

# Development Services

## From Concept to Construction

Phone: 503-823-7300 Email: [bds@portlandoregon.gov](mailto:bds@portlandoregon.gov) 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (<http://www.portlandoregon.gov/bds/article/519984>)



### APPEAL SUMMARY

**Status:** Decision Rendered

<b>Appeal ID:</b> 20531	<b>Project Address:</b> 2312 SE Ladd Ave
<b>Hearing Date:</b> 6/19/19	<b>Appellant Name:</b> W. Bruce Ely
<b>Case No.:</b> B-006	<b>Appellant Phone:</b> 503-381-2530
<b>Appeal Type:</b> Building	<b>Plans Examiner/Inspector:</b> Preliminary
<b>Project Type:</b> residential	<b>Stories:</b> 2 <b>Occupancy:</b> single family <b>Construction Type:</b> Bungalow
<b>Building/Business Name:</b> N/A	<b>Fire Sprinklers:</b> No
<b>Appeal Involves:</b> Alteration of an existing structure	<b>LUR or Permit Application No.:</b>
<b>Plan Submitted Option:</b> pdf [File 1] [File 2] [File 3]	<b>Proposed use:</b> single family

### APPEAL INFORMATION SHEET

#### Appeal item 1

**Code Section** ORSC R311.7.2 Headroom

**Requires** Requires: The headroom in stairways shall be not less than 6 feet 8 inches measured vertically from the sloped line adjoining the tread nosing or from the floor surface of the landing or platform on that portion of the stairway.

**Proposed Design** Proposed Design: The existing stairwell does not meet current code requirements. The proposed design rebuilds the stairs from the main floor to the second floor in the existing location.

The proposed design includes widening the stairwell to allow for the min 36" stairwell width throughout, as required by 2017 ORSC R311.7.1 Width. The proposed design will also provide min 9" treads and maximum 7-3/4" risers throughout, as required by 2017 ORSC R311.7.5 Stair treads and risers.

Existing head clearance at top of stairs is 5'-2". A minimum head clearance of 6'-2" will be achieved for the existing 33" width of the stairs. The new 36" wide stairs will only have 6' head clearance for the additional 3" of stair width due to existing roof framing. This is a substantial improvement upon the existing stair configuration to an existing habitable space.

The required 6'-8" minimum is not achievable due to the existing structural framing, avoiding excessive structural modifications and complications with the house being a Contributing Property to Ladd's Addition Historic District. It is not possible to alter the existing roofline.

The City of Portland Brochure 9 – Converting Attics, Basements and Garages to Living Space – Standards for Existing Situations - allows stairways with minimum headroom of min 6'-2" to be grandfathered in as acceptable for converted living spaces.

**Reason for alternative** The existing stairwell is very steep, narrow and unsafe. Working within the constraints of the existing floor plans and headroom available under the existing roofline, the proposed stairwell provides the best solution available for safe access to 2nd floor. The proposed stairs make significant gains in all areas over the existing stairs.

The proposed stairs meet or exceed all current code requirements; with the exception of a very small portion of the upper landing only. The proposed stairs will not have a negative impact on life safety over fully code compliant stairs and will have a dramatic positive impact on life safety over the existing conditions.

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## APPEAL DECISION

### **Reconstruction of stairway to 2nd floor with reduction of minimum required headroom to minimum 6'-0" for a 3" width: Granted as proposed.**

The Administrative Appeal Board finds that the information submitted by the appellant demonstrates that the approved modifications or alternate methods are consistent with the intent of the code; do not lessen health, safety, accessibility, life, fire safety or structural requirements; and that special conditions unique to this project make strict application of those code sections impractical.

Pursuant to City Code Chapter 24.10, you may appeal this decision to the Building Code Board of Appeal within 180 calendar days of the date this decision is published. For information on the appeals process and costs, including forms, appeal fee, payment methods and fee waivers, go to [www.portlandoregon.gov/bds/appealsinfo](http://www.portlandoregon.gov/bds/appealsinfo), call (503) 823-7300 or come in to the Development Services Center.

# Hauke|Ely Stair Remodel

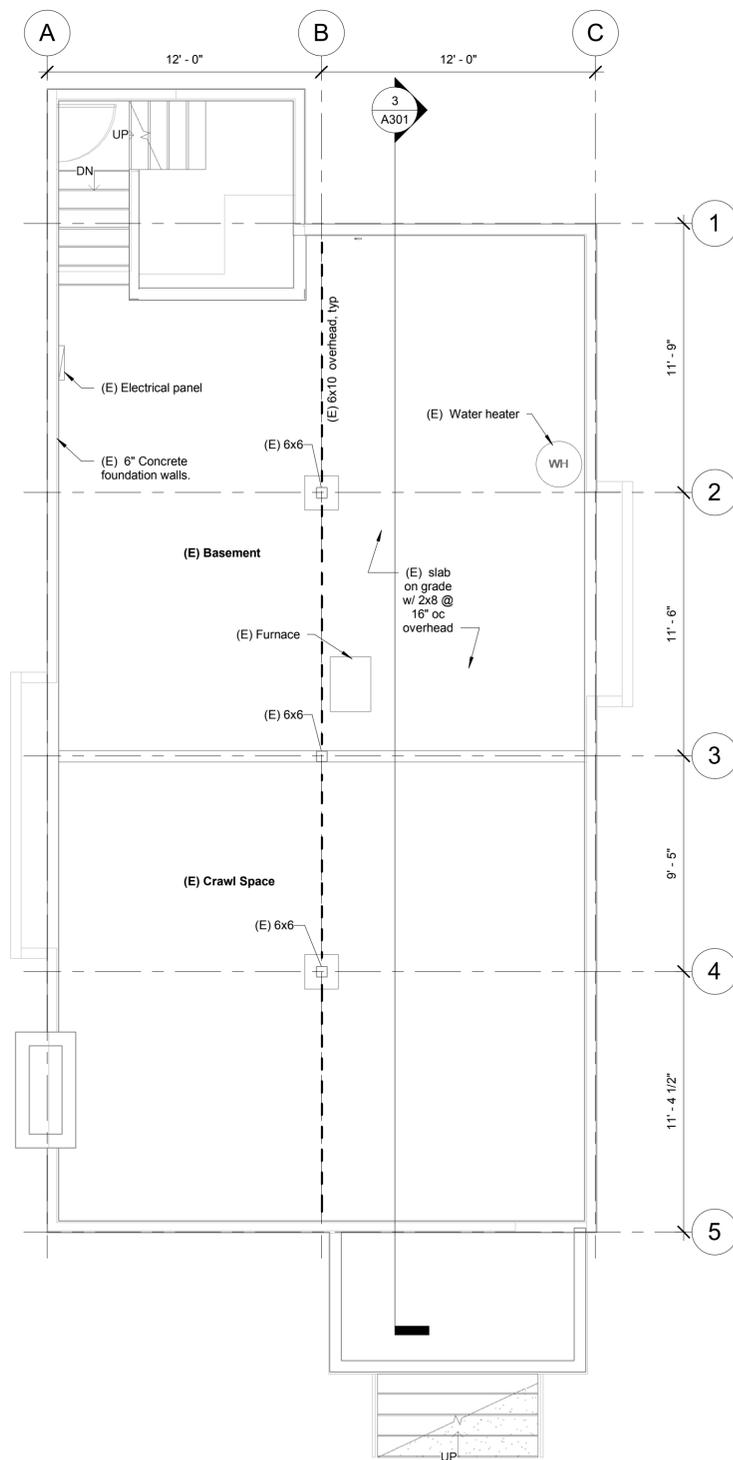
Owner: Bruce Ely and Kristi Hauke  
2312 SE Ladd Avenue  
Portland, Oregon 97214

Architect: Jen Wentzien, Architect  
Guide Architecture  
3331 SE Schiller Street  
Portland, OR 97202  
jen@guidearchitecture.com  
971.340.7722

