

Bill 2024-096: Planning Board Recommendation 3-10-2025

An Ordinance to amend the Amesbury Zoning Ordinance ~~and Amesbury Overlay Zoning Map~~ by ~~expanding~~ allowing Solar Energy Facilities outside the Renewable Energy Development Overlay District (REDD) ~~and to make by making~~ changes to Sections V, VI, ~~and XI.S and XIV~~ that would modify the requirements in those sections as they pertain to solar energy projects.

Summary: The development of large-scale solar energy projects has been recognized as being crucial to achieving the Commonwealth's goal of reaching net zero greenhouse gas emissions by 2050. Furthermore, Massachusetts law, including M.G.L. c. 40A, §3, aims to promote the development of solar energy facilities. Since 2016, Amesbury has permitted large-scale solar energy projects ~~in the city,~~ that produce more than 10 MW of clean energy, but the areas zoned for solar energy projects have been confined primarily to ~~the three separate overlay districts that comprise of approximately 680 acres of land area (or 8% of the total land area in Amesbury). Industrial District.~~ Based on the protections afforded to solar energy facilities pursuant to Section 40A, §3, this amendment seeks to substantially expand the available land area for solar energy facilities in Amesbury to approximately 6,330 acres (or 72% of the total land area in Amesbury) but exclude the Water Resource Protection District and regulate and manage the potential adverse risks to these expanded areas with a special permit process.

Purpose: The proposed zoning amendments seek to ~~expand~~ revise the existing Renewable Energy Development Overlay District (REDD) to formally recognize the protection afforded to solar energy facilities pursuant to G.L. C. 40A, §3 and allow for solar energy facilities outside the REDD by special permit while prohibiting solar energy facilities within the Water Resource Protection District to preserve and advance the purpose and intent of the Water Resource Protection District established pursuant to Section XIV. ~~to include a portion of a parcel not currently included in the REDD. Specifically, Assessor Parcel 45-4 has been identified by a solar energy proponent for large-scale solar development and is seeking amendments to the boundaries of the REDD and Amesbury Zoning Ordinance.~~ The proposed zoning amendments also seek to modify the provisions of Sections V, VI, ~~and XI.S, and X.IV~~ of the Amesbury Zoning Ordinance and add additional development and performance standards. The added performance standards and special permit requirements are intended to protect the health, safety, and welfare of the city's forested, agricultural, wetland, riverfront, and sensitive habitat areas, as well as other environmentally sensitive resources located outside the REDD. Understanding the potential for significant adverse impacts of large solar energy facilities on the city's environmental, agricultural, cultural, and historic resources located outside the REDD – primarily due to the potential for: batteries, power inverters, or other components of the system to leak, spill, or combust; chemical contamination of the soils; leaching from solar panel components; or contamination of stormwater runoff from cleaning agents or other chemical contaminants typically used in solar energy facilities – careful consideration and implementation of advanced and innovative mitigation strategies through

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a special permit process is needed to minimize and avoid any potential unmitigated adverse impacts to the health, safety, and welfare of the city's environmental, agricultural, cultural, and historic resources located outside the REDD.

Be it Ordained by the City Council of the City of Amesbury assembled and by the authority of the same, as follows:

~~1. Amend Amesbury Overlay Zoning Map, as follows:~~

~~To extend the Renewable Energy Development District (REDD) Overlay Zoning District to include portions of a Parcel identified on the Assessor Database as Map 45, Lot 4 and further shown on the attached Exhibit REDD 2024 01~~

Section XI.S of the Amesbury Zoning Ordinance pertains to Solar Energy Facilities. Amendments below pertain to changes proposed within Section XI.S.

1. Amend XI.S.3, APPLICABILITY, as follows:

a. Amend XI.S.3.2, as follows:

For projects *subject to the protections afforded to solar energy facilities pursuant to GL.c.40A §3 and/or* developed in accordance with this section, ~~where the provisions of the REDD are silent on a zoning regulation,~~ the requirements of the underlying zoning district shall apply unless contrary to the intent of this Section ~~the REDD~~. *All projects subject to the protections afforded to solar energy facilities pursuant GL.c.40A §3 shall comply with the requirements of this Section, regardless of where the project is located provided, that to preserve and advance the purposes set forth in Section XIV.A of these Ordinances, it is expressly stated that solar energy facilities, as defined in this Section, shall not be allowed in the Water Resources Protection District and, when located outside the REDD, a special permit shall be required pursuant to Section V, Note (16) of the Zoning Ordinance;*

2. Amend XI.S.5, GENERAL PROVISIONS, as follows:

a. Amend XI.S.5.2 - Dimensional and Density Regulations, as follows:

2. Dimensional and Density Regulations: A solar energy facility located within or outside the REDD *(except within the Water Resource Protection District)* shall comply with the provisions of Section V and VI of the Zoning Ordinance, as amended from time to time, except as follows:

a. The minimum front, rear and side yard setbacks shall be fifty (50) feet from the property line *except that the PGA may allow a reduced setback per Section XI.S.11;*

Add a new sub-section XI.S.5.2.e as follows:

e. *A solar energy facility may be erected on a lot or lots that do not meet the frontage requirements of the underlying zoning district, provided such requirement is waived by Special Permit from the PGA and that the PGA*

determines that safe and adequate access to the solar energy facility is provided.

b. Amend XI.S.5.10 - Safety and Environmental Standards, by adding the following:

*XI.S.5.10: f. - **Fencing**: Appropriately designed fencing shall be allowed as approved by the PGA in certain locations to restrict access to and provide screening for the solar energy facility. Such fencing may be allowed by the PGA within setback and natural buffer areas and shall be maintained by the solar energy project operator or their designee(s).*

c. Add a new section XI.S.5.13. as follows:

XI.S.5.13 - Access Roads/Driveways, Utilities and Power Lines:

*Service and access driveways (including temporary construction and emergency access driveways), utilities (excluding stormwater management features), and power lines (above or below ground) and associated equipment serving a solar energy facility may be located outside the REDD **(except within the Water Resource Protection District)** subject to the issuance of a Special Permit from the PGA and provided the limit of disturbance for such access driveways and utilities is limited to no greater than forty (40) feet in width and the travelled surface of such access driveways shall not exceed twenty (20) feet in width.*

3. Amend XI.S.7, MATERIALS FOR SUBMISSION, as follows:

a. Amend XI.S.7.1.a - Proposed Installation Plan, as follows:

ii. Outline of all existing buildings, including purpose (e.g. residence, garage, storage shed, etc.) on site parcel, *any parcel through or over which a service or access driveway will be utilized to access the site parcel*, and all adjacent parcels within 300 feet. Distance from the solar energy facility to each building shall also be shown on the plan;

b. Amend XI.S.7.1.e - Legal Documents, as follows:

e. Legal Documents: Copies of existing and proposed legal documents pertaining to public and private easements, covenants and agreements affecting the use of the site parcel *and any parcel or parcels through or over which a service or access driveway(s) will be utilized to access the site parcel.*

4. Amend XI.S.8, DEVELOPMENT AND PERFORMANCE STANDARDS, as follows:

Add new sections XI.S.8(8) and XI.S.8(9), as follows:

XI.S.8.8 - Wildlife Habitat Mitigation Plan:

A Wildlife Habitat Mitigation Plan shall be prepared by a qualified professional that (a) identifies measures for mitigating impacts to wildlife habitat, (b) includes but not limited to, access to the public via pedestrian trails, viewing areas, and other passive recreational uses; and (c) provides protocol for appropriate long-term maintenance of such measures, which protocol shall be incorporated into the Operation and Maintenance Plan required by Section XI.S.5(9).

XI.S.8.9 - Stormwater Management ~~and Protection of the City's Water Resources:~~

- a. *All solar energy facilities shall have a stormwater management system that includes best management practices designed to comply with the standards set forth in the Massachusetts Department of Environmental Protection's Stormwater Management Handbook (as it may be revised as of the date of approval or, for projects requiring Site Plan Review, as of the date of filing of the Site Plan Review application) and all other applicable federal, state and local regulations.*
- b. *For a solar energy facility located ~~in the Water Resources Protection District~~ outside the REDD (except within the Water Resource Protection District), the following additional requirements apply:*
 1. *No clearing or other land disturbance associated with a solar energy facility and no structure or infrastructure associated with such a facility (including any stormwater management features) may be located within ~~the Zone Aa~~ wetland resource or riverfront area- except that minimum clearing for the purposes of constructing or maintaining an access driveway(s), utilities (excluding stormwater management areas), and power lines (above or below ground), as permitted under Section XI.S.5.13 ; and,*
 2. *The PGA, when reviewing and evaluating the Site Plan for such facilities, shall place particular focus on ensuring protection of ~~the City's surface and ground-water resources~~ any wetland resource or riverfront area including careful evaluation and regulation of the proposed stormwater management system, clearing and land disturbance activities, grading, erosion and sedimentation controls during the construction and post- construction periods, permanent vegetation plan, the proposed mitigation measures, and any other solar energy facility features that may present a risk of impact to the health, safety, and welfare of ~~the City's Water Resource Protection District~~ any wetland resource or riverfront area.*

5. Amend Section V, Table of Uses, as follows:

Add Note 16 to the Table of Uses, as follows:

(16) Notwithstanding anything to the contrary set forth elsewhere in this Zoning Ordinance, a solar energy facility, or an access driveway(s) (including temporary construction and emergency access driveways), or utilities and power lines (above or below ground) and associated equipment serving a large solar energy facility located outside the Renewable Energy Development District (REDD) (except within the Water Resource Protection District~~within any zoning district~~), may be ~~approved~~allowed by the PGA Planning Board subject to a Special Permit pursuant to Section X.J and a Site Plan Approval pursuant to Section XI.S.

