STRUCTURAL OBSERVATION REQUIREMENTS	IRFQ'D	NOTES
FOUNDATIONS	1,240	
1. ISOLATED & CONTINUOUS FOOTINGS, STEM WALLS		
2. MAT FOUNDATIONS	X	
3. PIERS, CAISSONS, PILES, PILE CAPS	111111	
4. RETAINING WALLS, HILLSIDE CONSTRUCTION		
SHEAR WALLS		
<ol> <li>LIGHT-FRAMED SHEAR WALLS, INCLUDING HOLDOWN INSTALLATION AND SHEATHING NAILING</li> </ol>		
<ol> <li>CONCRETE SHEAR WALLS, INCLUDING REINFORCING STEEL PLACEMENT AND CONCRETE PLACEMENT</li> </ol>	Х	
<ol> <li>MASONRY SHEAR WALLS, INCLUDING REINFORCING STEEL PLACEMENT AND GROUT PLACEMENT</li> </ol>		
4. STEEL SHEAR WALLS		
MOMENT-RESISTING FRAMES		
<ol> <li>CONCRETE MOMENT—RESISTING FRAMES, INCLUDING REINFORCING STEEL PLACEMENT &amp; CONCRETE PLACEMENT</li> </ol>		
2. STEEL MOMENT-RESISTING FRAMES		
BRACED FRAMES		
1. STEEL BRACED FRAMES		
HORIZONTAL ROOF AND FLOOR DIAPHRAGMS		
1. CONCRETE	X	
2. STEEL DECK, CONCRETE ON STEEL DECK		
3. WOOD		
4. CHORDS AND/OR COLLECTORS		
Section Company		
OTHER		Y

WHERE INDICATED WITH AN "X" BELOW, THE CONTRACTOR SHALL SUBMIT CERTIFICATES OF CONFORMANCE, SHOP DRAWINGS, CALCULATIONS, AND DETAILS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. WHERE CALCULATIONS AND DETAILS ARE REQUIRED, THE SUBMITTAL SHALL BE SEALED AND SIGNED BY A REGISTERED DESIGN PROFESSIONAL IN THE STATE OF CALIFORNIA. FOR ADDITIONAL INFORMATION REGARDING SUBMITTALS, SEE SPECIFICATIONS.

ITEM	CERTIFICATES	SHOP DRAWINGS	CALCULATIONS & DETAILS	REMARKS
CONCRETE, REINFORCING	X	X		
CONCRETE, MIX DESIGN		X		
CONCRETE, CEMENT	X			
CONCRETE, FINE AGGREGATES	X			
CONCRETE, COARSE AGGREGATES	X			
CONCRETE, ADMIXTURES	X			
SHOTCRETE, MIX DESIGN				
PRECAST CONCRETE MEMBERS				
MASONRY, REINFORCING				
MASONRY, MORTAR MIX DESIGN				
MASONRY, GROUT MIX DESIGN				
MASONRY, UNITS				
MASONRY, LIME				
STRUCTURAL STEEL	X	X		
OPEN WEB JOISTS				
METAL DECKING WITH STUD LAYOUT	3			
COLD-FORMED STRUCTURAL STEEL				
METAL STAIRS				
TEMPORARY SHORING SYSTEM				

