SITE SPECIFIC SAFETY PLAN CHECKLIST		Abbr.
	Inspect entire jobsite for hazards	H
	Draw Sunrun vehicle locations on planset	SV
	Label Operations Safety Manual Location	OSM
	Label fire extinguisher location	FE
	Label first aid kit location	FA
	Label eye wash bottle location	EW
	Label drinking water location	DW
	Draw hard hat zone around house	HHZ
	Draw fall protection anchor locations	X
	Draw ladder & roof access points	L
	Draw electrical hazard areas	EH
	Draw water & trip hazard locations	

Daily weather forecast & HIPP measures:

Foreman conducts daily safety briefing and reviews this checklist with crew. Sign and date:

_____

Crew signatures:

_____

_____

_____

Safety Contact:	
Medical Clinic:	
Nearest Hospital:	
Restroom Location:	
Water Replenishment:	
Water Replenished by:	

SOPs

Note: For jobs that last longer than one day, conduct a safety briefing at the start of each day and initial this plan next to your signature.

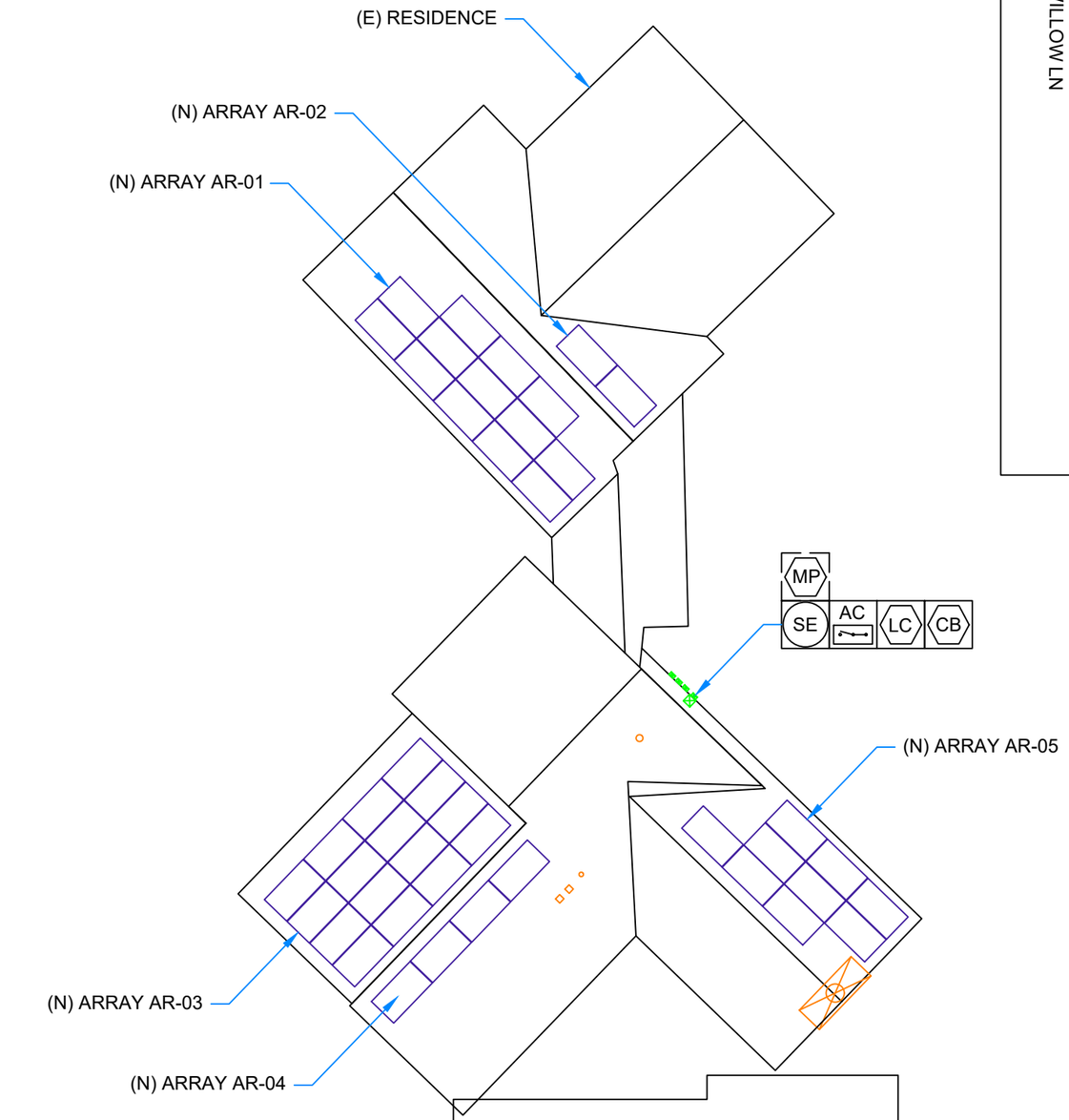
Design Feedback

Customer Signature:

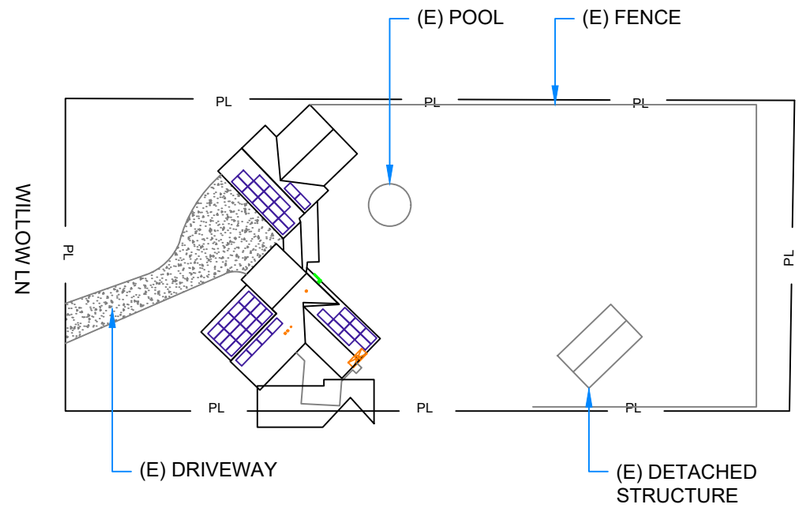
X _____

APPROVAL: I have reviewed the solar design and approve of the placement of solar panels and equipment identified on this page. I have added my initials next to the equipment locations and signed this document to note my agreement with the layout of the system.

SITE PLAN - SCALE = 1/16" = 1'-0"



SITE PLAN DETAIL- SCALE = 1/64" = 1'-0"



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FAX 0

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APN: 07-03-303-023-0000

PROJECT NUMBER:
711R-135KOLE

DESIGNER: (415) 580-6920 ex3
CINDY SAN MIGUEL

SHEET
SAFETY PLAN

REV: B 12/9/2022

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JURISDICTION	IL-VILLAGE WADSWORTH	UTILITY	ComEd	BRANCH	IL Chicago

ELECTRICAL SOW		
MAIN PANEL UPGRADE	No	----
MAIN PANEL REPLACEMENT	No	----
METER ADAPTER	No	----
SERVICE REFEED	No	----
NEW SUB-PANEL	No	
INTERCONNECTION	Supply Side Tap: Meter Conductors	
DESIGNER NOTES - ELECTRICAL	IC: SST in Meter Conductors Existing MSP: 200A/200A Install combiner box and ac disco to the right of meter. NOTE: The following stringing details are only valid for Hanwha Q-Cells: Q.PEAK DUO BLK ML-G10+ 400 - Enphase Energy: IQ8PLUS-72-2-US: Max Branch Size: 13; - Modules within branch are not required to be at the same orientation and pitch	

ROOF SOW		
RELOCATE VENT	No	
RELOCATE SATELLITE DISH	No	
DORMER REPLACED W/ FLUSH VENT	No	
DESIGNER NOTES - ROOF	Comp shingle is below 5 years old and in good condition.	

STRUCTURAL SOW		
SISTERING	No	----
DESIGNER NOTES - STRUCTURAL	Structure looks good. Dip test done on roof 7 and 8. Plywood/OSB sheathing on non-vaulted structures.	

OTHER SOW		
TRENCHING	No	----
ANIMAL DETERRENT SYSTEM	No	----
DESIGNER NOTES - MISC.	----	

AHJ ELECTRICAL REQS		
GROUND ROD	No	----
EXTERNAL GEC	No	----
VISIBLE BLADE AC DISCO	No	----
WIRE SIZE REQUIREMENTS	No	----

UTILITY REQS		
EQUIPMENT ORDER	----	
PRODUCTION METER	No	----
WIRE SIZING REQUIREMENTS	No	----
UTILITY CUSTOM GUIDELINES	----	

OTHER REQS		
AHJ COVER FLUSH VENTS	No	----
AHJ COVER PVC VENTS	----	----
UNPERMITTED	No	----
PLACARDS	No	----
AHJ CUSTOM GUIDELINES	----	
INSPECTION GUIDELINES	----	
PERMITTING GUIDELINES	----	
INVERTER 1 SPECIFICATIONS		
MAXIMUM MODULES		
MAXIMUM MODS/ STRING		
INVERTER 2 SPECIFICATIONS		
MAXIMUM MODULES		
MAXIMUM MODS/ STRING		

ADDITIONAL INFORMATION			
SYSTEM SIZE	17600W DC, 12760W AC	BACKFEED	70 AMPS
MODULES	(44) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400	MAIN MANUFACTURER	ITE Seimens
MODULE DIMS	73.98" x 41.14" x 1.26" (33mm)	RSD	----
INVERTER(S)	(44) ENPHASE ENERGY: IQ8PLUS-72-2-US Inv 2 (when applicable): ENPHASE ENERGY: IQ8PLUS-72-2-US Inv 3 (when applicable): ----	ENERGY STORAGE	(----) ----
NOTES TO INSTALLER	NOTES TO INSTALLER: • CONNECT SYSTEM VIA INSULATION PIERCING ON SUPPLY SIDE CONDUCTORS IN UTILITY METER ENCLOSURE. CONDUCTORS ARE FIELD INSTALLED. • BRANCH [A] MUST BE CENTER-FED. MAX SUB-BRANCH LENGTH = 0 • BRANCH [B] MUST BE CENTER-FED. MAX SUB-BRANCH LENGTH = 0 • BRANCH [C] MUST BE CENTER-FED. MAX SUB-BRANCH LENGTH = 0 • BRANCH [D] MUST BE CENTER-FED. MAX SUB-BRANCH LENGTH = 0 • BRANCH [E] MUST BE CENTER-FED. MAX SUB-BRANCH LENGTH = 9 • ADD 100AMP NEW PV LOAD CENTER. • ADD 40 AMP BREAKER TO PV LOAD CENTER (INV1). • ADD 35 AMP BREAKER TO PV LOAD CENTER (INV2).		

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SHEET
REQUIREMENTS

REV: B 12/9/2022

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STRUCTURAL SPECIFICATIONS

Structural Information

SYSTEM SIZE	17600W DC, 12760W AC	RACKING	SNAPNRACK RLU; RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436		
MODULES	(44) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400				
MODULE DIMS	73.98" x 41.14" x 1.26" (33mm)	ROOF TYPE	COMP SHINGLE - RLU		
MODULE CLAMPS	Portrait: 60, Landscape: 011-06607-ITC26	FRAME TYPE	2X4 PRE-FABRICATED TRUSSES		
MAX ROOF HEIGHT	1 STORIES	OC SPACING	24" OC		
LAG LENGTH	5/16": 2.5" MIN EMBEDMENT	COLUMN SPACING	0.75"	ROW SPACING	0.75"

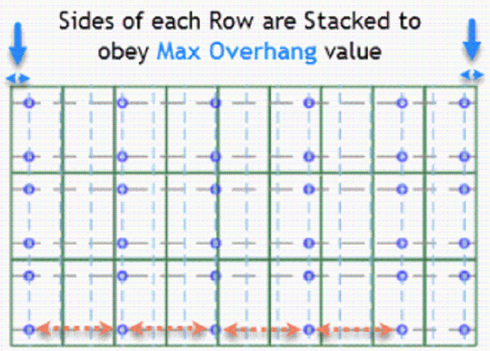
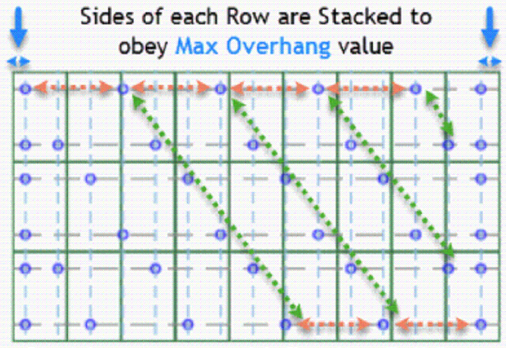
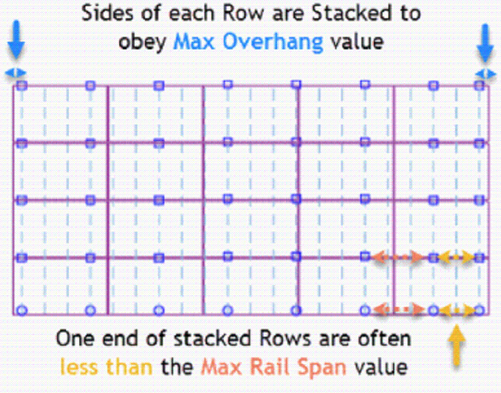
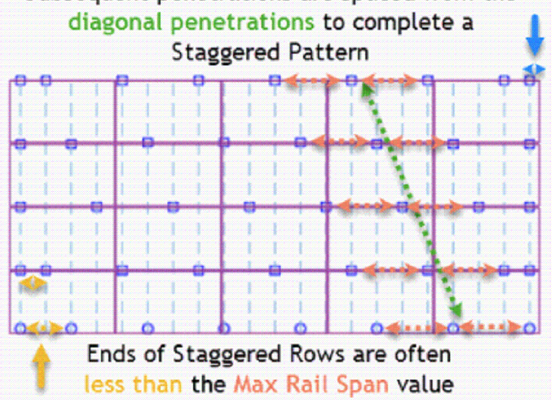
Structural SOW

SISTERING	No ----
DESIGNER NOTES	Structure looks good. Dip test done on roof 7 and 8. Plywood/OSB sheathing on non-vaulted structures.

