



2" BRASS CAP IN MONUMENT CASE AT THE INTERSECTION OF SE 32ND ST & 74TH AVE SE

2.0' CONTOUR INTERVAL - THE EXPECTED VERTICAL ACCURACY IS EQUAL TO 1/2 THE CONTOUR INTERVAL OR PLUS / MINUS 1.0' FOR THIS PROJECT.

FOUND 2" BRASS DISK IN CONCRETE MONUMENT IN CASE AT INTERSECTION WITH 72ND AVENUE

671.34' MON - MON N90°00'00"E (BASIS OF BEARINGS)

SE 32ND STREET

THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN

MERCER ISLAND, WA 98040 CITY OF MERCER ISLAND







VICINITY MAP:







PROJECT INFORMATION:

SITE ADDRESS:

TAX/PARCEL NUMBER: LEGAL DESCRIPTION:

PLAT BLOCK: 7 PLAT LOT: 16 TO 25

SCOPE OF PROJECT: ZONING: LOT SIZE:

FIRST FLOOR

SECOND FLOOR GROSS FLOOR AREA (ALLOWED AND PROVIDED)

BASEMENT

TOTAL BUILDING AREA PROVIDED PARKINC ÈNFÓRCED-CÓE

2014 Liquefied Petroleum Gas Code (NFPA 58) 2015 National Fuel Gas Code (NFPA 54) for LP gas 2015 Washington State Energy Code Washington Cities Electrical Code

FIRE REQUIREMENTS:

PROJECT CONTACTS:

PROJECT DESIGNER: GARRET CORD WERNER, LLC.

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SHEET LIST:

01-GENERAL	
G000	COVER SHEET
G001	ABBREVIATION
G002	GENERAL PRO
G003	ENERGY CODE
G004	SITE SURVEY
G005	TREE RETENTIO
G006	site plan and
02-ARCHITEC	TURE
A110	FLOOR PLAN -
A111	FLOOR PLAN -
A112	FLOOR PLAN -
A116	FLOOR PLAN -
A201	ELEVATIONS
A202	ELEVATIONS
A301	BUILDING SECT
A302	BUILDING SECT
A501	TYPICAL ASSEN
A502	TYPICAL ASSEM
A503	TYPICAL ASSEM
A504	TYPICAL ASSEM
A510	STAIRSDETAILS
A601	WINDOW SCHI
A610	DOOR SCHEDI



ABBREVIATIONS:

AB	ANCHOR BOLT	ENG	ENGINEER	KIT	KITCHEN
ABV	ABOVE	ENI		KO	
		EO		K3	
ACOUSI	ACOUSTICAL ASPHALT CONCRETE	FQUIP	EQUAL	IAM	I AMINATE I AMINATED
	PAVEMENT	EST	ESTIMATE	LAV	LAVATORY
ACT	ACOUSTICAL TILE	EW	EACH WAY	LF	LINEAL FEET
AD	AREA DRAIN	EXH	EXHAUST	LH	LEFT HAND
ADD	ADDITIVE	EXIST	existing	LL	LIVE LOAD
ADJ	ADJUSTABLE	EXP	EXPANDED/EXPANSION	LN	LENGTH
AFF	ABOVE FINISH FLOOR	EXPO	EXPOSED	LP	LOW POINT
AGG	AGGREGATE	EXT	EXTERIOR	LOC	LOCATION
AIB		EXIR	EXTRUDE		LIGHI
ALI				LIG	
ALUM		FAR		LIL	
	APPROXIMATE	FB	FLAT BAR	MAN	MANUAI
ARCH	ARCHITECT/ARCHITECTURAL	FBP	FABRIC PANEL	MAS	MASONRY
ASL	ABOVE SEA LEVEL	FBRK	FIRE BRICK	MATL	MATERIAL
ASPH	ASPHALT	FD	FLOOR DRAIN	MAX	MAXIMUM
AUTO	AUTOMATIC	FDN	FOUNDATION	MB	MACHINE BOLT
		FE	FIRE EXTINGUISHER	MC	MEDICINE CABINET
BD	BOARD	FEC	FIRE EXTINGUISHER CABINET	MDO	MEDIUM DENSITY OVERLAY
BIIUM	BITUMINOUS	HN F /F		MECH	MECHANICAL
BLDG	BUILDING			MEMB	
		FL, FLK FLASH	FLOOR, FLOORING		
	BOTTOM	FLUOR	FLUORESCENT	MFR	MANUFACTURER
BO	BOTTOM OF	FLX	FLEXIBLE	MH	MANHOLE
BSMT	BASEMENT	FO	FINISHED OPENING	MIN	MINIMUM
BRG	BEARING	FOC	FACE OF CONCRETE	MIR	MIRROR
BRK	BRICK	FOF	FACE OF FRAMING	MISC	MISCELLANEOUS
BUR	BUILT UP ROOFING	FOIC	FURNISHED BY OWNER	MLD	MOLDING
BVL	BEVELED		INSTALLED BY CONTRACTOR	MO	MASONRY OPENING
		FOM	FACE OF MASONRY	MOD	MODULE
CAB	CABINET	FOS	FACE OF STUDS	MTD	MOUNTED
C/C	CENTER TO CENTER	FRPF	FIREPROOF	MTL	MATERIAL
CEM				MUL	MULLION
CER				MVVK	MILLWORK
CG		FKI		N	
CIP		FTG	FOOTING	N/A	
CJ	CONTROL JOINT	FURN	FURNITURE	NIC	
CLG	CEILING	FURR	FURRING	NO	NUMBER
CLKG	CAULKING	FUT	FUTURE	NOM	NOMINAL
CLO	CLOSET	FV	FIELD VERIFY	NR	NOISE REDUCTION
CLR	CLEAR	FW	FULL WIDTH	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT		- ····		
CNTR	COUNTER	GA	GAUGE	OA ODC	OVERALL
COL	COLUMN	GAL		OR2	
CONC		GALV			
		GECI		OD	
CONTR		GICI			
CONTR	CONTRACTOR	GERC	GLASS FIBER REINFORCED	OPNG	OPENING
CORR	CORRIDOR	Once	CONCRETE	OPP	OPPOSITE
CP	CONCRETE PAVER	GLS	GLASS	011	
CPT	CARPET/CARPETED	GR	GRADE	РВ	PARTICLE BOARD
CRS	COURSE	GRND	GROUND	PC	PRE-CAST CONCRETE
CTSK	COUNTERSUNK	GRTG	GRATING	PCF	POUNDS PER CUBIC FOOT
CT	CERAMIC TILE	GVL	GRAVEL	PERP	PERPENDICULAR
CTD	COATED	GWB	GYPSUM WALL BOARD	PL	PROPERTY LINE, PLATE
CIR		GYP	GYPSUM	P LAM	
CWC	CHILLED WATER CABINET			PLAS	PLASIER
		НС			
CVG	CLEAR VERTICAL GRAIN		HOT DIPPED GAI VANIZED		PAIR
DBI		HDR	HEADER	PSF	POUNDS PER SQUARE FOOT
DEMO	DEMOLITION	HDO	HIGH DENSITY OVERLAY	PSI	POUNDS PER SQUARE INCH
DET	DETAIL	HDWD	HARDWOOD	PT	POINT
DIA	DIAMETER	HDWE	HARDWARE	PTD	PAINTED
DIM	DIMENSION	HM	HOLLOW METAL	PTN	PARTITION
DISP	DISPENSER	HORIZ	HORIZONTAL	PVC	POLYVINYL CHLORIDE
DL	DEAD LOAD	HP	HIGH POINT	OT	
DO					QUARTER
		TTV AC		QTT	QUANTIT
DS		НW	HOT WATER	R	RISER
DSP	DRY STANDPIPE	HWS	HOT WATER SUPPLY	RA	RETURN AIR
DTL	DETAIL	HWT	HOT WATER TANK	RAD	RADIUS
DW	DISHWASHER			RB	RUBBER BASE
DWG	DRAWING	ID	INSIDE DIAMETER	RCP	REFLECTED CEILING PLAN
DWGS	DRAWINGS	IN	INCH	RD	ROOF DRAIN
DWR	DRAWER	INCL	INCLUDE	RECP	RECEPTACLE
-			INCREASE	REF	REFERENCE
E r ·	EASI			KEFK	REFRIGERATOR
EA ED					
ED FF	LAF ANSION BOLL FACH END	INJUL			
LL FF		INV	INVERT		RESULENT
EIFS				REV	REVISION, REVISED
~	EXTERIOR INSULATION AND				· · · · · · · · ·
	EXTERIOR INSULATION AND FINISH SYSTEM	JB	JUNCTION BOX	RF	ROOF
EJ	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT	JB JF	JUNCTION BOX JOINT FILLER	rf RGH	ROOF ROUGH
EJ EL	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION	JB JF JST	JUNCTION BOX JOINT FILLER JOIST	rf RGH RGTR	roof Rough Register
ej El Elec	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL	JB JF JST JT	JUNCTION BOX JOINT FILLER JOIST JOINT	RF RGH RGTR RH	ROOF ROUGH REGISTER RIGHT HAND
ej el elec elev	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR	JB JF JST JT	JUNCTION BOX JOINT FILLER JOIST JOINT	RF RGH RGTR RH RM	ROOF ROUGH REGISTER RIGHT HAND ROOM
EJ EL ELEC ELEV EMER	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR EMERGENCY	JB JF JST JT	JUNCTION BOX JOINT FILLER JOIST JOINT	RF RGH RGTR RH RM RMV	ROOF ROUGH REGISTER RIGHT HAND ROOM REMOVE
EJ EL ELEC ELEV EMER ENCL	EXTERIOR INSULATION AND FINISH SYSTEM EXPANSION JOINT ELEVATION ELECTRICAL ELEVATOR EMERGENCY ENCLOSURE	JB JF JST JT	JUNCTION BOX JOINT FILLER JOIST JOINT	RF RGH RGTR RH RM RMV RO	ROOF ROUGH REGISTER RIGHT HAND ROOM REMOVE ROUGH OPENING

SYMBOLS LEGEND

S	South		
SAF	SELF ADHERED FLASHING		\bigcirc
SALV	SALVAGE SELE ADHERED MEMBRANE		U
SAN	SANITARY		\uparrow
SC	Solid Core		
SCHED	SCHEDULE		
s conc	SCOURED CONCRETE	GRID LINES:	+(0
SECT	SECTION		
SF	SQUARE FOOI		
SFGL SH	SAFELT GLASS		
SHR	SHOWER		ſ
SHT	SHEET	CENTER LINES:	Ł
Shthg	Sheathing		LEVEL 1
SIM	SIMILAR	ELEVATION/DATUM: —	0'-0''
SK	SINK		
SPEC	SPECIFICATION	ASSEMBLY TYPE	
SQ SQ FT		REFERENCE:	
SQ IN	SQUARE INCH		
SS	STAINLESS STEEL	ROOM REFERENCE:	
ST	STRAIGHT		
STA	STATION		
STD	STANDARD	DOOR TAG:	(101)
SIL	SIEEL		~
STRUCT		WINDOW/SKYLIGHT TAG:	
STWY	STAIRWAY		
SUR	SURFACE		SIM
SUSP	SUSPENDED	BUILDING SECTION:	
SYM	Symmetrical	A	01
TD			SIM
IB		EXTERIOR ELEVATION:	
TEI			AIUI
TER	TERRAZZO		1 Ref
T&G	TONGUE AND GROOVE		e e
THK	THICK	INTERIOR ELEVATION:	1 A101 1
THR	THRESHOLD		\sim
THRM	THERMAL		1 Ref
TIT	TOILET		
TO	TOP OF	DETAIL (1)	
TOL	TOLERANCE	REFERENCE:	1
TPH	TOILET PAPER HOLDER		
TRD	TREAD		
ISL			
131 TAT2T	THERMOSTAT		<u> </u>
TT	TERRAZZO TILE		
TV	TELEVISION		
TW	TOP OF WALL		
TYP	TYPICAL		
UNO		EXISTING TO REMAIN.	
UT	OTETT		
VAR	VARIES	DOWN SPOUT:	
VB	VINYL BASE		
VCT	VINYL COMPOSITION TILE	SMOKE ALARM	
VERT	VERTICAL	SMORE ALARM.	30
VESI			\frown
	VERIFT IN FIELD VENIEER	CARBON MONOXIDE ALAR	M: (CO)
VOI	VOLUME		_
VT	VINYL TILE	90 CFM VENT FAN:	90
W	WEST	110 CEM VENT FAN	M
W/			X
WC VVB	WOOD BASE		
WD	WOOD		
WG	WIRED GLASS		
WH	WATER HEATER	NORTH ARROW:	
WIN	WINDOW		
WLC			
WP		REVISION REFERENCE:	\sim \sim $>$
WPR	WATERPROOFING	()
WS	WEATHERSTRIPPING		VVV
WSCT	WAINSCOT		
WT	WEIGHT		
		(ONLY THE MOST RECENT RE	
		SHOWN CLOUDED. THE TAG	

PAST REVISIONS. THE NUMBERS ARE KEYED TO THE DATES THE REVISIONS WERE ISSUED).

SYMBOLS LEGEND 12" = 1'-0"

GENERAL CODES AND REGULATIONS

Building Code - 2015 International Residential Code (IRC) with statewide and City amendments

Mechanical Code - 2015 International Mechanical Code with statewide and City amendments 2014 Liquefied Petroleum Gas Code (NFPA 58) 2015 National Fuel Gas Code (NFPA 54) for LP gas 2015 International Fuel Gas Code with statewide and City amendments

Plumbing Code - 2015 Uniform Plumbing Code (UPC) including appendices A, B, and I, except chapters 12, 15 and portions of chapter 5 per WAC 51-56-003

Energy Code - 2015 WA State Residential Energy Code per WAC 51-11R

Fire Code - 2015 International Fire Code (IFC) including Appendix N as adopted by 51-54 WAC

Electrical Code - 2008 National Electrical Code (NEC) per WAC 296-46B-010

Zoning Code - City of Mercer Island Municipal Code

All surfaces shall be cleaned prior to occupancy.



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GENERAL REQUIREMENTS

Governing Codes and Regulations:

Building Code - 2015 International Residential Code (IRC) including appendices F, Q, and R, except chapters 11, 25-43 per WAC 51-51-003 - Chapter 51-51 WAC

Mechanical Code - 2015 International Mechanical Code (IMC) including adoption of 2015 International Fuel Gas Code, 2014 NFPA 58 & 2014 NFPA 54 - Chapter 51-52 WAC

<u>Plumbing Code</u> - 2015 Uniform Plumbing Code (UPC) including appendices A, B, and I, except chapters 12, 15 and portions of chapter 5 per WAC 51-56-003

Energy Code - 2015 WA State Residential Energy Code per WAC 51-11R

Fire Code - 2015 International Fire Code (IFC) including Appendix N as adopted by 51-54 WAC

Electrical Code - 2008 National Electrical Code (NEC) per WAC 296-46B-010

Contractor Responsibilities: It is the responsibility of the contractor to ensure compliance and conformance with the various provisions within these ordinances and codes in all of the work. The General Contractor is responsible for coordinating all work including additional permits and subcontractor work.

Dimensions: Dimensions that are not stated as "maximum" or "minimum" are absolute. All dimensions are subject to conventional industry tolerances. Verify and coordinate dimensions among all drawings prior to construction. Written dimensions take precedence over scaled lengths and heights in all cases. Do not scale the drawings.

Discrepancies: In the event of discrepancies or contradictory information in the drawings, notes, or specifications, it is the obligation of the contractor to notify the architect of the same and to obtain clarification from the architect before proceeding with the work. Any work done by the contractor after discovery of such discrepancy shall be done at the contractor's risk.

Inspections: Contractor shall be responsible for coordinating all building inspections. Required building inspections per IRC section R109 and WSEC 105:

- Foundation Inspection: after forms are erected and reinforcing steel is placed. - Plumbing, mechanical, gas, and electrical systems inspection: prior to covering/concealment

- Frame and masonry inspection: after the roof, masonry, firestopping, draftstopping, and bracing are in place and after plumbing, mechanical, and electrical rough inspections are approved.

- Special Inspections as required by the Engineer of Record. Wall insulation inspection: after all wall and cavity insulation is in place and prior to wall covering.

- Other inspections required by the Building Official.

- Final Inspection: after the permit work is complete and prior to occupancy.

<u>Contract Documents:</u> The Architect shall have the final authority with regard to interpretation of the intent and spirit of the contract documents. The Project Specifications are included by reference. All contract documents pertaining to this project are to be considered and interpreted for bidding and construction purposes as a complete whole. No part of the drawings or project specifications shall be distributed, considered, or used in any way independent of the complete set of documents.

Typical Details: Project drawings indicated general and typical details of construction Where conditions are not specifically indicated but are of similar character to details shown, similar details of construction to those provided shall be used - subject to review and approval by the architect and the structural engineer.

Work and Data by Others: The architect assumes no responsibility for, nor verifies the accuracy of, any engineering data supplied by others.

Submittals: General Contractor to provide a minimum of 10 business days for architect to review. Shop drawings are required for the following components:

- Items required by consultants. See individual consultant documentation for any shop drawings required by their respective disciplines

- Windows and doors

- Skylights and canopies - Trellises not of wood
- Railing systems

Gates and specialty doors

- Wine rack and shelving layouts

- Casework and built-ins

Sauna and steam rooms

- Other components called out in the specifications

<u>Changes:</u> Contractor initiated changes shall be submitted in writing to the architect and/or structural engineer for approval prior to fabrication or construction. Changes shown on shop drawings only do not satisfy this requirement. All changes - whether drawing or field required - shall have revisions approved & filed for record w/ the city once the original submission has been approved and the permit issued. Charge will be made by the city for all revision review and approvals including field inspections beyond that required under permit fees and paid for under estimated inspection fee.

<u>As-Built Drawings:</u> Contractor and subcontractors shall mark drawings for as-built condition. Mechanical, electrical, plumbing, and fire-protection drawings shall be revised for as-built conditions by their respective authors. Final as-built reproducible drawings shall be submitted to owner's representative.

Safety: Contractor shall be responsible for all required safety precautions and the methods, techniques, sequences, or procedures required to perform the work.

Site Maintenance: Contractor shall maintain a trash bin in an area designated by the owner's representative for the collection of all construction debris. Contractor shall dispose of all debris and remove trash bin prior to occupancy. All surfaces shall be cleaned prior to occupancy.

FIRE-RESITANT CONSTRUCTION

Occupancy Separation: The garage shall be separated from the dwelling unit and its attic area by not less than 1/2" gypsum wall board applied to the garage side. Garages shall be separated from all habitable rooms above and all structures supporting the floor/ceiling assembly by not less than 5/8" Type X gypsum board or equivalent. (Table R302.6)

Doors between the garage and the residence shall be minimum 1 3/8" thick solid wood, or 20-minute fire-rated, and shall be equipped with a self-closing device. (R302.5.1)

Ducts in the garage and ducts penetrating the separation assemblies shall be min 26 gage sheet steel and have no openings into the garage. (R302.5.2)

<u>Under-Stair Protection</u>: Enclosed accessible space under stairs shall be protected with minimum 1/2" gypsum board on the enclosed side. (R302.7)

Fire Blocking: Provide fire blocking in concealed wall spaces of stud walls and partitions vertically at ceiling and floor levels, at 10 feet max. horizontally, and at all interconnections of concealed vertical and horizontal spaces. Fire block concealed spaces between stair stringers at the top and bottom of run between studs and in line with the run of the stairs if the wall sunder the stairs are unfinished. Fire stop with noncombustible materials in openings around all vents, pipes, ducts, chimneys, fireplaces, and similar openings which afford passage for fire at ceiling and floor levels. (R302.11 & R1003.19)

<u>Draftstopping:</u> Draft stop floor/ceiling assemblies greater than 1,000 SF. into approximately equal areas with 1/2'' gypsum board parallel to the floor framing members. (R302.12)

EGRESS

Egress Openings: Emergency escape and rescue openings shall have a minimum net clear opening of 5.7 sq. ft. except the minimum net clear opening for emergency escape and rescue grade-floor openings shall be 5 sq. ft. Where provided, they shall have a sill height of not more than 44" measured from the finished floor to the bottom of the clear opening. The minimum net clear opening height shall be 24". The minimum net clear opening width shall be 20". (R310.1)

Handrails: One handrail shall be provided at every stairway having four or more risers and shall be continuous for the full length of the flight. Provide 2 handrails where indicated on plans. Handrail height, measured above stair tread nosings, or finish surface of ramp slope, shall be uniform, not less than 34" and not more than 38". Handrails with a circular cross section shall have an outside diameter of at least 1.25" and not greater than 2". If the handrail is not circular, it shall have a perimeter dimension of at least 4" and not greater than 6.25" with a maximum cross-section dimension of 2.25". Handrails with a perimeter greater than 6.25" shall have a graspable finger recess area on both sides of the profile. (R311.7.8)

Guards: Guards shall be located along open-sided walking surfaces, mezzanines, stairways, ramps and landings which are located more than 30" above the floor or arade below and within 36" of the edge of the open side. Guards shall be 36" high minimum except guards whose top rail also serves as a stair handrail shall have a height of no less than 34" and not more than 38" measured vertically from the leading edge of the stair tread nosing. (R312)

Open guards shall have balusters or ornamental patterns such that a 4"-diameter sphere cannot pass through any opening except the triangular openings formed by Ducts, air handlers, and filter boxes shall be sealed. Ducts shall be leak tested in the riser, tread, and bottom rail at the open side of a stairway shall not allow passage accordance with WSU RS-33, using the maximum duct leakage rates specified. of a sphere of 6" in diameter. Guards on the open side of stairs shall not have openings (R403.2.2) which allow passage of a sphere 4-3/8" in diameter. (R312.1.3)

FIRE PROTECTION SYSTEMS

<u>Bidder Designed:</u> Fire Protection systems, if necessary, shall be bidder designed. Designated subcontractors are responsible for the preparation of drawings and applications for appropriate required permits.

