

**Ordinance No. 2570 Summary**

On ~~March 16~~April 6, 2023, the City of De Soto, Kansas, adopted Ordinance No. 2570, amending the De Soto Zoning Regulations (incorporated as Appendix C to the De Soto City Code via Section 16-201 of Article 2 of Chapter XVI), specifically new subsection Q of Section 4 of Article 10 to provide guidelines and requirements for issuance of special use permits for utility scale facilities. A complete copy of this ordinance may be obtained or viewed free of charge at the Office of the City Clerk at City Hall, 32905 West 84<sup>th</sup> Street, De Soto, Kansas or at [www.desotoks.us](http://www.desotoks.us). This summary is certified by Patrick G. Reavey, De Soto City Attorney pursuant to K.S.A. 12-3001, et seq.

**ORDINANCE NO. 2570**

**AN ORDINANCE ADOPTING THE PLANNING COMMISSION'S RECOMMENDATION (~~WITH FORMATTING AND NON-SUBSTANTIVE BUT WITH~~ REVISIONS) TO INCORPORATE A NEW SUBSECTION Q OF SECTION 4 IN ARTICLE 10 RELATED TO THE ISSUANCE OF SPECIAL USE PERMITS FOR UTILITY SCALE SOLAR FACILITIES WITHIN THE CITY OF DE SOTO**

**WHEREAS**, the City Planning Commission has recommended that the Governing Body amend the City's Zoning Regulations to include guidelines and requirements for special use permits issued for utility scale solar energy facilities within the City; and

**WHEREAS**, all newspaper notifications were completed and a public hearing properly held before the City Planning Commission as to the requested text amendment; and

**WHEREAS**, after review of the proposed text amendments, the Planning Commission recommended that said amendments be made part of the Zoning Regulations; and

~~**WHEREAS**, subsequent to the public hearing, city staff made additional, non-substantive revisions and formatting to what was before the Planning Commission; and~~

~~**WHEREAS**, at its meeting on March 17, 2023, the governing body extensively discussed the new regulations and determined the northern boundary should be extended to the north and the length of allowable permit duration should be extended to 40 years; and~~

**WHEREAS**, the governing body is authorized to revise what the Planning Commission recommended so long as the revised text is approved by a 2/3 majority of the Governing Body.

**NOW THEREFORE**, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF DE SOTO, KANSAS:

**Section 1.** That Section 4 of Article 10 of the Zoning Regulations is amended to include new subsection Q which shall read as follows:

Q. Utility-Scale Solar Facilities. Utility Scale Solar Facility (hereafter "USSF") special use permits, when found to be in the interest of the public health, safety, morals, and general welfare of the community may be permitted. In addition to the requirements for other special use permits, USSF's will obtain a special use permit in accordance with this section. The approval of such special use permit application by the city is a purely discretionary act that will be decided based upon the facts and circumstances discovered in the review of each application.

1. Application for a special use permit for a USSF in De Soto can only be accepted for an area within ~~121st~~119<sup>th</sup> Street (Northern Limits), 143<sup>rd</sup> Street (Southern Limits) Evening Star Road (Western Limits) and String Town Road (Eastern Limits). Formerly known as the Sunflower Army Ammunition Plant. (SAAP).

2. **DEFINITIONS:**

**Battery Energy Storage Facility (BESF)** - One or more battery cells for storing electrical energy and includes battery management system regulators equipment and secondary containment.

**Battery Management System (BMS)** - An electronic regulator that manages a Battery Energy Storage System by monitoring individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access and capable of shutting down the system before operating outside safe parameters.

**Environmental Impact Assessment** - an evaluation of the environmental consequences of a plan, policy, program, or projects.

**Photovoltaic Solar Panel** - Materials and devices, including photovoltaic panels, that absorb sunlight and convert it directly into electricity.

**Utility Scale Solar Facility (USSF)** - A Solar Facility located on a Solar Facility Area of more than 1,000 acres. A facility of this size is typically equivalent to a rated capacity of one megawatt (MW) alternating current or greater. Such facilities are used to provide electricity to a utility provider.

**Project Area** - An area of land in acres used for converting sunlight into electricity including the necessary equipment for generating electricity, which shall include Solar Panel Photovoltaics, inverters; substation parking lots, support structures (which may include buildings); electrical substations and Battery Energy Storage Facilities.

