



CITY OF MERCER ISLAND	INSPECTION REQUES	TS: S PROJECT ALERTS:
DEVELOPMENT SERVICES GROUP	online:	Construction of the project shall be from <i>approved plans only</i> . No deviation from the approved project plans is allowed without prior approval from the city of Mercer Island. Approved plans must be kept on site and maintained in good condition.
9611 SE 36TH STREET MERCER ISLAND, WA 98040 PHONE: 206.275.7605 www.mercergov.org	MyBuildingPermit.co	 Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including: Site Considerations ROW restrictions Additional Fire Code Requirements Inspector shall initial and date appropriate inspection.
	<i>voicemail:</i> (206) 275-7730	 Hours of Work Drainage Requirements Separtment on the code Requirements Naise Abstrament Certification Naise Abstrament Certification
Mierian	(200) 270 7700	• Acess Road Requirements • Water Service Requirements • Tree Requirements
NOTE: ALL RECORDS AND DRAWINGS ARE SUBJECT TO	PUBLIC DISCLOSURE AS REQUIRED BY RCW 42.56	S A Refer to "Preconstruction Meeting Checklist" provided at the preconstruction meeting for development related requirements.
CONTACT INFORMATION:	TODELE DISCLOSORE AS REQUIRED BY REW 42.50	Erosion control measures must be as shown on approved project drawings. All erosion control is to be in place and inspected Erosion control Erosion control erosion control is to be in place and inspected Erosion control erosion control erosion control is to be in place and inspected Erosion control er
Applicant is to complete the following information.		Provide the start of any site work. A City of Mercer Island Business License is required for all subcontractors. Call (206) 275-7783 for more information. P Right-of-way use or work / easement, material delivery, etc. If applicable,
Applicant Contact information <i>prior</i> to permit issuance:	Applicant Contact information <i>post</i> permit issuance:	- TREE PROTECTION REQUIREMENTS:
Name:	Name:	Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and Temporary power Temporary power
Address:	Address:	No trees shall be cut without a City of Mercer Island tree permit.
Phone:	Phone:	Replacement trees must be a minimum of six feet tall at installation. They must be planted and approved prior to final inspection. reports of inspections (pile and shoring installation, etc.) For this project. trees are authorized to be removed and replaced with trees.
		This project appears to be within a protected eagle nest area. Contact Federal Fish and Wildlife at (360) 534-9304 or visit their (building height and setbacks); Special Inspector reports of inspections
Email:	Email:	Soli bearing capacity, compaction, earthwork, pile installation, etc.)
REQUIRED SPECIAL INSPECTIONS / STRUC	CTURAL OBSERVATIONS:	Separate Permits are required for ALL fire protection systems. For more information, see http://www.mercergov.org/Page.asp?NavID=2614
It is the Engineer of Record's responsibility to specify all required The owner is responsible for biring an approved private Special I	ed Special Inspections or Structural Observation (check items below).	Fire Sprinkler Monitored Household * Storm drainage, including (but not limited to):
Inspectors (except Geotechnical) must be WABO certified.	inspector for the checked inspections noted below. An special	Image: Image: NFPA 13D
When Special Inspection or Structural Observation is required, the Inspection. Note: Inspection by the City Inspector is required in a	e report shall be submitted to the City Building Inspector prior to the City addition to the Special Inspection or Structural Observation indicated	NFPA 13R • Storm drain in ROW NFPA 13R • Other: • Detention systems • Storm drain in ROW
below. Do not cover or conceal any work prior to the City inspec	ction.	Approved Fire Code Alternatives: • Control structures / mannoles • Catch basins including • Pump systems
STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR)	R):	FCA1
Engineer of Record: Cor	pmpany:Phone:	FCA2 Water Supply
General Conformance to Construction Documents	Utner:	WATER SLIPPLY REOLUREMENTS:
SOILS / GEOTECHNICAL: Special Inspector: Cor	ompany:Phone:	Connections to side Back-flow valves Back-flow valves Sewer main Grinder nump systems
Erosion control measures	Subsurface drainage placement	Water Supply system upgrade required • Connections to existing • Sewer manholes
 Shoring installation and monitoring Observe and monitor excavation 	 Verify fill material and compaction Rockery installation 	City Installation. Applicant Installation. Driveway / Access road
Verification of soil bearing	Pile placement (auger cast/driven pile)	Required Service Line Size: Required Supply Line Size: Required Meter Size: (water main to meter) (water main to house)
U Other:		(water main to meter) (water main to nouse) (water main to nouse) (water main to nouse) (water main to meter) (water main to nouse)
REINFORCED CONCRETE: Special Inspector: Cor	pmpany:Phone:	 Pressure reducing valve required if pressure exceeds 80 psi. Reduced pressure backflow assembly (RPBA) required for all lots with waterfront or non-city water supply (private wells
Concrete strength	Retaining wall construction	or lake irrigation).
Reinforcing steel and concrete placement Shotcrete placement	Prestressed / Precast construction Other:	Additional water supply requirements: Inspection letter for lateral wood inspection.
Other:	Other:	DKAINAGE REQUIREMENTS: Brough electric installation Image: State of the sta
STRUCTURAL STEEL: (AISC 360, Chapter N)		Solution system required Direct discharge into the lake Direct discharge into the lake Noder me alarm (wing inspection) Rough number of the lake
Special Inspector: Cor	Phone:Phone:Phone:	- Other:
Structural steel erection, field welds and bolting	Other:	Side Sewer Requirements:
Other:	Other:	Side sewer requires a backflow preventer when connecting to the lake line or when the elevation of the lowest plumbing fixture is lateral wood inspection, welding epoxy anchors, etc.
STRUCTURAL MASONRY: Special Inspector: Cor	ompany:Phone:	lower than the elevation of the upstream manhole rim or when side sewer is shared with one or more properties.
Mortar strength	Glass unit masonry installation	New connection. Connect to existing. Disconnect permit required. Reconnect permit required.
Masonry unit strength Other:	Wall panel and veneer installation Other:	Other:
Other:	Other:	Mercer Island Maintenance Department at (206) 275-7800.
WOOD:		APPROVED CODE ALTERNATIVES:
Engineer of Record: Cor	ompany:Phone:	CA1: CA2: CA2: CA2: TT
Lateral resisting system construction Other	High strength diaphragm construction	
		• Access Road • Fire Extinguishing System
Special Inspector: Cor	ompany:Phone:	SURVEY REQUIREMENTS (The following survey information must be submitted when checked):
Epoxy grout installations	Stucco installation	Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation Inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City
Other post installed anchors	Exterior Insulation Finish System (EIFS) installation	reserves the right to request an impervious area survey at any time prior to issuance of Certificate of Occupancy.
 Alternative construction methods: Alternative construction materials: 	Other:	Surveyor: • Waterfront property • Well water on property Building height survey • Boiler
DEFERRED SUBMITTALS:		Building setback survey Final Inspection: Site and utility: includes landscape, utilities and ROW. Site TS
The Applicant is required to select all deferred submittals / shop	p drawings for submittal to the City for review and approval prior to iten	Impervious surface survey Impervious surface survey
Connector plate wood trusses	Post tension lavout	A Building Inspection prior to demolition is required for all legally nonconforming single family dwelling to ensure no more than Inspectors. Geotechnical Engineer, and exterior wall cladding inspectors (EIES)
Metal joist / metal trusses	Exterior cladding	40 percent of the dwelling's exterior walls are structurally altered. Contact the Building Inspector at (206) 275-7730. 90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO):
Premanufactured structures (stairs, etc.) Precast concrete elements	Window wall / curtain wall construction Other:	Civil / Drainage LUP / Setback requirements Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.
Other:	Other:	Land clearing, grading, filling and foundation work within geologic hazard areas is NOT PERMITTED between October 1 and April 1
ENERGY CODE COMPLIANCE INFORMATIO	ON: Jung set Alternatively, incorporate or include the Residential Freeze Code	without an approved Seasonal Development Limitation Waiver. Approved
Prescriptive Compliance (RECPC) Form into the drawing set.	ing set. Alternatively, incorporate of include the Residential Energy Code	Geotechnical Report provided. All construction must comply with the recommendations of the Geotechnical Report. A copy of report and other geotechnical information must be kept on site at all times.
Sheet:		Call the appropriate contact to arrange the inspection. Call the appropriate contact to arrange the inspection.
Building envelope: wsec Table 402.1.1	Air Leakage Testing. IRC Section R402.4.1.2 WA Amendments	Geotechnical Engineer Phone SEASONAL DEVELOPMENT LIMITATION RESTRICTION: Phone
(include U-factors, insulation and moisture control)	Provide air leakage test report verifying air leakage rate	Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1.
(include ventilation option and duct sizing if applicable)	$\mathbf{M}_{\mathbf{M}} = \mathbf{M}_{\mathbf{M}} = $	Limitation Waiver Permit.
Energy Credit Information: wsec Table 406.2 (include specific, written requirements)	Postconstruction Test. wsec R403.2.2.1 Rough-in Test. wsec R403.2.2.3	Permit number Date Date PLAN REVIEW APPROVALS:
RECPC Form Information:		O If applicable.
(if incorporated within drawing set) http://www.mercergov.org/files/2012ResidentialEnergyCalcForm.pdf		□ Impact fees apply and are due <i>prior</i> to Final Inspection or on
		$O = \frac{1}{Date}, \text{ whichever occurs first.} \qquad \square \qquad $
FILE NAME: DSG CVR 2016 24x36.PDF		REVISED: December 1st, 2015

ABBREVIATIONS

A.B ABV ACC	ANCHOR BOLT ABOVE ACCESS	F.H.M.S F.H.W.S FIN.
ACOUS. A.C.P	ACOUSTICAL ASPHALT CONCRETE PAVEMENT	F/F. FF.
ACT A.D.	ACOUSTICAL TILE AREA DRAIN	FL; FLR FLASH.
ADD ADJ.	ADDITIVE ADJUSTABLE	FLUOR. F.O.
A.F.F. AGGR.	ABOVE FINISHED FLOOR AGGREGATE	F.O.C. F.O.F.
A.H.J. JURISDICTION	AUTHORITY HAVING	F.O.I.C. F
A.I.B ALT	AIR & MOISTURE BARRIERS ALTERNATE	F.O.I.O.
ALUM. AP.	ALUMINUM ACCESS PANEL	F.O.M. F.O.S.
APPROX. ARCH.	APPROXIMATE ARCHITECTURAL	F.O.W. FPRF.
ASB. A.S.L.	ASBESTOS ABOVE SEA LEVEL	FRPL. F.R
ASPH. AUTO.	ASPHALT AUTOMATIC	F.R.T. F.S.
BD.	BOARD	FT. FTG.
BITUM. BLDG.	BITUMINOUS BUILDING	FURR. FUT.
BLK. BLKG.	BLOCK BLOCKING	FW. F.V.
BM. B.O.	BEAM BOTTOM OF	GA.
BOT. BSMT.	BOTTOM BASEMENT	GAL. GALV.
BRG. BUR.	BEARING BUILT UP ROOFING	G.C. GL.
CAB.	CABINET	G.L.B. GR.
C.B. CB	CATCH BASIN CHALK BOARD	G.R. G.S.B.
CC.	CENTER TO CENTER CEMENT	G.W.B.
CER.	CERAMIC CORNER GUARD	HR
C.I.	CAST IRON CAST IN PLACE	H.C.
CJ.	CONTROL JOINT	HDR.
CLKG.	CAULKING	HDWD.
CLR.	CLEAR CONCRETE MASONRY UNIT	HEM.
CNTR.	COUNTER	HORIZ.
COL. CONC.		HR.
CONN. CONST.	CONNECTION	HVAC.
CONT. CONTR.	CONTRACTOR	HVV. H.W.H.
CORR. C.P.	CORRIDOR CONCRETE PAVER	I.B.C.
CPT. CPT SQRS.	CARPET; CARPETED CARPET SQUARES	I.D. IN.
CRS. C.S.	COURSE; COURSES CRAWL SPACE	INCL. INSUL.
CTSK. C.T.		INT. INV.
CTR. CU.FT.	CENTER CUBIC FEET	JAN.
C.V.G. C.W.C.	CLEAR VERTICAL GRAIN CHILLED WATER CABINET	J.B. JT.
		KIT.
DBL. DEMO.	DEMOLITION	K.U.
DTL., D.F.	DET. DETAIL DRINKING FOUNTAIN	LAM. LAV.
DIA. DIM.	DIAMETER DIMENSION	L.F. LL.
DISP. DL.	DISPENSER DEAD LOAD	LP. LOC.
DN. D.O.	DOWN DOOR OPENING	LI.
D.P. DR.	DAMPPROOFING DOOR DOWNDROUT	MAS. MAX.
DS. D.S.P	DOWNSPOOT DRY STAND PIPE	M.B. M.C.
DT. DW.	DRAIN TILE DISHWASHER DRAWING	MDO. MECH.
DWG.		MEMB. MET.
E. EA.	EAST EACH	MEZZ. METAL
EB. E.J.	EXPANSION BOLT EXPANSION JOINT	MFR. MH.
EL. ELEV.	ELEVATION ELEVATOR	MIN. MIR.
ELECT. EMER.	ELECTRICAL EMERGENCY	MISC. MNT.
ENCL E.O.	EDGE OF	M.O. MTL.
E.P. EQ.	ELECTRICAL PANELBOARD EQUAL	MUL.
EQUIP. EST.	EQUIPMENT ESTIMATE	N. N/A
E.W. (E), E.	EACH WAY EXISTING	N.I.C. NO., #
EXIST. EXP.	EXISTING EXPANDED; EXPANSION	NOM. NR.
EXPO. EXT.		N.T.S.
E.I.F.S. EXT. IN		0/ 0.A.
г.А. F.B.	FIRE ALARM FLAT BAR	0.C.
F.D. FDN.	FLOOK DRAIN FOUNDATION	O.D. OFF.
r.E. F.E.C.	FIRE EXTINGUISHER	O.H. OPH.
F.F.E. F.H.	FINISH FLOOR ELEVATION FIRE HOSE	opng. Opp.
F.H.C.	FIRE HOSE CABINET	

