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 Prepared by: **BTD/MT**
BO Letter Number: **3010523**

 Greg Carlson
Javiena Group
(503) 781-8347

Engineering Addendum

Project Name: Javiena Group Fremont St Remodel (Portland) 2810523
Project Location: 5935 NE Fremont St
 Portland, Oregon 97213
Project Number: 2810523
Date: 5/10/2023

The following is in response to an email request from Greg Carlson on 5/8/2023:

It was requested to verify the strength of a glulam beam that will replace the previous bearing wall.

- The new glulam beam will have enough sufficient strength to replace the bearing wall. See attached drawing for support clarification.

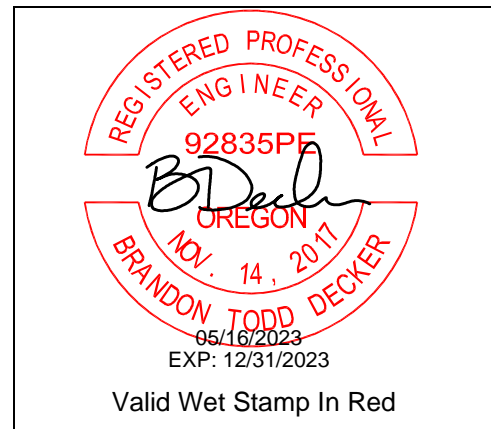
It was also requested to ensure that the drilled plumbing hole in the joist will not affect the joist.

- The joist with the drilled plumbing needs to be addressed. Attach a 30" CS14 strap to the bottom of the damaged joist, centered below the hole.
 - Alternative option: Attach a 30" long 1/4" thick steel plate to the bottom of the joist. Plate to have same width and nailing as the CS14 strap.

See the following schedules and calculations for updated plans:

BEAM SCHEDULE	
MARK	TYPE
RB 01	3-1/2 X 12 GLB
1. DIMENSIONAL LUMBER DF #2 U.N.O.	
2. LAMINATED VENEER LUMBER (LVL) 2.0E	
3. GLUED-LAMINATED TIMBER (GLB) 24F-1.8E	
4. STEEL W-SHAPES A992-50	
5. SUFFIXES (A, B, ETC.) DENOTE ALTERNATIVES FOR THE SPECIFIED BEAM	
6. ALL HEADERS IN BEARING WALLS TO HAVE MIN. (1) TRIMMER & (1) KING STUD U.N.O. ALL OTHER BEAMS AND GIRDER TRUSSES TO HAVE MIN. (2) 2X SUPPORTS U.N.O.	

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Summary

Mark = RB 01
 Section = 3-1/2 X 12 GLB [24F-1.8E]
 Span = 11.33 ft
 Result = Section adequate by 23 % - Load Combo. No.4 DL + 0.75*(FLL + RLL) - Flexure

RB 01**3-1/2 X 12 GLB [24F-1.8E]****Distributed Loads**

Class	LL (psf)	DL (psf)	Load Start		Load End	
			Trib (ft)	x1 (ft)	Trib (ft)	x2 (ft)
Roof	25	17	16.50	0.00	16.50	7.00
Roof	25	17	10.00	7.00	10.00	11.33
Floor	40	12	6.92	0.00	6.92	7.00

Point Loads

Ref.	a (ft)	RLL (lb)	FLL (lb)	DL (lb)	Total (lb)
JT 04-R	7	167	200	773	1,140

Dead Loads

Self Weight BSW = 10 plf

Allowable Stress

Shear Stress $F_v = 265$ psi
 Bending Stress $F_b = 2400$ psi

Beam Adjustment Factors

Load Duration $C_d = 1.15$
 Form $CF = 1.00$
 Repetitive $Cr / C_v = 1.00$

Load Reduction Factors

Live Load LLRF = 1.00

Beam Section Properties

Width $b = 3.5$ in.
 Depth $d = 12$ in.
 Area $A = 42$ in.²
 Shear Area $A_s = 28$ in.²
 Moment of Inertia $I = 504$ in.⁴
 Section Modulus $S = 84$ in.³

