

Land Use Application

Applicant(s): Chip & Val
Fowler

Property Owner(s): Chip & Val Fowler

Mailing Address:
381 Old Highway 8,
Lyle WA 98635

Mailing Address: (same)

Phone: 206-372-4881

Phone:

Email:
cwfsleddog@aol.com

Email:

Location of property:

Township: 3 North

Range: 12 East

Parcel address: 381 Old Highway 8

Section & Qtr. Section:
30

County: Klickitat

Tax Lot No(s).:
03123000000400

Parcel Size (acres): 55.95

Existing use of parcel:
Agriculture

Use of adjacent parcels:
N/A

Project description: (updated by applicants May 26, 2020)

We propose to remove the existing tool and vehicle shed on our 56-acre property and build an accessory building to support the most dominant and continuous use of our land, agriculture. The new accessory building will be necessary and subordinate to the current agricultural use and will enable us to: 1) store our farm vehicles; 2) provide space for farm equipment and supplies; and 3) establish a tool room/work bench area. Prior to completion of the accessory building, we will remove the badly decaying shed, which has been used to store two farm vehicles and includes a work space and tool storage; we will also rehabilitate the shed site, which will be incorporated into the farm road that travels east and west behind the rock wall.

The new three-bay accessory building (shown in Figure 2) will be slightly larger (32' x 29') than the existing two-bay shed (22' x 22') in order to accommodate three farm vehicles (tractor, skid steer, Polaris Ranger ATV), a vineyard sprayer, and a mower. We intend to build this 778 sq. ft. accessory building to the north of the existing garden shed, located directly north of a thick grove of mature trees consisting of Oregon oak and Ponderosa pines. From this location the extensive existing vegetation will effectively screen the structure, and the accessory building will be visually subordinate or not visually evident from all Key Viewing Areas (KVAs) in all seasons.

The footprint of the accessory building is located in a non-agricultural area of the parcel that is devoid of any trees or vegetation except packed dirt and local grasses. This location has been previously disturbed: the previous owner of the property leveled the area in the early 1980s when he was constructing the existing house. He affirms that he found no cultural resources or items of historic interest in the grading process. In 2017 Archeological Investigations Northwest, Inc. (AINW) surveyed the area adjacent to the proposed development site; AINW found no cultural resources and determined that no historic properties are affected on the surveyed site.

The structure will not negatively impact current agricultural uses on nearby lands, and is located to minimize the conversion of lands capable of producing farm crops and livestock. The accessory building will be constructed on top of a concrete slab so there will be minimal ground disturbance; the disturbed area will be a few inches (vertical depth) covering an estimated 3,000-3,300 square feet (horizontal ground area).

The proposal protects natural resources; prior Commission findings for the site have determined no likely adverse impacts to rare and sensitive plant species, no adverse effects on winter range habitat, and no impact on wetlands, streams, ponds, lakes, riparian areas, or buffers. The structure will be located to the west of the known seasonal flow of water that drops into the gully to the east of the current house.

The accessory building will be 8' high at the southern end and 16' high at the northern end, and will include garage doors to better protect the farm vehicles. We plan to use the same roof design as the current shed and will paint the wooden structure a low-reflectivity earth-tone color with dark brown roofing tiles. This will be a wood structure with wood/metal garage doors painted in a dark earth tone and a solar array on the roof to provide renewable power for the accessory building and vineyard irrigation system.

There will be three small exterior lights (2 on the north side, and 1 on the east side); each light will be directed downward and sited, hooded, and shielded to ensure they are not highly visible as seen from KVAs. The three small non-continuous windows on the west side of the structure are each under ten square feet. There is also a single smaller window on the east and south sides of the structure.

