

## OWNER & DESIGN TEAM INFORMATION

**OWNER:**  
CFP IL BLUESTEM SOLAR LLC  
2303 WYCLIFF, SUITE 300  
ST. PAUL, MN 55114

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215-932-2559  
glanoc@cleanfieldpower.com

**CONTRACTOR:**  
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NAPERVILLE, IL 60565

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**ELECTRICAL ENGINEER:**  
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ELK GROVE VILLAGE, IL 60007

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**CIVIL ENGINEER:**  
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# BLUESTEM SOLAR

AURORA, KANE COUNTY, IL  
ELECTRICAL ENGINEERING PLANS

The map shows a large, irregularly shaped green field area outlined in black, representing the solar site. A red dot on the eastern edge of this field is labeled 'SITE LOCATION'. The field is bordered by 'Prairie St' to the north and 'Gold St' to the east. To the southeast, there is a residential area with a street labeled 'Chicago Goldendoodles'. A scale bar at the bottom indicates a distance of 1 mile.

DESIGN CODES AND STANDARDS		DRAWING INDEX			
NFPA 70 - 2014 - NATIONAL ELECTRICAL CODE (NEC) NFPA 70E - 2014 - STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE  IBC 2015 - INTERNATIONAL BUILDING CODE IFC 2015 - INTERNATIONAL FIRE CODE ILLINOIS URBAN MANUAL  AIMA - AGRICULTURAL IMPACT MITIGATION AGREEMENT		SHEET #	NAME	ISSUANCE	DATE
		PV-001	TITLE SHEET	30% DESIGN SET	09/17/2025
		PV-002	SYMBOLS & ABBREVIATIONS	30% DESIGN SET	09/17/2025
		PV-003	GENERAL NOTES	30% DESIGN SET	09/17/2025
		PV-101	SITE PLAN	30% DESIGN SET	09/17/2025
		PV-201	SOLAR LAYOUT SYSTEM - 1	30% DESIGN SET	09/17/2025
		PV-202	SOLAR LAYOUT SYSTEM - 2	30% DESIGN SET	09/17/2025
		PV-203	SOLAR LAYOUT SYSTEM - 3	30% DESIGN SET	09/17/2025
		PV-301	SINGLE LINE DIAGRAM - SYSTEM-1	30% DESIGN SET	09/17/2025

DESIGN CODES AND STANDARDS	
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NFPA 70E - 2014	- STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE
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IFC 2015	- INTERNATIONAL FIRE CODE ILLINOIS URBAN MANUAL
AIMA	- AGRICULTURAL IMPACT MITIGATION AGREEMENT

DRAWING INDEX			
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PV-003	GENERAL NOTES	30% DESIGN SET	09/17/2025
PV-101	SITE PLAN	30% DESIGN SET	09/17/2025
PV-201	SOLAR LAYOUT SYSTEM - 1	30% DESIGN SET	09/17/2025
PV-202	SOLAR LAYOUT SYSTEM - 2	30% DESIGN SET	09/17/2025
PV-203	SOLAR LAYOUT SYSTEM - 3	30% DESIGN SET	09/17/2025
PV-301	SINGLE LINE DIAGRAM - SYSTEM-1	30% DESIGN SET	09/17/2025
PV-302	SINGLE LINE DIAGRAM - SYSTEM-2	30% DESIGN SET	09/17/2025
PV-303	SINGLE LINE DIAGRAM - SYSTEM-3	30% DESIGN SET	09/17/2025
PV-304	SCHEDULES	30% DESIGN SET	09/17/2025
PV-401	DETAILS (1 of 3)	30% DESIGN SET	09/17/2025
PV-402	DETAILS (2 of 3)	30% DESIGN SET	09/17/2025
PV-403	DETAILS (3 OF 3)	30% DESIGN SET	09/17/2025
PV-501	SIGNAGE	30% DESIGN SET	09/17/2025
PV-601	EQUIPMENT SPEC SHEETS	30% DESIGN SET	09/17/2025

# PROJECT INFORMATION

THREE (3) COMMUNITY SOLAR FACILITIES ARE PLANNED FOR DEVELOPMENT ON THE PROPERTY

- COMBINED TOTAL CAPACITY (DC) - **21.111 MWDC**
- COMBINED TOTAL CAPACITY (AC) - **15 MWAC**
- CAPACITY PER SYSTEM (DC) - **7.037 MWDC**
- CAPACITY PER SYSTEM (AC) - **5 MWAC**
- LOCATED WITHIN AN AREA CURRENTLY USED FOR AGRICULTURE.

**PROJECT OVERVIEW**

TOTAL PROPERTY AREA	-	~138.94 ACRES
SOLAR FOOTPRINT	-	~77.72 ACRES

**INTERCONNECTION**

ALL SYSTEMS WILL CONNECT TO COMED'S DISTRIBUTION GRID

**ABP / ILLINOIS SHINES**

SYSTEM 3 WILL BE DEVELOPED UNDER THE ILLINOIS POWER AGENCY'S 2022 LONG-TERM RENEWABLE RESOURCES PROCUREMENT PLAN (ILLINOIS SHINES)

**NON-ABP / ILLINOIS SHINES**

SYSTEMS 1 AND 2 WILL FOLLOW THE SAME DESIGN AND CONSTRUCTION APPROACH BUT ARE NOT ENROLLED IN THE ILLINOIS SHINES PROGRAM

**POST-CONSTRUCTION LAND USE**

NON SOLAR AREAS OUTSIDE OF FENCE LINE WILL CONTINUE TO BE FARMED. AFTER SOLAR PANEL ARE IN PLACE, THE PROJECT WILL BE LANDSCAPED AS NATIVE PRAIRIE AND POLLINATOR HABITAT.

SYSTEM INFORMATION						
SITE COMBINED SIZE - DC 21112 kW				SITE COMBINED SIZE - AC 15000 kW		
INVERTERS						
POWER	QTY	MANUFACTURER	MODEL	AC VOLTAGE	DC VOLTAGE	
250 kW	60	SOI ECO2RIA	XGI 1500-250	600 V	1500 V	

MODULES & STRINGS					
SIZE	MANUFACTURER	MODEL	QTY	STRING SIZE	APPROX. # OF STRINGS
540 W	WAAREE	Bl-55-540	30096	24	1629
TRANSFORMERS					
QTY	KVA (EACH)	SECONDARY VOLTAGE	PRIMARY VOLTAGE (POI)		
6	2500	600 V	34500 V		
RACKING					
CCR	RITCH	RACKING TYPE	MODULE ORIENTATION		

43.9	17" - 5 1/2"	SINGLE AXIS TRACKER	MODULO ENTENATION POTRAIT
WEATHER INFO			
ASHRAE 0.4% AVG HIGH TEMP	ASHRAE MIN EXTREME TEMP	ASHRAE WEATHER STATION	
32.5°C	-26.5°C	AURORA MUNICIPAL, IL, WMO:744655	


**IMPORTANT! CALL BEFORE YOU DIG**

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CONTRACTOR SHALL CONTACT THE APPROPRIATE ORGANIZATIONS BEFORE STARTING ANY CONSTRUCTION ACTIVITIES TO OBTAIN UTILITY INFORMATION AND HAVE EXISTING UTILITIES LOCATED IN THE FIELD. CONSTRUCTION ACTIVITIES WITHIN ANY GIVEN AREA MAY NOT PROCEED UNTIL THAT AREA HAS BEEN CHECKED AND MARKED FOR UTILITIES BY ALL APPROPRIATE ORGANIZATIONS.

- JULIE [juliebeforeyoudig.com](mailto:juliebeforeyoudig.com)

SITE COMBINED SIZE - DC				SITE COMBINED SIZE - AC			
21112 kW				15000 kW			
INVERTERS							
POWER	QTY	MANUFACTURER		MODEL	AC VOLTAGE	DC VOLTAGE	
250 kW	60	SOLECTRIA		XGI 1500-250	600 V	1500 V	
MODULES & STRINGS							
SIZE	MANUFACTURER		MODEL	QTY	STRING SIZE	APPROX. # OF STRINGS	
430 W	WAAREE		BI-55-540	30906	24	1629	
TRANSFORMERS							
QTY	KVA (EACH)		SECONDARY VOLTAGE		PRIMARY VOLTAGE (POI)		
6	2500		600 V		34500 V		
RACKING							
GCR	PITCH		RACKING TYPE		MODULE ORIENTATION		
43.9	17° - 5 1/2"		SINGLE AXIS TRACKER		POTRAIT		
WEATHER INFO							
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SIZE	MANUFACTURER	MODEL	QTY	STRING SIZE	APPROX. # OF STRINGS
540 W	WAAREE	B-55-540	30096	24	1629
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RACKING			
GCR 43.9	PITCH 17° - 5 1/2"	RACKING TYPE SINGLE AXIS TRACKER	MODULE ORIENTATION POTRAIT
WEATHER INFO			
ASHRAE 0.4% AVG HIGH TEMP 32.5°C	ASHRAE MIN EXTREME TEMP -26.5°C	ASHRAE WEATHER STATION AURORA MUNICIPAL, IL, WMO:744655	

CONTRACTOR SHALL CONTACT THE APPROPRIATE ORGANIZATIONS BEFORE STARTING ANY CONSTRUCTION ACTIVITIES TO OBTAIN UTILITY INFORMATION AND HAVE EXISTING UTILITIES LOCATED IN THE FIELD. CONSTRUCTION ACTIVITIES WITHIN ANY GIVEN AREA MAY NOT PROCEED UNTIL THAT AREA HAS BEEN CHECKED AND MARKED FOR UTILITIES BY ALL APPROPRIATE ORGANIZATIONS.