FIRE HOSE STATION

F.H.S.

	FLAT HEAD WOOD SCREW FINISH FINISH TO FINISH FACE TO FINISH
	FLOOR; FLOORING FLASHING
	FACE OF FACE OF CONCRETE FACE OF FINISH
URNIS	HED BY OWNER AND INSTALLED BY CONTRACTOR FURNISHED BY OWNER AND INSTALLED BY OWNER
	FACE OF MASONRY FACE OF STUDS FACE OF WALL
	FIREPROOF FIREPLACE FRAME FIRE RETARDANT TREATED
	FLOOR SINK FOOT OR FEET FOOTING
	FURTINTURE FULL WIDTH FIELD VARIFY
	GAUGE GALLON GALVANIZED
	GENERAL CONTRACTOR GLASS GLUE LAM BEAM
	GRADE GUARD RAIL GYPSUM SHEATHING BOARD GYPSUM WALL BOARD
	GYPSUM HOSE BIBB HOLLOW CORE
I	HOT DIPPED GALVANIZED HEADER HIGH DINSITY OVERLAY
	HARDWOOD HARDWARE HEMLOCK HOLLOW METAL
	HORIZONTAL HIGH POINT HOUR
	HEATING/VENTILATION/AIR CONDITIONING HOT WATER HOT WATER HEATER
	INTERNATIONAL BUILDING CODE INSIDE DIAMETER INCH
	INCLUDED; INCLUDING INSULATION INTERIOR INVERT
	JANITOR JUNCTION BOX JOINT
	KITCHEN KNOCK-OUT
	LAMINATE LAVATORY LINEAL FEET LIVE LOAD
	LOW POINT LOCATION LIGHT
	MASONRY MAXIMUM MACHINE BOLT
	MEDICINE CABINE I MEDIUM DENSITY OVERLAY MECHANICAL MEMBRANE
	METAL MEZZANINE MTL. MANUFACTURER
	MANHOLE MINIMUM MIRROR
	MISCELLANEOUS MOUNTED MASONRY OPENING MATERIAL MULLION
	NORTH NOT APPLICABLE NOT IN CONTRACT
	NUMBER NOMINAL NOISE REDUCTION NOT TO SCALE
	OVER OVERALL OBSCURE
	ON CENTER OUTSIDE DIAMETER OFFICE
	OPPOSITE HAND OPENING OPPOSITE

FLAT HEAD MACHINE SCREW

PRE-CAST CONCRETE POUNDS PER CUBIC FOOT PERFORATED PERPENDICULAR PAINTED GYPSUM WALL BOARD PROPERTY LINE, PLATE PLASTIC LAMINATE PLASTER PLYWOOD PANEL PΔIR POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH POINT PRESSURE TREATED PAINT PAPER TOWEL DISPENSER PARTITION POLYVINYL CHOORIDE PAINTED WOOD QUARRY TILE QUANTITY RISERS **RETURN AIR** RADIUS **RUBBER BASE** ROOF DRAIN REFERENCE REFRIGERATOR **REINFORCED. REINFORCING** REQUIRED RESILIENT **REVISION; REVISED** REGISTER **ROUND-HEAD; RIGHT HAND** ROOM ROUGH OPENING **RAIN WATER LEADER** SOUTH SEATTLE BUILDING CODE SCOURED CONCRETE SELF ADHERED FLASHING SOLID CORE SC.ALUM SOILD CORNER ALUMINUM SCHED. SCHEDULE SMOKE DETECTOR SEALED CONCRETE SECTION SAFETY GLASS SH;SHLF SHELF SHOWER SHEET SHEATH. SHEATHING SIMILAR SHEET METAL SHEET METAL SCREW SLAB ON GRADE SPECIFICATION SINGLE-PLY MEMBRANE SQUARE SQUARE FEET SQUARE INCH (ES) **STAINLESS STEEL** STONE STATION **STANDARD** STEEL STORAGE STRUCT. STRUCTURAL SUSPENDED SYMMETRICAL TREADS TACK BOARD TOWEL BAR **TOP OF CURB** TEMPERED TEMPERED GLASS TONGUE AND GROOVE TOP OF TOP OF SLAB; TOP OF STEEL TOP OF WALL TELEPHONE TOILET PAPER HOLDER TUBULAR STEEL TYPICAL UNLESS NOTED OTHERWISE UTILITY SINK VAPOR BARRIER WATER CLOSET WOOD WITH WITHOUT WATERPROOF OR WATERPROOFING

PARTICLE BOARD

P.B.

P.C.

PCF.

PERF.

PERP.

P.GWB.

P.LAM.

PLAS.

PLYWD.

PNL.

PR

PSF.

PSI.

PT.

P.T.

PTD.

P.T.D.

PTN.

PVC.

P.WD.

Q.T.

QUAN.

RAD.

RB.

R.D.

REF.

REFR.

REINF.

REQ.

RESIL

REV.

RH

RM.

R.O.

RWL.

S.B.C.

S.CONC

SAF.

SC.

S.D.

SEC.

SECT.

SHR.

SHT.

SIM.

SM.

SMS.

S.O.G.

SPEC.

S.P.M.

SQ.FT.

SQ.IN.

SQ.

SS.

ST.

STA.

STD.

STL.

STOR.

SUSP. SYM.

T.; TRD.

TB.

T.B.

T.C.

T.G.

T.&G.

T/;T.O

T.O.S

T.O.W.

T.P.H.

TEL.

T.S.

TYP.

U.N.O.

U.SK.

V.B.

W.C.

WD.

W/

WP

WR

WSCT.

WATER RESISTANT

WAINSCOT

W/O

TEMP.

S.G.

RGTR.

PL.

SYMBOLS LEGEND



PROJECT DATA

OWNER'S NAME: CHRIS & NICOLE NIEDERMAN

SITE & OWNERS ADDRESS 6800 96TH AVE SE, MERCER ISLAND, WA 98040

LEGAL DESCIPTION

BEG AT PT 185 FT E & 60 FT N OF SW COR OF GL 1 TH E TO SH OF LK TH SLY TO S LN SD GL TH W TO PT 10 FT E OF SW COR SD GL TH N 35 FT TH ELY TO BEG TGW SH LDS ADJ

ASSESSOR'S PARCEL NUMBER 3024059098

ECA

- Landslide Area
- Steep Slope Area - Shoreline Management Area
- Piped Watercourse on Property North of Site
- (25 foot Buffer)

ZONE

R-8.4 (Residential. Minimum 8,400 SF lot) Unified Land Development Code 19.02

LOT COVERAGE SUMMARY

LOT 16,181 SF

EXISTING

Main Structure Roof Area: 1,875 SF Accessory Building Roof Area: 1,592 SF Driveway: 1,625 SF Access Easements: 1,769 SF Covered Walk Way Area: 348 SF

TOTAL EXISTING LOT COVERAGE: 7,209 SF (45%)

PROPOSED

Main Structure Roof Area: 2,505 SF Accessory Building Roof Area: 1,364 SF Driveway: 912 SF Access Easements: 1,769 SF

TOTAL PROPOSED LOT COVERAGE: 6,550 SF (40%)

VICINITY MAP



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PROJECT DIRECTORY

PROJECT ADDRESS 6800 96TH AVE SE MERCER ISLAND, WA 98040

OWNER NICOLE & CHRIS NIEDERMAN

LOCAL JURISDICTION MERCER ISLAND, SDCI 700 5TH AVE, SUITE 2000

SEATTLE, WA, 98124 STRUCTURAL ENGINEER JOHN AND EVAN APOLIS **CONSULTING STRUCTURAL** ENGINEERING SERVICES 6311 17TH AVE NE **SEATTLE, WA 98115**

P: (206) 527-1288 CONTACT: EVAN APOLIS EMAIL: episoen@gmail.com

<u>CIVIL ENGINEER</u> PBG, LLC

5130 S. 166th Lane SeaTac, WA 98188 Cell: 206-229-6422 Office: 206-446-1292 CONTACT: HAN PHAN, P.E. Email: PBG.ENGR@yahoo.com

APPLICANT/ARCHITECT SUZANNE ZAHR, 2441 SE 76TH AVE, #160 MERCER ISLAND, WA 98040 P: (206) 354-1567 CONTACT: SUZANNE ZAHR EMAIL: INFO@SUZANNEZAHR.COM

LANDUSE CONSULTANT WETLAND PERMITTING SERVICE

(WPS) PO BOX 1601 MERCER ISLAND, WA 98040 P: (206)N 240-2413 **CONTACT: CELESTE BOTHA** EMAIL:

ARBORIST

Tree Harmony Arborists PO Box 1261 Mercer Island, WA 98040 P: 206-275-0991 CONTACT: SCOTT SINCLAIR OR ANTHONY MORAN EMAIL: info@treeharmonyarborists.com

<u>GEO TECH</u> PAN GEO, INC 3213 Eastlake Ave E # B Seattle, WA 98102 P:(206) 262-0370 CONTACT: Michael Xue EMAIL: mxue@pangeoinc.com

APPLICABLE CODES

ALL WORK SHALL CONFORM TO:

- 2015 INTERNATIONAL BUILDING (IBC) CODE W/WASHINGTON STATE AMENDMENTS - 2015 UNIFORM PLUMBING CODE (UPC)
- 2015 INTERNATIONAL MECHANICAL CODE (IMC)
- 2012 NATIONAL ELECTRICAL CODE - 2015 INTERNATIONAL FIRE CODE (IFC)
- 2009 ANSI A117.1 ADA STANDARDS
- WA STATE ENERGY CODE (WSEC))
- WA STATE RESIDENTIAL CODE
- ALL CODES, AS MODIFIED BY LOCAL JURISDICTIONS AND ALL OTHER GOVERNING LAWS, CODES, ORDINANCES AND REGULATIONS

NOTES

NO SEDIMENT SHALL BE TRACKED INTO THE STREET OR ONTO PAVED SURFACES. SEDIMENT SHALL BE REMOVED FROM TRUCKS AND EQUIPMENT PRIOR TO LEAVING THE SITE. IN THE EVENT OF FAILURE OF **EROSION CONTROL SYSTEM RESULTING IN SEDIMENT BEING TRACKED** ONTO PAVED SURFACES, THE CONTRACTOR SHALL IMMEDIATELY IMPLEMENT MEASURES TO CORRECT THE SITUATION, AND STREET SWEEPING SHALL BE EMPLOYED ON AN EMERGENCY BASIS. IF STREET SWEEPING VEHICLES ARE UTILIZED, THEY SHALL BE OF THE TYPE THAT ACTUALLY REMOVES SEDIMENT FROM THE PAVEMENT.

