

Menu Save Reset Cancel Help

Record Detail * (This section is required.)

Permit Type	Permit Number	Opened Date
Building/Residential/Misc/Solar Panel	B25004680	10/20/2025
Description of Work		
SFD/ Install (54) ground mounted solar panels**SUBJECT TO FIELD INSPECTION**		

Approved RLC
12/4/2025

Online BP.
8/10/23/25

[check spelling](#)

Address * (This section is required.)

Search	Reset	Clear	Get Parcel & Owner
Street #	Street Name	Street Type	
11906	HALL SHOP	RD	▼
Unit Type	Unit #	X Coordinate	Y Coordinate
-Select-	▼	-76.92444	39.18798
City	State	Zip Code	Primary
CLARKSVILLE	MD	21029	Yes ▼

Parcel * (This section is required.)

Search	Reset	Clear	Get Address & Owner			
GIS ID *	Parcel	Parcel Area	Land Value	Improved Value	Exemption Value	Plan Area
844765	360	3	296200	805100	508900	RURAL
Legal Description						
IMPSLOT 14 3.0000 A[]11906 HALL SHOP RD[]FOXPAUSE S 2 RSB LOT 2						

[check spelling](#)

Block	Lot	Census Tract	Council Dist	Inspection Dist	Supervisor Dist	Map #	DAP Zone
	14	605102	4				
Plan Area	State Tax Id	Subdivision Name					
	1405400198	FOX PAUSE					
Section	Area	Tax Map					
		35					
Grid	Zoning District	ADC Map					
35-20	RR-DEO	4934-C10					
SDP No.	Final Plan No.	WP File No.					
Record Plat No.	WS Contract No.	FDP No.	Primary				
6664			Yes ▼				
Owner Occupied	Year Built	Historic District					
☐ Yes ☐ No	1988	☐ Yes ☒ No					
Historic District Registry No.	Stat Area	Flood Plain					
	5-15A	☐ Yes ☒ No					
Building No							

Owner * (This section is required.)

Search	Reset	Clear
Name *		
QUDSI		
Address Line 1		
11906 HALL SHOP RD		
Address Line 2		
Address Line 3		
Mail City		

CLARKSVILLE

Mail State

MD

Mail Zip Code

21029

Phone

410-961-8863

Primary

Yes

E-mail

Cell Number

Fax Number

Professionals * (This section is required.)

License # *

08050134828

License Type *

MHIC Co

Primary

Yes

Business Name

IPSUN POWER INC

First Name

HERVE

Middle Name

Last Name

BILLIET

Address Line 1

9504 POPLAR LEAF COURT

Address Line 2

City

FAIRFAX

State

VA

ZIP Code

22034-0000

Phone 1

7032606028

Phone 2

Fax

E-mail

HERVE.BILLIET@GMAIL.COM

Applicant * (This section is required.)

Search

As Owner

As Lic. Prof

As Contact

Type *

Applicant

Relationship

Applicant

Primary

Yes

First Name

HERVE

MI

Last Name

Billiet

Full Name

HERVE BILLIET

Organization Name

Ipsun Solar

Street Address

9504 Poplar Leaf Ct

Address Line 2

City

Fairfax

State

VA

Zip Code

22031

Phone

703-239-3386

Cell

Fax

E-mail *

support@ipsunsolar.com

Addtl Info

Est Construction Cost *

24840

Housing Units *

0

Number of Buildings *

0

Public Owned

No

Construction Type

434 - Additions, Alterations and Conversions - Residential

RESIDENTIAL SOLAR PANEL INFO

SOLAR PANEL INFORMATION

Capital Project-No Fee

☐ Yes ☒ No

Type of Installation *

Solar Collector - Ground Mount

Number of Panels *

54

Water Supply *

(Number) Private

Sewage Disposal *

Private

Expiration Date

4/21/2026

Existing Use *

SFD

Sprinkler System *

☐ Yes ☒ No

PAYMENT INFORMATION

Submit

Cancel

NEW PHOTOVOLTAIC GROUND MOUNTED SYSTEM - 24.840 KW DC/23.000 KW AC
& ENERGY STORAGE SYSTEM - 27.0 KWH

11906 HALL SHOP RD., CLARKSVILLE, MD 21029

CONTRACTOR



IPSUN SOLAR
2817 DORR AVE., SUITE D.,
FAIRFAX, VA 22031
PHONE - (866) 484-7786
EMAIL:
SUPPORT@IPSUNSOLAR.COM

PROJECT NAME & ADDRESS

SAMEEN QUDSI
11906 HALL SHOP RD.,
CLARKSVILLE, MD 21029

APN #: 05400198

AHJ: COUNTY OF HOWARD
UTILITY: BALTIMORE GAS &
ELECTRIC

SYSTEM DETAILS

24.840 KW DC/23.000 KW AC
(64) REC SOLAR REC460AA PURE-RX
(2) TESLA POWERWALL 3 (1707000-XX-Y) [240V]
(28) TESLA MCH-2 INLINE RSD
(2) TESLA POWERWALL 3 (240V) BATTERIES
BATTERY SIZE: 27.0 KWH

REVISIONS

REV	DESCRIPTION	DATE

SHEET TITLE

COVER PAGE

DRAWN DATE

11/25/2025

DRAWN BY

PCAD

SHEET NUMBER

PV-01

SHEET INDEX

PV-01	COVER PAGE
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PV-03	ATTACHMENT PLAN & DETAILS-1
PV-03.1	ATTACHMENT PLAN & DETAILS-2
PV-03.2	ATTACHMENT PLAN & DETAILS-3
PV-04	ELECTRICAL DIAGRAM
PV-05	NOTES
PV-06	WARNING LABELS
PV-07	INSTALLATION RESOURCE
	EQUIPMENT DATASHEETS ATTACHED

