

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0000974
Insp Area: 2

Site Address: 7305 FLOWERWOOD WY SAC
Parcel No: 031-0750-057

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

CONTRACTOR
ZIMMERMAN ROOFING
3675 R ST
SACRAMENTO CA 95816

OWNER
YEE MENG PU/NGAN MEI
7305 FLOWERWOOD WY
SACRAMENTO CA 95831

ARCHITECT

Nature of Work: 24 SQ T/O REROOF WITH PIONEER LTWT 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.

X License Class C-39 License Number 557559 Date 2/2/00 Contractor Signature Billy Coy

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 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.

X Date 2-2-00 Applicant/Agent Signature Billy Coy

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.

X 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 COMP INS FUND Policy Number 713-98-2021

PAID
CITY OF SACRAMENTO
Exp Date 10/01/2000

(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.

X Date 2-2-00 Applicant Signature Billy Coy

FEB 01 2000
NEIGHBORHOODS, PLANNING
AND DEVELOPMENT SERVICES

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.

PERMIT SUMMARY DOCUMENT

Bldg Minor Permit

PC BIN #:

Address: **7305 FLOWERWOOD WY SAC** Date Issued: Area: 2

Permit #: **0000974** Thomas Bros: 336G2 1052

Location:

APN: 031-0750-057

PLAN CHECK #: _____

Owner: YEE MENG PU/NGAN MEI
ZIMMERMAN ROOFING
7305 FLOWERWOOD WY
SACRAMENTO CA
95831

Contractor:

3675 R ST
SACRAMENTO CA
95816

Phone:

Phone: 916-454-3667

JOB DESCRIPTION: 24 SQ T/O REROOF WITH PIONEER LTWT TILE

DBA:

Occupancy: R3

Change of Use: N

Zoning:

Const Type:

Sub-Type: RES

DR:

Fire Sprinkler?:

Activity Code: R1

Fed Code: 1A

Flood Zone:

Cert Req'd: ??

VALUATION: \$8,750.00

Sq. Footage: 0

BLDG Y

MECH N

PLBG N

ELEC N

SITE

FIRE

	<u>BLDG</u>	<u>L/S</u>	<u>MECH</u>	<u>PLBG</u>	<u>ELEC</u>	<u>SITE</u>	<u>FIRE</u>	<u>UTIL</u>	<u>PW</u>
Cycle 1	??	??	??	??	??	??	??	??	??
Cycle 2	??	??	??	??	??	??	??	??	??
Cycle 3	??	??	??	??	??	??	??	??	??
Cycle 4	??	??	??	??	??	??	??	??	??

CONDITIONS:



DEPARTMENT OF
PLANNING AND DEVELOPMENT

CITY OF SACRAMENTO
CALIFORNIA

1231 I STREET
ROOM 200
SACRAMENTO, CA
95814-2998

Permit Services
916-264-7819
FAX 916-264-7096

MRS. Mei Lee at
7305 Flowerwood
95831
TILE ROOF WORKSHEET

This worksheet must be filled out whenever any type of tile roof is applied for.

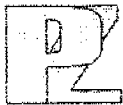
If the answer to question #5 is yes, a written engineering report from a registered engineer must be provided with each application.

1. BRAND AND MODEL OF TILE Pioneer Lite weight
2. TILE WEIGHT PER SQUARE 730 lbs
3. WEIGHT OF ROOF SYSTEM PER SQUARE 180 lbs
4. TOTAL WEIGHT OF ROOF SYSTEM 910 lbs
5. DOES TOTAL WEIGHT OF ROOF SYSTEM EXCEED 750# PER SQUARE? YES NO
6. ROOF SLOPE 4/12