PROJECT DISCRIPTION

REMODEL OF EXISITING SINGLE FAMILY RESIDENCE. EXISTING FOUNDATION, MAIN FLOOR, PARTIAL EXTERIOR WALLS AND PARTIAL ROOF FRAMING TO REMAIN. NEW CONSTRUCTION ADDITION OF 2ND AND 3RD STORIES WITH NEW CONSTRUCTION ADDITION TO WEST TO TIE INTO EXISITNG FOOTPRINT. DETACHED GARAGE TO BE REDUCED IN SIZE AND RECIEVE A NEW ROOF WITH FAUX DORMER. ACCESS TO HOUSE FROM EXISITING DETACHED GARAGE PROVIDED BY UNCOVERED IMPERVIOUS SKY BRIDGE. LAND USE PERMIT #CA017-001

DRAWING INDEX

SHEET #	SHEET NAME
MI	COVERSHEET
	COVER SHEET
Δ0.0	GENERAL NOTES
	SURVEY
C2	STORMWATER / UTILITY PLAN AND DETAILS
<u>.</u>	
Δ0 2	SITE PLAN / LOT COVERAGE CALCS
10.2 10.2h	
A0.25	
AU.0	
<u></u>	
<u></u> \	
<u></u>	
41.3 A2.0	
A2.0	
<u>+2.1</u>	
<u> </u>	
<u>\2.3</u>	GARAGE CONSTUCTION PLAN
12.4	
4.0	
4.1	
\4.2	
45.0	BUILDING SECTIONS
51	ROOF FRAMING AND 3RD FLOOR WALL PLAN
52	3RD FLOOR FRAMING AND 2ND FLOOR WALL PLAN
S3	2ND FLOOR FRAMING AND 1ST FLOOR WALL PLAN
S4	FOUNDATION PLAN
<u>85</u> √	GÁRAGE FRÁMING & FOUNDATION PLANS
S6	BEAM DETAILS
S7	DETAILS
S8	DETAILS
S9	RETAINING WALL DETAILS
S10	STRUCTURAL NOTES

<u>/2</u>

GENERAL CONDITIONS

1. DO NOT SCALE DIMENSIONS FROM DRAWINGS. USE CALCULATED DIMENSIONS ONLY. NOTIFY THE ARCHITECT IMMEDIATELY IF ANY CONFLICT EXIST.

- 2. ALL DIMENSIONS ARE TO FACE OF FINISH UNLESS NOTED OTHERWISE.
- 3. CONTRACTOR SHALL VERIFY ALL CONDITIONS PRIOR TO INITIATING THE WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- 4. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT. PROVIDE ALL BUCK-OUT, BLOCKING, BACKING AND JACKS REQUIRED FOR INSTALLATION.
- 5. VERIFY LOCATIONS OF ALL EXISTING UTILITIES AND SLEEVING: CAP, MARK, AND PROTECT AS NECESSARY TO COMPLETE THE WORK.
- 6. ALL WOOD IN CONTACT WITH CONCRETE IS PRESSURE TREATED.
- 7. PROVIDE AS-BUILT PLAN OF ALL UTILITY LOCATIONS.
- 8. SERVICE WATER PIPES IN UNHEATED SPACES TO BE INSULATED.







PERMIT SET

GENERAL NOTES

. SEE CONSTRUCTION PLAN, POWER AND DATA PLAN, REFLECTED CEILING PLAN AND FINISH PLAN NOTES FOR ADDITIONAL NOTES RELATED TO EACH SPECIFIC PLAN.

THE INTENT OF THE CONTRACT DOCUMENTS IS TO ALLOW FOR THE PERFORMANCE OF THE WORK. EVERY ITEM NECESSARILY REQUIRED MIGHT NOT BE SPECIFICALLY MENTIONED OR SHOWN. UNLESS EXPRESSLY STATED, ALL SYSTEMS AND EQUIPMENT SHALL BE COMPLETED AND APPROPRIATELY OPERABLE. FURNISH AND INSTALL ALL SPECIFIED AND APPROPRIATE ITEMS, AND ALL INCIDENTAL, ACCESSORY, AND OTHER ITEMS NOT SPECIFIED BUT REQUIRED FOR A COMPLETE AND FINISHED PROJECT.

NO WORK DEFECTIVE IN CONSTRUCTION OR QUALITY OR DEFICIENT IN ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS WILL BE ACCEPTABLE DESPITE THE ARCHITECT'S FAILURE TO DISCOVER OR POINT OUT DEFECTS OR DEFICIENCIES DURING CONSTRUCTION. DEFECTIVE WORK REVEALED WITHIN THE TIME REQUIRED BY GUARANTEES SHALL BE REPLACED BY WORK CONFORMING TO THE INTENT OF THE CONTRACT. NO PAYMENT, EITHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

4. IT IS INTENDED THAT THE CONTRACTOR PROVIDE COMPLETE CONSTRUCTION AND ANY OMISSIONS IN THESE NOTES OR IN THE OUTLINE OF WORK SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF SUCH RESPONSIBILITIES IMPLIED BY SCOPE OF WORK EXCEPT FOR THE ITEMS SPECIFICALLY NOTED.

5. SHOULD ANY PORTION OF THE CONTRACT DOCUMENTS PROVE NOT TO BE, FOR WHATEVER REASONS, UNENFORCEABLE, SUCH UNENFORCEABILITY SHALL NOT EXTEND TO THE REMAINDER OF THE CONTRACT NOR SHALL IT VOID ANY OTHER PROVISIONS OF THE CONTRACT.

THROUGHOUT THE DURATION OF THE PROJECT THE CONTRACTOR SHALL REFRAIN FROM ACTIONS THAT COULD LEAD TO THE FILING OF CLAIMS OF LIEN BY SUBCONTRACTORS, SUPPLIERS OF MATERIALS, LABOR, SERVICE, OR EQUIPMENT OR ANY OTHER INDIVIDUAL OR COMPANY SO ENTITLED UNDER GOVERNING LAWS AND REGULATIONS UNLESS HE CAN SHOW REASONABLE AND JUSTIFIABLE CAUSE. APPROVAL FOR FINAL PAYMENT SHALL BE CONTINGENT UPON THE CONTRACTOR'S OBTAINING AND FURNISHING TO THE ARCHITECT SIGNED RELEASES FROM SUCH INDIVIDUALS OR COMPANIES.

THE CONTRACTOR IS RESPONSIBLE FOR CHECKING CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION QUESTIONS, THE CONTRACTOR SHALL SUBMIT THEM, IN WRITING, TO THE DESIGNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A WRITTEN CLARIFICATION FROM THE DESIGNER BEFORE PROCEEDING WITH WORK IN QUESTION, OR RELATED WORK.

3. DURING THE COURSE OF CONSTRUCTION, ACTUAL LOCATIONS OF CONSTRUCTION ITEMS DENOTED IN THE CONSTRUCTION DOCUMENTS SHALL BE INDICATED BY THE CONTRACTOR. TO SCALE, IN CONTRASTING INK ON THE DRAWINGS FOR ALL RUNS OF MECHANICAL AND ELECTRICAL WORK; INCLUDING SITE UTILITIES AND CONCEALED DEVIATIONS FROM THE DRAWINGS. UPON COMPLETION OF THE PROJECT, INCLUDING DRAWINGS. PROVIDED BY THE ARCHITECT. THIS SET SHALL BE CONSPICUOUSLY MARKED "AS BUILT SET" AND DELIVERED TO THE ARCHITECT.

). UPON COMPLETION OF THE WORK OR SHORTLY BEFORE, THE ARCHITECT SHALL PREPARE A PUNCH-LIST OF CORRECTIONS AND UNSATISFACTORY AND/OR INCOMPLETE WORK. FINAL PAYMENT WILL BE CONTINGENT UPON THE COMPLETION OF THESE ITEMS UNDER THE TERMS OF THE OWNER/CONTRACTOR AGREEMENT.

10. EXECUTE WORK IN ACCORDANCE WITH ANY AND ALL APPLICABLE CODES, MANUFACTURER'S RECOMMENDATIONS AND TRADE AND REFERENCE STANDARDS. INCLUDING BUT NOT LIMITED TO: IBC. SEISMIC CODES, NEC, NPC, UPC, CBC, MFPA, ASME, UMC AUSI, FIRE AND SAFETY CODES, ADA, STATE TITLE AND ADMINISTRATIVE CODES, AND OTHER APPROPRIATE REGULATORY AUTHORITIES LATEST ENFORCED EDITIONS.

1. DO NOT SCALE DRAWINGS; DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS. LARGE-SCALE DETAILS SHALL GOVERN OVER SMALL-SCALE DETAILS.

2. THERE SHALL BE NO SUBSTITUTION OF MATERIALS WHERE A MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR APPROVED EQUAL" IS USED, THE ARCHITECT ALONE SHALL DETERMINE EQUALITY BASED UPON INFORMATION SUBMITTED BY THE CONTRACTOR.

13. ALL MATERIALS SHALL BE NEW, UNUSED, AND OF THE HIGHEST QUALITY IN EVERY RESPECT UNLESS OTHERWISE NOTED. MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS UNLESS NOTED OTHERWISE.

14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT OF ANY CONFLICTS HEREIN - EITHER APPARENT OR OBVIOUS - PRIOR TO THE START OF NEW WORK ON THAT ITEM OR BEAR THE RESPONSIBILITY OF CORRECTING SUCH WORK AS DIRECTED BY THE ARCHITECT

5. VERIFY LAYOUT AND EXACT LOCATION OF ALL PARTITIONS, DOORS, ELECTRICAL/TELEPHONE AND COMMUNICATION OUTLETS, LIGHT FIXTURES AND SWITCHES WITH THE ARCHITECT IN THE FIELD PRIOR TO INSTALLATION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER HIS/HER JURISDICTION.

7. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK REQUIRING ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE ARCHITECT. FAILURE TO OBTAIN AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR EXTRA COMPENSATION.

18. THE CONTRACTOR AND SUBCONTRACTORS SHALL PURCHASE AND MAINTAIN CERTIFICATIONS OF INSURANCE WITH RESPECT TO WORKERS COMPENSATION, PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE LIMITS AS REQUIRED BY LAW. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CORRECTING ANY DEFECTS FOUND IN EXISTING BUILDING CONSTRUCTION. THIS INCLUDES BUT IS NOT LIMITED TO UNEVEN SURFACES AND FINISHES AT GYPSUM BOARD OR DAMAGED FIREPROOFING. THE CONTRACTOR SHALL PATCH AND REPAIR SURFACES TO MATCH ADJACENT AND ADJOINING SURFACES, UNLESS NOTED OTHERWISE.

0. THE CONTRACTOR SHALL PROVIDE STRICT CONTROL AND JOB CLEANING TO PREVENT DUST AND DEBRIS FROM EMANATING FROM CONSTRUCTION AREA.

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING ALL ACCESS INTO ADJACENT PROPERTY WITH HE PROPERTY OWNERS AS REQUIRED FOR PRICING AND CONSTRUCTION.

22. THE CONTRACTOR SHALL PROVIDE PROTECTION TO ALL EXISTING FINISHES REMAINING. THE CONTRACTOR SHALL BE RESPONSIBLE TO REPAIR ANY DAMAGES CAUSED THEREIN BY THE CONTRACTOR OR SUBCONTRACTORS.

