

CITY OF SACRAMENTO  
1231 T Street, Sacramento, CA 95814

Permit No: 0109473  
Insp Area: 4

Site Address: 2870 CAMARILLO DR SAC  
Parcel No: 262-0314-031

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

**CONTRACTOR**

**OWNER**

**ARCHITECT**

SANDOVAL MARIA & FROH AN  
2870 CAMARILLO DR  
SACRAMENTO CA 95833

Nature of Work: REROOF T/O 22 SQ INSTALL LIGHTWEIGHT 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 \_\_\_\_\_ 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).

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.

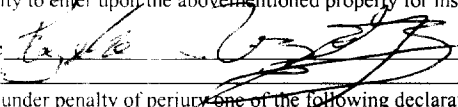
I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code). The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s)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

I am exempt under Sec. \_\_\_\_\_ B & P. for this reason: \_\_\_\_\_

Date 7-25 \_\_\_\_\_ 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 7-25 \_\_\_\_\_ Applicant Agent Signature 

**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 \_\_\_\_\_

(This section need not be completed if the permit is for \$100,000 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 that is prohibited by 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 7-25 \_\_\_\_\_ Applicant Signature 

**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.**



DEPARTMENT OF  
NEIGHBORHOODS, PLANNING  
AND DEVELOPMENT SERVICES

CITY OF SACRAMENTO  
CALIFORNIA

1231 I STREET  
ROOM 200  
SACRAMENTO, CA  
95814-2904

DEVELOPMENT SERVICES  
DIVISION

916-264-7619  
FAX 916-264-7046

EXHIBIT 1

I have read and am familiar with the contents of the City's Standard  
Owner-Builder Notification and Owner-Builder Verification, as required by  
California Health and Safety Code Section 19830 and 19831. I authorize my

agent(s) Rogelio Vasquez

to sign the Owner-Builder Verification on my behalf.

Signature [Signature] & Froilan Sandoval  
Print Name Maria and Froilan Sandoval  
Address 2870 Camarillo Drive  
Sacramento, CA 95833  
Telephone (916) 556-8595

City of Sacramento

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 or no) Yes

2. I (have/have not) have 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 \_\_\_\_\_

Signed \_\_\_\_\_

Job Address \_\_\_\_\_

Permit No: \_\_\_\_\_

0109473

2870 AMARILLO DR

**ISSUED**

Sandival

JUL 25 2001



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

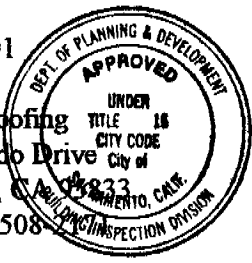
Sacramento Building Division

TEL: 916.961.3960  
FAX: 916.961.6552

PERMISSION TO REPRODUCE THIS REPORT IS GRANTED BY THE CITY OF SACRAMENTO FOR NON-COMMERCIAL USE ONLY.

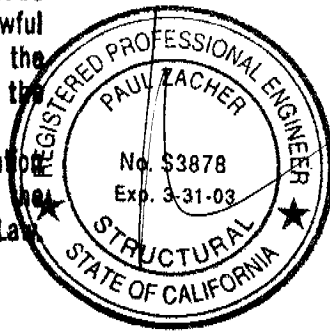
July 16, 2001

El Socios Roofing  
2935 Azevedo Drive  
Sacramento, CA 95833  
TEL: (916) 508-7272  
FAX:



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 specifications SHALL NOT be held to permit or approve any violation of any City Ordinance or State Law.



Attn.: Mr. Rogelio Vazquez,

re: Job 2001\_187: SANDIVAL

Subject: Structural Investigation Report of the Roof for the Residence located at 2870 Camarillo Drive, Sacramento, CA.

As requested by Mr. Rogelio Vazquez, 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 16, 2001. 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 1970's vintage.
Occupancy:	Residential.
No. of Stories:	Two.
Dimensions:	Approximately 2000 square feet with a first story plate height of 8 feet.

**CONSTRUCTION:**

Roof:  
The roof covering will consist of a Light Weight Concrete Tile over 1/2" solid sheathing. The living area is framed with pre-engineered wood trusses spaced at 24" on center.

**CONCLUSIONS:**

Roof:  
The living area has sufficient structural capacity for the applied live and dead loads.

**RECOMMENDATIONS:**

None.

*o.k.*  
*Paul Zacher*  
*7/25/01*  
*1/10*

Sandival



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

TEL: 916.961.3960  
FAX: 916.961.6552

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>	
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
2x4 rafters @ 24" oc	0.64	psf
	Load	10.5 psf
Roof Pitch Adjustment	0.57	psf
Total Load	11.1	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	0.64	psf
	Load	10.5 psf
Roof Pitch Adjustment	0.57	psf
Total Load	11.1	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	2.50	psf
	Load	4.3 psf

P.K. Zacher, S.E.

