SYSTEM SUMMARY		
	BRANCH #1	BRANCH #2
INVERTERS PER BRANCH	13	12
MAX AC CURRENT	15.73A	14.52A
MAX AC OUTPUT POWER	3,900W	3,600W
ARRAY STC POWER	10,250W	
ARRAY PTC POWER	9,760W	
MAX AC CURRENT	30.25A	
MAX AC POWER	7,500W	
DERATED (CEC) AC POWER	7,500W	

MODULES										
REF.	QTY.	MAKE AND MODEL	PMAX	PTC	ISC	IMP	VOC	VMP	TEMP. COEFF. OF VOC	FUSE RATING
PM1-25	25	PANASONIC EVPV410H	410W	390.40W	10.35A	9.61A	49V	9.61V	-0.118V/°C (-0.24%/°C)	25A

INVERTERS										
REF.	QTY	MAKE AND MODEL	AC VOLTAGE	GROUND	OCPD RATING	RATED POWER	MAX OUTPUT CURRENT	MAX INPUT CURRENT	MAX INPUT VOLTAGE	CEC WEIGHTED EFFICIENCY
I1-25	25	ENPHASE IQ8PLUS-72-2-US	240A	FLOATING	20A	290W	1.21A	15A	60V	97.0%

DISCONNECTS				
REF.	QTY.	MAKE AND MODEL	RATED CURRENT	MAX RATED VOLTAGE
SW1	1	SQUARE D DU222RB	60A	240V

ASHRAE EXTREME LOW	41.1°C (106°F), SOURCE: DAVIS MONTHAN AFB (-110.88°; 32.17°)
ASHRAE 2% HIGH	41.1°C (106°F), SOURCE: DAVIS MONTHAN AFB (-110.88°; 32.17°)

OCPDS			
REF.	QTY	RATED CURRENT	MAX VOLTAGE
CB1-2	2	20A	240V
CB3	1	15A	240V
CB4	1	40A	240V

STRAWBERRY SOLAR

CONTRACTOR

STRAWBERRY SOLAR

PHONE: (313)-960-7900

ADDRESS: 4444 2ND AVENUE WAYNE COUNTY DETROIT, MI 48201

LIC.NO.: 2101211279

HIC.NO.:

ELE.NO.:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 10250.0 KWP

EYLER RESIDENCE

14661 EAST CIRCLE H RANCH PLACE CORONA DE TUCSON, AZ 85641

APN: 205754170

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

ELECTRICAL PLAN

DATE: 2023-08-07

DESIGN BY: N. Kinareiev

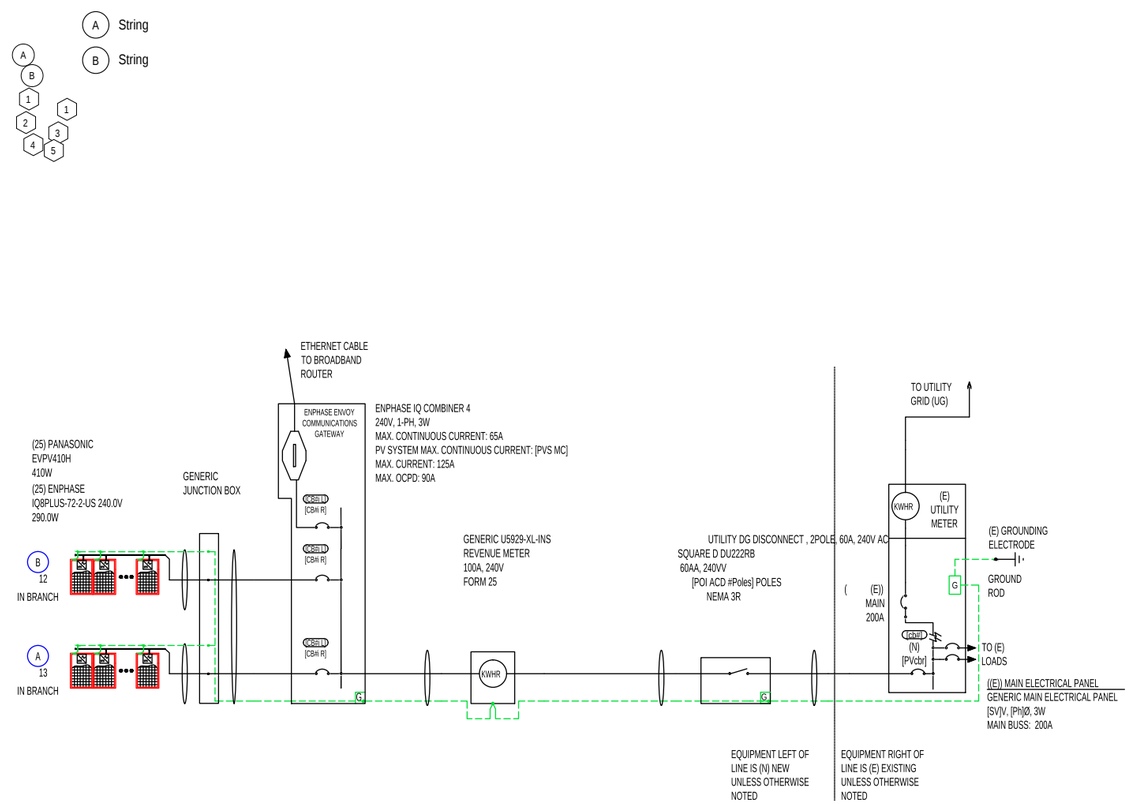
CHECKED BY: UKRDRAFTING

REVISIONS

A-102

(SHEET 1)

CONDUCTOR AND CONDUIT SCHEDULE W/ELECTRICAL CALCULATIONS														
ID	TYPICAL	CONDUCTOR	CONDUIT	CURRENT-CARRYING CONDUCTORS IN CONDUIT	OCPD	EGC	TEMP. CORR. FACTOR	CONDUIT FILL FACTOR	CONT CURRENT	MAX CURRENT (125%)	BASE AMP	DERATED AMP	TERM. TEMP. RATING	AMP TERMINAL
1	2	12 AWG THWN-2, COPPER, ENPHASE Q-CABLE	FREE AIR	N/A	N/A	6 AWG BARE, COPPER	0.87 (41.1ºC)	1	15.73A	19.66A	30A	26.1A	75ºC	25A
2	1	10 AWG THWN-2, COPPER	0.5" EMT	4	20A	10 AWG THWN-2, COPPER	0.87 (41.1ºC)	0.8	15.73A	19.66A	40A	27.84A	75ºC	35A
3	1	8 AWG THWN-2, COPPER	0.75" EMT	2	N/A	8 AWG THWN-2, COPPER	0.87 (41.1ºC)	1	30.25A	37.81A	55A	47.85A	75ºC	50A
4	1	8 AWG THWN-2, COPPER	0.75" EMT	2	N/A	8 AWG THWN-2, COPPER	0.87 (41.1ºC)	1	30.25A	37.81A	55A	47.85A	75ºC	50A
5	1	8 AWG THWN-2, COPPER	0.75" EMT	2	40A	8 AWG THWN-2, COPPER	0.87 (41.1ºC)	1	30.25A	37.81A	55A	47.85A	75ºC	50A



STRAWBERRY SOLAR

CONTRACTOR

STRAWBERRY SOLAR

PHONE: (313)-960-7900

ADDRESS: 4444 2ND AVENUE WAYNE COUNTY DETROIT, MI 48201

LIC.NO.: 2101211279

HIC.NO.:

ELE.NO.:

UNAUTHORIZED USE OF THIS DRAWING SET WITHOUT WRITTEN PERMISSION FROM CONTRACTOR IS IN VIOLATION OF U.S. COPYRIGHT LAWS AND WILL BE SUBJECT TO CIVIL DAMAGES AND PROSECUTIONS.

NEW PV SYSTEM: 10250.0 KWP

EYLER RESIDENCE

14661 EAST CIRCLE H RANCH PLACE CORONA DE TUCSON, AZ 85641

APN: 205754170

ENGINEER OF RECORD

PAPER SIZE: 11" x 17" (ANSI B)

LINE DIAGRAM

DATE: 2023-08-07

DESIGN BY: N. Kinareiev

CHECKED BY: UKRDRAFTING

REVISIONS

E-601

(SHEET 2)