CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0400044
Insp Area: 4
Thos Bros: 257-A4

Site Address: 5657 NORTHBOROUGH DR SAC Sub-Type: NSFR
Parcel No: 201-0610-006 HERITAGE @ NATOMAS PARK 3 LOT 44 Housing (Y/N): N

CONTRACTOR
US HOME
2366 GOLD MEADOW DR STE 100
GOLD RIVER, CA 95670 77041

OWNER

ARCHITECT

Nature of Work: MP2389 1 STORY 7 ROOM SFR

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'sAddress_____

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 B License Number 451839 Date 1/9/4 Contractor Signature Don McCloskey

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 1/9/4 Applicant/Agent Signature Don McCloskey

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.

PAID
CITY OF SACRAMENTO
JAN 09 2004
NORTH PERMIT CENTER

X 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 OLD REPUBLIC INS. CO. Policy Number MWC10815000 Exp Date 11/01/2003

_____ (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 1/9/4 Applicant Signature Don McCloskey

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.

INSULATION CONTRACTORS ASSOCIATION OF AMERICA

INSULATION CERTIFICATE

47634

1321 DUKE STREET, SUITE 303 • ALEXANDRIA, VA 22314 • (703) 739-0356

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT:

A _____ LOT # _____ TRACT # _____

STREET _____ CITY _____

EXTERIOR WALLS:

MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

CEILINGS:

BATTS:
MANUFACTURER FG THICKNESS/TYPE 12 R-VALUE 38

BLOWN IN:
MANUFACTURER _____ MINIMUM THICKNESS 14 3/4 R-VALUE 38

SQUARE FOOTAGE COVERED _____ NUMBER OF BAGS USED 39

FLOORS:
MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

SLAB ON GRADE:
MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

WIDTH OF INSULATION _____ INCHES

FOUNDATION WALLS:
MANUFACTURER _____ THICKNESS/TYPE _____ R-VALUE _____

GENERAL CONTRACTOR _____

CALIFORNIA CONTRACTORS LICENSE # _____ DATE _____

SIGNATURE _____ TITLE _____

INSULATION CONTRACTOR **ARCADE INSULATION**

CALIFORNIA CONTRACTORS LICENSE #815286
NEVADA CONTRACTORS LICENSE #55201

DATE 9/30/04

SIGNATURE _____ TITLE Installer

INSTALLATION CERTIFICATE

CF-6R

US HOME - NATOMAS 8-4

Site Address **Permit Number**

An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required; however, use of this form to provide the information is optional.) After completion of final inspection a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(b).

HVAC SYSTEMS:

Heating Equipment

Equip. Type (pkg. Heat pump)	CEC Certified Mfr name and Model #	# of Identical Systems	(1) Efficiency (AFUE, etc.) ≥ CF-1R value	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)	PLAN
FURNACE	YORK#P4HUB16L064	1	80%	ATTIC	6.0	42,448	80,000	2372
FURNACE	YORK#P4HUB16L064	1	80%	ATTIC	6.0	42,125	80,000	2389
FURNACE	YORK#P4HUB16L064	1	80%	ATTIC	6.0	40,818	80,000	2487
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	42,783	100,000	2669
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	41,398	100,000	2732
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	45,906	100,000	3377
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	45,899	100,000	3540
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	44,574	100,000	3527
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	61,758	100,000	3537
FURNACE	YORK#P4HUC20L080	1	80%	ATTIC	6.0	51,213	100,000	4097

Cooling Equipment

Equip. Type (pkg. Heat pump)	CEC Certified Compressor Unit Mfr Name and Model #	# of Identical Systems	(1) Efficiency (SEER, etc.) > CF-1R value	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)	PLAN
A/C	YORK #H*RC042	1	12.0	ATTIC	6.0	35,296	39,500	2372
A/C	YORK #H*RC042	1	12.0	ATTIC	6.0	33,440	39,500	2389
A/C	YORK #H*RA042	1	10.0	ATTIC	6.0	31,261	39,500	2487
A/C	YORK #H*RA048	1	10.0	ATTIC	6.0	32,662	44,000	2669
A/C	YORK #H*RA048	1	10.0	ATTIC	6.0	32,927	44,000	2732
A/C	YORK #H*RA048	1	10.0	ATTIC	6.0	37,201	44,000	3377
A/C	YORK #H*RA048	1	10.0	ATTIC	6.0	37,226	44,000	3540
A/C	YORK #H*RA060	1	10.0	ATTIC	6.0	49,541	57,500	3527
A/C	YORK #H*RA060*	1	14.0	ATTIC	6.0	50,776	57,500	3537
A/C	YORK #H*RA060	1	10.0	ATTIC	6.0	51,240	57,500	4097

* = TXV with coil

(1) ≥ reads greater than or equal to.

I, the undersigned, verify that equipment listed above is: 1) is the actual equipment installed, 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the *Energy Efficiency Standards* for residential buildings, and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the *Appliance Efficiency Regulations* or Part 6), where applicable.

Signature, Date

BEUTLER CORPORATION

Installing Subcontractor (Co. Name)

OR General Contractor (Co. Name) OR Owner

WATER HEATING SYSTEMS:

Heater Type	CEC Certified Mfr Name & Model #	Distribution Type (Std, point of use)	If Recirculation Control Type	# of Identical Systems	(2) Rated Input (kW or Btu/hr)	Tank Volume (gallons)	(2) Efficiency (EF,RE)	(2) Standby Loss (%)	External Insulation R-value

(2) For small gas storage (rated input of less than or equal to 75,000 Btu/hr), electric resistance and heat pump water heaters, list Energy Factor. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Recovery efficiency and Rated Input.

(3) R-12 external insulation is mandatory for storage water heaters with an energy factor of less that 0.58.

Facets & Shower Heads:

O'Connor Freeman & Associates, Inc.

Structural Engineering Services

March 4, 2003

ISSUED
City of Sacramento
MAR 10 2004
NORTH PERMIT CENTER

Chris Wylly
US Homes Corporation
2366 Gold River Meadow, Suite 200
Gold River, CA 95670

Re: Front Entry Holdowns: Plan 2389 Northborough Village 8-4
O'Connor Freeman Job Number: E020611

Dear Chris:

You contacted our office, via facsimile, regarding the front entry holdowns for Plan 2389 in the Northborough Village 8-4 subdivision. See the attached copy of this facsimile for reference and review. Specifically, you wanted to know if the lateral design could be re-analyzed in order to reduce the size of the holdown in order to make construction easier.

In response to your request, we have reevaluated the lateral loads to the front entry shear wall in order to determine if the holdown could be changed. As a result of our analysis, we found the shear wall sheathing would remain the same. However, by strapping around the window opening, we can reduce the holdown size. We have adjusted the plans to reflect this information. See the attached partial plan exhibits and structural calculations for reference and review.

If you should have any further questions or comments please do not hesitate to call.

Sincerely,

O'Connor Freeman & Associates, Inc.

REGISTERED PROFESSIONAL ENGINEER
KARL A. FREEMAN
No. C56639
Exp. 9/30/05
CIVIL
STATE OF CALIFORNIA

Karl A. Freeman, P.E.
Registered Civil Engineer #56639

cc: file

DEPT OF PLANNING & DEVELOPMENT
APPROVED
UNDER TITLE 8 & 15 CITY CODE City of SACRAMENTO, CALIF.
BUILDING INSPECTION DIVISION

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.

THO 3/10/04

JOB COPY

225 30th Street, Suite 201 ■ Sacramento, CA 95816 ■ (916) 441-5721 ■ fax (916) 441-5697

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Fax Coversheet

KARL @ O'CONNOR FREEMAN

To: LINDA GOSPODNETICH **From:** Chris Wylly

Company: US HOME LAURIER @ NORTH POINTE

Fax:

Date: 3/1/03

Pages (Including Cover):

Northpointe
Natomas Park
Phone: ~~(916) 419-1043~~
Fax: ~~(916) 515-0226~~
Cell: (916) 825-4499

PROBLEMS WITH PLAN 2389

#1 (F) SHEAR WALL AT ENTRY

5/8 FOR DOOR JAMS OK FOR STD ENTRY

IF OPTIONAL ANDERSEN FRENCH DOORS ARE USED IN DINING

WE HAVE A PROBLEM. ALSO THE USE OF

THE HD10A HOLD DOWN DO WE HAVE ANY

OTHER OPTIONS? THE THRU BOLTING IS GOING TO

CAUSE PROBLEMS.

