12-306-44 WIND ENERGY CONVERSION SYSTEMS

12-306-44.01 Definitions

Applicant. The party(ies), company(ies), or entity(ies) responsible for the construction, operation, maintenance, and decommissioning of a Personal - Wind Energy Conversion System, a Commercial - Wind Energy Conversion System, or a Commercial - Wind Energy Conversion System Project. (See also Operator)

Blade Glint. The intermittent reflection of the sunlight off the surface of wind Turbine blades.

Commercial - Wind Energy Conversion System (C-WECS). A single wind-driven machine that converts wind energy into electrical power for the primary purpose of sale, resale, or off-site use. (See also Turbine)

C-WECS Project Boundary. The exterior property line of all Participating Landowners making up the perimeter of the C-WECS Project. These parcels may or may not be contiguous but must be adjacent to other Participating Landowners within the same C-WECS Project should more than one property be participating in the C-WECS Project.

Commercial - Wind Energy Conversion System Project (C-WECS Project). A grouping of C-WECS, commonly referred to as a ‘wind farm’, that convert wind energy into electricity for the primary purpose of storage and sales of generated electricity off-site. This term includes all appurtenant facilities such as roads, substations, and operation or maintenance buildings. The system is connected to electrical infrastructure, such as transmission lines, and is intended for use in a larger electrical network exclusive of individual use.

Environmentally Sensitive Lands. As defined and listed within Douglas County Zoning and Land Use Regulations Section 12-314-2.

Extraordinary Events. Any of the following with respect to an approved C-WECS would be considered an ‘extraordinary event’: significant individual-Turbine damage or facility-wide damage to Turbines and/or infrastructure due to extreme weather, fire, or natural disasters; grievous injury to any individual; kills of endangered, threatened, or otherwise protected birds, bats, or other significantly affected animals defined by the U.S. Fish and Wildlife Service and/or Kansas Department of Wildlife and Parks; or, similar event.

Grading. The act of excavation or filling, or a combination of both, or any leveling to a smooth horizontal or sloping surface on a property but not including normal cultivation associated with an agricultural operation.

Height, Total. The vertical distance between the surface of the tower foundation and the highest point on the blade tip. Commonly referred to as “tip height”.

Net Metering. A system in which renewable energy generators are connected to a public-utility power grid and surplus power is transferred onto the grid, allowing customers to offset the cost of power drawn from the utility.
Non-Participating Landowner. Property owners who have not entered into leases, easements, or other monetary arrangements with an Applicant or Operator, and their successors, heirs, executors, and assigns, whereby they do not have reasonable expectation to benefit from approval, construction, and operation of a C-WECS Project.

Occupied Structure. Any enclosed structure that is, or is likely to be, occupied by persons or livestock. This includes, but is not limited to dwellings, places of business, places of assembly, and barns.

Operator. The party(ies), company(ies), or entity(ies) responsible for the construction, operation, maintenance, and decommissioning of a Personal - Wind Energy Conversion System, a Commercial - Wind Energy Conversion System, or a Commercial - Wind Energy Conversion System Project. (See also Applicant)

Participating Landowner. Property owners who have entered into leases or other monetary arrangements with an Applicant or Operator, and their successors, heirs, executors, and assigns, whereby they have reasonable expectation to benefit from approval, construction, and operation of a C-WECS Project. Any person(s) who is not a participating landowner shall be referred to as a Non-Participating Landowner.

Personal - Wind Energy Conversion System (P-WECS). A system of wind-driven machine(s) that convert wind energy into electrical power for the primary purpose of on-site personal use, not for off-site commercial power production. This may include windmills, wind pumps, ground water pumps, or devices used to power or run machinery via wind power.

Prescribed Burning. The controlled application of fire to naturally occurring or naturalized vegetative fuels under specified environmental (weather) conditions in accordance with a written prescription that is designed to confine the fire to a predetermined area and to accomplish planned land management objectives.

Property Line. The boundary line between two parcels of property used to define the points where properties begin and end.

Qualified Professional. An individual approved by the Zoning and Codes Director who has experience and training in the pertinent discipline and has expertise appropriate for the relevant subject.

Rotor. The rotating part of a Turbine, including the Turbine blades. Rotor diameter means the cross-section dimension of the circle swept by the rotating rotor blades.

Shadow Flicker. Alternating changes in light intensity caused by the moving blades of a wind energy system which cast a repeating pattern of shadows on the ground and stationary objects, such as a window of a dwelling.
Turbine. A wind-driven machine that converts wind energy into electrical power, also referred to as tower or wind energy conversion system (WECS).

FIGURE 1. (12-306-44) TURBINE DIAGRAMS

Wildlife Corridors. A vegetated route or other connection which allows unimpeded movement of wildlife between areas of habitat. A wildlife corridor may be naturally occurring areas such as stream corridors, or constructed breaks in the contiguously fenced areas other than for roads.

Wind Farm. For purposes of this regulation, a Wind Farm is referred to as a C-WECS Project.
12-306-44.02 Personal - Wind Energy Conversion System (P-WECS)

a. **Purpose.** It is the purpose of this section to provide details relating to any application for small, personal-use wind energy conversion system(s).

b. **Conditions Required for Approval.**

1) Cumulative maximum power rating of 50 kilowatts of electrical power on site, which may include one or multiple P-WECS.

2) Total Height shall not exceed 75 feet for any system included in P-WECS.

3) P-WECS shall be set back from the nearest property line a distance which is at least equal to 150% Total Height of the P-WECS, measured from the center of the tower.

   i. P-WECS shall be set back from roadways to meet the dimensional standards of the zoning district.

4) Excess power generated may be sold back to the utility company through Net Metering, to the extent permitted by the applicable utility company.

5) Subject to appropriate building permits and site plan requirements.

   i. P-WECS sited on industrially-zoned or business-zoned properties are subject to site plan requirements.

---

![Diagram of P-WECS with maximum total height 75 feet]
12-306-44.03 Commercial - Wind Energy Conversion System (C-WECS)

a. **Purpose.** It is the purpose of this section to protect and promote the public health, safety and general welfare of the residents of Douglas County, Kansas through a detailed application process for a Commercial Wind Energy Conversion System (C-WECS) Project; a process to permit the development of a C-WECS Project; a process for public discussion and informed comment on the C-WECS Project; and identify significant environmental, social, and economic effects related to a proposed C-WECS Project.

b. **Intent of Regulations.** It is the intent of these regulations to address major issues associated with the project; however, issues not listed may be deemed significant and issues may emerge as significant during the course of review, which will be addressed as part of the review and conditions of each individual conditional use permit.

1) These regulations specify the plans, surveys, and studies that must be submitted as part of the Conditional Use Permit application.

2) Appropriate criteria for siting a C-WECS.

3) Standards are provided to:
   i. Ensure the land remains viable for existing uses during the life of the C-WECS Project and following decommissioning;
   ii. Minimize the impact on Non-Participating properties;
   iii. Minimize the degradation of the visual character of the area;
   iv. Minimize negative environmental impacts;
   v. Ensure reclamation of the site;
   vi. Provide appropriate decommissioning and disposal measures;
   vii. Promote the safe, effective, and efficient use of C-WECS, and;
   viii. Regulate projects that supply of renewable energy in a manner that respects the economic, geographic, social, and environmental context of Douglas County.

