

**CITY OF SACRAMENTO**  
1231 I Street, Sacramento, CA 95814

**Permit No: 0006514**  
**Insp Area: 2**

**Site Address: 6633 VALLEY HI DR SAC**  
Parcel No: 117-0012-021

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

CONTRACTOR  
FERNANDEZ CONST. INC.  
106 CHURCH ST  
ROSEVILLE CA 95678

OWNER  
BANK OF AMERICA N T/SAVIN  
5310 HARVEST HILL RD #2  
DALLAS TX 75230

ARCHITECT

**Nature of Work: DRY-ROT REPAIR TO WALKWAYS ON SECOND AND THIRD. ADD POST TO EXISTING STAIRS.**

**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 A-B License Number 607780 Date 6-28-00 Contractor Signature [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 & 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.

Date 6-28-00 Applicant/Agent Signature [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 CALIFORNIA INDEMNITY Policy Number N5061032A 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.

Date 6-28-00 Applicant Signature [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.**



**DEVELOPMENT SERVICES DIVISION**  
1231 I STREET, ROOM 200, SACRAMENTO, CA 95814

Prior to issuance of a permit, the applicant shall complete Part I of this form. Part II and Part III shall be completed by the project Architect/Engineer and the Development Services Department as a part of the plan review process. Before permit issuance all parties must sign this agreement. Please note that failure to comply with special inspection requirements could be expensive in terms of retrofit design and construction as well as delays in the project.

**PART I • SPECIAL INSPECTION AND TESTING AGREEMENT**

PROJECT NAME \_\_\_\_\_  
 PROJECT ADDRESS 6637 Valley H DR  
 PLAN REVIEW NUMBER \_\_\_\_\_  
 PERMIT NUMBER \_\_\_\_\_  
 OWNER'S NAME Wasatch Property Management  
 OWNER'S ADDRESS 399 North Main, Suite 200 Logan Utah 84321  
 OWNER'S REPRESENTATIVE TERRY NUPPER PHONE NUMBER 606 3649

TESTING/INSPECTION FIRM(S)	ITEMS
1 <u>Signet Testing Labs</u> <u>4744 Bell Dr Suite 8</u>	
CONTACT PERSON: <u>Terry - 568-5858</u>	
2 _____	

CONTACT PERSON: \_\_\_\_\_

**PART II • SPECIAL INSPECTION AND TESTING AGREEMENT • INSPECTION REQUIRED**

*In accordance with Chapter 17 Section 1701 of the UBC, as adopted by this jurisdiction, SPECIAL INSPECTION is required as noted below:*

PRECONSTRUCTION MEETING ( ) REQUIRED ( ) WAVED

CODE SECTION	TYPE OF WORK	CONTINUOUS	PERIODIC
1701.5.1	CONCRETE		
1701.5.2	BOLTS INSTALLED IN CONCRETE		
1701.5.3	SPECIAL MOMENT - RESISTING CONCRETE FRAME		
1701.5.4	REINFORCING STEEL AND PRESTRESSING STEEL TENDONS		
1701.5	STRUCTURE WELDING		
1701.5.1	GENERAL		
	FIELD STRUCTURAL WELDING		
	SHOP STRUCTURAL WELDING (REQUIRING SPECIAL INSPECTION)		
1701.5.2	SPECIAL MOMENT - RESISTING STEEL FRAMES		
1701.5.3	WELDING OF REINFORCING STEEL		
1701.5.6	HIGH STRENGTH BOLTING		
1701.5.7	STRUCTURAL MASONRY		
1701.5.8	REINFORCED GYPSUM CONCRETE		
1701.5.9	INSULATING CONCRETE FILL		
1701.5.10	SPRAY APPLIED FIREPROOFING		
1701.5.11	PILING, DRILLED PIERS AND CAISSONS		
1701.5.12	SHOTCRETE		
1701.5.13	SPECIAL GRADING, EXCAVATION & FILLING		
1701.5.14	SMOKE CONTROL SYSTEM		
1701.5.15	SPECIAL CASES		
1702	STRUCTURAL OBSERVATION PER SECTION 307 REQUIRED: ( ) YES ( ) NO		
SCC 9.26.1004	FLOOD PROOFING INSPECTION & CERTIFICATION		

OTHER: \_\_\_\_\_

SPECIAL INSTRUCTIONS: \_\_\_\_\_



**CITY OF SACRAMENTO**  
**DEVELOPMENT SERVICES DIVISION**  
 1231 I STREET, ROOM 200, SACRAMENTO, CA 95814

**SPECIAL INSPECTION AND TESTING AGREEMENT**

When special inspection is required by Section 1701, the architect or engineer of record shall prepare an inspection program which shall be submitted to the Building Official for approval prior to issuance of the building permit. The special inspector shall be employed by the owner (other than owner-builder/developer), the engineer or architect of record, or an agent of the owner, BUT NOT the contractor, or any other person responsible for the work (such as an owner-builder/developer).

The special inspection firm(s) named in Part I have been authorized to perform the special inspection and testing services designated in this agreement, and in accordance with the Uniform Building Code (UBC) requirements, and to report all activities to the Building Official, and other parties as listed. It is understood that special inspections are required in addition to the normal inspections performed by the Building Inspector.

*The undersigned hereby affirm, under penalty of law, that the special inspection program is in accordance with the requirements of the UBC and the City of Sacramento.*

*The undersigned has used all reasonable diligence in completing this form and to the best of his/her knowledge the information contained herein is true and complete. The undersigned hereby certifies under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.*

SIGNATURES		PHONE NUMBER	
OWNER <i>agent</i>	<i>[Signature]</i>	916	606 3699
ARCHITECT			
ENGINEER			
CONTRACTOR			
DEVELOPER			
SPECIAL INSPECTOR			

**WARNING: Any person, who certifies under penalty of perjury in any case where certification is permitted by law and willfully states as true any material matter which he or she knows to be false, may be found guilty of perjury and subject to penalties which may include fines or imprisonment under the California Penal Code.**

**PART III • GEOTECHNICAL INSPECTION REQUIREMENTS**

GEOTECHNICAL FIRM		PHONE NUMBER	
GEOTECHNICAL FIRM ADDRESS			
GEOTECHNICAL ENGINEER			
REPORT NUMBER			
REPORT DATE	RECEIPT NUMBER	REVISION DATES	
		REQUIRED	

TYPE OF WORK	REQUIRED
SITE PREPARATION/FILL COMPACTION	
FOUNDATION OBSERVATION	
DRILLED PIERS AND CAISSONS	

IF THE EARTHWORK INSPECTION IS NOT BEING DONE BY THE ABOVE GEOTECHNICAL ENGINEERING FIRM THEN A REVISED REPORT MUST BE SUBMITTED TO AND APPROVED BY THE CITY'S DEVELOPMENT SERVICES DIVISION.

**ACCEPTED FOR THE BUILDING DEPARTMENT**

PLAN CHECK ENGINEER (Please Print)

PLAN CHECK ENGINEER SIGNATURE

*[Signature]*

DATE

*6/28/00*

**INSTRUCTIONS TO THE SPECIAL INSPECTOR**

- 1 • PROVIDE DAILY FIELD REPORTS TO THE BUILDING INSPECTOR ON SITE AS CONSTRUCTION PROGRESSES.
- 2 • A COPY OF ALL SPECIAL INSPECTIONS LABORATORY REPORTS SHALL BE SENT TO THE PLAN CHECK ENGINEER IDENTIFIED ABOVE AND THE ARCHITECT OR ENGINEER OF RECORD.
- 3 • UPON COMPLETION OF SPECIAL INSPECTIONS AND TESTING WORK, PROVIDE THE CITY'S PLAN CHECK ENGINEER WITH A FINAL SPECIAL INSPECTIONS TEST REPORT, WET STAMPED AND SIGNED BY THE RESPONSIBLE PROFESSIONAL ENGINEER



# O'Connor Freeman & Associates, Inc.

civil, structural, & electrical engineering

July 17, 1996

Mr. John Connolly  
Connolly Brothers  
500 Tamal Plaza, Suite 527  
Corte Madera, California 94925

Re: Balcony Failure @ the California Place Apartments

Dear Mr. Connolly:

Our office was contacted by William Bigelow regarding a balcony failure near apartment 257 in building 6639 at the California Place complex on Valley Hi Drive in Sacramento. The reason for this request was to solicit our professional opinion on the damage and determine if and when repair of this damage was needed.