ATTACHMENT SPECIFICATIONS

Array	Landscape				Portrait				Layout
Name	Max OC Spacing	Max Overhang	*Reduced Max OC Spacing	*Reduced Max Overhang	Max OC Spacing	Max Overhang	*Reduced Max OC Spacing	*Reduced Max Overhang	Configuration
AR-01	6' - 0"	2' - 4"	3'-0"	1'-2"	4' - 0"	1' - 10"	2'-0"	0'-10"	STAGGERED
AR-02	6' - 0"	2' - 4"	3'-0"	1'-2"	4' - 0"	1' - 10"	2'-0"	0'-10"	STAGGERED
AR-03	6' - 0"	2' - 4"	3'-0"	1'-2"	4' - 0"	1' - 10"	2'-0"	0'-10"	STAGGERED
AR-04	6' - 0"	2' - 4"	3'-0"	1'-2"	4' - 0"	1' - 10"	2'-0"	0'-10"	STAGGERED
AR-05	5' - 4"	2' - 1"	2'-6"	1'-0"	4' - 0"	1' - 10"	2'-0"	0'-10"	STAGGERED

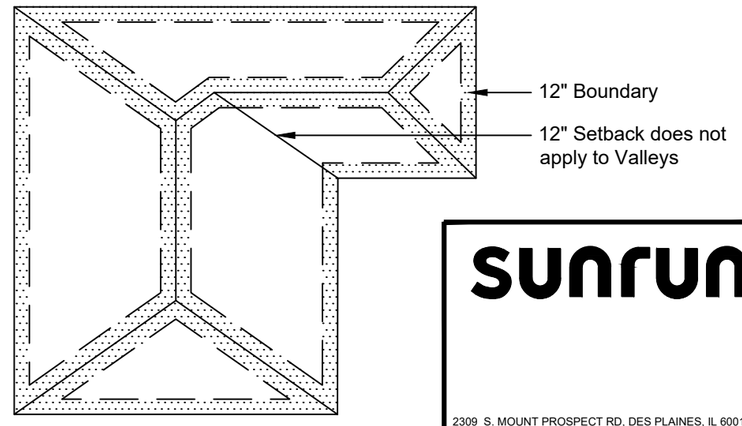
*Reduced maximum spacings and overhangs apply only within the roof edge boundary regions (see sample illustration below).

Racking Type	Stacked All Non-snow & Non-high Wind Regions (exception: Standing Seam is always staggered)	Staggered All Regions if Snow>10 PSF or Wind>150 mph
Railed	 Penetration Spacing must land on structural members and be <= the Max Rail Span value	 Start in one corner with first Max Rail Span and stagger penetrations diagonally onto every structural member
Rail-Less (RL)	 One end of stacked Rows are often less than the Max Rail Span value	 Ends of Staggered Rows are often less than the Max Rail Span value

PITCHED/SLOPED ROOFS - REDUCED SPACING AND OVERHANG DETAIL FOR 12" BOUNDARY REGION

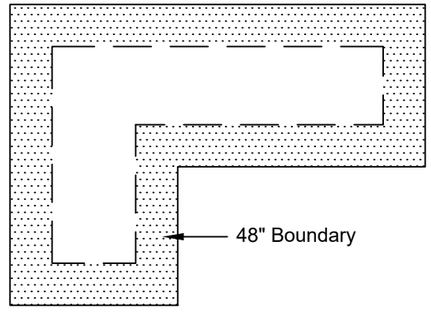
NOTE: If array (excluding skirt) is within 12" boundary region of any roof plane edges (except valleys), then attachments need to be added and overhang reduced within the 12" boundary region only as follows:

- Allowable attachment spacing indicated on plans to be reduced by 50% (refer to table above)
- Allowable overhang indicated on plans to be 1/5th of allowable attachment spacing indicated on plans (refer to table above)



FLAT ROOFS - REDUCED SPACING AND OVERHANG DETAIL FOR 48" BOUNDARY REGION

- Allowable attachment spacing indicated on plans to be reduced by 50% (refer to table above)
- Allowable overhang indicated on plans to be 1/5th of allowable attachment spacing indicated on plans (refer to table above)



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CINDY SAN MIGUEL

SHEET
STRUC. REQS.

REV: B 12/9/2022

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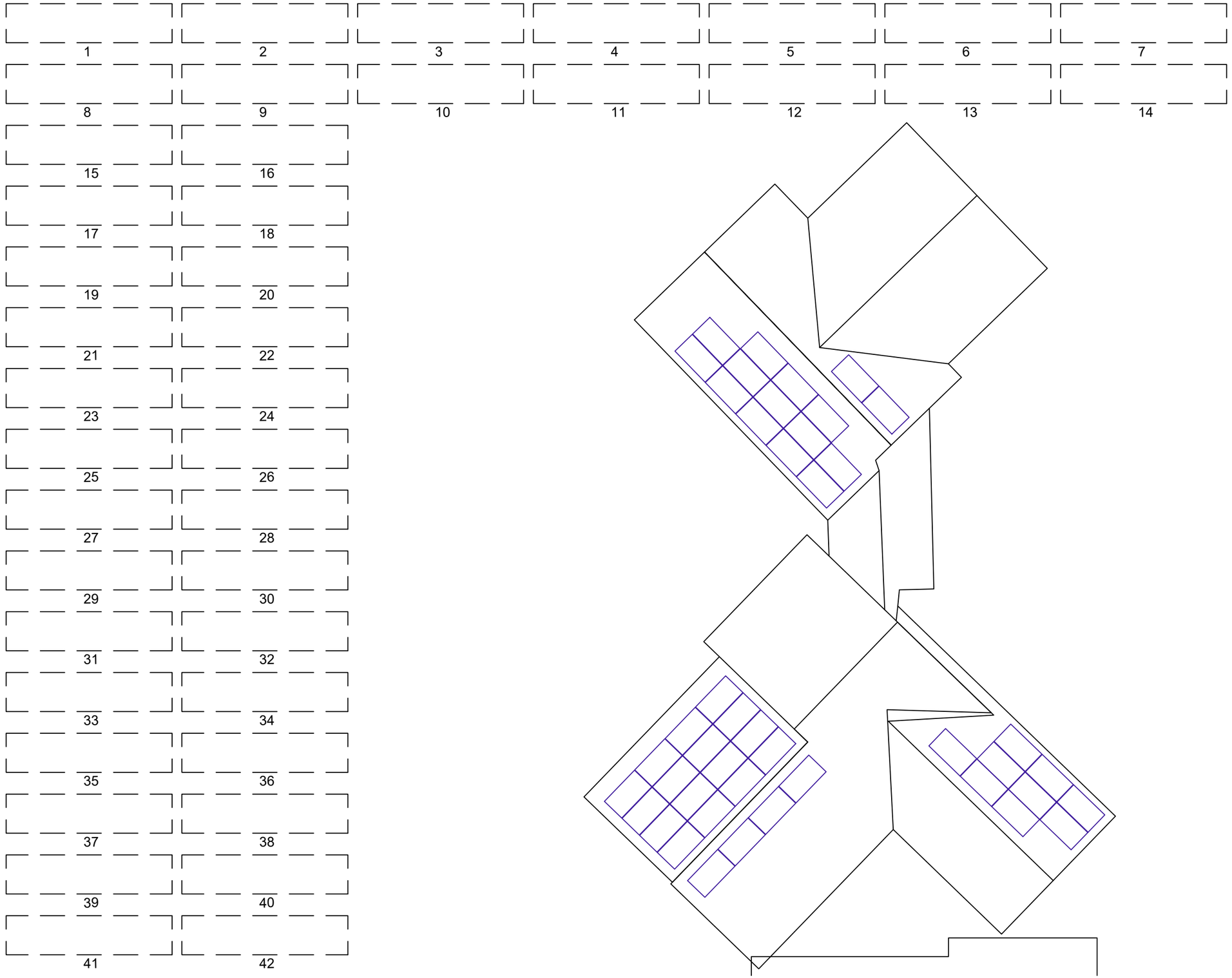
	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	23°	226°	229°	274.8
AR-02	23°	47°	50°	42.3
AR-03	23°	314°	317°	338.2
AR-04	23°	134°	137°	84.5
AR-05	23°	44°	47°	190.2



Mapping Instructions:

1. Remove the Enphase sticker and place neatly on the appropriate numbered space.

2. Write the corresponding number on the appropriate panel within the array.

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CINDY SAN MIGUEL

SHEET
MLPE MAP 1

REV: B 12/9/2022

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	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	23°	226°	229°	274.8
AR-02	23°	47°	50°	42.3
AR-03	23°	314°	317°	338.2
AR-04	23°	134°	137°	84.5
AR-05	23°	44°	47°	190.2

43 44 45 46 47 48 49

50 51 52 53 54 55 56

57 58

59 60

61 62

63 64

65 66

67 68

69 70

71 72

73 74

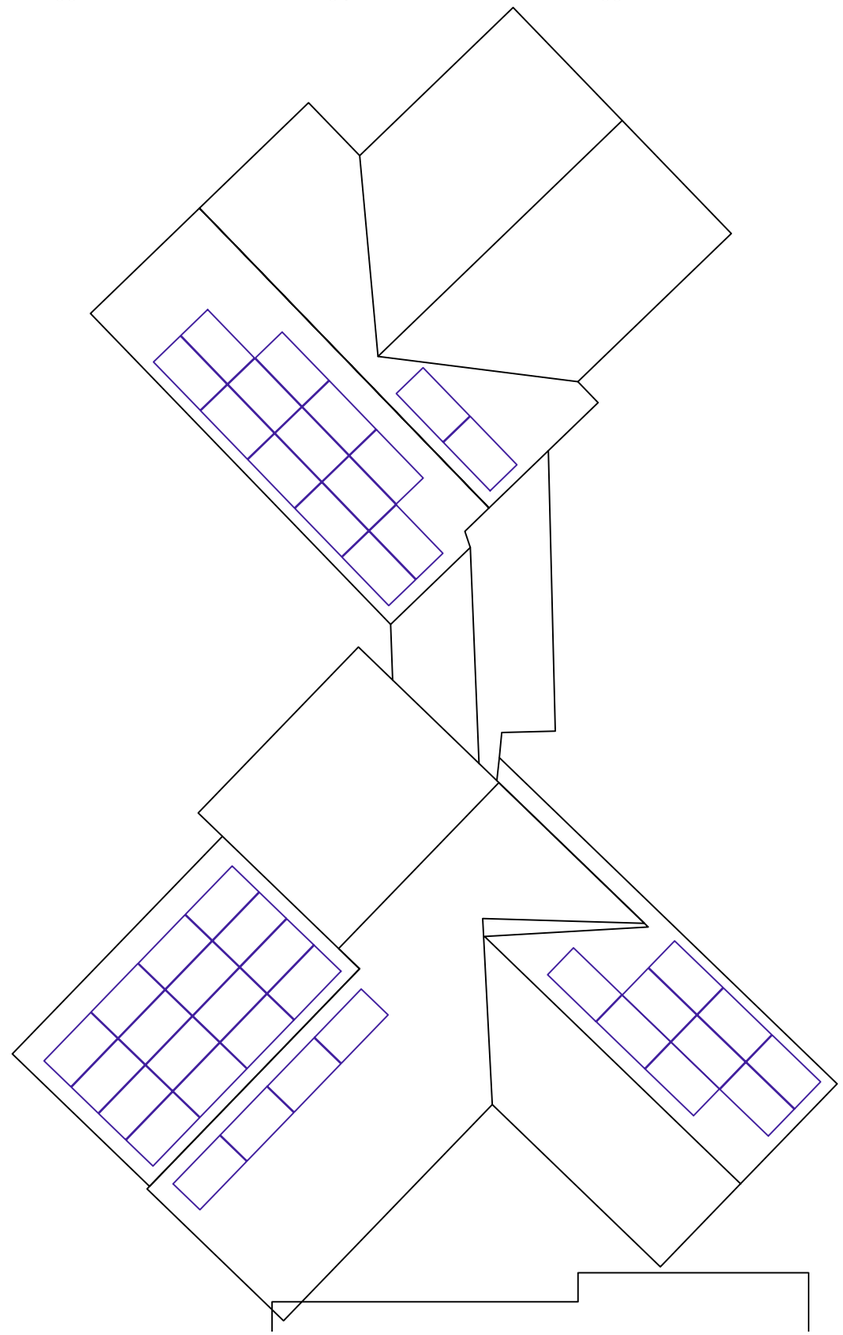
75 76

77 78

79 80

81 82

83 84



Mapping Instructions:

1. Remove the Enphase sticker and place neatly on the appropriate numbered space.

2. Write the corresponding number on the appropriate panel within the array.

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SHEET
MLPE MAP 2

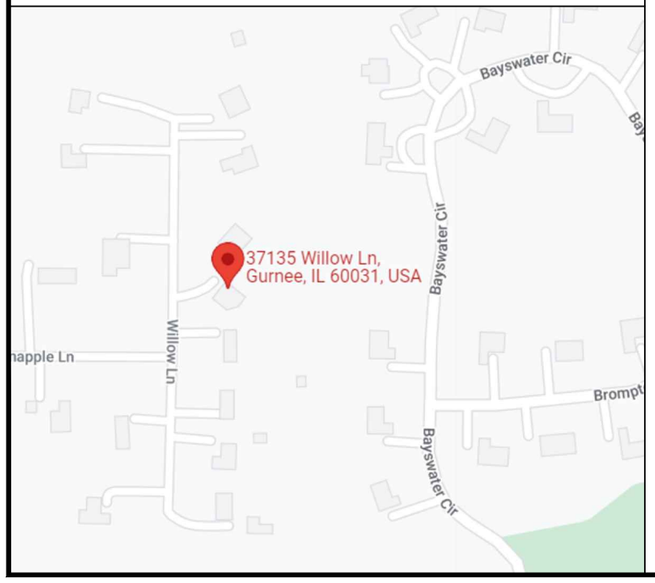
REV: B 12/9/2022

PAGE
CD-4.1

SCOPE OF WORK

- **SYSTEM SIZE:** 17600W DC, 12760W AC
- **MODULES:** (44) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400
- **INVERTER(S):** (44) ENPHASE ENERGY: IQ8PLUS-72-2-US
- **RACKING:** SNAPNRACK RLU; RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436

VICINITY MAP



GENERAL NOTES

• ALL WORK SHALL COMPLY WITH 2006 IRC/IBC/IEBC, MUNICIPAL CODE, AND ALL MANUFACTURERS' LISTINGS AND INSTALLATION INSTRUCTIONS.
• PHOTOVOLTAIC SYSTEM WILL COMPLY WITH NEC 2005.

• ELECTRICAL SYSTEM GROUNDING WILL COMPLY WITH NEC 2005.

• PHOTOVOLTAIC SYSTEM IS UNGROUNDED. NO CONDUCTORS ARE SOLIDLY GROUNDED IN THE INVERTER. SYSTEM COMPLIES WITH 690.35.

• MODULES CONFORM TO AND ARE LISTED UNDER UL 1703.

• INVERTER CONFORMS TO AND IS LISTED UNDER UL 1741.

• RACKING CONFORMS TO AND IS LISTED UNDER UL 2703.

• SNAPNRACK RACKING SYSTEMS, IN COMBINATION WITH TYPE I, OR TYPE II MODULES, ARE CLASS A FIRE RATED.

• RAPID SHUTDOWN REQUIREMENTS MET WHEN INVERTERS AND ALL CONDUCTORS ARE WITHIN ARRAY BOUNDARIES PER NEC 690.12(1).

• CONSTRUCTION FOREMAN TO PLACE CONDUIT RUN PER 690.31(G).

• ARRAY DC CONDUCTORS ARE SIZED FOR DERATED CURRENT.

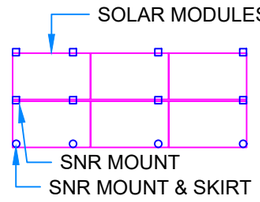
• 11.14 AMPS MODULE SHORT CIRCUIT CURRENT.

