

**Borough of Clearfield – PERMIT APPLICATION**

6 S. Front Street, Clearfield, PA 16830

Phone: 814-765-7817

Permit No. \_\_\_\_\_

**LOCATION OF PROPOSED WORK OR IMPROVEMENT**

Municipality: \_\_\_\_\_ Tax Parcel # \_\_\_\_\_

Site Address: \_\_\_\_\_

Lot# \_\_\_\_\_ Subdivision/Land Development: \_\_\_\_\_ Phase: \_\_\_\_\_ Section: \_\_\_\_\_

Owner: \_\_\_\_\_ Phone# \_\_\_\_\_ Fax# \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Email: \_\_\_\_\_

Principal Contractor: \_\_\_\_\_ Phone# \_\_\_\_\_ Fax# \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Architect: \_\_\_\_\_ Phone# \_\_\_\_\_ Fax# \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Email: \_\_\_\_\_

**TYPE OF WORK OR IMPROVEMENT (Circle all that apply)**

New Building   Addition   Alteration   Repair   Demolition   Relocation  
Change of Use   Plumbing   Electrical   Mechanical   Other \_\_\_\_\_

Describe the Proposed work: \_\_\_\_\_

**ESTIMATED COST OF CONSTRUCTION (Reasonable fair market value)** \_\_\_\_\_

**DESCRIPTION OF BUILDING USE (Check one then complete applicable info)**

**RESIDENTIAL**  
Single Family Dwelling  
Duplex  
Townhouse  
Total Sq. ft. of finished living space \_\_\_\_\_

**NON-RESIDENTIAL (Commercial)**  
Specific Use \_\_\_\_\_  
Use Group: \_\_\_\_\_ Construction Type: \_\_\_\_\_  
Change of Use (indicate former and proposed): \_\_\_\_\_  
Maximum Occupant Load: \_\_\_\_\_  
Maximum Live Load: \_\_\_\_\_

**Sprinkler system to be installed:** (Check one) Yes \_\_\_\_\_ No \_\_\_\_\_

**BUILDING DIMENSIONS**

Existing Building Area: \_\_\_\_\_ sq. ft.      Number of Stories: \_\_\_\_\_  
Proposed Building Area: \_\_\_\_\_ sq. ft.      Height Above Grade: \_\_\_\_\_ ft.  
Total Building Area: \_\_\_\_\_ sq. ft.      Area of Largest Floor: \_\_\_\_\_ sq. ft.

**FLOODPLAIN INFORMATION**

Is the site located within an identified flood plan area? (Check one) Yes \_\_\_\_\_ No \_\_\_\_\_

Note: All proposed development shall be in accordance with the requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act.

**HISTORIC DISTRICT INFORMATION**

Is the site located within a Historical District? (Check one) Yes \_\_\_\_\_ No \_\_\_\_\_

Note: If yes, you must provide proper Historical District certification per the UCC Law.

The applicant certifies that all information on this application is correct and the work will be completed in accordance with the “approved” construction documents and PA Act 45 – Uniform Construction Code and any additional approved building code requirements adopted by the Municipality. The property owner and applicant assumes the responsibility of locating all property lines, setback lines, easements, right of ways, flood areas, etc. Issuance of a permit and approval of construction documents shall not be construed as authority to violate, cancel or set aside any provisions of the codes or ordinances of the Municipality or any other governing body. The applicant hereby certifies he/she understands all applicable codes, ordinances and regulations.

Application for a permit shall be made by the **owner or lessee of the building or structure, or authorized agent of either, or by the authorized registered Design Professional** employed in connection with the proposed work.

**I certify that the Code Administrator or the Code Administrator’s authorized representative shall have the authority to enter areas covered by such permit at any reasonable hour to enforce the provisions of the applicable codes to such permit.**

\_\_\_\_\_  
Signature of Owner or Authorized Agent

\_\_\_\_\_  
Print Name of Owner or Authorized Agent

Address: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions to Worksite:** \_\_\_\_\_

