1231 I Street, Sacramento, CA 95	814		Insp Area: Thos Bros:	2 337G4
Site Address: 7758 DETROIT BL SA Parcel No: 053-0072-005	C		Sub-Type: Housing (Y/N)	RES
<u>CONTRACTOR</u>	OWNER HERNANDEZ FRANCISCO J 7758 DETROIT BLVD SACRAMENTO CA 95832		ARCHITECT	
Nature of Work: REROOF TEAR OFF SI BRACING-RESHEET- INSTALL STAND				
CONSTRUCTION LENDING AGENCY: 11 the work for which this permit is issued (Sec. 3097, Civ.	nereby affirm under penalty of perjury the . C).	at there is a const	ruction lending agenc	y for the performance of
Lender's Name	Lendcr'sAddress			
LICENSED CONTRACTORS DECLARAT (commencing with section 7000) of Division 3 of the B				provisions of Chapter 9
License Class License Number Date	Contractor Signature_			
OWNER-BUILDER DECLARATION: I here reason (Sec. 7031.5, Business and Professions Code; a prior to its issuance, also requires the applicant for such License Law (Chapter 9 (commencing with Section 70 basis for the alleged exemption. Any violation of Sect hundred dollars (\$500.00);	ny city or county which requires a permin permit to file a signed statement that he 00) of Division 8 of the Business and Protion 7031.5 by any applicant for a permi	t to construct, alto or she is licensed rofessions Code) t subjects the app	er, improve, demolish I pursuant to the prov or that he or she is ex dicant to a civil penal	, or repair any structure, isions of the Contractors tempt therefrom and the ty of not more than five
I, as a owner of the property, or my employees sale (Sec. 7044, Business and Professional Code: The who does such work himself or herself or through his/I the building or improvement is sold within one year of the purpose of sale.)	Contractors License Law does not apply her own employees, provided that such in	to an owner of properties to the provenients are	property who builds on not intended or offer	r improves thereon, and ed for sale. If, however,
I, as owner of the property, am exclusively con The Contractors License Law does not apply to an own licensed pursuant to the Contractors License Law).				
I am exempt under SecB	& PC for this reason:]	f).	
Date 8-9-04 Ov	wner Signature	Buckle		
IN ISSUING THIS BUILDING PERMIT, the appli measurements and locations shown on the application private agreement relating to permissible or prohibited improvement or the violation of any private agreement in	or accompanying drawings and that the locations for such improvements. This	e representation improvement to building nermit	be constructed does does not authorize an	not violate any law or
I certify that I have read this application and state that a building construction and herby authorize representative	e(s) of this city to enter upon the abovern	oly with all city are	nd county ordinances a for inspection purpos	and state laws relating to es.
Date 8-9-04 Ap	oplicant/Agent Signature	in Il	incoff	
WORKER'S COMPENSATION DECLARA? I have and will maintain a certificate of consent performance of work for which the permit is issued.	t to self-insure for workers' compensatio	n as provided for	by Section 3700 of t	the Labor Code, for the
I have and will maintain workers' compensation this permit is issued. My workers' compensation insura		of the Labor Cod	le, for the performanc	e of the work for which
Carrier	Policy Number		Exp Date	
(This section need not be completed if the permi not employ any person in any manner so as to become workers' compensation provisions of Section 3700 of the	subject to the workers compensation law	s of California a	nd agree that if I shou	s permit is issued, Ishall ld become subject to the
Date $g - g - O U$ Ap	pplicant Signature Luce	XX	ulf	
WARNING: FAILURE TO SECURE WORKER'S CRIMINAL PENALTIES AND CIVIL FINES UP COMPENSATION, DAMAGES AS PROVIDED FOR	TO ONE HUNDRED THOUSAND D	OLLARS (\$100	OOO) IN ADDITION	N TO THE COST OF