The solar panels we are planning to use are the 330W PERC Module (JAM60S09 310-330/PR) that is produced in Japan. The casing and panel are both colored black. It is powered by high efficiency Percium cells and has excellent low light performance and comes with a Single-Phase Inverter with HD Wave Technology that is designed for North American power grids. Most importantly, it can operate in very cold temperatures in the winter and very high temperatures in the summer. Each panel weighs 18 Kg and measures 39.57 inches by 65.59 inches. We would place the panels at the top of our shed roof facing south in three rows of 7 panels for a total of 21; however, this is only notional as the engineering team that installs the system after the

accessory building is constructed may suggest a different configuration such as two rows of 8 and a third row with five. The notional array would be approximately 24 ft long horizontal, centered on a roof that is 32 ft long. It would also be 16.5 ft vertical on the slope of the roof that is 30 ft. It is important to note that this is an initial estimate that is designed to meet most of the electrical energy requirements for just our farm.

Estimate of Energy production: With a 21 panel array we estimate that the peak production capacity will be 6.51 KW and can generate about 10.9 MWh per year, which should come close to meeting most of our energy needs with PUD. Depending on weather conditions, quarterly energy production will range from 1.9 MWh in the first quarter (winter) to 3.1 MWh in the second quarter (spring/summer).

Current energy consumption:

Jan-Apr 2020: 2.7 MWh (current house and well)

Jan-Apr 2020: 4.3 MWh (irrigation system, pumps, weather station)

If you multiply that by three for a notional year you end up with 8.1 MWh plus 12.9 MWh, for a total of 21MWh. Our notional 21 panel array is projected to produce about 11 MWh per year we will be well below any threshold and would have to add another 3 panels (8 x 3) to get closer to the actual requirement.

In 2019, the vineyard irrigation system and pumps averaged about 2 MWh per month for the seven primary irrigation months of Apr-Nov. The current house and well head pump numbers were slightly more than 7 MWh per annum which is consistent with this past 4 month range. If the solar engineers think we can meet our energy needs with less panels we will, of course, cut the numbers back so as to not generate excess energy.

The two photos below show the existing tool and vehicle storage shed to be demolished.



- ☒ Application form completed and signed
- ☒ Site plan
- ☐ Key viewing areas checklist, elevation drawings, and landscape details, if required
- ☒ Names and addresses of adjacent property owners, if required (*see below **)
- ☐ Any additional information as required

Signature of the property owner(s) indicates that the property owner(s) is/are aware that an application is being made on the subject property. **Signature of the property owner(s) also authorizes the Gorge Commission or the Commission's designee(s) reasonable access to the site in order to evaluate the application.**