Sprinkler System: An NFPA 13R fire sprinkler shall be provided in accordance with IRC P2904. The system shall be designed and the plans stamped by a person holding a Washington State Certificate of Competency. Contractor shall submit design to the Fire Department for approval. The system shall be installed by a state licensed sprinkler contractor.

Monitored Houshold Fire Alarm per NFPA 72 and Monitored Sprinkler Water Flow Alarm

Energy Certificate: A permanent certificate shall be posted on or within three feet of the electrical panel. The certificate shall be completed by the builder or registered design professional. The certificate shall list the R-values of insulation installed in or on ceiling/roof, walls, foundation (slab, below-grade wall, and/or floor), and ducts outside the conditioned spaces; U-factors for fenestration; and the solar heat gain coefficient (SHGC) of fenestration; and the results from any required duct system and building interconnected, and have a battery backup. (R314) envelope air leakage testing. Where more than one value for each component, the certificate shall list the value covering the largest area. The certificate shall list the type and efficiency of heating, cooling, and service water heating equipment. Where a gasfired unvented room heater, electric furnace, or baseboard electric heater is installed, the certificate shall list this as appropriate. (WSEC R401.3)

are required. Smoke Alarm System: An approved automatic smoke alarm system shall be provided and installed in accordance with the warning equipment provisions of NFPA 72. Smoke alarms shall be provided inside each sleeping room, outside of each sleeping area, and on each story of the dwelling. Required smoke alarms shall be hardwired, <u>Carbon Monoxide Alarms</u>: Provide approved carbon monoxide alarms outside of each separate sleeping area and on each level of the dwelling. (R315)

FIREPLACES AND CHIMNEYS

Factory-Built Fireplaces: Factory-built fireplaces shall be UL listed, labeled and installed and terminated in accordance with the conditions of their listing. (R1004)

Factory-Built Chimneys: Factory-built chimneys shall be UL 127-96 listed, labeled, installed, and terminated in accordance with the manufacturer's installation instructions. (R1005)

Hearth Extensions: Hearth extensions of factory-built fireplaces shall be installed in accordance with the listing of the fireplace and shall be readily distinguishable from the surrounding floor area. (R1004.2)

<u>Flue Clearances:</u> Metal flues venting gas appliances shall have a minimum net clearance to combustible materials as required by the appliance manufacturer in accordance with the listing of the flue. (UMC 504(a))

GLASS, GLAZING & FENESTRATION

Glazing shall be in accordance with IRC section 308.

Exterior Glazing: All exterior wall glazing shall be double-glazed and comply with the Washington State Energy Code (WAC 51-11).

<u>Safety Glazing:</u> Install in areas subject to human impact (R308.4) Such hazardous locations include:

- Glazing in fixed and operable panels of swinging, sliding, and bifold doors - Glazing in a fixed or operable panel adjacent to a door where the nearest vertical edge is within a 24" arch of the door in a closed position and whose bottom edge is less than 60" above the floor or walking surface except for:

- Decorative glazing
- Where there is an intervening wall - Glazing in the wall perpendicular to the latch side of the door
- Adjacent to the fixed panel of patio doors - Glazing in an individual or fixed panel that meets all of the following conditions:
- Exposed area of an individual pane greater than 9 square feet
- Bottom edge is less than 18" above the floor - Top edge is greater than 36" above the floor
- One or more walking surfaces within 36" horizontally of the glazing
- All glazing in railings, regardless of an area or height above walking surface. Included are structural baluster panels and nonstructural in-fill panels.

- Glazing in walls, enclosures, or fences for hot tubs, spas, whirlpools, saunas, steam rooms, bathtubs, showers, and indoor or outdoor pools where the bottom exposed edge of the glazing is less than 60" above any standing or walking surface and within 60" horizontally of the water's edge.

- Glazing adjacent to stairways, landings, and ramps within 36" horizontally of a walking surface when the bottom exposed edge of the glass is less than 36" above the adjacent walking surface. Except when a rail is installed on the accessible side of the glazing 34" to 38" above the walking surface.

- Glazing adjacent to the landing at the bottom of a stairway within 60" horizontally of the bottom tread when the exposed surface of the glazing is less than 36" above the nose of the tread. Except when the glazing is protected by a guard complying with section R312 and the glass is more than 18" from the guard.

<u>Fenestration Products:</u> U-factors of fenestration products (windows, doors, and skylights) shall be determined in accordance with NFRC 100, with exception to garage door Ufactors which shall be determined in accordance with either NFRC 100 or ANSI/DAMSA 105. U-factors shall be determined by an accredited, independent laboratory, and labeled and certified by the manufacturer per R303.1.3.

ENERGY EFFICIENCY

Insulation and Vapor Barriers: Application and installation of insulation and vapor barriers shall comply with WSEC. All insulating materials shall have a flame spread index of not more than 25 and a smoke-developed index of not more than 450. (R302.10.1)

<u>Air Leakage:</u> The building thermal envelope shall be constructed to limit air leakage ir accordance with the requirements of WSEC R402.4.1 through R402.4.4.

Testing: The building shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g.. Testing shall be performed at nay time after creation of all penetrations of the building thermal envelope. (WSEC R402.4.1.2)

<u>Air Barrier and Insulation:</u> The air barriers and insulation in walls, floors, roofs, and any other enclosures of conditioned space shall be installed in accordance with the manufacturer's instructions and the criteria listed in Table R402.4.1.1, or the building shall be tested and verified as having an air leakage rate of not exceeding 5 air changes per hour. (WSEC R402.2.4)

<u>Weatherstripping:</u> Access doors from conditioned spaces to unconditioned spaces shall be weatherstripped and insulated to a level equivalent to the insulation on surrounding surfaces. (WSEC R402.2.4)

<u>Thermostat:</u> Where the primary heating system is a forced-air furnace, at least one programmable thermostat shall be provided for each separate heating and cooling system. (WSEC R403.1)

STRUCTURAL SYSTEMS

Structural Systems: All structural systems (such as trusses) which are to be composed of components to be field erected shall be supervised by the supplier during manufacturing, delivery, handling, storage, and erection in accordance with instructions prepared by the supplier.

<u>Walls:</u> Exterior walls to be 2x6 wood studs at 16" o.c. unless indicated otherwise on plans. Interior walls to be 2x4 studs at 16" o.c. unless noted otherwise on plans.

Refer to structural documents by engineer of record for detailed information on structural components and connections.

SOILS AND FOUNDATIONS

<u>Damp-proofing</u>: Except where required by Section R406.2 to be waterproofed, foundation walls that retain earth and enclose interior spaces below grade shall be dampproofed from the top of the footing to the finished grade in accordance with one of the following: bituminous coating; three pounds per square yard of acrylic modified cement; 1/8" coat of surface-bonding cement complying with ASTM C 887; any material permitted for waterproofing in Section R406.2. (R406.1)

Perimeter Drains: Provide continuous 6" round perforated drain in gravel fill with filter fabric wrap at all foundation walls. Provide clean-outs such that all portions of drainage system can be adequately cleaned. Locate bottoms of drain pipes at the lowest point of wall footings and tight-line perimeter drains to storm sewer or other approved discharge. Do not connect the perimeter/foundation drain tight-line to any other tight-lines or site drainage systems. (R405)

Provide a minimum 12" wide layer of continuous gravel fill from bottom of footing to within 12" of finish grade - typical at all walls. Approved gravel fill consists of washed, clean, free drainage gravel ranging from 1/4" to 3/4" in size.

Site drainage shall conform to all local regulations and ordinances. Tight-line all roof drains to storm sewer system or approved discharge when storm sewers are not available. Refer to civil engineer's documents for additional information.

Finish Grade: Grade at the building face shall have a positive slope away from the building. All site hard surfaces to have a minimum slope of 1/8" per FT to drains unless otherwise noted.

WOOD AND WEATHER PROTECTION

Exterior Structures: Exterior wood framed decks and other wood framed structures exposed to weather: all wood shall be pressure treated to current American Wood Preservers Institute standards. This includes all plywood, trusses, sawn members, gluelaminated members, etc., unless noted otherwise. All nails and connectors shall be heavy-coat galvanized.

<u>Wood Protection:</u> Wood framing members in contact with exterior concrete foundations shall be pressure treated. Wood siding, sheathing, and wall framing on the exterior of the building less than 6" from the ground or less than 2" from slabs, steps, and similar horizontal surfaces shall be pressure treated. Ends of wood beams entering a concrete wall (pocket) shall have 1/2" clearance on top, sides, and ends. (R317)

Wall Flashing: Approved corrosion resistant flashing shall be applied shingle-fashion in a manner to prevent entry of water into the wall. Self-adhered membrane flashings shall comply with AAMA 711. The flashing shall extend to the surface of the exterior wall finish. Flashing shall be installed at exterior window and door openings; intersections of chimneys or other masonry with frame or stucco walls; under and at the ends of masonry, wood or metal copings and sills; above projecting wood trim; where exterior porches, decks or stairs attach to a wall or floor assembly of wood-frame construction; at wall and roof intersections; at gutters. (R703.8 and WAC 51-51-703)

Roof Flashings: Flashing shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction, at gutters, and around roof openings in a manner that prevents moisture from entering the wall and roof assemblies. A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical side wall. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019". (R903.2)

INTERIOR ENVIRONMENT

Attic Ventilation: The net free ventilating area of enclosed attics and rafter spaces shall not be less than 1/150 of the area of the space ventilated, except that 1/300 min. is permitted if 40%-50% of the required ventilating area is provided by ventilators located in the upper portion of the space no more than 3' below the ridge or highest point of the space, with the balance provided by eave or cornice vents. Where eave or cornice vents are installed, provide minimum 1-inch clear space between insulation and roof sheathing and the location of the vent. (R806)

<u>Crawlspace Access:</u> Provide access to crawlspaces through a floor access opening of 18"x24" minimum or a perimeter wall access opening of 16"x24" minimum. (R408.4)

Locate in a hallway or other readily-accessible location. (R807) Wet Areas: Shower compartments and walls above bathtubs with installed shower heads shall be finished with a non-absorbent surface to a height not less than 72" above the floor. (R307.2)

<u>Solid Blocking:</u> Provide solid blocking in walls at connection points behind cabinets wall shelving, towel and grab bars, and other wall-hung items.

Acoustical Insulation: Provide sound attenuation blankets at all bathroom, toilet room, and powder room walls and other spaces as noted on plans. Provide sound attenuation blankets at all bathroom, toilet room, and powder room floors and ceilings when these rooms occur above or below a habitable space.

<u>Soils:</u> The architect assumes no responsibility as to the physical characteristics of the soils. The geotechnical engineer shall inspect all excavations prior to pouring concrete.

Exhaust Fans: Exhaust fans vented to the exterior are required in bathrooms, water closets, laundry rooms, kitchens, and other rooms where water vapor or cooking odor is produced. (M1507.4 and WAC 51-51-1507)

Provide 50 CFM minimum fan flow rating at bathrooms, laundries, and similar rooms. Provide 300 CFM minimum for kitchens.

<u>Attic Access:</u> Provide access to any attic area having a clear height of over 30" and greater than 30 SF in size through an opening of 22"x30" minimum. A 30" minimum clear headroom in the attic space shall be provided at or above the access opening.



GARRET CORD WERNER LLC

3132 WESTERN AVE

SEATTLE WA

SUPERSEDES ALL PREVIOUS REVISIONS

OO Res	sidence			Amir Pamanpour	
3453 74t	h Ave SE, Mercer Islan	nd, WA 98040		800.478.1956	
Parcel #	1300301965		a	amir@garretcordwerner.co	m
This proje he minim number o Authorized	ect will use the requirem num values listed. In add f additional credits are d Representative	nents of the Prescriptive F dition, based on the size o checked as chosen by the	Path below and inco of the structure, the e permit applicant.	orporate the appropriate Date	
		Climate Zones	1		
		R-Value ^a	U-Factor ^a		
enestrati	on U-Factor ^b	n/a	0.30		
Skyliaht U	-Factor	n/a	0.50		
	nestration SHGC ^{b,e}	n/a			
Salina ^k	mestiation of 100	11/a	0.026		
	ma \A(all 9.m.n	49	0.020		
wood Fra			0.050		
viass VVal 	I K-Value'	21/21	0.056		
-loor		30 ⁹	0.029		
Below Gra	ade Wall ^{e,m}	10/15/21 int + TB	0.042		
Slab ^ª R-V	alue & Depth	10, 2 ft	n/a		
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Simple Heating System Size: Washington State This heating system sizing calculator is based on the Prescriptive Requirements of the 2015 Washington State Energy Code (WSEC) and ACCA Manuals

J and S. This calculator will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads. Please fill out all of the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please call the WSU Energy Extension Program at (360) 956-2042 for assistance.

Project Information	Contact Information
FOO Residence	Amir Parnianpour
3453 74th Ave SE, Mercer Island, WA 98040	800.478.1956
Parcel # 1300301965	amir@garretcordwerner.com
Heating System Type: O All Other Systems	Heat Pump
To see detailed instructions for each section, place your cursor on the wor	d "Instructions".
Design Temperature	
Instructions Mercer Island	Design Temperature Difference (ΔT) 45 ΔT = Indoor (70 degrees) - Outdoor Design Temp 45
Area of Building	
Conditioned Floor Area	
Instructions Conditioned Floor Area (sq ft)	5,306
Average Ceiling Height	Conditioned Volume
Instructions Average Ceiling Height (ft)	9.0 47,754
Glazing and Doors	U-Factor X Area = UA
U-0.28	0.280 2,260 632.86
Skylights	U-Factor X Area = UA
Instructions	0.50 0
Insulation	
Attic	U-Factor X Area = UA
Instructions	0.026 1,975 51.35
Circle Befferer Island Californi	
Single Rafter or Joist Valited Cellings	U-Factor X Area UA
R-38 Vented	0.027 1,154 31.17
Above Grade Walls (see Figure 1)	U-Factor X Area UA
Instructions R-21 INT plus R-4 ci	 ▼ 0.043 5,951 255.89
Floors	U-Factor X Area UA
Instructions R-30	0.029 330 9.57
Below Grade Walls (are Sigure 1)	Il Fostor X Area IIA
Instructions	
R-21 int plus R-5 ci	0.028 1,344 37.83
Slab Below Grade (see Figure 1)	F-Factor X Length UA
Instructions R-10 Fully insulated	0.303 134 40.60
Slab on Grade (see Figure 1)	E-Eactor X Length IIA
Instructions	- 0.360 206 74.16
R-10 Fully insulated	
Location of Ducts	
Instructions	Duct Leakage Coefficient
Conditioned Space	1.00
	Sum of UA 1133.23
	Envelope Heat Load 50,995 Btu / Hour
Figure 1.	Air Leakage Heat Load 23,208 Btu / Hour
Above Grade	volume × 0.6 × 67 × .018 Building Design Heat Load 74,204 Btu / Hour
Below Grade	Building and Duct Heat Load 74,204 Btu / Hour Ducts in unconditioned space: Sum of Building Heat Loss × 1.10 Ducts in conditioned space: Sum of Building Heat Loss × 1.
	Maximum Heat Equipment Output 92.755 Btu / Hour

Building and Duct Heat Loss X 1.40 for Forced Air Furnace Building and Duct Heat Loss X 1 25 for Heat Pump

OF R-8.

ALL HEADERS IN EXTERIOR WALLS TO HAVE A MINIMUM R-10 INSULATION.

DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR REGULATION OF TEMPERATURE (SEC 503.8.1).

MINIMUM 75% OF ALL INTERIOR LUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES, AND ALL EXTERIOR LIGHTING SHALL BE HIGH EFFICACY LUMINAIRES.

NO ROOF PER IRC F Min R-10 AIR IMPER BATT INS

ENERGY CODE NOTES

2015 WASHINGTON STATE ENERGY CODE

ALL DUCTS NOT LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE DUCTS SHALL BE INSULATED TO A MINIMUM

BUILDING AIR LEAKAGE TESTING, DEMONSTRATING SPECIFIC LEAKAGE AREA IS ≤0.00030 (SEC 502.4.5), IS REQUIRED PRIOR TO FINAL INSPECTION. THE TEST RESULTS SHALL BE POSTED ON THE RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE.

A SIGNED AFFIDAVIT DOCUMENTING THE DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION (SEC 503.10.2).

DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR AND HOMEOWNER PRIOR TO APPROVED FINAL INSPECTION (SEC 101.3.2.6 AND 503.10.2).

ROOF VENTILATION

F VENTILATION. ALL ROOFS ARE A R806.5.	INSULATED WITH A FLASH AND BATT SYSTEM
) RIDGED OVER ROOF DECK	-0************
RIABLE SPRAY FOAM	-0
SULATION	

Class II VAPOR BARETARDER APPLIED OVER INSULATION

VENTILATION CODE NOTES

WAC 51-13, WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE AND INTERNATIONAL MECHANICAL CODE CHAPTER 15

WHOLE HOUSE VENTILATION SYSTEM MINIMUM VENTILATION RATE = 90, PER TABLE M1508.2.

NOISE: WHOLE HOUSE FANS LOCATED FOUR FEET OR LESS FROM THE INTERIOR GRILLE SHALL HAVE A SONE RATING OF 1.0 OR LESS.

EXHAUST DUCTS SHALL TERMINATE OUTSIDE OF THE BUILDING.

OUTDOOR AIR DISTRIBUTION: OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY MEANS SUCH AS INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM.

DOORS SHALL BE UNDERCUT TO A MINIMUM OF ONE-HALF INCH ABOVE THE SURFACE OF THE FINISH FLOOR COVERING. DOORS AND OPERABLE LITES IN WINDOWS ARE DEEMED NOT TO MEET THE OUTDOOR AIR SUPPLY INTAKE REQUIREMENTS.

SOURCE SPECIFIC VENTILIATION: INTERMITTENTLY OPERATING MINIMUM EXHAUST RATES FOR BATHROOMS IS 50 CFM, KITCHENS IS 100 CFM. SYSTEMS EXCEEDING 400 CFM'S VENTED TO OUTSIDE AIR MUST BE INTERLOCKED WITH MAKE-UP AIR. PROVIDE MAKE-UP AIR PER SECTION M1503.8. EXHAUST SHALL BE DISTCHARGED OUTSIDE AND BACKDRAFT DAMPERS ARE REQUIRED.

VENTILATION CODE NOTES

WAC 51-13, WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE AND INTERNATIONAL MECHANICAL CODE CHAPTER 15 AND IRC.

WHOLE HOUSE VENTILATION SYSTEM MINIMUM VENTILATION RATE = 105, PER IRC.

NOISE: WHOLE HOUSE FANS LOCATED FOUR FEET OR LESS FROM THE INTERIOR GRILLE SHALL HAVE A SONE RATING OF 1.0 OR LESS.

