

TOWN *Of* **PARADISE VALLEY**



STAFF REPORT

TO: Chair and Board of Adjustment

FROM: Lisa Collins, Community Development Director
Paul Michaud, Planning Manager
George Burton, Senior Planner

DATE: November 3, 2021

DEPARTMENT: Community Development Department/Planning Division
George Burton, 480-348-3525

AGENDA TITLE:

**Barnier Residence Variance – 4141 E Keim Drive (APN 169-22-040)
Hillside Solar Variance. Case No. BA-21-10.**

RECOMMENDATION

Motion For Denial

It is recommended that the Board of Adjustment [**deny**] Case No. Case No. BA-21-10, a request by Jerome Barnier, property owners of 4141 E Keim Drive; for a variance from the Zoning Ordinance, Article XXII, Hillside Development Regulations, to allow for unscreened roof mounted solar panels (solar panels that are not hidden from view when viewed from the same or lower elevation) to be installed on a single-family residence with a pitched roof.

Reasons For Denial:

Staff find that the requested variance is a design hardship and not a property hardship. There are no special circumstances applicable to this property that warrant a variance and the granting of this variance would serve as a convenience to the applicant. Based upon these reasons, staff believes that the request does not meet all six variance criteria.

BACKGROUND/DISCUSSION

Request

The applicant is proposing to place 4 unscreened roof mounted solar arrays (with a total of 70 solar panels) on the house. The house has a pitched roof and Section 2207.II.E of the Town Zoning Ordinance requires all solar panels to be hidden from the same or lower elevation:

Section 2207.II.E. Solar panels may be allowed if they are integrated into the building design and hidden from view when viewed from the same or a lower elevation and approved by the Hillside Building Committee by a Combined



STAFF REPORT

Review. Solar panels may be allowed on pitched roofs when screened from the same or a lower elevation by the adjoining hillside or hillside cut and approved by the Hillside Building Committee by a Combined Review.

Stealth solar technology may also be used on roofs and may not be required to be hidden from view. Stealth solar technology shall be limited to solar shingles and solar tiles that are integrated to blend in with the building design, do not have a shiny metallic finish, have a light reflective value of 38% or less, and must be approved by the Hillside Building Committee by a Combined Review.

Typically, roof mounted solar panels are placed on flat portions of the roof and screened by the adjoining roof parapets. Since the house does not have any flat roofed area, the applicant is seeking a variance request to place unscreened solar panels on the pitched roof of the house.

Solar Panels	
Zoning Ordinance	Solar Arrays/Panels
Roof Mounted Panels – Screened from Same Elevation or Lower	Unscreened Roof Mounted Solar Panels. Pitched roof house with no flat roof
Roof Mounted Solar Tiles – Blend in with Design of Building	N/A – The applicant is requesting roof mounted solar panels due to inefficiency and potential safety concerns of solar tiles
Ground Mounted – Screened from Same Elevation or Lower and Included in Disturbed Area Calculation	N/A – The applicant is requesting roof mounted solar panels due to the additional site disturbance created by a ground mounted alternative. The applicant has not identified if this site has other limits which may affect a ground mounted unit (e.g. limited amount of available disturbance, etc.)

Lot Conditions

The property is zoned R-43 Hillside and is approximately 55,430 square feet in size (1.27 acres in size). The lot is relatively square in shape with a curvilinear frontage.

History

The subject property is Lot 39 of the Camelback Foothills II subdivision. The subdivision was platted in 1957 under Maricopa County's jurisdiction and then annexed into the Town in 1961. The following is a chronological history of the property:

TOWN *of* PARADISE VALLEY



STAFF REPORT

June 22, 1966	Building permit for a new single-family residence
December 27, 1966	Building permit for a pool
March 21, 1967	Building permit for a fence
September 30, 1968	Building permit for a chain link fence
July 19, 1984	Building permit for a remodel/addition to main residence
November 7, 1994	Building permit for a porch enclosure
April 17, 1998	Building permit for a remodel/addition to main residence
September 28, 1998	Building permit for a pool
February 13, 2006	Building permit for a retaining wall

DISCUSSION ITEMS

Variance criteria:

Town Code and Arizona Revised Statutes set criteria an applicant must meet before a Board of Adjustment may grant a variance request. If the Board finds an applicant meets all of these criteria, the Board may grant the variance. However, if the Board finds the applicant does not meet all of the criteria, the Board may not grant the variance. The following are staff's analysis with regard to the variance criteria.

