

PHOTOVOLTAIC GROUND MOUNT SYSTEM

42 MODULES-GROUND MOUNTED - 16.87 kW DC, 18.00 kW AC, 5850 WHITING WAY , PEYTON, CO 80831

PHOTOVOLTAIC SYSTEM SPECIFICATIONS:

SYSTEM SIZE:	16.87 KW DC 18.00 KW AC
MODULE TYPE & AMOUNT:	(28) RUNERGY HY-DHI08P8100B-400W & (14) RUNERGY HY-DHI08P8100B-405W
MODULE DIMENSIONS:	(L/W/H) 67.8"/44.65"/1.18"
INVERTER:	(3) EG4 6000XP OFF-GRID - IV-16000-HYB-AW-FX-XX
BATTERY:	(3) EG4 WALLMOUNT INDOOR 280AH LITHIUM BATTERY, 51.2V, 14.3 KWH EACH

14. THE INSTALLATION OF EQUIPMENT AND ALL ASSOCIATED WIRING AND INTERCONNECTION SHALL BE PERFORMED ONLY BY QUALIFIED PERSONS [NEC 690.4(C)]
15. ALL OUTDOOR EQUIPMENT SHALL BE NEMA 3R RATED (OR BETTER), INCLUDING ALL ROOF MOUNTED TRANSITION BOXES AND SWITCHES.
16. ALL EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED IN ACCORDANCE WITH NEC ARTICLE 250.
17. SYSTEM GROUNDING SHALL BE IN ACCORDANCE WITH NEC 690.41.
18. PV SYSTEM CIRCUITS INSTALLED ON OR IN BUILDINGS SHALL INCLUDE A RAPID SHUTDOWN FUNCTION IN ACCORDANCE WITH NEC 690.12
19. DISCONNECTING MEANS SHALL BE LOCATED IN A VISIBLE, READILY ACCESSIBLE LOCATION WITHIN THE PV SYSTEM EQUIPMENT OR A MAXIMUM OF 10 FEET AWAY FROM THE SYSTEM [NEC 690.13(A)]
20. ALL WIRING METHODS SHALL BE IN ACCORDANCE WITH NEC 690.31
21. WORK CLEARANCES AROUND ELECTRICAL EQUIPMENT WILL BE MAINTAINED PER NEC 110.26(A)(1), 110.26(A)(2) AND 110.26(A)(3).
22. GROUND MOUNTED PHOTOVOLTAIC PANELS AND MODULES SHALL BE TESTED, LISTED & IDENTIFIED IN ACCORDANCE WITH UL1703
23. ELECTRICAL CONTRACTOR TO PROVIDE CONDUIT EXPANSION JOINTS AND ANCHOR CONDUIT RUNS AS REQUIRED PER NEC

NOTE: MINIMUM 10' BRUSH CLEARANCE AROUND GROUND MOUNTED PV MODULES. CONDUCTORS INSTALLED IN READILY ACCESSIBLE LOCATIONS, SHALL BE GUARDED BY AN APPROVED SCRIM, OR FENCING [CEC 690.31 (A) AND CEC 110.27].

- NOTES:
- PV ARRAY SHALL MAINTAIN A 10 FT BRUSH-FREE CLEARANCE.
 - AC DISCONNECT SHALL BE LOCATED NEXT TO METER.