• 17.4 AMPS DERATED SHORT CIRCUIT CURRENT [690.8 (A) & 690.8 (B)].

B

LEGEND AND ABBREVIATIONS

- SE — SERVICE ENTRANCE
- MP — MAIN PANEL
- SP — SUB-PANEL
- LC — PV LOAD CENTER
- SM — SUNRUN METER
- PM — DEDICATED PV METER
- INV — INVERTER(S)
- AC — AC DISCONNECT(S)
- DC — DC DISCONNECT(S)
- CB — IQ COMBINER BOX
- INTERIOR EQUIPMENT SHOWN AS DASHED



- CHIMNEY
- ATTIC VENT
- FLUSH ATTIC VENT
- PVC PIPE VENT
- METAL PIPE VENT
- T-VENT
- SATELLITE DISH
- FIRE SETBACKS
- HARDSCAPE
- — PL — PROPERTY LINE

SCALE: NTS

A	AMPERE
AC	ALTERNATING CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AZIM	AZIMUTH
COMP	COMPOSITION
DC	DIRECT CURRENT
(E)	EXISTING
ESS	ENERGY STORAGE SYSTEM
EXT	EXTERIOR
INT	INTERIOR
MAG	MAGNETIC
MSP	MAIN SERVICE PANEL
(N)	NEW
NTS	NOT TO SCALE
OC	ON CENTER
PRE-FAB	PRE-FABRICATED
PSF	POUNDS PER SQUARE FOOT
PV	PHOTOVOLTAIC
RSD	RAPID SHUTDOWN DEVICE
TL	TRANSFORMERLESS
TYP	TYPICAL
V	VOLTS
W	WATTS

REV	NAME	DATE	COMMENTS
B	TONY DANG	12/9/2022	MOD SWAP/LAYOUT UPDATE

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PV-2.0	SITE PLAN
PV-3.0	LAYOUT
PV-4.0	ELECTRICAL
PV-5.0	SIGNAGE

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SHEET
COVER SHEET

REV: B 12/9/2022

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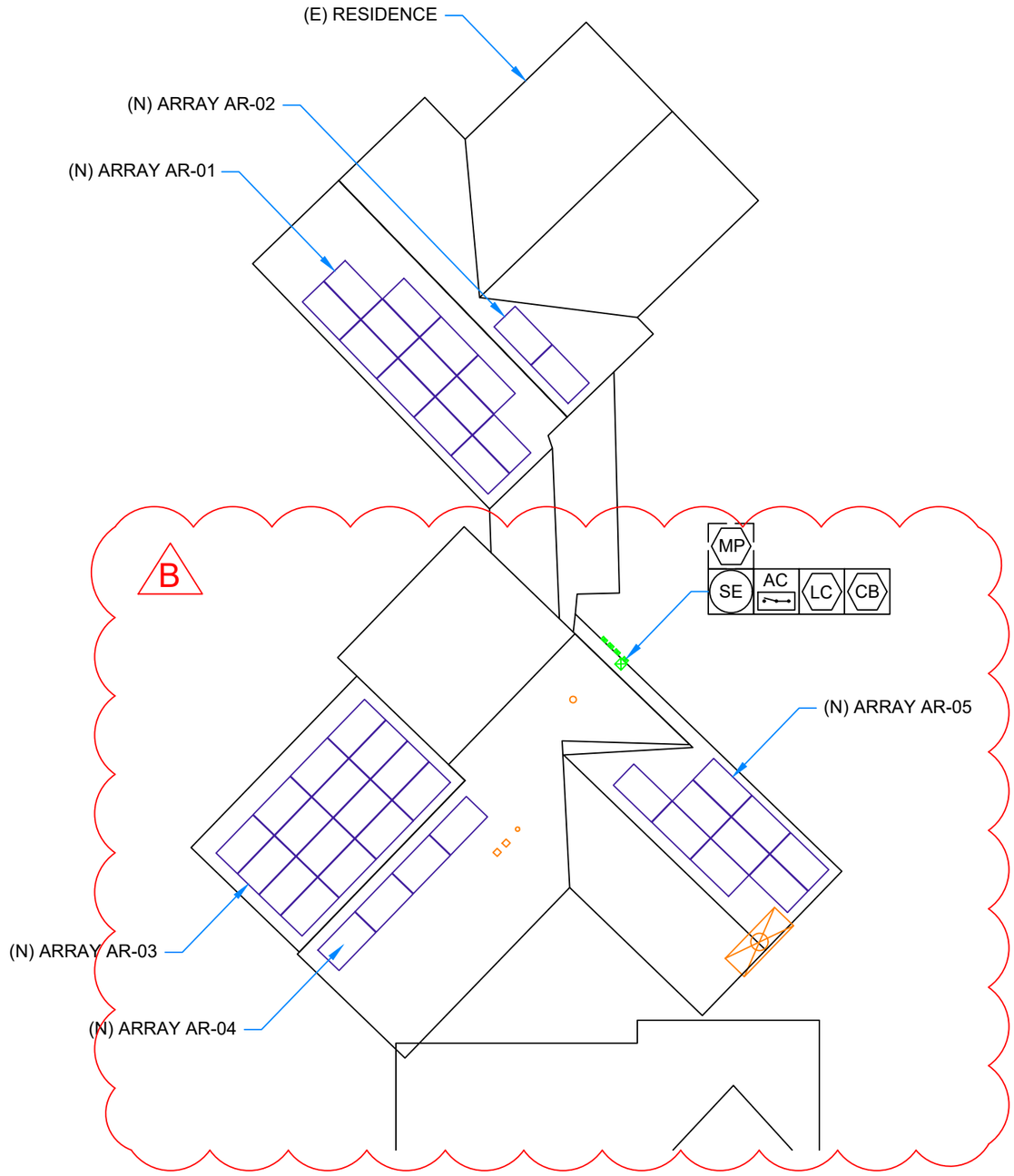
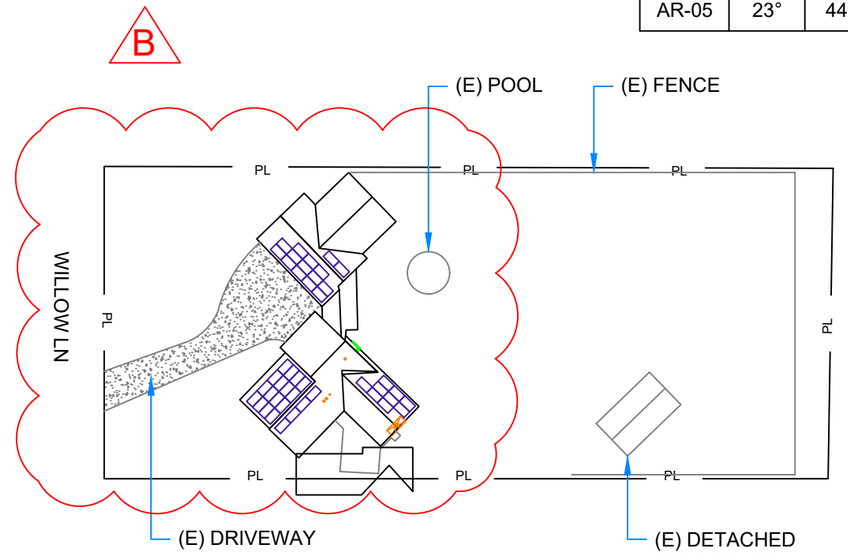
PV-1.0

SITE PLAN - SCALE = 1/16" = 1'-0"



SITE PLAN DETAIL- SCALE = 1/64" = 1'-0"



	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	23°	226°	229°	274.8
AR-02	23°	47°	50°	42.3
AR-03	23°	314°	317°	338.2
AR-04	23°	134°	137°	84.5
AR-05	23°	44°	47°	190.2

NOTE: MICRO-INVERTERS INSTALLED UNDER EACH MODULE

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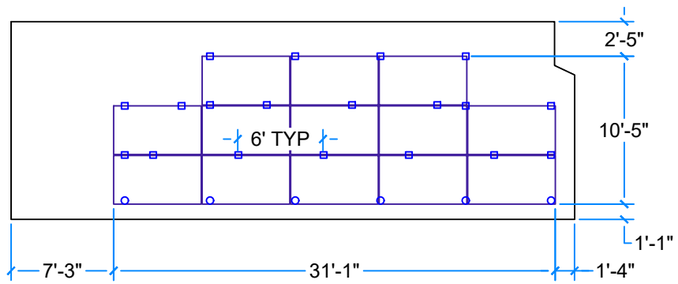
SHEET
SITE PLAN

REV: B 12/9/2022

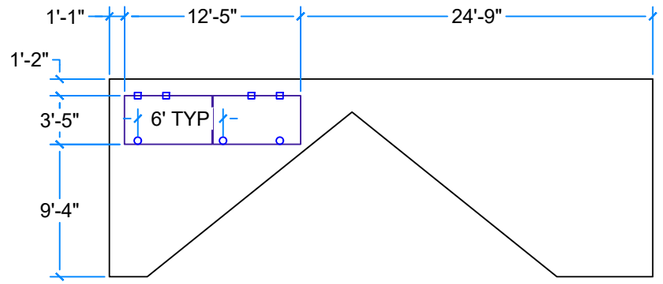
PAGE
PV-2.0

ROOF INFO			FRAMING INFO			ATTACHMENT INFORMATION					
Name	Type	Height	Type	Max Span	OC Spacing	Detail	Max Landscape OC Spacing	Max Landscape Overhang	Max Portrait OC Spacing	Max Portrait Overhang	Configuration
AR-01	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	5' - 5"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-02	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	5' - 5"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-03	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	6' - 7"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-04	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	6' - 7"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-05	COMP SHINGLE - RLU	1-Story	2X6 RAFTERS	10' - 6"	16"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	5' - 4"	2' - 1"	4' - 0"	1' - 10"	STAGGERED

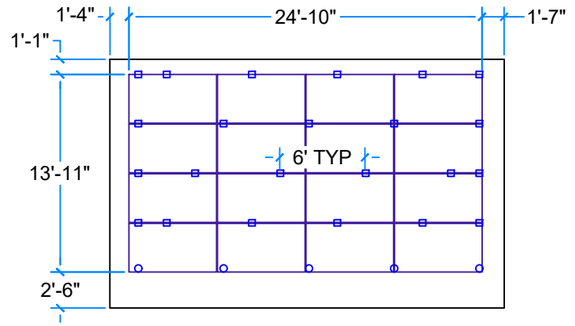
D1 - AR-01 - SCALE: 3/32" = 1'-0"
AZIM:226°
PITCH: 23°



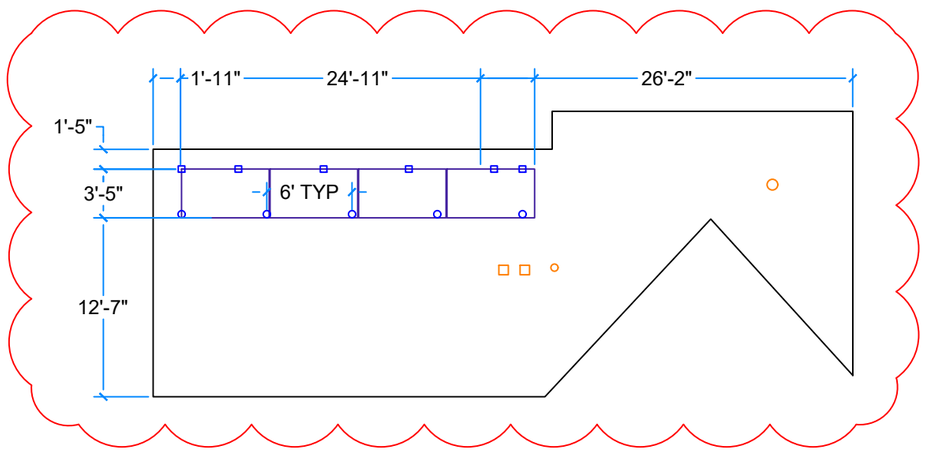
D2 - AR-02 - SCALE: 3/32" = 1'-0"
AZIM:47°
PITCH: 23°



D3 - AR-03 - SCALE: 3/32" = 1'-0"
AZIM:314°
PITCH: 23°

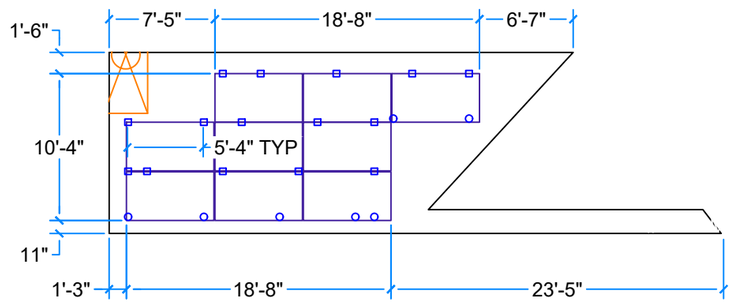


D4 - AR-04 - SCALE: 3/32" = 1'-0"
AZIM:134°
PITCH: 23°



B

D5 - AR-05 - SCALE: 3/32" = 1'-0"
AZIM:44°
PITCH: 23°



DESIGN CRITERIA

MAX DISTRIBUTED LOAD: 3 PSF
SNOW LOAD: 30 PSF
WIND SPEED:
90 MPH 3-SEC GUST.
S.S. LAG SCREW
5/16": 2.5" MIN EMBEDMENT
STRUCTURAL NOTES

- INSTALLERS SHALL NOTIFY ENGINEER OF ANY POTENTIAL STRUCTURAL ISSUES OBSERVED PRIOR TO PROCEEDING W/ INSTALLATION.
- IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
  - ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%
  - ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/5TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS

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TEL. (773) 818-5867
APN: 07-03-303-023-0000

PROJECT NUMBER:
711R-135KOLE

DESIGNER: (415) 580-6920 ex3
CINDY SAN MIGUEL

SHEET
LAYOUT

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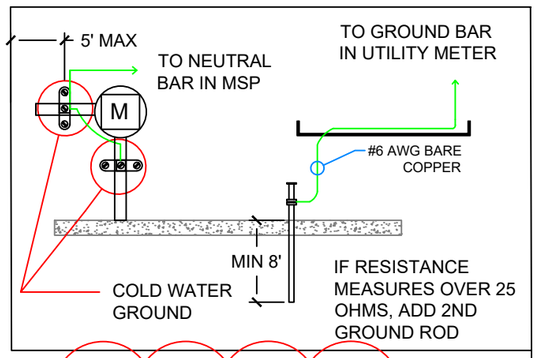
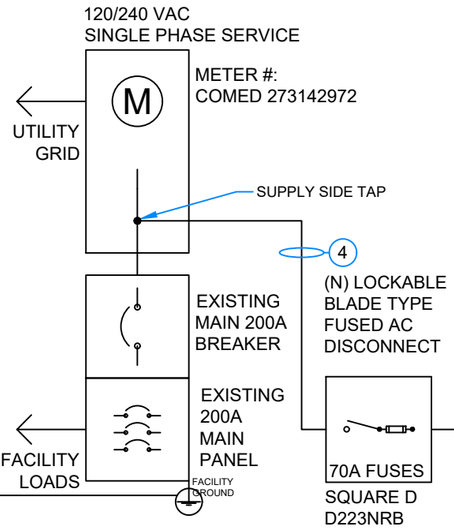