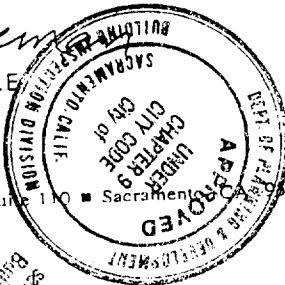
We examined the damage to the underside (soffit) of the third floor balcony near units 257 and 259. The rot damage present was very severe. Many of the balcony joists were completely rotted away along with the Oriented Strand Board (OSB) sheathing. (OSB sheathing is another form of plywood sheathing.) The main balcony beam has rot damage in the top five inches near the concrete deck. The immediate concern is to install temporary shoring to prevent the concrete deck from crashing down. We have attached an sketch to illustrate how this temporary shoring should be erected. This will allow protection from sudden failure of the concrete deck and allow very minimal pedestrian traffic until this region is repaired. The repair scheme our office designed on 12/4/94 will provide the contractor with all the necessary information to re-build the balcony in this area. Repair of this recently damaged area should begin as soon as possible.

Serious thought should be given to repairing all balconies in this complex as soon as possible. The recent damage found was thought to be in an area relatively untouched by rot damage. It is our opinion that "repairing only the area needing repair" method of addressing the rot damaged balconies will cost more money than repairing the balconies for an entire building. Our office is available to consult with you further on this subject should you have any further questions. Thank you for calling O'Connor Freeman & Associates, Inc..

Sincerely,

O'Connor Freeman & Associates, Inc.

*Karl A. Freeman*  
Karl A. Freeman, P.E.



1912 F Street, Suite 110 ■ Sacramento, CA 95814 ■ (916) 441-5721 ■ fax (916) 441-5697

**ISSUED**

JUN 28 2000

CITY OF SACRAMENTO  
DEVELOPMENT SERVICES DIV.

**ISSUED**

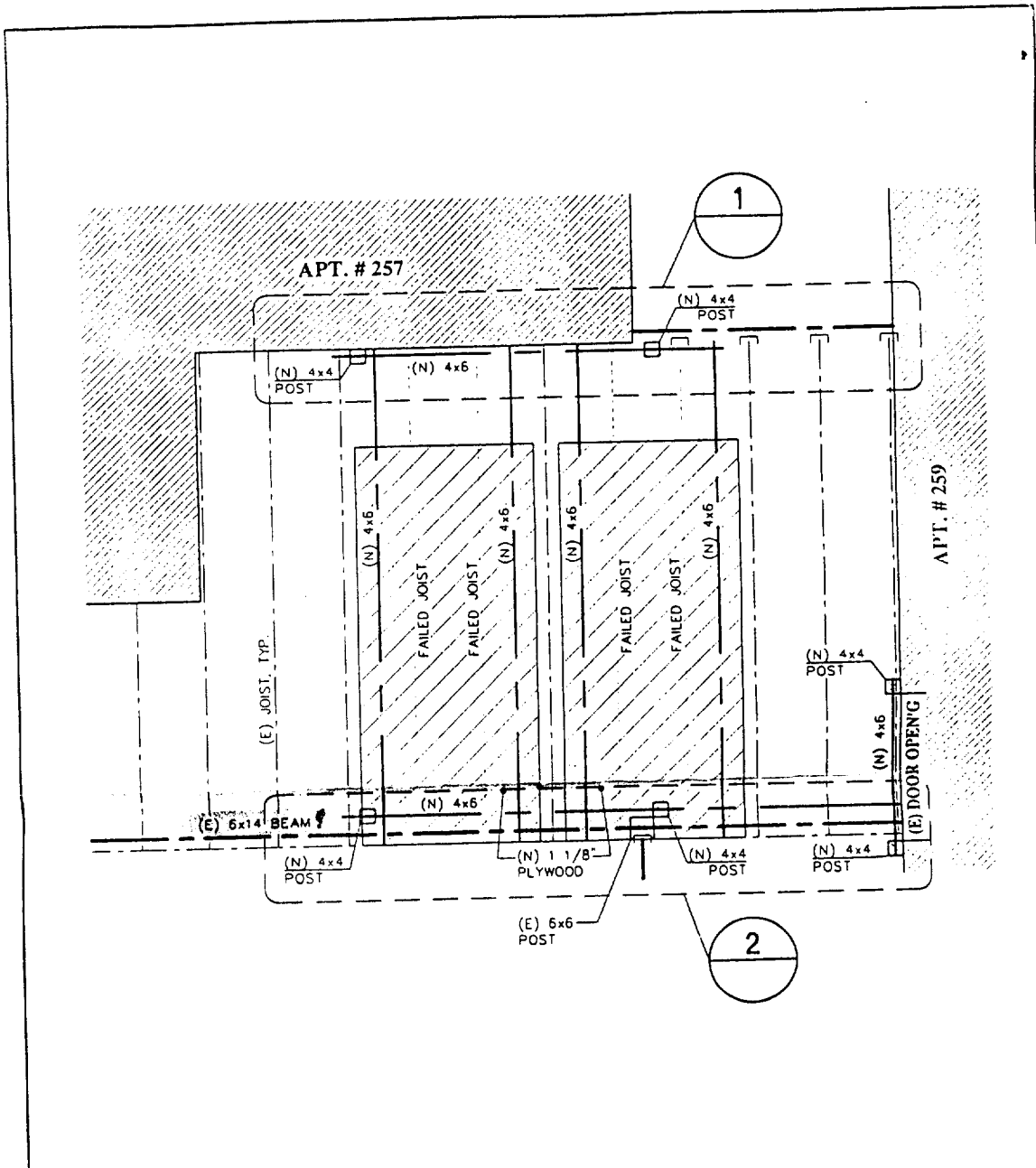
APR 7 1999

JAN 16 1997

CITY OF SACRAMENTO  
DEVELOPMENT SERVICES DIV.  
Sacramento Building Division

This set of plans and specifications must be kept on the job site and approved by the City of Sacramento. The contractor shall not be held liable for any violation of any City Ordinance or State Law.

Revised by METT P. 1/7/99



**TEMPORARY SHORING - PLAN VIEW**

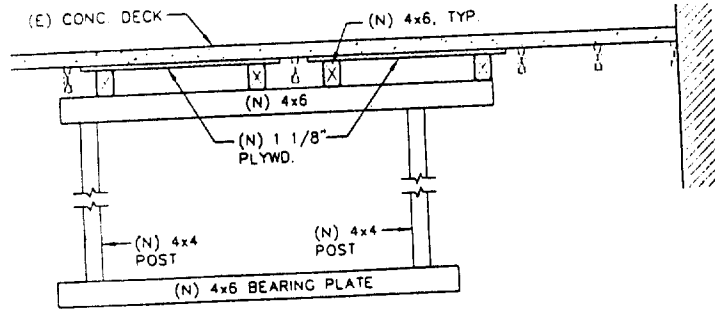
**CALIFORNIA PLACE APARTMENTS**

6633 Valley Hi Drive, Sacramento, California

DATE 7/17/96  
 DRAWN EDL  
 SCALE 3/8" = 1'  
 NO. E941202

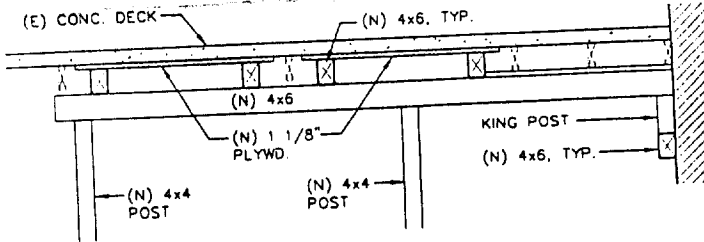


**O'Connor Freeman & Associates**  
 Consulting Civil, Structural & Electrical Engineers  
 1912 F Street, Suite 110 Sacramento, CA 95814  
 Phone: (916) 441-5721 Fax: (916) 441-5697



