

## LARGE-SCALE SOLAR FACILITIES

This article applies to the siting, construction, installation, maintenance, and decommissioning of any new large-scale solar facility. A large-scale solar facility constitutes of any solar energy system that is greater than 15 acres in area and produces up to 50 megawatts in power.

APPLICATION PROCESS: The applicant shall provide the following information:

- a. A complete application form (*Each township should determine which form this is, zoning permit, Conditional Use, etc. which could change the fee*)
- b. A statement shall be provided describing how this project will further Greene County's Perspectives 2040 Land Use Plan's goals and objectives. *Add township plan, if applicable.*
- c. Documents demonstrating the ownership of the subject parcel(s) or proof that the applicant has authorization to act upon the owner's behalf
- d. List of all adjacent property owners, their parcel ID numbers, and addresses.

Existing land use – the applicant shall provide information regarding land use in the region and potential impacts of the facility through the following maps and related information.

- e. Provide a map of showing the following within five-miles of the project area boundary:
  1. The proposed preliminary concept plan
    - a. The facility shall be constructed and operated in substantial compliance with the approved concept plan, with allowances for changes required by any federal or state agency. The project shall be limited to the phases and conditions set forth in the concept plan that constitutes part of this application, notwithstanding any other state or federal requirements. No additional phasing or reduction in facility size shall be permitted, and no extensions beyond the initial period shall be granted without amending the use permit.
    - b. The concept plan shall include the subject parcels; the proposed location of the solar panels and related facilities; the location of proposed fencing, driveways, internal roads, and structures; the closest distance to adjacent property lines and dwellings; the location of proposed setbacks; the location and nature of proposed buffers, including vegetative and constructed buffers and berms; the location of points of ingress/egress; any proposed construction phases.
  2. Land use, depicted as areas on the map, of the current economic use of each parcel. Categories should include residential, commercial, industrial, institutional recreational, agricultural and vacant, or as classified by the local land use authority.
  3. Structures, depicted as points on the map. Identified structures should include residences, commercial centers or buildings, industrial buildings and installations, schools, hospitals, churches, civic buildings, and other occupied places and their main points of ingress and egress.
  4. Any wetlands or floodplain
- f. A detailed decommissioning plan (see item **x** below).
  - a. A reliable and detailed estimate of the costs of decommissioning, including provisions for inflation (see item **x** below).

- b. A proposed method of providing appropriate escrow, surety, or security for the cost of the decommissioning plan (see item **x** below).
- c. Traffic study modelling the construction and decommissioning processes. Staff will review the study in cooperation with the state department of transportation and County Engineer.
- g. An estimated decommission construction schedule.
- h. Ten hard copy sets (11" × 17" or larger), one reduced copy (8½" × 11"), and one electronic copy of site plans, including elevations and landscape plans as required.
- i. The locality may require additional information deemed necessary to assess compliance with this section based on the specific characteristics of the property or other project elements as determined on a case by case basis.
- j. Application fee to cover any additional review costs, advertising, or other required staff time.
- k. Provide for the types of structures identified on the map a table showing the following:
  - 1. For all structures and property lines within two hundred fifty feet of a collection line, access road, or the associated facility, the distance between both the structure or property line and the associated facility.
  - 2. For each structure and property in the table, whether the property is being leased by the applicant for the proposed facility.
  - 3. Provide a baseline of the current use of the structure.
  - 4. Provide an evaluation of the impact of the decommissioning of the proposed facility on the above structures identified on the map.

### Solar Site Plan Requirements

In addition to all State site plan requirements and site plan requirements of the Zoning Administrator, the Applicant shall provide the following plans for review and approval for the Solar Facility prior to the issuance of a building permit:

- a. Construction Management Plan. The Applicant shall prepare a Construction Management Plan for each applicable site plan for the Solar Facility, and each plan shall address the following:
  - 1. Traffic control methods (in coordination with the Ohio Department of Transportation and/or County Engineer prior to initiation of construction), including lane closures, signage, and flagging procedures.
  - 2. Site access planning directing employee and delivery traffic to minimize conflicts with local traffic.
  - 3. Fencing. The Applicant shall install temporary security fencing prior to the commencement of construction activities occurring on the Solar Facility.
  - 4. Lighting. During construction of the Solar Facility, any temporary construction lighting shall be positioned downward, inward, and shielded to eliminate glare from all adjacent properties. Emergency and safety lighting shall be exempt from this construction lighting condition.

