REDWOOD INSPECTION SERVICE.

E□. (1.55E GRADE) ICC-ESR-1387

- 3. REDWOOD SHALL BE GRADED BY THE CALIFORNIA REDWOOD ASSOCIATION,
- 4. SILL PLATES SHALL BE PRESSURE-TREATED (PT) DOUGLAS FIR #2. REDWOOD IS PERMITTED WITH SEOR APPROVAL.
- 5. NON-LOAD BEARING STUDS, TOP PLATES, BLOCKING, FURRING AND BRACING SHALL BE. JOISTS, RAFTERS, PURLINS, BEAMS & POSTS SHALL BE ...DF #1 (UNO) LOAD BEARING STUDS SHALL BE: (UNO ON PLAN) STUDS 0-15 STUDS □15□ . DF #1 BLOCKING ☐ I-JOIST SHALL BE 1 ¾" THK PARALLAM PSL BY WEYERHOUSER OR
- MOISTURE CONTENT OF SAWN LUMBER SHALL NOT EXCEED 19□ WHEN FRAMING STARTS OR SHEATHING IS APPLIED. ANY NONCOMPLIANT WORK SHALL BE REJECTED AND REFRAMED WITH ACCEPTABLE LUMBER.
- 7. TIMBERS 4" NOMINAL IN THE LEAST DIMENSION SHALL NOT CONTAIN BOXED
- 8. SILL PLATES SHALL BE PRESSURE-TREATED AND SHALL BE BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS AT 32" OC MAX, UNO WITH A BOLT BETWEEN 6" TO 9" FROM THE END OF EACH PIECE OF SILL (2 BOLTS MIN EACH PIECE). PIECE OF SILL SHALL BE CONSIDERED ENDED WHERE PLATE IS CUT OUT OVER ONE-THIRD OF CROSS-SECTION.
- 9. ANCHOR BOLTS FOR NON-STRUCTURAL WALLS SUPPORTED ON SLABS SHALL HAVE 3 1/2" EMBEDMENT (UNO) MEASURED FROM TOP OF SLAB.
- 10. ANCHOR BOLTS FOR STRUCTURAL WALLS SHALL HAVE 12" EMBEDMENT (UNO) MEASURED FROM TOP OF SLAB.
- 11. STUD BEARING WALLS AND PARTITIONS SHALL HAVE DOUBLE TOP PLATES LAPPED AT WALL AND PARTITION INTERSECTIONS. JOINTS IN UPPER AND LOWER MEMBERS OF DOUBLE TOP PLATES SHALL BE STAGGERED AT LEAST
- 12. HOLES IN WOOD AND STEEL MEMBERS FOR BOLTS SHALL BE THE NOMINAL **BOLT DIAMETER PLUS 1/16".**
- 13. ALL BOLTS IN WOOD SHALL BE ASTM A307 STANDARD BOLTS, UNO. BOLTS AND SCREWS SHALL BE TIGHTENED AT TIME OF ERECTION AND RETIGHTENED BEFORE CLOSING IN OR AT THE COMPLETION OF THE JOB.
- 14. HOLES IN WOOD FOR LAG SCREW SHANK SHALL BE BORED TO THE SAME DIAMETER AND DEPTH AS THE SHANK, AND FOR THE THREADED PORTION BORED WITH A BIT NOT LARGER THAN THE BASE OF THREADS.
- 15. LAG SCREWS AND SCREWS SHALL BE SCREWED AND NOT DRIVEN INTO PLACE
- 16. STEEL WASHERS SHALL BE PROVIDED UNDER HEADS AND NUTS OF ALL BOLTS AND LAG SCREWS WHICH BEAR ON WOOD. STANDARD CUT WASHERS MAY BE USED IN ALL CASES EXCEPT SILL PLATES AND WOOD LEDGERS AGAINST CONCRETE OR MASONRY, WHICH SHALL BE ONE OF THE FOLLOWING SIZES:

BOLT & LAG SCREW DIAMETER	STEEL PLATE WASHER SIZE	MALLEABLE IRON WASHER SIZE	
1/2"	2" S□ □1/4"	2 1/2"Ø x 1/4"	
5/8"	2 1/2" S□ □1/4"	2 3/4Ø x 5/16"	
3/4"	3" S□ □5/16"	3"Ø x 7/16"	
7/8"	3 1/2" S□ □3/8"	3 1/2"Ø x 7/16"	
1"	3 3/4" S□ □3/8"	4"Ø x 1/2"	

NOTE: WASHERS UNDER CARRIAGE BOLT HEADS SHALL BE LARGE ENOUGH TO ALLOW FOR S UARE SHOULDERS.

- 17. INSTALL WINDOWS AND DOORS IN STUD WALLS AFTER DEAD LOADS ARE APPLIED, AND PROVIDE A 1/2" SHIM SPACE AT THE HEAD CONDITION.
- 18. FASTENERS, INCLUDING NAILS, NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE - TREATED WOOD SHALL BE OF HOT-DIPPED ZINC COATED GALVANIZED STEEL OR STAINLESS STEEL.

## TYPICAL WOOD FRAMING NOTES:

- 1. SEE THIS SHEET FOR TYPICAL NOTES, DETAILS, AND NAILING.
- 2. ONLY LOAD BEARING AND/OR SHEAR WALLS ARE SHOWN. SEE ARCHITECTURAL DRAWINGS FOR ALL OTHER PARTITIONS.
- 3. ELEVATIONS SHOWN ON PLANS ARE FROM FINISHED FIRST FLOOR, DATUM ELEVATION □ 0 ≡ 0".
- 4. ALL EXTERIOR WALLS AND INTERIOR BEARING WALLS ARE 2□6 STUDS □ 16"OC TYPICAL, UNO.
- 5. ALL EXTERIOR STUD WALLS SHALL BE COMPLETELY SHEATHED WITH 15/32" APA RATED SHEATHING, EXPOSURE-1 (32/16) UNO, REGARDLESS SHEAR WALL LENGTH SHOWN ON PLAN.
- 6. INTERIOR STRUCTURAL SHEATHED WALLS (SHEAR WALL) ARE SHOWN ON PLAN ABOVE AND BELOW ANY OPENING AND ANY WALL ON THE SAME LINE OF SHEAR WALL SHALL BE SHEATHED WITH THE SAME PLYWOOD SHEATHING W/ 10d NAILS □ 6" & 12" O/C (EN, BN). BLOCK ALL PLYWOOD EDGES.
- 7. ALL STRUCTURAL WALL SHEATHING IS SPLICED ON 2" NOMINAL BLOCKING AT HORIZONTAL JOINTS, UNO.
- 8. STRUCTURAL FLOOR AND ROOF SHEATHING SHALL BE AS SPECIFIED BELOW. NOTE: 1/8" GAP SHALL BE PROVIDED BETWEEN ADJACENT PANELS. PANELS WITH GRADE STAMP INDICATION "SIZED FOR SPACING" MAY BE USED TO FACILITATE THIS REQUIREMENT. SEE PLANS FOR REQUIRED BOUNDARY AND EDGE NAILING NOT LISTED BELOW. FLOOR SHEATHING SHALL BE GLUED AND NAILED PER PLAN.
- ( SHEATHING EXTERIOR DECKS SHALL BE EXTERIOR RATED PLYWOOD.)

BN BOUNDARY NAILING EN□EDGE NAILING FN□FIELD NAILING

- 9. SEE PLANS FOR LOCATION OF NOMINAL 2X FLAT BLOCKING AT ROOF AND FLOOR SHEATHING PANEL JOINTS. SEE THIS SHEET FOR PLY CLIP REUIREMENTS AT UNBLOCKED ROOF PANEL JOINTS. T&G FLOOR SHEATHING IS NOT REQUIRED WHERE JOINTS ARE BLOCKED.
- 10. BRIDGING SHALL BE 23 NOMINAL, OR SIMPSON "NB" AND SHALL OCCUR AS SHOWN ON PLANS OR SHEET S0.02.
- 11. SAWN LUMBER GRADING SHALL BE PER "TIMBER SPECIFICATIONS" NOTED ON THESE PLANS.
- 12. (S) INDICATES METAL FRAMING CONNECTORS MANUFACTURED BY SIMPSON STRONG TIE COMPANY (CURRENT CATALOG) OR "USP" WITH E□UIVALENT ICC PUBLISHED VALUES AND SHALL BE INSTALLED PER SPECIFICATIONS, NO EXCEPTIONS.

