

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0509180

Insp Area: 2
Thos Bros: 337A3

Site Address: 7549 MONTE BRAZIL DR SAC
Parcel No: 031-0720-037

Sub-Type: REP
Housing (Y/N): N

CONTRACTOR
ZIMMERMAN REROOFING CO.
3675 R ST
SACRAMENTO CA 95816

OWNER
WONG GILBERT DEAN/GILDA H
7549 MONTE BRAZIL DR
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: T/O & REROOF 28SQ'S WITH TILE

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C-39 License Number 763169 Date 6-24-05 Contractor Signature Karl Op

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 6-24-05 Applicant/Agent Signature Karl Op

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

KO I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 713-0002021 Exp Date 10/01/2005

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 6-24-05 Applicant Signature Karl Op

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

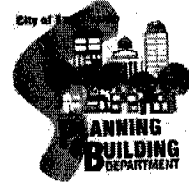
THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

0509180

1A



CITY OF SACRAMENTO
PLANNING & BUILDING DEPARTMENT
BUILDING DIVISION
www.cityofsacramento.org
Help Line: 1-916-264-5656 OR 1-866-EZ-PERMIT
Inspection: 1-916-808-4677



Downtown Permit Center 1-916-264-6807
1231 I Street, Suite 200, Sacramento, CA 95814

North Permit Center 1-916-808-2354
2101 Arena Blvd., Suite 200, Sacramento, CA 95834

PRELIMINARY RESIDENTIAL APPLICATION
1-916-264-5656 OR 1-866-EZ-PERMIT

7549 Monte Brazil Dr.	SUITE	2
031-0720-037	COMMUNITY PLAN NO.	0509180
BUILDING SITE ADDRESS		INSP. AREA
ASSESSOR'S PARCEL NO.		PLAN CHECK NO.

NAME OF APPLICANT	ADDRESS	ZIP CODE	PHONE NO.
LICENSED CONTRACTOR			
Zimmerman Re-Roofing, Inc.	3675 R Street	95816	454-3667
CONTRACTOR'S LICENSE NO.	763169		
PROPERTY OWNER			
Gilbert Wong	7549 Monte Brazil Dr	95831	395-4737
ARCHITECT/ENGINEER			
N/A			

No. of Stories	No. of Rooms	Roof Covering	Area 1 st Floor	Total Area	Garage Area	Patio Area
1+2				287		

THIS PERMIT IS FOR:
 BUILDING MECHANICAL PLUMBING ELECTRICAL SITE FIRE

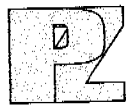
NATURE OF WORK IN DETAIL

Tear off and ReRoof w/ Eaglelite, Ponderosa tile. Single family residence. Roof pitch 4/12

\$ 13,500.00
VALUATION

\$24124

Wong



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

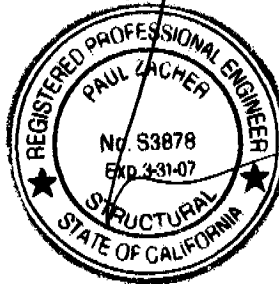
TEL: 916.961.3960
FAX: 916.961.6552

June 20, 2005

Zimmerman Roofing
3675 R Street
Sacramento, CA 95816
TEL: (916) 454-3667
FAX: (916) 691-1943

Attn.: Mr. Jeff Shulman,

re: Job 2005238: WONG



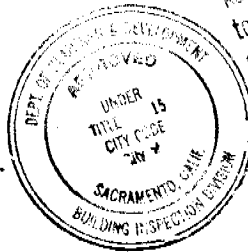
Subject: Structural Investigation Report of the Roof for the Residence located at 7549 Monte Brazil Drive, Sacramento, CA 95831.

As requested by Mr. Jeff Shulman, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site June 14, 2005. The investigation was made to determine the existing condition of the structure. All information, data and analysis contained within this report are based on the 1997 Uniform Building Code with 2001 CBC Title 24 Amendments.

The following is based on visual observations with no subsurface investigation being made.

DESCRIPTION:

Type of Facility: Residence.
Year Built: Estimated 1980's vintage.
Occupancy: Residential.
No. of Stories: Two.
Dimensions: Approximately 3000 square feet.