Applicant(s) signature: Charles W. Fowler date 24 MAR 2020

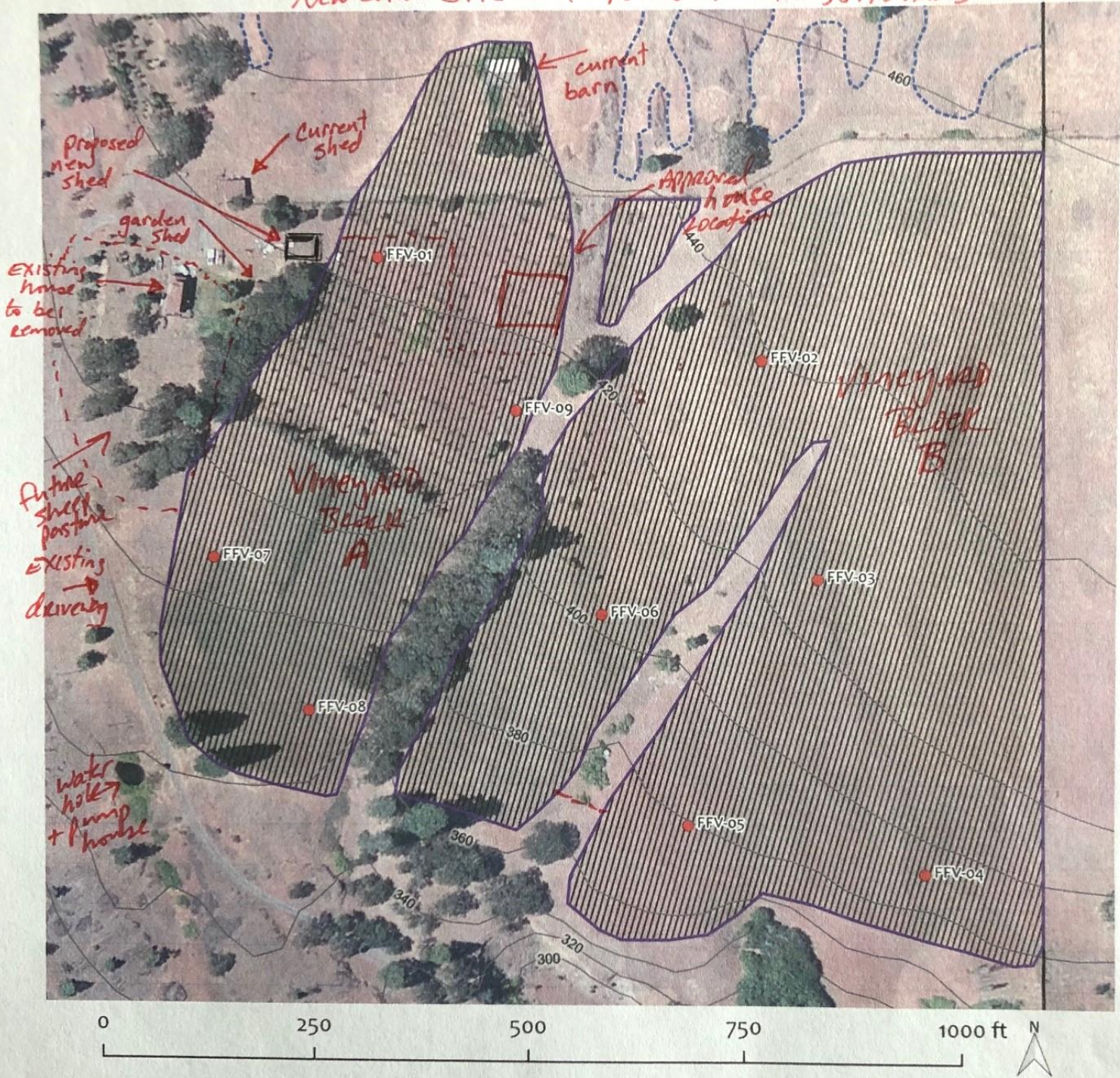
Valerie C Fowler date 24 March 2020

Property owner(s) signature: Charles W. Fowler date 24 MAR 2020

Valerie C Fowler date March 24, 2020

** Only one adjacent property owner: DAVID SANTER, Old Highway 8, Lyle, WA*

New Shed Site Plan - Fowler Ranch - 55.95 Acres



- Property boundary
- Planned vineyards with 7 foot row spacing
- Sample Pits
- 20 foot contours
- Loess Biscuits to be examined in future for soil depth

Scale 1:2,000
Map Projection: UTM Zone 10 NAD 1983
Map prepared by Richard Rupp, Palouse Geospatial
February 2017

Background image provided by Mapbox.

