LANDMARKS COMMISSION

AGENDA

Wednesday, July 2, 2025
6:00 p.m.

This meeting includes in-person and virtual participation.
Council Chambers
333 Broadalbin Street SW
Or join the meeting here:
https://council.albanyoregon.gov/groups/lac/zoom
Phone: 1 (253) 215-8782 (long distance charges may apply)
Meeting ID: 891-3470-9381 Passcode: 530561

Please help us get Albany's work done.
Be respectful and refer to the rules of conduct posted by the main door to the Chambers and on the website.

1. Call to Order and Pledge of Allegiance
2. Roll Call
3. Approval of Minutes
    - May 7, 2025 [Pages 3-6]
4. Public Comment
5. Scheduled Business
    A. HI-06-25, Type III – Quasi-Judicial Process [Pages 7-25]
    Summary: Historic Review of Exterior Alterations for the installation of rooftop solar panels on a historic building located at 326 6th Avenue SW. (Project Planner – Alyssa Schrems alyssa.schrems@albanyoregon.gov)
    Persons wanting to provide testimony may:
    *1- Email written comments to cdaa@albanyoregon.gov, including your name, before **noon on the day of the meeting.***
    *2- To comment virtually during the meeting, register by emailing cdaa@albanyoregon.gov before **noon on the day of the meeting,** with your name. The chair will call upon those who have registered to speak.*
    3- Appear in person at the meeting and register to speak.

6. Business from the Commission

7. Staff Updates

8. Next Meeting Date: July 7, 2025, at 4:00 p.m. Joint Landmarks Commission & City Council work session

9. Adjournment

This meeting is accessible to the public via video connection. The location for in-person attendance is accessible to people with disabilities. If you have a disability that requires accommodation, please notify city staff at least 48 hours in advance of the meeting at: cdaa@albanyoregon.gov or call 541-917-7550

Testimony provided at the meeting is part of the public record. Meetings are recorded, capturing both in-person and virtual participation, and are posted on the City website.

MINUTES

May 7, 2025
6:00 p.m.
Hybrid – Council Chambers
Approved: Draft

Call to Order

Chair Robinson called the meeting to order at 6:00 p.m.

Pledge of Allegiance

Roll Call

Members present: Camron Settlemier, Chad Robinson, Cathy Winterrowd, Richard Engeman, Rayne Legras, Mason Cox

Members absent: Jim Jansen

Approval of Minutes for April 2, 2025

Commissioner Winterrowd motioned to approve the minutes for April 2, 2025. Commissioner Engeman seconded the motion, which passed 6-0.

Historic Preservation Month Awards **6:02 p.m.**

Alyssa Schrems introduced the awards remarking that the Landmarks Commission is pleased to recognize projects or efforts that have happened or been completed in the last year. This year there were three projects or organizations that were awarded.

- Building at 401 2nd Avenue SW awarded to Varitone Architecture recognizing their contributions as well as the property owner for their renovation.
- Lise Grato, Albany Downtown Association was awarded for her leadership and all the work she put into promoting downtown business and historic districts and success in facilitating grant funds for renovations.
- Monteith Historic Society was recognized for their founding contribution to preserving Albany's history with the preservation of the Monteith House and efforts that led to the establishment of Albany's historic districts.

Recess called to allow for award photos at 6:06 p.m.

Meeting reconvened at 6:11 p.m.

Public Comment **6:11 p.m.**

Rebecca Bond, Executive Director, Albany Visitors Association, introduced Lonna Capaci as the Association's new Historic Resources Coordinator who will be their liaison to the commission. Capaci previewed their Celebrate National Historic Preservation Month brochure listing the Preservation Month activities in Albany and surrounding communities.

Albany Downtown Association, Executive Director, Lise Grato gave a May update.

Scheduled Business **6:14 p.m.**

Public Hearing (Continuance) Type III Quasi-Judicial Process File No. HI-02-25:
Historic Review of Exterior Alterations for a change in window size and Historic Review of Use of Substitute Materials for the replacement of four windows on an existing accessory structure at 632 Washington Street SW with minor changes to window size.

Chair Robinson called the public hearing to order at 6:16 p.m.

Commission Declarations

No members declared any Conflict of Interest, or Ex-parte contact.

All commissioners did a site visit.

No members abstained from participating in the deliberation. There were no challenges to participate.

David Martineau read the hearing procedures.

Staff Report

Alyssa Schrems, presented the staff report sharing slides* of HI-02-25 Historic Review of Substitute Materials and Exterior Alterations at 632 Washington Street SW.

Applicant Testimony **6:20 p.m.**

Jason Roeser, the property owner, provided requested information from the last hearing. They had contacted Willamette Window Restoration to determine if the windows were damaged beyond repair and an estimate if they chose the repair route. He noted that despite the expense they prefer to repair rather than replace the windows using substitute materials.

Public Testimony

None.

Staff Response

Schrems responded regarding how to handle a process modification where they are repairing instead of replacement. The commission could approve the replacement but deny the substitute materials or do a modification of the request to remove the substitute materials request as no longer needed.

Procedural Questions

None.

The Chair called the Public Hearing closed at 6:25 p.m.

Commission Deliberation

Commissioner Engeman expressed he was pleased at the property owner's further investigation, and coming to a different conclusion than using substitute materials.

Motion: Commissioner Settlemier motioned to approve the exterior alterations but deny the use of substitute materials including the conditions of approval as noted in the staff report and adding the additional condition of approval that the windows are repaired rather than replaced per the addendum provided by the applicant for planning file HI-02-25 and this motion is based on the findings and conclusions in the March 26, 2025 staff report and findings in support of the application made by the Landmarks Commission during deliberations in this matter. Commissioner Winterrowd seconded the motion, which passed 6-0.

Public Hearing Type III – Quasi-Judicial Process File No. HI-05-25:

Historic Review of Exterior Alterations to enclose rear area of house and move the non-historic rear door to align with rear east wall and Historic Review of Substitute Materials for window and siding replacement.

Chair Robinson called the public hearing to order at 6:27 p.m.

Commission Declarations
No members declared any Conflict of Interest, or Ex-parte contact.

All commissioners did a site visit.

No members abstained from participating in the deliberation. There were no challenges.

David Martineau read the hearing procedures.

Staff Report **6:29 p.m.**

Schrems provided the staff's report for application HI-05-25 sharing slides* for historic review for proposed exterior alterations and use of substitute materials at 244 6th Avenue SE.

Applicant Testimony **6:32 p.m.**

Applicant representative, Candace Ribera testified as to the condition of the house. With wall studs are a varying length on center and no footings, the electric was outdated and badly patched, the roof is bad in spots and no insulation in the walls or windows. Room joints need to be replaced with additional structure. The siding is rotting from the inside. There is a consideration for demolition if expense to repair is too onerous.

Commission Questions

Commissioner Winterrowd asked how they plan on proceeding. Ribera responded that they are planning on working from the inside out and have a structural engineer scheduled to do a review. Schrems clarified that the commission is reviewing the exterior changes and materials.

Commissioner Legras asked for clarification if the aluminum siding had been directly placed over the original cedar lap siding. Ribera indicated it had and that the original siding beneath the aluminum was rotting in place.

Commissioner Robinson asked about the siding treatment and reveal. Ribera agreed they would match the reveal and siding corners.

Commissioner Settlemier asked if they had any photographic evidence of the rotting siding as seen from the interior. Ribera did not at this time. The commissioner asked whether they could tell the original lap siding size, Ribera surmised it to be 3 1/2" and planned on matching that size and reveal. She also did not have any price comparison between the Hardi-plank and wood and inferred that the project expense may exceed what they were willing to do.

Commissioner Cox asked the purpose of moving the position of the back door. Ribera explained that it is to provide better alignment and room configurations.

Commissioner Robinson additionally inquired about any roofline changes. Ribera said there would not be any roofline changes.

Commissioner Legras asked about the soffit material and back door style. Ribera answered that it will just be a normal back door, the front door will be craftsman type. She supposed the aluminum soffits will be changed as well.

Staff Response

Schrems emphasized that the commission's jurisdiction only pertains to the outside, predominantly visible features. Interior work is exempt from historic review.

Public Testimony

None.

Procedural Questions

None.

Chair Robinson closed the public hearing at 6:48 p.m.

Commission Deliberation

Commissioner Robinson weighed in that he believes that this was a similar situation to what they had last month. That they are bound by the Development Code and it requires we have findings around the criteria and that there are several areas where there hasn't been any definitive information or evidence provided. He suggested re-opening the hearing to establish a continuance.

Commissioner Settlemier agreed and noted they need to know what information is missing. What types of corner boards, types of soffits, doors, pictures showing the original siding damage from the interior showing reveal and size. Also providing evidence as to whether it is cost prohibitive to use Hardi-plank versus wood. He added a concern around enclosing that covered walkway as it appears to have been a part of the home within the period of significance. Commissioner Legras offered that it would be better for the home security to enclose the area.

Commissioner Winterrowd agreed with Legras, but wanted more detail on the siding reveal as well as photo documentation of the deterioration.

Motion: Commissioner Legras motioned to re-open the public hearing. Commissioner Engeman seconded the motion, which passed 6-0.

The public hearing was re-opened at 6:54 p.m.

The Chair invited Candace Ribera back and reiterated the commission's request for additional information as discussed. He emphasized the importance of getting photos of the deterioration of the original siding under the aluminum. And repeated the commissioners request for additional information on the soffit treatment, door styles, corners and cost comparison of substitute materials. He explained that they are going to leave the hearing open to give them time to provide the requested information.

Ribera emphasized that until they get the structural engineer's review they won't know if it is feasible to save the structure or to walk away.

The Chair announced that the hearing will be continued with additional public notice on a date to be determined.

Business from the Commission **7:02 p.m.**

Commissioner Winterrowd announced that all was well with the presentation by David Lewis, OSU Associate Anthropology Professor for Preservation Month. It is scheduled at the library Harwood Hall at 6:00 p.m. May 21, 2025.

Commissioner Settlemier announced his talk "If Walls Could Talk" on how to research the history of your house scheduled at 6:00 p.m. on May 27, 2025, in the main Albany Library.

Staff Updates

Schrems brought up scheduling the June meeting, potentially June 9, 2025, at 4:00 p.m. This will be a Joint Work Session moving forward with the Article 7 updates. Schrems continued to provide some insight into what the joint work session may include, such as reporting on the feedback received in their outreach efforts and simplifying the review process with expanded staff reviews on some applications.

Next Meeting Date

The next meeting is to be determined.

Adjournment

Hearing no further business Chair Robinson adjourned the meeting at 7:17 p.m.

Respectfully submitted,

Susan Muniz
Recorder

Reviewed by,

David Martineau
Current Planning Manager

**Documents discussed at the meeting that are not in the agenda packet are archived in the record. The documents are available by emailing cdaa@albanyoregon.gov.*

COMMUNITY DEVELOPMENT
333 Broadalbin Street SW, PO Box 490, Albany, Oregon 97321-0144 | BUILDING & PLANNING 541-917-7550

Staff Report

Historic Review of Exterior Alterations

HI-06-25 **June 25, 2025**

Summary

This staff report evaluates a Historic Review of Exterior Alterations for a residential structure on a developed lot within the Monteith National Register Historic District (Attachment A). The applicant proposes installing solar panels on the historic home.