**Project Extent** – The entire area including property and setback lines, lease lines, streets, easements, landscaping, wildlife corridors, right-of-way corridors and utility easements, and includes the Project Area. Areas that don't count towards the project extent are remaining sites that are not ready for development due to Army Corps of Engineers' clean-

up efforts.

**Wildlife Corridor** - a strip of natural habitat connecting populations of wildlife that serve as a traveling avenue for wildlife species and provide sources of food and cover.

**Remnant grassland and woodland** - is an area containing native flora and fauna that has not been significantly disturbed by activities such as development, logging, transportation, or pollution.

**Solar Facility Decommissioning and Reclamation Plan** - A plan to disconnect, remove, and properly dispose of equipment, facilities, or devices of a Solar Facility and reclaim the site.

3. Required Utility Scale Solar Facility Application Special Use Permit Submittal Information.
  - a. **Preliminary Concept Plan:** A Preliminary Concept Plan will be submitted to the De Soto Planning Director. A pre-application meeting is required. The Preliminary concept plan must be submitted 30 days prior the pre-application meeting. The Preliminary Concept Plan will consist of aerial imagery of the Project Area (actual area with solar panels coverage, battery storage facilities, substations etc.) and the Project Extent (Total project area with setbacks, wildlife corridors, right-of-way and easements etc.), and the general location and arrangement of screening, fencing, tree preservation, structures, battery storage, driveways and entrances, wildlife corridors, floodplain, and electric and overhead utility lines to include the route of private electric power transmission lines from the USSF to the points of connection to the grid. Elevations of structures shall be included with the Concept Plan.
  - b. **Supplemental Narrative to Preliminary Concept Plan:** A narrative giving a general overview of the USSF, which includes:
    - i. The applicant, owner, and the operator of the proposed USSF.
    - ii. The current uses and physical characteristics of not only the Project Area but also the surrounding area.
    - iii. The intended energy provider to interconnect to the US Solar Facility.
    - iv. A development agreement (including items the City of De Soto needs for determining Franchise Fees or equivalent compensation, completed preliminary and final development plan and any tax incentive requests. If a “back of the meter” approach is utilized, then a payment in lieu of franchise fees to the City of De Soto will need to be included in the Development agreement.
    - v. Approximate Rated Capacity of the USSF project.
    - vi. Type and location of interconnection to electrical grid and details of coordination and pre-approval with the local energy provider.
    - vii. A copy of the interconnection agreement with the local energy provider or a written explanation outlining why an interconnection agreement is not necessary.

- viii. Approximate number of solar panels and representative types.
  - ix. The Project Area and Project Extent expressed in acres.
  - x. An inventory with descriptions of all proposed structures and uses including Battery Energy Storage Facilities, inverters, substations, and all structures over 35 feet in height.
  - xi. An inventory of all Solar Facilities within two (2) miles of the Project Extent.
  - xii. A visual impact analysis demonstrating project siting and, if necessary, proposed mitigation to reduce impacts on the visual character of the surrounding area.
- c. **Final Development Plan:** After the Preliminary Concept Plan meeting, a formal Development Plan will be submitted to the De Soto Planning Director. The Application review time for Special Use Permits for USSFs may take up to 75 days from the time of submittal. This is based upon the potential size and complexity of the application as determined by factors that include but are not limited to the number of third-party reviews to be coordinated and completed and the Project Area of the USSF. The Special Use permit application will include the following:
- i. A visual impact analysis demonstrating project siting and, if necessary, proposed mitigation to reduce impacts on the visual character of the surrounding area.
  - ii. The Project Area, Project Extent and Solar Photovoltaic Panel Coverage area, Battery Energy Storage Facilities and Sub-Stations expressed in acres.
  - iii. The Project Extent, property and setback lines, lease lines, streets, easements, landscaping, wildlife corridors, right-of-way and utility easements, and to include the Project Area.
  - iv. Location of driveways, parking and entrances onto streets and accompanying site distance reports for such entrances.
  - v. Locations and dimensions of all existing and proposed structures, including PV panels, charge regulators, inverters, substations, Battery Energy Storage Facilities, connections to the grid, fencing, and dwellings and associated structures, including the location of all dwellings within 300 feet of the Project Extent.
  - vi. Elevations of structures depicting the style, size, and exterior construction materials in sufficient detail to exhibit the relative compatibility of the proposed development with the character of the neighborhood.
  - vii. A grading plan indicating existing and proposed contours at no greater than two-foot (2-foot) contours.
  - viii. A stormwater management plan in accordance with applicable standards/regulations. The stormwater management plan will include, but not be limited to, the following sections:

- a) Water quantity analyses and requirements.
- b) Stream buffer analyses and requirements.
- c) Post-Construction Stormwater Quality Treatment Regulation requirements.
- d) Federal Emergency Management Agency floodplain regulations/requirements.
- ix. A landscaping plan in sufficient detail including specifications, installation, proposed ground cover, including seed mixes, screening materials, and herbicides used.
- x. The design and specifications for additional vegetative screening for nearby residences.
- xi. Locations of wildlife corridors and details regarding fencing, if any, that accommodate wildlife movement.
- xii. Locations of remnant grasslands and woodlands (which are areas that have not been previously plowed or graded).
- xiii. Proposed clearing or grading of natural vegetation including Stands of Mature Trees and remnant grasslands and woodlands, which may be a separate plan.
- xiv. Decommissioning and Reclamation Plan: A plan for decommissioning and reclamation of the site shall be submitted as part of the application. The plan shall be certified by a professional engineer licensed in the state of Kansas who has expertise in the removal of USSFs (e.g., educational knowledge or practical experience).
- xv. Lifespan: The anticipated life of the project.
- xvi. Implementation: The manner in which the project will be de-commissioned, and the site reclaimed to include but not limited to plans for stabilizing the soils, regrading, reseeding, and replanting, and disposal and recycling the USSF materials, including but not limited to PV panels, inverters and batteries.
- xvii. Estimated Costs of Decommissioning and Reclamation: A detailed cost estimate for decommissioning and reclamation of the USSF in accordance with the Decommissioning and Reclamation Plan.
- xviii. Traffic Plan: A preliminary traffic plan describing estimated travel routes and trip volumes during the construction and decommissioning processes. Public road improvement, repair and maintenance during installation and operations will be required and will be coordinated with the City Engineer. Damage to public roads will be repaired at the solar operator's expense.
- xix. Construction Management Plan: A construction management plan to include an estimated construction schedule and hours of operation.
- xx. Environmental Impact Assessment: An environmental impact assessment to include an assessment of viewshed impacts, including impacts on national or

state forests and grasslands, national or state parks, county or city parks, wildlife management areas, conservation easements, recreational areas, or any known historic or cultural resources including the project area and within one (1) mile of the Project Extent.

- xxi. Airport Studies: For the purpose of determining impacts on area airports, a glare impact study and/or an airspace study in accordance with, and if required by, Federal Aviation Administration (FAA) requirements.
  - xxii. Fire and Life Safety Program that includes coordination and responder training with the NW Consolidated Fire District and includes Hazardous Materials Risks. All designs will conform to the latest edition of all applicable codes and standards. Currently this includes the 2018 International Fire and Building Codes.
  - xxiii. Final Development Plan and Application Review Time: 75 Days
  - xxiv. Applicant shall provide a list and map identifying all non-available parcels that are within the proposed USSF project extent.
- d. **USSF Development and Performance Standards:**
- i. Permit Term of USSF: A Special Use permit for a USSF may be approved for a period not to exceed ~~30~~40 years which shall commence upon the earlier of (A) completed construction of a USSF or (B) the second anniversary of the Special Use permit approval. The minimum Project Extent of a USSF will be more than one thousand 1,000 acres in size, and the maximum Project Extent will not exceed Two Thousand eight hundred (2,800) acres. It is anticipated that the project will begin development from the southern boundary (143<sup>rd</sup> Street) and move towards the north, not to exceed ~~121st~~119<sup>th</sup> Street.
  - ii. USSFs shall be located greater than five (5) miles from the Project Extent of the New Century AirCenter.
  - iii. Waiver: In the event that an applicant desires to deviate from the Development and Performance standard requirements, the applicant will submit written information to the De Soto Planning Director indicating the circumstances which are believed to necessitate the need for a deviation from the development and performance standards. The additional consideration may be granted only if the request is affirmed by the De Soto City Council to be reasonable to deviate from the adopted policy.
- e. **Project Area Setbacks:** The setback of structures associated with the USSF from the Project Area or, if applicable, public streets whichever is nearest to such structures, will be a minimum of 100 feet, with the exception that substations and Battery Energy Storage Facilities will be set back a minimum of 200 feet.
- f. **Setbacks from Dwellings:** To minimize adverse impacts upon nearby surrounding residential uses located outside of the Project Area, the minimum setback of structures and uses associated with the USSF, including fencing and PV panels, but not including landscaping and berming, will be not less than 300 feet from all

