

**CITY OF SACRAMENTO**

**1231 I Street, Sacramento, CA 95814**

**Permit No: 0318242**

**Insp Area: 2**

**Site Address: 23 SAGE RIVER CR SAC**

**Thos Bros:**

**Parcel No: 031-0770-024**

**Sub-Type: REP**

**Housing (Y/N): N**

**CONTRACTOR**

ZIMMERMAN ROOFING, INC  
3675 R STREET  
SACRAMENTO, CA 95816

**OWNER**

KATHLEEN CARTER  
23 SAGE RIVER CIR  
SACRAMENTO CA 95831

**ARCHITECT**

**Nature of Work: REROOF- TEAR OFF, INSTALL 30SQ OF LIGHT WEIGHT CONCRETE 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 C39 License Number 557559 Date 11/21/03 Contractor Signature Alma Gonzalez

**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 herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 11/21/03 Applicant/Agent Signature Alma Gonzalez

**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 STATE FUND Policy Number 713-02-2021-01 Exp Date 10/01/2004

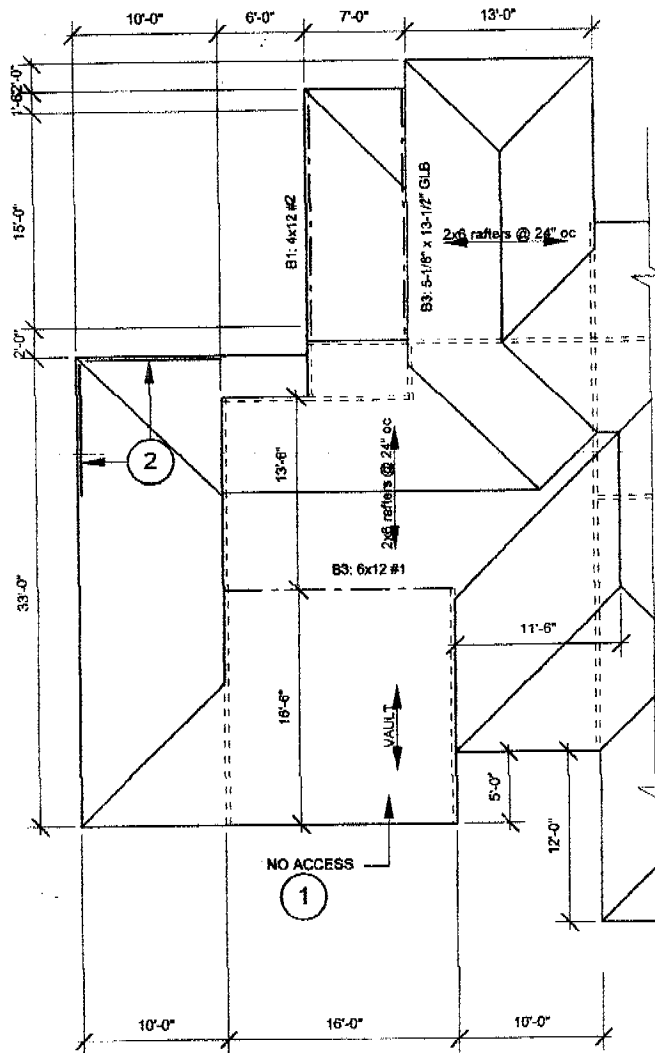
(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become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

Date 11/21/03 Applicant Signature Alma Gonzalez

**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.**

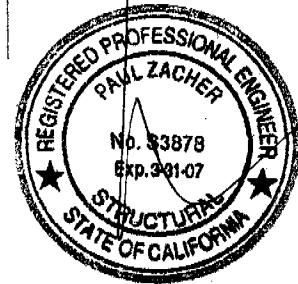
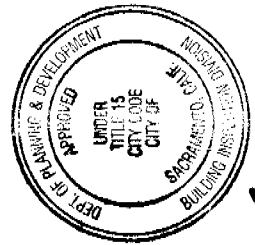
**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**

# 23 SAGE RIVER CIRCLE



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 liable or approved in violation of any City Ordinance of Lodi, Calif.

11/21/03



## FRAMING NOTES:

p. 2

1. No Access. See "Recommendations" for allowable rafter spans.
2. Add a 2x6 DF#2 x 10'-0" long fascia with 3 - 16d's to each existing rafter tail.

## 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 rafters are 2x6 DF#2 and hips and valleys are 2x8 DF#2 unless otherwise noted.
- C. All existing rafter, hips, valleys, rafter ties, and purlins are braced per UBC Section 2320.1 "Roof and Ceiling Framing" unless otherwise shown.
- D. All structural wood members that were observed appear to be in sound condition and without structural defect.



## ROOF PLAN - CARTER

Not to Scale

# CITY COPY

Carter

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

TEL: 916.961.3960  
FAX: 916.961.6552

November 16, 2003

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

Attn.: Mr. Jeff Tucker,

re: Job 2003554: CARTER

Subject: Structural Investigation Report of the Roof for the Residence located at 23 Sage River Circle,  
Sacramento, CA 95831.



As requested by Mr. Jeff Tucker, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site November 13, 2003. 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 2000 square feet.

CONSTRUCTION:

Roof:  
The roof covering will consist of a Light Weight Concrete Tile over 7/16" solid sheathing. The roof structure is conventionally framed with 2x6 rafters spaced at 24" on center. One area had no access and was not inspected.

CONCLUSIONS:

Roof:  
The roof structure currently lacks sufficient structural capacity for the applied live and dead loads. See "Recommendations" for location and repair to bring the roof structure up to the required capacity. No conclusion was drawn for the area that was inaccessible and was not inspected.