Application Information

Review Body:	Landmarks Commission (Type III review)
Staff Report Prepared By:	Alyssa Schrems, Planner II
Property Owner/Applicant:	Dustan Johnson Trust; 326 6th Avenue SW, Albany, OR 97321
Address/Location:	326 6th Avenue SW, Albany, OR 97321
Map/Tax Lot:	Linn County Tax Assessor's Map No. 11S-03W-07BB; Tax Lot 08700
Zoning:	Hackleman Monteith (HM) District (Monteith National Register Historic District)
Total Land Area:	6,160 square feet
Existing Land Use:	Single Unit Residential
Neighborhood:	Central Albany
Surrounding Zoning:	North: HM- Hackleman Monteith, DMU-Downtown Mixed Use, OP-Office Professional East: HM- Hackleman Monteith, LE-Lyons Ellsworth South HM- Hackleman Monteith West HM- Hackleman Monteith
Surrounding Uses:	North: Residential, Single Unit; Church, Office East: Residential, Single Unit, Commercial Office South Residential, Single Unit, West Residential, Single Unit & Multi-Unit
Prior History:	N/A

Notice Information

On June 11, 2025, a notice of public hearing was mailed to property owners within 100 feet of the subject property. On June 20, 2025, notice of public hearing was posted on the subject site. As of June 23, 2025, no public testimony has been received.

Analysis of Development Code Criteria

Historic Review of Exterior Alterations Generally (ADC 7.120)

Albany Development Code (ADC) review criteria for Historic Review of Exterior Alterations Generally (ADC 7.120) are addressed in this report for the proposed development. The criteria must be satisfied to grant

approval for this application. Code criteria are written in **bold** followed by findings, conclusions, and conditions of approval where conditions are necessary to meet the review criteria.

Exterior Alteration Criteria (ADC 7.100-7.165)

Section 7.150 of the ADC, Article 7, establishes the following review criteria in **bold** for Historic Review of Exterior Alterations applications. For applications other than the use of substitute materials, the review body must find that one of the following criteria has been met in order to approve an alteration request.

1. **The proposed alteration will cause the structure to more closely approximate the historical character, appearance, or material composition of the original structure than the existing structure; OR**
2. **The proposed alteration is compatible with the historic characteristics of the area and with the existing structure in massing, size, scale, materials, and architectural features.**

ADC 7.150 further provides that the review body will use the Secretary of the Interior's Standards for Rehabilitation as guidelines in determining whether the proposed alteration meets the review criteria.

Secretary of Interior's Standards for Rehabilitation – (ADC 7.160)

The following standards are to be applied to rehabilitation projects in a reasonable manner, taking into consideration economic and technical feasibility.

1. **A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.**
2. **The historic character of a property shall be retained and preserved. The removal of historic material or alteration of features and spaces that characterize a property shall be avoided.**
3. **Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.**
4. **Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.**
5. **Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.**
6. **Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.**
7. **Chemical or physical treatments, such as sandblasting, that cause damage to historic material shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.**
8. **Significant archeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.**
9. **New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.**
10. **New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.**

The analysis includes findings related to the Exterior Alterations review criteria in ADC 7.150, followed by the evaluation of the applicable Secretary of Interior Standards in ADC 7.160. Staff conclusions are presented after the findings.

Findings of Fact

1.1 Location and Historic Character of the Area. The subject property is located at 326 6th Avenue SW in the Hackleman Monteith (HM) zoning district within the Monteith National Register Historic District. The surrounding properties are in the HM, DMU, and OP zoning districts. Surrounding properties are developed with a mix of single dwelling unit residences, commercial offices and churches.

1.2 Historic Rating. The subject building is rated as a Historic Contributing resource in the Monteith National Register Historic District.

1.3 History and Architectural Style. The nomination form lists the architectural style of the building as Vernacular (Attachment B).

1.4 Prior Alterations. The nomination form notes that the porch steps and railings have been altered.

1.5 Proposed Exterior Alterations. The applicant proposes installing 16 roof mounted solar panels on the west roof elevation, with the related service located on the west side of the house near the existing main service panel (Attachment C).

The applicant states that the panels will be low-profile and match the angle of the roof. The instillation instructions show that the solar panels will be mounted on rails and raised approximately four inches above the roof. The solar panels will also be removable, non-permanent structures.

Based on the facts provided, the addition of solar panels will not change the historic character, appearance, or material composition of the existing structure. Based on these facts, criterion ADC 7.150(2) is met.

1.6 Building Use (ADC 7.160(1)). The building's original use was a single unit house. The building is still used as a dwelling and as an office. The applicant does not propose any changes to the use of the building at this time.

Only minimal exterior alterations are needed in association with the proposed use, which is consistent with ADC 7.160(1).

1.7 Historic Character (ADC 7.160(2)). The house was constructed in 1905 in the Vernacular style. Distinctive features of the house include a corbelled cap chimney and an exterior chimney (Attachment B).

The applicant states that the panels and hardware for the solar panels will be removable and that no historic material will be removed. There will be no alteration of any features or spaces that characterize the property as historic. Based on these facts, criterion ADC 7.160(2) is met.

1.8 Historic Record & Changes (ADC 7.160(3) and (4)). The house is designed in the Vernacular style. The applicant proposes installing solar panels onto the roof with removable hardware in order to generate energy. No conjectural features or architectural elements are proposed in addition to the solar panels. Based on these facts, criterion ADC 7.160(3) and (4) are met.

1.9 Distinctive Characteristics (ADC 7.160(5)). The applicant states that there will be no changes to any features, finishes, construction techniques, or examples of craftsmanship with the addition of the solar panels. No changes are proposed to the roof pitch. Based on these facts, criterion ADC 7.160(5) is met.

1.10 Deteriorated Features (ADC 7.160(6)). The applicant states that there are no existing deteriorated historic features. Since there are no deteriorated historic features and the applicant is proposing to add solar panels and not change any existing features, criterion ADC 7.160(6) is satisfied.

1.11 Use of Chemical or Physical Treatments (ADC 7.160(7)). The applicant does not propose any chemical or physical treatments in relation to the installation of the solar panels and further states that cleaning of solar panels only requires soap and water. Based on these facts, criterion ADC 7.160(7) is met.

1.12 Significant Archaeological Resources (ADC 7.160(8)). No ground disturbing work is proposed with this application. As no groundwork is proposed, no disturbance of any archaeological resources is anticipated. Based on these facts, this criterion appears to be met.

1.13 Historic Materials (ADC 7.160(9)). The applicant states that the project will not destroy any historic materials or make any changes to the massing, size, scale, or architectural features of the property. The removable solar panels will be set parallel with the existing roof and will not affect the profile or roofline of the structure. Based on these facts, the criterion in ADC 7.160(9) is met.

1.14 New Additions (ADC 7.160(10)). The applicant states they are not proposing any new additions or adjacent or related new construction. Solar panels will be installed with removable hardware and can conceivably be returned to its original form if a future property owner desired to remove the solar panels. Based on these facts, the criterion in ADC 7.160(10) is met.

Conclusions

1.1 The proposed exterior alterations will be compatible with the historic characteristics of the area and with the existing structure in massing, size, scale, materials, and architectural features.

1.2 The proposed alteration is consistent with the Secretary of the Interior's Standards in ADC 7.160.

Overall Conclusions

This proposal seeks to complete exterior alterations to add solar panels to the west roof of the house.

Staff finds all applicable criteria are met for the exterior alterations.

Options and Recommendations

The Landmarks Commission has three options with respect to the subject application:

Option 1: Approve the request as proposed;

Option 2: Approve the request with conditions of approval;

Option 3: Deny the request.

Based on the discussion above, staff recommends the Landmarks Commission pursue Option 2 and approve the Exterior Alteration request with conditions. If the Landmarks Commission accepts this recommendation, the following motion is suggested.

Motion

I move to approve the exterior alterations including conditions of approval as noted in the staff report for application planning file no. HI-06-25. This motion is based on the findings and conclusions in the June 25, 2025, staff report and findings in support of the application made by the Landmarks Commission during deliberations on this matter.

Conditions of Approval

Condition 1 **Exterior Alterations** – The proposed exterior alterations shall be performed and completed as specified in the staff report and application as submitted. Deviations from these descriptions may require additional review.

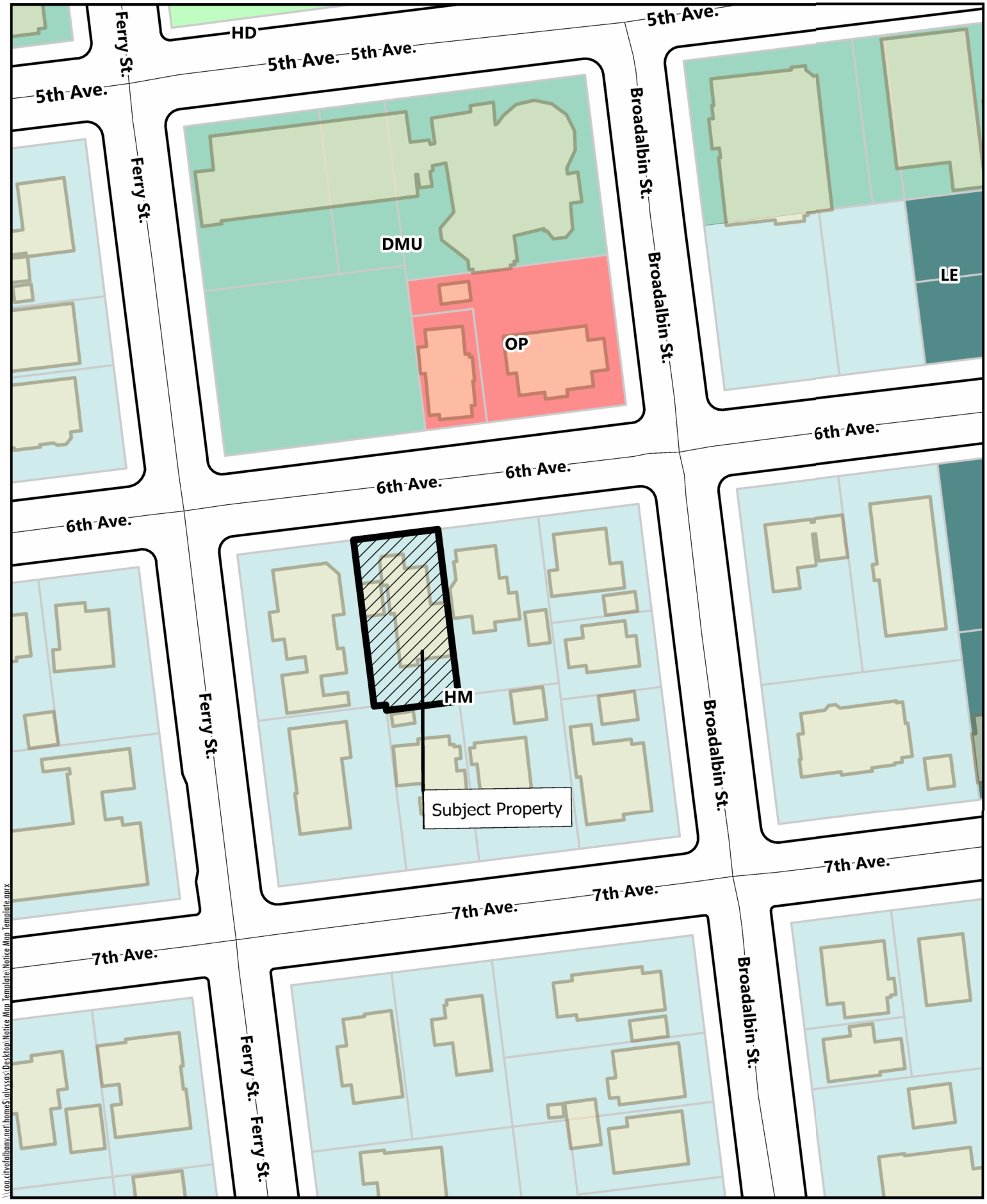
Condition 2 **Historic Review**– A final historic inspection is required to verify that the work has been done according to this application. Please call the historic planner (541-791-0176) a day or two in advance to schedule.

