




CITY OF WARWICK

FRANK J. PICOZZI, MAYOR

MEMORANDUM

TO: Honorable Stephen P. McAllister, Council President
Warwick City Council Members
Lynn D'Abrosca, City Clerk

FROM: Thomas J. Kravitz 
Planning Director

DATE: February 1, 2022

SUBJECT: Planning Board Advisory Recommendation for
An Amendment of the Warwick Zoning Ordinances:
Definitions Section 200; Establishment and Classification of Districts Section 300;
(New Section) Special Regulations in Section 509. Accessory Use Sections 601.2
And 601.10 Of Appendix A, Zoning Ordinances.

APPLICANT: City of Warwick

At the regularly scheduled January 12, 2022 Planning Board Meeting, the following vote was taken on the City of Warwick's proposed Amendment of the City of Warwick Zoning Ordinance: specifically: Definitions Section 200; Establishment and Classification of Districts Section 300; (New Section) Special Regulations in Section 509, Accessory Use Sections 601.2 And 601.10 Of Appendix A, Zoning Ordinances. On the motion of Mr. Catalano, seconded by Mr. Penta, the Planning Board voted to forward a positive advisory recommendation to the Warwick City Council in favor of the proposed zone change with the following findings and recommendations:

The Board found the Zoning Amendment to be generally consistent with Article 1 "Purposes and General Statements of the City's Development Review Regulations and generally consistent with the City of Warwick Comprehensive Plan 2033, as amended. specifically, the proposed zoning ordinance is consistent

- Part I, Chapter 2, page 2.9, entitled The Community Speaks because new citizen engagement occurred during the process of amending the zoning ordinance to allow solar. The public supports preservation of remaining forest, farmlands, and open space from solar development which instead should be focused in developed commercial and industrial areas.
- Part VI, Chapter 11 Sustainability and Resilience, Action Item 3, Page 11.16, Streamline and reduce barriers to green buildings and develop incentives to green construction by allowing solar canopies as an accessory use in commercial and industrial zones by building permit with extensive Planning or Zoning Board Review.

- Part VI, Chapter 13 Stewardship and Implementation, Page 13.36. Policy D., Encourage private sector to augment fossil fuels with solar power on sites that are already developed. Action 2, states to provide regulations that encourage solar canopies and rooftop solar in existing commercial areas; and,

Additionally, the Planning Board finds the proposed zoning ordinance amendment to be generally consistency with the and following purposes of zoning as presented in RIGL 45-24-30 and supported by the City of Warwick Zoning Code, Section 103 Purpose:

- 103.2. Provides for a range of uses and intensities of use appropriate to the character of the city and reflect current and expected future needs.
- 103.5. Providing for the protection of the natural, historic, cultural and scenic character of the city: and,
- 103.6. Providing for the preservation and promotion of agricultural production, forest, silviculture, aquaculture, timber resources and open space.
- 103.11 Promote the implementation of the Warwick comprehensive community plan, as amended.

The Planning Board voted unanimously to forward a positive advisory recommendation to the Warwick City Council in favor of the proposed zone change, to read as follows and attached:

SECTION 200. - Definitions.

Contaminated site. A property (1) that has been identified by the Rhode Island Department of Environmental Management (RIDEM) as having reviewed and approved a solar energy system atop property containing hazardous material contamination; (2) on which remediation activities were conducted to the satisfaction of RIDEM as documented within a “Letter of Compliance” or an “Interim Letter of Compliance,” and (3) for which RIDEM has required the use of the property to be restricted through an Environmental Land Use Restriction.

Solar energy system, accessory. A solar energy system that is incidental and subordinate to the principal use(s) of the parcel or development including the following:

- (a) Roof or building-mounted energy-generating panels;
- (b) Solar canopies and ground-mounted arrays.

Solar energy system The equipment and requisite hardware and structures that provide and are used for collecting, transferring, converting, storing or using incident solar energy for water heating, space heating, cooling, generating electricity, and off-loading said electricity to the grid, or other applications that would otherwise require the use of a conventional source of energy such as petroleum products, natural gas, manufactured gas, or electricity produced from a nonrenewable resource. This shall include photovoltaic arrays and installations that utilize ground-mounted systems. A solar energy system, when the principal use of a parcel, shall be deemed to be a manufacturing use.

Large Scale Solar Energy System. Any solar energy system that is not either (1) an accessory solar energy system or (2) a contaminated site solar energy system as defined by this ordinance.

Solar energy system, canopy. A solar energy system that has a support structure secured to the ground through the use of structural footings and is restricted to paved areas such as parking lots.

Accessory use solar energy system, roof or ground-mounted. A solar energy system that is structurally mounted to, structurally ballasted, or integrated into the design of the roof or any other architectural aspect of a building or structure.

Old growth forest. A forest that is over 1 acre in size where the oldest trees in that forest have attained a minimum age of 100 years old.

Old growth tree. Any native tree that has attained a minimum age of 100 years old.
[. . .]

SECTION 300. – Establishment and Classification of Districts.

