TOWN OF SPRINGFIELD
ORDINANCE 2021 - 02

APPROVING AMENDMENTS TO THE 2019 COMPREHENSIVE PLAN OF THE TOWN OF SPRINGFIELD,
DANE COUNTY, WISCONSIN TO ADDRESS SOLAR FIELD SITING

WHEREAS, the Town of Springfield is authorized to prepare and adopt a comprehensive plan as defined in §§66.1001(1)[a] and 66.1001(2), Wisconsin Statutes; and

WHEREAS, the Town Board adopted the last update to the Town’s comprehensive plan on August 20, 2019, and said plan has since been in effect; and

WHEREAS, §66.1001(4), Wisconsin Statutes establishes the required procedure for a local government to amend a comprehensive plan once it has been initially adopted or updated, which provides the Town Plan Commission with the authority and responsibility to recommend amendments to the plan to the Town Board; and

WHEREAS, various private companies, electric utilities, and private landowners are constructing solar energy collection systems ("solar fields") in rural towns throughout Wisconsin; and

WHEREAS, larger solar fields are subject to the approval of the Wisconsin Public Service Commission ("PSC"), and therefore, are not subject to local zoning approval; and

WHEREAS, solar fields often occupy a large amount of land area, and have proven to be potentially disruptive of land use planning, agricultural activity, local economies, and aesthetic values; and

WHEREAS, the Town has identified a need to establish policies and programs were a developer or owner of a proposed solar field to seek Town or PSC approval of such a facility in Springfield; and

WHEREAS, on March 1, 2021, the Plan Commission recommended Town Board approval of the comprehensive plan amendments via Plan Commission Resolution 2021-01; and

WHEREAS, the Town Board has conducted a public hearing on the plan amendments in compliance with the requirements of §66.1001(4)(d), Wisconsin Statutes and considered public comments and Commission recommendations.

NOW, THEREFORE, BE IT RESOLVED that the Town Board of Springfield does ordain that the following amendments are hereby approved and adopted to the Town of Springfield Comprehensive Plan:

Section 1: Amend policies 2 and 3 in the “Agricultural Resource Goal, Objectives and Policies” section on page 22 to read as follows:

2. Limit the number of houses and certain other types of non-farm development in the Agricultural Preservation Area by following a one home per 35-acre residential density policy, or equivalent, as described in more detail in Chapter Three—Land Use.

3. Direct new subdivisions and other major non-agricultural developments away from the Agricultural Preservation Area to the extent consistent with Town zoning rules and, except where consistent with the density policy.
Section 2: Amend the “Existing and Potential Land Use Conflicts” section on page 46 to read as follows:

Residential development in the Town has created some conflicts between newer residents and surrounding farming operations. Activities that make up the day-to-day operation of a farm—slow farm machinery on roads, farm odors associated with the stockpiling and spreading of manure, livestock noise—are sometimes considered nuisances by new, non-farming neighbors. These activities are protected under §823.08 Wis. Stats., Wisconsin’s right-to-farm law.

Energy generation facilities, such as wind turbines, biodigesters, and solar fields, create unique opportunities for local, environmentally responsible energy generation. Springfield has been and will continue to be an attractive location for these types of uses, as builders and managers of these energy generation facilities desire proximity to a large population, accessibility to transmission lines, and expanses of open land. Despite their benefits, such energy generation facilities have the potential to produce undesirable odors or noises, negatively affect viewsheds and nearby property values, and consume productive farmland.

This Town seeks to minimize these types of conflicts in the future by discouraging dense residential and other non-farm development in Agricultural Preservation Areas and through thoughtful land use planning. Conflicts will inevitably occur in areas where residential and other non-farm development abuts against planned Agricultural Preservation Areas. The use of the Agricultural Transition Areas between several planned development areas and the Agricultural Preservation Areas is one approach to minimize these conflicts. Map 7 shows where these different areas are mapped.

Section 3: Amend the policy 5 in the “General Policies” section on page 47 to read as follows:

5. Direct most new rural subdivisions and other non-farm rural developments adjacent to lands that have already been residentially developed.