Attachments

A. Location Map
B. Historic Resource Survey
C. Applicant's Submittal

Acronyms

ADC	Albany Development Code
DMU	Downtown Mixed Use District
LE	Lyons Ellsworth District
HM	Hackleman Monteith District
OP	Office Professional District



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N

0 50 100 200 Feet

326 6th Ave SW

Date: 6/18/2025 Map Source:

Location Map

COUNTY: Linn

HISTORIC NAME: Mason House
COMMON NAME: None
ADDRESS: 326 6th Ave. SW
ADDITIONAL ADDRESS: NONE
CITY: Albany
OWNER: Jerry & Melanie Wilken
CATAGORY: Building
LOCATION Monteith Historic District
MAP NO: 11S03W07BB **TAX LOT:** 08700
BLOCK: 48 **LOT** 2
ADDITION NAME: Original Platt
PIN NO: 11S03W07BB08700 **ZONING** HM

ORIGINAL USE: Residence
CURRENT USE: Residence
CONDITION: Good
INTEGRITY: Good **MOVED?** N
DATE OF CONSTRUCTION: c.1905
THEME 20th Century Architecture
STYLE: Vernacular
ARCHITECT UNKNOWN
BUILDER: UNKNOWN
QUADRANGLE Albany **ASSESSMENT:** N 1981
ORIGINAL RATING: Secondary
CURRENT RATING: Historic Contributing

PLAN TYPE/SHAPE: Irregular
FOUNDATION MAT.: Concrete
ROOF FORM/MAT.: Hipped
STRUCTURAL FRAMING: Balloon
PRIMARY WINDOW TYPE: 15/1 double hung
EXTERIOR SURFACING MATERIALS: Drop siding

NO. OF STORIES: 1
BASEMENT Y
PORCH: Shed, wrap around

DECORATIVE FEATURES:
Corbelled cap chimney (N), exterior chimney (E)

EXTERIOR ALTERATIONS/ADDITIONS:
Porch steps and railing

NOTEWORTHY LANDSCAPE FEATURES:
None

ADDITIONAL INFO:
None

INTERIOR FEATURES:
None

LOCAL INVENTORY NO.: M.075
SHPO INVENTORY NO.: None
CASE FILE NUMBER: None

OREGON INVENTORY OF HISTORIC PROPERTIES
HISTORIC RESOURCE SURVEY -ALBANY
MONTEITH HISTORIC DISTRICT -PAGE TWO

NAME: Jerry & Melanie Wilken
ADDRESS: 326 Sixth Ave. S.W.
QUADRANGLE: Albany

T/R/S: T11-R3W-S07
MAP NO.:11-3W-7BB
TAX LOT: 8700

****

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NEGATIVE NO.: JJ-02

SLIDE NO.: MS.075

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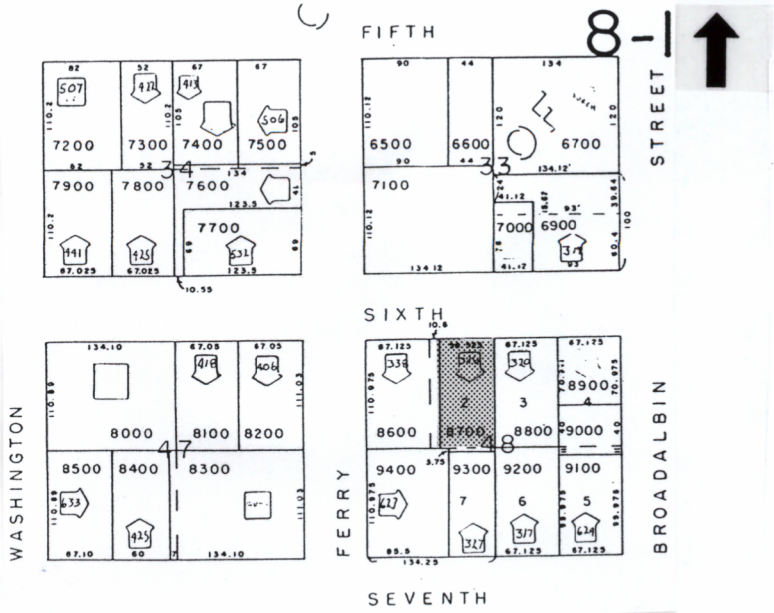


GRAPHIC & PHOTO SOURCES: Albany Community Development Planning Division & Tanya Neel.

Linn County Tax Data File

Tax lot #..... 11S03W07BB08700
Tax acct #.... 0091880
Site address.. 326 6TH AVE SW In-City? Y

Owner..... WILKEN, JERRY L
Address-1..... WILKEN, MELANIE J
Address-2..... 326 6TH AVE SW
Address-3..... ALBANY, OR 97321-2355
Address-4.....
Address-5.....

Property class... 0041 Tax Code #1...0801
Stat class..... 470 Tax Code #2...0000

Land market value... 8,870
Imp. market value... 49,340

172. 326 Sixth S.W.
Significance: Secondary
Use: Residence
Date: Post-1915

Present Owners: Jerry Wilken
326 Sixth S.W.
Tax Lot: 11-3W-7BB-8700

Description:

One story wood frame structure with basement. Hip roof; front exterior chimney with corbeled chimney cap. Windows-fifteen over one light, double hung sash. Boxed cornice with frieze board and corner boards - no capitals. Porch along two-thirds of front elevation appears to have been added later. Original building has drop wood siding while porch has wood shingle siding.

Remarks: Style is Transitional Box

AERIAL SITE VIEW

Attachment C.1

SCOPE OF WORK

INSTALLATION OF UTILITY INTERACTIVE PHOTOVOLTAIC SOLAR SYSTEM

6.88 kW DC & 5.12 kW AC PHOTOVOLTAIC SOLAR ARRAY

PV MODULES: (16) SILFAB SOLAR SIL-430 QD
INVERTER(S): (16) ENPHASE IQ8MC-72-M-US

ROOF TYPE: COMPOSITION SHINGLE - 1 LAYER(S)
PV MOUNTING HARDWARE: UNIRAC NXT

SHEET LIST

JURISDICTION CODES AND STANDARDS

GOVERNING CODES

1. ALL WORK SHALL COMPLY WITH:

2023 OREGON ELECTRICAL SPECIALTY CODE (OESC)

2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)

2023 OREGON RESIDENTIAL SPECIALTY CODE (ORSC)

2022 OREGON FIRE CODE (IFC)

AND ALL STATE AND LOCAL BUILDING, ELECTRICAL, AND PLUMBING CODES.

SITE CLASSIFICATION NOTES, OSHA REGULATION

OCCUPANCY CLASS: SFR

CONSTRUCTION CLASS: V-B

ZONING TYPE: RESIDENTIAL

1. A LADDER SHALL BE IN PLACE FOR INSPECTION IN COMPLIANCE WITH OSHA REGULATIONS.

2. MODULES HAVE AN ANTI-REFLECTIVE COATING TO PREVENT GLARE
3. FOR PROJECTS SUBMITTED FOR PRESCRIPTIVE REVIEW, ROOF ATTACHMENTS SHALL BE SPACED NO GREATER THAN 24" ON CENTER IN ANY DIRECTION WHERE LOCATED WITHIN 3' OF A ROOF EDGE, HIP, EAVE, OR RIDGE OSSC 3111.3.5.3 ITEM 5 EXCEPTION 1.2
JUNCTION BOXES UNDER PV ARRAY SHALL BE INSTALLED TO BE CONSIDERED ACCESSIBLE BY OESC 690.34

ELECTRICAL CRITERIA, NOTES

TEMPERATURE SOURCE: ASHRAE

WEATHER STATION: CORVALLIS MUNI

EXTREME MIN. TEMPERATURE: -8

ASHRAE 0.4% HIGH TEMP: 38

1. DRAWINGS HAVE BEEN DETAILED ACCORDING TO UL LISTING REQUIREMENTS.
2. TERMINALS AND LUGS WILL BE TIGHTENED TO MANUFACTURER TORQUE SPECIFICATIONS (WHEN PROVIDED) IN ACCORDANCE WITH NEC 110.14(D) ON ALL ELECTRICAL.
3. PV MODULE CERTIFICATIONS WILL INCLUDE UL1703, IEC61646, IEC61730.
4. CONDUIT AND WIRE SPECIFICATIONS ARE BASED ON MINIMUM CODE REQUIREMENTS AND ARE NOT MEANT TO LIMIT UP-SIZING AS REQUIRED BY FIELD CONDITIONS.
5. PROPER ACCESS AND WORKING CLEARANCE AROUND EXISTING AND PROPOSED ELECTRICAL EQUIPMENT WILL BE PROVIDED AS PER SECTION [NEC 110.26].
6. WHERE PV CABLES ON ROOFTOP WOULD OTHERWISE BE EXPOSED TO PHYSICAL DAMAGE, 3/4" EMT SHALL BE USED TO PROTECT CABLES

STRUCTURAL CRITERIA, NOTES

DESIGN LOAD STANDARD: ASCE 7-16

WIND EXPOSURE CATEGORY: B

WIND SPEED (3-SEC GUST): 96 MPH

GROUND SNOW LOAD: 36 PSF

DESIGN ROOF SNOW LOAD: 25 PSF

SEISMIC DESIGN CATEGORY: D

SEISMIC RISK FACTOR: II

16

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

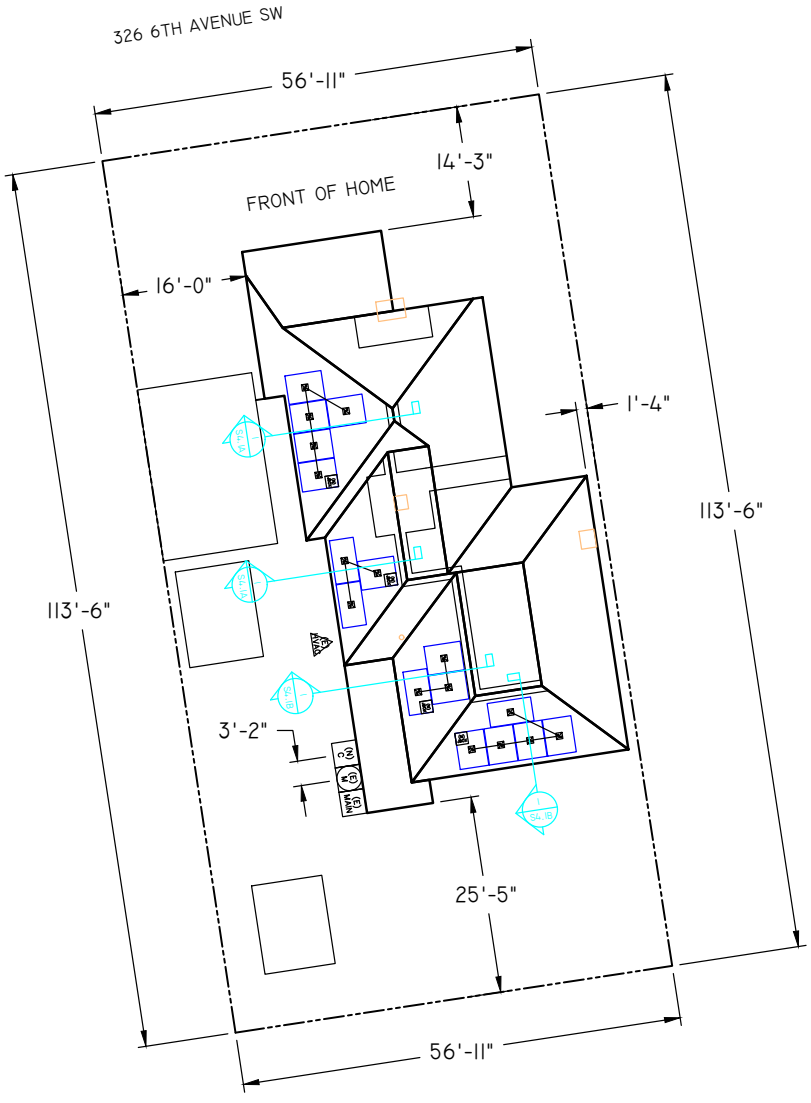
NABCEP
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
EXP. 9-27-2025

