RESOLUTION 2018-118

A resolution approving Boulder County Land Use Docket DC-18-0002 Proposed Amendments to the Boulder County Land Use Code related to Solar Energy Systems

Recitals

A. The Board of County Commissioners of Boulder County (the “Board”) is authorized to amend the text of County's Zoning Regulations according to the procedures in the regulations and C.R.S. § 30-28-112, -116 and -133.

B. Under other statutory authority, the Board is empowered to adopt regulations related to the control of land use, including but not limited to Article 65.1 of Title 24 (Areas and Activities of State Interest); Articles 67 and 68 of Title 24 (Planned Unit Developments and Vested Rights); Article 20 of Title 29 (Local Land Use Enabling Act); Articles 11 and 15 of Title 30 (County Powers and Police Power); Article 1 of Title 32 (Special District Control); and Article 2 of Title 43 (County Highways), C.R.S.

C. By Resolution 94-185, adopted October 18, 1994, the Board approved a unified Boulder County Land Use Code (the “Land Use Code”), which the Board has amended on subsequent occasions.

D. In the present Docket, DC-18-0002 (the “Docket”), authorized by the Board at a public meeting on May 10, 2018, Boulder County Land Use staff proposed text amendments to Article 3, Article 4, and Article 18 of the Land Use Code, as set forth in the Boulder County Land Use Department’s memorandum and recommendation dated October 25, 2018, with its attachments (the “Staff Recommendation”).

E. The Boulder County Planning Commission (the “Planning Commission”) held a duly noticed public hearing on the Proposed Amendments on September 17, 2018. The Planning Commission recommended approval of the Proposed Amendments, and certified the Docket for action to the Board.

F. On October 25, 2018, the Board held a duly noticed public hearing on the Docket and considered the Staff Recommendation, documents and testimony presented by the County Land Use Department staff (the “Public Hearing”). Two members of the public spoke at the Public Hearing.

G. Based on the Public Hearing, the Board finds that the Proposed Amendments included in Exhibit A meet the criteria for text amendments contained in Article 16 of the Land Use Code, in that the existing text is in need of amendment; the Proposed Amendments are not contrary to the
intent and purpose of the Land Use Code; and the Proposed Amendments are in accordance with the Boulder County Comprehensive Plan.

Therefore, the Board resolves:

1. The Proposed Amendments in Exhibit A are approved for incorporation into the Land Use Code, effective November 27, 2018.

2. The Board desires to review the Proposed Amendments annually, or as otherwise determined necessary, and directs Land Use staff to report to the Board on implementation of the Proposed Amendments one year from the date of this adoption.

3. Under §30-28-125, C.R.S., the Board authorizes the Clerk to the Board to transmit this Resolution, with its Exhibit A, to the County Clerk and Recorder for filing and appropriate indexing. This transmittal should state recording Reference No. 2735571, the recording of the Boulder County Land Use Code on November 4, 2005, which this transmittal amends.

A motion to approve the Proposed Amendments, was made at the Public Hearing by Commissioner Jones, seconded by Commissioner Gardner, and passed by a 2-1 vote, with Commissioners Jones and Gardner voting to approve and Commissioner Domenico voting not to approve.

ADOPTED as a final decision of the Board on this 27th day of November, 2018.

BOARD OF COUNTY COMMISSIONERS OF BOULDER COUNTY:

(Opposed)

Cindy Domenico, Chair

Elise Jones, Vice Chair

Deb Gardner, Commissioner

ATTEST:

Cecilia Sacey

Clerk to the Board

(DocuSign - Cathy Peterson) Wed 11/21/18 @ 9:52 AM
Exhibit A

Existing Solar-related Land Use Code Text

Article 4:

4-101 Forestry, 4-102 Agricultural, 4-110 Commercial, 4-111 Light Industrial, 4-112 General Industrial

(F) Additional Provisions

5. Small Wind-Powered Energy Collectors Systems, and Small Solar Energy Collectors Systems or Solar Gardens, Medium Solar Energy Systems or Solar Gardens, and Large Solar Energy Systems can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

