CITY OF WASHINGTON

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MEMORANDUM

TO: Chairman Burdette and Planning and Zoning Commission
FROM: Jon R. Oliphant, AICP, Planning & Development Director
SUBJECT: Public Hearing – Solar Energy Zoning Code Amendment
DATE: October 25, 2019

Synopsis: Attached is a zoning code text amendment that would establish more flexibility in the allowance of two components of roof-mount solar energy systems. Staff recommends approval of the text amendment.

Background: Staff has experienced increasing demand for solar energy projects. This is due in large part to the federal and state incentives available that allow for a relatively short payback on the upfront cost of the installation. The City's solar energy regulations were adopted in April 2018 and staff has issued 11 building permits for roof-mount solar systems since then.

One of the conditions in the April 2018 ordinance is that a special use must be approved for any roof-mount solar array on an accessory structure. A fourth such special use application will also be heard at the same meeting this text amendment is to be considered. Other inquiries have been received asking for possible future projects as well.

Staff would recommend waiving the requirement to obtain a special use permit for an accessory structure. Residents that are seeking to place the solar array on an accessory structure are trying to take advantage of the south-facing roof face on the property. While some panels have also been installed on east- or west-facing roofs, the south-facing roof is the most important for maximizing the energy generation. Any concern about the ability of the accessory structure to handle the gravity and wind loads of the panels is addressed through the building permit issuance by requiring the certification from a design professional attesting that the roof can suitably handle the loads. The special use process adds about 45-60 days of extra time before the installation could occur.

Additionally, staff would also recommend eliminating the maximum roof coverage requirement. While this was originally drafted to reduce the aesthetic impact of the panels, the installation of solar energy systems has become more widespread and the evolving technology will likely allow for them to be integrated directly into the roof in the near future. The NFPA Code also requires that there be a 3' setback from the edge of the roof on each side, so 100% coverage is not feasible.

A public hearing is scheduled on the solar energy zoning code text amendment at the November 4 Planning and Zoning Commission meeting.

ORDINANCE NO. _____

(Adoption of this ordinance would allow for roof mount solar energy systems to be located on an accessory structure as a permitted use and to eliminate the maximum allowable roof coverage percentage for solar energy systems).

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF WASHINGTON, ILLINOIS BY AMENDING CHAPTER 154.727 ENTITLED "GROUND MOUNT AND ROOF MOUNT SOLAR ENERGY SYSTEMS"

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WASHINGTON, TAZEWELL COUNTY, ILLINOIS, as follows:

Section 1. That §154.727 of the Washington Municipal Code of Ordinances titled "Ground Mount and Roof Mount Solar Energy Systems is hereby amended by deleting §154.727 in its entirety and by substituting the following as §154.727 in lieu thereof:

"§ 154.727 GROUND MOUNT AND ROOF MOUNT SOLAR ENERGY SYSTEMS

A. Roof Mount Solar Energy Systems designed to serve only the occupants of the parcel on which they are located and placed on the roof of a principal structure *or an accessory structure* shall not require a special use. ~~Roof Mount Solar Energy Systems designed to serve only the occupants of the parcel on which they are located and placed on the roof of an accessory structure shall require a special use. Ground Mount Solar Energy Systems shall not be permitted.~~ Such systems are accessory structures allowed only on zoning lots with a principal structure. An application shall be submitted to the Code Enforcement Officer demonstrating compliance with all applicable provisions of the City Code and with the following requirements:

1. Height:

   a. Roof mount solar energy systems placed on a principal structure shall not exceed the height of the principal structure on the zoning lot where the system is located.

   b. Roof mount solar energy systems placed on an accessory structure shall not exceed the height of the accessory structure on the zoning lot where the system is located.

2. Mounting on Pitched Roofs: Roof mount solar energy systems on pitched roofs shall not be permitted to tilt or rotate at a slope greater or less than the roof to which it is attached. Such roof mount solar energy systems cannot extend more than eight inches (8") from the roof surface to which it is attached. *The roof shall be considered a part of a building completely covering and permanently attached to such building and can be flat or pitched. Any roof that has a pitch of more than 1.5 inches in 12 inches shall be considered a separate roof side.*

3. Mounting on Flat Roofs: Roof mount solar energy systems on flat roofs on residential or non-residential structures shall not extend more than two feet (2') vertically or extend above the building parapet, whichever is less.

4. Setback: The collector surface and mounting devises for roof mount systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built. Exterior piping for solar systems generating heated water may extend beyond the perimeter of the building on a side yard exposure.

~~5. Roof Coverage: Roof mount solar energy systems shall not occupy more than fifty percent (50%) of the aggregate square footage of the roof area. If a roof mount solar energy system is installed on multiple roofs on the same structure, the coverage on any one (1) roof side shall not occupy more than thirty percent (30%) of the total square footage of that particular roof side on which the roof mount is located and shall not exceed fifty percent (50%) of the aggregate square footage of the roofs on which the roof mounts are located. The roof shall be considered a part of a building completely covering and permanently attached to such building and can be flat or pitched. Any roof that has a pitch of more than 1.5 inches in 12 inches shall be considered a separate roof side.~~

5~~6~~. Reflection Angles: Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.

6~~7~~. Visibility: Solar energy systems shall be located in a manner to reasonably minimize view blockage for surrounding properties and shading of property to the north while still providing adequate solar access for collectors. They shall be designed to blend into the architecture of the building or be screened from routine view from public rights-of-way provided that the screening shall not affect the operation of the system.

7~~8~~. Color: Roof mount solar energy systems shall match, as closely as possible, the color of the roof to which it is attached.

8~~9~~. Safety: Roof mount solar energy systems, excluding building integrated systems, shall allow for adequate roof access for firefighting purposes to the south facing or flat roof upon which the panels are mounted.

9~~10~~. Approved Solar Components: Electric solar energy system components shall have a UL listing or approved equivalent and solar hot water systems shall have an SRCC rating.

10~~11~~. Compliance with Building Codes: All solar energy systems shall meet approval of any currently adopted International Building Code, National Electric Code, and Illinois Plumbing Code.

11~~12~~. Utility Notification: All grid-intertie solar energy systems shall comply with the interconnection requirements of the electric utility. Off-grid systems are exempt from this requirement.

12~~13~~. Restrictions on Solar Energy Systems Limited: Consistent with 765 ILCS 165, no homeowner's agreements, covenants, common interest community or other contracts between multiple property owners within a subdivision shall prohibit or restrict homeowners from installing solar energy systems.

13~~14~~. Historic Buildings: Solar energy systems on designated historic landmarks or within designated historic districts must receive approval of the Historic Preservation Commission, consistent with the standards for solar energy systems on historically designated buildings published by the U.S. Department of Interior."

Section 2. That this ordinance shall be in full force and effect from and after its passage, approval, and publication as provided by law.

Section 3. That all ordinances or parts thereof in conflict herewith are hereby expressly repealed.

PASSED AND APPROVED this _____ day of _____, 2019.

AYES: _____

NAYS: _____

_____
Mayor

ATTEST:

_____
City Clerk