23. "TYPICAL" OR "TYP." MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS UNLESS NOTED OTHERWISE.

4. "SIMILAR" OR "SIM." MEANS COMPARABLE CHARACTERISTICS TO THE CONDITION NOTED. VERY DIMENSIONS AND ORIENTATION ON PLAN.

25. "VERIFY" OR "VER." MEANS TO ASCERTAIN AND CONFIRM APPLICATION WITH APPROPRIATE PARTY AS NOTED. 26. "ALIGN" MEANS TO ACCURATELY LOCATE FINISHED FACES IN THE SAME PLANE.

7. THE CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISES AND SHALL BASE HIS/HER BID ON THE EXISTING CONDITIONS, NOTWITHSTANDING ANY INFORMATION SHOWN OR NOT SHOWN ON THE CONSTRUCTION DRAWINGS.

28. ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT, AND THE SAME MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT. ALL COPYRIGHT LAWS AND REVELATIONS PERTAINING TO INTELLECTUAL PROPERTY APPLY, BEFORE, DURING, AND AFTER CONSTRUCTION.

29. ALL INSTALLED PLUMBING, MECHANICAL AND ELECTRICAL EQUIPMENT SHALL OPERATE QUIETLY AND FREE OF VIBRATION. ALL SUCH EQUIPMENT SHALL COMPLY WITH LOCAL SOUND ORDINANCES.

30. THE CONTRACTOR SHALL VERIFY THAT NO CONFLICTS EXIST IN LOCATIONS OF ANY AND ALL MECHANICAL, TELEPHONE AND COMMUNICATION, ELECTRICAL, LIGHTING, PLUMBING AND SPRINKLER EQUIPMENT (TO INCLUDE ALL PIPING, DUCTOWRK AND CONDUIT) AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED.

1. THE GENERAL CONTRACTOR SHALL PROVIDE SUBMITTAL INFORMATION FOR ALL APPLIANCES, FIXTURES, EQUIPMENT, HARDWARE, FINISH MATERIAL AND ANY ADDITIONAL SELECTIONS FOR APPROVAL PRIOR TO ORDERING. SUBMITTAL INFORMATION INCLUDES TECHNICAL INFORMATION, IMAGES OF THE PRODUCT, AND FINISH SAMPLES FOR APPROVAL.

CONSTRUCTION PLAN NOTES

1. SEE GENERAL NOTES.

2. THE CONTRACTOR SHALL PATCH AND REPAIR ALL FIREPROOFING DAMAGE INCURRED DURING DEMOLITION AND/OR CONSTRUCTION. THE CONTRACTOR SHALL FIREPROOF AS REQUIRED BY CODE, ALL NEW PENETRATIONS GENERATED BY THE WORK DESCRIBED IN THESE DOCUMENTS.

3. ALL PARTITION LOCATIONS SHALL BE AS SHOWN ON THE CONSTRUCTION PLAN. IN THE CASE OF A CONFLICT NOTIFY THE ARCHITECT. THE CONSTRUCTION PLAN BY THE ARCHITECT SUPERSEDES ALL OTHER PLANS, INCLUDING ALL CONSTRUCTION PLANS.

4. UPON COMPLETION OF PARTITION LAYOUT, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT.

5. ALL GYPSUM BOARD PARTITIONS SHALL BE TAPED AND SANDED SMOOTH WITH NO VISIBLE JOINTS. THE CONTRACTOR SHALL PATCH AND REPAIR SURFACES TO MATCH ADJACENT OR ADJOINING SURFACES WHEREVER REQUIRED. ALL SURFACES SHALL BE ALIGNED AND SANDED SMOOTH.

6. ALL PARTITIONS ARE DIMENSIONED FINISH FACE OF GYPSUM BOARD TO FINISH FACE OF GYPSUM BOARD, U.N.O. ALL DIMENSIONS MARKED "CLEAR" SHALL BE MAINTAINED AND SHALL ALLOW FOR THE THICKNESS OF ALL FINISHES INCLUDING CARPET (AND CUSHION), CERAMIC TILE, VCT AND PLYWOOD UNDERLAYMENT FILE CABINETS.

7. CEILING HEIGHT PARTITIONS SHALL BE INSTALLED TIGHT TO FINISHED CEILING WITH NO JOINTS VARYING MORE THAN 1/8 INCH OVER 6'-0" AND NO JOINTS GREATER THAN 3/16 INCH.

8. PROVIDE METAL CORNER OR EDGE BEADS AT ALL GWB TERMINATION. 9. REFER TO REFLECTED CEILING PLANS FOR GYPSUM BOARD SOFFITS, CEILINGS AND PLENUM BARRIER LOCATIONS.

10. FOR DOORS THAT ARE NOT LOCATED BY SPECIFIC PLAN DIMENSIONS, REFER TO TYPICAL DOOR

INCHES FROM THE FACE OF THE ADJACENT PARTITION OR CENTERED BETWEEN PARTITIONS. 11. TRIM THE BOTTOMS OF DOORS TO CLEAR THE TOP OF FINISHED FLOOR BY 3/8 INCH MAXIMUM,

U.N.O.

13. ALL GLASS SHALL BE CLEAR GLASS, U.N.O. GLAZING TONG MARKS SHALL NOT BE VISIBLE. CLEAN AND POLISH ALL GLASS PRIOR TO PROJECT DELIVERY.

14. ALL MILLWORK ABOVE 4'-0" SHALL BE BOLTED TO PARTITION. THE CONTRACTOR SHALL PROVIDE FIRE TREATED BLOCKING AS REQUIRED.

15. INSTALL ALL NEW OR RELOCATED APPLIANCES SPECIFIED AND ALL EQUIPMENT ACCORDING TO MANUFACTURER'S INSTRUCTIONS AND SPECIFICATIONS. VERIFY ALL CLEAR OPENING DIMENSIONS IN CABINETRY ADEQUATELY ACCOMMODATE THE SPECIFIED OR RELOCATED EQUIPMENT.

16. PROVIDE BLOCKING FOR ALL "IN CONTRACT" WALL MOUNTED SHELVES, FIXTURES, AND MILLWORK AND FOR ITEMS SPECIFICALLY NOTED THAT ARE N.I.C.

17. DIMENSIONS MARKED +/- MEAN A TOLERANCE NOT GREATER NOR SMALLER THAN 2 INCHES FROM INDICATED DIMENSION, U.N.O. VERIFY FIELD DIMENSIONS EXCEEDING TOLERANCE WITH THE ARCHITECT.

18. ALL HEIGHTS ARE DIMENSIONED FROM TOP OF FINISH FLOOR, U.N.O. 19. ALL WORK SHALL BE ERECTED AND INSTALLED PLUMB, LEVEL, SQUARE AND TRUE AND IN PROPER ALIGNMENT.

20. DO NOT SCALE DRAWINGS, WRITTEN DIMENSIONS GOVERN.

POWER & DATA PLAN NOTES

1. SEE GENERAL NOTES.

2. SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AS SHOWN. VERIFY LOCATION OF FLOOR OUTLETS AND OTHER OUTLETS IN RELATION TO STRUCTURAL AND OTHER ELEMENTS AS REQUIRED. NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.

3. ARCHITECTURAL DRAWINGS DETERMINE THE LOCATION OF OUTLETS AND SUPERSEDE CONSULTANTS DRAWINGS, UNLESS NOTED OTHERWISE, VERIFY FIELD CONDITIONS.

4. ELECTRICAL DESIGN TO BE HANDLED AS DESIGN/BUILD, WHERE APPLICABLE.

5. FURNITURE AND EQUIPMENT IS SHOWN FOR COORDINATION OF OUTLETS AND DEVICES ONLY. 6. ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE ARCHITECT PRIOR TO INSTALLATION.

7. WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER INSTALL BOTH ALIGNED VERTICALLY.

8. ALL ELECTRICAL AND COMMUNICATION OUTLETS AND SWITCHES SHALL BE THE SAME COLOR AS THE COVER PLATE, U.N.O. COORDINATE COVER PLATE COLOR WITH THE ARCHITECT PRIOR TO ORDERING OR INSTALLATION.

9. STANDARD MOUNTING HEIGHTS: ELECTRICAL AND COMMUNICATION OUTLETS +18" A.F.F. TO CENTER OF BOX WORK COUNTER OUTLETS AT +44" A.F.F. TO CENTER OF BOX WALL MOUNTED TELEPHONES AT +50" A.F.F. TO CENTER OF BOX SWITCHES AT +44" A.F.F.

10. ALL LIGHT SWITCHES AND OUTLETS TO BE LOCATED 6" FROM THE LATCH SIDE OF THE DOORFRAME, U.N.O.

11. SPECIAL OUTLET MOUNTING HEIGHTS ARE NOTED ADJACENT TO THE OUTLET. 12. AT ALL VOICE AND DATA LOCATIONS PROVIDE MUD RING AND PULL STRING OR CONDUIT IF REQUIRED BY

LOCAL BUILDING OFFICIAL. CABLING PROVIDED BY OTHERS.

BACK OUTLETS 2'-0" MIN. AT ACOUSTICAL PARTITIONS, U.N.O.

SPECIFICATIONS AND INSTRUCTIONS. 16. ALL EXISTING AND NEW FLOOR SLAB PENETRATIONS FOR PIPING AND CONDUIT SHALL BE FULLY PACKED

CORES WITH STRUCTURAL BEAMS AND MECHANICAL SYSTEMS BELOW. 17. UPON COMPLETION OF OUTLET LAYOUT, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT. THE

INSTALLATION. 18. FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.

19. MAINTAIN 4 INCH HORIZONTAL CLEARANCE IN BOTH DIRECTION MINIMUM FROM EDGE OF COVER PLATE, AND THE LIKE, FOR WALL MOUNTED OUTLETS, OR MONUMENT FOR FLOOR MOUNTED OUTLETS, AND THE LIKE, ADJACENT TO A WALL, COLUMN OR SIMILAR ELEMENTS, U.N.O.

20. INDICATED DIMENSIONS ARE TO THE CENTER OF THE COVER PLATE OF MONUMENT. CLUSTERS OF OUTLETS ARE DIMENSIONED TO THE CENTER OF THE CLUSTER, U.N.O. GANGED COVER PLATES SHALL BE ONE-PIECE TYPE, U.N.O.

21. WALL OUTLETS NOT DIMENSIONED AND SHOWN NEAR THE CORNER SHALL BE INSTALLED 8" FROM THE CORNER; WALL OUTLETS SHOWN NEAR THE CENTER OF A PARTITION SHALL BE INSTALLED ON THE CLOSEST STUD NEAREST THE CENTER, U.N.O.

VERIFICATION OF LAYOUT TO BE PROVIDED BY THE ARCHITECT PRIOR TO PARTITION INSTALLATION.

JAMB DIMENSIONS. DOOR OR CASED OPENINGS WITHOUT LOCATION DIMENSIONS ARE TO BE (6)

12. DIMENSIONS LOCATING DOORS BY EDGE ARE TO THE INSIDE EDGE OF JAMB, U.N.O.

13. ALL ELECTRICAL, MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR, U.N.O., VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.

14. OUTLETS SHOWN BACK TO BACK ON PARTITION WALLS SHALL BE OFFSET 1'-0". SEPARATE BACK-TO-

15. COORDINATE ALL WORK RELATED TO SPECIAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS,

AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. COORDINATE FLOOR

ARCHITECT SHALL SITE VERIFY ALL OUTLET LOCATIONS PRIOR TO COMMENCEMENT OF CORING OR OUTLET

REFLECTED CEILING PLAN NOTES

1 SEE GENERAL NOTES

1. OLE GENERAL NOTES.
2. THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO INSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEM, ETC. MAINTAIN THE FINISHED CEILING HEIGHTS INDICATED ON THE ARCHITECT'S DRAWINGS.
3. REFER TO DESIGN DRAWINGS AND SPECIFICATIONS FOR LOCATION ONLY. MECHANICAL AND ELECTRICAL TO BE HANDLED AS "DESIGN/BUILD". WHERE APPLICABLE.

5. PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE RATED ELEMENTS AS REQUIRED BY THE GOVERNING AUTHORITY.

6. PERIMETER CEILING ANGLE, WHERE OCCURS, SHALL BE INSTALLED TIGHT TO VERTICAL SURFACES, FREE FROM CURVES, BREAKS OR OTHER IRREGULARITIES AND PAINTED TO MATCH CEILING FINISH, U.N.O.

7. THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM AND FIXTURE LAMPS AS SPECIFIED, U.N.O.

8. ALL SWITCHES, OUTLETS, THERMOSTATS OR ANY OTHER ELECTRICAL ITEMS SHOWN ON PLAN SIDE BY SIDE BUT CALLED OUT AT DIFFERENT HEIGHTS SHOULD BE STACKED VERTICALLY. 9. ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE,

U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE DESIGNER PRIOR TO INSTALLATION. 10. WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER INSTALL BOTH ALIGNED VERTICALLY.

11. ACCESS PANEL TYPE AND LOCATION SHALL BE SUBMITTED TO THE ARCHITECT FOR APPROVAL PRIOR TO COMMENCING WORK.

12. ALL ELECTRICAL AND MECHANICAL THERMOSTATS, AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR, U.N.O. VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.

13. ALL SWITCHES AND DIMMERS SHALL BE LOCATED 48" ABOVE FINISHED FLOOR TO CENTER OF SWITCH, U.N.O.. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND FINISHED WITH TONE COVER PLATE, U.N.O..

14. THE REFLECTED CEILING PLAN INDICATES THE LOCATION OF CEILING TYPES, CEILING FIXTURES AND ASSOCIATED ITEMS.

15. ALL SPECIFIC INFORMATION CONCERNING INSTALLATION OF VARIOUS ABOVE CEILING ELEMENTS ARE TO BE FOUND IN THE HVAC, PLUMBING, AND FIRE PROTECTION, ELECTRICAL AND LIGHTING DRAWINGS, AND SPECIFICATIONS.

16. CONTRACTOR TO NOTIFY ARCHITECT OF ANY CONFLICTS OF LIGHT FIXTURE LOCATION WITH MAIN RUNNER, DUCTS, STRUCTURAL, HVAC (E) CONDUIT PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN THE ARCHITECT'S RCP AND ACTUAL FIELD CONDITIONS ARE TO BE CLARIFIED WITH THE ARCHITECT'S PRIOR TO INSTALLATION.

17. SUBMIT GRILLE, THERMOSTAT AND OTHER FIXTURES AND ELEMENT LAYOUT TO THE ARCHITECT FOR REVIEW AT LEAST 2 WEEKS PRIOR TO INSTALLATION.

18. VERIFY FIELD CONDITIONS AND LOCATIONS OF ALL PLUMBING, MECHANICAL DUCTS, STRUCTURAL ELEMENTS AND ANY AND ALL OTHER APPLICABLE ITEMS. INSTALL APPLICABLE NEW PLUMBING, MECHANICAL, FANS, DUCTS, CONDUITS AND OTHER RELATED AND PERTINENT ITEMS SO AS TO NOT CONFLICT WITH LUMINARIES AND ANY AND ALL FIELD CONDITIONS.

19. FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.

20. INSTALL LIGHT FIXTURES WITH PROTECTIVE MYLAR OR SIMILAR COVER OVER LOUVER LENS, BAFFLE, AND THE LIKE, TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.

ELECTRICAL PLAN NOTES

1. SEE GENERAL NOTES.

2. SURVEY FIELD CONDITIONS AND VERIFY THAT WORK IS FEASIBLE AS SHOWN. VERIFY LOCATION OF FLOOR OUTLETS AND OTHER OUTLETS IN RELATION TO STRUCTURAL AND OTHER ELEMENTS AS REQUIRED. NOTIFY THE DESIGNER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH WORK.

3. DESIGNER'S DRAWINGS DETERMINE THE LOCATION OF OUTLETS AND SUPERSEDE CONSULTANTS DRAWINGS, UNLESS NOTED OTHERWISE. VERIFY FIELD CONDITIONS.

- 4. ELECTRICAL DESIGN TO BE HANDLED AS DESIGNBUILD.
- 5. FURNITURE AND EQUIPMENT IS SHOWN FOR COORDINATION OF OUTLETS AND DEVICES ONLY.
- 6. ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE DESIGNER PRIOR TO INSTALLATION.
- 7. WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER, INSTALL BOTH ALIGNED VERTICALLY.
- 8. ALL ELECTRICAL AND COMMUNICATION OUTLETS AND SWITCHES SHALL BE THE SAME COLOR AS THE COVER PLATE, U.N.O. COORDINATE COVER PLATE COLOR WITH THE DESIGNER PRIOR TO ORDERING OR INSTALLATION.
- 9. STANDARD MOUNTING HEIGHTS:
- A. ELECTRICAL AND COMMUNICATION OUTLETS @ 18" A.F.F. TO CENTER OF BOX.
- B. WALL-MOUNTED TELEPHONES @ 50" A.F.F. TO CENTER OF BOX. C. SWITCHES @ 44" A.F.F.
- 10. ALL LIGHT SWITCHES AND OUTLETS TO BE LOCATED 8" FROM THE LATCH SIDE OF THE DOOR FRAME, U.N.O.
- 11. SPECIAL OUTLET MOUNTING HEIGHTS ARE NOTED ADJACENT TO THE OUTLET.
- 12. AT ALL VOICE AND DATA LOCATIONS PROVIDE MUD RING AND PULL STRING OR CONDUIT IF REQUIRED BY LOCAL BUILDING OFFICIAL CABLING PROVIDED BY OTHERS.

13. ALL ELECTRICAL, MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18" OF THE END OF A WALL OR A DOOR. VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.

- 14. OUTLETS SHOWN BACK-TO-BACK ON PARTITION WALLS SHALL BE OFFSET 1'0". SEPARATE BACK-TO-BACK OUTLETS 2'-0" MIN. AT ACOUSTICAL PARTITIONS, U.N.O.
- 15. COORDINATE ALL WORK RELATED TO SPECIAL EQUIPMENT WITH MANUFACTURER'S RECOMMENDATIONS, SPECIFICATIONS AND INSTRUCTIONS.

16. ALL EXISTING AND NEW FLOOR SLAB PENETRATIONS FOR PIPING AND CONDUIT SHALL BE FULLY PACKED AND SEALED IN ACCORDANCE WITH THE APPLICABLE BUILDING AND FIRE CODES. COORDINATE FLOOR CORES WITH STRUCTURAL BEAMS AND MECHANICAL SYSTEMS BELOW.

17. UPON COMPLETION OF OUTLET LAYOUT, THE CONTRACTOR SHALL NOTIFY THE DESIGNER. THE DESIGNER SHALL SITE VERIFY ALL OUTLET LOCATIONS PRIOR TO COMMENCEMENT OF CORING OR OUTLET INSTALLATION.

- 18. FURNISH AND INSTALL UNDERWRITER'S LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.
- 19. MAINTAIN 4 INCH HORIZONTAL CLEARANCE IN BOTH DIRECTION MINIMUM FROM EDGE OF COVER PLATE, AND THE LIKE, FOR WALL-MOUNTED OUTLETS OR MONUMENT FOR FLOOR MOUNTED OUTLETS, AND THE LIKE, ADJACENT TO A WALL, COLUMN OR SIMILAR ELEMENTS, U.N.O.
- 20. INDICATED DIMENSIONS ARE TO THE CENTER OF THE COVER PLATE OF MONUMENT. CLUSTERS OF OUTLETS ARE DIMENSIONED TO THE CENTER OF THE CLUSTER, U.N.O. GANGED COVER PLATES SHALL BE ONE PIECE TYPE, U.N.O.
- 21. WALL OUTLETS NOT DIMENSIONED AND SHOWN NEAR THE CORNER SHALL BE INSTALLED 8" FROM THE CORNER. WALL OUTLETS SHOWN NEAR THE CENTER OF A PARTITION SHALL BE INSTALLED ON THE STUD NEAREST THE CENTER, U.N.O.

3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC

FINISH PLAN NOTES

1. SEE GENERAL NOTES.

2. PAINTING - NO PAINTING OR INTERIOR FINISHING SHALL BE DONE UNDER CONDITIONS, WHICH WILL JEOPARDIZE THE QUALITY OR APPEARANCE OF SUCH WORK. ALL WORKMANSHIP, WHICH IS JUDGED LESS THAN FIRST QUALITY BY THE ARCHITECT, WILL BE REJECTED.

- A. ALL COLORS ARE TO BE SELECTED OR APPROVED BY THE ARCHITECT B. B. ALL NEW AND EXISTING SURFACES SHALL BE PREPARED TO RECEIVE THE SPECIFIED FINISH. C. PAINT GRADE WOODWORK SHALL BE HAND SANDED AND DUSTED CLEAN. ALL KNOT HOLES; PITCH POCKETS OR SAPPY PORTIONS SHALL BE SCRAPED AND SEALED. FILL NAIL HOLES, CRACKS OR DEFECTS CAREFULLY WITH MATCHING PUTTY. INTERIOR PAINT GRADE WOODWORK
- FINISHES SHALL BE SANDED BETWEEN COATS. D. INTERIOR GYPSUM WALLBOARD SURFACES SHALL BE WIPED WITH A DAMP CLOTH JUST PRIOR TO APPLICATION OF THE FIRST COAT, IN ORDER TO LAY FLAT ANY NAP, WHICH MAY HAVE FORMED, IN THE SANDING PROCESS.
- ALL EXISTING FERROUS METAL SHALL BE LIGHTING SANDED TO PREPARE A SMOOTH SURFACE. ALL EXISTING GWB SHALL BE PREPPED AND PATCHED TO MATCH ADJACENT SURFACE.
- G. THE CONTRACTOR SHALL, UPON COMPLETION, REMOVE ALL PAINT FROM WHERE IT HAS SPILLED, SPLASHED OR SPLATTERED ON EXPOSED ADJACENT SURFACES. PROTECT ALL SURFACES NOT TO RECEIVE PAINT FROM ALL DRIPS, SPLATTERS AND SPILLS.
- IMMEDIATELY CLEAN ANY SPILL TO AVOID DAMAGING THE EXISTING SURFACE. ALL VENEER STAINS SHALL HAVE UNIFORM COLOR.
- THE CONTRACTOR SHALL PROVIDE THE ARCHITECT WITH A MINIMUM OF (2) 8" X 10" BRUSH-OUTS OF EACH COLOR AND FINISH FOR THE ARCHITECT'S APPROVAL AT LEAST TWO WEEKS PRIOR TO SITE APPLICATION. A WALL TEST WILL BE REQUIRED ONE WEEK PRIOR TO FINAL APPROVAL. THE ARCHITECT RESERVES THE RIGHT TO ADJUST ANY COLOR ONCE THE WALL TEST HAS BEEN MADE.

3. ELECTRICAL SWITCH AND OUTLET COVER PLATES, SURFACE HARDWARE, ETC., SHALL BE INSTALLED AFTER PAINTING AND/OR APPLICATION OF WALLCOVERINGS AND CARPET. REMOVE ALL EXISTING SWITCH AND OUTLET COVER PLATES, SURFACE HARDWARE, GRILLS, SIGNAGE, ETC PRIOR TO PAINTING. REINSTALL WHEN PAINTING IS COMPLETE.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALLOWING FOR DELIVERY LEAD TIMES FOR ALL FINISHES WITHIN THE CONSTRUCTION SCHEDULE. ALL DELIVERY TIMES MUST BE CONFIRMED, AND ANY EXCESSIVE LENGTH MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION IMMEDIATELY TO ALLOW FOR RE-SPECIFICATION IF NEEDED.

