

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0010734
Insp Area: 4

Site Address: 2911 AZEVEDO DR SAC
Parcel No: 225-0614-005

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

CONTRACTOR

OWNER

ARCHITECT

GONZALEZ JOSE/MARIA A
2911 AZEVEDO DR
SACRAMENTO CA 95833

Nature of Work: REROOF T/O 20 SQ STANDARD WEIGHT CONCRETE TILE OVER 1/2" SOLID SHEATHING

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 _____ License Number _____ Date _____ Contractor Signature _____

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);

m.g. 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).

SEP 14 2000
NEIGHBORHOODS, PLANNING
AND DEVELOPMENT SERVICES

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

X Date *9-14-00* X Owner Signature *Marie A. Gonzales*

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 *9-14-00* X Applicant/Agent Signature *Marie A. Gonzales*

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.

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 _____ Policy Number _____ Exp Date _____

m.g. (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 these provisions.

X Date *9-14-00* X Applicant Signature *Marie A. Gonzales*

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.

OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNERS

An owner-builder building permit has been applied for in your name and bearing your signature.

Please complete and return this information in the envelope provided at your earliest opportunity to avoid unnecessary delay in processing and issuing your building permit. No building permit will be issued until this verification is received.

1. I personally ~~plan to~~ provide the major labor and materials for construction of the proposed Improvement (yes) (yes or no) _____
2. I (have) (have not) _____ signed an application for A building permit for the proposed work.

3. I have contracted with the following person (firm) to provide the proposed construction:

Name _____ Address _____

City _____ Telephone _____

Contractors License No. _____

4. I plan to provide portions of the work, but I have hired the following person to coordinate, Supervise, and provide the major work.

Name _____ Address _____

City _____ Telephone _____

Contractors License No. _____

5. I will provide some of the work but I have contracted (hired) the following to provide the Work indicated:

Name	Address	Phone	Type of work
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

X Signed Marie A. Gonzales

Job Address 2911 AZEVEDO DR X DATE 9-14-00

Permit No. 0010734

Gonzales

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

TEL: 916.961.3960
FAX: 916.961.6552

September 8, 2000

CITY OF SACRAMENTO
PERMIT ASSISTANCE

Gonzales
2911 Azevedo Drive
Sacramento, CA 95833
TEL: (916) 564-8504

SEP 12 2000

RECEIVED



Attn: Mr. Tony Gonzales.

re. Job 2000_207 GONZALES

Subject: Structural Investigation Report of the Roof for the Residence located at 2911 Azevedo Drive, Sacramento, CA 95833.

As requested by Mr. Tony Gonzales, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site September 8, 2000. 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.

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:	One
Dimensions:	Approximately 2000 square feet with a full story plate height of 8 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 Standard Weight Concrete Tile over 1/2" solid sheathing. The living area is conventionally framed with 2x4 and 2x6 rafters spaced at 24" on center with 2x6 purlins supported at no more than 6'-0" on center by 2x4 struts bearing on walls below except for the vaulted ceiling areas. The vaulted ceiling is constructed of 2x6 rafters spaced at 24" on center supported at the ridge by a 4x beam. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x6 cross ties spaced at 4'-0" on center

CONCLUSIONS

Roof:

The living area lacks sufficient structural capacity for the applied live and dead loads. The garage has sufficient structural capacity for the applied live and dead loads.

REVIEWED BY:
Paul Zacher
9/13/00

Gonzales

Paul Zacher – Structural Engineers
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.

Living Area

1. Scab a 1 3/4" x 9 1/4" x 12'-0" long LVL purlin to the existing 2x6 purlin which spans 12'-0". Attach it with 16d's @ 3" on center. Support the LVL to the bearing walls below with 2x4 struts. See details 1 and 2.
2. Provide an additional 2x4 strut from the existing purlin to the bearing wall below. The maximum spacing between the new and existing struts shall not exceed 6'-0" on center. The unbraced length of the strut shall not exceed 8'-0" and the minimum slope of the strut 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 4 in 12
Pitch Adjustment Factor 1.05

LOCATION: ROOF

<u>MATERIAL</u>	<u>WEIGHT</u>	
Standard Weight Tile	9.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
1/2" OSB/ plywood	1.50	psf
2x4 rafters @ 24" oc	<u>0.64</u>	psf
Load	12.8	psf
Roof Pitch Adjustment	<u>0.69</u>	psf
Total Load	13.5	psf

LOCATION: VAULT

<u>MATERIAL</u>	<u>WEIGHT</u>	
Standard Weight Tile	9.30	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	16.2	psf
Roof Pitch Adjustment	<u>0.88</u>	psf
Total Load	17.1	psf

Job #

30

Date:

9/3/00

STAIRS

RAIL

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

2 x 1/2"

27/102

7'

STAIRS

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

2 x 1/2"

27/92

11'

VAULT

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

2 x 1/2"

342/102

10'

STAIRS

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

4 x 1/2"

54/100

10'

STAIRS

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

4 x 1/2"

145/124

12'

STAIRS

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

4 x 1/2"

120/112

10'