4701 Lakeside Way  
Fair Oaks, CA 95628  
TEL: (916) 961-3960  
FAX: (916) 961-6552

Job #: 01-187

Date: 7/16/01

LOGGING

PAPER

DP = 11.1 pcf = 2' = 22.2 pcf

2.4#2

22.2/32

79

LP = 16.0 " " " 32 "

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

Title :  
 Dsgnr:  
 Description :  
 Scope :

Job #  
 Date: 10:59AM, 16 JUL 01

Rev. 510304  
 User: RW-0602844, 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

<b>Timber Section</b>		rafter
Beam Width	in	2x4 1.500
Beam Depth	in	3.500
L: Unbraced Length	ft	0.00
Timber Grade		Douglas Fir - Larch,
Fb - Basic Allow	psi	875.0
Fv - Basic Allow	psi	95.0
Elastic Modulus	ksi	1,600.0
Load Duration Factor		1.250
Member Type		Sawn
Repetitive Status		Repetitive

**Center Span Data**

Span	ft	7.75
Dead Load	#/ft	22.20
Live Load	#/ft	32.00

**Results** Ratio = 0.8451

Mmax @ Center	in-k	4.88
@ X =	ft	3.87
fb : Actual	psi	1,594.5
Fb : Allowable	psi	1,886.7
		Bending OK
fv : Actual	psi	55.7
Fv : Allowable	psi	118.8
		Shear OK

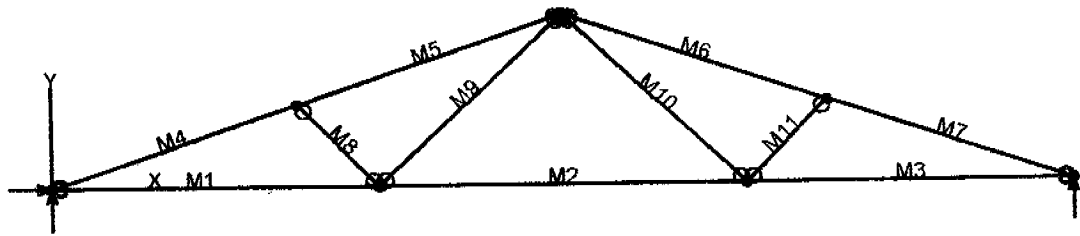
**Reactions**

@ Left End	DL	lbs	86.02
	LL	lbs	124.00
	Max. DL+LL	lbs	210.02
@ Right End	DL	lbs	86.02
	LL	lbs	124.00
	Max. DL+LL	lbs	210.02

**Deflections** Ratio OK

Center DL Defl	in	-0.210
L/Defl Ratio		442.6
Center LL Defl	in	-0.303
L/Defl Ratio		307.0
Center Total Defl	in	-0.513
Location	ft	3.875
L/Defl Ratio		181.3





# VisualAnalysis 3.50.c Report

07/16/01 10:50:24

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	8.00	0.00	No	No	"
N3	17.00	0.00	"	"	"
N4	25.00	0.00	"	Yes	"
N5	6.00	2.00	"	No	"
N6	19.00	2.00	"	"	"
N7	12.50	4.17	"	"	"

## Member Elements

Member	Section	Material	Length ft
M1	SS2x4	Wood	8.00
M2	"	"	9.00
M3	"	"	8.00
M4	"	"	6.32
M5	"	"	6.85
M6	"	"	6.85
M7	"	"	6.32
M8	"	"	2.83
M9	"	"	6.14
M10	"	"	6.14
M11	"	"	2.83

## Section Properties

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

## Material Properties

Material	Strength psi	Elasticity psi	Poisson	Density lb/ft <sup>3</sup>
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	821.70	-NA-
N4	"	-NA-	821.70	-NA-

## Member Results

Member	Axial lbs	Vy lbs	Mz lb-ft	Dy in
M1	1988.50	-39.94	-44.31	-0.1930
"	1988.50	-17.00	31.4660	-0.1710
"	1988.50	5.9285	46.2343	-0.1132
"	1988.50	28.8619	0.0000	-0.0000
M2	1221.36	-38.70	-44.31	-0.1930
"	1221.36	-12.90	32.9015	-0.2383
"	1221.36	12.9000	32.9015	-0.2383
"	1221.36	38.7000	-44.31	-0.1930
M3	1988.50	-28.86	-0.0000	-0.0000
"	1988.50	-5.9285	46.2343	-0.1132
"	1988.50	17.0048	31.4660	-0.1710
"	1988.50	39.9381	-44.31	-0.1930
M4	-2137.17	123.34	0.0000	-0.0000
"	-2101.04	14.9390	145.19	-0.1434
"	-2064.91	-93.46	62.4171	-0.1804
"	-2028.77	-201.86	-248.31	-0.1803
M5	-1821.33	212.39	-248.31	-0.1803
"	-1782.12	94.9520	102.03	-0.2911
"	-1742.92	-22.48	184.80	-0.3224
"	-1703.71	-139.91	0.0000	-0.1928
M6	-1821.33	-212.39	-248.31	-0.1621
"	-1782.12	-94.95	102.03	-0.2729
"	-1742.92	22.4813	184.80	-0.3041
"	-1703.71	139.91	0.0000	-0.1746
M7	-2137.17	-123.34	0.0000	0.0182
"	-2101.04	-14.94	145.19	-0.1252
"	-2064.91	93.4610	62.4171	-0.1622
"	-2028.77	201.86	-248.31	-0.1621
M8	-464.08	0.0000	0.0000	-0.1213
"	-464.08	0.0000	0.0000	-0.1130
"	-464.08	0.0000	0.0000	-0.1048
"	-464.08	0.0000	0.0000	-0.0965
M9	598.49	0.0000	0.0000	-0.1616
"	598.49	0.0000	0.0000	-0.1598
"	598.49	0.0000	0.0000	-0.1579
"	598.49	0.0000	0.0000	-0.1561
M10	598.49	0.0000	0.0000	-0.1225
"	598.49	0.0000	0.0000	-0.1207
"	598.49	0.0000	0.0000	-0.1188
"	598.49	0.0000	0.0000	-0.1170
M11	-464.08	-0.0000	0.0000	-0.1620
"	-464.08	-0.0000	-0.0000	-0.1537
"	-464.08	-0.0000	-0.0000	-0.1455
"	-464.08	-0.0000	-0.0000	-0.1372