NOTE: TOTAL PV BACKFEED = 67A
USED FOR INTERCONNECTION
CALCULATIONS

B



B

CONDUIT SCHEDULE

#	CONDUIT	CONDUCTOR	NEUTRAL	GROUND
1	NONE	(2) 12 AWG PER ENPHASE Q CABLE BRANCH	NONE	(1) 10 AWG BARE COPPER
2a	3/4" IMC	(6) 10 AWG THHN/THWN-2	NONE	(1) 8 AWG THHN/THWN-2
2b	3/4" IMC	(4) 10 AWG THHN/THWN-2	NONE	(1) 8 AWG THHN/THWN-2
3	3/4" IMC	(2) 6 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2
4	1" IMC	(2) 4 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2

MODULE CHARACTERISTICS

HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400:	400 W
OPEN CIRCUIT VOLTAGE:	45.3 V
MAX POWER VOLTAGE:	37.13 V
SHORT CIRCUIT CURRENT:	11.14 A

B

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CINDY SAN MIGUEL

SHEET
ELECTRICAL

REV: B 12/9/2022

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⚠ WARNING

ELECTRICAL SHOCK HAZARD

DO NOT TOUCH TERMINALS. TERMINALS ON LINE AND LOAD SIDES MAY BE ENERGIZED IN THE OPEN POSITION

LABEL LOCATION:
INVERTER(S), AC/DC DISCONNECT(S), AC COMBINER PANEL (IF APPLICABLE).
PER CODE(S): NEC 2014: 690.17(E), NEC 2011: 690.17(4)

⚠ WARNING

DUAL POWER SUPPLY

SOURCES: UTILITY GRID AND PV SOLAR ELECTRIC SYSTEM

LABEL LOCATION:
UTILITY SERVICE METER AND MAIN SERVICE PANEL.
PER CODE(S): NEC 2014: 705.12(D)(3), NEC 2011: 705.12(D)(4)

⚠ WARNING

POWER SOURCE OUTPUT CONNECTION

DO NOT RELOCATE THIS OVERCURRENT DEVICE

LABEL LOCATION:
ADJACENT TO PV BREAKER (IF APPLICABLE).
PER CODE(S): NEC 2014: 705.12(D)(2)(3)(b), NEC 2011: 705.12(D)(7)

⚠ WARNING

PHOTOVOLTAIC SYSTEM COMBINER PANEL

DO NOT ADD LOADS

LABEL LOCATION:
PHOTOVOLTAIC AC COMBINER (IF APPLICABLE).
PER CODE(S): NEC 2014: 705.12(D)(2)(3)(c), NEC 2011: 705.12(D)(4)

PHOTOVOLTAIC AC DISCONNECT

MAXIMUM AC OPERATING CURRENT: 53.17 AMPS

NOMINAL OPERATING AC VOLTAGE: 240 VAC

LABEL LOCATION:
AC DISCONNECT(S), PHOTOVOLTAIC SYSTEM POINT OF INTERCONNECTION.
PER CODE(S): NEC 2014: 690.54, NEC 2011: 690.54

NOTES AND SPECIFICATIONS:

- SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE NEC 2005 ARTICLE 110.21(B), UNLESS SPECIFIC INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL AHJ.
- SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
- LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND WRITTEN.
- LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
- SIGNS AND LABELS SHALL COMPLY WITH ANSI Z535.4-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS OTHERWISE SPECIFIED.
- DO NOT COVER EXISTING MANUFACTURER LABELS.

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SHEET
SIGNAGE

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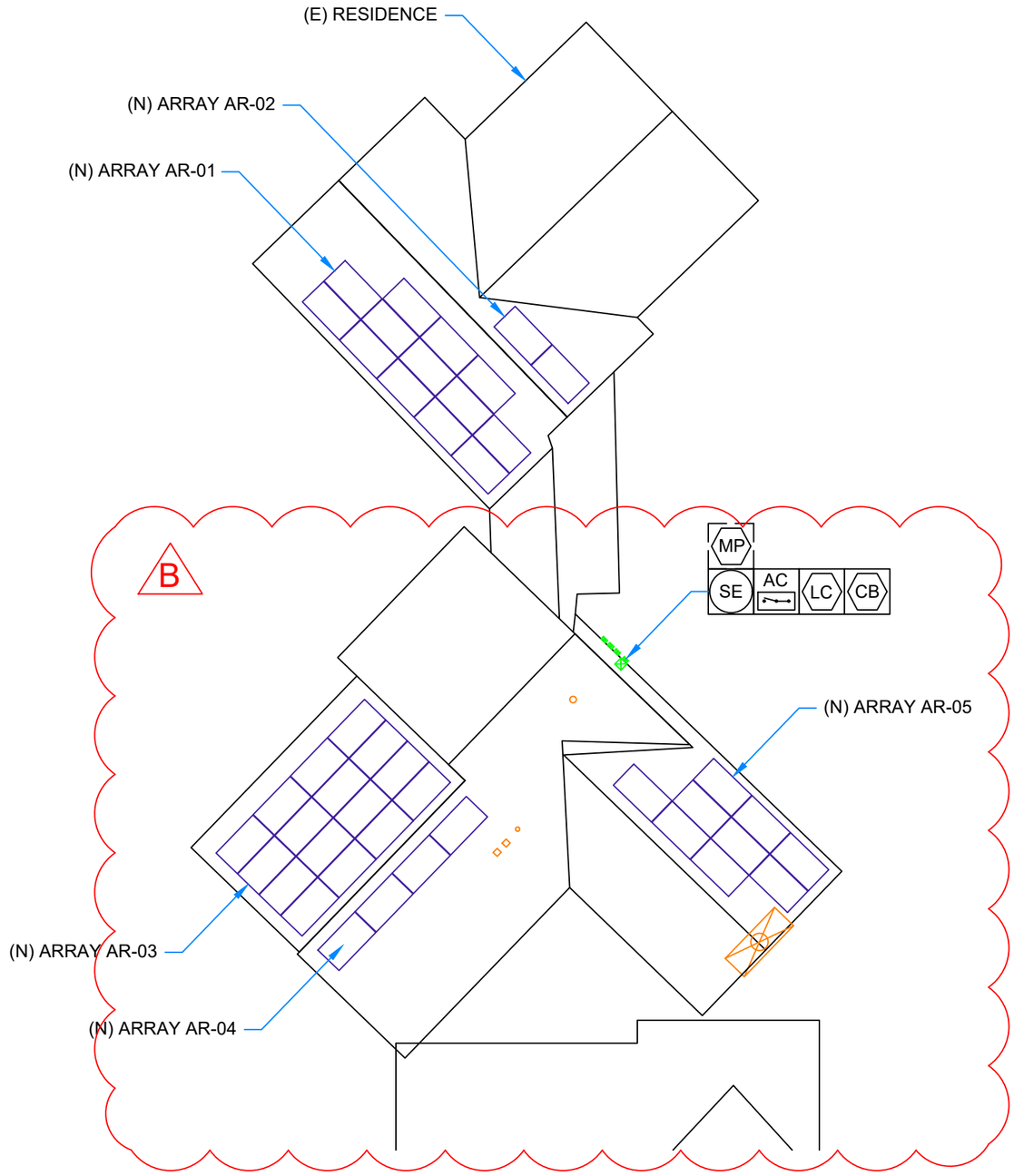
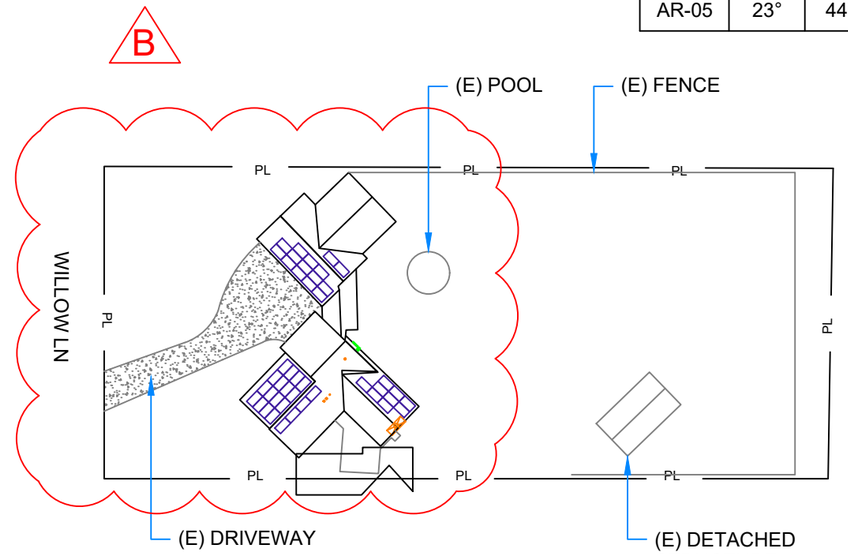
SITE PLAN - SCALE = 1/16" = 1'-0"



SITE PLAN DETAIL- SCALE = 1/64" = 1'-0"



	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	23°	226°	229°	274.8
AR-02	23°	47°	50°	42.3
AR-03	23°	314°	317°	338.2
AR-04	23°	134°	137°	84.5
AR-05	23°	44°	47°	190.2

NOTE: MICRO-INVERTERS INSTALLED UNDER EACH MODULE

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SHEET
SITE PLAN

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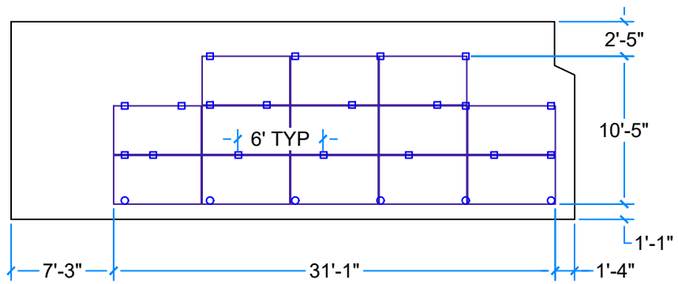
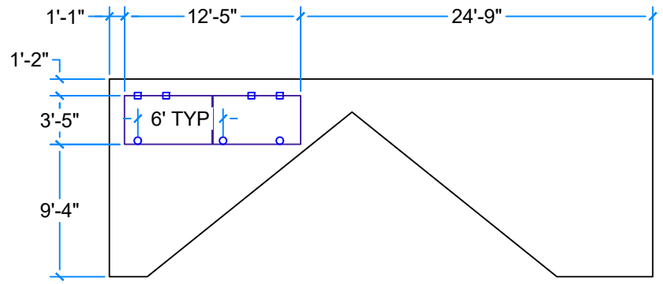
ROOF INFO			FRAMING INFO			ATTACHMENT INFORMATION					
Name	Type	Height	Type	Max Span	OC Spacing	Detail	Max Landscape OC Spacing	Max Landscape Overhang	Max Portrait OC Spacing	Max Portrait Overhang	Configuration
AR-01	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	5' - 5"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-02	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	5' - 5"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-03	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	6' - 7"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-04	COMP SHINGLE - RLU	1-Story	2X4 PRE-FABRICATED TRUSSES	6' - 7"	24"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	6' - 0"	2' - 4"	4' - 0"	1' - 10"	STAGGERED
AR-05	COMP SHINGLE - RLU	1-Story	2X6 RAFTERS	10' - 6"	16"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	5' - 4"	2' - 1"	4' - 0"	1' - 10"	STAGGERED

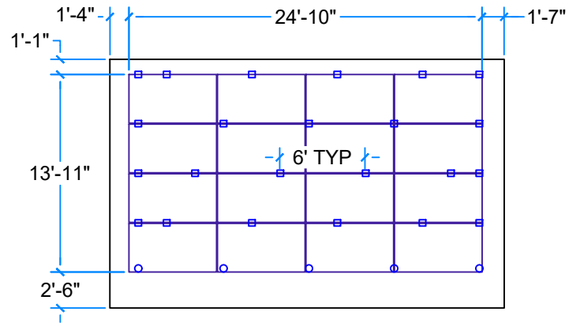
D1 - AR-01 - SCALE: 3/32" = 1'-0"
AZIM:226°
PITCH: 23°



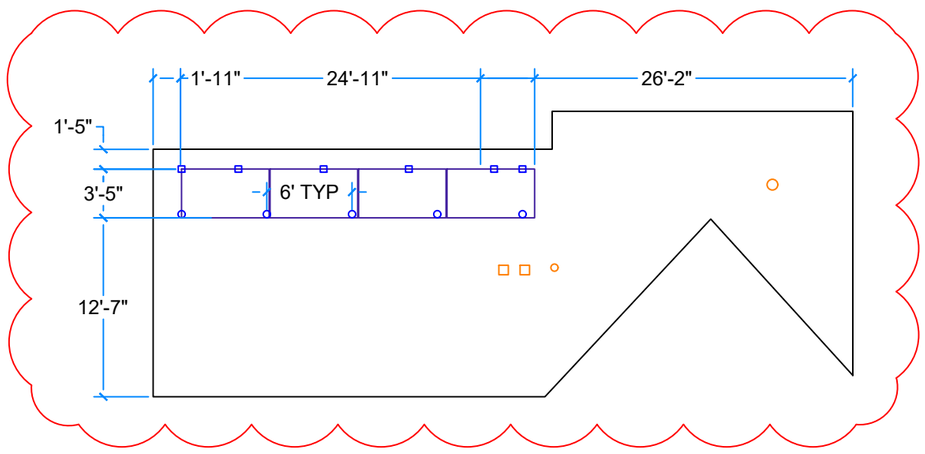
D2 - AR-02 - SCALE: 3/32" = 1'-0"
AZIM:47°
PITCH: 23°



D3 - AR-03 - SCALE: 3/32" = 1'-0"
AZIM:314°
PITCH: 23°

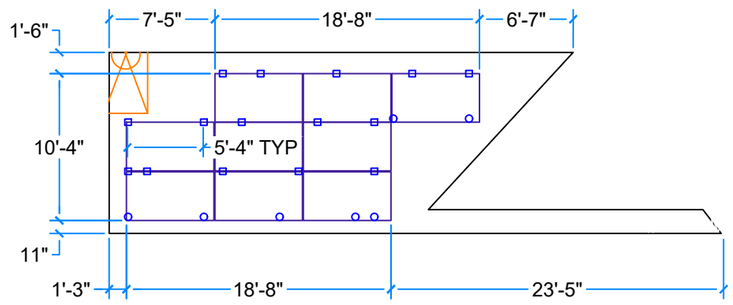


D4 - AR-04 - SCALE: 3/32" = 1'-0"
AZIM:134°
PITCH: 23°



B

D5 - AR-05 - SCALE: 3/32" = 1'-0"
AZIM:44°
PITCH: 23°



DESIGN CRITERIA

MAX DISTRIBUTED LOAD: 3 PSF
SNOW LOAD: 30 PSF
WIND SPEED:
90 MPH 3-SEC GUST.
S.S. LAG SCREW
5/16": 2.5" MIN EMBEDMENT
STRUCTURAL NOTES

- INSTALLERS SHALL NOTIFY ENGINEER OF ANY POTENTIAL STRUCTURAL ISSUES OBSERVED PRIOR TO PROCEEDING W/ INSTALLATION.
- IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
  - ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%
  - ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/5TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS

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TEL. (773) 818-5867
APN: 07-03-303-023-0000

PROJECT NUMBER:
711R-135KOLE

DESIGNER: (415) 580-6920 ex3
CINDY SAN MIGUEL

SHEET
LAYOUT

REV: B 12/9/2022

PAGE
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SITE SPECIFIC SAFETY PLAN CHECKLIST		Abbr.
	Inspect entire jobsite for hazards	H
	Draw Sunrun vehicle locations on planset	SV
	Label Operations Safety Manual Location	OSM
	Label fire extinguisher location	FE
	Label first aid kit location	FA
	Label eye wash bottle location	EW
	Label drinking water location	DW
	Draw hard hat zone around house	HHZ
	Draw fall protection anchor locations	X
	Draw ladder & roof access points	L
	Draw electrical hazard areas	EH
	Draw water & trip hazard locations	

Daily weather forecast & HIPP measures:

Foreman conducts daily safety briefing and reviews this checklist with crew. Sign and date:

_____

Crew signatures:

_____

_____

_____

_____

_____

Safety Contact:	
Medical Clinic:	
Nearest Hospital:	
Restroom Location:	
Water Replenishment:	
Water Replenished by:	

SOPs

Note: For jobs that last longer than one day, conduct a safety briefing at the start of each day and initial this plan next to your signature.