TABLE 1. USE REGULATIONS

Zoning Districts	OS	A-40	A-15	A-10	A-7	O	WB	GB	LI	GI	Inter-modal	Gate-way	Village District
600 Transportation, communication and utility uses:													
608 Accessory use solar canopy	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
612 Contaminated Site solar energy system, ground-mounted.	No	No	No	No	No	No	No	No	S ²⁸	S ²⁸	No	No	No
613 Accessory use rooftop or ground-mount solar	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
614 Large scale solar energy system	No	No	No	No	No	No	No	No	No	No	No	No	No

²⁸Subject to all applicable review procedure and performance standards outlined in Section 509.

509. - Administrative procedures for solar energy systems on contaminated sites.

Purpose and Applicability.

The purpose of this section is to regulate the installation of solar energy systems by providing standards for the placement, design, construction, operation monitoring modification and removal of such systems. These standards are intended to ensure that solar energy systems are compatible with the surrounding area, provide for public safety, and minimize impacts on scenic, natural, and historic resources. The Provision of this section shall apply, as specified herein, to construction, operation, and/or repair of solar energy system installation in the City.

Large scale solar energy systems (which refers to systems that are not either (1) and Accessory solar system or (2) a contaminated site solar system as defined by this ordinance) shall be prohibited throughout the City of Warwick.

509.1 Review procedures. Contaminated sites (i.e. brownfield sites) subject to solar energy systems shall require Planning Board review in accordance with Major Land Development review provisions.

Any system located in a historic overlay district in view of a public ROW as determined by the Building Official, must obtain a Certificate of Appropriateness in accordance with Section 311.

509.2 Performance standards. These standards shall be required in addition to the Major Land Development review procedures set forth by RIGL 45-23 and the City's Subdivision and Land Development Regulations. The standards set forth herein will ensure that solar energy systems are compatible with the surrounding area, provide for public safety, and minimize impacts on wildlife; scenic, natural and historic resources, and abutting properties.

- (A) The applicant is required to provide verification from a RI licensed landscape architect at the preliminary stage of review that the landscape buffer is adequate to thoroughly screen the solar energy facility year round. In addition, the required vegetated buffer/screening shall be maintained for the life of the solar energy facility. The property owner and/or facility owner shall be required to replant any section of the buffer/screening found not to meet the requirements of this section as determined by the Zoning Enforcement Officer with consultation from the City Planner.
- (B) All solar energy systems shall, at minimum, employ the zoning setback requirements in Table 2 A & B, entitled Dimensional Regulations. The Planning Board shall reserve the right to increase setbacks to minimize visibility of the system as a result of information learned through public hearings.
- (C) The maximum height of a ground-mounted solar energy system shall be 10 feet.
- (D) To prevent glare on adjacent properties and mitigate public safety potential, only matte finish, and non-reflective panels shall be utilized.

- (E) The applicant shall submit an independent, pre-development noise study for which a baseline shall be established indicating general background noise in perimeter areas adjacent to neighbors averaged over several weeks. A post startup noise study shall be executed to ensure no increase in noise occurs from the facility. Noise mitigation must be employed for solar energy systems responsible for an increased decibel level of 3dB.
- (F) Accessibility for emergency service vehicles is required along with clearly-marked procedures for shutting down the solar energy system.
- (G) A public safety preparedness and response plan detailing the standards, procedures, and communication protocol to be utilized for the system and in the event of an emergency shall be provided to the City's emergency management agency director, as well as documentation indicating that the plan has been distributed to the fire department.
- (H) Contaminated sites shall be remediated and properly capped in accordance with State or Federal remediation standards as part of the development.
- (I) Unless required by ELUR, no substantial clearing or grading of the proposed project site shall have occurred five (5) years prior to submission of the application for an SES based on a review of aerial photography provided by the applicant.
- (J) Clearcutting outside of the immediate array area is prohibited unless required by remediation permit. A reforestation plan prepared by a certified forester (CF) or registered landscape architect shall be required to minimize view shed nuisance from the perspective of abutters.
 - (1) A combination of natural vegetation, berms, fencing, walls, and other similar features shall be used to visually buffer the system(s) from the view of abutting properties, as well as mitigate noise, glare, or other potential nuisances.
 - (2) No chemicals, solvents, herbicides, or insecticides, excluding water, will be used in the operation and maintenance of the site landscaping requirements, (such as pollinator cover and buffer plantings).
 - (3) Buffer plantings shall be maintained for the life of the project by the owner, applicant, and or operator of the facility.
 - (4) A 1 to 1 tree replacement effort shall occur within the City for all trees requiring removal that are of 20 inches in diameter or larger. All newly-planted trees shall be a minimum of 3 inch caliper at breast height.
 - (5) Soil erosion and sediment control systems shall be maintained at all times in accordance with RIDEM wetlands permit(s), and local regulations.
 - (6) Clearing, cutting, girdling, and any other form of disturbance to an old growth tree or old growth forest is prohibited.
- (K) Neither blasting nor removal of ledge by mechanical means is allowed.