EXHAUST DUCTS SHALL TERMINATE OUTSIDE OF THE BUILDING.

OUTDOOR AIR DISTRIBUTION: OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY MEANS SUCH AS INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM.

DOORS SHALL BE UNDERCUT TO A MINIMUM OF ONE-HALF INCH ABOVE THE SURFACE OF THE FINISH FLOOR COVERING. DOORS AND OPERABLE LITES IN WINDOWS ARE DEEMED NOT TO MEET THE OUTDOOR AIR SUPPLY INTAKE REQUIREMENTS.

SOURCE SPECIFIC VENTILIATION: INTERMITTENTLY OPERATING MINIMUM EXHAUST RATES FOR BATHROOMS IS 50 CFM, KITCHENS IS 100 CFM. SYSTEMS EXCEEDING 400 CFM'S VENTED TO OUTSIDE AIR MUST BE INTERLOCKED WITH MAKE-UP AIR. PROVIDE MAKE-UP AIR PER SECTION M1503.8. EXHAUST SHALL BE DISTCHARGED OUTSIDE AND BACKDRAFT DAMPERS ARE REQUIRED.

ENERGY

TOTAL ENERG

EFFICIENT BUI OPTION 1a:

AIR LEAKAGE OPTION 2b:

HIGH EFFICIEN OPTION 3d:

EFFICIENT WAT OPTION 5a:

EFFICIENT WA OPTION 5C:

		GARRET CORD WERNER LLC 3132 WESTERN AVE SEATTLE WA 09121
RGY CREDITS		90121
L ENERGY CREDITS REQUIRED PER TABLE R406.2:	4.5 CREDITS	
IENT BUILDING ENVELOPE DN 1a:	0.5 CREDITS	TEI 206 749 9019
VERTICAL FENESTRATION U = 0.28 NEW FLOOR OVER UNCONDITIONED SPACE REQUNEW SLAB ON GRADE REQUIRES THERMAL BREAK NEW SLAB ON GRADE REQUIRES 24'' OF R-10 INSUL	JIRES R-38 INSULATION AT REIMITER FOOTING LATION AT PERIMETER	FAX 206.749.9128 WWW.GARRETCORDWERNER.COM
EAKAGE CONTROL AND EFFICIENT VENTILATION ON 2b:	1.0 CREDITS	
COMPLIANCE OF AIR LEAKAGE TO 2.0 AIR CHANG ALL WHOLE HOUSE VENTILATION REQUIREMENTS F THE INTERNATIONAL RESIDENTIAL CODE SHALL BE VENTILATION SYSTEM WITH MINIMUM SENSIBLE HE OF 0.70.	GES PER HOUR MAXIMUM PER SECTION M1507.3 OF MET WITH A HEAT RECOVERY AT RECOVERY EFFICIENCY	COPYRIGHT RESERVED THIS DRAWING, AS AN INSTRUMENT OF SERVICE, IS AND AT ALL TIMES REMAINS THE PROPERTY OF GARRET CORD WERRER, LLC, AND MAY NOT BE USED WITHOUT HIS WRITTEN PERMISSION, ALL DESIGNS AND. OTHER INFORMATION SHOWN ON THIS DRAWING ARE FOR USE ON THE SPECIFIED PROJECT AND SHALL NOT BE OTHERWISE USED WITHOUT THE PERMISSION OF GARRET CORD WERNER, LLC.
EFFICIENCY HVAC EQUIPMENT ON 3d:	1.0 CREDITS	GENERAL NOTES: 1. ALL CODE COMPLIANCE TO BE VERIFIED PRIOR TO CONSTRUCTION BY ARCHITECT AND
DUCTLESS SPLIT SYSTEM HEAT PUMPS, ZONAL CON THE PRIMARY SPACE HEATING SYSTEM IS ZONAL EI DUCTLESS HEAT PUMP SYSTEM SHALL BE INSTALLED TO THE LARGEST ZONE OF THE HOUSING UNIT.	ITROL: IN HOMES WHERE LECTRIC HEATING, A D AND PROVIDE HEATING	ADA EXPERT. 2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, DATUMS, AND LEVELS PRIOR TO THE START OF WORK. 3. ALL REVISIONS SHOWN TO BE VERIFIED BY ARCHITECT TO COMPLY WITH ALL BUILDING CODES AND STANDARDS.
IENT WATER HEATING DN 5a:	0.5 CREDITS	 MILLAVOKNEK TO CONFIRM ALL CLEARANCES. PERMIT DRAWINGS - NOT TO BE USED FOR CONSTRUCTION. DO NOT SCALE FROM THIS DRAWING
ALL KITCHEN SINK FAUCETS SHALL BE RATED AT 1.7 ALL SHOWERHEADS SHALL BE RATED AT 1.75 GPM ALL OTHER LAVATORY FAUCETS SHALL BE RATED A	75 GPM OR LESS. OR LESS. IT 1.0 GPM OR LESS.	 ALL GLAZING TEMPERED SAFETY GLASS UNLESS OTHERWISE NOTED ELECTRICAL & LIGHTING DRAWINGS FOR DESIGN PURPOSES ONLY. SUBCONTRACTOR TO NOTIFY ARCHITECT OF ANY DISCREPANCIES OR NON-COMPLIANCE OF BUILDING CODES.
IENT WATER HEATING		DATE DRAWN BY 02/26/20 AHP
GAS WATER HEATER WITH A MINIMUM EF OF 0.919	& SHALL BE INSTALLED	PROJECT
		Mercer Island, WA 98040 REV DATE ISSUE/REVISION
		REV DATE ISSUE/REVISION
		REV DATE ISSUE/REVISION
		SHEET TITLE SHEET SHEET
		SASS 74III AVE SE Mercer Island, WA 98040 REV DATE ISSUE/REVISION REV DATE ISSUE/REVISION CONSTRUCTION CONSTRUCTION REVISION NO.





		Tree Summa	ary Table						American	Forest M	anagement, Inc		
		For:	3453 74th A City of Merce	/e SE-Ne er Island	eighborin	g Trees	1.8		Date: Inspector:	11/5/2018 Layton	3	_	
ree/ ag#	Species	Exceptional	DBH (inches)	Height (feet)	Drip-Li	ne / Limit (fe	s of Distu et)	urbance	Condition	Proposal	Comments	Tree/ Tag #	
					N	S	E	W					T.
101	Douglas fir	yes	12	60		0/10			fair	Protect	suppressed, cannot isolate		Japanese
102	Douglas fir	yes	19	106			4/10		fair	Protect	shhweinitizi conk 2' from root crown		Ted alder
103	Douglas fir	yes	30	125			4/5		good	Protect	no concerns	3	Pacific do
104	Douglas fir	yes	23	98			4/6	Ĵ	good	Protect	no concerns	4	flowering
105	Douglas fir	no	10	48			4/4		fair	Protect	old broken top, regrown	5	white fir
106	Douglas fir	no	20	96			2/2	s	good	Protect	approx 8' off pl		
107	pigleaf maple	yes	21,23,23 (39)	95	16	na	22	30	fair	Protect	approx 8' off driveway	6	bigleaf m
108	awson cypress	no	8	35	0/0				good	Protect		7	Douglas f
109	awson cypress.	no	16	50	0/2		16	-	fair	Protect	lean		
110	awson cypress.	no	16	52	2/4		0.		good	Protect		8	Douglas t
111	awson cypress	no	10	42	2/2		7	-	good	Protect			Douglas
112	Douglas fir	yes	22	86		19		17/16	good	Protect	natural lean southwest	10	Douglas f
113	Douglas fir	yes	24	90				12/14	fair	Protect	old broken top	- 11	Douglas
114	Douglas fir	yes	21	62				19/14	fair	Protect	leans southwest, mod decay column	12	Douglas f
115	Douglas fir	yes	38	145				15/16	good	Protect		13	Pacific do
116	Douglas fir	yes	11	67				6/8	fair	Protect	suppressed	14	Douglas f
117	Douglas fir	yes	28	130				10/14	good	Protect	good taper	15	Douglas f
118	Douglas fir	yes	35	132				10/18	good	Protect		10	Desifie de
119	Douglas fir	yes	24	113				14/14	good	Protect		10	Douglas 1
120	Douglas fir	yes	36	135		14/16		[]]	good	Protect		18	Douglas
							(19	Douglas
												1.00	
							2	1				20	bigleaf m
												21	bigleaf m
												22	Douglas f



		Tree Summa	ry Table						American	Forest Man	agement, Inc
	For: 3453 74th Ave SE-Property Trees Date: City of Mercer Island Date: Inspector:		11/5/2018 Layton 10/28/2019 Tomco								
Tree/ Tag #	Species	Exceptional	DBH (inches)	Height (feet)	Drip-Li	ne / Limit: (fe	s of Distu et)	irbance	Condition	Proposal	Comments
			1000000	1	N	S	E	W			
1	Japanese white pine	no	8	28	10	10	11	12	good	Retain	No concerns.
2	red alder	no	15	63	13	14	16	7	fair	Retain	Leans sw, declining top.
3	Pacific dogwood	yes	9	37	14	8	12	12/10	fair	Remove	Exceptional due to size. Several small cavities, mod anthracnose infection. Exceptional threshold 6".
4	flowering dogwood	no	5,6 (8)	31	7	6	5	12	fair	Remove	Leans west, pruned in past.
5	white fir	yes	27	92	10/14	10/14	10/6	10/14	good	Remove	Exceptional due to size. No concerns. Exceptional threshold 24".
6	bigleaf maple	no	24	83	0	24	4	16	poor	Retain	Grove tree. Part of grove but poor health. Natural lean west, suppressed, minor decay column.
7	Douglas fir	yes	15	78	6	10	4	12	fair	Retain	Grove tree. Exceptional due to size. Good form, natural lean east.
8	Douglas fir	yes	32	116	14	14	16	12	good	Retain	Grove tree.
9	Douglas fir	yes	33	140	12	15	14	10	good	Retain	Exceptional due to size. 60% lcr. Grove tree.
10	Douglas fir	yes	12	33	7	8	10	6	fair	Retain	Old broken top, suppressed, moderate decay column. Grove tree.
11	Douglas fir	yes	36	144	na	11	13	10	good	Retain	Exceptional due to size. 70% lcr. Grove tree.
12	Douglas fir	yes	20	86	6	9	11	11	fair	Retain	Old broken top, Grove tree, Exceptional due to size, Large canker on east side,
13	Pacific dogwood	yes	11	53	10	19	14	12	fair	Retain	longevity in question, Grove tree.
14	Douglas fir	yes	37	127	12	15/12	16	14/13	good	Retain	Exceptional due to size. 70% lcr. Grove tree.
15	Douglas fir	yes	28	126	12	8/12	12	8	good	Retain	Natural lean north. Grove tree.
16	Pacific dogwood	yes	11	48	12	16/10	14	16	fair	Retain	Exceptional due to size, suppressed by Douglas fir, Grove tree.
17	Douglas fir	yes	32	128	12	16/14	12	12	good	Retain	Exceptional due to size. 70% Icr. Grove tree.
18	Douglas fir	yes	27	112	10	11/12	10	10	fair	Retain	60% Icr, old broken top. Grove tree.
19	Douglas fir	yes	32	118	14	10/14	12	12	good	Retain	Exceptional due to size, 60% Icr. Grove tree.
20	bigleaf maple	yes	12	40	20	0	12	16	fair-poor	Retain	Grove tree. Lots of dead cambium on ne side, suspect xviella. Gro
21	bigleaf maple	yes	19	88	14	18	13	15	fair	Retain	tree.
22	Douglas fir	yes	22	97	12	8	10	10	fair	Retain	Old broken top. Grove tree.
23	Douglas fir	yes	24	90	8	13/12	14	10	fair	Retain	Old broken top. Grove tree.

Trees on neighboring properties - Drip-Line and Limits of Disturbance measurements from property line Calculated DBH: the DBH is parenthesis is the square root of the sum of the dbh for each individual stem squared (example with 3 stems: dbh = square root [(stem1)2 +(stem2)2 +(stem3)2]).





lot slope:

D. NET LOT AREA

HARDSCAPE

TOTAL AREA TOTAL AREA 9% OF NET UNUSED LO TOTAL ALLC

BUILDING A

UPPER FLOO MAIN FLOC GROSS BAS GARAGE / TOTAL ARE

ACCESSOR BASEMENT 150% GFA 200% GFA STAIRCASE TOTAL BUIL



LOT SLOPE CALCULATIONS

HIGHEST ELEVATION POINT OF LOT: LOWEST ELEVATION POINT OF LOT: ELEVATION DIFFRENCE: HORIZANTAL DISTANCE BETWEEN HIGH AND LOW POINTS: 283.00 FT

275.00 FT

173.19FT

8.00 FT

4.62%

40% OF LOT

8,647.2 SF

21,618 SF

3,657.79 SF

294.56 SF

3,098.96 SF

7,395 SF

7,395 SF

7051.31 SF

7051.31 SF

32.6% OF LOT

LOT COVERAGE CALCULATIONS A. ALLOWED LOT COVERAGE B. ALLOWED LOT COVERAGE AREA E. MAIN STRUCTURE ROOF AREA F. ACCESSORY BUILDING ROOF AREA G. VEHICULAR USE(DRIVEWAY, ACCESS EASEMENTS, PARKING) H. TOTAL EXISTING LOT COVERAGE AREA I. (TOTAL LOT COVERAGE AREA REMOVED) J. TOTAL NEW LOT COVERAGE AREA K. TOTAL PROJECT LOT COVERAGE AREA = (H-I) + JN. PROPOSED LOT COVERAGE = (K/D)X100

A HARDSCAPE ON PROPERTY	3,488.16 SF
a decks on property	2,700.50 SF
LOT AREA	1,945.62 SF
DT COVERAGE	1,595.89 SF
DWABLE HARDSCAPE AREA	3,541.51 SF

AREA	EXISTING AREA	REMOVED AREA	NEW AREA	TOTAL
OR	0 SF	O SF	1,665 SF	1,665 SF
DR	4,330 SF	4,330 SF	2,490 SF	2,490 SF
Sement Area	0 SF	0 SF	0 SF	0 SF
CARPORT	436 SF	436 SF	560 SF	560 SF
A FLOOR	4,766 SF	4,766 SF	4,715 SF	4,715 SF
ry buildings	0 SF	0 SF	295 SF	295 SF
AREA EXCLUDED	0 SF	0 SF	866 SF	866 SF
MODIFIER	0 SF	0 SF	0 SF	0 SF
MODIFIER	0 SF	0 SF	45 SF	45 SF
GFA MODIFIER	0 SF	0 SF	0 SF	0 SF
DING AREA	4,766 SF	4,766 SF	5,921 SF	5,921 SF

AVE	ERAGE BL	IILDING ELEVATION	
POINT ELEVATION (FT)	LENGTH ID	WALL SEGMENT LENGTH (FT)	ELEV x LENGTH
280.10	a	20.00	5602.00
280.20	b	8.00	2241.60
280.30	С	13.00	3643.90
280.30	d	20.00	5606.00
281.00	е	51.00	14331.00
281.70	f	7.50	2112.75
281.80	g	13.00	3663.40
282.00	h	30.00	8460.00
281.50	m	77.00	21675.50
280.50	n	25.50	7152.75
280.00	0	20.00	5600.00
279.00	р	11.92	3325.68
279.00	q	9.50	2650.50
279.00	r	9.33	2603.07
279.00	S	9.50	2650.50
279.50	t	29.75	8315.125
	TOTAL	355.00	99,633.78
ABE		(ELEVxLENGTH)/ LENGTH	280.66
T BUILDING ELEVAT	ION	(ABE + 30.00')	310.66

98121	
70121	
TEL 206.749.90	
FAX 206.749.912	
COPYRIGH THIS DRAWING, AS AN INSTRUME PROPERTY OF GARRET CORD WE	TRESERVED
WRITTEN PERMISSION. ALL DESIG DRAWING ARE FOR USE ON THE S USED WITHOUT THE PERMISSION (NS AND OTHER INFORMATION SHOWN ON THIS SPECIFIED PROJECT AND SHALL NOT BE OTHERWISE OF GARRET CORD WERNER, LLC.
PRIOR TO CONSTR ADA EXPERT.	UCTION BY ARCHITECT AND
2. THE CONTRAC DIMENSIONS, DATU START OF WORK.	IOR SHALL VERIFY ALL JMS, AND LEVELS PRIOR TO THE
3. ALL REVISIONS ARCHITECT TO CO	SHOWN TO BE VERIFIED BY MPLY WITH ALL BUILDING DARDS
4. MILLWORKER 1 5. PERMIT DRAWI	TO CONFIRM ALL CLEARANCES. NGS - NOT TO BE USED FOR
6. DO NOT SCALE 7. ALL GLAZING T	E FROM THIS DRAWING 'EMPERED SAFETY GLASS
UNLESS OTHERWISE 8. ELECTRICAL & DESIGN PURPOSES	NOTED LIGHTING DRAWINGS FOR ONLY, SUBCONTRACTOR TO
NOTIFY ARCHITECT NON-COMPLIANC	OF ANY DISCREPANCIES OR E OF BUILDING CODES.
DATE 06/02/20	DRAWN BY
SCALE $1'' = 10'-0''$	
PROJECT	
'FOO'	
RESID	ENCE
2153 71-	th Ave SE
Mercer	Island WA
98040	
REV DATE	ISSUE/REVISION
REV DATE	ISSUE/REVISION Revision 1
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7/24/2020 1:32:42 PM









² BUILDING ELEVATION - NORTH 1/4" = 1'-0"





AVE	ERAGE BL	IILDING ELEVATION	
DINT ELEVATION (FT)	LENGTH ID	Wall Segment Length (FT)	ELEV x LENGTH
280.10	а	20.00	5602.00
280.20	b	8.00	2241.60
280.30	С	13.00	3643.90
280.30	d	20.00	5606.00
281.00	е	51.00	14331.00
281.70	f	7.50	2112.75
281.80	g	13.00	3663.40
282.00	h	30.00	8460.00
281.50	m	77.00	21675.50
280.50	n	25.50	7152.75
280.00	0	20.00	5600.00
279.00	р	11.92	3325.68
279.00	q	9.50	2650.50
279.00	r	9.33	2603.07
279.00	S	9.50	2650.50
279.50	t	29.75	8315.125
	TOTAL	355.00	99,633.78
ABE		(ELEVxLENGTH)/ LENGTH	280.66
IILDING ELEVAT	ION	(ABE + 30.00')	310.66

<u>Section 1</u> 1/4" = 1'-0"

 $1 \frac{\text{Section 8}}{1/4" = 1'-0"}$

WALL ASSEMBLY AND PARTITION NOTES

1. REPLACE 5/8" GWB WITH 5/8" TYPE 'X' GYPSUM BOARD FOR 1 HOUR RATED WALLS WHERE INDICATED ON PLANS.

- 2. REPLACE 5/8" GWB WITH 5/8" WR GWB IN WET LOCATIONS.
- 3. ADD PLYWOOD SHEATHING PER STRUCTURAL AT SHEAR WALL LOCATIONS.

4. AT LOCATIONS WHERE NEW WATERPROOFING IS INSTALLED ADJACENT TO EXISTING WATERPROOFING, GC TO VERIFY COMPATIBILITY.

5. ALL TILE WALLS TO COMPLY WITH APPROPRIATE METHOD LISTED IN THE TCNA HANDBOOK FOR CERAMIC, GLASS, AND STONE TILE INSTALLATION.

