GENERAL NOTES

G. LUMBER (CONTINUED):

a] USE COMMON WIRE NAILS FOR ALL CONNECTIONS, UNLESS NOTED OTHERWISE. SINKER NAILS ARE NOT ALLOWED,. SEE HANGER MANUFACTURER FOR NAIL SIZES AND QUANTITY.

b] WHERE CONNECTOR MANUFACTURER ALLOWS EITHER 10d OR 16d COMMON NAIL SIZES FOR FASTENING ANY PORTION OF A CONNECTOR, A 10d COMMON OR 16d COMMON NAIL SIZE SHALL BE USED FOR THAT PORTION OF THE CONNECTOR UNLESS NOTED OTHERWISE. SINKER NAILS SHALL NOT BE USED.

c] FOR CERTAIN METAL CONNECTORS SPECIAL SHORT NAILS, OF THE SAME DIAMETER AND PENETRATING INTO THE SUPPORT ONE HALF OF THE LENGTH CALLED FOR, MAY BE SUBSTITUTED. CONTRACTOR SHALL VERIFY WITH MANUFACTURER WHICH METAL CONNECTORS CAN USE THESE SPECIAL SHORT NAILS. SHORT NAILS SHALL NOT BE USED TO NAIL THROUGH PLYWOOD.

12. HOLDOWN DEVICES FOR WOOD SHEAR WALLS SHALL BE SANDWICH TIES (ST) BY ZONE FOUR, LLC SAN LEANDRO, CA (ICBO #ER-5302, LA RR# 25334).

13. HOLES THROUGH STRUCTURAL MEMBERS FOR PIPES AND CONDUIT SHALL BE VERIFIED WITH THE STRUCTURAL ENGINEER.

14. CEILING JOIST SUPPORTING ONE LAYER OF GYPBOARD UNLESS NOTED OTHERWISE ON PLAN SHALL BE AS FOLLOWS:

SIZE	MAXIMUM SPAN
2x4 AT 16"	10'-0"
2x6 AT 16"	15'-0"

WHERE CEILING JOIST ARE SUPPORTING MORE THAN ONE LAYER OF GYPBOARD OR PLASTER CEILING VERIFY WITH STRUCTURAL ENGINEER.

15. NAIL ALL 2X DOUBLE JOIST WITH 16d NAILS AT 9 INCH ON CENTER, STAGGERED.

16. NAIL ALL 2X DOUBLE STUDS WITH 16d NAILS AT 12 INCH ON CENTER, STAGGERED. UNLESS NOTED OTHERWISE

17. PROVIDE DOUBLE JOIST UNDER ALL PARALLEL PARTITIONS.

18. PROVIDE 2 INCH FIRE BLOCKING IN STUD WALLS AT MAXIMUM VERTICAL SPACING PERMITTED BY GOVERNING CODE AND AT ALL CEILING LINES.

19. FOR SIZE AND LOCATION OF ROOF, FLOOR AND WALL OPENING, SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS. FRAME ALL FOUR SIDES OF OPENINGS WITH ADEQUATE MEMBERS AND CONNECTORS.

20. NON-BEARING WOOD STUD WALLS SHALL HAVE TRANSVERSE LATERAL SUPPORT AT A MAXIMUM SPACING OF 12' – 0" ON CENTER. PROPERLY BRACED INTERSECTING STUD WALLS OR 4 X 6 MINIMUM WALL POSTS SHALL BE USED FOR LATERAL SUPPORT AT A MAXIMUM SPACING OF 12' – 0" ON CENTER. WALL POSTS SHALL BE CONTINUOUS FROM FLOOR TO UPPER CONNECTION. SEE STRUCTURAL DRAWINGS FOR WALL POST CONNECTION DETAILS. AT INTERSECTING WALLS, TOP PLATES SHALL BE CONNECTED WITH 3/8 INCH PLYWOOD GUSSET WITH 3–16d TO EACH WALL PLATE.

21. NON-BEARING WOOD STUD WALLS SHALL BE BRACED ALONG THEIR LENGTH AT LEAST ONCE IN EVERY 25 FEET OF LENGTH. THE BRACING SHALL BE A 1" X 4" CONTINUOUS LET-IN BOARD, NAILED TO EVERY STUD AND TO TOP AND BOTTOM PLATES AT INTERIOR WALLS ONLY, OR SIMPSON 16 GAUGE WB STRAPS IN EACH DIRECTION (X-BRACING) AT INTERIOR AND EXTERIOR WALLS. RUN BRACE DIAGONALLY FROM BOTTOM PLATE TO UPPER TOP PLATE AT AN ANGLE SUFFICIENT TO INCLUDE FOUR NORMAL STUD SPACES FOR EVERY 12 FOOT INCREMENT OF HEIGHT.