LEGEND

---	PROPERTY LINE
---	FENCE LINE

VICINITY MAP



SATELLITE MAP



PROJECT NOTES
1.1.1 THIS PHOTOVOLTAIC (PV) & ENERGY STORAGE SYSTEM SHALL COMPLY WITH THE RELEVANT YEAR OF THE NATIONAL ELECTRICAL CODE (NEC), ALL MANUFACTURER'S LISTING AND INSTALLATION INSTRUCTIONS, AND THE RELEVANT CODES AS SPECIFIED BY THE AUTHORITY HAVING JURISDICTION'S (AHJ) APPLICABLE CODES.
1.1.2 THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND THE PV & ENERGY STORAGE SYSTEM MUST BE INSPECTED PRIOR TO OPERATION.
1.1.3 ALL PV & ENERGY STORAGE SYSTEM COMPONENTS: MODULES, UTILITY-INTERACTIVE INVERTERS, BATTERIES, AND SOURCE CIRCUIT COMBINER BOXES ARE IDENTIFIED AND LISTED FOR USE IN PHOTOVOLTAIC SYSTEMS AS REQUIRED BY NEC AND OTHER GOVERNING CODES.
1.1.4 ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH LOCAL BUILDING CODE. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT. ALL PLAQUES AND SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC AND AHJ.

APPLICABLE CODES
ALL WORK SHALL CONFORM TO THE FOLLOWING CODES:
2021 INTERNATIONAL BUILDING CODE
2021 INTERNATIONAL RESIDENTIAL CODE
2021 INTERNATIONAL FIRE CODE
2020 NATIONAL ELECTRICAL CODE
AS ADOPTED BY COUNTY OF HOWARD

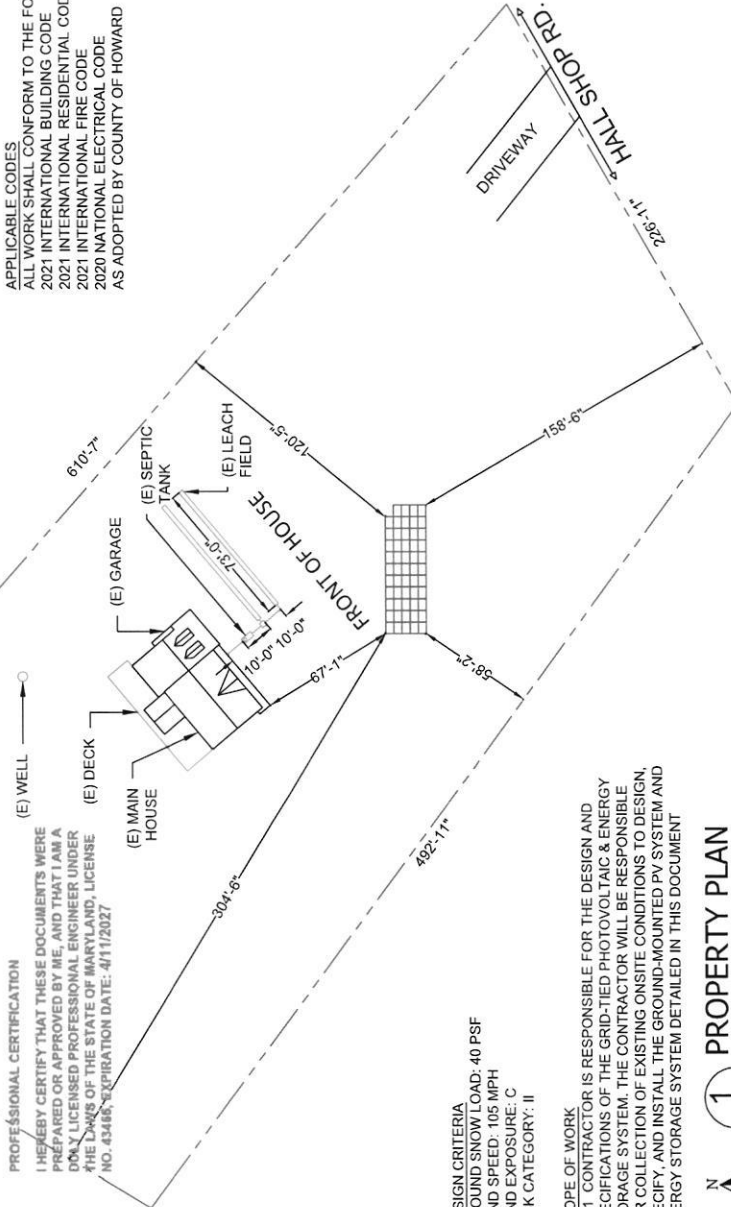
NEW PV SYSTEM SPECIFICATIONS:
SYSTEM SIZE: 24.840 KW DC-(STC)
AC SIZE: 23.000 KW AC
MODULE: (64) REC SOLAR REC460AA PURE-RX
INVERTER: (2) TESLA POWERWALL 3 (1707000-XX-Y) [240V]
RSD: (28) TESLA MCH-2 INLINE
BATTERY: (2) TESLA POWERWALL 3 (240V)
BATTERY SIZE: 27.0 KWH



Wyssing Consulting, PLLC
76 N. Meadowbrook Drive, Alpine UT
Maryland COA # 53509
Signed 11/25/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 4316, EXPIRATION DATE: 4/11/2027