4) These regulations are not intended to restrict installation of Personal - Wind Energy Conversion Systems (P-WECS) authorized and governed by Chapter 13, Construction Codes of Douglas County, Kansas. P-WECS are expressly exempt from the Conditional Use Permit process.

c. **Review and Approval Process.** C-WECS Projects shall be subject to Section 12-307-2 of Douglas County Zoning and Land Use Regulations for original approval, periodic review, and grounds for suspension, amendment, or revocation.
d. **Conditional Use Permit.** If approved, one conditional use permit will be issued for the entirety of real property included within the perimeter of the proposed C-WECS Project. Every Turbine and associated equipment or structures will be reviewed and documented independently for its siting consideration and impacts.

    1) **Consent.** In the event the application includes multiple properties, the Applicant shall provide written evidence of landowner consent for each, and every parcel contained within the conditional use permit application.

e. **Location Criteria.** Through this application, appropriate location criteria for siting wind turbines must be met. C-WECS shall be subject to Section 12-312 of the County Zoning Regulations and are prohibited from location within any federally designated floodway.

f. **Independent Third-Party Review.** If it is determined that the review body does not have the appropriate expertise to review or interpret any or all of the required application materials including but not limited to: construction activities, field inspections, decommissioning activities or adequacy of security amount, they may contract with an independent third party to conduct such reviews. In such cases, the Applicant shall be responsible for all costs of the external review.

g. **Burden of Proof.** An Applicant requesting approval of a C-WECS Project is subject to the requirements and procedures of Section 12-307-2, Conditional Uses, of the County Zoning Regulations.
12-306-44.03.01  Key Factors

In addition to the review and decision-making criteria listed in Section 12-307-2.05, the following factors shall also be evaluated.

a. The Applicant shall demonstrate their ability to strictly conform to all applicable performance standards detailed in these Regulations as well as applicable federal, tribal, state, and local laws and regulations.

b. Key factors to be considered with the review of the application include, but are not limited to:

1) Siting Considerations;
2) Visual Impact;
3) Noise Impact;
4) Environmental Impact;
5) Infrastructure Impact;
6) Aviation and Federal Aviation Administration Impact;
7) Building Safety and Construction Management;
8) Extraordinary Event Response;
9) Operation and Maintenance;
10) Post Construction Restoration;
11) Decommissioning and Reclamation;
12) Impact on Wildlife Habitat and Native Flora and Fauna;
13) Impact on cultural, historical, or archeological features;
14) Impact on critical wildlife habitats, current state-listed threatened and endangered, species, and species in need of conservation as defined by Kansas Department of Wildlife and Parks;
15) Impact on environmentally sensitive lands;
16) Impact on water quality and soil erosion;
17) Cumulative Impacts;
18) Company experience, reputation, and financial ability;
19) Bond agreement or other means of ensuring reclamation, disposal, and decommissioning performance; and
20) Degree to which agricultural uses and wildlife habitat are accommodated with the facility layout and design.
12-306-44.03.02 Contents of Application.

No action on the request will be taken until all the required information has been submitted. Applicants should use plain terminology when possible and provide additional context as needed. Applications shall include, at a minimum, the following:

a. **General Information.**

   1) Applicant Information

   a. For each party, company or entity responsible for construction, operation, maintenance and decommission of the C-WECS project, provide the name, point-of-contact, physical address, email address, phone number, and identify which part of the Project they will be responsible for;

   b. General discussion of ability to construct, operate, and maintain the C-WECS Project;

   c. Financial information regarding Applicant's ability to meet the decommissioning and reclamation requirements;

   d. Applicant's environmental management history;

   e. Applicant's qualifications and experience in C-WECS Project development;

      i. A list of projects developed by Applicant, and their parent company and/or subsidiary if applicable, within the last 10 years. Each project listed shall include the project’s name, location (state and county), year online, number of Turbines, power rating, and the contact information for a person who may be contacted (unique to each project).

      i. A disclosure of any code compliance violation, found to be the fault of the Applicant, within projects listed and the contact information for the applicable government office or other authority which enforced these violations.

      ii. A disclosure of judgements against the Applicant of state, federal, and tribal laws during the development or operation of projects listed.

      ii. Only wind energy projects that are either existing, approved, or applied for shall be considered. Speculative projects that are not publicly known are not required to be disclosed.

   2) Project Information

   a. Name of the C-WECS Project;

   b. Names and addresses of Participating Landowner(s);
c. Participating Landowner authorization documentation sufficient to demonstrate the Applicant’s right to construct and operate the project on each parcel in the proposed project area;

d. Demonstrate wind characteristics sufficient to support the performance plans of the proposed project and individual Turbine sites;

e. Narrative describing phases of construction;

f. Relevant background information on the project, including a general overview of the project location, timeframe and project life, phases of development (including construction, operations, and decommissioning), and possibilities for future expansion;

g. A narrative explaining why the proposed project site was chosen by the Applicant over alternative locations for the project in the region and reasons for preferring the proposed site over the alternatives considered by the Applicant. The region shall be defined as all counties adjoining and including Douglas County;

h. Map showing locations of Occupied Structures within a radius of 2 miles of the C-WECS Project Boundary, also indicating the proposed location(s) of Turbines; and

i. Proof of having submitted Federal Aviation Administration Form 7460-1, Notice of Construction, (and/or other applicable Federal Aviation Administration forms)

b. **A Concept Plan.** Plan drawn to a scale where all features of the proposed C-WECS Project are clear and legible, including the following:

1) The general vicinity of the project location;

2) Scale and north arrow;

3) Location and total number of proposed Turbines within C-WECS Project boundary;

4) Location of accessory structures and associated facilities to be located within the C-WECS Project boundary;

5) Technical specification of Turbines, including but not limited to: manufacturer, power rating, hub height, Total Height, Rotor diameter, tower style and color, foundation size at grade, and foundation depth;

6) Location of proposed staging and maintenance areas, including but not limited to: equipment storage buildings, exterior storage areas, batching plants, laydown yards, mobile construction offices, and similar uses;

   a. Indicate whether temporary or permanent in nature.

7) Location of existing and proposed substations within the proposed C-WECS Project boundary or within a 2-mile radius of the C-WECS Project boundary;
8) Location of existing and proposed utility easements including, but not limited to, easements for transmission and interconnection;
   a. All above ground and below ground electrical lines and facilities, including transmission lines;
   b. All underground pipelines;
   c. All railroad and drainage easements;
9) Contours showing the existing topography of the site at two-foot intervals. The source of the topographic data must be stated;
10) Locations of Environmentally Sensitive Lands as defined in Section 12-314-2 of the Douglas County Zoning and Land Use Regulations;
   a. Location of any historic, cultural, or archeological significant sites within the C-WECS Project boundary or adjacent to the C-WECS Project boundary; Relative distance and location of Wells Overlook, Wakarusa Wetland, Kansas River, and any local, state, tribal, or federal designated trails;
11) Extent of area within proposed C-WECS Project boundary to be disturbed or cleared for access, construction, operation, and maintenance;
   a. Area of proposed removal of natural vegetation, and;
   b. Area proposed to be graded.
12) Setbacks of all proposed Turbines from property lines and Occupied Structures of both Participating and Non-Participating Landowner within the C-WECS Project Boundary;
13) Location of all public or private roads, driveways, parking areas, Turbine access points, and other improved surfaces intended for vehicle use within the C-WECS Project boundary;
14) Location of all public or private roads adjacent to the C-WECS Project boundary, and each proposed point of access from a public road;
15) All proposed haul routes from the C-WECS Project boundary to a state highway, to be used for both construction and operation of the project;
16) Boundaries and designations of any Special Flood Hazard Areas identified on the Flood Insurance Rate Map of Douglas County, Kansas; and
17) Location of Kansas Department of Wildlife and Parks managed properties.

   c. Lighting Plan. An outdoor lighting plan shall be submitted whenever outdoor lighting is to be installed, both temporary and permanent. The lighting plan shall be reviewed to determine whether the proposed outdoor lighting complies with the standards of Section 12-314.303 of the County Zoning Regulations.
d. **Visual Impact Assessment.** A visual impact assessment shall be developed by a Qualified Professional. The assessment shall provide accurate and site-specific visualizations from key observation points and a detailed description of any proposed measures to mitigate or lessen the effects of any expected adverse impacts and supporting information. The assessment shall include, at a minimum, the following:

1) Virtual simulations which may include 3D visualization models, photographic simulations, and/or animated visualizations as determined necessary by Zoning and Codes Director;

2) Viewshed analysis to determine actual visibility and the characteristics of the views within the project area including different seasons, times of day, and weather conditions;
   a. The viewshed is considered the 10-mile area surrounding the C-WECS Project boundary.