4-103 Rural Residential, 4-104 Estate Residential, 4-105 Suburban Residential, 4-106 Multi-family, 4-107 Manufactured Home Park, 4-108 Transitional, 4-109 Business, and 4-117 Mountain Institutional

(F) Additional Provisions

Small Wind-Powered Energy Collectors Systems, and Small Solar Energy Collectors Systems or Solar Gardens can be approved on parcels with existing principal uses without Special Review approval, however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

4-514 Utility and Public Service Uses

F. Large Solar Energy System

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the transmission and distribution of transformed energy, and which may be used for one or more uses.

2. Districts Permitted: By Special Review in GL, LL, C, A, F if the system has a rated capacity greater than 2 MW but does not meet the Land Use Code definition of Power Plant

3. Parking Requirements: To be determined through the review

4. Loading Requirements: None

5. Additional Provisions:

a. This use is required to be located on a building lot or an outlot platted for this purpose.

b. Ground mounted solar energy collectors may not be located within utility easements or ditch easements unless authorized in writing by the easement holder.

c. This use shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways.

d. This use is permitted in the Agricultural or Forestry zone districts if the area used has not been contaminated or damaged making it unsuitable for agricultural, forestry, or residential uses. These areas may include former landfills, brownfields, Superfund sites, and the like.
Existing Solar-related Land Use Code Text

e. This use cannot be located on areas with the following Boulder County Comprehensive Plan designations: Agricultural Lands of National Importance, Agricultural Lands of Statewide Importance, Agricultural Lands of Local Importance, Natural Landmarks and Areas, or Critical Wildlife Habitats.

f. Roof-mounted systems proposed as a principal use may be mounted on any legal structure, subject to review through the building permit process. Roof-mounted systems shall be mounted as flush as possible to the roof. In order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).

g. Applications shall be reviewed with special consideration given to lands identified as Open Corridor, Roadside in the Boulder County Comprehensive Plan.

H. Medium Solar Energy System or Solar Garden

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the transmission and distribution of transformed energy, and which may be used for one or more users.

2. Districts Permitted: By Special Review in GI, LI, C, A, F if the rated capacity of the system will be at least 500 kW but not more than 2 MW

3. Parking Requirements: To be determined through the review

4. Loading Requirements: None

5. Additional Provisions:

a. This use is required to be located on a building lot or an outlet platted for this purpose.

b. Ground-mounted solar energy collectors may not be located within utility easements or ditch easements unless authorized in writing by the easement holder.

c. This use shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways.

d. Medium solar energy systems in the Forestry zone district will be permitted only if the area has been contaminated or damaged in the past making it unsuitable for agricultural, forestry, or residential uses. These areas may include former landfills, brownfields, superfund sites, and the like.

e. Medium solar energy systems cannot be located on areas with the following Boulder County Comprehensive Plan designations: Agricultural Lands of National Importance, Agricultural Lands of Statewide Importance, Agricultural Lands of Local Importance, Natural Landmarks and Areas, or Critical Wildlife Habitats.

f. Applications shall be reviewed with special consideration given to lands identified as Open Corridor, Roadside in the Boulder County Comprehensive Plan.

h. Roof-mounted systems proposed as a principal use may be mounted on any legal structure, subject to review through the building permit process. Roof-mounted systems shall be mounted as flush as possible to the roof in order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).

M. Small Solar Energy System or Solar Garden

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the transmission and distribution of transformed energy.
Existing Solar-related Land Use Code Text

2. Districts Permitted: By Site Plan Review in all districts if the system will have a rated capacity of 100 kW or less. By Limited Impact Special Review in all districts if the system will have a rated capacity greater than 100 kW but less than 500 kW.