Beam Material Properties

Modulus of Elasticity $E = 1800000$ psi
 Flexure Stiffness $EI = 907000000$ lb-in.²

Req'd bearing length = 2.34" 1.8"

Deflection Criteria

Span	DLD (in.)	LLD (in.)	Result	TLD (in.)	Result
Center	0.19	0.18	51 %	0.37	34 %

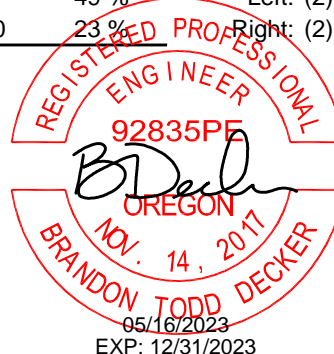
Strength Criteria

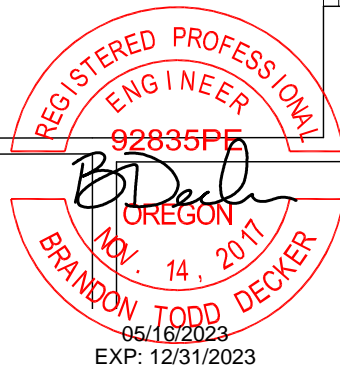
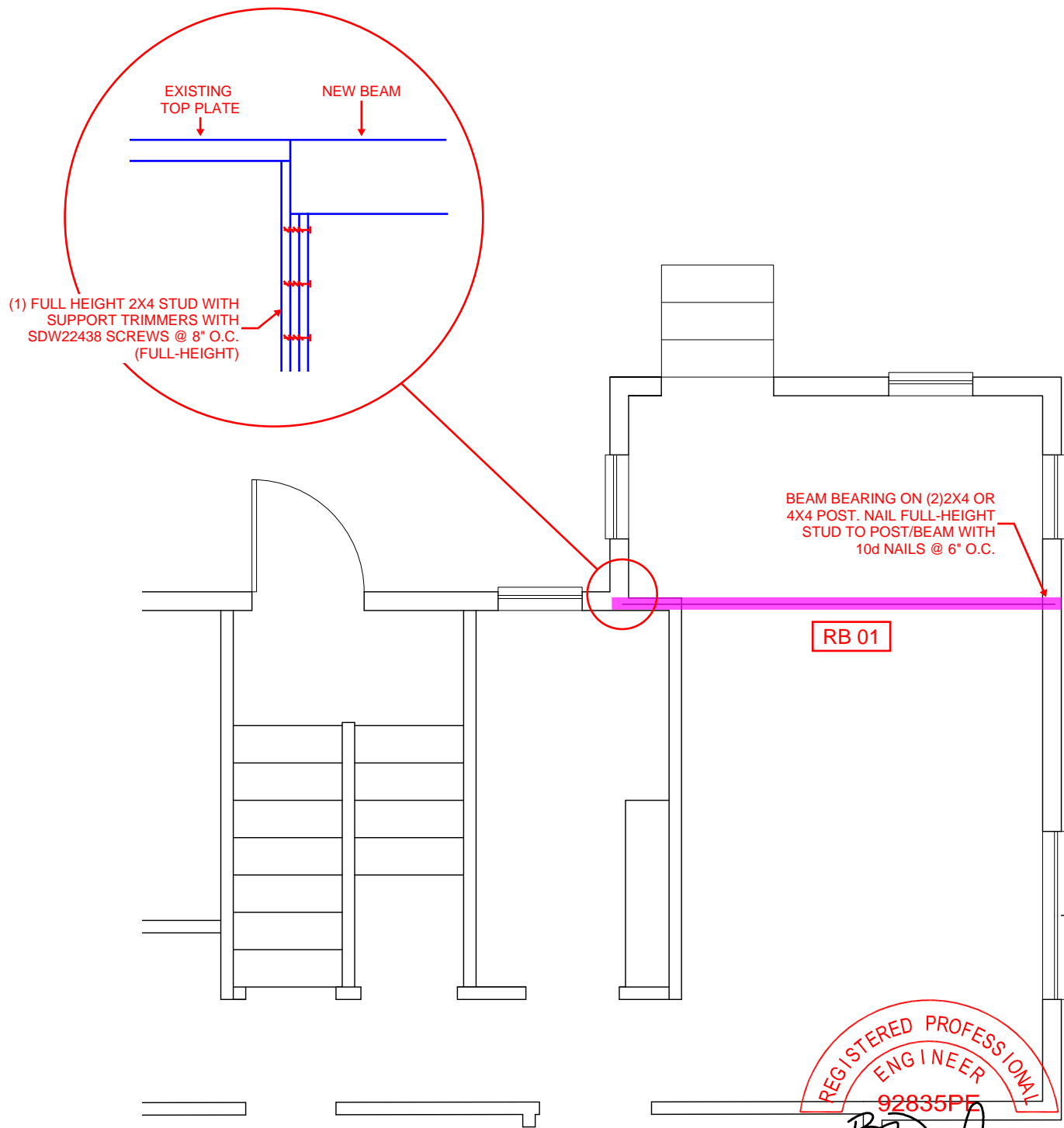
Condition	Maximum	Allowable	Result
Shear (lb)	4,368	8,533	49 %
Moment (lb-ft)	14,911	19,320	23 %

