# Haynes Township Ordinance #26-23

An ordinance to amend the Haynes Township Zoning Ordinance Section 2.1 (Definitions), Section 4.0 (Table of Permitted and Special Land Uses), and Article 7 (Supplemental Regulations)

Haynes Township, Alcona County, Michigan ordains:

### Section 1: Amendments to the Haynes Township Zoning Ordinance

That the Haynes Township Zoning Ordinance, Section 2.1 (Definitions) is hereby amended to read as follows:

SOLAR ENERGY STRUCTURES: A design or assembly consisting of a solar energy collector, an energy storage facility (where used), and components for the distribution of transformed energy.

(add the following)

Solar Energy Definitions:

- A. **Battery Energy Storage System**. One (1) or more devices, assembled together, capable of storing energy produced by solar energy facilities and/or wind energy facilities in order to supply electrical energy at a future time, not to include a stand-alone car battery or an electric motor vehicle.
- B. Solar Energy Facility (Utility Scale/Commercial). A facility designed to capture and utilize the energy of the sun to generate electrical power to be used primarily off-site. A solar energy collection facility consists of an array of solar collection devices used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.
- C. Solar Energy Panels (Accessory). Solar collection devices designed to capture and utilize the energy of the sun to generate electrical power primarily for use <u>on-site</u>. A solar collection device is the actual material(s) used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.
  - Building-Integrated Accessory Solar Energy Panels. Accessory solar energy panels that are an
    integral part of a primary or accessory building or structure (rather than a separate mechanical
    device), replacing or substituting for an architectural or structural component of the building or
    structure. Building-integrated systems include, but are not limited to, photovoltaic or hot water
    solar energy systems that are contained within roofing materials, windows, skylights, and
    awnings.
  - 2. *Ground-Mounted Accessory Solar Energy Panels*. Accessory solar energy panels mounted on support posts, like a rack or pole that are attached to or rest on the ground.
  - 3. **Building-Mounted Accessory Solar Energy Panels:** A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.

- D. *Maximum Tilt*. The maximum angle of a solar panel (i.e., most vertical position) for capturing solar radiation as compared to the horizon line.
- E. *Minimum Tilt*. The minimal angle of a solar panel (i.e., most horizontal position) for capturing solar radiation as compared to the horizon line.
- F. **Non-Participating Lot(s)**. One (1) or more lots for which there is not a signed lease or easement for development of a solar energy facility associated with the applicant project.
- G. *Participating Lot(s)*. One (1) or more lots under a signed lease or easement for development of a solar energy facility associated with the applicant project.
- H. *Repowering*. Reconfiguring, renovating, or replacing a solar energy facility to maintain or increase the power rating of the solar energy facility within the existing project footprint.

That the Haynes Township Zoning Ordinance, Section 4.0 (Table of Permitted and Special Land Uses – Utility/Energy Category) is hereby amended to read as follows:

| TABLE OF REPAILTED LISES & SPECIAL LAND LISES              | West to | STORY SERVICE |   |     |   |     |
|--|---------|---------------|---|-----|---|-----|
| TABLE OF PERMITTED USES & SPECIAL LAND USES                |         |               |   |     |   | KSS |
| P = Permitted by right                                     |         | A-R           | Α | F-R | c | ED  |
| S = Permitted with a Special Use Permit                    | R       | A-K           | A | r-K |   | ED  |
| *Uses with Supplemental Development Regulations            |         |               |   |     |   |     |
| (Article 7)  |         |               |   | 8   |   |     |
| If use does not have a "P" or an "S", it is not allowed in |         |               |   | 186 |   |     |
| that district.   |         |               |   |     |   |     |
| UTILITIES/ENERGY   |         |               |   |     |   |     |
| Battery Energy Storage System                              | P       | S             | S | Р   | Р | P   |
| Essential Services   | Р       | P             | P | P   | P | P   |
| Heating & Electric Power Generating Plants                 |         |               |   |     |   | S   |
| Public Utility Facilities (without storage yards)          |         | S             |   |     | Р | P   |
| Public Utility Facilities (with storage yards)             |         | S             |   |     |   | P   |
| Solar Energy Facility (Utility Scale/Commercial)           | P       | S             | S | P   | P | P   |
| Solar Energy Panels (Accessory)                            | P       | P             | P | P   | Р | P   |
| Transformer Stations & Substations (with service storage   |         |               |   |     | 5 |     |
| yards)   |         |               |   |     |   |     |
| Wind Energy Facilities and Anemometer Towers               |         | P             | Р |     |   |     |
| (commercial)* (§7.28)                                      |         |               |   |     |   |     |
| Wind Energy Systems (small on-site)* (§7.28)               | P       | P             | P | P   | P | P   |

That the Haynes Township Zoning Ordinance, Article 7 (Supplemental Regulations) is hereby amended to read as follows:

# (Add) Section 7.30 Solar Energy

## A. Solar Energy Facilities (Utility-Scale/Commercial).

- 1. **Intent**. Haynes Township intends to regulate solar energy facilities with the following relevant goals of the Haynes Township Comprehensive Plan in mind:
  - a. To preserve the existing character of Haynes Township.
  - b. To strive for orderly growth and development in accordance with the human, natural, and financial resources within the Township.
  - c. To preserve and protect farmland within the Township.

