NOTICE OF PUBLIC HEARING



The Common Council of the City of Madison having before it for consideration a proposed ordinance relating to zoning and city planning,

NOTICE IS HEREBY GIVEN, that a public hearing will be held in the Council Chambers, Room 201, in the City-County Building on Monday, July 21, 2008 at 6:00 p.m. before the Plan Commission, where opportunity will be afforded to all interested in being heard; and on Tuesday, August 5, 2008, at 6:45 p.m. before the regular meeting of the Common Council, at which time action on the ordinance will be considered.

Public Hearing items may be called at any time after the beginning of the Plan Commission public hearings – 6:00 pm. Anyone wishing to speak on an item must fill out a registration slip and give it to the person running the meeting. The registration slips are on a table near the front of the meeting room, just inside the doors to the room.

The Plan Commission uses a "consent agenda," which means that the Commission can consider any item at 6:00 pm if there are no registrants wishing to speak in opposition, regardless of where the item is listed on the agenda.

ORDINANCE FILE ID #11077 – The Ordinance is primarily an updating of appropriate provisions of Madison General Ordinances pertaining to solar and wind energy systems. No expenditure or allocation of additional staff resources are anticipated.

SPONSOR(S): Satya V. Rhodes Conway, Judy Compton, Marsha A Rummel, Brian Solomon

The Common Council of the City of Madison do hereby ordain as follows:

1. Subsection (2) entitled "Definitions" of Section 28.03 entitled "Rules and Definitions" of the Madison General Ordinances is amended by amending or adding therein the following:

"Solar Energy System means equipment that directly converts and then transfers or stores solar energy into usable forms of thermal or electrical energy.

Wind Energy System means equipment that converts and then stores or transfers energy from the wind into usable forms of energy."

- 2. Subdivision (e) of Subsection (18) entitled "Exemptions" of Section 28.04 entitled "General Provisions" of the Madison General Ordinances is created to read as follows:
- (e) Solar and wind energy systems are permitted accessory uses in all districts provided that the Director of the Department of Planning and Community and Economic Development has approved a placement plan showing the location of the solar or wind energy system on the lot and the design of the solar or wind energy system. The placement plan also shall include the location of improvements on adjoining lots as well as landscaping on the lot and adjoining lots that impacts the location of the solar or wind energy system. Additional materials may be required as determined by the Director of the Department of Planning and Community and Economic Development. Any conditions or restrictions imposed by the Director of the Department of Planning and Community and Economic Development shall be limited to those that serve to preserve or protect the public health and safety, or do not significantly increase the cost of the system or significantly decrease its efficiency, or allow for an alternative system of comparable cost and efficiency.
 - 2. In furtherance of public health and welfare concerns, all restrictive covenants, including covenants in deeds, and covenants or provisions in condominium owner's agreements, homeowner's association agreements, leases, and all other private agreements, to the extent such covenants or provisions apply to the storage, placement, location or use of solar and/or wind energy systems, as defined in Sec. 28.03(2), are set aside and declared unenforceable as against public policy. This subsection applies to all such covenants and provisions, including those created prior to the enactment of this ordinance "

