CONCRETE

1. ALL CONCRETE FOR THE FOOTINGS, FLATWORK AND MISCELLANEOUS ITEMS SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 2500 psi AT 28 DAYS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.

2. REINFORCING BARS SHALL BE OF INTERMEDIATE GRADE CONFORMING TO ASTM A 615, GRADE 40 FOR #2 AND #3 BARS AND GRADE 60 FOR #4 BARS AND LARGER.

3. CEMENT SHALL BE TYPE II, LOW ALKALI, CONFORMING TO ASTM C-150.

4. ALL AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C-33. MAXIMUM AGGREGATE SIZE SHALL BE 1".

5. SPLICES OF REINFORCING STEEL SHALL BE LAPPED A MINIMUM OF 30 DIAMETERS AND SECURELY WIRED TOGETHER. SPLICES OF ADJACENT REINFORCING BARS SHALL BE STAGGERED WHEREVER POSSIBLE. SEE DRAWINGS FOR PARTICULAR REQUIREMENTS FOR SPLICE BREAKS. ALL BARS ARE TO BE CONTINUOUS AROUND CORNERS AND INTERSECTIONS.

6. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE:
   CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH....3"
   CAST IN FORMS AND EXPOSED TO EARTH OR WEATHER....2"
   OTHER PER UNIFORM BUILDING CODE.

7. LOCATIONS OF SLEEVES FOR PIPES, AND FOR PIPES INTENDED TO BE CAST IN CONCRETE, FOR WHICH NO SPECIFIC DETAILS ARE SHOWN SHALL BE SUBJECT TO THE REVIEW OF THE STRUCTURAL ENGINEER.

8. EXTERIOR CONCRETE SLABS ON GRADE SHALL BE REINFORCED WITH #3'S @ 24" O.C. EACH WAY, PLACED 2" FROM THE TOP OF THE SLAB, UNLESS OTHERWISE NOTED ON THE PLANS. THIS REINFORCEMENT SHALL BE SUPPORTED BY CONCRETE BLOCKS 2" THICK, SPACED AT INTERVALS NOT EXCEEDING 4'-0".

9. ALL ANCHOR BOLTS, REINFORCING STEEL, DOWELS, INSERTS, ETC., SHALL BE WELL SECURED IN POSITION PRIOR TO POURING CONCRETE.

10. CONCRETE SHALL CONTAIN A MINIMUM OF 5 SACKS OF CEMENT PER CUBIC YARD AND SHALL HAVE A SLUMP OF NO GREATER THAN 4". ALL CONCRETE SHALL BE VIBRATED IMMEDIATELY AFTER POURING.

TIMBER

1. FRAMING AND SHEATHING GRADES SHALL BE AS FOLLOWS:
   ROOF RAFTERS.....DOUG FIR NO. 2
   FLOOR JOISTS .....DOUG FIR NO. 1
   4X, 6X, & 8X BEAMS/HEADERS ...DOUG FIR NO. 1
   WALL STUDS.....DOUG FIR CONSTRUCTION
   BLOCKING, STRIPPING, & MISC...DOUG FIR NO. 3
   PLYWOOD.....CD-X STRUCT I

2. MINIMUM NAILING PER UNIFORM BUILDING CODE, SEE TYPICAL NAILING SCHEDULE ON PLAN.

3. ALL NAILS SHALL BE COMMON SIZE. NO BOX NAILS OR SINKERS ALLOWED.

4. ANCHORAGE OF NON-BEARING STUD WALLS ON CONCRETE SHALL BE $\frac{3}{8}$" DIAMETER X 6" ANCHOR BOLTS AT 4'-0" O.C. OR POWDER DRIVEN PINS WHICH SHALL PENETRATE INTO CONCRETE A MINIMUM OF $1\frac{1}{2}$". POWDER DRIVEN ANCHORS SHALL BE SPACED AT 32" O.C.

