Submitted by: Chair of the Assembly at

the Request of the Mayor

Prepared by: Planning Department

For reading: June 22, 2010

Sea Ad 2010-50(5)

Anchorage, Alaska AO No. 2010-50

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

THE ANCHORAGE ASSEMBLY ORDAINS:

<u>Section 1.</u> Anchorage Municipal Code section 21.35.020 is hereby amended to read as follows: (Other definitions in the referenced section are not affected and are therefore not set out unless for context.)

21.35.020 Definitions and rules of construction.

B. The following words, terms and phrases, when used in this title, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Watershed manager means the executive director of the office of community planning and development or designee, who is the administrator of, and storm water program coordinator for, the National Pollutant Discharge Elimination System municipal separate storm sewer system permit required under federal law.

Wind Energy Conversion System (WECS) means any device or assemblage which directly converts wind energy into usable thermal, mechanical, or electrical energy, including such devices as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries, and associated control equipment.

A. A small WECS has a rated power capacity of not more than 25 kW and is intended to produce power primarily for on-site consumption, either instead of or as a supplement to utility power.

46

B. A utility WECS has one or more WECS units with a rated capacity greater than 100 kW, and is intended primarily to provide distributed electric power as a public or private utility.

(GAAB 21.05.020; AO No. 77-355; AO No. 78-16; AO No. 78-28; AO No. 78-171; AO No. 78-231; AO No. 79-214; AO No. 80-42; AO No. 81-67(S); AO No. 81-97; AO No. 81-180; AO No. 82-54; AO No. 82-167; AO No. 83-91(S); AO No. 84-14; AO No. 84-52; AO No. 85-58; AO No. 85-159; AO No. 85-91, 10-1-85; AO No. 85-216; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 86-171; AO No. 88-172; AO No. 88-171(S-1), 12-31-88; AO No. 89-35, 4-7-89; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 91-35; AO No. 90-152(S); AO No. 91-90(S); AO No. 91-184; AO No. 92-7(S-2); AO No. 92-26; AO No. 92-93; AO No. 92-128(S); AO No. 92-129(S); AO No. 93-58; AO No. 93-148, § 1, 11-16-93; AO No. 94-62, § 2, 4-12-94; AO No. 95-68(S-1), §§ 2, 3, 8-8-95; AO No. 95-173, § 1, 11-14-95; AO No. 96-41, § 1, 3-5-96; AO No. 96-131(S), § 1, 10-22-96; AO No. 98-106, § 1, 7-21-98; AO No. 98-160, § 3, 12-8-98; AO No. 99-62, § 2, 5-11-99; AO No. 2000-119(S), § 8, 2-20-01; AO No. 2001-79(S), § 1, 5-8-01; AO No. 2001-80, § 1, 5-8-01; AO No. 2002-101(S), § 2, 4-9-02; AO No. 2002-109, § 2, 9-10-02; AO No. 2002-117, § 4, 1-28-03; AO No. 2003-62(S-1), § 3, 10-1-03; AO No. 2003-97, § 1, 9-30-03; AO No. 2003-132, § 1, 10-7-03; AO No. 2003-124(S), § 1, 1-20-04; AO. No. 2004-108(S), § 2, 10-26-04; AO No. 2005-9, § 1, 3-1-05; AO No. 2005-150(S-1), § 1, 2-28-06; AO No. 2005-185(S), § 1, 2-28-06; AO No. 2005-124(S-1A), § 4, 4-18-06; AO No. 2006-121, § 1, 9-26-06; AO No. 2006-64(S-1), § 1, 12-12-06)

<u>Section 2.</u> Anchorage Municipal Code subsection 21.40.020 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.020 PLI public lands and institutions district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 6. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
 - 7. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

- C. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
 - 22. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
 - 23. Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

(GAAB 21.05.050.A; AO No. 77-355; AO No. 79-25; AO No. 81-67(S); AO No. 81-178(S); AO No. 82-24; AO No. 83-78; AO No. 84-34; AO No. 85-18; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 86-19; AO No. 86-90; AO No. 88-7(S), 7-4-88; AO No. 90-152(S); AO No. 92-93; AO No. 93-148, § 3, 11-16-93; AO No. 95-68(S-1), § 4, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 3, 5-11-99; AO No. 99-131, § 6, 10-26-99; AO No. 99-149, § 1, 12-14-99; AO No. 2002-109, § 3, 9-12-02; AO No. 2003-132, § 2, 10-7-03; AO No. 2005-9, § 2, 3-1-05; AO No. 2005-42(S), § 1, 5-31-05; AO No. 2005-150(S-1), § 2, 2-28-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 3.</u> Anchorage Municipal Code subsection 21.40.030 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.030 R-1 and R-1A single-family residential districts.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.B; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-216; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 1, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 4, 5-11-99; AO No 2002-109, § 3, 9-10-02;

AO No. 2005-175, § 1, 1-10-06; AO No. 2005-178, § 2, 1-24-06; AO No. 2005-185(S), § 3, 2-28-06; AO No. 2005-124(S-1A), § 6, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 4.</u> Anchorage Municipal Code subsection 21.40.040 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.040 R-2A two-family residential district (large lot); R-2D two-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 2, 6-9-98; AO No. 99-49, § 2, 3-23-99; AO No. 99-62, § 5, 5-11-99; AO No. 2005-175, § 2, 1-10-06; AO No. 2005-178, § 3, 1-24-06; AO No. 2005-185(S), § 4, 2-28-06; AO No. 2005-124(S-1A), § 7, 4-18-06; AO No. 2006-64(S-1), § § 2, 3, 12-12-06)

<u>Section 5.</u> Anchorage Municipal Code subsection 21.40.045 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.045 R-2M multiple-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 3, 6-9-98; AO No. 99-49, § 3, 3-23-99; AO No. 99-62, § 6, 5-11-99; AO No. 2005-175, § 3, 1-10-06; AO No. 2005-178, § 4, 1-24-06; AO No. 2005-185(S), § 5, 2-28-06; AO No. 2005-124(S-1A), § 8, 4-18-06; AO No. 2006-64(S-1), § 9, 2, 3, 12-12-06)

<u>Section 6.</u> Anchorage Municipal Code subsection 21.40.050 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.050 R-3 multiple-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 8. One small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.D; AO No. 77-355; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-218; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 7, 5-11-99; AO No. 2005-175, § 4, 1-10-06; AO No. 2005-178, § 5, 1-24-06; AO No. 2005-185(S), § 6, 2-28-06; AO No. 2005-124(S-1A), § 9, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 7.</u> Anchorage Municipal Code subsection 21.40.060 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.060 R-4 multiple-family residential district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

- One free-standing small wind energy conversion system on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.
- 10. Building-mounted small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.E; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 8, 5-11-99; AO No. 2003-124(S), § 2, 1-20-04; AO No. 2005-175, § 5, 1-10-06; AO No. 2005-178, § 6, 1-24-06; AO No. 2005-185(S), § 7, 2-28-06; AO No. 2005-124(S-1A), § 10, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 8.</u> Anchorage Municipal Code subsection 21.40.070 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.070 R-5 rural residential district; R-5A, rural residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.F; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-52; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 9, 5-11-99; AO No. 2002-63(S), § 1, 5-21-02; AO No. 2005-175, § 6, 1-10-06; AO No. 2005-178, § 7, 1-24-06; AO No. 2005-185(S), § 8, 2-28-06; AO No. 2006-64(S-1), § 8, 1, 4-18-06; AO No. 2006-121, § 2, 9-26-06; AO No. 2006-64(S-1), § 8, 2-28-06; AO No. 2006-64(S-

3, 12-12-06)

<u>Section 9.</u> Anchorage Municipal Code subsection 21.40.080 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.080 R-6 suburban residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.G; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-27, § 1, 2-23-99; AO No. 99-62, § 10, 5-11-99; AO No. 2005-175, § 7, 1-10-06; AO No. 2005-178, § 8, 1-24-06; AO No. 2005-185(S), § 9, 2-28-06; AO No. 2005-124(S-1A), § 12, 4-18-06; AO No. 2006-121, § 3, 9-26-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 10.</u> Anchorage Municipal Code subsection 21.40.090 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.090 R-7 intermediate rural residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.H; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-219; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-

147(S-2); AO No. 92-114; AO No. 99-62, § 11, 5-11-99; AO No. 2005-175, § 8, 1-10-06; AO No. 2005-178, § 9, 1-24-06; AO No. 2005-185(S), § 10, 2-28-06; AO No. 2005-124(S-1A), § 13, 4-18-06; AO No. 2006-121, § 4, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 11. Anchorage Municipal Code subsection 21.40.100 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.100 R-8 rural residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 12. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.U; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 4, 6-9-98; AO No. 99-62, § 12, 5-11-99; AO No. 2005-175, § 9, 1-10-06; AO No. 2005-178, § 10, 1-24-06; AO No. 2005-185(S), § 11, 2-28-06; AO No. 2006-124(S-1A), § 14, 4-18-06; AO No. 2006-121, § 5, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 12.</u> Anchorage Municipal Code subsection 21.40.110 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.110 R-9 rural residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 12. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.V; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO

No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 5, 6-9-98; AO No. 99-62, § 13, 5-11-99; AO No. 2005-175, § 10, 1-10-06; AO No. 2005-178, § 11, 1-24-06; AO No. 2005-185(S), § 12, 2-28-06; AO No. 2005-124(S-1A), § 15, 4-18-06; AO No. 2006-121, § 6, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 13.</u> Anchorage Municipal Code subsection 21.40.115 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.115 R-10 residential alpine/slope district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 11. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(AO No. 81-97; AO No. 81-217; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 6, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 14, 5-11-99; AO No. 2005-175, § 11, 1-10-06; AO No. 2005-178, § 12, 1-24-06; AO No. 2005-185(S), § 13, 2-28-06; AO No. 2005-124(S-1A), § 16, 4-18-06; AO No. 2006-121, § 7, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 14.</u> Anchorage Municipal Code subsection 21.40.117 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.117 R-11 Turnagain Arm district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 8. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

 (AO No. 82-162; AO No. 84-34; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-122; AO No. 86-182; AO No. 88-143; AO No. 88-144, 11-26-88; AO No. 88-171(S-1), 12-31-88; AO No. 94-120, § 1, 8-23-94; AO No. 94-238(S), § 3, 2-28-94; AO No. 94-239, § 1, 2-14-95; AO No. 96-118, § 1, 8-22-96; AO No. 96-118, § 1, 8-13-96; AO No. 99-62, § 15, 5-11-99; AO No. 2001-88, § 1, 6-5-01; AO No. 2005-175, § 12, 1-10-06; AO No. 2005-178, § 13, 1-24-06; AO No. 2005-185(S), § 14, 2-28-06; AO No. 2005-124(S-1A), § 17, 4-18-06; AO No. 2006-121, § 8, 9-26-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 15.</u> Anchorage Municipal Code subsection 21.40.130 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.130 R-O residential-office district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 6. One small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.1; AO No. 77-219; AO No. 77-355; AO No. 78-199; AO No. 80-57; AO No. 81-67(S); AO No. 83-226; AO No. 85-18; AO No. 85-23; AO No. 85-69; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 86-171; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 91-97; AO No. 92-114; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 16, 5-11-99; AO No. 2003-124(S), § 3, 1-20-04; AO No. 2005-175, § 13, 1-10-06; AO No. 2005-178, § 14, 1-24-06; AO No. 2005-185(S), § 15, 2-28-06; AO No. 2005-124(S-1A), § 18, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 16.</u> Anchorage Municipal Code subsection 21.40.140 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.140 B-1A local and neighborhood business district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

6. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.J; AO No. 77-355; AO No. 78-28; AO No. 78-169; AO No. 81-67(S); AO No. 81-143; AO No. 83-210; AO No. 85-18; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 87-62; AO No. 88-49(S); AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 17, 5-11-99; AO No. 2005-185(S), § 16, 2-28-06; AO No. 2005-124(S-1A), § 19, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 17.</u> Anchorage Municipal Code subsection 21.40.150 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.150 B-2A central business district core.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.W; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 87-148; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 6, 8-8-95; AO No. 98-160, § 4, 12-8-98; AO No. 98-188, §§ 1--3, 1-12-99; AO No. 99-62, § 19, 5-11-99; AO No. 99-131, § 7, 10-26-99; AO No. 2001-80, § 3, 5-8-01; AO No. 2005-185(S), § 18, 2-28-06; AO No. 2005-124(S-1A), § 21, 4-18-06; AO No. 2006-49, § 1, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 5, 10-23-07)

<u>Section 18.</u> Anchorage Municipal Code subsection 21.40.160 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.160 B-2B central business district, intermediate.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 4. Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.Y; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 7, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 5, 12-8-98; AO No. 98-188, §§ 4--6, 1-12-99; AO No. 99-62, § 20, 5-11-99; AO No. 99-131, § 8, 10-26-99; AO No. 99-149, § 2, 12-14-99; AO No. 2001-80, § 4, 5-8-01; AO No. 2005-185(S), § 19, 2-28-06; AO No. 2005-124(S-1A), § 22, 4-18-06; AO No. 2006-49, § 2, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 6, 10-23-07)

<u>Section 19.</u> Anchorage Municipal Code subsection 21.40.170 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.170 B-2C central business district, periphery.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.X; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 8, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 6, 12-8-98; AO No. 98-173, § 4, 11-3-98;

AO No. 98-188, §§ 7--9, 1-12-99; AO No. 99-62, § 21, 5-11-99; AO No. 99-131, § 9, 10-26-99; AO No. 99-149, § 3, 12-14-99; AO No. 2001-80, § 5, 5-8-01; AO No. 2005-185(S), § 20, 2-28-06; AO No. 2005-124(S-1A), § 23, 4-18-06; AO No. 2006-49, § 3, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 7, 10-23-07)

<u>Section 20.</u> Anchorage Municipal Code subsection 21.40.180 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.180 B-3 general business district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 3. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.M; AO No. 77-355; AO No. 78-28; AO No. 80-57; AO No. 80-132; AO No. 81-67(S); AO No. 83-209; AO No. 85-18; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 86-182; AO No. 87-32; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-26; AO No. 92-114; AO No. 95-68(S-1), § 9, 8-8-95; AO No. 96-107, § 1, 7-30-96; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 7, 12-8-98; AO No. 99-62, § 22, 5-11-99; AO No. 2001-80, § 6, 5-8-01; AO No. 2004-108(S), § 3, 10-26-04; AO No. 2005-185(S), § 21, 2-28-06; AO No. 2005-124(S-1A), § 24, 4-18-06; AO No. 2006-64(S-1), § § 2, 3, 12-12-06)

<u>Section 21.</u> Anchorage Municipal Code subsection 21.40.200 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.200 I-1 light industrial district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 4. One free-standing small wind energy conversion system by administrative site plan review and subject to the

requirements of section 21.45.410.

- 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21,45,410.
- D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
 - 17. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.

(GAAB 21.05.050.0; AO No. 77-355; AO No. 79-95; AO No. 81-67(S); AO No. 82-105; AO No. 84-57; AO No. 85-91, 10-1-85; AO No. 85-95; AO No. 86-50; AO No. 86-90; AO No. 87-32; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 92-114; AO No. 95-68(S-1), § 11, 8-8-95; AO No. 95-76, § 1, 4-4-95; AO No. 95-194, § 1, 1-2-96; AO No. 98-160, § 9, 12-8-98; AO No. 98-173, § 5, 11-3-98; AO No. 99-62, § 24, 5-11-99; AO No. 2001-80, § 8, 5-8-01; AO No. 2004-5, § 1, 1-20-04; AO. No. 2004-108(S), § 5, 10-26-04; AO No. 2004-178(am), § 1, 1-25-05; AO No. 2005-9, § 3, 3-1-05; AO No. 2005-185(S), § 23, 2-28-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 22.</u> Anchorage Municipal Code subsection 21.40.210 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.210 I-2 heavy industrial district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
 - 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

- D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
 - 8. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
 - 9. Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

(GAAB 21.05.050.P; AO No. 77-355; AO No. 85-91, 10-1-85; AO No. 87-32; AO No. 91-184; AO No. 93-148, § 4, 11-16-93; AO No. 96-60, § 1, 8-6-96; AO No. 96-125, § 1, 11-12-96; AO No. 97-78, § 2, 6-3-97; AO No. 99-62, § 25, 5-11-99; AO No. 2001-80, § 9, 5-8-01; AO No. 2005-185(S), § 24, 2-28-06; AO No. 2005-124(S-1A), § 26, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 23.</u> Anchorage Municipal Code subsection 21.40.240 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.240 T transition district.