98/110

FUELS

CE - 1/4" x 1/2" x 12' x 24'
CB - 1/4" x 1/2" x 12' x 24'

Paul Zacher - Structural Engineers
 4701 Lakeside Way
 Fair Oaks
 TEL: (916) 961-3960
 FAX: (916) 961-6552

Title :
 Dsgnr:
 Description :
 Scope :

Job #
 Date: 4:06PM, 8 SEP 00

Timber Beam & Joist

c:\enercalc\test.ecw.Calculations

REV: 11/03/04
 User: RW-0602844 Ver: 1.0.0.0 Jun 1999 Win32
 © 1983-99 ENERCALC

Description RAFTERS AND BEAMS

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

	rafter	rafter	vault	B1	B2	B3	Purlin
Timber Section	2x4	2x6	2x6	4x12	4x12	4x12	LVL:1.750x
Beam Width	in: 1.500	1.500	1.500	3.500	3.500	3.500	1.750
Beam Depth	in: 3.500	5.500	5.500	11.250	11.250	11.250	9.250
Le. Unbraced Length	ft: 0.00	0.00	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	Douglas Fir - Larch	Truss Joist - MacMil
Fb - Basic Allow	psi: 875.0	875.0	875.0	875.0	1,000.0	1,000.0	2,600.0
Fv - Basic Allow	psi: 95.0	95.0	95.0	95.0	95.0	95.0	285.0
Elastic Modulus	ksi: 1,600.0	1,600.0	1,600.0	1,600.0	1,700.0	1,700.0	1,900.0
Load Duration Factor	1.250	1.250	1.250	1.250	1.250	1.250	1.250
Member Type	Sawn	Sawn	Sawn	Sawn	Sawn	Sawn	Manuf/Pine
Repetitive Status	Repetitive	Repetitive	Repetitive	No	No	No	No

Center Span Data

	ft	ft	ft	ft	ft	ft	ft
Span	7.50	11.75	10.25	16.00	12.00	16.50	12.00
Dead Load #/ft	27.00	27.00	34.20	54.00	133.00	120.00	98.00
Live Load #/ft	32.00	32.00	32.00	64.00	124.00	112.00	116.00

Results Ratio = 0.8616 0.9881 0.8437 0.5101 0.5468 0.9333 0.5699

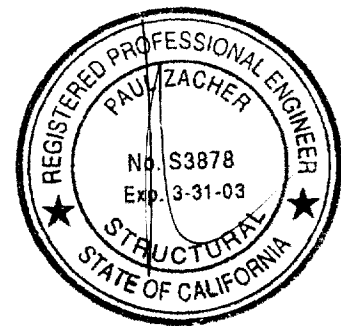
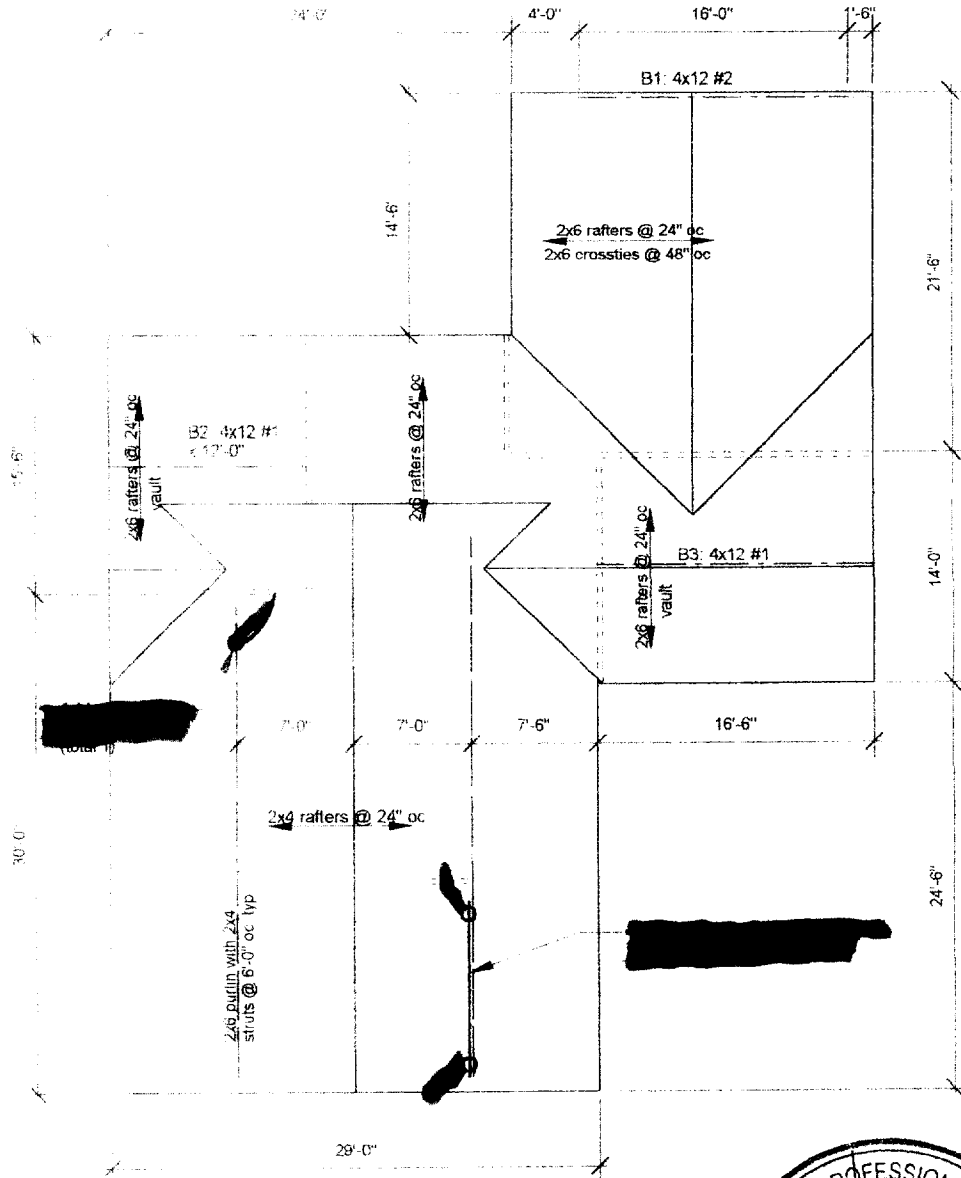
	in-k	ft	psi	psi	psi	psi	psi
Mmax @ Center	4.98	12.22	10.43	45.31	55.51	94.74	46.22
@ X =	3.75	5.87	5.12	8.00	6.00	8.25	6.00
fb Actual	psi: 1,625.5	1,615.7	1,379.5	613.7	751.9	1,283.3	1,852.2
Fb Allowable	psi: 1,886.7	1,635.2	1,635.2	1,203.1	1,375.0	1,375.0	3,250.0
	Bending OK	Bending OK	Bending OK	Bending OK	Bending OK	Bending OK	Bending OK
fv Actual	psi: 58.7	58.5	56.3	31.9	49.8	64.7	103.8
Fv Allowable	psi: 118.8	118.8	118.8	118.8	118.8	118.8	356.3
	Shear OK	Shear OK	Shear OK	Shear OK	Shear OK	Shear OK	Shear OK

