

**CITY OF LAKE ELMO  
COUNTY OF WASHINGTON  
STATE OF MINNESOTA**

**ORDINANCE NO. 08-198**

**AN ORDINANCE AMENDING THE LAKE ELMO CITY CODE OF ORDINANCES BY  
ADDING ADDITIONAL STANDARDS FOR SOLAR ENERGY SYSTEMS AND SOLAR  
FARMS**

**SECTION 1. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article II; Section 154.012; Subd. (B) (12) by removing the current definition of Solar Equipment and adding the following to a new Subd. (B) (10): Alternative Energy:**

*Solar Farm.* A commercial facility that converts sunlight into electricity, whether by photovoltaic (PV), concentrating solar thermal devices (CST), or other conversion technology, for the principal purpose of sales of generated electricity to off-site customers.

*Solar Energy System.* A device or structural design feature, a primary purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating, cooling, water heating, or for power generation.

**SECTION 2. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article II; Section 154.310 (B) (12) by moving the current standards of Solar Energy Systems to a new Section entitled Alternative Energy and to read as follows.**

*Solar Energy Systems.* Solar energy systems are permitted accessory uses in all districts, provided the system or equipment is in compliance with standards set forth below.

1. *Permits.* A building permit shall be obtained before the installation of solar arrays or panels on any property. All solar energy systems shall be installed and components labeled in accordance with the Minnesota State Electric Code Section 690.
- ~~2. *Signage.* Properties with solar energy systems shall have at least one (1) sign posted at the entrance of the property or structure on which the solar energy system is mounted, containing the following information: voltage information, manufacturer's name, emergency telephone number, and emergency shutdown procedures.~~
3. *Rooftop or Building Integrated Solar Energy Systems.*
  - a. These systems are permitted accessory uses in all districts in which buildings are permitted.
  - b. *Visibility, Commercial Installations.* Commercial rooftop systems shall be placed on the roof to limit visibility from the public right-of-way or to blend into the roof design, provided that minimizing visibility still allows the property owner to reasonably capture solar energy.
4. *Ground-Mount Solar Energy Systems.*
  - a. Ground-mount energy systems are permitted accessory uses in all districts where buildings are permitted.

- b. Ground-mount energy systems must comply with all accessory setback, height and lot coverage restrictions unless otherwise stated herein or a variance is granted and shall not encroach on any City easement unless an easement encroachment agreement approved by the Planning Director or his/her designee after review and approval from the City Engineer or his/her designee has been executed. A certificate of zoning compliance is required for all solar energy systems unless a conditional use permit is required as stated herein.
        - i. The collector surface of a ground-mount system and any foundation, compacted soil, or other component of the solar installation that rests on the ground is considered impervious surface. Vegetated ground under the collector surface can be used to mitigate stormwater runoff.
      - c. *Exemptions.* Solar energy systems of a size of six square feet or less may be exempt from zoning district setback requirements.
- 5. *Interconnection Agreement.* All electric solar energy systems that are connected to the electric distribution or transmission system through the existing service of the primary use on the site shall obtain an interconnection agreement with the electric utility in whose service territory the system is located. Solar energy systems connected directly to the distribution or transmission system must obtain an interconnection agreement with the interconnecting electric utility. Systems that are not directly connected to the grid or not connected to the electric system of a building that is connected to the grid are exempt from this requirement.
- 6. *Glare.* Glare produced from any solar energy system shall be minimized from affecting adjacent or nearby properties. Measures to minimize glare include selective placement of the system, screening of the solar array, modifying the orientation of the system, reducing use of the reflector system, or other remedies that limit glare.
  - a. *Mirror Reflecting Designed Solar Energy Systems.* Mirror reflecting designed solar energy systems are permitted only on properties with ten (10) acres or larger. A conditional use permit is required and more restrictive setback standards may be required upon review of the conditional use permit.
- 7. *Code Requirements.* Electric solar energy system components that are connected to a building electric system must have an Underwriters Laboratory (UL) listing. All solar installations must comply with the Minnesota and National Electric Code. All rooftop or building integrated solar energy systems require a building permit and shall comply with the Minnesota Building Code. Solar thermal hot water systems shall comply with applicable Minnesota State Plumbing Code requirements.
- 8. *Decommissioning.* A decommissioning plan shall be required to ensure that facilities are properly removed after their useful life. Decommissioning of solar panels must occur in the event they are not in use for 12 consecutive months. The plan shall include provisions for removal of all structures and foundations, restoration of soil and vegetation and a plan ensuring financial resources will be available to fully decommission the site. The City may require the posting of a bond, letter of credit or the establishment of an escrow to ensure proper decommissioning.
- 9. *Easements Allowed.* Solar easements may be filed, consistent with Minnesota Stat. Chapter 500 Section 30. Any building owner can purchase an easement across neighboring properties to protect access to sunlight. The easement is purchased or granted by owners of neighboring properties and can apply to buildings, trees, or other structures that would diminish solar access.

**SECTION 3. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article II; by adding the following Section 154.915:**

**§ 154.915 SOLAR FARMS**

1. *Conditional or Interim Use Permit.* A conditional or interim use permit subject to the zoning district in which the proposed solar farm is to be located.
2. *Minimum Lot Size, Setbacks, and Screening Requirements.* Solar farms are limited to properties at least ten acres in size. Solar farms must maintain a setback of at least 50 feet from adjacent properties and be screened and fenced as determined by the City from adjacent residential properties.
3. *Stormwater and NPDES.* Solar farms are subject to the City’s and watershed district’s stormwater management and erosion and sediment control provisions and NPDES permit requirements.
4. *Foundations.* A qualified engineer shall certify that the foundation and design of the solar panels, racking and support is within accepted professional standards, given local soil and climate conditions.