Support Reactions

	Left	Right
RLL (lb)	2,266	1,871
FLL (lb)	1,415	722
DL (lb)	2,554	2,158
Total (lb)	5,315	4,103

Left: (2) 2 X 4 (1) K 6314 lb
 Right: (2) 2 X 4 4980 lb





2nd FLOOR FRAMING PLAN

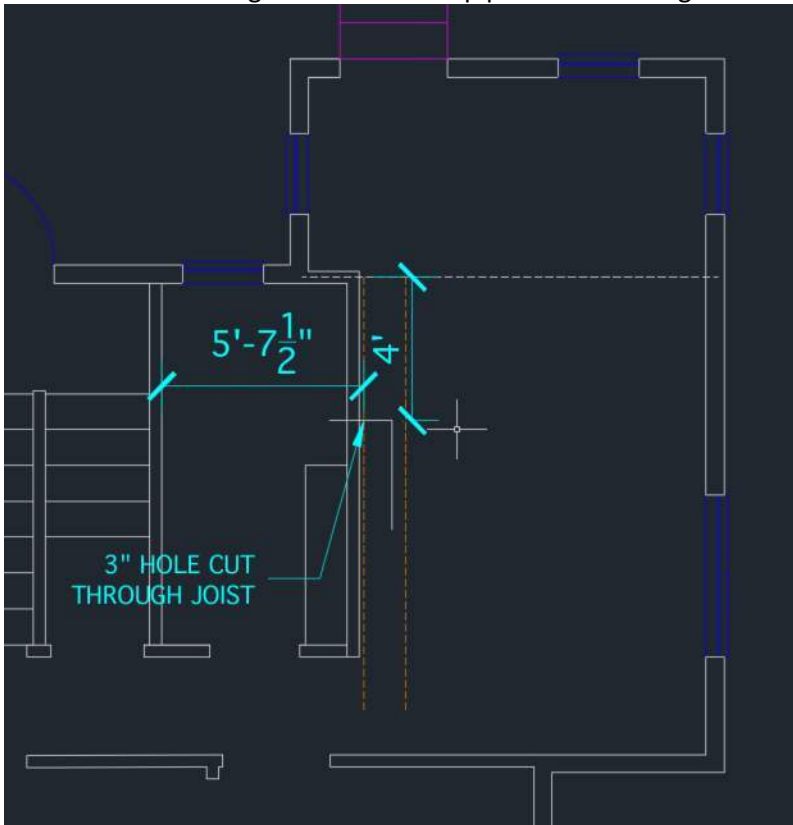
SCALE: 1/4"=1'-0"