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
CI524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW
	ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD
	(16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC
	5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-May-2025
SHEET NAME	COVER SHEET
SHEET #	G-1
REV	0

Attachment C.2



SCALE: 1/16" = 1'-0"

0' 4' 8' 16' 32'

17

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
EXP. 9-27-2025

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
CI524

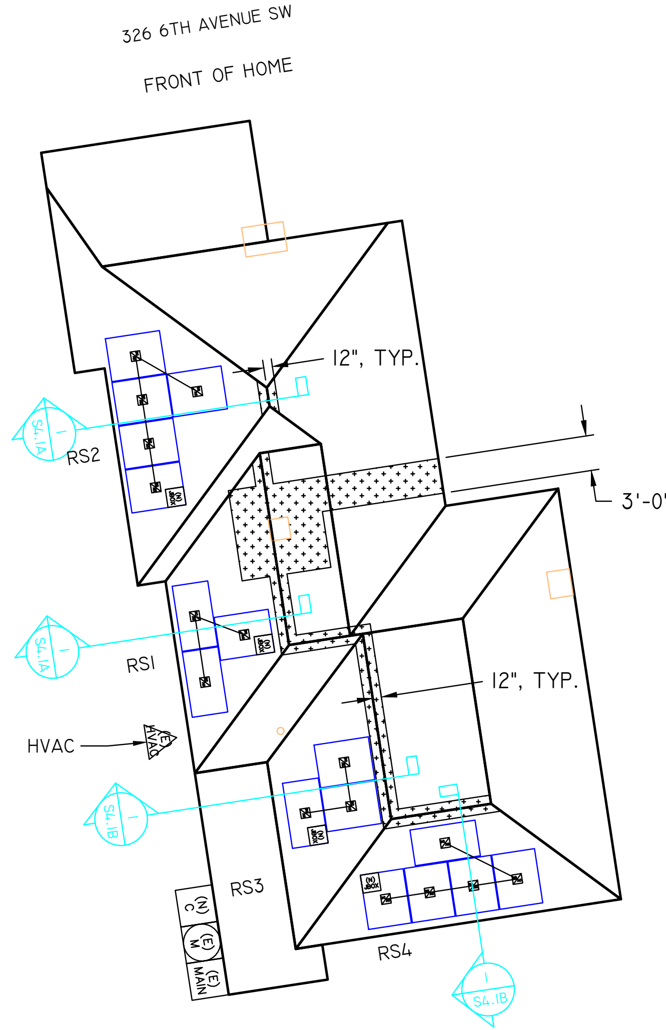
ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD (16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC 5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-MAY-2025
SHEET NAME	SITE PLAN
SHEET #	V-2
REV	0

Attachment C.3

FOR PROJECTS SUBMITTED FOR PRESCRIPTIVE REVIEW, ROOF ATTACHMENTS SHALL BE SPACED NO GREATER THAN 24" ON CENTER IN ANY DIRECTION WHERE LOCATED WITHIN 3' OF A ROOF EDGE, HIP, EAVE, OR RIDGE OSSC 3111.3.5.3 ITEM 5 EXCEPTION 1.2

JUNCTION BOXES UNDER PV ARRAY SHALL BE INSTALLED TO BE CONSIDERED ACCESSIBLE BY OESC 690.34



SCALE: 3/32" = 1'-0"

0' 2'-8" 5'-4" 10'-8" 21'-4"

SYSTEM LEGEND

- (E) M — (E) UTILITY METER / MAIN SERVICE PANEL
- (E) MAIN — (E) MAIN SERVICE PANEL
- (E) SUB — (E) SUBPANEL
- (N) C — (N) PV COMBINER PANEL
- (N) LC — (N) PV LOAD CENTER
- (N) PVM — (N) PV PRODUCTION METER
- (N) I — (N) DC-DC / STRING INVERTER
- (N) JBOX — (N) JUNCTION BOX
- (N) ACD — (N) AC DISCONNECT (VISIBLE-OPEN LOCKABLE LABELED DISCONNECT)
- DC/AC — (N) MICROINVERTER
- (N) DCD — (N) DC DISCONNECT
- S# — SUNEYE LOCATION
- FIRE SETBACK
- (N) PV MODULE
- STRUCTURALLY DISQUALIFIED

ROOF SECTION CRITERIA AND SPECIFICATIONS

ROOF SECTION	PV MODULE QTY	AZIMUTH	PITCH	TSRF
RS1	3	261	34	82%
RS2	5	261	34	82%
RS3	3	261	34	82%
RS4	5	171	34	75%

N

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY
EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP
BOARD CERTIFIED
PV INSTALLATION PROFESSIONAL

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD (16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC 5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-MAY-2025
SHEET NAME	ROOF PLAN
SHEET #	S-3
REV	0

STRUCTURAL INSTALLATION SCHEDULE AND CRITERIA

ROOF MEMBRANE	
ROOF TYPE:	COMPOSITION SHINGLE
ROOF SHEATHING TYPE:	LUMBER AND PLYWOOD

ARRAY PARAMETERS	
TOTAL ROOF AREA (SQ. FT.)	2144.19
TOTAL PV MODULE AREA (SQ. FT.)	336
% PV MODULE ROOF COVERAGE	15.67%

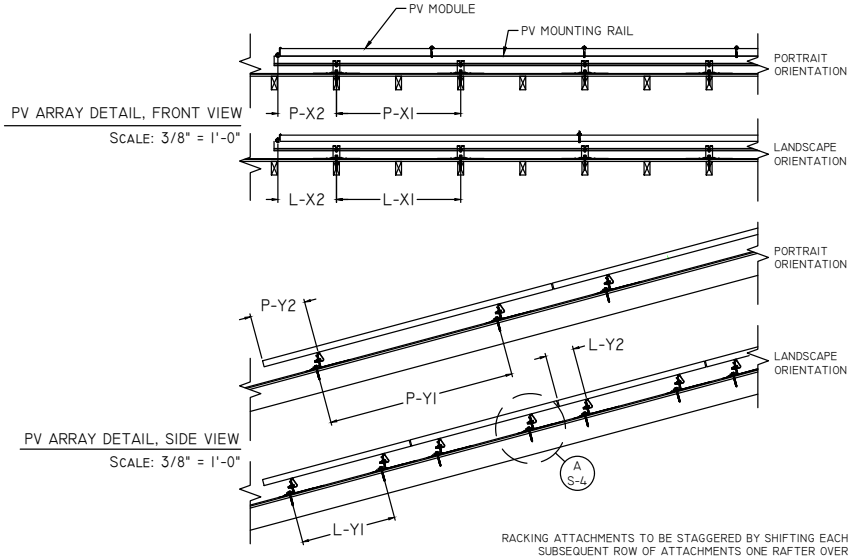
PV RACKING	
RACKING:	UNIRAC NXT
RACKING TYPE:	RAIL
STANDOFF:	UNIRAC STRONGHOLD BUTYL ATT KIT #14S MILL
STANDOFF TYPE:	L-FOOT & BUTYL TAPE MASTIC
FASTENER:	3" #14-14 AB SCREW

SPAN AREA	TAG	SPAN
RAIL - PORTRAIT - MODULE ORIENTATION		
X- SPACING	P-X1	32 IN. O.C. MAX.
X-CANTILEVER	P-X2	31 IN. MAX.
Y- SPACING	P-Y1	40.2 IN. MIN. - 55.9 IN. MAX.
Y-CANTILEVER	P-Y2	6 IN. MIN. - 13.8 IN. MAX.
RAIL - LANDSCAPE - MODULE ORIENTATION		
X- SPACING	L-X1	32 IN. O.C. MAX.
X-CANTILEVER	L-X2	31 IN. MAX.
Y- SPACING	L-Y1	24.9 IN. MIN. - 28.9 IN. MAX.
Y-CANTILEVER	L-Y2	7.9 IN. MIN. - 9.8 IN. MAX.

STRUCTURAL FRAMING

ROOF SECTION	*STRUCTURE TYPE*	*RAFTER / TC SIZE (IN)*	*RAFTER / TC SPACING (IN)*	*STRUCTURAL UPGRADE*	*UPGRADE SIZE & LENGTH (FT)*
RS1	CONVENTIONAL FRAMING	2x4	32	UPGRADE - UPSIZED FULL SISTER (2.5x)	2x6, FULL LENGTH
RS2	CONVENTIONAL FRAMING	2x4	24	UPGRADE - UPSIZED FULL SISTER (2.5x)	2x6, FULL LENGTH
RS3	CONVENTIONAL FRAMING	2x4	24	UPGRADE - PARTIAL SISTER (1.5x)	PS-LI - 2x4, 6 FT MIN.
RS4	CONVENTIONAL FRAMING	2x4	24	UPGRADE - PARTIAL SISTER (1.5x)	PS-LI - 2x4, 6 FT MIN.

Attachment 3.4

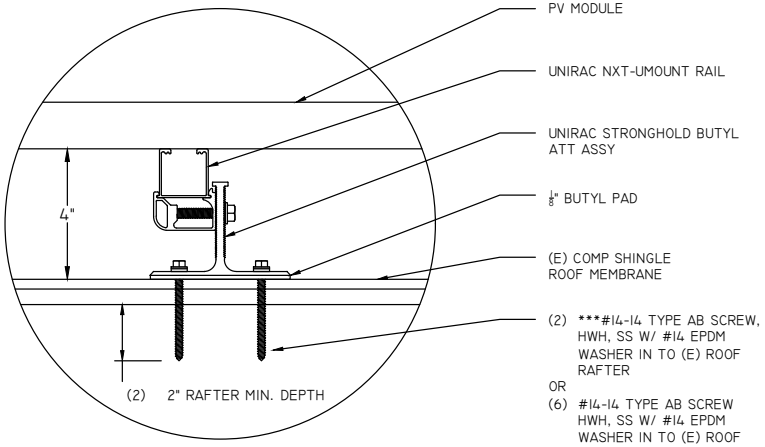


PV ARRAY DETAIL, FRONT VIEW
SCALE: 3/8" = 1'-0"

PV ARRAY DETAIL, SIDE VIEW
SCALE: 3/8" = 1'-0"

RACKING ATTACHMENTS TO BE STAGGERED BY SHIFTING EACH SUBSEQUENT ROW OF ATTACHMENTS ONE RAFTER OVER TO DISTRIBUTE LOAD ACROSS ALL FRAMING MEMBERS UNDER PV ARRAY.