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

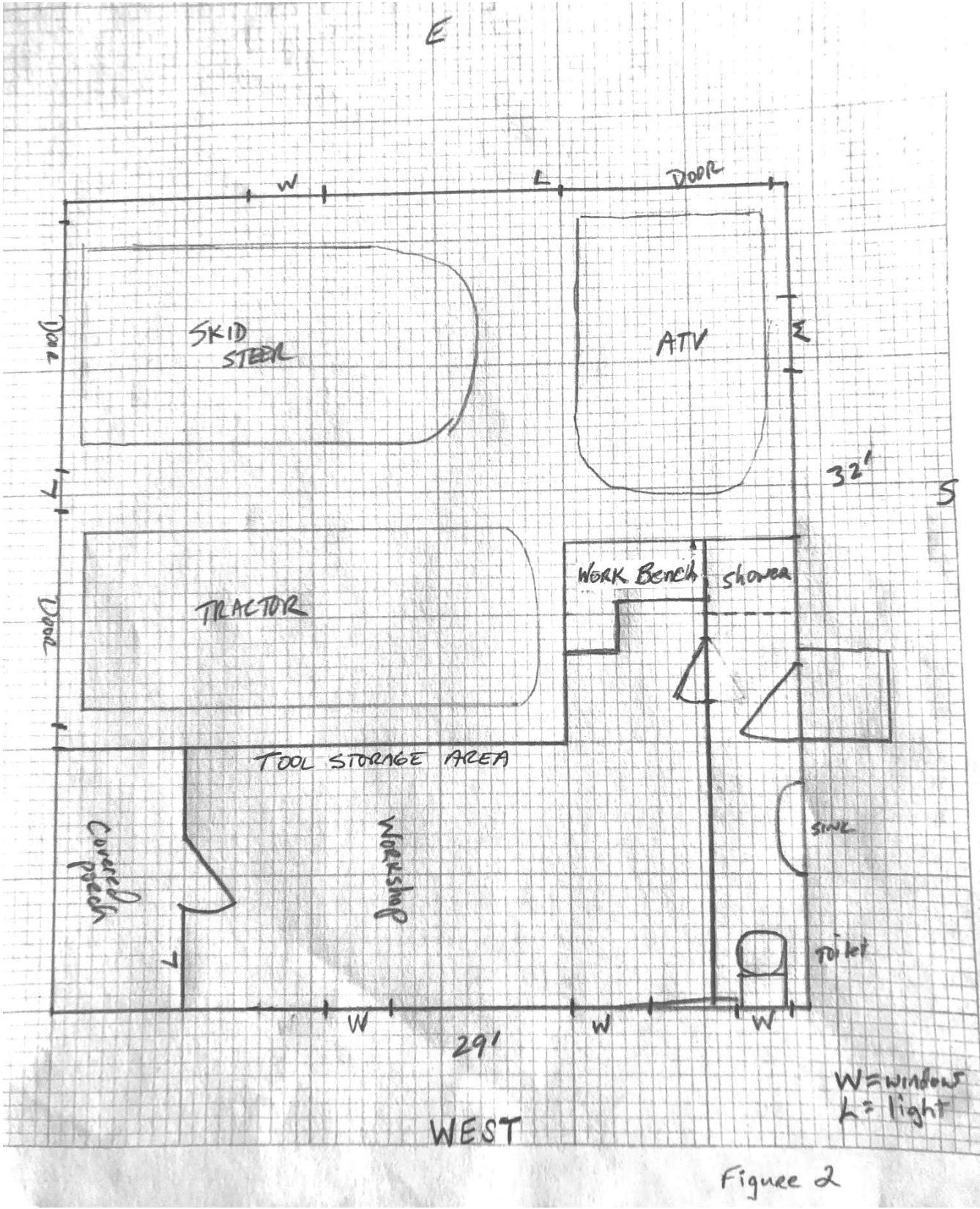