3. Parking Requirements: To be determined through the review.

4. Loading Requirements: None

5. Additional Provisions:
   a. This use is required to be located on a building lot or an outlot platted for this purpose.
   b. If necessary for the system's effectiveness, ground-mounted solar energy collectors may be located within the minimum lot line setbacks for the subject property zoning district and within any applicable major road supplemental setback without the need for a variance, provided that the solar energy collector is located no less than five feet from lot lines and no less than 15 feet from road rights-of-way.
   c. Ground-mounted solar energy collectors may not be located within utility easements or ditch easements unless authorized in writing by the easement holder.
   d. This use shall not have a significant adverse visual impact on the natural features or neighborhood character of the surrounding area and shall be located to minimize glare on adjacent properties and roadways.
   e. Applications shall be reviewed with special consideration given to lands identified as Environmental Resources and Open Corridor, Roadside in the Boulder County Comprehensive Plan.
   f. If larger than 100 kW, this use cannot be located on areas with the following Boulder County Comprehensive Plan designations: Agricultural Lands of National Importance, Agricultural Lands of Statewide Importance, Agricultural Lands of Local Importance, Natural Landmarks and Areas, or Critical Wildlife Habitats.
   g. Rooftop mounted systems proposed as a principal use may be mounted on any legal structure, subject to review through the building permit process. Roof-mounted systems shall be mounted as flush as possible to the roof in order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).

4-516 Accessory uses

K. Accessory Solar Energy System

1. Definition: A system composed of a solar energy collector which may include an energy storage facility, and components for the distribution of transformed energy, which may be attached to a residence or other structure.

2. Districts Permitted: By right in all districts for rooftop-mounted systems. By Site Plan Review Waiver for ground-mounted systems.

3. Parking Requirements: None

4. Loading Requirements: None

5. Additional Provisions:
   a. Ground-mounted systems are considered structures and must meet applicable setbacks for the zone district except as provided in 5.d. below.
   b. Ground-mounted systems shall not have a significant adverse visual impact on neighboring private and public property.
Existing Solar-related Land Use Code Text

c. Roof-mounted solar energy systems shall be mounted as flush as possible to the roof. In order to achieve proper solar orientation, panels may exceed the roofline by up to five feet or the maximum height of the zone district by up to five feet (whichever is more restrictive).
d. If necessary for the system’s effectiveness, ground-mounted solar energy collectors may be located within the minimum lot line setbacks for the subject property zoning district and within any applicable major road supplemental setback without the need for a variance, provided that the solar energy collector is located no less than five feet from lot lines and no less than 15 feet from road rights-of-way.
e. Ground-mounted solar energy collectors may not be located within utility easements or ditch easements.

4-802 Applicability and Scope of Site Plan Review Process for Development

A. Site Plan Review shall be required for (unless not required or waived pursuant to sections B and C below):
   13. A small solar energy system as a principal use

C. Site Plan Review may be waived for the following circumstances if the Land Use Director determines that there is no potential for any significant conflict with the criteria listed in Article 4-806 of this Code:
   7. Any ground-mounted accessory solar energy system.

4-1003 Non-conforming uses- solar energy device

(C) Enlargement or Alteration of a Nonconforming Use
2. An impermissible enlargement or alteration shall not include the following:
   d) the addition of a solar energy device to a structure containing a nonconforming use; or

Article 18 - Definitions:

18-136A Disturbed Area (as used in Article 7-904)
That area of the land’s surface disturbed or in any way changed construction activity.

18-162 Floor Area
The area of a building or structure, existing or new, including basements and attached garages calculated without deduction for corridors, stairways, closets, the thickness of interior walls, columns, or other features as measured from the exterior face of the exterior walls. Floor area does not include the area of any covered porch. (For Residential Structures, see also Article 18-1890.)

18-185 Power Plant
An electrical energy generating facility with generating capacity of more than 50 megawatts and any appurtenant facilities.
Existing Solar-related Land Use Code Text

**18-189D Residential Floor Area**
For the purposes of Site Plan Review and the presumptive size thresholds associated with the Expanded Transfer of Development Rights Program, Residential Floor Area includes all attached and detached floor area (as defined in 18-162) on a parcel including principal and accessory structures used or customarily used for residential purposes, such as garages, studios, pool houses, storage sheds, home offices, and workshops. (Exemptions: Gazebos, carports, detached greenhouses and hoop houses up to a total combined size of 400 square feet.)