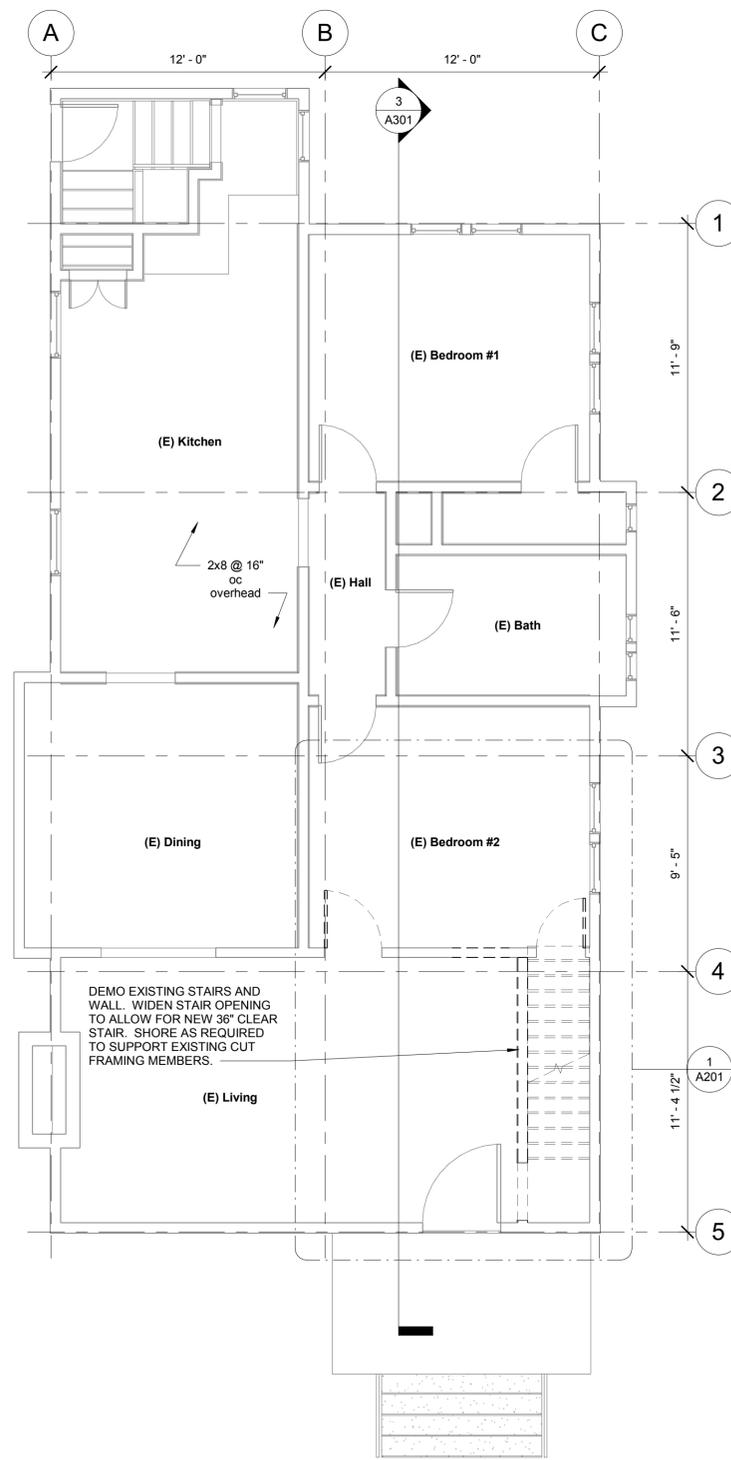
Structural Engineer: Jerome Madden, PE, SE  
Madden & Baughman Engineering, Inc  
jerome@maddenbaughman.com  
503.236.7611



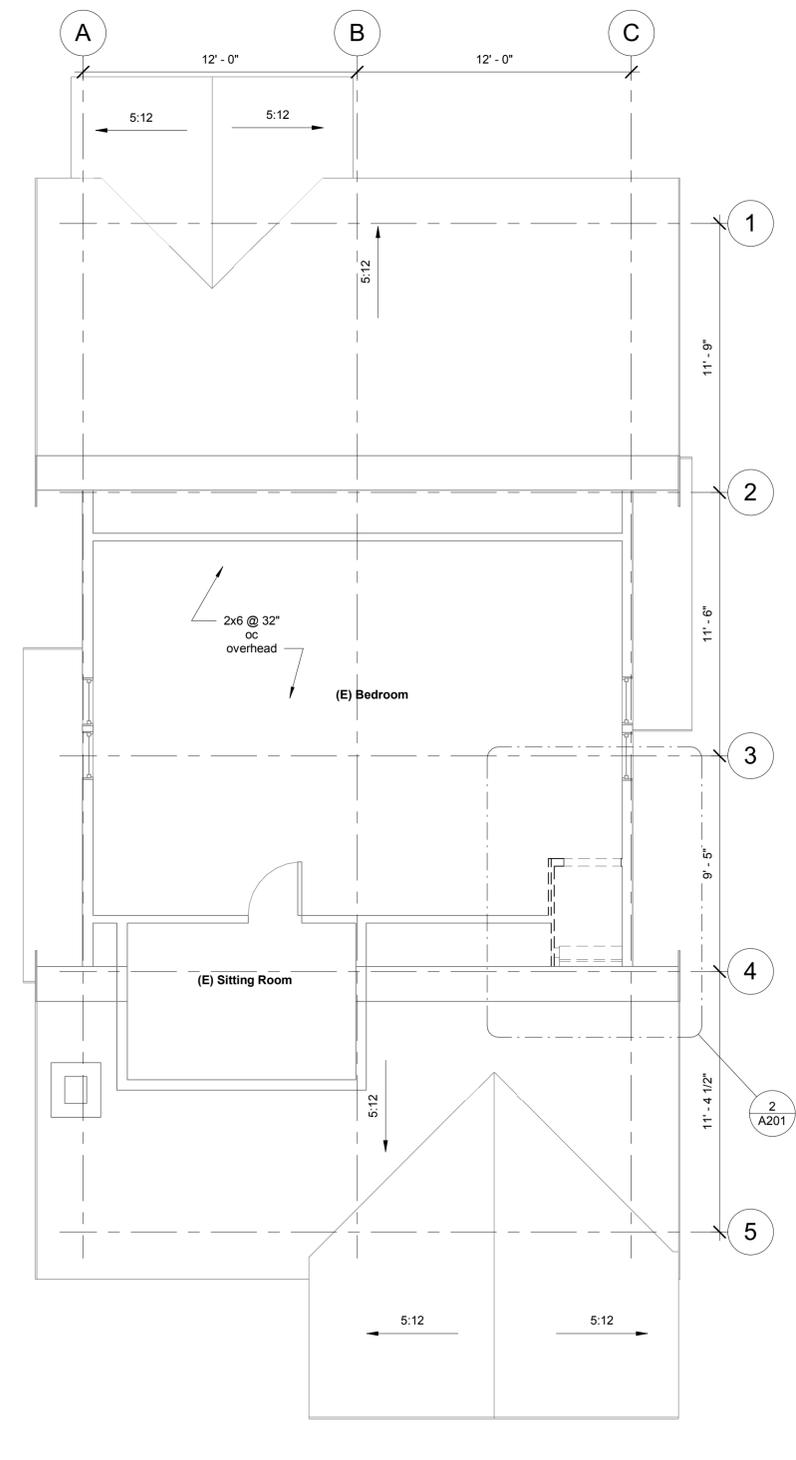
INDEX	ZONING	VICINITY MAP																																												
<ul style="list-style-type: none"> <li>- Cover and General Information</li> <li>A101 Existing and Demo Plans</li> <li>A201 Proposed Stair Plans and Sections</li> <li>A301 Building Section, Partial Reflected Ceiling Plan and Details</li> <li>S201 PARTIAL FOUNDATION AND FRAMING PLANS</li> </ul>	<p><b>Property and Zoning Information:</b></p> <p>Property Address: 2312 SE Ladd Avenue Portland, OR 9721</p> <p>Property Description: Prop ID: R200665 State ID: 1S1E02DC-02900 Alt Acct: R463306210 Tax Roll: LADDS ADD, BLOCK 28, LOT 16</p> <p>Description of Project: Replace stairs to (E) habitable attic. No changes to exterior.</p> <p>Building and Fire Code: 2017 Oregon Residential Code Occupancy: R-3 Private Residence. Construction: Type 5 NR</p> <p>Recent Land-Use and Permitting Decisions: None.</p> <p>Title 33 Zoning Code: R5 Single Family Detached. Setbacks: Front Yard: 10' Side Yard: 5' Rear Yard: 5'</p> <p>Contributing Property to Ladd's Historic District.</p> <p>Lot Size: 40x128=5,120 SF</p> <p>Max Allowed Building Coverage per Table 110-4: =N/A</p> <p>Actual Building Coverage: N/A</p> <p>Minimum Outdoor Area (Table 110-3): 250 SF (12'x12' Minimum)</p> <p>Actual Outdoor Area: Exceeds 250 SF.</p> <p>Existing House: 84 GSF Covered Front Porch 1174 GSF Main Floor 400 GSF Finished Attic 528 GSF Unfinished Basement</p> <p>Proposed House: No change.</p> <p><u>Major Alteration and Addition Neighborhood Notice Certification Form</u> N/A</p> <p><u>Title 11: Tree Code</u> N/A &lt;\$25,000 value.</p>	<p>① Vicinity Map 1" = 200'-0"</p>																																												
<p style="text-align: center;">ABBREVIATIONS</p> <table border="0"> <tr><td>CONC</td><td>Concrete</td></tr> <tr><td>DWG</td><td>Drawing</td></tr> <tr><td>ENG'D</td><td>Engineered</td></tr> <tr><td>(E)</td><td>Existing</td></tr> <tr><td>FV</td><td>Field verify</td></tr> <tr><td>GYP BD</td><td>Gypsum Board</td></tr> <tr><td>GSF</td><td>Gross Square Feet</td></tr> <tr><td>(N)</td><td>New</td></tr> <tr><td>OFCI</td><td>Owner Furnished, Contractor Installed</td></tr> <tr><td>OFOI</td><td>Owner Furnished Owner Installed</td></tr> <tr><td>PL</td><td>Property Line</td></tr> <tr><td>SF</td><td>Square feet</td></tr> <tr><td>STRUCT</td><td>Structural</td></tr> <tr><td>T.O.W.</td><td>Top of wall</td></tr> <tr><td>TYP</td><td>Typical</td></tr> <tr><td>UON</td><td>Unless otherwise noted</td></tr> <tr><td>w/</td><td>With</td></tr> </table>	CONC	Concrete	DWG	Drawing	ENG'D	Engineered	(E)	Existing	FV	Field verify	GYP BD	Gypsum Board	GSF	Gross Square Feet	(N)	New	OFCI	Owner Furnished, Contractor Installed	OFOI	Owner Furnished Owner Installed	PL	Property Line	SF	Square feet	STRUCT	Structural	T.O.W.	Top of wall	TYP	Typical	UON	Unless otherwise noted	w/	With	<p style="text-align: center;">LEGEND</p> <table border="0"> <tr><td></td><td>EXISTING WALLS</td></tr> <tr><td></td><td>NEW 2x WALLS</td></tr> <tr><td></td><td>SECTION CALLOUT</td></tr> <tr><td></td><td>ELEVATION CALLOUT</td></tr> <tr><td></td><td>KEYNOTE, REF KEYNOTE LEGEND A201</td></tr> </table>		EXISTING WALLS		NEW 2x WALLS		SECTION CALLOUT		ELEVATION CALLOUT		KEYNOTE, REF KEYNOTE LEGEND A201	<p style="text-align: center;">SITE PLAN</p> <p>② Site Plan 1/16" = 1'-0"</p>
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<p style="text-align: center;">GENERAL NOTES</p> <ol style="list-style-type: none"> <li>All dimensions to face of finish unless otherwise noted.</li> <li>Contractor to field verify all existing dimensions prior to start of work. Notify Architect of any discrepancies.</li> <li>Refer to Project Specifications for additional general notes.</li> </ol>																																														
<p style="text-align: center;">CODES</p> <p>Construct project in conformance with all applicable codes including the 2017 Oregon Residential Specialty Code. Requirements include, but are not limited to, the following:</p> <p><u>Fire and Life Safety:</u></p> <p>R314.3: Install/interconnect smoke detectors in each sleeping room and outside each separate sleeping area in the immediate vicinity of the bedrooms. Install at least one smoke alarm on each level including basement.</p> <p>R315.2: Add CO detection in each bedroom or within 15 feet outside of each bedroom door. Bedrooms on separate floor levels in a structure consisting of two or more stories shall have separate CO alarms serving each story.</p> <p><u>Energy Efficiency (Chapter 11):</u></p> <p>Per BDS Code Guide: Habitable Space Standards for Existing Elements within One and Two Family Dwellings</p> <p>Contractor to provide the following min R values (or max U values) within the Scope of Work:</p> <p>Item G: Where finishes have been removed from exterior walls and roofs provide min R-15 insulation. All roof insulation must be ventilated using insulation baffles that provide at least 1" air space.</p> <p><u>N1107 Lighting:</u> All permanently installed lighting fixtures shall contain high-efficacy lamps. Screw-in compact fluorescent and LED lamps comply with this requirement. * Exception: Two permanently installed light fixtures are not required to have high-efficacy lamps.</p>																																														