The Township recognizes the importance of agricultural lands as an economic base and way of life in Haynes Township. Where feasible, the Township intends to maintain and provide for the preservation of farmland and woodlands and to discourage the conversion of these lands into more intensive uses. The Township also recognizes the importance of allowing local residents the opportunity to purchase fresh foods on local agricultural land.

- 2. Permitted Area. Solar Energy Systems (Utility-Scale/Commercial) shall not be permitted on lands currently enrolled in Federal or State programs (i.e. Farm Services Agency) at the time this Ordinance was adopted by Haynes Township. However, these lands not engaged in active production for a period of three (3) consecutive years shall be deemed eligible for the development of Solar Energy Systems (Utility-Scale/Commercial).
- 3. **Reflection/Glare**. Solar collection devices, or a combination of devices, shall be designed and located to avoid glare or reflection onto adjacent properties and adjacent roadways and shall not interfere with traffic or create a safety hazard. This may be accomplished by both the placement and angle of the collection devices as well as human-made or environmental barriers. Glare intensity is considered an issue if it measures more than twenty (20) percent of the incident sun intensity. Plans to reduce glare may be required in the initial materials submitted.

#### 4. Groundcover and Impervious Surface/Stormwater.

a. If more than eight thousand (8,000) square feet of impervious surface will be located on the site, the application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff will be managed. If detergents will be used to clean solar panels, details on the type of detergent, frequency, and quantity of use, and stormwater quality protection measures shall be provided. Any necessary permits from outside agencies for off-site discharge shall be provided.

# Haynes Township Ordinance #26-23

An ordinance to amend the Haynes Township Zoning Ordinance Section 2.1 (Definitions), Section 4.0 (Table of Permitted and Special Land Uses), and Article 7 (Supplemental Regulations)

Haynes Township, Alcona County, Michigan ordains:

## Section 1: Amendments to the Haynes Township Zoning Ordinance

That the Haynes Township Zoning Ordinance, Section 2.1 (Definitions) is hereby amended to read as follows:

SOLAR ENERGY STRUCTURES: A design or assembly consisting of a solar energy collector, an energy storage facility (where used), and components for the distribution of transformed energy.

(add the following)

**Solar Energy Definitions:** 

- A. **Battery Energy Storage System**. One (1) or more devices, assembled together, capable of storing energy produced by solar energy facilities and/or wind energy facilities in order to supply electrical energy at a future time, not to include a stand-alone car battery or an electric motor vehicle.
- B. **Solar Energy Facility (Utility Scale/Commercial)**. A facility designed to capture and utilize the energy of the sun to generate electrical power to be used primarily <u>off-site</u>. A solar energy collection facility consists of an array of solar collection devices used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.
- C. Solar Energy Panels (Accessory). Solar collection devices designed to capture and utilize the energy of the sun to generate electrical power primarily for use on-site. A solar collection device is the actual material(s) used to collect solar rays and all associated ancillary and structural devices needed to support and convert/transmit the energy collected.
  - Building-Integrated Accessory Solar Energy Panels. Accessory solar energy panels that are an
    integral part of a primary or accessory building or structure (rather than a separate mechanical
    device), replacing or substituting for an architectural or structural component of the building or
    structure. Building-integrated systems include, but are not limited to, photovoltaic or hot water
    solar energy systems that are contained within roofing materials, windows, skylights, and
    awnings.
  - 2. **Ground-Mounted Accessory Solar Energy Panels**. Accessory solar energy panels mounted on support posts, like a rack or pole that are attached to or rest on the ground.
  - 3. **Building-Mounted Accessory Solar Energy Panels:** A solar energy system mounted on racking that is attached to or ballasted on the roof of a building or structure.

- D. *Maximum Tilt*. The maximum angle of a solar panel (i.e., most vertical position) for capturing solar radiation as compared to the horizon line.
- E. *Minimum Tilt*. The minimal angle of a solar panel (i.e., most horizontal position) for capturing solar radiation as compared to the horizon line.
- F. **Non-Participating Lot(s)**. One (1) or more lots for which there is not a signed lease or easement for development of a solar energy facility associated with the applicant project.
- G. *Participating Lot(s)*. One (1) or more lots under a signed lease or easement for development of a solar energy facility associated with the applicant project.
- H. *Repowering*. Reconfiguring, renovating, or replacing a solar energy facility to maintain or increase the power rating of the solar energy facility within the existing project footprint.

