

PENNSAFE BUILDING INSPECTION SERVICES LLC – PERMIT APPLICATION

175 Beaver Drive, P.O. Box 486 – DuBois, PA 15801

Phone: 814-375-1111 Fax: 814-375-1117 Toll Free: 855-PENNSAF

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: _____ Email: _____

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)

Building Code Used for Design: _____

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) _____ ft²

g. Distributed Weight of PV Module on Roof (b / c) _____ lbs/ft²

If distributed weight of the PV system is greater than 5 lbs/ft², 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 (NEC 250.166, 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)

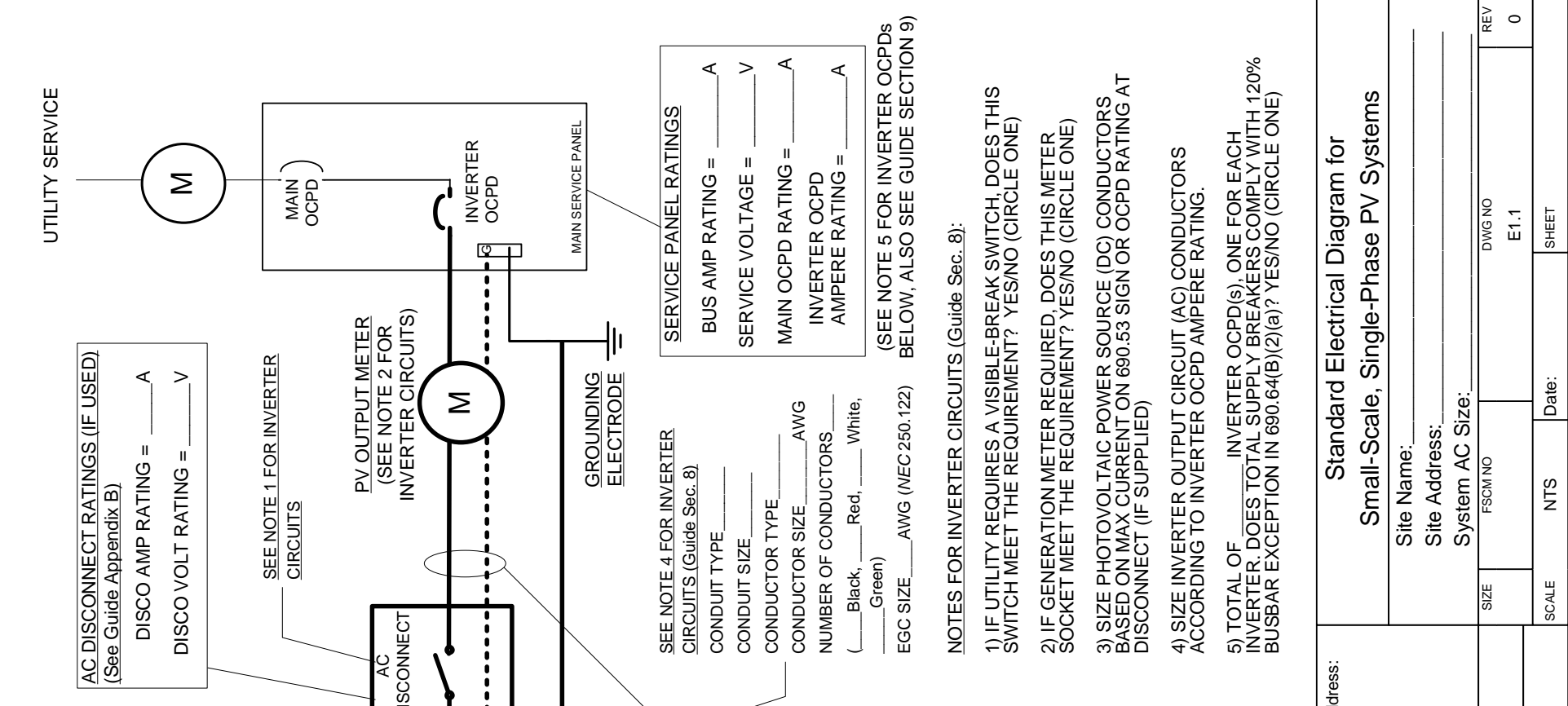
SOURCE-CIRCUIT CONDUCTORS
 OUTSIDE CONDUIT—MINIMUM 12 AWG AND TWO TYPE OPTIONS—(CIRCLE ONE)
 USE-2; PV WIRE/CABLE

SIGNS—SEE GUIDE SECTION 7

SIGN FOR DC DISCONNECT	SIGN FOR AC DISCONNECT (if used)
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: _____		Site Address: _____	
System AC Size: _____		System AC Size: _____	
SIZE	FSCM NO	DWG NO	REV
		E1.1	0
SCALE	NTS	Date:	SHEET