IF WE CAN WE NEED TO DELETE THE

5/8 SHEAR AND CHANGE THE HOLD DOWNS TO

SOMETHING MORE USER FRIENDLY

THANKS FOR YOUR HELP

CHRIS WYLLY

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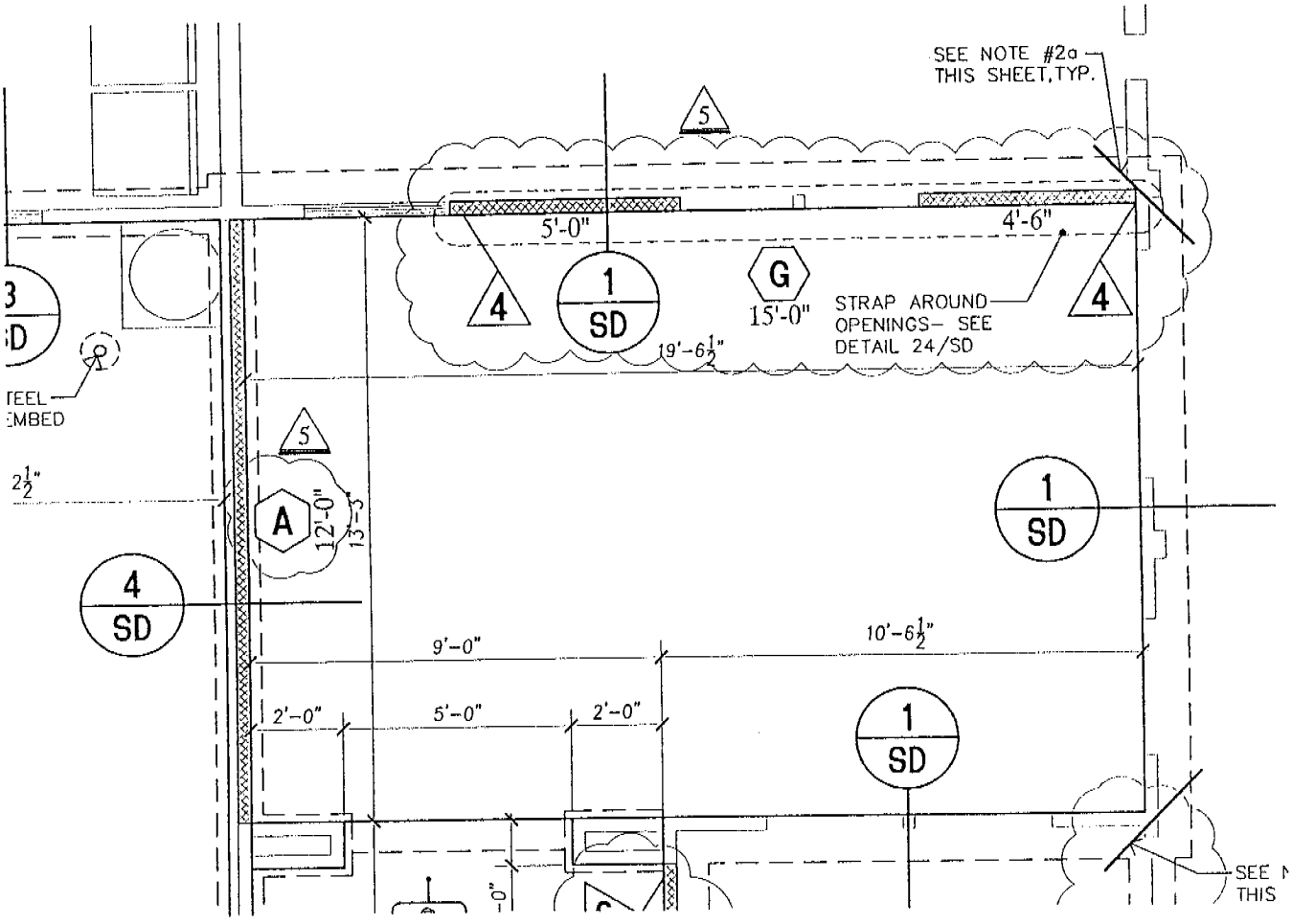

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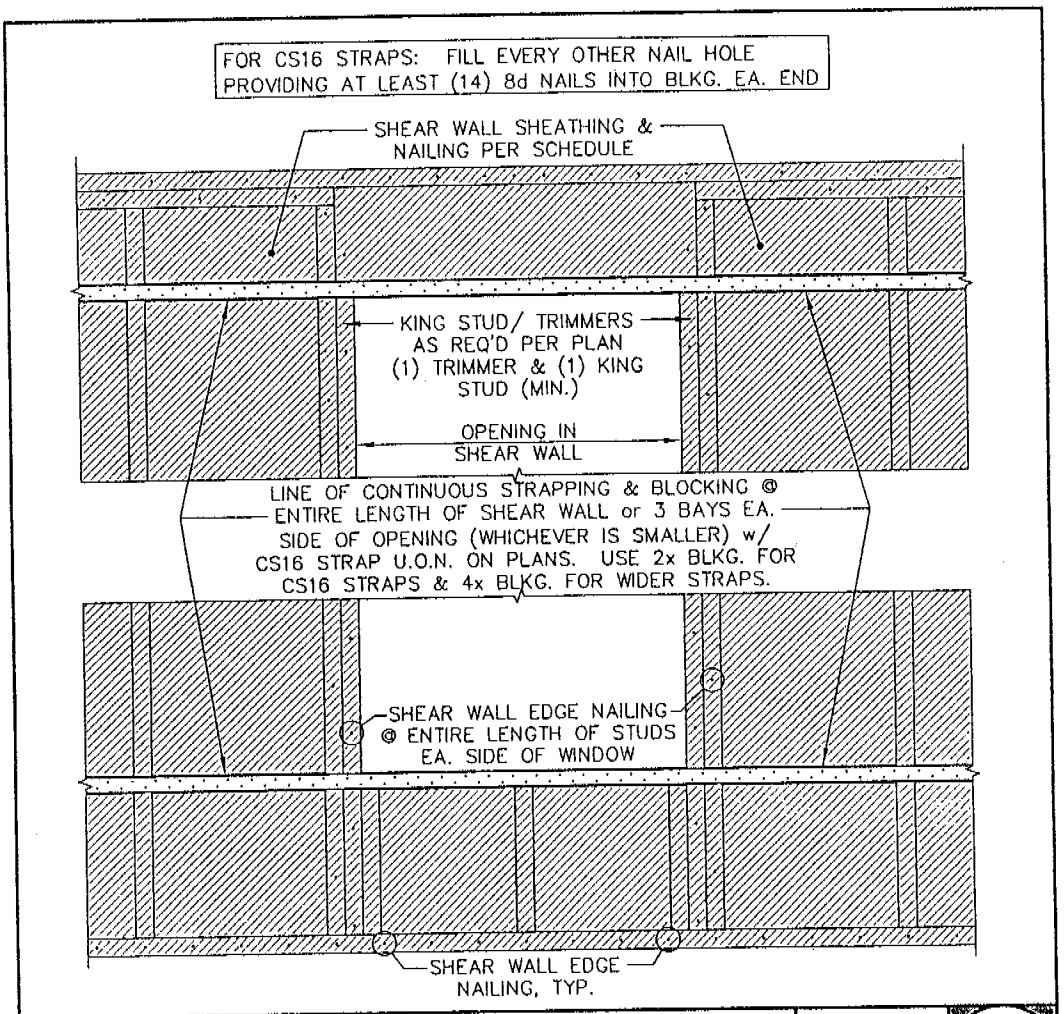

SHEAR WALL STRAP @ OPENINGS

SCALE 3/4"=1'-0"