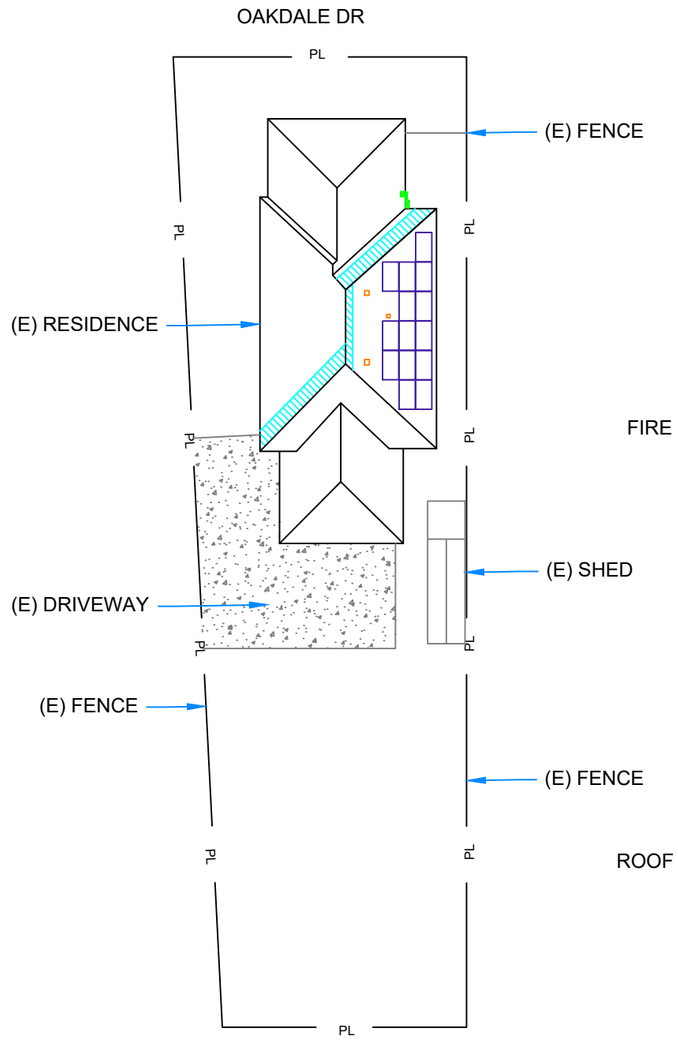
Design Feedback

Customer Signature:

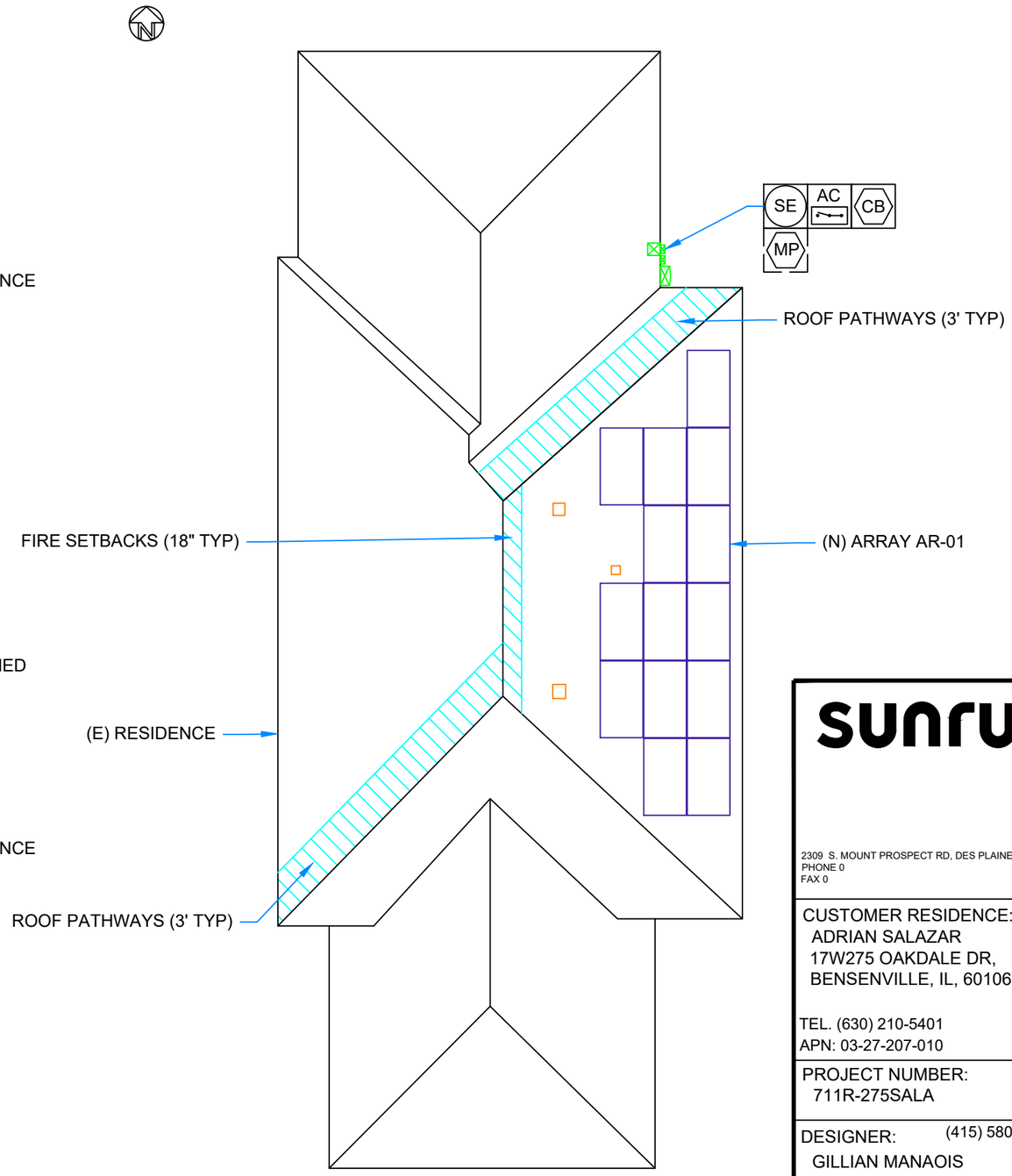
X _____

APPROVAL: I have reviewed the solar design and approve of the placement of solar panels and equipment identified on this page. I have added my initials next to the equipment locations and signed this document to note my agreement with the layout of the system.

SITE PLAN DETAIL - SCALE = 1/32" = 1'-0"



SITE PLAN - SCALE = 3/32" = 1'-0"



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ADRIAN SALAZAR
17W275 OAKDALE DR,
BENSENVILLE, IL, 60106

TEL. (630) 210-5401
APN: 03-27-207-010

PROJECT NUMBER:
711R-275SALA

DESIGNER: (415) 580-6920 ex3
GILLIAN MANAOIS

SHEET
SAFETY PLAN

REV: B 12/9/2022

PAGE CD-1.0

JURISDICTION	IL-COUNTY DUPAGE	UTILITY	ComEd	BRANCH	IL Chicago

ELECTRICAL SOW		
MAIN PANEL UPGRADE	No	----
MAIN PANEL REPLACEMENT	No	----
METER ADAPTER	No	----
SERVICE REFEED	Yes	Code Violations - Conductors undersized for 200 amp service refeed with 3/0 CU or 4/0 AL
NEW SUB-PANEL	No	
INTERCONNECTION	Supply Side Tap: Meter Conductors	
DESIGNER NOTES - ELECTRICAL	IC: SST in Meter Conductor CB & AC Disconnect are located on the left side of meter NOTE: The following stringing details are only valid for Hanwha Q-Cells: Q.PEAK DUO BLK ML-G10+ 400 - Enphase Energy: IQ8PLUS-72-2-US: Max Branch Size: 13; - Modules within branch are not required to be at the same orientation and pitch	

ROOF SOW		
RELOCATE VENT	No	
RELOCATE SATELLITE DISH	No	
DORMER REPLACED W/ FLUSH VENT	No	
DESIGNER NOTES - ROOF	Roof in good condition	

STRUCTURAL SOW		
SISTERING	No	----
DESIGNER NOTES - STRUCTURAL	Structure in good condition	

OTHER SOW		
TRENCHING	No	----
ANIMAL DETERRENT SYSTEM	No	----
DESIGNER NOTES - MISC.	----	

AHJ ELECTRICAL REQS		
GROUND ROD	No	----
EXTERNAL GEC	No	----
VISIBLE BLADE AC DISCO	No	----
WIRE SIZE REQUIREMENTS	No	----

UTILITY REQS		
EQUIPMENT ORDER	----	
PRODUCTION METER	No	----
WIRE SIZING REQUIREMENTS	No	----
UTILITY CUSTOM GUIDELINES	----	

OTHER REQS		
AHJ COVER FLUSH VENTS	No	----
AHJ COVER PVC VENTS	----	----
UNPERMITTED	No	----
PLACARDS	No	----
AHJ CUSTOM GUIDELINES	----	
INSPECTION GUIDELINES	----	
PERMITTING GUIDELINES	----	

ADDITIONAL INFORMATION			
SYSTEM SIZE	5600W DC, 4060W AC	BACKFEED	25 AMPS
MODULES	(14) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400	MAIN MANUFACTURER	Cutler Hammer
MODULE DIMS	73.98" x 41.14" x 1.26" (33mm)	RSD	----
INVERTER(S)	(14) ENPHASE ENERGY: IQ8PLUS-72-2-US Inv 2 (when applicable): ---- Inv 3 (when applicable): ----	ENERGY STORAGE	(----) ----
NOTES TO INSTALLER	NOTES TO INSTALLER: • CONNECT SYSTEM VIA INSULATION PIERCING ON SUPPLY SIDE CONDUCTORS IN UTILITY METER ENCLOSURE. CONDUCTORS ARE FIELD INSTALLED.		

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APN: 03-27-207-010

PROJECT NUMBER:
711R-275SALA

DESIGNER: (415) 580-6920 ex3
GILLIAN MANAOIS

SHEET
REQUIREMENTS

REV: B 12/9/2022

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STRUCTURAL SPECIFICATIONS

Structural Information

SYSTEM SIZE	5600W DC, 4060W AC	RACKING	SNAPNRACK RLU; RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436		
MODULES	(14) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400				
MODULE DIMS	73.98" x 41.14" x 1.26" (33mm)	ROOF TYPE	COMP SHINGLE - RLU		
MODULE CLAMPS	Portrait: 60, Landscape: 011-06607-ITC26	FRAME TYPE	2X6 RAFTERS		
MAX ROOF HEIGHT	1 STORIES	OC SPACING	16" OC		
LAG LENGTH	5/16"x 5.5": 2.5" MIN EMBEDMENT	COLUMN SPACING	0.75"	ROW SPACING	0.75"

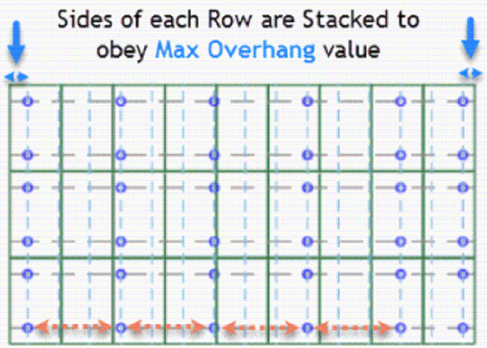
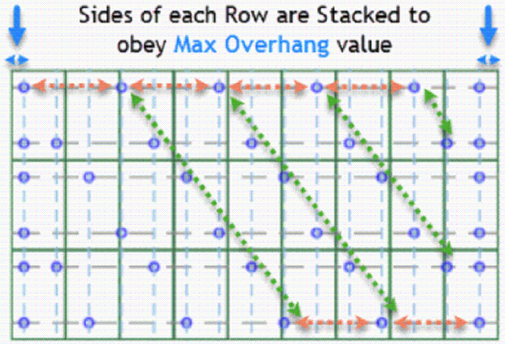
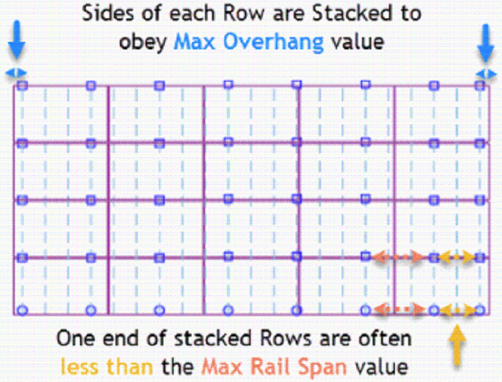
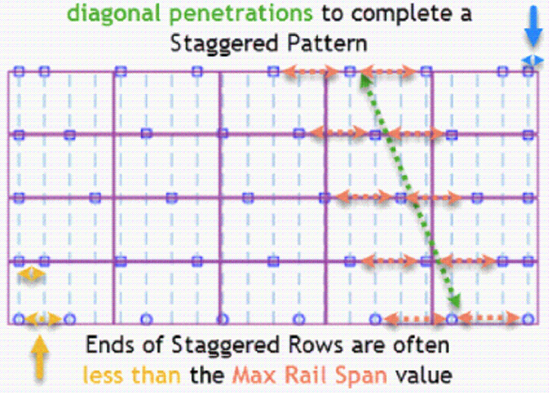
Structural SOW

SISTERING	No ----
DESIGNER NOTES	Structure in good condition

ATTACHMENT SPECIFICATIONS

Array	Landscape				Portrait				Layout
Name	Max OC Spacing	Max Overhang	*Reduced Max OC Spacing	*Reduced Max Overhang	Max OC Spacing	Max Overhang	*Reduced Max OC Spacing	*Reduced Max Overhang	Configuration
AR-01	5' - 4"	2' - 1"	2'-6"	1'-0"	4' - 0"	1' - 9"	2'-0"	0'-10"	STAGGERED

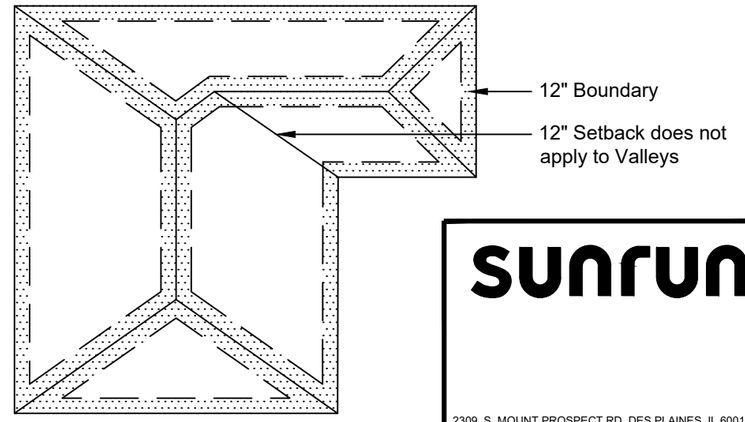
*Reduced maximum spacings and overhangs apply only within the roof edge boundary regions (see sample illustration below).

