**DRAFT SOLAR ENERGY ORDINANCE DRAFT**

**Town of Georgetown**

*Enacted June 18, 2022 For Amendment June 17, 2023*

1. **Title**
	1. This Ordinance shall be known as the “Georgetown Solar Energy Ordinance” and will be referred to herein as the “Ordinance”.
2. **Authority**
	1. This Ordinance is adopted pursuant to the Home Rule Powers as provided for in Article VIII of the Maine Constitution and under the authority granted to the Town by the Maine Revised Statutes, including of 30A MRSA §2101, et seq.
	2. To the extent that any provision of this Ordinance is deemed invalid by a court of competent jurisdiction, such provision shall be removed from the Ordinance and the balance of the Ordinance shall remain valid.
	3. This Ordinance shall be administered by the Town’s Planning Board and enforced by the Town’s Code Enforcement Officer and Board of Selectmen.
3. **Purpose**
	1. Establish clear guidelines and standards for the Town to regulate Solar Energy Systems.
	2. Permit the Town to fairly and responsibly protect public health, safety, and welfare.
	3. Minimize any potential adverse effect of solar development on surrounding land use.
	4. Provide for the decommissioning/removal of panel and associated utility structures that are no longer being used for energy generation and transmission purposes.
4. **Applicability**
	1. A Solar Energy System (SES) approved for construction prior to the effective date of this Ordinance shall not be required to meet the terms and conditions of this Ordinance. Any physical modification to any existing SES, whether or not existing prior to the effective date of this Ordinance that expands or relocates the footprint of the SES, shall require a new application under this Ordinance. Routine maintenance or replacements in kind do not require a permit.
5. **Definitions**
	1. Solar Energy System (SES): A solar photovoltaic cell, module, or array, or solar hot air or water collector device, including all Solar Related Equipment, which relies upon solar radiation as an energy source for collection, inversion, storage, and distribution of solar energy for electricity generation or transfer of stored heat.
	2. Solar Energy System, Ground-Mounted. A Solar Energy System that is structurally mounted to the ground and is not roof-mounted; may be of any size (private use, medium, or large scale).
	3. Solar Energy System, Roof Mounted. A Solar Energy System that is mounted on the roof of a building or structure; may be of any size (private use, medium, or large scale).
	4. Solar Farm. A Solar Energy System placed solely to generate electricity to feed power into an electrical grid or other commercial purpose.
	5. Solar Energy Farm, Large Scale. A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 4 acres and/or that generates a nameplate capacity of 1 MW or greater.
	6. Solar Energy Farm, Medium Scale. A Solar Energy System whose physical size based on total airspace projected over the ground is equal to or greater than 3,000 square feet but less than 4 acres, and/or that generates a nameplate capacity of 20 KW up to, but not including, 1 MW.
	7. Solar Energy System, Private Use. A Solar Energy System whose physical size based on total airspace projected over the ground is less than 3,000 square feet and/or that generates a nameplate capacity of less than ~~20~~ 60 KW. Such a system may consist of one or more freestanding ground, or roof mounted, solar arrays, or solar related equipment. The primary purpose of a Private Use System is to reduce on-site consumption of utility power or fuels, not to feed into an electrical grid.
	8. Kilowatt (KW): a unit for measuring power that is equivalent to 1,000 watts.
	9. Megawatt (MW): a unit for measuring power that is equivalent to one million watts, or 1,000 kilowatts.
	10. Megawatt Hour (MWh): A megawatt hour is equal to 1,000 Kilowatt hours (KWh). It is equal to 1,000 kilowatts of electricity used continuously for one hour.
	11. Rated Nameplate Capacity. The maximum rated output of electric power production of the photovoltaic system in watts of Direct Current (DC).
	12. Solar Energy. Radiant energy (direct, diffuse and/or reflective) received from the sun.
	13. Solar Array. A grouping of multiple solar modules with the purpose of harvesting solar energy.
	14. Solar Related Equipment. Items including a solar photovoltaic cell, module, or array, or solar hot air or water collector device panels, lines, pumps, batteries, mounting brackets, framing, fencing, foundations or other structures used or intended to be used for collection and management of solar energy.
6. **Permit Required**

A permit approved by the Planning Board shall be required for all Solar Energy Systems, including Large and Medium Scale Solar Energy Farms, and Private Use Solar Energy Systems. All Solar Energy Systems shall conform to the requirements of this Ordinance and other applicable provisions of the Town of Georgetown ordinances. Whenever the requirements of this Ordinance are in conflict with the requirements of any other lawfully adopted rule, regulation, or ordinance, the more restrictive provision shall apply.