PLEASE PROVIDE A SEPARATE WORKSHEET FOR EACH APPLICATION INVOLVING A TILE ROOF

All attached engin. report

Yee



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

TEL: 916.961.3960
FAX: 916.961.3960

INSPECTION REQUEST

ADDRESS

7305 Flowerwood Wy

New

AREA <i>2R</i>	INSPECTION DATE <i>2-3</i>	REQUEST DATE <i>2-2</i>	REQUEST TIME <i>3:42</i>	
	<input type="checkbox"/> MON.	<input type="checkbox"/> TUES.	<input checked="" type="checkbox"/> WED.	<input checked="" type="checkbox"/> THURS.
OWNER OR CONTRACTOR <i>Roofing 454-3667</i>			PERMIT NO. <i>00-00974</i>	

<input checked="" type="checkbox"/> BUILDING	<input type="checkbox"/> MECHANICAL	<input type="checkbox"/> PLUMBING	<input type="checkbox"/> ELECTRICAL
B10 <input type="checkbox"/> FORM	M30 <input type="checkbox"/> UNDR FLR/SLAB	P40 <input type="checkbox"/> UNDR FLR/SLAB	E60 <input type="checkbox"/> UFER (COMM.)
B11 <input type="checkbox"/> UFER (RES)	M31 <input type="checkbox"/> TOP/ROUGH	P41 <input type="checkbox"/> TOP/ROUGH	E61 <input type="checkbox"/> CONDUIT/UNDERGRD.
B12 <input type="checkbox"/> SLAB	M32 <input type="checkbox"/> CONDENSATE	P42 <input type="checkbox"/> WATER SERVICE	E62 <input type="checkbox"/> CONDUIT/SLAB
B13 <input type="checkbox"/> JOIST/GIRDER	M33 <input type="checkbox"/> GAS TEST	P43 <input type="checkbox"/> SEWER SERVICE	E63 <input type="checkbox"/> ROUGH ELECT.
B14 <input type="checkbox"/> INS. WALL	M34 <input type="checkbox"/>	P44 <input type="checkbox"/> STORM DRAIN	E64 <input type="checkbox"/> ROUGH (WALLS ONLY)
B15 <input type="checkbox"/> INS. FLOOR	M35 <input type="checkbox"/>	P45 <input type="checkbox"/> IRR. SVC. PIPING	E65 <input type="checkbox"/> ROUGH (CEIL. ONLY)
B16 <input type="checkbox"/> ROOF		P46 <input type="checkbox"/> FIRE SPR. SYS.	E66 <input type="checkbox"/> SERVICE UNDR. CONDUIT
B17 <input type="checkbox"/> ROOF PLYNAIL		P47 <input type="checkbox"/> GAS TEST	E67 <input type="checkbox"/> TEMP POWER
B18 <input type="checkbox"/> EXT. LATH/SIDE		P48 <input type="checkbox"/> TEMP GAS	E68 <input type="checkbox"/>
B19 <input type="checkbox"/> FRAME		P49 <input type="checkbox"/>	E69 <input type="checkbox"/>
B20 <input type="checkbox"/> FRAME(WALLS ONLY)		P50 <input type="checkbox"/>	
B21 <input type="checkbox"/> FRAME CEIL (T-BAR)			POOLS ONLY
B22 <input type="checkbox"/> SHTRCK NAIL			E70 <input type="checkbox"/> PREGUNITE
B23 <input type="checkbox"/> B.B.			E71 <input type="checkbox"/> PREDECK
B24 <input type="checkbox"/> TILTUP			E72 <input type="checkbox"/> CONDUIT/UNDERGR.
B25 <input type="checkbox"/> FIRE SPR. LOC			
B26 <input type="checkbox"/> SHEAR NAIL			
B29 <input type="checkbox"/> FINAL	M39 <input type="checkbox"/> FINAL	P59 <input type="checkbox"/> FINAL	E79 <input type="checkbox"/> FINAL

In progress tile re-roof. Call Redwood 600-5539
CLERK *600-5539*

REVISIONS

Year Built: Estimated 1970's vintage.
 Occupancy: Residential.
 No. of Stories: One.
 Dimensions: Approximately 2000 square feet with a first story plate height of 8 feet.