*** ONLY 2 FASTENERS REQUIRED IN TO (E) ROOF RAFTER/TOP CHORD. IF DURING INSTALLATION THE (E) RAFTER/TOP CHORD IS MISSED, CONTINUE TO DRIVE FASTENER UNTIL 2 LAND IN TO THE (E) RAFTER/TOP CHORD. IF ALL MISS, (6) IN (E) SHEATHING ONLY ARE SUFFICIENT AS LONG AS ATTACHMENTS SPAN NO GREATER THAN 24" OC.



A COMP SHINGLE - STRONGHOLD BUTYL ATT KIT - STANDOFF DETAIL
SCALE: 3" = 1'-0"

19

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
EXP. 9-27-2025

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
CI524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID
00FEGW

SITE OWNER: DUSTAN E JOHNSON
SITE ADDRESS: 326 6TH AVENUE SW
ALBANY, OREGON 97321-0509

EQUIP.
(16) SILFAB SOLAR SIL-430 QD
(16) ENPHASE IQ8MC-72-M-US

SYSTEM SIZE
6.88KW DC
5.12KW STC-AC, 4.982KW CEC-AC

PROJECT DESIGNER
JOHN MANALO

DATE
08-MAY-2025

SHEET NAME
STRUCTURAL DETAILS

SHEET # S-4

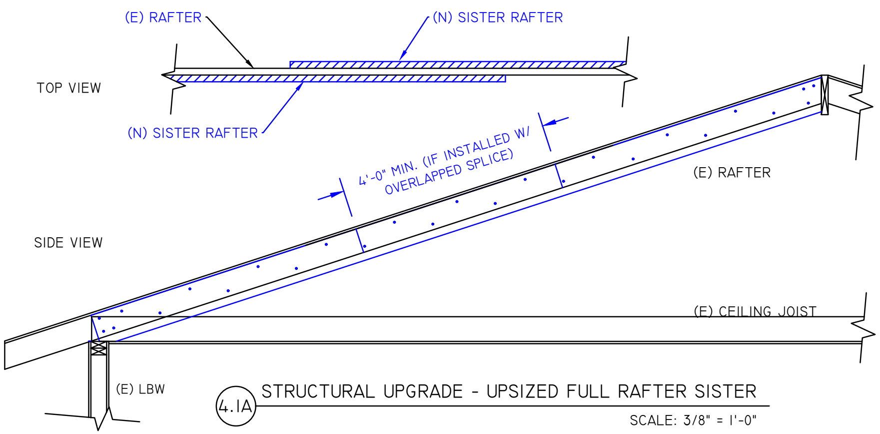
REV 0

Attachment C.5

STRUCTURAL UPGRADE DETAILS

STRUCTURAL UPGRADE REQUIRED - FULL RAFTER SISTER

1. INSTALL (N) FULL SISTER FULL LENGTH OR OVERLAPPED W/ SPLICE TO (E) RAFTERS TO OCCUR ONLY UNDER PV ARRAY.
2. SECURE WITH (N) 10D SINKERS @ 6" O.C. STAGGERED.
3. IF RIDGE BOARD PRESENT SECURE EACH END WITH 3 SCREWS OR NAILS GROUPED WITHIN 6" OF EACH END.

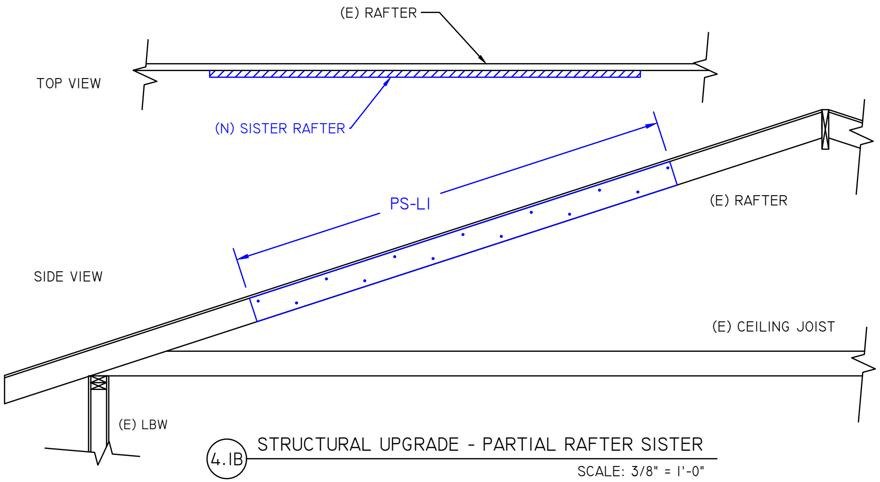


4.1A STRUCTURAL UPGRADE - UPSIZED FULL RAFTER SISTER

SCALE: 3/8" = 1'-0"

STRUCTURAL UPGRADE REQUIRED - PARTIAL RAFTER SISTER

1. INSTALL (N) PARTIAL SISTER CENTERED BETWEEN EXTERIOR LBW AND RIDGE TO OCCUR ONLY UNDER PV ARRAY.
2. SECURE WITH (N) 10D SINKERS SPACED STAGGERED 6" APART.



4.1B STRUCTURAL UPGRADE - PARTIAL RAFTER SISTER

SCALE: 3/8" = 1'-0"

05/12/2025

REGISTERED PROFESSIONAL ENGINEER 98950PE OREGON JAN 11, 2022 ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED. SEE PAGE S-4 FOR DETAILS.

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD (16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC 5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-MAY-2025
SHEET NAME	STRUCTURAL UPGRADE DETAILS
SHEET #	S-4.1
REV	0

PV SYSTEM STRUCTURAL SPECIFICATIONS AND CALCULATIONS

DESIGN LOCATION AND SITE SPECIFICATIONS

JURISDICTION	CITY OF ALBANY
STATE	OREGON
ADOPTED LOAD STANDARD	ASCE 7-16
OCCUPANCY / RISK CATEGORY	II
BASIC WIND SPEED (MPH (3-SEC GUST))	96
WIND EXPOSURE CATEGORY	B
GROUND SNOW LOAD (PSF) (PG)	36
BASE ELEVATION (FT)	214
STRUCTURE TYPE	INHABITED - HIP ROOF
MIN. ROOF SLOPE (DEG.)	34
MEAN ROOF HEIGHT (FT.)	23

RACKING AND ATTACHMENT SPECIFICATIONS

MODULE MANUFACTURER / TYPE	SILFAB SOLAR SIL-430 QD
SOLAR MODULE WEIGHT (LBS)	46.3
SOLAR MODULE LENGTH (IN.)	67.8
SOLAR MODULE WIDTH (IN.)	44.6
SOLAR MODULE AREA (SQ. FT)	21
PV RACKING	UNIRAC NXT
PV RACKING TYPE	RAIL
PV ROOF ATTACHMENT	UNIRAC STRONGHOLD BUTYL ATT KIT #14S MILL
PV ROOF ATTACHMENT FASTENER	(2) 3" #14-14 AB SCREW(S)
MANUFACTURER UPLIFT CAPACITY (LBS)	779
MANUFACTURER LATERAL CAPACITY (LBS)	320
PORTRAIT ATT. SPACING (IN. O.C.)	32
LANDSCAPE ATT. SPACING (IN. O.C.)	32
MAX PORTRAIT RAIL CANTILEVER SPACING (IN. O.C.)	31
MAX LANDSCAPE RAIL CANTILEVER SPACING (IN. O.C.)	31
# OF ATTACHMENT POINTS	82
RACKING DEAD LOAD (PSF)	0.8
SOLAR MODULE DEAD LOAD (PSF)	2.20
TOTAL PV ARRAY DEAD LOAD (PSF)	3.00
MAX. ROOF POINT DEAD LOAD (PSF)	22.6

DESIGNED VELOCITY PRESSURE CALCULATIONS — ASCE 7-16 (C&C)

VELOCITY PRESSURE (PSF) = QH = 0.00256(KH)(KZT)(KD)(KE)(V^2)		EQN. 26.10-1
TERRAIN EXPO. CONSTANT (A) =	7.0	TABLE 26.11-1
TERRAIN EXPO. CONSTANT (ZG)(FT) =	1200	TABLE 26.11-1
VP EXPOSURE COEFFICIENT (KH) =	0.70	TABLE 26.10-1
TOPOGRAPHIC FACTOR (KZT) =	1.0	EQN. 26.8-1
WIND DIRECTIONALITY FACTOR (KD) =	0.9	TABLE 26.6-1
GROUND ELEVATION FACTOR (KE) =	1.0	TABLE 26.9-1
QH (PSF) =	14.0	

DESIGNED ROOF SNOW LOAD CALCULATIONS — ASCE 7-16

SLOPED ROOF SNOW LOAD (PSF)	= PS = (CS)(0.7)(CE)(CT)(IS)(PG)	EQN. 7.4-1
EXPOSURE FACTOR (CE) =		TABLE 7.3-1
IMPORTANCE FACTOR (IS) =		TABLE 1.5-2
GROUND SNOW LOAD (PSF) (PG) =	36.0	
NO PV - WARM NON SLIPPERY SURFACE		
THERMAL FACTOR (CT) =		TABLE 7.3-2
SLOPE FACTOR (CS) =		FIG. 7.4-1
PS (PSF) =	25	
PV - COLD SLIPPERY SURFACE		
THERMAL FACTOR (CT) =		TABLE 7.3-2
SLOPE FACTOR (CS) =		FIG. 7.4-1
PS (PSF) =	25	