5. EXCEPT WHERE REQ'D. AT SHEAR WALLS, ANCHOR BOLTS SHALL BE $\frac{5}{8}$" MINIMUM DIAMETER, SPACED 6' MAXIMUM ON CENTER, WITH 7" MINIMUM EMBEDMENT, 12" MAXIMUM FROM CORNERS WITH A MINIMUM 2"x2"x $\frac{3}{16}$" SQUARE WASHER @ EACH ANCHOR BOLT. UBC 1806.6, 1806.6.1. THIS IS A TYPICAL REQUIREMENT FOR ALL BEARING AND EXTERIOR WALLS, U.N.O.

6. HOLES IN WOOD FOR BOLTS SHALL BE DRILLED 1/16" DIAMETER LARGER THAN THE NOMINAL SIZE OF THE BOLT UNLESS OTHERWISE NOTED ON THE DRAWINGS.

7. ALL BOLTS SHALL HAVE STANDARD CUT WASHERS UNDER HEADS AND/OR NUTS WHERE IN CONTACT WITH WOOD.

8. WHERE STUD WALL TERMINATES AT A CONCRETE OR MASONRY WALL, FASTEN THE LAST STUD TO THE WALL WITH 3/8" DIAMETER X 6" LONG LAG BOLTS AT THE TOP, BOTTOM, AND MID-HEIGHT OF THE STUD. MAXIMUM VERTICAL SPACING OF ANCHORS SHALL BE 6'-0".

9. LAG BOLTS SHALL BE PRE-DRILLED AS RECOMMENDED BY UBC STANDARDS AND SCREWED INTO PLACE.

10. SPLICES IN UPPER AND LOWER PLATES IN THE TOP OF STUD WALLS SHALL BE STAGGERED AT LEAST 4'-0". DOUBLE TOP PLATE SPLICES ARE TO HAVE (12) 16d NAILS EACH SIDE OF SPLICE. ANY DISCONTINUITY IN PLATE IS TO BE CONNECTED WITH A FULLY NAILED "SIMPSON" ST6236 STRAP, OR EQUAL.

11. ALL 2X JOISTS AND RAFTERS SHALL BE SOLID BLOCKED AT POINTS OF BEARING. WOOD CROSS-BRIDGING NOT LESS THAN 2" BY 3" NOMINAL, METAL CROSS-BRIDGING OF EQUAL STRENGTH, OR SOLID BLOCKING, SHALL BE PLACED BETWEEN JOISTS WHERE THE JOIST OR RAFTER SPAN EXCEEDS EIGHT (8) FEET. CROSS-BRIDGING OR BLOCKING MAY BE OMITTED FOR ROOF AND CEILING JOISTS 8" AND LESS IN DEPTH, UNLESS OTHERWISE NOTED ON PLANS.

12. NO NOTCHING OR CUTTING OF FRAMING MEMBERS IS PERMITTED WITHOUT WRITTEN APPROVAL OF ENGINEER.

13. PROVIDE ONE PLYWOOD CLIP BETWEEN EACH JOIST AT ALL UNBLOCKED EDGES OF PLYWOOD SHEATHING.

14. MINIMUM DIMENSION OF ANY PLYWOOD SHEET SHALL BE 24" AND THE MINIMUM AREA SHALL BE 8 SQUARE FEET.

15. MACHINE APPLIED NAILING: 1) SATISFACTORY INSTALLATION SHALL BE DEMONSTRATED ON THE JOB. 2) THE STRUCTURAL ENGINEER HAS THE RIGHT TO REVIEW APPLICATION TO CONFIRM CONTINUED SATISFACTORY PERFORMANCE.

16. ALL TIMBER CONNECTORS SHALL BE GALVANIZED OR PAINTED WITH CORROSION RESISTANT POLYMER PAINT.

17. ALL SHEET METAL FRAMING CONNECTORS SHOWN ON THE PLANS SHALL BE "SIMPSON" STRONG-TIE, BY SIMPSON CO., OR EQUAL. UNLESS NOTED OTHERWISE ON PLANS, INSTALL CONNECTORS WITH THE SIZE AND NUMBER OF BOLTS AS RECOMMENDED BY THE MANUFACTURER IN THE LATEST CATALOG.