3) Inventory of views to provide the basis for evaluating the extent of visibility. This inventory shall include written description of views, distance from proposed project, duration of view, and characteristics of the viewpoints from the following:
   a. All Occupied Structures located within one thousand five hundred feet (1500’) of the C-WECS Project boundary;
   b. Any historic, cultural, or archeological significant sites within the C-WECS Project boundary or within a 2-mile radius of the C-WECS Project boundary;
   Significant sites may include but are not limited to: Wells Overlook, Baker Wetland, Kansas River, and any local, state, tribal, federal designated trails;
   c. All public roads within the project area or adjacent to the project area, and;
   d. Any government-designated scenic byways, government-designated scenic overlooks, public parks, Conservation Areas, or Wildlife Refuges within the project area or adjacent to the project area.

4) Photographic simulations of key observation points, as identified within the inventory of views, shall be provided as determined necessary by Zoning and Codes Director;

5) Impact of Shadow Flicker on any Occupied Structure within the C-WECS Project and within a 1500 foot radius of the C-WECS Project Boundary for Participating Landowner, from any C-WECS including estimated duration of the Shadow Flicker (in minutes per day and hours per year);

6) Impact of Shadow Flicker on any Occupied Structure within one mile of the C-WECS Project boundary including estimated duration of the Shadow Flicker (in minutes per day and hours per year);

7) Potential hazards of Blade Glint;
8) A report detailing proposed measures that would minimize Shadow Flicker and Blade Glint caused by C-WECS operations at Non-Participating Occupied Structures; and

9) A report detailing expected cumulative impacts, as assessed above, caused by C-WECS operation.

e. Noise Impact Assessment. A noise impact assessment developed by a Qualified Professional, board certified by Institute of Noise Control Engineering, of potential adverse impacts from operational noise levels from the C-WECS Project and any proposed measures to mitigate or lessen impacts. The assessment and mitigation plan shall include, at a minimum, the following:

1) A report detailing existing noise levels prior to project, both during day hours and night hours for the following sound levels, including but not limited to existing mid-frequency (dBA);
   
   i. Day hours are 6:00AM to 9:59PM
   
   ii. Night hours are 10:00PM to 5:59AM
   
   a. Existing low-frequency noise (dBC);
   
   b. Existing high-frequency noise (dBC);
   
   c. Existing infrasound (dBG);
   
   d. A map of locations the data is collected including proposed Turbine sites; and
   
   i. Data must provide adequate understanding of existing conditions within C-WECS Project Boundary and the 2-mile radius surrounding the C-WECS Project. Further study may be required at the discretion of Zoning and Codes Director.

   e. Information regarding wind direction and speed of wind at time of collection.

2) A report detailing expected sound level at the nearest Participating Landowner’s Occupied Structure and nearest Non-Participating Landowner’s Occupied Structure for each C-WECS Turbine site.

   a. Expected mid-frequency (dBA) noise generated from C-WECS Project operations;

   b. Expected low-frequency noise (dBC) generated from C-WECS Project operations;

   c. Expected high-frequency noise (dBC) generated from C-WECS Project operations;
d. Expected infrasound (dBG) generated from C-WECS Project operations; and

e. Expected pure tones generated from C-WECS Project operations.

3) A report detailing expected sound level at the property line of the nearest Non-Participating Landowner for each C-WECS Turbine site.

a. Expected mid-frequency noise generated from C-WECS Project operations. (dBA);

b. Expected low-frequency noise generated from C-WECS Project operations. (dBC);

c. Expected high-frequency noise generated from C-WECS Project operations. (dBC);

d. Expected infrasound (dBG) generated from C-WECS Project operations; and

e. Expected pure tones generated from C-WECS Project operations.

4) A report detailing expected cumulative noise impacts caused by all collective Turbine sites within the C-WECS Project.

5) A report detailing proposed measures to mitigate or lessen the effects of the adverse impacts caused by C-WECS operations at affected Occupied Structures.

6) A report detailing proposed measures that would eliminate pure tones caused by C-WECS operations at Non-Participating Occupied Structures.

f. Environmental Impact Assessment. An assessment developed by a Qualified Professional of the potential adverse impacts on the natural and physical environment from the Project and any proposed measures to mitigate or lessen the effects of the adverse impacts. The assessment and mitigation plan shall include, at a minimum, the following:

1) Documentation that the Applicant has followed the United States Fish and Wildlife Service Land Based Wind Energy Guidelines and copies of all resulting studies and recommendations;

2) Impact, if any, to species of birds protected under the Migratory Bird Treaty Act of 1918, as may be amended from time to time;

3) Impact on any endangered or threatened species, including species in need of conservation as defined by Kansas Division of Wildlife and Parks in the project area;

4) An official ecological review determination and/or Action Permit issued by Kansas Department of Wildlife and Parks for potential impacts to any endangered or threatened species, including species in need of conservation, as defined by Kansas Department of Wildlife and Parks;
5) Impact on Environmentally Sensitive Lands;

6) Impact on wildlife;
   a. Impact on wildlife habitat in the C-WECS project boundary; and
   b. Impacts on Wildlife Corridors in the C-WECS project boundary.

7) Impact on flora in the C-WECS project boundary;

8) Impact of the project on water quality and water supply, including wells, in the C-WECS Project boundary;
   a. Map showing depth of water table within C-WECS Project with the overlay of proposed Turbine sites.

9) Impact on livestock, defined by Section 12-315.2 of the County Zoning Regulations, in the C-WECS Project boundary;

10) Expected long-term effects on agricultural land and mitigation techniques which would assure land remains viable for agricultural uses after decommissioning;

11) Any wastes, either solid waste or hazardous waste, generated by the project at any point in its lifespan;

12) Electromagnetic fields and communications interference generated by the project;

13) Risk of fire from the project, including but not limited to: fires started by equipment failure, threat of lightning strikes, and risks associated with prescribed and non-Prescribed Burnings;
   a. A Prescribed Burning plan shall be provided to and approved by the applicable Fire authority.

14) A summary of the identified resources as found on the Kansas Natural Resource Planner and Kansas Historic Resource Inventory (KHRI) as well as the accompanying results from site specific project data request.
   a. If the proposed project area has not been inventoried, this shall be done at the Applicant’s expense if determined necessary by the Heritage Conservation Coordinator and/or Kansas Biological Survey; and
   b. An Unanticipated Discoveries Plan for cultural resources and human remains shall be provided.