Racking Type	Stacked All Non-snow & Non-high Wind Regions (exception: Standing Seam is always staggered)	Staggered All Regions if Snow>10 PSF or Wind>150 mph
Railed	 Penetration Spacing must land on structural members and be <= the Max Rail Span value	 Start in one corner with first Max Rail Span and stagger penetrations diagonally onto every structural member
Rail-Less (RL)	 One end of stacked Rows are often less than the Max Rail Span value	 Ends of Staggered Rows are often less than the Max Rail Span value

PITCHED/SLOPED ROOFS - REDUCED SPACING AND OVERHANG DETAIL FOR 12" BOUNDARY REGION

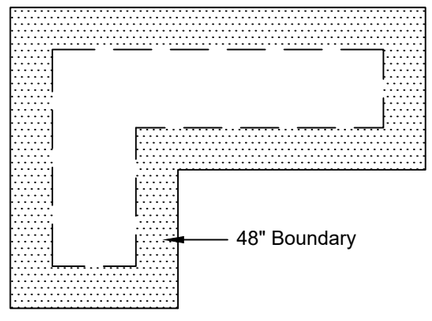
NOTE: If array (excluding skirt) is within 12" boundary region of any roof plane edges (except valleys), then attachments need to be added and overhang reduced within the 12" boundary region only as follows:

- Allowable attachment spacing indicated on plans to be reduced by 50% (refer to table above)
- Allowable overhang indicated on plans to be 1/5th of allowable attachment spacing indicated on plans (refer to table above)



FLAT ROOFS - REDUCED SPACING AND OVERHANG DETAIL FOR 48" BOUNDARY REGION

- Allowable attachment spacing indicated on plans to be reduced by 50% (refer to table above)
- Allowable overhang indicated on plans to be 1/5th of allowable attachment spacing indicated on plans (refer to table above)



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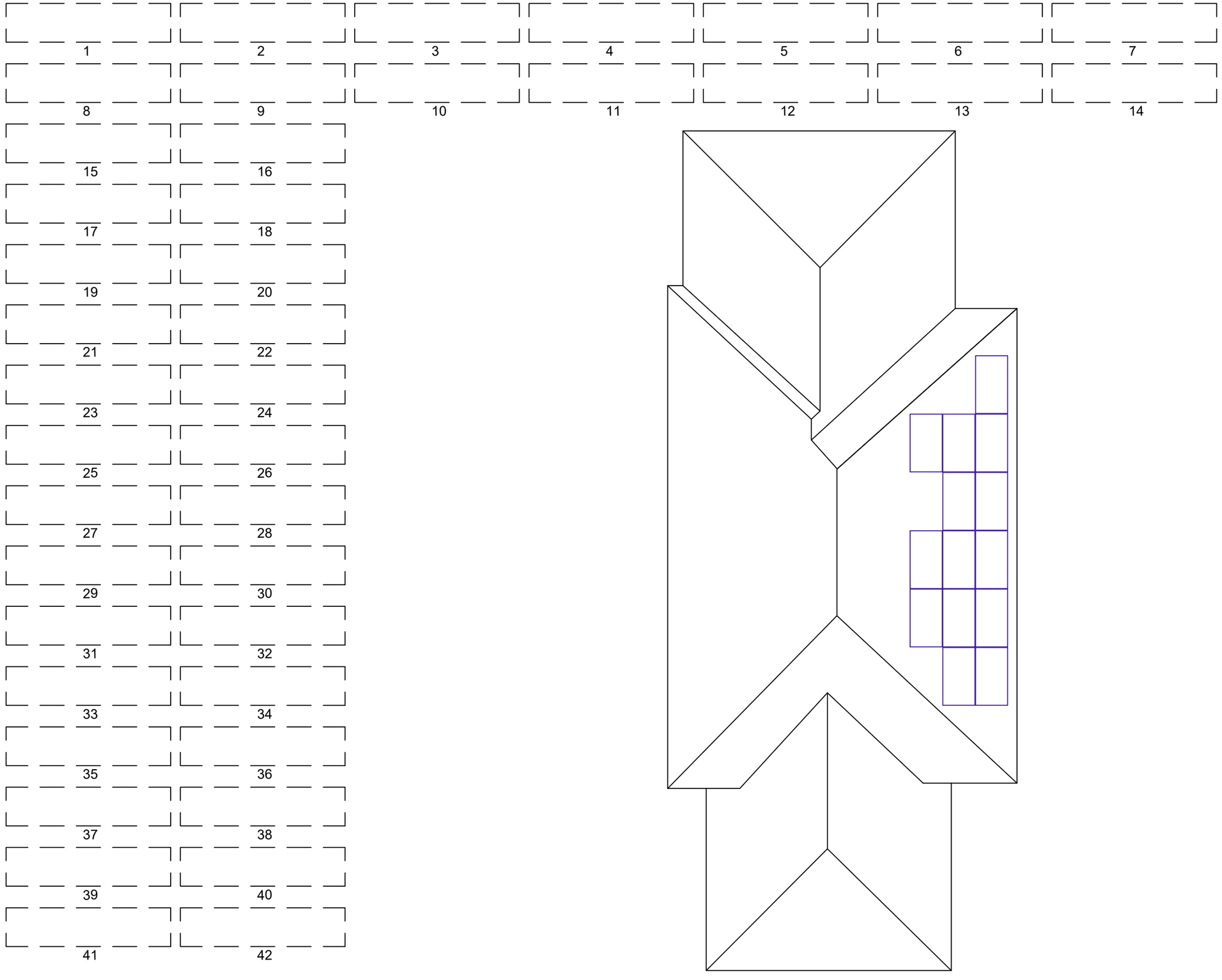
GILLIAN MANAOIS

SHEET
STRUC. REQS.

REV: B 12/9/2022

PAGE
CD-3.0

	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	22°	90°	93°	295.9



Mapping Instructions:

1. Remove the Enphase sticker and place neatly on the appropriate numbered space.

2. Write the corresponding number on the appropriate panel within the array.

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SHEET
MLPE MAP

REV: B 12/9/2022

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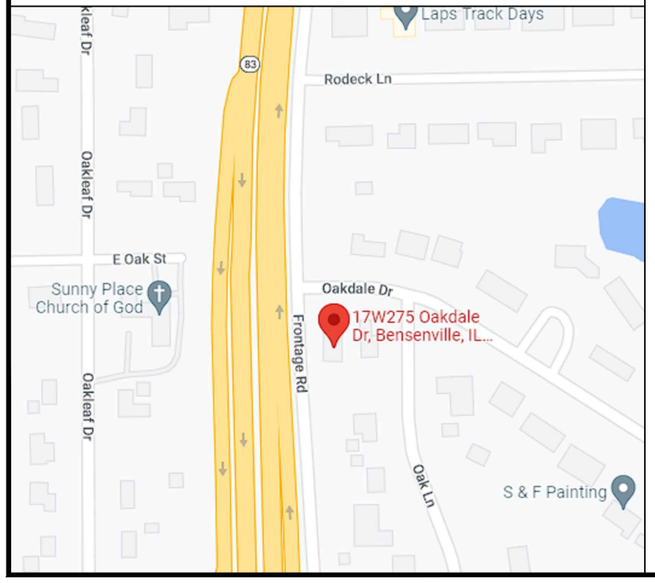
CD-4.0

SCOPE OF WORK

- **SYSTEM SIZE:** 5600W DC, 4060W AC
- **MODULES:** (14) HANWHA Q-CELLS: Q.PEAK DUO BLK ML-G10+ 400
- **INVERTER(S):** (14) ENPHASE ENERGY: IQ8PLUS-72-2-US
- **RACKING:** SNAPNRACK RLU; RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436

• SERVICE ENTRANCE CONDUCTORS TO BE REPLACED.

VICINITY MAP



GENERAL NOTES

• ALL WORK SHALL COMPLY WITH 2021 IRC/IBC/IEBC, MUNICIPAL CODE, AND ALL MANUFACTURERS' LISTINGS AND INSTALLATION INSTRUCTIONS.
• PHOTOVOLTAIC SYSTEM WILL COMPLY WITH NEC 2020.

• ELECTRICAL SYSTEM GROUNDING WILL COMPLY WITH NEC 2020.

• PHOTOVOLTAIC SYSTEM IS UNGROUNDED. NO CONDUCTORS ARE SOLIDLY GROUNDED IN THE INVERTER. SYSTEM COMPLIES WITH 690.35.

• MODULES CONFORM TO AND ARE LISTED UNDER UL 1703.

• INVERTER CONFORMS TO AND IS LISTED UNDER UL 1741.

• RACKING CONFORMS TO AND IS LISTED UNDER UL 2703.

• SNAPNRACK RACKING SYSTEMS, IN COMBINATION WITH TYPE I, OR TYPE II MODULES, ARE CLASS A FIRE RATED.

• RAPID SHUTDOWN REQUIREMENTS MET WHEN INVERTERS AND ALL CONDUCTORS ARE WITHIN ARRAY BOUNDARIES PER NEC 690.12(1).

• CONSTRUCTION FOREMAN TO PLACE CONDUIT RUN PER 690.31(G).

• ARRAY DC CONDUCTORS ARE SIZED FOR DERATED CURRENT.

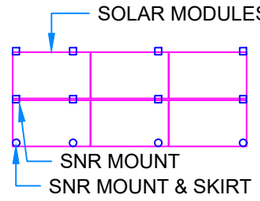
• 11.14 AMPS MODULE SHORT CIRCUIT CURRENT.

• 17.4 AMPS DERATED SHORT CIRCUIT CURRENT [690.8 (A) & 690.8 (B)].

B

LEGEND AND ABBREVIATIONS

- SE — SERVICE ENTRANCE
- MP — MAIN PANEL
- SP — SUB-PANEL
- LC — PV LOAD CENTER
- SM — SUNRUN METER
- PM — DEDICATED PV METER
- INV — INVERTER(S)
- AC — AC DISCONNECT(S)
- DC — DC DISCONNECT(S)
- CB — IQ COMBINER BOX
- INTERIOR EQUIPMENT SHOWN AS DASHED



- CHIMNEY
- ATTIC VENT
- FLUSH ATTIC VENT
- PVC PIPE VENT
- METAL PIPE VENT
- T-VENT
- SATELLITE DISH
- FIRE SETBACKS
- HARDSCAPE
- — PL — PROPERTY LINE

SCALE: NTS

A	AMPERE
AC	ALTERNATING CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AZIM	AZIMUTH
COMP	COMPOSITION
DC	DIRECT CURRENT
(E)	EXISTING
ESS	ENERGY STORAGE SYSTEM
EXT	EXTERIOR
INT	INTERIOR
MAG	MAGNETIC
MSP	MAIN SERVICE PANEL
(N)	NEW
NTS	NOT TO SCALE
OC	ON CENTER
PRE-FAB	PRE-FABRICATED
PSF	POUNDS PER SQUARE FOOT
PV	PHOTOVOLTAIC
RSD	RAPID SHUTDOWN DEVICE
TL	TRANSFORMERLESS
TYP	TYPICAL
V	VOLTS
W	WATTS

REV	NAME	DATE	COMMENTS
B	TONY DANG	12/9/2022	MOD SWAP

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PAGE #	DESCRIPTION
PV-1.0	COVER SHEET
PV-2.0	SITE PLAN
PV-3.0	LAYOUT
PV-4.0	ELECTRICAL
PV-5.0	SIGNAGE

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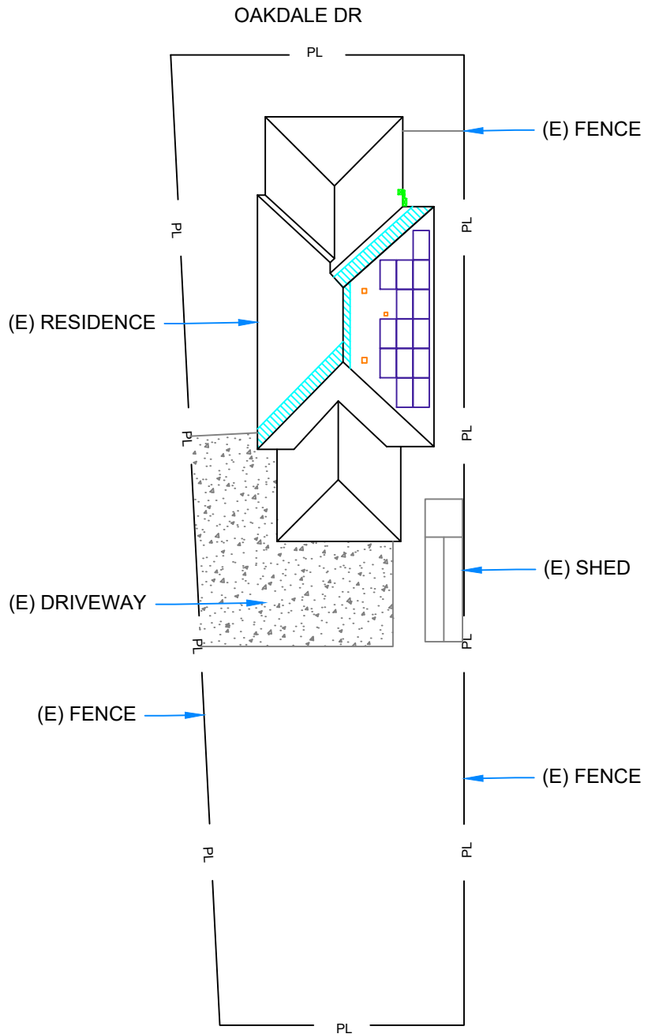
GILLIAN MANAOIS