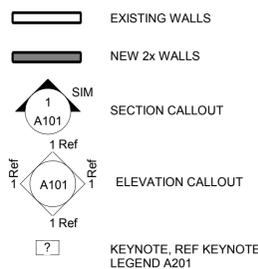
1 Basement - Existing and Demo  
1/4" = 1'-0"



2 Main Floor - Existing and Demo  
1/4" = 1'-0"



3 Attic - Existing and Demo  
1/4" = 1'-0"



Legend  
1/4" = 1'-0"

NOTES:

1. Full size drawings sets are 22x34. Reduce scale by 1/2 for 11x17 sets.
2. Reference Cover sheet and Project Specifications for additional information including finishes and project standards.

Kristi Hauke and Bruce Ely  
2312 SE Ladd Avenue  
Portland, OR 97214  
Hauke|Ely Stair Remodel

Existing and Demo Plans

PERMIT SET  
Project #: 18080  
Date: 6/5/2019  
Scale: 1/4" = 1'-0"



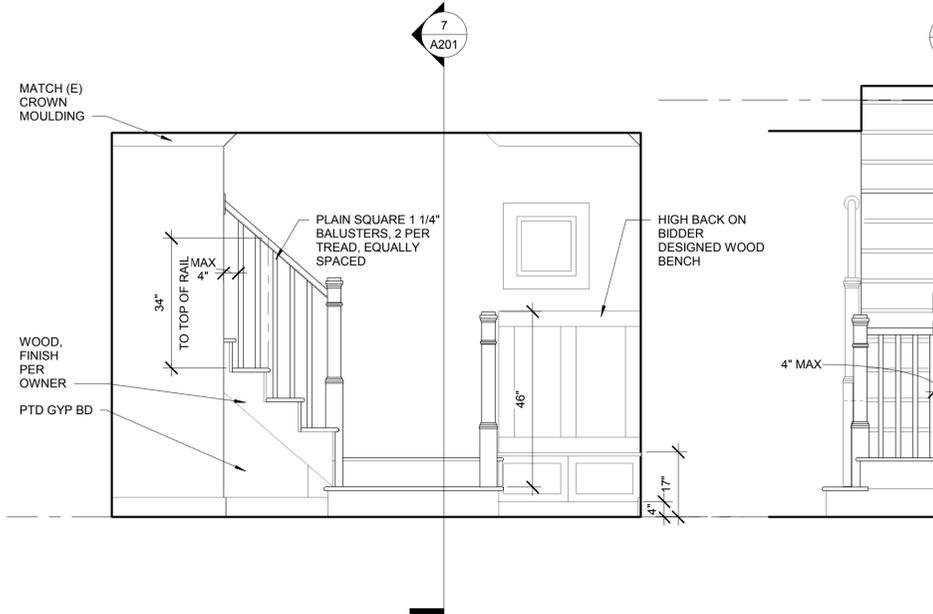
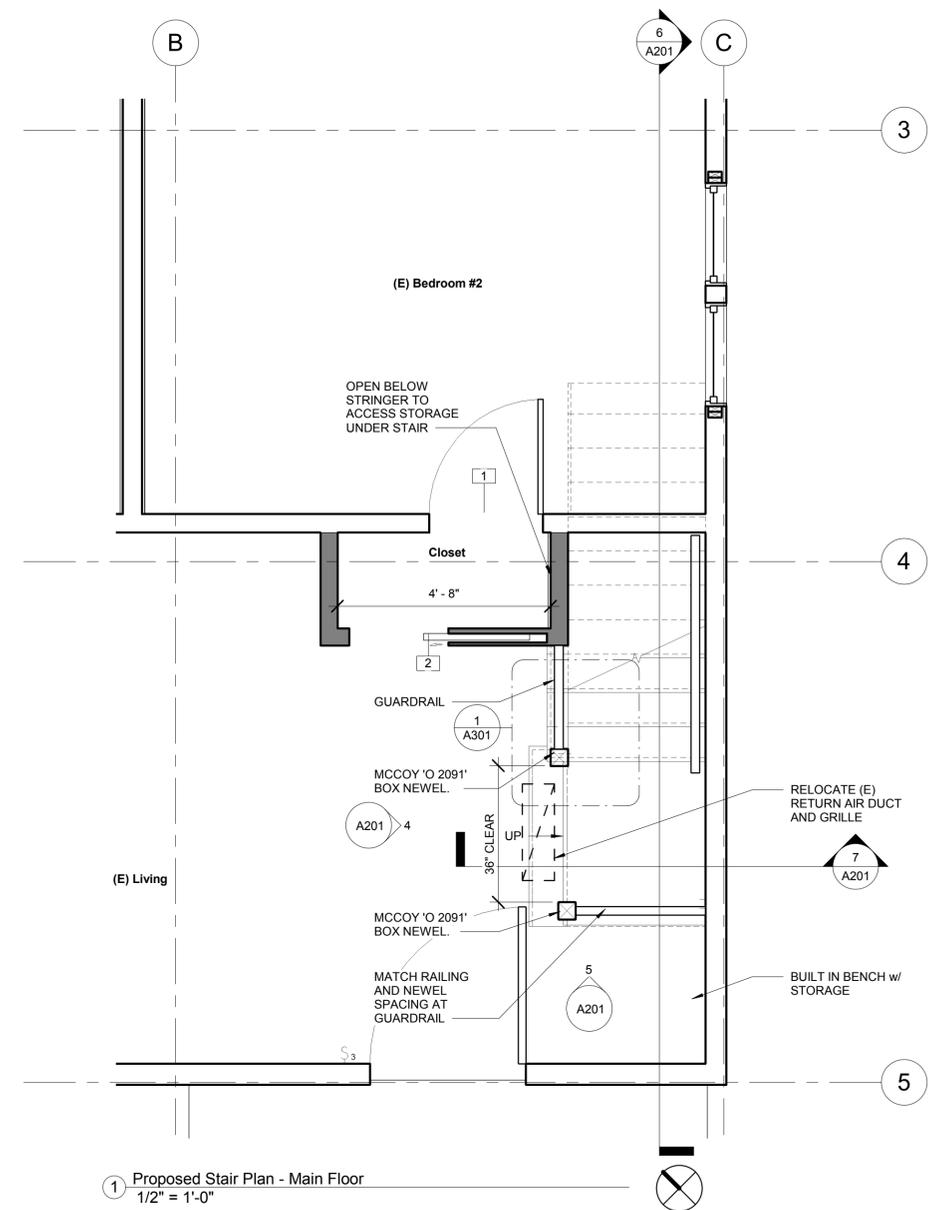
Keynote Legend	
Key Value	Keynote Text
1	NEW OR RE-USED 30"x80" SOLID CORE DOOR TO MATCH EXISTING DOORS AND HARDWARE.
2	NEW 28"x80" SOLID CORE POCKET DOOR. OWNER TO SELECT HARDWARE.