1. **Application Fee**
	1. Solar Energy System, Large Scale: The Application fee is $ 2,500.
	2. Solar Energy System, Medium Scale: The Application Fee is $1,000.
	3. Solar Energy System, Private Use. The Application Fee is the standard Building/Demolition Permit fee.
2. **Specific Application Requirements**
	1. An application for a Large or Medium Scale Solar Energy Farm must include the following, at the cost of the applicant:
		1. The name(s) of the owner(s) of the SES, and the operator, if different from the owner(s);
		2. If the operator will be leasing the land, a copy of the agreement (minus financial compensation) clearly outlining the relationship inclusive of the rights and responsibilities of the operator, landowner and any other responsible party with regard to the SES and the life of the agreement;
		3. A description of how and to whom the energy produced will be sold;
		4. A copy of the agreement and schematic details of the connection arrangement with the transmission system (most likely Central Maine Power), clearly indicating which party is responsible for various requirements and how they will be operated and maintained;
		5. Construction Documents
			1. All Construction Drawings and Specifications shall comply with all applicable statutes, regulations, standards, and ordinances issued by Federal, State and local jurisdictions.
			2. All Construction Documents and Specifications shall be prepared and stamped by a registered professional engineer in the State of Maine.
			3. Required drawings and specifications, including but not limited to the following:
				1. Boundary Survey: A boundary survey for the project performed by a licensed land surveyor, including but not limited to:

Comprehensive deed research investigation of the County Registry of Deeds;

Define the limits of the property including all property corners and tangents, monuments and exceptions;

Adjacent properties with lot number, acreage and property owner;

Locate all major structures, roads and parking;

Report Notes containing purpose of the survey, ownership and deed references, method of measurements, and past survey references. Also include any conflicts, exceptions, findings and opinions.

* + - * 1. Site Plan: A set of large scale drawings showing the improvements to the property. This includes:

Site boundaries and delineation of the property and adjacent properties, showing Lot Numbers;

Location of all structures and their relationship to the boundaries and adjacent structures. Include all new, existing and demolished structures;

Location of Land Use Zones and setbacks from the Shoreland Zoning Ordinance;

Location of all roads and parking areas and their relationship to the boundaries and adjacent structures;

Any zones such as floodplain or wetland zones;

Easements and other similar entitlements;

Other site features and components the Planning Board may require.

* + - * 1. Specific SES Drawings: The layout, design and installation of all components of the SES. All components shall conform to applicable industry standards, such as those of the American National Standards (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), Institute of Electrical and Electronics Engineers (IEEE), Solar Rating and Certification Corporation (SRCC), Electrical Testing Laboratory(ETL) or other similar certifying organizations, and shall comply with local ordinances, and with all other applicable fire and life safety requirements. The manufacturer specifications for the key components of the system shall be submitted as part of the application;
				2. A stormwater management plan developed in accordance with Maine’s Department of Environmental Protection regulations for Storm Water Management in Title 38, §420D of the Maine State Statutes, stamped and signed by a licensed Maine engineer.
		1. An operations and maintenance plan, including site control and the projected operating life of the system; Such a plan shall include measures for maintaining safe access to the installation, stormwater controls, as well as general procedures for operational maintenance of the installation.
		2. An emergency management plan for all anticipated hazards.
		3. A stormwater management plan, certified by a licensed Maine engineer, that demonstrates stormwater from the SES will infiltrate into the ground beneath the SES at a rate equal to that of the infiltration rate prior to the placement of the system.
		4. Proof of financial capacity to construct and operate the proposed facility.

10). A Decommissioning Plan: See Section 9.

11). A Building/Demolition Permit Application.