That the Haynes Township Zoning Ordinance, Section 4.0 (Table of Permitted and Special Land Uses – Utility/Energy Category) is hereby amended to read as follows:

| TABLE OF DEDAUTED HOLD & CRECKAL LAND HOLD                 |   |     |          |     |   |    |
|--|---|-----|----------|-----|---|----|
| TABLE OF PERMITTED USES & SPECIAL LAND USES                |   |     |          |     |   |    |
| P = Permitted by right                                     |   |     | e te est |     |   |    |
| S = Permitted with a Special Use Permit                    | R | A-R | Α        | F-R | C | ED |
| *Uses with Supplemental Development Regulations            |   |     |          |     |   |    |
| (Article 7)  |   |     |          |     |   |    |
| If use does not have a "P" or an "S", it is not allowed in |   |     |          |     |   |    |
| that district.   |   |     |          |     |   |    |
| UTILITIES/ENERGY   |   |     |          |     |   |    |
| Battery Energy Storage System                              | P | S   | S        | P   | P | P  |
| Essential Services   | P | P   | P        | P   | P | P  |
| Heating & Electric Power Generating Plants                 |   |     |          |     |   | S  |
| Public Utility Facilities (without storage yards)          |   | S   |          |     | P | P  |
| Public Utility Facilities (with storage yards)             |   | S   |          |     |   | P  |
| Solar Energy Facility (Utility Scale/Commercial)           | P | S   | S        | Р   | P | Р  |
| Solar Energy Panels (Accessory)                            | P | Р   | Р        | Р   | P | Р  |
| Transformer Stations & Substations (with service storage   |   |     |          |     | S |    |
| yards)   |   |     |          |     |   |    |
| Wind Energy Facilities and Anemometer Towers               |   | P   | Р        |     |   |    |
| (commercial)* (§7.28)                                      |   |     |          |     |   |    |
| Wind Energy Systems (small on-site)* (§7.28)               | P | Р   | Р        | P   | P | Р  |

That the Haynes Township Zoning Ordinance, Article 7 (Supplemental Regulations) is hereby amended to read as follows:

## (Add) Section 7.30 Solar Energy

## A. Solar Energy Facilities (Utility-Scale/Commercial).

- 1. **Intent**. Haynes Township intends to regulate solar energy facilities with the following relevant goals of the Haynes Township Comprehensive Plan in mind:
  - a. To preserve the existing character of Haynes Township.
  - b. To strive for orderly growth and development in accordance with the human, natural, and financial resources within the Township.
  - c. To preserve and protect farmland within the Township.

The Township recognizes the importance of agricultural lands as an economic base and way of life in Haynes Township. Where feasible, the Township intends to maintain and provide for the preservation of farmland and woodlands and to discourage the conversion of these lands into more intensive uses. The Township also recognizes the importance of allowing local residents the opportunity to purchase fresh foods on local agricultural land.

- 2. **Permitted Area**. Solar Energy Systems (Utility-Scale/Commercial) shall not be permitted on lands currently enrolled in Federal or State programs (i.e. Farm Services Agency) at the time this Ordinance was adopted by Haynes Township. However, these lands not engaged in active production for a period of three (3) consecutive years shall be deemed eligible for the development of Solar Energy Systems (Utility-Scale/Commercial).
- 3. **Reflection/Glare**. Solar collection devices, or a combination of devices, shall be designed and located to avoid glare or reflection onto adjacent properties and adjacent roadways and shall not interfere with traffic or create a safety hazard. This may be accomplished by both the placement and angle of the collection devices as well as human-made or environmental barriers. Glare intensity is considered an issue if it measures more than twenty (20) percent of the incident sun intensity. Plans to reduce glare may be required in the initial materials submitted.

#### 4. Groundcover and Impervious Surface/Stormwater.

a. If more than eight thousand (8,000) square feet of impervious surface will be located on the site, the application shall include a drainage plan prepared by a registered civil engineer showing how stormwater runoff will be managed. If detergents will be used to clean solar panels, details on the type of detergent, frequency, and quantity of use, and stormwater quality protection measures shall be provided. Any necessary permits from outside agencies for off-site discharge shall be provided.