- D. Conditional uses. Subject to the requirements of the conditional use and site plan standards and procedures of this title, the following uses may be permitted only as a conditional use:
 - 12. Small wind energy conversion systems, subject to the requirements of section 21.50.470.
 - 13. Utility wind energy conversion systems, subject to the requirements of section 21.50.480.

(GAAB 21.05.050.S; AO No. 77-355; AO No. 79-25; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 88-59(S); AO No. 88-171(S-1), 12-31-88; AO No. 98-160, § 10, 12-8-98; AO No. 99-62, § 28, 5-11-99; AO No. 2005-185(S), § 26, 2-28-06; AO No. 2005-124(S-1A), § 28, 4-18-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06; AO No. 2007-121(S-1), § 12, 10-23-07)

<u>Section 24.</u> Anchorage Municipal Code subsection 21.40.260 is hereby amended to read as follows: (Subsections not affected by this ordinance are not

	1		
1		<u>f.</u>	Two or three free-standing small wind energy
2			conversion systems, subject to the requirements of
2 3			section 21.50.470.
4			
5	***	***	***
5 6 7	(AO N	o. 98-16	0, § 11, 12-8-98; AO No. 99-62, § 30, 5-11-99; AO No.
7			§ 2, 3, 12-12-06)
8	2000	,(0 1), 3	3 2, 0, 12 12 00)
9	Section 26	Anchorac	ge Municipal Code subsection 21.40.280 is hereby
10			ollows: (Subsections not affected by this ordinance are not
11	set out unless		
12	001 001 0111033	i ioi coine	<i>>^c,</i>
13	21.40.2	DON MAI	marine industrial district.
14	21.40.2	.00 1411	marme muustriai uistrict.
15	***	***	***
16	C. I	Dormittoo	A accompany upon and atmestures. Dermitted accompany
17			I accessory uses and structures. Permitted accessory structures are as follows:
18	1	uses and	structures are as follows.
19	***	***	***
20		4. Or	o from standing small wind onergy conversion eveters by
21	-		ne free-standing small wind energy conversion system by
22		-	ministrative site plan review and subject to the
23		<u>100</u>	quirements of 21.45.410.
23 24	,	. D.	
	<u> </u>		ilding-mounted small wind energy conversion systems by
25			ministrative site plan review and subject to the
26		<u>rec</u>	quirements of 21.45.410.
27	***	***	***
28			
29	,		al uses. Subject to the requirements of the conditional
30	1		ndards and procedures of sections 21.15.030 and
31	4	21.50.020), the following uses may be permitted:
32	***	***	***
33			
34	<u> </u>		o or three small wind energy conversion systems, subject
35		to i	the requirements of section 21.50.470.
36	_		
37	<u> </u>		lity wind energy conversion systems, subject to the
38		<u>rec</u>	uirements of section 21.50.480.
39	***	***	***
40			
41	(AO No	. 99-62, §	§ 31, 5-11-99; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)
42			
43		_	e Municipal Code chapter 21.45 is hereby amended to
44	add a new sec	tion to re	ad as follows:
45	·		
46	21.45.4	10 Sm	nall wind energy conversion systems.

- A. Purpose. The purpose of this section is to regulate and provide standards for small wind energy conversion systems (WECS) as defined in this Code, and to encourage the development of small wind energy systems.
- B. Approval Process. Small WECS are subject to an administrative site plan review. Sufficient information shall be provided with the application to show that the standards below have been met. The planning director shall grant approval if the standards of this section have been met, and that the applicant has sized and sited the system to reduce impacts on surrounding properties to the maximum extent feasible. Structural stability of the foundation will be assured through the building permit process.
- C. Submittal Requirements.
 - 1. A description of the project, including the maximum rated power output capacity of the WECS.
 - The make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, the support structure, and method of attachment to the ground and/or structure.
 - 3. Elevation drawing of the WECS showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
 - 4. If the WECS is not certified as meeting the IEEE 1547 standard (Institute of Electrical and Electronic Engineers), then an assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication is required.
 - 5. Applications shall include a visual impact analysis of the proposed WECS as installed, which shall include color photographs of the proposed site from at least two locations accurately depicting the existing conditions. A computerized photographic simulation, demonstrating any visual impacts from strategic vantage points, is desirable and may be required at the director's discretion. The applicant shall indicate any visual screening proposed to be incorporated into the project that is intended to lessen the system's visual

prominence.

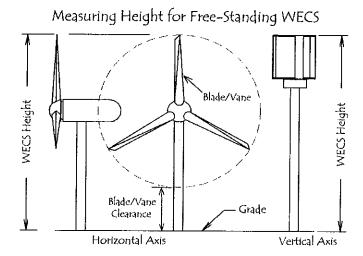
D. Building-Mounted WECS.

- 1. Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- 2. In residential districts on lots less than 20,000 square feet, a building mounted WECS shall not exceed the maximum height for principal structures of the underlying zoning district by more than 10 feet.
- 3. On buildings of 60 feet or less in height, building mounted WECS shall be no taller than 10 feet.
- 4. On buildings over 60 feet in height, building mounted WECS shall be set back from the structure edge by at least two feet for every one foot of height greater than 10 feet.
- 5. Building-mounted WECS shall meet the design standards for free-standing WECS in subsection E.6. below, with the exception of E.6.e.

E. Free-Standing WECS.

- 1. Number of WECS. Only one small WECS per lot is allowed in residential zoning districts. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- Power Capacity. Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- Minimum Lot Area and Maximum Height.
 - a. The minimum lot area for a small WECS is 40,000 square feet.
 - b. The height of a small WECS shall be determined by compliance with the setback provisions of subsection E.4. below. In no instance shall a small WECS exceed 95 feet in height.

c. Height shall be measured as depicted in the illustration. Structures shall not interfere with Federal Aviation Administration Regulations on airport approaches. In no case shall the height exceed manufacturer's specifications.



- 4. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 25 feet above grade. No blades may extend over public sidewalks/trails.
- 5. Setbacks.
 - a. Except as allowed in 5.b. below, all WECS shall be setback from all property lines at least 1.1 times the height of system
 - b. On lots abutting water bodies such as lakes or ponds, the WECS shall be setback at least 15 feet from the water body edge, but the setback distance required in 5.a. above may extend into the water body, provided that the full extent of the setback distance falls within the water body.
 - c. All systems shall be setback at least 1.1 times the height of the system from all overhead power and telecommunication lines, and any telecommunication towers.
- 6. Design Standards.

- a. Operational noise shall not exceed 50dBH at property line except for short-term high wind speed events such as storms.
- b. All systems shall be equipped with manual and automatic (mechanical or electrical) over-speed controls to limit the blade rotation speed to within the design limits of the system.
- c. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- d. Lattice type towers and towers using guy wires are prohibited.
- e. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground.
- f. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- g. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.
- h. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner.
- F. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

<u>Section 28.</u> Anchorage Municipal Code chapter 21.50 is hereby amended to add new sections to read as follows:

21.50.470 Small wind energy conversion systems—multiple free-standing towers.

A. Purpose. The purpose of this section is to provide standards for multiple free-standing small WECS in industrial districts and in the

PLI district.

- B. Submittal Requirements. Multiple free-standing small WECS in industrial districts and in the PLI districts shall provide the minimum application information required by section 21.50.480B.
- C. Maximum number of WECS. No more than three WECS shall be allowed on any one lot. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- D. Standards. Multiple free-standing small WECS shall meet the standards of section 21.45.410E.
- E. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

21.50.480 Utility wind energy conversion systems.

- A. Purpose. The purpose of this section is to provide standards for utility scale wind energy conversion systems (WECS) generally utilizing multiple towers designed to produce electric power as a public or private utility.
- B. Submittal Requirements. In addition to the minimum application information set forth in 21.15.030.C, the following shall be provided:
 - For each WECS model proposed, the make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, and drawings of the support structure stamped by a structural engineer registered in the State of Alaska.
 - 2. Elevation drawing of each WECS model showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
 - 3. An assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication.
 - 4. An analysis of impacts on local wildlife shall be prepared, regarding impacts anticipated during construction,

reconstruction, modification or operation of WECS. Wildlife impacts to be considered shall include, at a minimum, anticipated impacts on birds.

- 5. If any habitable building is located within 1,300 feet of any proposed Utility WECS unit, then the applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECS and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with habitable buildings and describe measures that shall be taken to eliminate or mitigate the problems. The applicant has the burden of proving that shadow flicker will not negatively impact neighboring uses.
- 6. Applications shall include a visual impact analysis of the proposed WECS as installed, which may include a computerized photographic simulation, demonstrating any visual impacts from strategic vantage points. Color photographs of the proposed site from at least two locations accurately depicting the existing conditions shall be included. The visual analysis shall also indicate the color treatment of the system's components and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.
- 7. A noise analysis by a competent acoustical consultant documenting the noise levels associated with the proposed WECS. The study shall document projected noise levels at property lines. The noise analysis shall include low frequency noise.
- C. Height. The height as measured from grade to the highest point of the fully operational system, including the turbine vane(s), shall not exceed 450 feet in the AF, W, T, and PLI zoning districts, or 200 feet in any other district in which a Utility WECS may be approved. A Utility WECS shall not interfere with Federal Aviation Administration Regulations in the vicinity of an airport. In no case shall the height exceed manufacturer's specifications.
- D. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 30 feet above grade.
- E. Setbacks.
 - 1. All WECS shall setback from all residential property lines at

- least 3.0 times the height of system, and from all non-residential property lines a minimum of 2.0 times the height of the system.
- 2. All systems shall be at least 325 feet from any telecommunications towers.
- 3. The tower shall maintain a minimum separation distance equal to 1.1 times the height of system from all overhead power and telecommunication lines.

F. Design Standards.

- Except for short-term high wind speed events such as storms, operational noise shall not exceed 50dBH at any property line adjacent to a residential zoning district, and 60dBH at any property line adjacent to a nonresidential zoning district.
- 2. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- 3. Lattice type towers and towers using guy wires are prohibited.
- 4. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground, unless otherwise allowed by the planning and zoning commission.
- 5. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- 6. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.
- 7. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner, as approved by the planning and zoning commission.
- 8. WECS structure shall be designed to prevent unauthorized external access to electrical and mechanical components and shall have access doors that are kept securely locked.

1 2 3 4 5 0		No climbing pegs or tower ladders shall be located closer than 12 feet to the ground level at the base of the structure. A fence with a locking portal may be required by the planning and zoning commission to enclose the entire WECS tower site.
6 7	G.	Abandanad as unacta wind anamy conversion and ana
8	G.	Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months
9		shall be considered abandoned and shall be dismantled and
10		removed from the property at the expense of the property owner.
11		Tomovou from the property at the expende of the property owner.
12	Section 29.	This ordinance shall become effective immediately upon its
13		approval by the Assembly.
14	,	
15	PASSED AN	ID APPROVED by the Anchorage Assembly thisday of
16		, 2010.
17		
18		
19		
20		
21		Chair of the Assembly
22		
23	ATTECT.	
24 25	ATTEST:	
26 26		
27		
28	Municipal Cle	rk

MUNICIPALITY OF ANCHORAGE Summary of Economic Effects -- General Government

AO Number: 2010-50

Title:

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL

STANDARDS AND CONDITIONAL USE STANDARDS.

(PZC Case No. 2010-038)

Sponsor:

Mayor

Preparing Agency: Planning Department

Others Impacted:

CHANGES IN EXPENDITURES AI	:S:	(In Thousands of Dollars)								
	FY10	F\	FY11		FY12		FY13		FY14	
Operating Expenditures 1000 Personal Services 2000 Non-Labor 3900 Contributions 4000 Debt Service										
TOTAL DIRECT COSTS:	\$ -	• \$	-	\$	-	\$	-	\$		
Add: 6000 Charges from Others Less: 7000 Charges to Others										
FUNCTION COST:	\$ -	\$	-	\$	-	\$	-	\$		
REVENUES:		•								
CAPITAL:										
POSITIONS: FT/PT and Temp										

PUBLIC SECTOR ECONOMIC EFFECTS:

Approval of this ordinance should have no significant impact on the public sector.

PRIVATE SECTOR ECONOMIC EFFECTS:

Approval of this ordinance should have no significant economic impact on the private sector. The ordinance facilitates the installation of Wind Energy Conversion Systems (WECS) for on-site and utility-scale renewable energy production.

Prepared by: Tyler Robinson, Physical Planning Supervisor Telephone: 343-7920

MUNICIPALITY OF ANCHORAGE ASSEMBLY MEMORANDUM

No. AM 378-2010

Meeting Date: June 22, 2010

From: MAYOR

Subject:

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 **DEFINITIONS** AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS. 21.45 DISTRICT SUPPLEMENTARY REGULATIONS. AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS. TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

12 13 14

1

2

4

5

6

7

8

9

10

11

This ordinance would amend sections of Title 21 of the Anchorage Municipal Code to define WECS and establish the standards and criteria by which WECS may be erected.

16 17 18

19

20

21

22

23

24

25

15

The ordinance addresses both utility-scale and small-scale WECS, the latter of which is intended for on-site use. Utility-scale WECS are often sited in "wind farms," where turbines can be mounted up to 300 feet high in order to harvest steady winds. Small WECS are designed for homes and businesses, and can either be pole- or building-mounted. Manufacturers also offer both traditional horizontal axis turbines as well as vertical axis turbines, which resemble a revolving DNA helix. As a response to market and regulatory demands in urban areas, manufacturers are designing WECS to be "architecturally integrated" to the buildings on which they are mounted.

26 27 28

29

30

31

32

33

34

35

The Department of Energy's (DOE's) Wind Program and National Renewable Laboratory indicates that "good" and "superb" potential for wind power exists in the state of Alaska, especially in western and coastal regions. For the most part, the potential for wind power in Anchorage is poor to fair. Exceptions include off-shore areas such as Fire Island and areas along the Turnagain Arm, as well as some of the prominent Chugach ridgelines. DOE's wind resource map is intended to show areas with the greatest potential for utility-scale production. Smaller scale wind energy may be viable in parts of the Municipality, and ultimately regardless of the energy payback, the investment is an individual decision.

36 37 38

39 40

41

The Assembly Title 21 Subcommittee reviewed an initial PZC recommendation and proposed ordinance in early 2009 and directed staff to make several changes to the ordinance prior to approval. Those changes included increasing the minimum lot size for small, free-standing WECS and requiring proof of wind. Staff proposes

 increasing the minimum lot size; however, we do not propose requiring proof of wind prior to approval. While most WECS distributors will perform a wind assessment prior to sale and installation, generally the amount of wind (which translates into energy produced and investment payback) acceptable varies by individual.

Staff brought forward a second WECS ordinance to PZC for recommendation and public hearing April 5, 2010. The proposed ordinance includes the following changes from the 2008 ordinance:

- Incorporates changes recommended by PZC in Resolution 2008-073;
- Reduces small WECS permitted on residential lots to no greater than 10kW;
- Reduces small WECS permitted on nonresidential lots to no greater than 25kW;
- Increases minimum lot size on which small, free-standing WECS is permitted to 40,000 s.f.;
- Eliminates requirement of free-standing WECS to be placed in the backyard.

It is worth noting that since 2008 the cities of Homer and Soldotna have passed WECS ordinances. Furthermore, in October 2009 the Regulatory Commission of Alaska (RCA) voted to adopt new regulations establishing net metering requirements for economically regulated utilities. The regulations are anticipated to become effective during the first half of 2010.

Potential land use impacts associated with WECS include noise, aesthetic, safety, and property values. Additional considerations include flicker shadows, vibrations, and wildlife impacts. The following is a summary of the proposed ordinance:

Definitions

- "Small Wind Energy Conversion System (WECS)" defined as intended to produce power for on-site consumption with power capacity no greater than 25 kW.
- "Utility WECS" defined as intended to provide distributed electric power as a utility with power capacity greater than 100kW.

By administrative site plan review

One small WECS no greater than 10 kW (free-standing or building-mounted) allowed as accessory use in R-1, R-1A, R-2A, R-2D, R-5, R-5A, R-6, R-7, R-8, R-9, R-10, R-11, R-O.

- One small WECS no greater than 10 kW (free-standing or building-mounted) allowed as accessory use on lots with only one principal structure in R-2M, R-3, R-4 (R-4 can have multiple building-mounted small WECS).
- Building-mounted small WECS no greater than 25 kW (no limit on number) allowed as accessory use in PLI, B-1A, B-3.
- Building-mounted small WECS no greater than 25 kW (no limit on number) allowed on buildings over 60 feet high, as accessory use in B-2A, B-2B, B-2C.
- One free-standing and multiple building-mounted small WECS no greater than 25 kW allowed as accessory use in PLI, I-1, I-2, MC, MI.