22. ALL BREAKS IN DOUBLE PLATES FOR VENTS, DUCTS AND PLUMBING SHALL BE STRAPPED AS PER TYPICAL DETAIL.

23. IF TOP PLATES OR STUDS ARE NOTCHED, OR DRILLED WITH A HOLE LOCATED LESS THAN 5/8 INCH CLEAR OF MEMBER EDGE THEN PROVIDE THE FOLLOWING:

a] FOR STUDS A 14 GAUGE BENT PLATE CHANNEL [DEPTH EQUAL TO STUD WIDTH, AND FLANGES = 1–1/2 INCH] SHALL BE SLIPPED OVER THE STUD. MAXIMUM HOLE SIZE IN CHANNEL SHALL EQUAL W/3. CHANNEL SHALL EXTEND 12 INCHES BEYOND HOLE ON EACH SIDE AND NAILED WITH 6–8d EACH SIDE OF OPENING. PLACE NAILS IN SIDE FLANGES.

b] FOR TOP PLATE USE A 1–1/2" x 1/8" STEEL STRAP WITH 4 – 16d NAILS EACH END OF EACH PLATE.

24. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF NON–BEARING PARTITIONS.

25. PROVIDE DOUBLE STUDS UNDER ALL BEAM ENDS UNLESS NOTED OTHERWISE AND CARRY STUDS DOWN TO FOUNDATION OR SLAB.

26. MOISTURE CONTENT OF ALL LUMBER SHALL BE LIMITED TO 19 PERCENT.

27. GLUE LAMINATED MEMBERS:

a. MANUFACTURED IN ACCORDANCE WITH LATEST AITC 117 SPECIFICATIONS.

b. LUMBER – DOUGLAS FIR–LARCH

c. COMBINATION 24F–V4, STRESS GRADE (Fb = 2400 PSI). COMBINATION 24F–V8, STRESS GRADE (Fb = 2400 PSI) AT BEAMS WITH CANTILEVER.

d. AITC APPEARANCE GRADE – SEE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS.

e. FABRICATOR TO FURNISH SHOP DRAWINGS TO ARCHITECT BEFORE FABRICATION. BEAM CAMBER IS TO BE SHOWN ON SHOP DRAWINGS.

f. WATERPROOF GLUE: PHENOL RESORCINOL GLUE, MIL–A397B.

g. MOISTURE CONTENT – 15 PERCENT MAXIMUM
4 PERCENT MAXIMUM VARIATION IN BEAM.

h. SEALER – TWO COATS OF WOODLIFE, REZ, OR EQUAL (HEAVY COATS ON END GRAIN).

i. WRAPPING – (WATER RESISTANT, NON–STAINING PAPER), BULKWRAP UP TO FOUR MEMBERS.

j. INSPECTION – CERTIFICATE OF CONFORMANCE WITH AITC STANDARDS AND LOS ANGELES CITY APPROVAL.

k. ALL PORTIONS OF GLU–LAM BEAMS EXPOSED TO THE WEATHER SHALL BE PRESERVATIVELY TREATED BY MANUFACTURER. TOP AND ENDS OF EXPOSED BEAMS SHALL BE FLASHED AS PER AITC RECOMMENDATIONS. TYPE OF PRESERVATIVE TREATMENT AND FLASHING TO BE COORDINATED WITH ARCHITECT. ALASKA CEDAR [STRESS GRADE 20F–V12] MAY BE SUBSTITUTED FOR PRESERVATIVELY TREATED DOUGLAS FIR WHERE APPROVED BY THE STRUCTURAL ENGINEER.

l. ALL GLUE LAMINATED FABRICATORS TO BE APPROVED BY THE CITY OF LOS ANGELES BUILDING DEPARTMENT.

28. PARALLAM:

a. MANUFACTURER: PARALLAM SPECIFIED IN THESE PLANS ARE TO BE MANUFACTURED BY TRUS JOIST MACMILLIAM CORPORATION OF BOISE, IDAHO. PARALLAM HAS BEEN DESIGNED IN ACCORDANCE WITH THE FOLLWING: NATIONAL EVALUATION REPORT 292 AND LOS ANGELES CITY RESEARCH REPORT RR 24878. ANY PARALLAM PRODUCT OTHER THAN THOSE SPECIFIED ARE TO BE BID AS AN ALTERNATE, AND ARE SUBJECT TO REVIEW AND APPROVAL OF BOTH THE ARCHITECT AND OWNER.