5. THE CONTRACTOR SHALL MODIFY EXISTING FLOOR SURFACES AS REQUIRED TO INSTALL NEW FLOORING MATERIALS THUS PREVENTING NOTICEABLE LUMPS, OR DEPRESSIONS, WHICH MAY CAUSE UNUSUAL WEAR TO NEW MATERIALS.

6. SEE FINISH PLAN, INTERIOR ELEVATIONS AND DETAILS FOR CLARIFICATION OF EXTENT OF FINISH.

7. THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT A CARPET SEAMING DIAGRAM AT LEAST 2 WEEKS PRIOR TO INSTALLATION.

8. THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT FOR COLOR FINISH OF ALL WALL-MOUNTED DEVICES ON ACCENT COLORED WALLS SUCH THAT DEVICES SHALL MATCH THE COLOR OF THE WALL (SWITCHES, OUTLETS, STROBES, ETC.), UNLESS FINISH IS GOVERNED BY CODE.

PAINT SCHEDULE FOR INTERIOR SURFACES

BENJAMIN MOORE OR EQUAL. REFER TO FINISH PLAN FOR COLOR SELECTIONS.

1. GYPSUM WALLBOARD: WALLS AND CEILINGS.

- A. LATEX, EGGSHELL. CLEAN AND ROLL ON THREE-COAT SYSTEM. 1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER 2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC
- 2. FERROUS METAL: HOLLOW METAL DOORS AND FRAMES, HANDRAILS, EXPOSED MISCELLANEOUS METALS. A. ACRYLIC SEMIGLOSS. SAND EXISTING METAL AND BRUSH ON THREE-COAT SYSTEM. 1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER
- 2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC 3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC
- 3. WOOD: WOOD TRIM, WOOD DOORS AND FRAMES.
- A. ACRYLIC SEMIGLOSS. SAND EXISTING WOOD AND BRUSH ON THREE-COAT SYSTEM. 1. BOTTOM COAT: BENJAMIN MOORE, PRISTINE ECO SPEC PRIMER 2. INTERMEDIATE COAT: BENJAMIN MOORE, PRISTINE ECO SPEC 3. TOP COAT: BENJAMIN MOORE, PRISTINE ECO SPEC

GENERAL LIGHTING NOTES

THE CONTRACTOR SHALL COORDINATE THE WORK OF ALL TRADES INVOLVED IN THE CEILING WORK TO INSURE CLEARANCES FOR FIXTURES, DUCTS, PIPING, CEILING SUSPENSION SYSTEM, ETC. MAINTAIN FINISHED CEILING HEIGHTS INDICATED ON THE ARCHITECT/DESIGNER'S DRAWINGS.

REFER TO DESIGN DRAWINGS AND SPECIFICATIONS FOR LOCATION ONLY. MECHANICAL AND ELECTRICAL TO BE HANDLED AS "DESIGNBUILD."

3. PROVIDE FIRE PROTECTION AT ALL PENETRATIONS OF FIRE-RATED ELEMENTS AS REQUIRED BY THE GOVERNING AUTHORITY.

4. PERIMETER CEILING ANGLE WHERE OCCURS SHALL BE INSTALLED TIGHT TO VERTICAL SURFACES, FREE FROM CURVES, BREAKS OR OTHER IRREGULARITIES AND PAINTED TO MATCH CEILING FINISH.

. THE ELECTRICAL SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL FIXTURES, ASSOCIATED TRIM AND FIXTURE LAMPS AS SPECIFIED.

3. ALL SWITCHES, OUTLETS, THERMOSTATS OR ANY OTHER ELECTRICAL ITEMS SHOWN ON PLAN SIDE BY SIDE BUT CALLED OUT AT DIFFERENT HEIGHTS SHOULD BE STACKED VERTICALLY.

7. ALL SWITCHES SHOWN ADJACENT TO EACH OTHER SHALL BE GANGED AND COVERED IN A SINGLE COVER PLATE, U.N.O. IF SWITCH DOES NOT ALLOW GANGING, VERIFY LOCATION WITH THE ARCHITECT/DESIGNER PRIOR TO INSTALLATION.

8. WHERE THERMOSTATS AND LIGHT SWITCHES OCCUR TOGETHER, INSTALL BOTH ALIGNED VERTICALLY.

9. ACCESS PANEL TYPE AND LOCATION SHALL BE SUBMITTED TO THE ARCHITECT/DESIGNER FOR APPROVAL PRIOR TO COMMENCING WORK.

10. ALL ELECTRICAL AND MECHANICAL THERMOSTATS AND LIFE SAFETY DEVICES TO BE LOCATED WITHIN 18 INCHES OF THE END OF A WALL OR A DOOR. VERTICALLY ALIGN DEVICES WITH SWITCHES WHERE APPLICABLE.

11. ALL SWITCHES AND DIMMERS SHALL BE LOCATED 48 INCHES ABOVE FINISHED FLOOR TO CENTER OF SWITCH, U.N.O. MULTIPLE SWITCHES AT ONE LOCATION SHALL BE GANGED TOGETHER AND FINISHED WITH ONE TONE COVER PLATE, U.N.O.

12. THE REFLECTED CEILING PLAN INDICATES THE LOCATION OF CEILING TYPES, CEILING FIXTURES AND ASSOCIATED ITEMS.

13. ALL SPECIFIC INFORMATION CONCERNING INSTALLATION OF VARIOUS ABOVE CEILING ELEMENTS ARE TO BE FOUND IN THE HVAC, PLUMBING AND FIRE PROTECTION, ELECTRICAL AND LIGHTING DRAWINGS.

14. CONTRACTOR TO NOTIFY ARCHITECT/DESIGNER OF ANY CONFLICTS OF LIGHT FIXTURE LOCATION WITH MAIN RUNNER, DUCTS, STRUCTURAL, HVAC (E) CONDUIT PRIOR TO FRAMING FOR LIGHTS. ANY DISCREPANCIES BETWEEN THE ARCHITECT/DESIGNERS RCP AND ACTUAL FIELD CONDITIONS ARE TO BE CLARIFIED WITH THE DESIGNER PRIOR TO INSTALLATION.

REVIEWED

FOR CODE

COMPLIANCE

April 25, 2018

SITE COPY

15. SUBMIT GRILLE, THERMOSTAT AND OTHER FIXTURES AND ELEMENT LAYOUT TO THE ARCHITECT/DESIGNER FOR REVIEW AT LEAST 2 WEEKS PRIOR TO INSTALLATION.

16. VERIFY FIELD CONDITIONS AND LOCATIONS OF ALL PLUMBING, MECHANICAL DUCTS, STRUCTURAL ELEMENTS AND ANY AND ALL OTHER APPLICABLE ITEMS. INSTALL APPLICABLE NEW PLUMBING, MECHANICAL, FANS, DUCTS, CONDUITS AND OTHER RELATED AND APPURTENANT ITEMS SO AS TO NOT CONFLICT WITH LUMINARIES AND ANY AND ALL FIELD CONDITIONS.

17. FURNISH AND INSTALL UNDERWRITERS LABORATORIES, INC. (UL) LABELED DEVICES THROUGHOUT.

18. INSTALL LIGHT FIXTURES WITH PROTECTIVE MYLAR OR SIMILAR COVER OVER LOUVER LENS. BAFFLE, AND THE LIKE, TO AVOID FIXTURE SOILING OR DAMAGE. FIXTURES SHALL BE MAINTAINED CLEAN AND AS NEW. LAMPS SHALL BE NEW AT PROJECT COMPLETION.



SUZANNE ZAHR INC.

2441 SE 76TH AVE, SUITE 160 MERCER ISLAND, WASHINGTON 98040 T. 206 354 1567 WWW.SUZANNEZAHR.COM





LINE	BEARING	DISTANCE
L1	N 81°51'45" E	63.27'
L2	N 81°51'45" E	75.23'
L3	N 81°51'45" E	21.47'
L4	N 81°51'45" E	16.81'
L5	N 89°59'05"W	22.60'
L6	N 89°58'33" E	37.84'
L7	N 89°59'49"E	38.49'
L8	N 89°57'50"E	23.89'
L9	N 89°56'13"W	8.94'
L10	N 89°58'35"E	52.85'
L11	N 89°59'48"E	51.54'
L12	N 89°59'33" E	32.85'
L13	N 89°59'33"E	37.03'
L14	N 89°59'33" E	21.49'
L15	N 89°59'33" E	36.81'
L16	N 89°59'33" E	32.29'
L17	N 89°59'33" E	35.06'
118	N 89°59'33" F	8.66'

URVEY 5E.. W.M. S () \succ SIDEN BOUNDARY Ц Ш Ш E IS DRMAN 96 F.R 8 00 PHIC OGRA ď TOI NE Mannan C C \mathbf{m} N 0 S S -080

150161 JOB NUMBER: 3/30/15 DATE: DRAFTED BY: AB EJG/JGM CHECKED BY: SCALE: 1"= 20' REVISION HISTORY 9/13/16 ESMN'T, SCHEDULE 9/20/16 UPDATE DRAWING 11/9/17 ADDTL TOPO 12/01/17 TITLE BLOCK 1/22/18 WTR ESMT SHEET NUMBER 1 OF 1



	REFERENCE SHEET NO.	SHEET 1 OF 3 SHEETS
LAKE WASHINGTON	NIEDERMAN RESIDENCE 6800 96TH AVE SE MERCER ISLAND, WA 98040	TREE PROTECTION PLAN TESC PLAN AND DETAILS
	HAN H HAN H OF W Shift OF W Hand 428 PROFINE SSIONA	ASHING ASHING 15 TERED L ENGINER
L INVENTORY:",10.5", 15"BIG LEAF MAPLEREGULATED-YES3"BIG LEAF MAPLEREGULATED-YES6"BIG LEAF MAPLEREGULATED-YES3.5"BIG LEAF MAPLEREGULATED-YES2.5", 13.5"BIG LEAF MAPLEREGULATED-YES5.5"BIG LEAF MAPLEREGULATED-YES5.5"BIG LEAF MAPLEREGULATED-YES"BIG LEAF MAPLEREGULATED-YES"BIG LEAF MAPLEREGULATED-YES"DOUGLAS FIRREGULATED-YES"DOUGLAS FIRREGULATED-YES"CORAL BARK MAPLEREGULATED-YES"CORAL BARK MAPLEREGULATED-YES"BIG LEAF MAPLEREGULATED-YES5.5"BIG LEAF MAPLEREGULATED-YES2.5", 13.5"BIG LEAF MAPLEREGULATED-YES5"BIG LEAF MAPLEREGULATED-YES6"BIG LEAF MAPLEREGULATED-YES5"BIG LEAF MAP	OB NO. ISSUE DATE 7650 1-22-2018 DBY: Land Development and Civil Engineering Consultant V: L. VU 5130 South 166th Lane Y: L. VU	BY: H.H. PHAN I (206) 229-6422 GR: H.H. PHAN
ANDBAGS, OR EQUIVALENT MAY BE USED TO WEIGHT PLASTIC SEAMS BETWEEN SHEETS MUST OVERLAP A MINIMUM OF 12" AND BE WEIGHTED OR TAPED	DATE BY REVISION DESCRIPTION J 1-22-18 HPH SUB 2 PERMIT M I I D DESIGNET I I D D I I D D I I D D I I D D	CHECKET