Section 4: Amend policy 7 in the “Density Policies” in Figure 15 on page 53 to read as follows:

7. Commercial and Other Uses: The following additional uses shall be considered the equivalent of one dwelling unit for the purpose of this policy:

a. Any commercial use requiring a rezoning away from an Exclusive Agriculture zoning district after March 1, 2002.

b. A freestanding telecommunication tower approved by Dane County or the Town after March 1, 2002.

c. A governmental, institutional, religious, or nonprofit community use.

d. A transportation, communications, pipeline, electric transmission, and utility use. Each wind turbine primarily for off-site energy distribution shall be considered the equivalent of one dwelling unit. Each 5-acre area used for solar panels, their ancillary structures, and required spacing, where primarily for off-site energy distribution, shall be considered the equivalent of one dwelling unit.
Section 5: Amend policies 3 and 4 in the “Policies Applicable to Other Uses in the Agricultural Preservation Area” in Figure 15 on page 54 to read as follows:

3. **Commercial and Institutional Uses:** Within the Agricultural Preservation Area, allow only such commercial and institutional and utility uses that meet all of the following criteria:

   a. A rural location for the use is necessary to support the continuation of agricultural operations or to serve primarily agricultural customers.

   b. The placement and operation of the proposed use will not be in conflict with farming operations to the extent determined applicable by the Town Board.

   c. The site is suitable for an on-site waste treatment system of the type and capacity contemplated.

   d. Unacceptable future commercial or other non-residential uses of the site are limited, through use of the appropriate zoning district, a deed restriction, or both.

   e. The project will adhere to the “Residential Development Siting Standards” above to the extent determined applicable by the Town Board.

   f. The project adheres to the Town’s design review ordinance.

4. **High Intensity Rural Uses (HIRUs):** Within the Agricultural Preservation Area, when considering the siting or expansion of HIRUs, utilize associated standards included in Chapter Five—Economic Development. HIRUs include, but are not limited to non-metallic mineral extraction operations, biodigesters, telecommunication towers, wind turbines, solar fields, and farm trucking operations. Such uses typically demand a rural location, but can have negative impacts on Town roads, the natural environment, farmland, rural character, and the enjoyment of nearby properties (particularly nearby housing). When considering the siting or expansion of HIRUs, utilize policy 3 above, associated standards in Chapter Five—Economic Development, and, for proposed wind turbines and solar fields, associated standards in Chapter Four—Transportation, Utilities, and Community Facilities.

Section 6: Repeal the “Power Plants and Transmission” section on page 86, and recreate it as the “Power Generation and Transmission Lines” section to read as follows:

**14. Power Generation and Transmission Lines**

Madison Gas & Electric provides electrical and gas service to Town residents.

The American Transmission Company (ATC) owns the electrical transmission lines through the Town. In early 2015, the State Public Services Commission approved ATC’s plans for an extension of a high-voltage transmission line from La Crosse to Middleton, called the Badger Coulee line. This line was completed in 2018.

The route through the Town to the North Madison substation is shown on Map 15. The line was constructed on steel, single-pole structures in a single- or double-circuit delta-configuration over most of the route in the Springfield area. The Town received a one-time payment from ATC of $366,001 and will receive an annual payment of $43,912 per year.
A 3-million-gallon biodigester opened in the Town in 2013. Biodigesters are designed to generate electricity and reduce the nutrient level and volume of manure, which eventually goes back to nearby farms to be spread on fields as fertilizer. The biodigester in the Town sends its energy to Madison Gas & Electric. In 2019, the digester generated nearly 11 million kilowatt-hours (kWh) of electricity, enough to power approximately 1,800 homes.

There are six wind turbines near Martinsville along Kick-A-Boo road. Epic Systems, Inc. built the turbines in 2012 and they were functional by fall 2013. Each turbine has the capacity to produce 1.6 megawatts each, totaling 9.9 megawatts altogether. The company worked with Madison Gas & Electric to lay 16 miles of underground power lines that provide energy straight to the company’s Verona campus. These are the only commercial wind turbines in Dane County at time of writing.

At time of writing, there were no commercial solar fields in the Town. There are 1,700 solar panels located on the roof of the City of Middleton Operations Center adjacent to the Town, which provide 500 kW to Madison Gas & Electric’s community grid. Also near the Town boundary, a five-megawatt solar field with 17,000 solar panels is planned for Middleton’s Morey Field airport, which would provide enough electricity to power approximately 1,500 homes.
Solar field proposals and developments are becoming more common in rural communities across Southern Wisconsin as utility companies and consumers desire to switch from fossil fuels to renewables for electricity production. In Jefferson County, the Badger Solar Field is currently under construction and planned to begin operation in 2021. In Iowa County, the Badger Hollow Solar Field is also under construction and planned to begin operation in 2023. At the time of writing, another large solar field was proposed in Kenosha County.