- JULIE.JULIEBEFOREYOU.DIG.COM
- AHJ's BUILDING & ZONING DEPARTMENT

CONTRACTOR SHALL CONTACT THE APPROPRIATE ORGANIZATIONS AT LEAST TWO (2) WORKING DAYS BEFORE STARTING ANY CONSTRUCTION ACTIVITIES TO ARRANGE FOR CONSTRUCTION INSPECTIONS. THE CONTRACTOR SHALL ALSO MAKE ARRANGEMENTS AND PROVIDE NOTIFICATIONS FOR INSPECTIONS DURING THE COURSE OF CONSTRUCTION AS REQUIRED BY THE THE AHJ's BUILDING & ZONING DEPARTMENT.

MUNICIPALITY APPROVAL STAMP



**CLEAN FIELD  
POWER**

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184.008367-0002

  
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BLUESTEM SOLAR

[illegible]

SEAL:

**NOT FOR  
CONSTRUCTION**

DATE: 09/12/2025

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TITLE:

TITLE SHEET

PROJECT #: IW-101

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SHEET: PV-001



SYMBOLS		DESCRIPTION	
	POWER DISTRIBUTION PANELBOARD		POTENTIAL TRANSFORMER
	CONTROL PANEL		POTENTIAL TRANSFORMER, # = NUMBER OF PTs
	MOTOR CONTROL CENTER		POTENTIAL TRANSFORMERS WITH POLARITY MARKS
	CAPACITOR		CURRENT TRANSFORMER
	FUSE		CURRENT TRANSFORMER, # = NUMBER OF CTs
	GROUND SYMBOL		CURRENT TRANSFORMERS WITH POLARITY MARKS
	LOW VOLTAGE CIRCUIT BREAKER <1500V AC/DC		BUSHING TYPE CURRENT TRANSFORMERS
	MED. VOLTAGE CIRCUIT BREAKER Fxxx — DENOTES FEEDER BREAKER Uxxx — DENOTES UTILITY BREAKER Txxx — DENOTES TRANSFORMER BREAKER Gxxx — DENOTES GENERATOR BREAKER BTxx — DENOTES BUS TIE BREAKER "XX" DENOTES BUSSES BEND TIED		CIRCUIT BREAKER WITH THERMAL OVERLOAD  AF = FRAME AMP RATING  AT = AMP TRIP RATING
	NORMALLY OPEN DISCONNECT SWITCH		CIRCUIT BREAKER WITH MAGNETIC OVERLOAD  AF = FRAME AMP RATING  AT = AMP TRIP RATING
	NORMALLY OPEN FUSED DISCONNECT		DRAWOUT CIRCUIT BREAKER  AF = FRAME AMP RATING  AT = AMP TRIP RATING
	SEPARABLE DISCONNECTS, DRAWOUTS		FUSED DISCONNECT  AT = AMP RATING
	NORMALLY CLOSED CONTACT		FUSED CUT-OUT DISCONNECT  AT = AMP RATING
	CLOSE CIRCUIT		POWER CIRCUIT BREAKER WITH OVERCURRENT PROTECTION
	TRIP CIRCUIT		RECLOSER # = A FOR AIR      ---A--- KV V FOR OIL      ---A--- INT CAP FOR VACUUM      ---W--- BIL FOR GAS          MFR - TYPE
	TRANSFORMER WITH DELTA/WYE WIRING CONVENTION		TEST SWITCH (CURRENT SHORTING)
	TRANSFORMER WITH WYE/WYE WIRING CONVENTION		TEST SWITCH (POTENTIAL OR ISOLATION)
	AC WIRING		GROUND
	MOTOR OUTLET, HORSEPOWER AS NOTED		GROUND ROD
	MOTOR STARTER		GROUND W/GROUND ROD
	RELAY		GROUND TEST WELL WITH GROUND ROD
	MEDIUM VOLTAGE VACUUM FAULT INTERRUPTER		
	PHASE RELAY		
	CAPACITOR TRIP		
	UTILITY POLE		
	SWITCHGEAR		
	TRANSFORMER		
	PRIMARY METER		
	RECLOSER		
	SOLAR PANEL		
	OPTIMIZER		
	INVERTER		

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT.