15) An archeological reconnaissance survey within the C-WECS Project boundary shall be developed by a Qualified Professional and provided to the State Historic Preservation Office to determine if cultural resources are present, and;

16) A general discussion of any potential changes to the above assessment items that could be anticipated when considering the cumulative impacts of other wind energy projects in the region. The region shall be defined as all counties adjoining Douglas County and including Douglas County. When considering the cumulative impacts, only wind energy projects that are either existing, approved,
or applied for shall be considered. Speculative projects that are not publicly known are not required to be considered.

g. **Stormwater Management Plan.** A stormwater management plan with supporting calculations, documenting how runoff will be conveyed throughout the site. The calculations must include the design of open channels and culverts on site. Based on recommendations from the Public Works Director, storage, and controlled release at points of discharge from the site may be required. The stormwater management plan must be included on the final site plan prior to Board of County Commissioner approval.

   1) Preliminary stormwater management plans shall be provided with the original application, as required by the Public Works Director, however, engineered, or detailed stormwater plans must be submitted for the Public Works Director’s review and evaluation prior to the Board of County Commissioners’ final action on the application.

h. **Traffic Impact Mitigation Plan.** A traffic study and traffic impact mitigation plan must be provided with the application. The Applicant will be required to mitigate impacts to county and township roadways. Additional plans and agreements may be required prior to the Board of County Commissioner’s final action on the application. The following items must be provided:

   1) A traffic study estimating the volume and type of traffic generated by the project, both during construction and during normal operations. The study must identify proposed haul routes for construction traffic, trucks, oversize loads, and ongoing maintenance. Haul routes must be identified from the project area to a state highway;

   2) Prior to final approval, a road maintenance agreement to be executed with the County and the applicable township, addressing compensation for road maintenance or dust control on public roadways; and

   3) Prior to final approval, a public improvement agreement to be executed with the County, addressing compensation for necessary road, bridge, and culvert improvements on public roadways.

i. **Operation and Maintenance Assessment.** An operation and maintenance assessment that provides the operation and maintenance requirements (including frequency of maintenance activities) for the Turbines and transmission lines; the width of transmission line easements required, and any restrictions necessary on land use, development, and access within said easement. Assessment shall include, at a minimum, the following:

   1) Potential hazards from collapse or damage of Turbines or system components in severe storms;

   2) Potential hazards from ice throws and debris throws; and

   3) Dust from project activities.
j. **Federal Aviation Administration Requirements Acknowledgement.** A description of the Federal Aviation Administration requirements applicable to the structures and facilities on the site and the proposed methods for meeting those requirements.

k. **Emergency Mitigation Plan.** A plan including all means of managing an Extraordinary Event within the C-WECS Project boundary shall include, but will not be limited to, the following information:

1) Site map including emergency ingress/egress with the location of the access drives and the width and load rating of the access drives.
   
   a. A description of how emergency fire and medical personnel will function in various Extraordinary Event scenarios.

2) Emergency contact information;

3) Description of how the fire safety system, and its associated controls, will function and be maintained in proper working order.

4) Fire protection and suppression systems for any C-WECS and any accessory structures.

5) Site control measures during and after any emergency. All means of managing an emergency, including shutting down the C-WECS, shall be noted and clearly marked.

6) Procedures for inspection and testing of associated alarms, interlocks, and controls shall be noted on the plan.

7) Material Safety Data Sheet. Unless the facility meets the reporting thresholds of Emergency Planning and Community Right to Know Act, in which case the Applicant shall provide a Tier II report, if required by the U.S. Environmental Protection Agency.

8) Emergency response training will be provided prior to the operation of a C-WECS Project, and annually thereafter, for all emergency response stakeholders (local fire district, medical emergency personnel, etc.) This training shall include in-person training on how to use special equipment and processes required to assure public safety and effective emergency management during an Extraordinary Event.

   a. Any specialty response equipment required to adequately manage Extraordinary Events will be provided, updated, and/or replaced by the Operator, as needed and at the Operator’s expense.

l. **Mitigation Plan.** A document which incorporates all means of mitigation, in addition to those already considered within the application, in order to avoid, reduce, or eliminate adverse impacts in other areas related to the C-WECS Project.
m. **Decommissioning Plan.** A general description of the decommissioning and land reclamation strategy in the event the project is abandoned, the Conditional Use Permit is revoked or expires without renewal, or upon the end of the useful life of the project;

   1) Any decommissioned equipment shall be hauled to an approved location and shall not be buried on site.

n. **Public Notice.** Within 24 hours of Conditional Use Permit submission, the Applicant shall mail notice of the conditional use permit application to property owners as provided in this section. This requirement is in addition to the notice requirement of Section 12-307 of the County Zoning Regulations.

   1) The Applicant must provide written notice to all landowners of record of unincorporated property located within the C-WECS Project boundary and within a 2-mile radius of the C-WECS Project boundary;

   2) At the time of mailing, the Applicant shall submit a certified list of landowners received from the County Clerk, and a copy of the letter sent.

   3) The notice shall include a brief description of the project, proposed construction date, date the application was submitted to the planning office, and the person representing the Applicant, with their contact information (phone number, email address, etc.) to respond to questions concerning the proposed application and the following statement:

   *This letter is being sent to the owners of nearby property for the purpose of informing the property owners and other interested parties about the proposed Commercial Wind Energy Conversion System (C-WECS) project described further in this letter. This letter does not grant the recipient and/or property owner any additional legal rights to challenge the proposed development, instead, it is being provided solely to advise property owner(s) of the pending development. For further information, contact the applicant’s designated representative or the Lawrence-Douglas County Planning Office at 785-832-7700.*

   4) The Applicant is responsible for mailing notice to all property owners listed on the certified property owner list.

   5) Failure of a party to receive such notice will not be grounds to invalidate any action taken by the Planning Commission or the Board of County Commissioners.

o. **Provisions.** The application shall acknowledge and note the following provisions, which shall be conditions of Conditional Use Permit approval, unless waived or modified by the Board of County Commissioners:

   1) Term of Conditional Use Permit. The Conditional Use Permit shall be valid for 25 years from the date of the Board of County Commissioners’ approval, or for such other duration as specified by the Board of County Commissioners. Continuation of the use beyond the authorized term will require the submission and approval of a new conditional use permit.
2) Prescribed Burning of land is permissible only after appropriate contact with County offices. All burning must follow the approved prescribed burning plan. Burning is not allowed on “designated no-burn days”.

3) Designated haul routes for construction, maintenance, and decommissioning shall be followed per the Road Maintenance Agreement on file with the Douglas County Public Works Office.

4) The Board of County Commissioners, or the appointed representatives thereof, shall have the right to request, upon 72 hours advance notice, to enter the C-WECS Project during construction and operation to confirm compliance with the conditions of this permit. The Applicant and Operator shall utilize reasonable efforts to accommodate such request, subject to reasonable safety and operational concerns and the Applicant’s and Operator’s right to participate in such inspection. The Applicant or Operator must ensure that County representatives have a legal right to access any real property within the Project area for this purpose, including but not limited to securing such rights from Participating Landowners. If the land within the Project area, or any portion thereof, is enclosed, the Applicant or Operator shall make arrangements with Participating Landowners so that County representatives have legal access to real property within the Project area and a right to inspect the turbine(s) as provided in this section.

5) The Board of County Commissioners, or the appointed representatives thereof, shall have the right to halt construction or operations of the C-WECS Project if a material breach of the CUP or applicable County Codes is found.
12-306-44.03.03 Design Standard
The following design standards are applicable to Commercial Wind Energy Conversion Systems Projects (C-WECS). P-WECS are exempt from this section.

a. Setback. This section regulates the setback of a C-WECS from specified locations.

1) Individual Turbines shall be set back not less than 1,500 feet from the center of tower to the Participating Landowner’s residence (dwelling) and any other Occupied Structures.