dwellings that are located outside of the Project Area and existing at the time the USSF was approved by the De Soto City Council.

- g. **Height:** The height requirements of structures associated with USSFs shall be as follows:
  - i. The maximum height of the lowest edge of the photovoltaic panels shall be 10 feet and the maximum height of the highest edge of the photovoltaic panels shall be 15 feet, as measured from the finished grade; and
  - ii. The maximum height of all other structures associated with the USSF shall be 35 feet as measured from the finished grade at the base of the structure to its highest point, including appurtenances with the exception of electrical power transmission lines, which are exempt from height requirements of these regulations.
- h. **Security Fencing:** USSF equipment and structures may be enclosed by security fencing not more than 12 feet in height. The fencing material can be chain link.
  - i. Security fencing can be placed around sections of photovoltaic PV solar panels and other structures rather than around the Project Extent in its entirety in order to provide pathways between the sections for the purpose of allowing the movement of wildlife. The fencing should be constructed with materials and a design that promotes the surrounding character, woven wire fencing with wooden posts may be more in keeping with the character of a rural area than chain link fencing with metal posts.
  - ii. The use of permeable fencing, which is constructed to allow wildlife to pass through the fence, is encouraged. Woven wire fencing with larger holes than a traditional chain link fence is an example of fencing that accommodates wildlife.
- i. **Wildlife Corridors:** Access corridors for wildlife to navigate through the USSF shall be provided and shown on the Concept Plan and Development Plan submitted to the City. Driveways within the Project Area may be considered a type of wildlife corridor.
- j. **Utility/Corridors:** Road and Utility corridors (existing and future) will be identified and approved by the De Soto Planning Director to allow for transportation access and utility services to be extended through the site if necessary. The future land use plan and other roadway and utility studies will be used for reference.
- k. **Ground Cover and Vegetation Preservation:** For the purpose of preventing erosion and managing runoff, disturbed land, to include land under and around the PV panels shall be seeded with a revegetation seed mix based on prairie grasses and forbs native to the Midwest United States. The intent of such seeding is to establish a short stature prairie with a diversity of grasses and wildflowers that bloom throughout the growing season. Such ground cover shall be continually maintained on the site for the duration of the Special Use permit. A list of seed mixes appropriate for Midwest USSFs are available at the Johnson County Extension Office. USSF shall be designed and developed to minimize grading and to protect and preserve Mature Trees, Stands of Mature Trees, tree-lines, streamways, ponds,

and other natural features, and, in particular, remnant grasslands and woodlands (which are areas that have not been previously plowed or graded) to the greatest extent reasonable and practicable.