NOTES:

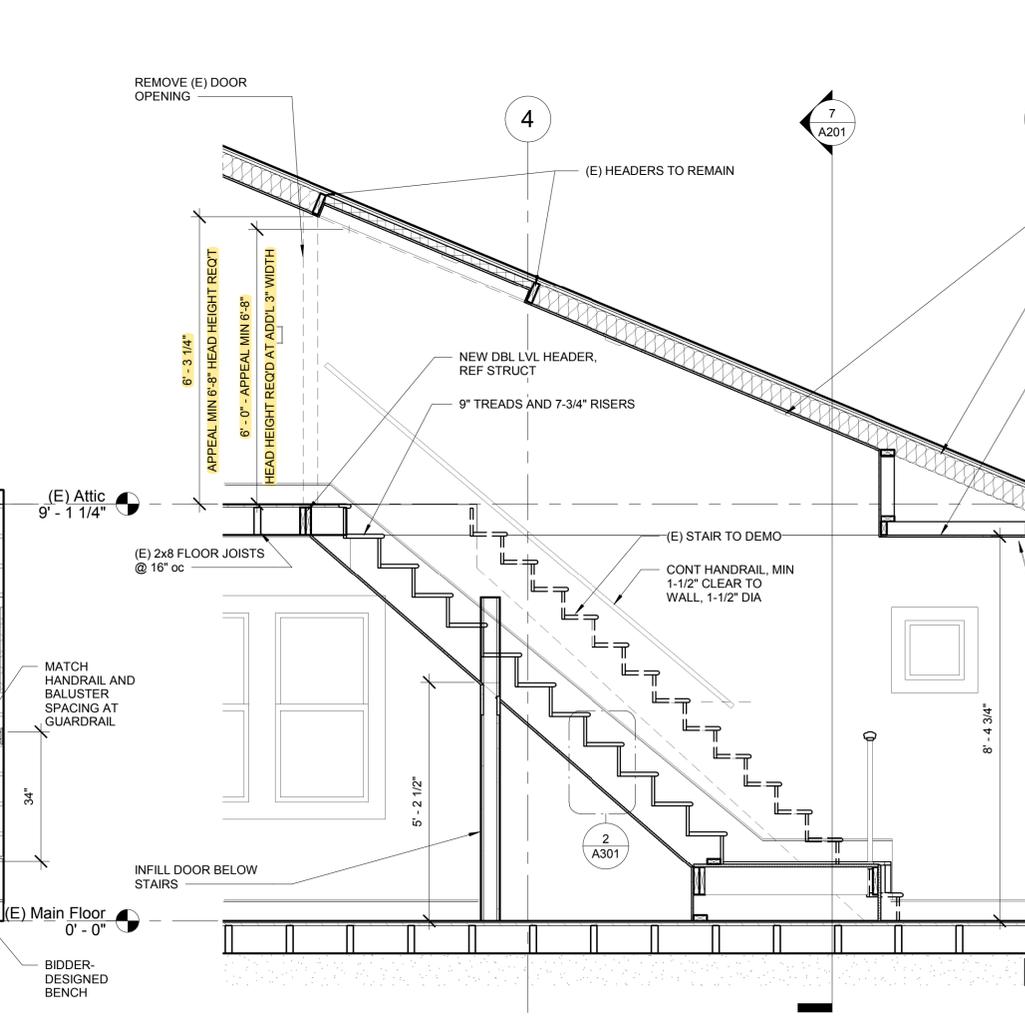
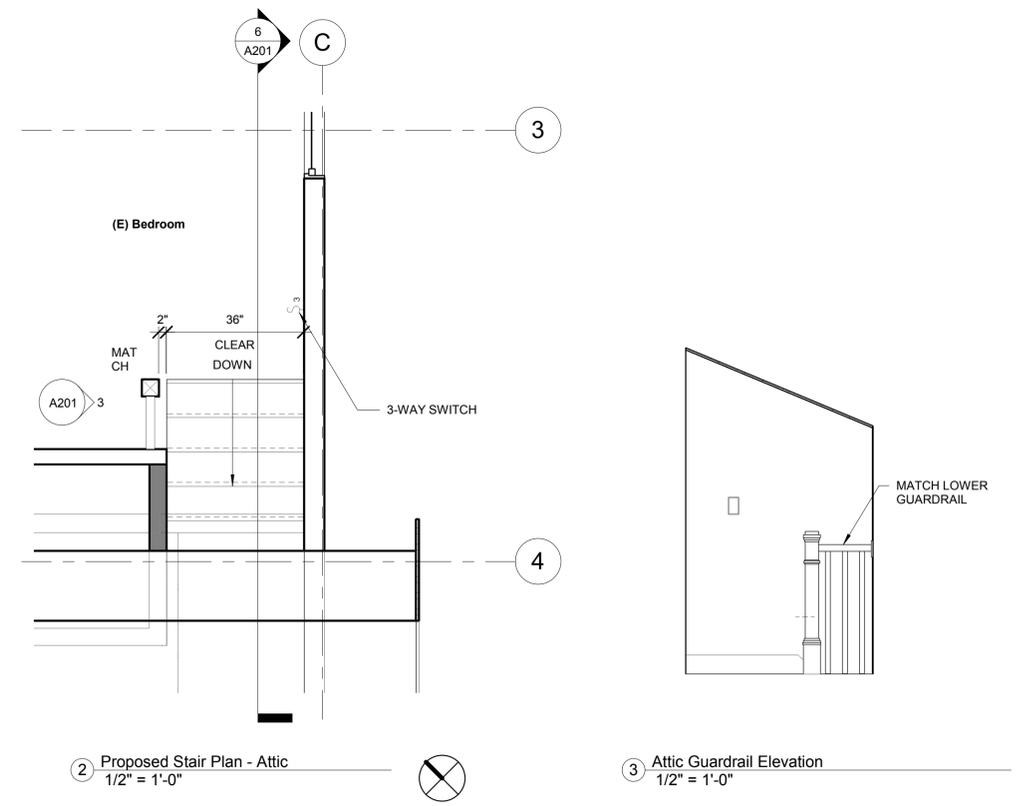
1. Full size drawings sets are 22x34. Reduce scale by 1/2 for 11x17 sets.
2. Reference Cover sheet and Project Specifications for additional information including project standards.
3. Mechanical: Relocate existing return air grille and patch floor as needed.