2) Individual Turbines shall be set back not less than 2,500 feet from the Property Line of Non-Participating Landowner.

3) Individual Turbines shall be set back from public roads and rights-of-way not less than 110% of the Total Height of the Turbine.

4) Individual Turbines shall be set back from overhead utility lines not less than 110% of the Total Height of the Turbine.

5) Individual Turbines shall be set back from Kansas Department of Wildlife and Parks managed properties not less than the setback recommendations provided by Kansas Department of Wildlife and Parks, 3 miles.

6) Individual Turbines shall be set back not less than 2,500 feet from the center of tower to Douglas County boundary line.

7) Additional or reduced setback requirements may be imposed by Board of County Commissioners as conditions of approval to the project.

8) Location of private lease agreements do not override these setback regulations.

TABLE 1. (12-306-44) C-WECS Setback Requirements

<table>
<thead>
<tr>
<th>Feature</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Landowner Occupied Structure</td>
<td>1,500 feet</td>
</tr>
<tr>
<td>Non-Participating Property Line</td>
<td>2,500 feet</td>
</tr>
<tr>
<td>Public roads</td>
<td>110% Turbine Total Height</td>
</tr>
<tr>
<td>Overhead utility lines</td>
<td>110% Turbine Total Height</td>
</tr>
<tr>
<td>Kansas Department of Wildlife and Parks managed properties</td>
<td>3 miles</td>
</tr>
<tr>
<td>County Boundary Line</td>
<td>2,500 feet</td>
</tr>
<tr>
<td>Airports and airstrips</td>
<td>Federal Aviation Administration guidelines and requirements dictate</td>
</tr>
<tr>
<td>Accessory structures and associated permanent equipment</td>
<td>Zoning district dictates</td>
</tr>
<tr>
<td>Maintenance buildings</td>
<td>Zoning district dictates</td>
</tr>
</tbody>
</table>
b. **Permitted Height.** The maximum height of any Turbine shall be 600 feet, as measured at tip height. The Board of County Commissioners may approve greater height for individual Turbines, if increased tower height better aligns with the purpose and intent of this section.

**FIGURE 3. (12-306-44) C-WECS**

---

FIGURE 3.

---

c. **Minimum Clearance.** Each C-WECS must maintain a minimum clearance of 50-feet from the ground, immediately adjacent to the tower base, to the Rotor tip at its lowest point.

d. **Anti-climb.** All C-WECS Turbines must include features to deter climbing or be protected by anti-climbing devices.

e. **Structure.** Structures for wind Turbines shall be self-supporting tubular towers painted a neutral color unless otherwise permitted by the Board of County Commissioners. A lattice structure shall be prohibited.

f. **Wireless Facility.** No telecommunications dishes, antennas, cellular telephone repeaters or other similar devices shall be attached to wind Turbine towers unless mounted inside the tower and approved subject to Section 12-306-45.03 of the Zoning Regulations.

g. **Fire Suppression.** All C-WECS shall be equipped with an automatic fire suppression system.

h. **Safety Protocols.** C-WECS shall be designed to industry best practices and standards.
   
   1) Best available technology shall be utilized for immediate shutdown of Turbines when ice buildup is detected in order to prevent ice throw.
2) Lightning protection systems shall be utilized.

i. **Prohibited Markings.** Logos or advertisements are prohibited on C-WECS.

j. **Identification Number.** Wind Turbines and accessory structures shall be marked with a visible identification number located no higher than fifteen (15) feet above ground level. Compliance with Emergency Management Standards is required.

   1) A phone number for the purpose of reporting an emergency to the C-WECS Project Operator shall be posted on site.

k. **Turbine Access Roads.** Access roads on private property shall be shown on the site plan.

   1) All access roads and bridges shall be designed to support an 80,000 pound emergency vehicle apparatus.

l. **Visual Uniformity.** To provide visual order to a C-WECS Project, all individual Turbines shall have the same number of Rotor blades. All Rotor blades shall spin in the same direction (i.e., clockwise or counterclockwise) in relation to the wind.
12-306-44.03.04 **Performance Standards**

The following standards apply to all Commercial Wind Energy Conversion Systems. Failure to comply with these standards may be grounds for suspension, amendment, or revocation of Conditional Use Permit as determined by the Board of County Commissioners as described in Section 12-307-2.14 of the County Zoning Regulations.

a. **Siting Considerations.**

1) Agricultural uses and wildlife habitat shall be accommodated within the facility layout and design to the greatest extent possible.

2) Historic, cultural, or archaeological resources shall be protected within the project area and the following shall be considered during construction:
   a. Any unrecorded cultural resources that are found during construction shall be documented and evaluated for integrity by a Registered Professional Archaeologist or Qualified Professional. This information shall be reported to the State Archaeologist for potential listing on the National Register of Historic Places.
   b. Undocumented resources that are eligible for listing on the National Register of Historic Places shall be avoided.
   c. All archaeological investigations shall meet the State Historic Preservation Office standards and guidelines.
   d. Adherence to standards set by Federally Recognized Tribes and associated Tribal Historic Preservation Offices that may have an interest in the project’s impact on archaeological resources shall also be required.

b. **Visual Impact.**

1) **Shadow Flicker**

   a. Turbines shall be sited in manner that minimizes Shadow Flicker to no more than 15 hours per year and no more than 15 minutes per day to any Non-Participating Occupied Structure within the project area and surrounding area.

   b. Property owners may waive these standards under a written agreement. Any such agreement shall be recorded with the Douglas County Register of Deeds office.

2) **Lighting**

   a. All Turbines and accessory facilities shall be sited to minimize adverse visual effect on the environment;
   b. All Turbines and accessory facilities shall be sited to minimize adverse visual effect on the Non-Participating Landowners;
c. Lighting of accessible doors on Turbines and accessory structures shall comply with Section 12-314-3 of the County Zoning Regulations.

d. Temporary lighting during construction shall follow Section 12-314-3 of the County Zoning Regulations unless special accommodations are made per Zoning and Codes Director.

e. Federal Aviation Administration Standards shall be followed including but not limited to:

   i. The Project should be designed and configured to minimize impacts to the night sky for all lighting that is not required by Federal Aviation Administration Standards;

   ii. Lighting of Turbines shall be radar activated and in compliance with current Federal Aviation Administration Aircraft Detection Lighting System regulations. Any emergency reserve lighting shall follow "daytime white / nighttime red" standards;

   iii. Lighting shall be shielded from ground view to Federal Aviation Administration maximum standards;

3) Blade Glint

   a. Blade Glint impacts shall be avoided at Non-Participating Occupied Structures;

   b. In no case shall Blade Glint adversely impact public health, safety, and welfare.

4) Viewshed

   a. If built C-WECS project area materially differs from simulations and descriptions provided in the visual impact assessment, such condition shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14. Resolution of the violation of the Conditional Use Permit may require greater mitigation techniques as determined by the Zoning and Codes Director;

   b. These mitigation techniques include but are not limited to, landscape screening, fencing, or removal of individual Turbines at Operator’s expense.

c. **Noise Impact.**

   1) Operational Noise Management

   a. Noise level associated with the C-WECS Project shall not exceed 50 dBA (A-weighted decibels) measured at the Property Line of the nearest Non-Participating Landowners.

   b. Noise level associated with the C-WECS Project shall not exceed 45 dBA (A-weighed decibels) measured at Occupied Structures.
c. Noise caused by operating Turbines shall not cause adverse sounds outside of the audible level, both low-frequency and high-frequency sounds, which disrupt Non-Participating Landowners.

d. Noise caused by the operating Turbine shall not cause pure tones.

e. If noise level exceeds the maximum allowed for a sustained period of time the Turbine shall be powered down until appropriate mitigation techniques are established. Further, such condition shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14.

f. Public health, safety, and welfare of the community shall be protected for the lifetime of the project. A good faith effort shall be made by the C-WECS Operator to mitigate any unforeseen issues caused by demonstrable noise impacts. C-WECS operations are exempt from Section 7, Article 2, Noise Control, of the Douglas County Code.

g. Property owners may waive these standards under a written agreement. Any such agreement shall be recorded with the Douglas County Register of Deeds office.