This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the same without written permission from the Building Inspection Division. The approval of this plan and specification shall not be held to permit or approve the violation of any City Ordinance or State Law.

CONSTRUCTION:

Roof:
The roof covering will consist of a Light Weight Concrete Tile over 7/16" solid sheathing. The roof structure is framed with pre-engineered wood trusses spaced at 24" on center. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x6 cross ties spaced at 4'-0" on center.

ISSUED

JUN 24 2005

CONCLUSIONS:

Roof:
The roof structure currently lacks sufficient structural capacity for the applied live and dead loads. See Building Division "Recommendations" for location and repair to bring the roof structure up to the required capacity.

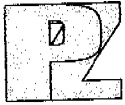
7549 MONTE BRAZIL DR #0509180

✓15

CITY COPY

916-961-3960
www.paulzacher.com
4701 Lakeside Way
Fair Oaks, CA 95628

Wong



Paul Zacher - Structural Engineers, Inc
4701 Lakeside Way
Fair Oaks, CA 95628

TEL: 916.961.3960
FAX: 916.961.6552

RECOMMENDATIONS:

If any of the following recommendations do not correspond to actual field conditions, the engineer of record shall be notified for further investigation and evaluation before continuing work.

Roof Structure:

1. Add a 2x8 DF#2 x 8'-0" long purlin with 2x4 struts to the bearing walls below. The maximum spacing between the struts shall not exceed 6'-0" on center. The unbraced length of the struts shall not exceed 8'-0" and the minimum slope of the struts shall not be less than 45 degrees from the horizontal. See detail 1.

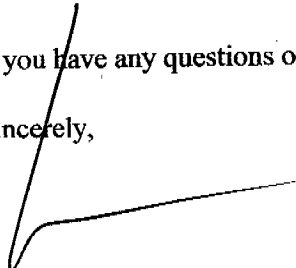
It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls that are load bearing or distributing roof strut loads. These cracks are a natural occurrence as the existing structure re-distributes the new roof weight. They are cosmetic in nature and are not an indication of a structural hazard or failure.

It shall be noted that some deflection of the rafters may be evident after installation of the tile. The existing roof framing has deflected but this may not be readily evident due to the uneven nature of the existing roofing material. Concrete tile is a very consistent and uniform product and when installed in an even plane, even small deflections can become apparent. This is only a cosmetic issue and not a structural concern.

The inspection consisted of visual observation only, made solely to determine the structural capacity of the existing roof. Analysis does not determine any effects on the overall structure under lateral forces or effects on the foundation unless specifically noted in the calculations and in this document. No warranties, expressed or implied, are made or intended in conjunction with this report. The inspection was made only to the portions that were accessible. The specific items noted were those that were observable and there may be defects that are not observable, or are hidden by architectural and structural materials.

If you have any questions on the above, do not hesitate to call.

Sincerely,



Paul Zacher, P.E., S.E.
file

DESIGN LOADING:

Roof Pitch	6	in 12
Pitch Adjustment Factor	1.12	

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
7/16" OSB/ plywood	1.30	psf
2x8 rafters @ 24" oc	<u>1.32</u>	psf
	Load	11.3 psf
Roof Pitch Adjustment	<u>1.34</u>	psf
Total Load	12.7	psf

The dead and live load on truss top chord is placed along the length of the top chord. Therefore, the live load is as follows:

Live Load on top chord	14.3
------------------------	------

LOCATION: TOP CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.30	psf
Roofing felt	0.30	psf
7/16" OSB/ plywood	1.30	psf
1x4 skip sht'g	1.09	psf
2x4 truss @ 24" oc	<u>0.64</u>	psf
Total Load	10.6	psf

LOCATION: BOTTOM CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Batt/blown insul	0.50	psf
2x4 truss @ 24" oc	1.28	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	4.3	psf

Job #: 05_238

Date: 06/20/2005

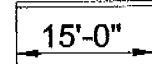
LOADING:

Rafter:

Dr = 12.7 psf x 2'-0" = 25.4 plf
Lr = 16.0 psf x 2'-0" = 32.0 plf

2x8 #2

25.4 / 32.0

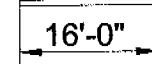


B1:

Dr = 12.7 psf x 6'-0" = 76 plf
Lr = 16.0 psf x 6'-0" = 96 plf

4x12 #2

76 / 96

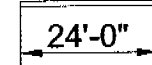


B2:

Dr = 12.7 psf x 12'-0" = 152 plf
Lr = 16.0 psf x 12'-0" = 192 plf

6-3/4" x 15" GLB

152 / 192



Scope :

Rev: 580006
 User: KW-0602844, Ver 5.8.0, 1-Dec-2003
 (c)1983-2003 ENERCALC Engineering Software

Timber Beam & Joist

Wong.ecw.Calculations

Description RAFTERS AND BEAMS

Timber Member Information Code Ref: 1997/2001 NDS, 2000/2003 IBC, 2003 NFPA 5000. Base allowables are user defined

		rafter	B1	B2
Timber Section		2x8	4x12	6.75x15
Beam Width	in	1.500	3.500	6.750
Beam Depth	in	7.250	11.250	15.000
Le: Unbraced Length	ft	0.00	0.00	0.00
Timber Grade		Douglas Fir - Larch, No.2	Douglas Fir - Larch, No.2	Douglas Fir, 24F - V4
Fb - Basic Allow	psi	875.0	875.0	2,400.0
Fv - Basic Allow	psi	95.0	95.0	240.0
Elastic Modulus	ksi	1,600.0	1,600.0	1,800.0
Load Duration Factor		1.250	1.250	1.250
Member Type		Sawn	Sawn	GluLam
Repetitive Status		Repetitive	No	No

Center Span Data

		rafter	B1	B2
Span	ft	15.00	16.00	24.00
Dead Load	#/ft	25.40	76.00	152.00
Live Load	#/ft	32.00	96.00	192.00

Results Ratio = 0.9767 0.7436 0.4169

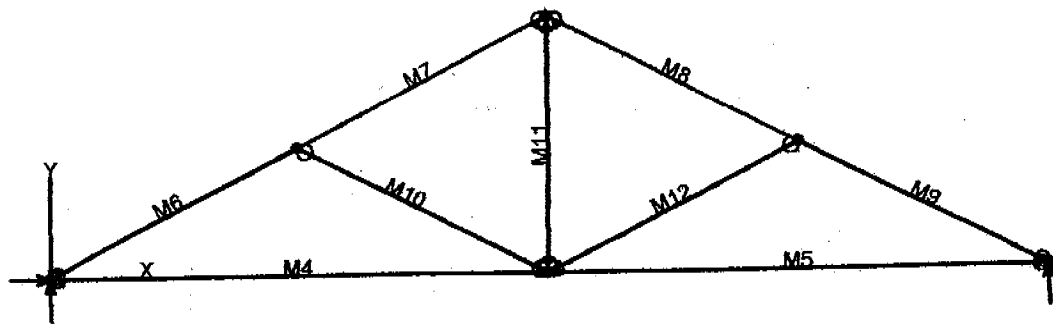
Mmax @ Center	in-k	19.37	66.05	297.22
@ X =	ft	7.50	8.00	12.00
fb : Actual	psi	1,474.2	894.6	1,174.2
Fb : Allowable	psi	1,509.4	1,203.1	2,816.2
		Bending OK	Bending OK	Bending OK
fv : Actual	psi	54.6	46.5	54.8
Fv : Allowable	psi	118.8	118.8	300.0
		Shear OK	Shear OK	Shear OK

