

LEGEND

X	- MODULE STRING ID	LC	- LOAD CENTER
(E)	- EXISTING	SP	- SUBPANEL
(N)	- NEW	JB	- JUNCTION BOX
M	- UTILITY METER	SCT	- STRING CENTER TAP
MSF	- MAIN SERVICE PANEL	---	- CONDUIT
ACD	- AC DISCONNECT	BAT	- ENERGY STORAGE
CB	- COMBINER BOX	ICD	- INTERCONNECTION DEVICE
		BUL	- BACK UP LOADS PANEL

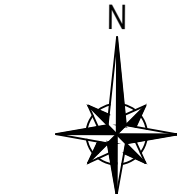
A red rectangular warning label with a black border. At the top, the word "WARNING" is in large, bold, white capital letters, flanked by two white lightning bolt symbols. Below "WARNING" is a horizontal line, and then the text "ELECTRIC SHOCK HAZARD" is written in white capital letters. A second horizontal line follows. Below this, the text "DO NOT TOUCH TERMINALS" is in white capital letters, followed by "TERMINALS ON BOTH THE LINE AND" on the next line, "LOAD SIDES MAY BE ENERGIZED" on the next line, and "IN THE OPEN POSITION" on the final line, all in white capital letters.

**WARNING: PHOTOVOLTAIC
POWER SOURCE**

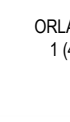
PHOTOVOLTAIC AC DISCONNECT		<u>LABEL LOCATION:</u>
RATED AC OUTPUT CURRENT	23.0 A	AC DISCONNECT
NOMINAL OPERATING AC VOLTAGE	240 V	PER CODE: NEC2017, 690.54

WARNING
DUAL POWER SOURCE
SOURCES: UTILITY GRID AND
PV SOLAR ELECTRIC SYSTEM

LABEL LOCATION:
POINT OF INTERCONNECTION
PER CODE: NEC 2017, 705.12



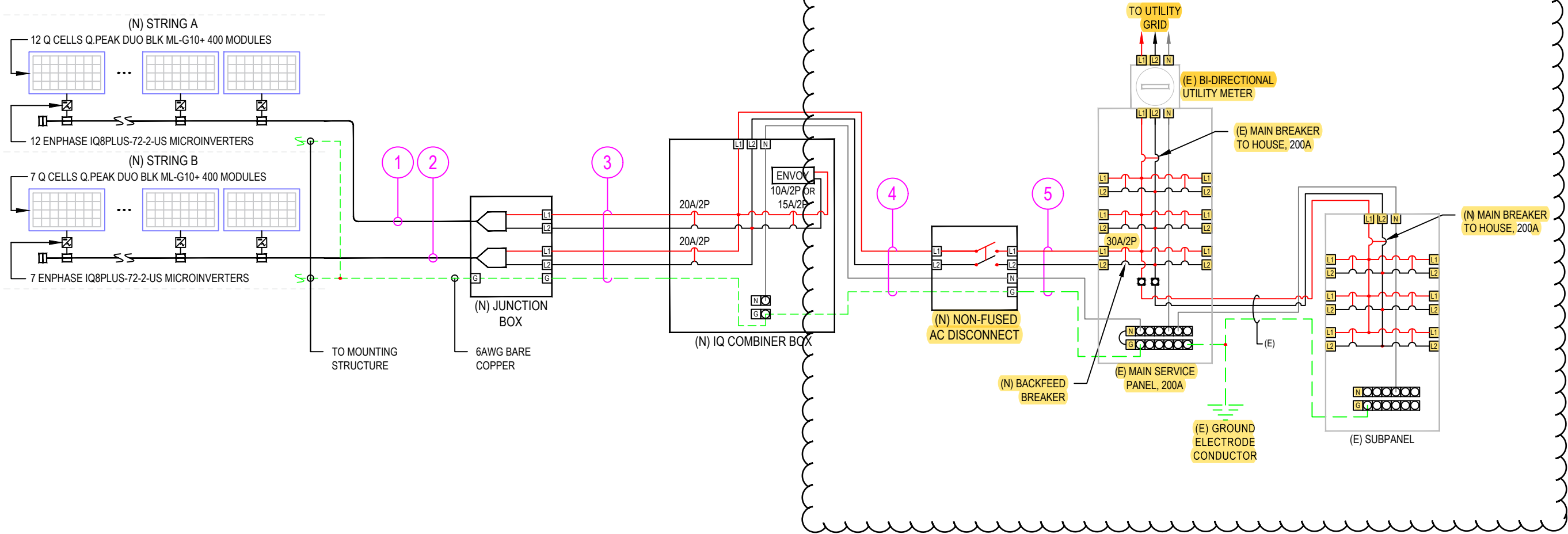
1	ROOF PLAN WITH STRING LAYOUT
E-1	SCALE: NTS