**OFFICE USE ONLY below**

Permit Fee: \$ \_\_\_\_\_

Plan Submittal Checklist Attached: yes \_\_\_\_\_ no \_\_\_\_\_

Plan Review Approval Date: \_\_\_\_\_

**MUNICIPAL PRIOR APPROVAL CHECKLIST**

Name of Municipality\_\_\_\_\_

Name of Applicant\_\_\_\_\_

Parcel#\_\_\_\_\_ Lot#\_\_\_\_\_

**This Section below to be completed by the Authorized Municipal Representative**

**CHECKLIST ITEMS**

Is the project site located in a Flood Area? (Check one) yes\_\_\_\_ no\_\_\_\_

**(Circle one)**-----**Residential Project** or **Commercial Project**

Description of Work: \_\_\_\_\_

Zoning or Land Use Permit                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Stormwater Management                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Street cut/ Driveway                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Sewage/Onlot Permit                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Water Permit                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

PennDot Highway Occupancy                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Floodplain Permit                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

Other \_\_\_\_\_                      Approved\_\_\_\_\_                      Not applicable\_\_\_\_\_

I certify that all required Municipal Codes, Ordinances and Regulations have been met and approval thereby is granted to issue the requested Permit.

Authorized Municipal Representative signature:\_\_\_\_\_

Date:\_\_\_\_\_

**\*\*NOTE THAT THIS PERMIT APPLICATION PACKAGE MUST BE COMPLETED AND THEN SUBMITTED WITH THE PROJECT CONSTRUCTION PLANS AND THE CORRESPONDING SUBMITTAL CHECKLIST\*\***

## **PENNSAFE BUILDING INSPECTION SERVICES LLC**

### PLAN SUBMITTAL HANDOUT for SOLAR PANELS

The Project Submittal package is required to include all information on this handout. Check each applicable item. If not applicable, then mark item n/a. This form must be submitted with attached project drawings.

- Permit Application
- Municipal Prior Approval
- Two full sets of Building Plans drawn to scale
- Existing Certificate of Occupancy (if available)

**\*\*The following items are required to be included on the Building Plans\*\***

(Check every item that will be included in the project or marked n/a as not applicable)

- System Description
  - Type of PV and Inverter
  - How is it wired
  - How is it mounted
- Specification sheets for all equipment
  - PV module
  - Inverter
  - PV mounting system
  - AC & DC disconnect
  - Combiner box
  - Battery
  - Charge controller
- Mechanical drawings
- Electrical drawings
- Wind loading calculations
- Weight of array
- Structural information about roof
- PV layout on roof
- Rack drawing from manufacturer
- Attachment plan
- Attachment detail (if attaching to a truss it requires approval of a registered design professional)
- Electrical 3-line diagram

**Is the array to be mounted on a defined, permitted roof structure?**  Yes  No

If No due to non-compliant roof or a ground mount, submit completed worksheet for structure.

#### **Roof Information:**

1. Is the roofing type lightweight (Yes = composition, lightweight, masonry, metal, etc.)  Yes  No

If No, submit completed worksheet for roof structure (No = heavy masonry, slate, etc.)

2. Does the roof have a single roof covering?  Yes  No

If No, submit completed worksheet for roof structure

3. Provide method and type of weatherproofing roof penetrations (flashing, caulk) \_\_\_\_\_  
\_\_\_\_\_

**Mounting System Information:**

1. Is the mounting structure an engineered product designed to mount PV modules?  Yes  No  
If No, provide details of structural attachment certified by a design professional.

2. For manufactured mounting systems, fill out information on the mounting system below:

- a. Mounting System Manufacturer \_\_\_\_\_ Product Name and Model # \_\_\_\_\_
- b. Total Weight of PV Modules and Rails \_\_\_\_\_ lbs
- c. Total Number of Attachment Points \_\_\_\_\_
- d. Weight per Attachment Point (b / c) \_\_\_\_\_ lbs (if greater than 45 lbs, see worksheet)
- e. Maximum Spacing Between Attachment Points on a Rail \_\_\_\_\_ inches (see product manual for maximum spacing allowed based on maximum design wind speed)
- f. Total Surface Area of PV Modules (square feet) \_\_\_\_\_ ft<sup>2</sup>
- g. Distributed Weight of PV Module on Roof (b / c) \_\_\_\_\_ lbs/ft<sup>2</sup>  
If distributed weight of the PV system is greater than 5 lbs/ft<sup>2</sup>, see worksheet.

**Ground Mounts:**

- PA One Call
- Find customer-owned underground utilities (septic, phone, electric wiring (yard lights, pool, etc.), pool plumbing
- Rack manufacturer can supply footer designs based on your soil conditions and wind zone.
- For multiple ground-mounts, space them far enough apart to avoid shading each other.