SHEET
COVER SHEET

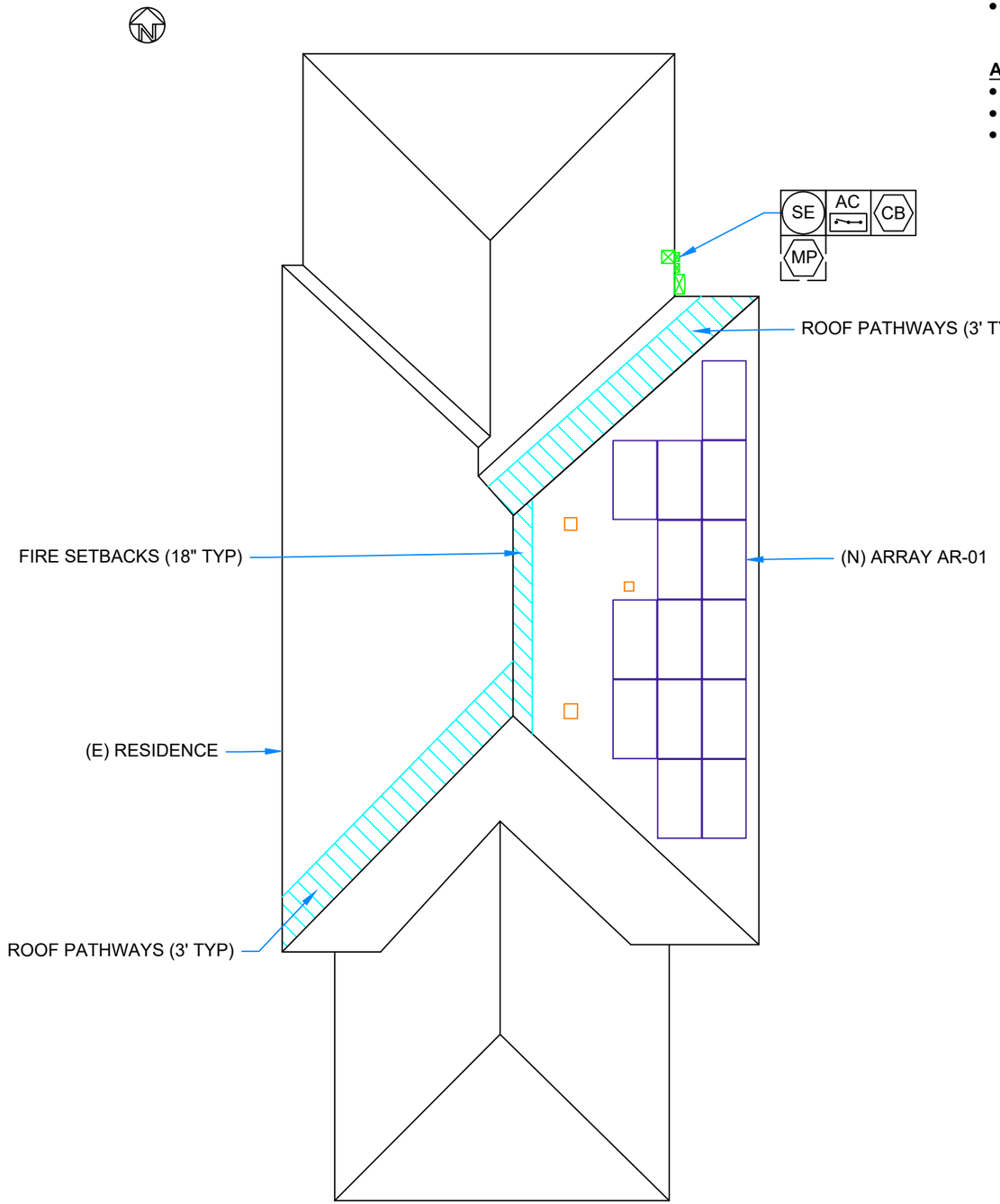
REV: B 12/9/2022

PAGE PV-1.0

SITE PLAN DETAIL - SCALE = 1/32" = 1'-0"



SITE PLAN - SCALE = 3/32" = 1'-0"



	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	22°	90°	93°	295.9

NOTES:

- RESIDENCE DOES NOT CONTAIN ACTIVE FIRE SPRINKLERS.

ARRAY DETAILS:

- TOTAL ROOF SURFACE AREA: 3190 SQFT.
- TOTAL PV ARRAY AREA: 295.9 SQ FT.
- PERCENTAGE PV COVERAGE: (TOTAL PV ARRAY AREA/TOTAL ROOF SURFACE AREA) * 100 = 9.3%

NOTE: MICRO-INVERTERS INSTALLED UNDER EACH MODULE

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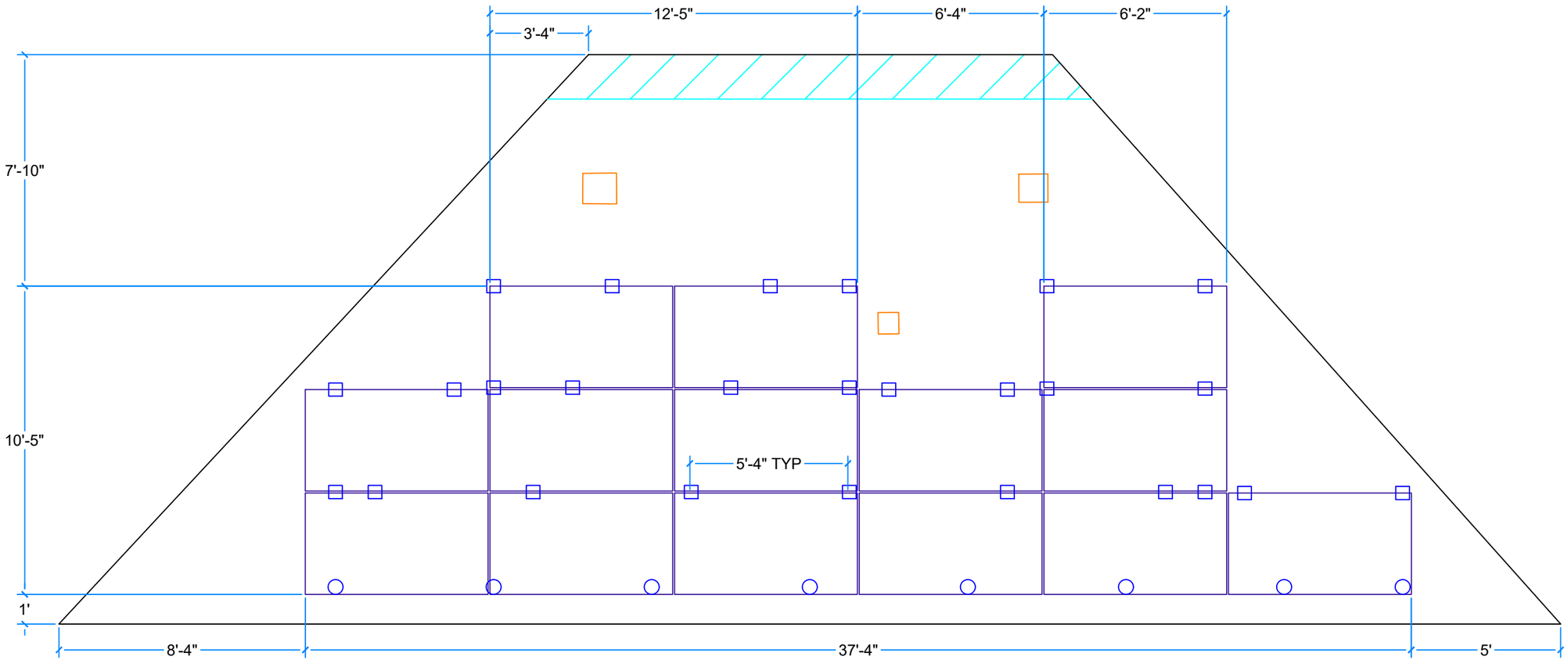
SHEET
SITE PLAN

REV: B 12/9/2022

PAGE
PV-2.0

ROOF INFO			FRAMING INFO			ATTACHMENT INFORMATION					
Name	Type	Height	Type	Max Span	OC Spacing	Detail	Max Landscape OC Spacing	Max Landscape Overhang	Max Portrait OC Spacing	Max Portrait Overhang	Configuration
AR-01	COMP SHINGLE - RLU	1-Story	2X6 RAFTERS	15' - 11"	16"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	5' - 4"	2' - 1"	4' - 0"	1' - 9"	STAGGERED

D1 - AR-01 - SCALE: 1/4" = 1'-0"
AZIM:90°
PITCH: 22°



DESIGN CRITERIA

MAX DISTRIBUTED LOAD: 3 PSF
SNOW LOAD: 30 PSF
WIND SPEED:
107 MPH 3-SEC GUST.
S.S.LAG SCREWS:
5/16"x 5.5": 2.5" MIN EMBEDMENT
STRUCTURAL NOTES:

- INSTALLERS SHALL NOTIFY ENGINEER OF ANY POTENTIAL STRUCTURAL ISSUES OBSERVED PRIOR TO PROCEEDING W/ INSTALLATION.
- IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
  - ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%
  - ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/5TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS

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GILLIAN MANAOIS

SHEET
LAYOUT

REV: B 12/9/2022

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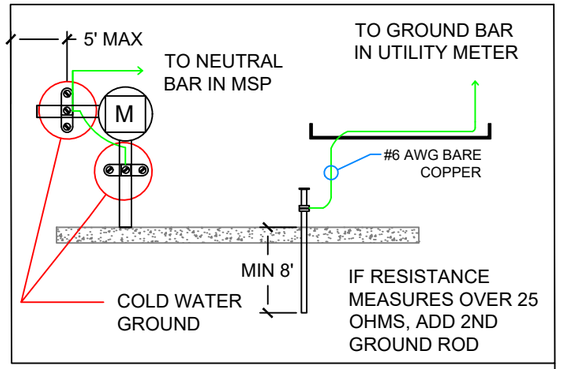
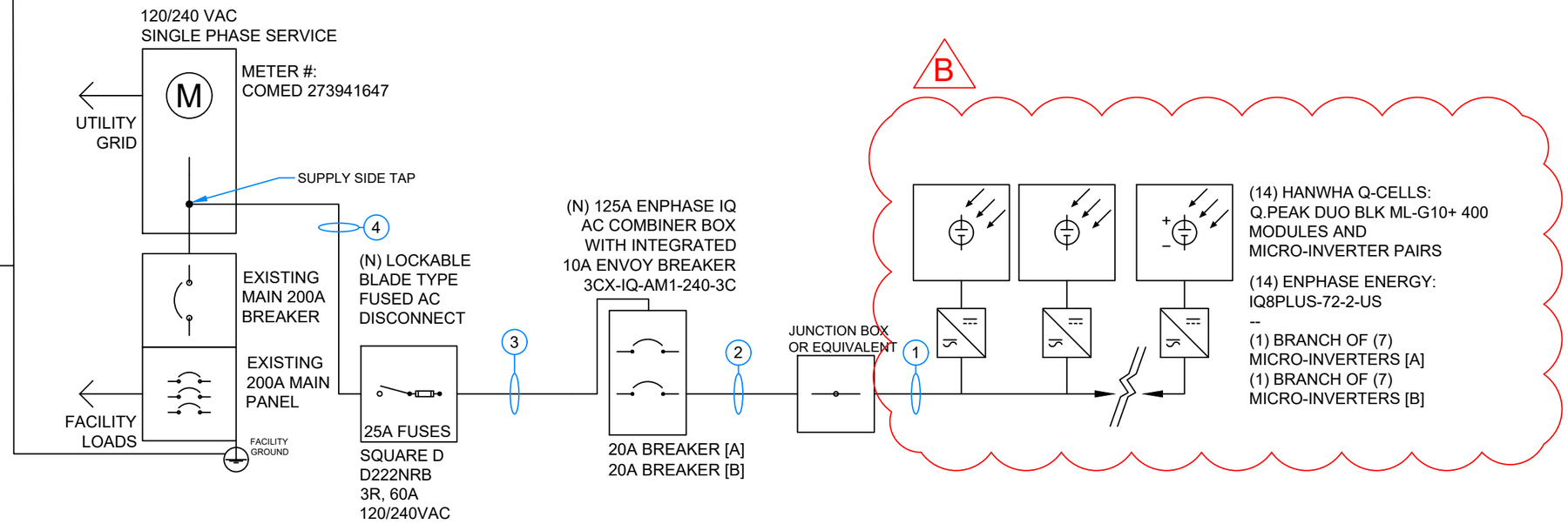
PV-3.0

IL PV ONLY - GROUNDING DETAIL





CONDUIT SCHEDULE

#	CONDUIT	CONDUCTOR	NEUTRAL	GROUND
1	NONE	(2) 12 AWG PER ENPHASE Q CABLE BRANCH	NONE	(1) 10 AWG BARE COPPER
2	3/4" IMC	(4) 10 AWG THHN/THWN-2	NONE	(1) 8 AWG THHN/THWN-2
3	3/4" IMC	(2) 10 AWG THHN/THWN-2	(1) 10 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2
4	3/4" IMC	(2) 6 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2	(1) 8 AWG THHN/THWN-2

MODULE CHARACTERISTICS

HANWHA Q-CELLS: Q.PEAK DUO BLK	
ML-G10+ 400:	400 W
OPEN CIRCUIT VOLTAGE:	45.3 V
MAX POWER VOLTAGE:	37.13 V
SHORT CIRCUIT CURRENT:	11.14 A

B

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SHEET
ELECTRICAL

REV: B 12/9/2022

PAGE PV-4.0

⚠ WARNING

ELECTRICAL SHOCK HAZARD

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

LABEL LOCATION:
INVERTER(S), AC/DC DISCONNECT(S), AC COMBINER PANEL (IF APPLICABLE).
PER CODE(S): NEC 2020: 690.13(B)

⚠ WARNING

DUAL POWER SUPPLY

SOURCES: UTILITY GRID AND PV SOLAR ELECTRIC SYSTEM

LABEL LOCATION:
UTILITY SERVICE METER AND MAIN SERVICE PANEL.
PER CODE(S): NEC 2020: 705.12(C)

⚠ WARNING

POWER SOURCE OUTPUT CONNECTION

DO NOT RELOCATE THIS OVERCURRENT DEVICE

LABEL LOCATION:
ADJACENT TO PV BREAKER AND ESS OCPD (IF APPLICABLE).
PER CODE(S): NEC 2020: 705.12(B)(3)(2)

⚠ WARNING

PHOTOVOLTAIC SYSTEM COMBINER PANEL

DO NOT ADD LOADS

LABEL LOCATION:
PHOTOVOLTAIC AC COMBINER (IF APPLICABLE).
PER CODE(S): NEC 2020: 705.12(D)(2)(3)(c)

PV SYSTEM DISCONNECT

MAXIMUM AC OPERATING CURRENT: 16.92 AMPS

NOMINAL OPERATING AC VOLTAGE: 240 VAC

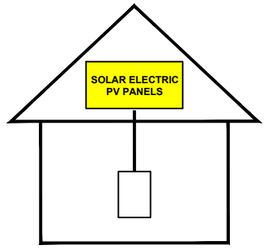
LABEL LOCATION:
AC DISCONNECT(S), PHOTOVOLTAIC SYSTEM POINT OF INTERCONNECTION.
PER CODE(S): NEC 2020: 690.54