CONSTRUCTION:

Roof:
 The roof covering will consist of Pioneer Light Weight Concrete Tile over 1/2" solid sheathing. The living and garage areas are framed with pre-engineered wood trusses spaced at 24" on center except for the vaulted ceiling area. The vaulted ceiling is in-accessible and not inspected.

CONCLUSIONS:

Roof:
 The living area has sufficient structural capacity for the applied live and dead loads except for the vaulted ceiling which was not inspected. The garage has sufficient structural capacity for the applied live and dead loads.

Reviewed by Matt P. 2/2/00

See Truss 1 on sheet 5. Verify it has support as shown
1/4" shear has to verify rafter framing is adequate after removal of material + send back in for plan deck



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.

Living Area:

1. After the roofing material has been removed, the contractor shall verify that the framing in the non-accessible of the structure does not exceed the following:

Vaulted Ceiling Portion:

- a. 2x12 @ 24" oc - max span = 20'-6"
- ry → b. 2x10 @ 16" oc - max span = 20'-6"

If the framing differs from the above, the contractor shall supply the engineer with diagrams showing the member sizes and span lengths. The engineer shall then determine if the structure can adequately support the applied dead and live loads and a supplemental report shall be issued. See detail 1.

It shall be noted that small hairline cracking may occur at exterior stucco and interior gypboard finished walls which 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 which 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 4 in 12
Pitch Adjustment Factor 1.05

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
1/2" OSB/ plywood	1.50	psf
2x6 rafters @ 24" oc	<u>1.00</u>	psf
Load	10.9	psf
Roof Pitch Adjustment	<u>0.59</u>	psf
Total Load	11.5	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x6 rafters @ 24" oc	1.00	psf
Batt/blown insul	0.50	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	13.9	psf
Roof Pitch Adjustment	<u>0.75</u>	psf
Total Load	14.6	psf

LOCATION: TOP CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Light Weight Tile	7.00	psf
Roofing felt	0.30	psf
1/2" OSB/ plywood	1.50	psf
1x4 skip sht'g	1.09	psf
2x4 truss @ 24" oc	<u>1.28</u>	psf
Load	11.2	psf
Roof Pitch Adjustment	<u>0.60</u>	psf
Total Load	11.8	psf

LOCATION: BOTTOM CHORD

<u>MATERIAL</u>	<u>WEIGHT</u>	
Batt/blown insul	0.50	psf
2x4 truss @ 24" oc	0.64	psf
1/2" Gypboard	<u>2.50</u>	psf
Load	3.6	psf

Paul Zacher - Structural Engineer
 4701 Lakeside Way
 Fair Oaks, CA 95628
 TEL: (916) 961-3960
 FAX: (916) 961-3960

Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 7:28PM, 11 NOV 99

Rev: 510304
 User: KVF-0002844, Ver 5.1.3, 22-Jun-1999, Win32
 (c) 1983-99 ENERCALC

Timber Beam & Joist

c:\enercalc\test.ecw\Calculations

Description RAFTERS AND BEAMS

Timber Member Information Calculations are designed to 1997 NDS and 1997 UBC Requirements

Timber Section		vault @ 24	vault @ 16	rafter	garage	porch
		2x12	2x10	2x6	4x12	6x12
Beam Width	in	1.500	1.500	1.500	3.500	5.500
Beam Depth	in	11.250	9.250	5.500	11.250	11.500
L: Unbraced Length	ft	0.00	0.00	0.00	0.00	0.00
Timber Grade		Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch, Douglas Fir - Larch,				
Fb - Basic Allow	psi	875.0	875.0	875.0	875.0	1,350.0
Fv - Basic Allow	psi	95.0	95.0	95.0	95.0	85.0
Elastic Modulus	ksi	1,600.0	1,600.0	1,600.0	1,600.0	1,600.0
Load Duration Factor		1.250	1.250	1.250	1.250	1.250
Member Type		Sawn	Sawn	Sawn	Sawn	Sawn
Repetitive Status		Repetitive	Repetitive	Repetitive	No	No

