



# CITY OF HAGERSTOWN, MARYLAND

Planning and Code Administration Department

## ALTERNATIVE ENERGY DESIGN STANDARDS

## Schedule E

(Last Revised: January 1, 2021)

### Submittal Requirements:

Case No. ZS – 20\_\_ – \_\_

- Attach this form to the original site plan or development plan application.
- Include an electronic copy of this schedule with the electronic site plan, subdivision or permit application.
- No additional copies are required beyond those required for the plan application itself.
- Filing fee is included in the site plan or development plan fee.

Office Use Only

Name and Description of Project: \_\_\_\_\_

Location of Property: \_\_\_\_\_ Zoning District: \_\_\_\_\_  
 (Please include street address, if known)

Engineering/Survey Company Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_ Email: \_\_\_\_\_

Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

This Chart for Staff Use Only	1 <sup>st</sup> Review	2 <sup>nd</sup> Review	3 <sup>rd</sup> Review
Date Accepted for Processing			
Review Date			
Returned to Design Firm			

The creation of wind or solar alternate energy systems are subject to certain design standards found in Article 4 (Zoning), Section K.12. Please use this Schedule when planning for your site plan or building permit application for such a use.

**Instructions to Engineer/Surveyor:** In the column marked "Engineer/Surveyor," identify each page which the required item appears on the plan. For items that appear on each page of the plan, use "All." If the item is not applicable, address as not applicable in a note on the plan and reference the page of the plan on which the note appears in the column below. Only addressing the issue as "not applicable" in this checklist is insufficient.

LMC Section	Ordinance Requirements	Engineer/Surveyor	1 <sup>st</sup> Review	2 <sup>nd</sup> Review	3 <sup>rd</sup> Review	Review Key ✓ = OK 0 = Incomplete N/A = Not Applicable
4.K.12	To obtain approval for a wind or solar energy system, the applicant shall submit a zoning permit application with a plan for review by the Planning and Code Administration Department. Once the zoning permit is approved, the applicant may apply for proper permits from the Code Administration Office.					

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4.K.12.a(1)	<p><b>Small Wind Energy Systems.</b>            Small Wind Energy Systems shall be permitted as an accessory use to any principal-permitted use in any zoning district.            (1) No more than one freestanding Small Wind Energy System shall be permitted on any individual property.</p>					
4.K.12.a(2)	<p>(2) The minimum setback from any property line for a Small Wind Energy System shall be:            (a) One and one-tenth (1.1) foot from the base of the structure to each property line for every one foot in structure height (as measured from the lowest point along the base to the highest point of the support tower, the top of either the turbine device or the area swept by the rotor blades, whichever is greatest).            (b) In the event that the maximum permitted height for Small Wind Energy System cannot be achieved on a specific property, the maximum permitted height shall be controlled by the setback constraints. The Board of Zoning Appeals shall not issue a variance to the minimum required setbacks for a Small Wind Energy System.            (c) Location in the required front building setback is prohibited.</p>					
4.K.12.a(3)	<p>(3) No Small Wind Energy System shall have a rated maximum output in excess of 15 kilowatts of electricity. No variance to this electric generating capacity shall be granted by the Board of Zoning Appeals.</p>					
4.K.12.a(4)	<p>(4) No support tower for Small Wind Energy System shall be taller than 100 feet in height.</p>					
4.K.12.a(5)	<p>(5) All wind energy systems shall be designed such that the lowest point of the area that may be swept by the rotor blades shall have a clearance of not less than 15 feet above the base of the supporting structure. The supporting tower shall not be climbable for the first 12 feet above the base of the structure. Any access doors to wind energy towers and electrical equipment shall be secured by safety locks and securely mounted into the ground, not a tree or other structure on the property. Appropriate, but not excessive, reflective or visible painting or colored objects (such as flags, reflectors, or tapes) shall be placed on all guy wires within ten feet of the ground in sufficient quantities or spacing to make them visible.</p>					
4.K.12.a(6)	<p>(6) Guy wires used to support a Small Wind Energy System structure shall be set back at least ten feet from all property lines and shall be secured to stationary anchors properly</p>					
4.K.12.a(7)	<p>(7) Public Airports and Heliports: With respect to the Federal Aviation Administration (FAA): CRF Title 14, Part 77.13 defines the controlling language for towers. The FAA must be notified when: a Wind Energy System is erected within 5,000 feet of a public use heliport that exceeds a 25:1 surface ratio; when requested by the FAA (applicant must contact FAA); when any construction or alteration is located on a public use airport or heliport.</p>					