EXISTING WALLS  
 NEW 2x WALLS  
 SECTION CALLOUT  
 ELEVATION CALLOUT  
 KEYNOTE, REF KEYNOTE LEGEND A201

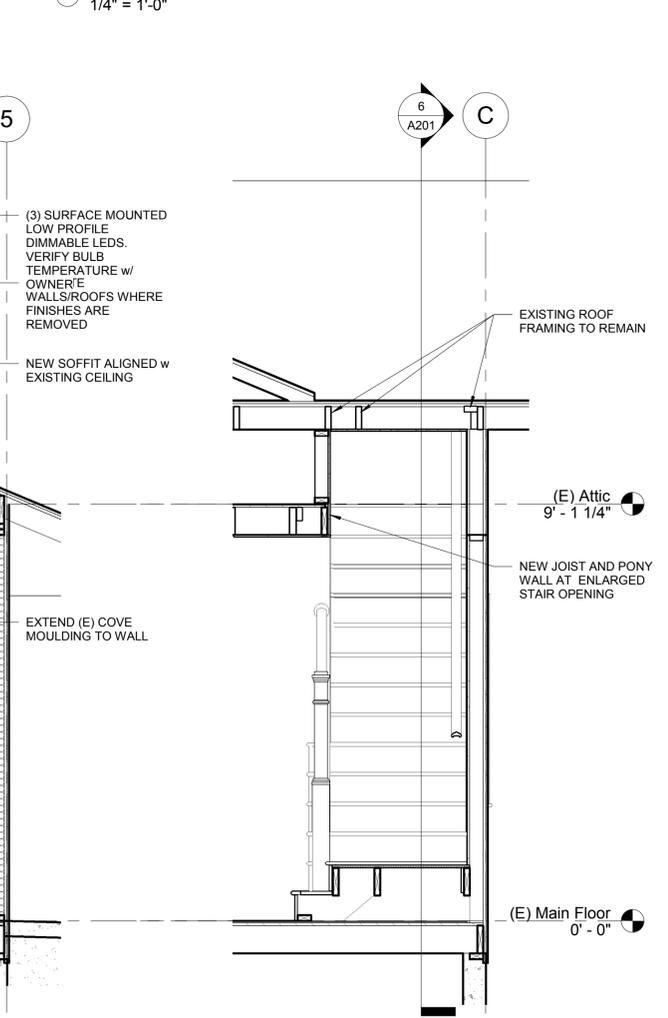
Legend  
1/4" = 1'-0"



4 Stair Railing - Front Elevation  
1/2" = 1'-0"



6 Stair Section  
1/2" = 1'-0"

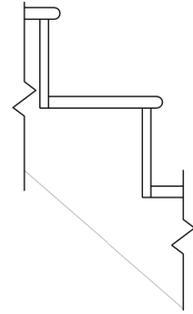
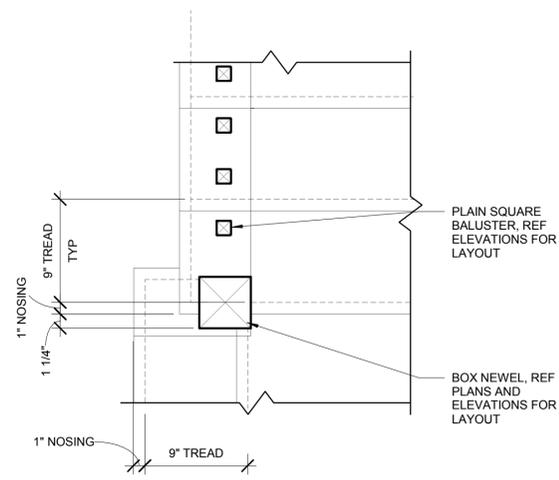


7 Section Perpendicular to Stair  
1/2" = 1'-0"

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Hauke|Ely Stair Remodel

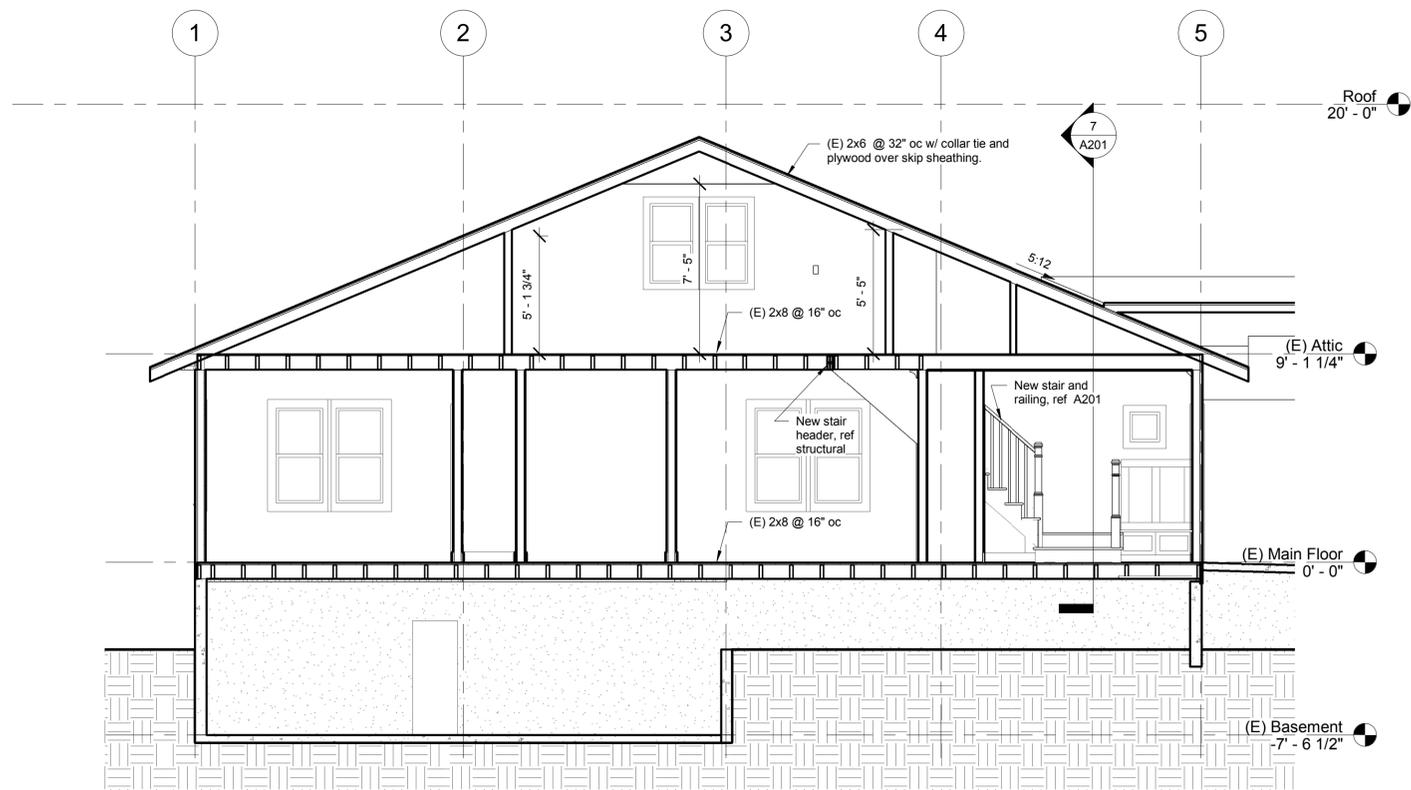
Proposed Stair Plans and Sections

PERMIT SET  
Project #: 18080  
Date: 6/5/2019  
Scale: As indicated

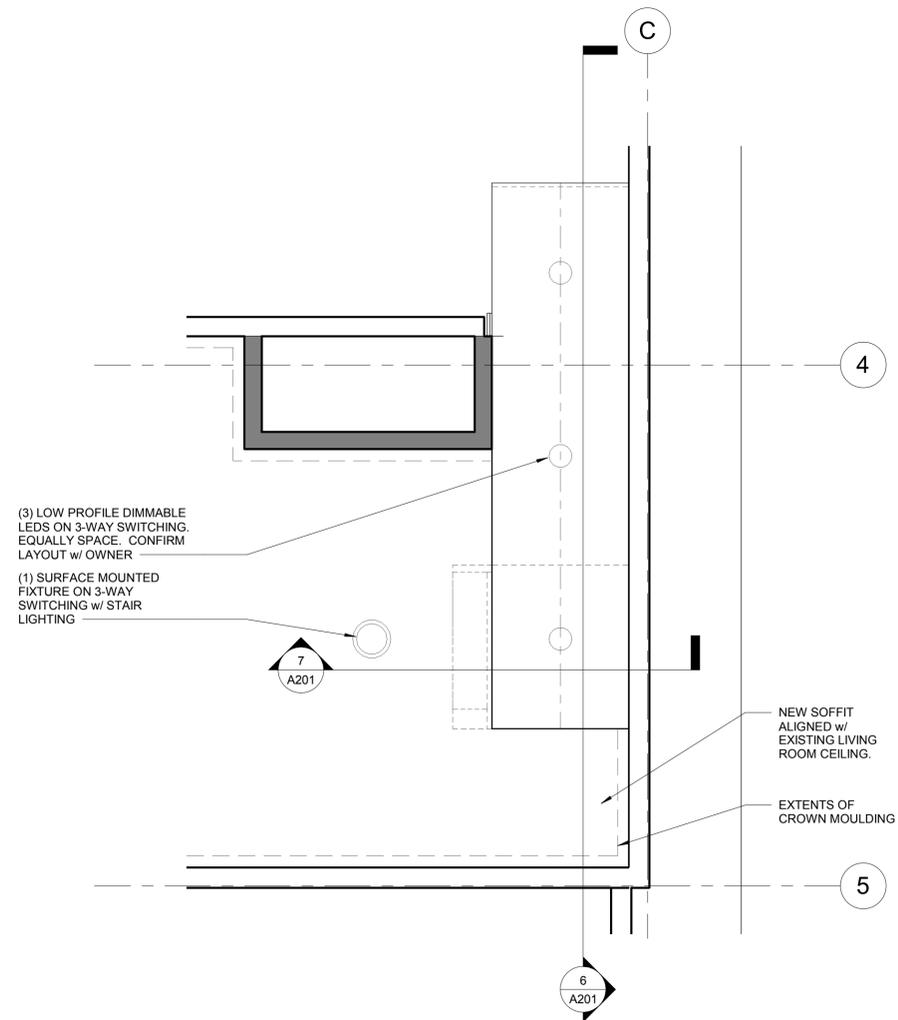


① PLAN DETAIL AT BOX NEWEL  
1 1/2" = 1'-0"