- b. If groundcover (such as conservation cover, pollinator habitat, forage cover, or agrivoltaics) is utilized, then a drainage plan is not required. The Planning Commission may require groundcover.
- 5. **Screening**. Solar devices shall be screened year-round from view from any existing residential use and the public right-of-way by use of a screening wall, evergreen vegetation, or other screening of similar effectiveness and quality, as determined by the Planning Commission. Screening shall be installed which screens the facility fully from view from the time of planting or installation. Screening shall be maintained throughout the life of the facility including replacing dead vegetation within six (6) months or at the earliest feasible time of year dependent on the weather.
- 6. Fencing. The Planning Commission may require wildlife-friendly fencing.
- 7. **Setbacks**. The setbacks of all solar collection devices and ancillary equipment shall be at least one hundred fifty (150) feet from all property lines of non-participating lots and seventy-five (75) feet from the road right-of-way. Fences do not have to comply with these setbacks.
- 8. Wiring. Wiring (including communication lines) may be buried underground. Any above-ground wiring within the footprint of the solar energy facilities shall not exceed the height of the solar array at maximum tilt.
- 9. Sound. The sound pressure level of a solar energy facility and all ancillary solar equipment shall not exceed forty-two (42) dBA at the property line of an adjoining non-participating lot. The site plan shall include modeled sound isolines extending from the sound source to the property lines to demonstrate compliance with this standard. If ambient sounds are at or above forty-two (42) dBA (Leq (1 hour)), then the sound pressure level shall not exceed the ambient sound plus five (5) dBA (Leq (1 hour)). The applicant may be required to provide operating sound pressure level measurements from a reasonable number of sampled locations at the perimeter of the solar energy facility to demonstrate compliance with this standard.
- 10. **Battery Storage**. Areas for battery storage shall be shown on the site plan, if applicable, and shall comply with **Section 7.31**.
- 11. Land Clearing. Land disturbance or clearing shall be limited to what is minimally necessary for the installation and operation of the system and to ensure sufficient all-season access to the solar resource given the topography of the land. Topsoil distributed during site preparation (grading) on the property shall be retained on site.
- 12. Access Drives. New access drives within the Solar Energy Facility shall be designed to minimize the extent of soil disturbance, water runoff, and soil compaction on the premises. The use of geotextile fabrics and gravel placed on the surface of the existing soil for temporary roadways during the construction of the Solar Energy Facility is permitted, provided that the geotextile fabrics and gravel are removed from those temporary roadways once the Solar Energy Facility is in operation. Access drives shall be removed upon decommissioning unless the property owner requests the access drives remain in place or the Planning Commission makes a determination that the access drives should remain in place.

- 13. **Agricultural Protection**. For sites where agriculture is a permitted use in a district, solar energy facilities shall be sited to minimize impacts to agricultural production through site design and accommodations including:
  - a. The ground mounting of panels by screw, piling, or a similar system that does not require a footing, concrete, or other permanent mounting in order to minimize soil compaction.
  - b. Siting panels to avoid disturbance and compaction of farmland by siting panels along field edges and in nonproduction areas to the maximum extent practicable and financially feasible.
  - c. Maintaining all drainage infrastructure on site, including drain tile and ditches, during the operation of the solar energy facility.
  - d. Siting the solar energy facility to avoid isolating areas of the farm operation such that they are no longer viable or efficient for agricultural production, including, but not limited to, restricting the movement of agricultural vehicles/equipment for planting, cultivation, and harvesting of crops, and creating negative impacts on support infrastructure such as irrigation systems or drains.
  - e. Voluntarily purchasing agricultural conservation easements from an equivalent number of prime farmland acres consistent with a purchase of development rights ordinance adopted in the Township.
- 14. **Repowering**. In addition to repairing or replacing solar energy components to maintain the system, a solar energy facility may at any time be repowered, without the need to apply for a new Special Land Use permit, by reconfiguring, renovating, or replacing the solar energy components to increase the power rating within the existing project footprint.
  - a. A proposal to change the project footprint of an existing solar energy facility shall be considered a new application, subject to the ordinance standards at the time of the request. Expenses for legal services and other studies resulting from an application to modify a solar energy facility will be reimbursed to the Township by the solar energy facility owner in compliance with established escrow policy.
- 15. Abandonment. Any freestanding solar collection site or device which is not used for six (6) continuous months shall be deemed to be abandoned. The applicant/permit holder will be so notified in writing by the Township and requested to dismantle the site and return it to its original state within one hundred (180) days of receipt of notice from the Township of such abandonment. If there are mitigating circumstances as to why the site has not been used, the applicant/permit holder may contact the Township and request a three (3) month extension. If a site has been deemed abandoned and no request for an extension is received, the applicant/permit holder will again be notified to dismantle the site and return it to its original state. If the applicant/permit holder does not do this, the Township will have the removal and restoration done at the owner/applicant's expense. Removal shall include removing posts, equipment, panels, foundations, and other items so that the ground is restored to its preconstruction state and is ready for development as another land use.
- 16. Application Requirements and Performance Guarantee.

