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METAL REINFORCEMENT (MASONRY): REINFORCING SHALL CONFORM TO ASTM A-615, GRADE 60 (GRADE A706 FOR WELDED BARS UNLESS OTHERWISE NOTED). DETAIL, FABRICATE AND PLACE PER ACI 315 AND ACI 318. SPLICES SHALL BE AS NOTED BELOW.

MINIMUM LAP SPlice LENGTHS "Ld" FOR TYPICAL CONDITIONS (1)					
BAR SIZE	CORNER BARS	FOUNDATION DOWELS	VERTICAL WALL REINFORCING	HORIZONTAL WALL REINFORCING	LONG. LINTEL REINFORCING
#3	18"	18"	18"	18"	18"
#4	24"	24"	24"	33"	33"
#5	30"	30"	36"	30"	48"
#6	36"	36"	60"	36"	60"
#7	42"	42"	-(2)	-(2)	-(2)
#8	48"	48"	-(2)	-(2)	-(2)

- (1) FOR SPECIAL SPlice CONDITIONS, REFER TO STRUCTURAL DRAWINGS FOR LAP LENGTH REQUIREMENTS.  
(2) MECHANICAL COUPLERS ARE REQUIRED

VERTICAL BAR POSITIONERS: VERTICAL REINFORCING SHALL BE SECURED AGAINST DISPLACEMENT PRIOR TO GROUTING BY "D/A 811" VERTICAL BAR POSITIONERS FOR SINGLY REINFORCED CELLS AND "D/A 816" VERTICAL BAR POSITIONERS FOR DOUBLY REINFORCED CELLS BY DUR-O-WALL INC. OR PRE-APPROVED EQUAL.

ANCHORED VENEER (MASONRY AND STONE UNITS): ALL VENEER ANCHORAGE ATTACHMENTS SHALL CONFORM TO IBC SECTION 1405.5 FOR SEISMIC DESIGN CATEGORY D.

ANCHOR TIES AND JOINT REINFORCEMENT SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153, CLASS B-2 AND SHALL BE MANUFACTURED BY DUR-O-WALL, INC. OR PRE-APPROVED EQUAL. ANCHOR TIES SHALL BE SPACED 16"O.C. EACH WAY MAXIMUM, AND SHALL HAVE A LIP OR HOOK ON THE EXTENDED LEG THAT WILL ENGAGE OR ENCLOSE A HORIZONTAL JOINT REINFORCEMENT WIRE OF NO. 9 GAUGE OR EQUIVALENT. THE JOINT REINFORCEMENT SHALL BE CONTINUOUS WITH BUTT SPLICES BETWEEN TIES PERMITTED.

ANCHORAGE OF VENEER TO BACKING SHALL BE AS FOLLOWS:

BACKING	VENEER TIE	ATTACHMENT TO BACKING
METAL STUDS	STANDARD DUR-O-WALL DA213S	(2) 1-1/2" LONG COPOLYMER COATED DA807 SCREWS (MIN. 1/2" PENETRATION PAST THE FACE OF METAL STUD)
MASONRY	DUR-O-WALL DA3600S SEISMIC LADUR-EYE OR DA3700S SEISMIC DUR-O-EYE	EMBED SEISMIC DUR-O-EYE OR LADUR EYE IN MASONRY. LAP SIDE RODS 6 IN.
CONCRETE	STANDARD DUR-O-WALL DA5213S	(1) 1/4" DIAMETER EXPANSION ANCHOR WITH MINIMUM EMBEDMENT OF 2 IN.
STRUCTURAL STEEL	STANDARD DUR-O-WALL DA700	STANDARD DUR-O-WALL DA709 WELDED TO STEEL SUPPORT.

## STRUCTURAL STEEL

### DETAILING, FABRICATION AND ERECTION

ALL WORKMANSHIP SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION, 9TH EDITION, THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, JUNE 1, 1989 INCLUDING SUPPLEMENT NO. 1, DECEMBER 17, 2001 AND THE AISC CODE OF STANDARD PRACTICE, MARCH 2000.

