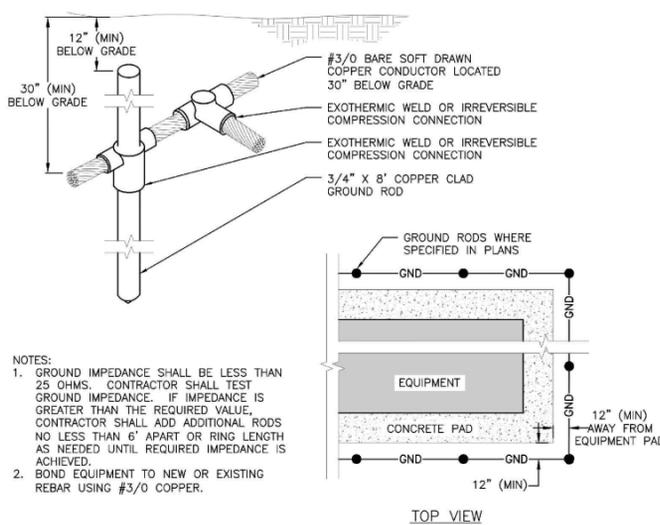
2) COMBINED



B) FOR NON-CONCENTRIC KNOCKOUTS, THE FOLLOWING METHODS SHALL BE PERMITTED (PER NEC 250.97)

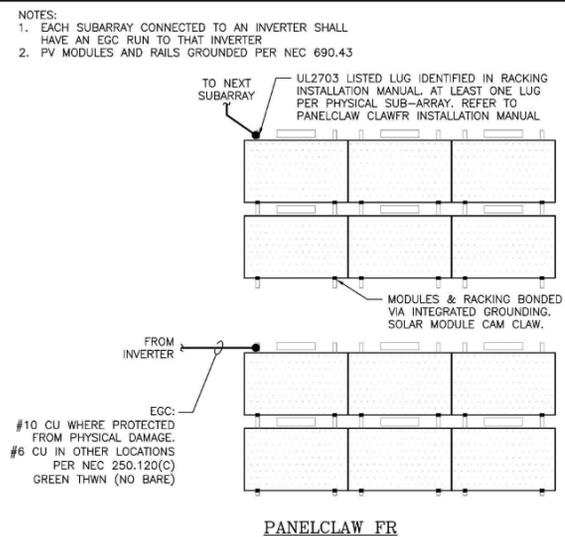
- 1) THREADLESS COUPLINGS AND CONNECTORS FOR CABLES WITH METAL SHEATHS
- 2) TWO LOCKNUTS, ON RIGID METAL CONDUIT OR INTERMEDIATE METAL CONDUIT, ONE INSIDE AND ONE OUTSIDE OF BOXES AND CABINETS
- 3) FITTINGS WITH SHOULDERS THAT SEAT FIRMLY AGAINST THE BOX OR CABINET, SUCH AS ELECTRICAL METALLIC TUBING CONNECTORS, FLEXIBLE METAL CONDUIT CONNECTORS AND CABLE CONNECTORS, WITH ONE LOCKNUT ON THE INSIDE OF BOXES AND CABINETS
- 4) LISTED FITTINGS (SUCH AS MYERS HUB)

4 LOAD SIDE EQUIPMENT BONDING JUMPER
SCALE: NONE

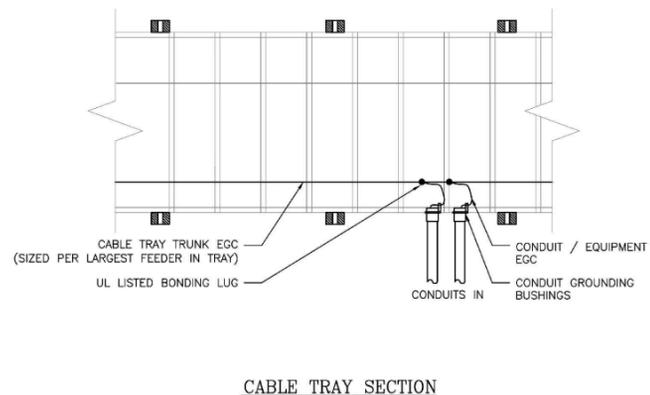


- NOTES:
1. GROUND IMPEDANCE SHALL BE LESS THAN 25 OHMS. CONTRACTOR SHALL TEST GROUND IMPEDANCE. IF IMPEDANCE IS GREATER THAN THE REQUIRED VALUE, CONTRACTOR SHALL ADD ADDITIONAL RODS NO LESS THAN 6' APART OR RING LENGTH AS NEEDED UNTIL REQUIRED IMPEDANCE IS ACHIEVED.
 2. BOND EQUIPMENT TO NEW OR EXISTING REBAR USING #3/0 COPPER.

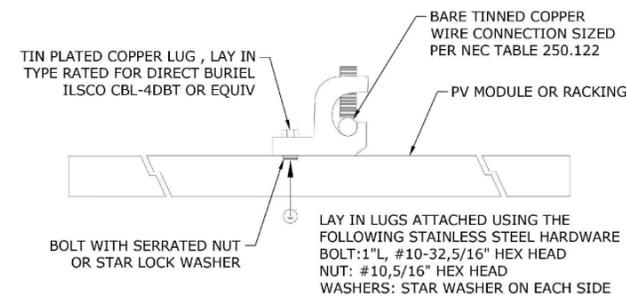
5 GROUND RING
SCALE: NONE



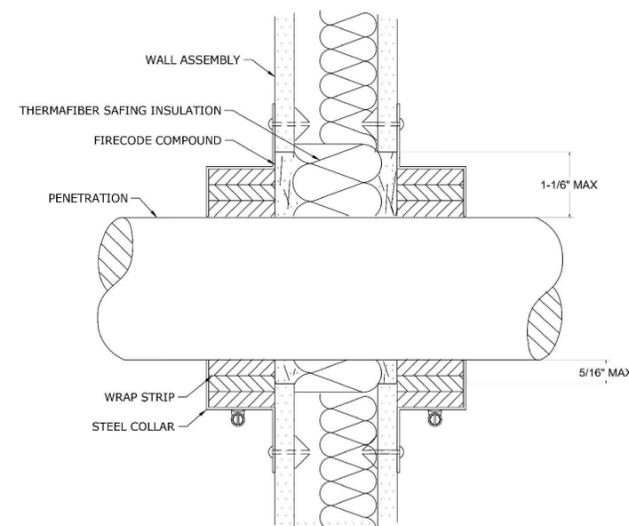
6 ARRAY GROUNDING
SCALE: NONE



7 TYPICAL CABLE TRAY GROUNDING
SCALE: NONE



8 GROUND LUG DETAIL
SCALE: NONE



9 FIRE WALL PENETRATION DETAIL
SCALE: NONE



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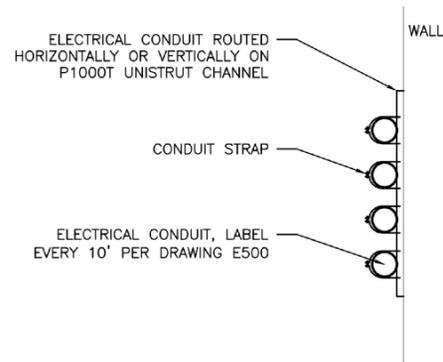
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DRAWN BY: JP	SEAL: SIGNED 02/17/2026

CHECKED BY: AM PROJECT NO.: GEC-4293

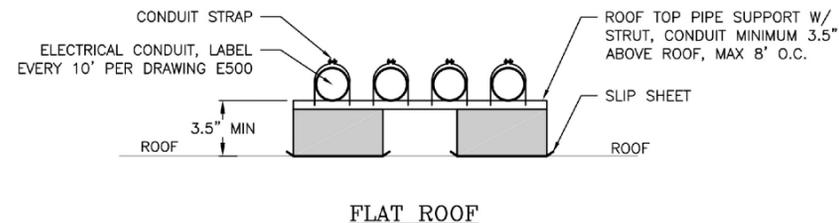
SHEET TITLE:

ELECTRICAL DETAILS

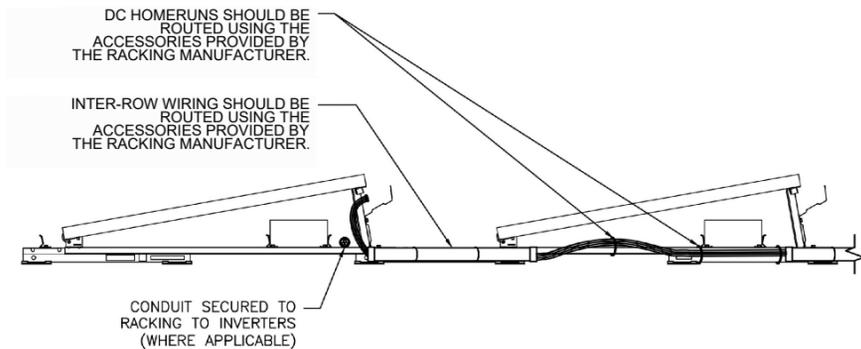
PEORIA PARK DISTRICT AT GLC FACILITY
(PEORIA, IL)
ROOFTOP SOLAR PV PROJECT
7815 N RADNOR RD UNIT GOLF,
PEORIA IL 60487



