



Photovoltaic Labeling Legend:

- 1** 89L SOLAR AC DISCONNECT "Gang Operated"
- 2** Warning - Inverter Output Connection Do NOT Relocate This Overcurrent Device
- 3** WARNING - DUAL POWER SOURCES
Second Source is A Photovoltaic System
Rated AC Current [] Amps
Nominal AV Voltage [] Volts
- 4** SOLAR AC COMBINER PANEL
- 5** SOLAR PV CIRCUITS ONLY
Do Not Use For Non-PV Circuits
- 6** SOLAR PRODUCTION METER
- 7** WARNING - DUAL POWER SOURCE
SECOND SOURCE IS PV SYSTEM
- 8** PHOTOVOLTAIC SYSTEM EQUIPPED WITH RAPID SHUTDOWN
- 9** PV SYSTEM DC DISCONNECT
OPERATING CURRENT: []
OPERATING VOLTAGE: []
MAXIMUM SYSTEM VOLTAGE: []
SHORT CIRCUIT CURRENT: []
- 10** PV SOURCE CIRCUIT

- Notes:
- Labels to comply with PSC and NEC requirements.
 - All wiring to comply with NEC.
 - Ground to be continuous
 - Ground wire connections to be "irreversible".
 - Meter pan to be grounded only.
 - Neutral to pass through Meter Pan.
 - No line side tap connection in utility meter pan.
 - All equipment to be bonded with ground lug per NEC Code.
 - No additional breakers to be added to spare spaces.



Unauthorized alteration or addition to a document prepared by a Licensed Professional Engineer is a violation of Section 2209, Sub-division 2 of the New York State Education Law.

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3 Wire Electrical Diagram

Club Fit
584 North State Road
Briarcliff Manor, NY 10510
Sect. 90.15, Block 2, Lot 1

DATE	VER.	DRAWN BY	CHECKED BY	REMARKS
11-13-2019	V1	CCW	DH	
4-13-2020	R1	CCW	DH	Changed to Longi Panels

SYSTEM DESCRIPTION:
-1435 Photovoltaic Panels
-Longi 380W (LR6-72HPH365-385M)
-System size -545.3 kW DC SYSTEM
-499.5 kW AC

Array 1-3
-Azimuth: 284°
-Tilt: 18.5°

Array 4-6
-Azimuth: 104°
-Tilt: 18.5°

CIRCUIT CALCULATIONS:
PV: 499,500 W + 480V + 3φ = 600 Amps
600 Amps x 1.25 = 750 Amps
Use 750 Amp OCPD

BESS: 406,000 Watts + 480V + 3φ = 489 Amps
489 Amps x 1.25 = 611 Amps
Use 750 Amp OCPD

SYSTEM SPECIFICATIONS:
PV: Nominal AC Voltage: 480V
Max AC Current: 600 Amps

BESS: Nominal Voltage: 480V
Max AC Current: 489 Amps

Combined Interconnection Max:
Nominal Voltage: 480V
Max AC Current: 800 Amps

LEGEND:

	Existing Conduit		Red Wire (as specified)		Ground- Green Wire
	Existing Cable		Black Wire (as specified)		Data Communication Wire
	Existing Service		L3 480V Yellow Wire		Sensor or Switch Wire
	Proposed PV Service		L2 480V Orange Wire		Photovoltaic Label (See Labeling Legend)
			L1 480V Brown Wire		
			Neutral- White/Gray Wire		