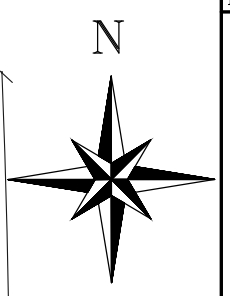


IMPERVIOUS SURFACES (SQFT)	
RESIDENCE	4,540
DRIVE & WALKS	4,193
BARN	1,346
PV SOLAR ARRAY	1,448
TOTAL IMPERVIOUS	11,527
TOTAL SQFT OF LOT	148,395
% OF IMPERVIOUS	7.76%



ENGINEER:

MODEL ENERGY
 300 FAYETTEVILLE ST.
 #1430
 RALEIGH, NC 27602
 919-274-9905
 MODELENERGY.COM
 P-1194

JOB TITLE:

NEW SOLAR PV SYSTEM
 29.20 kW DC INPUT
 19.00 kW AC EXPORT

Jennifer Zemo
 345 Rawls Club Rd,
 Fuquay-Varina, NC 27526

CLIENT:

READY SOLAR

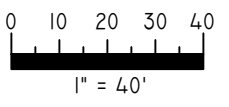
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CONSTRUCTION	07/20/22

SITE INFORMATION

PV2.1

1 SITE PLAN
 SCALE: 1" = 40'

345 RAWLS CLUB RD,
 FUQUAY-VARINA, NC 27526



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345 Rawls Club Road (#996129)
ground based

IRONRIDGE
28357 INDUSTRIAL BLVD., HAYWARD, CA 94545

Project Details

Name	345 Rawls Club Road	Date	07/20/2022
Location	345 Rawls Club Road, Fuquay-Varina, NC 27526	ASCE code	7.10
Total modules	80	Wind speed	120 mph
Module	URE: FAM365E7G-BB (35mm)	Snow load	20 psf
Dimensions	Dimensions: 69.37" x 41.26" x 1.38" (1762.0mm x 1048.0mm x 35.0mm)	Wind exposure	B
Total watts	29,200 kW	Piers	24

Substructure & Foundation

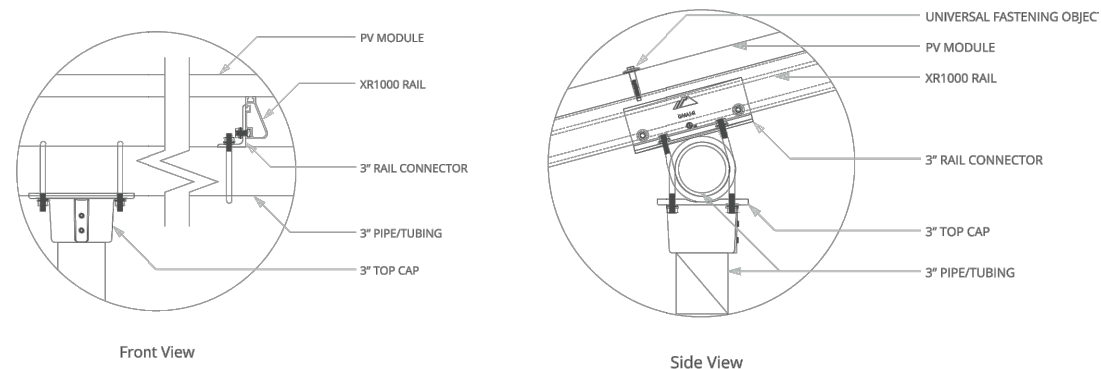
Tilt	25°	South facing grade	0°
Pipe/tubing diameter	3"	Soil class	2 - 5
Foundation type	Ground screws	Screw length	63"
Freeze thaw depth	None entered	Hex head set screws / Screw	4

345 Rawls Club Road (#996129)
ground based

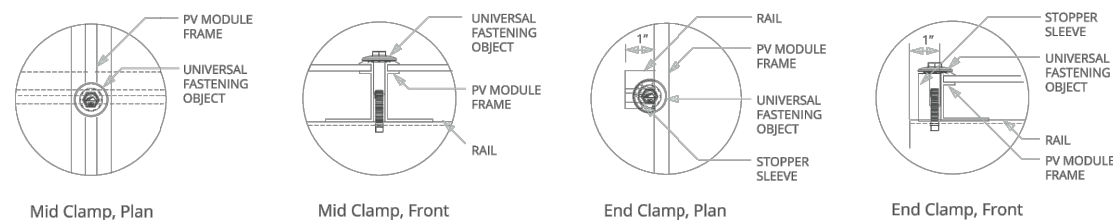
IRONRIDGE
28357 INDUSTRIAL BLVD., HAYWARD, CA 94545