DESIGN CRITERIA
GROUND SNOW LOAD: 40 PSF
WIND SPEED: 105 MPH
WIND EXPOSURE: C
RISK CATEGORY: II

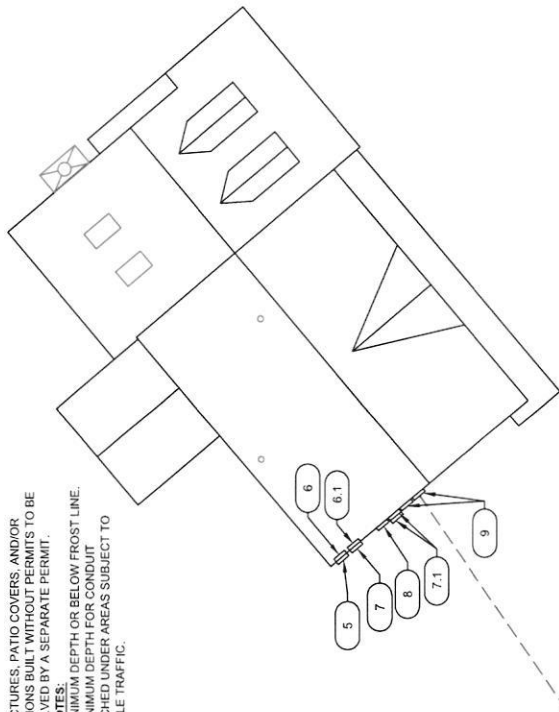
SCOPE OF WORK
1.2.1 CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND SPECIFICATIONS OF THE GRID-TIED PHOTOVOLTAIC & ENERGY STORAGE SYSTEM. THE CONTRACTOR WILL BE RESPONSIBLE FOR COLLECTION OF EXISTING ON-SITE CONDITIONS TO DESIGN, SPECIFY, AND INSTALL THE GROUND-MOUNTED PV SYSTEM AND ENERGY STORAGE SYSTEM DETAILED IN THIS DOCUMENT

1 PROPERTY PLAN

SCALE: 1" = 60'-0"

NOTES:

- STRUCTURES, PATIO COVERS, AND/OR ADDITIONS BUILT WITHOUT PERMITS TO BE RESOLVED BY A SEPARATE PERMIT.
- TRENCH NOTES:
 - 18" MINIMUM DEPTH OR BELOW FROST LINE.
 - 24" MINIMUM DEPTH FOR CONDUIT TRENCHED UNDER AREAS SUBJECT TO VEHICLE TRAFFIC.



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Signed 11/25/2025



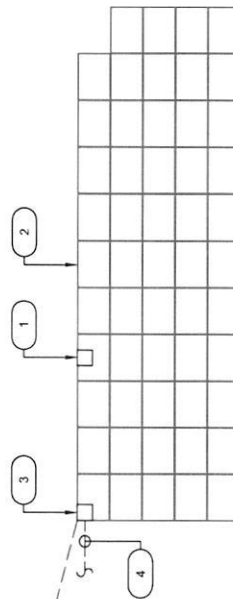
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1 SITE PLAN
PV-02
SCALE: 1" = 15'-0"



ARRAY 1

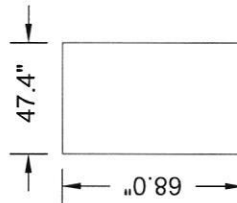


LEGEND

- = MECHANICAL VENT
- = FLUE / PLUMBING VENT
- 1 RAPID SHUTDOWN DEVICE (ONE PER TWO MODULES)
- 2 (64) REC SOLAR REC400AA PURE-RX MODULES WITH TESLA MC2 INLINE RSD UNDER EVERY TWO MODULES
- 3 JUNCTION BOX (NEMA 3R)
- 4 CONDUIT RUN: SURFACE MOUNTED (ACTUAL CONDUIT RUNS TO BE DETERMINED IN FIELD)
- 5 UTILITY METER (UNDERGROUND SERVICE) METER #: 156073712
- 6 (N) SPAN PANEL (BACKUP LOAD PANEL)
- 6.1 (E) MAIN SERVICE PANEL #2
- 7 (N) E-STOP BUTTON
- 7.1 (N) (2) ESS DISCONNECT
- 8 (N) TESLA BACKUP GATEWAY 3
- 9 (N) (2) TESLA POWERWALL 3 (1707000-XX-Y) [240V] INVERTERS & BATTERIES
- 10 138.2FT TRENCH

GROUND-MOUNT ARRAY(S)

ARRAY 1	ARRAY SLOPE - 25°
	AZIMUTH - 180°
	MODULE QTY. - 54



CONTRACTOR



IPSUN SOLAR
2817 DORR AVE., SUITE D.,
FAIRFAX, VA 22031
PHONE - (866) 484-7786
EMAIL: SUPPORT@IPSUNSOLAR.COM

PROJECT NAME & ADDRESS

SAMEEN QUDSI
11906 HALL SHOP RD.,
CLARKSVILLE, MD 21029
APN #: 05400198
AHJ: COUNTY OF HOWARD
UTILITY: BALTIMORE GAS & ELECTRIC

SYSTEM DETAILS

24,840 KW DC-1510 / 23,000 KW AC
(54) REC SOLAR REC400AA PURE-RX
(2) TESLA POWERWALL 3 (1707000-XX-Y) [240V]
(2) TESLA MC2 INLINE RSD
(2) TESLA POWERWALL 3 [240V] BATTERIES
BATTERY SIZE: 27.9 kWh