* 1. An application for a Solar Energy System, Private Use must include the following:
		1. A description of the panels to be installed, including make and model, and associated system components;
		2. The owner shall provide evidence that the roof is capable of supporting the collateral load of the SES;
		3. For a roof mounted system, a minimum three foot buffer zone is required from the ridge and one edge of the roof or parapet for firefighter access
		4. A Building/Demolition Permit Application.
1. **Standard for approval**
	1. The following standards must be met:
		1. Large and Medium Scale Ground Mounted Solar Energy Farms:
			1. Prohibited Locations:
				1. Shall not be placed in the Shoreland Zone;
				2. Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance.
			2. Legal Responsibilities: The Applicant must provide proof that it has authorization to construct, use and maintain the property and any access drive for the life of the project and including the decommissioning of the project. The roles and responsibilities of the system owner, operator, landowner and any other party involved in the project must be clear and demonstrate to the satisfaction of the Planning Board that the public interest is protected. The owner or operator of a Ground Mounted Solar Energy System shall build and maintain it in compliance with all relevant Federal, State and Local Laws, Regulations, and Ordinances.
			3. Setback and Height. Structures within a SES shall be setback a minimum of 75 feet from all lot lines. Any solar photovoltaic cells or arrays shall be subject to a maximum height of 20 feet above the ground surface. Associated SES structures shall be subject to the maximum height regulations specified for principal and accessory buildings.
			4. Utility Notification. A solar farm system shall not be installed until evidence has been given to the Planning Board that the applicant has an executed agreement with a utility provider to accept the power.
			5. Fence. Ground Mounted Solar Energy Systems shall be protected by a perimeter fence located inside any screening buffer. Such fences shall allow for small wildlife passage and movement.
			6. Signage. A sign shall be required to identify the owner/operator and provide a 24-hour emergency contact phone number. Solar energy systems shall not be used for displaying any advertising. A clearly visible warning sign shall be placed at the base of all pad-mounted transformers and substations and on the fence surrounding the SES informing individuals of potential voltage hazards.
			7. Screening. Lots on which Ground Mounted Solar Energy Systems are located shall utilize buffers / screening from roads and residences by plantings, berms, and natural topographical features. Ground mounted SES shall be screened from view to the greatest extent practical of any adjacent property that is used for residential purposes, as well as any public way. The screen shall consist of a vegetative barrier which provides a visual screen. In lieu of a vegetative screen, a fence that provides visual screening may be allowed only if a vegetative screen is deemed impractical by the Planning Board.
			8. Glare. All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
			9. Lighting. Lighting shall be limited to that required for safety and operational purposes and shall be shielded from interference with abutting properties. Lighting of the SES shall be directed downward and shall incorporate full cut-off fixtures to reduce light pollution. Other than lighting required for safety or by applicable federal, state, or local authority, lighting shall not be used/visible between 9pm and 7am.
			10. Utility Connections. Reasonable efforts, as determined by the Planning Board, shall be made to place all utility connections from the solar photovoltaic installation underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.
			11. Emergency Services. SES owner or operator shall provide a copy of the project summary, electrical schematic, and site plan to the Georgetown Volunteer Fire Department Fire Chief. Upon request, the owner or operator shall coordinate with local emergency services in developing an emergency response plan. A “3200 Series KNOX-BOX”, or agreed equivalent, shall be provided and installed by the operator to be used to allow emergency service personnel continuous access. All means of shutting down the solar energy system shall be clearly marked. The owner or operator shall identify a responsible person for public inquiries throughout the life of the installation.
			12. Maintenance Conditions. The SES owner or operator shall maintain the facility in good operating condition. Maintenance shall include, but not be limited to, painting, structural repairs, vegetative screening, fences, landscaping and plantings, and integrity of security measures. The SES must be properly maintained and be kept free from all hazards, including, but not limited to, faulty wiring, loose fastenings, being in an unsafe condition or detrimental to public health, safety or general welfare. Site access shall be maintained to a level acceptable to the Fire Chief for emergency response. The owner or operator shall be responsible for the cost of maintaining the SES and any access road(s), including regular plowing of snow to maintain road access.
			13. Satisfaction with All Aspects of Capacity and Plans Submitted -- The Planning Board must find that the Applicant has the capacity to finance, safely operate and decommission the SES.
			14. Alternatives Assessment. As determined by the Planning Board, if a proposed ground-mounted SES does not meet the standards in this Ordinance, then other potential suitable alternative area(s), on the lot(s) included in the application, where a SES can meet the Town’s standards, goals, and objectives shall be evaluated by the applicant. Alternative lot areas should be evaluated against those same Ordinance standards, and Town goals and objectives.
			15. Preservation of Town’s Character. All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan.
		2. Private Use Ground Mounted Solar Energy Systems:
			1. Lots. All SES shall be designed and located to ensure solar and physical access without reliance on and/or interference to/from adjacent properties.
			2. Setback and Height. Structures within a SES shall be setback a minimum of 20 feet from the side and rear property lines and meet the front setback requirements for roads. Any solar photovoltaic cell, array, or support structure for cells or arrays, shall be subject to a maximum height when oriented at maximum tilt of one foot of height for every two feet it is se back horizontally from the closest property line or road right-of-way, up to a maximum height of 22 feet. ~~Any solar photovoltaic cells or arrays shall be subject to a maximum height of 12 feet above the ground surface~~~~.~~