**\*\*THIS COMPLETED FORM MUST BE SUBMITTED WITH PROJECT PLANS\*\***

**PV ARRAY INFORMATION (Guide Sec. 6)**  
 NUMBER OF MODULES IN SERIES \_\_\_\_\_  
 NUMBER OF PARALLEL CIRCUITS \_\_\_\_\_  
 LOWEST EXPECTED AMBIENT TEMP \_\_\_\_\_ °C  
 HIGHEST CONTINUOUS TEMPERATURE \_\_\_\_\_ °C

MODULES IN SERIES SOURCE-CIRCUIT \_\_\_\_\_  
 MODULES IN SERIES SOURCE-CIRCUIT \_\_\_\_\_  
 MODULES IN SERIES SOURCE-CIRCUIT \_\_\_\_\_  
 MODULES IN SERIES SOURCE-CIRCUIT \_\_\_\_\_

FOR UNUSED SERIES STRINGS PUT "N/A" IN BLANK ABOVE  
 SEE GUIDE SECTION 10 FOR INFORMATION ON MODULE AND ARRAY GROUNDING

**PV MODULE RATINGS @ STC (Guide Sec. 5)**  
 MODULE MANUFACTURER \_\_\_\_\_  
 MODULE MODEL # \_\_\_\_\_  
 MAX POWER-POINT CURRENT (Imp) = \_\_\_\_\_ A  
 MAX POWER-POINT VOLTAGE (Vmp) = \_\_\_\_\_ V  
 OPEN-CIRCUIT VOLTAGE (Voc) = \_\_\_\_\_ V  
 SHORT-CIRCUIT CURRENT (Isc) = \_\_\_\_\_ A  
 MAX SERIES FUSE (OCPD) = \_\_\_\_\_ A  
 MAXIMUM POWER (Pmax) = \_\_\_\_\_ W  
 MAX SYSTEM VOLTAGE (typ 600Vdc) = \_\_\_\_\_ V  
 Voc TEMP COEFF = \_\_\_\_\_ mV/°C or %/°C  
 (IF SUPPLIED, CIRCLE TYPE OF COEFF)

OCPD = OVERCURRENT PROTECTION DEVICE (IF NO OCPD-PUT "N/A" IN RELEVANT BLANKS)  
 NATIONAL ELECTRICAL CODE® REFERENCES SHOWN AS (NEC XXX.XX)

**SOURCE-CIRCUIT COMBINER RATINGS (IF USED)**  
 MAX OCPD RATING = \_\_\_\_\_ A  
 OCPD AMP RATING = \_\_\_\_\_ A  
 OCPD VOLT RATING = \_\_\_\_\_ V

**DC DISCONNECT RATINGS (See Guide Appendix B)**  
 DISCO AMP RATING = \_\_\_\_\_ A  
 DISCO VOLT RATING = \_\_\_\_\_ V

**INVERTER RATINGS (Guide Sec. 4)**  
 INVERTER MAKE \_\_\_\_\_  
 INVERTER MODEL # \_\_\_\_\_  
 MAX DC VOLT RATING = \_\_\_\_\_ V  
 MAX POWER @ 40°C = \_\_\_\_\_ W  
 NOMINAL AC VOLTAGE = \_\_\_\_\_ V  
 MAX AC CURRENT = \_\_\_\_\_ A  
 MAX OCPD RATING = \_\_\_\_\_ A

**SEE NOTE 3 FOR INVERTER CIRCUITS (Guide Sec. 8—disregard if integral with inverter)**  
 CONDUIT TYPE \_\_\_\_\_  
 CONDUIT SIZE \_\_\_\_\_  
 CONDUCTOR TYPE \_\_\_\_\_  
 CONDUCTOR SIZE \_\_\_\_\_ AWG (Guide Sec. 10)  
 NUMBER OF CONDUCTORS \_\_\_\_\_  
 (\_\_\_\_ Red, \_\_\_\_ White, 1 Green)  
 EGC SIZE \_\_\_\_\_ AWG (NEC 250.122)