#### NAILING SCHEDULE

(UNLESS OTHERWISE NOTED ON PLANS)

NAIL SPACING TO BE NOT LESS THAN REQUIRED PENETRATION. EDGE AND END DISTANCES SHALL BE NOT LESS THAN HALF THIS SPACING. ALL SPACING AND EDGE AND END DISTANCES SHALL BE SUCH AS TO AVOID SPLITTING OF THE WOOD. HOLES FOR NAILS, WHERE NECESSARY TO PREVENT SPLITTING, SHALL BE BORED OF A DIAMETER SMALLER THAN THAT OF THE NAILS. COMMON OR BOX NAILS MAY BE USED FOR NAILING AT TYPICAL CONNECTIONS NOTED BELOW (U.N.O.). FOR ALL CONNECTIONS OTHERWISE NOTED OR DETAILED ON PLANS, COMMON NAILS SHALL BE USED (SEE SCHEDULE BELOW).

,	
CONNECTION, NAIL TYPE NAILING	
OISTS TO SILL OR GIRDER, TOENAIL	(3) 8d
RIDGING TO JOIST, TOENAIL EACH END	(2) 8d
" □6" SUBFLOOR OR LESS TO EACH JOIST, ACE NAIL	(2) 8d
VIDER THAN 1" □6" SUBFLOOR TO EACH OIST, BLIND & FACE NAIL	(3) 8d
" SUBFLOOR TO JOIST OR GIRDER, BLIND ND FACE NAIL	(2) 16d
ILL PLATE TO JOIST OR BLOCKING, FACE AIL  16d	16" OC
OP PLATE TO STUD, END NAIL	(2) 16d
TUD TO SILL PLATE (4) 8d, TOENAIL OR EN	(2) 16d, D NAIL
OUBLE STUDS, FACE NAIL 16d	24" OC
OUBLE TOP PLATES, FACE NAIL 16d 16"OC (COI	MMON)
OP PLATES, LAPS, FACE NAIL  (8) 16d (UNO) (18)  SHEARWALL LOCA	
OP PLATES AT INTERSECTIONS, FACE NAIL	(2) 16d
ONTINUOUS HEADER, TWO PIECES 16d   16d   16" OC ALONG	EACH EDGE
EILING JOISTS TO PLATE, TOENAIL	(3) 8d
ONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d
EILING JOISTS, LAPS OVER PARTITIONS, ACE NAIL	(3) 16d
EILING JOISTS TO PARALLEL RAFTERS, ACE NAIL	(3) 16d
AFTER TO PLATE, TOENAIL	(3) 8d
BRACE TO EACH STUD & PLATE, FACE AIL	(2) 8d
"□8" SHEATHING OR LESS TO EACH EARING, FACE NAIL	(2) 8d
VIDER THAN 1"⊡8" SHEATHING TO EACH EARING, FACE NAIL	(3) 8d
UILT-UP CORNER STUDS 16d	24" OC
UILT-UP GIRDERS AND BEAMS  20d  32" OC AT TOP, E STGRD (2) 20d AT ENE  EA SPLICE (2) 160 BE	S AND

NAIL SCHEDULE (COMMON NAILS)				
SIZE	DIAMETER (IN)	LENGTH (IN)		
8d	0.131	2 <del>1</del> 2		
10d	0.148	3		
12d	0.148	3 1/4		
16d	0.162	3 1/2		
20d	0.192	4		

SHORTENED 10d COMMON NAILS MAY BE USED TO FASTEN WOOD STRUCTURAL PANELS UNO. USE THE FOLLOWING MINIMUM LENGTHS: 10d  $\Box 2\frac{1}{4}$ " FOR  $\frac{15}{32}$ " OR THINNER PANELS, 10d  $\Box 2\frac{3}{8}$ " FOR 1%2" PANELS, AND FULL LENGTH FOR 5%" OR THICKER PANELS.