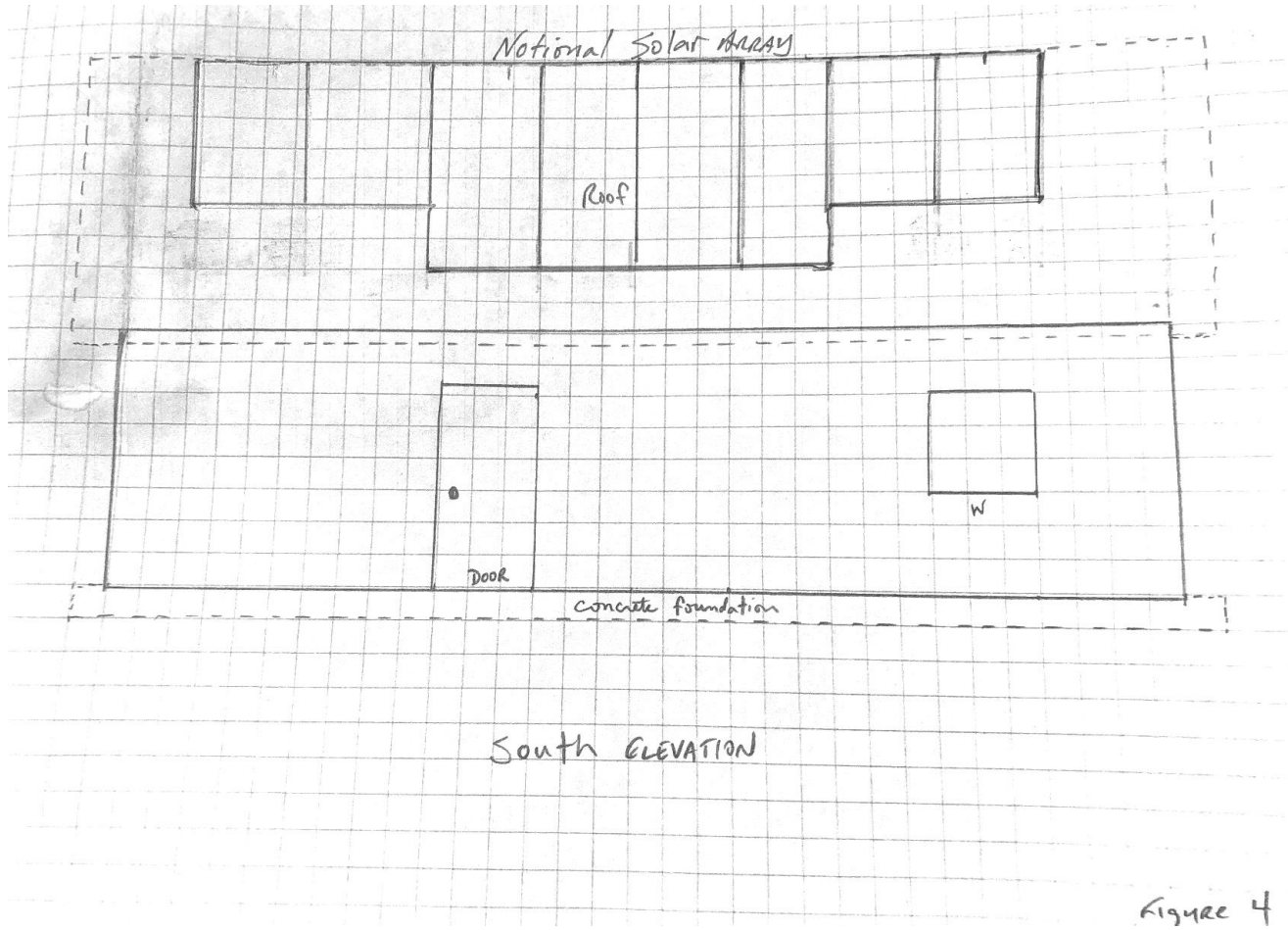
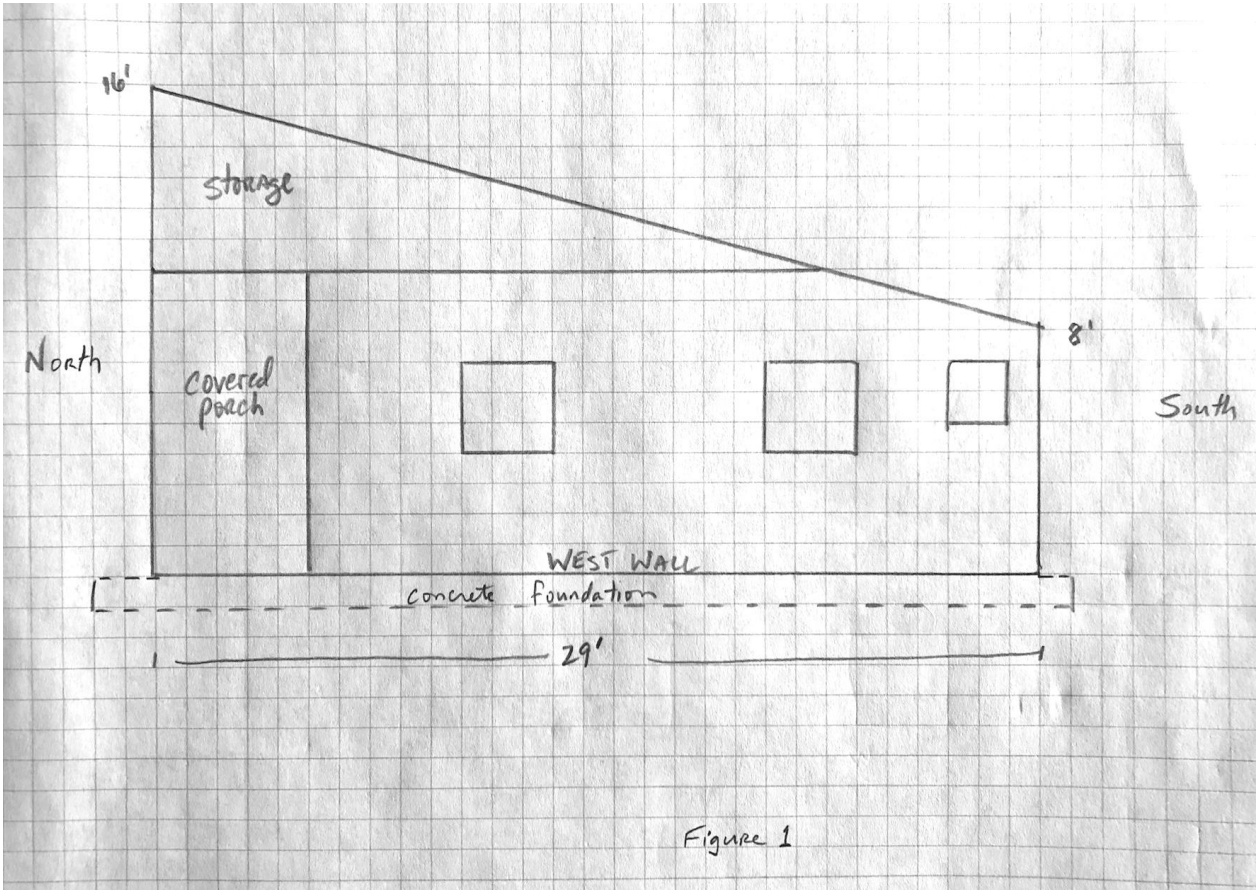