**18-198 Solar Access**
The ability to receive sunlight across real property for any solar energy device.

**18-199 Solar Energy Device**
A device which converts the sun's radiant energy into thermal, chemical, mechanical, or electric energy.
DC-18-0002:
Proposed Solar-related Land Use Code Text

3-203 Standards for Submittal Requirements

I. Solar Energy System Development Report

1. A solar energy system development report is required for an application for a ground mounted solar energy system with disturbed area greater than 0.5 acre on lands designated as Significant Agricultural Lands under the Boulder County Comprehensive Plan. The solar energy development report must include:
   a. An installation plan describing the installation method for the solar energy system, including a site plan showing the proposed disturbed area (as defined in Article 18) and the applicable items listed in Article 3-203(3)(b). The installation plan must include a proposal to minimize soil disturbance and compaction through best management practices.
   b. A management plan which includes best practices for maintaining or improving the existing soil quality and agricultural integrity of the land.

Article 4:

4-101 Forestry, 4-102 Agricultural, 4-110 Commercial, 4-111 Light Industrial, 4-112 General Industrial, 4-103 Rural Residential, 4-104 Estate Residential, 4-105 Suburban Residential, 4-106 Multi-family, 4-107 Manufactured Home Park, 4-108 Transitional, 4-109 Business, and 4-117 Mountain Institutional

F. Additional Provisions

5. or 6. [The following topic is currently addressed as sub-section 5. or 6. Depending on the zoning district in question. Adopted text amendments will be applied accordingly, to amend the applicable section containing this content.]

Small Wind-Powered Energy Collectors Systems and Solar Energy Systems may be approved without Special Review approval on parcels with existing principal uses; however, these uses shall be reviewed using the process and standards described in the Utility and Public Service Uses classification in this Code.

4-514 Utility and Public Service Uses

K. Solar Energy – Building-Mounted System

1. Definition: A solar energy system mounted on or integrated into the construction of a structure, such as, but not limited to, a roof-mounted solar energy system.
2. Districts Permitted: By right in all districts
3. Parking Requirements: None
4. Loading Requirements: None
5. Additional Provisions:
   a. Building-mounted systems may be mounted on an existing or new legal structure, subject to review through the building permit process.
   b. Building-mounted systems are allowed without Special Review approval as a secondary principal use on parcels with existing principal uses.
DC-18-0002:
Proposed Solar-related Land Use Code Text

c. A building-mounted solar energy system added to a non-conforming structure, or a structure containing a non-conforming use, will not be considered an enlargement, repair, or alteration of a nonconforming structure or use that increases the degree of nonconformity under Article 4-1003 or that is impermissible under 4-1003.
l. Building-mounted solar energy systems on a structure that is non-conforming because it does not meet or is currently at the minimum setback may project into the setback up to an additional one foot.
ii. Additional restrictions or requirements in Article 4-100 may apply to nonconforming structures and uses in the floodplain.
d. Roof mounted systems must be mounted as flush as possible to the roof. In order to achieve proper solar orientation, panels may exceed the height of the roofline and, consequently, the maximum height permitted in the zoning district by no more than five feet.

I. Solar Energy – Ground-Mounted System
1. Definition: A solar energy system mounted on a rack or poles that rests on or is attached to the ground, not including a solar energy system mounted on parking canopies.

2. Districts Permitted:

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Small &lt;2.5 acres disturbed area</th>
<th>Medium 2.5 to 10 acres disturbed area</th>
<th>Large 10+ acres disturbed area</th>
</tr>
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<tbody>
<tr>
<td>MF, MH, MI, SI, I</td>
<td>SPR</td>
<td>Not allowed</td>
<td>Not allowed</td>
</tr>
<tr>
<td>A, ER, RR, F</td>
<td>SPR/ SU*</td>
<td>LU/ SU*</td>
<td>SU*</td>
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<tr>
<td>LI, OI, O, B, T</td>
<td>SPR</td>
<td>SPR</td>
<td>LU</td>
</tr>
</tbody>
</table>

*Note: Special Review is required for Significant Agricultural Lands in A, RR, ER, as listed in the additional provisions, below. Medium and Large systems are not permitted in platted subdivisions in ER and RR.