1 CONDUIT WALL ANCHORING
SCALE: NONE

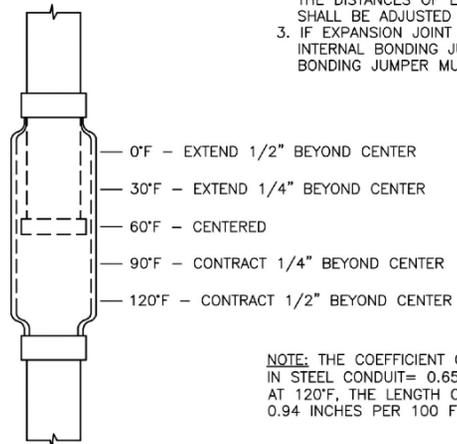


2 ROOF CONDUIT SUPPORT
SCALE: NONE



3 STRING WIRING ELEVATION - PANELCLAW FR
SCALE: NONE

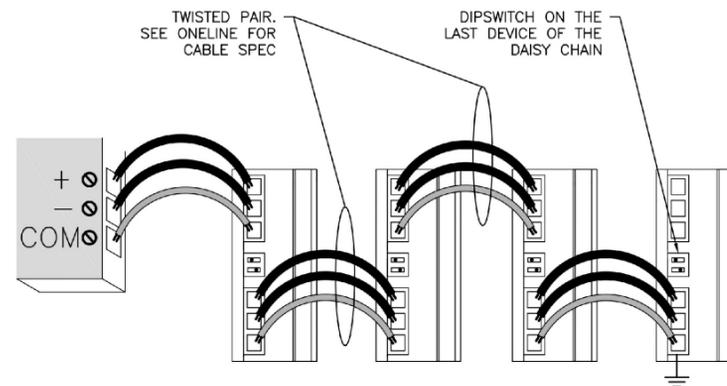
- NOTES:
1. INSTALL EXPANSION COUPLING EVERY 100' OF STRAIGHT CONDUIT RUN.
 2. IF EXPANSION COUPLINGS ARE INSTALLED AT LENGTHS GREATER OR LESS THAN 100', THE DISTANCES OF EXPANSION/CONTRACTION SHALL BE ADJUSTED PROPORTIONALLY.
 3. IF EXPANSION JOINT IS NOT PROVIDED WITH INTERNAL BONDING JUMPER, AN EXTERNAL BONDING JUMPER MUST BE INSTALLED.



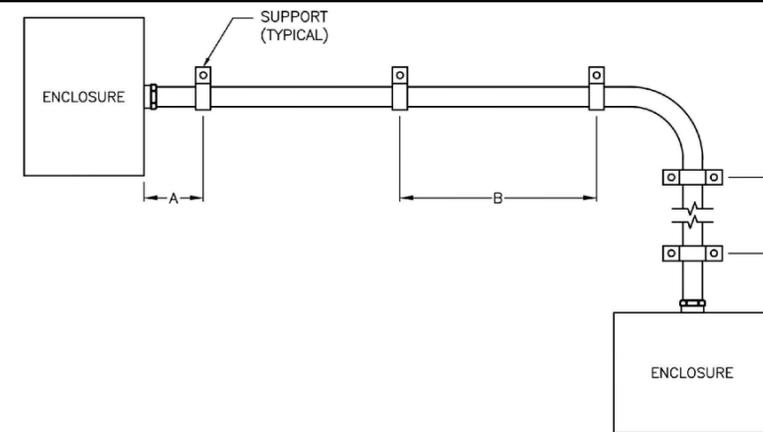
EMT/RMC/IMC

4 EXPANSION COUPLING
SCALE: NONE

- MONITORING NOTES:
1. REFER TO MONITORING SYSTEM INSTALLATION MANUAL FOR DETAILS ON TERMINAL BLOCKS, CABLE TERMINATIONS, AND SYSTEM CONFIGURATION.
 2. WIRELESS TRANSCEIVERS MUST HAVE LINE-OF-SIGHT BETWEEN EACH OTHER.
 3. PYRANOMETER MUST BE INSTALLED IN UNSHADED LOCATION.



5 MODBUS COMMUNICATIONS
SCALE: NONE



MAXIMUM CONDUIT HARDWARE SPACING			
CONDUIT TYPE	ENCLASURE TO SUPPORT (A)	SUPPORT TO SUPPORT (B)	NEC ARTICLE
ELECTRICAL METALLIC TUBING (EMT)	3'	10'	358
INTERMEDIATE METAL CONDUIT (IMC)	3'	10'	342
RIGID METAL CONDUIT (RMC)	3'	10'	344
LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)	1'	4.5'	350
PVC (SCH40 & 80) [0.5" - 1"]	3'	3'	352
PVC (SCH40 & 80) [1.25" - 2"]	3'	5'	352
PVC (SCH40 & 80) [2.5" - 3"]	3'	6'	352
PVC (SCH40 & 80) [3.5" - 5"]	3'	7'	352
PVC (SCH40 & 80) [6"]	3'	8'	352

6 CONDUIT SUPPORT SPACING
SCALE: NONE

REV.	DATE	ISSUED FOR PERMIT	DESCRIPTION
0.0	02/17/26		

CERTIFICATION:
I HAVE PREPARED, OR CAUSED TO BE PREPARED UNDER MY DIRECT SUPERVISION, THE ATTACHED PLANS AND SPECIFICATIONS AND STATE THAT, TO THE BEST OF MY KNOWLEDGE AND BELIEF AND TO THE EXTENT OF MY CONTRACTUAL OBLIGATION, THEY ARE IN COMPLIANCE WITH GOVERNING CODES AND ORDINANCES.

SIGNATURE:

ANAND MALHOTRA
062.051711
ELECTRICAL ENGINEER
EXPIRES 11/2027
SEAL: SIGNED 02/17/2026

LICENSE NO: 062.051711
EXPIRATION DATE: 11/30/2027
DRAWN BY: JP

CHECKED BY: AM PROJECT NO.: GEC-4293

SHEET TITLE:

ELECTRICAL DETAILS

Site Design Criteria - Flat Roof PV System Basis of Design	
Roof Live Load (psf)	20(see footnote 1)
Ground Snow Pg (psf)	20
Flat Roof Snow (psf)	20
Snow Importance Factor (Is)	1.0
Wind Design Data	
Basic Wind Speed (mph)	115
Risk Category	II
Wind Exposure	C
Earthquake Design Data	
Risk Category	II
Importance Factor (Ie)	1.00
Component Importance Factor (Ip)	1.0
Mapped Acceleration Parameter (Ss)	0.130
Mapped Acceleration Parameter (S1)	0.076
Seismic Site Class	D
Design Spectral Acceleration Parameter (Sds)	0.139
Design Spectral Acceleration Parameter (Sd1)	0.122
Seismic Design Category (SDC)	B
Basic seismic-force-resisting system(s)	N/A (see footnote 2)
Base Design Shear = Fp x 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)	IBC 2018
-	ASCE 7 - 16
ALTERNATE DESIGN METHOD	
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.	

GENERAL NOTES:

- 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.
- 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.
- 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.
- REFER TO THE SPECIFIC ARRAY BALLAST SHEETS FOR BALLASTING REQUIREMENTS BASED ON THE PROVIDED SITE INFORMATION.
- 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.
- 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.
- 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.
- BALLAST BLOCK DIMENSIONS MUST CONFORM TO THE FOLLOWING SPECIFICATIONS: 3-3/4" THICK MAX., 7-5/8" ± 1/8" WIDTH, 15-5/8" ± 1/8" LENGTH.
- 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.
- 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.