STEEL MEMBERS ARE EQUALLY SPACED BETWEEN COLUMNS AND/OR DIMENSION POINTS UNLESS NOTED OTHERWISE.

ALL STEEL FABRICATION SHALL BE PERFORMED BY A FABRICATOR CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION. THE FABRICATOR SHALL BE DESIGNATED AN AISC CERTIFIED PLANT, CATEGORY STANDARD AT THE TIME OF BID AND SHALL MAINTAIN THIS CERTIFICATION FOR THE DURATION OF THE PROJECT.

ALL STEEL ERECTION SHALL BE PERFORMED BY AN ERECTOR WITH A MINIMUM OF 5 YEARS EXPERIENCE ON PROJECTS OF EQUIVALENT SIZE AND COMPLEXITY.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDS AND JOINT PREPARATIONS THAT INCLUDE BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDS, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, WELD EXTENSION TABS, COFES, SURFACE ROUGHNESS VALUES AND TAPERS OF UNEQUAL PARTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH ALL CURRENT OSHA REQUIREMENTS.

HOLES, COFES OR OTHER CUTS OR MODIFICATIONS OF THE STRUCTURAL STEEL MEMBERS SHALL NOT BE MADE IN THE FIELD WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

### MATERIAL PROPERTIES

WIDE FLANGE SECTIONS: ASTM A992 (Fy = 50 KSI)

OTHER SHAPES AND PLATES: ASTM A36 (Fy = 36 KSI) TYP. U.N.O.; ASTM A572 (Fy = 50 KSI) WHERE INDICATED

STRUCTURAL STEEL PIPES: ASTM A53, GRADE B, TYPE E OR S (Fy = 35 KSI)

STEEL STRUCTURAL TUBING: ASTM A500, GRADE B, (Fy = 46 KSI)

MACHINE BOLTS (M.B.): ASTM A307, GRADE A

HIGH-STRENGTH BOLTS: A325-ASTM F1852, A490-ASTM A490

ANCHOR BOLTS (A.B.): ASTM F1554, GRADE 36, CLASS 2A TYPICAL, UNLESS OTHERWISE NOTED, ASTM F1554, GRADE 105 WHERE INDICATED.

### WELDING

STRUCTURAL STEEL: WELD IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" AWS D-1.1.

REINFORCING STEEL: WELD IN ACCORDANCE WITH "REINFORCING STEEL WELDING CODE" AWS D-1.4. WELD ONLY WITH SPECIFIC APPROVAL OF THE STRUCTURAL ENGINEER. IN NO CASE SHALL A WELD BE MADE WITHIN 6 BAR DIAMETERS OF A "COLD BEND".

CERTIFICATION: ALL WELDING SHALL BE PERFORMED BY WABO/AWS CERTIFIED WELDERS. WELDERS SHALL BE PREQUALIFIED FOR EACH POSITION AND WELD TYPE WHICH THE WELDER WILL BE PERFORMING.

WELD TABS (ALSO KNOWN AS WELD "EXTENSION" TABS OR "RUN OFF" TABS) SHALL BE USED. AFTER THE WELD HAS BEEN COMPLETED THE WELD TABS SHALL BE REMOVED AND THE WELD END GROUND TO A SMOOTH CONTOUR. WELD "DAMS" OR "END DAMS" SHALL NOT BE USED.

THE PROCESS CONSUMABLES FOR ALL WELD FILLER METAL INCLUDING TACK WELDS, ROOT PASS AND SUBSEQUENT PASSES DEPOSITED IN A JOINT SHALL BE COMPATIBLE.