By conditional use

- Two or three free-standing small WECS in PLI, I-1, I-2, MC, MI.
- One to three free-standing small WECS in T.
- Any WECS in W.
- Utility WECS in PLI, I-2, AF, MI, T.

Standards for building-mounted small WECS

- WECS height limited to 10 feet on buildings 60 feet high or less.
- Setback (2 feet for every 1 foot of WECS height over 10 feet) from building edge required for WECS on buildings taller than 60 feet.
- Same design standards as for free-standing small WECS below, except for undergrounding of power lines.

Standards for free-standing small WECS

- Minimum lot size is 40,000 square feet.
- WECS must be setback 1.1 times height from all property lines (except property line abutting lake or pond—some relief for that situation)
- Maximum height is 95 feet.
- Only monopoles allowed—no lattice towers or guyed towers.
- Design standards for noise, vibration, blade clearance from ground, undergrounding of power lines, color, illumination, and signs.
- Maximum of three on any lot, if multiple are allowed in district.

15 16

17

18 19

20

21

22 23

24

25

26

27

28

29

30

31

Standards for utility WECS

- Maximum height is 450 feet in PLI, AF, T, and W districts, and 200 in I-2 and
- Utility WECS must be setback 3 times height from residential districts and 2 times height from nonresidential districts.
- · Assessment of electromagnetic interference, analysis of wildlife impacts, analysis of visual impacts, noise analysis, and shadow flicker study (if near habitable building) required with application submittal.
- · Design standards for noise, vibration, blade clearance, undergrounding of power lines, color, illumination, signs, and access.
- Only monopoles allowed—no lattice towers or guyed towers.

This proposed ordinance was heard by the Planning and Zoning Commission on April 5 and approved on April 12, 2010.

The Administration feels that the ordinance facilitates the development of small- and utility-scale WECS while establishing standards to mitigate their impacts. This ordinance merits the consideration of the Assembly.

THE ADMINISTRATION RECOMMENDS APPROVAL OF AN ORDINANCE CODE SECTIONS 21.35.020 MUNICIPAL ANCHORAGE AMENDING DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

32 33 34

35

36

37

38

39

Prepared by: Approved by: Tyler Robinson, Planning Department Jerry T. Weaver, Jr., Planning Director

Concur:

Greg Jones, Executive Director

Office of Community Planning and Development

Concur:

Dennis A. Wheeler, Municipal Attorney

Concur:

George J. Vakalis, Municipal Manager

Respectfully submitted: Daniel A. Sullivan, Mayor

43

Attachments: A. Planning and Zoning Commission Resolution No. 2010-019

B. Planning Department Staff Packet for PZC Case 2010-038,

dated April 5, 2010

ATTACHMENT A

MUNICIPALITY OF ANCHORAGE

PLANNING AND ZONING COMMISSION RESOLUTION NO. 2010-019

A RESOLUTION RECOMMENDING APPROVAL OF AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

(Case 2010-038)

WHEREAS, wind energy has one of the highest payback ratios of any power technologies, and Wind Energy Conversion Systems (WECS) are available for both utility-scale and smaller scale production for on-site use; and

WHEREAS, the Planning Department has received several inquiries from Anchorage citizens and business owners to install WECS; however, Title 21 currently does not clearly or adequately deal with this emerging technology; and

WHEREAS, in response to these issues, the Planning Department has drafted an ordinance which provides regulations and standards to allow WECS in certain zoning districts; and

WHEREAS, the Planning and Zoning Commission initially held a public hearing and passed a resolution to approve a WECS ordinance in 2008; and

WHEREAS, after review of the previous draft ordinance the Assembly Title 21 Subcommittee asked Planning staff to modify the ordinance and re-submit to the Planning and Zoning Commission for review; and

WHEREAS, on October 14, 2009 the Regulatory Commission of Alaska voted to adopt new regulations establishing net metering requirements. Net metering will allow owners of small WECS to "sell" power back to their electric utilities; and

WHEREAS, the Planning and Zoning Commission held a public hearing on April 5, 2010; and

WHEREAS, the Commission deliberated on the WECS ordinance at its meeting of April 12, 2010.

Planning and Zoning Commission Resolution No. 2010-019 Page 2

NOW, THEREFORE, BE IT RESOLVED by the Anchorage Planning and Zoning Commission that:

- A. The Commission makes the following findings of fact:
 - 1. Since proposing the initial WECS ordinance in 2008 Planning Department staff has continued to research the issues of the ordinance and this version represents a more thorough understanding of wind energy related issues in Anchorage.
 - 2. The ordinance allowing WECS and providing standards for siting of WECS should balance the need to pursue new technologies for energy production with protection against potential impacts of the technology.
 - 3. As WECS are installed in Anchorage and as innovation continues in the wind energy industry, it is likely that the ordinance will undergo revisions.
- B. The Commission recommends to the Anchorage Assembly approval of the draft ordinance prepared by the Planning Department staff dated April 5, 2010

PASSED AND APPROVED by the Anchorage Planning and Zoning Commission on the 12th day of April 2010.

ADOPTED by the Anchorage Planning and Zoning Commission this 3rd day of May 2010.

Jerry/T. Weaver, Jr.

Secretary

Zoni M. Jones Jones

Chair

(2010-038)

Municipality of Anchorage

Planning Department

MEMORANDUM

DATE:

April 5, 2010

TO:

Planning and Zoning Commission

THRU:

Jerry T. Weaver, Jr., Planning Director

FROM:

Tyler Robinson, Planning Supervisor

Erika McConnell, Scnior Planner
Physical Planning Division

SUBJECT:

Case No. 2010-038, An Ordinance Amending Various Sections of Anchorage Municipal Code Title 21 to Define Wind Energy Conversion Systems (WECS) and Allow WECS in Certain Zoning Districts as

Accessory Uses

ATTACHMENTS:

- 1. Draft Ordinance
- 2. Permitted WECS and Approval Process by Zoning District
- 3. PZC Resolution 2008-073
- 4. Comments Received

On October 6, 2008, the Planning and Zoning Commission passed Resolution No. 2008-073 (Attachment 3) recommending Assembly approval of an ordinance defining and adopting standards for installation of Wind Energy Conversion Systems (WECS). The ordinance included regulations and standards for both small systems intended primarily for on-site power consumption as well as utility WECS to provide distributed electric power as a utility.

The Assembly Title 21 Subcommittee reviewed the PZC recommendation and proposed ordinance and directed staff to make several changes to the ordinance prior to approval. Those changes included increasing the minimum lot size for small, free-standing WECS and requiring proof of wind. Staff proposes increasing the minimum lot size; however, we do not propose requiring proof of wind prior to approval. While most WECS distributors will perform a wind assessment prior to sale and installation, generally the amount of wind (which translates into energy produced and investment payback) acceptable varies by individual.

Staff is bringing forth the WECS ordinance to PZC for recommendation and public hearing. The proposed ordinance includes the following changes from the 2008 ordinance:

- Incorporates changes recommended by PZC in Resolution 2008-073;
- Reduces small WECS permitted on residential lots to no greater than 10kW;

Planning and Zoning Commission Case 2010-038 April 5, 2010 Page 2

- Reduces small WECS permitted on nonresidential lots to no greater than 25kW;
- Increases minimum lot size on which small, free-standing WECS is permitted to 40,000 s.f.;
- Eliminates requirement of free-standing WECS to be placed in the backyard.

It is worth noting that since 2008 the cities of Homer and Soldotna have passed WECS ordinances. Furthermore, in October 2009 the Regulatory Commission of Alaska (RCA) voted to adopt new regulations establishing net metering requirements for economically regulated utilities. The regulations are anticipated to become effective during the first half of 2010.

This ordinance, introduced by the Planning Department, regulates and provides standards for wind energy conversion systems (WECS), and facilitates the development of small WECS intended for on-site consumption as well as utility WECS to provide distributed electric power as a utility.

DISCUSSION:

Background

Wind power is emerging as the worldwide leader in renewable energy production; the Global Wind Energy Council reported a 31 percent increase in production from 2006 to 2007 (Urban Land, June 2008). In addition to being a readily available and renewable source of energy in the U.S., wind energy has one of the "highest energy payback ratios of any power technology" (AWEA Fact Sheet). Furthermore, the industry shows significant promise in terms of job growth and new technology development.

Generally speaking, there are two basic scales of wind energy production: utility-scale production, intended for either land or off-shore application, and smaller scale production for onsite use, intended for both remote and urban locations. Utility-scale wind turbines are often sited in "wind farms" which often have up to 100 turbines; the leading states in wind energy capacity are Texas, California, and Minnesota. Small wind systems are designed for homes and businesses, and can either be pole or building mounted. Manufacturers also offer both the traditional horizontal axis turbine as well as vertical axis turbines, which resemble a revolving DNA helix. As a response to market and regulatory demands, manufacturers are designing wind turbines to be "architecturally integrated" to the buildings.

According to the American Wind Energy Association (AWEA) Small Wind Turbine Global Market Study (2008), urban and rooftop turbine sales represented only 1% of 2007 sales in the U.S. In the U.K., growth of urban and building-integrated turbines is largely attributed to greenhouse gas reduction targets for buildings. Despite the relatively small share of the small turbine market, rising energy costs and quickly developing technology are increasing the demand for small wind systems.

Planning and Zoning Commission Case 2010-038 April 5, 2010 Page 3

Conditions for Wind Energy

Wind farms are generally located in areas that have average annual wind speed of 16 miles per hour or greater. Wind energy systems work best in areas with steady, non-turbulent wind. And while utility turbines are mounted up to 300 feet high in order to harvest steady winds, local cities and more urbanized counties tend to establish regulations to reduce the visual and noise impacts caused by wind turbines.

The Department of Energy's Wind Program and National Renewable Laboratory publishes a wind resource map for every state. In many parts of Alaska, "good" to "superb" potential for wind power exists; the greatest potential exists in western and coastal areas of the State.

For the most part, the potential for wind power in Anchorage is poor to fair. Exceptions include off-shore areas such as Fire Island and areas along the Turnagain Arm, as well as some of the prominent Chugach ridgelines. The wind resource map is intended to show areas with the greatest potential for utility-scale production. Smaller scale wind energy may be viable in parts of the Municipality, and ultimately, regardless of the energy payback, the investment is an individual decision.

The Proposed Ordinance

The ordinance defines a Wind Energy Conversion System (WECS) as:

"any device or assemblage which directly converts wind energy into useable thermal, mechanical, or electrical energy, including such devices as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries, and associated control equipment."

Small WECS are defined as those rated with a power capacity of not more than 25 kW and intended for on-site consumption, and utility WECS greater than 100 kW and intended to provide distributed electric power as a public or private utility.

The Planning Department relied on several sources in compiling the proposed wind energy ordinance:

- American Planning Association inquiry service
- Consultant with Clarion Associates
- Research of existing local zoning codes
- Conversations with residents and distributors interested in pursuing wind energy options in Anchorage

Potential land use impacts associated with WECS include noise, aesthetics, safety, and property values. Most existing zoning ordinances establish height and setback standards; the setback standards, commonly 1.1 to 1.5 times the height of the WECS, are designed to accommodate

Planning and Zoning Commission Case 2010-038 April 5, 2010 Page 4

noise impacts and to also allow sufficient setback so that in the event of the structure failure it will fall on the subject property.

Many jurisdictions permit WECS only on large lots, or primarily in its rural or suburban zoning districts. Height limits of freestanding WECS range from 60 feet to 200 feet. Typically only self-supporting towers are permitted. The APA recommends neutral colors, the prohibition of advertising or signage on wind systems, and restrictions in historic districts or scenic by-ways. And the approval processes range from administrative reviews to special or conditional use approvals, often with larger systems requiring a more stringent review process. Minneapolis, Chicago, and San Francisco require WECS to be building mounted unless lots are large (e.g., Minneapolis permits freestanding WECS on lots 1 acre or greater).

Additional considerations include flicker shadows, vibrations, and wildlife impacts. Considerations of these potential impacts are considered in the proposed ordinance, though these are more likely to be impacts associated with utility versus small WECS. The summary of the attached ordinance follows.

Summary of Proposed Ordinance

A summary of permitted WECS and approval processes by zoning district is included as Attachment 2.

Definitions

- "Small Wind Energy Conversion System (WECS)" defined as intended to produce power for on-site consumption with power capacity no greater than 25 kW.
- "Utility WECS" defined as intended to provide distributed electric power as a utility.

By administrative site plan review

- One Small WECS no greater than 10 kW (free-standing or building-mounted) allowed as accessory use in R-1, R-1A, R-2A, R-2D, R-5, R-5A, R-6, R-7, R-8, R-9, R-10, R-11, and R-O.
- One Small WECS no greater than 10 kW (free-standing or building-mounted) allowed as accessory use on lots with only one principal structure in R-2M, R-3, R-4 (R-4 can have multiple building-mounted Small WECS).
- Building-mounted Small WECS no greater than 25 kW (no limit on number) allowed as accessory use in PLI, B-1A, B-3.
- Building-mounted Small WECS no greater than 25 kW (no limit on number) allowed on buildings over 60 feet high, as accessory use in B-2A, B-2B, B-2C.
- One free-standing and multiple building-mounted Small WECS no greater than 25 kW allowed as accessory use in PLI, I-1, I-2, MC, MI.

By conditional use

- Two or three free-standing Small WECS in PLI, I-1, I-2, MC, MI.
- One to three free-standing Small WECS in T.

Planning and Zoning Commission Case 2010-038 April 5, 2010 Page 5

- Any WECS in W.
- Utility WECS in PLI, I-2, AF, MI, T.

Standards for Building-mounted Small WECS

- WECS height limited to 10 feet on buildings 60 feet high or less.
- Setback (2 feet for every 1 foot of WECS height over 10 feet) from building edge required for WECS on buildings taller than 60 feet.
- Same design standards as for Free-standing Small WECS below, except for undergrounding of power lines.

Standards for Free-standing Small WECS

- Minimum lot size is 40,000 square feet.
- WECS must be setback 1.1 times height from all property lines (except property line abutting lake or pond—some relief for that situation)
- Maximum height is 95 feet.
- Only monopoles allowed—no lattice towers or guyed towers.
- Design standards for noise, vibration, blade clearance from ground, undergrounding of power lines, color, illumination, and signs.
- Maximum of three on any lot, if multiple are allowed in district.

Standards for Utility WECS

- Maximum height is 450 feet in PLI, AF, T, and W districts, and 200 in I-2 and MI.
- Utility WECS must be setback 3 times height from residential districts and 2 times height from nonresidential districts.
- Assessment of electromagnetic interference, analysis of wildlife impacts, analysis of visual impacts, noise analysis, and shadow flicker study (if near habitable building) required with application submittal.
- Design standards for noise, vibration, blade clearance, undergrounding of power lines, color, illumination, signs, and access.
- Only monopoles allowed—no lattice towers or guyed towers.

AGENCY COMMENTS:

Agency comments have not resulted in changes to the proposed ordinance.

GENERAL PUBLIC COMMENTS:

At the time of the writing of the staff report, no general comments had been received.

Planning and Zoning Commission Case 2010-038 April 5, 2010 Page 6

DEPARTMENT RECOMMENDATION:

The Department recommends the following amendments by the Planning and Zoning Commission:

Page 20, Lines 5-19

- "2. [IN RESIDENTIAL DISTRICTS ON LOTS LESS THAN 20,000 SQUARE FEET, A BUILDING MOUNTED WECS SHALL NOT EXCEED THE MAXIMUM HEIGHT FOR PRINCIPAL STRUCTURES OF THE UNDERLYING ZONING DISTRICT BY MORE THAN 10 FEET.]
- [3.] On buildings of 60 feet or less in height, building mounted WECS shall be no taller than 10 feet.
- 3. [4.] On buildings over 60 feet in height, building mounted WECS shall be set back from the structure edge by at least two feet for every one foot of height greater than 10 feet.
- 4. [5.] Building-mounted WECS shall meet the designs standards for free-standing WECS in subsection E.6.[5.] below, with the exception of E.6.[5.]e."

Page 21, Line 24

"a. Except as allowed in 5.[4.]b. below, all WECS shall be..."

Line 31

"...5.[4.]a. above may extend into the water body, provided..."

The Department recommends approval of the proposed ordinance amending various sections of Anchorage Municipal Code Title 21 to define Wind Energy Conversion Systems (WECS) and allow WECS in certain zoning districts as accessory uses.