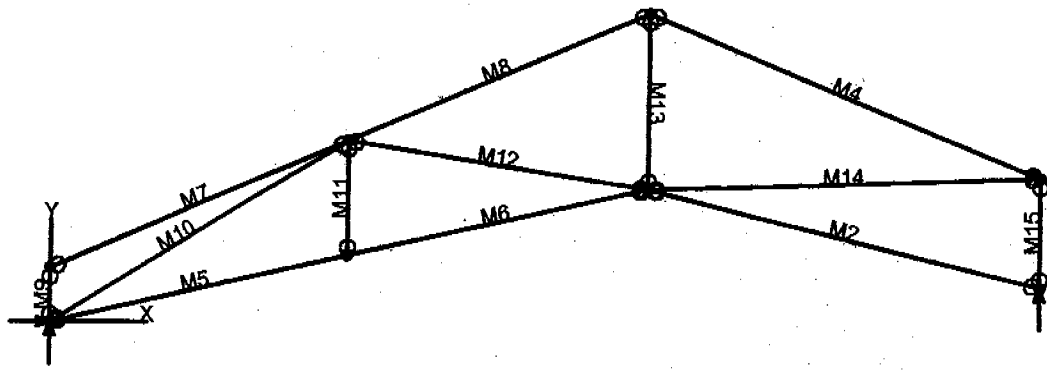
Reactions

@ Left End	DL	lbs	190.50	608.00	1,824.00
	LL	lbs	240.00	768.00	2,304.00
	Max. DL+LL	lbs	430.50	1,376.00	4,128.00
@ Right End	DL	lbs	190.50	608.00	1,824.00
	LL	lbs	240.00	768.00	2,304.00
	Max. DL+LL	lbs	430.50	1,376.00	4,128.00

Deflections Deflection OK Deflection OK Deflection OK

Center DL Defl	in	-0.380	-0.169	-0.332
L/Defl Ratio		474.2	1,138.4	867.4
Center LL Defl	in	-0.478	-0.213	-0.419
L/Defl Ratio		376.4	901.2	686.7
Center Total Defl	in	-0.858	-0.382	-0.751
Location	ft	7.500	8.000	12.000
L/Defl Ratio		209.8	503.0	383.3





VisualAnalysis 3.50.c Report

09/24/02 15:42:40

Project: Truss 1

File: Untitled.Vap

Company: PK Associates Engineers

Engineer: Paul Zacher

Default Units: Feet, Pounds, Degrees, °Fahrenheit, Seconds.

Nodes

Node	X ft	Y ft	Fix	DX	Fix	DY	Fix	RZ
N1	0.00	0.00	Yes		Yes		No	
N2	0.00	1.00	No		No			
N3	19.00	0.70	"		Yes			
N4	11.50	5.75	"		No			
N5	11.50	2.50	"		"			
N6	19.00	2.70	"		"			
N7	5.75	1.25	"		"			
N8	5.75	3.38	"		"			

Member Elements

Member	Section	Material	Length ft
M2	SS2x4	Wood	7.71
M4	"	"	8.10
M5	"	"	5.88
M6	"	"	5.88
M7	"	"	6.22
M8	"	"	6.22
M9	"	"	1.00
M10	"	"	6.67
M11	"	"	2.13
M12	"	"	5.82
M13	"	"	3.25
M14	"	"	7.50
M15	"	"	2.00

Section Properties

Category	Section	Ax in ²	Iz in ⁴	Sy+ in ³	Sy- in ³
Wood Sha	SS2x4	5.25	5.36	3.06	3.06

Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft ³
Wood	-NA-	1700000.00	0.36	40.47

Load Combination Summary

Equation Case: Equation Case 1
Combination: +1D+1L+1Lr

Contributing Cases & Source
 Service Case 1 (Dead loads)
 Service Case 2 (Roof Live loads)

Member Uniform Loads

This item is empty. Check the selection state, or report properties.

Nodal Reactions

Node	Load Case	FX lbs	FY lbs	MZ lb-ft
N1	Equation Case 1	0.00	599.47	-NA-
N3	"	-NA-	599.12	-NA-