**SEE NOTES FOR ARRAY CIRCUIT WIRING (Guide Sec. 8)**  
 CONDUIT TYPE \_\_\_\_\_  
 CONDUIT SIZE \_\_\_\_\_  
 CONDUCTOR TYPE (SEE BELOW)  
 CONDUCTOR SIZE \_\_\_\_\_ AWG  
 NUMBER OF CONDUCTORS \_\_\_\_\_  
 (\_\_\_\_ Red, \_\_\_\_ White, 1 Green)  
 EGC SIZE \_\_\_\_\_ AWG (NEC 250.122)

**ROOFTOP JUNCTION BOX**  
 NEMA 3R MINIMUM REQUIRED WITH WATERPROOF SPLICES OR OTHER APPROVED TERMINATION METHOD (NEC 110.14; 300.6; 314)

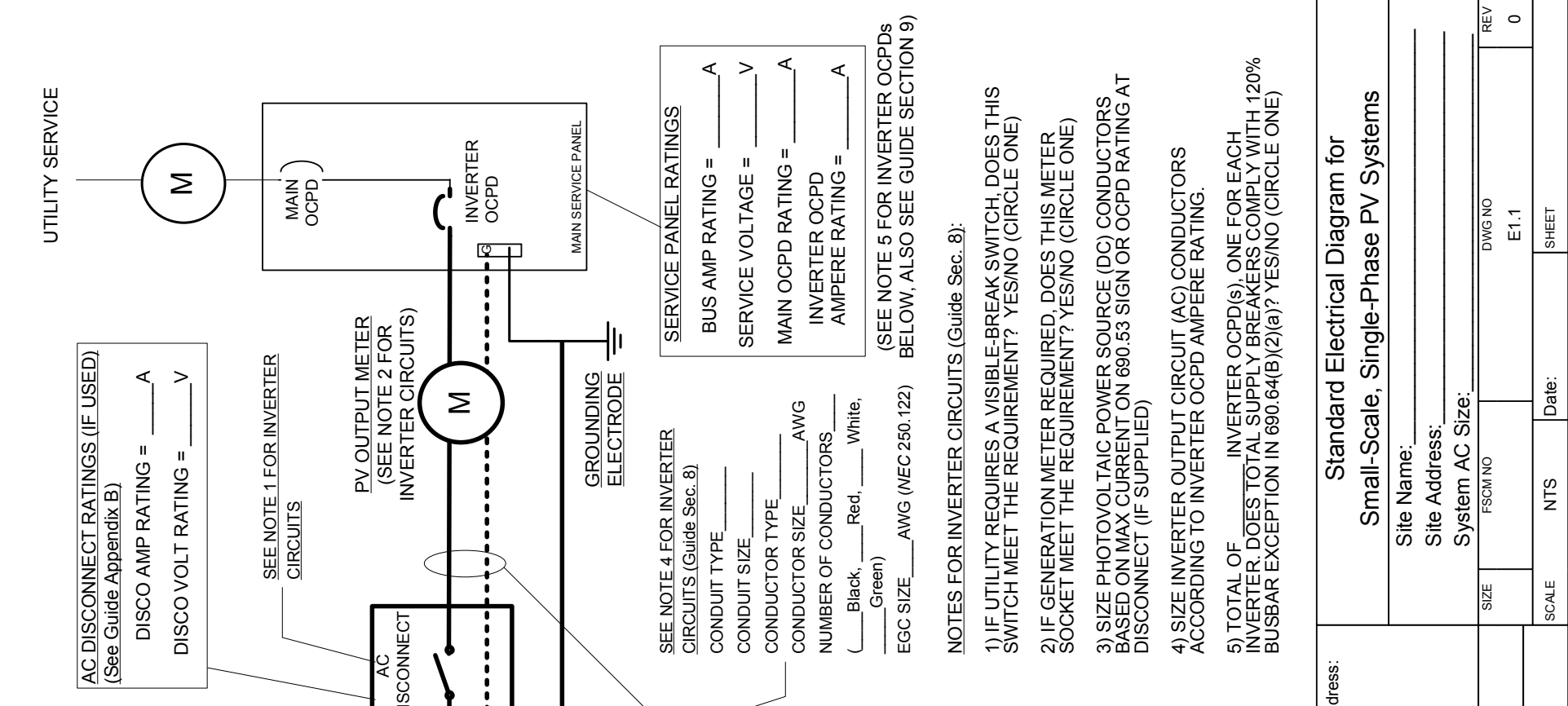
**SOURCE-CIRCUIT CONDUCTORS**  
 OUTSIDE CONDUIT—MINIMUM 12 AWG AND TWO TYPE OPTIONS—(CIRCLE ONE)  
 USE-2; PV WIRE/CABLE