ELECTRICAL ABBREVIATIONS					
ABBREV	DESCRIPTION	ABBREV	DESCRIPTION	ABBREV	DESCRIPTION
A	AMPERE	FAAP	FIRE ALARM ANNUNCIATOR PANEL	O/H	OVERHEAD
AC	ALTERNATING CURRENT	FACP	FIRE ALARM CONTROL PANEL	OL	OVERLOAD
A/C	AIR CONDITIONING	FB	FLOORBOX	OPT	OPTIMIZER
ACL	ACROSS THE LINE	FBO	FURNISHED BY OTHERS	P	POLE
ACS	AUXILIARY CONTACTS	FCU	FAN COIL UNIT	PA	PUBLIC ADDRESS
AF	FUSED AMPS	FDC	FIRE DEPARTMENT CONNECTION	PB	PULL BOX
AFCI	ARC FAULT CIRCUIT INTERRUPTER	FDR	FEEDER	PF	POWER FACTOR
AFF	ABOVE FINISHED FLOOR	FIXT	FIXTURE	PH	PHASE
AHJ	AUTHORITY/HAVING JURISDICTION	FLA	FULL LOAD AMPS	PNL	PANEL
AHU	AIR HANDLING UNIT	FLR	FLOOR	PR	PAIR
AI	ANALOG INPUT	FLUOR	FLUORESCENT	PRI	PRIMARY
AIC	AMPERES INTERRUPTING CAPACITY	FPB	FAN POWERED BOX	PROT	PROTECTION/PROTECTIVE
AL	ALUMINUM	FPC	FIRE PUMP CONTROLLER	PRV	POWER ROOF VENTILATOR
ALM	ALARM	F.S.	FUSED SWITCH	PT	POTENTIAL TRANSFORMER
AMP	AMPERE	FT	FOOT/FEET	PWR	POWER
ANN	ANNUNCIATOR	FU	FUSE		
A0	ANALOG OUTPUT	FVNR	FULL VOLTAGE, NON REVERSING (MAGNETIC STARTER)		
ARCH	ARCHITECT, ARCHITECTURAL	G	GROUND	R	RESISTANCE
AS	SWITCH AMPS	GEN	GENERATOR	RC	REMOTE CONTROL
AT	AMPS TRIP	GFI	GROUND FAULT INTERRUPTER	RECP	RECEPTACLE
ATS	AUTOMATIC TRANSFER SWITCH	GFP	GROUND FAULT PROTECTION	REQ'D	REQUIRED
AVG	AVERAGE	GHW	GALVANIZED HEAVY STEEL CONDUIT	RLP	RELAY LIGHTING PANEL
AWG	AMERICAN WIRE GAUGE	GRS	GALVANIZED RIGID STEEL CONDUIT	RT	RAINTIGHT
				S	SWITCH
BAL	BALLAST	H	HEIGHT-MOUNTED ABOVE COUNTER	SC	SHORT CIRCUIT
BAS	BUILDING AUTOMATION SYSTEM	HOA	HAND-OFF-AUTO	SE	SWITCH EMERGENCY
BFC	BELOW FINISHED CEILING	HP	HORSE POWER	SEC	SECONDARY
BGB	BUILDING GROUND BOX	HPS	HIGH PRESSURE SODIUM	SF	SQUARE FOOT/FEET
BHP	BRAKE HORSEPOWER	HR	HOUR	SGR	SINGLE GROUNDED RECEPTACLE
BMNT	BASEMENT	HV	HIGH VOLTAGE	SP	SINGLE POLE
BPS	BOLTED PRESSURE SWITCH	HZ	HERTZ	SPD	SURGE PROTECTIVE DEVICE
BR	BRANCH			SPDT	SINGLE POLE DOUBLE THROW
BRKR	BREAKER			SPEC	SPECIFICATION
		IC	INTERRUPTING CAPACITY	SPKR	SPEAKER
C	CONDUIT	IG	ISOLATED GROUND	SPO	SPECIAL PURPOSE OUTLET
CAB	CABINET	IMC	INTERMEDIATE STEEL CONDUIT	SPST	SINGLE POLE SINGLE THROW
CAP	CAPACITY	IN	INCH(ES)	SQ FT	SQUARE FOOT/FEET
CATV	CABLE TELEVISION	INC	INCANDESCENT	SS	STAINLESS STEEL
CB	CIRCUIT BREAKER	INV	INVERTER	STA	STATION
CCT	CIRCUIT			STD	STANDARD
CCTV	CLOSED CIRCUIT TELEVISION	JB	JUNCTION BOX	SW	SWITCH
CEC	CHICAGO ELECTRIC CODE	JPC	JOCKEY PUMP CONTROLLER	SWBD	SWITCHBOARD
CLG	CEILING	KCMIL	THOUSAND CIRCULAR MILS WIRE	SWGR	SWITCHGEAR
CLO	CLOSET		CROSS SECTION AREA	SYM	SYMMETRICAL
CMB	COMBINER BOX	KO	KNOCKOUT	SYS	SYSTEM
CO	CARBON MONOXIDE DETECTOR	KVA	KILOVOLT-AMPERE		
COAX	COAXIAL	KW	KILOWATT	TTC	TERMINAL CABINET
COMED	COMMON WEALTH EDISON COMPANY	KWH	KILOWATT-HOUR	TCP	TEMP. CONTROL PANEL
CONN	CONNECTION			TEL	TELEPHONE
CONV	CONVENIENCE			TEL CL	TELEPHONE CLOSET
CP	CONTROL PANEL	LB	POUND	TEMP	TEMPERATURE
CT	CURRENT TRANSFORMER	LCP	LIGHTING CONTROL PANEL	TERM	TERMINAL
CU	COPPER	LL	LOW LIMIT RELAY	TL	TWIST LOCK
C.U.	COEFFICIENT OF UTILIZATION	LS	LOUD SPEAKER	TR	TRANSFORMER RATING (e.g. TOROIDAL)
CUH	CABINET UNIT HEATER	LTG	LIGHTING	TTC	TELEPHONE TERMINAL CABINET
		LV	LOW VOLTAGE	TV	TELEVISION
DC	DIRECT CURRENT	M	MOTOR	TX	TRANSMISSION TRANSFORMER
DGR	DUPLEX GROUNDED RECEPTACLE	MAX	MAXIMUM	TYP.	TYPICAL
DIA	DIAMETER	MC	MECHANICAL CONTRACTOR	UC	UNDER COUNTER
DISC	DISCONNECT	MCB	MAIN CIRCUIT BREAKER	UE	UNDERGROUND ELECTRICAL
DIST	DISTRIBUTION	MCC	MOTOR CONTROL CENTER	UG	UNDERGROUND
DER.	DISTRIBUTED ENERGY RESOURCES	MCP	MAXIMUM CIRCUIT PROTECTION	UH	UNIT HEATER
DIV	DIVISION	MDF	MAIN DISTRIBUTION FRAME	UL	UNDERWRITER'S LABORATORY
DN	DOWN	MECH	MECHANICAL	UNO	UNLESS NOTED OTHERWISE
DO	DRAWOUT	MED	MEDIUM	UPS	UNINTERRUPTIBLE POWER SOURCE
DPDT	DOUBLE POLE DOUBLE THROW	MERC	MERCURY VAPOR		
DPST	DOUBLE POLE SINGLE THROW	MFR	MANUFACTURER	V	VOLT
DS	DISCONNECT SWITCH	MH	MANHOLE	VA	VOLT—AMPERE
DT	DUST TIGHT	MIN	MINIMUM	VDC	DC VOLTAGE
DWG	DRAWING	MLO	MAIN LUGS ONLY	VDT	VIDEO DISPLAY TERMINAL
		MOCP	MAX OVER CURRENT PROTECTION	VERT	VERTICAL
E	EXISTING TO REMAIN	MSB	MAIN SWITCHBOARD	VFD	VARIABLE FREQUENCY DRIVE
EC	ELECTRICAL CONTRACTOR	MTD	MOUNTED	VIF	VERIFY IN FIELD
EF	EXHAUST FAN	MTR	MOTOR	VOL	VOLUME
ELEC	ELECTRIC	MV	MULTI-VAPOR	VP	VAPOR PROOF
EM	EMERGENCY	N	NEUTRAL	VT	VAPOR TIGHT
EMT	ELECTRIC METALLIC TUBING	N/A	NOT APPLICABLE		
EP	EXPLOSION PROOF	NC	NORMALLY CLOSED	W	WATT
EPO	EMERGENCY POWER OFF DEVICE	NEC	NATIONAL ELECTRIC CODE	W/	WITH

NOTE: ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT.

MUNICIPALITY APPROVAL STAMP

CLIENT: \_\_\_\_\_



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MAHWAH, NJ 07430

CONTRACTOR: \_\_\_\_\_



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PROFESSIONAL DESIGN FIRM #  
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DESIGN FIRM NO. 184.008857-0002



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sme-engineers.com

PROJECT NAME:

BLUESTEM SOLAR

LOCATION:

41°45'08.6"N 88°24'16.0"W  
AURORA, KANE COUNTY, IL

[illegible]

SEAL:

SEAL:

**NOT FOR  
CONSTRUCTION**

DATE: 09/12/2025

TITLE:

## SYMBOLS & ABBREVIATIONS

PROJECT #:

IW-101

SHEET:

PV-002



## GENERAL NOTES

<p>1. <b>THE CONTRACTOR SHALL:</b></p> <p>A. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS REQUIRED FOR THE COMPLETE EXECUTION OF THE ELECTRICAL WORK AS SHOWN ON THE DRAWINGS.</p> <p>B. PROVIDE ALL ADDITIONAL WORK NOT SPECIFICALLY SHOWN OR SPECIFIED YET REQUIRED TO ENSURE PROPER AND COMPLETE OPERATION OF ALL SYSTEMS, TO SATISFY THE DESIGN INTENT, AND TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS.</p> <p>C. MAJOR LABOR IS PERFORMED BY EXPERIENCED PERSONS OF THE PROPER TRADE. ALL WORKMANSHIP SHALL BE FIRST CLASS, AND SHALL BE IN COMPLIANCE WITH THE SPECIFIC REQUIREMENTS OF THE CONTRACT DRAWINGS, AS WELL AS ALL APPLICABLE SAFETY CODES AND STANDARDS.</p> <p>D. NOTIFY THE ENGINEER IN WRITING OF ALL DRAWING DISCREPANCIES PRIOR TO SUBMISSION OF BIDS.</p> <p>E. PERFORM ALL WORK IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE CODES INDICATED ON PV-001, AS WELL AS THE FOLLOWING:</p> <p>a. ALL LOCAL CODES, ORDINANCES, REGULATIONS;</p> <p>b. THE AUTHORITY HAVING JURISDICTION.</p> <p>F. ENSURE ALL MATERIALS PROVIDED ARE NEW, FREE OF DEFECTS, AND ARE UL LISTED FOR THE INTENDED APPLICATION, ALL ELECTRICAL MATERIALS, INSTALLATION AND SYSTEMS SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS, INCLUDING THE LATEST ADDENDA AND AMENDMENTS:</p> <p>a. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)</p> <p>b. ELECTRONIC INDUSTRY ASSOCIATION (EIA)</p> <p>c. INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE)</p> <p>d. NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION, (NECA)</p> <p>e. NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)</p> <p>f. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)</p> <p>g. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)</p> <p>h. TELECOMMUNICATION INDUSTRY ASSOCIATION (TIA)</p> <p>i. UNDERWRITER'S LABORATORIES, INC. (UL)</p> <p>G. ENSURE THE ELECTRICAL DRAWINGS ARE NOT TO BE SCALED, CONTRACTOR SHALL TAKE MEASUREMENTS AND MAKE LAYOUTS AS REQUIRED FOR THE PROPER INSTALLATION AND COMPLETION OF THE WORK WHERE SPECIFIC DETAILS AND DIMENSIONS ARE NOT SHOWN ON THE DRAWINGS.</p> <p>H. OBTAIN ALL NECESSARY PERMITS, ARRANGE ALL REQUIRED INSPECTIONS, AND PAY ALL FEES AND CHARGES INCIDENTAL THERE TO.</p> <p>I. INSPECT SITE FOR FIELD VERIFICATION OF ALL ASPECTS OF THE PROJECT PRIOR TO BIDDING. SUBMISSION OF A BID CONSTITUTES ACCEPTANCE OF FIELD CONDITIONS.</p> <p>J. INSTALL WORK AS REQUIRED TO FIT STRUCTURE, AVOID OBSTRUCTIONS, AVOID OR PROVIDE PROTECTION IN AREAS SUBJECT TO DAMAGE, RETAIN CLEARANCE, HEADROOM, OPENINGS AND PASSAGEWAYS.</p> <p>K. INSTALL ALL MATERIALS AND EQUIPMENT AND COMPLETE ALL WORK IN A NEAT AND WORKMANLIKE MANNER, AND IN ACCORDANCE WITH BEST-IN-CLASS MODERN METHODS AND PRACTICES. ANY MATERIALS INSTALLED WHICH DO NOT PRESENT AN ORDERLY AND REASONABLY NEAT AND/OR WORKMANLIKE APPEARANCE, OR DO NOT ALLOW ADEQUATE SPACE FOR MAINTENANCE, SHALL BE REMOVED AND REPLACED WHEN SO DIRECTED BY THE ENGINEER.</p> <p>L. COMMISSION EACH ITEM OF EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, OR WHERE NOTED UNDER EQUIPMENT SPECIFICATION, COMMISSIONING SHALL BE PERFORMED BY QUALIFIED MANUFACTURER'S REPRESENTATIVE.</p> <p>M. THE CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS, LOCATION OF SWITCHES, PANELBOARDS, CONDUITS, AND OTHER WORK. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND LOCATIONS PRIOR TO INSTALLATION OF WORK.</p> <p>N. THE ELECTRICAL CIRCUITS, COMPONENTS, AND CONTROLS ARE SELECTED AND SIZED FOR THE EQUIPMENT SPECIFIED AND OR SHOWN, IF SUBSTITUTIONS AND/OR EQUIVALENT EQUIPMENT ARE FURNISHED, IT SHALL BE THE RESPONSIBILITIES OF ALL PARTIES CONCERNED, INVOLVED IN AND FURNISHING THE SUBSTITUTE AND/OR EQUIVALENT EQUIPMENT TO VERIFY AND COMPARE THE ELECTRICAL CHARACTERISTICS OF THAT FURNISHED TO THAT SHOWN.</p> <p>O. FIELD COORDINATE EXACT ELECTRICAL CONNECTION POINTS TO EQUIPMENT PRIOR TO ROUGH IN OF ELECTRICAL COMPONENTS.</p> <p>P. FIELD COORDINATE EXACT ROUTING OF CONDUIT, SPECIFIED CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY.</p> <p>Q. FURNISH AND INSTALL ALL RACEWAYS, BOXES, ENCLOSURES, AND CABINETS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.</p> <p>R. FURNISH AND INSTALL ALL CHANNEL AND ANGLE SUPPORTING SYSTEMS, HANGERS, ANCHORS, SLEEVES, BRACKETS, FABRICATED ITEMS, AND HARDWARE AS REQUIRED TO PROVIDE SECURE SUPPORT, PER NATIONAL ELECTRICAL CODE. SEE STRUCTURAL DRAWINGS FOR FOUNDATIONS AND EQUIPMENT SUPPORT AND RACKS.</p> <p>S. ALL CONNECTIONS OF DISSIMILAR METALS SHALL BE MADE TO MINIMIZE GALVANIC ACTION, CORROSION OR ELECTROLYSIS. ALL CONNECTORS, CONNECTION HARDWARE, CONDUCTORS, AND CONNECTION METHODS SHALL ENSURE THAT METALS IN DIRECT CONTACT ARE GALVANICALLY COMPATIBLE.</p> <p>T. AFTER INSTALLATION OF ALL CONDUCTORS, CONTRACTOR SHALL COMPLETELY SEAL OFF ALL CONDUIT ENDS TO PREVENT THE POSSIBILITY OF ANY MOISTURE FROM ENTERING ANY ELECTRICAL ENCLOSURE, ALL USED AND UNUSED OPENINGS IN ALL EQUIPMENT, BOXES, AND ENCLOSURES SHALL BE SEALED WEATHERTIGHT WITH A MATERIAL THAT WILL ALSO PREVENT INSECT INFILTRATION.</p>	<p>5. <b>ENCLOSURES:</b></p> <p>A. ALL ELECTRICAL EQUIPMENT ENCLOSURES SHALL BE SPECIFIED AND INSTALLED IN ACCORDANCE WITH NEMA STANDARDS AND TYPE NUMBER AND SHALL BE SUITABLE FOR THE LOCATION CONDITIONS.</p> <p>B. ALL EXTERIOR ELECTRICAL EQUIPMENT ENCLOSURES SHALL BE MIN TYPE NEMA 3R OR 4. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SWITCHBOARDS, DISTRIBUTION PANELS, CONTROL CABINETS, PULL BOXES, JUNCTION BOXES, DISCONNECT SWITCHES, COMBINER BOXES, WIREWAYS, ETC.</p> <p>C. ALL ENCLOSURES SHALL BE PROVIDED WITH PADLOCKING PROVISIONS OR EQUIVALENT.</p> <p>D. ALL SOLAR PHOTOVOLTAIC MODULES AND OTHER MATERIALS ENCLOSURES, INCLUDING LARGE CONTRACTOR INSTALLED ELECTRICAL EQUIPMENT (INCLUDING SWITCHBOARDS, DISTRIBUTION PANELS, CONTROL CABINETS, PULL BOXES, JUNCTION BOXES, COMBINER BOXES, AND INVERTERS) SHALL BE ENTIRELY AS ABOVE THE EQUIPMENT ELEVATION UNLESS OTHERWISE NOTED OTHERWISE APPROVED BY OWNER. CONTRACTOR SHALL PROVIDE SAFE EGRESS IN COMPLIANCE WITH OSHA AND CUSTOMER STANDARDS TO ALLOW FOR ACCESS TO SUCH EQUIPMENT ENCLOSURES FOR OPERATIONS AND MAINTENANCE RESPONSIBILITIES. SUCH EGRESS FEATURES SHALL INCLUDE BUT NOT BE LIMITED TO STAIRS, LADDERS, HANDRAILS, TIE-OFF POINTS, ETC.</p> <p>6. <b>AC SYSTEM WIRING:</b></p> <p>A. ALL CONDUCTORS, LUGS AND CABLE ACCESSORIES SHALL BE NRTL LISTED TO APPLICABLE UL STANDARDS.</p> <p>B. ALL LOW VOLTAGE AC WIRING SHALL UTILIZE COPPER CONDUCTORS WITH INSULATING AND INSULATION LEVELS AS NOTED ON THE PLANS.</p> <p>C. ALL AC WIRING RATINGS TO BE AS PER THE AC CABLE SCHEDULE ON THE PLANS.</p> <p>D. ALL MEDIUM VOLTAGE AC WIRE SHALL BE ALUMINUM 15KV, MV105, 13370, 100% CONCENTRIC COPPER NEUTRAL, TRXLP OR EPR OR URO RATED FOR DIRECT BURIAL BELOW GROUND AND INSTALLED IN PVC80 CONDUIT WHEN BURIED IN TRENCH PREFER TO PLANS FOR SPECIFIC DETAILS IF AN UNDERGROUND CABLE RUN IS TO BE CONCRETE ENCASED.