- a. A site plan pursuant to **Section 5.6** shall be required. The site plan shall include the following:
  - (1) All lot lines and dimensions and setbacks, including a legal description of each lot comprising the Solar Energy Facility.
  - (2) Names of owners of each lot within the Township that is proposed to be within the Solar Energy Facility.
  - (3) Vicinity map showing the location of all surrounding land uses.
  - (4) The location of all solar arrays, including setbacks.
  - (5) The width of arrays.
  - (6) The distance between arrays plus total height (and distance to the lowest edge of the array above grade).
  - (7) Ancillary structures and electrical equipment.
  - (8) Utility connections.
  - (9) Dwellings on the property and within five hundred five hundred (500) feet of the property lines (participating and non-participating lots).
  - (10) Existing and proposed structures as part of the Solar Energy Facility.
  - (11) Buried or above ground wiring.
  - (12) Temporary and permanent access drives.
  - (13) Fencing detail.
  - (14) Screening/landscape detail and berm detail.
  - (15) Signs.
  - (16) Plans for land clearing and/or grading required for the installation and operation of the system, and plans for ground cover establishment and management.
  - (17) Sound modeling study including sound isolines extending from the sound source(s) to the property lines of adjoining non-participating lots.
- b. Decommissioning Plan. A decommissioning plan is required at the time of application. The decommissioning plan shall include:

- (1) The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g. access drive, fencing), or restored for viable reuse of the property consistent with the zoning district. Removal shall include removing posts, equipment, panels, foundations, and other items so that the ground is restored to its preconstruction state and is ready for development as another land use.
- (2) The projected decommissioning costs for removal of the Solar Energy Facility and soil stabilization. (net of salvage value in current dollars) and soil stabilization, less the amount of the surety bond posted with the State of Michigan for decommissioning of panels installed on PA 116 lands.
- (3) The method of ensuring that funds will be available for site decommissioning and stabilization (performance guarantee pursuant to **Section 9.4**).
- c. Performance Guarantee. As a condition of approval, prior to construction, the Planning Commission shall require an owner to deposit a performance guarantee (pursuant to Section 9.4) at the time of approval equal to 1.25 times the estimated decommissioning cost plus funds to facilitate the repair of damage to roads and any other public infrastructure. A review of the amount of the performance guarantee based on inflation, salvage value, and current removal costs shall be completed every five (5) years, for the life of the project, and approved by the Township Board. The deposit or bond shall be maintained by successor owners of the facility. A Solar Energy Facility owner may at any time:
  - (1) Proceed with the decommissioning plan approved by the Planning Commission and remove the system as indicated in the most recent approved plan; or
  - (2) Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.
- d. Additional Studies. Additional studies may be required by the Planning Commission if reasonably related to the standards of this ordinance as applied to the application site, including but not limited to:
  - (1) Visual Impact Assessment: A technical analysis by a third party qualified professional of the visual impacts of the proposed project, including a description of the project, the existing visual landscape, and important scenic resources, plus visual simulations that show what the project will look like (including proposed landscape and other screening measures) a description of potential project impacts, and mitigation measures that would help to reduce the visual impacts created by the project and documented on the site plan.
  - (2) Environmental Analysis: An analysis by a third-party qualified professional to identify and assess any potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, wildlife, endangered and threatened species, historical and cultural sites, and antiquities. If required, the analysis shall identify all appropriate measures to minimize, eliminate or mitigate adverse impacts identified and show those measures on the site plan, where applicable.

(3) **Stormwater Study**: An analysis by a third-party qualified professional that takes into account the proposed layout of the Solar Energy Facility and how the spacing, row separation, and slope affects stormwater infiltration, including calculations for a 100-year rain event (storm). Percolation tests or site-specific soil information shall be provided to demonstrate infiltration on-site without the use of engineered solutions.

## B. Solar Energy Panels (Accessory).

Solar energy panels shall be allowed as a permitted accessory use in all zoning districts subject to the requirements below. A zoning permit shall be required for ground-mounted solar panels over two hundred (200) square feet. A building permit may be required.

### A. Height.

- Ground-mounted accessory solar energy panels shall not exceed the allowable height of structures in that district when oriented at maximum tilt measured from the ground to the top of the system.
- 2. Building-mounted accessory solar energy systems shall not exceed five (5) feet above the finished roof.

## B. Setbacks/Location.

- 1. Ground-mounted accessory solar energy panels shall adhere to setbacks and location established for detached accessory buildings pursuant to **Section 3.9.** Setbacks are measured from the lot line to the nearest portion of the structure when oriented at minimum tilt. If no solar access is available in the location required, the Planning Commission may approve ground-mounted solar energy panels in an alternate location on a case-by-case basis. Screening from the road or neighboring property may be required.
- 2. Building-mounted accessory solar energy panels shall adhere to district setbacks for a principal building but may encroach into designated principal building setbacks by twelve (12) inches.
- C. Glare. Panels shall not result in glare onto adjoining properties or public rights of way.
- D. Lot Coverage for Residential Lots. Ground-mounted accessory solar energy panels (all panels totaled together on one lot) shall be no greater than half (1/2) of the square footage of the principal dwelling.

#### E. Nonconformities.

1. A building-mounted accessory solar energy panel installed on a nonconforming building or nonconforming use shall not be considered an expansion of the nonconformity.

2. Ground-mounted accessory solar energy panels installed on a nonconforming lot or nonconforming use shall not be considered an expansion of the nonconformity.