2) Construction Noise Management

a. Construction noise management shall be reviewed, and any necessary regulations established during the public hearing process of a Conditional Use Permit.

d. Environmental Impact.

1) Industry and Environmental Guidelines

a. Environmental guidelines and industry codes of practice shall be followed.

b. In the event that U.S. Fish and Wildlife Land-Based Wind Energy Guidelines evaluation during application determines post-construction studies are necessary, then Tier 4 shall be completed at Operators expense.

i. Recommendations from this evaluation will be reported to the Zoning and Codes Director.

ii. Board of County Commissioners, at the recommendation of the Zoning and Codes Director, may initiate suspension, amendment, or revocation of Conditional Use Permit pursuant to Section 12-307-2.14 of the Zoning Regulations.
2) Wildlife and wildlife habitat, including avian and bat impact.
   a. C-WECS Projects should avoid areas that would interfere with wildlife migratory corridors and staging areas.
   b. There should be minimal impact to existing wildlife, endangered and threatened species, wetlands, species in need of conservation as defined by Kansas Department of Wildlife and Parks, and other Environmentally Sensitive Lands within the project area as defined in Douglas County Zoning and Land Use Regulation Section 12-314-2.
   c. In the event of an Extraordinary Event causing kills of protected species which requires reporting to state and/or federal agencies, the report will also be sent to the Zoning and Codes Director.
   d. C-WECS Projects should avoid areas which may adversely affect native lands and animals.

3) Impact on Environmentally Sensitive Lands
   a. Wind Turbines shall be subject to the Floodplain Regulations provided in Section 12-312 of the Zoning Regulations and are prohibited from being located within any federally designated floodway.
   b. Turbines shall be subject to the standards associated with Protection of Environmentally Sensitive Lands provided in Section 12-314-2 of the Zoning Regulations.

4) Water Quality and Soil Erosion
   a. Prior to issuance of a building permit, Operator shall obtain approval of a Kansas Department of Health and Environment stormwater permit and Stormwater Pollution Prevention Plan.

5) Electromagnetic fields and communications interference
   a. Operations from wind Turbines shall not interfere with the operations of emergency communications or electromagnetic fields.
   b. Any disruption to communications, (911 dispatch, cell phone reception, etc.) must be mitigated and addressed immediately at the Operator’s expense.
   c. Any disruption to television, radio, internet service providers, satellite communications, or any other services which rely on electromagnetic waves for service must be mitigated and addressed immediately at the Operator’s expense.

6) Impact on cultural, historical, or archeological features
a. C-WECS Projects shall avoid areas that would impact important cultural, historical, or archeological features.

e. **Infrastructure Impact.**

  1) Transportation

a. The Operator will be required to mitigate anticipated impacts to the transportation network. The transportation network includes, but is not limited, to bridges, private roads, and public roads.

  2) Utilities

a. Any disruption to public utilities caused by the Operator, (gas, electric, water, cable, etc.) shall be addressed immediately at the Operator’s expense.

  3) Emergency Response

a. Signage shall be required as identified by Douglas County Emergency Management.

b. The Operator shall update the Emergency Mitigation Plan annually in collaboration with Douglas County Emergency Management.

f. **Aviation and Federal Aviation Administration Impact.**

  1) Airports and airstrips

a. The C-WECS Project, and the operation thereof, shall not interfere with the operations of the Lawrence Regional Airport or any approved airport or airstrip, both public and private, within the region, as determined by the then applicable regulations of the Federal Aviation Administration, including but not limited to, 14 CFR Part 77.

b. Setbacks shall follow Federal Aviation Administration guidelines and requirements.

g. **Building Safety and Construction Management.**

  1) Industry Standards

a. Safety guidelines and industry codes of practice shall be followed.

  2) Building Codes

a. Project shall be subject to review and approval for compliance with applicable building codes.

  3) Safe Practices
a. A Qualified Professional shall complete a structural integrity review before building permit issuance and anytime thereafter, if found to be necessary at the discretion of the Zoning and Codes Director.

b. All C-WECS shall be in compliance with all applicable Federal, Tribal, State, and Local regulatory standards including, but not limited to, the Endangered Species Act, Clean Water Act, the International Building Code, National Fire Protection Association 855 Standards, the National Electric Safety Code, and the National Electric Code, as amended.

h. Extraordinary Event Response.

1) As soon as possible, and not later than 48 hours after the occurrence of an Extraordinary Event, the Operator shall notify the local fire district, emergency response agencies, Douglas County Emergency Management, and the Zoning and Codes Office.

   a. An event response plan shall be developed within three business days of the Extraordinary Event by the Operator.

      i. The plan will be reviewed and approved by the Zoning and Codes Director.

      ii. This plan shall include the timeline and methods for resolution.

      iii. Notification of the approved plan shall be given to all affected property owners at the cost of the Operator.

2) In the event of an Extraordinary Event, the Operator shall, within 30 days of the occurrence, submit a report of findings to the Zoning and Codes Director, and other state and federal agencies including but not limited to the following, as may be applicable:

   a. The Kansas Department of Wildlife and Parks

   b. The U.S. Fish and Wildlife Service

   c. Occupational Safety and Health Administration.

   d. U.S. Army Corps of Engineers

   e. The Kansas Department of Health and Environment

3) If the reason for the event is not immediately known, it shall be thoroughly investigated, and a report shall be submitted to the Zoning and Codes Director.

4) The Operator shall provide revised plans to avoid future occurrences subject to 12-306-44.03.06 (Revision to Approved Plan).
5) Any mitigation techniques required by the Zoning and Codes Director shall be followed by the Operator.

6) The Operator shall update the Emergency Mitigation Plan annually in collaboration with Emergency Management, and provide new copies to the local fire district, emergency response agencies, Douglas County Emergency Management, and the Zoning and Codes Office.

7) Any specialty response equipment required to adequately manage Extraordinary Events shall be provided, updated, and/or replaced by the Operator, as needed and at the Operator's expense.

8) Annual Emergency and Extraordinary Event response training shall be provided by the Operator, at the Operator's expense, for all emergency response stakeholders on the plan, site, equipment, and processes required to assure their safety and effective management during an event.

i. Operation and Maintenance Plan.

1) Operator shall update contact information as needed.

2) Operation and Maintenance Plan shall be updated as needed.
   a. This plan shall include but not be limited to: location and maintenance of laydown yard(s), location where spare parts may be kept.

3) Any C-WECS Conditional Use Permit shall not be transferred from one party to a different person or entity without advance approval of the Board of County Commissioners. The Operator shall notify the Board of County Commissioners and the Zoning and Codes Director, in writing, of any intent to transfer the Conditional Use Permit from one party to another. All Conditional Use Permit transferees shall be required to meet the same conditions as the original Operator. The transferee shall also meet the surety bond/escrow requirement to ensure the C-WECS is decommissioned and removed to Conditional Use Permit specifications at the end of the project's useful lifespan or in case of abandonment. Notwithstanding these limits on transfer, the Board of County Commissioners may, in its discretion, provide for conditions that allow bank financing of a C-WECS project, including a mortgage or lien on project assets, but any transfer or assignment of an interest in the Conditional Use Permit will remain subject to prior approval of the Board of County commissioners.