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

Permit No: 0412821

CITY OF SACRAMENTO

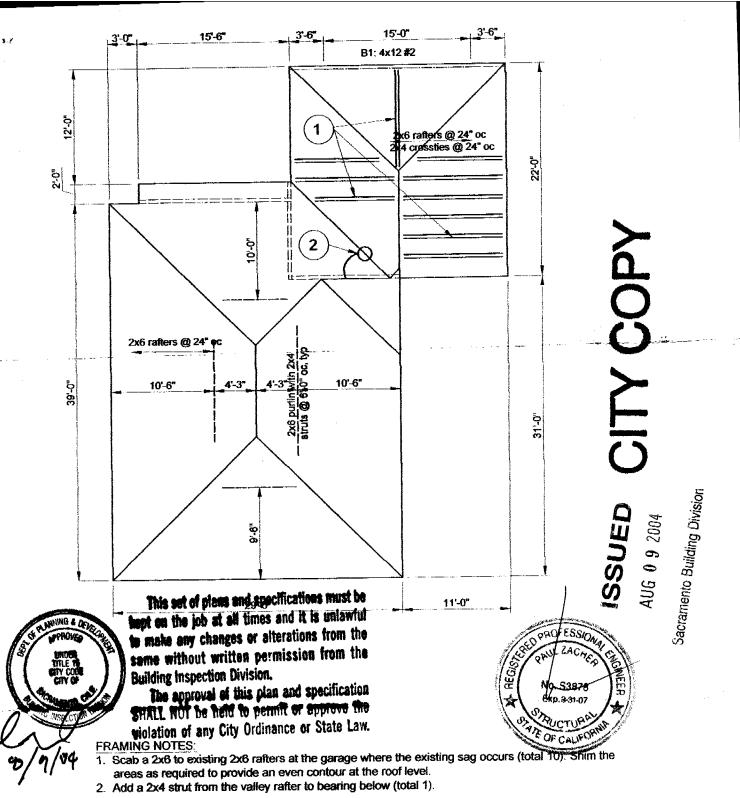
OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNER

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.

l. I personally proposed improvem	ent (yes or no)		
2. I (have/have permit for the pr	not) have (oposed work.	signed an application f	or a building
construction:		erson (firm) to provide the pr	
Name	33	Address	
City		Telephone	
	icense No		
coordinate, super	vise, and provide the maj	, but I have hired the follow jor work.	ing person to
Name		Address	
-			
	icense No		
Contractors L 5. I will provid	icense No de some of the work but I		
Contractors L	icense No de some of the work but I		
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Contractors L 5. I will provide the work indicate Name	icense No	have contracted (hired) the f	ollowing to provide Type of Work



- A. 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 10.3 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.



7 P

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

TEL: 916.961.3960 FAX: 916.961.6552

July 27, 2004

Hernandez

7758 Detroit Blvd Sacramento, CA 95828 TEL: (916) 454-3667

FAX: (916) 691-1943

Attn.: Mr. Hernandez,

re: Job 2004434: HERNANDEZ

Subject: Structural Investigation Report of the Roof for the Residence located at 7758 Detroit Blvd, Sacramento, CA 95828.

As requested by Mr. Hernandez, this is a report to determine what needs should be addressed to correct any structural deficiencies of the roof. Paul Zacher visited the site July 28, 2004. 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: Residen

Year Built:

Estimated 1960's vintage.

Occupancy:

AGEJ NGBGBL......WOLEBETERJ EGBUEBBLW. - S

Residential.

No. of Stories:

One.

Dimensions:

Approximately 1500 square feet.

CONSTRUCTION:

Roof:

The roof covering will consist of a Standard Weight Concrete Tile over 7/16" solid sheathing. The roof structure is conventionally framed with 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. The garage area is framed with 2x6 rafters spaced at 24" on center and 2x4 cross ties spaced at 4'-0" on center.

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. There is an existing sag in the roof of approximately 2 to 3 inches at the garage. This is due to the original construction.



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.