## TEMPORARY SHORING - ELEVATION

1



## TEMPORARY SHORING - ELEVATION

2

### CALIFORNIA PLACE APARTMENTS

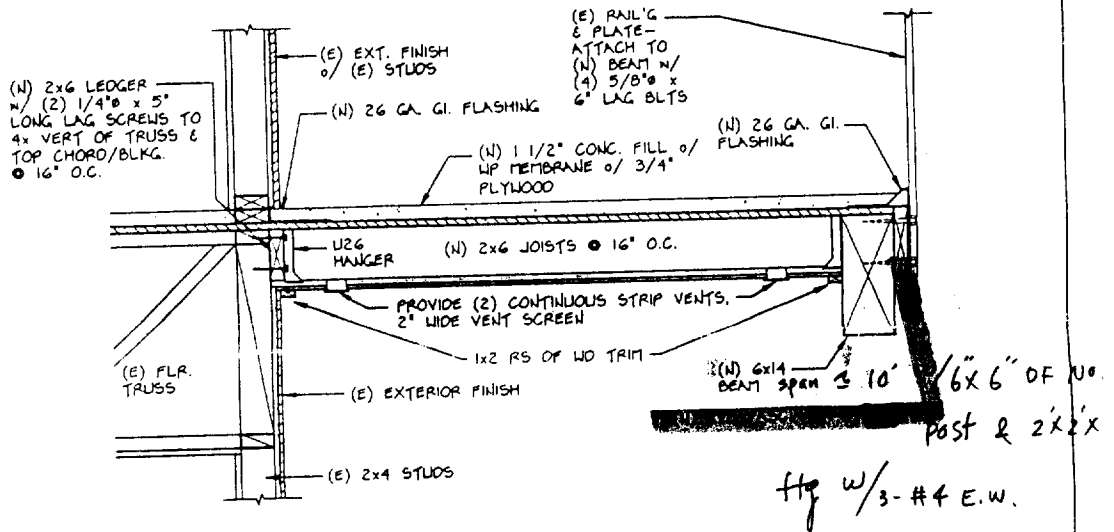
6633 Valley Hi Drive, Sacramento, California

DATE 7/17/96  
 DRAWN EDL  
 SCALE 3/8" = 1'  
 JOB# E941202



**O'Connor Freeman & Associates**  
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ALL ERRORS, OMISSIONS, OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS & ACTUAL SITE CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE PROJECT ENGINEER FOR CLARIFICATION OR CORRECTION. IF NOTIFICATION IS NOT MADE AND WORK IS CONTINUED, RESPONSIBILITY FOR ANY FUTURE PROBLEMS WILL BE BORNE BY THE CONTRACTOR/SUBCONTRACTOR INVOLVED.



## REPAIR DETAIL @ BALCONY

SCALE: 3/4" = 1' - 0"

California Place Apts.

6633 VALLEY HI DRIVE  
SACRAMENTO, CALIFORNIA 95823



O' Connor Freeman & Associates

Consulting Civil & Electrical Engineers  
1912 F Street, Suite 110 Sacramento, CA 95814  
Phone: (916) 441-5721 Fax: (916) 441-5697

REVISIONS	BY	DATE


DRAWN: EDL	JOB: E941202
SCALE: SHOWN	NOTES:
DATE: 12/5/94	

# BALCONY REPAIR SPECS

- 1) The contractor is to inspect the framing of all Balconies and ascertain if any dry rot damage exists.
- 2) Balcony sheathing will be replaced if underside of the sheathing is moist or if mold growth is present or if the balcony joists are to be replaced. When replacing balcony sheathing, remove the layer of light weight concrete and existing sheathing. Replace damaged sheathing with 3/4" C-D Structural II plywood with exterior glue. This sheathing is to be nailed with 10<sup>o</sup> at 6" on center at plywood edges and 10<sup>o</sup> at 12" on center in the plywood field. Cover the sheathing with 30# building paper or any other approved waterproof membrane. Install galvanized sheet metal flashing at edges of balcony and pour 1-1/2" lightweight concrete decking.
- 3) Balcony joists will be replaced if 1/4" or more of dry rot damage is found or if balcony sheathing is being replaced. Replace damaged balcony deck joists with 2 x 6 Douglas Fir (DF) #2 or better. The Contractor is to verify the serviceability of existing sheet metal hangers. Replace any unserviceable sheet metal hangers with Simpson Strong-Tie U26 hangers.

NOTE: All hangers are to be Simpson Strong-Tie or equivalent.

- 4) Balcony Beams will be replaced if there is 1/2" or more of dry rot damage or if perpendicular to grain crushing of beam at the support post is found. Replace damaged beams in kind with DF #1 or better where the depth and width of the new beam is equal to the depth and width of the existing beam. Provide Simpson HU hangers for beams framing into other beams. Use beam dimensions to pick hanger size and fill all holes in hanger.
- 5) The balcony support posts will be replaced if the end grain shows signs of dry rot damage. Replace damaged posts with new posts of same dimensional size. A 4 x post with a DF #2 or better and a 6 x post with a DF #1 or better. All posts are to have a Simpson PC post cap for all post to beam connections. Conventional beam pockets can be used to support the ends of the balcony beams that frame into a wall.
- 6) Once all dry rot repairs have been completed or if the contractor has determined that no dry rot damage exists, install a 3/8" plywood soffit to the under side of the balcony joists with a continuous strip vent 6" from the end of the joists. See Repair Detail @ Balcony for further information.

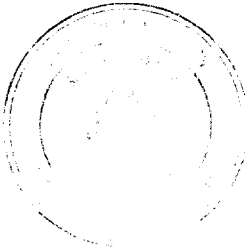
<p>California Place Apts. 6633 VALLEY HI DRIVE SACRAMENTO, CALIFORNIA 95823</p>	REVISIONS	BY	DATE
 <p><b>O' Connor Freeman &amp; Associates</b> Consulting Civil &amp; Electrical Engineers 1912 F Street, Suite 110 Sacramento, CA 95814 Phone: (916) 441-5721 Fax: (916) 441-5697</p>	DRAWN: EOL	JOB: E941202	
	SCALE: SHOWN	NOTES:	
	DATE: 12/5/94		



**California Place Apartment Complex  
Building at  
6637 Valley Hi Drive  
Sacramento, Calif. 958243**

Stair Stringer Supplemental Supports

The applicant and applicant shall be held responsible for the accuracy of the information provided in this application and shall be held liable for any violation of any City Ordinance or State Law. The approval of this plan and specification shall NOT be held to permit or approve the construction of the project.