- I. **Screening:** The purpose of screening is to help avoid potential detrimental impacts that may accompany the USSF. The required Project Extent Setbacks provide a measure of screening by providing increased distance or setbacks from exterior property lines to reduce impacts associated with the USSF.
  - i. USSF structures, including security fencing that is not ornamental, PV panels, equipment cabinets, substations, Battery Energy Storage Facilities, parking areas, and outdoor storage, if allowed, shall be screened when visible from any road, residential district, and any dwelling located outside of the Project Extent and existing at the time the USSF was approved by the De Soto City Council.
  - ii. Screening Methods: The applicant will use one or a combination of methods listed in this section, or other comparable methods deemed equivalent by the Planning Director, to satisfy the screening requirements. The method or methods proposed by the applicant will screen ground level views and activity. Such screening shall be located within the Buffer Zone and outside of security fencing and may also be required in other locations to screen specific uses or structures, such as substations and Battery Energy Storage Facilities. Screening shall not encroach upon the street right of way. The De Soto City Council may approve a plan to allow phased screening based on special or unique conditions of the use or site. The screening required by this section shall be shown on the required Landscaping Plan that is a part of the Development Plan.
  - iii. Existing vegetation, topography, buildings, open space, or other elements located on the site may be considered as part of the required screening.
  - iv. Landscaping intended for screening shall include a combination of evergreen trees that are 5-6 feet in height at time of planting and deciduous trees, which may include fruit trees, that are 5-6 feet in height at time of planting. Trees shall be placed on average at 25 feet or less on center. A plant schedule with specifications needs to be submitted by a licensed Landscape Architect.
  - v. Berms shall generally be constructed with a 3:1 side slope to rise ratio, 4-6 feet above the adjacent grade, with a 3-foot wide top (the wide top is necessary to have a flat area for plantings). The outside edges of the berm shall be sculpted such that there are vertical and horizontal undulations to give variations in appearance. All land berms shall be seeded with a revegetation seed mix based on prairie grasses and forbs native to the Midwest United States. A list of seed mixes appropriate for the area is available at the Johnson County, KS extension office
  - vi. Fencing intended for screening shall be at least seventy-five (75) percent visually solid as viewed on any line perpendicular to the fence from adjacent property or a public street. Such fencing may be used in combination with other screening



methods but shall not be the primary method, which shall mean for the purposes of this subsection that fencing shall not be used to screen more than thirty (30) percent of the views required to be screened. A typical example is the use of a combination of wood privacy fencing and landscaping to screen structures such as substations. Depending on the location, such as abutting residential zoning, ornamental features may be required on the fence. Fencing material shall not include chain link fencing with slats.

- vii. Additional Screening for residences: In addition to the above screening requirements, any residence at the time the USSF was approved by the De Soto City Council, that is located 300 feet or less from the Project Extent, shall receive additional vegetative screening from views of the USSF structures. Such vegetative screening shall be located within the Buffer Zone in an area extending at least 75 feet from either side of the dwelling (but shall not be required in any area outside of the Project Area). The vegetative screening shall be one-hundred (100) percent visually solid as viewed on a line from the dwelling and perpendicular to the Project Extent. The vegetative screening shall achieve a height of at least eight (8) feet or the height of the security fencing, whichever is greater, within three (3) years of installation.
- m. **Outdoor Storage:** Outdoor storage of equipment or materials associated with the USSF shall not be allowed unless expressly permitted by the Special Use permit.
- n. **Exterior/Outdoor Lighting:** Outdoor lighting associated with the USSF shall be limited to levels required for safety and security and shall not exceed the equivalent lumens of a 150 watt incandescent light bulb or 3000K LED. Outdoor lighting shall be arranged to direct light away from parcels located outside of the Project Area and from public streets and will be installed in such a manner as to avoid glare, visible bulbs, or light spillage onto adjacent properties. All light poles associated with the USSF shall not exceed a height of 20 feet. All lighting shall be shown on the Development Plan
- o. **Glare from Sunlight:** All structures associated with the USSF shall be arranged to direct reflected sunlight away from adjacent parcels and public streets and shall be installed in such a manner as to avoid glare onto adjacent parcels and interference with traffic, including but not limited to air traffic. The Federal Aviation Administration (FAA) may require a glare impact study and/or an airspace study to determine impacts on area airports.
- p. **Noise:** The noise level at the Project Extent shall not exceed 65 dB(A) or where abutting residential districts or parcels with dwellings existing at the time the USSF was approved by the De Soto City Council.
- q. **Signs:** Signs associated with the USSF shall be designed to comply the De Soto Zoning and Subdivision Regulations and a sign permit shall be obtained.
- r. **Compliance with County, State and Federal Laws, Regulations and Codes:** Construction and operation of the USSF shall fully comply with all applicable county, state and federal laws, regulations, and codes requirements.
- s. **General Installation and Maintenance:** The USSF shall be developed in accordance

with the approved Development Plan and shall be continually maintained and kept in good repair, which shall include, but not be limited to, fencing, ground cover, screening, lighting, driveways, entrances, and structures.