b. ANY DAMAGE, SPLIT OR OTHERWISE STRUCTURALLY UNSOUND MEMBER SHALL BE REPLACED.

c. ALL INDIVIDUAL PARALLAM SHALL BE STAMPED WITH MANUFACTURERS NAME AND EVALUATION REPORT NUMBER.

d. PARALLAM SHALL NOT BE NOTCHED OR CUT EXCEPT AS PERMITTED BY MANUFACTURER AND STRUCTURAL ENGINEER. WHERE UNAPPROVED NOTCHES OR CUTS OCCUR, PARALLAM SHALL BE REPLACED.

e. WOOD SPECIES USED IN THE FABRICATION OF PARALLAM SHALL BE LIMITED TO THE FOLLOWING: DOUGLAS FIR, WESTERN SPECIES, LODGEPOLE PINE, WESTERN HEMLOCK OR WHITE FIRE.

f. THE MINIMUM MODULUS OF ELASTICITY FOR PARALLAM (E) SHALL BE AS FOLLOWS:
COLUMNS AND POSTS: $E = 1.8 \times 10^6$
BEAMS AND JOIST: $E = 2.0 \times 10^6$

FOR GENERAL NOTES CONTINUATION SEE SHEET S-1.2.

E. STRUCTURAL STEEL:

1. STRUCTURAL STEEL SHALL CONFORM TO:

a] STRUCTURAL SHAPES AND PLATES: ASTM A36,

b] TUBES: ASTM A500, GRADE B

c] PIPE COLUMNS: ASTM A53, GRADE B, TYPE E OR TYPE S

d] ELECTRODES:

1] GENERAL WELDING: AWS D1.1, CLASS E70XX

2] ALL COMPLETE PENETRATION WELDS: AWS D1.1,CLASS E7018(STICK)

e] MACHINE BOLTS: ASTM A307
HIGH STRENGTH BOLTS: ASTM A325 OR A490

f] ANCHOR BOLTS: ASTM A307

2. STEEL FABRICATOR TO VERIFY ALL DIMENSIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS. STEEL FABRICATOR TO COORDINATE WITH MECHANICAL SUBCONTRACTOR FOR THE SIZE, LOCATION AND DIMENSIONS OF THE MECHANICAL UNITS AND OPENINGS.

3. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS.

4. ALL FABRICATION SHALL BE DONE BY LOS ANGELES CITY LICENSED AND APPROVED STEEL FABRICATORS FOR ALL GRADES OF STEEL ON THE JOB.

5. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF AWS D1.1.

6. ALL WELDING SHALL BE DONE BY AMERICAN WELDING SOCIETY (AWS) AND LOS ANGELES CITY CERTIFIED WELDERS USING AN ELECTRIC ARC PROCESS. CONTINUOUS INSPECTION IS REQUIRED FOR ALL FIELD WELDING.

7. ALL WELDING INSPECTORS SHALL BE BOTH A AWS CERTIFIED WELDING INSPECTOR AND LOS ANGELES CITY APPROVED WELDING INSPECTOR.

8. ALL ELECTRODES SHALL HAVE A MINIMUM RATED CHARPY V–NOTCH TOUGHNESS OF 20 FOOT–POUNDS AT ZERO DEGREES FARENHEIT U.N.O.

9. ALL GENERATORS USED ON THE JOB FOR WELDING SHALL BE CALIBRATED WITH A AMP METER TO VERIFY GENERATOR GAUGE ACCURACY. GAUGE ACCURACY SHALL BE INSPECTED AND APPROVED BY THE WELDING INSPECTOR.

10. MILL REPORTS SHALL BE FURNISHED TO THE CITY FOR ALL STRUCTURAL STEEL MEMBERS OR OTHER RECORDS ATTESTING THAT THE SPECIFIC GRADE CONFORMS TO UNIFORM BUILDING CODE STANDARD 27–1. OTHERWISE, TESTING OF MATERIALS WILL BE REQUIRED.

11. ALL STRUCTURAL STEEL ERECTED WITH ANCHOR BOLTS SHALL BE PLUMBED AND LEVELED TO FINAL POSITION WITH DOUBLE NUTS. NO LEVELING PLATES SHALL BE USED.

12. BEAMS DETAILED WITHOUT SPECIFIC CAMBER SHALL BE FABRICATED SO THAT AFTER ERECTION ANY MINOR CHANGE DUE TO ROLLING OR SHOP ASSEMBLY SHALL BE UPWARD. TOP OF ALL MEMBERS SHALL BE CLEARLY IDENTIFIED.

