

city of saint paul
planning commission resolution
file number 12-11
date February 24, 2012

WHEREAS, Metropolitan State University, File # 11-310-568, has applied for a conditional use permit for a wind turbine on a freestanding pole 104 feet high under the provisions of § 61.501 of the Saint Paul Legislative Code, on property located at 645 7th St E, Parcel Identification Number (PIN) 322922130131, legally described as Auditors Subdivision No 73 Part Of The Se 1/4 Of Nw 1/4 Lying Nly Of Vac Culvert St And Sly Of The Center Line Of Vac E 8th St And Ely Of And Par To The Centerline Of Sewer Esmt As Recorded In Blk 50 Of Plans Pg 2 In Sec 32 Tn 29 Rn 22 And Vac Culvert St ; and

WHEREAS, the Zoning Committee of the Planning Commission, on February 16, 2012, held a public hearing at which all persons present were given an opportunity to be heard pursuant to said application in accordance with the requirements of §61.303 of the Saint Paul Legislative Code; and

WHEREAS, the Saint Paul Planning Commission, based on the evidence presented to its Zoning Committee at the public hearing as substantially reflected in the minutes, made the following findings of fact:

1. Metropolitan State University is proposing to install a 20 kilowatt wind turbine on campus to the west of its Library and Learning Center building, located northeast of the intersection of East 7th Street and Mounds Boulevard, in the B2 community business district. The wind turbine will consist of a monopole 104 feet in height to the propeller hub, and a three-blade propeller 32 feet in diameter (16 foot blades), for a total height of 120 feet. The wind turbine will be used for research on alternative energy generation.
2. A determination of similar use/conditional use permit was granted to Macalester College for a 10 kW, 102 foot high, free-standing wind turbine on its campus for a test period in 2002 (Z.F. # 02-236-646) and permanently in 2005 based on noise monitoring during the test period (Z.F. # 05-085-530). In making the determination of similar use, the Planning Commission found that a wind turbine on a freestanding pole located on institutional use property at least one acre in area (a use not specifically addressed in the zoning code) is similar in character to a cellular telephone antenna on a freestanding pole located on institutional use property, which is a conditional use in business districts and thus a conditional use permit is required and conditions for a cellular telephone antenna located on institutional use property may be applied as appropriate to the proposed wind turbine.
3. §61.501 lists five standards that all conditional uses must satisfy:
 - (1) *The extent, location and intensity of the use will be in substantial compliance with the Saint Paul Comprehensive Plan and any applicable subarea plans which were approved by the city council.* This condition is met. As described on page 7 of the introduction section of the Saint Paul Comprehensive Plan (2010), environmental sustainability is one of the three overarching

moved by Connolly
seconded by Edgerton
in favor 10
against 4 (Nelson, Ochs, Shively, Wickiser)

themes of the Plan, which means “buildings, open spaces, and infrastructure are designed with attention to ecological systems and a light environmental footprint, and buildings are rehabilitated and constructed with reused and renewable materials and utilize technologies that are energy efficient and promote conservation.”

- (2) *The use will provide adequate ingress and egress to minimize traffic congestion in the public streets.* This condition is met. The proposed use will generate minimal traffic.
- (3) *The use will not be detrimental to the existing character of the development in the immediate neighborhood or endanger the public health, safety and general welfare.* This condition is met. The proposed use is on a college campus and its appearance will be similar to a nearby cellular telephone antenna.
- (4) *The use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.* This condition is met. The wind turbine is on a college campus and is set back 134 feet from the nearest property line and approximately 500 feet from the nearest residence. It should not impede the normal and orderly development and improvement of the surrounding property.
- (5) *The use shall, in all other respects, conform to the applicable regulations of the district in which it is located.* This condition is met. The use conforms to the applicable regulations of the B2 community business district, including applicable regulations for a cellular telephone antenna on a free-standing pole located on institutional use property noted below that may appropriately be applied to a wind turbine on a free-standing pole located on institutional use property at least one acre in area based on the Planning Commission's determination of similar use for a wind turbine on a free-standing pole located on institutional use property in Z.F. # 02-236-646 and Z.F. # 05-085-530.