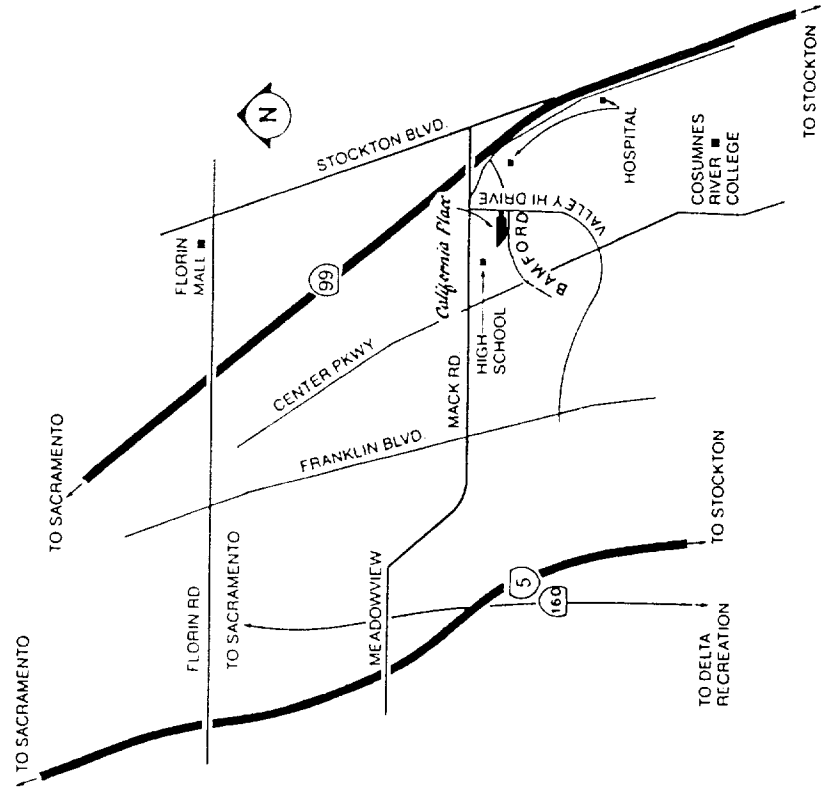
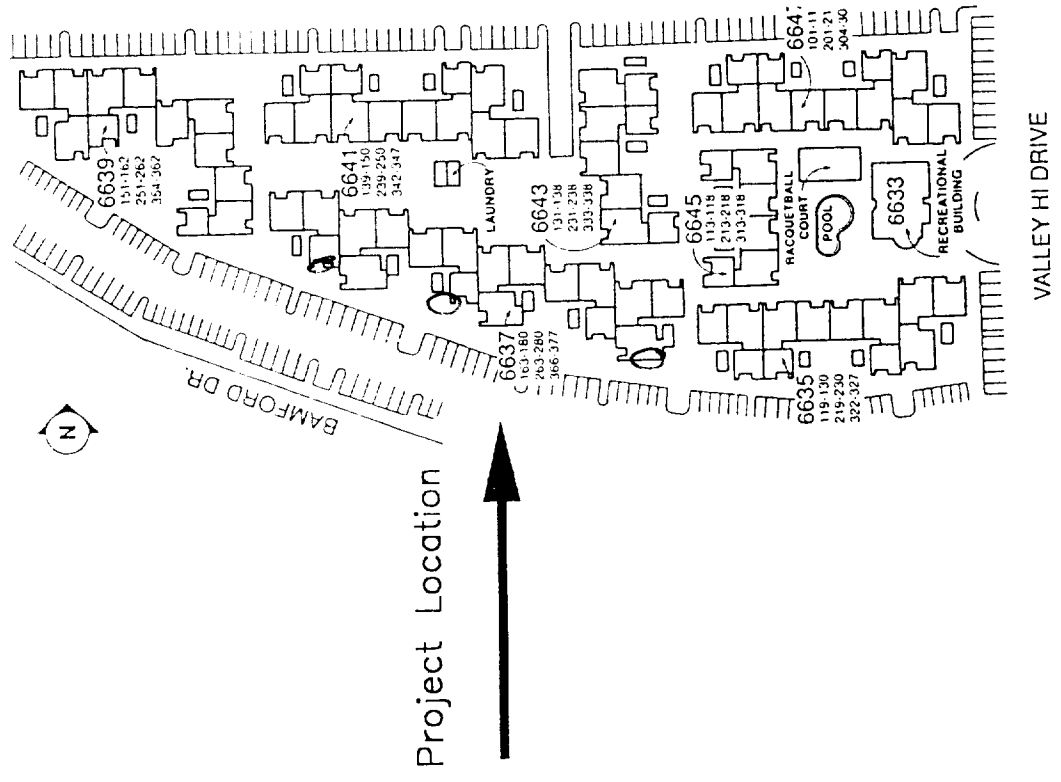
**ISSUED**

**JUN 2 \* 2000**

**CITY OF SACRAMENTO  
DEVELOPMENT SERVICES**

*h*

# Complex



**ROSEVILLE DESIGN GROUP**  
 108 CHURCH STREET - SUITE 1  
 ROSEVILLE, CALIFORNIA 95678  
 PHONE/FAX: (916) 782-1890

# **Structural Calculations**

# Roseville Design Group

## Structural and Civil Engineering

106 Church St., Suite 1  
Roseville, CA 95678  
(916) 782-1880

CALIFORNIA PLACE APARTMENT COMPLEX  
6637 VALLEY HI DRIVE  
SACRAMENTO, CA. 958243

### STAIR STRINGER SUPPLEMENTAL SUPPORTS

LIVE LOADING = 100 PSF = STAIRS SERVING > 10 PERSONS  
DEAD LOADINGS = 110 LBS PER CONC. TREAD (3.5' WIDE) = 110 PLF.  
= 2 STEEL STRINGERS AT 15 PLF PER STRINGER. = 30 PLF

DESIGN SPAN = 14'

TRIBUTARY LOAD PER STRINGER:

$$\text{L.L.} = [3.5' \text{ WIDE} \times 100 \text{ PSF}] / 2 \text{ STRINGERS} = 175 \text{ PLF}$$

$$\text{D.L.} = [110 \text{ LB}/2] + 15 \text{ PLF} = 70 \text{ PLF}$$

$$\begin{aligned} \text{LOAD TO STRINGER AT CENTER} &= 175 \text{ PLF} \times 7' = 1225\# \text{ S L.L.} \\ &= 70 \text{ PLF} \times 7' = 490\# \text{ S D.L.} \end{aligned}$$

$$\text{TOTAL LOAD PER STRINGER (AT CENTER)} \quad 1715\# \text{ S T.L.}$$

$$\begin{aligned} \text{LOAD TO STRINGER AT ENDS} &= 175 \text{ PLF} \times 3.5' = 612\# \text{ S L.L.} \\ &= 70 \text{ PLF} \times 3.5' = 245\# \text{ S D.L.} \end{aligned}$$

$$\text{TOTAL LOAD PER STRINGER (AT ENDS)} \quad 857\# \text{ S T.L.}$$

LOAD TO CENTER STRINGER SUPPORT FOOTING SUPPORTING  
2 STAIR RUNS = 2 STRINGERS  $\times$  1715#/ STRINGER  $\times$  2 RUNS =  
6,860 #S, / 1000 PSF SOIL BEARING = 7 SQ. FT. BEARING AREA =  
21" WIDE  $\times$  4' LONG. MINIMUM SIZE. WITH 4-#4 BARS  
LONGITUDINAL

### COLUMN DESIGN

MAXIMUM AXIAL LOAD = 3,430#S, COLUMN HEIGHT = 13.5',  
MAXIMUM UNSUPPORTED LENGTH = 9'  
SEE ATTACHED COMPUTER PRINTOUT.  
USE 3"  $\times$  3"  $\times$  1/4"  $\times$  36 KSI STRUCTURAL TUBING ATTACHED TO  
STRINGERS AS SHOWN ON ATTACHED DETAIL.



PAGE 2 STAIR STRINGER RETROFIT SUPPORTS

CHECK WELD CAPACITY FOR STRINGER /COLUMN

MOUNTING PLATE,... TRY 3/16" WELD,.. =.707 wt, =.707 x .1875 x  
13,600 PSI = 1,803 PLI ,.. P=3.43K/ 1.8 KLI = 1.9 " REQD. < 12"  
PROVIDED AT PLATE TO STRINGER,..< PLATE TO COLUMN,  
THEREFORE, WELD **OK**.

CHECK BASE PLATE

( SEE ATTACHED COMPUTER PRINTOUT)

DESIGN BASEPLATE AT 4.5" x 7" x 1/4" THICK, **OK**.