#### **COLD-FORMED STEEL FRAMING NOTES:**

- 1. DESIGN, FABRICATION AND ERECTION OF COLD-FORMED STEEL FRAMING SHALL CONFORM TO THE SPECIFICATIONS AND STANDARD OF THE AMERICAN IRON AND STEEL INSTITUTE (AISI), AS CONTAINED IN THE "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS", LATEST EDITION, INCLUDING ALL APPLICABLE AMENDMENTS.
- 2. ALL COLD-FORMED STEEL FRAMING SHALL BE ERECTED PLUMB AND TRUE TO LINE. TEMPORARY BRACING SHALL BE INSTALLED AND LEFT IN PLACE UNTIL OTHER MEANS IS PROVIDED TO ADE UATELY BRACE THE STRUCTURE.
- 3. COLD-FORMED STEEL GRADES:
  - A. 18 GA (43 MILS) OR THINNER .......ASTM A1003 GRADE 33 (FY □ 33 KSI) B. 16 GA (54 MILS) AND THICKER ......ASTM A1003 GRADE 50 (FY ☐ 50 KSI)
- 4. ALL COLD-FORMED STEEL FRAMING SHALL BE BRACED AS REQUIRED BY SECTION D3 OF THE AISI SPECIFICATION.
- 5. SUBMIT COLD-FORMED STEEL FRAMING SHOP DRAWINGS AND SPECIFICATIONS TO THE SEOR FOR REVIEW PRIOR TO FABRICATION.
- 6. COLD-FORMED STEEL STUDS AND TRACKS ARE TO BE ATTACHED WITH SHEET METAL SCREWS (SMS) WITH SIZES CALLED OUT ON THE DETAILS. PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHOULD NOT BE LESS THAN 3 EXPOSED THREADS. SCREWS ARE TO BE INSTALLED AND TIGHTENED IN

ACCORDANCE WITH SCREW MANUFACTURER'S RECOMMENDATIONS.

# **CONCRETE MASONRY NOTES:**

1. CONCRETE MASONRY UNITS (CMU) SHALL DEVELOP THE FOLLOWING MINIMUM 28 DAY PRISM COMPRESSIVE STRENGTHS IN ACCORDANCE WITH THE BUILDING CODE:

MINIMUM 28 DAY COMPRESSIVE STRENGTH				
OCATION IIII		TYPE S GROUT MORTAR PER ASTM C270  GROUT PER CBC 2103A.		
MU U.N.O.	2500	2500	2500	