REVISIONS

REV	DESCRIPTION	DATE

SHEET TITLE

SITE PLAN

DRAWN DATE 11/25/2025

DRAWN BY PCAD

SHEET NUMBER

PV-02

CONTRACTOR



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11906 HALL SHOP RD.,
CLARKSVILLE, MD 21029

APN #: 05400198

AHJ: COUNTY OF HOWARD
UTILITY: BALTIMORE GAS &
ELECTRIC

SYSTEM DETAILS

24.840 KW DC-AC (17/23.000 KW AC)
(54) REC SOLAR REC4600AA PURE-RX
(2) TESLA POWERWALL 3 (1707000-XX-Y) (240V)
(2) TESLA MCH-2 INLINE RSD
(2) TESLA POWERWALL 3 (240V) BATTERIES
BATTERY SIZE: 27.0 KWH

REVISIONS

REV	DESCRIPTION	DATE

SHEET TITLE

ATTACHMENT PLAN
& DETAILS-2

DRAWN DATE 11/25/2025

DRAWN BY PCAD

SHEET NUMBER

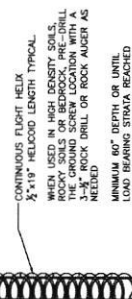
PV-03.1

INSTALLATION REQUIREMENT NOTES:

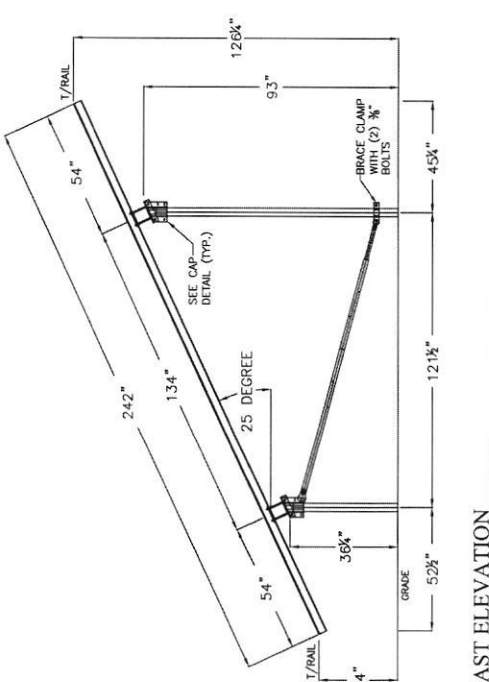
- THE MINIMUM AVERAGE INSTALLATION TORQUE REQUIRED TO OBTAIN THE REQUIRED INDICATED CAPACITIES AND THE MINIMUM INSTALLATION DEPTH SHOWN ON THE PLANS SHALL BE AVERAGE OF THE INDICATED TORQUE AND DEPTH. THE AVERAGE OF THE INSTALLATION TORQUES INDICATED DURING THE LAST ONE FOOT OF INSTALLATION.
- THE TORSIONAL STRENGTH RATING OF THE GROUND SCREW SHALL BE AT LEAST 100% OF THE TORSIONAL STRENGTH RATING OF THE GROUND SCREW HAS BEEN REACHED, BUT THE SCREW HAS NOT REACHED THE TARGET DEPTH, PERFORM THE FOLLOWING:
 - REVIEW DEVELOPED TORQUE AND GROUND SCREW DEPTH RATING. IF THE TORSIONAL STRENGTH RATING HAS BEEN REACHED, BUT THE SCREW HAS NOT REACHED THE TARGET DEPTH, PERFORM THE FOLLOWING:
 - FOR THIS INSTALLATION BASED UPON MINIMUM FROST DEPTH REQUIREMENT.
 - SHALL PRE-DRILL THE GROUND SCREW LOCATION WITH A 3/4" CARBIDE TIPPED ROCK AUGER TO FULL GROUND.
 - SCREW DEPTH PRIOR TO INSTALLATION OF THE GROUND SCREW.
 - FOR INSTALLATION INTO SOLID ROCK, CREW SHALL PRE-DRILL THE GROUND SCREW LOCATION WITH 3/4" CARBIDE TIPPED ROCK AUGER TO FULL GROUND. THE GROUND SCREW SHALL BE A MINIMUM OF 30" TO ALLOW INTO THE ROCK FOR FULL FLIGHT ENGAGEMENT.
 - IF THE TARGET DEPTH IS ACHIEVED, BUT THE TORSIONAL STRENGTH RATING HAS NOT BEEN MET THE INSTALLER PERFORM ONE OF THE FOLLOWING:
 - INSTALL THE GROUND SCREW DEEPER TO OBTAIN THE REQUIRED CAPACITY.
 - REMOVE THE GROUND SCREW AND INSTALL AN APPROVED 3/4" CARBIDE TIPPED ROCK AUGER TO FULL GROUND. RELOCATE THE GROUND SCREW LOCATION WITH HELIX PLATE ON ONE WITH MULTIPLE HELIX PLATES.
 - REDUCE THE LOAD ON THE INDIVIDUAL GROUND SCREWS BY SPACING THEM FURTHER APART AND/OR REDUCED DETERMINATION OF MAXIMUM PILE SPACING BASED UPON DEVELOPED TORQUE.

