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7-12-2024

**CITY OF ROSEBURG
HISTORIC RESOURCE REVIEW COMMISSION
Wednesday, July 17, 2024
Roseburg City Hall, Council Chambers – 4:00 p.m.**

Public Access: - Facebook Live at www.Facebook.com/CityofRoseburg

AGENDA

1. **CALL TO ORDER**
2. **ROLL CALL**

Chair Kylee Rummel	Marilyn Aller	James DeLap	Lisa Gogal
Bentley Gilbert	Stephanie Giles	Nick Lehrbach	
3. **APPROVAL OF MINUTES**
 - A. Minutes June 19, 2024. Please see attached minutes document.
4. **AUDIENCE PARTICIPATION: Comments can be provided by email or hand delivered. Please see information on the reverse.**
5. **BUSINESS FROM STAFF**
 - A. **Historic Resource Review HR-24-013** (Mark Moffett, staff). Exterior alterations to the (1902) Douglas County Creamery #1 building in the Roseburg Downtown Historic District at 338 SE Jackson Street, including new exterior walls and openings at the rear of the structure.
 - B. **Historic Resource Review HR-24-016** (Mark Moffett, staff). Rooftop solar panel installation on the (1925) Dr. Earl B. Stewart House at 839 SE Chadwick Street.
6. **BUSINESS FROM THE COMMISSION**
7. **NEXT MEETING – August 21, 2024**
8. **ADJOURNMENT**

The agenda packet is available on-line at:
<http://www.cityofroseburg.org/your-government/commissions/historic-resource-review/>

AMERICANS WITH DISABILITIES ACT NOTICE

Please contact the office of the City Recorder, Roseburg City Hall, 900 SE Douglas Avenue, OR 97470 (Phone 541-492-6700) at least 48 hours prior to the scheduled meeting time if you need an accommodation. TDD users please call Oregon Telecommunications Relay Service at 1-800-735-2900.

CITIZEN PARTICIPATION

Comments can be provided via email to the Commission at cdd@roseburgor.gov or hand delivered to City Hall, 900 SE Douglas Avenue in Roseburg, prior to 12:00 p.m. on July 17, 2024. Comments must include the person's name and address, including whether or not they are a resident of the City of Roseburg, for the record. The Commission reserves the right to delay any action requested until they are fully informed on the matter.

The Community Development Director will provide any comments received prior to 12:00 p.m. on July 17, 2024 to the Commission and will be read into the record during the meeting.

For further details or information please contact the Community Development Department Monday through Friday, 8:00 a.m. to 5:00 p.m., at Roseburg City Hall, 900 SE Douglas Avenue, Third Floor, Roseburg OR 97470, phone number 541-492-6750, or e-mail kmartin@roseburgor.gov.

CITY OF ROSEBURG
HISTORIC RESOURCE REVIEW COMMISSION MINUTES
June 19, 2024

CALL TO ORDER – Chair Kylee Rummel called the meeting of the Historic Resource Review Commission to order at 4:00 p.m. in the Roseburg City Hall Council Chambers.

ROLL CALL - Present: Chair Kylee Rummel, Commissioners Jim DeLap, Stephanie Giles, Nick Lehrbach

Absent: Commissioners Marilyn Aller, Lisa Gogal and Bentley Gilbert

Others Present: Senior Planner Mark Moffett, Department Technician Kristin Martin

Others in the audience: None

Commissioner Jim DeLap moved to approve the minutes of the May 15, 2024 meeting as submitted. The motion was seconded by Commissioner Nick Lehrbach and approved with the following votes: Chair Rummel and Commissioners DeLap, Giles, and Lehrbach voted yes. No one voted no.

PUBLIC HEARING –

Chair Rummel read the procedures for the public hearing, opened the public hearing and asked for the staff reports.

Historic Resource Review HR-24-008 (Mark Moffett, staff). Exterior alterations to the historic Stewart Park Drive Bridge in the Roseburg Veterans Administration Hospital Historic District.

No exparte contact or conflict of interest was declared by the Commissioners.

Moffett provided the staff report. Staff found that the guidelines for the exterior remodeling or alteration of a historic resource at RMC 12.04.110(G) could be met for this project to be approved. Based on the information provided by the applicant and the findings in this report, staff recommends that the Historic Resource Review Commission approve this proposal.

Chair Rummel asked if the size of the bridge was going to be increased during the process. Moffett stated that there would be neither expansion nor increase in size of the bridge as a result of the alteration process.

Public hearing was closed and there were no further questions or discussion.

*Commissioner Nick Lehrbach moved to adopt the proposed Findings of Fact and Order to **approve** Historic Resource Review Application #HR-24-008 for alterations to the historic Stewart Park Drive Bridge located in the Roseburg Veteran's Administration Hospital Historic District. The motion was seconded by Commissioner Jim DeLap. Chair Rummel and Commissioners DeLap, Giles, and Lehrbach voted yes. No one voted no.*

BUSINESS FROM COMMISSION – None

ADJOURNMENT – The meeting adjourned at 4:07 p.m. The next Historic Resource Review Commission meeting is scheduled for July 17, 2024.

A handwritten signature in black ink that reads "Kristin Martin". The script is cursive and fluid, with the first name and last name clearly distinguishable.

Kristin Martin
Department Technician



CITY OF ROSEBURG HISTORIC RESOURCE REVIEW COMMISSION AGENDA ITEM REPORT

HRRC Review No. HR-24-013**Meeting Date: Jul. 17, 2024**

Prepared for: Historic Resource Review Commission
Staff Contact: Mark Moffett, Senior Planner
Request: Historic Review Alteration Request at 338 SE Jackson Street.

APPLICATION SUMMARY:

James Walker, property owner and applicant, requests historic resource review approval to make exterior changes to an historic building at 338 SE Jackson Street in the Roseburg Downtown Historic District. The applicant enclosed and added windows to a previously second floor screen porch on the rear of the building, including enclose of both lower floors under the old screen porch, without benefit of the required historic site review and building permit. New exterior walls with windows and siding are proposed at the rear of the building and will impact the south side, east rear, and north side elevations. Exterior work includes framing new walls and openings, adding horizontal hardi plank siding, white vinyl windows, solid doors, a cedar trim board between the basement level and first floor, and faux board and batten siding at the basement level. The primary street-facing façade along Jackson Street and the majority of the front portion of the building on both sides are not being altered at this time.

CONCLUSION/RECOMMENDATION:

Guidelines for alterations to historic resources at RMC 12.04.110.G must be met for this project to be approved. Unfortunately, this project was largely completed without benefit of having an opportunity to review the removal of the original second story rear screen porch, and the new space was already largely enclosed at the time of application. The proposal is generally able to meet the relevant historic guidelines, and staff is recommending approval. However, Commission may wish to discuss the appropriateness of adding horizontal vinyl window openings with a slider mechanism as opposed to the vertical fixed windows found elsewhere on the building. Staff would support a condition of approval at the request of Commissioners to replace the horizontal sliders with two side-by-side hung windows in the new window openings to better match the historic design and appearance of the building, but is also willing to approve the project as submitted.

Therefore, and based on the above findings, the Historic Resource Review Commission **CONDITIONALLY APPROVES** Historic Resource Review application #HR-24-013 for alterations to the historic Douglas County Creamery Building #1 at 338 SE Jackson Street, as depicted in the plans attached to this report, subject to the following condition of approval:

1. Any significant deviation from this approval shall be re-reviewed by the City of Roseburg Community Development Department and Historic Resource Review Commission prior to approval.

SUGGESTED MOTION:

BASED ON THE PROPOSED STAFF FINDINGS, CONCLUSION AND CONDITION OF APPROVAL, THE HISTORIC RESOURCE REVIEW COMMISSION CONDITIONALLY APPROVES HISTORIC RESOURCE REVIEW APPLICATION #HR-24-013 FOR ALTERATIONS TO THE HISTORIC DOUGLAS COUNTY CREAMERY BUILDING #1 AT 338 SE JACKSON STREET, PER THE PLANS SUBMITTED BY THE APPLICANT.

**IN THE MATTER OF THE REQUEST
FOR PROJECT APPROVAL AT 338 SE JACKSON STREET**

**BEFORE THE ROSEBURG HISTORIC RESOURCE REVIEW COMMISSION
ORDER OF APPROVAL**

I. NATURE OF APPLICATION

James Walker, property owner and applicant, requests historic resource review approval to make exterior changes to an historic building at 338 SE Jackson Street in the Roseburg Downtown Historic District. The applicant enclosed and added windows to a previously second floor screen porch on the rear of the building, including enclose of both lower floors under the old screen porch, without benefit of the required historic site review and building permit. New exterior walls with windows and siding are proposed at the rear of the building and will impact the south side, east rear, and north side elevations. Exterior work includes framing new walls and openings, adding horizontal hardi plank siding, white vinyl windows, solid doors, a cedar trim board between the basement level and first floor, and faux board and batten siding at the basement level. The primary street-facing façade along Jackson Street and the majority of the front portion of the building on both sides are not being altered at this time.

II. HISTORIC RESOURCE REVIEW COMMISSION HEARING

A public hearing was held on the application before the Roseburg Historic Resource Review Commission on July 17, 2024. During that hearing, the Commission reviewed historic application number HR-24-013 and it was made part of the record.

III. FINDINGS OF FACT

A. EXISTING CONDITIONS

- i. The Historic Resource Review Commission takes official notice of the Roseburg Urban Area Comprehensive Plan adopted by City Council Ordinance No. 2980 on December 9, 1996 and of the Roseburg Municipal Code Ordinance No. 3497, as originally adopted March 12, 2018, as both may have been amended from time-to-time.
- ii. The subject site may be described as Township 27 South, Range 05 West, Section 19BB, Tax Lot 05600, Willamette Meridian; R68526.
- iii. The property is zoned C3 (General Commercial) and includes a small area at the northeast corner of the property, along the alley frontage by the parking and not underneath or near the building, where some Floodplain Overlay is located. The site is within the Roseburg Downtown Historic District.
- iv. The site has an existing two-story commercial building with basement, with a two-story façade facing SE Jackson Street, and a basement level exposed on the rear alley-facing façade that drops down below the grade of the sidewalk along Jackson Street. A separate detached cottage is located behind the building along the alley, and the northern portion of the site is developed with an informal parking lot.

- v. The building was constructed in 1902 and is identified in historic district documents as the “Douglas County Creamery Building #1”, but currently is used as a residential fourplex. The building is listed as a Primary Contributing structure to the district. The building has a “full 2-tiered veranda” facing SE Jackson Street with turned posts, and an attractive original cornice facing the street above a hip roof over the veranda. The primary building walls excluding the new enclosed addition on the rear are covered in non-original horizontal Masonite siding with wood window trim. The building is in relatively fair to poor condition, with the woodwork, cornice and trim pieces fully unpainted in many places, and some of the window glazing on the south side wall are actually detached from the window sashes. Non-original wood railings and new vertical porch posts have been added to the veranda over time. An exterior stairway climbs up to the second story on the north elevation. Windows are generally 1-over-1 double-hung and fixed. The original street-facing cornice sits above an intact frieze board and large dentils. Image below is from the 1983 city historic inventory document.



- vi. The Douglas County Creamery #1 is the only wood-frame creamery building still standing in Roseburg. The Creamery began commercial operation in May, 1902. It was originally owned by Gaddis and Gardner, the manager and operator, respectively. The Creamery sold approximately 800 pounds of butter per week. The company was purchased by Richard Willett and George Chandler, with Willett serving as the butter maker for approximately nine years. Chandler had just relocated to Roseburg from Minton, Nevada. Douglas County Creamery moved from this structure to a cast concrete building at the southwest corner of Douglas and Jackson Streets sometime between 1912 and 1920. The Sanborn Insurance Company Map of Roseburg showed the creamery had moved to the new building in 1912, but informants for the area interviewed in 1983 believe the company actually moved in 1920.

- vii. The applicant was originally submitted on April 12, 2024, and an incomplete letter was sent on May 3, 2024. Supplemental information was submitted by the applicant on June 14th, 18th and 19th,

2024.

