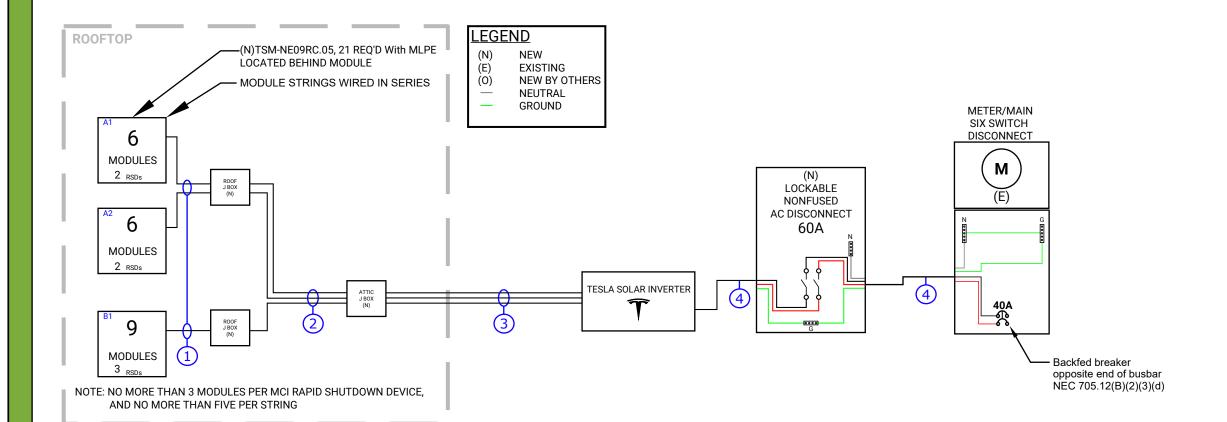
PANEL MODEL: TSM-NE09RC.05, QTY 21 REQ'D, 420W

INVERTER TYPE: 1538000-xx-y, QTY 1 REQ'D, 7600W, 240V

7.600 kW-AC/ 8.820 kW-DC



	WIRING SCHEDULE									
TAG	CONDUIT SIZE	CONDUCTOR	NEUTRAL	GROUND	NOTES					
1	NONE	10 AWG PV Wire	NONE	6 AWG Bare CU	(Mfg.supplied cabling within array)					
2	NONE	10/2 MC	NONE	10 AWG	J Box to Attic J Box					
3	3/4" EMT or EQUIV	10 AWG CU THWN-2	NONE	10 AWG CU THWN-2	Attic J box to Inverter					
4	1" PVC or EQUIV	8 AWG CU THWN-2	8 AWG CU THWN-2	10 AWG CU THWN-2	Inverter to Disconnect to MDP					

Min/Max Voltage (V):	Vmp/Voc (V):	Tk Vmp/Tk Voc (%/°C):	
38.79	42.8	-0.36	
55.74	50.9	-0.28	

MPPT Voltage Range	DC Voltage range	MPPT Min/Max	Absolute Min/Max	
60	60	2	2	
480	550	8	9	

V LEAD	ELECTRICIAN		9

SITE FLOOD PLANE: **ZONE X BFE: N/A** 

CAPE **FEAR SOLAR SYSTEMS** 

910 S. 2nd St. Wilmington, NC 28401 910-409-5533



GC LIC. NO.: 65677 ELEC. LIC. NO.: U-33321

FORNAH SOLAR PROJECT 8.82 kW DC PV SYSTEM

183 Tun Tavern Dr, Cameron, NC 28326

**LINE DIAGRAM** 

REVISION LIST  $\triangle$ REV. DATE DESC.

March 17, 2025 DRAWN BY:

Sheet No.

E-01

#### **GENERAL ELECTRICAL NOTES**

- 1. Equipment shall be new unless otherwise noted.
- 2. Equipment shall be listed unless otherwise noted.
- 3. Equipment shall be installed providing adequate working space in compliance with NEC.
- 4. Copper conductors shall be used and shall have insulation rating 600v, 90°C unless otherwise noted.
- 5. Conductors shall be sized in accordance with the NEC and ampacity shall be derated for temperature increase, conduit fill & voltage drop.
- All conductors shall be installed in approved conduits. Conduits shall be adequately supported in accordance with the NEC.
- 7. AC Disconnect is optional, however it may be required by the utility.
- 8. Exposed non-current carrying metal parts shall be grounded in accordance with the NEC.
- 9. All work shall comply with the NEC and all applicable local electrical code requirements.
- 10. Contractor will provide labeling in accordance with the NEC, Article 110, 225, 690, and 705.

#### PV SYSTEM DISCONNECT/ COMBINER BOX BREAKER PANELS





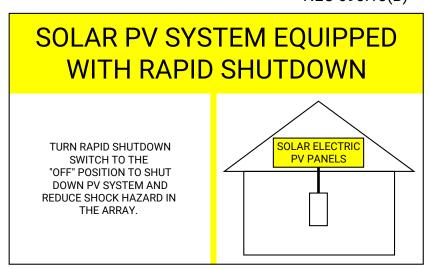
## RAPID SHUTDOWN PV ARRAY

NEC 110.27(C) & OSHA 1910.145(f)(7)

SERVICE DISCONNECT

# MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

NEC 690.13(B)



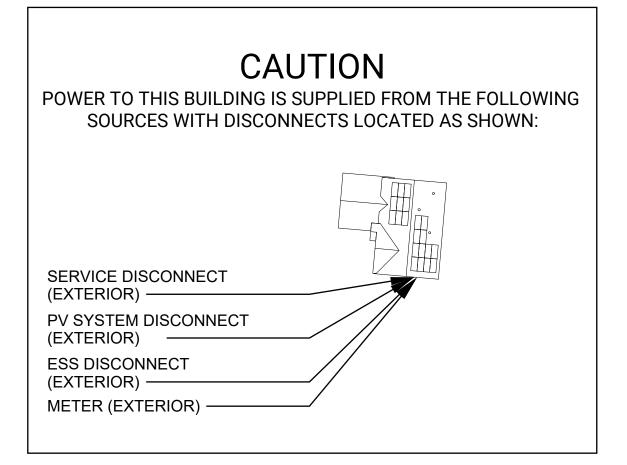
IFC 605.11.3(1) & NEC 690.12(D)



EMT/CONDUIT RACEWAYS

NEC 690.31(D)(2)

### PHOTOVOLTAIC POWER SOURCE





910 S. 2nd St. Wilmington, NC 28401 910-409-5533



GC LIC. NO.: 65677 ELEC. LIC. NO.: U-33321

STICKERS

FORNAH SOLAR PROJECT
83 Tun Tavern Dr, Cameron, NC 28326

8.82 kW DC PV SYSTEM

# REVISION LIST 
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DATE: March 17, 2025

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Sheet No.

E-02