13. ALL STRUCTURAL STEEL SURFACES TO BE WELDED OR HIGH STRENGTH BOLTED, TO BE ENCASED IN CONCRETE, TO RECEIVE SPRAY APPLIED FIREPROOFING, OR TO BE ENCLOSED BY FINISH MATERIALS, SHALL BE LEFT UNPAINTED.

F. NON–SHRINK GROUT OR DRYPACK:

1. NON–SHRINK GROUT OR DRYPACK SHALL CONSIST OF A PREMIXED NON–METALLIC FORMULA.

2. MINIMUM FORMULA REQUIREMENTS (LA. RR. #23137):

a] NO SHRINKAGE AFTER PLACEMENT.

b] NO EXPANSION AFTER SET (ASTM C–827).

c] INITIAL SET UP TIME NOT LESS THAN 45 MINUTES (ASTM C–1911).

d] ONE DAY COMPRESSIVE STRENGTH = 3000 PSI (ASTM C–109).

e] f'c AT 28 DAYS = 5000 PSI.

G. LUMBER:

1. ALL LUMBER SHALL BE DOUGLAS FIR–LARCH, UNLESS NOTED OTHERWISE. DOUGLAS FIR–LARCH [NORTH] AND DOUGLAS FIR [SOUTH] ARE NOT PERMITTED.

2. ALL FRAMING LUMBER SHALL BE S4S AND STRESS GRADED AS SHOWN BELOW UNLESS NOTED OTHERWISE. LUMBER STRESSES SHOWN ARE BASE DESIGN VALUES FROM THE 1997 EDITION OF NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION

a]	JOISTS AND RAFTERS UNLESS NOTED OTHERWISE	#2 GRADE, 1006 FB (REPETITIVE)
b]	4 X BEAMS	#1 GRADE, 1000 FB
c]	6 X BEAMS	#1 GRADE, 1350 FB
d]	2 X 4 STUDS	STANDARD OR BETTER
	2 X 6 OR LARGER STUDS	#2 GRADE, 875 FB
	3 X 4 STUDS	CONSTRUCTION
e]	4 X 4 POSTS	#1 GRADE
	4 X 4 WITH HOLDOWN	#1 GRADE
	4 X 6 OR LARGER POSTS	#1 GRADE, 1000 FB
f]	6X, 8X OR LARGER POSTS	#1 GRADE, 1200 FB
g]	TOP AND SILL PLATES	#2 GRADE, 875 FB

3. PLYWOOD SHEATHING (U.S. PS1–95) WITH EXTERIOR GLUE & APA RATED.

4. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY NEAR GRADE SHALL BE WOLMANIZED.

5. ALL NAILING SHALL BE IN ACCORDANCE WITH UNIFORM BUILDING CODE REQUIREMENTS UNLESS NOTED OTHERWISE ON THE DRAWINGS. USE COMMON WIRE NAILS. NAILING OF ROOF, FLOOR AND SHEARWALL SHEATHING SHALL BE INSPECTED AND APPROVED BY THE BUILDING DEPARTMENT BEFORE COVERING.

6. MACHINE APPLIED NAILING SHALL NOT BE USED UNLESS SATISFACTORY INSTALLATION IS DEMONSTRATED ON THE JOB AND ITS USE IS APPROVED BY THE GOVERNING CODE INSPECTORS. APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE.

7. MACHINE NAILING PERFORMANCE WILL BE DEEMED UNSATISFACTORY IF NAIL HEADS PENETRATE THE OUTER PLY. FOR ANY PIECE OF PLYWOOD, MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED.

8. BOLTS SHALL COMPLY WITH ASTM A–307. BOLT HOLES IN WOOD SHALL BE 1/32 INCH TO 1/16 INCH OVERSIZE. HOLES OVER 1/16 INCH LARGER SHALL REQUIRE REPLACEMENT OF LUMBER PIECE. ALL BOLT HEAD AND NUTS BEARING ON WOOD SHALL HAVE STEEL WASHERS.