SPECIFICATION REQUIREMENT NOTES:

- THE FOLLOWING MATERIAL SPECIFICATION REQUIREMENTS PERTAIN TO THE FABRICATION OF THE SOLAR FOUNDATIONS USA® GROUND MOUNT SOLAR SUPPORT STRUCTURE AS INDICATED ON THESE DRAWINGS.
- STUFA® ALUMINUM RAILS SHALL CONFORM TO ASTM B221.
 - STRUCTURAL STEEL TUBING SHALL BE ASTM A500 HIGH YIELD.
 - STEEL PIPE FOR PILES SHALL CONFORM TO ASTM A500 GRADE C.
 - STEEL PIPE EXTENSIONS SHALL BE ASTM A53 GRADE B.
 - STEEL PIPE FOR DIAGONAL BRACING SHALL BE ASTM A53 GRADE B.
 - APPROVED SYSTEM PLATE FOR THE CAP ASSEMBLY, BRACING CLAMPS, ETC. SHALL BE ASTM A53 OR A1011.
 - STEEL BOLTS SHALL CONFORM TO SAE J429 GRADE 5 OR 8.
 - STEEL U-BOLTS SHALL CONFORM TO ASTM F844 AND USS FLAT STEEL WASHERS SHALL CONFORM TO ASTM A563.
 - ALL FIELD WELDING SHALL CONFORM TO AWS D1.1/D1.1M STRUCTURAL WELDING CODE REQUIREMENTS.
 - ALL STEEL SHALL BE FABRICATED AFTER ASTM A133 OR A133 AFTER ALL FABRICATION HAS BEEN COMPLETED.

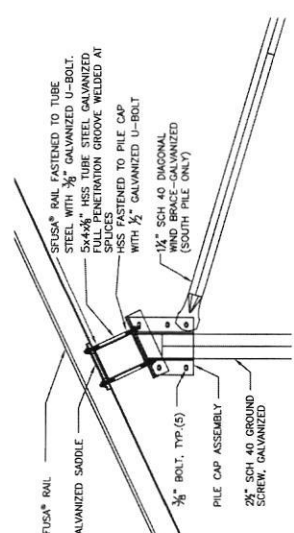


GROUND SCREW DETAIL
N.T.S.



EAST ELEVATION
N.T.S.

NOTE:
1. ARRAY HEIGHT DIMENSIONS ASSUME LEVEL GRADE



CAP DETAIL
N.T.S.

CONTRACTOR



IPSUN SOLAR

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CLARKSVILLE, MD 21029

APN #: 05400198

AHJ: COUNTY OF HOWARD
UTILITY: BALTIMORE GAS &
ELECTRIC

SYSTEM DETAILS

24,840 KW DC (STC) / 23,000 KW AC
(64) REC SOLAR REC460AA PURE-RX
(2) TESLA POWERWALL 3 (1707000-XX-Y) (240V)
(28) TESLA MCL2 IN-LINE RSD
(2) TESLA MCL2 IN-LINE RSD
(2) TESLA MCL2 IN-LINE RSD
BATTERY SIZE: 27.0 KWH

REVISIONS

REV	DESCRIPTION	DATE

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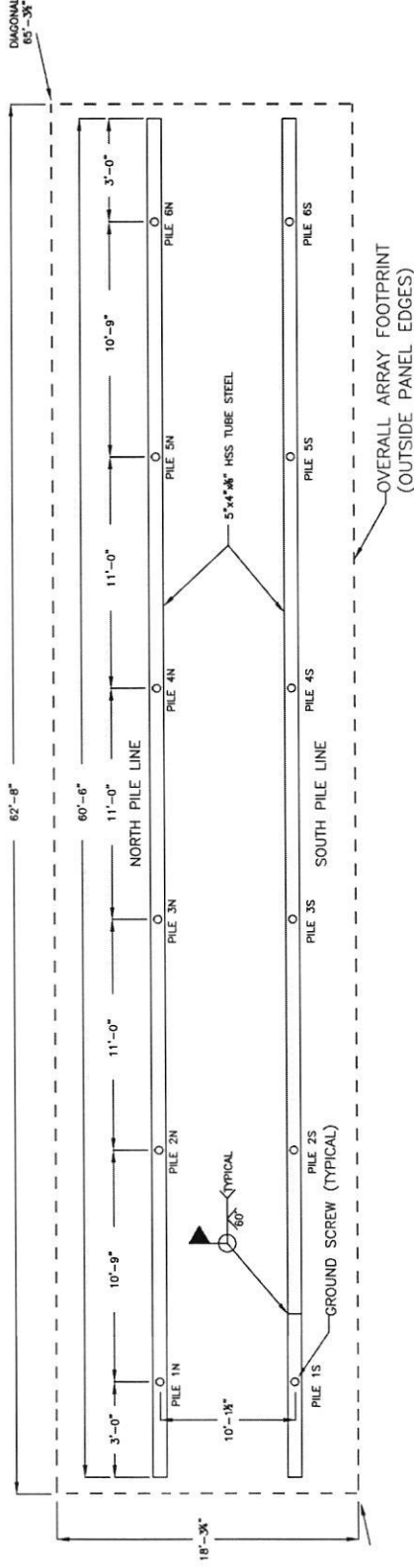
ATTACHMENT PLAN
& DETAILS-3

DRAWN DATE 11/25/2025

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SHEET NUMBER

PV-03.2



PILE PLAN LAYOUT

N.T.S.