</p> <p>E. ALL CONDUCTORS INSTALLED BELOW THE EQUIPMENT ELEVATION (AND THEREFORE INCLUDES CONDUCTORS BELOW GRADE) MUST BE LISTED FOR USE IN WET LOCATIONS (PER NEC AND UL DEFINITIONS, INCLUDING SUBMERSION), AND BE OF A CORROSION RESISTANT DESIGN. ALL UNDERGROUND WIRING SHALL BE IN PVC80 CONDUIT AND BE CONCRETE ENCASED WHERE SPECIFIED ON THE PLANS.</p> <p>F. ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH CURRENT NEC CODE REQUIREMENTS.</p> <p>G. CONDUCTORS SHALL HAVE INTEGRAL COLORING OR COLORED HEAT SHRINK SLEEVE AT ALL TERMINATIONS TO INDICATE GROUNDED CONDUCTORS, EQUIPMENT GROUNDING CONDUCTORS, AND AC PHASE CONDUCTORS. COLOR CODING SHALL BE AS FOLLOWS:</p> <p>H. ALL LUGS AND CONNECTORS SHALL BE 90C RATED, UL LISTED AND DESIGNATED FOR USE WITH THE CONDUCTOR BEING CONNECTED.</p> <p>I. LUGS AND CONNECTORS USED TO TRANSFER FROM COPPER TO ALUMINUM WIRE SHALL BE LISTED AND RATED FOR SUCH USE. APPLY ANTI-OXIDANT COATING MATERIAL TO ALL ALUMINUM TERMINATIONS.</p> <p>J. ALL AC POWER CONDUCTOR TERMINATIONS SHALL BE IRREVERSIBLE, DOUBLE CRIMP, LONG BARREL, TWO BOLT COMPRESSION TYPE LUGS RATED AT 90C WHERE APPROVED BY THE EQUIPMENT MANUFACTURER OR SUPPLIER, WHERE NOT POSSIBLE, SINGLE BOLT COMPRESSION LUGS MAY BE USED. MECHANICAL SET SCREW TERMINATIONS ARE APPROVED FOR EQUIPMENT TERMINATIONS WITH FACTORY INSTALLED MECHANICAL LUGS. ALL CRIMPED CONNECTIONS MUST BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. COAT CONDUCTOR WITH DIELECTRIC GREASE PRIOR TO CRIMPING.</p> <p>K. PROVIDE A MAX. OF TWO STACKABLE COMPRESSION LUGS WHEN MORE THAN ONE COMPRESSION LUG NEEDS TO BE TERMINATED AT A SINGLE SET OF BUS BAR HOLES.</p> <p>L. NO SPLICING OF ANY WIRES WITHOUT WRITTEN CONSENT OF OWNER. ALL UNDERGROUND WIRING SHALL BE CONTINUOUS WITHOUT SPLICES.</p> <p>M. ALL SINGLE PHASE POWER CIRCUITS SHALL HAVE A DEDICATED NEUTRAL. CLASS 1 AND CLASS 2 CONTROL CIRCUITS SHALL BE TYPE THHN/THWN, INSTALLED IN RACEWAY.</p> <p>O. TERMINAL SCREW TORQUE SPECS PER MANUFACTURER TO BE FOLLOWED AND WITNESSED BY QA.</p> <p>7. <b>DC SYSTEM WIRING:</b></p> <p>A. ALL CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH CURRENT NEC CODE REQUIREMENTS, INCLUDING TEMPERATURE RATING, AND OWNER SPECIFIED VOLTAGE DROP.</p> <p>B. ALL CONDUCTORS INSTALLED BELOW THE EQUIPMENT ELEVATION (AND THEREFORE INCLUDES CONDUCTORS BELOW GRADE) MUST BE LISTED FOR USE IN WET LOCATIONS (PER NEC AND UL DEFINITIONS, INCLUDING SUBMERSION), AND BE OF A CORROSION RESISTANT DESIGN.</p> <p>C. ALL DC STRING AND STRING TO INVERTERS, CONDUCTORS AND CABLES SHALL BE COPPER TYPE "PV-2", 2000VDC, 90C (WET OR DRY), W RESISTANT, COPPER WIRE, UL 4703, DC CONDUCTORS FROM DC BOXES TO INVERTERS SHALL BE ALUMINUM.</p> <p>D. FURNISH STRANDED WIRE FOR SIZES # 12 AND LARGER UNLESS OTHERWISE NOTED. MIN. CONDUCTOR SIZE SHALL BE AWG # 12. ALL STRING WIRE SHALL BE MIN. # 10 AWG.</p> <p>E. ALL WIRES AND CABLE SHALL HAVE UV RESISTANT AND OUTDOOR RATED WRAP-AROUND LAMINATING VINYL MACHINE PRINTED ID LABELS OR OTHER APPROVED LABELING METHOD INDICATING DESIGNATION AND POLARITY. CONDUCTORS SHALL HAVE INTEGRAL COLORING OR A COLORED OUTDOOR RATED HEAT SHRINK SLEEVE AT ALL TERMINATIONS TO INDICATE GROUNDED CONDUCTORS, EQUIPMENT GROUNDING CONDUCTORS AND CURRENT-CARRYING CONDUCTORS, PER NEC REQUIREMENTS AND INDUSTRY STANDARDS. COLOR CODING SHALL BE AS FOLLOWS:</p> <p>a. PV POSITIVE (+): RED</p> <p>b. PV NEGATIVE (-): BLACK</p> <p>c. GROUND: GREEN WITH STRIPE OR BARE</p> <p>F. SERIES STRING CONNECTIONS BETWEEN SOLAR PHOTOVOLTAIC MODULES SHALL BE VIA FACTORY-SUPPLIED TYPE "MC4" QUICK CONNECT CONNECTORS. FIELD INSTALLED QUICK CONNECT CONNECTORS SHALL BE OF THE SAME MAKE AND MODEL AS THOSE FACTORY SUPPLIED WITH THE MODULES. ALL MODULE CONNECTORS SHALL BE UL LISTED, NEC 680 COMPLIANT. LATCHING TYPE WITH POSITIVE LATCHING INDICATOR. CONNECTORS SHALL BE POLARIZED SUCH THAT POSITIVE AND NEGATIVE TERMINALS ARE NOT INTERCHANGEABLE.</p> <p>G. STRING WIRING SHALL BE RATED FOR DIRECT SUNLIGHT EXPOSURE. STRING WIRING SHALL BE PROPERLY SUPPORTED TO RACK AND/OR OWNER APPROVED WIRE MANAGEMENT METHOD. NYLON CABLE TIES SHALL NOT BE ALLOWED. PV CABLE CLIPS AND WIRE MANAGEMENT METHOD MUST BE APPROVED BY OWNER BEFORE INSTALLATION. ALL CABLES SHALL BE SECURED MIN. 24" ON CENTER AND 6" AT EACH END WHEN CHANGING DIRECTION. NO CABLE SHALL BE ALLOWED TO TOUCH THE SURFACE OF THE GROUND.</p> <p>H. RUN WIRING UNDERNEATH MODULE FRAMES, ALONG THE TRACKER TABLE FRAMING.</p> <p>I. STRING WIRING SHALL ENTER ENCLOSURES THROUGH CONDUIT, CORD GRIPS, OR OTHER APPROVED METHOD THAT WILL PROPERLY SEAL THE PENETRATION AND UPHOLD THE WEATHERPROOF RATING OF THE ENCLOSURE OR BOX.</p> <p>J. ON PROJECTS WITH COMBINERS, COMBINER OUTPUT FEEDERS SHALL BE ALUMINUM, WITH THERMOSET XLPE INSULATION AND JACKET MATERIALS, NON-THERMOPLASTIC INSULATION. CABLE SHALL BE 2000V RATED, WET LOCATION, 90 C OR BETTER.</p> <p>K. ALL POWER CONDUCTOR TERMINATIONS SHALL BE IRREVERSIBLE, DOUBLE CRIMP, LONG BARREL, TWO BOLT COMPRESSION TYPE LUGS RATED AT 90C WHERE APPROVED BY THE EQUIPMENT MANUFACTURER OR SUPPLIER, WHERE NOT POSSIBLE, SINGLE BOLT COMPRESSION LUGS MAY BE USED. MECHANICAL SET SCREW TERMINATIONS ARE APPROVED FOR COMBINER BOX TERMINATIONS ONLY. ALL CRIMPED CONNECTIONS MUST BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.</p> <p>L. ALL CONTROL AND INSTRUMENTATION CONDUCTORS SHALL BE TERMINATED BY CONTRACTOR.</p> <p>M. ALL LUGS AND CONNECTORS SHALL BE 90C RATED, UL LISTED AND DESIGNATED FOR USE WITH THE CONDUCTOR BEING CONNECTED.</p> <p>N. NO SPLICING OF ANY WIRES SHALL BE PERFORMED WITHOUT WRITTEN CONSENT FROM OWNER.</p> <p>O. TERMINAL SCREW TORQUE SPECS PER MANUFACTURER TO BE FOLLOWED AND WITNESSED BY QA.</p> <p>P. ALL DC WIRING INSTALLED BELOW GRADE SHALL BE RATED SUITABLE FOR DIRECT BURIAL IN PVC80 CONDUIT AND BE CONCRETE ENCASED BELOW VEHICULAR TRAVELED SURFACES.</p>	<p><b>NOTE:</b></p> <p>THESE SPECIFICATIONS ARE PROVIDED FOR GENERAL INSTALLATION AND EQUIPMENT REQUIREMENTS. REFER TO OWNER SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. SHOULD THERE BE ANY CONFLICTS BETWEEN THE SPECIFICATIONS HEREIN AND THAT OF THE OWNER, THE OWNER SPECIFICATIONS SHALL TAKE PRECEDENCE.</p> <p>8. <b>GROUNDING:</b></p> <p>A. MODULE EQUIPMENT GROUNDING CONNECTION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES AND APPLICABLE LISTINGS. MODULE FRAME GROUNDING HARDWARE SHALL BE LISTED TO UL 701 AND SPECIFIED BY MODULE MANUFACTURER AS ACCEPTABLE FOR USE WITH THE MODULE MODEL. WEBS WILL BE CONSIDERED AN ACCEPTABLE MEANS OF GROUNDING BUT</p>
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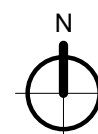
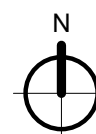
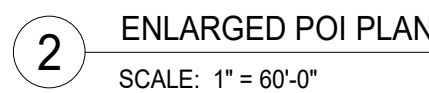
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# PV-003