- b. *Construction Mitigation Plan.* The Applicant shall prepare a Construction Mitigation Plan for each applicable site plan for the Solar Facility to the satisfaction of the Zoning Administrator. Each plan shall address, at a minimum, the effective mitigation of dust, burning operations, hours of construction activity, access and road improvements, and handling of general construction complaints. The description shall illustrate how avoidance and mitigation procedures will achieve the following;
1. Avoidance or minimization to the maximum extent practical of all damage to field tile drainage systems and soils in agricultural areas.
  2. Timely repair of damaged field tile systems to at least original conditions, at the applicant's expense
- c. *Grading plan.* The Solar Facility shall be constructed in compliance with the County-approved grading plan as determined and approved by the Zoning Administrator or their designee prior to the commencement of any construction activities and a bond or other security will be posted for the grading operations. The grading plan shall:
1. Clearly show existing and proposed contours;
  2. Note the locations and amount of topsoil to be removed (if any) and the percent of the site to be graded;
  3. Limit grading to the greatest extent practicable by avoiding steep slopes and laying out arrays parallel to landforms;
  4. Require an earthwork balance to be achieved on-site with no import or export of soil;
  5. Require topsoil to first be stripped and stockpiled onsite to be used to increase the fertility of areas intended to be seeded in areas proposed to be permanent access roads which will receive gravel or in any areas where more than a few inches of cut are required;
  6. Take advantage of natural flow patterns in drainage design and keep the amount of impervious surface as low as possible to reduce stormwater storage needs.
- d. *Erosion and Sediment Control Plan.* Shall be in compliance with the Greene County Engineer and Ohio EPA. Construction of commercial solar facilities shall be subject to the Greene County Erosion and Sediment Control Ordinance which includes but not limited to extent of grading and grading phases, runoff information, management of runoff and pollution both during construction and throughout the lifetime of the project
- e. *Stormwater Management Plan.* Shall be in compliance with the Greene County Engineer and Ohio EPA. Construction shall be subject to the Greene County Stormwater Management Plan. The owner or operator shall construct, maintain, and operate the project in compliance with the approved plan.
- f. *Solar Facility Screening and Vegetation Plan.* The owner or operator shall construct, maintain, and operate the facility in compliance with the approved plan per the Screening and Buffer Section X of this resolution.

- g. *Decommissioning Plan.* The Applicant shall submit a decommissioning plan to the County for approval in conjunction with the building permit. The purpose of the decommissioning plan is to specify the procedure by which the Applicant or its successor would remove the Solar Facility after the end of its useful life and to restore the property for agricultural uses.
1. Decommissioning shall consist of:
    - a. Physical removal of all ground-mounted solar photovoltaic installations, structures, equipment, security barriers and transmission lines from the site.
    - b. Disposal of all solid and hazardous waste in accordance with local, state, and federal waste disposal regulations.
    - c. Stabilization or re-vegetation of the site as necessary to minimize erosion. The Township may allow the owner or operator to leave landscaping or designated below-grade foundations in order to minimize erosion and disruption to vegetation.
    - d. Absent a notice of a proposed date of decommissioning, the solar facility shall be considered abandoned when it fails to operate for one year without the extension approval by the Board of Zoning Appeals. The Township Trustees reserve the right to remove abandoned structures pursuant to ORC 505.86 regarding the removal of buildings.
  2. *Decommissioning Cost Estimate.* The decommissioning plan shall include a decommissioning cost estimate prepared by a State licensed professional engineer.
    - a. The cost estimate shall provide the gross estimated cost to decommission the Solar Facility in accordance with the decommissioning plan and these conditions.
    - b. The decommissioning cost estimate shall not include any estimates or offsets for the resale or salvage values of the Solar Facility equipment and materials.
    - c. The Applicant, or its successor, shall reimburse the Township for an independent review and analysis by a licensed engineer of the initial decommissioning cost estimate.
    - d. The Applicant, or its successor, will update the decommissioning cost estimate every 5 years and reimburse the Township for an independent review and analysis by a licensed engineer of each decommissioning cost estimate revision.
- h. The Applicant will compensate the Township in obtaining an independent third-party review of any site plans or construction plans or part thereof.

### Screening and Vegetation

#### a. Setbacks.

1. A minimum 100-foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from a principal Solar Facility structure to the edge of right-of-way where the Property abuts any public rights-of-way.
2. A minimum 50-foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from a principal Solar Facility structure to any adjoining residential property line which is a perimeter boundary line for the project area
3. A minimum 50-foot setback, which includes a 50-foot planted buffer as described below, shall be maintained from a principal Solar Facility structure to any adjoining non-residential property line which is a perimeter boundary line for the project area

#### a. Screening

1. A minimum 50-foot vegetative buffer (consisting of existing trees and vegetation) shall be maintained. If there is no existing vegetation or if the existing vegetation is inadequate to serve as a buffer as determined by the Zoning Inspector, a triple row of trees and shrubs will be planted on approximately 10-foot centers in the 25 feet immediately adjacent to the security fence. New plantings of trees and shrubs shall be approximately 6 feet in height at time of planting. In addition, pine seedlings will be installed in the remaining 25 feet of the 50-foot buffer. Ancillary project facilities may be included in the buffer as described in the application where such facilities do not interfere with the effectiveness of the buffer as determined by the Zoning Administrator.