- 3. Paragraph 16 of Subdivision (c) entitled "Conditional Uses" of Subsection (2) entitled "R1 Single-Family Residence District" of Section 28 08 entitled "Residence Districts" of the Madison General Ordinances is hereby repealed
- 4. Paragraph 5. of Subdivision (c) entitled "Conditional Uses" of Subsection (9) entitled "R4L Limited General Residence District" of Section 28.08 entitled "Residence Districts" of the Madison General Ordinances is hereby repealed.
- 5. Paragraph 9 of Subdivision (c) entitled "Conditional Uses" of Subsection (11) entitled "R4A Limited General Residence District" of Section 28 08 entitled "Residence Districts" of the Madison General Ordinances is hereby repealed.
- 6. Subparagraph d. of Paragraph 10: of Subdivision (a) entitled "Amendments, Conditional Uses and Area Exceptions" of Subsection (13) entitled "Fees" of Section 28.12 entitled "Administration and Enforcement" of the Madison General Ordinances is hereby repealed.
- 7. Current Subparagraphs e., f., and g. of Paragraph 10. of Subdivision (a) entitled "Amendments, Conditional Uses and Area Exceptions" of Subsection (13) entitled "Fees" of Section 28.12 entitled "Administration and Enforcement" of the Madison General Ordinances are renumbered to Subparagraphs d., e., and f.
- 8 Paragraph 5 of Subdivision (b) of Subsection (3) entitled "Classes of Licenses" of Section 30.01 entitled "Administration" of the Madison General Ordinances is amended to read as follows:
- "5. Class A-4 license shall be issued to a person desiring to enter into the business of installing, altering or repairing active solar heating equipment. This license is not required if the person has a North American Board of Certified Energy Practitioners (NABCEP) certification."
- 9 Subdivision (b) of Subsection (5) entitled "Licenses-How Obtained" of Section 30.01 entitled "Administration" of the Madison General Ordinances is amended to read as follows:
- "(b) An application shall be filed with the Heating, Ventilating and Air Conditioning Inspector thirty (30) days prior to the date on which an examination is to be held. An application fee of sixty dollars (\$60) shall accompany application for Class B, Class A-3 and Class A-4 licenses. An application fee of one hundred twenty-five dollars (\$125) shall accompany application for Class A-1 and A-2 licenses. Application shall be made on forms furnished by the Neighborhood Preservation and Inspection Division of the Department of Planning and Community and Economic Development, City of Madison, Municipal Building, Madison, Wisconsin.

Persons who are engaged in solar system installation shall hold an A-4 license or an NABCEP certification for solar thermal installers. The applicant must furnish evidence that s/he is engaged in such installation. Upon finding that the applicant is engaged in the solar system installations, if the applicant is not NABCEP certified, an A-4 license will be issued after the appropriate fee is paid and the bond has been furnished."

- 10 Paragraphs 9. and 11. of Subdivision (c) entitled "Data Required as Part of the Permit Application" of Subsection (9) entitled "Permits, Plans, Specifications and Data" of Section 30.01 entitled "Administration" of the Madison General Ordinances are hereby repealed.
- 11 Current Paragraph 10. of Subdivision (c) entitled "Data Required as Part of the Permit Application" of Subsection (9) entitled "Permits, Plans, Specifications and Data" of Section 30.01 entitled "Administration" of the Madison General Ordinances is renumbered to Paragraph 9.
- Subsection (2) entitled "Shading of Solar Collectors" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is amended to read as follows:
- "(2) Shading of Solar Collectors. No more than five fifteen percent (515%) of the area of the solar path shading diagram shall be obstructed There shall be a solar window between 7:009:00 a.m. and 3:00 p.m."
- 13. Subsection (5) entitled "Use of Wood in Solar Collection Systems" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is hereby repealed.

- 14. Current Subsections (6) through (17) of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances are renumbered to Subsections (5) through (16).
- Renumbered Subsection (7) entitled "Liquid Systems Piping and Penetration" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is amended to read as follows:
- "(87) Liquid Systems Piping and Penetration.
 - (a) When three (3) or more collectors are installed in any one system, a Zflowreverse flow piping configuration shall be used unless an alternate flow
 configuration is recommended by the manufacturer.
 - (b) Piping shall be installed so the system can be completely drained.
 - (eb) No permanent piping shall connect the solar system with potable water.
 - All piping used in the solar loop supply and return and within ten (10) feet of the collector shall be made and assembled of materials that will not distort or deteriorate from fluids, temperatures, pressure, or exposure can withstand antifreeze solution at temperatures of up to 350°F. The remaining solar loop piping shall be made and assembled of materials that can withstand antifreeze solution of 200° F.
 - Note: CPVC Piping has performed poorly in certain installations.
 - (ed) All solar loop building penetrations shall be made using weatherproof devices which will allow for expansion and contraction. All penetrations into the building shall be weatherproofed to prevent leaks, insects and drafts from entering the building.
 - (fe) All of the components of a closed loop solar collector system shall be sized to provide adequate flow to the collectors.
 - (f) The solar loop shall incorporate a check valve downstream of the heat exchanger if collectors are mounted above the storage tank.
 - (g) Automatic air vents shall be disconnected from the solar loop by a ball valve."
- 16. Renumbered Subsection (9) entitled "Liquid Systems Pipe Insulation" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is amended to read as follows:
- "(109) Liquid Systems Pipe Insulation.
 - (a) All pipe insulation in the solar collection system shall be at least R-35 in insulating value. Pipes of nominal size of one and one half inch or larger shall be insulated with at least R-45 insulation.
 - (b) Exterior pipe insulation shall resist ultraviolet and environmental degradation and shall be covered by material providing weather resistance, UV protection and mechanical abuse protection. Exterior insulation joints, seams and connections shall be sealed to prevent entry of moisture. Fiberglass and Eelastomer insulation shall not be used for exterior solar application.
 - (c) Solar supply loop shall be insulated with three hundred degree (300°F) rated insulation approved for solar applications.