GENERAL NOTE	
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2.	WETLAND, TILE DRAIN, AND OTHER SITE ENVIRONMENTAL RELATED ASPECTS ARE SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO OWNER PROVIDED STUDIES AND SURVEYS FOR EXACT INFORMATION.

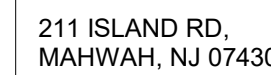
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#	KEY NOTES
1	TREES ALONG THE EAST PROPERTY LINE TO BE CLEARED. REFER TO CIVIL DWGS.
2	UTILITY POLE, SIZE, SPEC AND SPACING TO BE DETERMINED BY THE UTILITY. WORK TO BE UNDERTAKEN BY THE UTILITY; SHOWN FOR INFORMATION PURPOSES ONLY.
3	POLE LAYOUT, EQUIPMENT AND ARRANGEMENT IS TYP. FOR EACH SYSTEM. UTILITY MIN. CLEARANCE FOR ALL POLES WITH EQUIPMENT.
4	ALL POLES ARE TO BE 60' TALL AND CLASS 1.
5	MY CONDUIT FROM THE SOLAR SYSTEMS, MAINTAIN MIN. 36" COVER FROM GRADE TO TOP OF CONDUIT AND MAINTAIN 6' FROM THE EDGE OF THE ROAD TO THE FIRST CONDUIT. REFER TO DETAIL.

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- 2 DWGS.
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- 10 MV CONDUIT FROM THE SOLAR SYSTEMS, MAINTAIN MIN. 36" COVER FROM
- 11 GRADE TO TOP OF CONDUIT AND MAINTAIN 6' FROM THE EDGE OF THE ROAD
- 12 TO THE FIRST CONDUIT. REFER TO DETAIL.

CLIENT



## CONTRACTOR



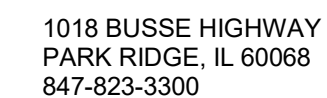
## ELECTRICAL ENGINEER:



ELK GROVE VILLAGE, IL 60007  
contact@iedesignco.com

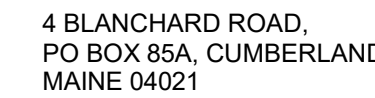
PROFESSIONAL DESIGN FIRM #  
184.008367-0002

## CIVIL ENGINEER:



4234 MERIDIAN PKWY, S  
AURORA, IL 60504

AURORA, IL 60504  
331-229-3512  
rwalker@bonoconsulting.co  
DESIGN FIRM NO. 184 008857-0002



207-829-5016  
sme-engineers.com

## PROJECT NAME:

BLUESTEM SOLAR

## LOCATION:

41°45'08.6"N 88°24'16.0"W  
AURORA, KANE COUNTY, IL

[illegible]

SEAL:



DATE: 09/12/2025

TITLE:

## SITE PLAN

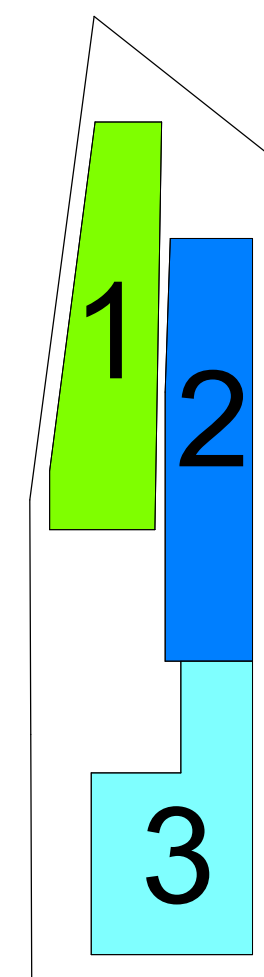
PROJECT #:

IW-101

SHEET:

# PV-101

## KEYPLAN

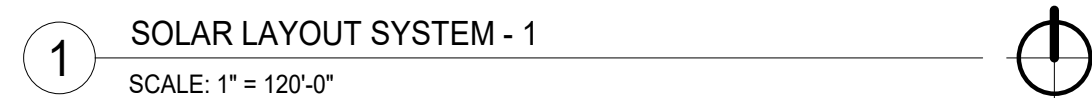




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#	KEY NOTES
1	STRUCTURAL FOUNDATION PAD FOR THE SOLAR AND ELECTRICAL EQUIPMENT
2	INSTALL EQUIPMENT ON STRUCTURAL SUPPORT. REFER TO MANUFACTURER INSTRUCTIONS.
3	MAINTAIN CLEARANCES SHOWN. TYP. OF ALL DIMENSIONS LISTED.
4	MIN. COVER: 36" FROM FINISHED GRADE TO TOP OF CONDUIT.
5	MAINTAIN 6" FROM THE EDGE OF THE ROAD TO THE FIRST CONDUIT. PROVIDE A BUFFER ZONE OF 3' STARTING FROM THE LAST CONDUIT IN THE DIRECTION AWAY FROM THE ROAD.
6	TYP. DISTANCE FROM FENCE TO ALL PANELS UNLESS NOTED OTHERWISE
7	ROW TO ROW SPACING.
8	ROW PITCH.
9	MIN CONDUIT FROM THE SOLAR SYSTEMS. MAINTAIN MIN. 36" COVER FROM GRADE TO TOP OF CONDUIT. REFER TO DETAIL.
10	CLEARANCE PROVIDED FOR TRACKER MOTOR INSTALLATION. TYPICAL OF ALL ARRAYS. FINAL REQUIREMENTS TO BE CONFIRMED BY RACKING DESIGN
11	ALL AISLEWAYS ARE TO BE TYPICAL TO THIS DIMENSION UNLESS STATED OTHERWISE.

- 1 STRUCTURAL FOUNDATION PAD FOR THE SOLAR AND ELECTRICAL EQUIPMENT.
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- 15 ARRAYS' FINAL REQUIREMENTS TO BE CONFIRMED BY RACKING DESIGN.
- 16 ALL AISLEWAYS ARE TO BE TYPICAL TO THIS DIMENSION UNLESS STATED
- 17 OTHERWISE.



DATE: 09/12/2025

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TITLE:

SOLAR LAYOUT SYSTEM -1

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PROJECT #:

IW-101

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SHEET:

# PV-201

1018 BUSSE HIGHWAY  
PARK RIDGE, IL 60068  
847-823-3300  
bbono@bonoconsulting.com  
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rwalker@bonoconsulting.com  
DESIGN FIRM NO. 184.008857-0002

4 BLANCHARD ROAD,  
PO BOX 85A, CUMBERLAND  
MAINE 04021  
207-829-5016  
sme-engineers.com

BLUESTEM SOLAR

41°45'08.6"N 88°24'16.0"W  
AURORA, KANE COUNTY, IL

[illegible]