② TREAD/RISER DIAGRAM  
1 1/2" = 1'-0"



③ Building Section  
1/4" = 1'-0"



④ Partial First Floor RCP  
1/2" = 1'-0"

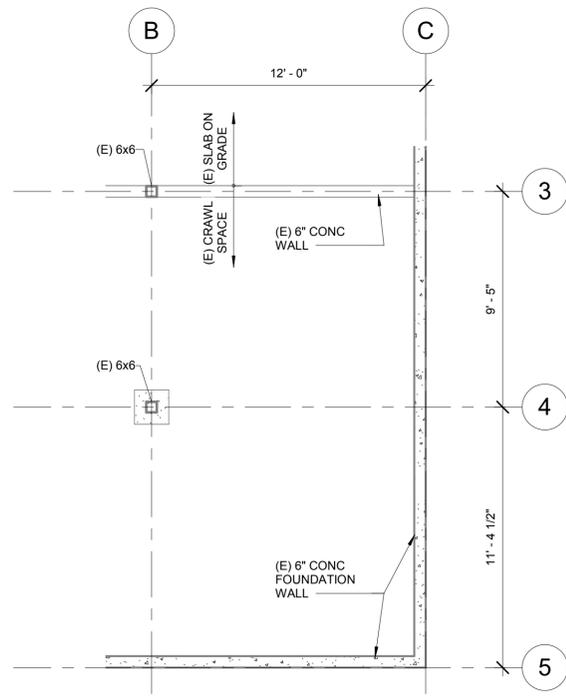
Kristi Hauke and Bruce Ely  
2312 SE Ladd Avenue  
Portland, OR 97214  
Hauke|Ely Stair Remodel

Building Section,  
Partial Reflected  
Ceiling Plan and  
Details

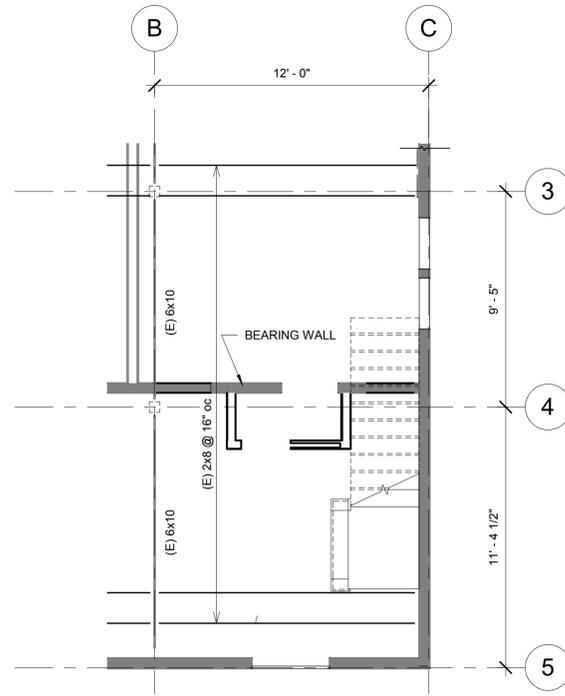
PERMIT SET  
Project #: 18080  
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Scale: As indicated



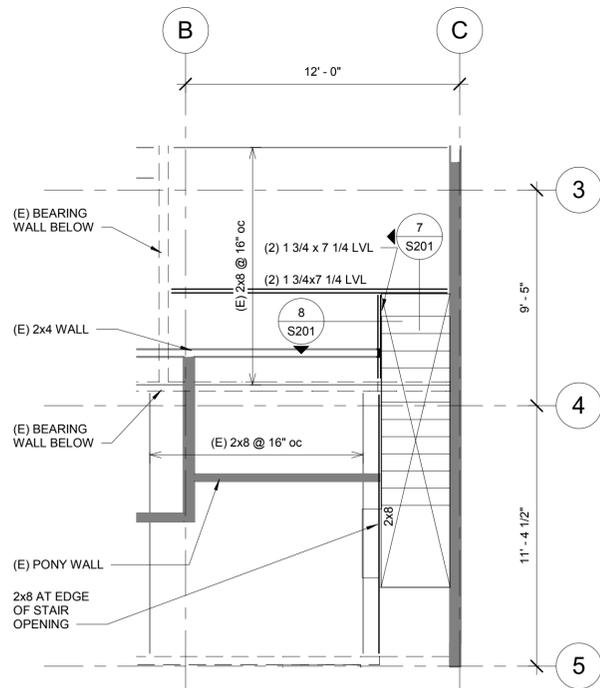
Structural Legend  
1/4" = 1'-0"



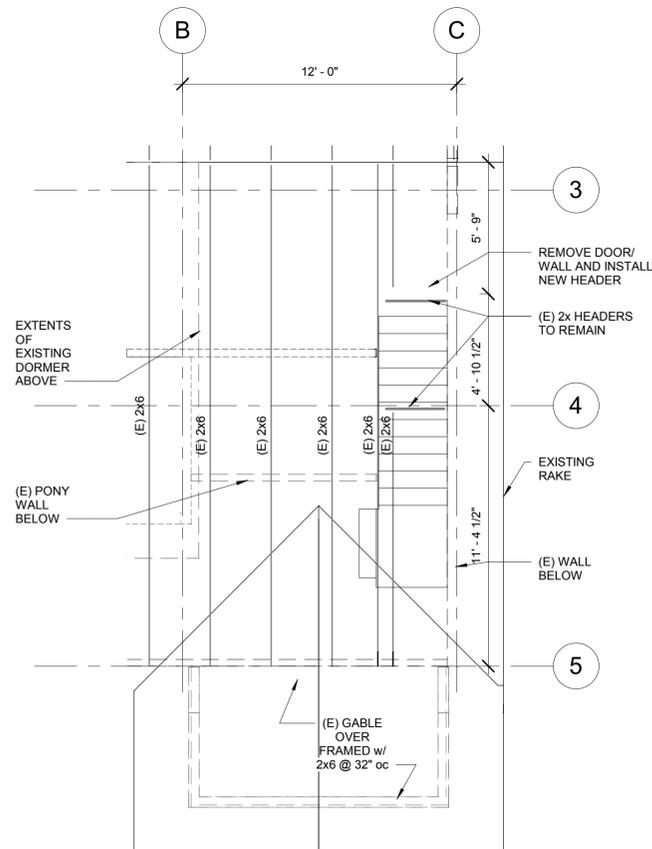
1 PARTIAL BASEMENT FOUNDATION PLAN  
1/4" = 1'-0"



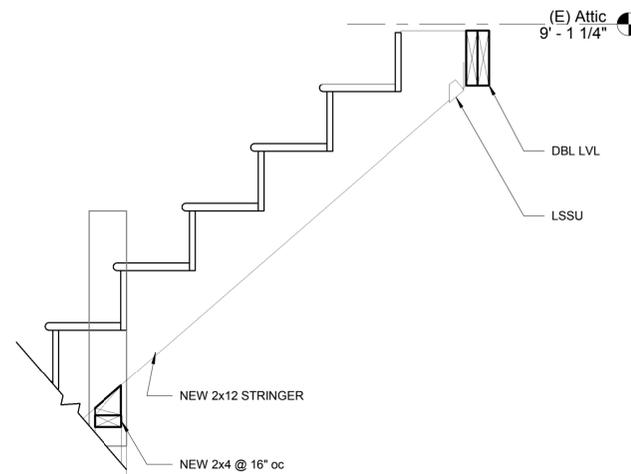
2 PARTIAL MAIN FLOOR FRAMING PLAN  
1/4" = 1'-0"



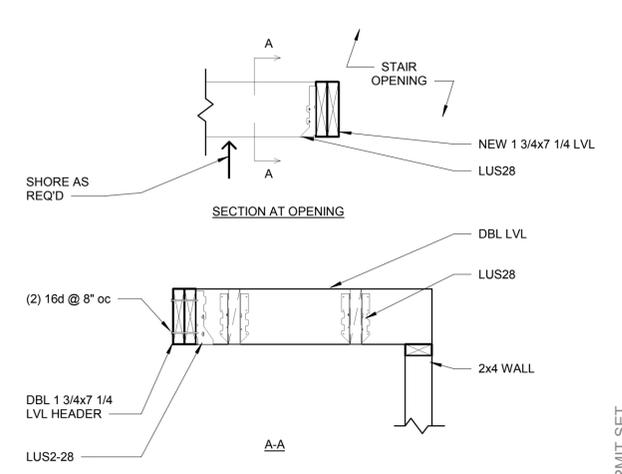
3 PARTIAL ATTIC FRAMING PLAN  
1/4" = 1'-0"