	-	<u> </u>		
	REFER SHEET	ENCE T NO. 2	SHE 2 0 3 SHEI	ET F ETS
LINE OF OHWM ELEV=18.6 LAKE WASHINGTON ROX. EX. 6" SIDE SEWER LD VERIFY) (3) (3) (3)	NIEDERMAN RESIDENCE	MERCER ISLAND, WA 98040	STORMWATER / UTILITY	PLAN AND DETAILS
SD SD SD SD SD SS SS	A A A A A A A A A A A A A A A A A A A	HAN H HAN OF WA STATE HAND A28 REGIST SSIONA	PHHU ASHING 10 15 ERED ENGINES	a subscription of the subs
HORIZONTAL GRAPHIC SCALE 1050510 PROPERTY LINE 1 inch = 10 ft. ADJACENT PROPERTY LINE RIGHT OF WAY LINE RIGHT OF WAY CENTERLINE ADJACENT LINE ADJACENT LINE	PBC, LLC	Land Development and Civil Engineering Consultan 5130 South 166th Lane SeaTac, WA 98188	1 (200) 229-0422	
OVERHANG / EAVE PROPOSED ADDITION STRUCTURE	JOB NO. ISSUE DATE R17650 1-22-2018	DESIGNED BY: L. VU DRAWN BY: L. VU	CHECKED BY: H.H. PHAN PROJ. MNGR: H.H. PHAN	
E AT THE MAIN F 6" DI @ 6.00%				
R METER 3' FROM EDGE OF PAVEMENT. JCED PRESSURE BACKFLOW ASSEMBLY (RPBA) PROTECTION IN ACCORDANCE WITH THE PLUMBING CODE	REVISION DESCRIPTION ERMIT			
REVIEWED FOR CODE April 25, 2018 SITE COPY	 VO. DATE BY 1-22-18 HPH SUB 2 PE 			





	REFERENCE SHEET NO. C3	E SHEET 3 OF 3 SHEETS
LAKE WASHINGTON	NIEDERMAN RESIDENCE 6800 96TH AVE SE	MERCER ISLAND, WA 98040 EXCAVATION PLAN
	A CONTROL OF	N H. PHI OF WASHING 42815 STONAL ENGINER
	Land Development and Civil Engineering Consultants 5130 South 166th Lane	SeaTac, WA 98188 T (206) 229-6422
	ISSUE DATE 1-22-2018 L. VU	L. VU H.H. PHAN H.H. PHAN
	JOB NO. R17650 DESIGNED BY:	DRAWN BY: CHECKED BY: PROJ. MNGR:
REVIEWED FOR CODE COMPLIANCE April 25, 2018 SITE COPY	3Y REVISION DESCRIPTION	
HORIZONTAL GRAPHIC SCALE 10 5 0 5 10 1 inch = 10 ft. HORIZONTAL GRAPHIC SCALE Call before you dig.	0. DATE	



Average Building Elevation-Main House				
Wall Segment	Elevation (A)	Length (a)	(A x a)	
N	31	44.833	1389.823	
0	29.6	11.541	341.6136	
C	25.7	2.75	70.675	
D	25	30.083	752.075	
E	25	14.083	352.075	
F	26.2	4.167	109.1754	
G	25.8	22.167	571.9086	
Н	24.4	4.167	101.6748	
l	24.5	14.083	345.0335	
J	25.3	30.083	761.0999	
К	25.6	2.75	70.4	
M	25.7	11.541	296.6037	
	5162.158			
	192.248			
AVERAGE BUILDING ELEVATION =			26.85155	
MAXIN	UM BUILDING	G HEIGHT =	56.85155	

Average Building Elevation-Garage					
Z	Z 47 21.5				
W	46	32.4	1490.4		
Х	37.8	21.5	812.7		
Y	45.8	32.4	1483.92		
	4797.52				
	107.8				
AVERAG	44.5039				
MAXIMUM BUILDING HEIGHT =			74.5039		

60 - 40 RULE					
	Existing	Portion	Remaining		
Wall Segment	Length (a)	Demolished (b)	Exisiting (a-b)		
А	24.67	24.67	0		
В	2.85	2.21	0.64		
С	13.84	7	6.84		
D	30.04	0	30.04		
E	14	0	14		
F	4.17	0	4.17		
G	23.92	23.92	0		
Н	4.17	3.58	0.59		
	12.5	0	12.5		
J	30.08	0	30.08		
К	12.44	3	9.44		
L	2.85	0	2.85		
Μ					
N					
0					
Total Exisitng =	175.53	64.38	111.15		
40% Max. Demo =	70.212	64.38 < 70.212			
60% Min to Remain =	105.318		111.15 > 105.318		

LOT COVERAGE TRADE-OFF CALCULA	TIONS

	Lot slope	
Highest Elevation Point of Lot	100.62	Ft
Lowest Elevation Point of Lot	18.6	Ft
Elevation Difference	82.02	Ft
Horizontal Distance Between		
High and Low Points	307.14	Ft
Lot Slope	26.70%	

	Lot Coverage - Existing											
Allowable Lot Coverage		35%		% of lot								
Gross Lot Area		16181		Sq. Ft.								
Main Structure Roof Area	Roofline	1875		Sq. Ft.								
Accessory Building Roof Area	Covered Walkway	348		Sq. Ft.								
	Garage	1592		Sq. Ft.								
	Impervious Deck	0		Sq. Ft.								
Vehicular Use	Parking/Driveway	1612.74		Sq. Ft.								
	Access Easements	1781.26		Sq. Ft.								
	ECA Buffer Mitigation	(-124)		Sq. Ft.								
Total Existing Impervious Surface		7209	44.55%									

	Lot Coverage - Proposed	k		
Ex. Impervious Surface to be Removed	Parking/Driveway	753.5		Sq. Ft.
	Covered Walkway	348		Sq. Ft.
	Garage	210.5		Sq. Ft.
		1312	8.11%	
50% Trade-Off		656	4.1%	16181
	•			
Total New Impervious Surface		597		Sq. Ft.
Remaining Available Impervious Surface		59	0.4%	
	Existing	7209	44.55%	
	Removed	1312	8.11%	
	Added	597	3.69%	
Total Proposed Impervious Surface	-	6494	40.13%	

















98040

) 96TH AVE SE CER ISLAND, WA (

09.14.18

02.27.18

LT

SZ



LT

SZ

DOOR SCHEDULE											
IUMBER	MANUF.	WIDTH	HEIGHT	SIZE	ТҮРЕ	SAFETY GLASS	U-VALUE	PHASE	NOTES		
100.2	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood CLOSET	•	New				
100.2	PELLA	3' - 0''	6' - 8''	36" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
100.3	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood CLOSET		New				
102.1	PELLA	3' - 0''	7' - 0''	36" x 84"	Door-Interior-Single-Flush Panel-Wood		New				
102.2	PELLA	2' - 8"	6' - 8''	32" x 80"	Single-Pocket		New				
104.1	PELLA	3' - 0''	8' - 0''	36" x 96"	Door-Interior-Single-Full Glass-Wood	SG	New				
104.2	PELLA	6' - 0''	8' - 0''	72" x 96"	Door-Exterior-Double-Full Glass-Wood Clad	SG	New				
104.3	PELLA	3' - 0''	8' - 0''	36" x 96"	Door-Interior-Single-Full Glass-Wood	SG	New				
104.4	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood CLOSET		New				
106.1	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
107.1	PELLA	0"	0"	7' x 96"	Door-Opening		New				
107.2	PELLA	5' - 0''	8' - 0''	60" x 96"	Door-Exterior-Double-Full Glass-Wood Clad	SG	New				
107.3	PELLA	9' - 0''	6' - 8''	108" x 80"	Slidina-Closet		New				
109.1	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
200.1	PELLA	2' - 8"	7' - 0''	32" x 84"	Door-Interior-Single-Full Glass-Wood	SG	New				
200.2	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood CLOSET	· · ·	New				
200.6	PELLA	3' - 0"	6' - 8"	36" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
201.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
202.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
202.2	PELLA	6' - 0''	6' - 8"	72" x 80"	Slidina-Closet		New				
203.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
203.2	PELLA	6' - 0''	6' - 8''	72" x 80"	Slidina-Closet		New				
203.3	PELLA	2' - 8"	7' - 0''	32" x 84"	Door-Interior-Single-Full Glass-Wood	SG	New				
204.1	PELLA	5' - 0''	6' - 8''	60" x 80"	Door-Interior-Double-Pocket-2 Panel-Wood	SG	New				
204.2	PELLA	6' - 0''	7' - 0''	72" x 84"	Door-Exterior-Double-Full Glass-Wood Clad	SG	New				
205.1	PELLA	5' - 0''	7' - 0''	60" x 84"	Door-Exterior-Double-Full Glass-Wood Clad		New				
205.2	PELLA	2' - 8"	7' - 0''	32" x 84"	Door-Interior-Single-Full Glass-Wood	SG	New				
206.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
207.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
207.2	PELLA	3' - 11"	7' - 0"	48" x 80"	Single-Pocket		New				
207.3	PELLA	2' - 6"	6' - 8"	30" x 80"	Single-Pocket		New				
207.4	PELLA	2' - 8"	7' - 0"	32" x 84"	Door-Interior-Single-Full Glass-Wood	SG	New				
208.1	PELLA	2' - 6"	6' - 8''	30" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
300.2	PELLA	3' - 0"	6' - 8"	36" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
300.3	PELLA	3' - 0"	6' - 8"	36" x 80"	Door-Interior-Single-Flush Panel-Wood		New				
301.1		3' - 0"	7' - 0"	36" x 84"	Single-Glass 1	SG	New				
302.1	PELLA	6' - 0"	7' - 0"	72" x 84"	Door-Exterior-Double-Full Glass-Wood Clad	SG	New				
302.2	PELLA	6' - 0"	7' - 0"	72" x 84"	Door-Exterior-Double-Full Glass-Wood Clad	SG	New				
302.3	PELLA	3' - 10"	7' - 0"	46" x 80"	Single-Pocket		New				
302.5	PELLA	3' - 0"	7' - 0"	36" x 84"	Door-Interior-Single-Flush Panel-Wood		New				
303.1		16' - 0''	7' - 0"	84" X 192"	Garage Door 8x8 17883	SG	New				
303.7		3' - 11"	7' - 0"	48" x 80"	Single-Pocket		New				
304.1	PELLA	2' - 6"	6' - 8"	30" x 80"	Single-Pocket		New				
305 1		3' - 0"	6' - 8"	36" x 80"	Single-Flush		Now				
206.1		2' 6"	<u> </u>	20" y 20"	Door Interior Single Elush Banel Wood		Now				

	WINDOW SCHEDULE											
TYPE	MANUF.	Family	QTY.	WIDTH	HEIGHT	TOTAL AREA	SAFETY GLASS	EGRESS	U-VALUE	PHASE	NOTES	
00		Concernant we Trim	•	01 4411	01 441	00.05						
-92	PELLA	Casement no Trim	2	3 - 11	2 - 11	23 SF			0.07	Existing		
/-1	PELLA	Casement 2x3 with Trim	2	4' - 3''	5' - 0''	43 SF			.027	New	REPLACE WITH NEW	
I-2	PELLA	Casement 2x3 with Trim	1	4' - 2''	5' - 0''	21 SF			.027	New	REPLACE WITH NEW	
/-3	PELLA	Casement 2x3 with Trim	2	4' - 3"	5' - 8 1/2"	49 SF			.027	Existing	REPLACE WITH NEW	
/-4	PELLA	Casement 2x3 with Trim	1	4' - 2''	5' - 8 1/2"	24 SF			.027	Existing	REPLACE WITH NEW	
/-5	PELLA	Casement 2x3 with Trim	10	3' - 0''	6' - 0''	180 SF		YES	.027	New		
/-6	PELLA	Casement 2x4 with Trim	2	3' - 6"	8' - 0''	56 SF	SG			New		
I -7	PELLA	Casement 2x2 with Trim	1	3' - 0''	5' - 0''	15 SF				New		
/-9	PELLA	Casement 2x4 with Trim	2	3' - 6''	7' - 0''	49 SF	SG			New		
/-10	PELLA	Casement 2x3 with Trim	1	3' - 0''	4' - 0''	12 SF				New		
/-11	PELLA	Casement 2x2 with Trim	1	3' - 0''	3' - 0"	9 SF				New		
/-12	PELLA	Casement no Trim	1	3' - 0''	2' - 0''	6 SF				New		
/-16	PELLA	Casement 2x2 with Trim	6	2' - 0''	4' - 0''	48 SF		YES		New		
/-17	PELLA	Casement 2x3 with Trim	2	3' - 0''	5' - 0''	30 SF				Existing	REPLACE WITH NEW	
/-20	PELLA	Casement 2x2 with Trim	2	3' - 6"	4' - 0''	28 SF	SG			New		
/-21	PELLA	Casement 2x4 with Trim	2	2' - 6''	7' - 0''	35 SF	SG			New		
/-25	PELLA	Casement no Trim	1	9' - 10"	2' - 10"	28 SF				Existing	REPLACE WITH NEW	
/-26	PELLA	Casement no Trim	4	3' - 10 1/2"	2' - 10 1/2"	45 SF				Existing	REPLACE WITH NEW	
I-27	PELLA	Casement no Trim	1	3' - 10"	2' - 10"	11 SF				Existing		
/-29		Casement 2x4 with Trim	2	1' - 3"	7' - 0''	18 SF				New		