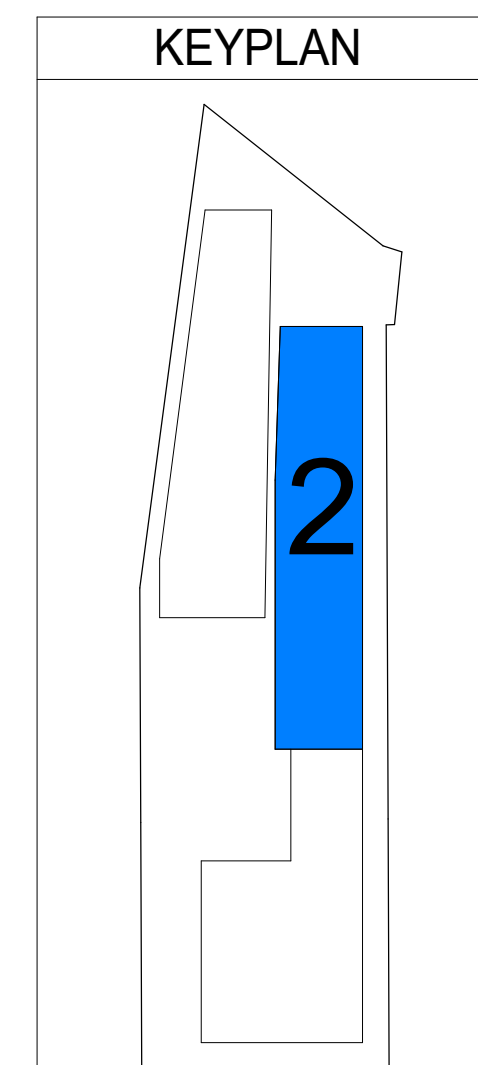
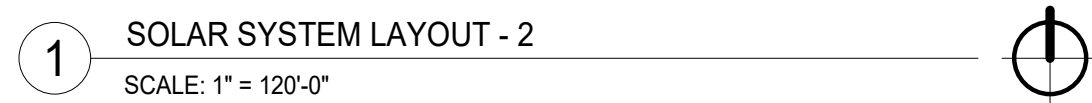
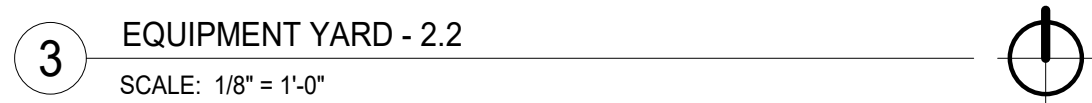
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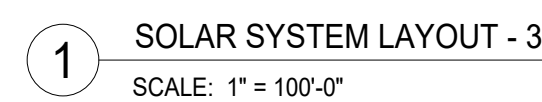
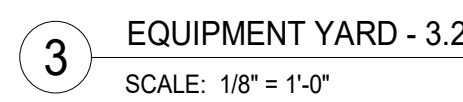
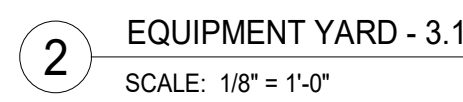
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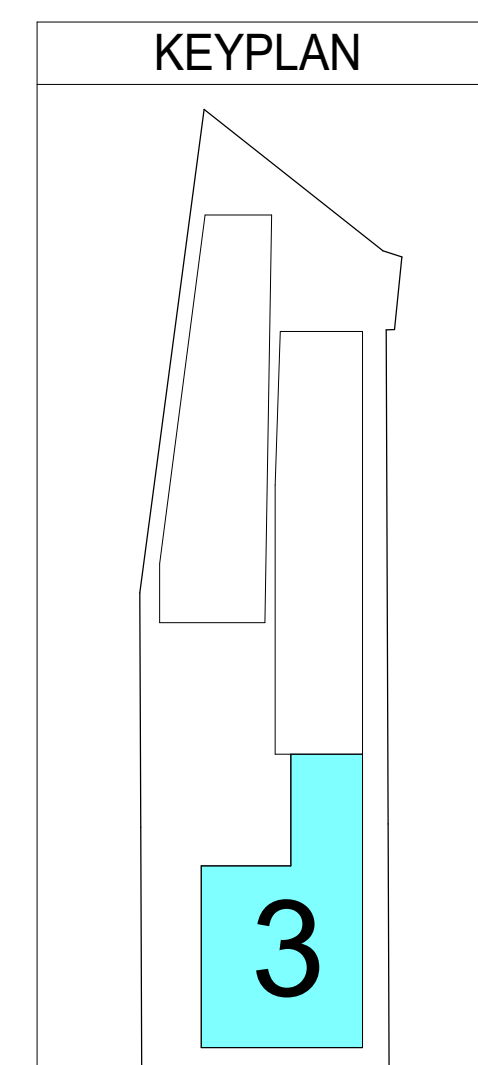
# PV-202





GENERAL NOTE	
1.	FENCING AND ACCESS ROADS ARE SHOWN FOR REFERENCE AND COORDINATION ONLY. REFER TO CIVIL DWG FOR FINAL DESIGN.
2.	WETLAND, TILE DRAIN, AND OTHER SITE ENVIRONMENTAL RELATED ASPECTS ARE SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO OWNER PROVIDED STUDIES AND SURVEYES FOR EXACT INFORMATION.

#	KEY NOTES
1	STRUCTURAL FOUNDATION PAD FOR THE SOLAR AND ELECTRICAL EQUIPMENT.
2	INSTALL EQUIPMENT ON STRUCTURAL SUPPORT. REFER TO MANUFACTURER INSTRUCTIONS.
3	MAINTAIN CLEARANCES SHOW TYP. OF ALL DIMENSIONS LISTED.
4	MIN. COVER: 36" FROM FINISHED GRADE TO TOP OF CONDUIT.
5	MAINTAIN 6" FROM THE EDGE OF THE ROAD TO THE FIRST CONDUIT. PROVIDE A BUFFER ZONE OF 3' STARTING FROM THE LAST CONDUIT IN THE DIRECTION AWAY FROM THE ROAD.
6	TYP. DISTANCE FROM FENCE TO ALL PANELS UNLESS NOTED OTHERWISE
7	ROW TO ROW SPACING.
8	ROW PITCH.
9	MIN CONDUIT FROM THE SOLAR SYSTEMS. MAINTAIN MIN. 36" COVER FROM GRADE TO TOP OF CONDUIT. REFER TO DETAIL.
10	CLEARANCE PROVIDED FOR TRACKER MOTOR INSTALLATION. TYPICAL OF ALL ARRAYS. RACKING DESIGN TO FINALIZE EXACT REQUIREMENTS.
11	ALL AISLEWAYS ARE TO BE TYPICAL TO THIS DIMENSION UNLESS STATED OTHERWISE.



MUNICIPALITY APPROVAL STAMP



211 ISLAND RD,  
MAHWAH, NJ 07430

CONTRACTOR:



NAPERVILLE, IL 60565  
contact@inwavere.com

ELECTRICAL ENGINEER:



IE DESIGN PLLC

ELK GROVE VILLAGE, IL 60007  
contact@iedesignco.com

PROFESSIONAL DESIGN FIRM #  
184.008367-0002

CIVIL ENGINEER:



1018 BUSSE HIGHWAY  
PARK RIDGE, IL 60068  
847-823-3300

bbono@bonoconsulting.com  
4234 MERIDIAN PKWY, STE 116  
AUBURN, IL 62504

AURORA, IL 60504  
331-229-3512  
rwalker@bonoconsulting.com

DESIGN FIRM NO. 184.008857-0002



4 BLANCHARD ROAD,  
PO BOX 85A, CUMBERLAND  
MAINE 04021  
207-829-5016  
sme-engineers.com

PROJECT NAME:

BLUESTEM SOLAR

LOCATION:

41°45'08.6"N 88°24'16.0"W  
AURORA, KANE COUNTY, IL

[illegible]

SEAL:

DATE: 09/12/2025

TITLE:

SOLAR LAYOUT SYSTEM - 3

PROJECT #:

IW-101

SHEET:

# PV-203









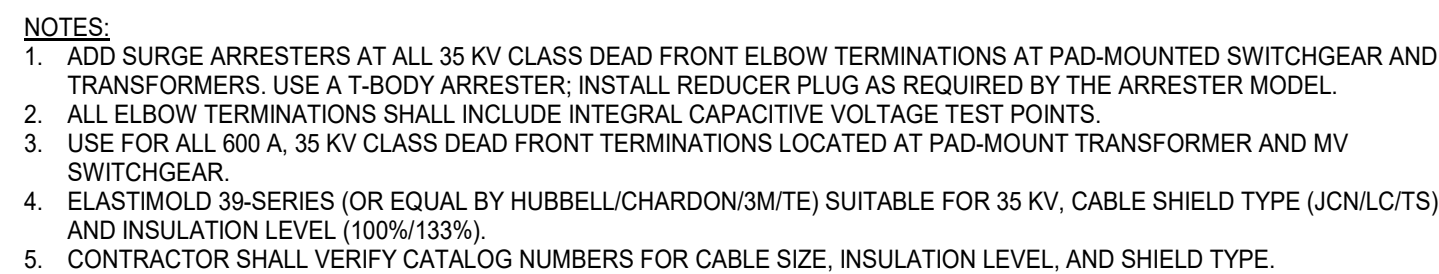






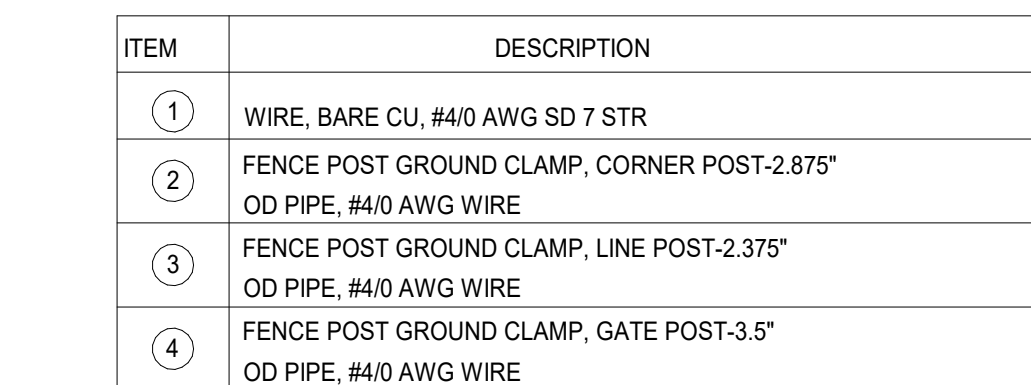
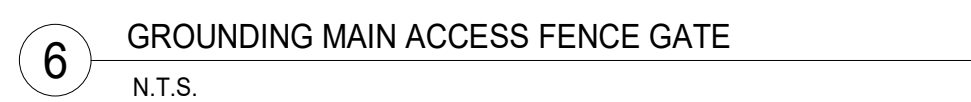
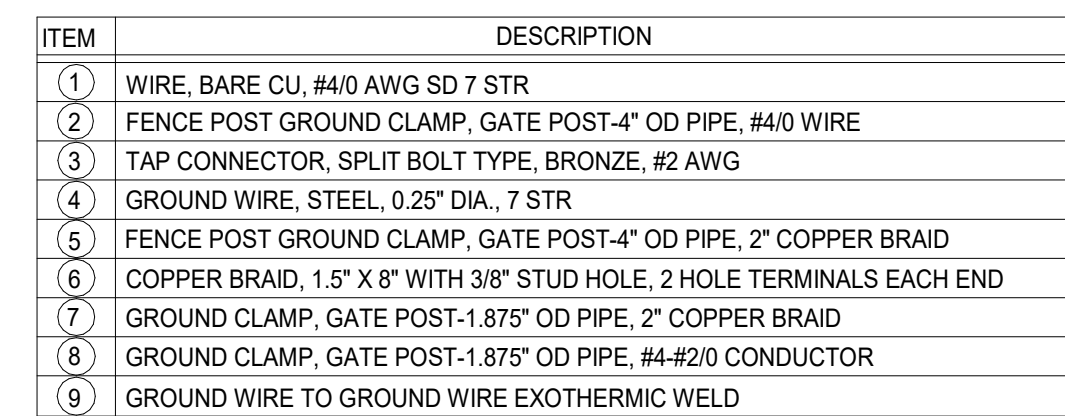
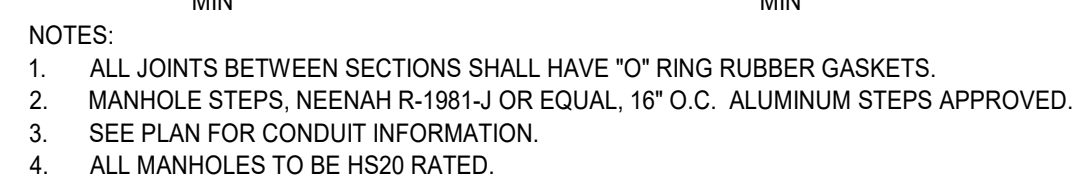
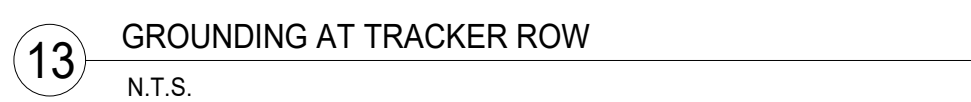
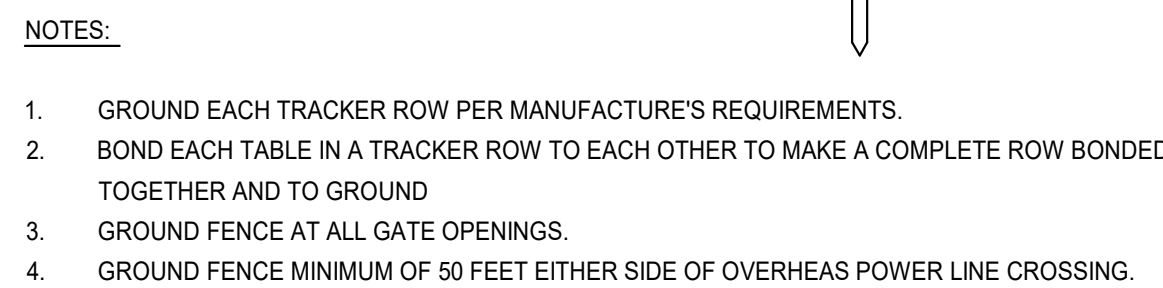
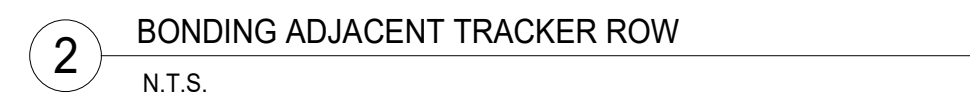
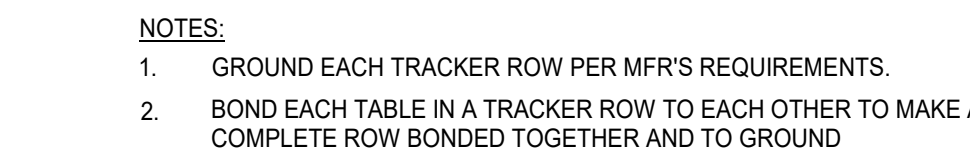
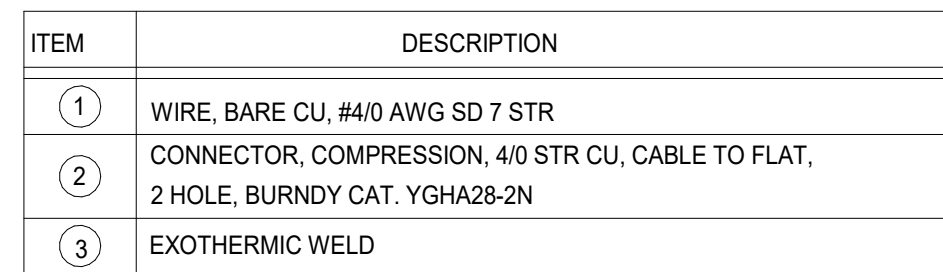
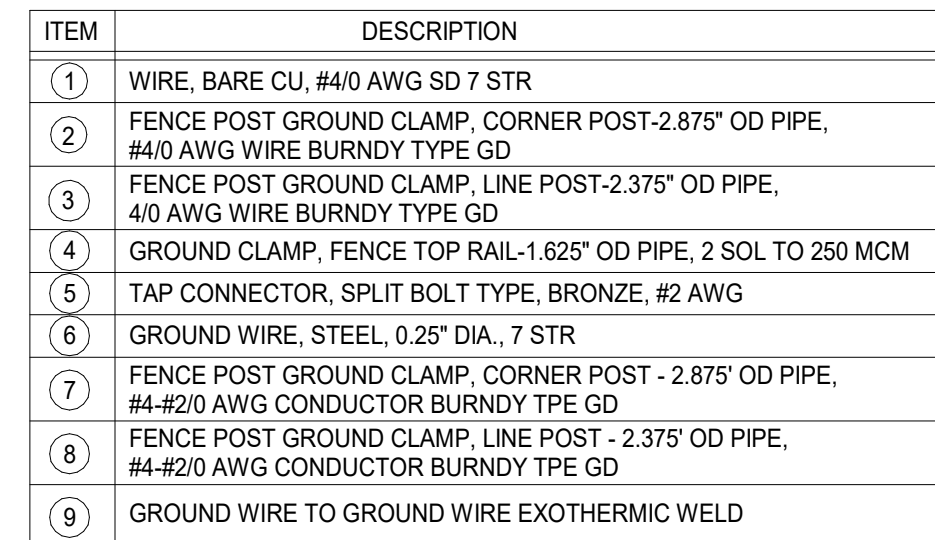
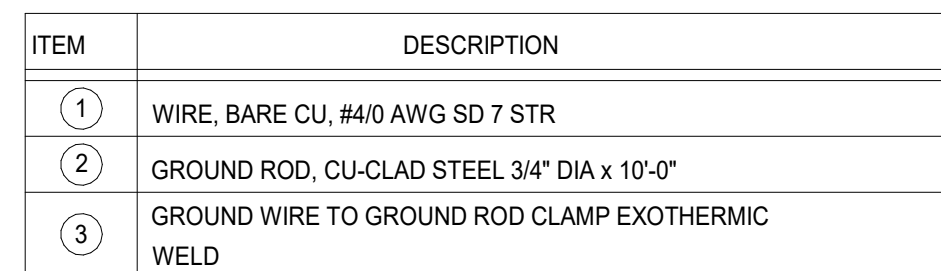
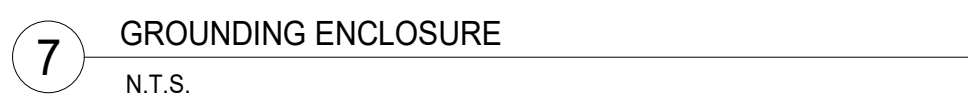
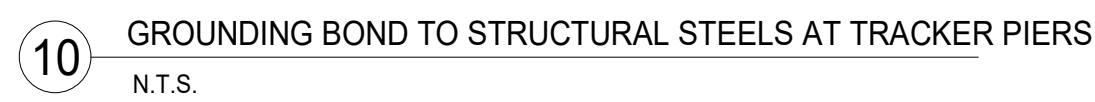
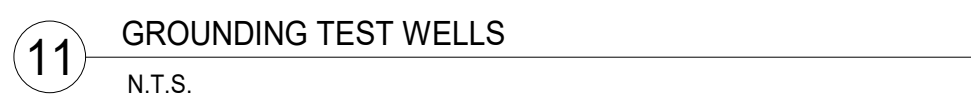






# PV-401





# PV-402