- t. **Groundcover and Screening Installation and Maintenance:** All grading, groundcover, berms, fencing, trees, and other forms of landscaping shall be installed in accordance with the Development Plan within one (1) year of approval of the Special Use Permit. Berms and fencing shall be continuously maintained and repaired or replaced if damaged. Groundcover and landscaping shall be continuously maintained and replaced if dead. Herbicides shall be applied in a manner that does not cause “drift”, which occurs when applied pesticides move through the air to abutting properties. Only designated low risk herbicides shall be used for vegetative and weed control. Herbicide applicators must possess a Kansas certified pesticide license. The USSF operator or owner shall be responsible for noxious weed management in accordance with state laws within the Project Extent.
  
- u. **Public Road Improvement, Repair and Maintenance** (including bridges, drainage structures, guard rails and all other roadway related infrastructure). The USSF owner or operator shall be responsible for any damage to public roads caused by the installation or decommissioning of a USSF. Any damage caused to a haul route, or any other road, caused by the installation, operation, maintenance, or decommissioning of the USSF shall be repaired at the USSF owner or operator’s expense.
  
- v. **Responsibility for Costs Incurred:** The USSF operator shall be responsible for the cost of developing and maintaining the USSF.
  
- w. **Annual Compliance Report:** In order to promote compliance with the restrictions, conditions, stipulations and limitations of the Special Use Permit and its associated Final Development Plan, the applicant shall submit a yearly report indicating the state of compliance with the approved Special Use permit, including the Final Development Plan and all approved stipulations.
  
- x. **Decommissioning and Reclamation:** The following requirements shall be met for decommissioning the USSF and reclamation of the Project Area:
  - i. **Guaranteed Funds:** The estimated cost of decommissioning and reclamation, will be guaranteed by financial surety satisfactory to and approved by the City in an amount equal to the estimated cost of decommissioning and reclamation.
  - ii. The USSF owner or operator shall deposit the required amount of financial surety, as directed by the City, before any building permit is issued to allow construction of the USSF.
  - iii. The below-referenced USSF Development Agreement, if applicable, shall prohibit the release of the surety without the written consent of the City. The City shall consent to the release of the surety upon compliance with the Decommissioning and Reclamation Plan approved by the De Soto City Council.
  - iv. The amount of surety required to be deposited shall be the full amount of the

estimated decommissioning and reclamation cost without regard to the possibility of salvage value.

- v. The estimated decommissioning and reclamation costs shall be recalculated at an interval no sooner than every year but not later than every five years. If the recalculated estimated cost of decommissioning and reclamation exceeds the original estimated cost of decommissioning and reclamation by ten percent (10%), then the USSF owner or operator shall deposit additional surety to meet the new cost estimate. If the recalculated estimated cost of decommissioning and reclamation is less than ninety percent (90%) of the original estimated cost of decommissioning and reclamation, then the City may approve reducing the amount of the surety to the recalculated estimate of decommissioning and reclamation cost.
- y. **End of SUP Term:** A minimum of one (1) year prior to the end of the Special Use Permit term, the USSF owner or operator shall notify the Planning Director in writing of future plans for the USSF, which may include decommissioning and reclamation or a request for Special Use Permit renewal.
- z. **Abandonment of USSF:** Unless otherwise approved by the Planning Director (e.g. to allow time to repair damage from severe weather or to update equipment), USSFs that have not been in active and continuous service for a period of six (6) months shall be decommissioned and reclaimed at the USSF's owner or operator's expense.
- aa. **Date of Decommissioning and Reclamation:** If the USSF is to be decommissioned and reclaimed, the USSF's owner or operator shall notify the Planning Director in writing of the proposed date of discontinued operations and plans for removal.
- bb. **Items Removed:** Decommissioning shall include removal of anything above or below-ground that was installed, constructed or erected as part of the USSF to include but not limited to structures, buildings, equipment, cabling and wiring, solar electric systems, electrical components, security barriers, foundations, pilings, and any other associated facilities. For any part of the USSF on leased property, the Decommissioning and Reclamation Plan may propose, for approval by the De Soto City Council, to incorporate agreements with landowners regarding the retainment of driveways, landscaping, berms, fences, gates or repurposed buildings or other structures. However, any proposed use of remaining buildings or other structures must be in conformance with the regulations in effect at that time.
- cc. **Reseeding:** Ground cover and screening established as part of the USSF Development Plan and other existing vegetation may remain and become part of the Decommissioning and Reclamation Plan. Land disturbed as part of the decommissioning process shall be reseeded or re-vegetated with crops, native seed mixes, or other plant species suitable to the area. A list of such appropriate plant materials are available at the Johnson County Extension Office. Such planting and associated grading or other land disturbance shall be completed within one (1) year of removal of USSF structures and equipment, in accordance with the Decommissioning and Reclamation Plan approved and adopted by the City.
- dd. **Disposal and Recycling of Materials:** Unless otherwise specifically indicated in the