That the Haynes Township Zoning Ordinance, Article 7 (Supplemental Regulations) is hereby amended to read as follows:

# (Add) Section 7.31 Battery Energy Storage Systems

#### A. Purpose.

This Section applies to Battery Energy Storage Systems that are stand-alone facilities or are in conjunction with another use such as Solar Energy Facilities or Wind Energy Facilities. Battery Energy Storage Systems shall comply with this Section and the site plan review standards in **Section 5.6** and the Special Use standards in **Section 6.3**.

- 1. **Intent**. Haynes Township intends to regulate Battery Energy Storage Systems with the following relevant goals of the Haynes Township Comprehensive Plan in mind:
  - a. To preserve the existing character of Haynes Township.
  - b. To strive for orderly growth and development in accordance with the human, natural, and financial resources within the Township.
  - c. To preserve and protect farmland within the Township.

The Township recognizes the importance of agricultural lands as an economic base and way of life in Haynes Township. Where feasible, the Township intends to maintain and provide for the preservation of farmland and woodlands and to discourage the conversion of these lands into more intensive uses. The Township also recognizes the importance of allowing local residents the opportunity to purchase fresh foods on local agricultural land.

B. Permitted Area. Battery Energy Storage Systems shall not be permitted on lands currently enrolled in Federal or State programs (i.e. Farm Services Agency) at the time this Ordinance was adopted by Haynes Township. However, these lands not engaged in active production for a period of three (3) consecutive years shall be deemed eligible for the development of Battery Energy Storage Systems.

# C. Setbacks and Height.

- 1. **Setbacks**. The setbacks of all buildings and components of Battery Energy Storage Systems shall be at least one hundred-fifty (150) feet from all lot lines of non-participating lots and at least five hundred (500) feet from a residence on a non-participating lot.
- 2. **Height**. The maximum height of a Battery Energy Storage System or building containing a Battery Energy Storage System shall not exceed the maximum building height in the district.

### D. Screening.

- a. Battery Energy Storage Systems shall be screened from view from any residential district or residential use on non-participating lots by use of a masonry screen wall, berm, evergreen vegetation, or other screening of a similar effectiveness and quality, if determined as necessary by the Planning Commission. The Planning Commission may require screening to be installed which screens the facility fully from view from the time of planting or installation. Screening shall be maintained throughout the life of the facility including replacing dead vegetation within six (6) months or at the earliest feasible time of year dependent on the weather. The Planning Commission may reduce or waive screening requirements provided that any such adjustment is in keeping with the intent of the Ordinance.
- b. Areas within ten (10) feet on each side of a Battery Energy Storage System shall be cleared of combustible vegetation and other combustible growth.

#### E. Lighting.

Lighting of the Battery Energy Storage System shall be limited to that minimally required for safety and operational purposes and shall be reasonably shielded and downcast from abutting properties.

#### F. Sound.

The sound pressure level of a Battery Energy Storage System and all ancillary equipment shall not exceed forty-two (42) dBA (Leq (1 hour)) at the lot line of an adjacent non-participating lot. The site plan shall include modeled sound isolines extending from the sound source to the lot lines to demonstrate compliance with this standard. If ambient sounds are at or above forty-two (42) dBA (Leq (1 hour)), then the sound pressure level shall not exceed the ambient sound plus five (5) dBA (Leq (1 hour)). The applicant may be required to provide operating sound pressure level measurements from a reasonable number of sampled locations at the perimeter of the Battery Energy Storage System to demonstrate compliance with this standard.

#### G. Land Clearing.

Land disturbance or clearing shall be limited to what is minimally necessary for the installation and operation of the system. Topsoil distributed during site preparation (grading) on the property shall be retained on site.

#### H. Access Drives.

New access drives within the Battery Energy Storage System shall be designed to minimize the extent of soil disturbance, water runoff, and soil compaction on the premises. The use of geotextile fabrics and gravel placed on the surface of the existing soil for temporary roadways during the construction of the Battery Energy Storage System is permitted, provided that the geotextile fabrics and gravel are removed from those temporary roadways once the Battery Energy Storage System is in operation. Access drives shall be removed upon decommissioning unless the property owner requests the access drives remain in place or the Planning Commission makes a determination that the access drives should remain in place.

### Fencing.

Battery Energy Storage Systems may be secured with perimeter fencing to restrict unauthorized access. Fencing is not subject to setbacks in subsection C. The Planning Commission may require wildlife-friendly fencing.