Smaller-scale community-solar fields are slightly more expensive per megawatt than large-scale solar fields, but still feasible. At time of writing, Wisconsin was home to more than a dozen examples in Wisconsin of small-scale solar fields located on or near agricultural lands in rural communities. These are predominately located immediately adjacent to transmission lines, owned by the underlying landowner, and cover between five to ten acres of land.

In general, five to seven acres of land are used for every megawatt of solar power capacity. Additionally, solar fields, if not located immediately adjacent to a substation or transmission line, must be served by a dedicated transmission line and transformer to connect to the grid, requiring more land for distribution.

Solar fields sized under 100 megawatts are subject to local zoning regulations and approval, while solar fields 100 megawatts or larger are not subject to local zoning regulations. Instead, these larger solar fields must gain approval from the State of Wisconsin’s Public Service Commission (PSC). This process is called a Certificate for Public Convenience and Necessity, or CPCN, which requires the PSC to find that the project will 1) be in the public interest, 2) have no undue adverse impact on environmental values, 3) not interfere with orderly land use and development plans, and 4) have no adverse impact on competition in the relevant wholesale market. Additionally, Wisconsin law limits local restrictions on solar developments, only allowing restrictions that 1) preserve or protect the public health or safety, 2) do not significantly increase the cost of the system of significantly decrease its efficiency, or 3) allow for an alternative system of comparable cost and efficiency.

The Town’s policies and programs related to solar fields are located in the next section of this chapter.

Section 7: Amend the objective 2 in the “Facilities and Community Facilities Goal, Objectives, and Policies” section on page 88 to read as follows:

2. Protect the Town’s public health and natural environment, farmland, and existing residents through proper siting of utility uses and on-site wastewater treatment systems, and mitigation of off-site impacts such as through proper siting and stormwater management.

Section 8: Amend the policy 9 in the “Facilities and Community Facilities Goal, Objectives, and Policies” section on page 89 to read as follows:

9. Discourage the future development of a landfill in the Town, and remain actively involved in processes to site power generation facilities.
Section 9: Renumber current programs 2 and 3 on pages 89 and 90 to programs 3 and 4 respectively, then create a new program 2 to read as follows:

2. **Apply Town Priorities in Evaluation of Solar Field Proposals**

The Town understands and recognizes the benefits of solar energy development. Solar energy does not produce pollution, contribute to climate change, consume water, cause noise or odor, or reflect sunlight. Also, towns in which solar fields are sited often receive payments from their developers or owners, similar to what Springfield has received from ATC for its recent transmission lines. Property owners on which the solar fields are located also enjoy financial benefits.

Still, the Town has the following concerns related to the potential future siting of solar fields used primarily for off-site energy distribution within Springfield.

- Large-scale solar fields often consume hundreds of acres of farmland. Farmland preservation is clearly a Town priority, as articulated in the vision and numerous goals, objectives, policies, and programs in this Plan. (As an aside, though often referred to as “solar farms”, the Town does not consider solar fields to be farming.)

- Solar fields in Springfield could negatively impact its rural character, viewsheds, and natural environment. These aspects of the Town are prioritized in the cultural and natural resources sections of Chapter Two of this Plan.

- The Town has plans and intergovernmental agreements that support future residential, commercial, and mixed use development in certain parts of the Town. These are articulated in the Land Use and Intergovernmental Cooperation chapters. Were large-scale solar fields to instead occupy such areas, such future development would be stopped, impeded, or forced to leap-frog into less desirable areas for development.

- The Town does not desire to be left with a “solar wasteland” if and when a solar field, panels, and associated equipment exceed their useful life; new technologies emerge; the owner or operator goes out of business or otherwise experiences financial difficulties; or some combination.