INTERIOR

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<u>o</u> <u>o</u>

GARRET CORD WERNER LLC

<u>EXTERIOR</u>

<u>INTERIOR</u>

<u>EXTERIOR</u>

EXTERIOR

<u>EXTERIOR</u>

<u>EXTERIOR</u>

(R3B)

PEDESTAL PAVER ROOF OVER BEAMS

- PAVERS PER FINISH SCHEDULE EXTERIOR PEDESTAL PAVER SYSTEM
- ROOF MEMBRANE
- PROTECTION BOARD RIGID INSULATION SLOPED 1/4" PER
- FOOT MIN, MIN. 2'' R-10
- PLYWOOD SHEATHING PER STRUCTURAL FLOOR FRAMING PER STRUCTURAL
- 6" CLOSED CELL SPRAY FOAM
- INSULATION, MIN. R-39 CEILING JOISTS PER STRUCTURAL
- 5/8" GWB
- FINISH PER FINISH SCHEDULE

PEDESTAL PAVER ROOF OVER BEAMS

- PAVERS PER FINISH SCHEDULE EXTERIOR PEDESTAL PAVER SYSTEM
- ROOF MEMBRANE PROTECTION BOARD
- RIGID INSULATION SLOPED 1/4" PER
- FOOT MIN, MIN. 2" R-10 PLYWOOD SHEATHING PER STRUCTURAL
- FLOOR FRAMING PER STRUCTURAL
- CEILING JOISTS PER STRUCTURAL
- EXTERIOR GRADE WOOD SOFFIT PANELS FINISH PER FINISH SCHEDULE

<u>EXTERIOR</u>

INTERIOR

- WOOD FLOOR OVER BEAMS $\langle R7A \rangle$
 - 4" PREVEGETATED MODULAR GREEN
 - **ROOF SYSTEM** PROTECTION COURSE
 - ROOF MEMBRANE COVER BOARD
 - RIGID INSULATION, MIN 2" R-10
 - VAPOR BARRIER • PLYWOOD SHEATHING PER STRUCTURAL
 - ROOF FRAMING PER STRUCTURAL • 6" CLOSED CELL SPRAY FOAM
 - INSULATION, MIN. R-39
 - WOOD SOFFIT CEILING PANELS TO MATCH EXTERIOR WOOD SOFFIT
 - FINISH PER FINISH SCHEDULE

GARRET CORD WERNER LLC

3132 WESTERN AVE

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č 4/2020

WINDOW NOTES

1. Safety glazing (SG) to be provided where required by IRC R308.4. Refer to plans for safety glazing locations. Each pane of safety glazing shall be identified by a label in accordance with the IRC.

2. Emergency escape and rescue openings shall be installed per IRC R310. See plans for locations. All emergency escape and rescue openings shall have a minimum net clear opening of 5.7SF. The minimum net clear opening height shall be no less than 24", clear opening width no less than 20", with a finished sill height not more than 44" above the floor.

3. Window supplier/manufacturer to field verify all rough openings, window divisions, and operation prior to production of all windows.

4. All window finishes per architect. Window supplier to submit color sample for approval by architect/owner.

5. Windows within 10'-0" of grade (or accessible deck) shall be capable of being locked.

6. All glazing to have an area weighted average U-factor of 0.30 max per the WSEC and using the prescriptive option. Manufacturer to confirm during shop drawing process.

7. Safety glazing to be provided when adjacent to stairways and landings within 36" horizontally of a walking surface.

Mark	Bas	e Constraint
W101	LEVEL 1	ABE=280.66'
W102	LEVEL 1	ABE=280.66'
W103	LEVEL 1	ABE=280.66'
W104	LEVEL 1	ABE=280.66'
W105x	LEVEL 1	ABE=280.66'
W106	LEVEL 1	ABE=280.66'
W107	LEVEL 1	ABE=280.66'
W108-109x	LEVEL 1	ABE=280.66'
W110x	LEVEL 1	ABE=280.66'
W111	LEVEL 1	ABE=280.66'
W114	LEVEL 1	ABE=280.66'
W115	LEVEL 1	ABE=280.66'
W116	LEVEL 1	ABE=280.66'
W204-205x	LEVEL 2	
W206	LEVEL 2	
Grand total		

<u>WINDOW SCHEDULE</u>										
SILL	Length	Unconnecte d Height	Area	U-Factor	UA	Comments				
0' - 0''	18' - 10 7/16''	11' - 2 3/4"	309.7 SF	0.28	86.7					
0' - 0''	4' - 6 1/16''	12' - 0''	57.4 SF	0.28	16.1					
0' - 0''	4' - 6 1/16''	12' - 0''	57.7 SF	0.28	16.2					
0' - 0''	19' - 1 1/8''	20' - 0''	310.2 SF	0.28	86.9					
0' - 0''	9' - 10''	15' - 2''	149.1 SF	0.28	41.8					
0' - 0''	24' - 5 1/4''	11' - 2 3/4''	235.7 SF	0.28	66.0					
0' - 0''	10' - 1''	25' - 6''	252.9 SF	0.28	70.8					
0' - 0''	20' - 3''	11' - 0''	192.1 SF	0.28	53.8					
0' - 0''	14' - 7 15/16''	11' - 2 3/4''	135.5 SF	0.28	38.0					
0' - 0''	5' - 2 3/8''	7' - 2''	35.8 SF	0.28	10.0					
11' - 0''	17' - 1 3/8''	2' - 6''	42.1 SF	0.28	11.8					
11' - 0''	20' - 8 3/8''	2' - 6''	50.9 SF	0.28	14.3					
11' - 0''	4' - 2 3/8''	2' - 6''	9.9 SF	0.28	2.8					
0' - 0''	20' - 3''	11' - 8''	225.7 SF	0.28	63.2					
0' - 0''	5' - 10''	10' - 0''	58.3 SF	0.28	16.3					
1			2123.4 SF	1	594.5					

DOOR NOTES

1. Safety Glazing (SG) to be provided where required by IRC R308.4. All glazing subject to human impact shall be tempered, safety glazing as required by the IRC. Provide safety glazing in fixed or operable panels adjacent to a door where the nearest exposed edge of the glazing is within a 24" arc of either vertical edge or the door in a closed position and where the bottom edge of the glazing is less than 60" above the walking surface. Provide safety glazing for panels over 9SF and within 18" vertical and 36" horizontal of any walking surface. Provide safety glazing in all shower doors, shower enclosures, bathtub enclosures, or bathtub doors. Glass enclosure doors and panels must be labeled category II, and doors must swing outward. Refer to plans for safety glazing locations. Each pane of safety glazing shall be identified by a label in accordance with the IRC.

2. Door frames and frame anchorage shall be installed according to the conditions of their listing.

3. All exterior doors, except garage doors, to be provided with mortise lock and deadbolt. Minimum 1/2" throw dead latch for doors per IRC R329.

4. All glazed doors to have an area weighted average U-factor of 0.30 max. per the WSEC using the prescriptive option.

5. 1 1/2" maximum threshold for all exterior doors swinging out to the exterior. (IRC R311.3)

6. Exterior doors to have a U-factor of 0.20 max per the WSEC prescriptive option.

7. Fire doors, windows, and dampers shall have an approved label or listing mark, indicating fire-protection rating, which is visible for inspection and permanently affixed at the time of manufacture.

8. All exterior, mechanical room doors shall be insulated, with interlocking lowrise thresholds and weatherstripping.

9. Door thresholds shall not exceed 1/2" in height above finished floor.

10.All bedroom, bathroom, and powder room doors to be provided with privacy locks.

11.Operation, hinging, pocketing or sliding per plans.

12.All interior doors to be painted wood solid core.

13.Door supplier/manufacturer to field verify all rough openings and operation prior to production of the doors.

14.Sizes noted are for reference only, field verify R.O. size before ordering doors.

15.Door glazing to be argon filled, 1" 366 I.G.

16. Windows and doors shall limit infiltration per ASTM E 283-73.

○ DOOR TYPES 1/4" = 1'-0"

	DOOR SCHEDULE										
Mark	Function	Description	Height	Width	Thickness	Door Type	Hardware Package	Door Material		Comments	
	Exterior		13' - 4 29/32''	18' - 1 1/4''	0' - 8 9/16''						
23	Exterior		7' - 0''	18' - 0''	0' - 1 1/2''						
24	Interior	Offset Pivot	7' - 0''	3' - 4''	0' - 1 3/4''						
25	Exterior	Offset Pivot	13' - 6''	4' - 8''	0' - 1 3/4''						
26	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
28	Interior	Pocket	7' - 0''	2' - 6''	0' - 1 3/8''						
30	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
31	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
32	Interior	Flush	7' - 0''	2' - 6''	0' - 1 3/8''						
33	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
34	Interior	Pocket	7' - 0''	2' - 6''	0' - 1 3/8''						
35	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
36	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
37	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
38	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
39	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
42	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
43	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
44	Interior	Pocket	8' - 0''	4' - 0''	0' - 1 3/8''						
45	Interior	Flush	7' - 0''	3' - 0''	0' - 1 3/8''						
46	Interior	Pocket	8' - 0''	4' - 0''	0' - 1 3/8''						
W105	Exterior	Glazed Slider 2 Panel XO	14' - 7''	8' - 8''	0' - 5 7/8''						
W106	Exterior		9' - 7 3/4''	24' - 5 1/4''	0' - 5 7/8''						
W108	Exterior	Glazed Slider 2 Panel XO	9' - 7 3/4''	9' - 7 1/2"	0' - 5 7/8''						
W109	Exterior	Glazed Slider 2 Panel XO	9' - 7 3/4''	9' - 8 1/2"	0' - 5 7/8''						
W110	Exterior		9' - 7 3/4''	14' - 0 5/8''	0' - 5 7/8''						
W111	Interior	Offset Pivot	7' - 0''	3' - 0''	0' - 1 3/4''						
W112	Interior	Pocket	7' - 0''	3' - 0''	0' - 1 3/8''						
W115	Interior	Pocket	7' - 0''	2' - 6''	0' - 1 3/8''						
W116	Interior	Pocket	7' - 0''	4' - 8''	0' - 1 3/8''						
W117	Interior	Pocket	7' - 0''	3' - 0''	0' - 1 3/8''						
W118	Interior	Pocket	7' - 0''	2' - 6''	0' - 1 3/8''						
W204	Exterior	Glazed Slider 2 Panel XO	11' - 1 1/4"	9' - 7 1/2"	0' - 5 7/8''						
W204	Exterior	Glazed Slider 2 Panel XO	0' - 0''	0' - 0''	0' - 5 7/8''						
W205	Exterior	Glazed Slider 2 Panel XO	11' - 0''	9' - 8 1/2"	0' - 5 7/8''						
W205	Exterior	Glazed Slider 2 Panel XO	0' - 0''	0' - 0''	0' - 5 7/8''						
L	1					1	1	I			

ABBREVIATION

& @ ' # = /	AND AT FEET(FOOT) INCH (INCHES) POUND(S), NUMBER EQUAL(S) PER
A.B. ABV. ADJ. ALUM. ALT. APPRX. ARCH. ASSY B. BEL. BEN B.F. BLDG. BLK. BLKG. BLW. BLKG. BLW. BM. BNU BN BNDRY. B.O. E.O. E.O. F. BRDG. BRDG. BRDG. BRDG. BRDG. BTM. BTWN.	ANCHOR BOLT ABOVE ADDITIONAL ADJACENT ALUMINUM ALTERNATE APPROXIMATE(LY) ARCHITECT(URAL) ASSEMBLY BOTTOM BELOW BOUNDARY EDGE NAILING BRACED FRAME BUILDING BLOCK BLOCKING BLOCK BLOCKING BELOW BEAM BRICK MASONRY UNIT BOUNDARY NAILING BOUNDARY BOTTOM OF BOTTOM OF BOTTOM OF EXCAVATION BOTTOM OF FOOTING BRIDGE(ING) BEARING BOTTOM BETWEEN
C CAMB. CANT. CF C.I.P. C.J. CLG. CLR. COL. CONC. CONN. CONST. CONT. CTSK. CTR. CY	CAMBER CAMBER(ED) CANTILEVER(ED) CUBIC FOOT CAST IN PLACE CONSTRUCTION JOINT CENTER LINE CEILING CLEAR COLUMN CONCRETE CONNECTION CONSTRUCTION CONSTRUCTION CONTINUOS COUNTERSINK CENTER(ED) CUBIC YARD
d DB DBA DBL. DCW DEPT. DET. DF DIA. DIAG. DIAG. DIAPH. DIM. DN. D.O. DP. D.S. DWG. DWL.	PENNY(NAILS) DROPPED BEAM DEFORMED BAR ANCHORS DOUBLE DEMAND CRITICAL WELD DEPARTMENT DETAIL DOUGLAS FIR DIAMETER DIAGONAL DIAPHRAGM DIMENSION DOWN DITTO(REPEAT) DEEP DRAG STRUT DRAWING(S) DOWEL(S)
(E) EA. E.F. E.J. EL. ELEV. EMBD. EN ENG. EQ. EQPT. E.W. EXP. EXST. EXT.	EXISTING EACH EACH END EACH FACE EXPANSION JOINT ELEVATION ELEVATOR EMBED(MENT) EDGE NAIL ENGINEER EQUAL EQUIPMENT EACH WAY EXPANSION EXISTING EXTERIOR
FAB. FB FDN. F.F. FIN. FLG. FLR. FN F.O. F.O.C. F.O.M. F.O.S. F.O.W. FRM. F.S. FT. FRTW FTG.	FABRICATION FLUSH BEAM FOUNDATION FINISH FLOOR FINISH(ED) FLANGE FLOOR FIELD (FACE) NAIL FINISHED OPENING FACE OF CONCRETE FACE OF MASONRY FACE OF STUD FACE OF STUD FACE OF WALL FRAME(ING) FAR SIDE FEET(FOOT) FIRE RETARDANT TREATED WOC FOOTING
GA. GALV. GB. GLB GRD. GWB GYP.	GAUGE GALVANIZE(D) GRADE BEAM GLUE LAMINATED BEAM GRADE GYPSUM WALLBOARD GYPCRETE
H. HD H.D.G. HDR. HGR. HORZ. HORIZ. HR H.S.B. HT.	HORIZONTAL HOLDOWN HOT DIPPED GALVANIZED HEADER HANGER HORIZONTAL HORIZONTAL HEADER HIGH STRENGTH BOLT HEIGHT
I.D. I.E. I.F.	INSIDE DIAMETER INVERT ELEVATION INSIDE FACE

INFO. INT.	INCHE(S) INFORMATION INTERIOR
JST. JT.	JOIST JOINT
К	KIPS(1000)
LAT. LB. LG. LGTH. LGMF LLH LLV LSH LT. WT. L.W.	LATERAL POUND(S) LAG BOLT(S) LONG(ITUDINAL) LENGTH LIGHT GAUGE METAL FRAMING LONG LEG HORIZONTAL LONG LEG VERTICAL LONG SLOTTED HOLE(S) LIGHT WEIGHT LIGHT WEIGHT
MAS. MASN. MAT. MAX. M.B. MBM MECH. M.E.J. MFR. MIN. MISC. MTL.	MASONRY MASONRY MATERIAL MAXIMUM MACHINE BOLT METAL BUILDING MANUFACTURE MECHANICAL MASONRY EXPANSION JOINT MEZZANINE MANUFACTURER MINIMUM MISCELLANEOUS METAL
(N) N.L.B. NO. N.S. N.T.S. N.W.C.	NEW NON-LOAD BEARING NUMBER NEAR SIDE NOT TO SCALE NORMAL WEIGHT CONCRETE
OC O.C. O.D. O.F. O.H. OPNG. OPP. ORNT. OSB O.W.J.	ON CENTER ON CENTER OUTSIDE DIAMETER OUTSIDE FACE OPPOSITE HAND OPENING OPPOSITE ORIENTATE(ION) ORIENTED STRAND BOARD OPEN WEB JOIST
PAR. P/C PEN PL. PL. PL PLN PLMBG. PLYWD. PSF PSI P.T. PT	PARALLEL PRECAST PANEL EDGE NAIL PERPENDICULAR PLATE PROPERTY LINE PLAN PLUMBING PLYWOOD POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH PRESERVATIVE TREATED POST TENSION(ED)
QTY.	QUANTITY
R. RAD.	RADIUS RADIUS
RE: REF. REINF. REQ. R.F. R.O. R.S.	REFERENCE REFERENCE REINFORCEMENT(ING) REQUIRED RIGID FRAME ROUGH OPENING ROUGH SAWN
RE: REF. REINF. REQ. R.F. R.O. R.S. SCH. SCL SCHED. SHT. SIM. S.J. SKW. S.O.G. SPC. SPC. SPC. SPC. SPC. STD. STGR. STIFF. STIR. STIR. STRUC. STRUCT SUSP. SYMM.	REFERENCE REFERENCE REINFORCEMENT(ING) REQUIRED RIGID FRAME ROUGH OPENING ROUGH SAWN SCHEDULE STRUCTURAL COMPOSITE WOOD SCHEDULE SHEET SIMILAR SHRINKAGE CONTROL JOINT SKEW(ED) SLAB ON GRADE SPACE(S) (ING) SPECIFICATION(S) SQUARE STANDARD STAGGER STIFFENER(S) STIRRUP(S) STEEL STRUCTURAL STRUCTURAL SUSPENDED(TION) SYMMETRICAL
RE: REF. REINF. REQ. R.F. R.O. R.S. SCH. SCL SCHED. SHT. SIM. S.J. SKW. S.O.G. SPEC. SQ. STD. STGR. STGR. STGR. STIFF. STIR. STRUC. STRUCT. STRUCT. STRUCT. SYMM. T. T.&B. TEMP. T.&G. THK. THRD. TN T.O.S. T.O.W. TRANSV T.O.S TYP.	REFERENCE REFERENCE REINFORCEMENT(ING) REQUIRED RIGID FRAME ROUGH OPENING ROUGH SAWN SCHEDULE STRUCTURAL COMPOSITE WOOD SCHEDULE SHEET SIMILAR SHRINKAGE CONTROL JOINT SKEW(ED) SLAB ON GRADE SPACE(S) (ING) SPECIFICATION(S) SQUARE STANDARD STAGGER STIFFENER(S) STIRRUP(S) STEEL STRUCTURAL STRUCTURAL SUSPENDED(TION) SYMMETRICAL TOP TOP AND BOTTOM TEMPORARY TONGUE AND GROOVE THICK(NESS) THREADED TOE NAIL TOP OF SHEATHING(SLAB) TOP OF STEEL TYPICAL
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01000 - GENERAL REQUIREMENTS THE STRUCTURAL NOTES SUPPLEMENT THE PLANS AND SPECIFICATIONS. ANY DISCREPANCY FOUND BETWEEN THE DRAWINGS, NOTES, SPECIFICATIONS, SITE CONDITIONS, AND ARCHITECTURAL PLANS SHALL BE REPORTED TO THE ARCHITECT WHO SHALL CORRECT THE DISCREPANCY IN WRITING. ANY WORK COMPLETED AFTER DISCOVERY OF THE DISCREPANCY SHALL BE DONE AT THE CONTRACTOR'S RISK. REFER TO ARCHITECTURAL PLANS FOR OPENINGS, ARCHITECTURAL TREATMENTS, AND DIMENSIONS NOT SHOWN. CONSULT MECHANICAL PLANS FOR DUCTS AND PIPES ETC. NOT SHOWN.

THE CONTRACTOR SHALL PROVIDE BRACING AND SUPPORT REQUIRED FOR TEMPORARY CONSTRUCTION LOADS AND FOR STRUCTURAL COMPONENTS AS REQUIRED DURING ERECTION. BACKFILL BEHIND WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL WORK INCLUDING BUT NOT LIMITED TO EXCAVATION. SHORING, AND OTHER WORK WITH ALL UTILITIES AND ADJACENT PROPERTIES. CALL THE UTILITY LOCATE SERVICE PRIOR TO ANY WORK AT 1-800-424-5555.

01001 - CODE REQUIREMENTS

ALL DESIGN AND CONSTRUCTION SHALL CONFORM TO THE 2015 INTERNATIONAL BUILDING CODE AS ADOPTED BY SEATTLE, WASHINGTON.

01100 - DESIGN LOADS

DEAD LOADS: ACTUAL WEIGHT OF MATERIALS OF CONSTRUCTION AND PERMANENT EQUIPMENT.