RACKING - ATTACHMENT AND FASTENER, CONNECTION ZONE WIND PRESSURE AND POINT LOAD

HIP ROOF 27° < Ø ≤ 45° — FIGURE 30.3-2H

DESIGN WIND PRESSURE (PSF) = W = QH(GCP)(YE)(YA) — EQN. 26.10-1

ARRAY EDGE FACTOR (YE) = 1 — EQN. 29.4-7

	UPLIFT ZONE 1	UPLIFT ZONE 2R	UPLIFT ZONE 2E	COMPRESSION ALL ZONES	LATERAL ALL ZONES
RAIL - PORTRAIT MODULE ORIENTATION	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*
SOLAR PANEL PRESSURE EQ. FACTOR (YA) =	0.80	0.80	0.80	0.80	0.80
EXTERNAL PRESSURE COEFF. (GCP) =	-1.4	-2.7	-2.8	0.9	-2.8
ASD PRESSURE (W)(PSF) =	-16.00	-30.32	-31.44	10.11	17.58
PV DEAD LOAD (D) =	3.00	3.00	3.00	3.00	0.00
SNOW OR LIVE LOAD (S OR L)(PSF) =	0.00	0.00	0.00	25.00	20.00
MAX. TRIBUTARY AREA (SQ. FT) =	7.5	7.5	8.5	8.5	8.5
GOV. LOAD COMBINATION (2.4.1) =	0.6D+0.6W	0.6D+0.6W	0.6D+0.6W	D+0.45W+0.75S	D+0.75L+0.45W
MAX. LOAD (LBS) =	-58.7	-123.5	-144.6	191.4	82.1
RAIL - LANDSCAPE MODULE ORIENTATION	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*	*32 IN. O.C.*
SOLAR PANEL PRESSURE EQ. FACTOR (YA) =	0.80	0.80	0.80	0.80	0.80
EXTERNAL PRESSURE COEFF. (GCP) =	-1.4	-2.7	-2.8	0.9	-2.8
ASD PRESSURE (0.6P)(PSF) =	-16.00	-30.32	-31.44	10.11	17.58
PV DEAD LOAD (D) =	3.00	3.00	3.00	3.00	0.00
SNOW OR LIVE LOAD (S OR L)(PSF) =	0.00	0.00	0.00	25.00	20.00
TRIBUTARY AREA (SQ. FT) =	4.96	4.96	5.58	5.58	5.58
GOV. LOAD COMBINATION (2.4.1) =	0.6D+0.6W	0.6D+0.6W	0.6D+0.6W	D+0.45W+0.75S	D+0.75L+0.45W
MAX. LOAD (LBS) =	-38.6	-81.2	-95.1	125.9	59.1

RACKING - ATTACHMENT AND FASTENER, CAPACITY / DEMAND CHECK — NDS 12.2

UNIRAC STRONGHOLD BUTYL ATT KIT #14S MILL - (2) 3" #14-14 AB SCREW(S)

LAG SCREW WITHDRAWAL DESIGN VALUE (LBS) = W = 1800(G^3/2)(D^3/4)			12.2.1
ROOF ATTACHMENT FASTENER (D) (IN.) =	6/25		TABLE 2.3.2
FASTENER QTY PER ATTACHMENT =	2		TABLE 12.3.3A
FASTENER EMBEDMENT DEPTH (IN.) =	2.0		
LUMBER SPECIFIC GRAVITY (G) =	0.5		
LOAD DURATION FACTOR (CD) =	1.6		
PRYING COEFFICIENT =	1.4		
WITHDRAWAL DESIGN VALUE(W)(LBS / IN.) =	218.2		
LAG SCREW WITHDRAWL CAPACITY (LBS) =	997.6		
	UPLIFT	LATERAL	
MANUFACTURER MAX. CAPACITY (LBS) =	779.0	320.0	
MAX. LAG SCREW CAPACITY (LBS) =	997.6		
MAX. ATT. WITHDRAWL DEMAND (LBS) =	191.4	82.1	
	OK	OK	

RACKING - RAIL, SPAN AND CANTILEVER CHECK - ALL ZONES

UNIRAC NXT

	COMPRESSION	UPLIFT	LATERAL
MAX. HORIZONTAL RAIL SPAN (L)(FT.) =	2.7		
MAX. VERTICAL SPACING BETWEEN RAILS (FT.) =	4.7		
MAX. RAIL CANTILEVER SPAN (A)(X)(FT.) =	2.6		
GOV. LOAD COMBINATION (2.4.1) =	D+0.45W+0.75S	0.6D+0.6W	D+0.6W
TOTAL LOAD (PSF) =	28.1	6.6	8.4
TOTAL LINEAR LOAD (W)(LB. / FT.) =	65.7	18.7	13.3
RAIL - SPAN CHECK			(WL^2)/8
ALLOWABLE MANU. BENDING MOMENT (LB. / FT.) =	223	331	264
ACTUAL MAX. BENDING MOMENT (LB / FT.) =	58.4	16.6	11.8
			(W)(L)^4 / 185(E)(I)
ALLOWABLE DEFLECTION (IN.) =	0.53	0.53	0.53
ACTUAL MAX DEFLECTION (IN.) =	0.02	0.01	0.00
	OK	OK	OK
RAIL - CANTILEVER CHECK			
OVERHANG			(W/2)(A-X)^2
ALLOWABLE MANU. BENDING MOMENT (LB. / FT.) =	223	331	264
ACTUAL MAX BENDING MOMENT (LB / FT.) =	219.4	62.4	44.4
			(WX/24EI)(4LA^2-L^3+6XA^2-4AX^2+X^3)
ALLOWABLE MANU. DEFLECTION (L/60)(IN.) =	0.52	0.52	0.52
ACTUAL MAX DEFLECTION (IN.) =	0.32	0.09	0.06
SPAN REACTION			(W/8L^2)(L+A)^2(L-A)^2
ALLOWABLE MANU. BENDING MOMENT (LB. / FT.) =	331	223	264
ACTUAL MAX BENDING MOMENT (LB / FT.) =	0.2	0.1	0.0
			(WX/24EIL)(L^4-2L^2X^2+LX^3-2A^2L^2+2A^2X^2)
ALLOWABLE MANU. DEFLECTION (L/60)(IN.) =	0.53	0.53	0.53
ACTUAL MAX DEFLECTION (IN.) =	0.00	0.00	0.00
ATTACHMENT / CONNECTION REACTION			(W/2L)(L+A)^2
UPLIFT CAPACITY (LBS) =	779.0	779.0	779.0
ACTUAL MAX REACTION UPLIFT FORCE (LBS) =	339.8	96.6	68.8
	OK	OK	OK

RACKING - MODULE CLAMPS CAPACITY / DEMAND CHECK

MID CLAMP: UNIRAC NXT UMOUNT COMBO CLAMP - DARK

END CLAMP: UNIRAC NXT UMOUNT COMBO CLAMP - DARK

	UPLIFT	SLIDING	LATERAL
MANUFACTURER MAX. CAPACITY (LBS) =	1820.0	652.0	398.0
MAX. CLAMP WITHDRAWL DEMAND (LBS) =	144.6	82.1	82.1
	OK	OK	OK

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP BOARD CERTIFIED
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
PV-011719-015866
EXP. 3-17-2026

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD (16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC 5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-MAY-2025
SHEET NAME	STRUCTURAL CALCULATIONS 1
SHEET #	S-5
REV	0

PV SYSTEM STRUCTURAL SPECIFICATIONS AND CALCULATIONS

GRAVITY LOAD / FRAMING CALCULATIONS

DEAD LOAD (PSF)	RS1		RS2		RS3		RS4	
ROOF MEMBRANE	COMPOSITION SHINGLE	4.0	COMPOSITION SHINGLE	4.0	COMPOSITION SHINGLE	4.0	COMPOSITION SHINGLE	4.0
SHEATHING	LUMBER AND PLYWOOD	4	LUMBER AND PLYWOOD	4	LUMBER AND PLYWOOD	4	LUMBER AND PLYWOOD	4
PITCH (DEG)	34		34		34		34	
FRAMING	CONVENTIONAL FRAMING - UPGRADE - UPSIZED FULL SISTER (2.5X) - RAFTER 2X4 @ 32 IN. O.C. - DF #2 @ 8.6 FT. MAX SPAN	1.7	CONVENTIONAL FRAMING - UPGRADE - UPSIZED FULL SISTER (2.5X) - RAFTER 2X4 @ 24 IN. O.C. - DF #2 @ 10.2 FT. MAX SPAN	2.2	CONVENTIONAL FRAMING - UPGRADE - PARTIAL SISTER (1.5X) - RAFTER 2X4 @ 24 IN. O.C. - DF #2 @ 7.1 FT. MAX SPAN	1.8	CONVENTIONAL FRAMING - UPGRADE - PARTIAL SISTER (1.5X) - RAFTER 2X4 @ 24 IN. O.C. - DF #2 @ 7.1 FT. MAX SPAN	1.8
PV ARRAY	3.0		3.0		3.0		3.0	
TOTAL ROOF DEAD LOAD	12.7		13.2		12.8		12.8	
ADJUSTED TO SLOPED ROOF	15.4		15.9		15.5		15.5	
GREATER OF LIVE / SNOW LOAD	25.0		25.0		25.0		25.0	
LIVE LOAD (PSF)	20.0		20.0		20.0		20.0	
TOTAL GREATEST LIVE OR PV LOAD (PSF)	40.4		40.9		40.5		40.5	

IBC 1607.14.4.1

RAFTER / TOP CHORD MEMBER PROPERITES	DF #2 - 2X4 - UPGRADE - UPSIZED FULL SISTER (2.5X)	DF #2 - 2X4 - UPGRADE - UPSIZED FULL SISTER (2.5X)	DF #2 - 2X4 - UPGRADE - PARTIAL SISTER (1.5X)	DF #2 - 2X4 - UPGRADE - PARTIAL SISTER (1.5X)
SECTION MODULUS (S)(IN^3)	10.13	10.13	3.06	3.06
MOMENT OF INERTIA (I)(IN^4)	22.78	22.78	5.36	5.36
TOTAL LOAD ON MEMBER (W) (PLF)	107.6	81.9	80.9	80.9
MEMBER SPAN 1 (L) (FT)	8.6	10.2	7.1	7.1
MEMBER SPAN 2 (K) (FT)	0	0	0	0
MIN. EAVE SPAN (V) (FT)	1	1	1	1
MODULUS OF ELASTICITY (E) (PSI)	1600000	1600000	1600000	1600000
SHEAR (Fv) (PSI)	180	180	180	180
AREA (A) (IN^2)	13.5	13.5	5.25	5.25

MAX BENDING STRESS CHECK	(Fb)(Cd)(Cf)(Cr)		(Fb)(Cd)(Cf)(Cr)		(Fb)(Cd)(Cf)(Cr)		(Fb)(Cd)(Cf)(Cr)	
BENDING (Fb) (PSI)	900		900		900		900	
LOAD DURATION FACTOR (Cd)	1.15		1.15		1.15		1.15	
SIZE FACTOR (Cf)	1.40		1.40		1.50		1.50	
REPETITIVE MEMBER FACTOR (Cr)	1.00		1.15		1.15		1.15	
ALLOWABLE BENDING MOMENT (FT-LBS)	1222.6 (W/8L^2)((L+V)^2)((L-V)^2)/(S)		1406.0 (W/8L^2)((L+V)^2)((L-V)^2)/(S)		911.3 (W/8L^2)((L+V)^2)((L-V)^2)/(S)		911.3 (W/8L^2)((L+V)^2)((L-V)^2)/(S)	
ACTUAL MAX BENDING MOMENT (FT-LBS)	968.4		1044.5		489.8		489.8	
	79%	OK	74%	OK	54%	OK	54%	OK

	UNIFORM DISTRIBUTED L / 120		UNIFORM DISTRIBUTED L / 120		UNIFORM DISTRIBUTED L / 120		UNIFORM DISTRIBUTED L / 120	
MAX DEFLECTION CHECK - TOTAL LOAD								
ALLOWABLE DEFLECTION	0.860	IN.	1.020	IN.	0.710	IN.	0.710	IN.
ACTUAL MAX DEFLECTION	0.151	IN.	0.227	IN.	0.112	IN.	0.112	IN.
(W)(L)^4 / 185(E)(I)	18%	OK	22%	OK	16%	OK	16%	OK
MAX DEFLECTION CHECK - LIVE LOAD	L / 180		L / 180		L / 180		L / 180	
ALLOWABLE DEFLECTION	0.430	IN.	0.680	IN.	0.473	IN.	0.473	IN.
ACTUAL MAX DEFLECTION	0.075	IN.	0.111	IN.	0.055	IN.	0.055	IN.
(W)(L)^4 / 185(E)(I)	17%	OK	16%	OK	12%	OK	12%	OK

MAX SHEAR CHECK								
ALLOWABLE SHEAR = Fv (A)	2430	LBS.	2430	LBS.	945	LBS.	945	LBS.
ACTUAL MAX SHEAR = (W)(L)/2	463	LBS.	418	LBS.	287	LBS.	287	LBS.