1. Scab a 2x6 rafter to the existing 2x6 rafters with 16d's @ 12" on center at the garage area where the existing sag occurs. Shim the areas as required where the existing sags occur to provide an even contour at the roof level. The rafter to be scabbed to the existing rafter may be held short of the intersecting bearing wall, hip, valley, ridge or purlin by no more than 4". See detail 1.

Provide a 2x4 strut from the existing valley rafter to the bearing wall below. 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
	1.05	
Pitch Adjustment Factor	1:02	

LOCATION: ROOF		_
MATERIAL	<u>WEIGHT</u>	-
Standard Weight Tile	10.30	psf
Roofing felt	0.30	psf
1x4 skip sht'g	1.09	psf
7/16" OSB/ plywood	1.30	psf
	1.00	psf
2x6 rafters @ 24" oc Load	14.0	psf
Roof Pitch Adjustment	<u>0.76</u>	psf
Total Load	14.8	psf

PAUL ZACHER- STRUCTURAL ENGINEERS, INC. Job #: 04_434 Date: 07/29/2004		4701 Lakesion Fair Oaks, Cartel: (916) FAX: (916)	a 95628 961-3960
LOADING: Rafter: Dr = 14.8 psf x 2'-0" = 29.6 plf Lr = 16.0 psf x 2'-0" = 32.0 plf	2x6 #2		29.6 / 32.0
B1: Dr = 14.8 psf x 7'-0" = 104 plf Lr = 16.0 psf x 7'-0" = 112 plf	4x12 #2		104 / 112
		-	· • · ·

. Paul Zacher - Structural Engr's 4701 Lakeside Way

Fair Oaks, CA 95628 TEL: (916) 961-3960

Title: Dsgnr: Description : Job # Date: 9:48PM, 29 JUL 04

Scope:

FAX: (916) 961-6552
Rev: 560100
User: KW-0602644, Ver 5.6.1, 25-Oct-2002
(c)1983-2002 EMERCALC Engineering Software

Timber Beam & Joist

Description

RAFTERS AND BEAMS

Timber Member In	forma	tion		Calculations are designed to 1997 NDS and 1997 UBC Requirements
	868-242	rafte	War and Carry an	
Timber Section	ļ	2x6	4x12	
Beam Width	in	1.500	3.500	
Beam Depth	in	5.500	11.250	
Le: Unbraced Length	ft	0.00	0.00	
Timber Grade	1	Jouglas Fir - Larch	, Jouglas Fir - Larch,	
Fb - Basic Allow	psi	875.0	875.0	
Fv - Basic Allow	psi	95.0	95.0	
Elastic Modulus	ksi	1,600.0	1,600.0	
Load Duration Factor		1.250	1.250	
Member Type		Sawn	Sawn	
Repetitive Status		Repetitive	No	
Center Span Data				
Span	A	11.50	15.00	
Dead Load	#/R	29.60	104.00	
Live Load	#/ft		112.00	
to the service of the				
Results	Ratio ≃	0.9882	0.8207	
Mmax @ Center	in-k	12.22	72.90	MR CARLON CONTROL OF C
@ X =	ft	5.75	7.50	
fb : Actual	psi	1.615.9	987.4	
Fb : Allowable	DSI	1,635.2	1,203,1	
	,	Bending OK	Bending OK	
fv : Actual	psi	59.8	54.3	
Fv : Allowable	psi	118.8	118.8	
	•	Shear OK	Shear OK	
Reactions				
@ Left End DL	ibs	170.20	780.00	A STATE OF THE STA
LL	lbs	184.00	840.00	
Max. DL+LL	lbs	354.20	1,620.00	
@ Right End DL	lbs	170.20	780.00	
ii.	lbs	184.00	840,00	
Max. DL+LL	lbs	354.20	1,620.00	
Deflections		Ratio OK	Deflection OK	
Center DL Defl	in	-0.350	-0.178	
L/Defl Ratio	ш)	394.2	1.009.6	
Center LL Defl	in	-0.378	-0.192	
L/Defi Ratio	171	364.7	937.5	
Center Total Defi	in	-0.728	-0.370	
Location	ft	5.750	7.500	