Wyssling Consulting, PLLC
76 N. Meadowbrook Drive, Alpine UT
Maryland COA # 58508
Signed 11/25/2025

PROFESSIONAL CERTIFICATION

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PREPARED OR APPROVED BY ME, AND THAT I AM A
DULY LICENSED PROFESSIONAL ENGINEER UNDER
THE LAWS OF THE STATE OF MARYLAND, LICENSE
NO. 43486, EXPIRATION DATE: 4/11/2027

GENERAL NOTES

SITE NOTES

2.1.1 A LADDER WILL BE IN PLACE FOR INSPECTION IN ACCORDANCE WITH OSHA REGULATIONS.
2.1.2 THE PV MODULES ARE CONSIDERED NON-COMBUSTIBLE AND THIS SYSTEM IS A UTILITY INTERACTIVE SYSTEM WITH STORAGE BATTERIES.
2.1.3 THE SOLAR PV INSTALLATION WILL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
2.1.4 PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED IN ACCORDANCE WITH SECTION NEC 110.
2.1.5 ROOF COVERINGS SHALL BE DESIGNED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THIS CODE AND THE APPROVED MANUFACTURER'S INSTRUCTIONS SUCH THAT THE ROOF COVERING SERVES TO PROTECT THE BUILDING OR STRUCTURE.

EQUIPMENT LOCATIONS

2.2.1 ALL EQUIPMENT SHALL MEET MINIMUM WORKING CLEARANCES IN ACCORDANCE WITH NEC 110.
2.2.2 WIRING SYSTEMS INSTALLED IN DIRECT SUNLIGHT MUST BE RATED FOR EXPECTED OPERATING TEMPERATURE AS SPECIFIED BY 2020 NATIONAL ELECTRICAL CODE.
2.2.3 JUNCTION AND PULL BOXES PERMITTED INSTALLED UNDER PV MODULES IN ACCORDANCE WITH NEC 690.
2.2.4 ALL EQUIPMENT SHALL BE INSTALLED ACCESSIBLE TO QUALIFIED PERSONNEL IN ACCORDANCE WITH NEC APPLICABLE CODES.
2.2.5 ALL COMPONENTS ARE LISTED FOR THEIR PURPOSE AND RATED FOR OUTDOOR USAGE WHEN APPROPRIATE.

STRUCTURAL NOTES

2.3.1 RACKING SYSTEM & PV ARRAY WILL BE INSTALLED IN ACCORDANCE WITH THE CODE-COMPLIANT INSTALLATION MANUAL. TOP CLAMPS REQUIRE A DESIGNATED SPACE BETWEEN MODULES, AND RAILS MUST ALSO EXTEND A MINIMUM DISTANCE BEYOND EITHER EDGE OF THE ARRAY/SUB-ARRAY, IN ACCORDANCE WITH RAIL MANUFACTURER'S INSTALLATION PRACTICES.
2.3.2 JUNCTION BOX WILL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. IF ROOF-PENETRATING TYPE, IT SHALL BE FLASHED & SEALED PER LOCAL REQUIREMENTS.

WIRING & CONDUIT NOTES

2.4.1 ALL CONDUIT AND WIRE WILL BE LISTED AND APPROVED FOR THEIR PURPOSE. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING.
2.4.2 CONDUCTORS SIZED IN ACCORDANCE WITH THE NEC
2.4.3 AC CONDUCTORS TO BE COLORED OR MARKED PER NEC
2.4.4 LISTED OR LABELED EQUIPMENT SHALL BE INSTALLED AND USED IN ACCORDANCE WITH ANY INSTRUCTIONS INCLUDED IN THE LISTING OR LABELING PER NEC

GROUNDING NOTES

2.5.1 GROUNDING SYSTEM COMPONENTS SHALL BE LISTED FOR THEIR PURPOSE, AND GROUNDING DEVICES EXPOSED TO THE ELEMENTS SHALL BE RATED FOR SUCH USE.
2.5.2 PV EQUIPMENT SHALL BE GROUNDING IN ACCORDANCE WITH NEC 690.
2.5.3 METAL PARTS OF MODULE FRAMES, MODULE RACKING, AND ENCLOSURES CONSIDERED GROUNDING IN ACCORDANCE WITH NEC 250.
2.5.4 EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED IN ACCORDANCE WITH NEC 690 AND INVERTER MANUFACTURER'S INSTALLATION PRACTICES
2.5.5 EACH MODULE WILL BE GROUNDING AS SHOWN IN MANUFACTURER DOCUMENTATION AND APPROVED BY THE AHJ.
2.5.6 THE GROUNDING CONNECTION TO A MODULE SHALL BE ARRANGED SUCH THAT THE REMOVAL OF A MODULE DOES NOT INTERRUPT A GROUNDING CONDUCTOR TO ANOTHER MODULE.
2.5.7 GROUNDING AND BONDING CONDUCTORS, IF INSULATED, SHALL BE COLORED GREEN OR MARKED GREEN IF #4 AWG OR LARGER PER NEC 250.
2.5.8 THE GROUNDING ELECTRODE SYSTEM COMPLIES WITH NEC 690.47 AND NEC 250. IF EXISTING SYSTEM IS INACCESSIBLE, OR INADEQUATE, A GROUNDING ELECTRODE SYSTEM PROVIDED IN ACCORDANCE WITH NEC 250, NEC 690 AND THE AHJ.
2.5.9 GROUND-FAULT DETECTION SHALL COMPLY WITH NEC 690 TO REDUCE FIRE HAZARDS

DISCONNECT AND OVERCURRENT PROTECTION NOTES
2.6.1 DISCONNECTING SWITCHES SHALL BE WIRED SUCH THAT WHEN THE SWITCH IS OPENED THE CONDUCTORS REMAINING ENERGIZED ARE CONNECTED TO THE TERMINALS MARKED "LINE SIDE" (TYPICALLY THE UPPER TERMINALS).
2.6.2 DISCONNECTS TO BE ACCESSIBLE TO QUALIFIED UTILITY PERSONNEL, BE LOCKABLE, AND BE A VISIBLE-BREAK SWITCH
2.6.3 PV SYSTEM CIRCUITS INSTALLED ON OR IN HABITABLE BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION TO REDUCE SHOCK HAZARD FOR EMERGENCY RESPONDERS IN ACCORDANCE WITH 690.
2.6.4 ALL OCPD RATINGS AND TYPES SPECIFIED ACCORDING TO NEC 690 AND 240.
2.6.5 INVERTER ON-GRID BRANCHES SHALL BE CONNECTED TO A SINGLE BREAKER OR GROUPED FUSE DISCONNECT(S) IN ACCORDANCE WITH NEC 110.
2.6.6 IF REQUIRED BY THE AHJ, SYSTEM WILL INCLUDE ARC-FAULT CIRCUIT PROTECTION IN ACCORDANCE WITH NEC 690 AND UL 1699B.