ALL WELD FILLER METAL AND WELD PROCESS SHALL PROVIDE THE TENSILE STRENGTH CHARPY V-NOTCH RATINGS AS FOLLOWS:

### GRAVITY FRAME

WELD TYPE	FILLER METAL TENSILE STRENGTH	CHARPY V-NOTCH (CVN) RATING
FILLET	70 KSI	-----
PARTIAL PENETRATION	70 KSI	-----
COMPLETE PENETRATION	70 KSI	20 FT-LBS @ -20 DEG F

### LATERAL FRAME

WELD TYPE	FILLER METAL TENSILE STRENGTH	CHARPY V-NOTCH (CVN) RATING
FILLET	70 KSI	20 FT-LBS @ -20 DEG F
PARTIAL PENETRATION	70 KSI	20 FT-LBS @ -20 DEG F
COMPLETE PENETRATION	70 KSI	20 FT-LBS @ -20 DEG F AND 40 FT-LBS @ 70 DEG F

### WELDED CONNECTIONS INSPECTION:

- ALL WELDING SHALL BE CHECKED BY VISUAL MEANS AND BY OTHER METHODS DEEMED NECESSARY BY THE WELDING INSPECTOR.
- ALL FULL PENETRATION WELDS TO MEMBERS WHICH FORM A PORTION OF THE LATERAL LOAD RESISTING FRAME SHALL BE CHECKED 100 PERCENT BY ULTRASONIC TESTING.
- THE CONTRACTOR SHALL SUBMIT A WRITTEN WELDING PROCEDURE SPECIFICATION FOR SHOP AND FIELD WELDING OF ALL LATERAL LOAD RESISTING FRAME CONNECTIONS FOR APPROVAL TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO FABRICATION.

THE STANDARDS OF ACCEPTANCE FOR WELDS TESTED BY ULTRASONIC METHODS SHALL CONFORM TO AWS D1.1.

ALL WELDS FOUND TO BE DEFECTIVE SHALL BE REPAIRED AND REINSPECTED BY THE SAME METHODS ORIGINALLY USED, AND THIS REPAIR AND REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.

### STEEL GENERAL REQUIREMENTS

HIGH-STRENGTH BOLTS: ALL A325 HIGH-STRENGTH BOLTS (HSB) SHALL BE ASTM F1852, UNLESS OTHERWISE DESIGNATED AS A490. ALL HSB DESIGNATED AS A490 SHALL BE ASTM F2280. ALL HSB SHALL BE BY "LEJEUNE BOLT COMPANY" OR PRE-APPROVED EQUAL AND SHALL BE INSTALLED PER SECTION 8.2 OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", JUNE 2000 BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RSCC SPECIFICATION). ALL BOLT HOLES SHALL BE STANDARD ROUND HOLES UNLESS NOTED OTHERWISE. THE FAYING SURFACES OF ALL PLIES WITHIN THE GRIP OF SLIP-CRITICAL BOLTS (A325SC OR A490SC) SHALL MEET THE REQUIREMENTS FOR A CLASS A SURFACE PER SECTION 3.2 OF THE RSCC SPECIFICATION.

BOLTED CONNECTIONS INSPECTION: CONNECTIONS MADE WITH BEARING TYPE BOLTS SHALL BE INSPECTED PER SECTION 9.1 AND CONNECTIONS MADE WITH SLIP-CRITICAL TYPE BOLTS (A325SC OR A490SC) SHALL BE INSPECTED PER SECTION 9.3 OF RSCC SPECIFICATION.

EPOXY GROUTED ANCHORS: "ALL-THREAD" - ASTM A36 (Fy = 36 KSI)

EXPANSION OR WEDGE ANCHORS: HILTI "KWIK BOLT TZ" OR SIMPSON "STRONG-BOLT". HOLE SHALL BE DRY AND CLANED WITH WIRE BRUSH AND PRESSURIZED AIR JUST PRIOR TO INSTALLING. THE ANCHOR SHALL BE CLEAN AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

POWDER ACTUATED FASTENERS: "X-Z" PINS BY HILTI, INC. OR "8 MM DRIVE PINS" BY POWERS/ RAWL, OR PRE-APPROVED EQUAL. INSTALL PER MANUFACTURERS PUBLISHED INSTALLATION INSTRUCTIONS.

HEADED STUDS: SHALL BE "S3L SHEAR CONNECTORS" AS MANUFACTURED BY NELSON STUD WELDING, INC. OR PRE-APPROVED EQUAL AND SHALL CONFORM TO AWS D1.1. ALL HEADED STUDS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS USING A NELSON WELD GUN, UNLESS NOTED OTHERWISE ON DETAILS. ALL WELDS SHALL BE MADE AND INSPECTED IN ACCORDANCE WITH AWS D1.1.