## **ABBREVIATIONS**

114.0.440	NO CHARLES AND THE CONTRACTOR		FUNDAMENTAL DUPL MER INSCRIPTION		
A.B.	ANCHOR BOLT	F.F.	FINISH FLOOR	R	RADIUS
ACI	AMERICAN CONCRETE INSTITUTE	F.G.	FINISH GRADE	R.C.	RELATIVE COMPACTION
ADDT'L	ADDITIONAL AD IACENT	FIN FL	FINISH FLOOR	RDWD REINF	REDWOOD  REINFORCING REINFORCEMENT
ADJ AISC	ADJACENT AMERICAN INSTITUTE OF STEEL	FNDN	FOUNDATION	KLIINF	REINFORCING, REINFORCEMENT REINFORCED
AISC	CONSTRUCTION	F.O.C.	FACE OF CONCRETE	REQ'D	REQUIRED
ARCH	ARCHITECTURAL	F.O.F.	FACE OF FINISH	RET	RETAIN, RETAINING
ASTM	AMERICAN STANDARDS TESTING AND	F.O.S.	FACE OF STUD	R.O.	ROUGH OPENING
	MATERIALS	F.O.W.	FACE OF WALL	K.O.	NOODIT OF ENING
AWS	AMERICAN WELDING SOCIETY	FRP	FIBER REINFORCED PLASTIC		
AWSS	AUXILIARY WATER SUPPLY SYSTEM	FT	FOOT, FEET		
&	AND	FTG	FOOTING	S.A.D.	SEE ARCHITECTURAL DRAWING
@	AT			S.E.D.	SEE ELECTRICAL DRAWING
	Water and appropriate	GA	GAGE	S.L.D.	SEE LANDSCAPE DRAWING
BAL	BALANCE	GALV	GALVANIZED	S.M.D.	SEE MECHANICAL DRAWING
BLDG	BUILDING			S.P.D.	SEE PLUMBING DRAWING
BLKG	BLOCKING	H, HORIZ	HORIZONTAL	SCHED	SCHEDULE
BM	BEAM	H.R.	HAND RAIL	SEC	SECTION
B, BOT	ВОТТОМ	H.S.B.	HIGH STRENGTH BOLT	SFBC	SAN FRANCISCO BUILDING COL
B.O.	BOTTOM OF	HSS	HOLLOW STRUCTURAL SECTION	SHT	SHEET
B.O.E.	BOTTOM OF EXCAVATION	*V8*W	THE NAME OF THE PARTY OF THE PA	SHTG	SHEATHING
B.O.F.	BOTTOM OF FOOTING	ICC	INTERNATIONAL CODE COUNCIL	SIM	SIMILAR
B.O.S.	BOTTOM OF STEEL	I.D.	INSIDE DIAMETER	S.O.G.	SLAB-ON-GRADE
B.O.W. B.S.	BOTTOM OF WALL BOTH SIDE	1.F.	INNER FACE	SPEC	SPECIFICATION
BET, BTWN		IN	INCHES	S.S.	STAINLESS STEEL
DEI, DIWN	BETWEEN	INFO	INFORMATION	SQ	SQUARE
CBC	CALIFORNIA BUILDING CODE	INSUL	INSULATION	STD	STANDARD
CCSF	CITY AND COUNTY OF SAN	INT	INTERIOR	STIFF	STIFFENER
.0001	FRANCISCO	JT	JOINT	STIR STL	STIRRUP
CHK PL	CHECKERED PLATE	UI	JOINT	STRUCT	STEEL STRUCTURAL
C.J.	CONTROL JOINT	1	ANGLE	SYM	SYMMETRICAL
C.J.P.	COMPLETE JOINT PENETRATION	LLH	LONG LEG HORIZONTAL	3111	STMMETMORE
Q.	CENTER LINE	LLV	LONG LEG VERTICAL	T	TOP
CLR	CLEAR	LVL	LAMINATED VENEER LUMBER	Т & В	TOP AND BOTTOM
CMU	CONCRETE MASONRY UNITS	L.W.C.	LIGHT WEIGHT CONCRETE	THK	THICK
COL	COLUMN	Design Name (	CHARLES AND STATE AND STAT	THRU	THROUGH
CONC	CONCRETE	MAT'L	MATERIAL	T.O.	TOP OF
CONN	CONNECTION	MAX	MAXIMUM	T.O.C.	TOP OF CONCRETE
CONT	CONTINUOUS	MECH	MECHANICAL	T.O.S.	TOP OF STEEL
CTR	CENTER	MET	METAL	T.O.W.	TOP OF WALL
201	BOURIE	MIL	MILLIMETER	TYP	TYPICAL
DBL	DOUBLE	MIN	MINIMUM		NORTH LITTE IN COMMUNICATION, CARRY THE CO.
DET	DETAIL	MISC	MISCELLANEOUS	U.O.N.	UNLESS OTHERWISE NOTED
DIA, Ø	DIAMETER			Child Contrasts	100 May 25 (100 M/2000)
DIAG DIM	DIAGONAL DIMENSION	(N)	NEW	V, VERT	VERTICAL
DIR	DIRECTION	NDT	NON-DESTRUCTIVE TESTING	VIF	VERIFY IN FIELD
DN	DOWN	N.I.C.	NOT IN CONTRACT		
DO	DITTO	N.T.S.	NOT TO SCALE	W/	WITH
DWG	DRAWING	NO.	NUMBER	W/0	WITHOUT
		NOM	NOMINAL NEIGHT CONCERTS	WD	WOOD
(E)	EXISTING	N.W.C.	NORMAL WEIGHT CONCRETE	WF	WIDE FLANGE
EA	EACH	0.0	ON OFNITED	W.R.T.	WITH RESPECT TO
E.F.	EACH FACE	O.C. O.D.	ON CENTER OUTSIDE DIAMETER	WWE	WEIGHT
E.J.	EXPANSION JOINT	0.b.	OUTER FACE	W.W.F.	WELDED WIRE FABRIC
EL, ELEV	ELEVATION	O.H.	OPPOSITE HAND		
ELEC	ELECTRICAL	OPNG	OPENING		
EMBED	EMBEDMENT	OPP	OPPOSITE		
E.N.	EDGE NAILING	20.W			
EQ	EQUAL	P.J.P.	PARTIAL JOINT PENETRATION		
EQUIP	EQUIPMENT	PL	PLATE		
E.S.	EACH SIDE	P.L.	PROPERTY LINE		
E.W.	EACH WAY	PLF	POUNDS PER LINEAR FOOT		
EXT	EXTERIOR	PLYWD	PLYWOOD		
		PSI	POUNDS PER SQUARE INCH		
		PSF	POUNDS PER SQUARE FOOT		
		PSI	PARALLEL STRAND LUMBER		

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CITY DISTRIBUTION DIVISION

AUXILIARY WATER SUPPLY SYSTEM WORK

MA-S1.4

STRUCTURAL GENERAL NOTES IV

DISTRICT

PROJECT ID

CONTRACT No.

04-0G3501

PLAN APPROVAL DATE

PSL

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES

COUNTY

0400000325 R0.94/4.05 O LIMITATION TO LEGISLA

ROUTE

PARALLEL STRAND LUMBER

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APPROVED

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