approved Decommissioning and Reclamation Plan, all USSF materials and equipment, including but not limited to PV panels, inverters and batteries, shall be removed from the Project Area. Disposal and recycling of such materials and equipment shall fully comply with all applicable county, state and federal laws, regulations, and code requirements, which includes a city-approved demolition permit to a licensed contractor and an approved location for disposal of such materials and equipment.

- ee. **Amendment of Plan:** Decommissioning and reclamation shall be performed in compliance with the approved and adopted Decommissioning and Reclamation Plan (Plan). However, the Plan may be amended at such time that the applicant is ready to begin such decommissioning and reclamation if amendments are approved by the De Soto City Council. Amendment approval shall first require a public hearing under the same procedures as required for the Special Use Permit.
- ff. **Emergency Planning and Preparedness:** The USSF owner or operator shall coordinate with City and County emergency services staff (e.g. Sheriff's, fire district and emergency management staff) to provide materials, education and/or training to these departments serving the Project Area with emergency services on how to safely respond to on-site emergencies, including emergencies associated with Battery Energy Storage Facilities, if any, and to provide a fire safety plan, a fire evacuation plan, and all other submittals relating to emergency planning and preparedness as required by then applicable fire, electrical and building codes adopted by the City or referenced by these regulations.
- gg. **Change of Owner or Operator:** The USSF owner or operator shall give the City one hundred twenty (120) days written notice prior to any proposed change in USSF ownership or operator, with the additional requirement that the new owner or operator shall enter into all required written agreements and provide the required surety prior to the release of the owner or operator.
- hh. **USSF Agreement:** A USSF Development Agreement between the Project Extent landowners; USSF owner or operator, as satisfactory to and approved by the De Soto City Council will be required to provide that the USSF is developed, maintained, decommissioned, and reclaimed in accordance with the requirements of these regulations, the Decommissioning and Reclamation Plan approved and adopted by the City, and the Special Use permit, and shall address, among other things, items associated with:
  - i. installation and maintenance of the facility,
  - ii. monitoring annual compliance,
  - iii. installation and operation of Battery Energy Storage Systems, including the provision of specialized fire safety equipment or other protections, and
  - iv. decommissioning the USSF and reclamation of the Project Area. It shall be the responsibility of USSF owner or operator and not the City to obtain the required Project Area landowner signatures in a timely manner.
- ii. **Surety:** The USSF Development Agreement includes at a minimum two distinct and

separate sureties, including surety for installation and maintenance and surety for decommissioning and reclamation of the USSF. Surety type to be approved by the City.

- jj. **Installation and Maintenance:** Failure to develop or maintain the USSF in the manner required may result in loss of surety, or in revocation of the Special Use Permit and decommissioning of the USSF
- kk. **Decommissioning and Reclamation:** The USSF Development Agreement shall be required to assure that, among other things, the USSF is decommissioned and reclaimed in accordance with the requirements of these regulations, the Decommissioning and Reclamation Plan approved and adopted by the De Soto City Council, and the Special Use permit, and that the full cost of decommissioning and reclamation of the USSF shall be borne by the USSF owner or operator. The items addressed within the agreement shall include, but are not limited to, posting and collection of surety, review and recalculation of the decommissioning and reclamation costs, the various required deadlines associated with decommissioning and reclamation, and adherence to the Decommissioning and Reclamation Plan. Furthermore, if the owner or operator of the USSF fails to decommission and reclaim the site in accordance with the requirements of these regulations, the Decommissioning and Reclamations Plan and the Special Use permit, then the City may collect the surety and the City and/or a hired third party may enter the Project Area to decommission and reclaim the sites.
- ll. **Use of Third Parties:** The City may obtain reviews, inspections or other work completed by a third party for the purpose of reviewing or monitoring of the USSF, the costs of which shall be required to be reimbursed by the USSF owner or operator. Examples of such work include but are not limited to reviews and associated inspections of environmental impact assessments, stormwater quantity and quality plans, decommissioning and reclamation plans, and compliance reports.
- mm. **Battery Storage:** In addition to the above general provisions, application requirements, and development and performance standards, the following additional requirements shall be met for the approval of a Battery Energy Storage Facility:
  - i. Locational Criteria: Due to their potentially combustible nature and possible large footprint, the siting of Battery Energy Storage Facilities (BESF) will
    - a) Avoid locating nearby or in residential areas or areas used by the public (e.g. parkland),
    - b) Buffer from the surrounding areas by siting toward the interior of the parcel and using greater parcel sizes and setbacks,
    - c) Take advantage of existing topography, structures, and vegetation to provide extra screening,
    - d) Locate and design the BESF so that it mitigates the potential detrimental impacts to the general health, safety and welfare of the community,