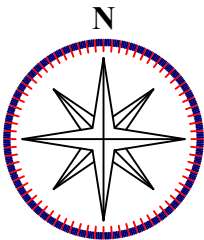
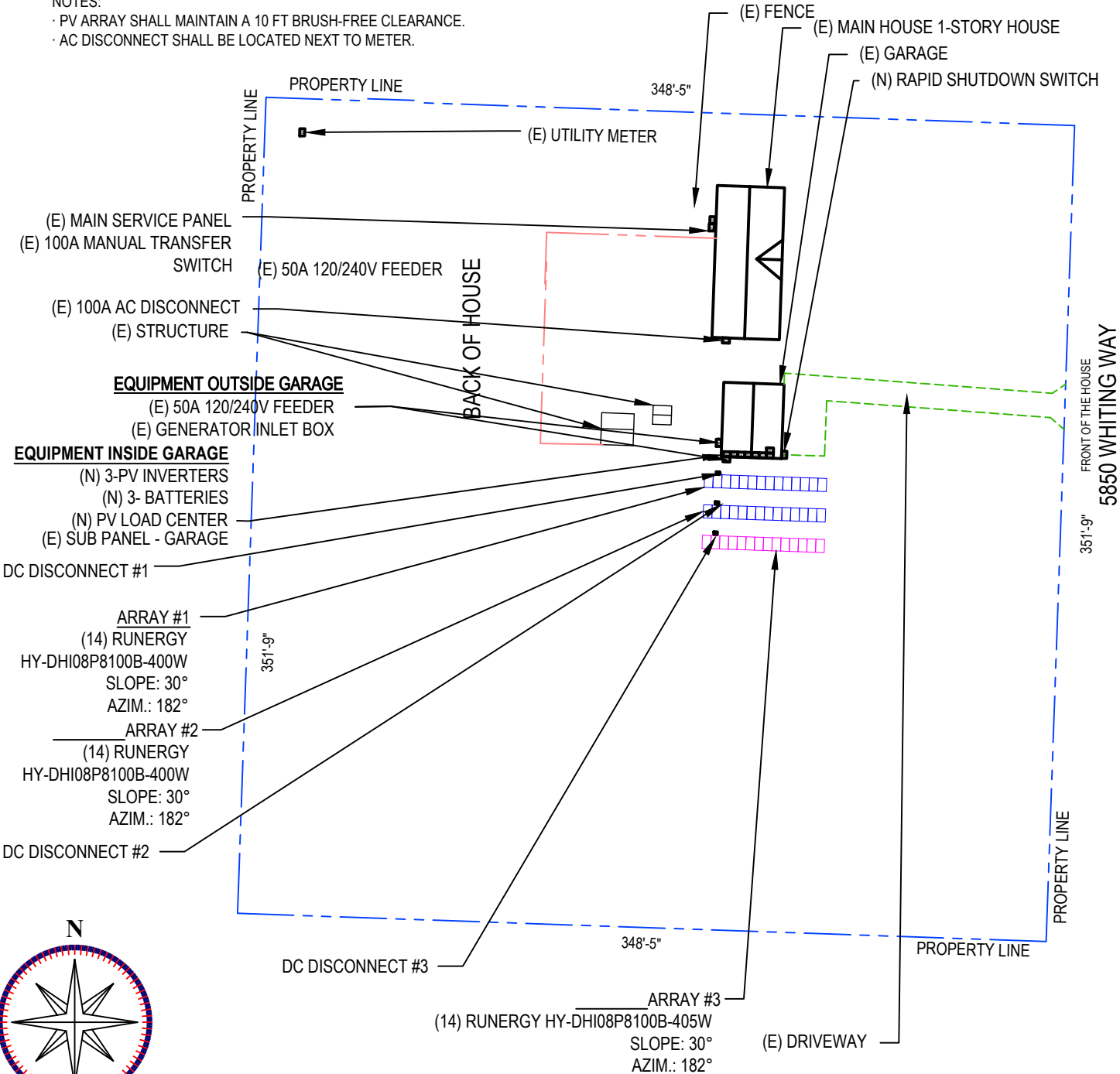
GOVERNING CODES

ALL WORK SHALL CONFORM TO THE FOLLOWING CODES

1. 2021 INTERNATIONAL BUILDING CODE
2. 2021 INTERNATIONAL RESIDENTIAL CODE
3. 2021 INTERNATIONAL FIRE CODE
4. 2018 NATIONAL ELECTRICAL CODE

GENERAL NOTES:

1. ALL COMPONENTS ARE UL LISTED AND CEC CERTIFIED, WHERE WARRANTED.
2. THE SOLAR PV SYSTEM WILL BE INSTALLED IN ACCORDANCE WITH ARTICLE 690 OF THE NEC 2018.
3. THE UTILITY INTERCONNECTION APPLICATION MUST BE APPROVED AND PV SYSTEM INSPECTED PRIOR TO PARALLEL OPERATION.
4. ALL CONDUCTORS OF A CIRCUIT, INCLUDING THE EGC, MUST BE INSTALLED IN THE SAME RACEWAY, OR CABLE, OR OTHERWISE RUN WITH THE PV ARRAY CIRCUIT CONDUCTORS WHEN THEY LEAVE THE VICINITY OF THE PV ARRAY.
5. WHERE METALLIC CONDUIT CONTAINING DC CONDUCTORS IS USED INSIDE THE BUILDING, IT SHALL BE IDENTIFIED AS "CAUTION: SOLAR CIRCUIT" EVERY 10FT.
6. HEIGHT OF THE AC DISCONNECT SHALL NOT EXCEED 6'-7" PER NEC CODE 240.24.
7. A GROUNDING ELECTRODE SYSTEM IN ACCORDANCE WITH CEC 690.47 AND 250.50 THROUGH 60 AND 250-166 SHALL BE PROVIDED. PER NEC GROUNDING ELECTRODE SYSTEM OF EXISTING BUILDING MAY BE USED AND BONDED TO THE SERVICE ENTRANCE. IF EXISTING SYSTEM IS INACCESSIBLE OR INADEQUATE A SUPPLEMENTAL GROUNDING ELECTRODE WILL BE USED AT THE INVERTER LOCATION CONSISTING OF A UL LISTED 8 FT. GROUND ROD WITH ACORN CLAMP. GROUNDING ELECTRODE CONDUCTORS SHALL BE NO LESS THAN #8 AWG AND NO LARGER THAN #6 AWG COPPER AND BONDED TO THE EXISTING GROUNDING ELECTRODE TO PROVIDE FOR A COMPLETE SYSTEM.
8. PHOTOVOLTAIC MODULES ARE TO BE CONSIDERED NON-COMBUSTIBLE.
9. PHOTOVOLTAIC INSTALLATION WILL NOT OBSTRUCT ANY PLUMBING, MECHANICAL, OR BUILDING ROOF VENTS.
10. ALL WIRING MUST BE PROPERLY SUPPORTED BY DEVICES OR MECHANICAL MEANS DESIGNED AND LISTED FOR SUCH USE. WIRING MUST BE PERMANENTLY AND COMPLETELY HELD OFF THE ROOF SURFACE.
11. ALL SIGNAGE TO BE PLACED IN ACCORDANCE WITH THE LOCAL BUILDING CODE. IF EXPOSED TO SUNLIGHT, IT SHALL BE UV RESISTANT. ALL PLAQUES AND SIGNAGE WILL BE INSTALLED AS REQUIRED BY THE NEC AND AHJ.
12. AS SPECIFIED BY THE AHJ, EQUIPMENT USED IN UNGROUNDED SYSTEMS LABELED ACCORDING TO NEC 690.35(F).
13. INVERTER(S) USED IN UNGROUNDED SYSTEM SHALL BE LISTED FOR THIS USE [NEC 690.35(G)].



1

PLOT PLAN

PV 0.0

SCALE: 1/64" = 1'-0"

SHEET INDEX:

PV 0.0:	COVER SHEET
PV 1.0:	SITE PLAN
PV 2.0:	ELEVATION
E1.1:	THREE-LINE DIAGRAM
E 1.2:	NOTES
E 1.3:	WARNING LABELS
DS 1.0+:	EQUIPMENT SPEC SHEETS

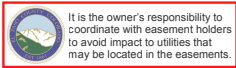
SYSTEM LEGEND

- EXISTING EXTERIOR UTILITY METER
- EXISTING MAIN SERVICE PANEL
- DEDICATED PV INVERTER
- VISIBLE, LOCKABLE, LABELED AC DISCONNECT
- EG4 WALLMOUNT INDOOR 280AH BATTERY

ADD26613
RR-2.5
PLAT - 8372



This parcel is in a low/moderate/high intensity fire risk area. Please reach out to the local fire district regarding recommendations for compliance with the WRC code.