B. SITE PHOTOS

Included below are images of the building were taken by staff on February 5, 2024.

Image below shows the work area at the rear of the building under consideration in this review. View looking northeast from the alley towards the structure.



Image below shows the work area at the rear of the building under consideration in this review. View looking southeast from the alley towards the structure.



C. AGENCY COMMENTS

Staff from the Roseburg Public Works Department, Roseburg Fire Department, and the Roseburg Urban Sanitary Association have reviewed the proposal and responded with recommendations of approval. There were no significant comments or objections from the Fire Department and RUSA. The Roseburg Public Works Department will require, consistent with regulations in the Roseburg Municipal Code (RMC) at 12.06.020.E.3, that the sidewalks and curbing along SE Jackson Street be brought into conformance with the RMC. Specifically, there are multiple trip hazards in the sidewalk abutting the property, with any gaps ¼" or taller or ½" or wider be repaired, and there is a section of sidewalk that looks like an old driveway approach that will also need to be fixed. A separate individual work permit from the Public Works Department will be required for this work. In addition, additional charges are being added to the storm water billing for this property in recognition that there are four dwelling units at the site, not the three units previously identified in city records for the property.

D. ANALYSIS

As a contributing resource, exterior alterations to the building require consideration before the Historic Resource Review Commission (HRRC) prior to approval, with publication of a staff report before the hearing. The appropriate guidelines are those found at RMC 12.04.110.G.1-7.

The applicant has the burden of proof to show that all the relevant historic review guidelines have been met, and that the proposal complies with all applicable criteria of the Roseburg Municipal Code (RMC 12.10.010.O.1.a).

E. APPLICANT STATEMENT

The applicant has submitted drawings and written statements in support of the application. Although the drawings are not technically detailed elevations showing the proposed layout of exterior siding and trim, basic dimensions and material notes have been provided. The applicant has measured the vertical reveal of the existing Masonite siding and horizontal belly band between the first floor and basement, and intends to mimic those dimensions on the new siding for the addition at the rear. Specifically, 1" x 8" horizontal hardi plank siding will be used on the addition at the upper two floors, 1" x 6" cedar window and door trim will be provided at all new openings, and a 1" x 10" cedar board will be applied in alignment with the existing belly band on the original facades between the first floor and basement. The basement area of the addition will be enclosed with plywood and added 1" x 3" battens to create a board-and-batten appearance consistent with existing basement siding on the north-facing basement façade.

F. REVIEW CRITERIA: RMC 12.04.110.G.1-7: EXTERIOR ALTERATIONS/ADDITIONS TO HISTORIC RESOURCES

This section applies to all contributing, significant, primary, historic, eligible or similarly classified historic resources. Affirmative findings shall be documented addressing the following guidelines based upon their relative importance.

1. Retention of original construction. All original exterior materials and details shall be preserved to the maximum extent possible.

Findings for 1: The original second-story screen porch on the back of the building was removed and replaced with newer balloon-frame wood construction, some new exterior vinyl windows, and also some exterior plywood sheathing around part of the new construction (see photos in section B, above). Enclosing exterior space underneath the existing roof is in keeping with the original general massing of the building, but aside from the prior screen porch walls and screen window openings there are no impacts to the original construction. Although it is unfortunate that this prior historic

material was removed, it has been destroyed by the owner/applicant and is no longer available to be restored in place. Because it is no longer possible to preserve the original screen porch, this criterion is met.

2. Height. Additional stories may be added to historic building and zoning codes.
 - a. The added height complies with requirements of the building and zoning codes.
 - b. The added height does not exceed that which was traditional for the style of the building.
 - c. The added height does not alter the traditional scale and proportions of the building style.
 - d. The added height is visually compatible with adjacent historic resources.

Findings: There are no changes proposed to the height of the building. Therefore, this guideline is not relevant to the current proposal.

3. Bulk. Horizontal additions may be added to historic buildings provided that:
 - a. The bulk of the additions do not exceed that which was traditional for the building style.
 - b. The addition maintains the traditional scale and proportion of the building style.
 - c. The addition is visually compatible with adjacent historic resources.

Findings: The proposed additions at the rear of the building fall underneath the footprint of the original historic roof structure, although the new enclosure of the lower two floors beneath the old screen porch are technically horizontal additions. As the new enclosed areas fall underneath the historic roofline, the additions do not exceed that which was traditional for this traditional, rectangular building style. The new enclosed area at the back of the building generally maintains the traditional scale and proportion of multi-story historic commercial building styles. By applying horizontal siding and a belly band on the upper most visually prominent floors that mimic the reveal and dimensions of the existing siding elsewhere on the building, the addition is visually compatible with the current building and others nearby. Therefore, based on the submitted drawings and materials details, this guideline is met.

4. Visual Integrity of Structure. The lines of columns, piers, spandrels, and other primary structural elements shall be maintained so far as is practicable.

Findings: The visual integrity of the structure on the existing structure has been compromised by additions to the front veranda and porch railings that are of a utilitarian and contemporary design, but the current proposal involves only new enclosed space at the rear. As a balloon frame building with horizontal siding and trimmed window and door openings, the rear addition will generally maintain the existing primary visual design of the existing structure. There are no prominent exterior columns, piers, spandrels or other significant structural elements that are being modified, except for the screen porch support piers that are now enclosed with walls below the top floor. As far as is practicable, the visual integrity of the structure remains intact in the area of the addition and this guideline can be met.

5. Scale and Proportion. The scale and proportion of altered or added building elements, the relationship of voids to solids (window to wall) shall be visually compatible with traditional architectural character of the historic building.

Findings for 5 and 6: The window to wall relationship in the added building area at the rear of the building uses simple vertical door openings that are in keeping with the historic architectural character of the building. The new window openings are horizontal in orientation and proportion, whereas the existing structure includes primarily vertical window openings. However, there are large fixed horizontal window openings on each of the original side facades, so a horizontal window opening itself is not unprecedented on the building. The slider-type vinyl windows that are proposed are a significant design departure from the hung and fixed windows on the intact historic openings of the building, and the thinner sash design is a departure from the wood windows and doors found

elsewhere, which feature thicker sashes and muntins than are proposed with the addition. However, the rear of the building originally featured a screen porch with thin-framed screen windows. Applying compatible trim, siding and a matching belly band between the basement and first floor will help increase the visual compatibility of the addition. Although the new windows themselves are not ideal in this regard, and will stick out visually to the keen observer, these features are already in place and the rear portion of the building occupies secondary facades that are not immediately visible from the street, but mostly only from the alley. This guideline is met.

6. **Materials and Texture.** In-kind materials and textures shall be used in the alteration or addition of historic resources. Exterior alteration or addition shall follow the requirements of the Secretary of Interior's Standards for Historic Preservation Projects and the Historic Preservation League of Oregon's Rehab Oregon Right manual.

Findings for 5 and 6: The window to wall relationship in the added building area at the rear of the building uses simple vertical door openings that are in keeping with the historic architectural character of the building. The new window openings are horizontal in orientation and proportion, whereas the existing structure includes primarily vertical window openings. However, there are large fixed horizontal window openings on each of the original side facades, so a horizontal window opening itself is not unprecedented on the building. The slider-type vinyl windows that are proposed are a significant design departure from the hung and fixed windows on the intact historic openings of the building, and the thinner sash design is a departure from the wood windows and doors found elsewhere, which feature thicker sashes and muntins than are proposed with the addition. However, the rear of the building originally featured a screen porch with thin-framed screen windows. Applying compatible trim, siding and a matching belly band between the basement and first floor will help increase the visual compatibility of the addition. Although the new windows themselves are not ideal in this regard, and will stick out visually to the keen observer, these features are already in place and the rear portion of the building occupies secondary facades that are not immediately visible from the street, but mostly only from the alley. This guideline is met.

7. **Signs, lighting, and other appurtenances.** Signs, exterior lighting, and other appurtenances, such as walls, fences, awnings, and landscaping shall be visually compatible with the traditional architectural character of the historic resource.

Findings for 2 and 3: There are no changes to signs, lighting and other appurtenances with this application. Therefore, this guideline does not apply.

IV. CONCLUSION

Guidelines for alterations to historic resources at RMC 12.04.110.G must be met for this project to be approved. Unfortunately, this project was largely completed without benefit of having an opportunity to review the removal of the original second story rear screen porch, and the new space was already largely enclosed at the time of application. The proposal is generally able to meet the relevant historic guidelines, and staff is recommending approval. However, Commission may wish to discuss the appropriateness of adding horizontal vinyl window openings with a slider mechanism as opposed to the vertical fixed windows found elsewhere on the building. Staff would support a condition of approval at the request of Commissioners to replace the horizontal sliders with two side-by-side hung windows in the new window openings to better match the historic design and appearance of the building, but is also willing to approve the project as submitted.

Therefore, and based on the above findings, the Historic Resource Review Commission **CONDITIONALLY APPROVES** Historic Resource Review application #HR-24-013 for alterations to the historic Douglas County Creamery Building #1 at 338 SE Jackson Street, as depicted in the plans attached to this report, subject to the following condition of approval:

2. Any significant deviation from this approval shall be re-reviewed by the City of Roseburg Community Development Department and Historic Resource Review Commission prior to approval.

V. ORDER

Based on the proposed staff findings, conclusion and condition of approval, the Historic Resource Review Commission **CONDITIONALLY APPROVES** Historic Resource Review Application #HR-24-013 for alterations to the historic Douglas County Creamery Building #1 at 338 SE Jackson Street, per the plans submitted by the applicant.

Stuart Cowie, Community Development Director

Date

Kylee Rummel, Historic Resource Review Commission Chair

Date

Historic Resource Review Commission Members:

Kylee Rummel, Chair
Bentley Gilbert

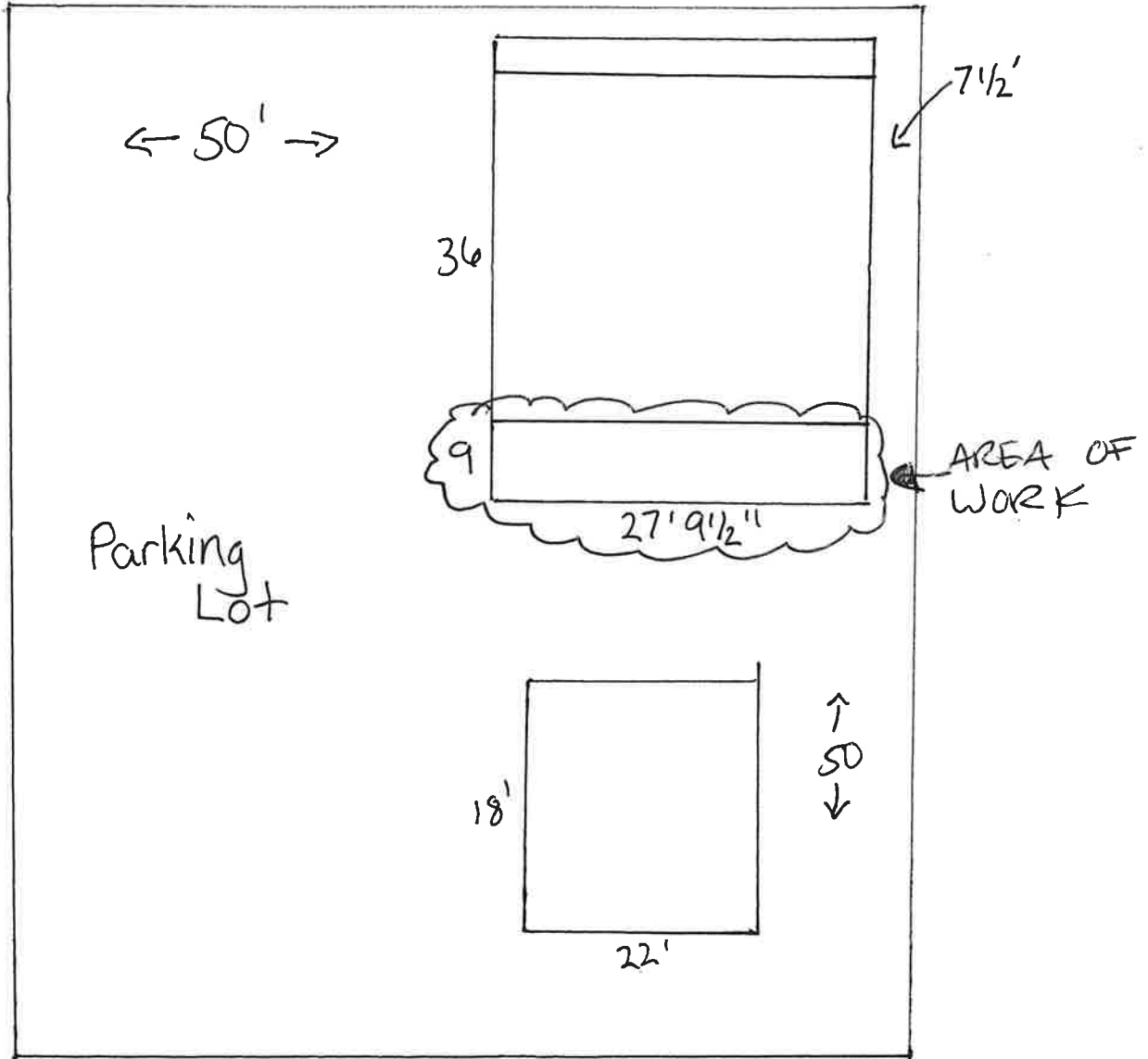
Lisa Gogal, Vice Chair
Nick Lehrbach

Marilyn Aller
Stephanie Giles

James De Lap

ATTACHED: Site Plan
First Floor Plan
Second Floor Plan
South and North Elevations
East Elevation
Floor Framing Details
Wall Framing Details