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4.K.12.a(8)	(8) All supporting towers for a Small Wind Energy System shall be specifically engineered to support a wind turbine. Steel lattice support towers shall be prohibited in all residential zoning districts. The use or modification of a supporting tower originally designed for a telecommunications antenna as a supporting tower for a Small Wind Energy System shall be prohibited. Supporting towers constructed of aluminum also shall be prohibited.					
4.K.12.a(9)	(9) The applicant shall document that the proposed Small Wind Energy System shall not generate audible noise levels over 55 dBA at all property boundaries.					
4.K.12.a(10)	(10) All Small Wind Energy Systems shall be designed with braking, governing, or feathering systems to prevent uncontrolled rotation, over speeding, and excessive pressure on the tower structure, rotor blades, and system components.					
4.K.12.a(11)	(11) To the maximum extent practicable under the applicable regulatory requirements, rotor blades for all Small Wind Energy Systems shall be designed with non-reflective (non-gloss) paints and materials to minimize the potential “flicker” or “strobing” effect of reflected sunlight on adjoining properties. The system also shall be designed or sited to minimize the potential impacts of rotor blade shadow strobing on nearby residential dwellings, where such siting flexibility exists.					
4.K.12.a(12)	(12) No Small Wind Energy System shall be lighted or illuminated in any way that is not otherwise specifically required by the Federal Aviation Administration.					
4.K.12.a(13)	(13) No Small Wind Energy System shall contain any lettering, advertisement, or signage of any kind, with the exception of any required or standard warning signage and not more than one (1) manufacturer label bonded to or painted upon the Wind Energy System.					
4.K.12.a(14)	(14) Small Wind Energy Systems shall be designed and painted in a manner that is appropriate to minimize visual impacts on the area and setting.					
4.K.12.a(15)	(15) To the maximum extent practicable, all on-site wiring or power lines necessary to control or transmit power from the Wind Energy System shall be placed underground or hidden from public view, except where necessary to connect the system with an above-ground power line.					
4.K.12.a(16)	(16) Where a Small Wind Energy System will be connected to the electric power grid to permit “net-metering”, the applicant also shall provide an affidavit signed by the owner documenting that “the owner will comply with all applicable utility notification requirements contained in the Maryland net metering law and the system will comply with the Institute of Electrical and Electronics Engineers (IEEE) 1547 Standard for Interconnecting Distributed Resources with Electric Power Systems, as may be amended, and the applicable requirements promulgated by the Maryland Small Generator Interconnection Standards by the Maryland Public Service Commission.”					

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4.K.12.a(17)	(17) When an approved Small Wind Energy System has ceased active production of electricity for a period of at least 12 consecutive months, the owner of said property shall remove the Wind Energy System and supporting structure from the property.					
4.K.12.a(18)	(18) Small Wind Energy Systems that are proposed for location in historic districts shall be required to obtain a Certificate of Appropriateness from the Historic District Commission (HDC). The HDC may reject the application if found to compromise the historic architecture of a building or the historic environment of a site.					
4.K.12.b	<b>Large Wind Energy Systems.</b> Large Wind Energy Systems shall not be permitted in any zoning district within the City.					
4.K.12.c(1)	<b>c. Building-Mounted Wind Energy Systems.</b> Building-Mounted Wind Energy Systems shall be permitted as an accessory use to any principal permitted use in any zoning district.  (1) No more than one Building-Mounted Wind Energy System with a rated maximum output of not more than 15 kilowatts of electricity shall be permitted on any individual property. No variance to this electric generating capacity shall be granted by the Board of Zoning Appeals.					
4.K.12.c(2)	(2) The highest part of the Building-Mounted Wind Energy System may not exceed ten feet above the highest point of the roof in all zoning districts.					
4.K.12.c(3)	(3) Safety and aesthetic standards under Subsection 12.a.9 through 18 of this Section shall also apply to Building-Mounted Wind Energy Systems.					
4.K.12.d(1)	<b>d. Ground-Mounted Solar Collection Systems.</b> Ground-Mounted Solar Collection Systems are permitted as an accessory use in any zoning district.  (1) In residential and mixed-use zoning districts and for residential uses in any other zoning district, Ground-Mounted Solar Collection Systems shall not occupy more than nine hundred (900) square feet of the lot, shall not be taller than ten (10) feet in height, and shall meet all setback requirements for accessory structures.					
4.K.12.d(2)	(2) In commercial and industrial districts, Ground-Mounted Solar Collections Systems shall meet the height and setback requirements for accessory structures in that district.					
4.K.12.e	<b>e. Building-Mounted Solar Collection Systems.</b> Building-Mounted Solar Collection Systems are permitted in any zoning district.  (1) Building-Mounted Solar Collection Systems may not exceed 12 inches in height on gabled or hipped roofs or ten feet on flat roofs.					

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	(2) Building-Mounted Solar Collection Systems that are proposed for location in historic districts shall be required to obtain a Certificate of Appropriateness from the Historic District Commission (HDC).					
	(3) To the greatest extent possible, the finished material on the panels should be treated to reduce glare.					

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