Attachment C.7

22

05/12/2025

REGISTERED PROFESSIONAL ENGINEER
98950PE
OREGON
JAN 11, 2022
ALAN ROWLEY

EXPIRES: 12/31/26

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP CERTIFIED
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
PPA-011710-013866
EXP. 9-17-2025

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID
00FEGW

SITE OWNER
DUSTAN E JOHNSON

SITE ADDRESS
326 6TH AVENUE SW
ALBANY, OREGON 97321-0509

EQUIP.
(16) SILFAB SOLAR SIL-430 QD
(16) ENPHASE IQ8MC-72-M-US

SYSTEM SIZE
6.88KW DC
5.12KW STC-AC, 4.982KW CEC-AC

PROJECT DESIGNER
JOHN MANALO

DATE
08-MAY-2025

SHEET NAME
STRUCTURAL CALCULATIONS 2

SHEET # S-6

REV 0

Attachment C.8

CONDUCTOR AND RACEWAY SCHEDULE

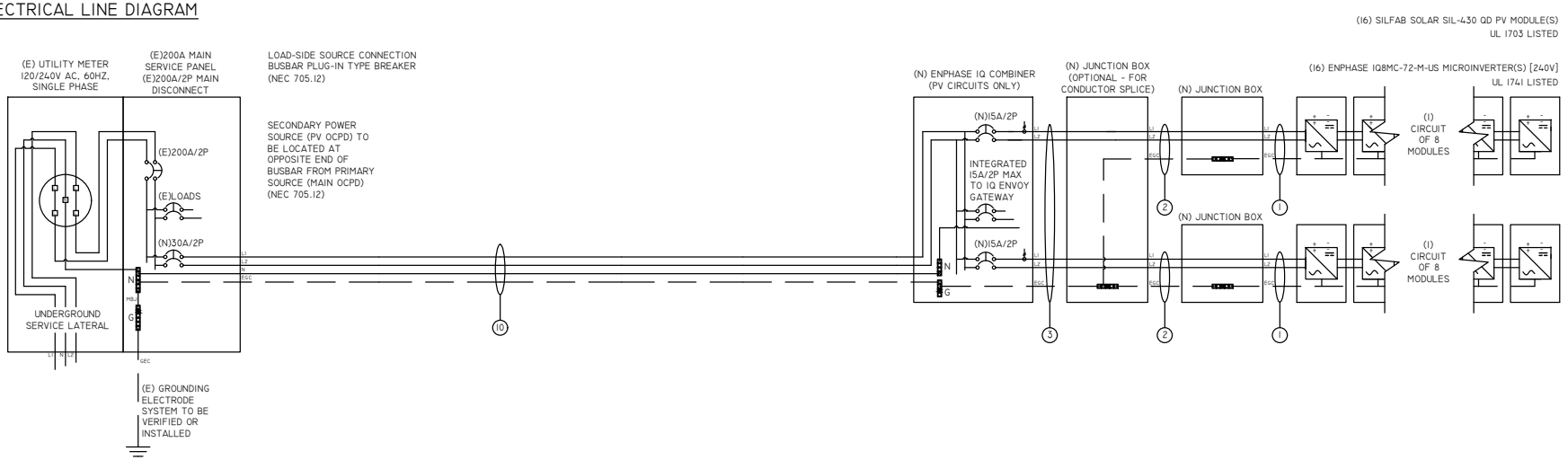
TAG	QTY	SIZE - #	TYPE	DESIGNATOR	I / V
10	(1)	10 AWG	THHN / THWN-2, CU.	BLACK (L1)	21.3 A AC (MAX)
	(1)	10 AWG	THHN / THWN-2, CU.	RED (L2)	240 V AC
	(1)	10 AWG	THHN / THWN-2, CU.	WHITE (N)	
	(1)	10 AWG	THHN / THWN-2, CU.	GREEN (EGC)	
	(1)	3/4 IN.	EMT	(RACEWAY)	EXTERIOR

TAG	QTY	SIZE - #	TYPE	DESIGNATOR	I / V

TAG	QTY	SIZE - #	TYPE	DESIGNATOR	I / V

TAG	QTY	SIZE - #	TYPE	DESIGNATOR	I / V
1	(1)	12 AWG	2C, TC-ER, CU.	(L1), (L2)	10.6 A AC (MAX)
	(1)	6 AWG	SOLID BARE CU.	(EGC)	240.0 V AC
					EXTERIOR
2	(1)	12 AWG	2C, NM-B W/G, CU. (CABLE)	(L1), (L2), (EGC)	10.6 A AC (MAX) 240.0 V AC
					INTERIOR
3	(2)	12 AWG	THHN / THWN-2, CU.	BLACK (L1)	10.6 A AC (MAX)
	(2)	12 AWG	THHN / THWN-2, CU.	RED (L2)	240.0 V AC
	(1)	12 AWG	THHN / THWN-2, CU.	GREEN (EGC)	
	(1)	3/4 IN.	EMT	(RACEWAY)	EXTERIOR

ELECTRICAL LINE DIAGRAM



STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID
00FEGW

SITE OWNER
DUSTAN E JOHNSON

SITE ADDRESS
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ALBANY, OREGON 97321-0509

EQUIP.
(16) SILFAB SOLAR SIL-430 QD
(16) ENPHASE IQ8MC-72-M-US

SYSTEM SIZE
6.88KW DC
5.12KW STC-AC, 4.982KW CEC-AC

PROJECT DESIGNER
JOHN MANALO

DATE
08-MAY-2025

SHEET NAME
ELECTRICAL LINE DIAGRAM

SHEET # E-7

REV 0

Attachment C9

PV SYSTEM ELECTRICAL SPECIFCATIONS AND CALCULATIONS

DESIGN LOCATION AND TEMPERATURES

TEMPERATURE DATA SOURCE	ASHRAE
STATE	OREGON
JURISDICTION	CITY OF ALBANY
WEATHER STATION	CORVALLIS MUNI
ASHRAE EXTREME LOW TEMP (°C)	-8
ASHRAE 0.4% HIGH TEMP (°C)	38
DESIGNED MAX. SYSTEM VDROP / VRISE	4.00%

PV MODULE SPECIFICATIONS

PV MODULE SPECIFICATIONS	SILFAB SOLAR SIL-430 QD
RATED POWER (PMAX) (W DC)	430
MAXIMUM POWER VOLTAGE (VMP DC)	33.25
MAXIMUM POWER CURRENT (IMP DC)	12.93
OPEN CIRCUIT VOLTAGE (VOC DC)	38.91
SHORT CIRCUIT CURRENT (ISC DC)	13.87
PMP/VMP TEMP. COEFFICIENT	-0.29
VOC TEMP. COEFFICIENT	-0.24
SERIES FUSE RATING (A DC)	25
ADJ. MODULE VOC @ ASHRAE LOW TEMP (°C)	42.0
ADJ. MODULE VMP @ ASHRAE 2% AVG. HIGH TEMP (°C)	28.9

INVERTER(S) SPECIFICATIONS

INVERTER(S) SPECIFICATIONS	ENPHASE IQ8MC-72-M-US
TYPE	MICROINVERTER
MAX. OR RECOMMENDED MODULE POWER (W)	460
MAXIMUM INPUT DC OPEN-CIRCUIT VOLTAGE (VOC)	60
MINIMUM START VOLTAGE (V)	22
MAXIMUM DC START VOLTAGE(V)	58
MAXIMUM INPUT CURRENT (ISC) (A)	20
MAX CONTINUOUS OUTPUT POWER (VA)	320
MAX. CONTINUOUS OUTPUT CURRENT (A)	1.33
NOMINAL (L-L) OUTPUT VOLTAGE	240
CEC WEIGHTED EFFICIENCY (%)	97.0%

SYSTEM ELECTRICAL SPECIFICATIONS

SYSTEM ELECTRICAL SPECIFICATIONS	CIR 1	CIR 2
NUMBER OF MODULES PER CIRCUIT	8	8
DC POWER RATING PER CIRCUIT (STC)(W DC)	3440	3440
TOTAL MODULE QUANTITY	16 PV MODULES	
STC DC POWER RATING OF ARRAY	6880W DC	
INVERTER OUTPUT CIRCUIT CURRENT(A AC)	10.64	10.64
125% INVERTER OUTPUT CIRCUIT CURRENT(A AC)	13.3	13.3
CIRCUIT OCPD RATING (A)	15	15
COMBINED INV. CONT. OUTPUT CURRENT x 125% (A AC)	26.6	
PV POWER PRODUCTION SYSTEM OCPD RATING (A)	30	
MAX. ARRAY STC-AC POWER (W)	5120	
MAX. ARRAY CEC-AC POWER (W)	4982	

AC VOLTAGE RISE CALCULATIONS

AC VOLTAGE RISE CALCULATIONS	DIST (FT)	COND.	VRISE(V)	VEND(V)	%VRISE	
VRISE SEC. 1 (MICRO TO JBOX) *	28.8	12 Cu.	1.2	241.2	0.51%	
VRISE SEC. 2 (JBOX TO COMBINER BOX)	80	12 Cu.	3.4	243.4	1.42%	
VRISE SEC. 3 (COMBINER BOX TO POI)	16	10 Cu.	0.8	240.8	0.34%	
TOTAL VRISE			5.4	245.4	2.27%	OK

* 8 MICROINVERTER MAX SUB-BRANCH CIRCUIT SIZE TO COMPLY WITH VRISE CALCULATIONS.