Jackson st



100'

Parking Lot

36

9

27' 9 1/2"

7 1/2'

AREA OF WORK

18'

22'

↑ 50 ↓

Alley 100'

SITE PLAN

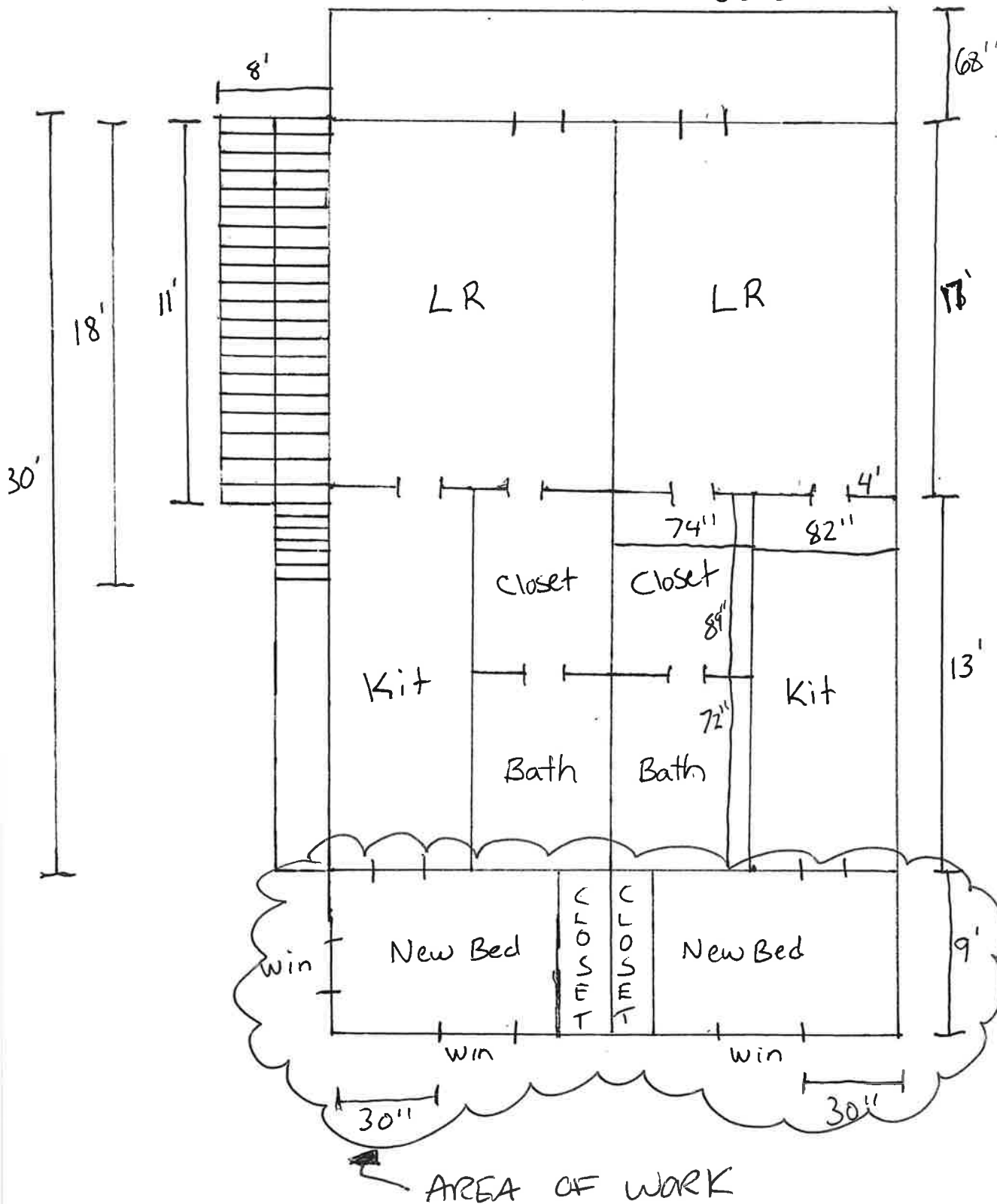
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NOT TO SCALE

HR-24-013

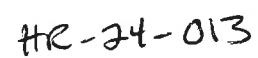
1st Floor

26' Jackson St.



HR-24-013

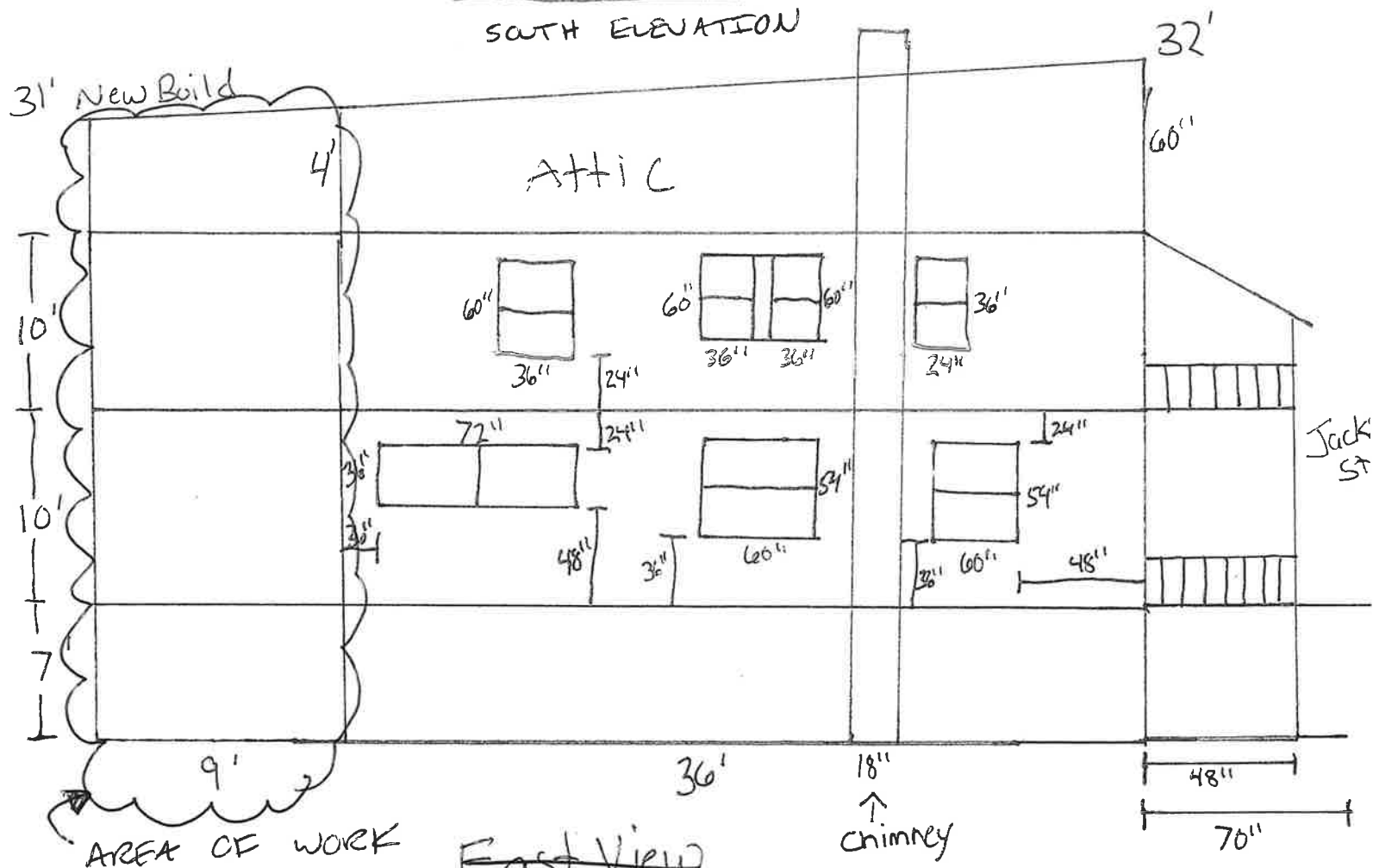
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~~West View~~

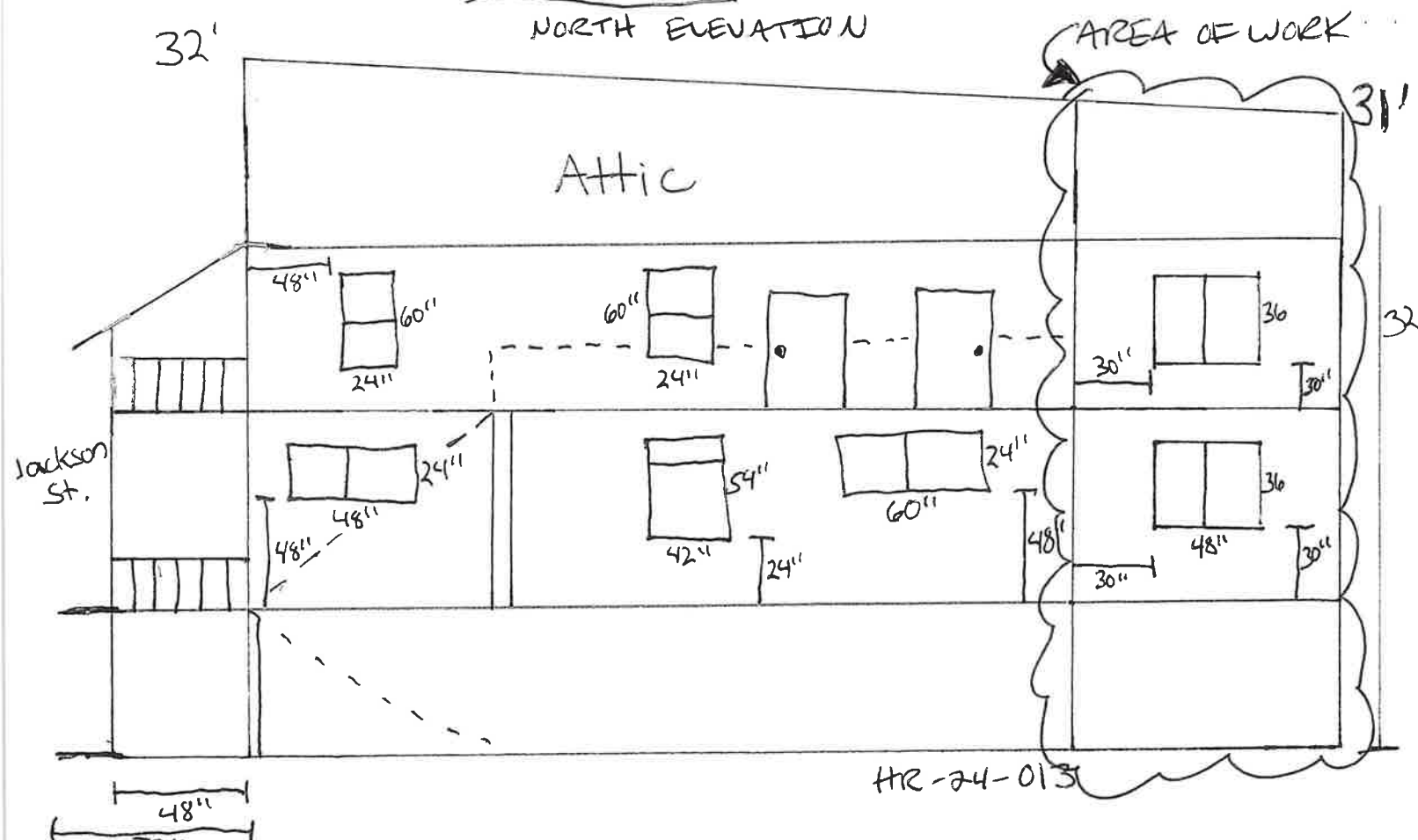
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SOUTH ELEVATION