4. Based on the Planning Commission's decision that a wind turbine on a freestanding pole located on institutional use property at least one acre in area is similar in character to a cellular telephone antenna on a freestanding pole on institutional use property, and therefore may be similarly permitted as a conditional use in the B2 community business district, the following conditions in § 65.310, Antenna, cellular telephone, may appropriately be applied to the proposed wind turbine.
- (a) *In residential districts, a conditional use permit is required for cellular telephone antennas on a residential structure less than sixty (60) feet high. In residential, traditional neighborhood and business districts, a conditional use permit is required for cellular telephone antennas on a freestanding pole, except for existing utility poles. In residential and traditional neighborhood districts, existing utility poles to which cellular telephone antennas are attached shall be at least sixty (60) feet high.* This condition is met. The proposed wind turbine will be constructed on a freestanding pole.
 - (c) *For antennas proposed to be located on a residential structure less than sixty (60) feet high in residential districts, or on a new freestanding pole in residential, traditional neighborhood, and business districts, the applicant shall demonstrate that the proposed antennas cannot be accommodated on an existing freestanding pole, an existing residential structure at least sixty (60) feet high, an existing institutional use structure, or a business building within one-half (½) mile radius of the proposed antennas due to one (1) or more of the following reasons:*
 - 1. *The planned equipment would exceed the structural capacity of the existing pole or structure.* This condition is met. Existing poles and structures in the area do not meet the required foundation specifications for the wind turbine due to vibration transmission into the structure.

(d) In residential, traditional neighborhood and business districts, cellular telephone antennas to be located on a new freestanding pole are subject to the following standards and conditions:

- 1. The freestanding pole shall not exceed seventy-five (75) feet in height, unless the applicant demonstrates that the surrounding topography, structures, or vegetation renders a seventy-five-foot pole impractical. Freestanding poles may exceed the above height limit by twenty-five (25) feet if the pole is designed to carry two (2) antennas. This condition is met. The proposed freestanding pole will be 104 feet in height. The wind turbine manufacturer stated that this tower height is necessary to overcome the turbulence generated by obstacles and trees on the ground and for the turbine to generate electricity, and therefore a seventy-five foot pole is impractical.*
- 2. Antennas shall not be located in a required front or side yard and shall be set back one (1) times the height of the antenna plus ten (10) feet from the nearest residential structure. This condition is met. The proposed wind turbine will not be located in a required front or side yard and its proposed location is set back 134 feet from the nearest property line, and approximately 500 feet from the nearest residential property.*
- 3. The antennas shall be designed where possible to blend into the surrounding environment through the use of color and camouflaging architectural treatment. Drawings or photographic perspectives showing the pole and antennas shall be provided to the planning commission to determine compliance with this provision. This condition is met. Due to proximity of the proposed wind turbine to the St. Paul Downtown Holman Field Airport, the Federal Aviation Administration (FAA) requires a red light at the top and that the pole and blades be painted white.*
- 4. In residential and traditional neighborhood districts, the pole shall be on institutional use property at least one (1) acre in area. In business districts, the zoning lot on which the pole is located shall be within contiguous property with OS or less restrictive zoning at least one (1) acre in area. This condition is met. The parcel is 4.46 acres and the MSU campus is over 14 acres in size.*

(g) Freestanding poles shall be a monopole design. This condition is met. The proposed wind turbine has a monopole design.

(h) Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary, it shall be permitted and regulated as an accessory building, section 63.500, and screened from view by landscaping where appropriate. This condition is met. Conduit from the proposed wind turbine will be trenched to the existing Library and Learning Center Building.

NOW, THEREFORE, BE IT RESOLVED, by the Saint Paul Planning Commission, under the authority of the City's Legislative Code, based on the findings above, that the application of Metropolitan State University for a conditional use permit for a wind turbine on a freestanding pole 104 feet high at 645 E 7th Street is hereby approved.