Reactions

	DL	LL	Max DL+LL	DL	LL	Max DL+LL	DL	LL	Max DL+LL
@ Left End	lbs: 101.25	158.62	259.87	175.27	244.00	419.27	432.00	644.00	1,076.00
@ Right End	lbs: 101.25	158.62	259.87	175.27	244.00	419.27	432.00	644.00	1,076.00

Deflections

	Ratio OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK	Deflection OK
Center DL Defl	in: -0.224	-0.348	-0.255	-0.120	-0.088	-0.283	-0.208
L/Defl Ratio	401.5	405.2	481.9	1,602.2	1,638.4	698.5	690.7
Center LL Defl	in: -0.266	-0.412	-0.239	-0.142	-0.082	-0.265	-0.247
L/Defl Ratio	338.8	341.9	515.0	1,351.9	1,757.3	748.4	583.5
Center Total Defl	in: -0.490	-0.760	-0.494	-0.262	-0.170	-0.548	-0.455
Location	ft: 3.750	5.875	5.125	8.000	6.000	8.250	6.000
L/Defl Ratio	183.7	185.4	248.9	733.2	847.9	361.3	316.3



Notes:

- 1 This is a reroof project. The new roofing material shall be a Standard Weight Concrete Tile. The tile shall weigh less than or equal to 9.3 psf.
- 2 All rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- 3 All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.12 "Roof and Ceiling Framing" unless otherwise shown.
- 4 All structural wood members that were observed appear to be in sound condition and without structural defect.

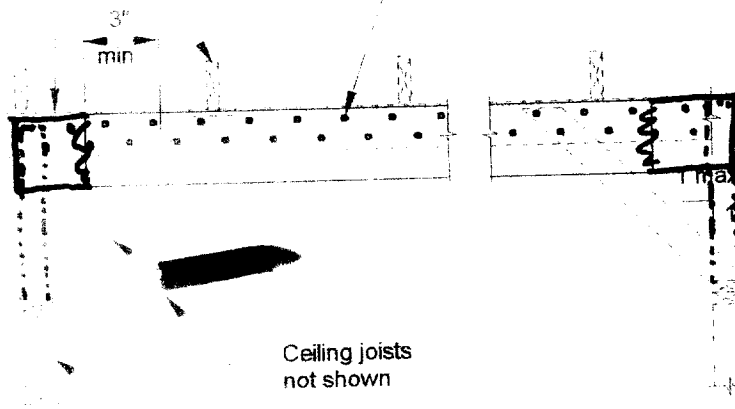
1

ROOF PLAN - GONZALES

Not to Scale

Existing rafters
Existing purlin

Nail purlin to existing purlin
w/ 16d @ 3" oc staggered.
Shim as required.



Ceiling joists
not shown

Existing bearing wall

EXTEND
PURLIN OVER
BRNG WALL
& ADD 2x4
VERT. SUPPORT,
TYP. EA. END.

2

PURLIN DETAIL

scale: 1/2" = 1'-0"