~~East View~~

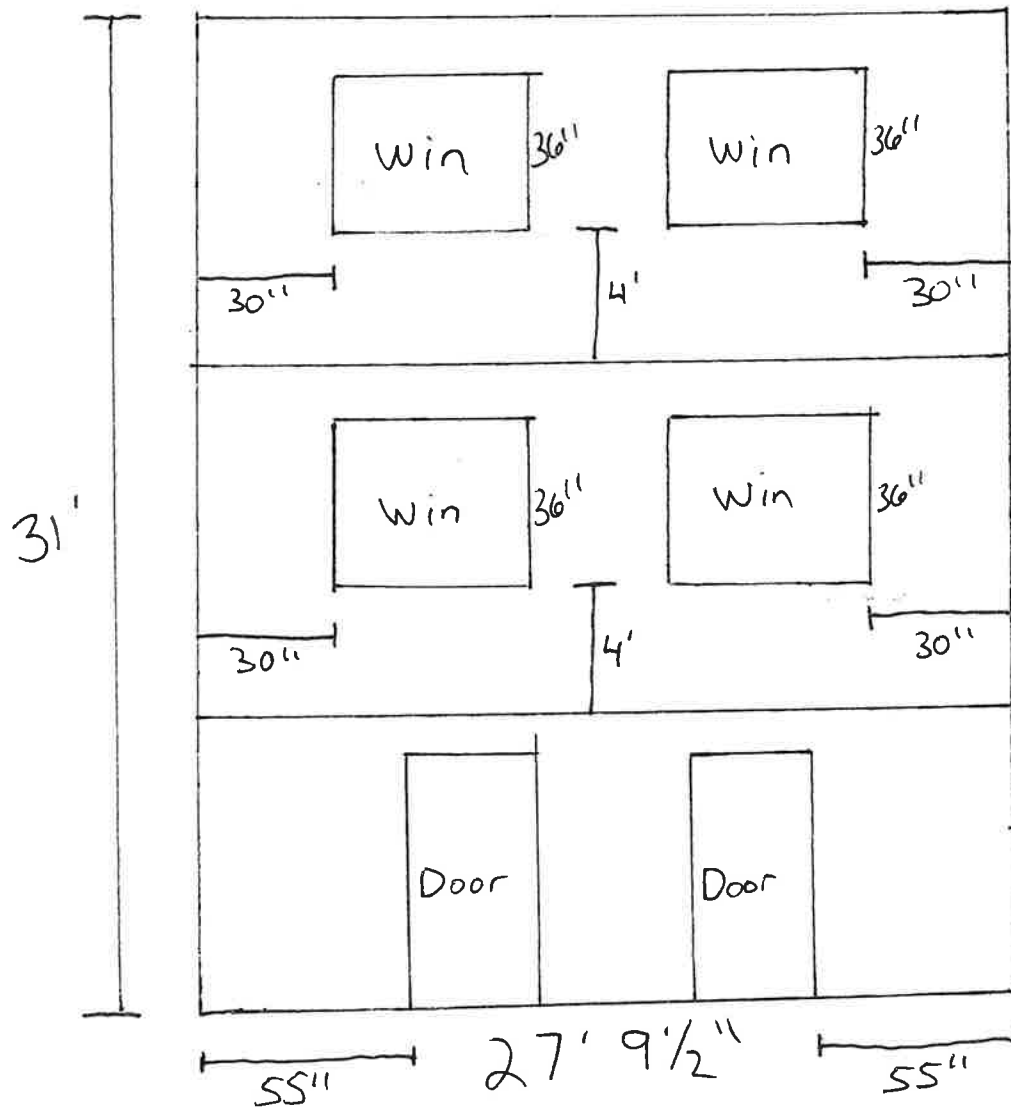
NORTH ELEVATION



HR-24-013

Back View

rw 6/19/24



- All windows new white
10' Vinyl Sliders

- 2 36" wide doors for basement access

- Matching horizontal siding on new build 1st + 2nd floor

7' 6"

- Bottom area will have same vertical 1"x3" cedar

- 10" separation between 1st Floor and basement level using 1x10 cedar

- Siding is 8" hardy plank matching existing

- All windows will be trimmed out with 1"x6" cedar to match existing

LOWER/BASEMENT SIDING: PLYWOOD WITH APPLIED 1"x3" BATTENS

HC-24-013

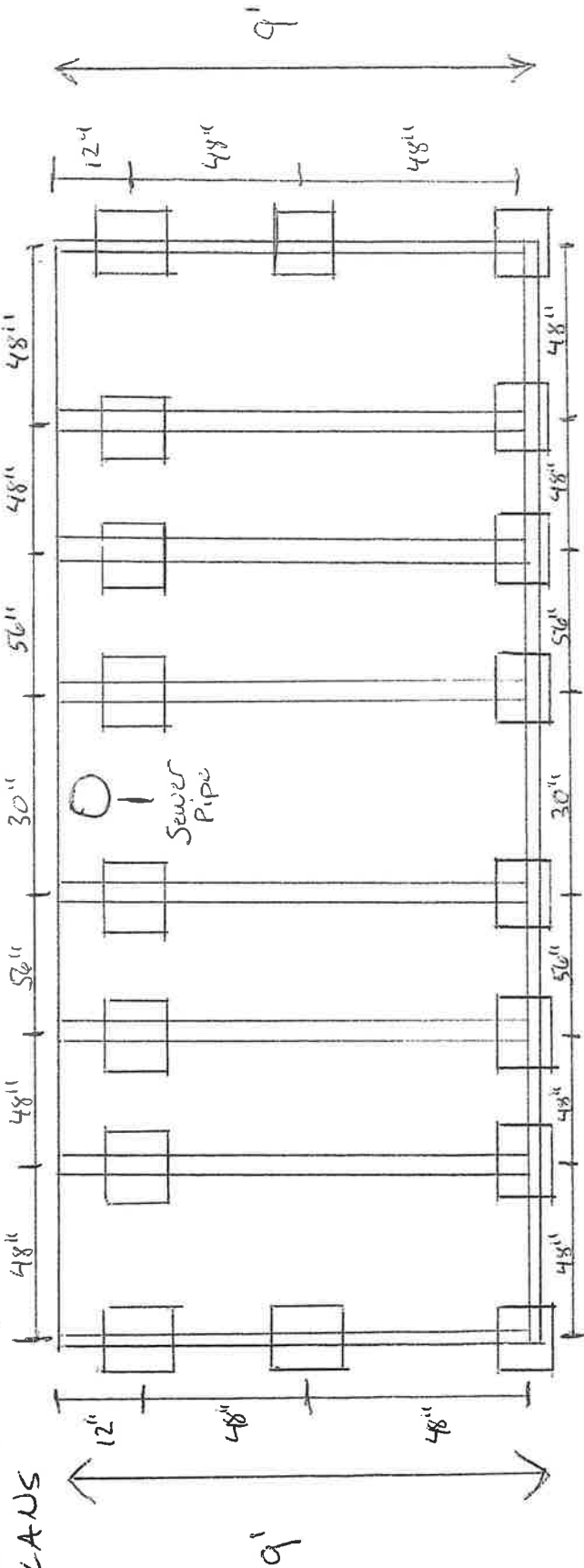
338 Jackson St.

