Guidelines for Solar Installations

for Locally Designated Historic Properties

Introduction

Sensitive retrofitting of historic buildings ensures their continued use and optimal functioning, contributes to sustainability by preserving energy, and makes for happier historic homeowners.

To that end, the Olympia Heritage Commission encourages historic property owners to pursue energy-saving retrofits that achieve reasonable energy savings, at reasonable costs, with the least intrusion or impact on the character of the building, including the use of use renewable energy sources such as solar power.

The installation of solar panels is an adaptive alteration that need not conflict with historic preservation. Recognizing that the characteristics of individual properties will vary greatly, the principles and guidelines presented here will be applied.

All solar panel installations should conform to the **Secretary of the Interior's Standards for Rehabilitation.*** This means that the system must be compatible with the historic building, it must be reversible, and it must not destroy or conceal character-defining historic features.

***The Applicable Standards are:**

Standard Two: The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features that characterize a property shall be avoided.

Standard Nine: New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property.

In reviewing proposals in the context of these standards, the Heritage Commission will consider the following:

1. **Location. Ideally, solar panels and other equipment will not be visible from a public street.**
2. **Historic Features. Historic features and materials should not be damaged or obscured, and installations should be fully reversible.**
3. **Overall Impact. The physical and visual impact of the installation should be subordinate to the design, proportions, and overall appearance of the home.**

Roof locations that are not visible from public streets, locations within the rear yard, or on secondary structures are preferred for solar arrays.

OHC will consider solar panel placement on primary elevations only if no other location is viable. See "Primary Elevations" below.

"Viable" is defined as a Total Solar Resource Fraction (TSRF) of 80% or higher, to be assessed and documented by a professional solar consultant or installer.

Secondary Elevations

- Solar panels should be installed on rear slopes or other locations not easily visible from the public right-of-way. Panels should be installed flat and not alter the slope of the roof. Installation of panels must be reversible and not damage the historic integrity of the resource and district.

- Flat roof structures should have solar panels set back from the roof edge to minimize visibility. Pitch and elevation should be adjusted to reduce visibility from public right-of-way.

- Solar panels should be positioned behind existing architectural features such as parapets, dormers, and chimneys to limit their visibility without impeding effectiveness whenever possible.

- Use solar panels and mounting systems that are compatible in color to established roof materials.

- Mechanical equipment associated with the solar panel system such as conduits, junction boxes, and safety disconnect switch boxes should be placed as unobtrusively as possible and painted or treated to match surrounding material.

- Use of solar systems in non-historic windows or on walls, siding, or shutters should be installed as to limit visibility from the public right of way.

Freestanding or Detached

- Freestanding or detached on-site solar panels should be installed in locations that minimize visibility from the public right of way. These systems should be screened from the public right of way with materials seen elsewhere in the district such as fencing, or vegetation of suitable scale for the district and setting.

- Placement and design should not detract from the historic character of the site or destroy historic landscape materials.

New Construction in Historic Site or District

- Solar panels should be integrated into the initial design of new construction or infill projects, when possible, to assure cohesion of design within the historic context.

- Solar panels should be installed on rear slopes or other locations not highly visible from the public right of way whenever possible. Panels should be installed flat and not alter the slope of the roof.

- Flat roof structures should have solar panels set back from the roof edge to minimize visibility. Pitch and elevation should be adjusted to reduce visibility from the public right-of-way.

- Use solar panels and mounting systems that are compatible in color to established roof materials.

- Solar systems in windows or on walls, siding, or shutters should be installed with limited visibility from the public right-of-way.

- Mechanical equipment associated with the solar panel system such as conduits, junction boxes, and safety disconnect switch boxes should be placed as unobtrusively as possible and painted or treated to match surrounding material.

Primary Elevations

For most properties, locating solar panels on the primary facade is the least desirable option because it will have the greatest adverse effect on the property's character-defining features. All other viable options (those with TSRF of 80% or higher) as well as other home-energy conservation measures should be pursued first.

- If visible, the proposed location must meet TSRF of 80% or higher and be designed and placed so that they are not a dominant feature of the façade.

- Utilization of low-profile solar panels is recommended. Solar shingles, laminates, glazing, or similar materials should not replace original or historic materials. Use of solar systems in windows or on walls, siding, and shutters should be avoided.

- Panels should be installed flat and not alter the slope of the roof. Installation of panels must be reversible and not damage the historic integrity of the resource or district.

- Solar panels should be positioned behind existing architectural features such as parapets, dormers, and chimneys or on flat surfaces to limit their visibility without impeding effectiveness whenever possible.

- Use solar panels and mounting systems that are compatible in color to established roof materials.
- Associated equipment such as conduits, junction boxes and safety disconnect switch boxes should not be located on the primary building facade.

Not Recommended for Any Reason

- Removal of historic roofing materials during the installation of solar systems.

- Removing or otherwise altering historic roof configuration – dormers, chimneys, or other features – to add solar systems.

- Any other installation procedure that will cause irreversible changes to historic features or materials.

These standards have been developed in consideration of current materials and techniques (2021). In the future, it is likely that technologies will change, prompting a re-examination of standards to address new retrofit options.