

(22) SILFAB SIL-300 ML MODULES
 (1) STRING OF 14 MODULES CONNECTED IN SERIES
 (1) STRING OF 08 MODULES CONNECTED IN SERIES

SERVICE INFO

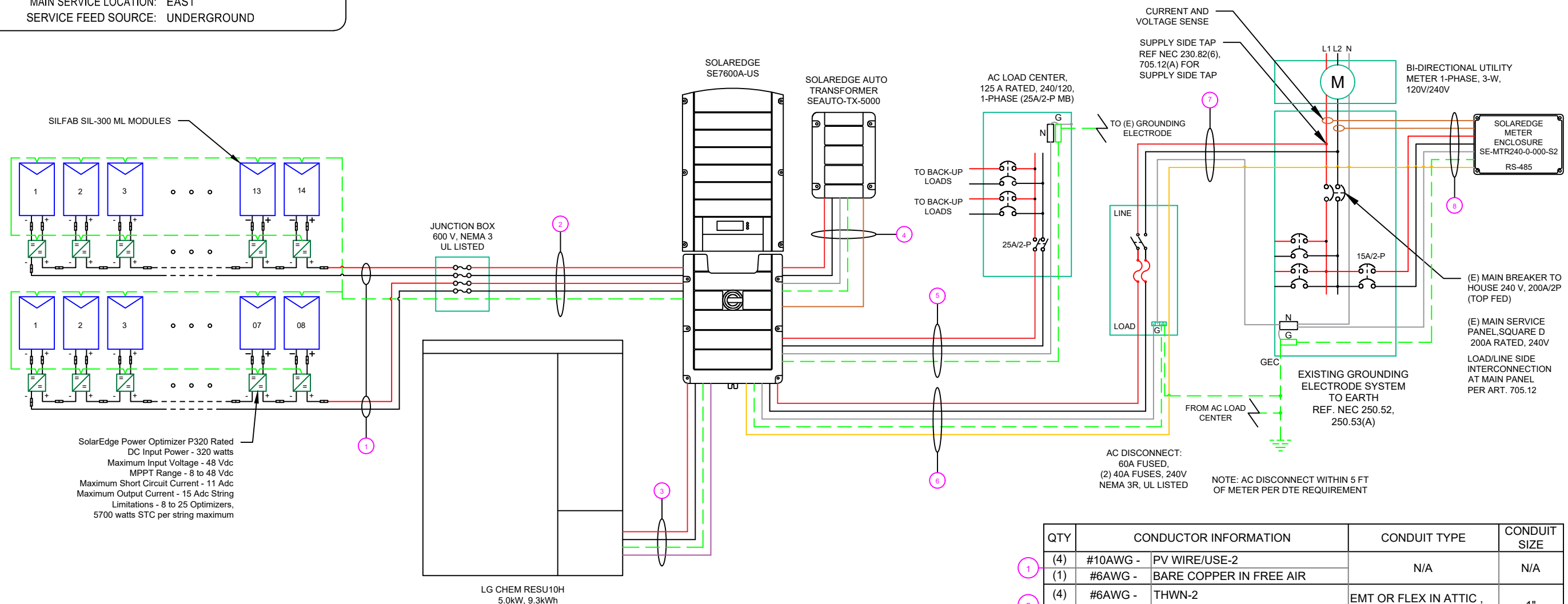
UTILITY PROVIDER: DTE ENERGY
 MAIN SERVICE VOLTAGE: 240V
 MAIN PANEL BRAND: SQUARE D
 MAIN SERVICE PANEL: 200A
 MAIN CIRCUIT BREAKER RATING: 200A
 MAIN SERVICE LOCATION: EAST
 SERVICE FEED SOURCE: UNDERGROUND

ELECTRICAL NOTES

- 1.) ALL EQUIPMENT TO BE LISTED BY UL OR OTHER NRTL, AND LABELED FOR ITS APPLICATION.
- 2.) ALL CONDUCTORS SHALL BE COPPER, RATED FOR 600 V AND 90 DEGREE C WET ENVIRONMENT.
- 3.) WIRING, CONDUIT, AND RACEWAYS MOUNTED ON ROOFTOPS SHALL BE ROUTED DIRECTLY TO, AND LOCATED AS CLOSE AS POSSIBLE TO THE NEAREST RIDGE, HIP, OR VALLEY.
- 4.) WORKING CLEARANCES AROUND ALL NEW AND EXISTING ELECTRICAL EQUIPMENT SHALL COMPLY WITH NEC 110.26.
- 5.) DRAWINGS INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS. CONTRACTOR SHALL FURNISH ALL NECESSARY OUTLETS, SUPPORTS, FITTINGS AND ACCESSORIES TO FULFILL APPLICABLE CODES AND STANDARDS.
- 6.) WHERE SIZES OF JUNCTION BOXES, RACEWAYS, AND CONDUITS ARE NOT SPECIFIED, THE CONTRACTOR SHALL SIZE THEM ACCORDINGLY.
- 7.) ALL WIRE TERMINATIONS SHALL BE APPROPRIATELY LABELED AND READILY VISIBLE.
- 8.) MODULE GROUNDING CLIPS TO BE INSTALLED BETWEEN MODULE FRAME AND MODULE SUPPORT RAIL, PER THE GROUNDING CLIP MANUFACTURER'S INSTRUCTION.
- 9.) MODULE SUPPORT RAIL TO BE BONDED TO CONTINUOUS COPPER G.E.C. VIA WEEB LUG OR ILSCO GBL-4DBT LAY-IN LUG.
- 10.) THE POLARITY OF THE GROUNDED CONDUCTORS IS NEGATIVE