4 PARTIAL ROOF FRAMING PLAN  
1/4" = 1'-0"



7 SECTION AT STAIR  
1" = 1'-0"



8 SECTION AT OPENING  
1" = 1'-0"

Kristi Hauke and Bruce Ely  
2312 SE Ladd Avenue  
Portland, OR 97214  
Hauke|Ely Stair Remodel

PARTIAL  
FOUNDATION  
AND FRAMING  
PLANS

PERMIT SET  
Project #: 18080  
Date: 6/5/2019  
Scale: As indicated



**MADDEN & BAUGHMAN**  
ENGINEERING, INC.

June 5, 2019

Ms. Jennifer Wentzien  
Guide Architecture  
3331 SE Schiller  
Portland, Oregon 97202

RE: Structural Calculations  
Ely Hauke 2<sup>nd</sup> floor stair remodel  
2312 SE Ladd Ave, Portland, Oregon

Dear Jen

Attached please find structural calculations for the design of the framing for a residential remodel of a 2<sup>nd</sup> floor stair located at 2312 SE Ladd Ave in Portland, Oregon. The building is designed to meet the requirements of the 2014 Oregon Structural Specialty Code.

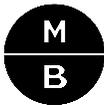
Sincerely,

Jerome Madden, PE, SE  
Madden & Baughman Engineering, Inc.



The attached calculations represent design for gravity and lateral loads as determined by the applicable building code. To the extent the design is based on information provided by the client or others, Madden & Baughman Engineering, Inc. has relied on such information and assumes that it is accurate. Madden & Baughman Engineering, Inc. shall have no liability with respect to means and methods of construction. The engineering reflects the finished product and no consideration has been made for temporary conditions that may exist during construction (such as loads induced during erection, shoring, etc.), which are entirely the responsibility of the contractor.

Madden & Baughman Engineering, Inc. is and shall remain the owner of the calculations. Unauthorized use of these calculations is prohibited including but not limited to making changes to this project or use on other projects.



**MADDEN & BAUGHMAN**  
ENGINEERING, INC.

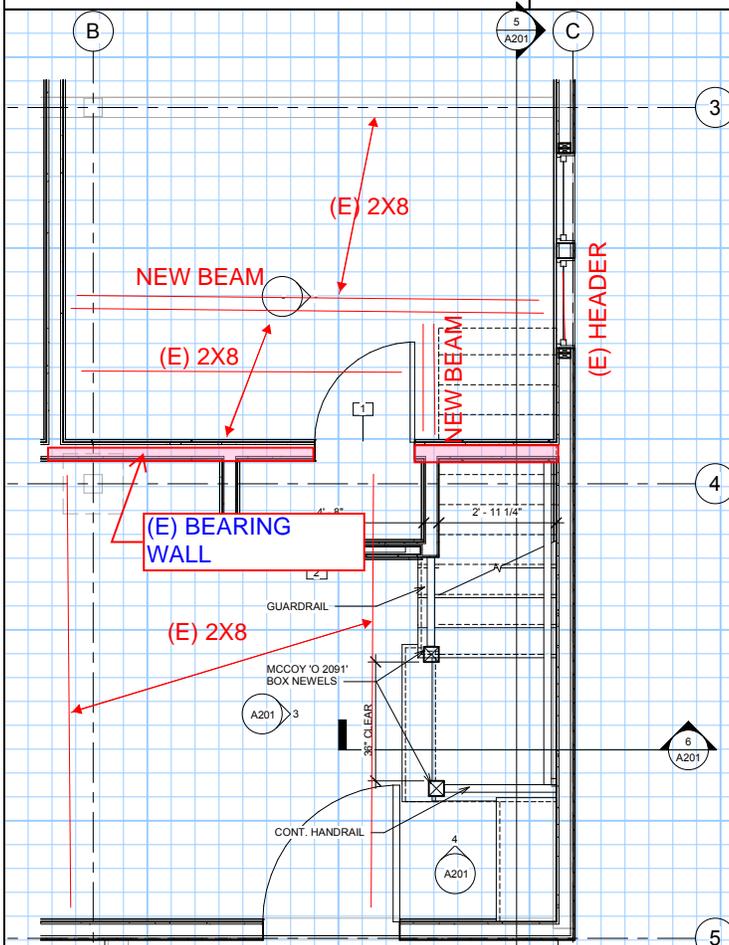
Portland, OR  
tel 503.236.7611  
www.maddenbaughman.com

Project **Kristi Hauke and Bruce Ely**  
Location **2312 SE Ladd Avenue**  
Client **Portland, OR 97214**

By **JM**  
Date **6/5/19**  
Revised  
Date

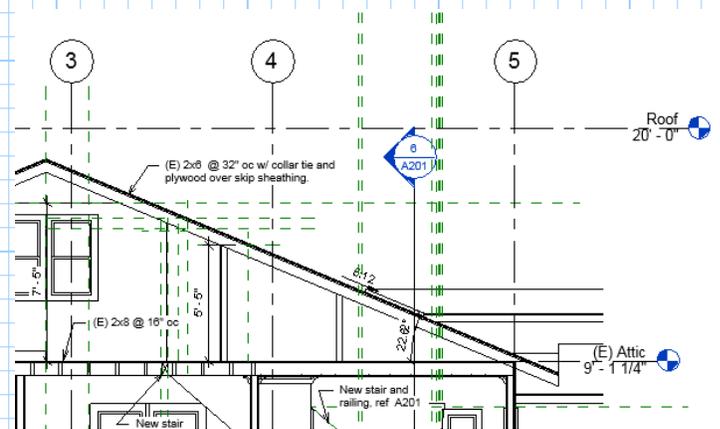
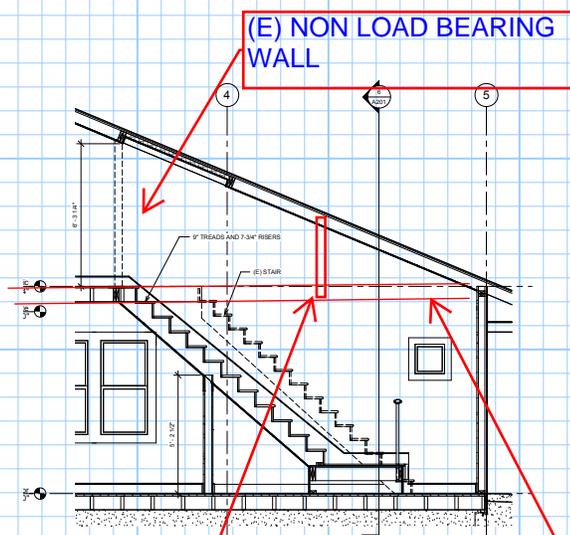
Sheet No.

Job No.