Hussam Fallatah

From: Leo Botello <leo@fasterpermits.com>
Sent: Wednesday, May 10, 2023 2:29 PM
To: Greg Carlson
Cc: Brandon Decker; Zac Horton
Subject: Re: NEW WORK - 5935 NE Fremont

Brandon, Greg

I think this is the rough location of the pipe from the images I have that what I am seeing



On Wed, May 10, 2023 at 9:47 AM Greg Carlson <gregcarlson1984@gmail.com> wrote:
67.5" to a LB wall

On Tue, May 9, 2023 at 3:15 PM Greg Carlson <gregcarlson1984@gmail.com> wrote:
If the bathroom wall (less than 2' away), then it's the wall in the 1st pic below which is less than 10' I'm out of town otherwise I could go there to

check.



On Tue, May 9, 2023 at 2:05 PM Greg Carlson <gregcarlson1984@gmail.com> wrote:
Leo to provide but I believe the LB wall is right next to it.

On Tue, May 9, 2023 at 2:00 PM Brandon Decker <brandon@acuteeng.com> wrote:

Greg,

Still waiting for the location of the hole in the joist.

Brandon Decker, PE | Partner | Acute Engineering, Inc.

Oregon Office: [3800 SW Cedar Hills Blvd Ste 145, Beaverton, OR 97005](#)

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From: Greg Carlson <gregcarlson1984@gmail.com>
Sent: Tuesday, May 9, 2023 11:07 AM
To: Brandon Decker <brandon@acuteeng.com>
Cc: Leo Botello <leo@fasterpermits.com>; Zac Horton <zac@fasterpermits.com>
Subject: Re: NEW WORK - [5935 NE Fremont](#)

Hi Brandon,

Do you have everything you need?

On Mon, May 8, 2023 at 2:15 PM Greg Carlson <gregcarlson1984@gmail.com> wrote:

Hi Brandon,

Let's go ahead with the standard turnaround time.

You can bill me direct:

Javiena Group

2805 South Shore Blvd4.

Lake Oswego OR 97034

503-781-8347

Questions:

1. Plumbing hole - yes upper floor framing above kitchen
2. Plumbing hole location to load bearing wall - Leo to provide
3. Roof framing pic attached
4. Right side of house - yes popped out and sitting over a crawl space - pic attached

Thanks.

Greg





On Mon, May 8, 2023 at 1:17 PM Brandon Decker <brandon@acuteeng.com> wrote:

Leo and Greg,

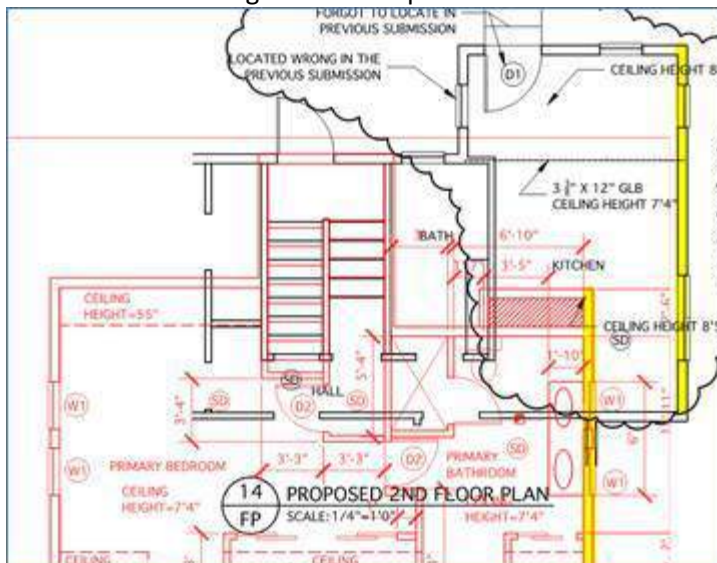
I've reviewed the drawings and our fee for structural engineering services would be as follows:

- Standard turnaround time: \$400 with approximately 6 business day turnaround.
- Expedited turnaround time: \$1,925 if we get approval this afternoon to have it back to you Wednesday morning.