FLOOR LIVE LOADS: FLOORS (RESIDENTIAL)	40 PSF
ROOF LIVE LOADS: ROOF	20 PSF
DECK LIVE LOAD: DECK	60 PSF

SNOW LOAD DESIGN DATA: Pg = 20 PSF, Pf = 20 PSF, Ce = 0.9, Is = 1.0, Ct = 1.0, 25 PSF UNIFORM

VIND DESIGN DATA: BASIC WIND SPEED WIND IMPORTANCE FACTOR WIND EXPOSURE TOPOGRAPHICAL FACTOR INTERNAL PRESSURE COEFFICIENT COMPONENT(CLADDING WIND PRESSURE	110 MPH (3-SECOND GUST) lw = 1.0 EXPOSURE C Kzt = 1.6 GCpi = +/- 0.18 P(C) = 25 PSF		
COMPONENT/GLADDING WIND FRESSURE	F(0) = 20 F 3F		
ARTHQUAKE DESIGN DATA: SEISMIC IMPORTANCE FACTOR	le = 1.0		
	II 0 4 00 7	04 0 500	
SPECTRAL RESPONSE ACCELERATIONS	Ss = 1.397 D	S1 = 0.538	
SPECTRAL RESPONSE COEFFICIENTS	SDS = 0.92	SD1 = 0.538	
WOOD LEVELS - BEARING WALL SYSTEM	R = 6.5	Cs = 0.14	
LIGHT FRAMED PLYWOOD SHEAR WALLS			

01200 - FOUNDATIONS - GEOTECHNICAL INVESTIGATION

FOUNDATION DESIGN BASED ON REPORT 20-084 DATED APRIL 9, 2020 PREPARED BY PAN GEO INC.. ALL SITE PREPARATION AND FOUNDATION CONSTRUCTION TO BE PERFORMED PER REPORT. FILLS TO BE COMPACTED TO 95% MODIFIED PROCTOR PER ASTM D-1557.

ALL FOUNDATIONS SHALL BE FOUNDED ON EITHER COMPETENT NATIVE MATERIAL OR BY OTHER MEANS

AS DEFINED BY THE GEOTECHNICAL ENGINEER. WHERE FOOTINGS ARE ALLOWED TO BE FOUNDED ON NATIVE MATERIAL BY THE GEOTECHNICAL

ENGINEER, ALLOWABLE BEARING CACITY IS 3,000 PSF. 1/3 INCREASE ALLOWABLE FOR WIND OR SEISMIC LOADS.

GEOTECHNICAL DESIGN PARAMETERS HAVE BEEN COORDINATED WITH PAN GEO INC. AS LISTED BELOW:

SIGN PARAMETERS FOR RETAINING WALLS WITH FLAT BACKFILL ARE AS	FOLLOWS:
ACTIVE EARTH PRESSURE (YIELDING) 35 PCF (ASSUMED)	
ACTIVE EARTH PRESSURE (AT-REST) 50 PCF (FOR DESIGN (OF BASEMENT WALLS)
PASSIVE EARTH PRESSURE 350 PCF (ALLOWABLE -	- FS=1.5)
COEFFICIENT OF FRICTION 0.35 (ALLOWABLE - FS	=1.5)
SOIL PROFILE SITE CLASS D	
SEISMIC SURCHARGE UNIFORM 8H	
VEHICLE SURCHARGE 2'-0" OF SOIL	

ALL FOUNDATION INSTALLATIONS SHALL BE SUBJECT TO APPROVAL OF THE GEOTECHNICAL ENGINEER.

01300 - SHOP DRAWING SUBMITTAL PROCESS

SHOP DRAWINGS ARE TO BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION. IF SHOP DRAWINGS DIFFER FROM THE APPROVED DESIGN DRAWINGS, NEW DESIGN DRAWINGS BEARING THE SEAL AND SIGNATURE OF A LICENSED STATE OF WASHINGTON STRUCTURAL ENGINEER SHALL BE SUBMITTED ALONG WITH THE SHOP DRAWINGS TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO FABRICATION.

SHOP DRAWINGS ARE REQUIRED FOR ALL STRUCTURAL STEEL AND PROPRIETARY GUARD COMPONENTS.

01400 - INSPECTIONS AND SPECIAL INSPECTIONS THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL INSPECTIONS REQUIRED BY THE LOCAL BUILDING DEPARTMENT.

SPECIAL INSPECTIONS ARE GENERALLY NOT REQUIRED FOR GROUP R-3 OCCUPANCIES UNLESS OTHERWISE REQUIRED BY THE BUILDING OFFICIAL. HOWEVER, SPECIAL INSPECTIONS ARE REQUIRED FOR STRUCTURAL STEEL WELDING. SHEAR WALLS WITH TIGHTER NAILING THAN 4" O.C. AS WELL AS POST INSTALLED ANCHORS. REFER TO THE INSPECTION TABLES FOR FURTHER DIRECTION.

01500 - STRUCTURAL OBSERVATION STRUCTURAL OBSERVATION IS NOT REQUIRED.

01600 - QUALITY ASSURANCE REQUIREMENTS THE QUALITY ASSURANCE PLAN SHALL BE TO VERIFY THAT THE SPECIAL INSPECTIONS NOTED IN SECTION 01400 AND THE STRUCTURAL OBSERVATION NOTED IN SECTION 01500 HAVE BEEN COMPLETED AND THAT SUPPORTING DOCUMENTATION NOTED IN SUCH SECTIONS HAS BEEN PROVIDED.

QUALITY ASSURANCE PLAN IS NOT REQUIRED FOR STRUCTURES OF LIGHT WOOD FRAMING WITH DESIGN SPECTRAL RESPONSE AT SHORT PERIODS, SDS, NOT EXCEEDING 0.50g.

QUALITY ASSURANCE PLAN IS NOT REQUIRED FOR WIND EXPOSURE B WHERE BASIC WIND SPEED IS LESS THAN 120 MPH.

SUMMARY: A QUALITY ASSURANCE PLAN IS NOT REQUIRED BY CODE FOR THIS STRUCTURE.

01700 - EXECUTION REQUIREMENTS

INSTALLATION OF ALL STRUCTURAL COMPONENTS SHALL BE AS REQUIRED PER ALL LOCAL CODES.

02000: SITE CONSTRUCTION ALL SITE CONSTRUCTION SHALL BE CONSISTENT WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS AS NOTED IN THE GEOTECHNICAL ENGINEERING REPORT (SEE SECTION 01300) AND IN SUBSEQUENT DIRECTIVES.

02100 - EXCAVATION SUPPORT AND PROTECTION

EXCAVATION FOR FOUNDATIONS SHALL BE PER PLAN DOWN TO UNDISTURBED NATIVE MATERIAL PER THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS. OVER-EXCAVATED AREAS SHALL BE BACKFILLED WITH LEAN CONCRETE OR PER GEOTECHNICAL RECOMMENDATIONS AT THE CONTRACTOR'S EXPENSE.

EXCAVATION SLOPES SHALL BE SAFE AND SHALL NOT BE GREATER THAN THE LIMITS SPECIFIED BY LOCAL, STATE, AND NATIONAL SAFETY REGULATIONS.

INSTALLATION OF CONSTRUCTION SHORING, IF REQUIRED, SHALL BE PER THE SHORING DRAWINGS, NOTES, AND SPECIFICATIONS.

02200 - BACKFILL AND COMPACTION

BACKFILL SHALL NOT BE PLACED UNTIL THE REMOVAL OF FORMWORK AND OF ANY DEBRIS. BACKFILL BEHIND ALL WALLS SHALL NOT BE PLACED UNTIL THE WALLS ARE PROPERLY SUPPORTED. ALL BACKFILL MATERIAL AND PLACEMENT PROCEDURES SHALL BE CONSISTENT WITH THE GEOTECHNICAL ENGINEERING RECOMMENDATIONS.CATILEVERED BASEMENT WALLS SHALL CURE FOR A MINIMUM OF 14 DAYS PRIOR TO BACKFILL AND COMPACTION PER THE SOILS REPORT.

						NOTES				
03000 - CA CONCRET 318-14 "BU CEMENT A THE ENGIN SECTION 3 ADMIXTUR	ST-IN-PLAC E CONSTR ILDING CO ND CONCF IEER OF R 3.6. CONCR E CONFOF	CE CONO UCTION DE REQ RETE SH ECORD ETE EXF RMING TO	CRETE SHALL (UIREME IALL COI AND SH POSED 1 O IBC SE	CONFOF NTS FO NFORM ALL COI FO FREE ECTION	RM TO T R STRU TO IBC MPLY W EZING A 1904.2.	HE AMERICAN CONCRETE INSTITUTE STANDARD ACI CTURAL CONCRETE". SECTION 1903. ADMIXTURES SHALL BE APPROVED BY ITH ACI 318-14 ND THAWING SHALL HAVE AN AIR ENTRAINING ITHE USE OF WATER SOLUBLE CHLORIDE ION SHALL	06100 - ROUGH FRAMIN SAWN LUMBER SHALL DRESSING RULES" NO. PERCENT MAXIMUM MO DRYING OF ASSEMBLEI WEATHER OR IN CONT PLAN. LUMBER SPECIE U.N.O. PER PLAN/SCHE	IG CONFORM TO WES 17 LATEST EDITIO DISTURE CONTENT D FRAMING TO MIN ACT WITH CONCRE S, GRADE, AND PF DULE:	ST COAST LUMB N. SAWN LUMB T. PROTECT LUI NIMIZE WOOD SH ETE OR MASONF ROPERTIES FOR	ER IN ER SH VBER HRINK RY SH EACI
CONCRET (1) 28 DAY ENTRAINM APPLICATI	e Mix Desi Max. Stre Ent [%] (5) On.	GNS SH ENGTH f) SPECIA	ALL MEE Ic [PSI] (2 AL INSPE	et the 1 2) Max. Ection	FOLLOW WATER REQUIR	/ING REQUIREMENTS: / CEMENT RATIO (3) MAX. SLUMP [IN] (4) AIR ED (6) MIN. 90 LB SACKS OF CEMENT (7) LOCATION AND	USE/LOCATION WALL STUDS/BLOCKING 2X, 3X 4" WIDE	SPECIES G HEM-FIR	GRADE STUD	Fb (PSI) 675
(1) 3000 3000 3000 3000 3000	(2) 0.45 0.45 0.50 0.45 0.50	(3) 4+/-1 4+/-1 5+/-1 5+/-1 5+/-1	(4) 5+/-1 0+/-1 0+/-1 5+/-1 5+/-1	(5) NO NO NO NO	(6)	(7) EXTERIOR SLAB ON GRADE INTERIOR SLAB ON GRADE FOOTINGS STEMS ALL OTHER CONCRETE	2X, 3X 6" & WIDER WALL PLATES 2X4, 3X4 2X6, 3X6	HEM-FIR HEM-FIR HEM-FIR	NO. 2 STUD NO. 2	850 675 85(

SPECIAL INSPECTION IS NOT REQUIRED AS THE DESIGN IS BASED ON fc = 2500 PSI.

CHAMFER ALL EXPOSED CORNERS PER THE ARCHITECTURAL PLANS OR 3/4 INCH IF NOT SPECIFIED BY THE ARCHITECT.

03100 - REINFORCING STEEL

REINFORCING STEEL DETAILING, FABRICATION, AND PLACEMENT SHALL BE PER ACI 318-14. REINFORCING STEEL SHALL MEET THE FOLLOWING REQUIREMENTS:

ASTM A-615 DEFORMED BARS GRADE 40 (fy=40 KSI) FOR #3 BARS ONLY ASTM A-615 DEFORMED BARS GRADE 60 (fy=60 KSI) FOR #4 BARS AND LARGER ASTM A-706 DEFORMED BARS GRADE 60 (fy=60 KSI) FOR ALL WELDABLE BARS

ASTM A-1064 SMOOTH BAR (fy=60 KSI) FOR WELDED WIRE FABRIC

REINFORCING FOR SLABS ON GRADE SHALL BE 6X6 W1.4XW1.4 WELDED WIRE FABRIC OR FIBER MESH UNLESS NOTED OTHERWISE. PROVIDE LAP SPLICES PER THE LAP SPLICE SCHEDULE ON SHEET S6.0. REINFORCING STEEL AT ALL WALLS, SLABS, AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS ELSE CORNER BARS SHALL BE PROVIDED.

COVER REQUIREMENTS SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE:

CONCRETE CAST AGAINST EARTH

ALL BAR SIZES . . . FORMED SURFACE EXPOSED TO EARTH OR WEATHER

#6 AND LARGER . .

#5 AND SMALLER . . .1 1/2" CONCRETE NOT EXPOSED TO EARTH OR WEATHER

WALLS AND JOISTS	
#14 AND #18 BARS	1 1/2"
#11 BARS AND SMALLER	3/4"

SLADS AND JUISTS	
#14 AND #18 BARS	.1 1/2"
#11 BARS AND SMALLER	. 1"
BEAMS, COLUMNS	

PRIMARY REINFORCEMENT1 1/2" TIES, STIRRUPS, AND SPIRALS ... 1 1/2"

REINFORCING STEEL SHALL BE ACCURATELY PLACED AND ADEQUATELY SECURED IN PLACE PRIOR TO CONCRETE PLACEMENT. REINFORCING STEEL SHALL NOT BE FIELD BENT EXCEPT AS NOTED IN THE DESIGN DRAWINGS. WELDING OF REINFORCING STEEL SHALL NOT BE PERMITTED WITHOUT PRIOR APPROVAL OF THE ENGINEER OF RECORD EXCEPT AS NOTED ON THE DESIGN DRAWINGS.

03200 - CONCRETE WALL REINFORCING

05000 - STRUCTURAL STEEL

STRUCTURAL W SHAPE

WOOD CONNECTION BOLTS

WELDING ELECTRODES

FINISH REQUIREMENTS.

SHEET S9.0.

NAIL SIZE

8d

10d

12d

16d

06000 - WOOD FRAMING NOTES

S, M, AND C SHAPES

STEEL ANGLES

PLATE MATERIAL

ANCHOR RODS

STRUCTURAL PIPE

STRUCTURAL HSS

PLACE TWO HORIZONTAL #5 BARS AT EACH FLOOR LEVEL OR TOP OF WALL ELEVATION. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT AT EACH WALL CORNER AND INTERSECTION. PROVIDE TWO VERTICAL #5 BARS AT EACH WALL CORNER AND INTERSECTION. AT ALL WALL OPENINGS PROVIDE TWO #5 BARS OVER, UNDER, AND AT THE SIDES OF THE OPENINGS. EXTEND THE HORIZONTAL BARS THE LAP SPLICE DISTANCE PAST THE OPENING OR EXTEND AS FAR AS POSSIBLE AND HOOK. PROVIDE ONE #5 BAR BY 4'-0" LONG DIAGONALLY AT EACH CORNER OF THE WALL OPENING. ALL CONCRETE SHALL BE PLACED AND CONSOLIDATED WALLS SHALL BE REINFORCED PER SCHEDULE BELOW U.N.O.:

DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE

Fy = 50 KSI

Fv = 36 KSI

Fy = 36 KSI

Fy = 36 KSI

Fy = 35 KSI

Fy = 46 KSI

Fy = 36 KSI

ASTM A-992

ASTM A-36

ASTM A-36

ASTM A-36

ASTM F1554

SOCIETY (AWS) CERTIFIED WELDERS. ALL COMPLETE PENETRATION (CP) WELDS SHALL BE

ULTRASONICALLY TESTED. ALL FILLET WELDS SHALL BE VISUALLY INSPECTED RE: S1.3.

BE COATED WITH BRUSH APPLIED ZINC-RICH PAINT COMPLYING WITH ASTM A-780.

E7018

ASTM A-53 GRADE B

ASTM A-500 GRADE B

ASTM A-307 GRADE A

ALL WELDING SHALL CONFORM TO THE AWS D1.4 "STRUCTURAL WELDING CODE". ALL WELDING SHALL BE

PERFORMED BY A WASHINGTON ASSOCIATION OF BUILDING OFFICIALS (WABO) AND AMERICAN WELDING

STRUCTURAL STEEL AND CONNECTIONS EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED

AFTER FABRICATION IN COMPLIANCE WITH ASTM A-123. ALL FIELD WELDS EXPOSED TO WEATHER SHALL

ALL STRUCTURAL STEEL TO RECEIVE ONE COAT OF PAINT (PRIME COAT). PROVIDE A MINIMUM FRY-FILM THICKNESS OF ONE MIL. PREPARE SURFACE TO MEET REQUIREMENTS OF SSPC-SP2. TOUCHUPS OF

DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION RELATING TO FINISH PAINT OR OTHER

FRAMING CONNECTORS, ACCESSORIES, AND FASTENERS AS NOTED IN THE PLANS AND DETAILS SHALL BE

EACH MEMBER. PROVIDE SOILD BLOCKING AT ALL BEARING POINTS. SEE SECTION 06100 FOR FASTENER

REQUIREMENTS AT TREATED LUMBER. TYPICAL NAILING NOT SHOWN PER PLAN, DETAIL, OR SCHEDULE

NAILS SHALL BE COMMON UNLESS NOTED OTHERWISE COMMON NAIL DIMENSIONS ARE AS FOLLOWS:

SHALL CONFORM TO FASTENING SCHEDULE PER IBC TABLE 2304.10.1 OR TO THE FASTENING SCHEDULE ON

AS MANUFACTURED BY SIMPSON STRONG-TIE. EQUIVALENT HARDWARE MY BE USED WITH PRIOR APPROVED BY ENGINEER OF RECORD. INSTALL ALL HARDWARE PER MANUFACTURERS SPECIFICATIONS. WHERE STRAPS CONNECT TWO MEMBERS TOGETHER, PLACE HALF OF THE REQUIRED FASTENERS INTO

ABRASIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR. UNO. REFER TO ARCHITECTURAL

WALL THICKNESS	HORIZONTAL	VERTICAL	LOCATION
6"	#4 AT 14"OC	#5 AT 18"OC	CENTERLINE
8"	#4 AT 10"OC	#5 AT 15"OC	CENTERLINE
10"	#4 AT 16"OC	#5 AT 18"OC	EACH FACE
12"	#4 AT 12"OC	#5 AT 18"OC	EACH FACE

LATEST EDITION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION "AISC 360-10 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS". MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING U.N.O.:

DIAMETER LENGTH 2 1/2" 0.131" 0.148" 0.148" 3 1/4" 3 1/2" 0.162"

UNLESS NOTED OTHERWISE PER SHEARWALL SCHEDULE OR PLANS, ANCHOR BOLTS AT SILL PLATES SHALL BE 5/8 INCH DIAMETER WITH 7 INCHES MINIMUM EMBEDMENT INTO CONCRETE AND SHALL BE SPACED NOT MORE THAN 4 FEET APART. THERE SHALL BE A MINIMUM OF TWO BOLTS PER SILL PIECE WITH ONE BOLT LOCATED NOT MORE THAN 12 INCHES NOR LESS THAN 4 1/2 INCHES FROM EACH END OF THE PIECE. A 3"x3"x1/4" PLATE WASHER SHALL BE PROVIDED FOR ALL ANCHOR BOLTS (COUNTERSINK PLATE WASHERS SHALL NOT BE ALLOWED).