24

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HOLDOWN SCHEDULE

MARK	SIMPSON TYPE	HOLDOWN POST	POST FASTENERS	HOLDOWN ANCHORS			THR'D ROD MINIMUM EMBEDMENT	EPOXY RETROFIT		REMARKS
				THR'D ROD DIAMETER	MONOLITHIC SSTB TYPE	TWO-POUR SSTB TYPE		MIN. EMBED.	DIST. FROM CORNER	
1	MSTC28	4x POST	(16) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
2	MSTC40	4x POST	(28) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
3	MSTC52	4x POST	(48) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
4	STHD14/ STHD14RJ	(2) 2x STUDS	(38) 16d SINKER	N / A	N / A	N / A	N / A	N / A	N / A	SEE NOTE 3, 6
5	PHD2	(2) 2x STUDS	(10) SDS 1/4 x 3 WOOD SCREWS	5/8"ø	SSTB16	SSTB20	12"	6"	4"	SEE NOTE 1, 5
6	PHD5	(2) 2x STUDS	(14) SDS 1/4 x 3 WOOD SCREWS	5/8"ø	SSTB20	SSTB24	12"	6"	4"	SEE NOTE 1, 5
7	PHD6	(2) 2x STUDS	(18) SDS 1/4 x 3 WOOD SCREWS	7/8"ø	SSTB28	SSTB34	14"	6 1/2"	5"	SEE NOTE 1, 5
8	PHD8	(2) 2x STUDS	(24) SDS 1/4 x 3 WOOD SCREWS	7/8"ø	SSTB28	SSTB34	16"	7 1/2"	5 1/2"	SEE NOTE 1, 5
9	HD10A	4x POST	(4) 7/8"ø M.B.'s	7/8"ø	SSTB28	SSTB34	18"	9"	6 1/2"	SEE NOTE 1

1. ANCHOR BOLTS SHALL BE ASTM A307 THREADED ROD MATERIAL FOR ALL FIRST FLOOR HOLDOWNS. HOWEVER, SIMPSON SSTB ANCHOR BOLTS MAY BE SUBSTITUTED FOR THREADED ROD ANCHORS AS NOTED IN THE SCHEDULE ABOVE. SEE THE "SSTB ANCHOR BOLT DETAIL" ON THE DETAIL SHEET WHERE OCCURS.
2. "SIMPSON" N16 FASTENERS (16d "SHORTS") OR "SIMPSON" SS16D FASTENERS MAY BE USED IN LIEU OF 16d COMMONS.
3. 10d COMMON NAILS MAY BE USED IN LIEU OF 16d SINKERS.
4. 5/8"ø SSTB MAY BE SUBSTITUTED FOR 3/4"ø THREADED ROD ANCHOR BOLT PROVIDED A DOUBLE WASHER IS INSTALLED BELOW NUT.
5. SEE "SIMPSON" CATALOG C-2001 FOR WOOD SCREW FASTENER INFORMATION.
6. "HTT22", "PHD5", OR "PHD6" HOLDOWN MAY BE USED IN LIEU OF THE "MTT28B", "HPAHD", "STHD" OR "LSTHD" HOLDOWNS IN ANY CASE.
7. PROVIDE LONGER STRAP AS NEEDED TO EXTEND TO SIDE GRAIN OF FASTENING MEMBER (END GRAIN NAILING NOT ALLOWED). LENGTH OF STRAP IS TO BE SUFFICIENT TO ACCOMODATE 1/2 OF THE NUMBER OF FASTENERS PER SCHEDULE IN TO THE FASTENING MEMBERS AT EACH END OF THE STRAP (# OF FASTENERS SPECIFIED ON SCHEDULE IS THE TOTAL REQUIRED FOR EACH STRAP.)
8. HDC ANCHOR BOLT IS TO ALIGN DIRECTLY UNDER HOLDOWN POST SEE SIMPSON CATALOG FOR MORE INFORMATION

GENERAL HOLDOWN NOTES (APPLIES TO ALL HOLDOWNS)

A. EVERY HOLDOWN INDICATED ON THIS SCHEDULE MAY NOT NECESSARILY BE USED. SEE PLAN FOR SPECIFIC HOLDOWN TYPES USED.

B. IF ANCHOR BOLTS ARE MISINSTALLED OR NEED TO BE RETROFITTED INTO EXISTING CONCRETE, USE "SIMPSON S.E.T. EPOXY-TIE SYSTEM WITH THR'D ROD DIAMETER, EMBEDMENT INTO FIRST POUR FOOTING, AND MIN. DISTANCE AWAY FROM CORNER PER SCHEDULE. PROVIDE SPECIAL INSPECTION BY BLDG. DEPT. APPROVED INSPECTOR FOR ALL EPOXY ANCHOR INSTALLATIONS.

C. USP LUMBER CONNECTORS WITH REFERENCE NUMBERS FOR SUBSTITUTION MAY BE USED IN LIEU OF SIMPSON HARDWARE.

ISSUED
City of Sacramento

MAR 1 0 2004

NORTH PERMIT CENTER

SHEARWALL SCHEDULE

MARK	SHEATHING REQUIRED	EDGE NAILING	MIN. FND. SILL PLATE 3	MIN. FRMG. @ ADJNG. PNL. EDGES 4	ANCHOR BOLT SPACING 1/2" DIA.	5/8" DIA.	3/4" DIA.	LMA 5	SILL PLATE NAILING 6 STANDARD	ALTERNATE	KEYNOTES
A	3/8" CDX PLYWOOD	8d @ 6"	2x	2x	38" O.C.	54" O.C.	72" O.C.	30" O.C.	16d @ 6"	1/4"ø LAGS @ 13" O.C.	1, 2
B	3/8" CDX PLYWOOD	8d @ 4"	2x	2x	28" O.C.	40" O.C.	55" O.C.	23" O.C.	16d @ 5"	1/4"ø LAGS @ 10" O.C.	1, 2
C OPT#1	3/8" CDX PLYWOOD	8d @ 4"	3x	3x	30" O.C.	48" O.C.	62" O.C.	21" O.C.	1/2"ø LAGS @ 22" O.C.	1/4"ø LAGS @ 9" O.C.	1, 2, 3, 4
C OPT#2	3/8" CDX PLYWOOD	8d @ 4"	2x	3x	13" O.C.	18" O.C.	25" O.C.	10" O.C.	16d @ 4"	1/4"ø LAGS @ 9" O.C.	1, 2, 4
D OPT#1	3/8" CDX PLYWOOD	8d @ 3"	3x	3x	23" O.C.	37" O.C.	48" O.C.	16" O.C.	1/2"ø LAGS @ 17" O.C.	1/4"ø LAGS @ 7" O.C.	1, 2, 3, 4
D OPT#2	3/8" CDX PLYWOOD	8d @ 3"	2x	3x	10" O.C.	14" O.C.	19" O.C.	8" O.C.	16d @ 3"	1/4"ø LAGS @ 7" O.C.	1, 2, 4
E OPT#1	3/8" CDX PLYWOOD	8d @ 2"	3x	3x	19" O.C.	30" O.C.	39" O.C.	13" O.C.	1/2"ø LAGS @ 14" O.C.	1/4"ø LAGS @ 5 1/2" O.C.	1, 2, 3, 4
E OPT#2	3/8" CDX PLYWOOD	8d @ 2"	2x	3x	8" O.C.	11" O.C.	16" O.C.	N / A	16d @ 2 1/2"	1/4"ø LAGS @ 5 1/2" O.C.	1, 2, 4
F	1/2" CDX PLYWOOD	10d @ 2"	3x	3x	15" O.C.	23" O.C.	30" O.C.	10" O.C.	5/8"ø LAGS @ 14" O.C.	1/4"ø LAGS @ 4 1/2" O.C.	1, 3, 4
G	5/8" CDX PLYWOOD	10d @ 2"	3x	3x	13" O.C.	21" O.C.	27" O.C.	9" O.C.	5/8"ø LAGS @ 12" O.C.	1/4"ø LAGS @ 4" O.C.	1, 3, 4
H	3/8" CDX BOTH SIDES	8d @ 2"	3x	3x	9" O.C.	14" O.C.	18" O.C.	N / A	5/8"ø LAGS @ 8" O.C.	1/2"ø LAGS @ 6" O.C.	1, 2, 3, 4

KEYNOTES:

1. ALL NAILS SHALL BE COMMON WIRE NAILS (UBC TABLE 21-II-B-1) OR GALVANIZED BOX (UBC TABLE 23-III-C-1) UNLESS OTHERWISE NOTED. (8d COMMON = .131" x 2 1/2" ; 10d COMMON = .148" x 3")
2. 5/8" THICK T1-11 SIDING w/ 1/4" DEEP GROOVES MAY BE SUBSTITUTED FOR 3/8" CDX PLYWD.
3. WHERE REQUIRED BY SCHEDULE ABOVE, PROVIDE NOMINAL 3x FOUNDATION SILL PLATE (DBL. 2x PLATE NOT ALLOWED)
4. INDICATES MINIMUM FRAMING REQUIRED @ ADJOINING PANEL EDGES. WHERE REQUIRED BY SCHEDULE ABOVE, FRAMING AT ADJOINING PANEL EDGES SHALL BE 3x NOMINAL OR WIDER (DOUBLE 2x FRAMING NOT ALLOWED) AND NAILS SHALL BE STAGGERED.
5. "SIMPSON" LMA4, LMA6 ANCHORS IN LIEU OF CONVENTIONAL ANCHOR BOLTS. SEE "SIMPSON" CATALOG FOR MORE INFORMATION. LMA ANCHORS ARE NOT ALLOWED AT TWO POUR SLAB CONDITION UNLESS SLAB DOWELS ARE PROVIDED. MAXIMUM #4 SLAB DOWEL SPACING @ SHEARWALLS WHERE A COLD JOINT OCCURS IS EVERY THIRD ANCHOR OR 32", WHICHEVER IS SMALLER. SEE FOUNDATION DETAILS FOR SLAB DOWEL CONFIGURATION WHERE OCCURS.
6. "SILL PLATE NAILING" PER SCHEDULE IS NOT REQUIRED WHEN SHEAR WALL PLYWOOD EXTENDS PAST THE SOLE PLATE AND IS NAILED INTO RIM JOIST OR ANCHORED MUDSILL BELOW. IF THE SHEAR WALL PLYWOOD EXTENDS TO THE RIM JOIST ONLY, THE RIM JOIST OR BLOCKING MUST BE CLIPPED TO THE TOP PLATE OF THE WALL OR ANCHORED MUDSILL BELOW PER DETAILS OR SPECIFIC NOTE ON PLANS AT SHEAR WALL IN QUESTION. WHERE LAG BOLTING IS SPECIFIED, LAG SCREWS MUST BE LONG ENOUGH TO BE EMBEDDED 3" (MIN.) INTO SOLID BLKG. OR JOIST OR TOP PLATE. THE MIN. WIDTH OF THE MEMBER TO RECEIVE LAG BOLTING IS 4 x "D", AND MIN. EDGE DISTANCE FOR LAG BOLTING IS 1.5 X "D". ("D" = DIAMETER OF LAG SCREW)

GENERAL SHEAR WALL NOTES (APPLIES TO ALL SHEARWALLS)

A). TO REDUCE BUCKLING OF PLYWOOD SIDING OR SHEAR PLYWD, PROVIDE A 1/8" GAP AT ALL EDGES UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.

B). ORIENTED STRAND BOARD (OSB) SHEATHING MAY BE SUBSTITUTED FOR PLYWD SHEATHING IN ALL CASES PROVIDED THAT THE OSB SHEATHING HAS THE SAME THICKNESS AND SPAN RATING AS THE PLYWOOD SHEATHING SPECIFIED. (1997 UBC 2303.1.1)

C). INSTALL ALL SHEAR WALL SHEATHING PRIOR TO INTERIOR WALL CONSTRUCTION.

D). IF PLYWOOD SHEATHING IS CONTINUOUS THEN THE PLYWOOD SHEATHING CAN BE APPLIED TO EITHER FACE OF WALL (ie. NO BREAK RESULTING FROM INTERIOR WALL INTERSECTION)

E). ALL SHEAR WALLS ARE TO BE CONSTRUCTED, INSPECTED & APPROVED PRIOR TO BUILDING ANY ARCHITECTURAL POP-OUTS.

F). OPTION #1 IN SHEAR WALL SCHEDULE REQUIRES A 3" NOMINAL OR WIDER MUDSILL OR WALL SOLE PLATE.
OPTION #2 IN SHEAR WALL SCHEDULE ALLOWS THE USE OF 2x MUDSILL OR WALL SOLE PLATES.

G). ALL SHEAR WALL TYPES MUST USE A 2" x 2" x 3/16" STEEL PLATE WASHER AT ALL MUDSILL ANCHOR BOLTS. (UBC 1806.6)

H). ALL SHEARWALL EDGES SHALL BE BLOCKED (ACCORDING TO KEYNOTES ABOVE). MAXIMUM NAIL SPACING IN THE FIELD IS 12" O.C., USING THE SAME TYPE FASTENERS PER "EDGE NAILING" IN SCHEDULE ABOVE.

I). STAGGER SHEARWALL EDGE NAILING @ FRAMING MEMBERS WIDER THAN 2x NOMINAL AND AT CONNECTED MULTIPLE 2x MEMBERS WHERE OCCURS.

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Criteria: (cont.) - Detailed Seismic Force Analysis

Find Period of Building: $T = C_t (h_n)^{3/4}$ (1997 UBC 1630.2.2)

h_n (ft) = 10 Height to top plate or top of lateral force resisting elements.

C_t = 0.02 For Building Types other than Steel Moment Resisting Frames

T(sec)= 0.112

Seismic Force: $V = (C_v I / RT) W$ (1997 UBC 1630.2.1)

$V_{min} = (0.11 C_a I) W$ *for Zones 1-3* $V_{min} = (0.8 Z N_V I) W$ *for Zone 4* $V_{max} = (2.5 C_a I / R) W$ *for Zones 1-4*

Zone for this project = 3

Zone Factor "Z" = 0.3

Importance Factor "I" = 1.0

C_v = 0.30 (1997 UBC Table 16-R) based on Soil Type (Default Soil Type = SD: conservative) Soil type: SB

C_a = 0.30 (1997 UBC Table 16-Q) based on Soil Type (Default Soil Type = SD: conservative) Soil type: SB

N_v = 1.0 (1997 UBC Table 16-T) based on Seismic Source Type and closest distance to known seismic source (Default Source Type = A: conservative) (Default Source Distance = 2km: conservative) Source type: C; Distance (km): 2

N_a = 0.0 (1997 UBC Table 16-S) based on Seismic Source Type and closest distance to known seismic source (Default Source Type = A: conservative) (Default Source Distance = 2km: conservative) Source type: C; Distance (km): 2

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Vmin $(0.11 C_a I)$ = 0.033 *for Zones 1-3;* $(0.8 Z N_V I/R)$ = N/A *for Zone 4 only*

$V = (C_v I / RT) W$; $V_{max} = (2.5 C_a I / R)$

		V_{min}	V_{max}	V	V_{use}	
Plywd. shear walls	R= 5.5	0.033	0.14	0.485	0.136	x W (Dead Load)
Other walls / masonry	R= 4.5	0.033	0.17	0.593	0.167	x W (Dead Load)
Steel frames (OMRF)	R= 4.4	0.033	0.17	0.606	0.170	x W (Dead Load)
Cantilevered columns	R= 2.2	0.033	0.34	1.212	0.341	x W (Dead Load)

Final Earthquake Force: $E = \rho E_h + E_v$

$E_v = 0$ (ASD) 1997 UBC 1630.1.1

$\rho = 2 - (20 / r_{max} \sqrt{A_B}) =$ 1.00

r_{max} = 0.0000

A_B = 0.0998

Values above are the lesser of the detailed method and the simplified method on previous page

Plywd. shear walls	0.136	x W (Dead Load)
Other walls / masonry	0.167	x W (Dead Load)
Steel frames (OMRF)	0.170	x W (Dead Load)
Cantilevered columns	0.341	x W (Dead Load)

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Lateral Load Determination - 1 Story

Wind

Wind Case 1:	N/S	Mean Roof Ht, ft. =	16		
Upper limit Ht.	15	20	25	30	40
Loads, psf	19.84	21.15	22.28	23.03	24.52
T.W.	10	1	0	0	0
Load, plf	198	21	0	0	0

Top Plate Ht, ft=	10
Bot. Plate Ht, ft =	0
Effective T.W. =	11
V (Case 1) plf =	220

Wind Case 2:	E/W	Mean Roof Ht, ft. =	16		
Upper limit Ht.	15	20	25	30	40
Loads, psf	19.84	21.15	22.28	23.03	24.52
T.W.	10	1	0	0	0
Load, plf	198	21	0	0	0

Top Plate Ht, ft=	10
Bot. Plate Ht, ft =	0
Effective T.W. =	11
V (Case 2) plf =	220

Wind Case 3:	Garage	Mean Roof Ht, ft. =	13		
Upper limit Ht.	15	20	25	30	40
Loads, psf	19.84	21.15	22.28	23.03	24.52
T.W.	8.5	0	0	0	0
Load, plf	169	0	0	0	0

Top Plate Ht, ft=	9
Bot. Plate Ht, ft =	0
Effective T.W. =	8.5
V (Case 3) plf =	169

Seismic

Seismic Load Determination (ASD) - See Page 4 for Factor Determination

V = Factor/1.4 x [(Roof W, psf)(width of roof) + (Ext. Wall W, psf)(H/2)(# of walls) + (Int. Wall W, psf)(H/2)(# of walls)]

