Solar Photovoltaic Plan Review Process

- Submitted Projects
- Master Plan Projects
- Complying Template Projects
Solar Photovoltaic Plan Review Process

- Submitted Projects
  - Roof Mounted
  - Ground Mounted
  - New Structure Mounted
Solar Photovoltaic Plan Review Process

- Master Plans
  - Initial Review
  - Subsequent Projects
Solar Photovoltaic Plan
Review Process

• Complying Template Projects
  – Roof Mounted SFD
DSD Residential Plan Template for Solar Photovoltaic

• The Purpose is to reduce plan review time by:
  – Establishing a standard format and layout
  – Suggesting standard notes
Residential PV Template

General Project Information

Notes for each page on the right-hand side of the page

Plans need to be in a simple legible format (11” X 17”)

Development Services Department
Division of Building, Construction and Safety
• Residential PV Template

PV Company Name & Logo

Designer Name
Signature
License #

Project Location
• Residential PV Template

- Notes font large enough to be legible
- Identify Property Lines
- Page Reference
• **Residential PV Template**

Array layout custom to each project showing the number of modules

Locate Building, Plumbing and Mechanical Vents
• Residential PV Template

Identify the location of the conduit. If DC conductors are routed within the building they must be within a metallic conduit marked **CAUTION DC CIRCUIT** every five feet.
• Residential PV Template

- Show Meter Location
- Show Inverter Location
Residential PV Template

Structural calculations are required for the roof or structure mounted PV systems if the weight of the PV system exceeds five pounds per square foot.
• Residential PV Template

- Roof Framing and the Rack lay out
- Typical Detail to show the attachment
- Provide a Water Proofing Detail
• Residential PV Template Single Line

Show the module manufactures' name and the model number

Identify the wire type and size

Show the number of modules per string and the number of strings per system
Residential PV Template Single Line

Identify the wire type, and size

Identify the conduit type, and size
Show the inverter manufacturers' name and the model number

Identify the wire type and size

Identify the conduit type and size
If a combiner box is used identify the ampere rating of the bus and OCP.

Residential PV Template Single Line
Identify the ampere rating of the bus, main breaker and back-fed PV breaker.
If micro inverter system is installed show the module manufactures' name and the model number.

Systems with micro inverters need to show disconnects in compliance with (CEC 609.14 (D))
Identify DC and AC disconnects and where fuses are required show the ampere rating of the fuses.
Residential PV Template – Manufacturer Information Sheets

Include 8.5” by 11” copies of the Manufacturer’s specifications

Verify that all components are listed by a Nationally Recognized Testing Laboratory for the intended use.
Identify the short circuit current (\(I_{sc}\)) and the open circuit voltage (\(V_{oc}\)).