WIRE LEGEND

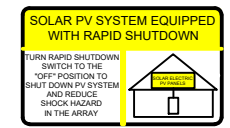
- PV ARRAY +VE CONDUCTOR AND L1
- PV ARRAY -VE CONDUCTOR AND L2
- NEUTRAL CONDUCTOR
- - - EGC AND GEC
- SINGLE TWISTED PAIR, BELDEN 3106A
- SINGLE TWISTED PAIR, BELDEN 3088A
- 5 CONDUCTOR CABLE, BELDEN 3064A



SolarEdge Power Optimizer P320 Rated
 DC Input Power - 320 watts
 Maximum Input Voltage - 48 Vdc
 MPPT Range - 8 to 48 Vdc
 Maximum Short Circuit Current - 11 Adc
 Maximum Output Current - 15 Adc String
 Limitations - 8 to 25 Optimizers,
 5700 watts STC per string maximum

! WARNING !
 PHOTOVOLTAIC
 POWER SOURCE

LABEL 1
 ON ALL CONDUITS
 SPACED AT MAX 10FT



LABEL 2
 AT INVERTER

! CAUTION !
 SOLAR ELECTRIC
 SYSTEM CONNECTED
 AND ENERGIZED

LABEL 3
 AT INVERTER

! WARNING !
 PHOTOVOLTAIC
 DC DISCONNECT

LABEL 4
 AT EACH DC
 DISCONNECT

! WARNING !
 ELECTRIC SHOCK HAZARD
 DO NOT TOUCH TERMINALS
 TERMINALS ON BOTH LINE AND LOAD SIDES
 MAY BE ENERGIZED IN THE OPEN POSITION

LABEL 5
 AT EACH AC
 DISCONNECT

! WARNING !
 PHOTOVOLTAIC
 AC
 DISCONNECT

LABEL 6
 AT EACH AC
 DISCONNECT

! WARNING !
 DUAL POWER SOURCES
 SECOND SOURCE IS PV SYSTEM

LABEL 8
 AT MEP

! WARNING !
 SOLAR SYSTEM
 CONNECTED
 AND ENERGIZED

LABEL 9
 AT MEP

! CAUTION !
 SOLAR POINT OF
 INTERCONNECTION

LABEL 10
 AT UTILITY METER

! WARNING !
 THE SERVICE METER IS ALSO SERVED
 BY A PHOTOVOLTAIC SYSTEM

LABEL 11
 AT UTILITY METER

QTY	CONDUCTOR INFORMATION	CONDUIT TYPE	CONDUIT SIZE
1	(4) #10AWG - PV WIRE/USE-2	N/A	N/A
	(1) #6AWG - BARE COPPER IN FREE AIR		
2	(4) #6AWG - THWN-2	EMT OR FLEX IN ATTIC, IMC OR PVC IN TRENCH	1"
	(1) #6AWG - THWN-2 GND		
3	(2) #10AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #10AWG - THWN-2 GND		
4	(3) #10AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #10AWG - THWN-2 GND		
5	(3) #10AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #10AWG - THWN-2 GND		
6	(3) #6AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #6AWG - THWN-2 GND		
7	(3) #6AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #6AWG - THWN-2 GND		
8	(3) #14AWG - THWN-2	EMT OR FLEX	3/4"
	(1) #14AWG - THWN-2 GND		
	(2) SINGLE TWISTED PAIR, BELDEN 3088A	EMT OR FLEX	3/4"
	(1) SINGLE TWISTED PAIR, BELDEN 3106A		

POWERHOME
 POWER HOME SOLAR, LLC
 "POWER YOUR FUTURE"
 919 N. MAIN ST.
 MOORESVILLE, NC 28115
 Phone: 704-800-6891 (OFFICE)
 Email: info@powerhome.com
 Web: www.powerhome.com

REVISIONS

DESCRIPTION	DATE	REV

Signature with Seal
 DATE: 01/06/2020

PROJECT NAME & ADDRESS
 DWIGHT BLAKEY
 RESIDENCE
 15024 ASHTON RD,
 DETROIT, MI 48223

DESIGNED BY
PHS

SHEET NAME
**ELECTRICAL LINE
 DIAGRAM**

SHEET SIZE
**ANSI B
 11" X 17"**

SHEET NUMBER
PV-4