CHECK STRINGER SUPPORT HEADER

TYPICAL APPARENT SPAN = 5' = MIN SPAN(POST TO POST) AT  
FIRST AND SECOND LEVEL = 10' MAX AT 3<sup>RD</sup> LEVEL.

HEADER SIZE PER WORK BY O'CONNOR AND FREEMAN = 6"x14"

D.F. #1

BALCONY OUTER HALF LOADING = 2.75 SQ.FT. PER LIN.FT. x 100  
PSF L.L. AND 30 PSF D.L. = 275 PLF L.L. + 82.5 PLF D.L. *UNIFORM  
LOAD.*

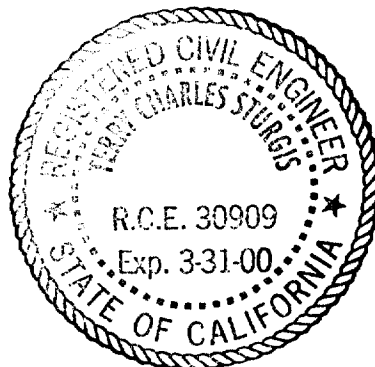
*POINT* LOADS FROM STAIR STRINGERS (ASSUMING "RETROFIT"  
SUPPORTS TO MID-STRINGERS) = 612 LBS. L.L. AND 245 LBS. D.L.  
(SEE ATTACHED COMPUTER PRINTOUT)

5' SPAN = **OK**

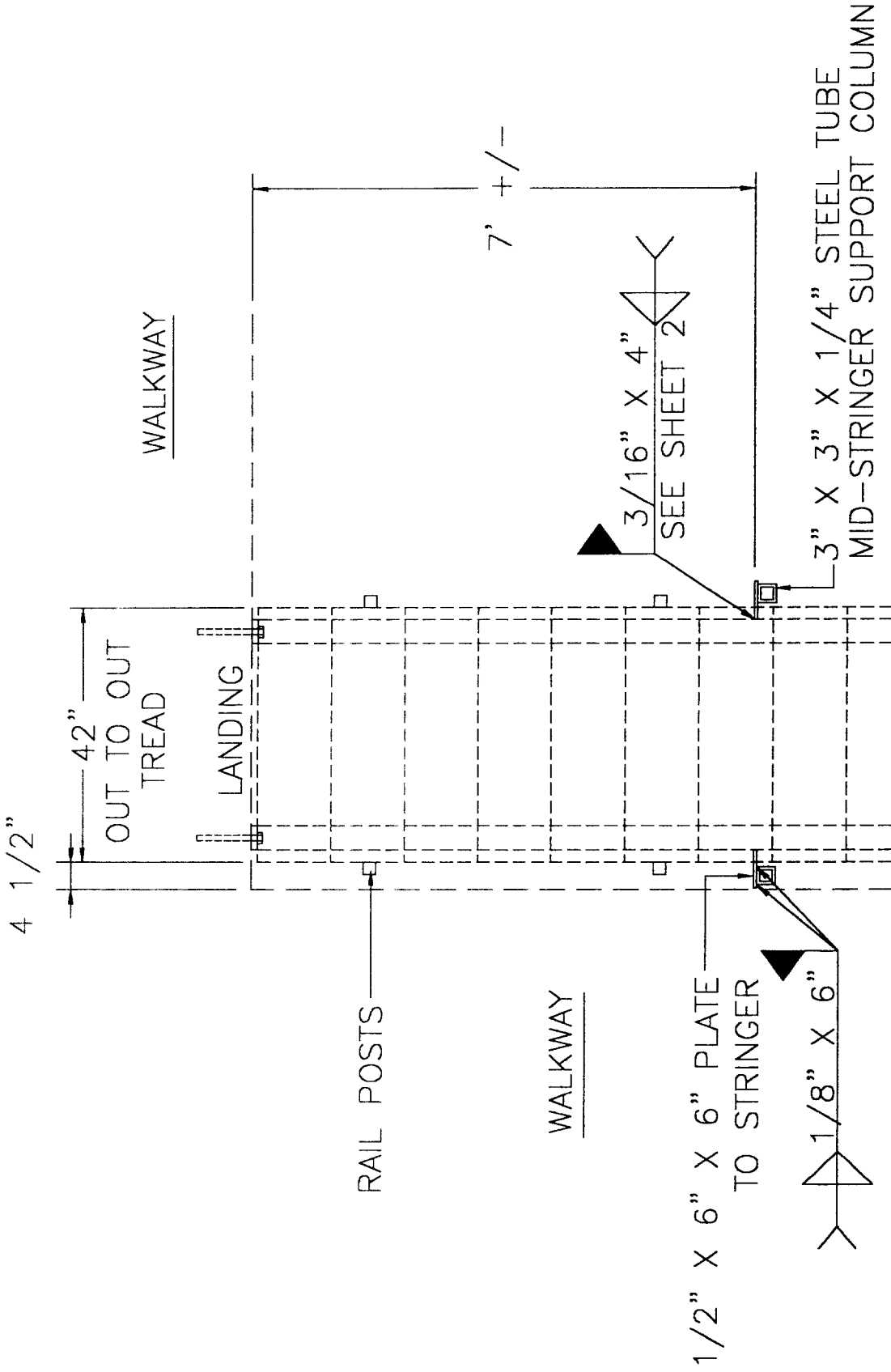
10' SPAN = **OK**

RESPECTFULLY SUBMITTED:

  
TERRY C. STURGIS R.C.E. 30909



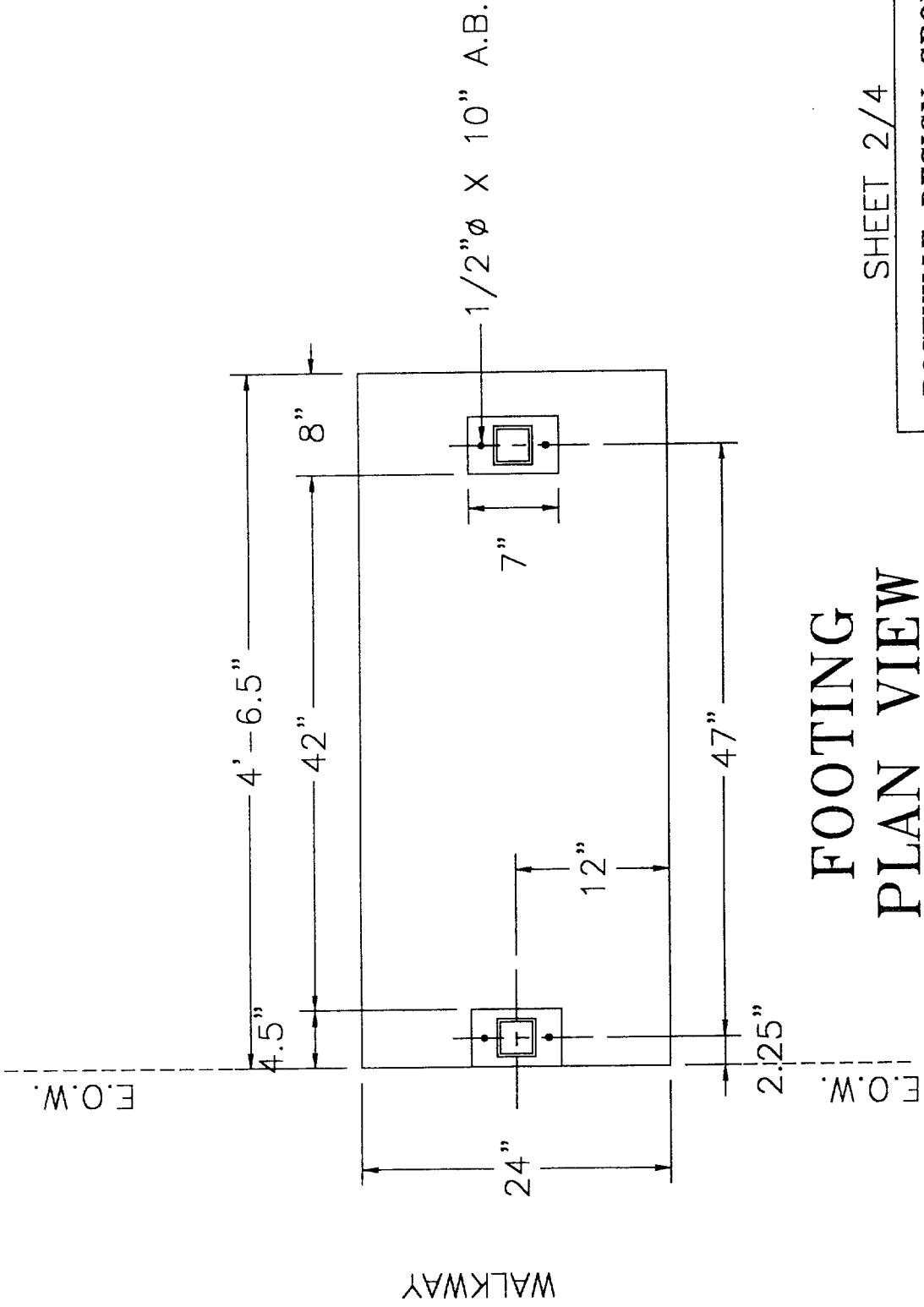
# **Stair Support Drawing & Details**



SHEET 1/4

**MID-STAIR STRINGER  
RETROFIT SUPPORT DETAIL**  
SCALE: 1/2" = 1'

**ROSEVILLE DESIGN GROUP**  
106 CHURCH STREET - SUITE 1  
ROSEVILLE, CALIFORNIA 95678  
PHONE/FAX: (916) 782-1880



**FOOTING  
PLAN VIEW**

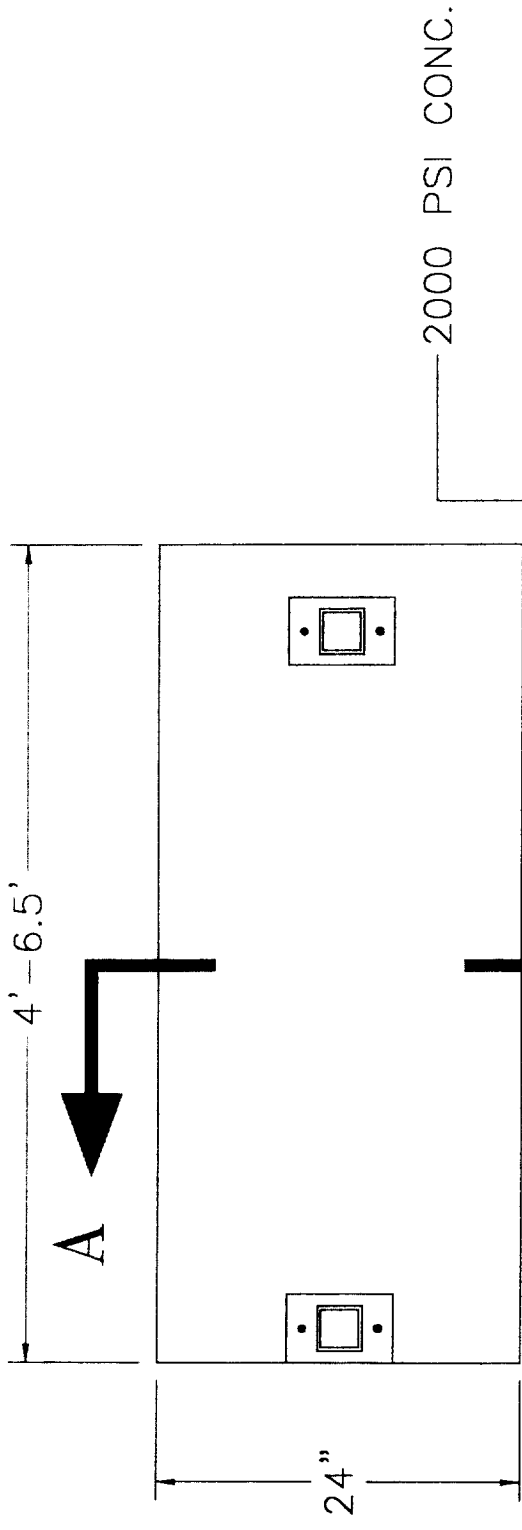
SHEET 2/4

**ROSEVILLE DESIGN GROUP**

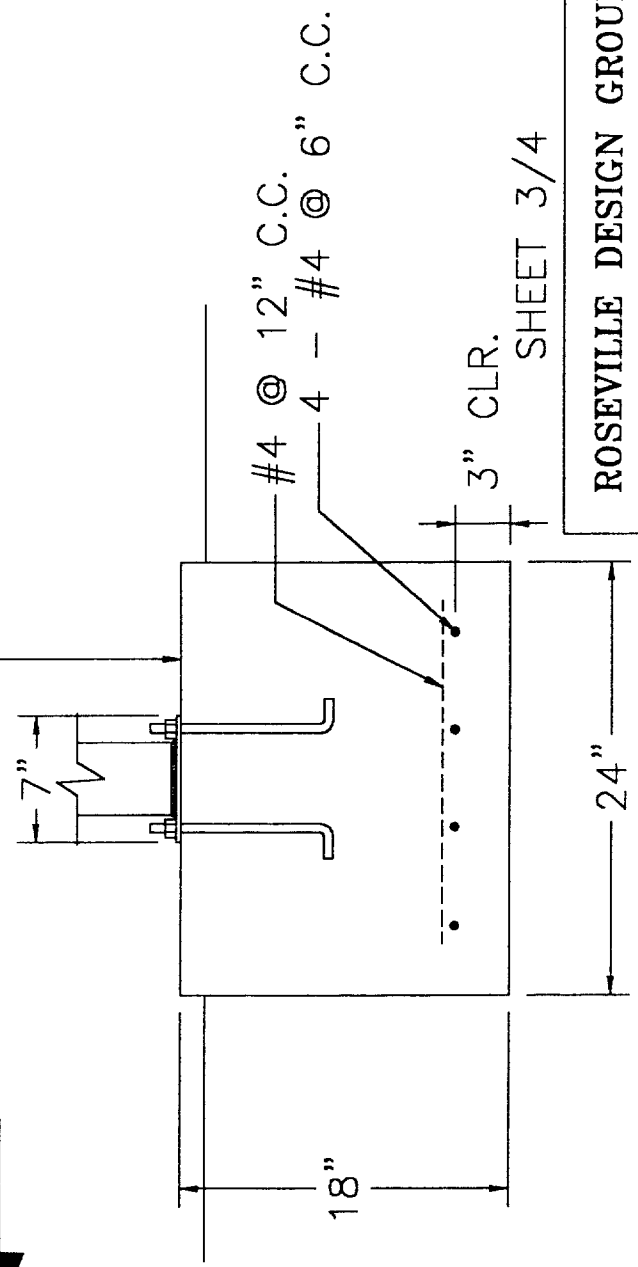
106 CHURCH STREET - SUITE 1  
 ROSEVILLE, CALIFORNIA 95678  
 PHONE/FAX: (916) 782-1880