Draft Ordinance

	•	Chair of the Assembly at the Request of the Mayor Planning Department
ANCH	IORAGE, ALASKA AO NO	

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

5

THE ANCHORAGE ASSEMBLY ORDAINS:

<u>Section 1.</u> Anchorage Municipal Code section 21.35.020 is hereby amended to read as follows: (Other definitions in the referenced section are not affected and are therefore not set out unless for context.)

21.35.020 Definitions and rules of construction.

 B. The following words, terms and phrases, when used in this title, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Watershed manager means the executive director of the office of planning, development, and public works or designee, who is the administrator of, and storm water program coordinator for, the National Pollutant Discharge Elimination System municipal separate storm sewer system permit required under federal law.

Wind Energy Conversion System (WECS) means any device or assemblage which directly converts wind energy into usable thermal, mechanical, or electrical energy, including such devices as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries, and associated control equipment.

A. A small WECS has a rated power capacity of not more than 25 kW and is intended to produce power primarily for on-site consumption, either instead of or as a supplement to utility power.

B. A utility WECS has one or more WECS units with a rated capacity greater than 100 kW, and is intended primarily to provide

3 4 5

7

8

24 25

26

32 33 34

31

<u>distributed electric power as a public or private utility.</u>

(GAAB 21.05.020; AO No. 77-355; AO No. 78-16; AO No. 78-28; AO No. 78-171; AO No. 78-231; AO No. 79-214; AO No. 80-42; AO No. 81-67(S); AO No. 81-97; AO No. 81-180; AO No. 82-54; AO No. 82-167; AO No. 83-91(S); AO No. 84-14; AO No. 84-52; AO No. 85-58; AO No. 85-159; AO No. 85-91, 10-1-85; AO No. 85-216; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 86-171; AO No. 88-172; AO No. 88-171(S-1), 12-31-88; AO No. 89-35, 4-7-89; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 91-35; AO No. 90-152(S); AO No. 91-90(S); AO No. 91-184; AO No. 92-7(S-2); AO No. 92-26; AO No. 92-93; AO No. 92-128(S); AO No. 92-129(S); AO No. 93-58; AO No. 93-148, § 1, 11-16-93; AO No. 94-62, § 2, 4-12-94; AO No. 95-68(S-1), §§ 2, 3, 8-8-95; AO No. 95-173, § 1, 11-14-95; AO No. 96-41, § 1, 3-5-96; AO No. 96-131(S), § 1, 10-22-96; AO No. 98-106, § 1, 7-21-98; AO No. 98-160, § 3, 12-8-98; AO No. 99-62, § 2, 5-11-99; AO No. 2000-119(S), § 8, 2-20-01; AO No. 2001-79(S), § 1, 5-8-01; AO No. 2001-80, § 1, 5-8-01; AO No. 2002-101(S), § 2, 4-9-02; AO No. 2002-109, § 2, 9-10-02; AO No. 2002-117, § 4, 1-28-03; AO No. 2003-62(S-1), § 3, 10-1-03; AO No. 2003-97, § 1, 9-30-03; AO No. 2003-132, § 1, 10-7-03; AO No. 2003-124(S), § 1, 1-20-04; AO. No. 2004-108(S), § 2, 10-26-04; AO No. 2005-9, § 1, 3-1-05; AO No. 2005-150(S-1), § 1, 2-28-06; AO No. 2005-185(S), § 1, 2-28-06; AO No. 2005-124(S-1A), § 4, 4-18-06; AO No. 2006-121, § 1, 9-26-06; AO No. 2006-64(S-1), § 1, 12-12-06)

Section 2. Anchorage Municipal Code subsection 21.40.020 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.020 PLI public lands and institutions district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One free-standing small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
 - Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
- C. Conditional uses. Subject to the requirements of the conditional use

standards and procedures of this title, the following uses may be permitted:

- 22. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
- 23 Utility wind energy conversion systems.

(GAAB 21.05.050.A; AO No. 77-355; AO No. 79-25; AO No. 81-67(S); AO No. 81-178(S); AO No. 82-24; AO No. 83-78; AO No. 84-34; AO No. 85-18; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 86-19; AO No. 86-90; AO No. 88-7(S), 7-4-88; AO No. 90-152(S); AO No. 92-93; AO No. 93-148, § 3, 11-16-93; AO No. 95-68(S-1), § 4, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 3, 5-11-99; AO No. 99-131, § 6, 10-26-99; AO No. 99-149, § 1, 12-14-99; AO No. 2002-109, § 3, 9-12-02; AO No. 2003-132, § 2, 10-7-03; AO No. 2005-9, § 2, 3-1-05; AO No. 2005-42(S), § 1, 5-31-05; AO No. 2005-150(S-1), § 2, 2-28-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 3.</u> Anchorage Municipal Code subsection 21.40.030 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.030 R-1 and R-1A single-family residential districts.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 9. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.B; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-216; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 1, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 4, 5-11-99; AO No 2002-109, § 3, 9-10-02; AO No. 2005-175, § 1, 1-10-06; AO No. 2005-178, § 2, 1-24-06; AO No. 2005-185(S), § 3, 2-28-06; AO No. 2005-124(S-1A), § 6, 4-18-06; AO No.

2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 4.</u> Anchorage Municipal Code subsection 21.40.040 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.040 R-2A two-family residential district (large lot); R-2D two-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - 9. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 2, 6-9-98; AO No. 99-49, § 2, 3-23-99; AO No. 99-62, § 5, 5-11-99; AO No. 2005-175, § 2, 1-10-06; AO No. 2005-178, § 3, 1-24-06; AO No. 2005-185(S), § 4, 2-28-06; AO No. 2005-124(S-1A), § 7, 4-18-06; AO No. 2006-64(S-1), § 8, 2, 3, 12-12-06)