DEFORMED BAR ANCHORS: SHALL BE "D2L DEFORMED BAR ANCHORS" AS MANUFACTURED BY NELSON STUD WELDING, INC. OR PRE-APPROVED EQUAL AND SHALL CONFORM TO AWS D1.1. ALL DEFORMED BAR ANCHORS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS USING A NELSON WELD GUN, UNLESS NOTED OTHERWISE ON DETAILS. ALL WELDS SHALL BE MADE AND INSPECTED IN ACCORDANCE WITH AWS D1.1.

FINISH: STRUCTURAL STEEL SHALL BE UNPAINTED, UNLESS NOTED OTHERWISE, AND SHALL BE CLEAN OF LOOSE RUST, LOOSE MILL SCALE, OIL, GREASE AND OTHER FOREIGN SUBSTANCES AND SHALL MEET THE REQUIREMENTS OF SSPC-SP1, WHERE STRUCTURAL STEEL IS NOTED TO BE PAINTED, ALL AREAS COMPRISING THE FAYING SURFACES OF BOLTED CONNECTIONS MADE WITH SLIP-CRITICAL TYPE BOLTS (A325SC OR A490SC) SHALL COMPLY WITH THE REQUIREMENTS OF THE RSCC SPECIFICATION. WHERE STRUCTURAL STEEL IS NOTED TO BE GALVANIZED, IT SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123, A384, AND A385. ALL SURFACES WITHIN TWO INCHES OF ANY FIELD WELD LOCATION SHALL BE FREE OF MATERIALS THAT WOULD PREVENT PROPER WELDING OR PRODUCE OBJECTIONABLE FUMES. FIELD TOUCH-UP OF PRIMED, PAINTED, AND GALVANIZED SURFACES SHALL BE PERFORMED TO REPAIR COATING ABRASIONS, AS WELL AS TO PROTECT ALL AREAS AT CONNECTIONS.

ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS): ALL MEMBERS DESIGNATED AS AESS SHALL CONFORM TO SECTION 10, ARCHITECTURALLY EXPOSED STRUCTURAL STEEL, OF THE AISC CODE OF STANDARD PRACTICE.

COMPOSITE FLOOR DECK: SHALL CONTAIN THE MINIMUM PROPERTIES SHOWN ON THE STRUCTURAL DRAWINGS AND SHALL BE "EPICORE" AS MANUFACTURED BY EPIC METALS, OR PRE-APPROVED EQUAL. THE FLOOR UNITS SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A-653, AND GALVANIZED PER ASTM A-924. SUBMIT SHOP DRAWINGS SHOWING LAYOUT AND FASTENING PATTERN. ALL ACCESSORIES INCLUDING EDGE FORMS, CLOSURE, ETC. SHALL BE PROVIDED TO COMPLETE THE INSTALLATION OF THE COMPOSITE FLOOR.

METAL ROOF DECK: SHALL CONTAIN THE MINIMUM PROPERTIES SHOWN ON THE STRUCTURAL DRAWINGS AND SHALL BE MANUFACTURED BY EPIC METALS, OR PRE-APPROVED EQUAL. THE ROOF DECK SHALL BE FORMED FROM STEEL SHEETS CONFORMING TO ASTM A-611 OR A-653, AND SHALL BE GALVANIZED PER ASTM A-924. THE ROOF DECK SHALL BE PLACED ON THE SUPPORTING FRAMEWORK WITH A MINIMUM END LAP OF TWO INCHES. SUBMIT SHOP DRAWINGS SHOWING LAYOUT AND FASTENING PATTERN. ALL ACCESSORIES SHALL BE PROVIDED TO COMPLETE THE ERECTION OF THE STEEL DECK.