**BENDING & COMP: TRUSS 1 - MEMBER 4**

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

Grading:

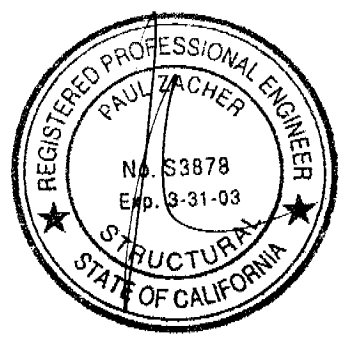
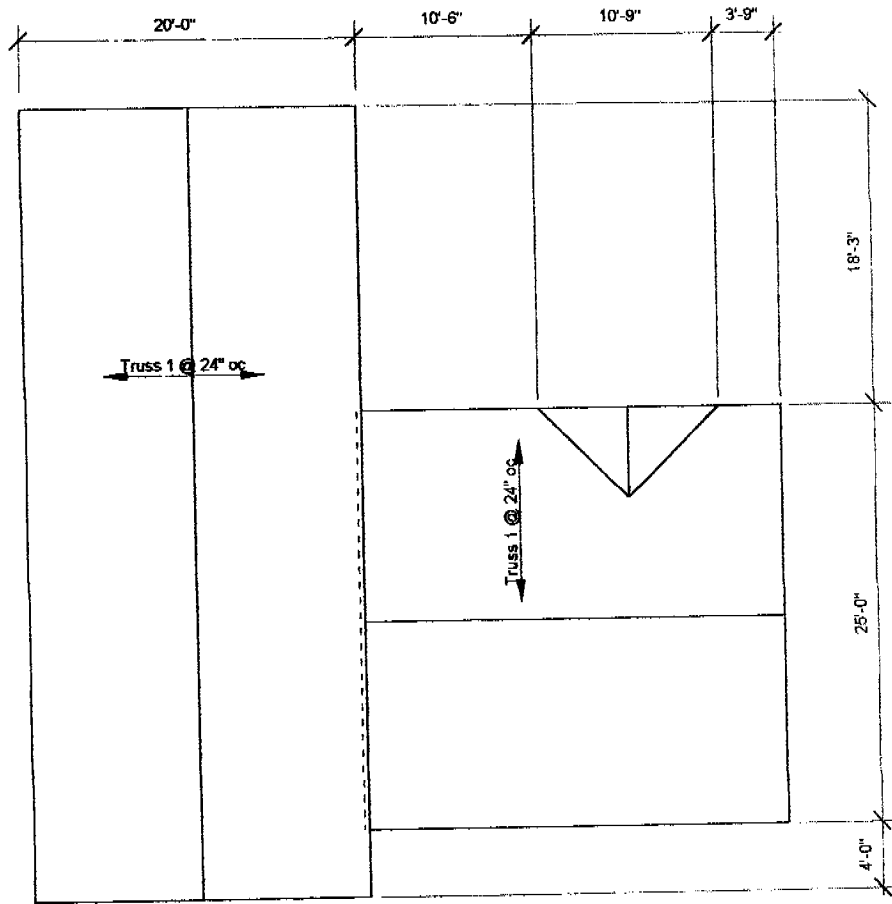
2x or 4x

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	6.32 feet
Max Axial Comp, C	2028 feet
Max Reaction, R	201 feet
Max Moment, M	248 feet
Max LL Deflection	0.08 feet
Max TL Deflection	0.18 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 =	1.17
fc =	386 psi
Fce=	1275 psi
Fc*=	2084 psi
F'c=	1057 psi
fb=	972 psi
F'b=Fb*=	2156 psi
Shear D/C ratio	0.48 < 1.0, Member OK
Interaction equation:	
(fc/F'c)^2 +	
fb/ (F'b(1-fc/Fcc)) =	0.78 < 1.0, Member OK
Live Load defl ratio	0.25 < 1.0, Member OK
Total Load defl ratio	0.43 < 1.0, Member OK



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

1 ROOF PLAN - SANDIVAL  
Not to Scale 10