**SIGNS—SEE GUIDE SECTION 7**

<b>SIGN FOR DC DISCONNECT</b>	<b>SIGN FOR AC DISCONNECT (if used)</b>
PHOTOVOLTAIC POWER SOURCE	SOLAR AC DISCONNECT
RATED MPP CURRENT = _____ A	AC OUTPUT CURRENT = _____ A
RATED MPP VOLTAGE = _____ V	NOMINAL AC VOLTAGE = _____ V
MAX SYSTEM VOLTAGE = _____ V	SIGN FOR INVERTER OCPD
MAX CIRCUIT CURRENT = _____ A	AC POINT OF CONNECTION
WARNING: ELECTRICAL SHOCK HAZARD—LINE AND LOAD MAY BE ENERGIZED IN OPEN POSITION	AC OUTPUT CURRENT = _____ A
	NOMINAL AC VOLTAGE = _____ V

NOTES FOR ARRAY CIRCUIT WIRING (Guide Sec. 8):

- THREE OPTIONS FOR SOURCE CIRCUIT CONDUCTOR TYPE (INSIDE CONDUIT—CIRCLE ONE)  
 THWN-2; XHHW-2; RHW-2
- 2005 ASHRAE FUNDAMENTALS 2% DESIGN TEMPERATURES DO NOT EXCEED 47°C IN THE UNITED STATES (PALM SPRINGS, CA IS 44.1°C). FOR LESS THAN 9 CURRENT-CARRYING CONDUCTORS IN ROOF-MOUNTED SUNLIT CONDUIT AT LEAST 0.5" ABOVE ROOF AND USING THE OUTDOOR DESIGN TEMPERATURE OF 47°C OR LESS (ALL OF UNITED STATES).  
 a) 12 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH Isc OF 7.68 AMPS OR LESS WHEN PROTECTED BY A 12-AMP OR SMALLER FUSE.  
 b) 10 AWG, 90°C CONDUCTORS ARE GENERALLY ACCEPTABLE FOR MODULES WITH Isc OF 9.6 AMPS OR LESS WHEN PROTECTED BY A 15-AMP OR SMALLER FUSE.



**SERVICE PANEL RATINGS**  
 BUS AMP RATING = \_\_\_\_\_ A  
 SERVICE VOLTAGE = \_\_\_\_\_ V  
 MAIN OCPD RATING = \_\_\_\_\_ A  
 INVERTER OCPD AMPERE RATING = \_\_\_\_\_ A

(SEE NOTE 5 FOR INVERTER OCPDS BELOW, ALSO SEE GUIDE SECTION 9)

NOTES FOR INVERTER CIRCUITS (Guide Sec. 8):

- IF UTILITY REQUIRES A VISIBLE-BREAK SWITCH, DOES THIS SWITCH MEET THE REQUIREMENT? YES/NO (CIRCLE ONE)
- IF GENERATION METER REQUIRED, DOES THIS METER SOCKET MEET THE REQUIREMENT? YES/NO (CIRCLE ONE)
- SIZE PHOTOVOLTAIC POWER SOURCE (DC) CONDUCTORS BASED ON MAX CURRENT ON 690.53 SIGN OR OCPD RATING AT DISCONNECT (IF SUPPLIED)
- SIZE INVERTER OUTPUT CIRCUIT (AC) CONDUCTORS ACCORDING TO INVERTER OCPD AMPERE RATING.
- TOTAL OF \_\_\_\_\_ INVERTER OCPD(S), ONE FOR EACH INVERTER. DOES TOTAL SUPPLY BREAKERS COMPLY WITH 120% BUSBAR EXCEPTION IN 690.64(B)(2)(a)? YES/NO (CIRCLE ONE)

Contractor Name and Address:		Standard Electrical Diagram for	
		Small-Scale, Single-Phase PV Systems	
Site Name: _____		FSCM NO _____	
Site Address: _____		DWG NO E1.1	
System AC Size: _____		REV 0	
SIZE _____	SCALE _____	NTS	Date: _____
Drawn By: _____	Checked By: _____		SHEET _____