



CITY OF WASHINGTON, ILLINOIS

Committee of the Whole Agenda Communication

Meeting Date: August 14, 2023

Prepared By: Jon Oliphant, AICP, Planning & Development Director

Agenda Item: Possible Residential Ground-Mount Solar Array Amendment Discussion

Explanation: The City's solar energy regulations were first adopted in April 2018 and were twice amended in 2019. Chapter 154.727 specifically prohibits ground-mount solar energy systems. A ground-mount solar energy system is defined in City Code as "a solar energy system that is directly installed onto the ground and is not attached or affixed to an existing structure." A solar energy contractor spoke at the April 3 City Council meeting expressing interest in a code amendment that would allow for the placement of ground mount arrays.

Most of the City's solar energy regulations are based on the State model ordinance and generally mirror numerous similar ordinances in Illinois. Each of the nearby jurisdictions that regulate solar energy allow for ground-mount arrays, though Eureka only permits them in non-residential areas. A summary of the primary regulations within those entities is attached. The original Washington draft ordinance contained the allowance of ground-mount arrays but the desire of the Council at that time was to prohibit them and they were subsequently prohibited in the adopted version of the ordinance. Discussion was held at the April and May Committee of the Whole meetings to determine if there is interest in a future code amendment to allow for ground-mount arrays.

A first reading ordinance was held at the August 7 Council meeting. Following direction offered at the Committee of the Whole meetings, the draft regulations would only allow for ground-mount arrays on properties with a non-residential use that have a minimum lot size of 0.75 acres. Staff was directed to place an agenda item at the August 14 Committee of the Whole meeting to allow for discussion on the possible allowance for residential ground-mount arrays.

Fiscal Impact: The allowance of ground-mount arrays would likely increase the number of properties to contain solar energy systems, particularly those that do not have strong south-facing roofs or those that have other nearby structures or vegetation that interfere with roof sun angles. One variance request to allow a residential ground-mount array is scheduled for a public hearing at the August 16 Planning and Zoning Commission (PZC) meeting and another is scheduled for the September 6 meeting.

Action Requested: Staff requests feedback on the possible allowance for residential ground-mount arrays. Should general consensus be reached and a corresponding regulatory framework, staff and the City Attorney will draft an ordinance and schedule a public hearing for an upcoming PZC meeting prior to the eventual scheduling of a first reading ordinance. It would be advisable for the existing draft amendment ordinance that is currently scheduled for a second reading on August 21 to be postponed and for those regulations to be combined with any residential regulations. The draft code amendment ordinance that would establish the regulations for ground-mount arrays on properties with a non-residential use is attached.

ORDINANCE NO. _____

**AN ORDINANCE AMENDING THE SOLAR ENERGY CODE
TO ALLOW FOR GROUND MOUNT SOLAR ENERGY SYSTEMS ON REAL
PROPERTY THAT HAS NON-RESIDENTIAL USES**

WHEREAS, the City of Washington (the “City”) has previously established a Solar Energy Code (the “Code”) within Chapter 154, the Zoning Code, which provides for solar energy regulations; and

WHEREAS, the City currently expressly prohibits ground mount solar energy systems; and

WHEREAS, the City believes that ground mount solar energy systems should now be allowed on real property located in the City limits that have non-residential uses; and

WHEREAS, a public hearing on the proposed textual amendments were held before the Planning and Zoning Commission on August 2, 2023, in the manner prescribed by the City’s Municipal Code and by Illinois law; and

WHEREAS, after holding such public hearing, the Planning and Zoning Commission has unanimously recommended approval of the textual amendments; and

WHEREAS, the City Council has determined it is in the best interests of the City that the textual amendments to the Code be passed to allow for certain ground mount solar energy systems.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Washington, Illinois as follows:

Section 1: The recitals; as set forth above, are incorporated herein as though fully set forth and shall be considered the express findings of the City Council.

Section 2: That the minutes of the Planning and Zoning Commission made at the public hearing held on August 2, 2023, and the recommendation of staff contained in its Memorandum to the Planning and Zoning Commission dated July 24, 2023, are hereby incorporated by reference as additional findings of the City Council, as completely as if fully recited herein at length. All exhibits, if any, submitted at the public hearing are hereby incorporated by reference as fully as if attached hereto.