<u>Section 5.</u> Anchorage Municipal Code subsection 21.40.045 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.045 R-2M multiple-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
 - One small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

~~~ <del>\*\*\*</del>

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

(GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 98-53(S), § 3, 6-9-98; AO No. 99-49, § 3, 3-23-99; AO No. 99-62, § 6, 5-11-99; AO No. 2005-175, § 3, 1-10-06; AO No. 2005-178, § 4, 1-24-06; AO No. 2005-185(S), § 5, 2-28-06; AO No. 2005-124(S-1A), § 8, 4-18-06; AO No. 2006-64(S-1), § \$ 2, 3, 12-12-06)

<u>Section 6.</u> Anchorage Municipal Code subsection 21.40.050 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.050 R-3 multiple-family residential district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - One small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.D; AO No. 77-355; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); AO No. 82-54; AO No. 83-218; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 7, 5-11-99; AO No. 2005-175, § 4, 1-10-06; AO No. 2005-178, § 5, 1-24-06; AO No. 2005-185(S), § 6, 2-28-06; AO No. 2005-124(S-1A), § 9, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 7.</u> Anchorage Municipal Code subsection 21.40.060 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.060 R-4 multiple-family residential district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

- 9. One free-standing small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.
- 10. Building-mounted small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\* \*\*\* \*\*\*

(GAAB 21.05.050.E; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 8, 5-11-99; AO No. 2003-124(S), § 2, 1-20-04; AO No. 2005-175, § 5, 1-10-06; AO No. 2005-178, § 6, 1-24-06; AO No. 2005-185(S), § 7, 2-28-06; AO No. 2005-124(S-1A), § 10, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 8.</u> Anchorage Municipal Code subsection 21.40.070 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

# 21.40.070 R-5 rural residential district; R-5A, rural residential district (large lot).

\*\*\* \*\*\* \*\*\*

\*\*\*

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 11. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\* \*\*\* \*\*\*

\*\*\*

(GAAB 21.05.050.F; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-52; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 9, 5-11-99; AO No. 2002-63(S), § 1, 5-21-02; AO No. 2005-175, § 6, 1-10-06; AO No. 2005-178, § 7, 1-24-06; AO No. 2005-185(S), § 8, 2-28-06; AO No. 2006-64(S-1), §§ 2, 11, 4-18-06; AO No. 2006-121, § 2, 9-26-06; AO No. 2006-64(S-1), §§ 2,

\*\*\*

3, 12-12-06)

\*\*\*

\*\*\*

\*\*\*

\*\*\*

<u>Section 9.</u> Anchorage Municipal Code subsection 21.40.080 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.080 R-6 suburban residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 11. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.G; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-27, § 1, 2-23-99; AO No. 99-62, § 10, 5-11-99; AO No. 2005-175, § 7, 1-10-06; AO No. 2005-178, § 8, 1-24-06; AO No. 2005-185(S), § 9, 2-28-06; AO No. 2005-124(S-1A), § 12, 4-18-06; AO No. 2006-121, § 3, 9-26-06; AO No. 2006-64(S-1), § \$ 2, 3, 12-12-06)

<u>Section 10.</u> Anchorage Municipal Code subsection 21.40.090 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.090 R-7 intermediate rural residential district.

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 11. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.H; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-219; AO No. 85-21; AO No. 85-28; AO No. 85-78;

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 11, 5-11-99; AO No. 2005-175, § 8, 1-10-06; AO No. 2005-178, § 9, 1-24-06; AO No. 2005-185(S), § 10, 2-28-06; AO No. 2005-124(S-1A), § 13, 4-18-06; AO No. 2006-121, § 4, 9-26-06; AO No. 2006-64(S-1), § \$ 2, 3, 12-12-06)

<u>Section 11.</u> Anchorage Municipal Code subsection 21.40.100 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.100 R-8 rural residential district (large lot).

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 12. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.U; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 4, 6-9-98; AO No. 99-62, § 12, 5-11-99; AO No. 2005-175, § 9, 1-10-06; AO No. 2005-178, § 10, 1-24-06; AO No. 2005-185(S), § 11, 2-28-06; AO No. 2005-124(S-1A), § 14, 4-18-06; AO No. 2006-121, § 5, 9-26-06; AO No. 2006-64(S-1), § 8, 2, 3, 12-12-06)

<u>Section 12.</u> Anchorage Municipal Code subsection 21.40.110 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.110 R-9 rural residential district.

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 12. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

(GAAB 21.05.050.V; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 5, 6-9-98; AO No. 99-62, § 13, 5-11-99; AO No. 2005-175, § 10, 1-10-06; AO No. 2005-178, § 11, 1-24-06; AO No. 2005-185(S), § 12, 2-28-06; AO No. 2005-124(S-1A), § 15, 4-18-06; AO No. 2006-121, § 6, 9-26-06; AO No. 2006-64(S-1), § 2, 3, 12-12-06)

<u>Section 13.</u> Anchorage Municipal Code subsection 21.40.115 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.115 R-10 residential alpine/slope district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 11. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(AO No. 81-97; AO No. 81-217; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 6, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 14, 5-11-99; AO No. 2005-175, § 11, 1-10-06; AO No. 2005-178, § 12, 1-24-06; AO No. 2005-185(S), § 13, 2-28-06; AO No. 2005-124(S-1A), § 16, 4-18-06; AO No. 2006-121, § 7, 9-26-06; AO No. 2006-64(S-1), § \$ 2, 3, 12-12-06)

<u>Section 14.</u> Anchorage Municipal Code subsection 21.40.117 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.117 R-11 Turnagain Arm district.

\*\*\*

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

\*\*\* \*\*\* \*\*\*

\*\*\*

\*\*\*

8. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(AO No. 82-162; AO No. 84-34; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-122; AO No. 86-182; AO No. 88-143; AO No. 88-144, 11-26-88; AO No. 88-171(S-1), 12-31-88; AO No. 94-120, § 1, 8-23-94; AO No. 94-238(S), § 3, 2-28-94; AO No. 94-239, § 1, 2-14-95; AO No. 96-118, § 1, 8-22-96; AO No. 96-118, § 1, 8-13-96; AO No. 99-62, § 15, 5-11-99; AO No. 2001-88, § 1, 6-5-01; AO No. 2005-175, § 12, 1-10-06; AO No. 2005-178, § 13, 1-24-06; AO No. 2005-185(S), § 14, 2-28-06; AO No. 2005-124(S-1A), § 17, 4-18-06; AO No. 2006-121, § 8, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 15.</u> Anchorage Municipal Code subsection 21.40.130 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.130 R-O residential-office district.

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.1; AO No. 77-219; AO No. 77-355; AO No. 78-199; AO No. 80-57; AO No. 81-67(S); AO No. 83-226; AO No. 85-18; AO No. 85-23; AO No. 85-69; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 86-171; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 91-97; AO No. 92-114; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 16, 5-11-99; AO No. 2003-124(S), § 3, 1-20-04; AO No. 2005-175, § 13, 1-10-06; AO No. 2005-178, § 14, 1-24-06; AO No. 2005-185(S), § 15, 2-28-06; AO No. 2005-124(S-1A), § 18, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 16. Anchorage Municipal Code subsection 21.40.140 is hereby amended to read as follows: (Subsections not affected by this ordinance are not

88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 6, 8-8-95; AO No. 98-160, § 4, 12-8-98; AO No. 98-188, §§ 1--3, 1-12-99; AO No. 99-62, § 19, 5-11-99; AO No. 99-131, § 7, 10-26-99; AO No. 2001-80, § 3, 5-8-01; AO No. 2005-185(S), § 18, 2-28-06; AO No. 2005-124(S-1A), § 21, 4-18-06; AO No. 2006-49, § 1, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 5, 10-23-07)

<u>Section 18.</u> Anchorage Municipal Code subsection 21.40.160 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.160 B-2B central business district, intermediate.

\*\*\* \*\*\* \*\*\*

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

\*\*\* \*\*\* \*\*\*

 Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.Y; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 7, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 5, 12-8-98; AO No. 98-188, §§ 4--6, 1-12-99; AO No. 99-62, § 20, 5-11-99; AO No. 99-131, § 8, 10-26-99; AO No. 99-149, § 2, 12-14-99; AO No. 2001-80, § 4, 5-8-01; AO No. 2005-185(S), § 19, 2-28-06; AO No. 2005-124(S-1A), § 22, 4-18-06; AO No. 2006-49, § 2, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 6, 10-23-07)

<u>Section 19.</u> Anchorage Municipal Code subsection 21.40.170 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.170 B-2C central business district, periphery.

\*\*\* \*\*\* \*\*\*

| 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 16                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 19                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1 2 3 4 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 3 14 5 6 7 8 9 10 11 2 11 11 11 11 11 11 11 11 11 11 11 1 |
| 24                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 26                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 29                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 31                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 32<br>33                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>3</b> 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 37<br>38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 39                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 40                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 41                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 42<br>43                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 43                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 46                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 47                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.X; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 8, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 6, 12-8-98; AO No. 98-173, § 4, 11-3-98; AO No. 98-188, §§ 7--9, 1-12-99; AO No. 99-62, § 21, 5-11-99; AO No. 99-131, § 9, 10-26-99; AO No. 99-149, § 3, 12-14-99; AO No. 2001-80, § 5, 5-8-01; AO No. 2005-185(S), § 20, 2-28-06; AO No. 2005-124(S-1A), § 23, 4-18-06; AO No. 2007-121(S-1), § 7, 10-23-07)

<u>Section 20.</u> Anchorage Municipal Code subsection 21.40.180 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.180 B-3 general business district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.M; AO No. 77-355; AO No. 78-28; AO No. 80-57; AO No. 80-132; AO No. 81-67(S); AO No. 83-209; AO No. 85-18; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 86-182; AO No. 87-32; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-26; AO No. 92-114; AO No. 95-68(S-1), § 9, 8-8-95;

AO No. 96-107, § 1, 7-30-96; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 7, 12-8-98; AO No. 99-62, § 22, 5-11-99; AO No. 2001-80, § 6, 5-8-01; AO. No. 2004-108(S), § 3, 10-26-04; AO No. 2005-185(S), § 21, 2-28-06; AO No. 2005-124(S-1A), § 24, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 21.</u> Anchorage Municipal Code subsection 21.40.200 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.200 I-1 light industrial district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

\*\*\* \*\*\* \*\*\*

- 4. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
- 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\* \*\*\* \*\*\*

D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:

\*\*\* \*\*\* \*\*\*

Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.

\*\*\* \*\*\* \*\*\*

(GAAB 21.05.050.0; AO No. 77-355; AO No. 79-95; AO No. 81-67(S); AO No. 82-105; AO No. 84-57; AO No. 85-91, 10-1-85; AO No. 85-95; AO No. 86-50; AO No. 86-90; AO No. 87-32; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 92-114; AO No. 95-68(S-1), § 11, 8-8-95; AO No. 95-76, § 1, 4-4-95; AO No. 95-194, § 1, 1-2-96; AO No. 98-160, § 9, 12-8-98; AO No. 98-173, § 5, 11-3-98; AO No. 99-62, § 24, 5-11-99; AO No. 2001-80, § 8, 5-8-01; AO No. 2004-5, § 1, 1-20-04; AO. No. 2004-108(S), § 5, 10-26-

\*\*\*

\*\*\*

\*\*\*

\*\*\*

04; AO No. 2004-178(am), § 1, 1-25-05; AO No. 2005-9, § 3, 3-1-05; AO No. 2005-185(S), § 23, 2-28-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 22.</u> Anchorage Municipal Code subsection 21.40.210 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.210 I-2 heavy industrial district.

\*\*\*

\*\*\*

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 4. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
  - 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
- D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
  - 8. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.
  - Utility wind energy conversion systems.

(GAAB 21.05.050.P; AO No. 77-355; AO No. 85-91, 10-1-85; AO No. 87-32; AO No. 91-184; AO No. 93-148, § 4, 11-16-93; AO No. 96-60, § 1, 8-6-96; AO No. 96-125, § 1, 11-12-96; AO No. 97-78, § 2, 6-3-97; AO No. 99-62, § 25, 5-11-99; AO No. 2001-80, § 9, 5-8-01; AO No. 2005-185(S), § 24, 2-28-06; AO No. 2005-124(S-1A), § 26, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 23.</u> Anchorage Municipal Code subsection 21.40.240 is hereby amended to read as follows: (Subsections not affected by this ordinance are not

set out unless for context.)

\*\*\*

\*\*\*

\*\*\*

#### 21.40.240 T transition district.

\*\*\*

- D. Conditional uses. Subject to the requirements of the conditional use and site plan standards and procedures of this title, the following uses may be permitted only as a conditional use:
  - 12. Small wind energy conversion systems, subject to the requirements of section 21.50.470.
  - 13. Utility wind energy conversion systems.

(GAAB 21.05.050.S; AO No. 77-355; AO No. 79-25; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 88-59(S); AO No. 88-171(S-1), 12-31-88; AO No. 98-160, § 10, 12-8-98; AO No. 99-62, § 28, 5-11-99; AO No. 2005-185(S), § 26, 2-28-06; AO No. 2005-124(S-1A), § 28, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 12, 10-23-07)

<u>Section 24.</u> Anchorage Municipal Code subsection 21.40.260 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.260 AF antenna farm district.

\*\*\*

- D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:
  - 4. <u>Utility wind energy conversion systems.</u>

(AO No. 88-147(S-2); AO No. 99-62, § 29, 5-11-99; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

**Section 25.** Anchorage Municipal Code subsection 21.40.270 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### requirements of 21.45.410.

- 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of 21.45.410.
- \*\*\* \*\*\* \*\*\*
- F. Conditional uses. Subject to the requirements of the conditional use standards and procedures of sections 21.15.030 and 21.50.020, the following uses may be permitted:
  - 6. Two or three small wind energy conversion systems, subject to the requirements of section 21.50.470.
  - Utility wind energy conversion systems.

\*\*\* \*\*\* \*\*\*

(AO No. 99-62, § 31, 5-11-99; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 27.</u> Anchorage Municipal Code chapter 21.45 is hereby amended to add a new section to read as follows:

#### 21.45.410 Small wind energy conversion systems.

- A. Purpose. The purpose of this section is to regulate and provide standards for small wind energy conversion systems (WECS) as defined in this Code, and to encourage the development of small wind energy systems.
- B. Approval Process. Small WECS are subject to an administrative site plan review. Sufficient information shall be provided with the application to show that the standards below have been met. The planning director shall grant approval if the standards of this section have been met, and that the applicant has sized and sited the system to reduce impacts on surrounding properties to the maximum extent feasible. Structural stability of the foundation will be assured through the building permit process.
- C. Submittal Requirements.
  - 1. A description of the project, including the maximum rated power output capacity of the WECS.
  - 2. The make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data

for the proposed WECS, the support structure, and method of attachment to the ground and/or structure.

- 3. Elevation drawing of the WECS showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
- 4. If the WECS is not certified as meeting the IEEE 1547 standard (Institute of Electrical and Electronic Engineers), then an assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication is required.
- 5. Applications shall include a visual impact analysis of the proposed WECS as installed, which shall include color photographs of the proposed site from at least two locations accurately depicting the existing conditions. A computerized photographic simulation, demonstrating any visual impacts from strategic vantage points, is desirable and may be required at the Director's discretion. The applicant shall indicate any visual screening proposed to be incorporated into the project that is intended to lessen the system's visual prominence.

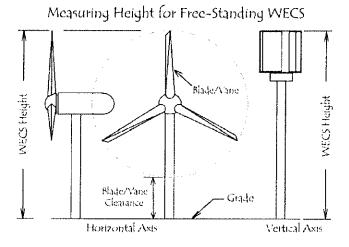
#### D. Building-Mounted WECS.

- Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- 2. In residential districts on lots less than 20,000 square feet, a building mounted WECS shall not exceed the maximum height for principal structures of the underlying zoning district by more than 10 feet.
- 3. On buildings of 60 feet or less in height, building mounted WECS shall be no taller than 10 feet.
- On buildings over 60 feet in height, building mounted WECS shall be set back from the structure edge by at least two feet for every one foot of height greater than 10 feet.
- 5. Building-mounted WECS shall meet the design standards for free-standing WECS in subsection E.5. below, with the

exception of E.5.e.

#### E. Free-Standing WECS.

- Number of WECS. Only one small WECS per lot is allowed in residential zoning districts. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- Power Capacity. Small WECS in residential zoning districts shall have a rated power capacity of not more than 10 kW. Small WECS in nonresidential zoning districts shall have a rated power capacity of not more than 25 kW.
- Minimum Lot Area and Maximum Height.
  - a. The minimum lot area for a small WECS is 40,000 square feet.
  - b. The height of a small WECS shall be determined by compliance with the setback provisions of subsection E.4. below. In no instance shall a small WECS exceed 95 feet in height.
  - c. Height shall be measured as depicted in the illustration. Structures shall not interfere with Federal Aviation Administration Regulations on airport approaches. In no case shall the height exceed manufacturer's specifications.



4. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 25 feet above

grade. No blades may extend over public sidewalks/trails.

#### 5. Setbacks.

- Except as allowed in 4.b. below, all WECS shall be setback from all property lines at least 1.1 times the height of system
- b. On lots abutting water bodies such as lakes or ponds, the WECS shall be setback at least 15 feet from the water body edge, but the setback distance required in 4.a. above may extend into the water body, provided that the full extent of the setback distance falls within the water body.
- c. All systems shall be setback at least 1.1 times the height of the system from all overhead power and telecommunication lines, and any telecommunications towers.

#### 6. Design Standards.

- Operational noise shall not exceed 50dBH at property line except for short-term high wind speed events such as storms.
- b. All systems shall be equipped with manual and automatic (mechanical or electrical) over-speed controls to limit the blade rotation speed to within the design limits of the system.
- c. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- d. Lattice type towers and towers using guy wires are prohibited.
- e. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground.
- f. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- g. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.

- h. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner.
- F. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

<u>Section 28.</u> Anchorage Municipal Code chapter 21.50 is hereby amended to add new sections to read as follows:

## 21.50.470 Small wind energy conversion systems—multiple free-standing towers.

- A. Purpose. The purpose of this section is to provide standards for multiple free-standing small WECS in industrial districts and in the PLI district.
- B. Submittal Requirements. Multiple free-standing small WECS in industrial districts and in the PLI districts shall provide the minimum application information required by section 21.50.480B.
- C. Maximum number of WECS. No more than three WECS shall be allowed on any one lot. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- D. Standards. Multiple free-standing small WECS shall meet the standards of section 21.45.410E.
- E. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

#### 21.50.480 Utility wind energy conversion systems.

- A. Purpose. The purpose of this section is to provide standards for utility scale wind energy conversion systems (WECS) generally utilizing multiple towers designed to produce electric power as a public or private utility.
- B. Submittal Requirements. In addition to the minimum application

information set forth in 21.15.030.C, the following shall be provided:

- 1. For each WECS model proposed, the make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, and drawings of the support structure stamped by a structural engineer registered in the State of Alaska.
- 2. Elevation drawing of each WECS model showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
- 3. An assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication.
- 4. An analysis of impacts on local wildlife shall be prepared, regarding impacts anticipated during construction, reconstruction, modification or operation of WECS. Wildlife impacts to be considered shall include, at a minimum, anticipated impacts on birds.
- 5. If any habitable building is located within 1,300 feet of any proposed Utility WECS unit, then the applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECS and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with habitable buildings and describe measures that shall be taken to eliminate or mitigate the problems. The applicant has the burden of proving that shadow flicker will not negatively impact neighboring uses.
- 6. Applications shall include a visual impact analysis of the proposed WECS as installed, which may include a computerized photographic simulation, demonstrating any visual impacts from strategic vantage points. Color photographs of the proposed site from at least two locations accurately depicting the existing conditions shall be included. The visual analysis shall also indicate the color treatment of the system's components and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.
- 7. A noise analysis by a competent acoustical consultant

documenting the noise levels associated with the proposed WECS. The study shall document projected noise levels at property lines. The noise analysis shall include low frequency noise.

- C. Height. The height as measured from grade to the highest point of the fully operational system, including the turbine vane(s), shall not exceed 450 feet in the AF, W, T, and PLI zoning districts, or 200 feet in any other district in which a Utility WECS may be approved. A Utility WECS shall not interfere with Federal Aviation Administration Regulations in the vicinity of an airport. In no case shall the height exceed manufacturer's specifications.
- D. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 30 feet above grade.
- E. Setbacks.
  - 1. All WECS shall setback from all residential property lines at least 3.0 times the height of system, and from all non-residential property lines a minimum of 2.0 times the height of the system.
  - 2. All systems shall be at least 325 feet from any telecommunications towers.
  - 3. The tower shall maintain a minimum separation distance equal to 1.1 times the height of system from all overhead power and telecommunication lines.
- F. Design Standards.
  - Except for short-term high wind speed events such as storms, operational noise shall not exceed 50dBH at any property line adjacent to a residential zoning district, and 60dBH at any property line adjacent to a nonresidential zoning district.
  - 2. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
  - 3. Lattice type towers and towers using guy wires are prohibited.
  - 4. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground, unless otherwise allowed by the planning and zoning

# **Table**

# Permitted WECS and Approval Process by Zoning District

### **Attachment 2**

## Permitted WECS and Approval Process by Zoning District

| District                                                                                | 1 Small<br>WECS           | 2-3 Small<br>WECS  | 1 Small<br>Building       | Multiple<br>Building      | Utility            |
|-----------------------------------------------------------------------------------------|---------------------------|--------------------|---------------------------|---------------------------|--------------------|
| R-1, R-1A, R-<br>2A, R-2D, R-<br>5, R-5A, R-6,<br>R-7, R-8, R-9,<br>R-10, R-11, R-<br>O | Admin Site<br>Plan Review |                    | Admin Site<br>Plan Review |                           |                    |
| R-2M, R-3,<br>lots with one<br>principal<br>structure only                              | Admin Site<br>Plan Review |                    | Admin Site<br>Plan Review |                           |                    |
| R-4, lots with one principal structure only                                             | Admin Site<br>Plan Review |                    | Admin Site<br>Plan Review | Admin Site<br>Plan Review |                    |
| B-1A, B-3                                                                               |                           |                    |                           | Admin Site<br>Plan Review |                    |
| B-2A, B-2B,<br>B-2C,<br>buildings over<br>60 feet only                                  |                           |                    |                           | Admin Site<br>Plan Review |                    |
| PLI                                                                                     | Admin Site<br>Plan Review | Conditional<br>Use |                           | Admin Site<br>Plan Review | Conditional<br>Use |