INTERCONNECTION NOTES

2.7.1 LOAD SIDE INTERCONNECTION SHALL BE IN ACCORDANCE WITH NEC 705.
2.7.2 THE SUM OF THE UTILITY OCPD AND INVERTER CONTINUOUS OUTPUT MAY NOT EXCEED 120 PERCENT OF BUSBAR RATING PER NEC 705.
2.7.3 THE SUM OF 125 PERCENT OF THE POWER SOURCE(S) OUTPUT CIRCUIT CURRENT AND THE RATING OF THE OVERCURRENT DEVICE PROTECTING THE BUSBAR SHALL NOT EXCEED 120 PERCENT OF THE AMPACITY OF THE BUSBAR. PV DEDICATED BACKFEED BREAKERS MUST BE LOCATED OPPOSITE END OF THE BUS FROM THE UTILITY SOURCE OCPD PER NEC 705.
2.7.4 AT MULTIPLE ELECTRIC POWER SOURCES OUTPUT COMBINER PANEL, TOTAL RATING OF ALL OVERCURRENT PROTECTION DEVICES SHALL NOT EXCEED AMPACITY OF BUSBAR, HOWEVER, THE MAIN OVERCURRENT PROTECTION DEVICE MAY BE EXCLUDED IN ACCORDANCE WITH NEC 705.
2.7.5 FEEDER TAP INTERCONNECTION (LOAD SIDE) IN ACCORDANCE WITH NEC 705.
2.7.6 SUPPLY SIDE TAP INTERCONNECTION IN ACCORDANCE WITH TO NEC 705 WITH SERVICE ENTRANCE CONDUCTORS IN ACCORDANCE WITH NEC 230.
2.7.7 BACKFEEDING BREAKER FOR ELECTRIC POWER SOURCES OUTPUT IS EXEMPT FROM ADDITIONAL FASTENING PER NEC 705.



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PROJECT NAME & ADDRESS

SAMEEN QUDSI
11906 HALL SHOP RD.,
CLARKSVILLE, MD 21029

APN #: 05400198

AHJ: COUNTY OF HOWARD
UTILITY: BALTIMORE GAS &
ELECTRIC

SYSTEM DETAILS

24,840 KW DC-(STC) / 23,000 KW AC
(54) REC SOLAR REC460AA PURE-RX
(2) TESLA POWERWALL 31170/000-XX-Y1 (240V)
(2) TESLA POWERWALL 31170/000-XX-Y1 (240V)
(2) TESLA POWERWALL 31240V BATTERIES
BATTERY SIZE: 27.0 KWH

REVISIONS

REV	DESCRIPTION	DATE

SHEET TITLE

NOTES

DRAWN DATE 11/25/2025

DRAWN BY PCAD

SHEET NUMBER

PV-05

WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON THE LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL LOCATION: COMBINER PANEL, AC DISCONNECT, POINT OF INTERCONNECTION
PER CODE: NEC 705.15(C)(4), NEC 690.13(B)

WARNING

TURN OFF PHOTOVOLTAIC AC DISCONNECT PRIOR TO WORKING INSIDE PANEL

LABEL LOCATION: COMBINER PANEL(S), MAIN SERVICE DISCONNECT
PER CODE: NEC 110.27(C), OSHA 1910.146(F)

PHOTOVOLTAIC POWER SOURCE

LABEL LOCATION: DC CONDUIT/TRACEWAYS
PER CODE: NEC 690.31(D)(2)

SOLAR PV DC CIRCUIT

LABEL LOCATION: DC CONDUIT/TRACEWAYS
PER CODE: NEC 690.31(D)(2)

PHOTOVOLTAIC SYSTEM AC DISCONNECT

RATED AC OUTPUT CURRENT: 96.00 A

NOMINAL OPERATING AC VOLTAGE: 240 V

LABEL LOCATION: AC DISCONNECT/POINT OF INTERCONNECTION
PER CODE: NEC 690.54

WARNING

MULTIPLE POWER SOURCE SOURCES: UTILITY GRID, PV AND ESS SYSTEM

LABEL LOCATION: MAIN SERVICE DISCONNECT, PRODUCTION/NET METER
PER CODE: NEC 690.59, 705.12(C)

PV SYSTEM

DISCONNECT

LABEL LOCATION: AC DISCONNECT
PER CODE: NEC 690.13(B)

WARNING

THIS EQUIPMENT FED BY MULTIPLE POWER SOURCES. TOTAL RATING OF ALL PERCUTENT DEVICES EXCLUDING MAIN POWER SUPPLY SHALL NOT EXCEED AMPACITY OF BUSBAR

LABEL LOCATION: AC DISCONNECT
PER CODE: NEC 705.12(B)(3)(5)

WARNING

POWER SOURCE OUTPUT CONNECTION, DO NOT RELOCATE THIS OVERCURRENT DEVICE.