- (NOTE: These do not include fees for a site visit. If a site visit is required, that will be a separate fee of \$150/hr including travel time from our Beaverton office. I could be available anytime Tuesday after 10am for a site visit.)

If you would like me to proceed with engineering, please provide the following:

- Email confirming that we may proceed and if you want the standard turnaround time or expedited turnaround time.
- Billing information (Name, Email, Phone Number, and Billing Address)
- Clarification on the plumbing hole situation.
 - Where is this plumbing hole on the plans? Is this the upper floor framing?
 - Where is the plumbing hole in relation to its bearing? (e.g. Is it 3'-6" away from a bearing wall?)
 - Can you provide pictures of the roof framing up above? I'm trying to determine if this is a floor functioning independently as a floor or if it's part of a roof system.
- Clarification on the right side of the house – When I stack the upper floor (red) on top of the main floor (black), the right sides don't appear to line up. Could you send me some photos from the exterior of the home showing the right side so I can better understand what is happening with these highlighted yellow walls? Since the basement appears to line up with the upper floor, I'm assuming that this popped out kitchen area is sitting on a crawl space extension of the house?



Additional Notes:

- The above quote is subject to change if the design is modified during engineering. Design changes after initial engineering will be billed based on our time to update the engineering and drawings.
- Engineering Addendums for changes in the field during construction or for fixes on construction errors will be billed separately based on our time.

Let me know if you have any questions!

Brandon Decker, PE | Partner | Acute Engineering, Inc.

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From: Zac Horton <zac@fasterpermits.com>

Sent: Thursday, May 4, 2023 5:31 PM

To: Brandon Decker <brandon@acuteeng.com>; Greg Carlson <gregcarlson1984@gmail.com>

Cc: Leo Botello <leo@fasterpermits.com>

Subject: NEW WORK - [5935 NE Fremont](#)

Hey Brandon,

Hopefully a fairly easy one for you. During the course of construction, the contractor (cc'd) removed an extra wall on this project and put in a beam. The zip file attached has pictures and the plans attached cloud the occurrence in the plans.

We need to run a revision and need your help with engineering! I imagine a memo with a detail or two would suffice for city review.

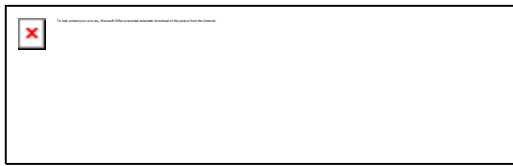
Second item: There is a joist that Greg needed to run Plumbing through. We likely need a memo confirming that the system isn't compromised by that...

It'll probably be worth it to take a look at things on-site. Feel free to schedule that here with Greg and Leo.

Let us know what your cost and timeline will be to assist. Thanks!

NOTE: I will be out of the country from 5/5 (Friday) - 5/15 (Monday).

Best regards,



ZAC HORTON, Assoc. AIA | Owner

503-438-9654 Mobile/Text | 503-447-3400 Office

2000 SW 1st Ave Suite 420, Portland OR 97201

zac@fasterpermits.com



To: +1 (503) 781-8347



Hi Zac. Need to reinforce this joist per the inspector & wants a EOR letter with calcs. Joist is 2 x 7. Plumbing is 3". Can you have your engineer do this please? Let me know if he needs more info. It's always something.... Thx