#### b. Wildlife corridors

1. The Applicant shall identify an access corridor for wildlife to navigate through the Solar Facility. The proposed wildlife corridor shall be shown on the site plan submitted to the County. Areas between fencing shall be kept open to allow for the movement of migratory animals and other wildlife.

#### c. Height of Structures

1. Solar facility structures shall not exceed 15 feet, unless required by applicable code to interconnect into existing electric infrastructure or necessitated by applicable code to cross certain structures (e.g. pipelines).

### Review Process

- a. Township Zoning Inspector shall organize a Technical Review Committee consisting of the Fire Chief, Road Superintendent, County Engineer, Regional Planning, Soil and Water Division, and any other township and county deemed necessary to attend to review the application, Construction Plan, Grading Plan, Erosion and Sediment Control Plan, Stormwater Management Plan, Decommissioning Plan, and Screening and Vegetation Plan.

- b. If applicable, all solar facilities must meet or exceed the standards and regulations of the Federal Aviation Administration (FAA), State Corporation Commission (SCC) or equivalent, and any other agency of the local, state, or federal government with the authority to regulate such facilities that are in force at the time of the application.
- c. Public notice.
  - 1. Use permits shall follow the public notice requirements as set forth in the zoning resolution or by Ohio Revised Code.
  - 2. Neighborhood meeting: A public meeting shall be held prior to the public hearing with the planning commission to give the community an opportunity to hear from the applicant and ask questions regarding the proposed project.
  - 3. The applicant shall inform the zoning administrator and adjacent property owners in writing of the date, time, and location of the meeting, at least seven but no more than 14 days in advance of the meeting date.
  - 4. The date, time, and location of the meeting shall be advertised in the newspaper of record by the applicant, at least seven but no more than 14 days in advance of the meeting date.
  - 5. The meeting shall be held within the community, at a location open to the general public with adequate parking and seating facilities which may accommodate persons with disabilities.
  - 6. The meeting shall give members of the public the opportunity to review application materials, ask questions of the applicant, and make comments regarding the proposal.
  - 7. The applicant shall provide to the zoning administrator a summary of any input received from members of the public at the meeting.

### Operations

- a. *Permanent Security Fence.* The Applicant shall install a fence that conforms to the character of the surrounding area, 6 feet in height, surmounted by three strands of barbed wire, around the Solar Facility prior to the commencement of operations of the Solar Facility. Failure to maintain the fence in a good and functional condition will result in revocation of the permit.
- b. *Lighting.* Any on-site lighting provided for the operational phase of the Solar Facility shall be dark-sky compliant, shielded away from adjacent properties, and positioned downward to minimize light spillage onto adjacent properties.
- c. *Noise.* Daytime noise will be under 67 dBA during the day with no noise emissions at night.
- d. *Ingress/Egress.* Permanent access roads and parking areas will be stabilized with gravel, asphalt, or concrete to minimize dust and impacts to adjacent properties.

- e. *Signage*. Shall display signs:
  - 1. Stating the risks that may result from entering the project area
  - 2. Identifying the owner or operator of the facility
  - 3. Providing a 24 -hour emergency contact phone number.
- f. *Site maintenance*.
  - 1. Native grasses shall be used to stabilize the site for the duration of the facility's use.
  - 2. Weed control or mowing shall be performed routinely and a performance bond reflecting the costs of such maintenance for a period of [six (6) months] shall be posted and maintained.
  - 3. Anti-reflection coatings. Exterior surfaces of the collectors and related equipment shall have a nonreflective finish and solar panels shall be designed and installed to limit glare to a degree that no after image would occur towards vehicular traffic and any adjacent building.
  - 4. Repair of panels. Panels shall be repaired or replaced when either nonfunctional or in visible disrepair.

#### Safety

- a. *Inspections*. The Applicant will allow designated County representatives or employees access to the facility at any time for inspection purposes as set forth in their application.
- b. *Training*. The Applicant shall arrange a training session with the Fire Department to familiarize personnel with issues unique to a solar facility before operations begin.
- c. *Compliance*. The Solar Facility shall be designed, constructed, and tested to meet relevant local, state, and federal standards as applicable.
- d. *Coordination of local emergency services*. Applicants for new solar energy facilities shall coordinate with emergency services staff to provide materials, education and/or training to the departments serving the property with emergency services in how to safely respond to on-site emergencies.