VILLAGE OF BOLINGBROOK SUBMITTAL REQUIREMENTS FOR NEW RESIDENTIAL SOLAR PHOTOVOLTAIC SYSTEMS

General Requirements:
1. Completed permit application.
2. Copy of the signed contract for work to be completed.
3. Approval letter from the electric utility company (Com Ed) if system is to be tied to the utility.
4. Home Owner’s Association letter of approval required at time of submittal (where applicable).
5. Submit 3 complete sets of plans for plan review, specifying all elements and sizes of the system and all structural details. Careful consideration must be paid to potential reflection nuisance when designing. These plans must be stamped and signed by an Illinois Licensed Design Professional and are to include the following items:

Site Plan, Plot Plan, or Plat of Survey:
- Show locations of all solar photovoltaic panels, including the location of all disconnects, and inverters in relation to all property lines (show distances to lot lines).
- Indicate physical sizes of equipment (show dimensions of all equipment).

Electrical Details:
- Provide manufacturer’s specifications on all equipment.
- Provide a wiring diagram showing the number of solar photovoltaic panels with the voltage and kilowatt output, all disconnects, and all inverters with input and output ratings. Show the size of the main electrical panel in amperes, and the size of the solar photovoltaic circuit breaker in amperes. Show battery locations (if applicable). Show point of connection to existing service. Show conduit types and sizes, conductor types and sizes and number of conductors in conduits for all parts of the installation.
- Indicate grounding method of solar panels. Must follow and comply with manufacturer’s specific listing.
- Include complete electrical calculations for the proposed solar PV system.
- All plans must indicate the existing equipment as well as the new solar photovoltaic equipment.
Structural Details:

- Provide structural details for the installation of the PV Array. The plans and calculations must be stamped and signed by an Illinois Licensed Design Professional.
- A detail sheet showing either the supporting structure for ground mounted arrays or attachment of panels to the roof.
- Provide information on existing roof frame and roofing material used (if roof mounted). Size, spacing and span of existing roof rafters. Existing roof slopes. Number of layers, and type of roofing material. Indicate clear access path locations and widths.
- Roof framing cross-section detail that also indicates location of load bearing walls.
- Attachment details showing the type diameter and length of embedment of bolts and their spacing, and number of bolts per solar panel.
- Any requirements of, and details for, high strength concrete footings, shop-fabricated support structures, or field welding must be included in the stamped and signed plans.

ADDITIONAL Requirements:

- Some Home Owners Associations, Declarations of Covenants and Restrictions may govern or limit the locations of solar photovoltaic panels and equipment. For example; Americana Estates requires that these panels be located on the rear portion of the roof only, regardless of the direction the house is facing.
- Complete set of approved plans and manufacturer’s specification sheets must be on site at time of inspection.
- Special inspections may be required.
- All contractors must register with the Village prior to the issuance of the permit.
- A qualified individual must be present to accompany inspector during inspection.
- The system shall be ready for inspection with all boxes open and ladders tied off.
- Any changes to approved plans due to field conditions or unforeseen circumstances must first be approved by the licensed design professional of record, then reviewed and approved by the Bolingbrook Building Department prior to scheduling the inspection.

Note: This guide is not to be misconstrued as a design document or formal interpretation of the applicable building codes or electrical codes. It is intended to be for information purposes only.