LABEL LOCATION: POINT OF INTERCONNECTION
PER CODE: NEC 705.12(B)(3)(2)

SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY

LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 690.56(C)

MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

LABEL LOCATION: MAIN SERVICE DISCONNECT, UTILITY METER
PER CODE: NEC 690.13(B)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

LABEL LOCATION: RSD INITIATION DEVICE, AC DISCONNECT
PER CODE: NEC 690.56(C)(2)

CAUTION

PHOTOVOLTAIC SYSTEM CIRCUIT IS BACKFEED

LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 705.12(D), NEC 690.59

DO NOT DISCONNECT UNDER LOAD

LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 690.15(B) & NEC 690.33(D)(2)

MAXIMUM DC VOLTAGE OF PV SYSTEM

LABEL LOCATION: DC DISCONNECT/INVERTER/PV DIST. EQUIPMENT
PER CODE: NEC 690.53

WARNING

ELECTRICAL SHOCK HAZARD

TERMINALS ON BOTH LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

DC VOLTAGE IS ALWAYS PRESENT WHEN SOLAR MODULES ARE EXPOSED TO SUNLIGHT

LABEL LOCATION: DC DISCONNECT
PER CODE: NEC 690.13(B)

Wyssling Consulting, PLLC

78 N. Meadowbrook Drive, Alpine UT

Maryland COA # 58509

Signed 11/25/2025

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 43486, EXPIRATION DATE: 4/11/2027

INVERTER #1 & #2

PHOTOVOLTAIC DC DISCONNECT

MAXIMUM SYSTEM VOLTAGE: 600 VDC

MAXIMUM CIRCUIT CURRENT: 13 ADC

MAX RATED OUTPUT CURRENT OF THE CHARGE CONTROLLER OR DC-TO-DC CONVERTER (IF INSTALLED): 15 ADC

LABEL LOCATION: INVERTER(S), DC DISCONNECT(S)
PER CODE: NEC 690.53

WARNING

ENERGY STORAGE SYSTEM DISCONNECT

SINGLE 120-VOLT SUPPLY DO NOT CONNECT MULTIWIRE BRANCH CIRCUITS

LABEL LOCATION: MAIN SERVICE DISCONNECT
PER CODE: NEC 705.82

CAUTION

MULTIPLE SOURCES OF POWER. POWER TO THIS BUILDING IS ALSO SUPPLIED FROM THE FOLLOWING SOURCES WITH DISCONNECTS LOCATED AS SHOWN:

ADDRESS: 11906 HALL SHOP RD., CLARKSVILLE, MD 21029

SPAN PANEL

UTILITY METER

E-STOP BUTTON

GATEWAY 3

(2) ESS DISCONNECT

INVERTERS & BATTERIES

MAIN SERVICE PANEL

FRONT OF HOUSE

GROUND-MOUNT ARRAY

CONTRACTOR

IPSUN SOLAR

2817 DORR AVE., SUITE D., FAIRFAX, VA 22031

PHONE - (866) 484-7786

EMAIL - SUPPORT@IPSUNSOLAR.COM

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APN #: 05400198

AHJ: COUNTY OF HOWARD

UTILITY: BALTIMORE GAS & ELECTRIC

SYSTEM DETAILS

24.840 KW DC-15CT/7/23,000 KW AC

(54) REC SOLAR REC-460AA PURE-RX

(2) TESLA POWERWALL 3 (17,000-XX-V) [240V]

(2) TESLA MCH-2 IN-LINE RSD

(2) TESLA POWERWALL 3 [240V] BATTERIES

BATTERY SIZE: 27.0 KWH

REVISIONS

REV

DESCRIPTION

DATE

SHEET TITLE

WARNING LABELS

DRAWN DATE

11/25/2025

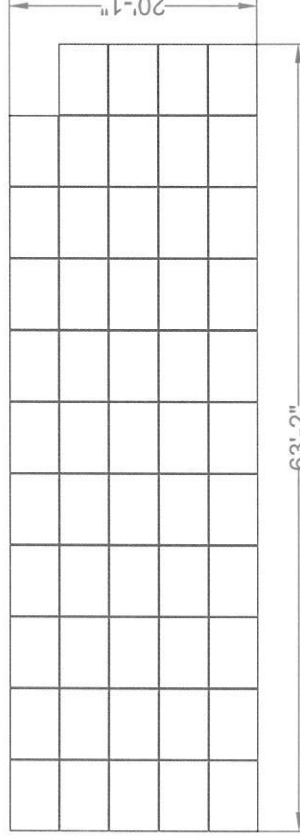
DRAWN BY

PCAD

SHEET NUMBER

PV-06

REFERENCE ONLY



Wyssling Consulting, PLLC
76 N. Meadowbrook Drive, Alpine UT
Maryland COA # 58509
Signed 11/25/2025

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**DIMENSIONS ARE 2D (FLAT)

A B C D E F

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CONTRACTOR



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SYSTEM DETAILS

24,840 KW DC / 5107 / 23,000 KW AC
(54) REC SOLAR REC460AA PURE-RX
(2) TESLA POWERWALL 3 (17070000-XX-Y) (240V)
(2) TESLA POWERWALL 3 (240V) BATTERIES
BATTERY SIZE: 27.0 KWH

REVISIONS

REV	DESCRIPTION	DATE

SHEET TITLE

INSTALLATION
RESOURCE

DRAWN DATE 11/25/2025

DRAWN BY PCAD

SHEET NUMBER

PV-07