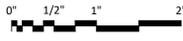
SHEET INDEX	
NO.	DESCRIPTION
PC-1	COVER SHEET
PC-2	PROJECT SUMMARY
PC-3	ARRAY SITE MAP
PC-4	TYPICAL ARRAY DIMENSIONS
PC-5	ASSEMBLIES
PC-6	RACKING COMPONENTS
PC-7	BALLAST LEGEND
PC-8	BALLAST LAYOUT - 1
PC-9	MECHANICAL ATTACHMENT DETAIL

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 STATE OF ILLINOIS
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PREPARED FOR:
 General Energy Corp

PROJECT:
 Peoria PD GLC

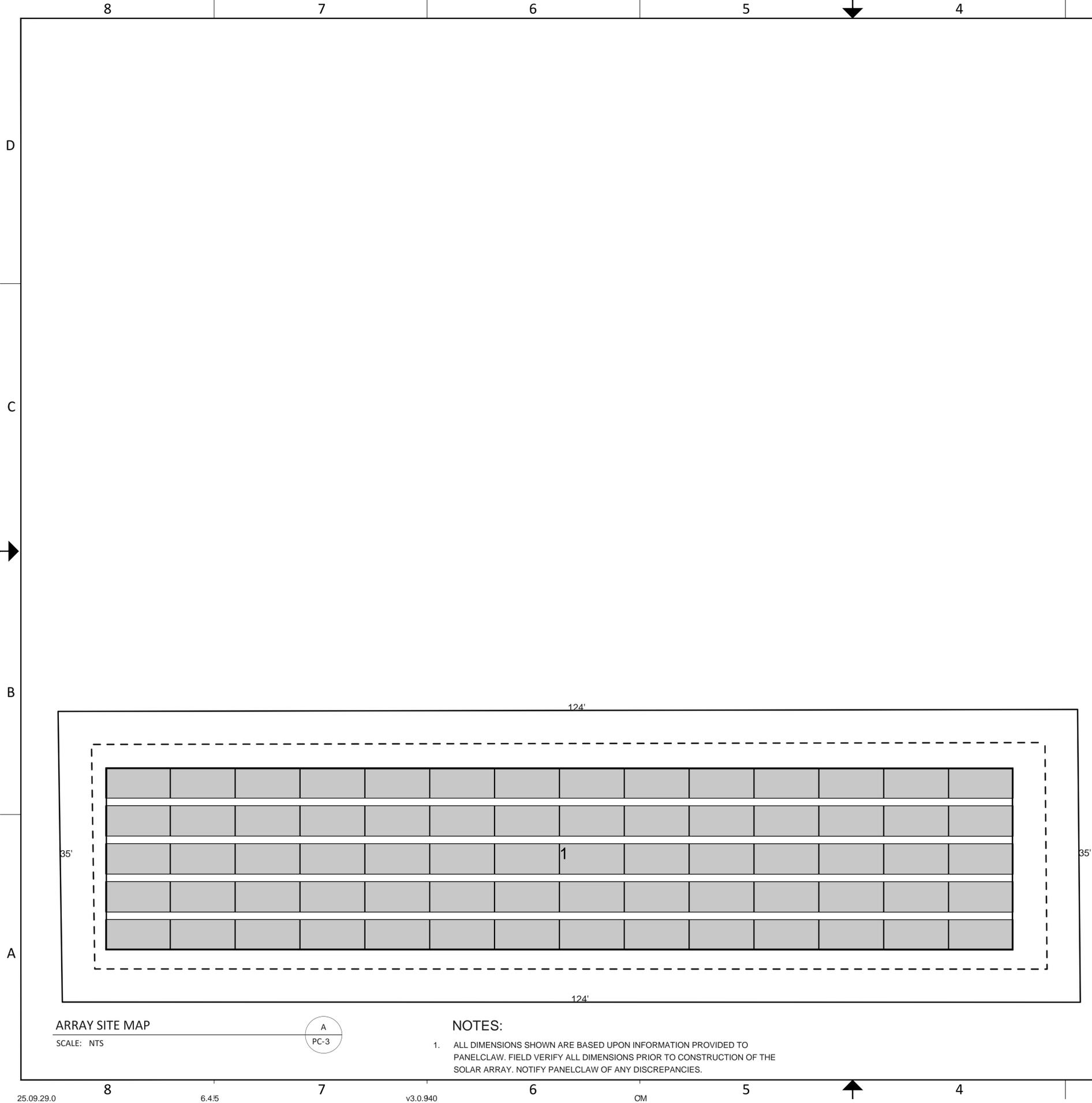
LOCATION:
 7815 N Radnor Rd, Peoria, IL, USA

SHEET TITLE:
 COVER SHEET

REVISION: 0 SHEET: PC-1

THIS CONSTRUCTION SET PROVIDES THE RACKING LAYOUT FOR ALL ARRAYS WITH NUMBER OF BALLAST BLOCKS AND/OR MECHANICAL ATTACHMENTS BASED ON THE APPROVED STRUCTURAL CALCULATIONS FOR THE COMPLETED INSTALLED CONDITION OF THE SOLAR ARRAY. THE INSTALLER IS RESPONSIBLE FOR THE SAFETY AND CARE OF THE ARRAY DURING ALL PHASES OF INSTALLATION. THEREFORE, THE INSTALLER MUST MONITOR THE WEATHER FORECAST AND TAKE NECESSARY PRECAUTIONS (SEE GENERAL NOTE #10) TO TEMPORARILY SHORE/BRACE ALL ARRAYS DURING CONSTRUCTION UNTIL INSTALLATION IS COMPLETED IN CONFORMANCE WITH THIS APPROVED CONSTRUCTION SET AND THE PRODUCT INSTALLATION MANUAL (SEE GENERAL NOTE #2). THE INSTALLER HAS SOLE RESPONSIBILITY FOR THE MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION OF THE SOLAR ARRAY FOR COMPLIANCE WITH LAWS, REGULATIONS, AND CODES, AND FOR THE SAFETY OF CONSTRUCTION APPLICABLE TO THIS WORK.

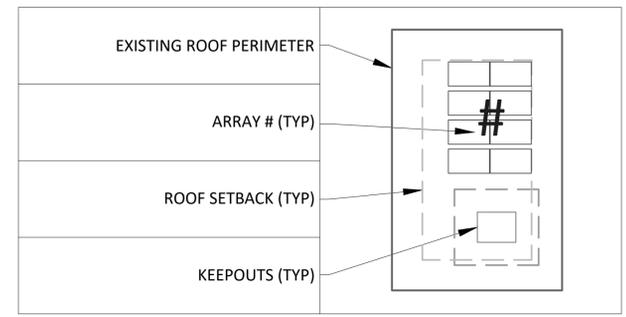
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ARRAY SITE MAP
SCALE: NTS



NOTES:
1. ALL DIMENSIONS SHOWN ARE BASED UPON INFORMATION PROVIDED TO PANELCLAW. FIELD VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION OF THE SOLAR ARRAY. NOTIFY PANELCLAW OF ANY DISCREPANCIES.



ROOF NAME	ROOF SETBACK (FT.)	ROOF HEIGHT (FT)	PARAPET HEIGHT (FT)	ROOF TILT (DEG)
Roof 1	4.00	30.00	0.0	1

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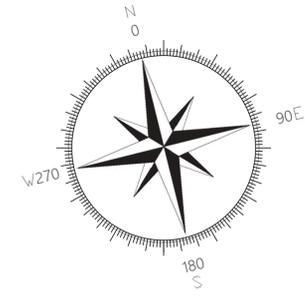
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SHEET TITLE:
ARRAY SITE MAP

REVISION: 0	SHEET: PC-3
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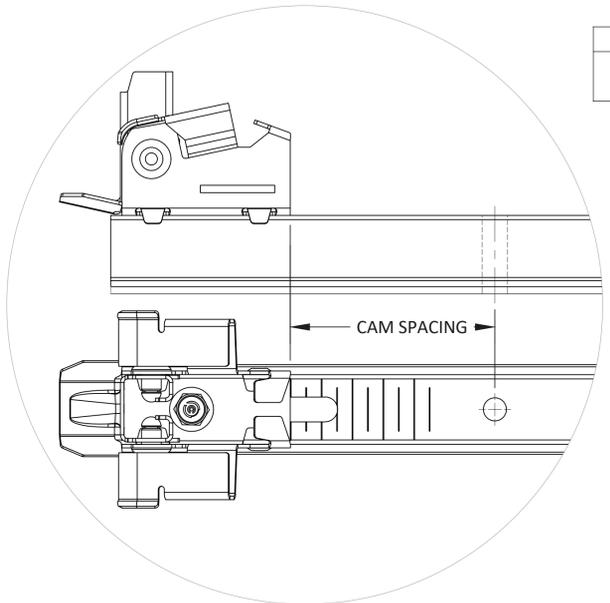
PROJECT:
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LOCATION:
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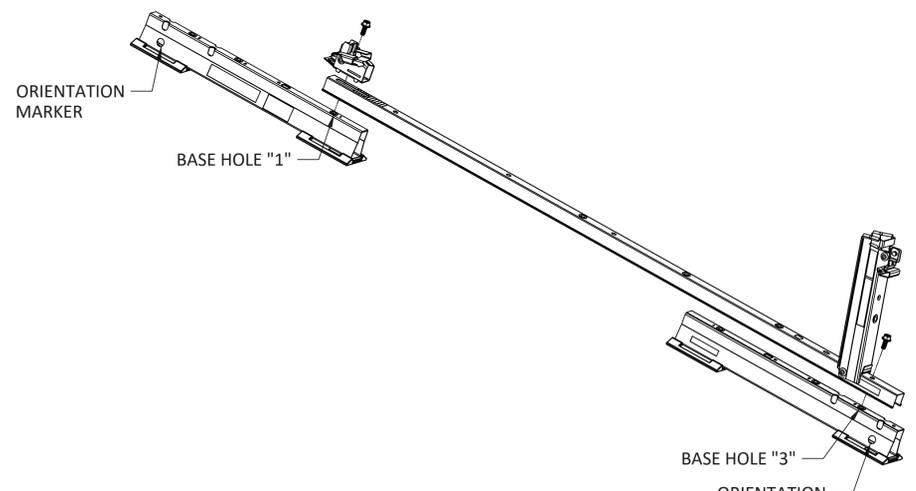
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ASSEMBLIES