Center Span Data

Span	ft	20.50	20.50	12.00	16.00	8.00
Dead Load	#/ft	29.20	19.50	23.00	62.00	69.00
Live Load	#/ft	32.00	21.30	32.00	64.00	96.00

Results Ratio = 0.9694 0.8690 0.9607 0.5447 0.1131

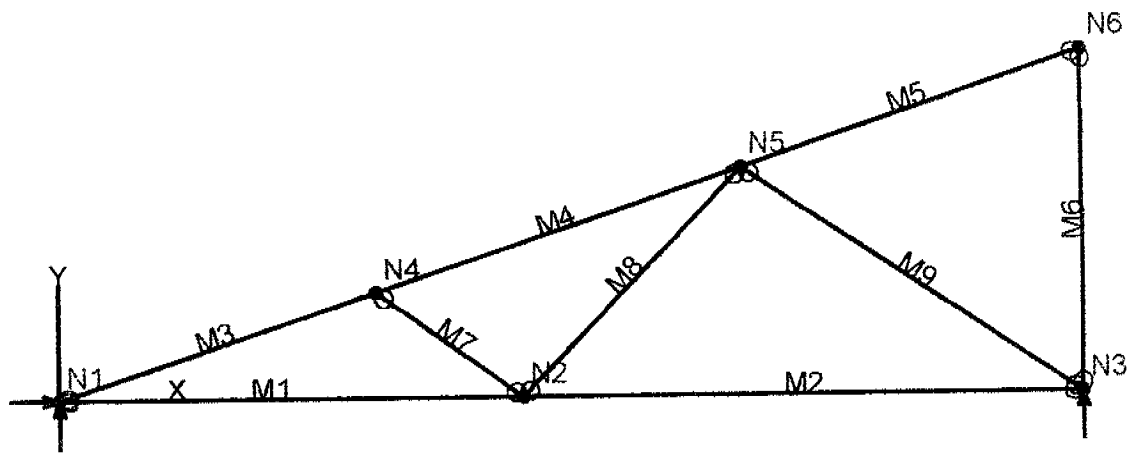
Mmax @ Center	in-k	38.58	25.72	11.88	48.38	15.84
@ X =	ft	10.25	10.25	6.00	8.00	4.00
fb : Actual	psi	1,219.3	1,202.4	1,570.9	655.4	130.7
Fb : Allowable	psi	1,257.8	1,383.6	1,635.2	1,203.1	1,687.5
		Bending OK	Bending OK	Bending OK	Bending OK	Bending OK
fv : Actual	psi	50.9	42.0	55.7	34.1	12.0
Fv : Allowable	psi	118.8	118.8	118.8	118.8	106.3
		Shear OK	Shear OK	Shear OK	Shear OK	Shear OK

Reactions

@ Left End	DL	lbs	299.30	199.87	138.00	496.00
	LL	lbs	328.00	218.32	192.00	512.00
	Max. DL+LL	lbs	627.30	418.20	330.00	1,008.00
@ Right End	DL	lbs	299.30	199.87	138.00	496.00
	LL	lbs	328.00	218.32	192.00	512.00
	Max. DL+LL	lbs	627.30	418.20	330.00	1,008.00

Deflections

Center DL Defl	in	-0.407	-0.490	-0.322	-0.138	-0.006
L/Defl Ratio		603.7	502.5	446.5	1,395.5	16,837.8
Center LL Defl	in	-0.447	-0.535	-0.449	-0.142	-0.008
L/Defl Ratio		550.9	460.1	320.9	1,351.9	12,102.2
Center Total Defl	in	-0.854	-1.024	-0.771	-0.280	-0.014
Location	ft	10.250	10.250	6.000	8.000	4.000
L/Defl Ratio		288.1	240.2	186.7	686.7	7,041.3



VisualAnalysis 3.50.c Report

11/11/99 19:49:55

Project:

File: C:\WINDOWS\Desktop\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	9.50	0.00	No		No		"	
N3	21.00	0.00	"		Yes		"	
N4	6.50	2.17	"		No		"	
N5	14.00	4.67	"		"		"	
N6	21.00	7.00	"		"		"	

Member Elements

Member	Section	Material	Length ft
M1	SS2x4	Wood	9.50
M2	"	"	11.50
M3	"	"	6.85
M4	"	"	7.91
M5	"	"	7.38
M6	"	"	7.00
M7	"	"	3.70
M8	"	"	6.49
M9	"	"	8.41

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

Load Case	Member	Direction	Offset ft	End Offset ft	Magnitude
Service Case 1	M1	DY proj.	0.00	9.50	-7.60 lbs/ft
"	M2	"	0.00	11.50	-7.60 lbs/ft
"	M3	"	0.00	6.85	-23.60 lbs/ft
"	M4	"	0.00	7.91	-23.60 lbs/ft
"	M5	"	0.00	7.38	-23.60 lbs/ft
Service Case 2	M3	"	0.00	6.85	-32.00 lbs/ft
"	M4	"	0.00	7.91	-32.00 lbs/ft
"	M5	"	0.00	7.38	-32.00 lbs/ft

Nodal Reactions

Node	Load Case	FX lbs	FY lbs	MZ lb-ft
N1	Equation Case 1	0.00	663.60	-NA-
"	Service Case 1	-NA-	-NA-	-NA-
"	Service Case 2	-NA-	-NA-	-NA-
N3	Equation Case 1	-NA-	663.60	-NA-
"	Service Case 1	-NA-	-NA-	-NA-
"	Service Case 2	-NA-	-NA-	-NA-

Member Extreme Results

Member	Axial (lc) lbs	Vy (lc) lbs	Mz (lc) lb-ft	Dx (lc) in	Dy (lc) in
M1	1480.41 (3)	-45.92 (3)	-93.32 (3)	-0.00 (3)	-0.10 (3)
"	1480.41 (3)	26.28 (3)	45.36 (3)	0.02 (3)	-0.00 (3)
M2	713.56 (3)	-35.58 (3)	-93.32 (3)	0.02 (3)	-0.23 (3)
"	713.56 (3)	51.82 (3)	83.28 (3)	0.03 (3)	-0.00 (3)
M3	-1606.04 (3)	-207.07 (3)	-244.43 (3)	-0.01 (3)	-0.19 (3)
"	-1491.60 (3)	135.73 (3)	184.12 (3)	-0.00 (3)	-0.00 (3)
M4	-1206.32 (3)	-204.63 (3)	-298.43 (3)	-0.03 (3)	-0.17 (3)
"	-1074.45 (3)	190.97 (3)	119.51 (3)	-0.01 (3)	-0.06 (3)
M5	-74.92 (3)	-144.19 (3)	-298.43 (3)	-0.03 (3)	-0.20 (3)
"	47.99 (3)	225.09 (3)	207.55 (3)	-0.03 (3)	0.01 (3)
M6	-151.97 (3)	0.00 (3)	0.00 (3)	0.00 (3)	-0.03 (3)
"	-151.97 (3)	0.00 (3)	0.00 (3)	0.00 (3)	0.03 (3)
M7	-489.21 (3)	0.00 (3)	0.00 (3)	0.07 (3)	-0.07 (3)
"	-489.21 (3)	0.00 (3)	0.00 (3)	0.08 (3)	-0.07 (3)
M8	533.90 (3)	-0.00 (3)	-0.00 (3)	-0.06 (3)	-0.08 (3)
"	533.90 (3)	-0.00 (3)	0.00 (3)	-0.05 (3)	-0.04 (3)
M9	-857.78 (3)	-0.00 (3)	-0.00 (3)	0.02 (3)	-0.06 (3)
"	-857.78 (3)	-0.00 (3)	0.00 (3)	0.03 (3)	0.02 (3)