TOP VIEW (Footing Placement - All 2'x2',

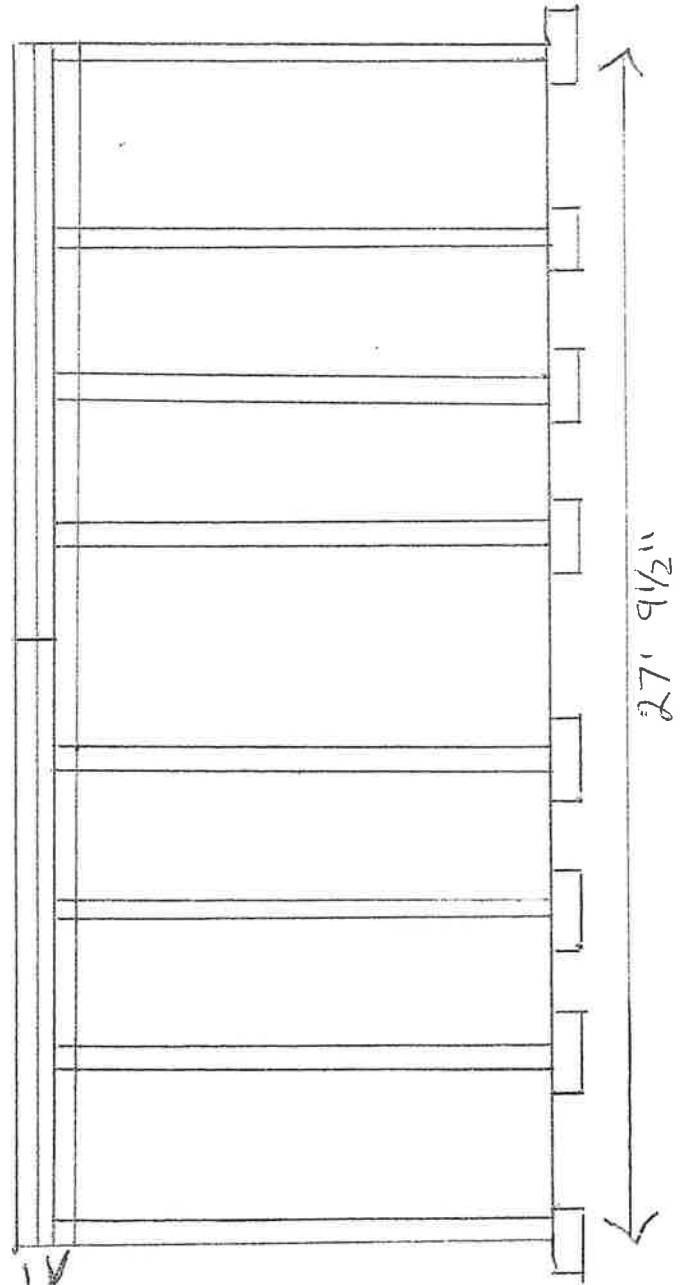
Beams on top of 4"x8" posts,

FLOOR FRAMING

PLANS



2"x8" Floor Rafters
4"x8" Beams



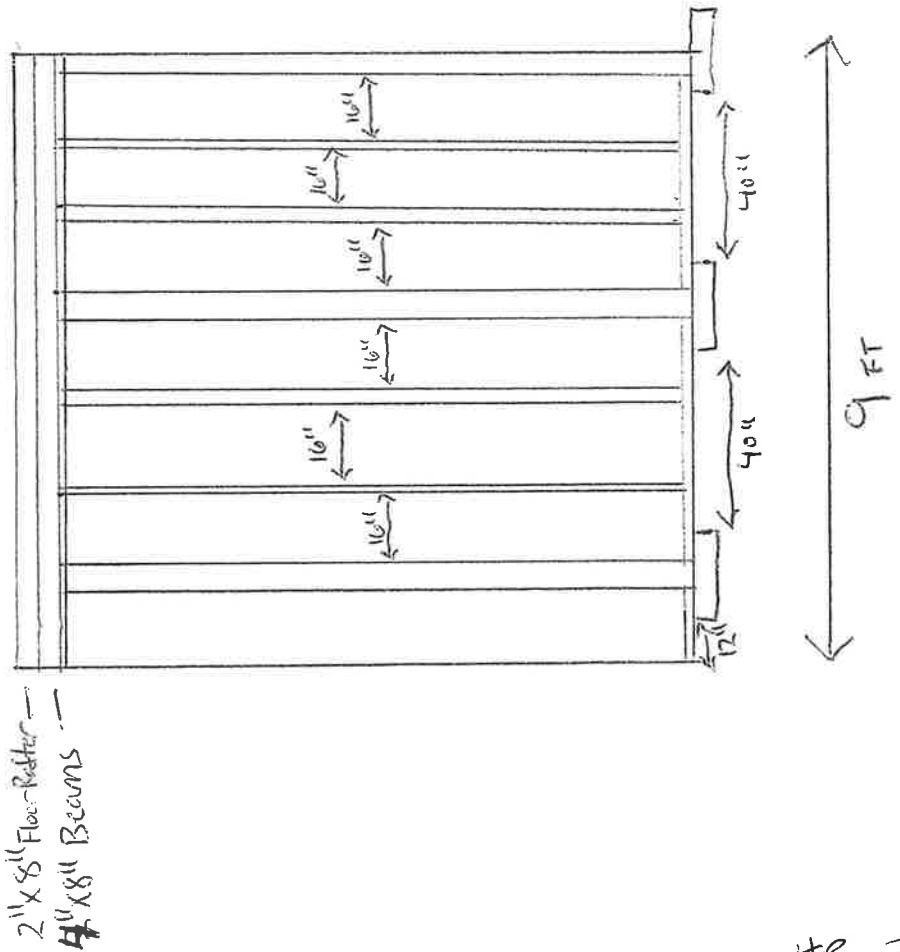
- 4" x 6" PT Posts on each footing
- 4" x 8" Beams on top of each post to support floor rafters
- Covered in 5/8 4' x 8' Plywood Sheets

HR-24-013

338 Jackson St.

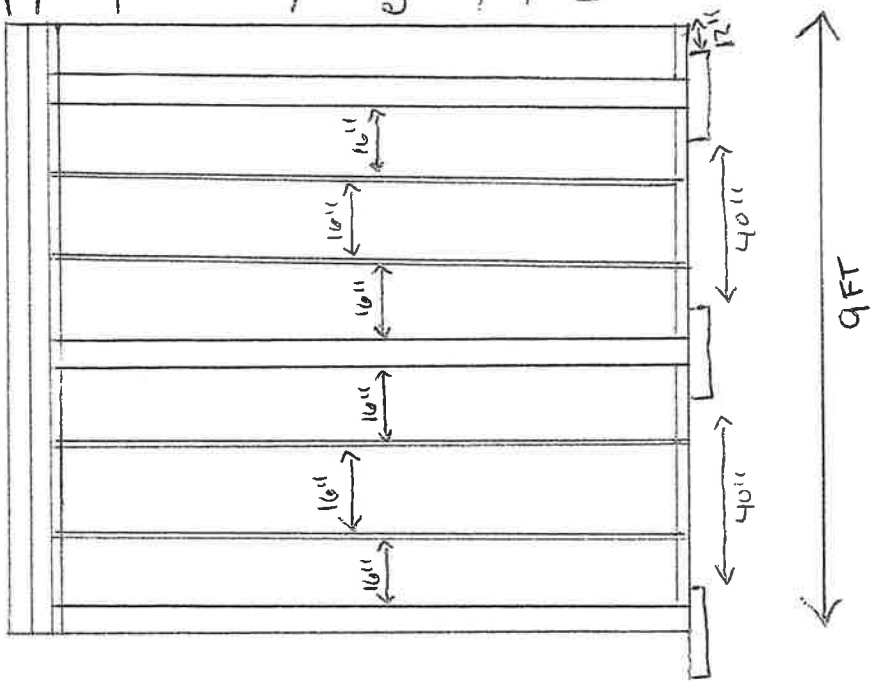
WALL FRAMING DETAIL

East Sideview



- 2" x 8" Floor Joists
- 4" x 8" Beam
- All Posts are 4" x 6" PT
- 2" x 4" Framing every 16"
- 2" x 4" Top and bottom plate

West Sideview





CITY OF ROSEBURG HISTORIC RESOURCE REVIEW COMMISSION AGENDA ITEM REPORT

HRRC Review No. HR-24-016**Meeting Date: July 17, 2024**

Prepared for: Historic Resource Review Commission
Staff Contact: Mark Moffett, Senior Planner
Request: Historic Review Alteration Request for the Dr. Earl B. Stewart House at 839 SE Chadwick Street.

PROPOSAL SUMMARY:

Purelight Power LLC on behalf of the property owner Colleen Richards, requests historic resource review approval to install twelve roof-mounted solar panels on the historic (1925) Dr. Earl B. Stewart House at 839 SE Chadwick Street, including accessory electrical equipment at grade.

CONCLUSION AND RECOMMENDATION:

Guidelines for the exterior remodeling or alteration of a historic resource at RMC 12.04.110(G) must be met for this project to be approved. Based on the findings provided by the applicant and in this report, staff recommends that the Historic Resource Review Commission approve the Historic Review application for a roof-mounted solar installation on the (1925) Dr. Earl B. Stewart House. This approval is subject to the following condition of approval:

1. Any significant deviation from this approval shall be re-reviewed by the City of Roseburg Community Development Department and Historic Resource Review Commission prior to approval.

SUGGESTED MOTION:

I MOVE TO ADOPT THE PROPOSED FINDINGS OF FACT AND ORDER TO APPROVE HISTORIC REVIEW NUMBER HR-24-016 FOR A ROOFTOP SOLAR INSTALLATION ON THE HISTORIC DR. EARL B. STEWART HOUSE AT 839 SE CHADWICK STREET.

**IN THE MATTER OF THE REQUEST
FOR PROJECT APPROVAL AT 639 SE CHADWICK STREET (DR. EARL B. STEWART HOUSE)
BEFORE THE ROSEBURG HISTORIC RESOURCE REVIEW COMMISSION
ORDER OF APPROVAL**

I. NATURE OF APPLICATION

Purelight Power LLC on behalf of the property owner Colleen Richards, requests historic resource review approval to install twelve roof-mounted solar panels on the historic (1925) Dr. Earl B. Stewart House at 839 SE Chadwick Street, including accessory electrical equipment at grade.

II. HISTORIC RESOURCE REVIEW COMMISSION HEARING

A public hearing was held on the application before the Roseburg Historic Resource Review Commission on July 17, 2024. During that hearing, the Commission reviewed historic application number HR-24-016 and it was made part of the record.

III. FINDINGS OF FACT

A. EXISTING CONDITIONS

- i. The Historic Resource Review Commission takes official notice of the Roseburg Urban Area Comprehensive Plan adopted by City Council Ordinance No. 2980 on December 9, 1996 and of the Roseburg Municipal Code Ordinance No. 3497, as originally adopted March 12, 2018, as both may have been amended from time-to-time.
- ii. The subject site may be described as Township 27 South, Range 5 West, Section 19CB, Taxlot 7800, Willamette Meridian; R71977.
- iii. The property is zoned R7.5 (Single-Family Residential), and also includes both the Hillside Development and Historic District Overlay. The site is not within the boundaries of any historic district, but is an individually listed structure.
- iv. The existing home on the property is listed as a Contributing resource, and was constructed circa 1925. This 2.5-story home was originally constructed prior to 1925 at an unknown date, but was remodeled into a Colonial Revival architectural style in 1925. The house is located on the east side of SE Chadwick Street approximately 100' south of the intersection with SE Lane Street. The house is located approximately 15' above street grade. This house is one of the finest showpieces of Roseburg's historic residential architecture, and is in excellent condition with few if any appreciable alterations or additions over the years. The pediment portico roof is supported by four large balanced columns. The eaves are boxed on the pediment roof. Modillions and a lunette light are present on the tympanums. A second story veranda runs the full width of the porch behind the columns. A balustrade is present on the veranda. The windows are 6/1 double hung sash in bays of two and three. These are capped with a cornice. The main entrance door is offset slightly to the south of center of the porch. It is of two-panel single leaf with a fan transom light and sidelights. The second story doors to the veranda are French windows. The pediment roof in detail is not repeated on other gables on the side and rear elevations, which instead have exposed eaves and purlins.
- v. Dr. Earl B. Stewart (1881-1974) was born in Mason City, Iowa. He graduated from Rush Medical School in Chicago in 1904. A year later, he began his practice in Glendale, Oregon, and stayed there for three years. Moving to Roseburg, Dr. Stewart commenced a permanent practice which spanned 54 years. Dr. Stewart's largest achievement was that of persuading the federal government to locate a Veteran's Administration Hospital in Roseburg in 1931. Stewart researched evidence and submitted it to the federal government and Veteran's Administration. Approximately three years prior

to this, the Southern Pacific changed the railroad division point from Roseburg to Eugene, which resulted in drastic decrease in jobs and income in Roseburg. The decision to build a Veteran's Administration Hospital in Roseburg directed federal money for jobs and later, for the operation of the facility for Roseburg's citizens. Roseburg's largest public park was dedicated to the doctor and named the Earl B. Stewart Park. The image below is from the city's historic inventory documents and was taken in 1983.



- vi. The proposed solar installation includes twelve panels on the east- or rear-facing portion of the roof surface. Accessory equipment would be located at grade at the garage, near the existing electrical panel meters and junction boxes.
- vii. The application was submitted on June 10, 2024, and preliminary feedback was sent to the applicant via e-mail on June 19th, encouraging a revision to the proposal to relocate the antennas off the main west-facing roof structure of the home. A revised plan set with panels confined to the east rear-facing roof plane was received from the applicant on June 25, 2024, at which time the application was deemed complete.

B. AGENCY COMMENTS

Rooftop solar panel applications are not sent out for review by Roseburg Public Works, Roseburg Fire, or the Roseburg Urban Sanitary Authority. As a project that does not physically alter the structure of a building by expanding the footprint on the ground, and as a result will not impact water, sewer, or transportation services, there are no relevant agency comments for this application.

C. ANALYSIS

Application for alterations of Historic Resources must comply with standards found in RMC 12.04.110(G).

D. REVIEW CRITERIA: RMC 12.04.110(G): EXTERIOR ALTERATIONS/ADDITIONS TO HISTORIC RESOURCES

Exterior alterations/additions to historic resources. This Section applies to all contributing, significant, primary, historic, eligible or similarly classified historic resources. Affirmative findings shall be documented addressing the following guidelines based upon their relative importance.

1. Retention of original construction. All original exterior materials and details shall be preserved to the maximum extent possible.

Finding: No significant modifications to the original construction are proposed. The addition of solar panels is a reversible change; if owners decide to remove them in the future they will leave no lasting impact to the home. Accessory equipment at-grade in the rear yard area near the garage will not impact the existing historic home. Rooftop mounting brackets will be screwed into the roofing boards under the shingles, and conduit will be mounted onto the exterior of the home with screws into existing siding and trim boards, but these alterations can be easily patched over if and when the facility is removed, without significant impact to the original construction. Therefore, based on the proposal as indicated on the submitted plan set, this criterion is met.

2. Height. The proportion of the new or relocated building is compatible with the average height of the traditional character of the surroundings.