Seismic Factor =	0.136	Rf W, psf =	23	Ext. Wall W, psf =	15	Int. Wall W, psf =	8

Seismic Case 1:	N/S	Avg. Roof Width, ft. =	62	Wall H, ft.=	10	
	# of Ext. Walls =	2	# of Int. Walls =	4	V (Case 1) plf =	169

Seismic Case 2:	E/W	Avg. Roof Width, ft. =	55	Wall H, ft.=	10	
	# of Ext. Walls =	2	# of Int. Walls =	4	V (Case 2) plf =	153

Seismic Case 3:	Garage	Avg. Roof Width, ft. =	22	Wall H, ft.=	9	
	# of Ext. Walls =	2	# of Int. Walls =	0	V (Case 3) plf =	62

Remarks

Wind Case 1:	Governs @	N/S	=	220 plf
Wind Case 2:	Governs @	E/W	=	220 plf
Wind Case 3:	Governs @	Garage	=	169 plf

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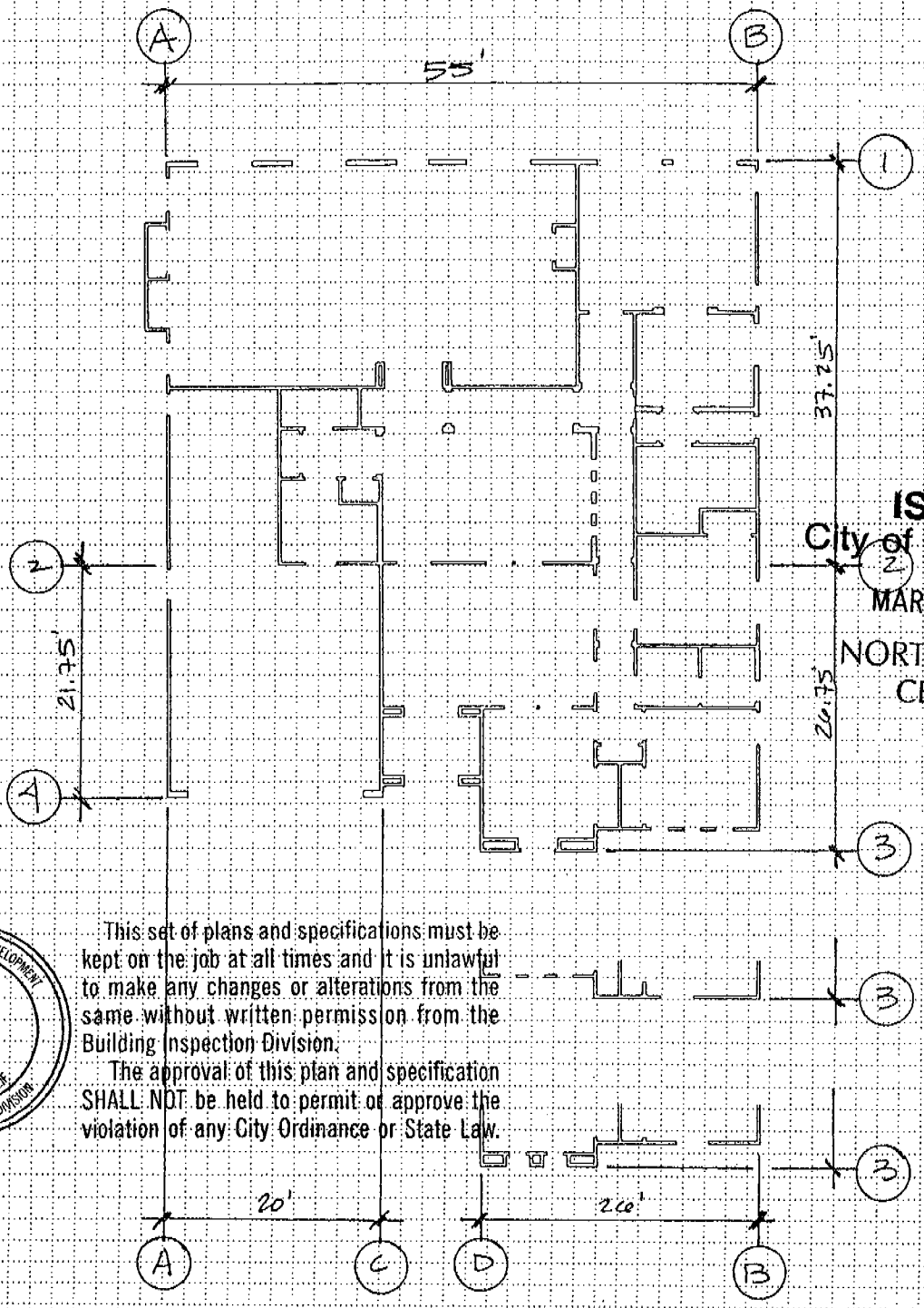
BUILDING SCHEMATIC

PLAN 2389



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Date		Sheet	Of
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Line 2

Wind Governs: V, # = 7040

Load Determination

Seismic	T.W., ft =	64.0	/ 2 +	0.0	=	32.0	Wind	T.W., ft =	64.0 / 2 + 0.0 = 32.0
	w, plf:	153	Trib. V, # =			4896		w, plf:	220 Trib. V, # = 7040
Seismic Load From Line ___ Above							Wind Load From Line ___ Above		
Other Seismic Load							Other Wind Load		
Total Seismic Load, # =		4896	^ ht, ft. ^		^ V, # ^		Total Wind Load, # =		7040 ^ ht, ft. ^ ^ V, # ^

*Panel heights shown are used for calculations only; does not apply to height:width ratio determination

Shear Analysis & Overturning Moments

Panel #	1	2	3	4	5	6	7	8	9
Length, ft.	5.00	4.50							
Panel Ht., ft.	10.00	10.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Seis. Load, #	2576.8	2319.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wind Load, #	*3705.3*	*3334.7*	0.0	0.0	0.0	0.0	0.0	0.0	0.0
O.T.M., ft.-#	37052.6	33347.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

☑ Use DF Shear Values? f_v, plf = 741 | Allow. Shear, plf = 870 | OK | **5/8" one side w/ 10d @ 2:12**

*Distances below measured in feet from left end of shear wall, typ.

R.M. Factor =	0.67	Roof DL, psf:	23	Floor DL, psf:	10	Wall DL, psf:	10	[Other DL], psf:	0

Overturning Analysis

CASE "A"	Panel #('s):	1	2			Override L =	15	O.T. Length =	15.0
Unif. Loads	START, ft.	END, ft.	Roof T.W.	Floor T.W.	Wall T.W.	Other Load T.W.	w (DL), plf	R.M. Left	R.M. Right
w1 (DL)	0.0	15.0	8.00		10.00		284	31950	31950
w2 (DL)							0	0	0
(UP) Pt. Lds	Loc., ft	P (DL), #	O.T.M. Left	O.T.M. Right	*(DN) Pt. Lds*	Location, ft.	P (DL), #	R.M. Left	R.M. Right
P1 (UP)			0	0	P1 (DL)			0	0
P2 (UP)			0	0	P2 (DL)			0	0

OVER-TURNING SUMMARY	O.T.M., ft.-#	O.T.M. From Pt. Loads	Factored R.M., ft.-#	TDF, #			Holdown:	**STHD14**
About Left End of Wall	70400	0	21300	3273		OK	Capacity:	3800
About Right End of Wall		0	21300	3273			Notes:	(38) 16d snkr

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November 17, 2003

Eric Lokey
US Homes Corporation
2366 Gold River Meadow, Suite 200
Gold River, CA 95670

Re: Clarification of March 4, 2003 Letter on Front Entry Holdowns
Plan 2389 Northborough Village 8-4
O'Connor Freeman Job Number: E020611

Dear Eric:

In our letter dated March 4, 2003, we incorrectly stated the shear wall sheathing could remain the same. This statement created a conflict in the plans between the old and new Shear Wall Schedules. Our intention was to relate the adjusted shear wall design to the new revised Shear Wall Schedule. The correct shear wall construction needs to use 5/8" thick sheathing, which is nailed along all panel edges with 10d nails, spaced at 2" on center and at 12" on center into intermediate field members. This correlates to a Type 'G' shear wall in the New Revised Shear Wall Schedule. ***Therefore, the framers are to use the New Revised Shear Wall Schedule to construct the front shear walls of Plan 2389.*** The reason for the adjustment in the Shear Wall Schedule came about by attempting to further subdivide shear panel requirement with 4" edge nailing into two separate designations that more accurately represent the UBC requirements and allows for some cost savings in the material to construction the building in this project. See the attached copy of your fax for further reference.