### J. Safety and Compliance.

- 1. Construction of a Battery Energy Storage System shall comply with the National Electric Safety Code and the Building Code. In the event of a conflict between the County Building Code and National Electric Safety Code (NESC), the NESC shall prevail.
- 2. System Certification. Battery energy storage systems and equipment shall be listed by a Nationally Recognized Testing Laboratory to UL 9540 (Standard for Battery Energy Storage Systems and Equipment) or approved equivalent, with subcomponents meeting each of the following standards as applicable:
  - a. UL 1973 (Standard for Batteries for Use in Stationary, Vehicle Auxiliary Power and Light Electric Rail Applications),
  - b. UL 1642 (Standard for Lithium Batteries),
  - c. UL 1741 or UL 62109 (Inverters and Power Converters),
  - d. Certified under the applicable electrical, building, and fire prevention codes as required.
  - e. Alternatively, field evaluation by an approved testing laboratory for compliance with UL 9540 (or approved equivalent) and applicable codes, regulations and safety standards may be used to meet system certification requirements.
- 3. **Site Access**. Battery energy storage systems shall be maintained in good working order and in accordance with industry standards. Site access shall be maintained, including snow removal at a level acceptable to the local fire department.
- 4. Battery Energy Storage Systems, components, and associated ancillary equipment shall have required working space clearances, and electrical circuitry shall be within weatherproof enclosures marked with the environmental rating suitable for the type of exposure in compliance with NFPA 70.

#### K. Increased Storage Capacity.

- 1. The components with the Battery Energy Storage System may be reconfigured, renovated, or replaced to increase the power storage capacity within the existing project footprint.
- 2. A proposal to change the project footprint of an existing Battery Energy Storage System shall be considered a new application, subject to the ordinance standards at the time of the request. Expenses for legal services and other studies resulting from an application to modify a Battery Energy Storage System will be reimbursed to the Township by the Battery Energy Storage System owner in compliance with established escrow policy.

#### L. Abandonment.

If a Battery Energy Storage System owner or operator has an intent to abandon, and, in fact, does abandon a Battery Energy Storage System for six (6) continuous months, the Battery Energy Storage System shall be deemed to be abandoned. The applicant/permit holder will be so notified in writing by the Township and requested to dismantle the site and return it to its original state within one hundred (180) days of receipt of notice from the Township of such abandonment. If there are mitigating circumstances as to why the site has not been used, the applicant/permit holder may contact the Township and request a three (3) month extension. If a site has been deemed abandoned and no request for an extension is received, the applicant/permit holder will be notified to dismantle the site and return it to its original state. If the applicant/permit holder does not do this within the one hundred (180) day period, the Township will have the removal and restoration done at the owner/applicant's expense.

#### M. Application Requirements and Performance Guarantee.

- 1. **Site Plan**. A site plan pursuant to **Section 5.6** shall be required. The site plan shall include the following:
  - a. All lot lines and dimensions, including a legal description of each lot comprising the Battery Energy Storage System.
  - b. Names of owners of each lot within the Township that is proposed to be within the Battery Energy Storage System.
  - c. Vicinity map showing the location of all surrounding land uses.
  - d. Location of all proposed battery structures, buildings which house batteries, other buildings or structures, electrical tie lines and transmission lines, security fencing, and all above-ground structures and utilities associated with a Battery Energy Storage System.
  - e. Horizontal and vertical (elevation) to-scale drawings with dimensions.
  - f. Proposed setbacks from the Battery Energy Storage System to all existing and proposed structures on participating and non-participating lots.
  - g. Dwellings on the property and within five hundred five (500) hundred feet of the property lines (participating and non-participating lots).
  - h. Temporary and permanent access drives.
  - Screening/landscape detail and berm detail.
  - j. Signs.
  - k. Plans for land clearing and/or grading required for the installation and operation of the system, and plans for ground cover establishment and management.

- I. Sound modeling study including sound isolines extending from the sound source(s) to the property lines of adjoining non-participating lots.
- m. Planned security measures to prevent unauthorized trespass and access during the construction, operation, removal, maintenance, or repair of the Battery Energy Storage System.
- n. A written description of the maintenance program to be used for the Battery Energy Storage System, including decommissioning and removal. The description shall include maintenance schedules, types of maintenance to be performed, and decommissioning and removal procedures and schedules if the Battery Energy Storage System is decommissioned.
- o. Planned lightning protection measures.
- p. A preliminary equipment specification sheet that documents the proposed battery energy storage system components and associated electrical equipment that are to be installed. A final equipment specification sheet shall be submitted prior to the issuance of zoning permit.
- q. Name, address, and contact information of proposed or potential system installer and the owner and/or operator of the battery energy storage system. Such information of the final system installer shall be submitted prior to the issuance of zoning permit.
- r. **Fire Safety Compliance Plan**. Such plan shall document and verify that the system and its associated controls and safety systems are in compliance with the Fire Code.
- s. **Emergency Operations Plan**. A copy of the approved Emergency Operations Plan shall be given to the system owner, the local fire department, and local fire code official. A permanent copy shall also be placed in an approved location to be accessible to facility personnel, fire code officials, and emergency responders. The emergency operations plan shall include the following information:
  - (1) Procedures for safe shutdown, de-energizing, or isolation of equipment and systems under emergency conditions to reduce the risk of fire, electric shock, and personal injuries, and for safe start-up following cessation of emergency conditions.
  - (2) Procedures for inspection and testing of associated alarms, interlocks, and controls.
  - (3) Procedures to be followed for summoning service and repair personnel, and providing agreed-upon notification to fire department personnel for potentially hazardous conditions in the event of a system failure.
  - (4) Emergency procedures to be followed in case of fire, explosion, release of liquids or vapors, damage to critical moving parts, or other potentially dangerous conditions. Procedures can include sounding the alarm, notifying the fire department, evacuating personnel, de-energizing equipment, and controlling and extinguishing the fire.