9. ANCHORAGE OF WOOD TO CONCRETE, MASONRY OR STEEL:

a] ALL SILL PLATE BOLTS SHALL BE 5/8 INCH DIAMETER, MINIMUM EMBEDMENT 7 INCH, LOCATED AT 4'–0" ON CENTER MAXIMUM AND SHALL HAVE AN ANCHOR BOLT 6 TO 9 INCHES FROM EACH END, UNLESS OTHERWISE NOTED

b] SECURE WOOD LEDGER WITH 3/4 INCH DIAMETER BOLTS AT 4'–0" ON CENTER UNLESS NOTED OTHERWISE

c] THE END STUD OF ALL PARTITIONS ABUTTING MASONRY OR CONCRETE SHALL BE ANCHORED WITH 1/2 INCH DIAMETER BOLTS AT TOP, BOTTOM AND 4'–0" ON CENTER

d] ALL WOOD MEMBERS SHALL HAVE AN ANCHOR BOLT BETWEEN 6 TO 9 INCHES FROM EACH END. LENGTH OF ANCHOR BOLTS SHALL BE SUFFICIENT TO GRIP FULL NUT AND BE ANCHORED AT LEAST 6 INCHES PLUS HOOK INTO MASONRY OR CONCRETE.

e] FOR WOOD NAILERS TO STRUCTURAL STEEL , USE 1/2 INCH DIAMETER STUD BOLTS AT 2'–0" ON CENTER TO STRUCTURAL STEEL UNLESS OTHERWISE NOTED

f] INTERIOR NON–BEARING WALL SILL PLATES MAY BE ANCHORED TO CONCRETE WITH 7/32 INCH DIAMETER POWDER DRIVEN PINS AT 30 INCH ON CENTER UNLESS DETAILED OTHERWISE

10. NO LENGTH OF SPLIT IN MEMBER SHALL EXCEED THE WIDTH OF THE MINOR FACE.

11. CONNECTOR DESIGNATIONS REFER TO STRONG–TIE CONNECTORS BY SIMPSON COMPANY, BREA, CALIFORNIA, UNLESS NOTED OTHERWISE. [ICBO 1211, 1258, 1746,4448, LA RR 22086]. THE MINIMUM NAILING REQUIREMENTS ARE AS FOLLOWS:

B. CONCRETE (CONTINUED):

14. SHORING OF STRUCTURAL SLABS:

a] ALL SHORING AND RE–SHORING SHALL BE DONE IN ACCORDANCE WITH ACI STANDARD RECOMMENDED PRACTICE FOR CONCRETE FORMWORK [ACI–347].

b] ONE HUNDRED PERCENT SHORING AND FORMS SHALL REMAIN IN PLACE FOR 14 DAYS MINIMUM. SHORING MAY BE REDUCED TO 50 PERCENT AFTER 14 DAYS, PROVIDED CONCRETE STRENGTH EQUALS AT LEAST 75 PERCENT OF DESIGN STRENGTH.

c] RESHORES SHALL NOT BE REMOVED IF CONCRETE STRENGTH DOES NOT MEET SPECIFIED STRENGTH AT 28 DAYS.

d] NEWLY PLACED SLABS SHALL NOT BE USED TO SUPPORT SLAB ABOVE UNTIL THE LOWER SLAB HAS CURED FOR 5 DAYS, MINIMUM. SHORING TO SUPPORT UPPER LEVEL SLAB MAY BE PLACED WITHIN THE 5 DAYS CURING PERIOD.

15. READY MIX CONCRETE SHALL BE PLACED AFTER BATCHING IN LESS THAN 90 MINUTES. CONCRETE OVER 90 MINUTES OLD SHALL NOT BE PLACED.

C. MASONRY:

1. CONCRETE BLOCK MASONRY UNITS: ASTM C90, UNIT AREA STRENGTH F'm = 1900 PSI, MEDIUM WEIGHT. MASONRY UNIT COLOR AND FACE TEXTURED AS NOTED ON ARCHITECTURAL DRAWINGS. DESIGN STRENGTH f'm=1500 PSI AND f'm=2500 PSI.

2. MASONRY DESIGN STRENGTH (f'm) SHALLBE VERIFIED BY THE "UNIT STRENGTH METHOD" AS SPECIFIED IN THE MASONRY SECTION OF THE BUILDING CODE.

3. MASONRY UNIT SHALL HAVE BEEN CURED FOR NOT LESS THAN 28 DAYS AND SHALL BE CLIMATIZED TO SITE BEFORE PLACED IN BUILDING.

4. CONTINUOUS INSPECTION IS REQUIRED, UNLESS NOTED OTHERWISE, FOR:

a] PREPARATION AND FORMING OF WALL PRISMS

b] SAMPLING AND PLACING OF MASONRY UNITS

c] PLACEMENT OF REINFORCEMENT

d] GROUT SPACE IMMEDIATELY PRIOR TO CLOSING OF CLEANOUTS AND DURING ALL GROUTING OPERATIONS

5. ALL MORTAR AND GROUT SHALL HAVE A MINIMUM 28 DAYS COMPRESSIVE STRENGTH EQUAL TO 1800 PSI AND 2000 PSI, RESPECTIVELY (2500 PSI GROUT FOR f'm=2500 PSI). ADMIXTURES WHEN USED SHALL BE PER MANUFACTURER'S RECOMMENDATION AND WITH APPROVAL OF THE BUILDING OFFICIAL.