18. MEMBERS EXPOSED TO VIEW: 1) SELECT FOR BEST APPEARANCE AVAILABLE IN GRADE SPECIFIED, FREE OF HEART RINGS, CHECKS, AND SPLITS. 2) GRADE STAMPS EXPOSED TO VIEW WILL NOT BE ACCEPTABLE. 3) REMOVE ALL STAINS OR GOUGES PRIOR TO INSTALLATION.

19. SILL PLATES RESTING ON CONCRETE OR MASONRY SHALL BE DOUGLAS FIR PRESSURE IMPREGNATED WITH AN APPROVED PRESERVATIVE.

SOIL REPORT NOTES

ALL FOUNDATION WORK SHALL CONFORM TO THE "PRELIMINARY FOUNDATION INESTIGATION REPORT" DATED JUNE 1, 2006, PREPARED BY RON PIKE OF PACIFIC MATERIALS LABORATORY. REPORT LAB NO. 69000-2 / FILE NO 06-12407-2
SITE SOIL IS TYPE S_D IN SEISMIC ZONE 4 & IS WITHIN 2 KILOMETERS OF A TYPE B FAULT
-OVER-X TOP 24" OF SOIL IN FILL AREAS
-FILL SLOPES SHALL BE GRADED TO A 2:1 SLOPE
-ALLOWABLE SOIL BEARING VALUE IS 2,000 PSF AND MAY BE INCREASED 1/3 FOR WIND & SEISMIC FOR UNDISTURBED SOIL
-ONE STORY FOOTINGS SHALL EXTEND 12" INTO HARD UNDISTURBED SOIL OR A MIN OF 15" BELOW FINAL EXT GRADE OR A MIN OF 12" BELOW CRAWL SPACE, WHICHEVER IS DEEPER
TWO STORY FOOTINGS SHALL EXTEND 18" BELOW LOWEST ADJACENT GRADE
ALLOWABLE SOIL BEARING VALUE FOR COMPACTED FILL IS 1300 PSF FOR 12" DEEP FTGS AND 1500 PSF FOR 18" DEEP FTGS W/ 1/3 INCREASE FOR WIND & SEISMIC

GENERAL NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO THE REVIEW OF THE OWNER AND STRUCTURAL ENGINEER.

2. APPARENT DISCREPANCIES OR AMBIGUITIES ON THE DRAWINGS AND/OR SPECIFICATIONS SHALL BE REPORTED TO THE STRUCTURAL ENGINEER IN WRITING BEFORE PROCEEDING WITH WORK.

3. ALL WORK DONE UNDER THIS CONTRACT SHALL BE IN COMPLIANCE WITH THE 2001 EDITION OF THE CALIFORNIA BUILDING CODE.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND INSTALL ALL TEMPORARY BRACING AND SHORING TO INSURE SAFETY UNTIL THE WORK IS COMPLETED.

5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO STARTING WORK. THE OWNER AND STRUCTURAL ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES OR INCONSISTENCIES. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING AND COORDINATING ALL DIMENSIONS. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND NON-STRUCTURAL ITEMS NOT SHOWN ON STRUCTURAL PLANS.

6. ALL SCAFFOLDING AND SHORING SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE INDUSTRIAL SAFETY COMMISSION OF THE STATE OF CALIFORNIA.

7. THE CONTRACTOR IS REQUIRED TO ASSUME SOLE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT MADE TO APPLIED CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS THE STRUCTURAL ENGINEER FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SLOE NEGLIGENCE OF THE STRUCTURAL ENGINEER.

8. ALL WATERPROOFING, DRAINAGE, SEALING, OR ANY AND ALL WATER AND/OR MOISTURE RELATED ISSUES ARE THE FULL RESPONSIBILITY OF THE CONTRACTOR.