2

VICINITY MAP

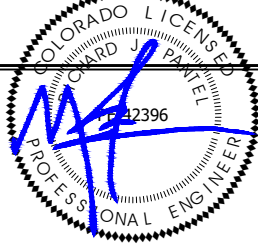
PV 0.0

SCALE: NTS



SOLAR PERMIT SOLUTIONS

PHONE (912) 521-4228



Reviewed and approved
Richard Pantel, P.E.
CO Lic. No. PE-42396
09/21/2026

Project Name & Address

KEN NIELSEN RESIDENCE

5850 WHITING WAY ,
PEYTON, CO 80831
APN NO. 4313007006
COUNTY - EL PASO

DRAWN BY
J.S.
DATE: 6/1/2026

Sheet Name
COVER SHEET

Sheet Number
PV 0.0

RESIDENTIAL



2023 PPRBC
IECC: N/A

Address: 5850 WHITING WAY, PEYTON

Parcel: 4313007006

Plan Track #: 217478 

Received: 07-Oct-2026 (TREYW)

Description:

PV SOLAR/ESS GROUND MOUNT UP TO 7FT

Contractor:

Type of Unit:

Required PPRBD Departments (3)

Floodplain

(N/A) RBD GIS

Construction

Electrical

Required Outside Departments (1)

County Zoning

APPROVED
Plan Review

10/08/2026 3:08:00 PM

dsdmaes

EPC Planning & Community
Development Department

Release of this plan does not preclude compliance with all
applicable codes, ordinances and other pertinent regulations.
This plan set must be present on the job site for every inspection.

SYSTEM SIZE: 16.87 kW DC
18.00 kW AC

DESIGN SPECIFICATION OCCUPANCY: I
CONSTRUCTION: SINGLE-FAMILY
ZONING: RESIDENTIAL
GROUND SNOW LOAD: 7 psf
WIND EXPOSURE: C
WIND SPEED: 105 mph

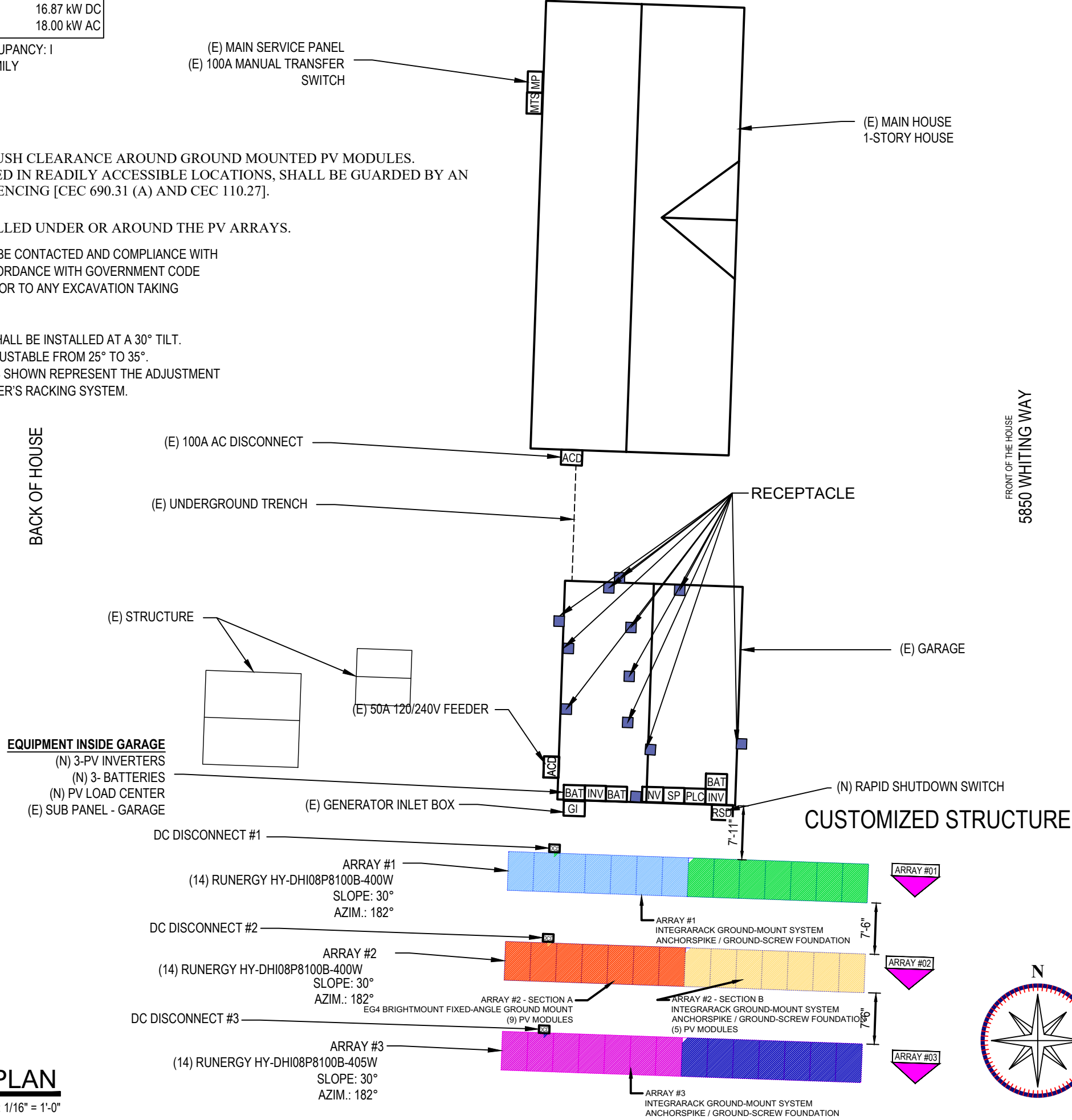
NOTE: MINIMUM 10' BRUSH CLEARANCE AROUND GROUND MOUNTED PV MODULES.
CONDUCTORS INSTALLED IN READILY ACCESSIBLE LOCATIONS, SHALL BE GUARDED BY AN
APPROVED SCRIM, OR FENCING [CEC 690.31 (A) AND CEC 110.27].