6. ADMIXTURES WHEN USED SHALL BE PER MANUFACTURER'S RECOMMENDATIONS AND WITH THE APPROVAL OF THE BUILDING OFFICIAL

7. PORTLAND CEMENT – ASTM C150, TYPE II, LOW ALKALI.

8. MORTAR MIX: 1– USE 1:3 WITH 1/4 PART LIME PUTTY, TYPE S.
2– ANY PREMIX MORTAR SHALL BE SUBMITTED FOR APPROVAL AND SHALL BE TYPE S.

9. GROUT MIX – 1:3 WITH 2 PARTS PEA GRAVEL.

10. GROUT REQUIREMENTS:

a] GROUT MIX SHALL BE IN ACCORDANCE WITH UBC STANDARDS

b] GROUT STRENGTH MIX DESIGN SHALL BE DOCUMENTED BY NEW OR EXISTING TEST REPORTS FROM APPROVED LICENSED TESTING LABORATORIES PRIOR TO BATCHING.

c] COPIES OF THE "STATEMENT OF MIX DESIGN FOR GROUT" SIGNED BY A REGISTERED CIVIL ENGINEER RESPONSIBLE FOR THE MIX DESIGN SHALL BE IN THE OFFICE OF THE BUILDING INSPECTION DIVISION AT THE DEPARTMENT OF BUILDING AND SAFETY AND AT THE CONCRETE PLANT PRIOR TO BATCHING OF THE GROUT AND AT THE JOB SITE PRIOR TO PLACING OF THE GROUT.

d] GROUT MIX SHALL HAVE A FINAL SLUMP OF 8–10 INCHES. WHEN ADDING SIKA GROUT AID OR EQUAL TO THE MIX, INITIAL GROUT SLUMP SHALL BE 6–7 INCHES.

11. GROUT ALL CELLS, UNLESS OTHERWISE NOTED.

12. USE BOND BEAM UNITS AT HORIZONTAL REINFORCING.

13. LOCATE REBARS ABOUT CENTERLINE OF MASONRY WALL UNLESS DETAILED OTHERWISE.

14. ALL WALLS SHALL BE CONSTRUCTED USING 1/2 RUNNING BOND BETWEEN MASONRY UNITS, UNLESS OTHERWISE NOTED.

15. ALL WOOD PLATES TO BE BOLTED TO THE TOP OF MASONRY WALLS SHALL BE SET ON A MORTAR BED, TO PROVIDE UNIFORM BEARING.

D. REINFORCING STEEL FOR CONCRETE AND MASONRY:

1. REINFORCING BARS: ASTM A615, GRADE 60, GRADE 40 FOR #3 BARS. ALL REINFORCING STEEL THAT IS TO BE WELDED SHALL CONFORM TO ASTM A706, UNLESS OTHERWISE NOTED ON PLANS.

2. FOR EPOXY COATED REBAR CONTACT STRUCTURAL ENGINEER FOR APPROVAL AND REVISED REBAR LAP SPLICE SCHEDULE.

3. WELDED WIRE FABRIC: ASTM A185

4. WELDING ELECTRODES: AWS D1.4, CLASS E90, LOW HYDROGEN

5. MINIMUM SPLICE LENGTHS, UNLESS DETAILED OTHERWISE

a] CONCRETE – SEE SCHEDULE ON DRAWING

b] MASONRY – SEE SCHEDULE ON DRAWING

c] WELDED WIRE FABRIC SHALL BE SPLICED WITH A MINIMUM LAP OF 12 INCHES

6. MINIMUM CLEARANCE BETWEEN REINFORCING AND FACE OF CONCRETE SHALL BE AS FOLLOWS (UNLESS SHOWN OTHERWISE):

a] CONCRETE BELOW GRADE (CAST AGAINST SOIL) = 3"

b] CONCRETE BELOW GRADE (FORMED) = 2"

c] CONCRETE WALLS EXPOSED TO WEATHER:
NUMBER 5 BARS AND SMALLER = 1–1/2"
NUMBER 6 BARS AND LARGER = 2"

d] CONCRETE WALLS, INTERIOR WALLS = 1"

e] CONCRETE SLAB (STRUCTURAL) = 1"

f] CONCRETE BEAMS AND COLUMNS = 1–1/2"

7. MINIMUM CLEARANCE BETWEEN REBAR AND MASONRY SHALL BE ONE BAR DIAMETER OR 3/4" WHICHEVER IS LARGER.

8. SPLICES IN COLUMNS OR BEAMS SHALL OCCUR ONLY WHERE DETAILED. SPLICES IN CONTINUOUS GRADE BEAMS SHALL OCCUR AT MIDSPAN. CONTACT THE STRUCTURAL ENGINEER IF CLARIFICATION IS NEEDED.