REVISION: 0
SHEET: PC-5

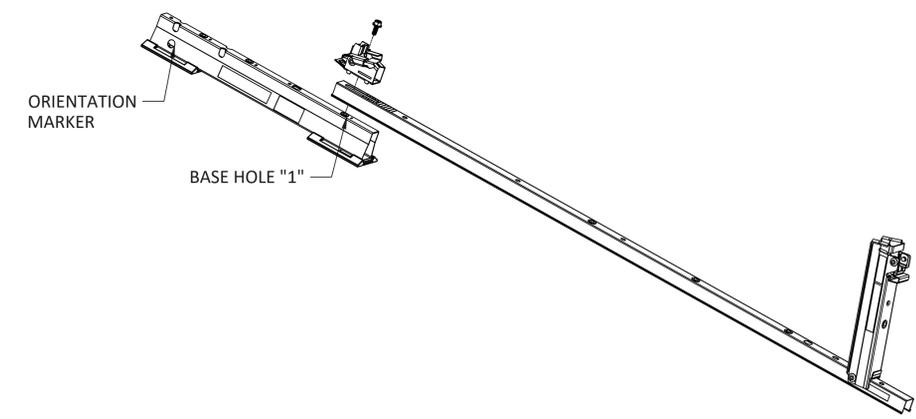
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	mm	53
	inches	2 1/8



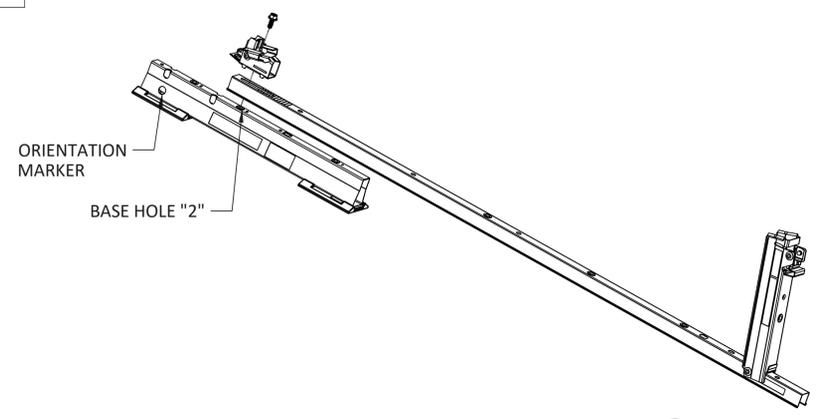
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PC-5



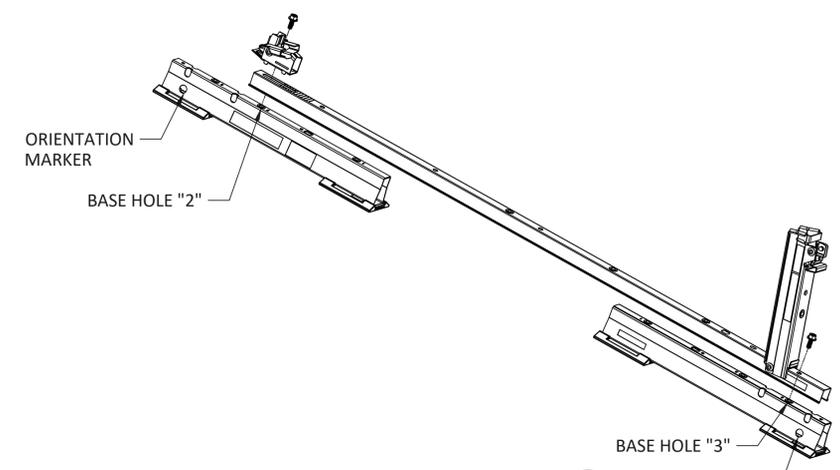
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PC-5



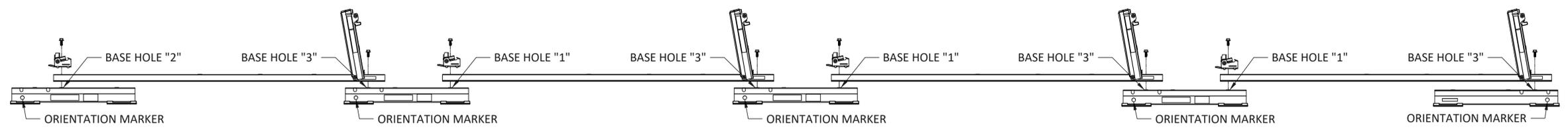
MIDDLE ASSEMBLY
SCALE: NTS
C
PC-5



SOUTH ASSEMBLY
SCALE: NTS
D
PC-5



NORTH SOUTH ASSEMBLY
SCALE: NTS
E
PC-5



EXAMPLE ARRAY CONSTRUCTION
SCALE: NTS
F
PC-5

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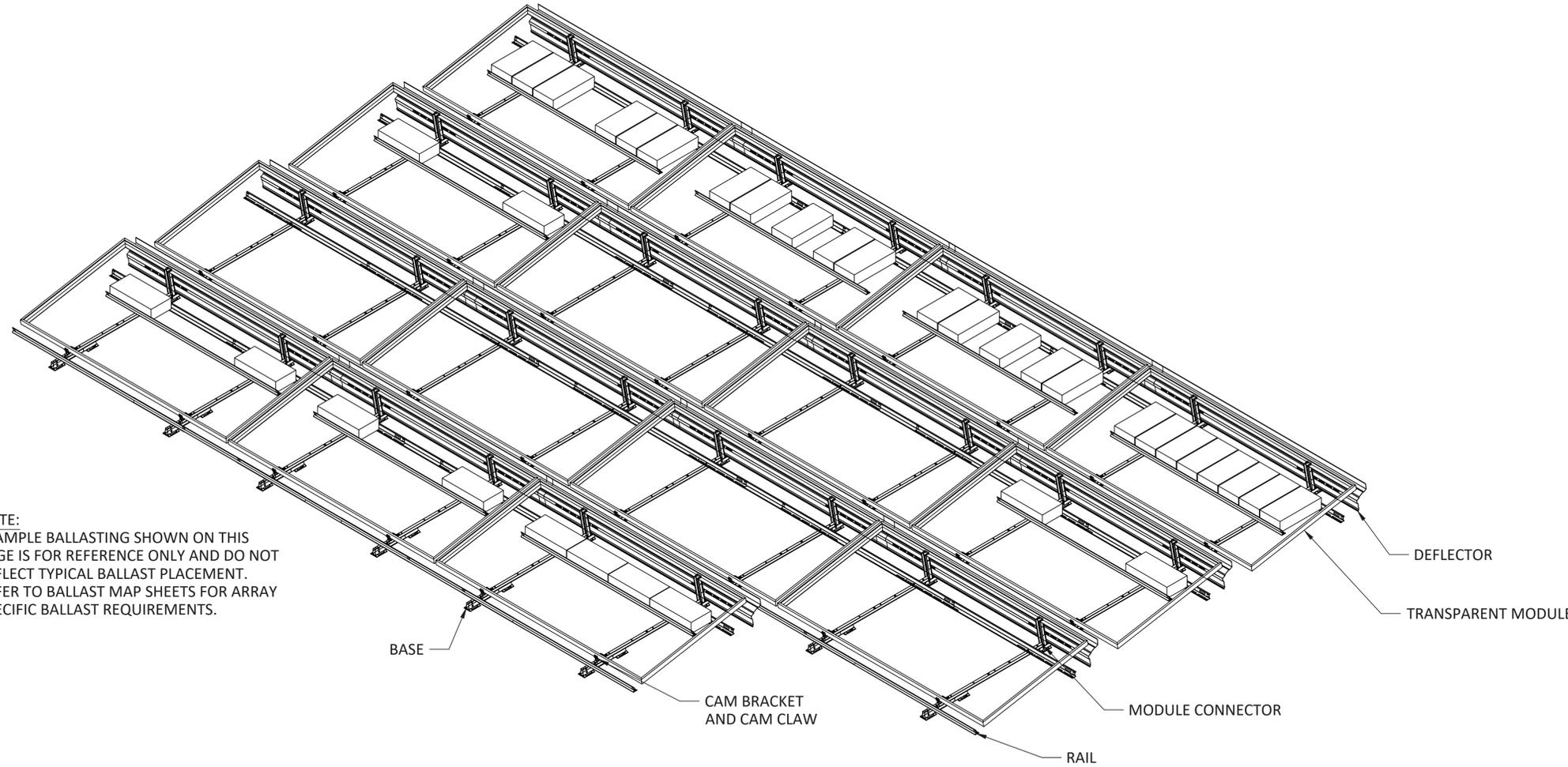
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D