If you should have any further questions or comments please do not hesitate to call.

Sincerely,

O'Connor Freeman & Associates, Inc.

REGISTERED PROFESSIONAL ENGINEER
KARL A. FREEMAN
No. C50639
Exp. 9/30/05
CIVIL
STATE OF CALIFORNIA

Karl A. Freeman, P.E.
Registered Civil Engineer # 50639

Enclosures: 5 sheets from 11/14 fax
cc: file

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THO 3/10/04

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1/5

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Lennar

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To: Karl Freeman **From:** Eric Loke

Company:

Laureate @ Natomas Park
Sacramento
Phone: (916) 515-0217
Fax: (916) 515-0226
Cell: (916) 869-5228

Fax: 441-5697

Date: 11/14

Pages (Including Cover): #5

2389 Plan

Karl - It has been brought to my attention through my inspector that your letter dated March 4 2003 regarding the Front Entry Hold downs is not worded correctly. Per your letter attached you are saying the shear wall sheathing should remain the same. There is no direction in your letter to indicate the use of the new shear schedule which you included with the letter. All I need is a sentence stating to use the new revised shear schedule.

Thanks Eric

FROM :US HOME NORTHPOINTE FAX NO. :515-0226 Nov. 14 2003 01:41PM P1

New Revised

2/5

SHEARWALL SCHEDULE

MARK	SHEATHING REQUIRED	EDGE NAILING	MIN. FND. SILL PLATE 3	MIN. FRMG. @ ADJNG. PNL. EDGES 4	ANCHOR BOLT SPACING 1/2" DIA.	5/8" DIA.	3/4" DIA.	LMA 5	SILL PLATE NAILING 6 STANDARD	ALTERNATE	KEYNOTES
A	3/8" CDX PLYWOOD	8d @ 6"	2x	2x	36" O.C.	54" O.C.	72" O.C.	30" O.C.	16d @ 6"	1/4"ø LAGS @ 13" O.C.	1, 2
B	3/8" CDX PLYWOOD	8d @ 4"	2x	2x	28" O.C.	40" O.C.	56" O.C.	23" O.C.	16d @ 5"	1/4"ø LAGS @ 10" O.C.	1, 2
C OPTION #1	3/8" CDX PLYWOOD	8d @ 4"	3x	3x	30" O.C.	48" O.C.	62" O.C.	21" O.C.	1/2"ø LAGS @ 22" O.C.	1/4"ø LAGS @ 9" O.C.	1, 2, 3, 4
C OPTION #2	3/8" CDX PLYWOOD	8d @ 4"	2x	3x	13" O.C.	18" O.C.	25" O.C.	10" O.C.	16d @ 4"	1/4"ø LAGS @ 9" O.C.	1, 2, 4
D OPTION #1	3/8" CDX PLYWOOD	8d @ 3"	3x	3x	23" O.C.	37" O.C.	48" O.C.	16" O.C.	1/2"ø LAGS @ 17" O.C.	1/4"ø LAGS @ 7" O.C.	1, 2, 3, 4
D OPTION #2	3/8" CDX PLYWOOD	8d @ 3"	2x	3x	10" O.C.	14" O.C.	19" O.C.	8" O.C.	16d @ 3"	1/4"ø LAGS @ 7" O.C.	1, 2, 4
E OPTION #1	3/8" CDX PLYWOOD	8d @ 2"	3x	3x	19" O.C.	30" O.C.	39" O.C.	13" O.C.	1/2"ø LAGS @ 14" O.C.	1/4"ø LAGS @ 5 1/2" O.C.	1, 2, 3, 4
E OPTION #2	3/8" CDX PLYWOOD	8d @ 2"	2x	3x	8" O.C.	11" O.C.	16" O.C.	N / A	16d @ 2 1/2"	1/4"ø LAGS @ 5 1/2" O.C.	1, 2, 4
F	1/2" CDX PLYWOOD	10d @ 2"	3x	3x	15" O.C.	23" O.C.	30" O.C.	10" O.C.	5/8"ø LAGS @ 14" O.C.	1/4"ø LAGS @ 4 1/2" O.C.	1, 3, 4
G	5/8" CDX PLYWOOD	10d @ 2"	3x	3x	13" O.C.	21" O.C.	27" O.C.	8" O.C.	5/8"ø LAGS @ 12" O.C.	1/4"ø LAGS @ 4" O.C.	1, 3, 4
H	3/8" CDX BOTH SIDES	8d @ 2"	3x	3x	9" O.C.	14" O.C.	18" O.C.	N / A	5/8"ø LAGS @ 8" O.C.	1/2"ø LAGS @ 6" O.C.	1, 2, 3, 4

KEYNOTES:

1. ALL NAILS SHALL BE COMMON WIRE NAILS (UBC TABLE 21-II-B-1) OR GALVANIZED BOX (UBC TABLE 23-III-C-1) UNLESS OTHERWISE NOTED. (8d COMMON = .131" x 2 1/2" ; 10d COMMON = .148" x 3")
2. 6/8" THICK T1-11 SIDING w/ 1/4" DEEP GROOVES MAY BE SUBSTITUTED FOR 3/8" CDX PLYWD.
3. WHERE REQUIRED BY SCHEDULE ABOVE, PROVIDE NOMINAL 3x FOUNDATION SILL PLATE (DBL. 2x PLATE NOT ALLOWED)
4. INDICATES MINIMUM FRAMING REQUIRED @ ADJOINING PANEL EDGES. WHERE REQUIRED BY SCHEDULE ABOVE, FRAMING AT ADJOINING PANEL EDGES SHALL BE 3x NOMINAL OR WIDER (DOUBLE 2x FRAMING NOT ALLOWED) AND NAILS SHALL BE STAGGERED.
5. "SIMPSON" LMA4, LMA5 ANCHORS IN LIEU OF CONVENTIONAL ANCHOR BOLTS. SEE "SIMPSON" CATALOG FOR MORE INFORMATION. LMA ANCHORS ARE NOT ALLOWED AT TWO POUR SLAB CONDITION UNLESS SLAB DOWELS ARE PROVIDED. MAXIMUM #4 SLAB DOWEL SPACING @ SHEARWALLS WHERE A COLD JOINT OCCURS IS EVERY THIRD ANCHOR OR 32", WHICHEVER IS SMALLER. SEE FOUNDATION DETAILS FOR SLAB DOWEL CONFIGURATION WHERE OCCURS.
6. "SILL PLATE NAILING" PER SCHEDULE IS NOT REQUIRED WHEN SHEAR WALL PLYWOOD EXTENDS PAST THE SOLE PLATE AND IS NAILED INTO RIM JOIST OR ANCHORED MUDSILL BELOW. IF THE SHEAR WALL PLYWOOD EXTENDS TO THE RIM JOIST ONLY, THE RIM JOIST OR BLOCKING MUST BE CLIPPED TO THE TOP PLATE OF THE WALL OR ANCHORED MUDSILL BELOW PER DETAILS OR SPECIFIC NOTE ON PLANS AT SHEAR WALL IN QUESTION. WHERE LAG BOLTING IS SPECIFIED, LAG SCREWS MUST BE LONG ENOUGH TO BE EMBEDDED 3" (MIN.) INTO SOLID BLKG. OR JOIST OR TOP PLATE. THE MIN. WIDTH OF THE MEMBER TO RECEIVE LAG BOLTING IS 4 x "D", AND MIN. EDGE DISTANCE FOR LAG BOLTING IS 1.5 X "D". ("D" = DIAMETER OF LAG SCREW)

GENERAL SHEAR WALL NOTES (APPLIES TO ALL SHEARWALLS)

A). TO REDUCE BUCKLING OF PLYWOOD SIDING OR SHEAR PLYWD. PROVIDE A 1/8" GAP AT ALL EDGES UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER.

B). ORIENTED STRAND BOARD (OSB) SHEATHING MAY BE SUBSTITUTED FOR PLYWD SHEATHING IN ALL CASES PROVIDED THAT THE OSB SHEATHING HAS THE SAME THICKNESS AND SPAN RATING AS THE PLYWOOD SHEATHING SPECIFIED. (1997 UBC 23-II-I-1)

C). INSTALL ALL SHEAR WALL SHEATHING PRIOR TO INTERIOR WALL CONSTRUCTION.