4" WIDE						
2X, 3X 6" & WIDER	HEM-FIR	NO. 2	850	150	405	130
WALL PLATES 2X4, 3X4 2X6, 3X6	HEM-FIR HEM-FIR	STUD NO. 2	675 850	150 150	405 405	800 130
JOISTS 2X, 3X	HEM-FIR	NO. 2	850	150	405	130
LEDGERS 2X, 3X 4X	DOUGLAS FIR-LARCH DOUGLAS FIR-LARCH	NO. 2 NO. 1	900 1000	180 180	625 625	135 150
BEAMS AND POSTS 4X 6X	DOUGLAS FIR-LARCH DOUGLAS FIR-LARCH	NO. 2 NO. 1	900 1200	180 170	625 625	135 100

AIL SIZE	DIAMETER	LENGTH	
8d	0.131"	2.5"	
0d	0.148"	3.0"	
2d	0.148"	3.25"	
6d	0.162"	3.5"	

MEMBER SIZE SAWN LUMBER	HANGER LUS OR HUS SERIES TO MATCH LUMBER WHERE NOT NOTED SPECIFICALLY BELO
I JOIST-FLOOR	11 7/8" TJI 110 IUS 1.81 / 11.88 W/(10) 10d (0.148"DIA. x 3") W/WEB STIFFENERS ADD (2) 0.148"DIA. x 1 1/2" JOIST IN TRIANG PROVIDE 0.148"DIA. x 3" CLINCHED NAILS J LSL RIM BOARDS. MIN. WEB STIFFENER S (EACH SIDE OF WEB) 5/8" x 2 5/16" W/(3) 0.113" DIA. x 2 1/2"
I JOIST-SLOPING ROOF	11 7/8" TJI 110 LSSU125 W/(10) 10d FACE; W/(7) 10d x 1 1/2" JOIST MIN. WEB STIFFEN (EACH SIDE OF WEB) 5/8" x 2 5/16" W/(3) 0.113" DIA. x 2 1/2"
GLUED LAMINATED BEAMS (H = I 3 1/8" LGU3.25-SDS W/(16) SDS 3 1/2" HGU3.63-SDS W/(36) SDS 5 1/8" HGU5.25-SDS W/(36) SDS 5 1/4" HHGU5.50-SDS W/(44) SD3 5 1/2" HHGU5.62-SDS W/(44) SD3 6 3/4" HHGU7.00-SDS W/(44) SD3 8 3/4" HHGU9.00-SDS W/(44) SD3 10 3/4" HHGU11.00-SDS W/(44) SD3	BEAM DEPTH TYPICAL) (DF CAPACITY / HF CAPA 1/4x2 1/2" FACE, (12) SDS 1/4x2 1/2" JOIST (67: 1/4x2 1/2" FACE, (24) SDS 1/4x2 1/2" JOIST (14 1/4x2 1/2" FACE, (24) SDS 1/4x2 1/2" JOIST (14 S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" S IST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" S IST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" S IST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" S IST (18: S 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" S IST (18: S 1/4x2 1/2" S IST (18: S IST S I) S I/4x2 1/2" S IST (18: S I) S I) S I/4x2 1/2" S IST (18: S I) S I) S I) S I) S I S I) S I S I S
LSL	

TES		
S100 - ROUGH FRAMING AWN LUMBER SHALL CONFORM TO WEST COAST LUMBER INSPECTION BUREAU (WCLIB) "GRADING AND RESSING RULES" NO. 17 LATEST EDITION. SAWN LUMBER SHALL BE S4S AND SURFACED DRIED, 19 ERCENT MAXIMUM MOISTURE CONTENT. PROTECT LUMBER FROM WEATHER AND PROVIDE FURTHER RYING OF ASSEMBLED FRAMING TO MINIMIZE WOOD SHRINKAGE POTENTIAL. ALL LUMBER EXPOSED TO 'EATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESERVATIVE TREATED U.N.O. PER LAN. LUMBER SPECIES, GRADE, AND PROPERTIES FOR EACH USE/LOCATION SHALL BE AS FOLLOWS .N.O. PER PLAN/SCHEDULE:	06500 - WOOD SHEATHING STRUCTURAL WOOD SHEATHING PANELS SHALL HAVE APA GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOCIATION. WOOD SHEATHING PANELS SHALL BE C-D INT APA WITH EXTERIOR GLUE (CDX). ORIENTED STRAND BOARD (OSB) PANELS SHALL BE EXPOSURE 1. PANELS SHALL HAVE THE FOLLOWING THICKNESS, SPAN RATING, AND FASTENING UNLESS NOTED OTHERWISE PER PLAN: EDGE FIELD NAILS NAILS ROOF: 5/8" 40/20 C-D APA CDX 8d AT 6" 8d AT 12"	ING. NA 98109
FbFvFcpFcESE/LOCATIONSPECIESGRADE (PSI) (PSI) (PSI) (PSI) (PSI)(PSI)/ALL STUDS/BLOCKING2X, 3XHEM-FIRSTUD6751504058001.2E6	FLOOR:3/4" 48/24 C-D T&G10d AT 6"10d AT 12"SHEARWALL:7/16" C-D EXTERIOR GLUESEE SCHEDULE SHEET S1.1EXTERIOR WALL:7/16" D-D EXTERIOR GLUE10d AT 6"10d AT 12"ALL ROOF SHEATHING PANELS SHALL BE INSTALLED FACE GRAIN PERPENDICULAR TO SUPPORTS AND IN	ineers 6.285.0618 (F)
4" WIDE 2X, 3X HEM-FIR NO. 2 850 150 405 1300 1.3E6 5" & WIDER	A STAGGERED PATTERN UNLESS NOTED OTHERWISE PER PLAN. BLOCKING AT INTERMEDIATE FLOOR AND ROOF SHEATHING JOINTS SHALL NOT BE REQUIRED UNLESS NOTED OTHERWISE PER PLAN. SHEARWALL SHEATHING SHALL BE BLOCKED AT ALL EDGES WITH 2X OR 3X FRAMING PER SHEARWALL SCHEDULE.	al Eng Street Su (V) 20
ALL PLATES 2X4, 3X4 HEM-FIR STUD 675 150 405 800 1.2E6 2X6, 3X6 HEM-FIR NO. 2 850 150 405 1300 1.3E6	06620 - STRUCTURAL GLUED LAMINATED TIMBER GLUED-LAMINATED MEMBERS SHALL HAVE AMERICAN INSTITUTE OF TIMBER CONSTRUCTION (AITC) IDENTIFICATION MARK. EXPOSED MEMBERS SHALL RECEIVE ONE COAT OF END SEALER APPLIED IMMEDIATELY AFTER TRIMMING IN EITHER SHOP OR FIELD. DESIGN MATERIAL PROPERTIES SHALL BE AS	BNG Structura 180 Nickerson 206.285.4512 www.ctenginee
DISTS 2X, 3X HEM-FIR NO. 2 850 150 405 1300 1.3E6	USE COMBINATION SYMBOL SPECIES CAMBER SIMPLE SPAN BEAM 24F-V4 DF/DF STANDARD	CT
2X, 3X DOUGLAS FIR-LARCH NO. 2 900 180 625 1350 1.6E6 4X DOUGLAS FIR-LARCH NO. 1 1000 180 625 1500 1.7E6	CONTINUOUS BEAM 24F-V8 DF/DF ZERO CANTILEVER BEAM 24F-V8 DF/DF ZERO	
EAMS AND POSTS 4X DOUGLAS FIR-LARCH NO. 2 900 180 625 1350 1.6E6 5X DOUGLAS FIR-LARCH NO. 1 1200 170 625 1000 1.6E6	OTHERWISE. EXPOSED GLUED LAMINATED TIMBER SHALL BE APPEARANCE CLASS PER ARCHITECT. 06630 - STRUCTURAL COMPOSITE LUMBER (SCL)	6/11/20
S102: FRAMING NOTES RAMING CONNECTORS, ACCESSORIES, AND FASTENERS AS NOTED IN THE PLANS AND DETAILS SHALL BE S MANUFACTURED BY SIMPSON STRONG-TIE. EQUIVALENT HARDWARE MAY BE USED WITH PRIOR PPROVAL BY ENGINEER OF RECORD. INSTALL ALL HARDWARE PER MANUFACTURERS' SPECIFICATIONS. 'HERE STRAPS CONNECT TWO MEMBERS TOGETHER, PLACE HALF OF THE REQUIRED FASTENERS INTO ACH MEMBER. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. SEE SECTION 06200 FOR FASTENER EQUIREMENTS AT TREATED LUMBER. TYPICAL NAILING NOT SHOWN PER PLAN, DETAIL, OR SCHEDULE HALL CONFORM TO FASTENING SCHEDULE PER IBC TABLE 2304.10.1 OR TO THE FASTENING SCHEDULE N SHEET S9.0.	STRUCTORAL COMPOSITE LOWBER SHALL COMPORED FORM TO ALL PERTINENT PROVISIONS OF ASTM D3436 AND SHALL BE THE SIZE AND TYPE SHOWN ON THE DRAWINGS AS MANUFACTURED BY ILEVEL TRUS JOIST OR APPROVED EQUAL. STORAGE, ERECTION, AND INSTALLATION SHALL BE PER MANUFACTURER SPECIFICATIONS. ALL MEMBERS SHALL NOT HAVE NOTCHES OR DRILLED HOLES WITHOUT PRIOR ENGINEER OF RECORD APPROVAL. ALLAOWABLE DESIGN MATERIAL PROPERTIES SHALL BE AS FOLLOWS (ALL UNITS ARE IN PSI): ORIENTATION Fb Fv Fc(perp) Fc E COLUMN 1700 400 680 1400 1.3E6 PLANK 1900 150 435 1400 1.3E6 BEAM 2325 310 800 2050 1.55E6	DATE
AIL SIZE DIAMETER LENGTH 8d 0.131" 2.5" 10d 0.148" 3.0" 12d 0.148" 3.25" 16d 0.162" 3.5"	MICROLAM LAMINATED VENEER LUMBER (LVL) BEAM 2600 NA NA 2500 1.9E6 PARALLAM PARALLEL STRAND LUMBER (PSL) COLUMN 2400 NA NA 2500 1.8E6	
NLESS NOTED OTHERWISE PER SHEARWALL SCHEDULE OR PLANS, ANCHOR BOLTS AT SILL PLATES HALL BE 5/8" DIAMETER WITH 7" MINIMUM EMBEDMENT INTO CONCRETE AND SHALL BE SPACED NOT ORE THAN 4 FEET APART. THERE SHALL BE A MINIMUM OF TWO BOLTS PER SILL PIECE WITH ONE BOLT DCATED NOT MORE THAN 12" NOR LESS THAN 4.5" FROM EACH END OF THE PIECE. A 3"X3"X0.229" PLATE (ASHER SHALL BE PROVIDED FOR ALL ANCHOR BOLTS (DO NOT COUNTER-SINK PLATE WASHERS). A 3/16" X 1 3/4" DIAGONAL SLOTTED HOLE IN THE 3" X 3" PLATE WASHER IS ALLOWED WITH A STANDARD UT WASHER.	BEAM290029075029002.0E606640 - PREFABRICATED PLYWOOD WEB JOISTSPREFABRICATED PLYWOOD WEB JOISTS SHALL BE THE SIZE AND TYPE SHOWN ON THE DRAWINGS AS MANUFACTURED BY TRUS-JOIST OR APPROVED EQUAL. STORAGE, ERECTION, AND INSTALLATION SHALL BE PER MANUFACTURER SPECIFICATIONS. JOIST FLANGES SHALL NOT BE CUT. DRILLED HOLES IN WEB SHALL BE PER MANUFACTURER REQUIREMENTS. DESIGN LOADING AND DEFLECTION CRITERIA SHALL BE AS FOLLOWS:	REVISION
6200 - PRESERVATIVE TREATED WOOD PRODUCTS RESERVATIVE TREATED WOOD SHALL BE REQUIRED FOR ALL WOOD THAT FORMS THE STRUCTURAL UPPORT OF THE BUILDING, BALCONIES PORCHES, OR SIMILAR PERMANENT BUILDING PPURTENANCES THAT ARE EXPOSED TO THE WEATHER WITHOUT ADEQUATE PROTECTION FROM A OOF, EAVE, OVERHANG OR OTHER COVERING TO PREVENT MOISTURE OR WATER ACCUMULATION AT HE SURFACE OR AT JOINTS BETWEEN MEMBERS.	TOP CHORD LIVE LOADSEE LIVE LOADS IN SECTION 01100TOP CHORD DEAD LOAD12 PSF + (14 PSF GYPCRETE)BOTTOM CHORD DEAD LOAD6 PSFMECHANICAL LOADSSEE MECHANICAL PLANSLIVE LOAD DEFLECTIONL/480	
LL WOOD INSTALLED ABOVE GROUND AND RESTING ON AN EXTERIOR CONCRETE OR MASONRY OUNDATION WALL LESS THAN 8 INCHES FROM EXPOSED EARTH.	08100 - EPOXY ADHESIVE ANCHORS CONCRETE EPOXY SPECIFIED IN THE DRAWINGS SHALL BE SIMPSON STRONG-TIE SET-XP EPOXY ADHESIVE. ANCHOR ROD, THREADED ROD, OR REINFORCING DIAMETER AND EMBEDMENT PER PLAN. INSTALLATION PER ESR-2508	Ś
R FOOTING THAT IS IN DIRECT CONTACT WITH THE EARTH. EXCEPT; IF LOCATED IN BASEMENTS ON A CONCRETE PIER OR METAL PEDESTAL 1 INCH ABOVE THE SLAB AND SEPARATED THEREFROM BY AN IMPERVIOUS MOISTURE BARRIER. IF IN AN ENCLOSED CRAWL SPACE OR AN UNEXCAVATED AREA WITHIN THE BUILDING	08200 - EXPANSION ANCHORS CONCRETE EXPANSION ANCHORS SPECIFIED IN THE DRAWINGS SHALL BE SIMPSON STRONG-TIE STRONG-BOLT WEDGE ANCHOR. ANCHOR DIAMETER AND EMBEDMENT PER PLAN. INSTALLATION PER SECTION 4.3 OF ESR-1771.	B #: 20035 IG: BJM AD: JMA ALE: JMA ALE: 3/4" = 1-0" Y ISSUE DATES Y ISSUE DATES CD CD CD CD CD CD CD CD CD CD CD CD CD
PERIPHERY AND SUPPORTED BY A CONCRETE PIER OR PEDESTAL MORE THAN 8 INCHES FROM EXPOSED GROUND AND SEPARATED THEREFROM BY AN IMPERVIOUS MOISTURE BARRIER. SLEEPERS AND SILLS ON A CONCRETE SLAB ON GRADE THAT DOES NOT HAVE AN IMPERVIOUS	08300 - SCREW ANCHORS CONCRETE	O E C C E C
MOISTURE BARRIER SEPARATION WITH EXPOSED EARTH. LEDGERS AND FURRING ATTACHED DIRECTLY TO THE INTERIOR OF EXTERIOR CONCRETE OR MASONRY WALLS BELOW GRADE.	SCREW ANCHORS SPECIFIED IN THE DRAWINGS SHALL BE SIMPSON STRONG-TIE TITEN HD. ANCHOR DIAMETER AND EMBEDMENT PER PLAN. INSTALLATION PER ESR-2713.	
RESERVATIVE TREATMENT SHALL BE PER AMERICAN WOOD PRESERVERS' ASSOCIATION (AWPA) PECIFICATION C2 AND C9 OR APPLICABLE STANDARDS.		
LL FASTENERS (NAILS, BOLTS, ANCHOR BOLTS, PLATES, HANGERS, ETC.) IN CONTACT /ITH TREATED LUMBER SHALL BE CORROSION RESISTANT G-185 HOT DIPPED GALVANIZED PER ASTM 153 OR STAINLESS STEEL.		
3300 - JOIST AND BEAM HANGERS DIST AND BEAM HANGERS AS NOTED IN THE PLANS SHALL BE AS MANUFACTURED BY SIMPSON STRONG- E. EQUIVALENT HARDWARE MAY BE USED WITH PRIOR APPROVAL BY ENGINEER OF RECORD. JOIST AND EAM HANGERS SHALL BE INSTALLED PER MANUFACTURERS' SPECIFICATIONS AND SHALL BE AS FOLLOWS NI ESS NOTED OTHERWISE PER PLANS OR DETAILS:		
EMBER SIZE HANGER AWN LUMBER LUS OR HUS SERIES TO MATCH LUMBER SIZE	5 STRUCTURAL DRAWING LIST	
IOIST-FLOOR 11 7/8" TJI 110 IUS 1.81 / 11.88 W/(10) 10d (0.148"DIA. x 3") FACE	SHEET DESCRIPTION Rev Rev Date S1.0 Structural Notes	
W/WEB STIFFENERS ADD (2) 0.148"DIA. x 1 1/2" JOIST IN TRIANGLE HOLES. PROVIDE 0.148"DIA. x 3" CLINCHED NAILS AT 1 1/2" LSL RIM BOARDS, MIN, WEB STIFFENER SIZE	S1.1 Snearwall Schedule and Details S1.2 Holddown Schedule and Details S1.3 Special Inspection	
IOIST-SLOPING ROOF 11 7/8" TJI 110 LSSU125 W/(10) 10d FACE; W/(7) 10d x 1 1/7" IOIST MIN, WEB STIEFENED SIZE	S2.0 Basement Level Foundation Plan S2.1 Level 1 Framing - Fdn Plan S2.2 Level 2 Framing Plan - Low Roof	otes
(EACH SIDE OF WEB) 5/8" x 2 5/16" W/(3) 0.113" DIA. x 2 1/2"	S2.3 Fligh Root Framing Plan S6.0 Typical Concrete Details S6.1 Typical Concrete Details	
1/8" LGU3.25-SDS W/(16) SDS 1/4x2 1/2" FACE, (12) SDS 1/4x2 1/2" JOIST (6720 / 4840) 1/2" HGU3.63-SDS W/(36) SDS 1/4x2 1/2" FACE, (24) SDS 1/4x2 1/2" JOIST (14145 / 10185) 1/8" HGU5.25-SDS W/(36) SDS 1/4x2 1/2" FACE, (24) SDS 1/4x2 1/2" JOIST (14145 / 10185) 1/4" HHGU5.50-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (14145 / 10185) 1/4" HHGU5.62-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 1/4" HHGU5.62-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 1/4" HHGU5.62-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 3/4" HHGU7.00-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 3/4" HHGU9.00-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 3/4" HHGU11.00-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 3/4" HHGU11.00-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (17845 / 12850) 3/4" HHGU11.00-SDS W/(44) SDS 1/4x2 1/2" FACE, (28) SDS 1/4x2 1/2" JOIST (18480 / 13305)	S8.0 Steel Framing Details S9.0 Typical Wood Framing Details S9.1 Floor TJI Wood Framing Details S10.0 Wood Stair Component Details S10.1 Steel Stair Component Details S10.2 Ordinary Mamont Frame	tural ence ve SE d, WA 980 ²
SL 1/2" x 11 7/8" MIU1.56/11 W/(20) 16d FACE, (2) 10d x 1 1/2" JOIST (2880)) 1 3/4" x 11 7/8" HHUS410 W/(30) 16d FACE, (10) 16d JOIST (5635) 1/2" x 11 7/8" HHUS410 W/(30) 16d JOIST (5635) ROVIDE HUC HANGER FOR BEAM SIZE SPECIFIED FOR END OF BEAM CONDITIONS. 6400 - SHRINKAGE OF WOOD FRAMING	S10.0Ordinary Moment FrameS10.4Ordinary Moment FrameS10.5Ordinary Moment Frame Notes	Struc Too Resid 453 74th Ar Aercer Islan
HRINKAGE IN WOOD FRAMING IS DUE TO LOSS OF MOISTURE CONTENT AND TO COMPRESSION OF SSEMBLIES OF WOOD COMPONENTS. PLUMBING, ELECTRICAL, AND MECHANICAL SYSTEMS AS WELL AS XTERIOR FINISHES SHALL BE DESIGNED AND BUILT TO ACCOMMODATE 1/4 INCH PER FLOOR WOOD HRINKAGE. THE USE OF KILN DRIED LUMBER AND PROVIDING A DRYING PROCESS TO THE FRAMING EMBERS PRIOR TO APPLICATION OF FINISHES WILL HELP CONTROL BUT WILL NOT ELIMINATE SHRINKAGE.		S1.0

	SPECIAL INSPECTIO	N			
	IBC 2009 TABLE 1704.3 - REQUIRED VERI	FICATION AND I		OF STEEL CONSTRUCTION	N
	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED	IBC REFERENCE
1.	MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND				
	a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	Х	AISC 360, SEC. A3.3 AND APPLICABLE ASTM MATERIAL STANDARDS	
	b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	Х		
2.	INSPECTION OF HIGH STRENGTH BOLTING:				
	a. SNUG-TIGHT JOINTS.	-	Х	AISC 360, SEC, M2,5	1704.3.3
	b. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST-OFF BOLT OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION.	-	X	AISC 360, SEC. M2.5	1704.3.3
	c. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITHOUT MATCHMARKING OR CALIBRATED WRENCH METHODS OF INSTALLATION.	Х	-	AISC 360, SEC. M2.5	1704.3.3
3.	MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
	a. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.	-	Х	AISC 360, SEC. M5.5	
	b. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	Х	APPLICABLE ASTM MATERIAL STANDARDS	
	c. MANUFACTURER'S CERTIFIED TEST REPORTS.	-	Х		
4.	MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
	a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	Х	AISC 360, SEC. A3.5 AND APPLICABLE AWS A5 DOCUMENTS	
	b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	-	Х		
5.	INSPECTION OF WELDING:				
	a. STRUCTURAL STEEL AND COLD-FORMED STEEL DECK:				
	1) COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS.	Х	-	AWS D1.1	1704.3.1
	2) MULTIPASS FILLET WELDS.	Х	-	AWS D1.1	1704.3.1
	3) SINGLE-PASS FILLET WELDS > 5/16"	Х	-	AWS D1.1	1704.3.1
	4) PLUG AND SLOT WELDS.	Х	-	AWS D1.1	1704.3.1
	5) SINGLE-PASS FILLET WELDS <= 5/16"	-	Х	AWS D1.1	1704.3.1
	6) FLOOR AND ROOF DECK WELDS.	-	Х	AWS D1.3	
	b. REINFORCING STEEL:				
	1) VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706.	-	Х	AWS D1.4, ACI 318: 3.5.2	
	2) REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, AND BOUNDARY ELEMENTS OF SPECIAL STRUCTURAL WALLS OF CONCRETE AND SHEAR REINFORCEMENT.	Х	-	AWS D1.4, ACI 318: 3.5.2	
	3) SHEAR REINFORCEMENT.	X	-	AWS D1.4, ACI 318: 3.5.2	
	4) OTHER REINFORCING STEEL.	-	Х	AWS D1.4, ACI 318: 3.5.2	
6.	INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:			,	
	a. DETAILS SUCH AS BRACING AND STIFFENING.	-	Х		1704.3.2
	b. MEMBER LOCATIONS.	-	Х		1704.3.2
	c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	-	Х		1704.3.2
		1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		1101.0.2