9. ANY DISCREPANCIES BETWEEN THIS DRAWING AND ANY OTHER DRAWING AND/OR EXISTING OR NEW CONDITION SHALL BE REPORTED TO THE ENGINEER PRIOR TO PROCEEDING WITH WORK AND SHALL BE THE CONTRACTORS RESPONSIBILITY.

10. IF ANY DISCREPANCIES EXIST BETWEEN THESE DRAWINGS AND ACTUAL CONDITIONS AND/OR ARCHITECTURAL DRAWINGS; CONTRACTOR IS TO NOTIFY ENGINEER IN WRITING PRIOR TO PROCEEDING WITH WORK.

FOUNDATIONS

1. A SOILS REPORT HAS BEEN PERFORMED ALL RECOMMENDATIONS OF THIS REPORT SHALL BE COMPLIED WITH.

2. PRIOR TO POURING CONCRETE FOUNDATIONS, ALL LOOSE EARTH, WATER, AND DEBRIS SHALL BE REMOVED FROM THE FOUNDATION BED.

3. DESIGN SOIL BEARING PRESSURE IS 1000 PSF DL + LL, WITH A ⅓ INCREASE FOR SEISMIC LOADS.

4. THE BOTTOM ELEVATION OF ALL FOOTINGS SHALL BE SUBJECT TO THE APPROVAL OF THE CITY OR COUNTY BUILDING INSPECTOR.

5. CONTRACTOR TO PROVIDE FOR DE-WATERING OF ALL EXCAVATIONS FROM EITHER SURFACE WATER OR SEEPAGE.

6. CONTRACTOR SHALL PROTECT ALL FOUNDATION EXCAVATIONS ON THE SITE FROM CAVING.

7. AFTER FOUNDATION EXCAVATIONS HAVE BEEN COMPLETED AND PRIOR TO PLACING REINFORCING AND FORMWORK, THE FOUNDATION BED SHALL BE INSPECTED BY THE CITY OR COUNTY BUILDING INSPECTOR. ALL LOOSE MATERIAL SHALL BE REMOVED AS DIRECTED BY THE CITY OR COUNTY BUILDING INSPECTOR.

SHEAR PANEL NOTES:

1. Hold Down Bolts are as follows:
   --PHD2, SSTB 24
   --PHD5, SSTB 24
   --HDQ8 and PHD6 SSTB 34
   --PHD's to affix to double stud or 4x
2. All abutting plywood edges in shear panels shall be nailed to 3x or 4x material
3. Use 3x3x.229 plate washers on all anchor bolts (ABs) at all shear and non-shear wall. Leave adequate thread projection to allow one full thread turn exposed above the nut.
4. Stagger nailing in all cases
5. Provide continuous blocking and edge nailing "in-line" with all shear walls
6. Use A-34s @ 16" O.C. directly above all shear walls. (Blocking to double top plate)
7. All HD bolts shall be tied in place prior to pour for inspector's verification.
8. All double top plates shall be fully continuous.
9. All shear panels shall be full height from sill to double top plate. Lengths of shear walls called for on plans are the minimum continuous length, without exception unless written permission is obtained from Engineer.

SHEAR WALL SCHEDULE

1. 3/8" CC or CD plywood, 8d edge nail at 6" o.c.
   5/8" Abs at 32" o.c. to 2x PTDF sill plate
2. 3/8" CC or CD plywood, 8d edge nail at 4" o.c.
   5/8" Abs at 32" o.c. to 3x PTDF sill plate
3. 3/8" Str 1 Plywd, 8d edge nail @ 3" o.c.
   5/8" Abs @ 16" o.c. to 3x PTDF sill plate.
4. 3/8" Str 1 Plywd, 10d edge nail @ 2" o.c.
   5/8" Abs @ 16" oc to 3x PTDF sill plate

12-17-07 1ST PLN CHK
2-7-08 2ND PLN CHK

6/22

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DATE 12-19-07
SCALE
DRAWN
JOB 2005-007
SHEET A-6.2
OF SHEETS

12-4-08