SCALE: NONE





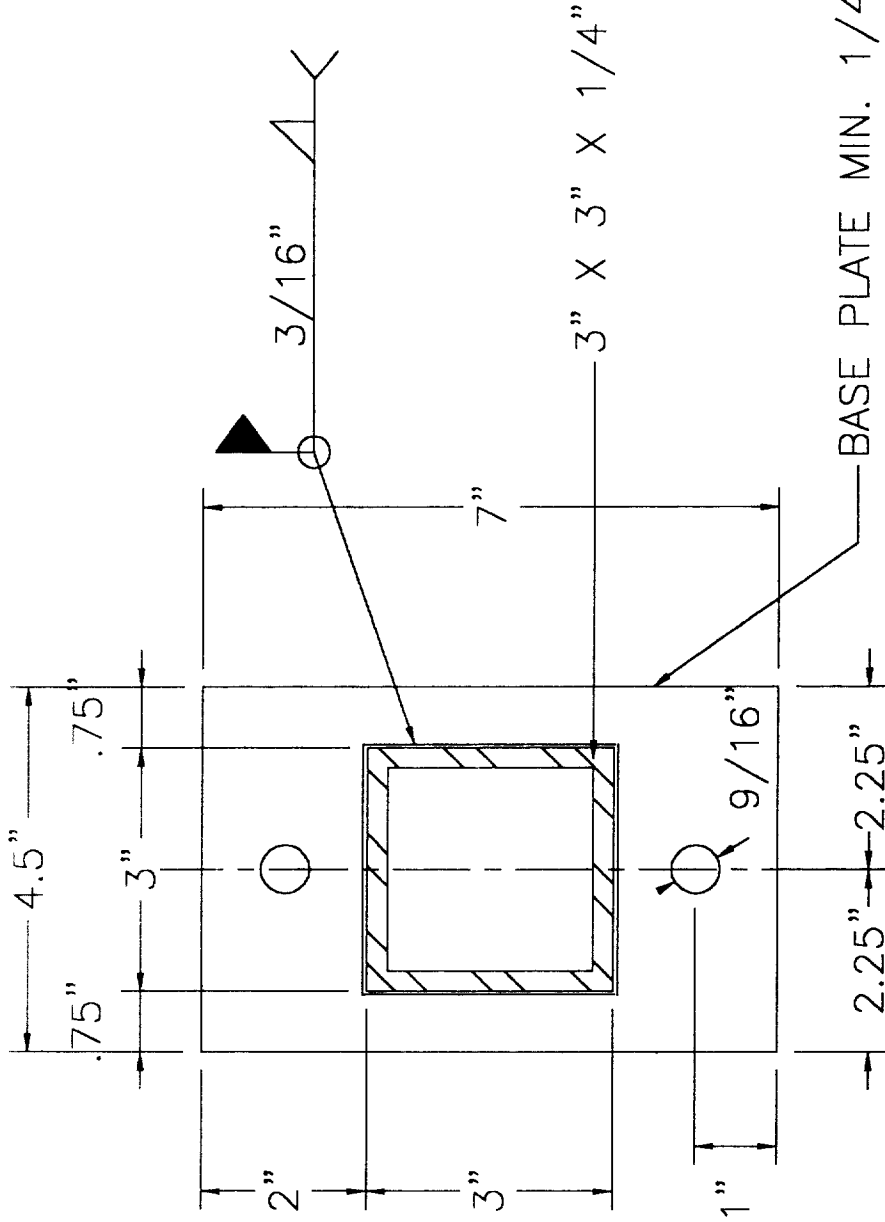
**PLAN**



SHEET 3/4

**ROSEVILLE DESIGN GROUP**  
 106 CHURCH STREET - SUITE 1  
 ROSEVILLE, CALIFORNIA 95678  
 PHONE/FAX: (916) 782-1880

SCALE: NONE



## BASE PLATE DETAIL

SHEET 4/4

SCALE: NONE

**ROSEVILLE DESIGN GROUP**

106 CHURCH STREET - SUITE 1  
 ROSEVILLE, CALIFORNIA 95678  
 PHONE/FAX: (916) 782-1880

# **Computer Print-outs of Structural Calculations**



**Description** STAIR STRINGER CENTER SUPPORT

**General Information**

Calculations are designed to AISC 9th Edition ASD and 1997 UBC Requirements

Steel Section	TS3X3X1/4	Fy	36.00 ksi	X-X Sidesway :	Restrained
		Duration Factor	1.330	Y-Y Sidesway :	Restrained
Column Height	13.500 ft	Elastic Modulus	29,000.00 ksi		
End Fixity	Fix-Fix	X-X Unbraced	9.000 ft	Kxx	1.000
Live & Short Term Loads Combined		Y-Y Unbraced	9.000 ft	Kyy	1.000

**Loads**

**Axial Load...**

Dead Load	0.98 k	Ecc. for X-X Axis Moments	in
Live Load	2.45 k	Ecc. for Y-Y Axis Moments	in
Short Term Load	k		

**Summary**

**Column Design OK**

Section : TS3X3X1/4, Height = 13.50ft, Axial Loads: DL = 0.98, LL = 2.45, ST = 0.00k, Ecc. = 0.000in

Unbraced Lengths: X-X = 9.00ft, Y-Y = 9.00ft

Combined Stress Ratios	Dead	Live	DL + LL	DL + ST + (LL if Chosen)
AISC Formula H1 - 1				
AISC Formula H1 - 2				
AISC Formula H1 - 3	0.0285	0.0714	0.0999	0.0751

XX Axis : Fa calc'd per 1.5-1,  $K^*L/r < Cc$

YY Axis : Fa calc'd per 1.5-1,  $K^*L/r < Cc$

**Stresses**

Allowable & Actual Stresses	Dead	Live	DL + LL	DL + Short
Fa : Allowable	13.26 ksi	13.26 ksi	13.26 ksi	17.63 ksi
fa : Actual	0.38 ksi	0.95 ksi	1.32 ksi	1.32 ksi
Fb <sub>xx</sub> : Allow [F3.1]	23.76 ksi	23.76 ksi	23.76 ksi	31.60 ksi
fb <sub>xx</sub> : Actual	0.00 ksi	0.00 ksi	0.00 ksi	0.00 ksi
Fb <sub>yy</sub> : Allow [F3.1]	23.76 ksi	23.76 ksi	23.76 ksi	31.60 ksi
fb <sub>yy</sub> : Actual	0.00 ksi	0.00 ksi	0.00 ksi	0.00 ksi

**Analysis Values**

F <sub>ex</sub> : DL+LL	15,620 psi	C <sub>m,x</sub> : DL+LL	0.60	C <sub>b,x</sub> : DL+LL	1.75
F <sub>ey</sub> : DL+LL	15,620 psi	C <sub>m,y</sub> : DL+LL	0.60	C <sub>b,y</sub> : DL+LL	1.75
F <sub>ex</sub> : DL+LL+ST	20,775 psi	C <sub>m,x</sub> : DL+LL+ST	0.60	C <sub>b,x</sub> : DL+LL+ST	1.75
F <sub>ey</sub> : DL+LL+ST	20,775 psi	C <sub>m,y</sub> : DL+LL+ST	0.60	C <sub>b,y</sub> : DL+LL+ST	1.75
Max X-X Axis Deflection	0.000 in at 0.000 ft	Max Y-Y Axis Deflection	0.000 in at 0.000 ft		

**Section Properties** TS3X3X1/4

Depth	3.00 in	Weight	8.80 #/ft	I <sub>xx</sub>	3.16 in <sup>4</sup>
Width	3.000 in	Area	2.59 in <sup>2</sup>	I <sub>yy</sub>	3.16 in <sup>4</sup>
Thickness	0.250 in			S <sub>xx</sub>	2.107 in <sup>3</sup>
				S <sub>yy</sub>	2.107 in <sup>3</sup>
				r <sub>xx</sub>	1.105 in
				r <sub>yy</sub>	1.105 in



Roseville Design Group  
106 Church Street, Suite 1  
Roseville, Ca. 95678  
R.C.E. 30909-California  
P.E. 5315-Nevada

Title : CALIFORNIA PLACE  
Dsgnr: T.C.S. R.C.E.  
Description : BLDG. #6637

Job # FERNANDEZ  
Date:

Scope : STAIR STRINGER RETROFIT

Rev: 510300  
User: KW-06/01/97, Ver 5.1.3.22-Jun-1999, Win32  
(c) 1992-99 ENERCALC

### Steel Column

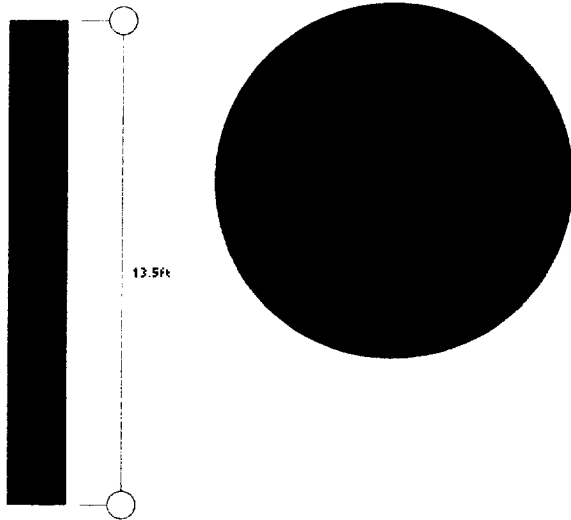
Page 2

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Description STAIR STRINGER CENTER SUPPORT

### Sketch & Diagram

Axial DL = 0.98k  
Axial LL = 2.45k  
Axial ST = 0k



## CALCULATION

Archon Weld Calculator Program, Ver. 4 Series

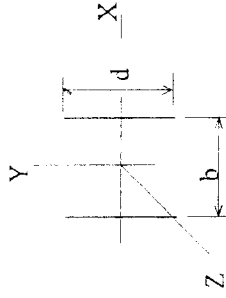
$d = 3$  (in)  
 $b = 3$  (in)

Allowable Stress = 21 (ksi)  
Base Steel Yield Stress = 36 (ksi)

### LOADS:

$F_X = 3.4$  (kips)  $F_Y = 3.4$  (kips)  $F_Z = 3.4$  (kips)

Actual Weld Size = 0.125 (in)  
Min. Weld for Stress = 0.0661 (in)  
Min. Thru Wall Weld = 0.0525 (in)



**INPUT DATA**

- Column Width,  $bf = 3.000(\text{in})$
- Column Depth,  $d = 3.000(\text{in})$
- Concrete pedestal base width,  $CB = 12(\text{in})$
- Concrete pedestal base depth,  $CD = 21(\text{in})$
- Base plate yield strength =  $36(\text{ksi})$
- Concrete compressive strength =  $2(\text{ksi})$
- Column Axial Load =  $3.400(\text{kip})$

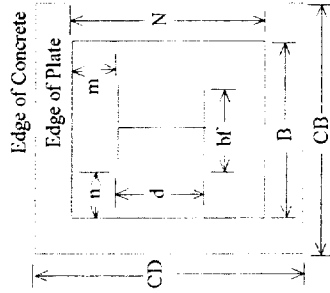
**OUTPUT DATA**

- Required plate thickness =  $0.123(\text{in})$
- Required plate width =  $4.000(\text{in})$
- Required plate depth =  $4.000(\text{in})$

The optimum concrete base area is  $9.714 \text{ in}^2$   
Your input concrete base area is  $252.0 \text{ in}^2$

Your input area meets recommended area requirements.  
Plate dimensions are controlled by column size.  
1 inch was added to allow room for welding.

Actual bearing pressure on concrete =  $0.213(\text{ksi})$   
Allowable bearing pressure on concrete =  $1.400(\text{ksi})$





**ROSEVILLE DESIGN GROUP**  
 106 Church Street, Suite 1  
 Roseville, Ca. 95678  
 California-R.C.E. 30909  
 Nevada- P.E. 5315

**Title :** California Place Apartments  
**Dsgnr:** T. Sturgis **Date:**  
**Description :** Stair Work at Bldg. 6637  
**Scope :** Retrofit Stair Repair

**Job #** Fernandez2

Rev: 5/10/200  
 User: K:\09601975\_Var 5 1.3\_22-Jun-1999\_Win32  
 (c) 1985-99 ENERCALC

**Steel Column Base Plate**

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**Description** Stair Column Baseplate

**General Information**

Calculations are designed to AISC 9th Edition ASD and 1997 UBC Requirements

**Loads**

Axial Load 3.43 k  
 X-X Axis Moment 0.00 k-ft

**Plate Dimensions**

Plate Length 7.000 in  
 Plate Width 4.500 in  
 Plate Thickness 0.250 in

**Support Pier Size**

Pier Length 24.000 in  
 Pier Width 12.000 in

**Steel Section**

**TS3x3x1/4**  
 Section Length 3.000 in  
 Section Width 3.000 in  
 Flange Thickness 0.250 in  
 Web Thickness 0.250 in

**Allowable Stresses**

Concrete f'c 2,000.0 psi  
 Base Plate Fy 36.00 ksi  
 Load Duration Factor 1.330

**Anchor Bolt Data**

Dist. from Plate Edge 1.000 in  
 Bolt Count per Side 1  
 Tension Capacity 5.500 k  
 Bolt Area 0.190 in<sup>2</sup>

**Summary**

Baseplate OK

**Concrete Bearing Stress**

Actual Bearing Stress 108.9 psi  
 Allow per ACI 10.15 2,380.0 psi  
 Allow per AISC J9 1,862.0 psi

**Thickness OK**

Full Bearing : No Bolt Tension

**Plate Bending Stress**

Actual fb 16,920.4 psi  
 Max Allow Plate Fb 35,910.0 psi

**Bearing Stress OK**

**Tension Bolt Force**

Actual Tension 0.000 k  
 Allowable 5.500 k

**Bolt Tension OK**



Description Balcony /Stair Header (5' and 10')

Timber Member Information

Calculations are designed to 1997 NDS and 1997 UBC Requirements

		Stair Header	Long Stair Hdr.
Timber Section		6x14	6x14
Beam Width	in	5.500	5.500
Beam Depth	in	13.500	13.500
Le: Unbraced Length	ft	0.00	0.00
Timber Grade		Douglas Fir - Larch	Douglas Fir - Larch
Fb - Basic Allow	psi	1,350.0	1,350.0
Fv - Basic Allow	psi	85.0	85.0
Elastic Modulus	ksi	1,600.0	1,600.0
Load Duration Factor		1.000	1.000
Member Type		Sawn	Sawn
Repetitive Status		No	No

Center Span Data

		5.00	10.00
Span	ft	5.00	10.00
Dead Load	#/ft	82.50	82.50
Live Load	#/ft	275.00	275.00
Point #1 DL	lbs	245.00	245.00
LL	lbs	612.00	612.00
@ X	ft	0.750	0.750
Point #2 DL	lbs	245.00	245.00
LL	lbs	612.00	612.00
@ X	ft	4.250	4.250

Results

Ratio = 0.1173 0.4315

Mmax @ Center	in-k	21.12	81.93
@ X =	ft	2.50	4.28
fb : Actual	psi	126.4	490.4
Fb : Allowable	psi	1,332.4	1,332.4
		Bending OK	Bending OK
fv : Actual	psi	10.0	36.7
Fv : Allowable	psi	85.0	85.0
		Shear OK	Shear OK

Reactions

@ Left End DL	lbs	451.25	780.00
LL	lbs	1,299.50	2,293.00
Max. DL+LL	lbs	1,750.75	3,073.00
@ Right End DL	lbs	451.25	535.00
LL	lbs	1,299.50	1,681.00
Max. DL+LL	lbs	1,750.75	2,216.00

Deflections

Center DL Defl	in	-0.001	-0.016
L/Defl Ratio		51,002.3	7,443.2
Center LL Defl	in	-0.003	-0.049
L/Defl Ratio		17,262.3	2,456.0
Center Total Defl	in	-0.005	-0.065
Location	ft	2.500	4.880
L/Defl Ratio		12,897.1	1,846.7