- 2. CONCRETE BLOCK SHALL CONFORM TO ASTM C90 MEDIUM WEIGHT. USE OF LIGHT WEIGHT BLOCK REQUIRES PRIOR WRITTEN APPROVAL BY THE SEOR.
- 3. PRISM TEST SHALL BE PERFORMED FOR CMU WITH ...... OVER 2000 PSI FOR CBC
- 4. VERTICAL REINFORCING SHALL BE FULL HEIGHT OF WALL AND SHALL BE BRACED AT 6E8" MAXIMUM TO PREVENT MOVEMENT WHILE GROUTING.
- 5. HORIZONTAL REINFORCING SHALL BE IN BOND BEAM UNITS AND TIED SECURELY TO VERTICAL REINFORCING.
- 6. DOWELS, ANCHORS, AND OTHER EMBEDDED ITEMS SHALL BE TIED SECURELY IN PLACE TO PREVENT MOVEMENT WHILE GROUTING. WET SETTING OR STABBING IS NOT ALLOWED.
- 7. MAXIMUM GROUT LIFTS SHALL NOT EXCEED 8 € 0" AND CLEANOUTS AT THE BOTTOM OF ALL CELLS SHALL BE USED UNLESS THE LIFT IS 4 EO" OR LESS. THE CLEANOUTS SHALL BE SEALED BEFORE GROUTING. GROUT FOR EACH POUR SHALL BE STOPPED 1 1/2" BELOW THE TOP OF A BLOCK COURSE EXCEPT AT THE FINAL COURSE. ALL GROUT SHALL BE THOROUGHLY CONSOLIDATED BY VIBRATING IMMEDIATELY AFTER PLACING. SHAKING OR RODDING REBAR IS NOT ALLOWED. FILL ALL CELLS WITH
- 8. BLOCK SHALL BE PLACED IN RUNNING BOND AND SHALL BE 8" 16" NOMINAL UNITS, UNO. WHERE BLOCK IS RE□UIRED TO BE PLACED IN STACK BOND (SEE ARCH), OPEN-ENDED UNITS (I.E., "SPEED BLOCK") SHALL BE USED.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SAFETY OF LIFT HEIGHT FOR OPEN ENDED OR FIELD MODIFIED BLOCKS.
- 10. LAYOUT OF MASONRY BLOCK UNITS SHALL BE RUNNING BOND, U.N.O. BLOCK MODULES/MORTAR JOINTS SHOWN ON THESE DRAWINGS ARE FOR PRESENTATION. PURPOSES ONLY, AND NOT INTENDED TO SUPERCEDE ARCHITECTURAL DESIGN RE UIREMENTS.
- 11. CMU WALL REINFORCEMENT SEE PLANS & ELEVATIONS
- 12. PROVIDE VERTICAL CONTROL JOINTS IN CMU WALLS AS SHOWN ON PLAN. UNLESS NOTED OTHERWISE VERTICAL CONTROL JOINTS SHALL OCCUR AT 25 ED" OC MAXIMUM ALONG WALL LENGTH, AT FOUNDATION STEPS, FLOOR OR ROOF JOINTS, WALL HEIGHT CHANGES, AND 24" MINIMUM PAST ONE SIDE OF OPENINGS □ 6 □ 0" WIDE, UNO ON PLANS.
- 13. WHEN THE AMBIENT TEMPERATURE FALLS BELOW 40°F, OR EXCEEDS 100°F, PROVSIONS OF TMS602 / ACI 530 / ASCE6. ARTICLE 1.8C OR ARTICLE 1.8D SHALL BE IMPLEMENTED.

#### **ADDITIONAL NOTES PER LADBS:**

- CONTRACTORS RESPONSIBLE FOR THE CONSTRUCTION OF A WIND OR SEISMIC FORCE RESISTING SYSTEM/COMPONENT LISTED IN THE "STATEMENT OF SPECIAL INSPECTION" SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE LABDS INSPECTORS AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON SUCH SYSTEM OR COMPONENT PER SEC 1709.1.
- 2. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS RE UIRED FOR FIELD WELDING, CONCRETE STRENGTH F® □ 2500 PSI, HIGH STRENGTH BOLTING, SPRAYED-ON FIREPROOFING, ENGINEERED MASONRY, HIGH-LIFT GROUTING, PRE-STRESSED CONCRETE, HIGH LOAD DIAPHRAGMS AND SPECIAL MOMENT-RESISTING CONCRETE FRAMES.
- 3. FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED
- 4. A COPY OF THE LOS ANGELES RESEARCH REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE AT THE JOB SITE.
- 5. POWER-DRIVEN FASTENERS SHALL NOT BE USED TO ANCHOR SILL PLATES EXCEPT AT INTERIOR NONBEARING WALLS NOT DESIGNED AS SHEAR WALLS.
- 6. EXTERIOR ANCHOR BOLTS AND POST BASES SHALL BE GALVANIZED AND EACH ANCHOR BOLTS SHALL HAVE AT LEAST TWO GALVANIZED NUTS ABOVE THE BASE PLATE.
- 7. THE TOP OF EXTERIOR PEDESTALS MUST BE SLOPED FOR POSITIVE DRAINAGE.
- 8. ALL MAIN FOOTING AND GRADE BEAM REINFORCEMENT STEEL SHALL BE BENT INTO THE INTERSECTING FOOTING AND FULLY DEVELOPED AROUND EACH CORNER AND INTERSECTION.
- 9. CONTINUOUS INSPECTION BY A LOS ANGELES CITY LICENSED DEPUTY INSPECTOR IS REUUIRED FOR ALL STRUCTURAL CONNECTIONS, FOOTINGS, GRADE BEAMS AND RETAINING WALLS DURING INSTALLATION.
- 10. STRUCTURAL OBSERVATION BY THE ENGINEER OR ARCHITECT OF RECORD IS REUIRED IN ACCORDANCE WITH LA INFORMATION BULLETIN P/BC 2008-024.
- 11. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY LADBS FOR STRUCTURAL STEEL, REINFORCING STEEL & LIGHT GAUGE STEEL. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS RE UIRED.
- 12. SHOP WELDS MUST BE PERFORMED IN A LICENSED LADBS FABRICATOR'S SHOP.
- 13. LADBS LICENSED FABRICATOR IS REQUIRED FOR STRUCTURAL STEEL.
- 14. GLUE-LAMINATED TIMBERS MUST BE FABRICATED IN A LADBS LICENSED SHOP. IDENTIFY GRADE SYMBOL AND LAMINATION SPECIES PER 2015 NDS SUPPLEMENT TABLE 5A.
- 15. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE
- 16. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR
- 17. ALL BOLT HOLES SHALL BE DRILLED 1/32 TO 1/16" OVERSIZED.