4"

3"

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:
ON OR NO MORE THAT 1 M (3 FT) FROM THE SERVICE DISCONNECTING MEANS TO WHICH THE PV SYSTEMS ARE CONNECTED.
PER CODE(S): NEC 2020: 690.56(C)

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

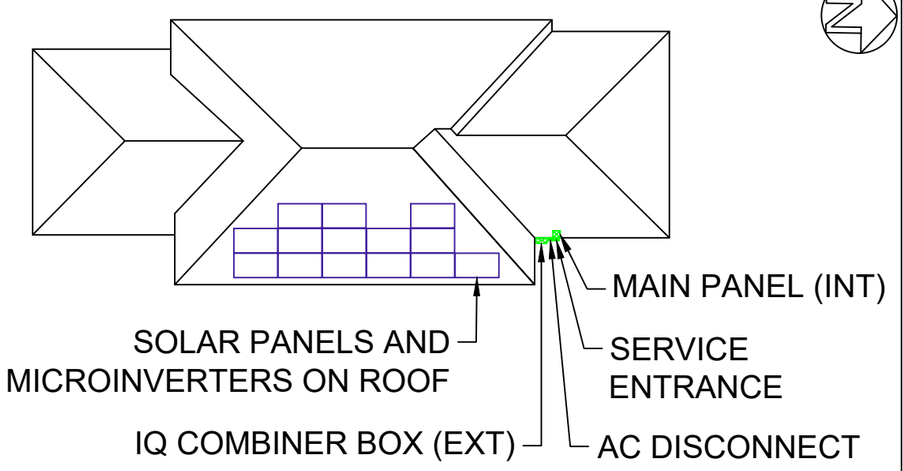
LABEL LOCATION:
INSTALLED WITHIN 3' OF RAPID SHUT DOWN SWITCH PER CODE(S): NEC 2020: 690.56(C)(2), IFC 2012: 605.11.1, IFC 2018: 1204.5.3

NOTES AND SPECIFICATIONS:

- SIGNS AND LABELS SHALL MEET THE REQUIREMENTS OF THE NEC 2020 ARTICLE 110.21(B), UNLESS SPECIFIC INSTRUCTIONS ARE REQUIRED BY SECTION 690, OR IF REQUESTED BY THE LOCAL AHJ.
- SIGNS AND LABELS SHALL ADEQUATELY WARN OF HAZARDS USING EFFECTIVE WORDS, COLORS AND SYMBOLS.
- LABELS SHALL BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HAND WRITTEN.
- LABEL SHALL BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
- SIGNS AND LABELS SHALL COMPLY WITH ANSI Z535.4-2011, PRODUCT SAFETY SIGNS AND LABELS, UNLESS OTHERWISE SPECIFIED.
- DO NOT COVER EXISTING MANUFACTURER LABELS.

CAUTION:

MULTIPLE SOURCES OF POWER



17W275 OAKDALE DR, BENSENVILLE, IL, 60106

PER CODE(S): NEC 2020 : 705.10, 710.10

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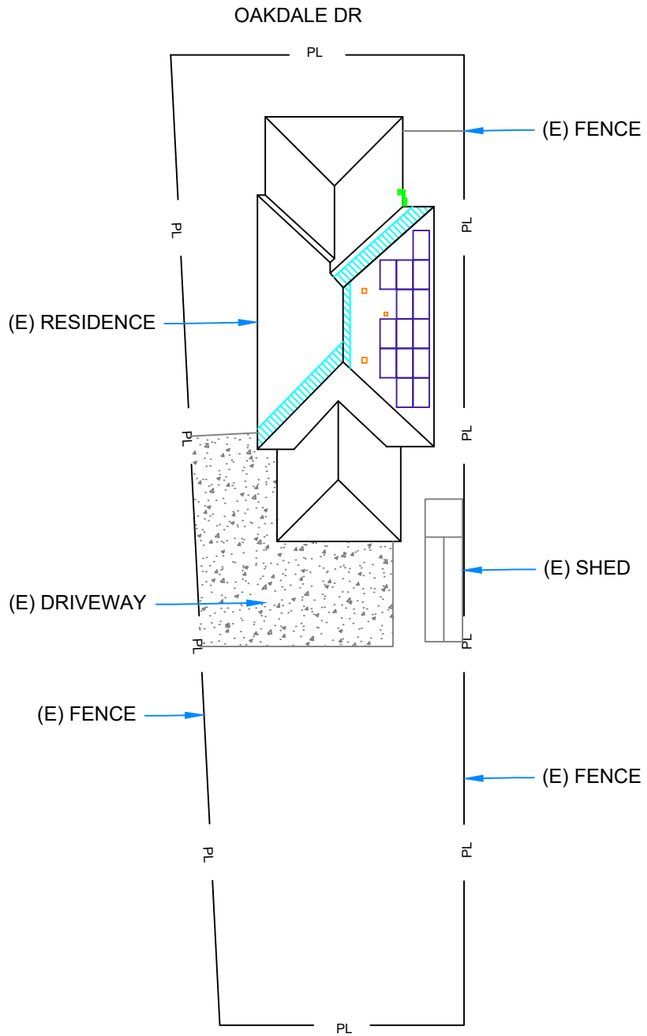
SHEET
SIGNAGE

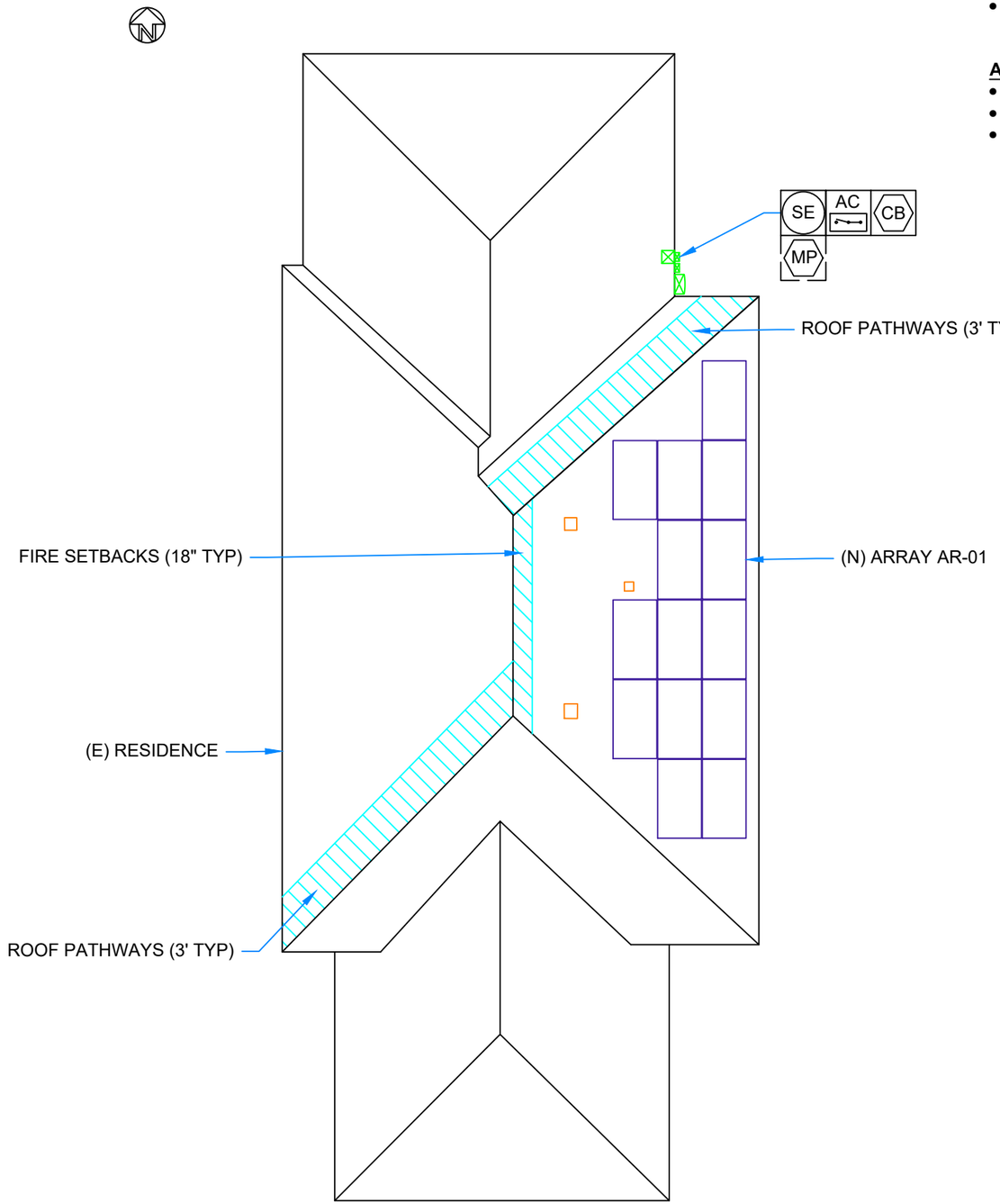
REV: B 12/9/2022

PAGE
PV-5.0

SITE PLAN DETAIL - SCALE = 1/32" = 1'-0"



SITE PLAN - SCALE = 3/32" = 1'-0"



	ARRAY PITCH	TRUE AZIM	MAG AZIM	PV AREA (SQFT)
AR-01	22°	90°	93°	295.9

NOTES:

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- TOTAL ROOF SURFACE AREA: 3190 SQFT.
- TOTAL PV ARRAY AREA: 295.9 SQ FT.
- PERCENTAGE PV COVERAGE: (TOTAL PV ARRAY AREA/TOTAL ROOF SURFACE AREA) * 100 = 9.3%

NOTE: MICRO-INVERTERS INSTALLED UNDER EACH MODULE

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GILLIAN MANAOIS

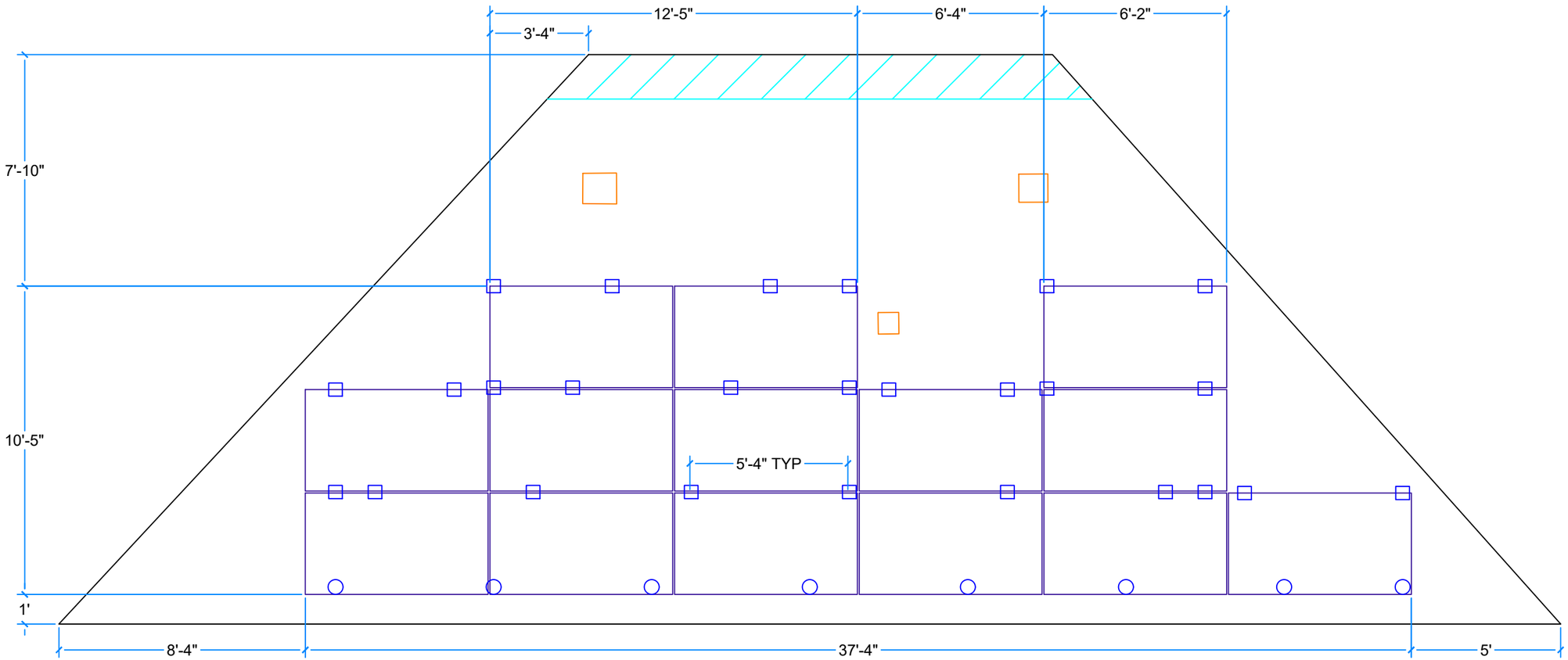
SHEET
SITE PLAN

REV: B 12/9/2022

PAGE
PV-2.0

ROOF INFO			FRAMING INFO			ATTACHMENT INFORMATION					
Name	Type	Height	Type	Max Span	OC Spacing	Detail	Max Landscape OC Spacing	Max Landscape Overhang	Max Portrait OC Spacing	Max Portrait Overhang	Configuration
AR-01	COMP SHINGLE - RLU	1-Story	2X6 RAFTERS	15' - 11"	16"	RL UNIVERSAL, SPEEDSEAL TRACK ON COMP, SEE DETAIL SNR-DC-00436	5' - 4"	2' - 1"	4' - 0"	1' - 9"	STAGGERED

D1 - AR-01 - SCALE: 1/4" = 1'-0"
AZIM:90°
PITCH: 22°



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SNOW LOAD: 30 PSF
WIND SPEED:
107 MPH 3-SEC GUST.
S.S.LAG SCREWS:
5/16"x 5.5": 2.5" MIN EMBEDMENT
STRUCTURAL NOTES:

- INSTALLERS SHALL NOTIFY ENGINEER OF ANY POTENTIAL STRUCTURAL ISSUES OBSERVED PRIOR TO PROCEEDING W/ INSTALLATION.
- IF ARRAY (EXCLUDING SKIRT) IS WITHIN 12" BOUNDARY REGION OF ANY ROOF PLANE EDGES (EXCEPT VALLEYS), THEN ATTACHMENTS NEED TO BE ADDED AND OVERHANG REDUCED WITHIN THE 12" BOUNDARY REGION ONLY AS FOLLOWS:
  - ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS TO BE REDUCED BY 50%
  - ALLOWABLE OVERHANG INDICATED ON PLANS TO BE 1/5TH OF ALLOWABLE ATTACHMENT SPACING INDICATED ON PLANS

sunrun

2309 S. MOUNT PROSPECT RD, DES PLAINES, IL 60018
PHONE 0
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CUSTOMER RESIDENCE:
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APN: 03-27-207-010

PROJECT NUMBER:
711R-275SALA

DESIGNER: (415) 580-6920 ex3
GILLIAN MANAOIS

SHEET
LAYOUT

REV: B 12/9/2022

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