 AKE SOLAR		
ATLANTIC KEY ENERGY LLC 12600 CHALLENGER PARKWAY SUITE 200 ORLANDO, FL 32826 1 (407) 988-0273		
		
PROJECT NAME & ADDRESS		
NANCY TURNER RESIDENCE PROJECT # P-0074750 123 NW NOVEMBER CT LAKE CITY, FL 32055		
SIGNATURE WITH SEAL		
REVISIONS		
DESCRIPTION	DATE	REV
MSP UPDATE	5/18/23	A
Drawn by:		C.M.
Date:		4/18/2023
SHEET NAME		
STRING LAYOUT & SIGNAGE		
SHEET NUMBER		
E-1		

ID	INITIAL CONDUCTOR LOCATION	FINAL CONDUCTOR LOCATION	MIN. CONDUCTOR SIZE (AWG)		MIN. DIA CONDUIT SIZE (IN.)	# OF PARALLEL CIRCUITS	CURRENT-CARRYING CONDUCTORS IN CONDUIT	OCPD (A)	MIN. EGC SIZE (AWG)		TEMP. CORR. FACTOR		CONDUIT FILL FACTOR	CONT. CURRENT (A)	MAX. CURRENT (A)	BASE AMP. (A)	DERATED AMP. (A)	TERM. AMP. RATING (A)	LENGTH (FT)	VOLTAGE DROP (%)
1	STRING A	JUNCTION BOX	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	14.52	18.15	30	N/A	N/A	65.00	0.63
2	STRING B	JUNCTION BOX	12	Q CABLE	N/A	1	2	N/A	6	BARE COPPER	0.76	55°C	N/A	8.47	10.59	30	N/A	N/A	23.00	0.32
3	JUNCTION BOX	COMBINER BOX	10	THWN-2 COPPER	0.75 LTNM	2	4	20	10	THWN-2 COPPER	0.76	55°C	0.8	14.52	18.15	40	24.3	35	36.00	0.54
4	COMBINER BOX	AC DISCONNECT	10	THWN-2 COPPER	0.75 LTNM	1	3	N/A	10	THWN-2 COPPER	0.96	34°C	1	22.99	28.74	40	38.4	35	5.00	0.12
5	AC DISCONNECT	MSP	10	THWN-2 COPPER	0.75 LTNM	1	3	30	10	THWN-2 COPPER	0.96	34°C	1	22.99	28.74	40	38.4	35	5.00	0.12

Gregory Elvestad, PE

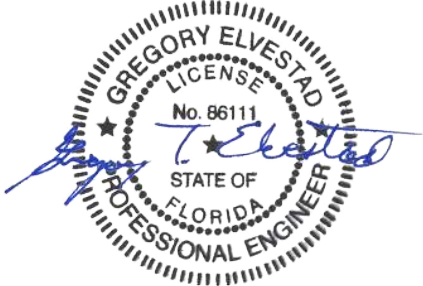
Digitally signed by Gregory Elvestad, PE
DN: C=US, SN="Elvestad, PE", G=Gregory, E=gelvestad@wysslingconsulting.com, CN="Gregory Elvestad, PE"
Reason: I have reviewed this document
Location: your signing location here
Date: 2023.05.19 16:40:44-06'00'
Foxit PDF Editor Version: 11.1.0



THIS PLAN HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY GREGORY ELVESTAD, PE USING A DIGITAL SIGNATURE AND DATE. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES

1 | ELECTRICAL LINE DIAGRAM
E-2 | SCALE: NTS

I, GREGORY ELVESTAD, PE#86111, AN ENGINEER PURSUANT TO CHAPTER 471, CERTIFY THAT THE PV ELECTRICAL SYSTEM AND ELECTRICAL COMPONENTS ARE DESIGNED AND APPROVED USING THE STANDARDS CONTAINED IN THE MOST RECENT VERSION OF THE FLORIDA BUILDING CODE, FBC 107.



Wyssling Consulting, PLLC
76 N Meadowbrook Drive, Alpine UT 84004
Florida COA #34912
Signed 5/19/2023

NOTE:
1. LTNM OR EQUIVALENT TYPE CONDUIT

LEGEND
(E) - EXISTING
(N) - NEW

DESIGN TEMPERATURE SPECIFICATIONS	
RECORD LOW TEMP	-5°C
AMBIENT TEMP. (HIGH TEMP. 2%)	34°C
CONDUIT HEIGHT	1.0"
CONDUCTOR TEMP. RATE (ROOF)	55°C

AKE SOLAR
ATLANTIC KEY ENERGY LLC
12600 CHALLENGER PARKWAY
SUITE 200
ORLANDO, FL 32826
1 (407) 988-0273

Lumio
PROJECT NAME & ADDRESS

NANCY TURNER
RESIDENCE
PROJECT # P-0074750
123 NW NOVEMBER CT
LAKE CITY, FL 32055

SIGNATURE WITH SEAL

REVISIONS

DESCRIPTION	DATE	REV
MSP UPDATE	5/18/23	A

Drawn by: C.M.

Date: 4/18/2023

SHEET NAME

ELECTRICAL LINE
DIAGRAM & CALCS.

SHEET NUMBER

E-2