| I-1, MC                                                                                 | Admin Site<br>Plan Review | Conditional<br>Use |                           | Admin Site<br>Plan Review |                    |
| I-2, MI                                                                                 | Admin Site<br>Plan Review | Conditional<br>Use |                           | Admin Site<br>Plan Review | Conditional<br>Use |
| Т                                                                                       | Conditional<br>Use        | Conditional<br>Use |                           |                           | Conditional<br>Use |
| W                                                                                       | Conditional<br>Use        | Conditional<br>Use | Conditional<br>Use        | Conditional<br>Use        | Conditional<br>Use |
| AF                                                                                      | :                         |                    |                           |                           | Conditional<br>Use |

# PZC Resolution 2008-073

#### MUNICIPALITY OF ANCHORAGE

#### PLANNING AND ZONING COMMISSION RESOLUTION NO. 2008-073

A RESOLUTION RECOMMENDING APPROVAL OF AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

#### (Case 2008-127)

WHEREAS, wind energy has one of the highest payback ratios of any power technologies, and Wind Energy Conversion Systems (WECS) are available for both utility-scale and smaller scale production for on-site use; and

WHEREAS, the Planning Department has received several inquiries from Anchorage citizens and business owners to install WECS; however, Title 21 currently does not clearly or adequately deal with this emerging technology; and

WHEREAS, in response to these issues, the Planning Department has drafted an ordinance which provides regulations and standards to allow WECS in certain zoning districts; and

WHEREAS, the Planning and Zoning Commission held a public hearing on October 6, 2008; and

WHEREAS, the Commission deliberated on the WECS ordinance at its meeting of October 6, 2008.

NOW, THEREFORE, BE IT RESOLVED by the Anchorage Planning and Zoning Commission that:

- A. The Commission makes the following findings of fact:
  - 1. Title 21 should provide clear regulation and guidelines regarding the installation of both utility- and small-scale WECS.
  - 2. The ordinance allowing WECS and providing standards for siting of WECS should balance the need to pursue new technologies for energy production with protection against potential impacts of the technology.
  - 3. As WECS are installed in Anchorage and as innovation continues in the wind energy industry, it is likely that the ordinance will undergo revisions.

- 4. Planning Department staff thoroughly researched the issues of the ordinance, the Commission had a full and free discussion of the issues, and resolution was reached.
- В. The Commission recommends to the Anchorage Assembly approval of the draft ordinance prepared by the Planning Department staff dated September 29, 2008, with the following amendments:
  - 1. In Subsection 21.45.410B., page 14, line 31, add line: "Structural stability of the foundation will be assured through the building permit process."
  - 2. In Subsection 21.45.410D.1., page 15, line 23, add: "by more than 10 feet."
  - 3. In Subsection 21.50.480B.1., page 18, lines 11-13, change to: "For each WECS model proposed, [T]the make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, and drawings of the support structure stamped by a structural engineer registered in the State of Alaska (FOR EACH WECS MODEL PROPOSED]."
  - 4. In Subsection 21.50.480F. Design Standards, page 19, lines 23-24, replace with: "Except for short-term high wind speed events such as storms, operational noise shall not exceed 50dBH at any property line adjacent to a residential zoning district, and 60dBH at any property line adjacent to a nonresidential zoning district."

PASSED AND APPROVED by the Anchorage Planning and Zoning Commission this 6th day of October 2008.

Tom Nelson

Secretary

Attachment A: Amended Draft Ordinance

#### Attachment A

#### To Planning and Zoning Commission Resolution No. 2008-073

Submitted by: Chair of the Assembly at the Request of the Mayor

Prepared by: Planning Department

For reading:

#### ANCHORAGE, ALASKA AO NO.

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50 STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL STANDARDS AND CONDITIONAL USE STANDARDS.

THE ANCHORAGE ASSEMBLY ORDAINS:

<u>Section 1.</u> Anchorage Municipal Code section 21.35.020 is hereby amended to read as follows: (Other definitions in the referenced section are not affected and are therefore not set out unless for context.)

#### 21.35.020 Definitions and rules of construction.

B. The following words, terms and phrases, when used in this title, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Watershed manager means the executive director of the office of planning, development, and public works or designee, who is the administrator of, and storm water program coordinator for, the National Pollutant Discharge Elimination System municipal separate storm sewer system permit required under federal law.

Wind Energy Conversion System (WECS) means any device or assemblage which directly converts wind energy into usable thermal, mechanical, or electrical energy, including such devices as windmills and wind turbines, towers and supporting structures and such directly connected facilities as generators, alternators, inverters, batteries, and associated control equipment.

- A. A small WECS has a rated power capacity of not more than 100 kW and is intended to produce power primarily for on-site consumption, either instead of or as a supplement to utility power.
- B. A utility WECS has one or more WECS units with a rated capacity greater than 100 kW, and is intended primarily to provide distributed electric power as a public or private utility.

\*\*\* \*\*\*

(GAAB 21.05.020; AO No. 77-355; AO No. 78-16; AO No. 78-28; AO No. 78-171; AO No. 78-231;

\*\*\*

AO No. 79-214; AO No. 80-42; AO No. 81-67(S); AO No. 81-97; AO No. 81-180; AO No. 82-54; AO No. 82-167; AO No. 83-91(S); AO No. 84-14; AO No. 84-52; AO No. 85-58; AO No. 85-159; AO No. 85-91, 10-1-85; AO No. 85-216; AO No. 86-19; AO No. 86-78; AO No. 86-90; AO No. 86-171; AO No. 88-172; AO No. 88-171(S-1), 12-31-88; AO No. 89-35, 4-7-89; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 91-35; AO No. 90-152(S); AO No. 91-90(S); AO No. 91-184; AO No. 92-7(S-2); AO No. 92-26; AO No. 92-93; AO No. 92-128(S); AO No. 92-129(S); AO No. 93-58; AO No. 93-148, § 1, 11-16-93; AO No. 94-62, § 2, 4-12-94; AO No. 95-68(S-1), §§ 2, 3, 8-8-95; AO No. 95-173, § 1, 11-14-95; AO No. 96-41, § 1, 3-5-96; AO No. 96-131(S), § 1, 10-22-96; AO No. 98-106, § 1, 7-21-98; AO No. 98-160, § 3, 12-8-98; AO No. 99-62, § 2, 5-11-99; AO No. 2000-119(S), § 8, 2-20-01; AO No. 2001-79(S), § 1, 5-8-01; AO No. 2001-80, § 1, 5-8-01; AO No. 2002-101(S), § 2, 4-9-02; AO No. 2002-109, § 2, 9-10-02; AO No. 2002-117, § 4, 1-28-03; AO No. 2003-62(S-1), § 3, 10-1-03; AO No. 2003-97, § 1, 9-30-03; AO No. 2003-132, § 1, 10-7-03; AO No. 2003-124(S), § 1, 1-20-04; AO. No. 2004-108(S), § 2, 10-26-04; AO No. 2005-9, § 1, 3-1-05; AO No. 2005-150(S-1), § 1, 2-28-06; AO No. 2005-185(S), § 1, 2-28-06; AO No. 2005-124(S-1A), § 4, 4-18-06; AO No. 2006-121, § 1, 9-26-06; AO No. 2006-64(S-1), § 1, 12-12-06)

Section 2. Anchorage Municipal Code subsection 21.40.020 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.020 PLI public lands and institutions district.

20

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

23

25

26

- 6. One free-standing small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.
- 27 28
- 7. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

29 30

D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:

32 33

31

22. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.

34 35 36

23. Utility wind energy conversion systems.

37 38

39

40

41

42

43

44

(GAAB 21.05.050.A; AO No. 77-355; AO No. 79-25; AO No. 81-67(S); AO No. 81-178(S); AO No. 82-24; AO No. 83-78; AO No. 84-34; AO No. 85-18; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 86-19; AO No. 86-90; AO No. 88-7(S), 7-4-88; AO No. 90-152(S); AO No. 92-93; AO No. 93-148, § 3, 11-16-93; AO No. 95-68(S-1), § 4, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 99-62, § 3, 5-11-99; AO No. 99-131, § 6, 10-26-99; AO No. 99-149, § 1, 12-14-99; AO No. 2002-109, § 3, 9-12-02; AO No. 2003-132, § 2, 10-7-03; AO No. 2005-9, § 2, 3-1-05; AO No. 2005-42(S), § 1, 5-31-05; AO No. 2005-150(S-1), § 2, 2-28-06; AO No. 2005-185(S), § 2, 2-28-06; AO No. 2005-124(S-1A), § 5, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-

Anchorage Municipal Code subsection 21.40.045 is hereby amended to

read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

39

40

Section 5.

| ,                                      | 21.40.045 R-2M multiple-ramily residential district.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                         |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 2                                      | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 3<br>4                                 | C. Permitted accessory uses and structures. Permitted accessory structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | uses and                                                |
| 5                                      | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 6<br>7<br>8                            | <ol> <li>One small wind energy conversion systems on lots with only one<br/>structure, by administrative site plan review and subject<br/>requirements of section 21.45.410.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                         |
| 9                                      | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 10<br>11<br>12<br>13<br>14<br>15<br>16 | (GAAB 21.05.050.C; AO No. 77-355; AO No. 79-13; AO No. 80-27; AO No. 80-42; AO (S); AO No. 82-54; AO No. 83-217; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO (S); AO No. 85-78; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-86-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 3, 6-9-98; AO No. 99-49, § 3, 3-23-99; AO No. 99-62, § 6, 5-11-99; AO (S); AO | AO No. 85-<br>19; AO No.<br>92-114; AO<br>) No. 2005-   |
| 18<br>19                               | Section 6. Anchorage Municipal Code subsection 21.40.050 is hereby am read as follows: (Subsections not affected by this ordinance are not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ended to                                                |
| 20                                     | 21.40.050 R-3 multiple-family residential district.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                         |
| 21                                     | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 22<br>23                               | C. Permitted accessory uses and structures. Permitted accessory և structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | uses and                                                |
| 24                                     | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 25<br>26<br>27                         | 8. One small wind energy conversion systems on lots with only one structure, by administrative site plan review and subject requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                         |
| 28                                     | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |
| 29<br>30<br>31<br>32<br>33<br>34<br>35 | (GAAB 21.05.050.D; AO No. 77-355; AO No. 80-27; AO No. 80-42; AO No. 81-67(S); A 54; AO No. 83-218; AO No. 84-52; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 85-163; AO No. 86-19; AO No. 86-78; A 90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-1 10-22-96; AO No. 99-62, § 7, 5-11-99; AO No. 2005-175, § 4, 1-10-06; AO No. 2005-124-06; AO No. 2005-185(S), § 6, 2-28-06; AO No. 2005-124(S-1A), § 9, 4-18-06; AO 64(S-1), §§ 2, 3, 12-12-06)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | No. 85-28;<br>40 No. 86-<br>31(S), § 2,<br>178, § 5, 1- |
| 37<br>38                               | Section 7. Anchorage Municipal Code subsection 21.40.060 is hereby ame read as follows: (Subsections not affected by this ordinance are not set out unless for contex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                         |
| 39                                     | 21.40.060 R-4 multiple-family residential district.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                         |
| 40                                     | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                     |

| 1<br>2                           | C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3                                | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4<br>5<br>6                      | 9. One free-standing small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                           |
| 7<br>8<br>9                      | 10. Building-mounted small wind energy conversion systems on lots with only one principal structure, by administrative site plan review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                           |
| 10                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 11<br>12<br>13<br>14<br>15<br>16 | (GAAB 21.05.050.E; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 8, 5-11-99; AO No. 2003-124(S), § 2, 1-20-04; AO No. 2005-175, § 5, 1-10-06; AO No. 2005-178, § 6, 1-24-06; AO No. 2005-185(S), § 7, 2-28-06; AO No. 2005-124(S-1A), § 10, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06) |
| 17                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 18<br>19                         | <b>Section 8.</b> Anchorage Municipal Code subsection 21.40.070 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                  |
| 20<br>21                         | 21.40.070 R-5 rural residential district; R-5A, rural residential district (large lot).                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 22                               | *** ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 23<br>24                         | C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 25                               | *** *** ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 26<br>27                         | 11. One small wind energy conversion systems by administrative site plan<br>review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                                                                |
| 28                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 29<br>30<br>31<br>32<br>33<br>34 | (GAAB 21.05.050.F; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 83-52; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 9, 5-11-99; AO No. 2002-63(S), § 1, 5-21-02; AO No. 2005-175, § 6, 1-10-06; AO No. 2005-178, § 7, 1-24-06; AO No. 2005-185(S), § 8, 2-28-06; AO No. 2005-124(S-1A), § 11, 4-18-06; AO No. 2006-121, § 2, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)                           |
| 35                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 36<br>37                         | <u>Section 9.</u> Anchorage Municipal Code subsection 21.40.080 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                  |
| 38                               | 21.40.080 R-6 suburban residential district (large lot).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 39                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 40                               | C. Permitted accessory uses and structures. Permitted accessory uses and                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| 1                                | structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                           |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| 2                                | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 3<br>4                           | 11. One small wind energy conversion systems by administrative review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                | site plan                                 |
| 5                                | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 6<br>7<br>8<br>9<br>10<br>11     | (GAAB 21.05.050.G; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; 18; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 85-91, 10-1-86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 2-23-99; AO No. 99-62, § 10, 5-11-99; AO No. 2005-175, § 7, 1-10-06; AO No. 2005-24-06; AO No. 2005-185(S), § 9, 2-28-06; AO No. 2005-124(S-1A), § 12, 4-18-06; AC 121, § 3, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06) | 85; AO No.<br>99-27, § 1,<br>178, § 8, 1- |
| 13<br>14                         | Section 10. Anchorage Municipal Code subsection 21.40.090 is hereby am read as follows: (Subsections not affected by this ordinance are not set out unless for conte                                                                                                                                                                                                                                                                                                       |                                           |
| 15                               | 21.40.090 R-7 intermediate rural residential district.                                                                                                                                                                                                                                                                                                                                                                                                                     |                                           |
| 16                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 17<br>18                         | C. Permitted accessory uses and structures. Permitted accessory uses structures are as follows:                                                                                                                                                                                                                                                                                                                                                                            | uses and                                  |
| 19                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 20<br>21                         | 11.One small wind energy conversion systems by administrative review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                 | site plan                                 |
| 22                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 23<br>24<br>25<br>26<br>27<br>28 | (GAAB 21.05.050.H; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; 219; AO No. 85-21; AO No. 85-28; AO No. 85-78; AO No. 85-23; AO No. 86-90; A 171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-114; AO No. 99-62, § 11, 5-11-2005-175, § 8, 1-10-06; AO No. 2005-178, § 9, 1-24-06; AO No. 2005-185(S), § 10, 2 No. 2005-124(S-1A), § 13, 4-18-06; AO No. 2006-121, § 4, 9-26-06; AO No. 2006-64(3, 12-12-06)                                               | 10 No. 88-<br>99; AO No.<br>-28-06; AO    |
| 29<br>30                         | Seption 44 Anchorage Municipal Code subsection 21 40 100 is hereby am                                                                                                                                                                                                                                                                                                                                                                                                      | andad ta                                  |
| 31                               | Section 11. Anchorage Municipal Code subsection 21.40.100 is hereby am read as follows: (Subsections not affected by this ordinance are not set out unless for contents)                                                                                                                                                                                                                                                                                                   |                                           |
| 32                               | 21.40.100 R-8 rural residential district (large lot).                                                                                                                                                                                                                                                                                                                                                                                                                      |                                           |
| 33                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 3 <b>4</b><br>35                 | C. Permitted accessory uses and structures. Permitted accessory և structures are as follows:                                                                                                                                                                                                                                                                                                                                                                               | ises and                                  |
| 36                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| 37<br>38                         | 12. One small wind energy conversion systems by administrative review and subject to the requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                | site plan                                 |
| 39                               | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***                                       |
| I                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                           |

(GAAB 21.05.050.U; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 4, 6-9-98; AO No. 99-62, § 12, 5-11-99; AO No. 2005-175, § 9, 1-10-06; AO No. 2005-178, § 10, 1-24-06; AO No. 2005-185(S), § 11, 2-28-06; AO No. 2005-124(S-1A), § 14, 4-18-06, AO No. 2006-121, § 5, 9-26-06; AO No. 2006-64(S-1), § \$ 2, 3, 12-12-06)

7

9

Section 12. Anchorage Municipal Code subsection 21.40.110 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

10 21.40.110

\*\*\*

12-12-06)

\*\*\*

R-9 rural residential district. \*\*\*

11 12

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

13 14

15 16

12. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

17 18

19

20

(GAAB 21.05.050.V; AO No. 77-355; AO No. 80-27; AO No. 81-67(S); AO No. 82-54; AO No. 85-21; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 5, 6-9-98; AO No. 99-62, § 13, 5-11-99; AO No. 2005-175, § 10, 1-10-06; AO No. 2005-178, § 11, 1-24-06; AO No. 2005-185(S), § 12, 2-28-06; AO No. 2005-124(S-1A), § 15, 4-18-06; AO No. 2006-121, § 6, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3,

21 22 23

24

25

Section 13. Anchorage Municipal Code subsection 21.40.115 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

27

26

28

29

30 31

> 32 33

34 35

40

41

21.40.115 R-10 residential alpine/slope district. \*\*\*

C. Permitted accessory uses and structures. Permitted accessory uses and

structures are as follows:

11. One small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

(AO No. 81-97; AO No. 81-217; AO No. 85-23; AO No. 85-28; AO No. 85-78; AO No. 86-90; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 98-53(S), § 6, 6-9-98; AO No. 99-49, § 1, 3-23-99; AO No. 99-62, § 14, 5-11-99; AO No. 2005-175, § 11, 1-10-06; AO No. 2005-178, § 12, 1-24-06; AO No. 2005-185(S), § 13, 2-28-06; AO No. 2005-124(S-1A), § 16, 4-18-06; AO No. 2006-121, § 7, 9-26-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

Section 14. Anchorage Municipal Code subsection 21.40.117 is hereby amended to

\*\*\*

| 1                                                                                                  | read as follows: (Subsections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | not affected by this ordinance ar                                                                                                                                                                                                                                                                                                             | e not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                            |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
| 2                                                                                                  | 21.40.117 R-11 T                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | urnagain Arm district.                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| 3                                                                                                  | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                                                                                                                                                                                                                                                                                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |
| 4<br>5                                                                                             | C. Permitted access structures are as                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | •                                                                                                                                                                                                                                                                                                                                             | Permitted accessory uses a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | nd                                         |
| 6                                                                                                  | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                                                                                                                                                                                                                                                                                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |
| 7<br>8                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | nd energy conversion sys<br>bject to the requirements of                                                                                                                                                                                                                                                                                      | tems by administrative site place section 21.45.410.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <u>an</u>                                  |
| 9                                                                                                  | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                                                                                                                                                                                                                                                                                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |
| 10<br>11<br>12<br>13<br>14<br>15<br>16                                                             | 86-122; AO No. 86-182;<br>88; AO No. 94-120, § 1,<br>AO No. 96-118, § 1, 8-22<br>2001-88, § 1, 6-5-01; AO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | AO No. 88-143; AO No. 88-144;<br>8-23-94; AO No. 94-238(S), § 3<br>2-96; AO No. 96-118, § 1, 8-13-9<br>) No. 2005-175, § 12, 1-10-06; A<br>06; AO No. 2005-124(S-1A), § 1                                                                                                                                                                     | 85-78; AO No. 85-91, 10-1-85; AO N<br>, 11-26-88; AO No. 88-171(S-1), 12-3<br>. 2-28-94; AO No. 94-239, § 1, 2-14-5<br>6; AO No. 99-62, § 15, 5-11-99; AO N<br>O No. 2005-178, § 13, 1-24-06; AO N<br>7, 4-18-06; AO No. 2006-121, § 8, 9-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 31-<br>95;<br>Vo.<br>Vo.                   |
| 17                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| 18<br>19                                                                                           | Section 15. Anchorage M read as follows: (Subsections                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                               | 21.40.130 is hereby amended e not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | to                                         |
| 20                                                                                                 | 21.40.130 R-O res                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | sidential-office district.                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
|                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                            |
| 21                                                                                                 | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ***                                                                                                                                                                                                                                                                                                                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                            |
|                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | sory uses and structures.                                                                                                                                                                                                                                                                                                                     | Permitted accessory uses ar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | nd                                         |
| 21<br>22                                                                                           | C. Permitted access                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | sory uses and structures.                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | nd                                         |
| 21<br>22<br>23                                                                                     | C. Permitted access structures are as the structure are as the struc | sory uses and structures.<br>follows:<br>***                                                                                                                                                                                                                                                                                                  | Permitted accessory uses ar  ***  ems by administrative site pla                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                            |
| 21<br>22<br>23<br>24<br>25                                                                         | C. Permitted access structures are as the structure are as the struc | sory uses and structures. follows:  *** and energy conversion syst                                                                                                                                                                                                                                                                            | Permitted accessory uses ar  ***  ems by administrative site pla                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                            |
| 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33<br>34                   | C. Permitted access structures are as the structure are as the str | sory uses and structures. follows:  ***  ***  ***  ***  ***  ***  ***                                                                                                                                                                                                                                                                         | Permitted accessory uses ar  ***  tems by administrative site place section 21.45.410.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 31-<br>30<br>37;<br>33-<br>10.             |
| 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33                         | C. Permitted access structures are as five st | sory uses and structures. follows:  ***  ***  ***  ***  ***  ***  ***                                                                                                                                                                                                                                                                         | Permitted accessory uses ar  ***  ***  ***  ***  ***  ***  ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 31-<br>30<br>37;<br>33-<br>10.             |
| 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33<br>34                   | C. Permitted access structures are as the structure are as the st | sory uses and structures.  ***  ***  ***  ***  ***  ***  ***                                                                                                                                                                                                                                                                                  | ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **   | an<br>31-<br>30<br>77;<br>33-<br>10.<br>2, |
| 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33<br>34<br>35             | C. Permitted access structures are as the structure are as the structures are as the structures are as the structure are as the structures are as the stru | sory uses and structures.  ***  ***  ***  ***  ***  ***  ***                                                                                                                                                                                                                                                                                  | ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  ** | an<br>31-<br>30<br>77;<br>33-<br>10.<br>2, |
| 21<br>22<br>23<br>24<br>25<br>26<br>27<br>28<br>29<br>30<br>31<br>32<br>33<br>34<br>35<br>36<br>37 | C. Permitted access structures are as the structure are as the structures are as the structures are as the structure are as the structures are as the stru | sory uses and structures.  ***  Ind energy conversion system Diect to the requirements of  ***  No. 77-219; AO No. 77-355; AO O No. 85-18; AO No. 85-23; AO O No. 88-171(S-1), 12-31-8 96-131(S), § 3, 10-22-96; AO N No. 2005-175, § 13, 1-10-06; AO No. 2005-124(S-1A), § 1  Inicipal Code subsection 2 Inot affected by this ordinance are | ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  ***  ***  ***  ***  ***  ***  ***  ***  ***  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  **  ** | an<br>31-<br>30<br>77;<br>33-<br>10.<br>2, |

| 1                                            | structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| 2                                            | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 3<br>4                                       | 6. Building-mounted small wind energy conversion systems by admin site plan review and subject to the requirements of section 21.45.47                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                           |
| 5                                            | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 6<br>7<br>8<br>9<br>10<br>11                 | (GAAB 21.05.050.J; AO No. 77-355; AO No. 78-28; AO No. 78-169; AO No. 81-67(S) 81-143; AO No. 83-210; AO No. 85-18; AO No. 85-23; AO No. 85-91, 10-1-85; AO No. 8 17-86; AO No. 86-90; AO No. 87-62; AO No. 88-49(S); AO No. 88-171(S-1), 12-31-88 88-147(S-2); AO No. 96-131(S), § 2, 10-22-96; AO No. 99-62, § 17, 5-11-99; AO No. 185(S), § 16, 2-28-06; AO No. 2005-124(S-1A), § 19, 4-18-06; AO No. 2006-64(S-1), §§ 12-06)                                                                                                                                                                                                                  | 5-173, 3-<br>; AO No.<br>lo. 2005-                        |
| 13<br>14                                     | Section 17. Anchorage Municipal Code subsection 21.40.150 is hereby americad as follows: (Subsections not affected by this ordinance are not set out unless for context.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | nded to                                                   |
| 15                                           | 21.40.150 B-2A central business district core.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                           |
| 16                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 17<br>18                                     | C. Permitted accessory uses and structures. Permitted accessory us structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ses and                                                   |
| 19                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 20<br>21<br>22                               | 4. Building-mounted small wind energy conversion systems on buildin 60 feet in height, by administrative site plan review and subject requirements of section 21.45.410.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                           |
| 23                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 24<br>25<br>26<br>27<br>28<br>29<br>30<br>31 | (GAAB 21.05.050.W; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AC 72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AC 62; AO No. 87-148; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 6, 8-8-95; AC 160, § 4, 12-8-98; AO No. 98-188, §§ 13, 1-12-99; AO No. 99-62, § 19, 5-11-99; AO 131, § 7, 10-26-99; AO No. 2001-80, § 3, 5-8-01; AO No. 2005-185(S), § 18, 2-28-06; 2005-124(S-1A), § 21, 4-18-06; AO No. 2006-49, § 1, 5-16-06; AO No. 2006-64(S-1), §§ 12-06; AO No. 2007-121(S-1), § 5, 10-23-07) | No. 87-<br>; AO No.<br>) No. 98-<br>) No. 99-<br>; AO No. |
| 33<br>34                                     | Section 18. Anchorage Municipal Code subsection 21.40.160 is hereby amer read as follows: (Subsections not affected by this ordinance are not set out unless for context.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                           |
| 35                                           | 21.40.160 B-2B central business district, intermediate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                           |
| 36                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 37<br>38                                     | C. Permitted accessory uses and structures. Permitted accessory us structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | es and                                                    |
| 39                                           | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ***                                                       |
| 40                                           | 4. Building-mounted small wind energy conversion systems on building                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | gs over                                                   |

\*\*\*

60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\*

(GAAB 21.05.050.Y; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 81-72; AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 7, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 5, 12-8-98; AO No. 98-188, §§ 4-6, 1-12-99; AO No. 99-62, § 20, 5-11-99; AO No. 99-131, § 8, 10-26-99; AO No. 99-149, § 2, 12-14-99; AO No. 2001-80, § 4, 5-8-01; AO No. 2005-185(S), § 19, 2-28-06; AO No. 2005-124(S-1A), § 22, 4-18-06; AO No. 2006-49, § 2, 5-16-06; AO No. 2006-64(S-1), § 8, 2, 3, 12-12-06; AO No. 2007-121(S-1), § 6, 10-23-07)

<u>Section 19.</u> Anchorage Municipal Code subsection 21.40.170 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

#### 21.40.170 B-2C central business district, periphery.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 5. Building-mounted small wind energy conversion systems on buildings over 60 feet in height, by administrative site plan review and subject to the requirements of section 21.45.410.

(GAAB 21.05.050.X; AO No. 77-20; AO No. 77-355; AO No. 80-57; AO No. 81-67(S); AO No. 82-49; AO No. 85-173, 3-17-86; AO No. 85-91, 10-1-85; AO No. 86-90; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 90-124; AO No. 91-1; AO No. 91-39; AO No. 91-144; AO No. 92-57; AO No. 95-68(S-1), § 8, 8-8-95; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 6, 12-8-98; AO No. 98-173, § 4, 11-3-98; AO No. 98-188, §§ 7--9, 1-12-99; AO No. 99-62, § 21, 5-11-99; AO No. 99-131, § 9, 10-26-99; AO No. 99-149, § 3, 12-14-99; AO No. 2001-80, § 5, 5-8-01; AO No. 2005-185(S), § 20, 2-28-06; AO No. 2005-124(S-1A), § 23, 4-18-06; AO No. 2006-49, § 3, 5-16-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 7, 10-23-07)

**Section 20.** Anchorage Municipal Code subsection 21.40.180 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

# 21.40.180 B-3 general business district.

- C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:
  - 3. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

\*\*\*

\*\*\*

\*\*\*

| 1 |
|---|
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 8 |
| 9 |

(GAAB 21.05.050.M; AO No. 77-355; AO No. 78-28; AO No. 80-57; AO No. 80-132; AO No. 81-67(S); AO No. 83-209; AO No. 85-18; AO No. 85-91, 10-1-85; AO No. 85-173, 3-17-86; AO No. 86-90; AO No. 86-182; AO No. 87-32; AO No. 87-62; AO No. 88-171(S-1), 12-31-88; AO No. 88-147(S-2); AO No. 92-26; AO No. 92-114; AO No. 95-68(S-1), § 9, 8-8-95; AO No. 96-107, § 1, 7-30-96; AO No. 96-131(S), § 3, 10-22-96; AO No. 98-160, § 7, 12-8-98; AO No. 99-62, § 22, 5-11-99; AO No. 2001-80, § 6, 5-8-01; AO. No. 2004-108(S), § 3, 10-26-04; AO No. 2005-185(S), § 21, 2-28-06; AO No. 2005-124(S-1A), § 24, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 21.</u> Anchorage Municipal Code subsection 21.40.200 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

# 21.40.200 I-1 light industrial district.

C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:

- 4. One free-standing small wind energy conversion system by administrative site plan review and subject to the requirements of section 21.45.410.
- 5. Building-mounted small wind energy conversion systems by administrative site plan review and subject to the requirements of section 21.45.410.

 D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:

17. Two or three free-standing small wind energy conversion systems, subject to the requirements of section 21.50.470.

\*\*\* \*\*\* \*\*\*

(GAAB 21.05.050.0; AO No. 77-355; AO No. 79-95; AO No. 81-67(S); AO No. 82-105; AO No. 84-57; AO No. 85-91, 10-1-85; AO No. 85-95; AO No. 86-50; AO No. 86-90; AO No. 87-32; AO No. 88-147(S-2); AO No. 90-50(S); AO No. 92-114; AO No. 95-68(S-1), § 11, 8-8-95; AO No. 95-76, § 1, 4-4-95; AO No. 95-194, § 1, 1-2-96; AO No. 98-160, § 9, 12-8-98; AO No. 98-173, § 5, 11-3-98; AO No. 99-62, § 24, 5-11-99; AO No. 2001-80, § 8, 5-8-01; AO No. 2004-5, § 1, 1-20-04; AO. No. 2004-108(S), § 5, 10-26-04; AO No. 2004-178(am), § 1, 1-25-05; AO No. 2005-9, § 3, 3-1-05; AO No. 2005-185(S), § 23, 2-28-06; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)

<u>Section 22.</u> Anchorage Municipal Code subsection 21.40.210 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)

21.40.210 I-2 heavy industrial district.

C. Permitted accessory uses and structures. Permitted accessory uses and

| 1                    | structures are as follows:                                                                                                                                                                                                                                                                                                            |                               |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 2                    | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 3<br>4               | 4. One free-standing small wind energy conversion system by ad<br>site plan review and subject to the requirements of section 21.4                                                                                                                                                                                                    |                               |
| 5<br>6               | 5. Building-mounted small wind energy conversion systems by ad site plan review and subject to the requirements of section 21.4                                                                                                                                                                                                       |                               |
| 7                    | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 8<br>9               | D. Conditional uses. Subject to the requirements of the cond standards and procedures of this title, the following uses may be perm                                                                                                                                                                                                   |                               |
| 10                   | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 11<br>12             | 8. Two or three free-standing small wind energy conversion system to the requirements of section 21.50.470.                                                                                                                                                                                                                           | ms, subject                   |
| 13                   | 9. Utility wind energy conversion systems.                                                                                                                                                                                                                                                                                            |                               |
| 14                   | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 15<br>16<br>17<br>18 | (GAAB 21.05.050.P; AO No. 77-355; AO No. 85-91, 10-1-85; AO No. 87-32; AO No. No. 93-148, § 4, 11-16-93; AO No. 96-60, § 1, 8-6-96; AO No. 96-125, § 1, 11-12-96; 78, § 2, 6-3-97; AO No. 99-62, § 25, 5-11-99; AO No. 2001-80, § 9, 5-8-01; AO No. § 24, 2-28-06; AO No. 2005-124(S-1A), § 26, 4-18-06; AO No. 2006-64(S-1), §§ 2, 3 | 6; AO No. 97-<br>2005-185(S), |
| 19<br>20<br>21       | Section 23. Anchorage Municipal Code subsection 21.40.240 is hereby a read as follows: (Subsections not affected by this ordinance are not set out unless for con                                                                                                                                                                     |                               |
| 22                   | 21.40.240 T transition district.                                                                                                                                                                                                                                                                                                      |                               |
| 23                   | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 24<br>25<br>26       | D. Conditional uses. Subject to the requirements of the condition<br>site plan standards and procedures of this title, the following use<br>permitted only as a conditional use:                                                                                                                                                      |                               |
| 27                   | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 28<br>29             | <ol> <li>Small wind energy conversion systems, subject to the requirements.</li> </ol>                                                                                                                                                                                                                                                | rements of                    |
| 30                   | 13. Utility wind energy conversion systems.                                                                                                                                                                                                                                                                                           |                               |
| 31                   | ***                                                                                                                                                                                                                                                                                                                                   | ***                           |
| 32<br>33<br>34<br>35 | (GAAB 21.05.050.S; AO No. 77-355; AO No. 79-25; AO No. 85-23; AO No. 85-91, No. 88-59(S); AO No. 88-171(S-1), 12-31-88; AO No. 98-160, § 10, 12-8-98; AO No. 5-11-99; AO No. 2005-185(S), § 26, 2-28-06; AO No. 2005-124(S-1A), § 28, 4-18 2006-64(S-1), §§ 2, 3, 12-12-06; AO No. 2007-121(S-1), § 12, 10-23-07)                     | 99-62, § 28,                  |
| 36                   |                                                                                                                                                                                                                                                                                                                                       |                               |
| 37<br>38             | Section 24. Anchorage Municipal Code subsection 21.40.260 is hereby at read as follows: (Subsections not affected by this ordinance are not set out unless for con-                                                                                                                                                                   |                               |

| 1              | 21.40.260 AF antenna farm district.                                                                                                                                                            |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2              | ***                                                                                                                                                                                            |
| 3<br>4         | D. Conditional uses. Subject to the requirements of the conditional use standards and procedures of this title, the following uses may be permitted:                                           |
| 5              | ***                                                                                                                                                                                            |
| 6              | 4. Utility wind energy conversion systems.                                                                                                                                                     |
| 7              | ***                                                                                                                                                                                            |
| 8<br>9         | (AO No. 88-147(S-2); AO No. 99-62, § 29, 5-11-99; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)                                                                                                      |
| 10<br>11       | Section 25. Anchorage Municipal Code subsection 21.40.270 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)               |
| 12             | 21.40.270 MC marine commercial district.                                                                                                                                                       |
| 13             | ***                                                                                                                                                                                            |
| 14<br>15       | C. Permitted accessory uses and structures. Permitted accessory uses and structures are as follows:                                                                                            |
| 16             | *** ***                                                                                                                                                                                        |
| 17<br>18       | <ol> <li>One free-standing small wind energy conversion system by administrative<br/>site plan review and subject to the requirements of 21.45.410.</li> </ol>                                 |