Carter



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. After the roofing material has been removed, the contractor shall verify that the framing in the inaccessible portion of the structure does not exceed the following:
  - a. 2x10 @ 16" oc - max span = 19'-9"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.
2. Add a 2x6 DF#2 x 10'-0" long fascia with 3 - 16d's to each existing rafter tail. 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

LOADING:

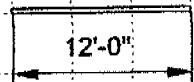
Rafter

Dr =  $12.3 \text{ psf} \times 2'-0" = 24.6 \text{ plf}$

2x6 #2

24.6 / 32.0

Lr =  $16.0 \text{ psf} \times 2'-0" = 32.0 \text{ plf}$



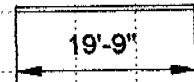
Vault

Dr =  $17.4 \text{ psf} \times 1'-4" = 23.2 \text{ plf}$

2x10 #2

23.2 / 21.3

Lr =  $16.0 \text{ psf} \times 1'-4" = 21.3 \text{ plf}$



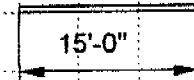
B1

Dr =  $12.3 \text{ psf} \times 7'-0" = 86 \text{ plf}$

4 x 12 #2

86 / 112

Lr =  $16.0 \text{ psf} \times 7'-0" = 112 \text{ plf}$



B2

Dr =  $12.3 \text{ psf} \times 10'-0" = 123 \text{ plf}$

5-1/8" x 13-1/2" GLB

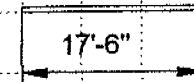
308 / 440

Lr =  $16.0 \text{ psf} \times 10'-0" = 160 \text{ plf}$

Df =  $10.0 \text{ psf} \times 6'-6" = 65 \text{ plf}$

Lr =  $40.0 \text{ psf} \times 6'-6" = 260 \text{ plf}$

Dr =  $15.0 \text{ psf} \times 8'-0" = 120 \text{ plf}$



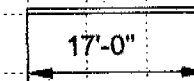
B3

Dr =  $17.4 \text{ psf} \times 15'-0" = 261 \text{ plf}$

6 x 12 #1

261 / 240

Lr =  $16.0 \text{ psf} \times 15'-0" = 240 \text{ plf}$



Paul Zacher - Structural Engr's  
 4701 Lakeside Way  
 Fair Oaks, CA 95628  
 TEL: (916) 961-3960  
 FAX: (916) 961-6552

Title :  
 Dsgnr:  
 Description :

Job #  
 Date: 7:56PM, 16 NOV 03

Scope :

Rev: 560100  
 User: KW-0602644, Ver 5.6.1, 25-Oct-2002  
 (c)1983-2002 ENERCALC Engineering Software

### Timber Beam & Joist

c:\documents and settings\paul.zacher\desktop

Description RAFTERS AND BEAMS

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

Timber Section		rafter	vault	B1	B2	B3
		2x6	2x10	4x12	6.125x13.5	6x12
Beam Width	in	1.500	1.500	3.500	5.125	5.500
Beam Depth	in	5.500	9.250	11.250	13.500	11.500
Le: 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, 24F - V Douglas Fir - Larch,				
Fb - Basic Allow	psi	875.0	875.0	875.0	2,400.0	1,350.0
Fv - Basic Allow	psi	95.0	95.0	95.0	165.0	85.0
Elastic Modulus	ksi	1,600.0	1,600.0	1,600.0	1,800.0	1,600.0
Load Duration Factor		1.250	1.250	1.250	1.000	1.250
Member Type		Sawn	Sawn	Sawn	Glulam	Sawn
Repetitive Status		Repetitive	Repetitive	No	No	No

#### Center Span Data

	ft	12.00	19.75	15.00	17.60	16.00
Span	ft					
Dead Load	#/ft	24.60	23.20	86.00	308.00	261.00
Live Load	#/ft	32.00	21.30	112.00	440.00	240.00

#### Results Ratio = 0.9887 0.8797 0.7523 0.9302 0.9404

Mmax @ Center	in-k	12.23	26.04	66.82	347.55	192.38
@ X =	ft	6.00	9.87	7.50	8.80	8.00
fb : Actual	psi	1,616.6	1,217.2	905.1	2,232.6	1,586.9
Fb : Allowable	psi	1,635.2	1,383.6	1,203.1	2,400.0	1,687.5
		Bending OK	Bending OK	Bending OK	Bending OK	Bending OK
fv : Actual	psi	57.3	44.1	49.8	125.6	84.4
Fv : Allowable	psi	118.8	118.8	118.8	165.0	106.3
		Shear OK	Shear OK	Shear OK	Shear OK	Shear OK

#### Reactions

@ Left End	DL	lbs	147.60	229.10	645.00	2,710.40	2,088.00
	LL	lbs	192.00	210.34	840.00	3,872.00	1,920.00
	Max. DL+LL	lbs	339.60	439.44	1,485.00	6,582.40	4,008.00
@ Right End	DL	lbs	147.60	229.10	645.00	2,710.40	2,088.00
	LL	lbs	192.00	210.34	840.00	3,872.00	1,920.00
	Max. DL+LL	lbs	339.60	439.44	1,485.00	6,582.40	4,008.00

#### Deflections Ratio OK Deflection OK Deflection OK Deflection OK Deflection OK

Center DL Defl	in	-0.345	-0.502	-0.147	-0.352	-0.345
L/Defl Ratio		417.5	472.4	1,221.0	600.8	556.4
Center LL Defl	in	-0.449	-0.461	-0.192	-0.502	-0.317
L/Defl Ratio		320.9	514.5	937.5	420.5	605.1
Center Total Defl	in	-0.794	-0.962	-0.339	-0.854	-0.662
Location	ft	6.000	9.875	7.500	8.800	8.000
L/Defl Ratio		181.5	246.3	530.3	247.4	289.9