			3. Prohibited Locations. Components of a ground mounted SES shall not be placed within any legal easement or right-of-way location, or be placed within any stormwater conveyance system, or in any other manner that would alter or impede stormwater runoff from collecting in a constructed stormwater conveyance system.
			4. Signage. Solar energy systems shall not be used for displaying any advertising.
			5. Glare. All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
			6. Preservation of Town’s Character. All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via visual consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan.
		3. Roof Mounted Solar Energy Systems:
			1. SES mounted on roofs of any building shall be subject to the maximum height regulations as specified in the Building/Demolition Permit Ordinance.
			2. Glare. All SES shall be situated to eliminate concentrated glare onto nearby structures or roadways.
			3. Preservation of Town’s Character - All reasonable efforts, as determined by the Planning Board, shall be made to ensure any SES is consistent with the character of the community via consistency with local neighborhood area, maintenance of scenic views, maintenance of open space land and farms, and the Town Comprehensive Plan.
2. **Decommissioning and Removal**
	1. Any Solar Farm System that has reached the end of its useful life, ceases to generate power or has been abandoned shall be removed pursuant to a plan approved by the Planning Board during the application process. The landowner, or SES owner or operator shall physically remove the installation no more than 180 days after the date of discontinued operations. The owner or operator shall notify the Code Enforcement Officer by certified mail, return receipt requested, of the proposed date of the discontinued operations and plans for removal.
	2. A decommissioning plan must include an estimate of the total cost of decommissioning, value of the equipment, and itemization of the estimated major expenses, including the projected costs of measures taken to minimize or prevent adverse effects on the environment during implementation of the decommissioning plan. The itemization of major costs may include, but is not limited to, the cost of the following activities: panel removal, panel foundation removal and permanent stabilization, building removal and permanent stabilization, transmission corridor removal and permanent stabilization and road infrastructure removal and permanent stabilization.
	3. Before an application is approved for a Large Scale or Medium Scale Ground Mounted Solar Energy Farm, the applicant shall submit a performance guarantee in the form of a performance bond, surety bond, irrevocable letter of credit, or other form of financial assurance as may be acceptable to the Planning Board that upon the end of the useful life of the Solar Energy System the Applicant will have the necessary financial assurance in place for 125% of the estimated total cost of decommissioning, subject to a review of such cost by the Code Enforcement Officer. The financial assurance shall include a provision granting the Town the ability to access the funds and property and perform the decommissioning if the facility is abandoned or the Applicant or subsequent responsible party fails to meet their obligations after reasonable notice, to be defined in the agreement and approved by the Planning Board. For a Medium Scaled Ground Mounted SES, the Applicant may propose securing the necessary financial assurance in phases, as long as the total required financial assurance is in place a minimum of 5 years prior to the expected end of the useful life of the Solar Energy System.
	4. Note the applicant may apply to the Code Enforcement Officer for release of the guarantee at such time that it or its assignees remove the system and associated abandoned structures, and such completed removal is found to be satisfactory by the Planning Board.
	5. Decommissioning shall consist of:
		1. Physical removal of all solar energy systems, structures, equipment, security barriers and transmission lines from the site;
		2. Disposal of all solid and hazardous waste in accordance with Local, State and Federal waste disposal regulations; and
		3. Stabilization or revegetation of the site as necessary to minimize erosion. The Code Enforcement Officer may allow the owner or operator to leave landscaping or designated below-grade foundations to minimize erosion and disruptions to vegetation.
	6. Absent a notice of a proposed date of decommissioning or written notice of extenuating circumstances, a Ground Mounted Solar Energy System shall be considered to be abandoned when it fails to generate 10% or less permitted capacity of electricity for a continuous period of twelve (12) months without having first obtained the written consent of the Code Enforcement Officer. Determination of abandonment shall be made by the Code Enforcement Officer.
	7. If the owner or operator of a Ground Mounted Solar Energy System fails to remove the installation in accordance with the requirements of this section within 180 days of abandonment or the proposed date of decommissioning, the Town of Georgetown retains the right to use the performance guarantee and any and all legal or available means necessary to cause an abandoned, hazardous or decommissioned solar energy system to be removed.
3. **Modifications**
	1. Any physical modification to any existing SES, whether or not existing prior to the effective date of this Ordinance, shall require review and approval under this Ordinance.
	2. Any design modifications prior to completion of construction to a Medium or Large Scale Ground-Mounted Solar Energy Farm made after issuance of the required town permit(s) shall require reapproval by the Planning Board.
	3. Any modifications to a Private Use Solar Energy System made after issuance of the required town permit(s) shall require approval by the Code Enforcement Officer
	4. Application fees for modifications shall be consistent with the overall size of the SES, not solely the modification.
	5. Removal -When any portion of a ground mounted SES is removed, any earth disturbance must be graded and re-seeded, unless authorized for another developed use.

1. **Effective Date and Duration**
	1. This Ordinance shall take effect on June 18, 2022 upon enactment by the Town of Georgetown unless otherwise provided and shall remain in effect until it is amended or repealed.
2. **Appeals**

A. Appeals shall be in accordance with the standards established in the Building Permit Ordinance or Shoreland Zoning Ordinance. Appeal applications and variance requests shall be in accordance with Board of Appeals Ordinance Section VI.

1. **Enforcement of violations and Penalties**
	1. This Ordinance shall be enforced by the municipal officers or their designee. Violation of this Ordinance shall be subject to the enforcement and penalty provisions of 30-A, MRSA § 4452.