RACEWAY / CONDUCTOR CALCULATIONS

MICROINV. TO JUNCTION BOX (1)

MAX INVERTER OUTPUT CIRCUIT CURRENT = 10.6 A AC
CONDUCTOR SIZE / INSULATION / TYPE = 12 AWG 2C, TC-ER, CU.
CONDUCTOR AMP. RATING @ 90°C = 30 A

PER NEC 690.8(B)(1)(W/OUT CORRECTION FACTORS)
MAX INVERTER OUTPUT CURRENT X125%= 13.3 A AC

PER NEC 690.8(B)(2)(WITH CORRECTION FACTORS)
AMB. TEMP. AMP. CORRECTION = 0.91
OF CONDUCTORS IN RACEWAY CORRECTION = 1.0
ADJUSTED CONDUCTOR AMPACITY (A) = 27.3 A AC

LARGER AMPACITY OF 690.8(B)(1) OR (B)(2) = 13.3 < 27.3
(B)(1) - W/OUT CORRECTION FACTORS
LARGER AMPACITY COMPLIANCE = 30.0 > 13.3 OK

RACEWAY SIZE / TYPE = 1 1/4 IN. EMT OR NO RACEWAY
CONDUCTOR(S) / CABLE(S) CROSS-SECTION AREA (IN.^2) = 0.311 IN.2
CROSS-SECTIONAL AREA OF RACEWAY(IN.^2) = 1.496 IN.2
% ALLOWABLE RACEWAY FILL (NEC CH. 9, TBL 1) = 40% > 21% OK

JUNCTION BOX TO JUNCTION BOX (2)

MAX INVERTER OUTPUT CIRCUIT CURRENT = 10.6 A AC
CONDUCTOR SIZE / INSULATION / TYPE = 12 AWG 2C, NM-B W/G, CU.
CONDUCTOR AMP. RATING @60°C = 20 A

PER NEC 690.8(B)(1)(W/OUT CORRECTION FACTORS)
MAX INVERTER OUTPUT CURRENT X125%= 13.3 A AC

PER NEC 690.8(B)(2)(WITH CORRECTION FACTORS)
AMB. TEMP. AMP. CORRECTION = 0.82
OF CONDUCTORS IN RACEWAY CORRECTION = 1.0
ADJUSTED CONDUCTOR AMPACITY (A) = 16.4 A AC

LARGER AMPACITY OF 690.8(B)(1) OR (B)(2) = 13.3 < 16.4
(B)(1) - W/OUT CORRECTION FACTORS
LARGER AMPACITY COMPLIANCE = 20.0 > 13.3 OK

RACEWAY SIZE / TYPE = CABLE

JUNCTION BOX TO COMBINER BOX (3)

MAX INVERTER OUTPUT CIRCUIT CURRENT = 10.6 A AC
CONDUCTOR SIZE / INSULATION / TYPE = 12 AWG THHN / THWN-2, CU.
CONDUCTOR AMP. RATING @75°C = 20 A

PER NEC 690.8(B)(1)(W/OUT CORRECTION FACTORS)
MAX INVERTER OUTPUT CURRENT X125%= 13.0 A AC

PER NEC 690.8(B)(2)(WITH CORRECTION FACTORS)
AMB. TEMP. AMP. CORRECTION = 0.88
OF CONDUCTORS IN RACEWAY CORRECTION = 0.8
ADJUSTED CONDUCTOR AMPACITY (A) = 14.1 A AC

LARGER AMPACITY OF 690.8(B)(1) OR (B)(2) = 13.0 < 14.1
(B)(1) - W/OUT CORRECTION FACTORS
LARGER AMPACITY COMPLIANCE = 20.0 > 13.0 OK

RACEWAY SIZE / TYPE = 3/4 IN. EMT
CONDUCTOR(S) / CABLE(S) CROSS-SECTION AREA (IN.^2) = 0.067 IN.^2
CROSS-SECTIONAL AREA OF RACEWAY(IN.^2) = 0.533 IN.^2
% ALLOWABLE RACEWAY FILL (NEC CH. 9, TBL 1) = 40% > 12% OK

COMBINER BOX TO MAIN PV OCPD (10)

COMBINED INVERTER CONTINUOUS OUTPUT CURRENT = 21.3 A AC
CONDUCTOR SIZE / INSULATION / TYPE = 10 AWG THHN / THWN-2, CU.
CONDUCTOR AMP. RATING @75°C = 35 A

PER NEC 690.8(B)(1)(W/OUT CORRECTION FACTORS)
MAX COMBINED INVERTER CONT. OUTPUT CURRENT X125% = 27.0 A AC

PER NEC 690.8(B)(2)(WITH CORRECTION FACTORS)
AMB. TEMP. AMP. CORRECTION = 0.88
OF CONDUCTORS IN RACEWAY CORRECTION = 1.0
ADJUSTED CONDUCTOR AMPACITY (A) = 30.8 A AC

LARGER AMPACITY OF 690.8(B)(1) OR (B)(2) = 27.0 < 30.8
(B)(1) - W/OUT CORRECTION FACTORS
LARGER AMPACITY COMPLIANCE = 35.0 > 27.0 OK

RACEWAY SIZE / TYPE = 3/4 IN. EMT
CONDUCTOR(S) / CABLE(S) CROSS-SECTION AREA (IN.^2) = 0.084 IN.^2
CROSS-SECTIONAL AREA OF RACEWAY(IN.^2) = 0.533 IN.^2
% ALLOWABLE RACEWAY FILL (NEC CH. 9, TBL 1) = 40% > 16% OK

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

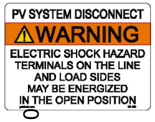
NABCEP BOARD CERTIFIED
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
#PV-011719-015866
EXP. 3-17-2025

ION DEVELOPER
DAVID STANLEY CONRAD
C - ELECTRICAL CONTRACTOR
C1524

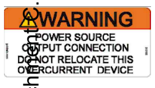
ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID: 00FEGW
SITE OWNER: DUSTAN E JOHNSON
SITE ADDRESS: 326 6TH AVENUE SW
ALBANY, OREGON 97321-0509
EQUIP.: (16) SILFAB SOLAR SIL-430 QD
(16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE: 6.88KW DC
5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER: JOHN MANALO
DATE: 08-MAY-2025
SHEET NAME: ELECTRICAL CALCULATIONS
SHEET #: E-8
REV: 0

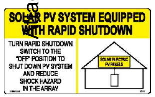
ELECTRICAL FIELD-APPLIED HAZARD MARKINGS



A — FOR EACH PV DISCONNECTING MEANS WHERE ALL TERMINALS OF THE DISCONNECTING MEANS MAY BE ENERGIZED IN THE OPEN POSITION.
[NEC 690.13(B), NEC 690.56, NEC 705.20]



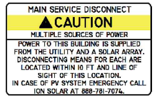
B — PLACED ADJACENT TO PV SYSTEM PLUG-IN TYPE BREAKER TO A BUSBAR FOR A LOAD SIDE CONNECTION.
[NEC 705.12(B)(2)]



C — FOR ELECTRICAL SERVICES CONNECTED TO PV SYSTEM. SIGN TO BE LOCATED AT EACH SERVICE EQUIPMENT LOCATION.
[NEC 690.12]

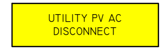
D — FOR RAPID SHUTDOWN SWITCH INITIATION DEVICE LOCATED AT A READILY ACCESSIBLE OUTDOOR LOCATION. CAN BE THE SYSTEM PLUG-IN TYPE BREAKER OR A SAFETY SWITCH.
[NEC 690.12]

H — FOR WIRING METHODS CONTAINING DC PV CIRCUITS (NOT TO BE CONFUSED WITH AC PV CIRCUITS). TO BE PLACED ON JUNCTION BOXES AND ALONG RACEWAYS NO GREATER THAN 10 FT. [NEC 690.12]



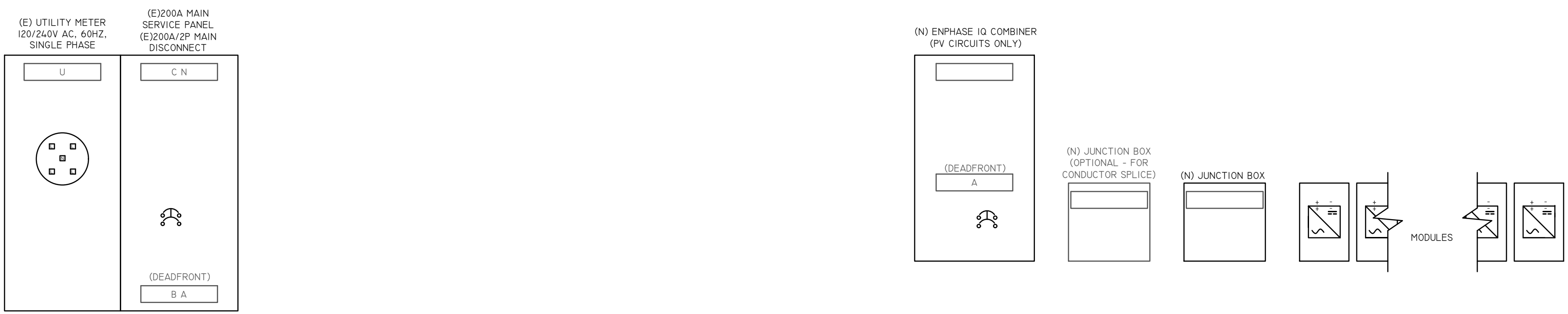
N — PERMANENT DIRECTORY TO BE LOCATED AT MAIN SERVICE EQUIPMENT LOCATION IF ALL ELECTRICAL POWER SOURCE DISCONNECTING MEANS (SOLAR ARRAY RAPID SHUTDOWN SWITCH) ARE GROUPED AND IN LINE OF SITE OF MAIN SERVICE DISCONNECTING MEANS. [NEC 690.56(C) & NEC 705.10].

R — LOCATED AT ANY NEW SERVICE DISCONNECTING MEANS, AND AT THE FIRST PV DISCONNECT IF SYSTEM INTERCONNECTED VIA SUPPLY SIDE TAP.
[NEC 230.85(C), (E), & NEC 705.11 (D)]



T — LOCATED ON EXTERIOR, NON-REMOVEABLE PORTION OF THE UTILITY A/C DISCONNECT (BLACK LETTERS, YELLOW BACKGROUND).
[UTILITY SPECIFIC PLACARD] MADE OF WEATHERPROOF & DURABLE MATERIAL SUCH AS HARD PLASTIC OR METAL PERMANENTLY ATTACHED WITH SCREWS OR RIVETS
AT LEAST 1-1/2" HIGH BY 3" WIDE WITH ARIAL BOLD FONT

U — LOCATED ON EXTERIOR, NON-REMOVEABLE PORTION OF THE EXISTING UTILITY METER SOCKET (BLACK LETTERS, YELLOW BACKGROUND).
[UTILITY SPECIFIC PLACARD] MADE OF WEATHERPROOF & DURABLE MATERIAL SUCH AS HARD PLASTIC OR METAL PERMANENTLY ATTACHED TO THE METER SOCKET WITH SCREWS OR RIVETS
AT LEAST 1-1/2" HIGH BY 3" WIDE WITH ARIAL BOLD FONT



ALL CAUTION, WARNING, OR DANGER SIGNS OR LABELS SHALL:
1. COMPLY WITH ANSI Z535.4-2011 STANDARDS.
2. BE PERMANENTLY AFFIXED TO THE EQUIPMENT OR WIRING METHOD AND SHALL NOT BE HANDWRITTEN.
3. SHALL BE OF SUFFICEINT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED.
4. UNLESS OTHERS SPECIFIED MINIMUM TEXT HEIGHT TO BE $\frac{1}{8}$" (3MM).

STRUCTURAL UPGRADES REQUIRED.
SEE PAGE S-4 FOR DETAILS.

NABCEP BOARD CERTIFIED
PV INSTALLATION PROFESSIONAL
SCOTT A. GURNEY
PV-011719-015866
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ION DEVELOPER
DAVID STANLEY CONRAD
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C1524

ION SOLAR
44 E 800 N
OREM, UTAH 84057
888.781.7074

PROJECT ID	00FEGW
SITE OWNER	DUSTAN E JOHNSON
SITE ADDRESS	326 6TH AVENUE SW ALBANY, OREGON 97321-0509
EQUIP.	(16) SILFAB SOLAR SIL-430 QD (16) ENPHASE IQ8MC-72-M-US
SYSTEM SIZE	6.88KW DC 5.12KW STC-AC, 4.982KW CEC-AC
PROJECT DESIGNER	JOHN MANALO
DATE	08-MAY-2025
SHEET NAME	ELECTRICAL LABELS
SHEET #	E-10
REV	0