

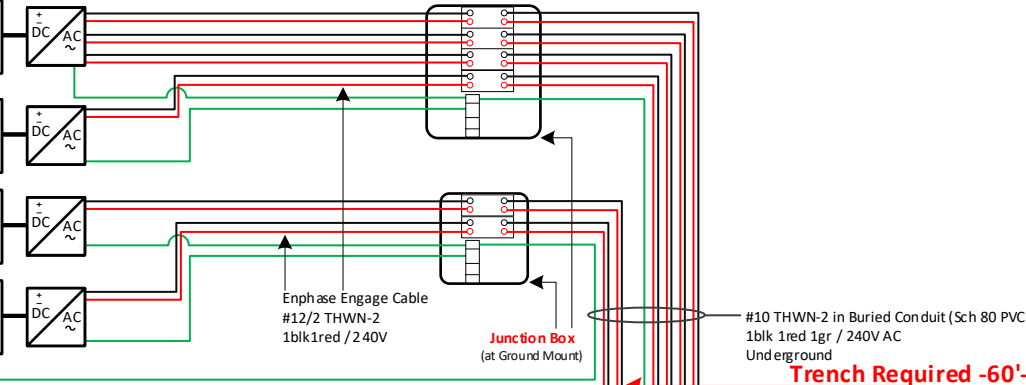
Ground Mounted (68 Modules)

LG-355 -> LG355N1C-N5
 3-Solar Arrays - 3 Strings of 12 modules
 Enphase IQ7+ -> IQ7PLUS-72-2US
 Microinverters - located under each panel

LG-355 -> LG355N1C-N5 (240v)
 1-Solar Array - 1 String of 13 modules
 Enphase IQ7+ -> IQ7PLUS-72-2US
 Microinverters - located under each panel

LG-355 -> LG355N1C-N5 (240v)
 1-Solar Array - 1 String of 10 modules
 Enphase IQ7+ -> IQ7PLUS-72-2US
 Microinverters - located under each panel

LG-355 -> LG355N1C-N5
 1-Solar Array - 1 String of 9 modules
 Enphase IQ7+ -> IQ7PLUS-72-2US
 Microinverters - located under each panel



- Back-Up Loads Panel Schedule**
- 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - General Lights/Rec
 - 15A - Kitchen GFI
 - 15A - Bath GFI
 - 20A - Refrigerator

Circuits will be removed out of existing panel and extended to the Back-Up loads Panel in the vicinity of the existing panel

Larry Fite

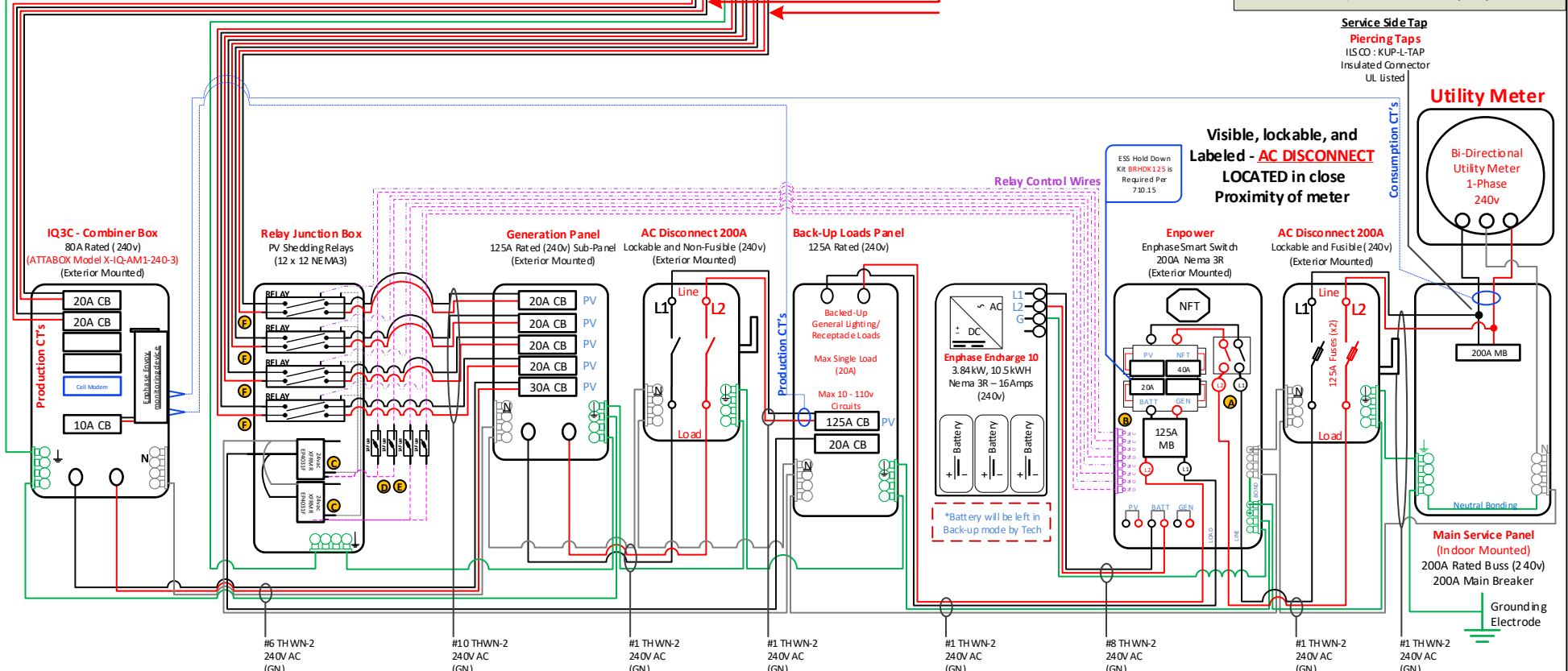
68 X 355 = 24.14kWDC
68 X 290 = 19.72kWAC