**SECTION 4. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Article XI: Rural Districts; Section 154.401: Permitted, Conditional, and Interim Uses to read as follows.**

	RT	A	RR	RS	RE	Standard
<b>Residential Uses</b>						
<b>Household Living</b>						
Single-Family Detached Dwelling	P	P	P	P	P	154.404 (A)
Secondary Dwelling	-	P	-	-	-	154.404 (D)
<b>Services</b>						
Self Service Storage Facility	I <sup>a</sup>	I <sup>a</sup>	-	-	-	154.404 (G)
<b>Recreation</b>						
Outdoor Recreation Facility	-	C	-	-	-	154.306 (C)
Parks and Open Areas	P	P	P	P	P	154.012 (B) (7)
Restricted Recreation	-	C	-	-	-	154.306 (B)
<b>Agricultural and Related Uses</b>						
Agricultural Entertainment Business	I	I	I	-	-	154.914
Agricultural Production	P	P	P	-	-	154.012 (B) (9)
Agricultural Sales Business	I	I	I	-	-	154.913
Agricultural Services	C	C	-	-	-	154.404 (J)
Forestry Operations	-	P	-	-	-	154.012 (B) (9)
Greenhouses, Non Retail	C	C	C	-	-	154.012 (B) (9)
Solar Farm	I	C	C	-	-	154.915
Wayside Stand	P	P	P	-	-	154.012 (B) (9)
<b>Industrial and Extractive Uses</b>						
Motor Freight and Warehousing	I <sup>a</sup>	-	-	-	-	154.404 (G)
<b>Accessory Uses</b>						
Bed and Breakfast	C	C	C	-	-	154.012 (B) (12)

	RT	A	RR	RS	RE	Standard
Domestic Pets	P	P	P	P	P	154.012 (B) (12)
Family Day Care	P	P	P	P	P	154.012 (B) (12)
Home Occupation	P	P	P	P	P	154.012 (B) (12)
Kennel, Private	C	C	C	-	-	154.012 (B) (12)
Solar Energy Systems	P	P	P	P	P	154.310 (C)
Stable, Private	C	C	C	-	-	154.012 (B) (12)
Swimming Pools, Hot Tubs, Etc.	P	P	P	P	P	154.012 (B) (12)
Temporary Sales	P	P	P	P	P	154.012 (B) (12)
Water-Oriented Accessory Structures	P	P	P	P	P	154.800
Other Structures Typically Incidental and Clearly Subordinate to Permitted Uses	P	P	P	P	P	
Commercial Wedding Ceremony Venue	I	I	I			154.310 (D)

Notes to Rural Districts Table 9-2

- a. 1 dwelling unit per 40 acres applies to all non-farm dwellings. In addition to non-farm dwellings (1 per 40 acres), each farm is allowed one farm dwelling per farm.
- b. Nominal 40 acres: a 40-acre parcel not reduced by more than 10% due to road rights-of-way and survey variations.
- c. Nominal 10 acres: a 10-acre parcel not reduced by more than 10% and/or a 10-acre parcel located on a corner or abutting a street on 2 sides not reduced by more than 15% due to road rights-of-way and survey variations.
- d. The minimum lot size for lots served by public sanitary sewer shall be 24,000 square feet per residential unit.
- e. A minimum of 1.25 acres of land above the flood plain or free of any drainage easements is required.
- f. Lots must be configured to contain a circle with a diameter of 250 feet minimum; the ratio of lot length to width shall be a maximum of 3:1 – Flag lots are prohibited.
- g. Corner properties: The side façade of a corner building adjoining a public street shall maintain the front setback of the adjacent property fronting upon the same public street, or the required front yard setback, whichever is less. If no structure exists on the adjacent property, the setback shall be as shown in the table.
- h. Setback standards do not apply to solar farms. 154.915 should be referenced for these specific standards.

**SECTION 5. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Section 154.802 by amending the following:**

**§ 154.802 PERMITTED, CONDITIONAL, AND INTERIM USES.**

Table 18-1 lists all permitted, conditional, and interim uses allowed in the Closed Landfill Restricted zoning district. “P” indicates a permitted use, “C” a conditional use, and “I” an interim use. Uses not

so indicated shall be considered prohibited. Cross-references listed in the table under “Standards” indicate the location within this Ordinance of specific development standards that apply to the listed use.

	CLR	Standard
Closed Landfill Management	P	154.012 (B) (10)
Solar Farms	C	154.802, 154.803 (A), 154.915

**SECTION 6. The City Council of the City of Lake Elmo hereby amends Title XV: Land Usage; Chapter 154: Zoning Code; Section 154.802 by adding the following:**

**§ 154.803 LOT DIMENSIONS AND BUILDING BULK REQUIREMENTS.**

	CLR
<b>Structure setback requirements (feet)</b>	
Front yard	50
Side yard	50
Rear yard	25

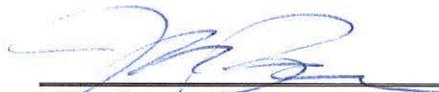
**§ 154.804 SITE DESIGN AND DEVELOPMENT STANDARDS.**

*A. Solar Farms.* Proposed locations and plans for Solar Farms must be approved by both the City and Minnesota Pollution Control Agency (MPCA). Required buffer width may be waived through conditional use permit approval

**SECTION 6. Effective Date.** This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

**SECTION 7. Adoption Date.** This Ordinance 08-198 was adopted on this 20<sup>th</sup> day of Feb. 2018 by a vote of 5 Ayes and 0 Nays.

**LAKE ELMO CITY COUNCIL**

  
 \_\_\_\_\_  
 Mike Pearson, Mayor

ATTEST:



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Julie Johnson, City Clerk

This Ordinance 08-198 was published on the 29<sup>th</sup> day of February, 2018.