- (L) Pollinator mix is required, shall be supported by a maintenance plan, and contain annual reports supplied by the applicant's landscape architect until the pollinator mix approved by RIDEM is established. Disturbed topsoil shall remain onsite unless removal is required by remediation permit(s).
- (M) Utility connections shall be underground, equipment screened from view with plantings or fencing, and approved by the utility company as part of the Final Plan Application.
 - (1) Interconnection agreement shall be compliant with Code of Ordinance Section 74-52, Renewable energy system tax exemption, and submitted with the Final Plan Application.
 - (2) A comprehensive development pro forma including but not limited to land cost (lease or purchase, equipment cost, construction, decommission cost etc., shall be submitted with Final Plan application.
- (N) Perimeter fencing shall be raised a minimum of 8 inches for wildlife passage and be comprised of black coated chain link fence.
- (O) A sign shall be posted at the entry of the SES displaying the name of the owner and operator of the system and a twenty-four (24) hour emergency contact number.
- (P) SES systems shall provide for motion detect lighting in maintenance areas and dark sky compliant lighting elsewhere.
- (Q) Applicant shall provide a decommissioning plan and cost estimate with the Preliminary Application, and surety funds provided with the Final Plan Application to ensure adequate removal at the end of useful life or abandonment.
 - (1) Funds deposited shall be equal in amount to removal of the system, as verified by the City's peer review engineer, inclusive of 2% annual inflation over life of the system with funds deposited into an interest bearing escrow account under City control.
 - (2) The calculation of the decommissioning reserve shall be predicated upon the assumption that 100% of the retired solar panels will be recycled by an accredited solar panel waste recycler, without any credit on the financial guarantee amount for anticipated salvage value or reuse of and project components. City peer review engineers shall afford the City the right to evaluate the inflation rate every 5 years.
 - (3) A separate surety of an amount equal to the cost of repairing 100% of the pollinator mix, as established by the City's peer review engineer during Preliminary Application review, shall be submitted with the Final Plan Application.
 - (4) Within one week after permanent shutdown, the owner, applicant, and or operator shall notify the Building Official and remove the system within 6 months of said notification. The City shall utilize escrow funds to remove all or remaining system components beyond six months, with owner, applicant, and or operator liable for all expenses beyond escrow, should escrow be exceeded. City shall retain the right to fine the owner in accordance with local ordinances.

- (R) Maintenance. The contaminated site solar energy system shall be maintained by the solar energy owner and/or operator and shall be cleared of debris, weeds, trash, etc. Maintenance shall include, but not be limited to, painting, structural repairs, maintenance of the landscape buffers, care and replanting if necessary, of any vegetative screening, cleaning clearing and repairing of stormwater and drainage infrastructure, and integrity of security measures.
- (S) Enforcement. The Building/zoning Official and City engineering consultant have the power to inspect any solar energy system at any time to ensure compliance with the provisions of this Ordinance. Any entity who fails or refuses to adhere to all of the provisions of this Ordinance or any other conditions imposed by the City, State of Rhode Island or Federal government, shall be deemed to be in violation and liable to the City of Warwick for penalties not to exceed \$500 per day for each violation. Each day of existence of a violation shall be deemed a separate offense.
- (T) Inspection. The City's Engineer or designee shall inspect any contaminated site solar energy system at the expense of the applicant on a weekly basis during construction, and during the month of April each year after completion of construction. Said inspection will include a review of any and all reports as required by the State of Rhode Island, the City of Warwick and the Federal Government. The applicant and any successor shall reimburse the City for any cost incurred as specified in the Stormwater Facility Maintenance Agreement.

601.2 (A) A building or use accessory to a dwelling, including an attached, detached garage, carport, or solar canopy, shall not be located in any required front or corner side yard....

601.10. *Accessory solar energy systems (SES)*. Accessory SESs shall require a building permit only, shall not require Planning Board review as land development projects, and shall be subject to the following requirements:

1. Roof or building mounted SES must not increase the footprint of the structure.
2. Residential use ground mounted systems shall be no larger than that required to power the needs of the residential use only, and not sell power into the power grid on a commercial scale.
3. Residential use ground mounted systems shall incorporate landscaping and design elements to visually screen the installation from view of public roads and adjoining properties, at ground-level, year round. If planting is required within the designated setbacks due to a lack of natural screening, such planting shall be a minimum of 6 feet in height at the time of installation.
4. Accessory solar canopies in non-residential zones shall comply with all operating standards outlined under Section 604.

5. Solar canopies shall be visually and architecturally compatible with the building, in terms of color, lighting, materials, and basic form. Where appropriate, integrated artwork, trim additions, or other such design features shall be used to improve architectural compatibility. Ground level casings, conduits, and other electronics shall be given similar treatment as the main structures of the solar canopies.
6. Solar canopies shall include, by AASHTO or equivalent standards, lighting beneath canopies to ensure pedestrian and vehicular safety.

Accessory solar canopies shall be shut down in the event of an abandonment or vacancy of the primary use of the property to ensure public safety and ensure employment is not displaced by solar canopies.