Note: One-inch thickness of urethane, fiberglass and phenolic foam, with appropriate cover will meet the requirements of Subsection (b) above."

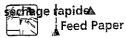
- 17. New Subdivision (d) of Renumbered Subsection (13) entitled "Storage Tanks Liquid Systems" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is created to read as follows:
- "(d) Heat traps shall be included on all supply and discharge lines for the storage tank."
- 18. Current Subdivisions (d) through (f) of Renumbered Subsection (13) entitled "Storage Tanks Liquid Systems" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances are renumbered to Subdivisions (e) through (g), respectively.
- 19. Subdivision (h) of Renumbered Subsection (13) entitled "Storage Tanks Liquid Systems" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is created to read as follows:
- "(h) Storage tanks shall have a tempering valve adjustable to 120°F downstream from the regular water heater and heat trap."

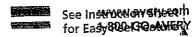
- 20. New Subdivision (b) of Renumbered Subsection (15) entitled "Monitoring and Manuals" of Section 30 05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is created to read as follows:
- "(b) A pressure gauge shall be installed in the solar loop."
- 21. New Subdivision (c) of Renumbered Subsection (15) entitled "Monitoring and Manuals" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances is created to read as follows:
- "(c) The solar loop supply and return and the discharge line of the tempering valve shall have thermometers."
- 22. Current Subdivisions (b) and (c) of Renumbered Subsection (15) entitled "Monitoring and Manuals" of Section 30.05 entitled "Active Solar Collector Systems" of the Madison General Ordinances are renumbered to Subdivisions (d) and (e), respectively
- Paragraph 3 entitled "Solar Apparatus" of Subdivision (d) entitled "Criteria for the Review of Additions, Exterior Alterations and Repairs in R2 and R4A Zoning Districts" of Subsection (12) entitled "University Heights Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances is hereby repealed.
- 24. Current Paragraphs 4. through 11. of Subdivision (d) entitled "Criteria for the Review of Additions, Exterior Alterations and Repairs in R2 and R4A Zoning Districts" of Subsection (12) entitled "University Heights Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances are renumbered to Paragraphs 3. through 10.
- 25. Subparagraph f. entitled "Solar Panels" of Paragraph 1. entitled "Principal Buildings" of Subdivision (f) entitled "Criteria for the Review of New Construction in the R2, R4, R4A, R5, R6, C1, C2 and OR Zoning Districts" of Subsection (12) entitled "University Heights Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances is hereby repealed.
- 26. Current Subparagraph g entitled "Parking Lots" of Paragraph 1. entitled "Principal Buildings" of Subdivision (f) entitled "Criteria for the Review of New Construction in the R2, R4, R4A, R5, R6, C1, C2 and OR Zoning Districts" of Subsection (12) entitled "University Heights Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances is renumbered to Subparagraph f
- 27. Paragraph 8. entitled "Solar Apparatus" of Subdivision (d) entitled "Criteria for the Review of Additions, Exterior Alterations and Repairs" of Subsection (13) entitled "Marquette Bungalows Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances is hereby repealed.
- 28. Current Paragraphs 9. through 13. of Subdivision (d) entitled "Criteria for the Review of Additions, Exterior Alterations and Repairs" of Subsection (13) entitled "Marquette Bungalows Historic District" of Section 33.19 entitled "Landmarks Commission" of the Madison General Ordinances are renumbered to Paragraphs 8. through 12. EDITOR'S NOTE:
- 1. Section 28.08(2)(c)16. currently reads:
- "16. Solar heat collection apparatus that:
 - In rear yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)3.1.;
 - b. In side yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)4.e.; or
 - c. In front yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)2.e."
- 2. Section 28.08(9)(c)5. currently reads:
- "5. Solar heat collection apparatus that:
 - a. In rear yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)3.L;
 - b. In side yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)4.e.; or
 - In front yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)2.e."
- 3. Section 28.08(11)(c)9. currently reads:
- "9. Solar heat collection apparatus that:
 - a. In rear yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)3.1.;
 - b. In side yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)4.e.; or
 - In front yards, are not a permitted obstruction pursuant to Sec. 28.04(6)(e)2.e."
- 4. Section 28 12(13)(a)10.d. currently reads:
- "d. Solar heat collection apparatuses;"