Section 3: That Chapter 154 of the City Code of the City of Washington, Tazewell County, Illinois, be, and the same hereby is amended by deleting Section 154.727 in its entirety and replacing it as follows:

“§ 154.727 GROUND MOUNT AND ROOF MOUNT SOLAR ENERGY SYSTEMS

(A) Ground Mount Solar Energy Systems and Roof Mount Solar Energy Systems are designed to serve only the occupants of the parcel on which they are located. Ground Mount Solar Energy Systems are installed onto the ground, only allowed on real property that have non-residential uses, and shall not require a special use. Roof Mount Solar Energy Systems are placed on the roof of a principal structure or an accessory structure and shall not require a special use. 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) Ground Mount Solar Energy System Requirements-

- (a) Height: Ground Mount Solar Energy Systems shall not exceed ten (10) feet above the grade of the real property when the system is oriented at maximum design tilt.
- (b) Setback: Ground Mount Solar Energy Systems must be setback a minimum of five (5) feet from the rear property line or the applicable setback for the zoning district in which the system is located, whichever is greater. Such systems must also be setback at least ten (10) feet from any other principal or accessory structure.
- (c) Allowance: Ground Mount Solar Energy Systems are only allowed on real property that has a non-residential use, regardless of the real property's zoning classification.
- (d) Minimum Lot Size: Ground Mount Solar Energy Systems are only permitted on real property with a minimum lot size of 0.75 acres.
- (e) Placement: Ground Mount Solar Energy Systems are only allowed to be placed in the rear yard of a real property. The system must not be located within any known dedicated easement on the real property.
- (f) Lot Coverage: The total coverage of the Ground Mount Solar Energy System shall not exceed half the building footprint of the principal structure. Ground Mount Solar Energy Systems shall be exempt from impervious surface standards/calculations if the soil under the solar collector is maintained in vegetation and not compacted. For purposes of this section, foundations, gravel, or compacted soils are considered impervious.

(2) Roof Mount Solar Energy System Requirements-

- (a) Height for System on Principal Structure: 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) Height for System on Accessory Structure: 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.
 - (c) 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.
 - (d) 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.
 - (e) Setback: The solar collector surface and mounting devices for Roof Mount Solar Energy 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. Any Roof Mount Solar Energy Systems proposed to be placed on the roof of an accessory structure that do not meet the side or rear setbacks in place at the time of installation must have a variance approved by the Planning and Zoning Commission.
 - (f) Color: Roof Mount Solar Energy Systems shall match, as closely as possible, the color of the roof to which it is attached.
 - (g) Safety: Roof Mount Solar Energy Systems, excluding building integrated solar energy systems, shall allow for adequate roof access for firefighting purposes to the south facing or flat roof upon which the panels are mounted.
- (3) Requirements Applicable to Both Ground Mount Solar Energy Systems and Roof Mount Solar Energy Systems-
- (a) Reflection Angles: Reflection angles for solar collectors shall be oriented such that they do not project glare onto adjacent properties.

- (b) 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 solar 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.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) 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.
- (g) 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 4: All ordinances or parts of ordinances in conflict with this Ordinance are hereby repealed insofar as they are in conflict with this Ordinance.

Section 5: If any provision of this Ordinance is adjudged invalid, such adjudication shall not affect the validity of the ordinance as a whole or of any portion not adjudged invalid.

Section 6: This Ordinance shall be in full force and effect from and after its passage, approval and publication as required by law.

PASSED AND APPROVED this _____ day of _____ 2023.

AYES: _____

NAYS: _____

ATTEST:

MAYOR

CITY CLERK

Area City/County Ground-Mount Solar Regulations

City/County	Regulations		
	Height	Setbacks	Other
Bloomington	4' in residential districts; 15' in other districts	Same as accessory structures	
East Peoria	20' (side/rear); 30" (front - w/SU)	Same as accessory structures	Only allowed on lots w/principal structure
El Paso	10' at maximum tilt in any zoning district	30' (side/rear)	Lot size must be at least one acre
Eureka	10'	30' (side/rear)	Cannot exceed half the building footprint of the principal structure
			Only allowed on lots w/principal structure
			Cannot exceed half the building footprint of the principal structure
			Only allowed in non-residential areas
Germantown Hills	10' at maximum tilt in any zoning district	30' (side/rear)	Lot size must be at least one acre
			Cannot exceed half the building footprint of the principal structure
Mackinaw	10' at maximum tilt in any zoning district	30' (side/rear)	Lot size must be at least one acre
			Cannot exceed half the building footprint of the principal structure
Morton	Cannot exceed the maximum allowable height for an accessory structure in the underlying zoning district	Same as accessory structures	Reflection angles shall be oriented such that they do not project glare onto adjacent properties
Normal	4' in residential districts; 15' in other districts	Same as accessory structures	Can only be located in rear yards within residential districts
Pekin	Cannot exceed the maximum allowable height for an accessory structure when oriented at maximum tilt	Same as accessory structures	Only allowed on lots w/principal structure
			Reflection angles shall be oriented such that they do not project glare onto adjacent properties
Peoria	14'	10' from principal structure, 6' from other accessory structures	
Peoria County	Cannot exceed the maximum allowable height for an accessory structure in the underlying zoning district	Same as accessory structures	
Peoria Heights	8' at maximum tilt	Same as accessory structures, no less than 5'	Cannot be located within 50' of any principal structure unless the adjacent owner joins the application
Tazewell County	20' at maximum tilt	Same as accessory structures (side/rear)	Reflection angles shall be oriented such that they do not project glare onto adjacent properties
Woodford County	18' at maximum tilt	10' (side/rear)	