1. *"Such variance... will serve not merely as a convenience to the applicant, but [is] necessary to alleviate some demonstrable hardship or difficulty so great as to warrant a variance under the circumstances." (Town Code Section 2-5-3(C)2).*

Staff Analysis: Reducing electrical costs and having a pitched roof are not property hardships. Although not ideal, it appears that other code compliant alternatives exist such as using ground mounted solar panels, using solar tiles, or a combination of the two.

2. *The "special circumstances, hardship, or difficulty [do not] arise out of misunderstanding or mistake..." (Town Code Section 2-5-3(C)4(b)).*

Staff Analysis: The applicant should be aware of all special circumstances on the property and plan any designs accordingly. This variance is a result of the house not having a flat roof to accommodate roof mounted panels and the applicant not utilizing other code compliant options such as ground mounted panels and/or roof mounted solar tiles.

TOWN *Of* PARADISE VALLEY



STAFF REPORT

3. *“Such variance from ... the strict application of the terms of [the Zoning Ordinance] ... are in harmony with its general purposes and intents...” (Town Code Section 2-5-3(C)2).*

Staff Analysis: The variance does not meet the intent of the Zoning Ordinance. One of the goals of the Zoning Ordinance is to “encourage all improvements to be designed and constructed in a manner that minimizes the impact of Development from viewpoints on the valley floor and adjacent slopes.” As a result, the Ordinance requires solar panels to be screened or requires the use of stealth solar technology to ensure the improvements blend in with the surrounding hillside as much as possible. Unscreened roof mounted solar panels are visible from off the property and do not meet the intent of the Code. Although not ideal, the applicant may utilize other code compliant alternatives exist such as ground mounted solar panels, solar tiles, or a combination of these two technologies.

4. *“The special circumstances, hardship or difficulty applicable to the property are [not] self-imposed by the property owner, or predecessor...” (Town Code Section 2-5-3(C)4).*

Staff Analysis: Reducing electrical costs and have a pitched roof are not a hardship. Other solar options exist and other building improvements such as using triple pane windows, using a tankless water heater, and re-insulating home can help reduce energy costs.

5. *Because of special circumstances applicable to the property, including its size, shape, topography, location, or surroundings, the strict application of the Zoning Ordinance will deprive such property of privileges enjoyed by other property of the same classification in the same zoning district.” (Arizona Revised Statutes 9-462.06(G)(2)).*

Staff Analysis: The size, shape, and topography of the lot do not prevent the applicant from installing a code complaint solar system (such as ground mounted panels and/or solar tiles). Having a pitched roof is not a property hardship and the applicant has not identified any limitations that prevent the use of ground mounted solar panels.

6. *The variance would not “constitute a grant of special privilege inconsistent with the limitations upon other properties in the vicinity and zone in which such property is located.” (Arizona Revised Statutes 9-462.06(G)(2)).*

Staff Analysis: The request is a grant of special privilege since the applicant may use code compliant options. Also, the request does not appear to be in character

TOWN *Of* **PARADISE VALLEY**



STAFF REPORT

with the neighborhood. Based upon Maricopa County aerial photos, it appears that only two other homes in the immediate area have roof mounted solar panels and the solar panels appear to be placed on the flat roofs.

REQUIRED ACTION

The Board must consider the facts and determine if the request meets all six variance criteria. The Board may take the following actions:

1. Deny the variance request.
2. Approve the variance request, subject to the following stipulations:
 - a. The improvements shall be in compliance with submitted plans & documents:
 - i. The Narrative, prepared by Sun Valley Solar Solutions;
 - ii. Plans Sheets PV1 – PV5, dated September 11, 2021, and prepared by Sun Valley Solar Solutions; and
 - iii. Solar Panel Detail, Silfab Solar BC Series SIL-330 BL;
 - b. The applicant must obtain Hillside Building Committee approval; and
 - c. The applicant must obtain the required building permits and inspections from the Building Department;
3. Continue the application for further review.

COMMENTS: Staff received no comments nor inquiries regarding this request.

COMMUNITY IMPACT: None.

CODE VIOLATIONS: None

ATTACHMENTS:

- A. Staff Report
- B. Vicinity Map & Aerial Photo
- C. Application
- D. Narrative & Plans
- E. Notification Materials

C: Rebecca Van Horn (Applicant)
Case File BA-21-10