C

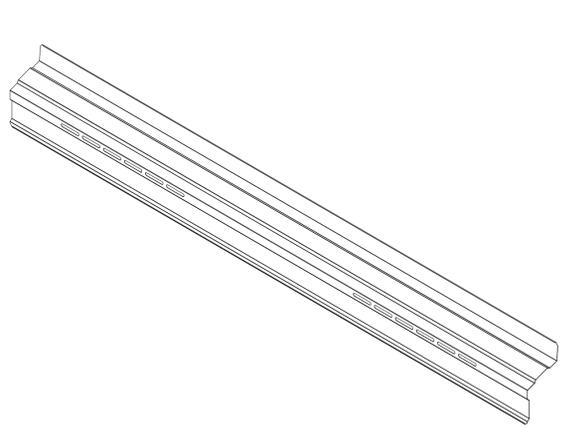
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A



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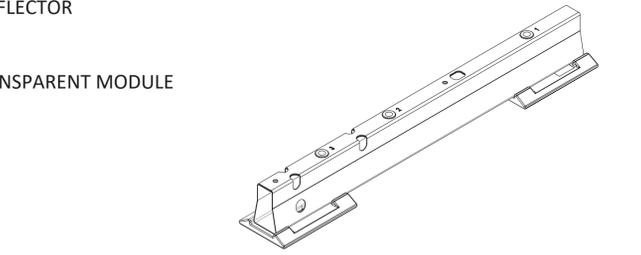
EXAMPLE RAIL AND BLOCK CONFIGURATION
SCALE: NTS



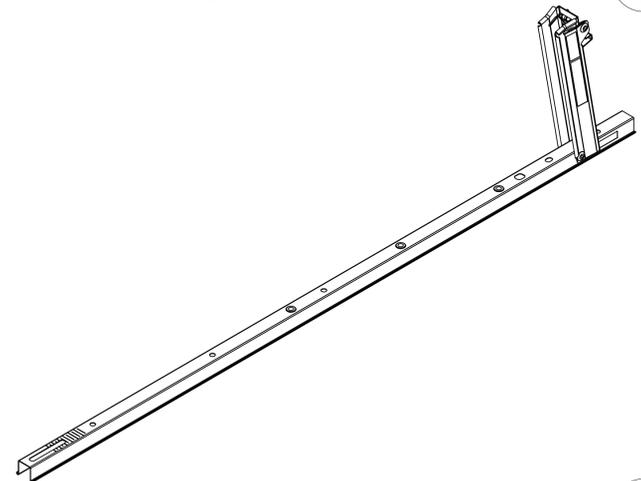
DEFLECTOR
SCALE: NTS



RAIL
SCALE: NTS



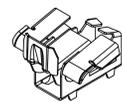
BASE
SCALE: NTS



MODULE CONNECTOR
SCALE: NTS



CAM CLAW
SCALE: NTS



CAM BRACKET
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SHEET TITLE:
RACKING COMPONENTS

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SHEET: PC-6

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8 7 6 5 4 3 2 1

D
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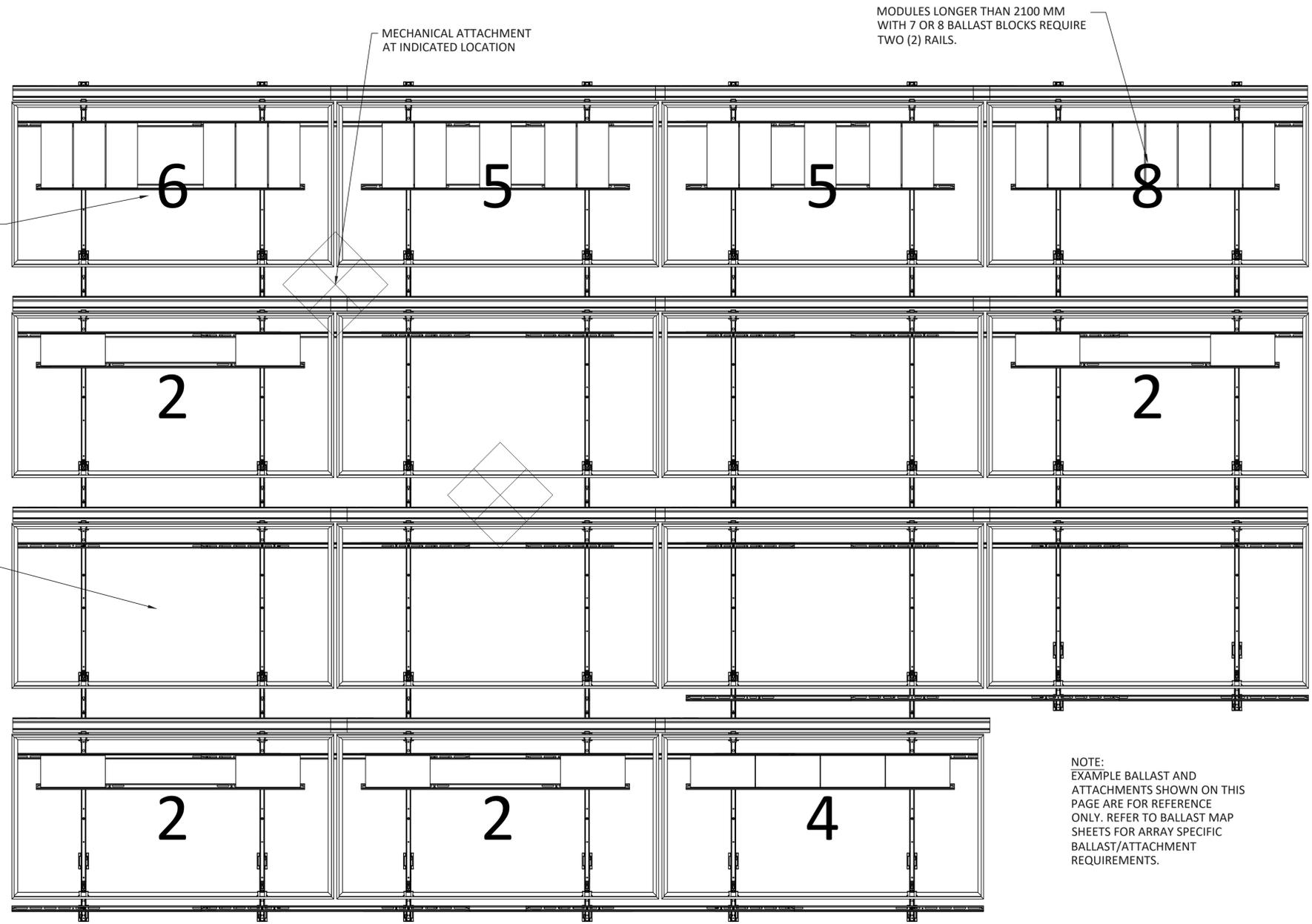
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SHEET TITLE:
 BALLAST LEGEND

REVISION: 0 SHEET: PC-7



BALLAST QUANTITY:
 "# "=QUANTITY OF BALLAST BLOCK INSTALLED CENTERED UNDER MODULE
 IF NO BALLAST QUANTITY SHOWN, DO NOT PLACE BALLAST
 SEE INSTALLATION MANUAL FOR NOTES ON INSTALLING MORE THAN FOUR BALLAST BLOCKS PER MODULE