**SCOPE: EXTEND EXISTING STAIR OPENING ON 2ND FLOOR**

**PARTIAL 2ND FLOOR FRAMING PLAN**



**TYP. BUILDING SECTION**

**(E) PONY WALL AT TYP**

**(E) 2X8 AT TYPICAL**



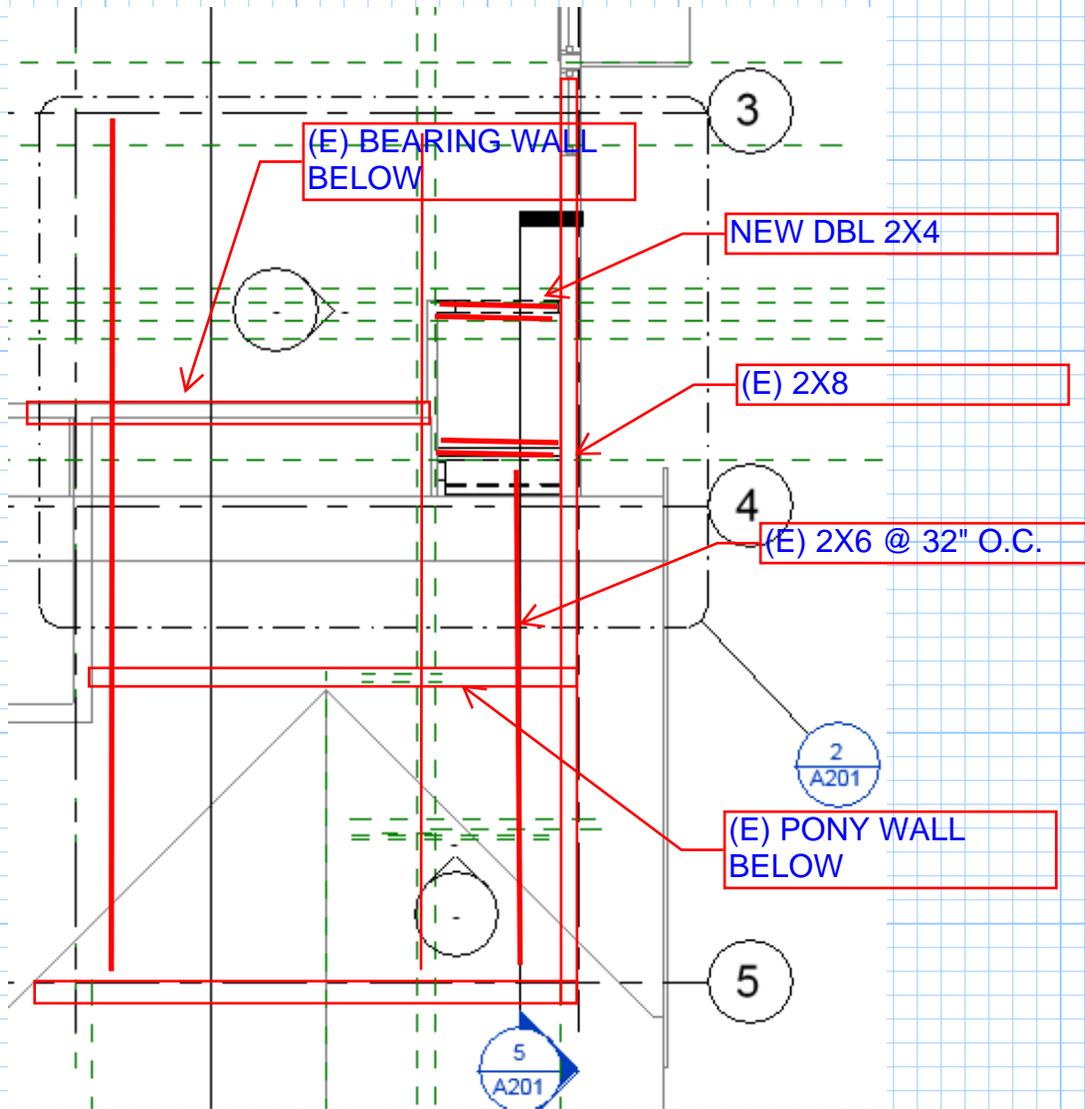
**MADDEN & BAUGHMAN**  
ENGINEERING, INC.  
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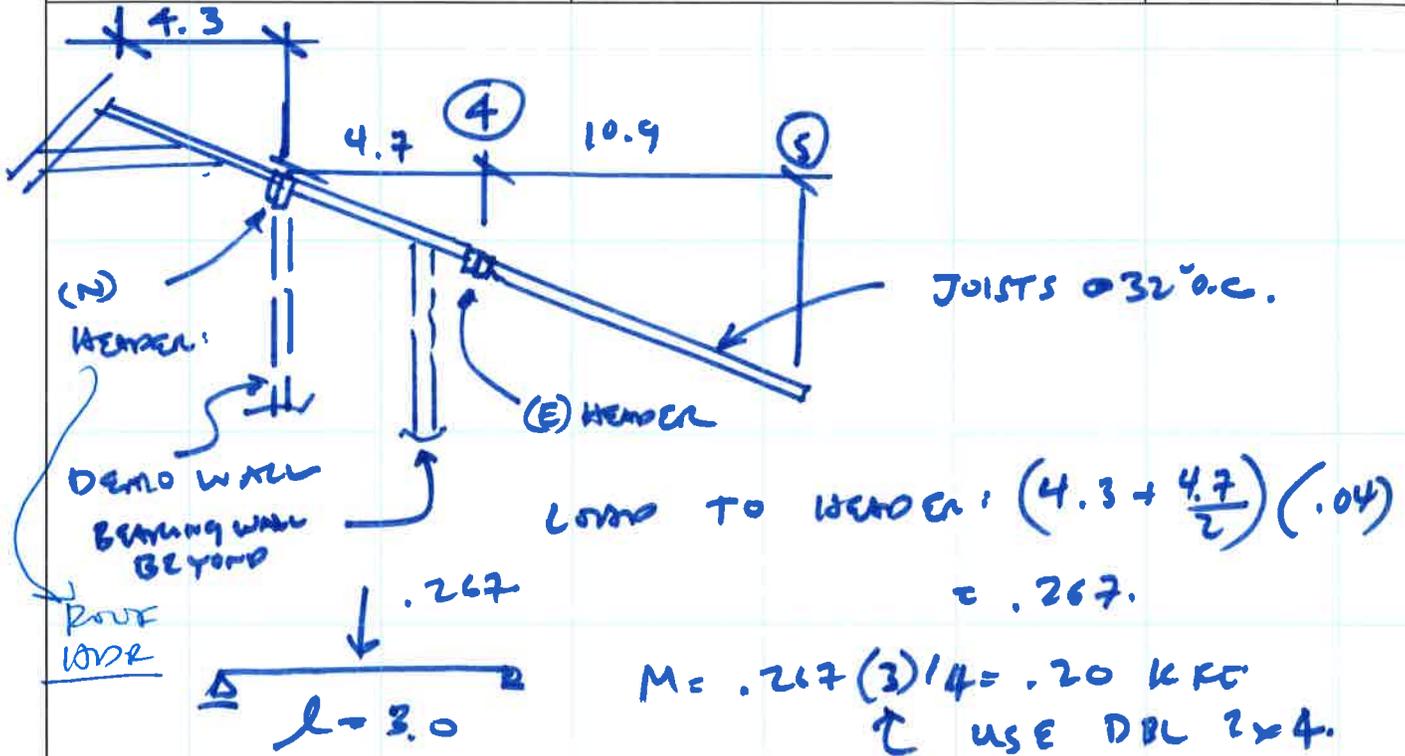
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Job No.



PARTIAL ROOF FRAMING

SEE CALCULATIONS NEXT PAGE

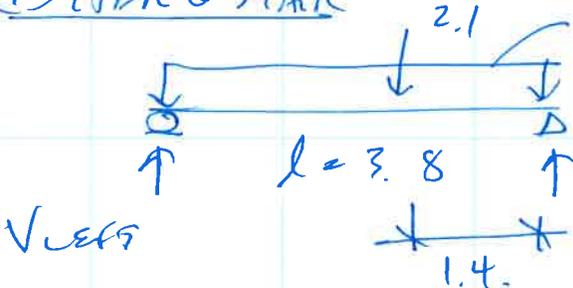


TRUB TO (E) BEARING WALL:

$$\left( \frac{5.1}{2} + 8.7 \right) (.04) = .45 \text{ kip}$$

LOAD TO NEW HEADER @ STAIR:  $0.45 (9.2/2) = 2.1 \text{ kip}$

(N) LOAD @ STAIR



$$\frac{9.2}{2} (.055) = .253 \text{ klf}$$

$$M = .253 (3.8)^2 \frac{1}{8} + \frac{2.1 (3.8)}{4}$$

$$M = 2.45 \text{ kft}$$

$$f_{bxt} = \frac{2.45 (12)}{31} = .95 \text{ ksi}$$

$$V_{LEFT} = \frac{.253 (3.8)}{2} +$$

$$2.1 \left( \frac{1.4}{3.8} \right) = 1.25 \text{ kip}$$



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ENGINEERING, INC.  
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tel 503.236.7611  
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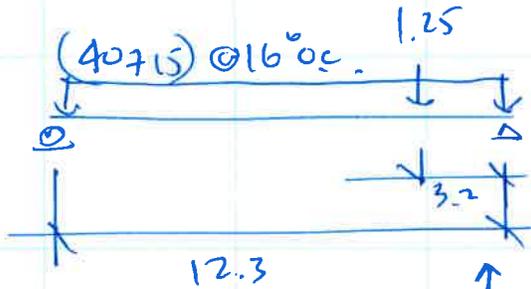
Project **Kristi Hauke and Bruce Ely**  
Location 2312 SE Ladd Avenue  
Client Portland, OR 97214

By **JM**  
Date **6/5/19**  
Revised  
Date

Sheet No.

Job No.

NEW REINF JUST:



$$M = 73 \left( \frac{12.3}{8} \right)^2 + \frac{1.25 (3.2) (9.1)}{12.3}$$

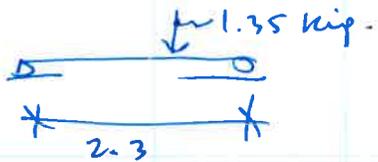
$$M = 1.38 + 2.9 = 4.33 \text{ kft}$$

$$V = 1.35$$

$$f_{max} = \frac{4.33 (12)}{30.4} = 1.7 \text{ ksi}$$

↪ P3C LVL  
13/4 x 7 1/2

(E) HEADER @ grid c:



$$M = \frac{1.3 (2.3)}{4} = .75 \text{ kft}$$

$$f = \frac{.75 (12)}{13} = .92 \text{ ksi}$$

↪ (E) HEADER 2x8