Member Results

Member	Axial lbs	Vy lbs	Mz lb-ft	Dy in
M2	-7.7400	-32.25	-0.0000	0.0130
"	-2.5800	-10.75	55.1381	-0.0769
"	2.5800	10.7500	55.1381	-0.1035
"	7.7400	32.2500	0.0000	-0.0667
M4	-980.20	-188.25	-0.0000	0.0150
"	-929.16	-62.75	337.85	-0.4383
"	-878.12	62.7500	337.85	-0.4637
"	-827.09	188.25	0.0000	-0.0614
M5	1254.95	22.6827	0.0000	-0.0000
"	1258.54	6.1994	28.2444	-0.0494
"	1262.12	-10.28	24.2386	-0.0802
"	1265.70	-26.77	-12.02	-0.0952
M6	1254.07	26.7673	-12.02	-0.0952
"	1257.65	10.2839	24.2386	-0.1081
"	1261.23	-6.1994	28.2444	-0.1052
"	1264.82	-22.68	0.0000	-0.0837
M7	-46.30	112.09	0.0000	-0.0005
"	-6.5570	15.8749	132.19	-0.1094
"	33.1846	-80.34	65.3417	-0.1241
"	72.9263	-176.56	-200.53	-0.0985
M8	-978.59	176.56	-200.53	-0.0985
"	-938.85	80.3417	65.3417	-0.1504
"	-899.11	-15.87	132.19	-0.1620
"	-859.37	-112.09	0.0000	-0.0794
M9	-121.28	-0.0000	-0.0000	-0.0000
"	-121.28	-0.0000	-0.0000	0.0003
"	-121.28	-0.0000	-0.0000	0.0006
"	-121.28	-0.0000	0.0000	0.0009
M10	-1427.54	-0.0000	-0.0000	0.0000
"	-1427.54	-0.0000	-0.0000	0.0326
"	-1427.54	-0.0000	-0.0000	0.0651
"	-1427.54	-0.0000	0.0000	0.0977
M11	54.7849	-0.0000	-0.0000	0.0300
"	54.7849	-0.0000	-0.0000	0.0328
"	54.7849	-0.0000	-0.0000	0.0356
"	54.7849	-0.0000	0.0000	0.0384
M12	-398.59	0.0000	0.0000	-0.0839
"	-398.59	0.0000	0.0000	-0.0796
"	-398.59	0.0000	0.0000	-0.0754
"	-398.59	0.0000	0.0000	-0.0711
M13	361.66	-0.0000	0.0000	-0.0373
"	361.66	-0.0000	-0.0000	-0.0329
"	361.66	-0.0000	-0.0000	-0.0284

12

"	361.66	-0.0000	-0.0000	-0.0240
M14	837.37	-0.0000	0.0000	-0.0786
"	837.37	-0.0000	-0.0000	-0.0533
"	837.37	-0.0000	-0.0000	-0.0280
"	837.37	-0.0000	-0.0000	-0.0027
M15	-565.95	-0.0000	0.0000	0.0437
"	-565.95	-0.0000	-0.0000	0.0478
"	-565.95	-0.0000	-0.0000	0.0518
"	-565.95	-0.0000	-0.0000	0.0559

BENDING & COMP: TRUSS 1 - MEMBER 4

Design based on 1997 UBC 2321 Division V and ANSI/TPI 1-1995

Grading:

2x or 4x

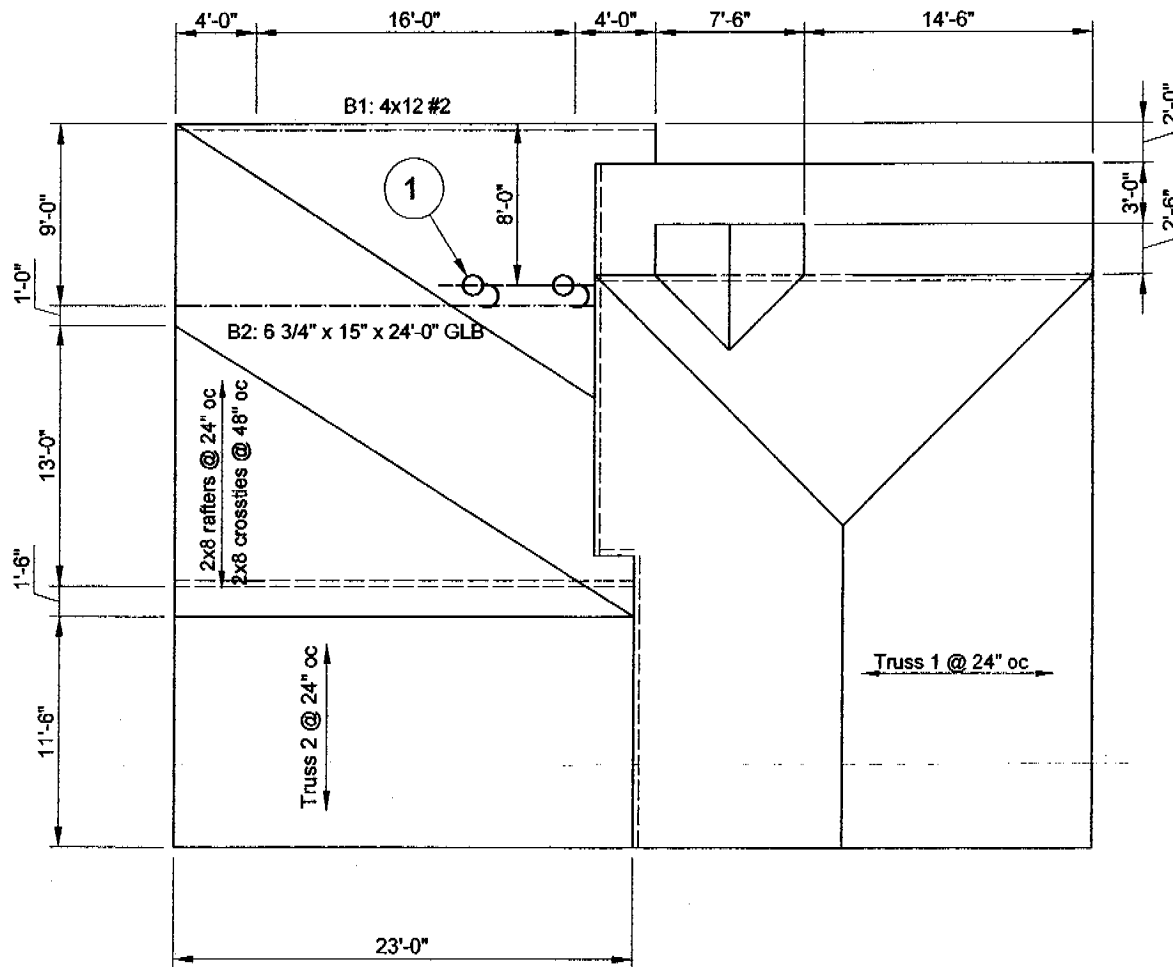
Doug-fir larch: No. 2

Assumptions:

Solid sheathing on top chord of truss. Therefore,
continuous lateral support is provided along compression face
Maximum center-center spacing = 24"

Width, b	1.5 inches
Depth, d	3.5 inches
Length	8.1 feet
Max Axial Comp, C	878 feet
Max Reaction, R	62 lbs
Max Moment, M	337 ft-lbs
Max LL Deflection	0.23 feet
Max TL Deflection	0.46 feet
LL Defl Criteria = L/	240
TL Defl Criteria = L/	180
Duration factor, Cd	1.25
Repetitive Factor, Cr	1.15
Size Factor, Cf bending	1.5 1.5 for 2x4, 1.3 for 2x6
Size Factor, Cf comp	1.15 1.15 for 2x4, 1.1 for 2x6
Buckling Factor, CT =	1.22
fc =	167 psi
Fce =	809 psi
Fc* =	2084 psi
F'c =	730 psi
fb =	1320 psi
F'b = Fb* =	2156 psi
Shear D/C ratio	0.15 < 1.0, Member OK
Interaction equation: (fc/F'c)^2 +	
fb / (F'b(1-fc/Fce)) =	0.82 < 1.0, Member OK
Live Load defl ratio	0.57 < 1.0, Member OK
Total Load defl ratio	0.85 < 1.0, Member OK

14



FRAMING NOTES:

1. Add a 2x8 DF#2 x 8'-0" long purlin with 2x4 struts to bearing below.

NOTES:

- A. This is a reroof project. The new roofing material shall be a Light Weight Concrete Tile. The tile shall weigh less than or equal to 7.3 psf.
- B. All framing members including rafters, purlins, joists and beams are existing unless otherwise noted in the framing notes above.
- C. All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- D. All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.1 "Roof and Ceiling Framing" unless otherwise shown.
- E. All structural wood members that were observed appear to be in sound condition and without structural defect.

1 ROOF PLAN - WONG
Not to Scale

15