SCRIM SHALL BE INSTALLED UNDER OR AROUND THE PV ARRAYS.

NOTE: DIG ALERT (811) IS TO BE CONTACTED AND COMPLIANCE WITH
EXCAVATION SAFETY IN ACCORDANCE WITH GOVERNMENT CODE
4216 WILL BE FOLLOWED, PRIOR TO ANY EXCAVATION TAKING
PLACE. QÍŠGK

THE PROPOSED PV ARRAY SHALL BE INSTALLED AT A 30° TILT.
THE RACKING SYSTEM IS ADJUSTABLE FROM 25° TO 35°.
THE 25° AND 35° DIMENSIONS SHOWN REPRESENT THE ADJUSTMENT
LIMITS OF THE MANUFACTURER'S RACKING SYSTEM.

BACK OF HOUSE



SYSTEM LEGEND

- EXISTING EXTERIOR UTILITY METER
- EXISTING MAIN SERVICE PANEL
- DEDICATED PV INVERTER
- VISIBLE, LOCKABLE, LABELED AC DISCONNECT
- EG4 WALLMOUNT INDOOR 280AH BATTERY
- 28 NEW RUNERGY HY-DHI08P8100B-400W MODULES
- 14 NEW RUNERGY HY-DHI08P8100B-405W MODULES
- DC DISCONNECT
 - = ATTACHMENT POINTS
 - = RECEPTACLE

ARRAY SECTIONS

- ARRAY #01 MODULE - 14
SLOPE - 30°
AZIMUTH - 182°
- ARRAY #02 MODULE - 14
SLOPE - 30°
AZIMUTH - 182°
- ARRAY #03 MODULE - 14
SLOPE - 30°
AZIMUTH - 182°

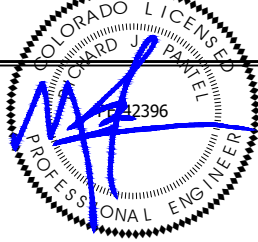
CIRCUIT(S)

- CIRCUIT #1 - 7 MODULES
- CIRCUIT #2 - 7 MODULES
- CIRCUIT #3 - 7 MODULES
- CIRCUIT #4 - 7 MODULES
- CIRCUIT #5 - 7 MODULES
- CIRCUIT #6 - 7 MODULES



SOLAR PERMIT SOLUTIONS

PHONE (912) 521-4228



Reviewed and approved
Richard Pantel, P.E.
CO Lic. No. PE-42396
09/21/2026

Project Name & Address

KEN NIELSEN RESIDENCE

5850 WHITING WAY,
PEYTON, CO 80831
APN NO. 4313007006
COUNTY - EL PASO

DRAWN BY
J.S.
DATE: 6/1/2026

Sheet Name
SITE PLAN

Sheet Number
PV 1.0

1

SITE PLAN

PV 1.0

SCALE: 1/16" = 1'-0"