GROUT.

- 18. CONSTRUCTION SHALL COMPLY WITH PART 3 OF TMS 602-13/ACI 530.1-13/ASCE 6-13. A. REINFORCEMENT SHALL BE SUPPORTED TO PREVENT DISPLACEMENTS BEYOND THE TOLERANCES PRIOR TO GROUTING. (3.4B OF TMS 602-13/ACI 530.1-13/ASCE 6-13)
- B. CLEANOUTS SHALL BE PROVIDED FOR ALL GROUT POURS OVER 5 4". (3.2 F OF TMS 602-13/ACI 530.1-13/ASCE 6-13) GROUT LIFT HEIGHT SHALL NOT EXCEED 12E8" WHEN THE MASONRY HAS CURED FOR 4-HRS., THE GROUT SLUMP IS MAINTAINED BETWEEN 10 AND 11IN., AND NO INTERMEDIATE REINFORCED BOND BEAMS ARE PLACED BETWEEN THE TOP AND
- BOTTOM OF THE POUR HEIGHT. OTHERWISE GROUT LIFT HEIGHT SHALL NOT EXCEED 5 4". (3.5 D OF TMS 602-13/ACI 530.1-13/ASCE 6-13) D. ALL CELLS AND SPACED CONTAINING REINFORCEMENT SHALL BE FILLED WITH
- 19. PIPES AND CONDUITS EMBEDDED IN MASONRY SHALL NOT REDUCE THE REQUIRED STRENGTH. (3.2.2)
- 20. JOINT REINFORCEMENT USED IN MASORNY EXPOSED TO EARTH OR WEATHER SHALL BE STAINLESS STEEL OR PROTECTED FROM CORROSION BY MILL GALVINAZED, HOT-DIP GALVANIZED, OR EPOXY COATING. (6.4.2 AND 6.4.3)