6. Amend Section VI, Table of Dimensional and Density Regulations, as follows:

Add n.15 to Minimum Lot Frontage header and add Note 15, as follows:

(15) REDD Zoning: Minimum Lot Frontage requirements may be waived by the PGA and the issuance of a Special Permit for parcels on which a Solar Energy Facility is proposed within or outside the Renewable Energy Development Overlay District (REDD) provided the PGA determines that safe and adequate access to the solar energy facility is provided pursuant to Section ~~XI.S~~XLSXS.

~~**7. Amend Section XIV Water Resources Protection District, as follows:**~~

~~Amend Section XIV.E, Allowed Uses within the Water Resource Protection District, by adding a new Section XIV.E.11, as follows:~~

~~*Section XIV.E.11 – Construction, operation and maintenance of a Solar Energy Facility, subject to Site Plan Approval from the PGA pursuant to Section X.J. and the following limitation: No clearing or other land disturbance associated with the facility and no structure or infrastructure associated with facility (including any stormwater management features) may be located within 400 feet of the upper boundary of the bank of Meadowbrook Pond or the Powwow River of the resource area – except that access driveways, utilities (excluding stormwater management features) and power lines (above or below ground) and clearing or land disturbance as permitted under Section XI.S.5.13 may be allowed in the Zone A.*~~

SUPPLEMENTAL AMENDMENTS (PB – 3/10/2025)

The following additional amendments are being proposed to provisions of Section XI.S to address additional materials for review, performance standards and criteria for site plan and special permit for a solar energy facility.

A1. Amend XI.S.5.10, Safety and Environmental Standards, as follows:

1. ***Add XI.S.5.10.f – Battery Energy Storage System (BESS) Safety Plan - The safety plan shall include: hazard detection systems; means of protecting against incipient fires, including but not limited to training, methods and procedures for local emergency and public safety responders; and ventilation and/or cooling strategies for protecting against thermal runaway, fires, and explosions. BESS should have plans to address extreme weather, earthquakes, or other environmental threats that may occur.***

A2. Amend XI.S.6, SITE PLAN REVIEW PROCEDURES, as follows:

1. ***Amend XI.S.6.1 – Prior to construction **and** installation of a new solar energy facility or modification of an existing facility ~~within the REDD~~, a Site Plan Review application for a Solar Energy Facility shall be made pursuant to the provisions of Section XI.C.4.c***

A3. Amend XI.S.7, MATERIALS FOR SUBMISSION, as follows:

1. ***Amend XI.S.7.1 – In addition to the Site Plan Review requirements established under Section XI.C.5 and ~~6-Section XI.C.6~~ of the Zoning Ordinances, the materials listed in this section must also be included in a Site Plan Review Application for a **proposed** solar energy facility ~~proposed within the REDD~~.***
2. ***Amend XI.S.7.1.a.ii – The following existing conditions on the site parcel(s) and all adjacent parcels within 300 feet shall be shown:***
 1. ***Outline of all existing buildings, including purpose (e.g. residence, garage, storage shed, etc.). Distance from the solar facility to each building shall also be shown on the plan.***
 2. ***Locations of active farmland and prime farmland soils, wetlands, permanently protected open space, Priority Habitat Areas and BioMap Critical Natural Landscape Core Habitat mapped by the Natural Heritage & Endangered Species Program (NHESP) and “Important Wildlife Habitat” mapped by the DEP.***
 3. ***Locations of floodplains or inundation areas for moderate or high hazard dams.***
 4. ***Locations of Scenic Roads, Local or National Historic Districts, inventoried historic buildings, and archaeologically sensitive areas***

3. *Add XI.S.7.1.k – Battery Energy Storage System (BESS) Risk Mitigation Plan: A battery storage system hazardous mitigation plan shall be provided that includes sections for identifying potential hazards related to the battery system, analyzing the likelihood and severity of those hazards, outlining mitigation strategies to minimize risks, and detailing emergency response procedures in case of incidents, including specific information on the battery type, site layout, fire suppression systems, ventilation, monitoring systems, and personnel training requirements.*