3. Parking Requirements: To be determined through review
4. Loading Requirements: None
5. Additional Provisions:
   a. This use is required to be located on a building lot, or an outlot platted for this purpose.
   b. The use may be allowed on right-of-way, as permitted by the right-of-way owner and if compatible with the use of the right-of-way. For right-of-way systems, further requirements may be stipulated by the Boulder County Transportation Department or the Colorado Department of Transportation to ensure compatibility with transportation-related uses of the right-of-way.
   c. The appropriateness of a site, the specific location on the site, and the extent of site disturbance will be determined through the applicable review process.
   d. Ground-mounted systems with disturbed area greater than 0.5 acre cannot be located on areas designated by the Boulder County Comprehensive Plan as Natural Landmarks, Natural Areas, Critical Wildlife Habitats, or Wildlife Migration Corridors.
DC-18-0002:
Proposed Solar-related Land Use Code Text

e. Ground-mounted systems are allowed as a second principal use on parcels subject to the review process applicable for the proposed new ground-mounted system.
f. Ground-mounted systems shall not exceed 15 feet in height, except to accommodate site specific needs and as approved through review. Systems exceeding 15 feet in height require an increased setback of 75 feet from all property lines, unless it is demonstrated that a lesser setback or topographical or vegetative screening adequately mitigates visual impacts. In no case shall a system exceed 25 feet in height.
g. Ground-mounted systems with disturbed area greater than 2.5 acre are not permitted in the Forestry Zoning District unless the site has been previously contaminated or the soil otherwise damaged, making it unsuitable for agricultural or forestry uses. Qualifying areas may include properties that have previously undergone intensive development and where it is determined, through the review process, that installation of a ground-mounted system will not have additional significant impacts.
h. Ground-mounted systems with a disturbed area greater than 0.5 acre on lands designated as Significant Agricultural Lands under the Boulder County Comprehensive Plan, and located in the Agricultural, Estate Residential, or Rural Residential Zones, require Special Review and are subject to the following additional requirements intended to preserve and maintain soil and agricultural integrity:
i. The total disturbed area associated with the ground-mounted system cannot exceed 7 acres on parcels smaller than 70 acres in size, or 14 acres on parcels larger than 70 acres in size.
ii. Application for the ground-mounted system must contain a solar energy system development report as set forth in Article 3.203.

M. Solar Energy - Parking Canopy System
1. Definition: A solar energy system mounted on or integrated into the construction of a vehicle parking shade structure which covers vehicle or other multimodal parking areas.
2. Districts Permitted: By Site Plan Review in all districts
3. Parking Requirements: To be determined through the review
4. Loading Requirements: None
5. Additional Provisions:
a. This use is not required to be located on a building lot.
b. This use is required to be located on an existing or approved parking area and the vehicle shade structure for this use must meet building code requirements.
c. Unobstructed separation of not less than 16 feet, between canopy structures, must be maintained over dedicated parking aisles. Parking space striping and other applicable requirements as described in the Multimodal Transportation Standards must be met.
d. A parking canopy system and all of its component parts must not obstruct or encroach into a fire lane.
e. Where possible, parking canopy systems should be designed to minimize the increase in overall massing on the site, for example, by having larger systems consist of multiple smaller canopy structures.
f. Parking canopy system design must minimize drainage impacts.
g. Parking canopy solar energy systems must not exceed a maximum height of 30 feet, unless otherwise approved through Site Plan Review to accommodate site specific needs.
DC-18-0002:
Proposed Solar-related Land Use Code Text

