Guidelines for Electrical Drawings

Electrical Drawing Guidelines:

- Standard Sheet Size
  - 8.5 x 11 (Preferred)
  - 11 x 17 (Preferred)
  - 22 x 34
- General
  - Consistent line weight, varying line width is acceptable provided it does not confuse a reader
  - Standard symbology, ref ANSI Y32
  - Black and white preferred but adequately contrasting colors acceptable
  - Revisions shown with revision clouds and update to revision block
- Layout
  - Title block
    - Customer name, address, TMK
  - Drawing date
  - Revision block (revision date), if applicable
  - Notation of Sheet X of X if drawing spans multiple sheets
  - Solar Contractor/Designer/etc. contact information (address, phone number, email)
- Text and Lines
  - Sans serif font for all except title block
  - Minimum 1/4” text height for titles, minimum 1/8” text height for all else
  - Minimum #0 line weight, minimum #3 line weight for proposed or new items (on site plan/single line drawing/elevations)
  - Communication and electric wiring lines must be unique or easily identifiable
- Site Plan
  - Show property lines and closest streets by name
  - North should be toward top or left of sheet
  - Direction arrow in bottom left corner
  - Generating Facility equipment called out; including, but not limited to the utility meter, utility meter number, AC disconnect, and production meter (if applicable)
  - Note scale of site plan, or “not to scale” whichever applies
- SLD/TLD
  - Connecting lines change direction at 90-degree angles whenever possible, 45-degree lines are acceptable for callouts and certain connections but should be minimized
  - Minimize connector line crossings (use a line cross symbol when crossings are unavoidable)
  - All equipment and devices necessary for normal system operation shown on drawing, including communication and energy management equipment
  - Generator manufacturer and model shown (includes energy storage power conversion system)
  - Generating Facility ratings given as nominal values (includes energy storage power and energy ratings)
  - All electrical connections from PV panels shown up to the point of common coupling (utility meter)
  - Location of loads should be shown
  - Electrical connection sizes are labeled (service voltage, circuit breaker, fuses, switches, etc.)