9. SPLICES IN HORIZONTAL WALL REINFORCEMENT SHALL BE STAGGERED 3'– 0" MINIMUM FROM SPLICE CENTERLINE. WHERE WALLS HAVE TWO CURTAINS OF REINFORCING SPLICES SHALL NOT OCCUR IN THE SAME LOCATION.

10. ALL REINFORCING SHALL BE ACCURATELY PLACED AND ADEQUATELY SUPPORTED BEFORE CONCRETE IS PLACED AND SHALL BE SECURED AGAINST DISPLACEMENT WITHIN PERMITTED TOLERANCE, CLEARANCE FOR REBAR SHALL BE SHOWN IN DETAIL OR CALLED IN NOTES. TOLERANCE SHALL BE AS PER SECTION 7.5 ACI CODE (318–89).

11. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE MEMBERS BEFORE PLACING CONCRETE. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. CORING IN CONCRETE IS NOT PERMITTED EXCEPT WHERE SHOWN ON DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER.

12. CONTRACTORS SHALL PROVIDE FOR AN ALLOWANCE OF ONE TON OF REINFORCING STEEL TO BE FABRICATED AND PLACED DURING PROGRESS OF WORK, AS MAY BE DIRECTED BY THE STRUCTURAL ENGINEER. THE UNUSED PORTION SHALL BE CREDITED TO THE OWNER AT THE COMPLETION OF THE CONCRETE WORK.

13. NO BRICK OR POROUS MATERIAL SHALL BE USED TO SUPPORT FOOTING STEEL OFF THE GROUND.

A. GENERAL:

1. ALL CONSTRUCTION SHALL CONFORM TO THE 1997 UNIFORM BUILDING CODE AS AMENDED BY THE CITY OF LOS ANGELES, UNLESS MORE STRINGENT REQUIREMENTS ARE REQUIRED IN THE PLANS AND SPECIFICATIONS.

2. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL CONDITIONS, ELEVATIONS AND DIMENSIONS BEFORE STARTING WORK. THE ARCHITECT AND STRUCTURAL ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND.

3. THE CONTRACTOR SHALL INFORM THE ENGINEER IN WRITING OF ANY DISCREPANCIES OR OMISSIONS NOTED ON THE DRAWINGS OR IN THE SPECIFICATIONS OR OF ANY VARIATIONS NEEDED IN ORDER TO CONFORM TO CODES, RULES AND REGULATIONS. UPON RECEIPT OF SUCH INFORMATION, THE ENGINEER WILL SEND WRITTEN INSTRUCTIONS TO ALL CONCERNED, AND WORK SHALL BE PERFORMED IN A MANNER AS DIRECTED BY THE ENGINEER. ANY SUCH DISCREPANCY, OMISSION, OR VARIATION NOT REPORTED, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

4. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE METHOD OF CONSTRUCTION.

5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY BRACES, SHORES AND GUYS, WHEREVER NECESSARY TO SUPPORT ALL LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED DURING CONSTRUCTION, INCLUDING ERECTION EQUIPMENT AND ITS OPERATION. THIS TEMPORARY SUPPORT SYSTEM SHALL HOLD ALL ELEMENTS AND MEMBERS IN THEIR FINAL POSITION UNTIL TOTALLY AND FINALLY CONNECTED TO THE PERMANENT BRACING ELEMENTS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE CALIFORNIA CONSTRUCTION SAFETY ORDERS.

7. REVIEW OF SHOP DRAWINGS BY STRUCTURAL ENGINEER SHALL NOT BE CONSTRUED AS ACCEPTING RESPONSIBILITY FOR SAFE CONSTRUCTION.

8. SHOP DRAWINGS ARE AN AID FOR THE FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED IF ANY DISCREPANCIES ARE FOUND.

9. THE TYPICAL NOTES AND DETAILS SHALL APPLY IN ALL CASES UNLESS SPECIFIC DETAILS OCCUR ELSEWHERE. WHERE NO DETAIL IS SHOWN, CONSTRUCTION SHALL BE AS FOR SIMILAR WORK.

10. OPENINGS, POCKETS, ETC. SHALL NOT BE PLACED IN STRUCTURAL MEMBERS UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS. NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN STRUCTURAL MEMBERS.

11. REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION OF OPENINGS OR SUPPORTS FOR THEIR RESPECTIVE ITEMS. NOTIFY ARCHITECT, PRIOR TO CONSTRUCTION, OF ANY INTERFERENCE OR INCOMPATIBILITY.

12. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF PLACED ON FRAMED FLOORS OR ROOFS. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH OR WHERE OVERLOAD IS ANTICIPATED.

13. SEE SPECIFICATIONS FOR MATERIALS AND WORKMANSHIP REQUIREMENTS. SPECIFICATIONS ARE A PART OF THESE DRAWINGS.

14. ADVANCE NOTICE – CONTRACTOR SHALL PROVIDE 48 HOURS ADVANCE NOTICE OF ALL CONCRETE POURS TO THE ARCHITECT AND STRUCTURAL ENGINEER.

15. REQUIRED INSPECTIONS BY INDEPENDENT APPROVED INSPECTION AGENCIES:

a] SOIL SCARIFICATION, FILL AND COMPACTION: SOILS ENGINEER (CONTINUOUS INSPECTION)

b] CONCRETE: [CONTINUOUS INSPECTION – SEE NOTE B2 BELOW]

c] FOUNDATION EXCAVATION: SOILS ENGINEER (CALLED)

d] STRUCTURAL STEEL WELDING:
SHOP (CONTINUOUS INSPECTION OR APPROVED FABRICATOR U.N.O.)
FIELD (CONTINUOUS INSPECTION)

e] REINFORCING STEEL WELDING: FIELD [CONTINUOUS INSPECTION]
REINFORCING STEEL PLACEMENT: FIELD [SEE NOTE B–2 BELOW]

f] MASONRY: [CALLED]. SEE NOTE C–2 BELOW

g] HOLDOWNS: ANCHOR BOLTS PRIOR TO CONCRETE POUR.

h] EPOXY ANCHORS: CONTINUOUS INSPECTION

i] EXPANSION ANCHORS: CONTINUOUS INSPECTION

j] NOTE:

1] ALL INDEPENDENT INSPECTORS SHALL BE CERTIFIED REGISTERED DEPUTY BUILDING INSPECTORS WHERE REQUIRED BY THE GOVERNING AGENCY.

2] CONTRACTOR SHALL KNOW AND COMPLY WITH REQUIREMENTS OF GOVERNING AGENCY BY INFORMING BUILDING DEPARTMENT WHEN THE REQUIRED INSPECTIONS ARE TO TAKE PLACE.

B. CONCRETE:

1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS EQUAL TO:

a] 4000 PSI FOR SUPPORTED STRUCTURAL SLAB AND BEAMS

b] 4000 PSI FOR COLUMNS

c] 3000 PSI FOR WALLS, INCLUDING ELEVATOR PIT

d] 3000 PSI FOR ALL FOOTINGS, TIE BEAMS AND GRADE BEAMS

e] 2500 PSI FOR SLABS ON GRADE

f] 3000 PSI FOR ALL OTHER CONCRETE WORK, UNLESS NOTED OTHERWISE

2. CONTINUOUS INSPECTION REQUIRED FOR ALL CONCRETE STRENGTHS EXCEEDING 2500 PSI. INSPECTION BY DEPUTY INSPECTOR IS REQUIRED FOR THE PLACEMENT OF REINFORCING STEEL PRIOR TO POURING CONCRETE. CONTINUOUS INSPECTION IS NOT REQUIRED DURING PLACING OF THE REINFORCING, PROVIDED THE SPECIAL INSPECTOR HAS INSPECTED FOR CONFORMANCE WITH THE APPROVED PLANS PRIOR TO THE CLOSING OF FORMS OR THE DELIVERY OF CONCRETE TO THE JOB SITE.

3. ALL CONCRETE SHALL BE NORMAL WEIGHT (145 PCF) UNLESS NOTED AS LIGHTWEIGHT CONCRETE MIX DESIGN BY METHOD II, PER LOS ANGELES CITY BUILDING CODE.

4. PORTLAND CEMENT: ASTM C150, TYPE I OR TYPE II, LOW ALKALI.

5. CONCRETE MIX DESIGN WATER–CEMENT RATIO SHALL BE IN ACCORDANCE WITH UBC TABLE 19–A–3. CONCRETE DESIGN STRENGTH f'c FOR CONCRETE IN CONTACT WITH SOIL SHALL NOT BE LESS THAN VALUES SHOWN IN TABLE 19–A–3.

6. NO MORE THAN ONE GRADE OF CONCRETE SHALL BE ALLOWED ON THE SITE AT ANY ONE TIME.

7. CONCRET