BENDING & COMP: TRUSS 1; MEMBER 4

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

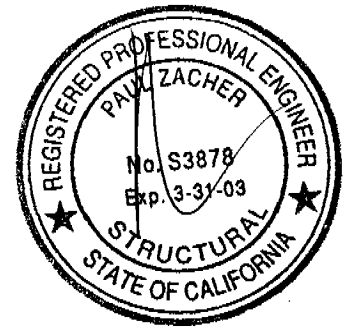
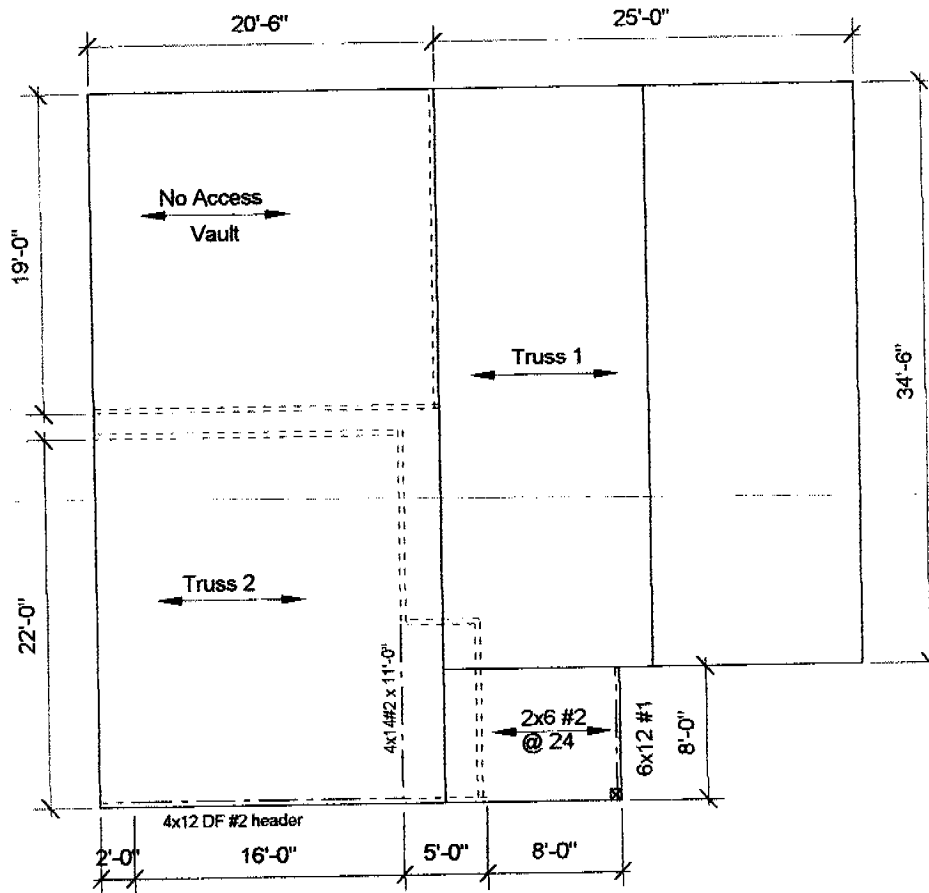
Grading:

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	6.85 feet
Max Axial Comp, C	1606 lbs
Max Reaction, R	207 lbs
Max Moment, M	244 ft-lbs
Max LL Deflection	0.08 inches
Max TL Deflection	0.19 inches
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 =	1.20
fc =	306 psi
Fce =	1045 psi
Fc* =	1869 psi
F'c =	885 psi
fb =	956 psi
F'b = Fb* =	1887 psi
Shear D/C ratio	0.50 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb / (F'b(1-fc/Fce)) =	0.84 < 1.0, Member OK
Live Load defl ratio	0.23 < 1.0, Member OK
Total Load defl ratio	0.42 < 1.0, Member OK



Notes:

1. 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 7.0 psf.
2. All structural wood members that were observed appear to be in sound condition and without structural defect.

1

ROOF PLAN - YEE

Not to Scale

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