Finding: No change to height of the structure proposed; this criterion not applicable.

3. Bulk. Horizontal additions may be added to historic buildings provided that:
 - a. The bulk of the additions do not exceed that which was traditional for the building style.
 - b. The addition maintains the traditional scale and proportion of the building style.
 - c. The addition is visually compatible with adjacent historic resources.

Finding: No horizontal addition proposed; this criterion not applicable.

4. Visual Integrity of Structure. The lines of columns, piers, spandrels, and other primary structural elements shall be maintained so far as is practicable.

Finding: The primary, street-facing façades and roof surfaces of the home are essential components of visual integrity of the structure. For the primary structure of the house, the west roof surfaces is most highly visible from the right-of-way in SE Chadwick. As proposed, the rooftop solar panels on the house are facing east, towards the secondary street frontage along SE Watson, where they will be less visible and have significantly lesser impact on the visual integrity of the structure from the primary Chadwick facade. With the rooftop panels on the home confined to secondary facades, the proposed panels themselves will maintain the overall visual integrity of the historic home.

Accessory equipment associated with the facility includes conduit connecting the panels with at-grade electrical cabinets and equipment, most of which is located adjacent to existing electrical junction boxes and meters at the base of the detached garage, anchored to the ground and facing north towards the rear yard. These new accessory features of the proposal will not have any significant impact on the visual integrity of the home, but rather only slightly enlarge an existing electrical meter and junction box layout.

Douglas County records indicate that the detached garage was constructed in 1923, but this accessory building is not identified with any contributing or noncontributing status in the historic district documents, which focus on the home itself.

For the reasons noted above, and with approval based on the plan and elevations in the submitted drawing set for the project, this criterion can be met.

5. Scale and Proportion. The scale and proportion of altered or added building elements, the relationship of voids to solids (window to wall) shall be visually compatible with traditional architectural character of the historic building.

Finding: No modification to the traditional architectural character of the home is proposed. This criterion does not apply.

6. Materials and Texture. In-kind materials and textures shall be used in the alteration or addition of historic resources.

Finding: There are no building additions or alterations where siding or other primary exterior building materials are proposed. This criterion does not apply.

7. Signs, lighting, and other appurtenances. Signs, exterior lighting, and other appurtenances, such as walls, fences, awnings, and landscaping shall be visually compatible with the traditional architectural character of the historic resource.

Finding: The solar panels are an accessory feature that differs from signage, lighting, walls, fences or awnings, in that they are a utilitarian feature that is separate from the primary architectural presence of the building. Mounted on the asphalt-shingled rooftop, they are above and separated from the main building façade, windows, porches and other architectural elements. At-grade equipment is also a utilitarian item that contrasts with the primary architectural features of the house, and in this case are co-located and adjacent to an existing electrical junction box and meter facility at-grade, in the rear yard by the garage. Based on the findings for guideline 4 above, and incorporating those findings herein, the proposal is visually compatible with the traditional architectural character of the building and this guideline is met.

IV. CONCLUSION AND RECOMMENDATION

Guidelines for the exterior remodeling or alteration of a historic resource at RMC 12.04.110(G) must be met for this project to be approved. Based on the findings provided by the applicant and in this report, staff recommends that the Historic Resource Review Commission approve the Historic Review application for a roof-mounted solar installation on the (1925) Dr. Earl B. Stewart House. This approval is subject to the following condition of approval:

1. Any significant deviation from this approval shall be re-reviewed by the City of Roseburg Community Development Department and Historic Resource Review Commission prior to approval.

V. ORDER

I MOVE TO ADOPT THE PROPOSED FINDINGS OF FACT AND ORDER TO APPROVE HISTORIC REVIEW NUMBER HR-24-016 FOR A ROOFTOP SOLAR INSTALLATION ON THE HISTORIC DR. EARL B. STEWART HOUSE AT 839 SE CHADWICK STREET.

Stuart Cowie, Community Development Director

Date

Kylee Rummel, Historic Resource Review Commission Chair

Date

Historic Resource Review Commission Members:

Kylee Rummel, Chair
Bentley Gilbert

Lisa Gogal, Vice Chair
Nick Lehrbach

Marilyn Aller
Stephanie Giles

James De Lap

Attachment: Revised 6/25/24 Plan Set (18 pages)

LEGEND	
	PROPERTY LINE
	FENCE LINE

AHJ STAMP

STRUCTURAL STAMP

REGISTERED PROFESSIONAL ENGINEER

963030127

TREVOR JOHNSON

EXPIRES: 06/30/25

06/10/2024

STRUCTURAL ONLY

CUSTOMER INFORMATION

COLLEEN RICHARDS

839 SE CHADWICK ST

ROSEBURG, OR 97470

PHONE # 530 933 5127

EMAIL: COL_POWERFUL@YAHOO.COM

APN # R71877

AHJ: DOUGLAS COUNTY

UTILITY: PACIFIC POWER

REVISIONS

REV #	DESCRIPTION - DATE

SHEET TITLE

PROPERTY PLAN

DRAWN DATE

6/21/2024

DRAWN BY

AAJ

SHEET NUMBER

PV-01

1

PROPERTY PLAN

PV.01

SCALE: 1" = 15'

MP #1

PLAN VIEW TOTAL ROOF AREA (SQFT): 2418

TOTAL PV ARRAY AREA (SQFT): 252.27

TOTAL % OF ROOF COVERED BY PV: 10.14%

MODULE QTY: 12

AZIMUTH: 219°

PITCH: 28°

RAFTER: 2x4 @ 24 OC

ASPHALT SHINGLES

NOTES:

1. STRUCTURES, PATIO COVERS, AND/OR ADDITIONS BUILT WITHOUT PERMITS TO BE RESOLVED BY A SEPARATE PERMIT

2. ROOF ACCESS POINT SHALL NOT BE LOCATED IN AREAS THAT REQUIRE THE PLACEMENT OF GROUND LADDERS OVER OPENINGS SUCH AS WINDOWS OR DOORS, AND LOCATED AT STRONG POINTS OF BUILDING CONSTRUCTION IN LOCATIONS WHERE THE ACCESS POINT DOES NOT COME IN CONTACT WITH OVERHEAD OBSTRUCTIONS SUCH AS TREE LIMBS, WIRES OR SIGNS.

LEGEND

OREGON FIRE SETBACKS

3' 12'

MECHANICAL VENT

FLUE / PLUMBING VENT

HMA-1500MT (1 PER 4 MODULES)

STRING 1

AHJ STAMP

STRUCTURAL STAMP

REGISTERED PROFESSIONAL ENGINEER

95003PC

OREGON

JAN 12, 2021

TREVOR JONES

EXPIRES: 06/30/25

06/10/2024

STRUCTURAL ONLY

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APN #: R71977

AHL: DOUGLAS COUNTY

UTILITY: PACIFIC POWER

REVISIONS

REV # - DESCRIPTION - DATE

SHEET TITLE

SITE PLAN

DRAWN DATE: 6/21/2024

DRAWN BY: AAJ

SHEET NUMBER: PV-02

FRONT OF HOUSE

ROOF ACCESS POINT

(N) JUNCTION BOX NEMA 3R

(E) UTILITY METER-MAIN (OVERHEAD SERVICE) 200A BUS RATING 200A MAIN BREAKER

(N) 30 NON-FUSED VISIBLE LOCKABLE LABELED PV RAPID SHUTDOWN

MODULE DIMENSIONS

44.65"

67.8"

1

PV-02

SITE PLAN

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

AHJ STAMP

STRUCTURAL STAMP



EXPIRES: 06/30/25
06/10/2024

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APN #: R71977
AHJ: DOUGLAS COUNTY
UTILITY: PACIFIC POWER

REVISIONS

REV # - DESCRIPTION - DATE

SHEET TITLE

FRAMING DETAIL

DRAWN DATE 6/21/2024

DRAWN BY

AAJ

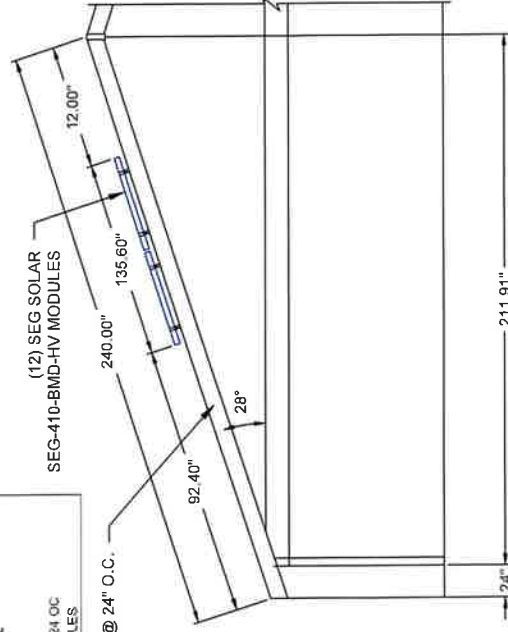
SHEET NUMBER

PV-03.1

MP #1	MODULE QTY: 12
	AZIMUTH: 219°
PITCH: 28°	RAFTER: 2x4 @ 24" OC
	ASPHALT SHINGLES

(12) SEG SOLAR
SEG-410-BMD-HV MODULES

(E) 2x4 RAFTERS @ 24" O.C.



1 FRAMING DETAIL (MP-1)

SCALE: NTS

8" MINIMUM CONDUIT HEIGHT ABOVE ROOF SURFACE.

MINIMUM WIRE SIZES CALLED OUT. USE OF LARGER WIRE IS ACCEPTABLE.

VISIBLE, LOCKABLE & LABELED AC DISCONNECT LOCATED WITHIN 10FT OF THE UTILITY METER

SERVICE ENTRANCE OVERHEAD METER # 82 036 500

AHJ STAMP

STRUCTURAL STAMP

CUSTOMER INFORMATION
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REVISIONS

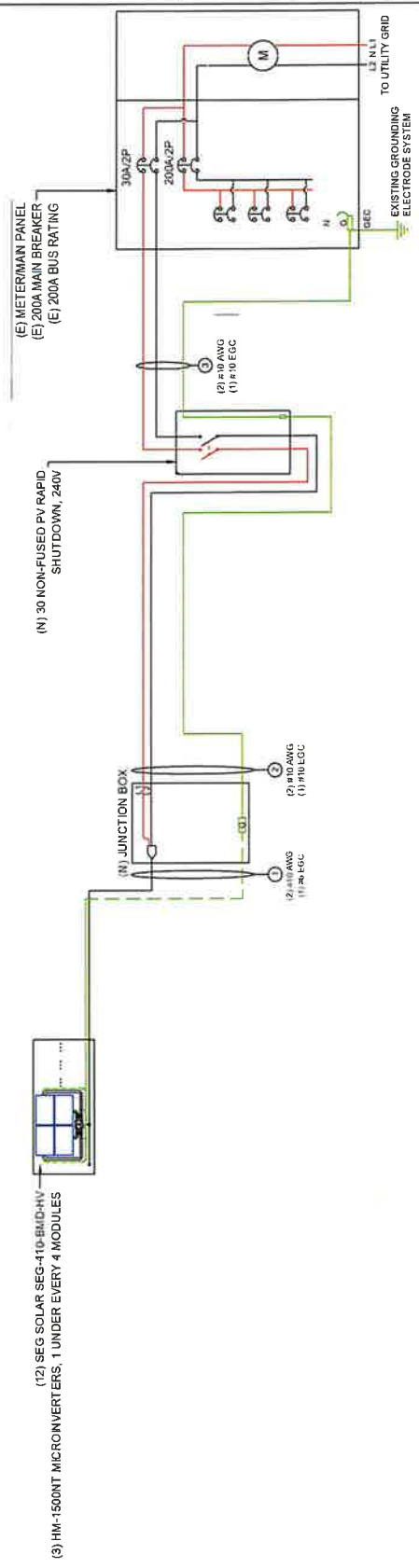
REV # - DESCRIPTION - DATE

SHEET TITLE
ELECTRICAL
DIAGRAM

DRAWN DATE 6/21/2024

DRAWN BY
AAJ

SHEET NUMBER
PV-04



DESCRIPTION				FORMULA				RESULT				
PV OVERCURRENT PROTECTION - NEC 690.9(B)				TOTAL INVERTER OUTPUT CURRENT $\times 1.25 = 17.97 \text{ A} \times 1.25$				22.4625 A (SELECTED OCPD = 30 A)				
SUPPLY SIDE CONNECTION - NEC 705.11(A)												
WIRE ID	EXPECTED WIRE TEMP (°C)	TEMP DERATE (90°C)	# OF CCC'S	CONDUIT FILL DERATE	MINIMUM CONDUIT SIZE (TBD ON SITE)	WIRE GAUGE & TYPE	CCC AMPACITY @ 90°C (A)	CCC AMPACITY @ 75°C (A)	REQUIRED CIRCUIT CONDUCTOR AMPACITY (A)	ADJUSTED CIRCUIT CONDUCTOR AMPACITY (A)	NEUTRAL CONDUCTOR TYPE	GROUND WIRE SIZE & TYPE
1	28	1	2	N/A	IN AIR	#10 HOVMILES TRUNK CABLE	40	35	22.46	40.00	NONE	#6 SBC
2	28	1	2	1	3/4"	#10 THWN-2	40	35	22.46	40.00	NONE	#10 THWN-2
3	28	1	2	1	3/4"	#10 THWN-2	40	35	22.46	40.00	NONE	#10 THWN-2