Pipe Fitting Detail

XR1000 Rail



Clamp Detail



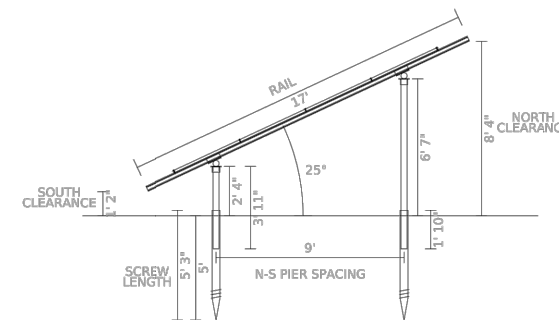
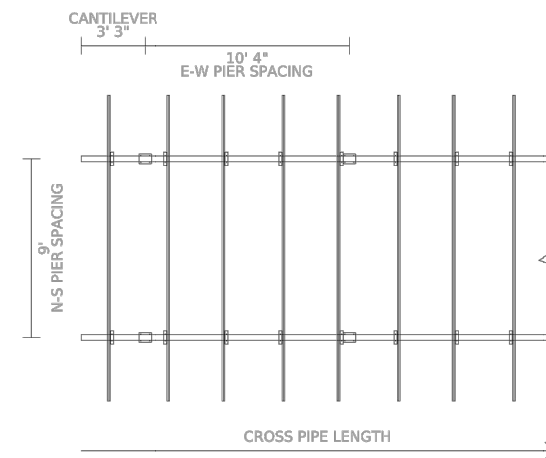
1 GROUND MOUNT DETAILS
SCALE: NTS

345 Rawls Club Road (#996129)
ground based

IRONRIDGE
28357 INDUSTRIAL BLVD., HAYWARD, CA 94545

Sub array #1

Rows	4	Columns	10	Repeats	2
Area	58' 1" (EW) x 14' (NS)	Rail type	XR1000	Diagonal bracing	no
E/W spacing	10' 4"	Rail cantilever	3' 6"	Pipe cantilever	3' 3"
Piers/repeat	12	Total south piers	12 (3' 11")	Total north piers	12 (8' 2")
Total cross pipes	4 (58' 1")	Total pipe length	377' 3"		
Shear	1,138 lbs	Moment	2,845 ft-lbs	Uplift	-1,430 lbs



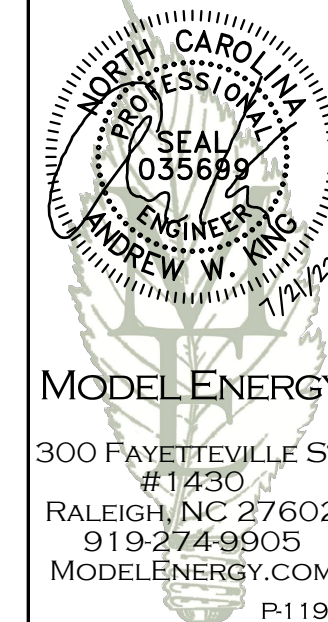
Last updated by Kevin Ochoa on 07/20/22 04:29 PM

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ENGINEER:



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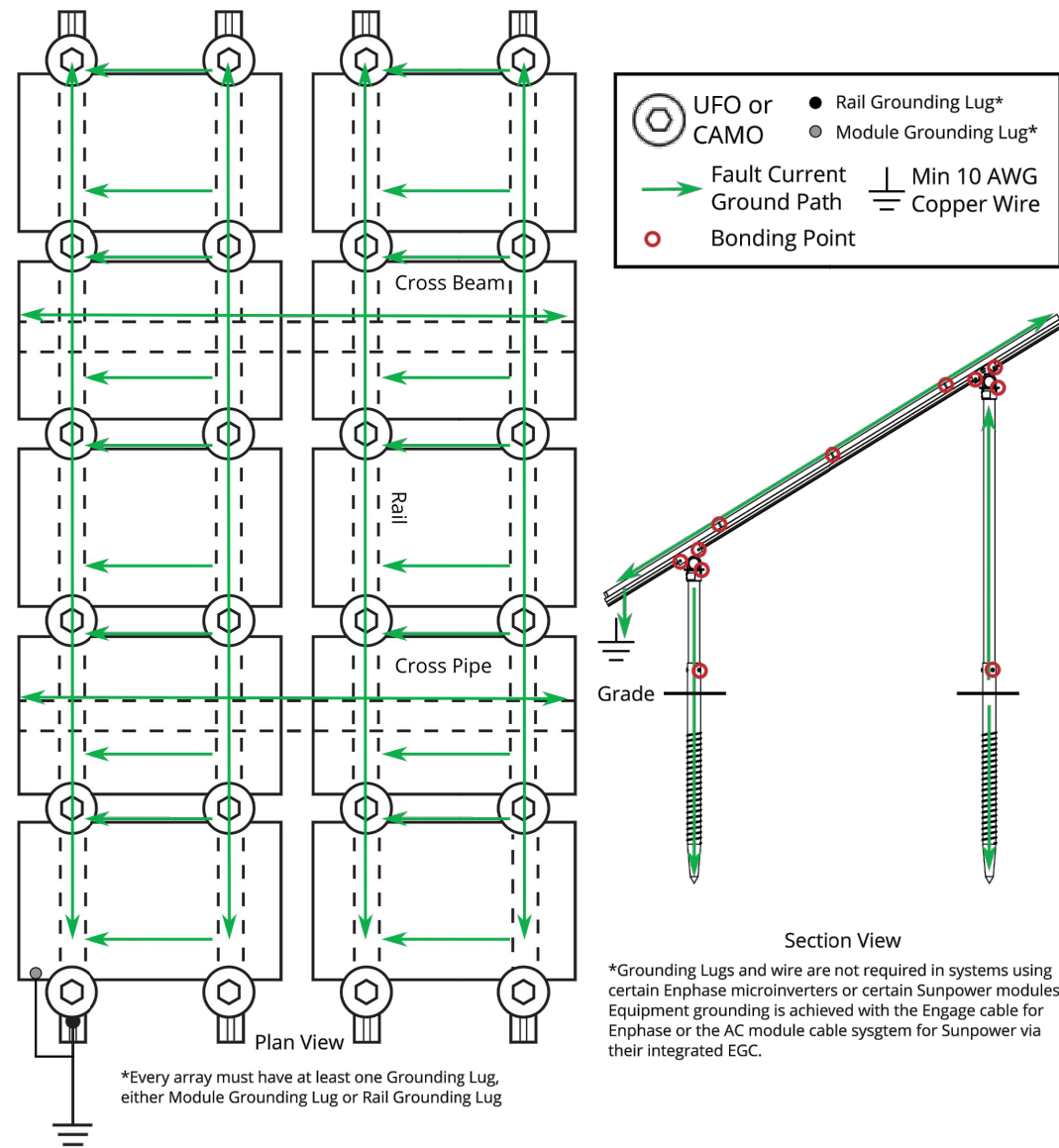
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STRUCTURAL
INFORMATION

PV3.1

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Grounding Diagram



Bill of Materials

Part	Spares	Total Qty
Rails		
XR-1000-204A XR1000, Rail 204* (17 Feet) Clear	0	40
Clamps & Grounding		
UFO-CL-01-A1 Universal Module Clamp, Clear	0	200
UFO-STP-35MM-M1 Stopper Sleeve, 35MM, Mill	0	80
XR-LUG-03-A1 Grounding Lug, Low Profile	0	2
Substructure		
70-0300-SGA SGA Top Cap at 3"	0	24
GM-BRC-003 Ground Mount Bonded Rail Connector - 3"	0	80
GM-HSHW-01-M1 Hex Head Set Screw	0	96
Accessories		
29-4000-077 Wire Clips, Molded PVC Black, Polybag 20	0	8
XR-1000-CAP Kit, End Cap XR1000 (10 sets per bag)	0	4
BHW-MI-01-A1 Microinverter/MLPE Bonding Hardware, T-Bolt	0	82
QM-JBX-RL01-B1 JayBox, Rail-Mounted	0	1

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2 GROUND MOUNT DETAILS
SCALE: NTS

ENGINEER:



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STRUCTURAL
INFORMATION

PV3.2