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	MARK	DEPTH	WIDTH	LENGTH	REINFORCING	DETAILS
	F10	12"	1'-0"	RE: PLAN	(2) #5 CONT. BOTTOM	-
	F16 (EXT)	10"	1'-6"	RE: PLAN	(2) #5 CONT. BOTTOM	11 & 12 / S6.0
NS TYPICAL	F16 (INT)	12"	1'-6"	RE: PLAN	(1) #5 TOP & BOTTOM	1 / S6.1
	F2.0	12"	2'-0"	2'-0"	(3) #5 EACH WAY BOTTOM	7 / S6.0
	F3.0	12"	3'-0"	3'-0"	(4) #5 EACH WAY BOTTOM	7 / S6.0
	F4.0	12"	4'-0"	4'-0"	(5) #5 EACH WAY BOTTOM	7 / S6.0
	FA	24"	RE: PLAN	RE: PLAN	#5 AT 6"OC SHORT AND LONG BOTTOM	-

(TERIOR HEADERS U.N.O. PER PLAN.	I
OR HEADERS U.N.O. PER PLAN.	I
MING SPECIES AND GRADE, HANGERS, AND ENGINEERED LUMBER	
S SHALL HAVE A MINIMUM OF (1) FULL (KING STUD) FOR BRACING.	
E P6 SHEARWALLS UN O. PER PLAN	

TOM 2'-0" 	
WN EDGE	

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	IBC 2015 TABLE 2	304.10.1 FASTENING SCHED	ULE	
	CONNECTION	FASTENING (a)	LOCATION	
	ROOF1.BLOCKING BETWEEN CEILING JOISTS, RAFTERS OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(3) 8d COMMON (2 1/2" X 0.131"); OR (3) 3" X 0.131" NAILS	EACH END, TOENAIL	دن ع د ا
<u> </u>	BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	(2) 8d COMMON (2 1/2" X 0.131") (2) 3" X 0.131" NAILS	EACH END, TOENAIL	IN (IN(=)
	BLOCKING BETWEEN RAFTERS OR TRUSSES NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	(2) 16d COMMON (3 1/2" X 0.162") (3) 3" X 0.131" NAILS	EACH END	neers 1.285.0618 (
	FLAT BLOCKING TO TRUSS AND WEB FILLER	16d COMMON (3 1/2" X 0.161") AT 6"OC	FACE NAIL	Engi eet Suit
	2. CEILING JOISTS TO TOP PLATE	(3) 8d COMMON (3 1/2" X 0.131"); OR (3) 3" X 0.131" NAILS	EACH JOIST, TOENAIL	Urral son Stra jineerin
	3. CEILING JOIST NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (NO THRUST) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	(3) 16d COMMON (3 1/2" X 0.162"); OR (4) 3" X 0.131" NAILS	FACE NAIL	Struct 206.285.4
	4. CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) (SEE SECTION 2308.7.3.1, TABLE 2308.7.3.1)	PER TABLE 2308.7.3.1	FACE NAIL	CT
	5. COLLAR TIE TO RAFTER	(3) 10d COMMON (3" X 0.148"); OR (4) 3" X 0.131" NAILS	FACE NAIL	
G DETAIL	6. RAFTER OR ROOF TRUSS TO TOP PLATE (SEE SECTION 2308.7.5, TABLE	(3) 10d COMMON (3" X 0.148");OR (4) 3" X 0.131" NAILS	TOENAIL	
	7. ROOF RAFTERS TO RIDGE VALLEY OR HIP RAFTERS; OR ROOF RAFTER TO 2-INCH RIDGE BEAM	(2) 16d COMMON (3 1/2" X 0.162");OR (3) 3" X 0.131" NAILS	END NAIL	C F ROD
	8. STUD TO STUD (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" X 0.162"); 3" X 0 131" NAU S	24"OC FACE NAIL	
	9. STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	16d COMMON (3 1/2" X 0.162");OR 3" X 0.131" NAILS	16"OC FACE NAIL 12"OC FACE NAIL	
	(AT BRACED WALL PANELS) 10. BUILT-UP HEADER (2" TO 2" HEADER)	16d COMMON (3 1/2" X 0.162")	16"OC EACH EDGE, FACE NAIL	DATE
	 CONTINUOUS HEADER TO STUD TOP PLATE TO TOP PLATE 	(4) 8d COMMON (2 1/2" X 0.131") 16d COMMON (3 1/2" X 0.162") OR	TOENAIL 16"OC FACE NAIL	
	13. TOP PLATE TO TOP PLATE, AT END JOINTS	3" X 0.131" NAILS (8) 16d COMMON (3 1/2" X 0.162") OR (12) 3" X 0.131" NAILS	12"OC FACE NAIL EACH SIDE OF END JOINT, FACE NAIL (MINIMUM 24" LAP SPLICE LENGTH EACH	
	14. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS)	16d COMMON (3 1/2" X 0.162"); OR 3" X 0.131" NAILS	SIDE OF END JOINT) 16"OC FACE NAIL 12"OC FACE NAIL	REVISION
	15. BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING AT BRACED WALLO PANELS	(2) 16d COMMON (3 1/2" X 0.162"); OR (4) 3" X 0.131" NAILS	16"OC FACE NAIL	
	16. STUD TO TOP OR BOTTOM PLATE	(4) 8d COMMON (2 1/2" X 0.131"); OR (3) 3" X 0.131" NAILS		
	17. TOP OT BOTTOM PLATE TO STUD	(2) 16d COMMON (3 1/2 X 0.162); OR (2) 16d COMMON (3 1/2" X 0.162"); OR		Ö
	18. TOP PLATES, LAPS AT CORNERS AND	(3) 3" X 0.131" NAILS (2) 16d COMMON (3 1/2" X 0.162"); OR	FACE NAIL	
	INTERSECTIONS 19. 1" BRACE TO EACH STUD AND PLATE	(3) 3" X 0.131" NAILS (2) 8d COMMON (2 1/2" X 0.131"); OR	FACE NAIL	0035 esigner 3/4" = 1'-1 3/4" = 1'-1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	20. 1" X 6" SHEATHING TO EACH BEARING	(2) 3" X 0.131" NAILS (2) 8d COMMON (2 1/2" X 0.131")	FACE NAIL	B #: 2 G: 1 D: 4 ALE: 4 Y ISSU SSU SSU AMIT: 00 D D C C C C SSU HER: B
JPPORTS AND AT	21. 1" X 8" AND WIDER SHEATHING TO EACH BEARING	(3) 8d COMMON (2 1/2" X 0.131")	FACE NAIL	OT EE SC P O
	FLOOR 22. JOIST TO SILL, TOP PLATE, OR GIRDER	(3) 8d COMMON (2 1/2" X 0.131"): OR	TOENAIL	
	23. RIM JOIST, BAND JOIST, OR BLOCKING	3" X 0.131" NAILS 8d COMMON (2 1/2" X 0.131"); OR	6"OC, TOENAIL	
S SYSTEM FRAMING	TO TOP PLATE, SILL OR OTHER 24. 1" X 6" SUBFLOOR OR LESS TO EACH	3" X 0.131" NAILS (2) 8d COMMON (2 1/2" X 0.131")	FACE NAIL	$\frac{1}{2}$
	25. 2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d COMMON (3 1/2" X 0.162")		ai
	20. 2 PLANKS (PLANK NAD BEAM-FLOOR AND ROOF) 27 BUILT-UP GIRDERS AND BEAMS 2"	20d COMMON (4" X 0 192")	ACH BEARING, FACE NAIL 32"OC, FACE NAIL AT	Gt
	LUMBER LAYERS		TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES	\square
		3" X 0.131" NAILS	24"OC, FACE NAIL AT TOP AND BOTTOM STAGGERED ON	30
	28. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	(2) 20d COMMON (4" X 0.192"); OR (3) 3" X 0.131" NAILS (3) 16d COMMON (3 1/2" X 0.162"); OR (4) 3" X 0.131" NAILS	END JOIST OR RAFTER, FACE NAIL FACE NAIL	min
		(2) 16d COMMON (3) 3" X 0.131" NAILS	FACE NAIL	.a
	29. JOIST TO BAND JOIST OR RIM JOIST	(3) 16d COMMON (3 1/2" X 0.162"); OR (4) 3" X 0.131" NAILS	END NAIL	
	30. BRIDGING OR BLOCKING TO JOIST, RAFTER OR TRUSS	(2) 8d COMMON (2 1/2" X 0.131"); OR (2) 3" X 0.131" NAILS	EACH END, TOENAIL	
	31. WOOD STRUCTURAL PANELS TO FRAMING SUBFLOOR TO FRAMING	SEE SHEARWALL SCHEDULE SEE STRUCTURAL NOTES	SECTION06160	00
	 a. COMMON OR BOX NAILS ARE PERMITTE b. FASTENING SCHEDULE BASED ON IBC 1 DECUMPED WHEN SPECIFIED ELSEWHEN 	D TO BE USED EXCEPT WHERE NOTE TABLE 2304.10.1 AND PROVIDES THE N	D OTHERWISE.	/O 040
	FOR COMPLETE NAILING SCHEDULE.	RE IN THESE PLANS PROVIDE NAILIN	GAS SPECIFIED. SEE IDC	
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05800 SLRS - STEEL CONNECTIONS, JOINTS AND FASTENERS

CONNECTIONS, JOINTS AND FASTENERS THAT ARE PART OF THE SEISMIC LOAD RESISTING SYSTEM (SLRS) AS INDICATED IN THE CONSTRUCTION DOCUMENTS SHALL COMPLY WITH AISC 360-10 SPECIFICATION CHAPTER J AND WITH THE ADDITIONAL REQUIREMENTS BELOW.

STEEL BOLTED JOINTS

ALL BOLTS SHALL BE PRETENSIONED HIGH STRENGTH BOLTS AND SHALL MEET THE REQUIREMENTS FOR SLIP-CRITICAL FAYING SURFACES IN ACCORDANCE WITH AISC 360-10 SPECIFICATION SECTION J3.8 WITH A CLASS A SURFACE. THE FAYING SURFACES FOR END PLATE MOMENT CONNECTIONS ARE PERMITTED TO BE COATED WITH COATINGS NOT TESTED FOR SLIP RESISTANCE OR WITH COATINGS WITH A SLIP COEFFICIENT LESS THAN THAT OF A CLASS A FAYING SURFACE. BOLTS SHALL BE INSTALLED IN STANDARD HOLES OR IN SHORT-SLOTTED HOLES PERPENDICULAR TO THE APPLIED LOAD. FOR BRACE DIAGONALS. OVERSIZE HOLES SHALL BE PERMITTED WHEN THE CONNECTION IS DESIGNED AS A SLIP CRITICAL JOINT AND THE OVERSIZED HOLE IS IN ONE PLY ONLY. ALTERNATE HOLE TYPES AS SPECIFIED PER AISC 358-05 "PREQUALLIFIED CONNECTIONS FOR SPECIAL AND INTERMEDIATE STEEL MOMENT FRAMES FOR SEISMIC APPLICATIONS" ARE ACCEPTABLE AS NOTED IN THE CONSTRUCTION DOCUMENTS.

DEMAND CRITICAL WELDS

WHERE WELDS ARE SPECIFIED AS DEMAND CRITICAL WELDS (DCW) WITHIN THE CONSTRUCTION DOCUMENTS THEY SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20 FT-LB AT -20° F AS DETERMINED BY THE APPROPRIATE AWS CLASSIFICATION TEST MEATHOD OR MANUFACTURER CERTIFICATION, AND 40 FT-LB AT 70° F AS DETERMINED BY AISC 341-05 APPENDIX X OR OTHER APPROVED MEATHOD, WHEN THE STEEL FRAME IS NORMALLY ENCLOSED AND MAINTAINED AT A TEMPERATURE OF 50° F OR HIGHER. SMAW ELECTRODES CLASSIFIED IN AWS A5.1 AS E7018 OR E7018-X, SMAW ELECTRODES CLASSIFIED IN AWS A5.5 AS E7018-C3L OR E8018-C3, AND GMAW SOLID ELECTRODES ARE EXEMPTED FROM PRODUCTION LOT TESTING WHEN THE CVN TOUGHNESS OF THE ELECTRODE EQUALS OR EXCEEDS 20FT-LB AT A TEMPERATURE NOT EXCEEDING -20° F AS DETERMINED BY AWS CLASSIFICATION TEST MEATHODS. THE MANUFACTURER'S CERTIFICATE OF COMPLIANCE SHALL BE CONSIDERED SUFFICIENT EVIDENCE OF MEETING THIS REQUIREMENT.

MINIMUM DCW AT MOMENT FRAMES

DEMAND CRITICAL WELDS SHALL BE PROVIDED AS A MINIMUM AT SPECIAL AND INTERMEDIATE MOMENT FRAMES AT THE FOLLOWING CJP GROOVE WELDS: 1. WELDS OF BEAM FLANGES TO COLUMNS

- 2. WELDS OF SINGLE PLATE SHEAR CONNECTIONS TO COLUMNS
- 3. WELDS OF BEAM WEBS TO COLUMNS

4. COLUMN SPLICE WELDS, INCLUDING COLUMN BASES

DEMAND CRITICAL WELDS AS A MINIMUM SHALL BE PROVIDED AT ORDINARY MOMENT FRAMES PER ITEMS 1, 2, AND 3 ABOVE.

MINIMUM DCW AT ECCENTRICALLY BRACED FRAMES:

1. CJP GROOVE WELDS BETWEEN LINK BEAMS AND COLUMNS

2. WELDS THAT JOIN THE WEB PLATE TO FLANGE PLATES IN BUILT UP EBF LINK BEAMS 3. CJP GROOVE WELDS AT COLUMN SPLICES

PROTECTED ZONE

WHERE A "PROTECTED ZONE" IS SPECIFIED WITHIN THE CONSTRUCTION DOCUMENTS IT SHALL COMPLY WITH THE FOLLOWING:

1. WITHIN THE PROTECTED ZONE, DISCONTINUITIES CREATED BY FABRICATION OR ERECTION OPERATIONS, SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING SHALL BE REPAIRED AS REQUIRED BY THE ENGINEER OF RECORD. 2. WELDED SHEAR STUDS AND DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE PROTECTED ZONE. DECKING ARCH SPOT WELDS AS REQUIRED TO SECTURE DECKING SHALL BE PERMITTED. 3. WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS FOR PERIMITER EDGE ANGLES, EXTERIOR FACADES, PARTITIONS, DUCT WORK, PIPING OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE.

CONTINUITY PLATES AND STIFFENERS

CORNERS OF CONTINUITY PLATES AND STIFFENERS PLACED IN THE WEBS OF ROLLED SHAPES SHALL BE CLIPPED AS DESCRIBED BELOW:

- . ALONG THE WEB THE CLIP SHALL BE DETAILED SO THAT THE CLIP EXTENDS A DISTANCE OF AT LEAST 1 1/2" BEYOND THE PUBLISHED K DETAIL DIMENSION FOR THE ROLLED SHAPE.
- ALONG THE FLANGE THE CLIP SHALL BE DETAILED SO THAT THE CLIP DOES NOT EXTEND A DISTANCE OF 1/2" BEYOND THE PUBLISHED K1 DETAIL DIMENSION. 3. THE CLIP SHALL BE DETAILED TO FACILITATE SUITABLE WELD TERMINATIONS FOR BOTH THE FLANGE WELD AND THE WEB WELD.
- 4. IF A CURVED CLIP IS USED, IT SHALL HAVE A MINIMUM RADIUS OF 1/2". 5. AT THE COLUMN WEB/FLANGE JUNCTURE WELD TABS SHALL NOT BE REMOVED.

05810 ORDINARY MOMENT FRAME (OMF)

WHERE STEEL BACKING IS USED IN FULLY RESTRAINED MOMENT CONNECTIONS WITH COMPLETE-JOINT-PENETRATION (CJP) BEAM FLANGE GROOVE EELDS, STEEL BACKING AND TABS SHALL BE REMOVED EXCEPT THAT TOP-FLANGE BACKING ATTACHED TO THE COLUMN BY A CONTINUOUS FILLET WELD ON THE EDGE BELOW THE CJP GROOVE WELD NEED NOT BE REMOVED.

COMPLETE-JOINT-PENETRATION GROOVE WELDS OF BEAM FLANGES, SHEAR PLATES, AND BEAM WEBS TO COLUMNS SHALL BE DEMAND CRITICAL WELDS PER NOTES SECTION 5800.

REMOVAL OF STEEL BACKING AND TABS SHALL BE AS FOLLOWS:

FOLLOWING THE REMOVAL OF BACKING, THE ROOT PASS SHALL BE BACKGOUGED TO SOUND WELD METAL AND BACKWELDED WITH A REINFORCING FILLET. THE REINFORCING FILLET SHALL HAVE A MINIMUM LEG SIZE OF 5/16 IN.

WELD TAB REMOVAL SHALL EXTEND TO WITHIN 1/8 IN OF THE BASE METAL SURFACE, EXCEPT AT CONTINUITY PLATES WHERE REMOVAL TO WITHIN 1/4 IN OF THE PLATE EDGE IS ACCEPTABLE. EDGES OF THE WELD TAB SHALL BE FINISHED TO A SURFACE ROUGHNESS VALUE OF 500 MICRO (10-6) IN. OR BETTER. GRINDING TO A FLUSH CONDITION IS NOT REQUIRED. GOUGES AND NOTCHES ARE NOT PERMITTED. THE TRANSITIONAL SLOPE OF ANY AREA WHERE GOUGES AND NOTCHES HAVE BEEN REMOVED SHALL NOT EXCEED 1:5. MATERIAL REMOVED BY GRINDING THAT EXTENDS MORE THAN 1/16 IN. BELOW THE SURFACE OF THE BASE METAL SHALL BE FILLED WITH WELD METAL. THE CONTOUR OF THE WELD AT THE ENDS SHALL PROVIDE A SMOOTH TRANSITION, FREE OF NOTCHES AND SHARP CORNERS.

WELD ACCESS HOLES SHALL BE AS SHOWN ON SHEET SX.X. THE WELD ACCESS HOLE SHALL HAVE A SURFACE ROUGHNESS VALUE NOT TO EXCEED 500 MICRO (10-6) IN. AND SHALL BE FREE OF NOTCHES AND GOUGES. NOTCHES AND GOUGES SHALL BE REPAIRED AS REQUIRED BY THE ENGINEER OF RECORD. WELD ACCESS HOLES ARE PROHIBITED IN THE BEAM WEB ADJACENT TO THE END-PLATE IN BOLTED MOMENT END-PLATE CONNECTIONS.

RE: NOTES SECTION 5900 FOR THE REQUIRED QUALITY ASSURANCE (QA) AND QUALITY CONTROLE (QC) PLAN.

05830 SPECIAL MOMENT FRAME (SMF)

DESIGN STANDARDS:

ALL STRUCTURAL STEEL FOR THIS PROJECT IS DESIGNED IN ACCORDANCE WITH AMERICAN INSTITUTE OS STEEL CONSTRUCTION (AISC) SPECIFICATIONS

REFERENCE STANDARDS:

- 1. AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" (2000)
- 2. RESEARCH COUNCIL ON STRUCTURAL CONNECTION (RCSC), "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" (2000).
- 3. WELDING CODE: AWS D1.1-200 "STRUCTURAL WELDING CODE STEEL".
- 4. AISC STEEL CONSTRUCTION MANUAL, THIRTEENTH EDITION (2005). 5. ANSI/AISC 360-05 SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS (2005).
- 6. ANSI/AISC 341-05 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS
- ANSI/ASNT CP-189-2001 STANDARD FOR THE QUALIFICATION AND CERTIFICATION 7 OF NONDESTRUCTIVE TESTING.