METER MAIN SERVICE PANEL



ELECTRICAL SHOCK HAZARD

▲ WARNING DUAL POWER SOURCE
SECOND SOURCE IS PHOTOVOLTALIC SYSTEM

THIS EQUIPMENT FED BY
MULTIPLE SOURCES TOTAL
RATING OF ALL OVERCURRENT
DEVICES EXCLUDING MAIN POWER
SUPPLY SHALL NOT EXCEED
AMPACITY OF BUSBAR

PHOTOVOLTAIC SYSTEM CIRCUIT IS BACKFED

PHOTOVOLTAIC AC DISCONNECT
MAXIMUM AC OPERATING CURRENT: 17.97
NOMINAL OPERATING AC VOLTAGE: 240

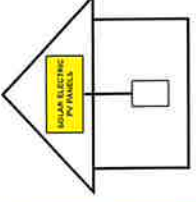
MAIN PHOTOVOLTAIC SYSTEM DISCONNECT

RAPID SHUTDOWN FOR SOLAR PV SYSTEM

PHOTOVOLTAIC SYSTEM
COMBINER PANEL

DO NOT ADD LOADS

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN THE ARRAY.



STRUCTURAL STAMPS

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APN #: R71977

UTILITY: PACIFIC POWER

REV # - DESCRIPTION - DATE

WARNING LABELS:

DRAWN BY

SHEET NUMBER

PV-05

AHJ STAMP

STRUCTURAL STAMP

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AHJ: DOUGLAS COUNTY

UTILITY: PACIFIC POWER

REVISIONS

REV # - DESCRIPTION - DATE

SHEET TITLE
DIRECTORY
PLACARD

DRAWN DATE 6/21/2024

DRAWN BY

AAJ

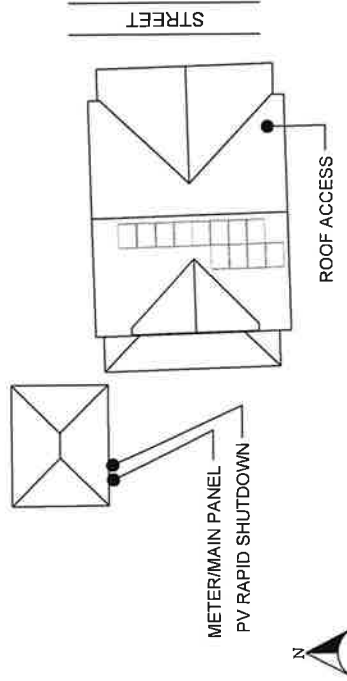
SHEET NUMBER

PV-05.1

CAUTION

MULTIPLE SOURCES OF POWER.
POWER TO THIS BUILDING IS ALSO SUPPLIED
FROM THE FOLLOWING SOURCES WITH
DISCONNECTS LOCATED AS SHOWN:

ADDRESS: 839 SE CHADWICK ST, ROSEBURG, OR, 97470



MODULE SPECIFICATIONS		INVERTER SPECIFICATIONS	
SEG SOLAR SEG-410-BMD-HV		HOV/MILES PH: 1500NT	
MAX POWER-POINT CURRENT (Imp)	[A]	MAX DC INPUT VOLTAGE	[V]
MAX POWER-POINT VOLTAGE (Vmp)	[V]	MIN/MAX STARTUP RANGE	[V]
OPEN CIRCUIT VOLTAGE (Voc)	[V]	MAX CONTINUOUS OUTPUT CURRENT	[A]
SHORT CIRCUIT CURRENT (Isc)	[A]	MAX CONTINUOUS OUTPUT POWER	[W]
MAX POWER (Pmax)	[W]	NOMINAL AC OUTPUT VOLTAGE	[V]
TEMP COEFF OF Vmp	[% / °C]	MODULE WATTAGE ALLOWANCE	[W]
TEMP COEFF OF Vmp	[% / °C]		
TEMP COEFF OF Isc	[% / °C]		

AHJ STAMP	
STRUCTURAL STAMP	
CUSTOMER INFORMATION	
COLLEEN RICHARDS 839 SE CHADWICK ST ROSEBURG, OR 97470 PHONE #: 530 933 5127 EMAIL: COL_POWERFUL@YAHOO.COM APN #: R71977 AHJ: DOUGLAS COUNTY UTILITY: PACIFIC POWER	
REVISIONS	
REV #	DESCRIPTION - DATE
SHEET TITLE	
ELECTRICAL CALCULATIONS	
DRAWN DATE	6/21/2024
DRAWN BY	AAJ
SHEET NUMBER	
PV-06	



www.segsolar.com

YUKON Series

Half-Cell Monofacial Module

400-415W

Module Power Output

21.25%

Max Efficiency



Key Features



High module conversion efficiency



Better temperature coefficient



Super multi busbar technology



Low attenuation long warranty



Superior load capacity



Aesthetic appearance

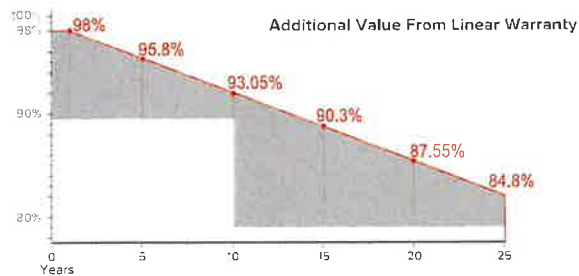


USA based liability insurance



Houston, Texas based company

Warranty



25 <Years>
Guarantee on product
material and workmanship

25 <Years>
Linear power
output warranty

Product Certification

IEC61215:2016; IEC 61730:2016; UL1703; UL61730/ETL/CEC

IEC62304

PID

IEC61701

Salt Mist

IEC62716

Ammonia Resistance

IEC60068

Dust and Sand

IEC61215

Hailstone

Fire Type (UL61730):Type*

ISO14001:2015; ISO9001:2015; ISO45001:2018



About SEG Solar

SEG Solar is a leading manufacturer of high-performance solar panels for residential, commercial, and utility applications. The company, headquartered in Houston, Texas, is committed to providing cost-effective and reliable solar solutions that help customers reduce their energy costs and carbon footprint.





YUKON Series SEG-XXX-BMD-HV(108Cells)

Electrical Characteristics

Module Type	SEG-400-BMD-HV		SEG-405-BMD-HV		SEG-410-BMD-HV		SEG-415-BMD-HV	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power -Pmp(W)	400	301	405	304	410	308	415	311
Open Circuit Voltage -Voc(V)	37.12	34.64	37.22	34.73	37.32	34.81	37.42	34.90
Short Circuit Current -Isc(A)	13.60	10.99	13.70	11.07	13.80	11.15	13.90	11.23
Maximum Power Voltage -Vmp(V)	30.81	28.82	30.93	28.91	31.05	29.05	31.16	29.19
Maximum Power Current -Imp(A)	12.99	10.44	13.10	10.51	13.21	10.59	13.32	10.66
Module Efficiency STC-ηm(%)	20.48		20.74		21.00		21.25	
Power Tolerance(W)					(0, +3%)			
Maximum System Voltage					1500V DC			
Maximum Series Fuse Rating					25 A			

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5

NOCT: Irradiance 800W/m² ambient temperature 20°C module temperature 45°C wind speed 1m/s

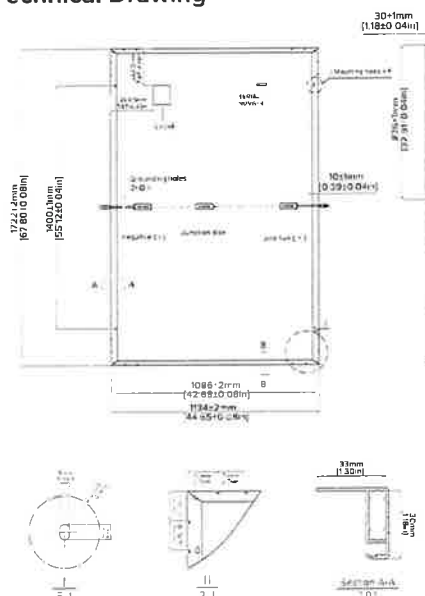
Power measurement tolerance: ±3%

Mechanical Specifications

External Dimension	1722 x 1134 x 30 mm
Weight	21.5 kg
Solar Cells	PERC Mono 182 x 91mm(108 pcs)
Front Glass	3.2 / mm AR coating tempered glass / low iron
Frame	Black anodized aluminium alloy
Junction Box	IP68 / 3 diodes
Connector Type	MC4
Cable Type / Length	12 AWG PV Wire (UL) /1200 mm
Mechanical Load(Front)	5400 Pa / 113 psf*
Mechanical Load(Rear)	3600 Pa / 75 psf*

*Refer to SEG Installation Manual for details

Technical Drawing



Refer to SEG Installation Manual for details

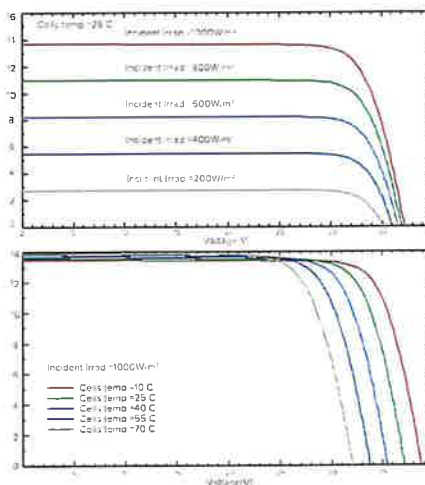
Packing Configuration

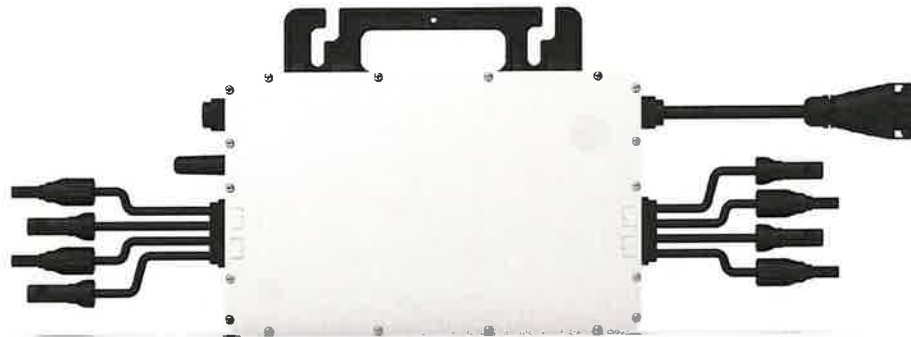
Container	20'GP	40'HQ
Pieces per Pallet	36	36
Pallets per Container	6	26
Pieces per Container	216	936

Temperature Characteristics

P _{max} Temperature Coefficient	-0.35 %/°C
V _{oc} Temperature Coefficient	-0.27 %/°C
I _{sc} Temperature Coefficient	+0.05 %/°C
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature (NOCT)	45±2 °C

I-V Curve





Microinverter Datasheet

HM-1200NT
HM-1500NT

Description

Hoymiles 4-in-1 microinverter is one of the most cost-effective module-level solar solutions, as it can support up to 4 panels at once and maximize the PV production of your installation. With a maximum DC voltage of 60 volts, Hoymiles microinverter is a PV Rapid Shutdown Equipment and conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218.