Figure 2



Scale NTS

Sheet

6.0 KW AC PHOTOVOLTAIC SYSTEM

UT 801-614-0606

Harvest the Sunshine

Mono

330W PERC Module

JAM60S09 310-330/PR Series

Introduction

Powered by high-efficiency PERCIUM cells, this series of high-performance modules provides the most cost-effective solution for lowering the LCOE of any PV systems large or small.





5 busbar solar cell design



Higher output power



Excellent low-light performance



Lower temperature coefficient

Superior Warranty

- 12-year product warranty
- 25-year linear power output warranty



Year	JA Linear Power Warranty (%)	Industry Warranty (%)
0	97%	97%
5	94%	94%
10	91%	91%
15	88%	88%
20	85%	85%
25	80%	70%

■ JA Linear Power Warranty ■ Industry Warranty

Comprehensive Certificates

- IEC 61215, IEC 61730, UL 1703
- ISO 9001: 2015 Quality management systems
- ISO 14001: 2015 Environmental management systems
- OHSAS 18001: 2007 Occupational health and safety management systems
- IEC TS 62941: 2016 Terrestrial photovoltaic (PV) modules – Guidelines for increased confidence in PV module design qualification and type approval






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Specifications subject to technical changes and tests. JA Solar reserves the right of final interpretation.