### **POST INSTALLED ANCHORS:**

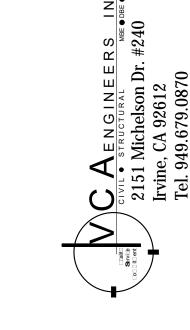
- 1. ANCHOR DIAMETER REFERS TO THE THREAD SIZE FOR THE WEDGE & SHELL CATEGORIES AND TO THE ANCHOR OUTSIDE DIAMETER FOR THE SLEEVE
- 2. APPLY PROOF TEST LOADS TO WEDGE & SLEEVE ANCHORS WITHOUT REMOVING THE NUT IF POSSIBLE. IF NOT, REMOVE NUT & INSTALL A THREADED COUPLER TO THE SAME TIGHTNESS OF THE ORIGINAL NUT USING A TOR UE WRENCH & APPLY LOAD.
- 3. FOR SLEEVE/SHELL INTERNALLY THREADED CATEGORIES, VERIFY THAT THE ANCHOR IS NOT PREVENTED FROM WITHDRAWING BY A BASEPLATE OR OTHER FIXTURES. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE FIXTURE(S)
- 4. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY THE FIXTURE(S).
- 5. SHELL TYPE ANCHORS MUST BE TESTED AS FOLLOWS: VISUALLY INSPECT 25 FOR FULL EXPANSION AS EVIDENCED BY THE LOCATION OF THE EXPANSION PLUG IN THE ANCHOR BODY. PLUG LOCATION OF A FULLY EXPANDED ANCHOR SHOULD BE AS RECOMMENDED BY THE MANUFACTURER OR, IN THE ABSENCE OF SUCH RECOMMENDATION, AS DETERMINED ON THE JOB SITE FOLLOWING THE MANUFACTURERS INSTALLATION INSTRUCTIONS, AND PROOF LOAD 5 AS INDICATED IN THE TABLE ABOVE, BUT NOT LESS THAN THREE ANCHORS PER DAY FOR EACH DIFFERENT PERSON OR CREW INSTALLING ANCHORS, OR TEST 50 OF THE INSTALLED ANCHORS PER 2624(d)
- 6. TEST E□UIPMENT IS TO BE CALIBATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES.
- 7. TOR UE TEST VALUES FOR SHELL TYPE ANCHORS ARE OMMITTED DUE TO LACK OF DATA. TOR UE TESTING CAN OCCUR ON AN INDIVIDUAL BASIS WHEN TEST PROCEDURES ARE SUBMITTED AND APPROVED BY THE ENFORCEMENT AGENCY. TABULATED VALUES MAY BE FORTHCOMING ONCE THE ENFORCEMENT AGENCY HAS MORE DATA TO EVALUATE THE FEASIBLITY OF STANDARD TOR UE VALUES.
- 8. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED
- A. HYDRAULIC RAM METHOD: THE ANCHOR SHOULD HAVE NO OBSERVABLE MOVEMENT AT THE APPLCABLE TEST LOAD. FOR WEDGE AND SLEEVE TYPE ANCHORS, A PRACTICAL WAY TO DETERMINE OBSERVABLE MOVEMENT IS THAT THE WASHER UNDER THE NUT BECOMES LOOSE
- B. TOR UE WRENCH METHOD: THE APPLICABLE TEST TOR UE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE OR SLEEVE TYPE: ONE-HALF (1/2) TURN OF THE NUT. 3/8 IN. SLEEVE ANCHOR ONLY: ONE-□UARTER (1/4) TURN OF THE NUT.
- 9. TESTING SHOULD OCCUR 24 HOURS MINIMUM AFTER INSTALLATION OF THE SUBJECT ANCHORS.
- 10. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER DRIVEN PINS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST- TENSIONED) LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.
- 11. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE SPECIAL INSPECTOR/INSPECTOR OF RECORD.

#### 12. TEST LOADS:

HARDROCK OR LIGHTWEIGHT CONCRETE						
ANCHOR	WEDGE		SLEEVE		SHELL	
DIA (IN)	LOAD (LBS)	TOR□UE (FT-LBS)	LOAD (LBS)	TOR□UE (FT-LBS)	LOAD (LBS)	TOR□UE (FT-LBS)
1/4	800	10	400	4	1000	-
5/16	-	-	400	5	1400	-
3/8	1100	25	700	10	1800	-
1/2	2000	50	900	20	2700	-
5/8	2300	80	1100	45	3700	-
3/4	3700	150	1400	90	5400	-
1	5800	250	-	-	-	-

#### **CONTRACTOR RESPONSIBILITY NOTE:**

- 1. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A MAIN LATERAL-FORCE-RESISTING SYSTEM, DESIGNATED ON PLANS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO DSA AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
- A. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS.
- B. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL.
- C. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTORS ORGANIZATION, THE METHOD AND FREDUENCY OF REPORTING AND THE DISTRIBUTION OF THE REPORTS.
- D. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.