Both models listed are equipped with reactive power control and can meet the requirements of IEEE 1547, UL 1741 and CA Rule21.

Features

- 01 Easy installation, just plug and play
- 02 With Reactive Power Control, compliant with CA Rule 21
- 03 Compliant with U.S. NEC-2017&NEC-2020 690.12 rapid shutdown

- 04 External antenna for stronger communication with DTU
- 05 High reliability: NEMA 6 (IP67) enclosure, 6000 V surge protection

Technical Specifications

Model	HM-1200NT		HM-1500NT	
Input Data (DC)				
Commonly used module power (W)	240 to 405+		300 to 505+	
Maximum input voltage (V)			60	
MPPT voltage range (V)			16-60	
Start-up voltage (V)			22	
Maximum input current (A)	4 × 11.5		4 × 11.5	
Maximum input short circuit current (A)			4 × 15	
Number of MPPTs			2	
Number of inputs per MPPT			2	
Output Data (AC)				
Peak output power (VA)	1260	1200	1500	1350
Maximum continuous output power (VA)	1200	1109	1438	1246
Maximum continuous output current (A)	5	5.33	5.99	5.99
Nominal output voltage/range (V) ¹	240/211-264	208/183-228	240/211-264	208/183-228
Nominal frequency/range (Hz) ¹	60/55-65			
Power factor (adjustable)	> 0.99 default 0.8 leading ... 0.8 lagging			
Total harmonic distortion	< 3%			
Maximum units per 10AWG branch ²	4	4	4	4
Efficiency				
CEC peak efficiency	96.7%			
CEC weighted efficiency	96.5%			
Nominal MPPT efficiency	99.8%			
Nighttime power consumption(mW)	<50			
Mechanical Data				
Ambient temperature range (°C)	-40 to +65			
Dimensions (W × H × D mm)	280 × 176 × 33			
Weight (kg)	3.35			
Enclosure rating	Outdoor-NEMA 6 (IP67)			
Cooling	Natural convection – No fans			
Features				
Communication	2.4GHz Proprietary RF (Nordic)			
Type of isolation	Galvanically Isolated HF Transformer			
Monitoring	S-Miles Cloud ³			
Warranty	Up to 25 years			
Compliance	UL 1741, IEEE 1547, UL 1741 SA (240 Vac), CA Rule 21 (240 Vac), CSA C22.2 No. 107.1-16, FCC Part 15B, FCC Part 15C			
PV Rapid Shutdown	Conforms with NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218 Rapid Shutdown of PV Systems			

*1 Nominal voltage/frequency range can vary depending on local requirements.

*2 Refer to local requirements for exact number of microinverters per branch.

*3 Hoymiles Monitoring System.



QuickMount™ L-Mount®

Roof Protection without Compromise

The L-Mount® attachment, featuring an open-slotted L-Foot, is designed for cost-effective, single-bolt installation onto existing composition (asphalt) shingle roofs. The patented Elevated Water Seal Technology® has been integrated into the open-slotted L-Foot and flashing for fast installation, to provide maximum waterproofing.

To maximize versatility, the mount is available with a lag bolt or structural screw option for the strength you depend on. Both hardware options come with an installed EPDM bonded washer to seal and prevent water entry.

L-Mount features a 9x12" aluminum flashing with alignment guides and rounded corners, to easily slide under shingles and speed up installation on the roof. The kit is available in both mill and black finishes.

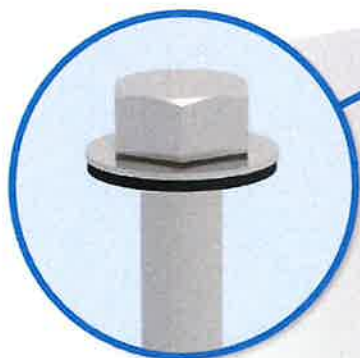


This component is part of the QuickMount™ product line.



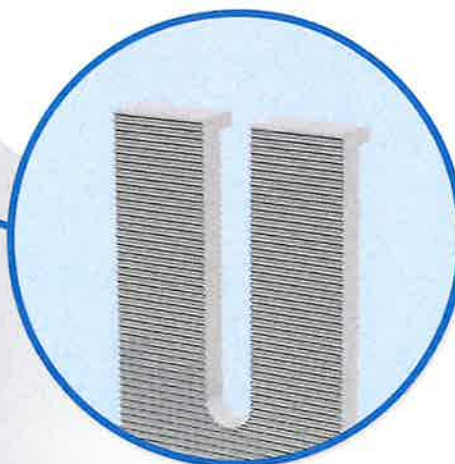
Elevated Water Seal Technology®

This proprietary flashing design cleverly places the roof penetration seal onto an aluminum flute fused into the flashing, above the bolt hole. The secondary EPDM rubber seal keeps water out—raised above the path of rain water and out of harm's way.



Pre-Installed Sealing Washer

Hardware options include a lag bolt or structural screw. The EPDM washer arrives already attached.



Open-Slotted L-Foot

The redesigned L-Foot can rotate 360 degrees for optimal adjustability and positioning of the rail, while the open slot allows the rail hardware to quickly drop-in and be compatible with any side-mounted racking on the market.



25-Year Warranty
Product guaranteed free of impairing defects.



L-Mount® Installation Instructions

Installation Tools Required: tape measure, roofing bar, chalk line, stud finder, caulking gun, sealant compatible with roofing materials, drill with 7/32" or 1/8" bit, drill or impact gun with 1/2" socket.



Locate, choose, and mark centers of rafters to be mounted. Select the courses of shingles where mounts will be placed.



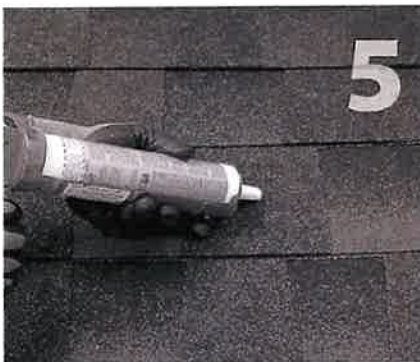
Carefully lift composition roof shingle with roofing bar, just above placement of mount. Remove nails as required and backfill holes with approved sealant. See "Proper Flashing Placement" on next page.



Insert flashing between 1st and 2nd course. Slide up so top edge of flashing is at least 3/4" higher than the butt-edge of the 3rd course and lower flashing edge is above the butt-edge of 1st course. Mark center for drilling.



If attaching with lag bolt use a 7/32" bit (Lag). Use a 1/8" bit (ST) for attaching with the structural screw. Drill pilot hole into roof and rafter, taking care to drill square to the roof. Do not use mount as a drill guide. Drill a 2" deep hole into rafter.



Clean off any sawdust, and fill hole with sealant compatible with roofing materials.



Place L-foot onto elevated flute and rotate L-foot to desired orientation.



Prepare lag bolt or structural screw with sealing washer. Using a 1/2-inch socket on an impact gun, drive prepared lag bolt through L-foot until L-foot can no longer easily rotate. **DO NOT over-torque.** NOTE: Structural screw can be driven with T-30 hex head bit.



You are now ready for the rack of your choice. Follow all the directions of the rack manufacturer as well as the module manufacturer. NOTE: Make sure top of L-Foot makes solid contact with racking.

All roofing manufacturers' written instructions must also be followed by anyone modifying a roof system. Consult the roof manufacturer's specs and instructions prior to working on the roof.





#537 RAIL

Chiko's 537R Aluminum Rail is designed for all types of roof mounted solar systems. A variety of lengths are available reducing waste with unnecessary cuts. The 537R rail comes in both clear (silver) anodized aluminum and black anodized aluminum.

PRODUCT LINE

Item

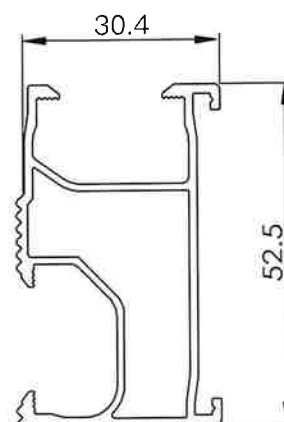
CK-FT-R537B2-2400
 CK-FT-R537B2-3500
 CK-FT-R537B2-4700

Product Name

CHIKO 537 Black Rail 2400mm
 CHIKO 537 Black Rail 3500mm
 CHIKO 537 Black Rail 4700mm

TECHNICAL DATA

Main Material : AL 6005-T5
 Wind Velocity : Up to 60 M/S
 $X_i = 31918.082 \text{ mm}^4$
 $Y_i = 81501.592 \text{ mm}^4$



COMPONENT LIST

Material	QTY
Aluminium Rail	01

ORDERING SPECIFICS

Standard Packaging	8pcs/unit 320/384/504 pcs per pallet
Dimensions	2400/3500/4700 mm
Weight	14/20/26 kg

ADVANTAGES

- Easy installation
- Highclass anodized
- Tilt- in nut
- Universal on roof mount system

WARRANTY



INTERTEK LISTED





Certificate of Compliance

Certificate: 80035475

Master Contract: 261002

Project: 80155388

Date Issued: 2023-03-15

Issued To: Hoymiles Power Electronics Inc.
No.18 Kangjing Road,
Hangzhou, Zhejiang, 310015
China

Attention: Steven Zhang

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

Issued by: *Henry Huan*
Henry Huan



PRODUCTS

CLASS - C5311 09 - POWER SUPPLIES Distributed Generation Power Systems Equipment
CLASS - C5311 89 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

Grid Support Utility Interactive Inverter with PV input, Model HM-800, HM-800T, HM-700, HM-700T, HM-600, HM-600T, HM-500, HM-500T, HM-800N, HM-800NT, HM-700N, HM-700NT, HM-600N, HM-600NT, HM-500N and HM-500NT, rack mounted.

Note:

For details related to rating, size, configuration, etc., reference should be made to the CSA Certification Record, Certificate of Compliance Annex A or the Descriptive Report.



Certificate: 80035475
Project: 80155388

Master Contract: 261002
Date Issued: 2023-03-15

APPLICABLE REQUIREMENTS

- CSA-C22.2 No. 107.1-16 - Power conversion equipment
- *UL Std No. 1741-3rd - Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources (Third Edition, Dated September 28, 2021)
- UL1741 CRD - Grid Support Utility Interactive Interoperability Optional Functions: Prevent Enter Service and Limit Active Power (CA Rule 21, Phase 3, functions 2 and 3) (Dated October 22, 2019)

***Note:** This product conforms with Photovoltaic Rapid Shutdown Requirements of NEC-2017 and NEC-2020 Article 690.12 and CEC-2021 Sec 64-218, for AC and DC conductors, when installed according to manufacturer's instructions.

***Note:** Conformity to UL 1741(Third Edition, Dated September 28, 2021) includes compliance with applicable requirements of IEEE 1547-2003(R2008), IEEE 1547.1-2005 (R2011), IEEE 1547-2018, IEEE1547.1-2020, 1547a-2020, Grid support function is verified according to UL 1741 Supplement SB and IEEE 1547.1-2020 with the SRDs of IEEE 1547-2018 and IEEE 1547a-2020, Hawaiian Electric Co. SRD-V2.0; California Rule 21 and Supplement SA8-18, While the grid support function evaluated according to IEEE 1547.1-2020, the interoperability is verified with IEEE 2030.5-2018 protocol.

Notes:

Products certified under Class C531109 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