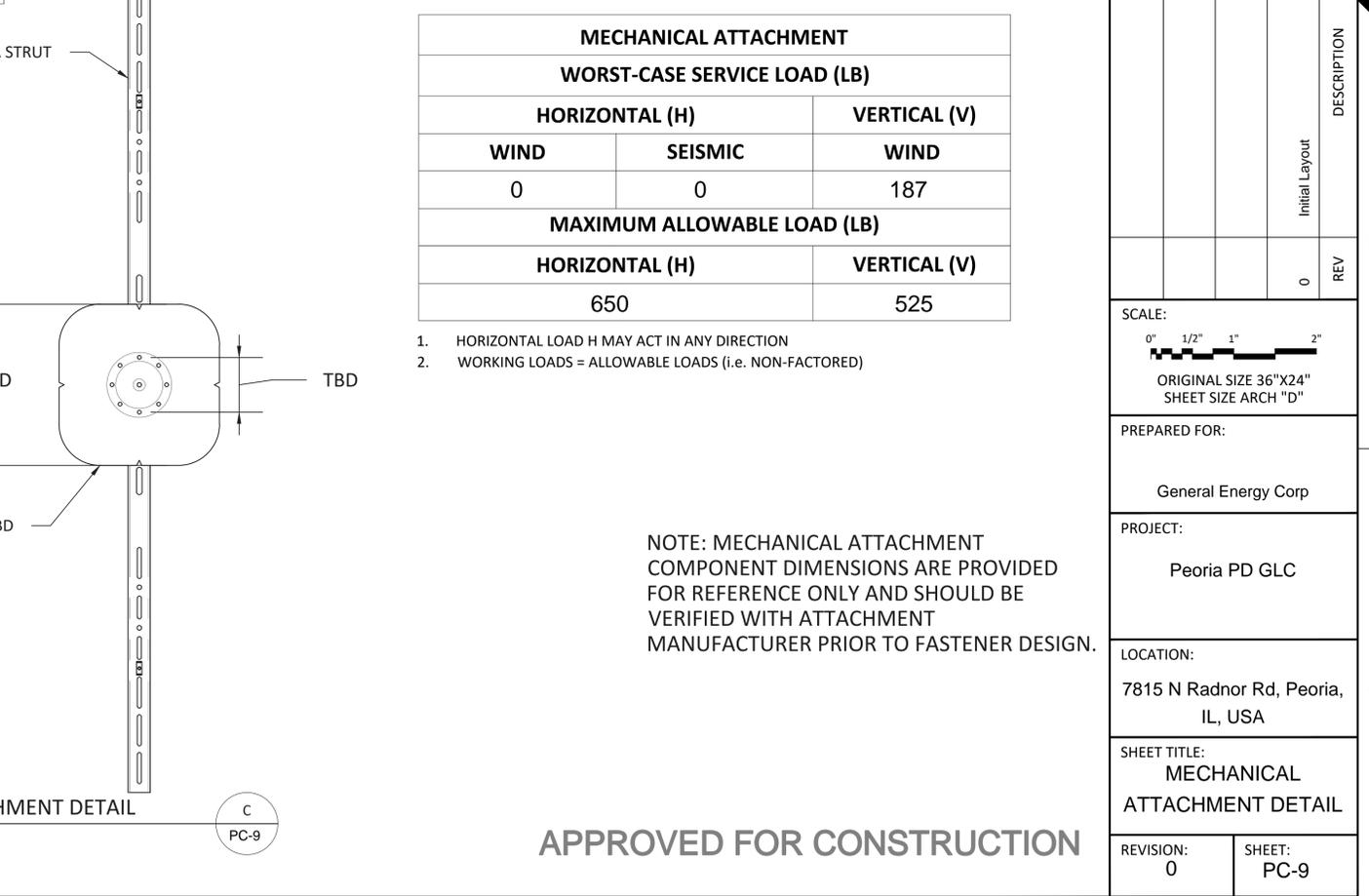
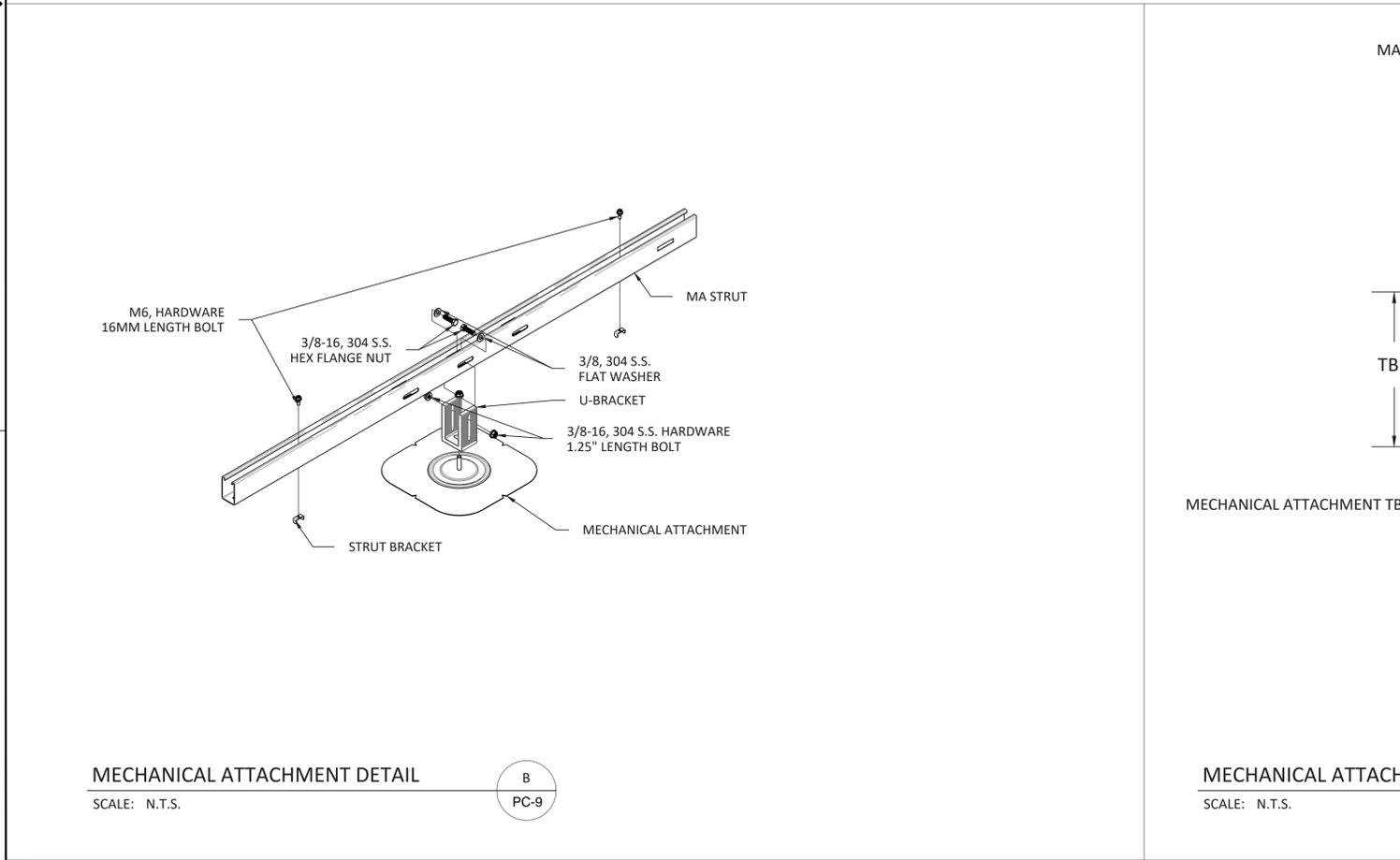
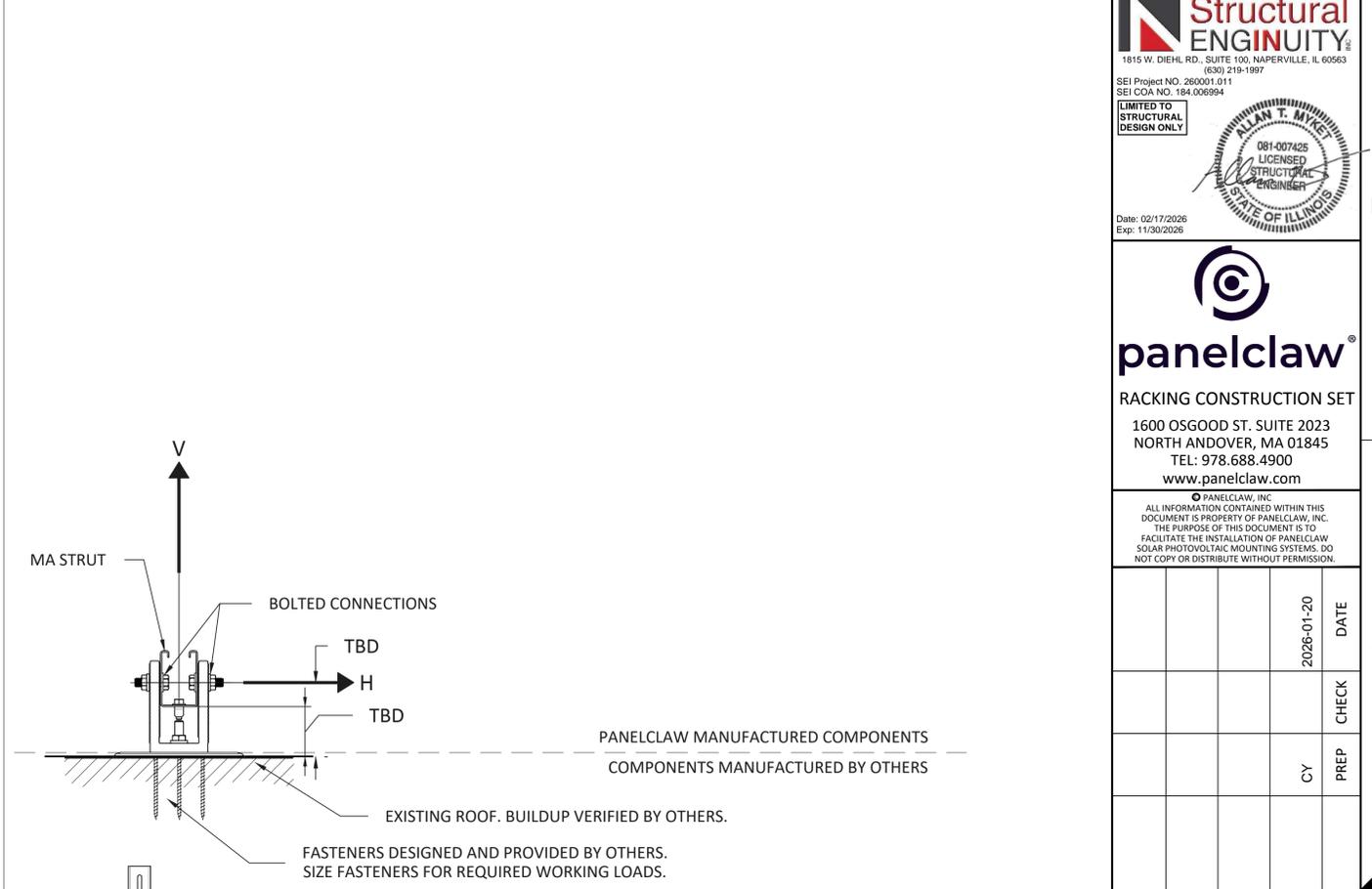
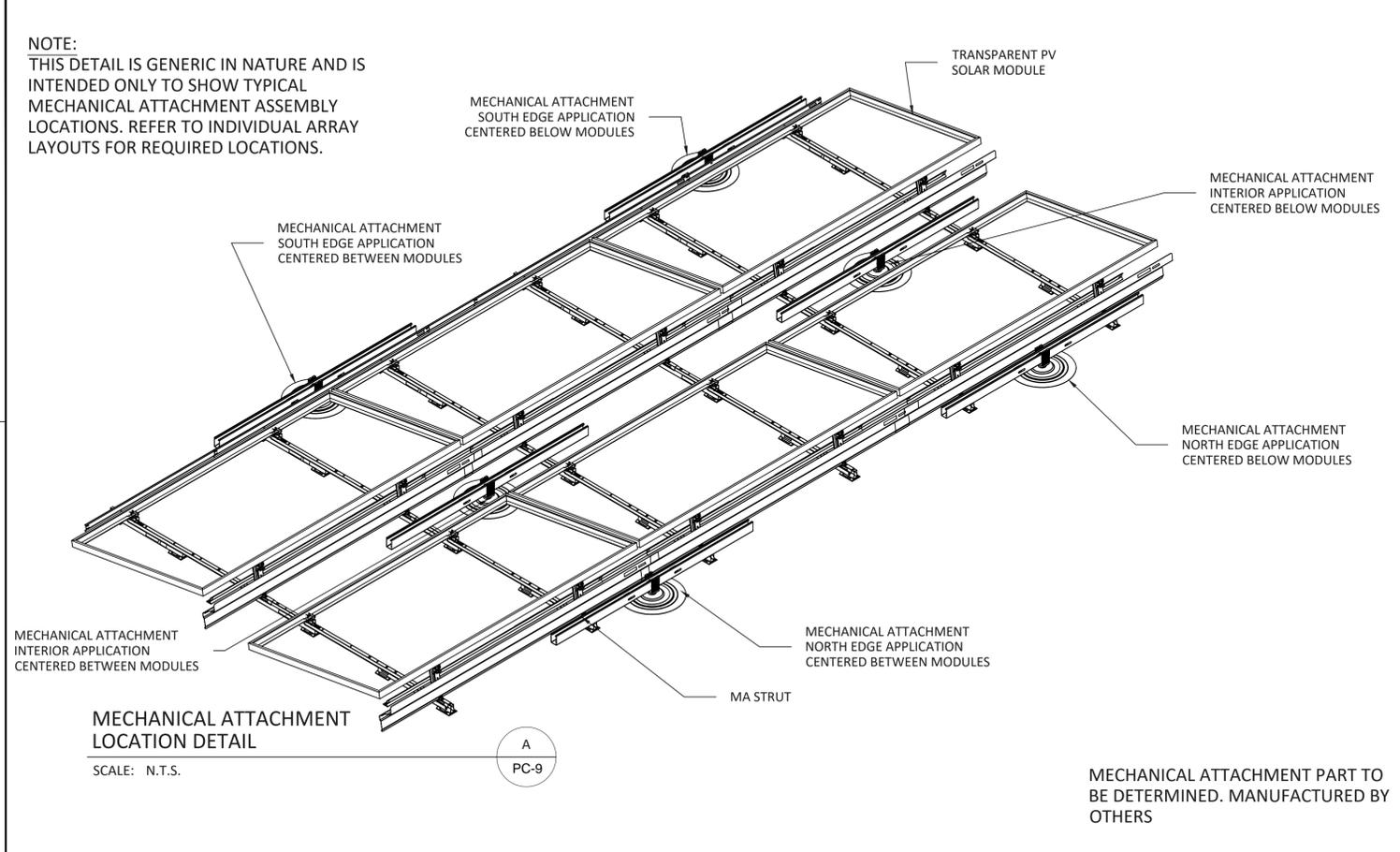
DO NOT INSTALL ADDITIONAL RAIL TO HOLD BALLAST ON MODULES WITH NO BALLAST SHOWN.