(3) Branch circuit of 12 modules
 (1) Branch circuit of 13 modules
 (1) Branch circuit of 10 modules
 (1) Branch circuit of 9 modules

Inverter output current: **1.21A**
 Max system output current: **82.28A**

PV Module: (68) LG355N1C-N5
 Inverter: Enphase (68) IQ7PLUS-72-2-US(240v) (290va)

Battery: (1) Enphase En charge 10
 3.84KW, 10.5KWH Nema 3R (240v)



IQ3C - Combiner Box
 80A Rated (240v)
 (ATTABOX Model X-IQ-AM1-240-3)
 (Exterior Mounted)

Relay Junction Box
 PV Shedding Relays
 (12 x 12 NEMA3)

Generation Panel
 125A Rated (240v) Sub-Panel
 (Exterior Mounted)

AC Disconnect 200A
 Lockable and Non-Fusible (240v)
 (Exterior Mounted)

Back-Up Loads Panel
 125A Rated (240v)

Empower
 EnphaseSmart Switch
 200A Nema 3R
 (Exterior Mounted)

AC Disconnect 200A
 Lockable and Fusible (240v)
 (Exterior Mounted)

Utility Meter
 Bi-Directional
 Utility Meter
 1-Phase
 240v

Main Service Panel
 (In door MOUNTED)
 200A Rated Bus (240v)
 200A Main Breaker

#6 THWN-2
 240V AC
 (GN)

#10 THWN-2
 240V AC
 (GN)

#1 THWN-2
 240V AC
 (GN)

#1 THWN-2
 240V AC
 (GN)

#1 THWN-2
 240V AC
 (GN)

#8 THWN-2
 240V AC
 (GN)

#1 THWN-2
 240V AC
 (GN)

#1 THWN-2
 240V AC
 (GN)

(GN) General Conduit Note:
 Conduit to be UL Listed
 for wet locations and
 UV protected
 (Ex. - EMT, Sch 80 PVC or RMC)

* FMC May be used in indoor
 applications where permitted
 by NEC Art. 348

- (A) Empower Main Lug rated for #1 awg-350 Kcmil - (All Smaller Wire Terminations Required UL Ring Terminal)
- (B) Empower Dry Contactor Ratings- 12v-24v Max. (1A)
- (C) Control Transformer - (Fada - 807DBS6NK)
- (D) Fuse Retainer - (Eaton - BR/HMK-RP)
- (E) Fuses - (Eaton - BP-AGC-1-RP 250v Glass Fuse)
- (F) Contactor - (SquareD - 891DDP3214 30A)

MARCJONES CONSTRUCTION
 residential · commercial · solar

SUNPRO SOLAR HOME SPECIALISTS

ADDRESS: 22259 Burns Rd. Harlingen, TX. 78552		
DESC.: 24.14 kW solar panel system		
UTILITY: AEP		
JURISDICTION: Cameron County		
DATE: 05.07.21	REV: 2	SHEET: 1 OF 1
Layout Designer:	One-Line Designer: B. Royce	