4-516 Accessory uses
K. Accessory Solar Energy System
   1. Definition. Building-mounted, ground-mounted, and parking canopy solar energy systems designed
      primarily for serving on-site needs of a principal use.
   2. Districts Permitted: By right in all districts for building-mounted systems. By Site Plan Review for
      ground mounted and parking canopy systems. Site Plan Review may be waived by the Director for
      systems with a disturbed area less than 0.5 acres, per 4-802.
   3. Parking Requirements: None
   4. Loading Requirements: None
   5. Additional Provisions:
      a. Ground-mounted systems are structures that must meet applicable setbacks for the zone
doctor except as provided in section 5.b. below.
      b. If necessary for the effectiveness of the system, accessory ground-mounted systems may be
         located within minimum lot line setbacks and within any applicable major road supplemental
         setback without the need for a variance, provided that the solar energy system is located not
         less than 5 feet from lot lines and not less than 15 feet from all roads.
      c. Accessory ground-mounted systems may not exceed 15 feet in height, except to accommodate
         site specific needs and as approved through review. In no case shall a system exceed 25 feet in
         height.
      d. Accessory solar energy systems must also meet all applicable Additional Provisions for solar
         energy including building-mounted, ground-mounted, or parking canopy systems contained in
         Article 4-514.

4-802 Applicability and Scope of Site Plan Review Process for Development
A. Site Plan Review shall be required for (unless not required or waived pursuant to sections B and C below):
   1. A ground-mounted or parking canopy solar energy system as a principal use or accessory use, as
      specified in Articles 4-514 and 4-516.

B. Site Plan Review may be waived for the following circumstances if the Land Use Director determines that
   there is no potential for any significant conflict with the criteria listed in Article 4-806 of this Code:
   1. A principal or accessory ground-mounted solar energy system less than 0.5 acre.
   2. A parking canopy solar energy system less than 0.5 acre.

4-1002 Nonconforming Structures
DC-18-0002:
Proposed Solar-related Land Use Code Text

C. A nonconforming structure may not be altered, repaired, or enlarged in any way which would increase the degree of nonconformity with respect to the setback or height regulations of this Code.

4-1003 Nonconforming uses
C. Enlargement or Alteration of a Nonconforming Use
2. An impermissible enlargement or alteration shall not include the following:
   d. the addition of a solar energy system to a structure containing a nonconforming use provided it meets the specifications in Articles 4-514 or 4-516, or

Article 18 - Definitions:

18-136A Disturbed Area (as used in Article 7-904, or in Article 4-514, 4-516 or 4-802, pertaining to solar energy systems)
That area of the land's surface disturbed or in any way changed as a result of construction activity, including but not limited to new structures, access and areas used for access or parking during and following the construction process.

18-162 Floor Area
The area of a building or structure, existing or new, including basements and attached garages calculated without deduction for corridors, stairways, closets, the thickness of interior walls, columns, or other features as measured from the exterior face of the exterior walls. Floor area does not include the area of any covered porch or solar energy ground-mounted system, or a solar energy parking canopy system except as specified for Residential Floor Area. (For Residential Structures, see also Article 18-185D.)

18-185 Power Plant
An electrical energy generating facility with generating capacity of more than 50 megawatts and any appurtenant facilities.

18-189D Residential Floor Area
For the purposes of Site Plan Review and the presumptive size thresholds associated with the Expanded Transfer of Development Rights Program, Residential Floor Area includes all attached and detached floor area (as defined in 18-162) on a parcel including principal and accessory structures used or customarily used for residential purposes, such as garages, studios, pool houses, storage sheds, home offices, and workshops. (Exemptions: Gazebos, carports, solar parking canopies, detached greenhouses, renewable energy storage facilities, and hoop houses up to a total combined size of 400 square feet.)

18-198 Solar Access
The ability to receive sunlight across real property for any solar energy device.

18-199 Solar Energy System
DC-18-0002: Proposed Solar-related Land Use Code Text

A system composed of panels, arrays, or devices which convert the sun’s radiant energy into thermal, chemical, mechanical, or electric energy, which may include an energy storage facility, and components for the transmission and distribution of transformed energy.