NOTE:
 EXAMPLE BALLAST AND ATTACHMENTS SHOWN ON THIS PAGE ARE FOR REFERENCE ONLY. REFER TO BALLAST MAP SHEETS FOR ARRAY SPECIFIC BALLAST/ATTACHMENT REQUIREMENTS.

ARRAY CROSS SECTION VIEW
 SCALE: NTS

ARRAY TOP VIEW
 SCALE: NTS

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SHEET SIZE ARCH "D"

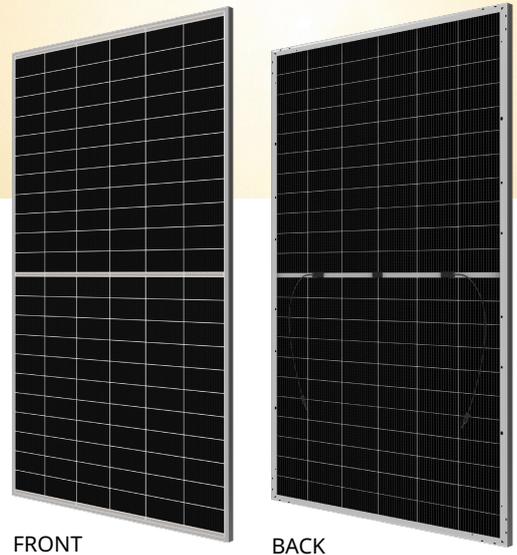
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PROJECT:
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SHEET TITLE:
MECHANICAL ATTACHMENT DETAIL

REVISION: 0
SHEET: PC-9



FRONT

BACK

TOPBiHiKu6

N-type Bifacial TOPCon Technology

600 W ~ 630 W

CS6.2-66TB-600 | 605 | 610 | 615 | 620 | 625 | 630H

MORE POWER



Module power up to 630 W
Module efficiency up to 23.3 %



Up to 85% Power Bifaciality,
more power from the back side



Excellent anti-LeTID & anti-PID performance.
Low power degradation, high energy yield



Lower temperature coefficient (Pmax): -0.29%/°C,
increases energy yield in hot climate



Lower LCOE & system cost

MORE RELIABLE



Tested up to ice ball of 35 mm diameter
according to IEC 61215 standard



Minimizes micro-crack impacts



Heavy snow load up to 5400 Pa,
wind load up to 4000 Pa*

TRACEABLE SUPPLY CHAIN



Independently audited by SIS

* For detailed information, please refer to the Installation Manual.



Enhanced Product Warranty on Materials
and Workmanship*



Linear Power Performance Warranty*

1st year power degradation no more than 1%
Subsequent annual power degradation no more than 0.4%

*According to the applicable Canadian Solar Limited Warranty Statement.