4) Individual Turbines, associated equipment, and C-WECS Project boundary shall be maintained and kept in good condition by the Operator.
   a. Maintenance shall include, but not be limited to, painting, structural repairs, replacement of damaged or worn parts or cables, and integrity of security measures, as considered appropriate by the Zoning and Codes Director.
b. Site access shall be maintained to a level acceptable to local emergency personnel. The Operator shall be solely responsible for maintaining the subject site, all appurtenant structures and the installation and maintenance of any access road(s), unless accepted as public right-of-way.

j. **Post Construction Restoration Plan.**

1) This plan shall apply to areas impacted by the construction of the C-WECS Project and include the following:

a. **Final grading plan.**

b. **All Grading and construction activities shall preserve existing topsoil.** Topsoil may be temporarily displaced where Grading has been approved as part of an installation. The amount of topsoil displaced shall be minimized. Topsoil shall be stockpiled on the site out of the regulatory floodplain. After rough Grading, the topsoil shall be redistributed uniformly on the surface of all areas to be vegetated. Displaced topsoil shall not be removed from the site. A landscaping plan shall include the area to be seeded and/or planted with native vegetation. Selected plantings shall be compatible with adjacent land uses. All landscape material, including trees and plant material shall be in place within two years of planting and shall be maintained through the life of the Conditional Use Permit and shall be compliant with Section 12-307 of the Zoning Regulations.

c. **Certificate of Occupancy.**

d. **Plan for how water quality and water supply, including wells, in the area will be maintained to pre-construction condition.**

e. **All excavated sand, rock, aggregate, clay, or similar materials shall be removed from the site unless otherwise expressly exempt within the Conditional Use Permit.**

f. **Temporary access drives shall be removed compliant with the Road Maintenance Plan.**

g. **Rock, or other road materials, cannot be buried or retained on site unless expressly allowed within Conditional Use Permit.**

k. **Decommissioning and Reclamation.**

1) **The decommissioning and reclamation plan shall be maintained and updated as necessary at the discretion of the Zoning and Codes Director.**

2) **To verify production level, a report of power generated by the C-WECS shall be submitted to the Zoning and Codes Director annually.**
a. Additional reports shall be provided upon request of the Zoning and Codes Director in order to assess operational status and to determine if Turbine(s) have been abandoned.

I. Evaluation.
   1) In the event a C-WECS is performing in such a way to cause immediate harm to the public’s life, safety, or welfare, the Zoning and Codes Director shall have the authority to require the Operator to cease operations immediately. Further, such condition shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14.

   2) The Operator shall provide a point of contact where members of the public may submit complaints and concerns.
      a. A record of these submissions must be shared with the Zoning and Codes Director within ten (10) business days of receipt by Operator. Operator must provide a response and, if applicable, a mitigation plan to both the person submitting the complaint and the Zoning and Codes Director within 30 days.

      b. The Operator will promptly comply with proposed mitigation techniques, if any, as directed by the Zoning and Codes Director to ensure compliance with the requirements, terms, and conditions of the Conditional Use Permit. Failure to do so shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14. Such mitigation techniques will be completed by the Operator at the Operator’s expense.

   3) Complaints and concerns received by County Zoning and Codes Office will be documented, and forwarded to the Operator within ten (10) business days of receipt.
      a. Operator must provide a response and, if applicable, an approved mitigation plan to both the person submitting the complaint and the Zoning and Codes Director within 30 days. Zoning and Codes may also conduct its own independent investigation.

      b. The Operator will promptly comply with approved mitigation techniques, if any, as directed by the Zoning and Codes Director to ensure compliance with the requirements, terms, and conditions of the Conditional Use Permit. Failure to do so shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14. Such mitigation techniques will be completed by the Operator at the Operator’s expense.
12-306-44.03.05 Building Permit Issuance

Upon issuance of the Conditional Use Permit, Douglas County Zoning and Codes must issue a building permit for the project prior to the start of construction by the Operator.

a. **Time limitation on Approval.** If a building permit for a C-WECS is not obtained for the site within two years from the date of the Conditional Use Permit approval by the Board of County Commissioners, the Conditional Use Permit approval shall expire.

b. **Affidavit.** Following approval by the Board of County Commissioners and upon issuance of the Conditional Use Permit by the Zoning and Codes office, Zoning and Codes shall file an affidavit with the Register of Deeds on all the properties and/or parcels within the Conditional Use Permit C-WECS Project boundary. The affidavit will include a reference to the Conditional Use Permit by number, date, and expiration. Filing fees will be at the Applicant’s expense.

c. **Application.** In addition to the requirements outlined in the building code, the building permit application shall contain the following information:

1) Exhibits and documentation to demonstrate compliance with conditions required of approval of the Conditional Use Permit;

2) A site plan in final detail, drawn to a scale, where all features of the proposed C-WECS Project are clear and legible, including but not limited to the following:

   a. The general vicinity of the project location;
   
   b. Scale and north arrow;
   
   c. Turbine sites, including access roads, within C-WECS Project area;
   
   d. Accessory structures and associated facilities to be located within the C-WECS Project area;
   
   e. Public roads within and adjacent to the project area including road names and dimensions;
   
   f. Staging and maintenance areas;
   
   g. Substations and transmission lines within the C-WECS Project area;
   
   h. Location of utility, drainage, and access easements;
   
   i. Setbacks of all proposed Turbines and accessory structures from Property Lines and Occupied Structure of both Participating and Non-Participating Landowners;
   
   j. Table of technical specification of Turbines, including but not limited to, manufacturer, power rating, hub height, Total Height, Rotor diameter, tower style and color, foundation size at grade, and foundation depth;
k. Provisions as noted in Section 12-306-44.03.02 (p) of the County Zoning Regulations to be included on the site plan as notes on the face of the drawing, unless waived by the Board of County Commissioners.

l. Any conditions of approval in accordance with the Conditional Use Permit approved by the Douglas County Board of County Commissioners.

3) Copy of the Kansas Department of Health and Environment Approved Stormwater Permit and Stormwater Pollution Prevention Plan;

4) Copy of the approved and executed Road Maintenance Agreement and Public Improvement Agreement;

5) Copy of Approved Haul Route;

6) Post Construction Reclamation Plan;

7) Emergency Mitigation Plan;

8) Unanticipated Discovery Plan;

9) A final plan for site security;

10) A final decommissioning and reclamation plan;

11) Documentation of the establishment of the Security for reclamation, and;

12) Documentation that the project is in compliance with all of the requirements of the following:

   a. Federal Aviation Administration;

   b. Federal Communications Commission, if applicable;

   c. Kansas Department of Wildlife and Parks, if applicable;

   d. Kansas Department of Agriculture – Division of Conservation, if applicable, and;

   e. Any other Federal, Tribal, State, and/or Local agency that has regulations applicable to the project.

   d. C-WECS Project Permitting. Building permits for the C-WECS and accessory structures shall be subject to Chapter 13 of the Douglas County Code and the Commercial or Non-Residential Structure Building Permit Requirements.