PREFABRICATED METAL STAIR & LANDING: SHALL BE DESIGNED PER AISC AND IBC REQUIREMENTS. STRINGERS AND LANDINGS SHALL BE DESIGNED FOR A MINIMUM OF 100 PSF LIVE LOAD. INDIVIDUAL TREADS SHALL BE DESIGNED FOR 300 POUND CONCENTRATED LOAD. THE STAIR DESIGN CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER SHOWING THE COMPLETE ASSEMBLY AND ATTACHMENTS TO THE SURROUNDING STRUCTURE. THE ATTACHMENTS SHALL BE DETAILED SUCH THAT NO TORQUE IS APPLIED TO THE SURROUNDING STRUCTURAL MEMBERS. THE CALCULATIONS AND SHOP DRAWINGS SHALL BEAR THE SEAL AND SIGNATURE OF A REGISTERED STRUCTURAL ENGINEER LICENSED IN THE STATE OF WASHINGTON.

BAR GRATING: SHALL BE RYERSON "RY-WELD" STEEL GRATING OR PRE-APPROVED EQUAL AND DESIGNED TO OSHA STANDARDS. GRATING SHALL BE DESIGNED TO CARRY THE LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL LOADS INDICATED ON THE FRAMING PLAN. PROVIDE SHOP AND INSTALLATION DRAWINGS PRODUCED UNDER THE SUPERVISION OF AND BEARING THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON. DETAIL DRAWINGS TO INDICATE TYPES, SIZE, SPACING, CONNECTIONS, ANCHORING AND OTHER PERTINENT DETAILS.

### COLD-FORMED STEEL FRAMING CONSTRUCTION:

THE DESIGN, INSTALLATION AND CONSTRUCTION OF COLD-FORMED CARBON OR LOW-ALLOY STEEL, STRUCTURAL AND NON-STRUCTURAL STEEL FRAMING, SHALL BE IN ACCORDANCE WITH THE STANDARD FOR COLD-FORMED STEEL FRAMING, GENERAL PROVISIONS, AMERICAN IRON AND STEEL INSTITUTE (AISI-GENERAL) AND AISI-NASPEC. ALL 54 MIL AND HEAVIER GALVANIZED MEMBERS SHALL BE FORMED FROM STEEL THAT MEETS THE REQUIREMENTS OF ASTM A-653, QUALITY S0, GRADE 50, CLASS 1, FY=50 KSI. ALL 43 MIL AND LIGHTER GALVANIZED MEMBERS SHALL BE FORMED FROM STEEL THAT MEETS THE REQUIREMENTS OF ASTM A-653, QUALITY S0, GRADE 33, FY=33 KSI. BRIDGING PER MANUFACTURER'S REQUIREMENTS AND AS SHOWN IN THE STRUCTURAL DRAWINGS SHALL BE IN PLACE PRIOR TO PLACING OF ANY CONSTRUCTION LOADS. ALL RUNS SHALL BE RIGIDLY ANCHORED TO END WALLS.

EXTERIOR WALL AND BEARING WALL COLD-FORMED STEEL FRAMING: COLD-FORMED STEEL FRAMING MEMBERS SHALL MEET THE TYPE, SIZE AND THICKNESS AS INDICATED ON THE STRUCTURAL PLANS AND SPECIFICATIONS, AND SHALL BE MANUFACTURED BY A MEMBER OF THE STEEL STUD MANUFACTURER'S ASSOCIATION (SSMA), OR PRE-APPROVED EQUAL, IN ACCORDANCE WITH SSMA ICC ER-4943P.

COLD-FORMED STEEL FRAMING SUBSTITUTION: AT THE CONTRACTOR'S OPTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, FABRICATION AND ERECTION OF THE INTERIOR NON-BEARING COLD-FORMED STEEL FRAMING AND THE CONNECTION OF THE COLD-FORMED STEEL FRAMING TO THE STRUCTURE. THE DESIGN AND DETAILING OF THE COLD-FORMED STEEL FRAMING AND CONNECTION TO THE STRUCTURE SHALL BE PREPARED UNDER THE DIRECTION OF AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WASHINGTON AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO CONSTRUCTION.