SUBMITTALS: SUBMITTALS:

ALL SHOP DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH AISC "CODE OF STANDARD PRACTICE", SECTION 4 "SHOP AND ERECTION DRAWINGS" AND SECTION M1 OF THE APPLICATION AISC SPECIFICATION. ALL SHOP DRAWINGS SHALL INCLUDE THE REQUIREMENTS SPECIFIED IN AISC341-05, SECTION 5.2.

MATERIALS:

ALL STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF AISC 341-05, SECTION 6.1. REFERENCE GENERAL STEEL NOTES FOR SPECIFIC ASTM SPECIFICATIONS.

FILLER METALS:

ALL FILLER METALS SHALL CONFORM TO THE REQUIREMENTS OF AISC 341-05, APPENDIX W. SECTION 7.3.

HIGH STRENGTH BOLTING REQUIREMENTS:

ALL BOLTED MEMBERS SHALL BE PREPARED WITH CLASS B FAYING SURFACES PER RCSC SPECIFICATION SECTION 3.2 AND SHALL HAVE FAYING SURFACES PREPARED AND BOLTS INSTALL IN ACCORDANCE WITH THE JOINT TYPE SC CLASS A (UNCOATED) "SLIP-CRITICAL" PER RCSC SPECIFICATION TABLE 4.1 AND SECTION 8.3. ALL INSPECTIONS SHALL BE PER RCSC SECTION 9.3.

WELDING REQUIREMENTS:

- 1. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF AISC 341-05, APPENDIX W "WELDING PROVISIONS" FOR ALL WELDING APPLIED TO SEISMIC LOAD RETAINING SYSTEM
- 2. ALL WELDING SHALL CONFORM TO AWS D1.1 "STRUCTURAL WELDING CODE -STEEL" AND VISUALLY CONFORM TO AWS SECTION 6 AND TABLE 6.1. VERIFICATION SHALL BE BY A CURRENTLY QUALIFIED CONSTRUCTION WELDING INSPECTOR
- 3. ALL WELDERS SHALL BE QUALIFIED FOR THE SPECIFIC PRE QUALIFIED JOINTS REQUIRED BY THE DESIGN AND CERTIFIED IN ACCORDANCE WITH AWS AND WABO REQUIREMENTS
- 4. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH APPROPRIATE WELD PROCEDURES. ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AISC 341-05, APPENDIX W, SECTION 7.3.
- 5. ALL WELDING SHALL BE DONE WITH AWS PRE QUALIFIED WELDING PROCESSES UNLESS OTHERWISE APPROVED.
- 6. ALL WELDER QUALIFICATIONS AND WSP'S SHALL BE MAINTAINED AT THE SITE OF THE WORK AND SHALL BE READILY AVAILABLE FOR INSPECTION UPON REQUEST, BOTH IN THE SHOP AND IN THE FIELD. DEMAND CRITICAL WELDS:

ALL WELDS DESIGNATED AS DEMAND CRITICAL ON PLANS SHALL COMPLY WITH THE REQUIREMENTS OD AISC 341-05. SECTION 7.3b AND SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF TWENTY FOOT POUNDS AT -20 DEGREES FAHRENHEIT AS DETERMINED BY THE APPROPRIATE AWS CLASSIFICATION TEST METHOD OR MANUFACTURE CERTIFICATION AND FORTY FOOT POUNDS AT 70 DEGREES FAHRENHEIT AS DETERMINED BY AISC 341-05, APPENDIX X, OR OTHER APPROVED METHOD, WHEN THE STEEL FRAME IS NORMALLY ENCLOSED AND MAINTAINED AT A TEMPERATURE OF 50 DEGREES FAHRENHEIT OR HIGHER. FOR STRUCTURES WITH SERVICE TEMPERATURES LOWER THAN 50 DEGREES FAHRENHEIT, THE QUALIFICATION TEMPERATURE FOR AISC 341-05, APPENDIX X SHALL BE 20 DEGREES FAHRENHEIT ABOVE THE LOWEST ANTICIPATED SERVICE TEMPERATURE, OR AT A LOWER TEMPERATURE.

BACKING AT CJP WELDS:

FXCEPTION

- 1. ALL FUSIBLE STEEL BACKING USED AT BEAM TOP FLANGE AND CONTINUITY PLATE TO COLUMN WELDS NEED NOT BE REMOVED. AT COLUMN FLANGES. STEEL BACKING LEFT IN PLACE SHALL BE ATTACHED TO THE COLUMN FLANGE USING A CONTINUOUS 5/16 INCH FILLET WELD ON THE EDGE BELOW THE CJP GROVE WELD. WHEN BACKING IS REMOVED, FOLLOWING THE REMOVAL OF THE BACKING, THE ROOT PASS SHALL BE BACK GOUGED TO SOUND METAL AND BACK WELDED WITH A REINFORCING FILLET. THE REINFORCING FILLET SHALL BE CONTINUOS WITH A MINIMUM SIZE OF 5/16 INCH. FUSIBLE STEEL BACKING USED CJP GROOVE WELDS BETWEEN THE BEAM BOTTOM FLANGE AND COLUMN, THE BACKING SHALL BE REMOVED. FOLLOWING THE REMOVAL OF BACKING, THE ROOT PASS SHALL BE BACK GOUGED TO
- SOUND WELD METAL AND BACK WELDED WITH A REINFORCING FILLET. THE REINFORCING FILLET SHALL BE CONTINUOUS WITH A MINIMUM SIZE OF 5/16 INCH AND THE REINFORCING FILLET LEG ADJACENT TO THE BEAM FLANGE SHALL BE SUCH THAT THE FILLET TOE IS LOCATED ON THE BEAM FLANGE BASE METAL. IF THE BASE METAL AND WELD ROOT ARE GROUND SMOOTH AFTER REMOVAL OF BACKING, THE REINFORCING FILLET ADJACENT TO THE BEAM FLANGE NEED NOT EXTEND TO BASE METAL.
- 3. STEEL BACKING AT BEAM FLANGE TO COLUMN FLANGE JOINTS SHALL NOT BE WELDED TO THE UNDERSIDE OF THE BEAM FLANGE, NOR SHALL TACK WELDS BE PERMITTED AT THIS LOCATION. IF FILLET WELDS OR TACK WELDS ARE PLACED BETWEEN THE BACKING AND THE BEAM FLANGE IN ERROR, THEY SHALL BE REPAIRED AS FOLLOWS;
- A. THE WELD SHALL BE REMOVED SUCH THAT THE FILLET WELD OR TACK WELD NO LONGER ATTACHES THE BACKING TO THE BEAM FLANGE. B. THE SURFACE OF THE BEAM FLANGE SHALL BE GROUND FLUSH AND SHALL BE FREE OF DEFECTS.
- C. ANY GOUGES OR NOTCHES SHALL BE REPAIRED. REPAIR WELDING SHALL BE DONE WITH E7018 SMAW ELECTRODES OR OTHER FILLER METALS MEETING THE REQUIREMENTS OF AISC 341-05, SECTION 3.1 FOR DEMAND CRITICAL WELDS. A SPECIAL WELDING PROCEDURE SPECIFICATION (WPS) SHALL BE REQUIRED FOR THIS REPAIR. FOLLOWING WELDING, THE REPAIR SHALL BE GROUND SMOOTH.
- 4. WHERE NONFUSIBLE STEEL BACKING IS USED WITH CJP GROOVE WELDS BETWEEN THE BEAM FLANGES AND THE COLUMN, THE BACKING SHALL BE REMOVED. FOLLOWING THE REMOVAL OF BACKING, THE ROOT PASS SHALL BE BACK GOUGED TO SOUND WELD METAL AND BACK WELDED WITH A REINFORCING FILLET. THE REINFORCING FILLET SHALL BE BACK GOUGED TO SOUND WELD METAL AND BACK WELDED WITH A REINFORCING FILLET. THE REINFORCING FILLET SHALL BE CONTINUOUS WITH A MINIMUM SIZE OF 5/16 INCH AND THE REINFORCING FILLET LEG ADJACENT TO THE BEAM FLANGE SHALL BE SUCH THAT THE FILLET TOE IS LOCATED ON THE BEAM FLANGE BASE METAL.

FXCEPTION

EXTEND TO BASE METAL. DETAILS AND TREATMENT OF WELD TABS:

IF THE BASE METAL AND WELD ROOT ARE GROUND SMOOTH AFTER REMOVAL OF BACKING, THE REINFORCING FILLET ADJACENT TO THE BEAM FLANGE NEED NOT

05830 SPECIAL MOMENT FRAME (SMF)

ALL WELD TABS SHALL BE REMOVED WITHIN 1/8 INCH OF THE BASE METAL SURFACE AND THE END OF THE WELD FINISHED. EXCEPT AT CONTINUITY PLATES WHERE REMOVAL TO WITHIN 1/4 INCH OF THE PLATE EDGE SHALL BE PERMITTED. REMOVAL SHALL BE BY AIR CARBON ARC CUTTING (CAC-A) GRINDING, CHIPPING, OR THERMAL CUTTING. THE PROCESS SHALL BE CONTROLLED TO MINIMIZE ERRANT GOUGING. THE EDGES WHERE WELD TABS HAVE BEEN REMOVE SHALL BE FINISHED TO A SURFACE ROUGHNESS OF FIVE HUNDRED MICRO INCHES OR BETTER. THE CONTOUR OF THE WELL END SHALL PROVIDE A SMOOTH TRANSITION TO ADJACENT SURFACE, FREE OF NOTCHES, GOUGES. OR SHARP CORNERS. WELD DEFECTS GREATER THAN 1/16 INCH DEEP SHALL BE EXCAVATED AND REPAIRED BY WELDING IN ACCORDANCE WITH AN APPLICABLE WPS. OTHER WELD DEFECTS SHALL BE REMOVED BY GRINDING, FAIRED TO A SLOP NOT GREATER THAN 1:5.

TACK WELDS:

IN THE PROTECTED ZONE, ALL TACK WELDS ATTACHING BACKING AND WELD TABS SHALL BE PLACED WHERE THEY WILL BE INCORPORATED INTO A FINAL WELD AND TABS SHALL BE REMOVED TO WITHIN 1/8 INCH OF THE BASE METAL SURFACE AND THE END OF THE WELD FINISHED, EXCEPT AT CONTINUITY PLATES WHERE REMOVAL TO WITHIN 1/4 INCH OF THE PLATE EDGE SHALL BE PERMITTED. REMOVAL SHALL BE BY AIR CARBON ARC CUTTING (CAC-A), GRINDING, CHIPPING, OR THERMAL CUTTING.

CONTINUITY PLATES:

- 1. ALONG THE WEB, THE CORNER CLIP SHALL BE DETAILED SO THAT THE CLIP EXTENDS A DISTANCE OF AT LEAST 1 1/2 INCHES BEYOND THE PUBLISHED "K" DETAIL DIMENSION FOR THE ROLLED SHAPE. ALONG THE FLANGE, THE PLATE SHALL BE CLIPPED TO AVOID INTERFERENCE WITH THE RADIUS OF THE ROLLED SHAPE AND SHALL BE DETAILED SO THAT THE CLIP DOES NOTE EXCEED A DISTANCE OF 1/2 INCH BEYOND THE PUBLISHED "K1" DIMENSION. THE CLIP SHALL BE DETAILED TO FACILITATE SUITABLE WELD TERMINATION FOR BOTH THE FLANGE WELD AND THE WEB WELD. WHEN A CURVED CLIP IS USED, IT SHALL HAVE E MINIMUM RADIUS OF 1/2 INCH.
- 2. AT THE END OF THE WELD ADJACENT TO THE COLUMN WEB/FLANGE JUNCTURE, WELD TABS FOR CONTINUITY PLATES SHALL NOT BE USED, EXCEPT WHEN PERMITTED BY THE STRUCTURAL ENGINEER OF RECORD. UNLESS SPECIFIED TO BE REMOVED BY THE STRUCTURAL ENGINEER OF RECORD, WELD TABS SHALL NOT BE REMOVED IN THIS LOCATION.
- WHERE CONTINUITY PLATE WELDS ARE MADE WITHOUT WELD TABS NEAR THE COLUMN FILLER RADIUS, WELD LAYERS SHALL BE PERMITTED TO BE TRANSITIONED AT AN ANGLE OF ZERO DEGREES TO 45 DEGREES MEASURED FROM THE VERTICAL PLANE. THE EFFECTIVE LENGTH OF THE WELD SHALL BE DEFINED AS THAT PORTION OF THE WELD HAVING FULL SIZE, NONDESTRUCTIVE TESTING (NDT) SHALL NOT BE REQUIRED NOT THE TAPERED OR TRANSITION PORTION OF THE WELD NOT HAVING FULL SIZE. REDUCED BEAM SECTION (RBS)
 - 1. THE REDUCED BEAM SECTION (RBS) SHALL BE MADE USING THERMAL CUTTING TO PRODUCE A SMOOTH CURVE. THE MAXIMUM SURFACE ROUGHNESS OF THE THERMALLY CUT SURFACE SHALL BE FIVE HUNDRED MICRO INCHES IN ACCORDANCE WITH ANSI B46.1, AS MEASURED USING AWS C4.1-77 SAMPLE FOUR OR SIMILAR VISUAL COMPARATOR. ALL TRANSITIONS BETWEEN THE REDUCED BEAM SECTION AND THE UNMODIFIED BEAM FLANGE SHALL BE ROUNDED IN THE DIRECTION OF THE FLANGE LENGTH TO MINIMIZE NOTCH EFFECTS DUE TO ABRUPT TRANSITIONS. CORNERS BETWEEN THE REDUCED SECTION SURFACE AND THE TOP AND BOTTOM OF THE FLANGES SHALL BE GROUND TO REMOVE SHARP EDGES, BUT A MINIMUM CHAMFER OR RADIUS SHALL NOT BE REQUIRED
 - 2. ALL THERMAL CUTTING TOLERANCES SHALL BE PLUS OR MINUS 1/4 INCH FROM THE THEORETICAL CUT LINE. THE BEAM EFFECTIVE FLANGE WIDTH AT ANY SECTION SHALL HAVE A TOLERANCE OF PLUS OR MINUS 3/8 INCH.
 - 3. ALL GOUGES AND NOTCHES THAT OCCUR IN THE THERMALLY CUT REDUCED BEAM SECTION SHALL BE REPAIRED BY GRINDING OF NOT MORE THAN 1/4 INCH DEEP. THE GOUGED OR NOTCHED AREA SHALL BE FAIRED BY GRINDING SO THAT A SMOOTH TRANSITION EXISTS AND THE TOTAL LENGTH OF THE AREA GROUND FOR THE TRANSITION SHALL BE NO LESS THAN FIVE TIMES THE DEPTH OF THE REMOVE GOUGE ON EACH SIDE OF THE GOUGE. IF A SHARP EXISTS, THEY SHALL BE INSPECTED BY MAGNETIC PARTICLE TESTING (MT) AFTER GRINDING TO ENSURE THAT THE ENTIRE DEPTH OF THE NOTCH HAS BEEN REMOVED. GRINDING THAT INCREASES THE DEPTH OF THE RBS CUT MORE THAN 1/4 INCH BEYOND SPECIFIED DEPTH OF CUT IS NOT PERMITTED.
 - 4. ALL GOUGES AND NOTCHES THAT EXCEED 1/4 INCH IN DEPTH BUT NOT TO EXCEED 1/2 INCH DEPTH AND THOSE NOTCHES AND GOUGES WHERE REPAIR BY GRINDING WOULD INCREASE THE EFFECTIVE DEPTH OF THE REDUCED BEAM SECTION CUT BEYOND TOLERANCE, MAY BE REPAIRED BY WELDING. THE NOTCH OR GOUGE SHALL BE REMOVED AND GROUND TO PROVIDE A SMOOTH RADIUS OF NOT LESS THAN 1/4 INCH IN PREPARATION FOR WELDING. THE REPAIR AREA SHALL BE PREHEATED TO A TEMPERATURE OF 150 DEGREES FAHRENHEIT OR THE VALUE SPECIFIED IN AWS D1.1, TABLE 3.2, WHICHEVER IS GREATER, MEASURED AT THE LOCATION OF THE WELD REPAIR.
- 5. ALL NOTCHES AND GOUGES EXCEEDING 1/2 INCH IN DEPTH SHALL BE REPAIRED ONLY WITH A METHOD APPROVED BY THE STRUCTURAL ENGINEER OF RECORD. PROTECTED ZONE:

THE PROTECTED ZONE FOR THE REDUCED BEAM SECTION CONNECTION AS INDICATED ON DRAWINGS AND IS DEFINED AS THE AREA FROM THE FACE OF THE COLUMN FLANGE TO ONE HALF OF THE BEAM DEPTH BEYOND THE THEORETICAL HINGE POINT OR TO THE INSIDE EDGE OF THE BEAM FLANGE RADIUS CUT, WHICHEVER IS GREATER. THE PROTECTED ZONE SHALL COMPLY WITH THE FOLLOWING;

- 1. THE PROTECTED ZONE SHALL BE DISTINCTLY MARKED WITH CONTRASTING PAINT OR BY OTHER ACCEPTABLE MEANS.
- 2. WITHIN THE PROTECTED ZONE, DISCONTINUITIES CREATED BY FABRICATION OR ERECTION OPERATIONS SUCH AS TACK WELDS, ERECTION AIDS, AIR-ARC GOUGING AND THERMAL CUTTING SHALL BE REPAIRED AS REQUIRED BY
- STRUCTURAL ENGINEER OF RECORD. 3. WELDED SHEAR STUDS AND DECKING ATTACHMENTS THAT PENETRATE THE BEAM FLANGE SHALL NOT BE PLACED ON BEAM FLANGES WITHIN THE
- PROTECTED ZONE. DECKING ARC SPOT WELDS AS REQUIRE TO SECURE DECKING SHALL BE PERMITTED. 4. WELDED, BOLTED, SCREWED OR SHOT-IN ATTACHMENTS FOR PERIMETER EDGE
- ANGLES, EXTERIOR FACADES, PARTITIONS, DUCTWORK, PIPING OR OTHER CONSTRUCTION SHALL NOT BE PLACED WITHIN THE PROTECTED ZONE. QUALITY ASSURANCE PLAN:

QUALITY CONTROL AND QUALITY ASSURANCE FOR MEMBERS OF THE SEISMIC LOAD RESTRAINING SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH AISC 341-05, APPENDIX Q. VISUAL WELDING INSPECTION POINTS AND FREQUENCIES SHALL BE PER TABLES LISTED IN SECTION Q5. NONDESTRUCTIVE TESTING (NDT) OF WELDS;

NONDESTRUCTIVE TESTING OF WELDS OF MEMBERS PART OF THE SEISMIC LOAD RESISTING SYSTEM SHALL BE PERFORMED BY QUALITY ASSURANCE PERSONNEL IN ACCORDANCE WITH AISC 341-05, APPENDIX Q, SECTION Q5.2. ALL NONDESTRUCTIVE TESTING PERFORMED SHALL BE DOCUMENTED AND THE REPORT SHALL IDENTIFY THE TESTED WELD BY PIECE MARK AND LOCATION THE PIECE. REDUCTION OF NONDESTRUCTIVE TESTING REQUIREMENTS SHALL BE PERMITTED PER THE REQUIREMENTS OF AISC 341-05, SECTION Q5.2(G) AND (H) AND AUTHORITY HAVING JURISDICTION.

Ordinary Noment Frame Notes Jobst. 2005 Jobst. 2005 Jobst. 2005 Foo Residence Exc. 2016 Designer Designer Foo Residence Scale: Exc. 2016 Designer 3453 74th Ave SE Designer Designer Designer Mercer Island, WA 98040 Order: B Designer Designer
Ordinary Noment Frame Notes Job #: 2005 Job #: 2005 Job #: 2005 Foo Residence 3453 74th Ave SE Mercer Island, WA 98040
Ordinary Noment Frame Notes Job #: 2005 Mo. Revision Foo Residence 3453 74th Ave SE Mercer Island, WA 98040 Mercer Island, WA 98040 Mercer Island, WA 98040
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