Given these concerns, the following are the Town’s policies relative to the siting of solar fields primarily intended for off-site energy distribution in Springfield:

a. Do not site on Group I or II agricultural soils, as depicted on Map 2: Soil Suitability for Agriculture, as these align with the most productive farming areas of the Town.

b. Discourage in other areas used for crop production in the Town. In addition to providing food, these areas also serve an important function for the spreading of manure to support local dairy farming.

c. Do not site over lands designated as Agricultural Transition Area, Rural Neighborhood Area, Town Activity Center, or Conservancy Area on Map 7: Future Land Use. These areas are instead intended for other forms of development or conservation, in line with local and intergovernmental plans and agreements.

d. Discourage within the viewshed of any residential subdivision, public recreation land, or Highway 12 as represented on Map 5: Visual Character Analysis; or effectively screen the solar field from views from these places using topographic changes, woodlands, setbacks, and/or landscaped berms.
e. Require siting along existing electric transmission lines capable of distributing energy from the solar field, or require that new lines outside of the solar field be buried, in order to minimize the installation of new overhead lines outside of the solar field in the Town.

f. Require the submittal of site, grading, stormwater management, and erosion control plans to comply with associated Town, Dane County, and State regulations.

g. Discourage the large-scale removal of topsoil, mature trees, and woodlands; preserve environmental corridors and logical animal movement routes; and promote prairie and pollinator-friendly vegetation as ground cover throughout the solar field.

h. Require every solar field proposal to include an evaluation of environmental, wildlife habitat, architectural, archeological, cultural, and other resources on and near such site, and avoid negative impacts on such resources.

i. Require adequate security and other legal assurances that financial resources are available to remove the solar field and all associated equipment and infrastructure when their usefulness or lifespan is exhausted, other technologies render the facilities obsolete or no longer cost effective, or the owner or operator goes out of business or is otherwise financially unable to maintain the facility or remove the equipment and infrastructure following use.

j. Require the use of “splits” for solar field installation per Figure 15, density policy 7 of this Plan.

k. Attempt to apply review standards for High-Intensity Rural Uses (HIRUs) as laid out in Figure 24 of this Plan.
<table>
<thead>
<tr>
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<tr>
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**Figure 2.1** Urban and Community Factors Important
Section 11: Amend Figure 26 on page 121 to read as follows:

**Figure 26: Comprehensive Plan Priority Programs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Program</th>
<th>Priority Rating</th>
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<tbody>
<tr>
<td>Agricultural Resources</td>
<td>Implement the Town’s Transfer of Development Rights (TDR) Program</td>
<td>Top</td>
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<td>Support Continued Diversification of Springfield’s Agricultural Base</td>
<td>High</td>
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<td>Natural Resources</td>
<td>Encourage Participation in the Grass Roots Resource Protection Efforts</td>
<td>Moderate</td>
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<td></td>
<td>Demonstrate Springfield’s Stewardship Through Groundwater Quality Protection</td>
<td>Moderate</td>
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<tr>
<td>Cultural Resources</td>
<td>Protect the Town’s Image Along Highway 12</td>
<td>Moderate</td>
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<td>Transportation</td>
<td>Advocate Upgrades to Highway 19</td>
<td>Top</td>
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<td></td>
<td>Advocate for Town Resident and Landowner Interests Regarding Morey Field</td>
<td>High</td>
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<td></td>
<td>Advocate Town Interests in Implementation of USH 12 Freeway Conversion Project</td>
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<tr>
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<td>Voice Town Concerns Over North Mendota Parkway Project</td>
<td>Moderate</td>
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<tr>
<td>Utilities and Community Facilities</td>
<td>Manage the Siting and Safe Operation of Wind Energy Systems</td>
<td>Moderate</td>
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<td>Apply Town Priorities in Evaluation of Solar Field Proposals</td>
<td>High</td>
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<td>Stage Community Facilities Investments Based on Need and Budget</td>
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<td>Reevaluate the Town’s Parkland Fee, in Conjunction with Town Park Investigation</td>
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<td>Housing</td>
<td>Explore Strategies for More Affordable Housing Serving Local Needs</td>
<td>Moderate</td>
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<tr>
<td>Economic Development</td>
<td>Implement Clear and Consistent Standards for “High Intensity Rural Uses”</td>
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<tr>
<td>Intergovernmental Cooperation</td>
<td>Pursue a New Intergovernmental Agreement with Village of Waunakee</td>
<td>Top</td>
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Adopted at a Town Board meeting this 8th day of April, 2021.

Jim Pulvermacher, Town Chairperson

Attest:

Dianah Fayas, Town Clerk