- 5. Section 30.01(9)(c)9. currently reads:
- "9. For solar systems, furnish a plot plan showing the proposed location of solar collector and any tree and/or structure that presently casts a shadow within twenty (20) feet of the proposed collector location."
- 6. Section 30.01(9)(c)11. currently reads:
- "11 For solar systems, furnish detailed drawings of all piping, pumps, blowers, wiring, storage vessels, ductwork, dampers, valves, insulation and all other material that will be required to install the system."
- 7. Section 30.05(5) currently reads:
- "(5) <u>Use of Wood in Solar Collection Systems</u>. All wood components used in collector mounting which are exposed to the weather shall be pressure treated wood, meeting Interim Federal Specifications TT-W-571J-Rev. 1974, as amended or revised. Wood used in collector frames or housing shall be protected against pyrolysis."
- 8. Renumbered Section 30.05(11)(e) currently reads:
- "(e) The heat transfer fluid used in the collectors shall be isolated from the potable water supply through the use of an approved double wall heat exchanger."
- 9. Section 33.19(12)(d)3. currently reads:
- Solar Apparatus. Passive and active solar apparatus are prohibited unless the Landmarks Commission determines that they are as unobtrusive as possible and that their use does not detract from the architectural integrity of the building provided, however, that solar apparatus will not be permitted where the device hides from street view significant architectural features of the building or neighboring buildings, where its installation requires the loss of significant architectural features or where the device is of such a large scale that it becomes a major feature of the design."
- 10. Section 33.19(12)(f)1.f. currently reads:
- "f. Solar Panels. Solar panels are permitted on new buildings or structures, including front facades, except when such devices hide from street view significant architectural features of neighboring buildings or if they are of such a large scale that they become a major feature of the design."
- 11. Section 33.19(13)(d)8. currently reads:
- "8. <u>Solar Apparatus</u>. Solar apparatus is not compatible with the historic character of the district and is prohibited."

PUBLICATION DATE(S): WSJ: July 7 & 14, 2008

MARIBETH WITZEL-BEHL, CITY CLERK









COMMON COUNCIL OFFICE (21) _ISA VELDRAN **117 CCB**

CITY TRAFFIC ENGINEER DAN MCCORMICK MMB

DANE COUNTY ZONING ADMIN 116 CCB

CITY PLANNING & DEVELOPMENT MARK OLINGER MMB

CITY ENGINEER JANET DAILEY 115 CCB

WATER UTILITY AL LARSON 119 E OLIN AVENUE

BOARD OF EDUCATION 545 W DAYTON ST MADISON WI 53703

AIRPORT DIRECTOR DANE COUNTY REGIONAL AIRPORT 4000 INTERNATIONAL LN MADISON WI 53704

