City of CADDO MILLS

Solar Panel Installation Requirements

General Info

1. Solar energy equipment shall be located in the least visible location. **No panels on front of residence.**
2. Solar energy equipment shall comply with all setback and height requirements for the zoning district in which the property is located.
3. Non-functioning solar energy equipment shall be repaired or removed within six (6) months of becoming non-functional.

Ground Mounted Equipment

1. Solar energy equipment shall be located in the rear yard of the property.
2. Ground mounted energy equipment shall not be located more than twelve (12) feet above grade and shall be substantially screened from public view and public rights of way.
3. All exterior electrical service lines shall be placed in conduit and buried below the surface of the ground.

Roof Mounted Equipment

1. Roof mounted solar energy equipment shall be installed in the plane of the roof or be made part of the roof design.
2. Solar energy equipment shall not project above the peak of the roof to which it is attached.
3. Solar panels facing public rights-of-way shall be avoided.

The Following Documents Must Be Submitted with your Application

☐ Building Permit Application (3 copies)

☐ Construction Plan (3 copies)

☐ Site Plan (3 copies)

Solar systems shall be installed in accordance with the **2023 NEC, 2021 IRC, 2021 National Fire Protection Association National Electrical Code (NFPA 70) as adopted by the State of Texas, applicable ordinances, districts, and/or special use categories (e.g.: zoning or special use, etc.).

The Following Checklist Must Be Submitted with your Application

☐ Site specific, stamped engineering drawings (reviewed or designed, and sealed by a licensed professional engineer), assembly installation plans, manufacturer's installation instructions, and/or equipment manufacturer's data sheets.

☐ Make, model, and quantity of module, inverter, and racking system certified to the UL 2703, UL 62109, and UL 1741 standard by a Nationally Recognized Testing Laboratory as appropriate.

☐ Framing plans

☐ Method of sealing/flashing for roof penetrations.

☐ Connection details to building.

☐ Structural calculations or load diagram by structural engineer. Connection details to the building and indicating any additional framing designed to support the system or indicating the existing structure has adequate capacity.

☐ Data cut sheets for battery storage if applicable (including type of battery).

☐ Site Plan: Include the PV array layout showing compliance with the Fate unified Development ordinance.

☐ Roof plan showing location of equipment and, if required, fire setbacks.

SOLAR PHOTOVOLTAIC (PV) SYSTEM CHECKLIST

☐ Existing site easements, property lines, building setback lines, zoning setbacks.

☐ Typical side view detail of the solar PV system mount on the roof.

☐ Location of all existing structures and proposed PV system equipment (including modules, disconnects, inverters, panel boards, combiner boxes, storage batteries, utility meters, etc.).

☐ Plumbing vent termination: Vent termination is not allowed under solar installations and must be relocated or modified in accordance with the 2021 International Plumbing Code (IPC) and/or the 2021 International Residential Code (IRC).

☐ Fire Code Requirements: Installation complies with Section 605.11 of the 2021 International Fire Code (IFC), or a more recent IFC version.

☐ Electrical Plans: In addition to the construction documents, include a three-line diagram, or a

☐ line diagram that meets the requirements of the 2023 NEC.

A proper line diagram should include:

☐ AC and/or DC circuit arc fault protection as required by the NEC or ordinance (if any).

☐ Inverter listed to the UL 62109 or UL 1741 Safety Standard; photovoltaic module(s) listed to the UL 1703 safety standard. Listings conducted by a Nationally Recognized Testing Laboratory.

☐ Inverter AC output disconnect location, utility disconnect location, and AC output over-current protection device rating.

☐ Location of combiner box(es), disconnect switch, size of source circuit overcurrent protection, if required.

☐ Service panel bus rating and main circuit breaker/fuse ampere rating.

☐ Circuit diagram with conduit, wire type and sizes, and/or cable type and wire sizes.

☐ Equipment grounding and bonding conductors and grounding electrode conductor, if applicable.

☐ Battery disconnect and overcurrent protection, if applicable.

☐ List of all appropriate labels and marking per NEC and IFC requirements.