D). IF PLYWOOD SHEATHING IS CONTINUOUS THEN THE PLYWOOD SHEATHING CAN BE APPLIED TO EITHER FACE OF WALL. (ie. NO BREAK RESULTING FROM INTERIOR WALL INTERSECTION)

E). ALL SHEAR WALLS ARE TO BE CONSTRUCTED, INSPECTED & APPROVED PRIOR TO BUILDING ANY ARCHITECTURAL POP-OUTS.

F). OPTION #1 IN SHEAR WALL SCHEDULE REQUIRES A 3" NOMINAL OR WIDER MUDSILL OR WALL SOLE PLATE.
OPTION #2 IN SHEAR WALL SCHEDULE ALLOWS THE USE OF 2x MUDSILL OR WALL SOLE PLATES.

G). ALL SHEAR WALL TYPES MUST USE A 2" x 2" x 3/16" STEEL PLATE WASHER AT ALL MUDSILL ANCHOR BOLTS. (UBC 1806.6)

H). ALL SHEARWALL EDGES SHALL BE BLOCKED (ACCORDING TO KEYNOTES ABOVE). MAXIMUM NAIL SPACING IN THE FIELD IS 12" O.C., USING THE SAME TYPE FASTENERS PER "EDGE NAILING" IN SCHEDULE ABOVE.

I). STAGGER SHEARWALL EDGE NAILING @ FRAMING MEMBERS WIDER THAN 2x NOMINAL AND AT CONNECTED MULTIPLE 2x MEMBERS WHERE OCCURS.

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TWO-POUR SSTB TYPE	THRD ROD MINIMUM EMBEDMENT	EPOXY RETROFIT MIN. EMBED.	EPOXY RETROFIT DIST. FROM CORNER	REMARKS
N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3
N / A	N / A	N / A	N / A	SEE NOTES 2, 6
N / A	N / A	N / A	N / A	SEE NOTE 3, 6
SSTB20	12"	6"	4"	SEE NOTE 1, 5
SSTB24	12"	6"	4"	SEE NOTE 1, 5
SSTB34	18"	7 1/2"	5 1/2"	SEE NOTE 1, 5
SSTB34	18"	9"	6 1/2"	SEE NOTE 1
N / A	N / A	N / A	N / A	2nd FLOOR HOLDOWN SEE NOTE 3

ALL FIRST FLOOR HOLDOWNS. HOWEVER, SIMPSON SSTB AS NOTED IN THE SCHEDULE ABOVE. SEE THE "SSTB ANCHOR

STENERS MAY BE USED IN LIEU OF 16d COMMONS.

OR BOLT PROVIDED A DOUBLE WASHER IS INSTALLED BELOW NUT.

ATION.

VITZ2B", "HPAHD", "STHD" OR "LSTHD" HOLDOWNS IN ANY CASE.

E USED. SEE PLAN FOR SPECIFIC HOLDOWN TYPES USED.

NTO EXISTING CONCRETE, USE "SIMPSON S.E.T. EPOXY-TIE OTING, AND MIN. DISTANCE AWAY FROM CORNER PER SCHEDULE FOR ALL EPOXY ANCHOR INSTALLATIONS.

ION MAY BE USED IN LIEU OF SIMPSON HARDWARE.

SHEARWALL SCHEDULE

MARK	SHEATHING REQUIRED	BLOCK EDGES	EDGE NAILING	FIELD NAILING	ANCHOR BOLT SPACING 1/2" DIA.	5/8" DIA.	3/4" DIA.	M/G	SILL P NAIL
A	3/8" CDX PLYWOOD	YES	8d @ 6"	8d @ 12"	37" O.C.	54" O.C.	73" O.C.	30" O.C.	16d @
B	3/8" CDX PLYWOOD	YES	8d @ 4"	8d @ 12"	N / A	37" O.C.	50" O.C.	20" O.C.	1/2"ø @ 20"
B OPTION	3/8" CDX PLYWOOD	YES	8d @ 4"	8d @ 12"	12" O.C.	18" O.C.	25" O.C.	20" O.C.	16d @
C	3/8" CDX PLYWOOD	YES	8d @ 3"	8d @ 12"	N / A	28" O.C.	38" O.C.	15" O.C.	1/2"ø @ 16"
C OPTION	3/8" CDX PLYWOOD	YES	8d @ 3"	8d @ 12"	10" O.C.	14" O.C.	19" O.C.	15" O.C.	16d @
D	3/8" CDX PLYWOOD	YES	8d @ 2"	8d @ 12"	N / A	17" O.C.	32" O.C.	12" O.C.	1/2"ø @ 13"
D OPTION	3/8" CDX PLYWOOD	YES	8d @ 2"	8d @ 12"	N / A	11" O.C.	16" O.C.	12" O.C.	16d @
E	1/2" CDX PLYWOOD	YES	10d @ 2"	10d @ 12"	N / A	13" O.C.	24" O.C.	10" O.C.	5/8"ø @ 14"
F	5/8" CDX PLYWOOD	YES	10d @ 2"	10d @ 12"	N / A	12" O.C.	22" O.C.	10" O.C.	5/8"ø @ 12"
G	3/8" CDX BOTH SIDES	YES	8d @ 2"	8d @ 12"	N / A	8" O.C.	15" O.C.	N / A	5/8"ø @ 8" O.
H	3/8" CDX BOTH SIDES	YES	8d @ 2"	8d @ 12"	N / A	8" O.C.	15" O.C.	N / A	5/8"ø @ 8" O.

1. ALL NAILS SHALL BE COMMON WIRE NAILS (UBC TABLE 23-II-B-1) OR GALVANIZED BOX (UBC TABLE 23-III UNLESS OTHERWISE NOTED. (8d COMMON = .131" x 2 1/2" ; 10d COMMON = .148" x 3")
2. 5/8" THICK T1-11 SIDING w/ 1/4" DEEP GROOVES MAY BE SUBSTITUTED FOR 3/8" CDX PLYWD.
3. CONVENTIONAL SOLE PLATE NAILING, 16d @ 16" O.C. MAY BE USED IN LIEU OF SOLE PLATE NAILING INDIC. IN SCHEDULE ABOVE WHERE SHEATHING EXTENDS TO MUDSILL. SEE NOTE #7 BELOW.
4. FRAMING AT ADJOINING PANEL EDGES SHALL BE 3" NOMINAL OR WIDER (3x (MIN.) SINGLE MEMBER) AND NA SHALL BE STAGGERED.
5. "SIMPSON" MAS ANCHORS - SEE "SIMPSON" CATALOG FOR MORE INFORMATION.
6. SILL PLATES SHALL BE 3" NOMINAL OR WIDER AND NAILS SHALL BE STAGGERED. (DBL. 2x SILL PLATES NO
7. "SILL PLATE NAILING" PER SCHEDULE IS NOT REQUIRED WHEN SHEAR WALL PLYWOOD EXTENDS PAST THE S AND IS NAILED INTO RIM JOIST OR ANCHORED MUDSILL BELOW. IF THE SHEAR WALL PLYWOOD EXTENDS TO JOIST ONLY, THE RIM JOIST OR BLOCKING MUST BE CLIPPED TO THE TOP PLATE OF THE WALL OR ANCHOR BELOW PER DETAILS OR SPECIFIC NOTE ON PLANS AT SHEAR WALL IN QUESTION. WHERE LAG BOLTING IS LAG BOLTS MUST BE LONG ENOUGH TO BE EMBEDDED 2 1/2" (MIN.) INTO SOLID 3 1/2" (MIN.) WIDE BLKG. OR TOP OF DBL. TOP PLATE.

GENERAL SHEAR WALL NOTES (APPLIES TO ALL SHEARWALLS)

1. TO REDUCE BUCKLING OF PLYWOOD SIDING OR SHEAR PLYWD, PROVIDE A 1/8" GAP AT ALL EDGES UNLESS RECOMMENDED BY THE MANUFACTURER.
2. ORIENTED STRAND BOARD (OSB) SHEATHING MAY BE SUBSTITUTED FOR PLYWD SHEATHING IN ALL CASES P THE OSB SHEATHING HAS THE SAME THICKNESS AND SPAN RATING AS THE PLYWOOD SHEATHING SPECIFIED (1997 UBC 23-II-I-1)
3. INSTALL ALL SHEAR WALL SHEATHING PRIOR TO INTERIOR WALL CONSTRUCTION.
4. IF PLYWOOD SHEATHING IS CONTINUOUS THEN THE PLYWOOD SHEATHING CAN BE APPLIED TO EITHER FACE (Ie. NO BREAK RESULTING FROM INTERIOR WALL INTERSECTION)
5. ALL SHEAR WALLS ARE TO BE CONSTRUCTED, INSPECTED & APPROVED PRIOR TO BUILDING ANY ARCHITECTURAL
6. OPTION #1 IN SHEAR WALL SCHEDULE REQUIRES A 3" NOMINAL OR WIDER MUD SILL OR WALL SOLE PLATE. OPTION #2 IN SHEAR WALL SCHEDULE ALLOWS THE USE OF 2x MUD SILL OR WALL SOLE PLATES.
7. ALL SHEAR WALL TYPES MUST USE A 2"x 2"x 3/16" STEEL PLATE WASHER AT ALL MUD SILL ANCHOR BOL (UBC 1806.6)

Shows shear on both sides where new does not.