# TYPICAL ABBREVIATIONS

JST

JOIST

ANCHOR BOLT

ABOVE

ABV

ADJ

ARCH

BLDG

BLKG

BLW

BM

B.O.

BOTT

BTWN

CLR

CMU

COL

CONC

CONN

CONT

CP

DBL

DEMO

DET

DIA

DIAG

DIM

DO

DWG

ΕN

E.O.

EOR

EXP

EXT

FIN

FLR

FND

F.O.

DEMOLITION

DETAIL

DIAMETER

DIAGONAL

DITTO

FACH

EMBED EMBEDMENT

ELEC ELECTRICAL

ELEV ELEVATION

DRAWING

**EXISTING** 

EACH FACE

**EDGE NAILING** 

EACH SIDE OR EDGE

EDGE OF

E⊓UAL

SCREW

**EACH WAY** 

EXPANSION

**EXTERIOR** 

FIELD NAILING

FOUNDATION

FACE OF

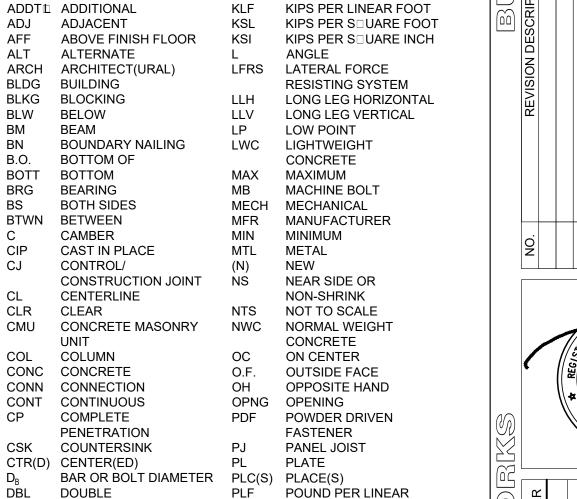
FINISH

FLOOR

EUUIP EUUIPMENT

**EXPANSION JOIST** 

**DIMENSION** 



POUND PER LINEAR PLF PLYWD PLYWOOD PREFAB PREFABRICATED PSF POUND PER S□UARE POUND PER S□UARE PSI PRESSURE TREATED OR POST TENSION □UANTITY RAD. R RADIUS RFF REFERENCE REINF REINFORCING REDD REDUIRED

SILL BOLT SB SAW CUT OR SLIP ENGINEER OF RECORD CRITICAL SCHED SCHEDULE SEOR STRUCTURAL ENGINEER ON RECORD SHTG SHEATHING

> SIMILAR SHEET METAL SCREW SILL NAIL SOG SLAB ON GRADE SUARE STAINLESS STEEL STD STANDARD STGRD STAGGERED

> > TOS

UNO

W/O

TYP

FAR SIDE OR FIELD STIFF STIFFENER SCREW STL STEEL FRMG FRAMING STRUCT STRUCTURAL FOOT OR FEET TOP AND BOTTOM T&B FTG FOOTING THICK THK **GIRDER** T.O. TOP OF GAGE TOP OF MASONRY TOM

GALV GALVANIZED **HEADED ANCHOR BOLT** HAR HD HOLDDOWN HDR HEADER HGR HANGER HOOK

HIGH POINT HIGH STRENGTH HOLLOW STRUCTURAL STEE

HEIGHT

INCH

HORIZ

ΗТ

HORIZONTAL

WIDE FLANGE WF WLD WELDED WO WHERE OCCURS WP WORK POINT WT WEIGHT WWF WELDED WIRE FABRIC

TOP OF STEEL

UNLESS NOTED

**OTHERWISE** 

VERTICAL

WITHOUT

WITH

TYPICAL

WORK ORDER NO #E170517

PLAN FILE NO