- e) Locate in areas where the potential adverse impact on the community is minimal, and
  - f) Design and configure the BESF in a way that minimizes adverse impacts such as views, noise, vibration and the like.
- ii. Construction, Maintenance and Operation: Battery Energy Storage Facilities shall be constructed, maintained and operated in accordance with applicable codes and standards including but not limited to the then applicable fire, electrical and building codes adopted by the City and National Fire Protection Association. Each individual battery shall have 24/7 automated fire detection and extinguishing technology built in and
  - a) The Battery Monitoring System (BMS) shall monitor individual battery module voltages and temperatures, container temperature and humidity, off-gassing of combustible gas, fire, ground fault and DC surge, and door access; The BMS shall be capable of shutting down the system before thermal runaway takes place;
  - b) Access to all batteries and electrical switchgear shall be from the exterior for normal operation and maintenance. Access to the container interior shall not be permitted while the system is in operation except for safety personnel and first responders;
  - c) Signage shall include the following information: the type of technology associated with the battery energy storage systems; any special hazards associated; the type of suppression system installed in the area of the battery energy storage system; 24-hour emergency contact information, including reach-back phone number. Additionally, disconnect and other emergency shutoff information shall be clearly displayed on a light reflective surface.
  - d) In addition to the annual life and fire safety inspections required annually by the fire code and performed by city staff, the USSF owner or operator shall conduct semi-annual on-site self-inspections of the battery units and submit a written report to the Planning Director on their condition.
- nn. **Substations:** In addition to the above general provisions, application requirements, and development and performance standards, the following additional requirements will be met for the approval of a substation:
  - i. locate the substation in nonresidential areas,
  - ii. avoid locating the substation in areas used by the public (e.g., parkland),
  - iii. buffer the substation from the surrounding areas by siting toward the interior of the parcel and through the use of greater parcel sizes and setbacks,
  - iv. take advantage of existing topography, structures and vegetation to provide extra screening,
  - v. locate and design the substation so that it mitigates the potential detrimental

- impacts to the general health, safety and welfare of the community,
- vi. locate the substation in areas where the potential adverse impact on the community is minimal,
- vii. design and configure the substation in a way that minimizes adverse impacts such as views, noise, vibration, and
- viii. Substations included as part of the USSF shall have the same term as the USSF. However, substations may have a life expectancy longer than that of the remainder of USSF, therefore, alternatively, upon decommissioning of the USSF, the substation owner may apply for a Special Use permit or such other zoning approval to allow the continued use of the substation, which may be applicable and authorized for this use.

**Section 3.** City Staff is authorized to revise other portions of the City Code or Zoning Regulations to be consistent with the above text amendment.

**Section 4.** This ordinance shall take effect and be enforced from and after its publication once in the official city newspaper.

**PASSED** by the Governing Body of the City of De Soto, Kansas on the ~~16<sup>th</sup> day~~<sup>6<sup>th</sup></sup> day of ~~March~~<sup>April</sup> 2023.

(Seal)

\_\_\_\_\_  
Rick Walker, Mayor

ATTEST:

\_\_\_\_\_  
Brandon Mills, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Patrick G. Reavey, City Attorney