- (5) Response considerations similar to a safety data sheet (SDS) that will address response safety concerns and extinguishment when an SDS is not required.
- (6) Procedures for dealing with battery energy storage system equipment damaged in a fire or other emergency event, including maintaining contact information for personnel qualified to safely remove damaged battery energy storage system equipment from the facility.
- (7) Other procedures as determined necessary by the Township to provide for the safety of occupants, neighboring properties, and emergency responders.
- (8) Procedures and schedules for conducting drills of these procedures and for training local first responders on the contents of the plan and appropriate response procedures.
- t. Additional detail(s) and information as required by the Special Use requirements of the Zoning Ordinance, or as required by the Planning Commission.
- 2. **Decommissioning Plan**. A decommissioning plan is required at the time of application. The decommissioning plan shall include:
  - a. The anticipated manner in which the project will be decommissioned, including a description of which above-grade and below-grade improvements will be removed, retained (e.g. access drive, fencing), or restored for viable reuse of the property consistent with the zoning district. Removal shall include removing equipment, foundations, and other items so that the ground is restored to its preconstruction state and is ready for development as another land use.
  - b. The projected decommissioning costs for removal of the Battery Energy Storage Systems and soil stabilization.
  - c. The method of ensuring that funds will be available for site decommissioning and stabilization (performance guarantee pursuant to **Section 9.4**).
- 3. Performance Guarantee. The Township shall require a performance guarantee (pursuant to Section 9.4) at the time of approval equal to 1.25 times the estimated decommissioning cost plus funds to facilitate the repair of damage to roads and any other public infrastructure. A review of the amount of the performance guarantee based on inflation, salvage value, and current removal costs shall be completed every five (5) years, for the life of the project, and approved by the Township Board. A Battery Energy Storage System owner may at any time:
  - a. Proceed with the decommissioning plan approved by the Planning Commission and remove the system as indicated in the most recent approved plan; or
  - b. Amend the decommissioning plan with Planning Commission approval and proceed according to the revised plan.

- 4. Additional Studies. Additional studies may be required by the Planning Commission if reasonably related to the standards of this Ordinance as applied to the application site, including but not limited to:
  - a. Visual Impact Assessment: A technical analysis by a third party qualified professional of the visual impacts of the proposed project, including a description of the project, the existing visual landscape, and important scenic resources, plus visual simulations that show what the project will look like (including proposed landscape and other screening measures) a description of potential project impacts, and mitigation measures that would help to reduce the visual impacts created by the project and documented on the site plan.
  - b. Environmental Analysis: An analysis by a third-party qualified professional to identify and assess any potential impacts on the natural environment including, but not limited to wetlands and other fragile ecosystems, wildlife, endangered and threatened species, historical and cultural sites, and antiquities. If required, the analysis shall identify all appropriate measures to minimize, eliminate or mitigate adverse impacts identified and show those measures on the site plan, where applicable.

### Section 2: Severability

If any clause, sentence, paragraph or part of this Ordinance shall for any reason be finally adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair or invalidate the remainder of this Ordinance but shall be confined in its operation to the clause, sentence, paragraph or part thereof directly involved in the controversy in which such judgment is rendered.

# Section 3: Saving Clause

The Haynes Township Zoning Ordinance, except as herein or heretofore amended, shall remain in full force and effect. The amendments provided herein shall not abrogate or affect any offense or act committed or done, or any penalty or forfeiture incurred, or any pending fee, assessments, litigation, or prosecution of any right established, occurring prior to the effective date hereof.

# Section 4: Effective Date

The ordinance changes shall take effect on the 8th day after the publication of the notice of adoption.

Haynes Township Clerk

I, Ιαγγαία Ουι εκ, Clerk for Haynes Township, hereby certify that the foregoing is a true and correct copy of Ordinance # 26-23 of Haynes Township, adopted by at a meeting of the Township Board of Trustees held on Declo 2003.

A copy of the complete ordinance text may be inspected or purchased at the Haynes Township Hall, at 3939 E. McNeil Rd, Lincoln, Michigan.

Adopted:

Published:

Effective

Dec 4, 2023 Dec 4, 2023 Dec 14, 2023, subject to PA 110 of 2006, as amended