| 19<br>20       | <ol> <li>Building-mounted small wind energy conversion systems by administrative<br/>site plan review and subject to the requirements of 21.45.410.</li> </ol>                                 |
| 21             | *** *** ***                                                                                                                                                                                    |
| 22<br>23<br>24 | D. Conditional uses. Subject to the requirements of the conditional use and site<br>plan standards and procedures of Sections 21.15.030 and 21.50.020, the<br>following uses may be permitted: |
| 25             | ***                                                                                                                                                                                            |
| 26             | 2. Conditional uses with general standards in Section Chapter 21.50:                                                                                                                           |
| 27             | ***                                                                                                                                                                                            |
| 28<br>29       | f. Two or three free-standing small wind energy conversion systems, subject<br>to the requirements of section 21.50.470.                                                                       |
| 30             | ***                                                                                                                                                                                            |
| 31<br>32       | (AO No. 98-160, § 11, 12-8-98; AO No. 99-62, § 30, 5-11-99; AO No. 2006-64(S-1), §§ 2, 3, 12-12-06)                                                                                            |
| 33             |                                                                                                                                                                                                |
| 34<br>35       | <u>Section 26.</u> Anchorage Municipal Code subsection 21.40.280 is hereby amended to read as follows: (Subsections not affected by this ordinance are not set out unless for context.)        |
| 36             | 21.40.280 MI marine industrial district.                                                                                                                                                       |

| 1                                      | *** | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                         | ***                                             |
|----------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| 2<br>3                                 | C.  | Permitted accessory uses and structure structures are as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | s. Permitted accessory                                                                                                                  | uses and                                        |
| 4                                      | *** | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                         | ***                                             |
| 5<br>6                                 |     | 4. One free-standing small wind energy of site plan review and subject to the requ                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | onversion system by adm<br>irements of 21.45.410.                                                                                       | <u>inistrative</u>                              |
| 7<br>8                                 |     | <ol> <li>Building-mounted small wind energy consite plan review and subject to the requ</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                         | <u>inistrative</u>                              |
| 9                                      | *** | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                         | ***                                             |
| 10<br>11<br>12                         |     | Conditional uses. Subject to the recondards and procedures of sections 21.15 as may be permitted:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | uirements of the conditi<br>5.030 and 21.50.020, the                                                                                    |                                                 |
| 13                                     | *** | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                         | ***                                             |
| 14<br>15                               |     | <ol> <li>Two or three small wind energy or<br/>requirements of section 21.50.470.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | onversion systems, subje                                                                                                                | ct to the                                       |
| 16                                     |     | <ol><li>Utility wind energy conversion systems.</li></ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                         |                                                 |
| 17                                     | *** | ***                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                         | ***                                             |
| 18                                     | (AC | No. 99-62, § 31, 5-11-99; AO No. 2006-64(S-1), §§                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2, 3, 12-12-06)                                                                                                                         |                                                 |
| 19                                     |     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                         |                                                 |
| 20<br>21                               |     | 7. Anchorage Municipal Code chapter 2 on to read as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 1.45 is hereby amended                                                                                                                  | to add a                                        |
| 22                                     | 21. | 45.410 Small wind energy conversion                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | systems.                                                                                                                                |                                                 |
| 23<br>24<br>25                         |     | Purpose. The purpose of this section is to small wind energy conversion systems (Water encourage the development of small wind the contract of the contract | ECS) as defined in this C                                                                                                               |                                                 |
| 26<br>27<br>28<br>29<br>30<br>31<br>32 |     | Approval Process. Small WECS are subserview. Sufficient information shall be proched that the standards below have been met. approval if the standards of this section has sized and sited the system to reduce to the maximum extent feasible. Structure assured through the building permit process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ovided with the application The planning director shore been met, and that the a impacts on surrounding pal stability of the foundation | to show<br>nall grant<br>applicant<br>roperties |
| 33                                     | C.  | Submittal Requirements.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                         |                                                 |
| 34<br>35                               |     | A description of the project, including capacity of the WECS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | the maximum rated powe                                                                                                                  | er output                                       |
| 36                                     | ;   | 2. The make, model, an illustrative photo                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | graph or brochure, manuf                                                                                                                | acturer's                                       |

specifications including noise decibels data for the proposed WECS, the support structure, and method of attachment to the ground and/or structure.

- Elevation drawing of the WECS showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
- 4. If the WECS is not certified as meeting the IEEE 1547 standard (Institute of Electrical and Electronic Engineers), then an assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication is required.
- 5. Applications shall include a visual impact analysis of the proposed WECS as installed, which shall include color photographs of the proposed site from at least two locations accurately depicting the existing conditions. A computerized photographic simulation, demonstrating any visual impacts from strategic vantage points, is desirable and may be required at the Director's discretion. The applicant shall indicate any visual screening proposed to be incorporated into the project that is intended to lessen the system's visual prominence.

# D. Building-Mounted WECS.

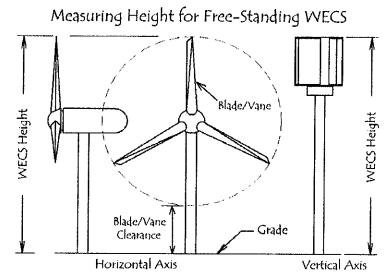
- 1. In residential districts on lots less than 20,000 square feet, a building mounted WECS shall not exceed the maximum height for principal structures of the underlying zoning district by more than 10 feet.
- 2. On buildings of 60 feet or less in height, building mounted WECS shall be no taller than 10 feet.
- On buildings over 60 feet in height, building mounted WECS shall be set back from the structure edge by at least two feet for every one foot of height greater than 10 feet.
- 4. Building-mounted WECS shall meet the design standards for free-standing WECS in subsection E.5. below, with the exception of E.5.e.

# E. Free-Standing WECS.

- Number of WECS. Only one small WECS per lot is allowed in residential zoning districts. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- 2. Minimum Lot Area and Maximum Height.
  - a. The minimum lot area for a small WECS is 20,000 square feet.

38

- b. The height of a small WECS shall be determined by compliance with the setback provisions of subsection E.4. below. In no instance shall a small WECS exceed 95 feet in height.
- c. Height shall measured as depicted in the illustration. Structures shall not interfere with Aviation Federal Administration Regulations airport approaches. no case shall the height exceed manufacturer's specifications.



3. Blade or Vane
Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 25 feet above grade. No blades may extend over public sidewalks/trails.

#### 4. Setbacks.

- a. Except as allowed in 4.b. below, all WECS shall be setback from all property lines at least 1.1 times the height of system
- b. On lots abutting water bodies such as lakes or ponds, the WECS shall be setback at least 15 feet from the water body edge, but the setback distance required in 4.a. above may extend into the water body, provided that the full extent of the setback distance falls within the water body.
- c. All WECS shall be located so that the principal structure is between the WECS and the front property line.
- d. All systems shall be setback at least 1.1 times the height of the system from all overhead power and telecommunication lines, and any telecommunications towers.

#### 5. Design Standards.

 Operational noise shall not exceed 50dBH at property line except for short-term high wind speed events such as storms.

- b. All systems shall be equipped with manual and automatic (mechanical or electrical) over-speed controls to limit the blade rotation speed to within the design limits of the system.
- c. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- d. Lattice type towers and towers using guy wires are prohibited.
- e. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground.
- f. No tower shall be illuminated unless required by a state or federal agency, such as the FAA.
- g. All structures in a project shall be finished in a single, non-reflective, matte finished, neutral color.
- h. No commercial or non-commercial advertisements, signs, or other messages shall be placed or painted on the tower, rotor, generator or tail vane, except that a system or tower's manufacturer's logo may be displayed on a system generator housing in an unobtrusive manner.
- F. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.
- <u>Section 28.</u> Anchorage Municipal Code chapter 21.50 is hereby amended to add new sections to read as follows:

# 21.50.470 Small wind energy conversion systems—multiple free-standing towers.

- A. *Purpose*. The purpose of this section is to provide standards for multiple free-standing small WECS in industrial districts and in the PLI district.
- B. Submittal Requirements. Multiple free-standing small WECS in industrial districts and in the PLI districts shall provide the minimum application information required by section 21.50.480B.
- C. Maximum number of WECS. No more than three WECS shall be allowed on any one lot. Adjoining lots under the same ownership shall be treated as one lot for purposes of this limitation.
- D. Standards. Multiple free-standing small WECS shall meet the standards of section 21.45.410E.

E. Abandoned or unsafe wind energy conversion systems. Any system that is not operated for a continuous period of 12 months shall be considered abandoned and shall be dismantled and removed from the property at the expense of the property owner.

#### 21.50.480 Utility wind energy conversion systems.

- A. *Purpose*. The purpose of this section is to provide standards for utility scale wind energy conversion systems (WECS) generally utilizing multiple towers designed to produce electric power as a public or private utility.
- B. Submittal Requirements. In addition to the minimum application information set forth in 21.15.030.C, the following shall be provided:
  - For each WECS model proposed, t[T]he make, model, an illustrative photograph or brochure, manufacturer's specifications including noise decibels data for the proposed WECS, and drawings of the support structure stamped by a structural engineer registered in the State of Alaska[FOR EACH WECS MODEL PROPOSED].
  - Elevation drawing of each WECS model showing total height, turbine dimensions, tower and turbine colors, distance between ground and lowest point of any blade, and if proposed, the location of ladders, climbing pegs, and access doors.
  - 3. An assessment of potential electromagnetic interference with microwave, radio, television, personal communication systems and other wireless communication.
  - 4. An analysis of impacts on local wildlife shall be prepared, regarding impacts anticipated during construction, reconstruction, modification or operation of WECS. Wildlife impacts to be considered shall include, at a minimum, anticipated impacts on birds.
  - 5. If any habitable building is located within 1,300 feet of any proposed Utility WECS unit, then the applicant shall conduct a study on potential shadow flicker. The study shall identify locations where shadow flicker may be caused by the WECS and the expected durations of the flicker at these locations. The study shall identify areas where shadow flicker may interfere with habitable buildings and describe measures that shall be taken to eliminate or mitigate the problems. The applicant has the burden of proving that shadow flicker will not negatively impact neighboring uses.
  - 6. Applications shall include a visual impact analysis of the proposed WECS as installed, which may include a computerized photographic simulation, demonstrating any visual impacts from strategic vantage points. Color photographs of the proposed site from at least two locations accurately depicting the existing conditions shall be included. The visual analysis

- shall also indicate the color treatment of the system's components and any visual screening incorporated into the project that is intended to lessen the system's visual prominence.
- 7. A noise analysis by a competent acoustical consultant documenting the noise levels associated with the proposed WECS. The study shall document projected noise levels at property lines. The noise analysis shall include low frequency noise.
- C. Height. The height as measured from grade to the highest point of the fully operational system, including the turbine vane(s), shall not exceed 450 feet in the AF, W, T, and PLI zoning districts, or 200 feet in any other district in which a Utility WECS may be approved. A Utility WECS shall not interfere with Federal Aviation Administration Regulations in the vicinity of an airport. In no case shall the height exceed manufacturer's specifications.
- D. Blade or Vane Clearance. Lowest point of moving elements, such as blades or vanes, shall be at least 30 feet above grade.

#### E. Setbacks.

- 1. All WECS shall setback from all residential property lines at least 3.0 times the height of system, and from all non-residential property lines a minimum of 2.0 times the height of the system.
- 2. All systems shall be at least 325 feet from any telecommunications towers.
- 3. The tower shall maintain a minimum separation distance equal to 1.1 times the height of system from all overhead power and telecommunication lines.

#### F. Design Standards.

- Except for short-term high wind speed events such as storms, operational noise shall not exceed 50dBH at any property line adjacent to a residential zoning district, and 60dBH at any property line adjacent to a nonresidential zoning district[OPERATIONAL NOISE SHALL NOT EXCEED 60DBH AT PROPERTY LINE EXCEPT FOR SHORT-TERM HIGH WIND SPEED EVENTS SUCH AS STORMS].
- 2. The rotating turbine shall not produce vibrations that are humanly perceptible beyond the property lines of the site.
- 3. Lattice type towers and towers using guy wires are prohibited.
- 4. All power transmission and telemetry lines from the tower to any building or other structure shall be placed underground, unless otherwise allowed by the planning and zoning commission.

272829

ATTEST:

Municipal Clerk

# **Comments Received**

# **MUNICIPALITY OF ANCHORAGE**



Anchorage Metro Area Transportation Solutions

Traffic Department Transportation Planning Division Permit & Development Center, 4700 Elmore Road P.O. Box 196650, Anchorage, AK 99519-6650 voice (907) 343-7994, facsimile (907) 343-7998 e-mail: BrewerTM@muni.org

Date:

17 February 2010

To:

Department of Planning, Zoning & Platting Division

Thru:

Mada Angell, Assistant Traffic Engineer

From:

Teresa Brewer, Associate Planner

Subject:

Title 21 Amendment for Wind Energy Conversion Systems, Case No.

2010-038, Agency Review comments

Thank you for the opportunity to comment upon the above-referenced project. Transportation Planning staff has reviewed the Title 21 Amendment for Wind Energy Conversion Systems, Case No. 2010-038 and we have the following comments:

A. No comment. Note: It is assumed that stand alone systems will not be placed near access/egress points, will not obstruct pedestrian and non-motorized movement (i.e. be placed within sidewalk/separated path facilities), and will not hinder or limit vehicular movement and driver's line-of-sight.



# **FLOOD HAZARD REVIEW SHEET**

| Date     | e: 03/04/10                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cas      | e: 2010-038                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Floo     | d Hazard Zone: NA                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Мар      | Number: NA                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|          | Portions of this lot are located in the floodplain as determined by the Federal Emergency Management Agency.                                                                                                                                                                                                                                                                                                                                         |
|          | Flood Hazard requests that the following be added as a condition of approval:                                                                                                                                                                                                                                                                                                                                                                        |
|          | "Portions of this subdivision are situated within the flood hazard district as it exists on the date hereof. The boundaries of the flood hazard district may be altered from time to time in accordance with the provisions of Section 21.04.080.D.4 (Anchorage Municipal Code). All construction activities and any land use within the flood hazard district shall conform to the requirements of Chapter 21.04.080.D (Anchorage Municipal Code)." |
|          | A Flood Hazard permit is required for any construction in the floodplain.                                                                                                                                                                                                                                                                                                                                                                            |
|          | Other:                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| $\times$ | I have no comments on this case.                                                                                                                                                                                                                                                                                                                                                                                                                     |
|          |                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Revi     | ewer: Jeffrey Urbanus, CFM                                                                                                                                                                                                                                                                                                                                                                                                                           |



### MUNICIPALITY OF ANCHORAGE

Development Services Department
Right of Way Division

Phone: (907) 343-8240 Fax: (907) 343-8250



DATE:

March 8, 2010

TO:

Planning Department, Zoning and Platting Division

THRU:

Jack L. Frost, Jr., Right of Way Supervisor

FROM:

Lynn McGee, Senior Plan Reviewer

**SUBJ:** 

Comments on Planning and Zoning Commission case(s) for April 5, 2010.

Right of Way Division has reviewed the following case(s) due March 8, 2010.

### 10-028 International Industrial Center, Tract 2, grid 1929

(Rezoning Request, I-1 to I-2)

Right of Way Division has no comments at this time.

Review time 15 minutes.

#### 10-031 Gregson, Lot 1, grid 1632

#### (Site Plan Review, Large Retail/Commercial Establishment)

The site plan and the traffic analysis are predicated on the on Benson Boulevard site and the larger plan set has the facility located on the Old Seward Highway.

Review time 30 minutes.

#### 10-033 Ordinance Amendment

#### (Title 21 for Buffer Landscaping for Child Care Centers)

Right of Way Division has no comments at this time.

Review time 15 minutes.

# 10-036 Providence-Chester Creek, Tract A, grid 1634, 1635, 1734, & 1735

(Conditional Use, Master Plan Approval and Medical Buildings)

Right of Way Division has no comments at this time.

Review time 15 minutes.

# 10-038 Ordinance Amendment

# (Title 21 for Wind Energy Conversion Systems)

A recent meeting and plan review has shown the Fire Island Wind Energy Project proposal is not a registered public utility as defined and controlled by the Regulatory Commission of Alaska. The RCA requirement is possibly germane to this rewrite because the installation of the connections to the utility grid in public places, as defined in Title 24, is limited to utilities providing service to the public.

Can't find the referenced section 21.45.410 to complete the review.

Review time 15 minutes.

**Content ID: 009024** 

Type: Ordinance - AO

AN ORDINANCE AMENDING ANCHORAGE MUNICIPAL CODE SECTIONS 21.35.020 DEFINITIONS AND RULES OF CONSTRUCTION, 21.40 ZONING DISTRICTS, 21.45 SUPPLEMENTARY DISTRICT REGULATIONS, AND 21.50

Title: STANDARDS FOR CONDITIONAL USES AND SITE PLANS, TO DEFINE WIND ENERGY CONVERSION SYSTEMS (WECS), TO ALLOW WECS IN CERTAIN ZONING DISTRICTS AS ACCESSORY USES BY ADMINISTRATIVE SITE PLAN REVIEW AND AS CONDITIONAL USES, TO SET GENERAL

STANDARDS AND CONDITIONAL USE STANDARDS.

Author: perrysu Initiating Planning Dept:

**Description: Wind Energy Conversion Systems (WECS) Ordinance** 

**Date** 5/7/10 2:55 PM **Prepared:** 

**Director** Jerry T. Weaver, Jr. **Name:** 

Assembly 6/22/10 Meeting Date:

Public 7/13/10 **Hearing Date:** 

| Workflow Name           | Action Date         | Action  | <u>User</u>         | Security<br>Group | Content<br>ID |
|-------------------------|---------------------|---------|---------------------|-------------------|---------------|
| Clerk_Admin_SubWorkflow | 6/11/10 12:03<br>PM | Exit    | Nina Pruitt         | Public            | 009024        |
| MuniManager_SubWorkflow | 6/11/10 12:03<br>PM | Approve | Nina Pruitt         | Public            | 009024        |
| Legal_SubWorkflow       | 6/11/10 11:58<br>AM | Approve | Dean Gates          | Public            | 009024        |
| Finance_SubWorkflow     | 6/8/10 7:04 PM      | Approve | Lucinda Mahoney     | Public            | 009024        |
| OMB_SubWorkflow         | 6/7/10 4:20 PM      | Approve | Cheryl Frasca       | Public            | 009024        |
| OCPD_SubWorkflow        | 6/7/10 11:02<br>AM  | Approve | Tawny<br>Klebesadel | Public            | 009024        |
| Planning_SubWorkflow    | 6/3/10 3:41 PM      | Approve | Jerry Weaver Jr.    | Public            | 009024        |
| AllOrdinanceWorkflow    | 6/3/10 3:24 PM      | Checkin | Susan Perry         | Public            | 009024        |
| OCPD_SubWorkflow        | 5/10/10 12:59<br>PM | Reject  | Tawny<br>Klebesadel | Public            | 009024        |
| Planning_SubWorkflow    | 5/7/10 3:32 PM      | Approve | Jerry Weaver Jr.    | Public            | 009024        |
| AllOrdinanceWorkflow    | 5/7/10 3:00 PM      | Checkin | Susan Perry         | Public            | 009024        |