   1) Structures or facilities which require a local building permit include, but are not limited to:

      a. C-WECS towers.

      b. Equipment storage buildings, exterior storage areas, batching plants, laydown yards, maintenance and office buildings, mobile construction offices, etc.
c. Substations, both within the C-WECS project boundary and external to.

e. **Building Permit and Plan Review.** The Applicant shall contract with a special inspector and/or Plan Reviewer, approved by the Zoning and Codes Director, for construction plan review and all required construction inspections, at the Operator’s expense.

f. **Conditional Use Compliance.**

  1) Operator shall provide a field survey, at their expense, prepared by a Qualified Professional, prior to construction activity which demonstrates compliance with tower locations approved within the conditional use permit.

  2) Operator shall contract, at their expense, with a Qualified Professional to have an on-site representative verifying continued compliance during the construction phase of the Conditional Use Permit.

  3) Reports regarding compliance shall be submitted to the Zoning and Codes Director.
12-306-44.03.06 Revisions to Approved Plan

a. **Minor Revisions.** Modifications may be approved through the administrative site plan process per Section 12-307 of the Zoning Regulations.

   1) A minor change has to be mutually agreed upon by the Zoning and Codes Director and the Planning Director and may include:

      a. Change in location of project-interior Turbines subject to all setbacks and other siting requirements;

      b. Modifications to project phasing;

      c. Changes which do not adversely affect the adjacent Non-Participating Landowner(s).

   2) A minor modification includes changes which are not considered major changes.

b. **Major Revision.** Any major change of the project will require approval of a new conditional use permit. This would include but is not limited to:

   1) Expansion of the project area.

   2) Increase in Turbine height.

   3) Additional Turbines beyond those approved in the Conditional Use Permit.

   4) Changes which may adversely affect the adjacent Non-Participating Landowner(s) as determined by the Zoning and Codes Director and/or the Planning Director.

   5) All major changes must be approved by the Board of County Commissioners subject to public notice standards as set forth in Section 12-307-2 of the Zoning Regulations.

c. **Revised Plan.** Plans reflecting revisions, including exact location of as-built structures, will be sent to Zoning and Codes Director within 30-days of C-WECS Project completion.
12-306-44.03.07 Abandonment, Decommissioning and Reclamation Plan
A decommissioning and reclamation plan shall be required to ensure that facilities are properly removed, and the land is reclaimed as defined within these regulations. This plan shall be revisited and evaluated every five years unless otherwise specified by the Board of County Commissioners.

   1) Purpose. The purpose of the security requirement is to ensure that adequate funding is available to pay the costs of decommissioning and site reclamation, including removal of individual Turbines and other project improvements, and other tasks as necessary to reclaim and restore the project site.
   2) Submittal of Security. The Operator of a C-WECS shall, at its expense, and prior to receiving a building permit, obtain and submit Security in favor of the County for approval by the Board of County Commissioners.
   3) Form of Security. Such Security shall be in the form of a letter of credit, a cash escrow account, a performance bond, or other form of Security which is acceptable to the County. Any entity providing Security must be authorized to provide such Security in the State of Kansas and must be acceptable to the Board of County Commissioners. The Security must contain such provisions, terms or conditions as the County deems to be necessary, including, but not limited to, those set out herein, unless specifically waived in writing by the County.
   4) Amount. The Security shall be in an amount equal to one hundred (100) percent of the estimated decommissioning and reclamation costs at the expiration of the Conditional Use Permit and/or shall provide for an annual adjustment of the amount of the Security based on the annual rate of inflation. Such amount shall be determined by the Board of County Commissioners based upon estimates set forth in the decommissioning and reclamation plan and/or from Qualified Professionals opinions of cost to implement the plan.
   5) Maintenance of Security. The Security may not be canceled, released, or in any way terminated without prior written approval from the Board of County Commissioners. The Security shall be maintained and continued in force as long as such Turbines or other improvements exist and until all decommissioning and site reclamation has been completed and paid for.
      a. Additional Security. If the Board of County Commissioners has any reason to believe that the Security is insufficient, it may require such other Security as it deems to be necessary. Failure to provide additional security shall be the basis for amendment, suspension or revocation of the Conditional Use Permit as provided in 12-307-2.14.
      b. Survival of Sale. The Security must be written so as to survive any sale or transfer of the Turbines and related project property or the insolvency of the Operator. It shall further apply to all successors and assigns of the Operator.
6) Non-Liability. By accepting the Security described in this section, Douglas County does not and will not accept any liability or duty whatsoever for taxes, wages, or any other employee benefits for any person or entity. Contractors, suppliers, or consultants accepting and relying on documents, materials, and other information from the Applicant or Conditional Use Permit holder will do so on their own responsibility and at their risk.

b. Abandonment

1) Individual Turbine. An individual Turbine shall be considered to have been abandoned when the Turbine is incapable of producing at least 20% of the average amount of electricity produced by such Turbine in comparable previous time periods (adjusted for actual wind conditions), as determined by a Qualified Professional, for a period of at least six (6) consecutive months and there is no demonstrated viable plan to restore the equipment to operating condition.

2) Entire Project. An entire project shall be considered to have been abandoned when fifty percent (50%) or more of the individual Turbines in any C-WECS Project boundary are abandoned, and there is no demonstrated viable plan to restore the equipment to operating condition within one year, except in the case of an Extraordinary Event subject to an approved schedule of completion.

3) Extension. An extension of the 6-month time period may be granted by the Board of County Commissioners upon the presentation of sufficient justification by the Operator.

4) Excavation. All underground equipment and foundation systems of C-WECS shall be removed to a depth of at least four feet (4’) to allow for the cultivation of crops, restoration of pasture, or installation of underground utilities. Decommissioned equipment and foundation removal shall be inspected by the Zoning and Codes office.

c. Reclamation

1) Operator Initiated. The Operator shall commence reclamation proceedings within 90-days of the date of abandonment of an individual Turbine and/or the entire project or at the end of the conditional use permit timeframe. Reclamation activities shall be conducted in accordance with the reclamation plan and the standards contained in these regulations.

2) Board of County Commissioner-Initiated. Upon determining that any individual Turbines and/or the entire C-WECS Project has been abandoned, the Zoning and Codes Director shall notify the Operator by certified mail. The notice shall allow 90-days for the commencement of decommissioning. The notice shall also inform the Operator of their right to request a hearing before the Board of County Commissioners.

   a. Abandonment and Reclamation Hearing. Upon request of the Operator or expiration of the 90-day deadline without completion of reclamation, the Zoning and Codes Director may schedule a hearing with the Board of
County Commissioners and provide the Operator notice as to the time and location of the hearing.

b. Hearing Purpose. The purpose of the hearing is to determine the validity of the determination of abandonment, establish whether the Operator intends to reclaim, and whether to authorize the use of Security to complete the reclamation of the individual Turbine site(s) or the entire project.

3) Within 6 months of notification of abandonment and the need for reclamation, unless amended or vacated through the hearing process described in this section, the C-WECS shall be removed from the property and the property restored by the Operator. The post-decommissioning storm water runoff plan shall be implemented.

a. Extension. An extension of the 6-month time period may be granted by the Board of County Commissioners upon the presentation of sufficient justification by the Operator.

b. If the Operator or Participating Landowner fails to remove the C-WECS and reclaim the site, the Board of County Commissioners may remove or cause the removal of the C-WECS and the reclamation of the site. The County may recover the cost of decommissioning and reclamation from the Operator, Security and the Participating Landowner, but shall not assess costs against the Participating Landowner unless and until all reasonable steps have been taken to recover from the Operator and the Security.

c. Any decommissioning and reclamation cost incurred by the County that is not recovered from the Operator, Participating Landowner, or Security will become a lien on the property where the removal or reclamation takes place and may be collected from the landowner as set forth in applicable law.