4. *Amend XI.S.7.~~k~~.2 – Very Large Solar Energy Facilities: When Solar Energy Facilities with a name plate capacity of one (1) megawatt (MW) or more **are proposed**, the PGA ~~may~~ **shall** also require that the following documents be provided in addition to those noted above:*

5. *Add XI.S.7.2.v – Ecological Assessment Report - An Ecological Assessment Report shall be provided where the potential project impacts are identified, quantified, and assessed through ecological surveys for the site. Ecological impacts pertain to the habitats, species, and ecosystems which may be affected by the project within or abutting the solar energy facility. Factors should include the extent and magnitude of the impact, the duration and reversibility as well as the timing and frequency of the impact on the ecology. The Assessment Report shall identify the features of ecological interest within the site as well as establishing the baseline information for the site. The Assessment Report shall identify and prioritize the ecological features of the site, the potential impacts, significant effects on important ecological features, and proposed mitigation measures, and proposed enhancements to avoid, minimize, or mitigate any adverse impacts caused by the project.*

A4. Amend XI.S.8, DEVELOPMENT AND PERFORMANCE STANDARDS as follows:

1. *Amend the first para as follows: Any proposed solar energy facility ~~within the REDD~~ shall be subject to the*

2. *Amend Section XI.S.8 Development and Performance Standards:
Add new sections XI.S.8(10), XI.S.8(11), XI.S.8(12), and XI.S.8(13), as follows:*
 10. *Land Alteration: Solar energy facilities shall assess the soil types, slopes, current conditions, and the neighboring topography. Test pits shall determine the depth to groundwater. Natural or graded slopes supporting solar arrays shall be no greater than 3:1. Only native plantings and seed mixes shall be used to revegetate disturbed areas and no synthetic pesticides, herbicides or fertilizers shall be used. For any*

trees over 12” at diameter at breast height (DBH) that will be removed from the site to install the solar facility, mitigation for the loss of vegetative cover shall be provided at a ratio of 3:1 by planting similar tree species at a caliper of at least 3 ½” DBH on- or off-site, or, by contributing a commensurate amount into a municipal mitigation fund for planting elsewhere in the city.

11. **Hazardous Materials:** *No oil, hazardous materials, cleaners, or other potential contaminants shall be used. Disposal of any washing water at the facility shall be minimized to prevent contamination of the ground and surface water supply. All solar panels shall be PFAS free including but not limited to any self-cleaning coatings, adhesives, or substrates.*
12. **Battery Storage Units:** *All battery storage units shall be located at least 600’ from the Zone A of the Water Resource Protection District and 100’ from a wetland resource area. Such units shall also be located above the 100’ flood elevation. All units shall install a smoke detection system within each battery chamber containing its own sensor and detection alarm system. All battery storage units shall also be stored in self-containment areas all spent or expired batteries shall be immediately removed from the facility.*
13. **Construction Phasing:** *Construction of solar energy facilities shall be phased with no more than 10 acres of disturbance in each phase. Prior to commencement of construction on a successive phase, the soils and slopes shall be stabilized with erosion controls until vegetation is reestablished.*

A5. Amend XI.S.9, SITE PLAN REVIEW CRITERIA, as follows:

1. ***Amend XI.S.9.3*** – Minimize and, where applicable, mitigate the volume of cut and fill, the number of removed trees that are ~~six (6)~~ twelve (12”) inches **DBH** or more in caliper, the area of wetland vegetation displaced, soil erosion, threat of air and water pollution, **or the loss of agricultural uses.**
2. ***Amend XI.S.9.5*** – Minimize **adverse impact on ~~obstruction of~~** scenic views from publicly accessible locations.
3. ***Amend XI.S.9.7*** – Minimize **off-site reflective** glare from ~~headlights~~ solar panels and lighting intrusion.
4. ***Insert XI.S.9.10*** – **Minimize wildlife and habitat impacts on the property and/or any adjacent wildlife corridors or other open space areas.**

A6. Amend XI.S.10, FINAL ACTION, as follows:

1. ***Amend XI.S.10.2*** – The PGA may grant a Site Plan Approval, and **when located outside the REDD, the PGA may also grant a special permit under X.J, subject to the findings listed under both X.J and the following: ~~and require certain requirements be met as conditions of approval, after it finds in writing that:~~**

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2. *Amend XI.S.10.2.d* – The proposed solar energy facility complies with all the requirements *and criteria* set forth in this section, and
3. *Amend XI.S.10.2.e* – The facility shall be *designed*, constructed and operated in a manner that minimizes or *mitigates any* adverse visual, safety and environmental impacts.