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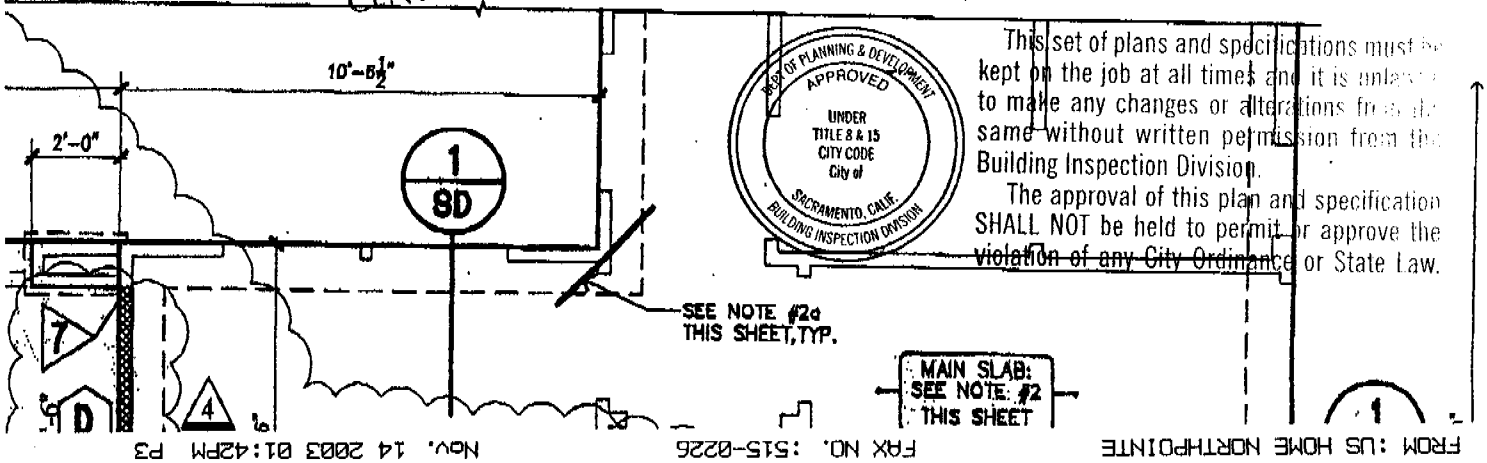

DEPT OF PLANNING & DEVELOPMENT
APPROVED
UNDER
TITLE 8 & 15
CITY CODE
City of
SACRAMENTO, CALIF.
BUILDING INSPECTION DIVISION

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.

4/5

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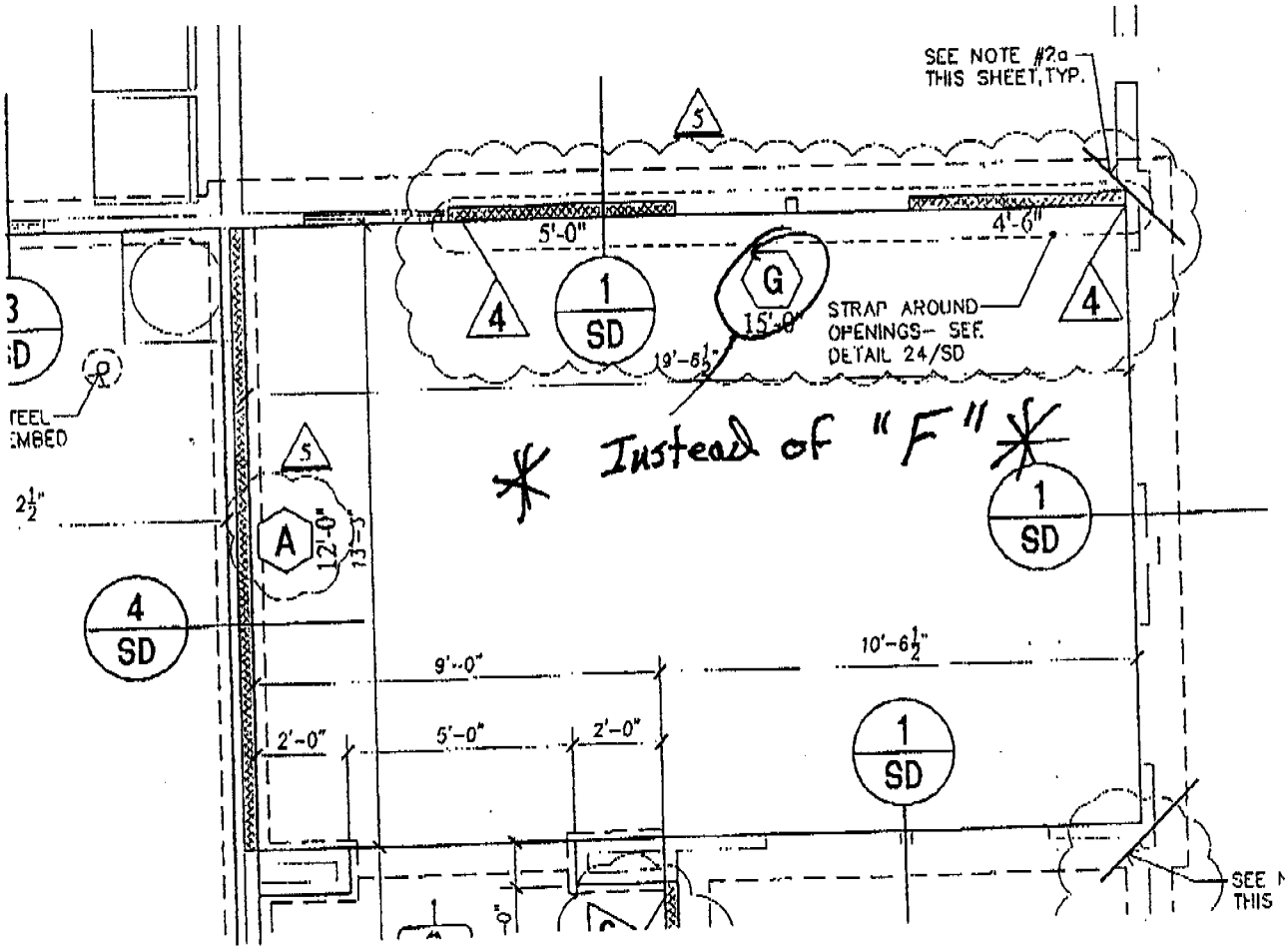

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O'Connor Freeman & Associates, Inc.

Structural Engineering Services

March 4, 2003

Chris Wylly
US Homes Corporation
2366 Gold River Meadow, Suite 200
Gold River, CA 95670

Re: Front Entry Holdowns: Plan 2389 Northborough Village 8-4
O'Connor Freeman Job Number: E020611

Dear Chris:

You contacted our office, via facsimile, regarding the front entry holdowns for Plan 2389 in the Northborough Village 8-4 subdivision. See the attached copy of this facsimile for reference and review. Specifically, you wanted to know if the lateral design could be re-analyzed in order to reduce the size of the holdown in order to make construction easier.

In response to your request, we have reevaluated the lateral loads to the front entry shear wall in order to determine if the holdown could be changed. As a result of our analysis, we found the shear wall sheathing would remain the same. However, by strapping around the window opening, we can reduce the holdown size. We have adjusted the plans to reflect this information. See the attached partial plan exhibits and structural calculations for reference and review.

If you should have any further questions or comments please do not hesitate to call.

Sincerely,

O'Connor Freeman & Associates, Inc.

Karl A. Freeman, P.E.
Registered Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
KARL A. FREEMAN
No. C 50699
Exp. 9/30/05
CIVIL
STATE OF CALIFORNIA

cc: file

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225 30th Street, Suite 201 ■ Sacramento, CA 95816 ■ (916) 441-5721 ■ fax (916) 441-5697