INTERIOR NON-BEARING WALL, CEILING, SOFFIT, AND OTHER MISC. COLD-FORMED STEEL FRAMING:

COLD-FORMED STEEL FRAMING MEMBERS SHALL MEET THE TYPE, SIZE, AND THICKNESS AS INDICATED IN THE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS, AND SHALL CONFORM TO THE MINIMUM PERSCRIPTIVE REQUIREMENTS OF THE GYPSUM CONSTRUCTION HANDBOOK BY CGC, INC. FRAMING CONDITIONS THAT EXCEED THE SPAN OR HEIGHT LIMITATIONS SHALL BE CONSTRUCTED USING APPLICABLE DETAILS ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, DETAILING, FABRICATION AND ERECTION OF ALL COLD-FORMED FRAMING NOT SPECIFICALLY DETAILED IN THE GYPSUM CONSTRUCTION HANDBOOK OR ON THE STRUCTURAL DRAWINGS. THE DESIGN AND DETAILING OF THE COLD-FORMED STEEL FRAMING AND CONNECTION TO THE STRUCTURE SHALL BE PREPARED UNDER THE DIRECTION OF AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF WASHINGTON AND SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO CONSTRUCTION.

SLIP CONNECTIONS: THE STEEL NETWORK "VERTICLIP" OR PRE-APPROVED EQUAL MATCH CLIP WITH STUD SIZE AND THICKNESS. ATTACH PER MANUFACTURER'S REQUIREMENTS.

### MISCELLANEOUS:

#### PRE-APPROVED SUBSTITUTIONS

SUBSTITUTIONS MAY BE ALLOWED ONLY IF THEY MEET THE REQUIREMENTS OF THESE GENERAL NOTES AND THE SPECIFICATIONS, AND IF COMPLETE WRITTEN ENGINEERING DATA FOR EACH CONDITION REQUIRED FOR THIS PROJECT IS PROVIDED TO THE STRUCTURAL ENGINEER TWO WEEKS PRIOR TO BID DATE AND APPROVED IN WRITTEN ADDENDA BY THE ARCHITECT. DATA IS TO INDICATE CODE BASIS BY YEAR, AUTHORITY FOR STRESSES AND STRESS INCREASES, IF ANY, AND AMOUNT OF EXPECTED DEFLECTION FOR FLEXURAL MEMBERS UNDER (1) TOTAL LOAD AND (2) LIVE LOAD ONLY. ALL INCREASED COSTS IN MECHANICAL, SPRINKLER, ELECTRICAL OR GENERAL INSTALLATION AND ANY ARCHITECTURAL OR STRUCTURAL REDESIGN RESULTING FROM SUBSTITUTION SHALL BE BORNE BY THE GENERAL CONTRACTOR.

#### SHOP DRAWINGS/SUBMITTALS

THE FOLLOWING SHOP DRAWINGS/SUBMITTALS SHALL BE PROVIDED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR DELIVERY.

	STRUCTURAL ENGR.	BLDG. DEPT.
1. CONCRETE MIX DESIGNS	X	X
2. REINFORCING STEEL SHOP DRAWINGS	X	
3. FORMWORK AND RESHORING PROCEDURE	X	
4. MASONRY WALL REINFORCING DRAWINGS	X	X
5. VENEER ANCHORAGE SYSTEMS	X	X
6. STRUCTURAL STEEL	X	X
7. METAL DECK	X	X
8. LIGHT-GAUGE METAL FRAMING	X	X
9. PREFABRICATED METAL STAIRS & LANDING	X	X
10. MISCELLANEOUS STEEL	X	X
11. CONDUIT EMBEDDED IN CONCRETE	X	X
12. CONTRACTOR'S STATEMENT OF RESPONSIBILITY	X	X

SPECIAL INSPECTION: SPECIAL INSPECTION SHALL BE PROVIDED BY AN INDEPENDENT TESTING LABORATORY PER THE REQUIREMENTS OF IBC CHAPTER 17 AND THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION AND THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SUBMIT INSPECTION REPORTS AND A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL FOR THE ITEMS LISTED IN THE QUALITY ASSURANCE/SPECIAL INSPECTION SECTION:

## ABBREVIATION LIST

ADD'L	ADDITIONAL	HORIZ.	HORIZONTAL
A.B.	ANCHOR BOLT	HSS	HOLLOW STRUCTURAL SECTION
A.F.F.	ABOVE FINISH FLOOR	INT.	INTERIOR
ALT.	ALTERNATE	JT	JOINT
ARCH.	ARCHITECTURAL	JST	JOIST
@	AT	L	ANGLE
BM	BEAM	LLH	LONG LEG HORIZONTAL
BRG	BEARING	LLV	LONG LEG VERTICAL
BTWN	BETWEEN	L.L.	LIVE LOAD
BLK'G	BLOCKING	LOC.	LOCATION
BOT.	BOTTOM	MAX.	MAXIMUM
B.O.F.	BOTTOM OF FOOTING	M.B.	MACHINE BOLT
BLD'G	BUILDING	MFR	MANUFACTURER
B.U.	BUILT UP	MECH.	MECHANICAL
(C = )	CAMBER	MEZZ.	MEZZANINE
C.J.	CONTROL/CONSTRUCTION JOINT	MIN.	MINIMUM
C.P.	COMPLETE PENETRATION	MISC.	MISCELLANEOUS
CL	CENTERLINE	N.S.	NEAR SIDE
CLR.	CLEARANCE	NTS	NOT TO SCALE
COL.	COLUMN	O.C.	ON CENTER
CONC.	CONCRETE	OPN'G	OPENING
CONF'G.	CONFIGURATION	OPP.	OPPOSITE
CMU	CONCRETE MASONRY UNIT	PL	PLATE
CONN.	CONNECTION	PAF	POWDER ACTUATED FASTENER
CONST.	CONSTRUCTION	PERP.	PERPENDICULAR
CONT.	CONTINUOUS	P.P.	PARTIAL PENETRATION
CONTR.	CONTRACTOR	P.S.F.	POUNDS PER SQUARE FOOT
COORD.	COORDINATE	REINF.	REINFORCING
CTR'D	CENTERED	REQ'D	REQUIRED
CU.	CUBIC	SCHED.	SCHEDULE
D.L.	DEAD LOAD	SHT'G	SHEATHING
DIA. OR Ø	DIAMETER	SIM.	SIMILAR
DBL.	DOUBLE	S.O.G.	SLAB ON GRADE
DWG.	DRAWING	SQ.	SQUARE
DWL	DOWNEL	STD	STANDARD
EA.	EACH	STL	STEEL
EL.	ELEVATION	STIFF.	STIFFENER
ELEV.	ELEVATOR	STRUCT.	STRUCTURAL
ENGR.	ENGINEER	T.O.F.	TOP OF FOOTING
EQ.	EQUAL	T.O.S.	TOP OF STEEL
(E)	EXISTING	TYP.	TYPICAL
EXP.	EXPANSION	U.N.O.	UNLESS NOTED OTHERWISE
EXT.	EXTERIOR	U.T.	ULTRASONIC TESTED
FTG	FOOTING	VERT.	VERTICAL
FDN	FOUNDATION	W.P.	WORK POINT
FLR	FLOOR	WT	WEIGHT
F.S.	FAR SIDE	WWR.	WELDED WIRE REINFORCING
FRMG	FRAMING	W	WITH
GALV.	GALVANIZED	YD	YARD
GA.	GAGE/GAUGE		
GR.	GRADE		
GWB	GYPSUM WALL BOARD		
HGR	HANGER		
HT	HEIGHT		

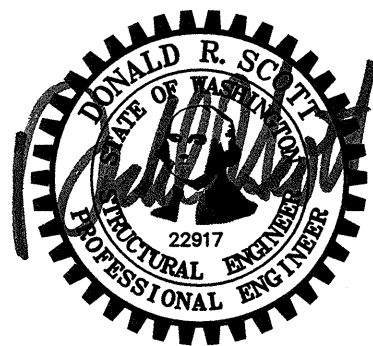


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TACOMA, WASHINGTON

Date 09-26-2008  
Scale NO SCALE  
Drawn By RSC  
Job No. 4034

GENERAL NOTES

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