MANAGEMENT SYSTEM CERTIFICATES*

ISO 9001: 2015 / Quality management system
ISO 14001: 2015 / Standards for environmental management system
ISO 45001: 2018 / International standards for occupational health & safety
IEC 62941: 2019 / Photovoltaic module manufacturing quality system

PRODUCT CERTIFICATES*

IEC 61215 / IEC 61730
UL 61730 / IEC 61701 / IEC 62716
Take-e-way

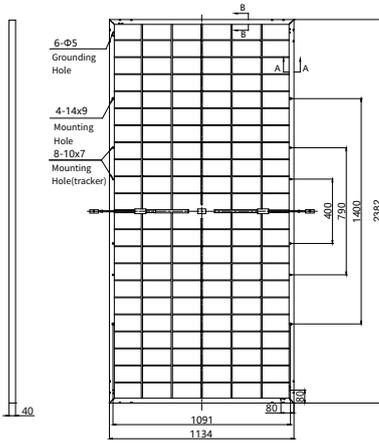


* The specific certificates applicable to different module types and markets will vary, and therefore not all of the certifications listed herein will simultaneously apply to the products you order or use. Please contact your local Canadian Solar sales representative to confirm the specific certificates available for your Product and applicable in the regions in which the products will be used.

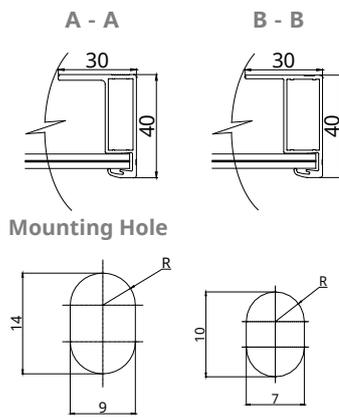
Canadian Solar (USA) Inc. is committed to providing high quality solar photovoltaic modules, solar energy and battery storage solutions to customers. The company was recognized as the No. 1 module supplier for quality and performance/price ratio in the IHS Module Customer Insight Survey. Over the past 23 years, it has successfully delivered over 133 GW of premium-quality solar modules across the world.

ENGINEERING DRAWING (mm)

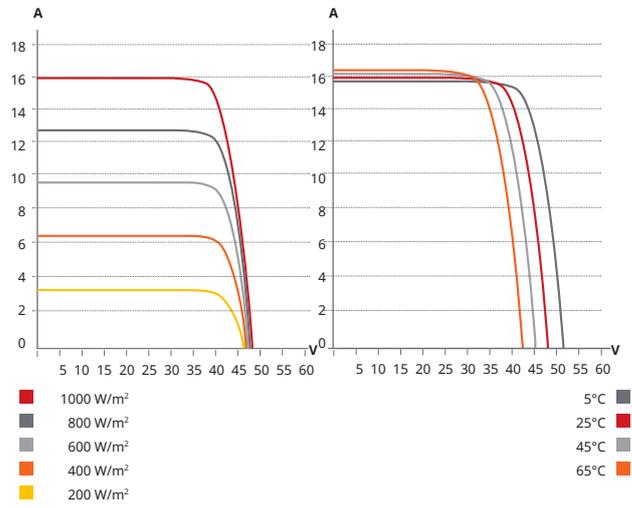
Rear View



Frame Cross Section



CS6.2-66TB-610H / I-V CURVES



ELECTRICAL DATA | STC*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Module Efficiency
CS6.2-66TB-600H	600 W	40.4 V	14.86 A	47.6 V	15.85 A	22.2%
Bifacial Gain**	5%	630 W	40.4 V	15.60 A	47.6 V	23.3%
	10%	660 W	40.4 V	16.35 A	47.6 V	24.4%
	20%	720 W	40.4 V	17.83 A	47.6 V	26.7%
CS6.2-66TB-605H	605 W	40.6 V	14.91 A	47.8 V	15.91 A	22.4%
Bifacial Gain**	5%	635 W	40.6 V	15.66 A	47.8 V	23.5%
	10%	666 W	40.6 V	16.40 A	47.8 V	24.7%
	20%	726 W	40.6 V	17.89 A	47.8 V	26.9%
CS6.2-66TB-610H	610 W	40.8 V	14.96 A	48.0 V	15.97 A	22.6%
Bifacial Gain**	5%	641 W	40.8 V	15.71 A	48.0 V	23.7%
	10%	671 W	40.8 V	16.46 A	48.0 V	24.8%
	20%	732 W	40.8 V	17.95 A	48.0 V	27.1%
CS6.2-66TB-615H	615 W	41.0 V	15.01 A	48.2 V	16.02 A	22.8%
Bifacial Gain**	5%	646 W	41.0 V	15.76 A	48.2 V	23.9%
	10%	677 W	41.0 V	16.51 A	48.2 V	25.1%
	20%	738 W	41.0 V	18.01 A	48.2 V	27.3%
CS6.2-66TB-620H	620 W	41.2 V	15.06 A	48.4 V	16.08 A	23.0%
Bifacial Gain**	5%	651 W	41.2 V	15.81 A	48.4 V	24.1%
	10%	682 W	41.2 V	16.57 A	48.4 V	25.2%
	20%	744 W	41.2 V	18.07 A	48.4 V	27.5%
CS6.2-66TB-625H	625 W	41.4 V	15.11 A	48.6 V	16.14 A	23.1%
Bifacial Gain**	5%	656 W	41.4 V	15.87 A	48.6 V	24.3%
	10%	688 W	41.4 V	16.62 A	48.6 V	25.5%
	20%	750 W	41.4 V	18.13 A	48.6 V	27.8%
CS6.2-66TB-630H	630 W	41.6 V	15.16 A	48.8 V	16.20 A	23.3%
Bifacial Gain**	5%	662 W	41.6 V	15.92 A	48.8 V	24.5%
	10%	693 W	41.6 V	16.68 A	48.8 V	25.7%
	20%	756 W	41.6 V	18.19 A	48.8 V	28.0%

* Under Standard Test Conditions (STC) of irradiance of 1000 W/m², spectrum AM 1.5 and cell temperature of 25°C.

** Bifacial Gain: The additional gain from the back side compared to the power of the front side at the standard test condition. It depends on mounting (structure, height, tilt angle etc.) and albedo of the ground.

ELECTRICAL DATA

Operating Temperature	-40°C ~ +85°C
Max. System Voltage	1500 V (IEC/UL)
Module Fire Performance	TYPE 29 (UL 61730) or CLASS C (IEC61730)
Max. Series Fuse Rating	35 A
Protection Class	Class II
Power Tolerance	0 ~ + 10 W
Power Bifaciality*	80 %

* Power Bifaciality = $P_{max_{rear}} / P_{max_{front}}$, both $P_{max_{rear}}$ and $P_{max_{front}}$ are tested under STC, Bifaciality Tolerance: ± 5 %

* The specifications and key features contained in this datasheet may deviate slightly from our actual products due to the on-going innovation and product enhancement. CSI Solar Co., Ltd. reserves the right to make necessary adjustment to the information described herein at any time without further notice. Please be kindly advised that PV modules should be handled and installed by qualified people who have professional skills and please carefully read the safety and installation instructions before using our PV modules.

ELECTRICAL DATA | NMOT*

	Nominal Max. Power (Pmax)	Opt. Operating Voltage (Vmp)	Opt. Operating Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)
CS6.2-66TB-600H	454 W	38.2 V	11.88 A	45.1 V	12.77 A
CS6.2-66TB-605H	458 W	38.4 V	11.92 A	45.3 V	12.82 A
CS6.2-66TB-610H	461 W	38.6 V	11.96 A	45.4 V	12.87 A
CS6.2-66TB-615H	465 W	38.8 V	12.00 A	45.6 V	12.91 A
CS6.2-66TB-620H	469 W	38.9 V	12.04 A	45.8 V	12.96 A
CS6.2-66TB-625H	473 W	39.1 V	12.08 A	46.0 V	13.00 A
CS6.2-66TB-630H	477 W	39.3 V	12.12 A	46.2 V	13.05 A

* Under Nominal Module Operating Temperature (NMOT), irradiance of 800 W/m² spectrum AM 1.5, ambient temperature 20°C, wind speed 1 m/s.

MECHANICAL DATA

Specification	Data
Cell Type	TOPCon cells
Cell Arrangement	132 [2 x (11 x 6)]
Dimensions	2382 × 1134 × 40 mm (93.8 × 44.6 × 1.57 in)
Weight	33.4 kg (73.6 lbs)
Front Glass	2.0 mm heat strengthened glass with anti-reflective coating
Back Glass	2.0 mm heat strengthened glass
Frame	Anodized aluminium alloy
J-Box	IP68, 3 bypass diodes
Cable	4.0 mm ² (IEC), 12 AWG (UL)
Cable Length (Including Connector)	300 mm (11.8 in) (+) / 200 mm (7.9 in) (-) or customized length*
Connector	T6 or MC4-EVO2 or MC4-EVO2A
Per Pallet	27 pieces
Per Container (40' HQ)	540 pieces or 486 pieces (only for US & Canada)

* For detailed information, please contact your local Canadian Solar sales and technical representatives.

TEMPERATURE CHARACTERISTICS

Specification	Data
Temperature Coefficient (Pmax)	-0.29 % / °C
Temperature Coefficient (Voc)	-0.25 % / °C
Temperature Coefficient (Isc)	0.045 % / °C
Nominal Module Operating Temperature	41 ± 3°C

PARTNER SECTION



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