		L					
PORTION OF ROOF TO BE DEMOLISHED	 		/			23'-1"	
			-	7'-9"	k		15'-4"
	,,,,,,,						BED 1
	2'-10'' 2'-4" 3'-3" 7'-			HALL		₹	BED 2
	¦ _▲ 			+			· — — —
			2'-11"	4'-10"	2'-10"	¢	12
PORTION OF ROOF TO BE DEMOLISHED							
$(1) \frac{\text{UPPER FLOOR DEMO}}{1/4" = 1'-0"}$	PLA	N		_			
		EGEI		K SOLID INFILL REPRES	SENTS EXISTI	IG	_ N
			BUIL STOF	DING WALLS TO REMAIN REFREONT, STRUCTURE	I (BLOCKWOR , ETC.)	К,	
				RESENTS NEW WALL.			
				RESENTS EXISTING WAL	L TO BE DEMO	DLISHED.	
		x	REPR	ESENTS WALL TAG.			
		<mark>∤ 3'-0"</mark> ∤	REPR	ESENTS WALL DIMENSI CTURE UNLESS NOTED	ON FROM FAC OTHERWISE	EOF	
	-			RESENTS OVERHEAD O	R BELOW.		

7" / 12"





EXISTING CONCRETE RETAINING WALL AND FOOTING TO REMAIN, PER



EXISTING CONCRETE RETAINING WALL AND FOOTING TO REMAIN, -PER STRUCTURAL



98040

) 96TH AVE SE CER ISLAND, WA 9

6800 (MERC

07/18/17

07.18.17

LT SZ

)	
	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.)	
	REPRESENTS NEW WALL.	
	REPRESENTS EXISTING WALL TO BE DEMOLISHED.	
x	REPRESENTS WALL TAG.	
<mark>∤ 3'-0"</mark>	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE	
	REPRESENTS OVERHEAD OR BELOW.	





LEGEND)	NC
	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.)	
	REPRESENTS NEW WALL.	
	REPRESENTS EXISTING WALL TO BE DEMOLISHED.	
x	REPRESENTS WALL TAG.	
3'-0" + +	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE	
	REPRESENTS OVERHEAD OR BELOW.	

CARBON MONOXIDE DETECTORS

IRC R315.1 CARBON MONOXIDE ALARMS

FOR NEW CONSTRUCTION. AN APPROVED CARBON MONOXIDE

ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATELY VICINITY OF THE BEDROOMS

IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.

SMOKE DETECTORS

IRC R314.3 SMOKE ALARMS

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS

1. IN EACH SLEEPING ROOM 2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. 3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING

BASEMENTS, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS. A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

VENTILATION SCHEDULE

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH IRC SECTIONS M1507.3.1 THROUGH M1507.3.3.

SMOKE DETECTORS TO BE HARDWIRED, INTERCONNECTED, WITH BATTERY BACKUP PER IRC R314.4.

INTERMITTENT WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED AIR SYSTEM (IRC M1507.3.5) -

90 CFM. 1 100 CFM ON SWITCH

3

50 CFM ON SWITCH

90 CFM CONTINUOUSLY OPERATING WHOLE HOUSE FAN, SIZED PER TABLE IRC M1507.3.3(1)

 4 MIN 4 SI SCREENED OUTDOOR c.4 AIR INLET - WALL PORT OR WINDOW VENT AS REQUIRED

MECHANICAL VENTILATING SYSTEMS IN BATHROOMS, LAUNDRY ROOMS AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL BE AT LEAST THREE FEET FROM ANY OPENING INTO THE BUILDING PER IRC 1502.3

WHOLE HOUSE EXHAUST FANS SHALL HAVE A SONE RATING OF 1.0 OR LESS WHEN LOCATED 4' OR LESS FROM THE INTERIOR GRILLE PER IMC 403.8.6.5/ IRC M1507.3.4.2

PER TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS ARE:

DWELLING UNIT FLOOR AREA 3,001-4,500 WITH 4-5 BEDROOMS REQUIRING 90 CFM AIRFLOW

ENERGY EFFICIENCY CREDITS

EFFICIENT BUILDING ENVELOPE 1a: - 0.5 CREDITS

Vertical fenestration U = 0.28 Floor R□38

Slab on grade $R \square 10$ perimeter and under entire slab Below grade slab $R \square 10$ perimeter and under entire slab. AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2a: - 0.5 CREDITS

Compliance based on R402.4.1.2: Reduce the tested air leakage to 3.0 air changes per hour maximum AND All whole house ventilation requirements as determined by Section M1507.3 of the International Residential *Code* shall be met with a high efficiency fan (maximum 0.35 watts/cfm), not interlocked with the furnace fan. Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only mode

HIGH EFFICIENCY HVAC EQUIPMENT 3b: - 1.0 CREDIT

Air Source heat pump with minimum HSPF of 9.0. Projects may only include credit from one space heating option, 3a. 3b. 3c or 3d. When a housing unit has two pieces of equipment (i.e., two furnaces) both must meet the standard to receive the credit.

HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM: - 1.0 CREDIT

All heating and cooling system components installed inside the conditioned space. This includes all equipment and distribution system components such as forced air ducts, hydronic piping, hydronic floor heating loop, onvectors and radiators. All compustion equipment shall be direct vent or sealed compustion For forced air ducts: A maximum of 10 linear feet of return ducts and 5 linear feet of supply ducts may be located outside the conditioned space. All metallic ducts located outside the conditioned space must have both transverse

and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices. Flex duct connections must be made with nylon straps and installed using a plastic strapping tensioning tool. Ducts located outside the conditioned space must be insulated to a minimum of $R\Box 8$. Locating system components in conditioned crawl spaces is not permitted under this option. Electric resistance

heat and ductless heat pumps are not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this option.

EFFICIENT WATER HEATING 5a: - 0.5 CREDITS All showerhead and kitchen sink faucets installed in the house shall be rated at 1.75 GPM or less. All other lavatory

faucets shall be rated at 1.0 GPM or less. Plumbing Fixtures Flow Ratings. Low flow plumbing fixtures (water closets and urinals) and fittings (faucets and

- showerheads) shall comply with the following requirements: 1. Residential bathroom lavatory sink faucets: Maximum flow rate
 3.8 L/min (1.0 gal/min) when tested in accordance with ASME
- A112.18.1/CSA B125.1

2. Residential kitchen faucets: Maximum flow rate

6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

3. Residential showerheads: Maximum flow rate

6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

CRAWLSPACE VENTILATION

WHOLE HOUSE VENTILATION TO CONFORM TO IRC R408

CRAWLSPACE AREA: 1,423 sf VENTILATION REQUIRED: (1,423 sf/300)x144 si/sf = 683 si 16"x8" CRAWLSPACE VENT: 128 si ea. 683 si / 128 si = 5.33 VENTS TOTAL VENTILATION REQUIRED:

PROVIDE: (6) 16"x8" CRAWLSPACE VENTS

REQUIRED OPENINGS SHALL BE EVENLY SPACED TO PROVIDE CROSS VENTILATION OF THE SPACE EXCEPT ONE SIDE OF THE BUILDING SHALL BE PERMITTED TO HAVE NO VENTILATION OPENINGS.

LEGEND

	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.) REPRESENTS NEW WALL.	ROOM NAME XXX	REPRESENTS A WINDOW TAG. REPRESENTS A ROOM TAG.	FLOOR PLAN NO ALL INTERIO ALL EXTERIO HEADERS PE WINDOW SIZ PROVIDE FIF PROVIDE SC IN SEISMIC Z TO EARTHQU OF ITS VERT	TES IR WALLS T DR WALLS 2 ER STRUCT ZES ARE NC REBLOCKIN DLID BLOCK ZONES DO, UAKE MOTI FICAL DIMEI
	REPRESENTS INSULATION		REPRESENTS OVERHEAD OR BELOW.	 PROVIDE OL STAIRS 1. OPEN GUAR FLOOR BELC 	JTDOOR CO DRAILS AN DW SHALL F
×	REPRESENTS A WALL TAG.	SD	REPRESENTS A SMOKE DETECTOR.	 STAIRWAYS STAIRWAY R STRAIRWAY R STRAIRWAY THE LENGTH MINIMUM 3/4 	SHALL NO {ISES SHAL TREAD SH, OF RUN A I'' NOSING
<mark>∤ 3'-0"</mark> ∤	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE		REPRESENTS A CEILING 100 OR 50 CFM FAN AS NOTED.	COMPONENT	FENES
XXX.X	REPRESENTS A DOOR TAG.	6	REPRESENTS A CARBON MONOXIDE DETECTOR.	PRESCRIPTIVE VALUE	VERTICAL U. 0.30 MAX.

set forth in this section.

- 1607.8.1.1 shall be applied.
- m).

ASCE 7.



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CARBON MONOXIDE DETECTORS

IRC R315.1 CARBON MONOXIDE ALARMS.

FOR NEW CONSTRUCTION. AN APPROVED CARBON MONOXIDE

ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATELY VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.

SMOKE DETECTORS

IRC R314.3 SMOKE ALARMS

SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS

1. IN EACH SLEEPING ROOM

2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. 3. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING

BASEMENTS, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS. A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.

SMOKE DETECTORS TO BE HARDWIRED, INTERCONNECTED, WITH BATTERY BACKUP PER IRC R314.4.

VENTILATION SCHEDULE

WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH IRC SECTIONS M1507.3.1 THROUGH M1507.3.3.

INTERMITTENT WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED AIR SYSTEM (IRC M1507.3.5) - 90 CFM.



50 CFM ON SWITCH

90 CFM CONTINUOUSLY OPERATING WHOLE HOUSE FAN, SIZED PER TABLE IRC M1507.3.3(1)

BE AT LEAST THREE FEET FROM ANY OPENING INTO THE BUILDING PER IRC 1502.3

MIN 4 SI SCREENED OUTDOOR c.4 AIR INLET - WALL PORT OR WINDOW VENT AS REQUIRED MECHANICAL VENTILATING SYSTEMS IN BATHROOMS. LAUNDRY ROOMS AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL

WHOLE HOUSE EXHAUST FANS SHALL HAVE A SONE RATING OF 1.0 OR LESS WHEN LOCATED 4' OR LESS FROM THE INTERIOR GRILLE PER IMC 403.8.6.5/ IRC M1507.3.4.2

PER TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS ARE:

DWELLING UNIT FLOOR AREA 3,001-4,500 WITH 4-5 BEDROOMS REQUIRING 90 CFM AIRFLOW

ENERGY EFFICIENCY CREDITS

EFFICIENT BUILDING ENVELOPE 1a: - 0.5 CREDITS Vertical fenestration U = 0.28

Floor R⊡38 Slab on grade $R \square 10$ perimeter and under entire slab Below grade slab $R \square 10$ perimeter and under entire slab.

AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2a: - 0.5 CREDITS Compliance based on R402.4.1.2: Reduce the tested air leakage to 3.0 air changes per hour maximum AND All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code shall be met with a high efficiency fan (maximum 0.35 watts/cfm), not interlocked with the furnace fan. Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only mode.

HIGH EFFICIENCY HVAC EQUIPMENT 3b: - 1.0 CREDIT Air source heat pump with minimum HSPF of 9.0. Projects may only include credit from one space heating option, 3a, 3b, 3c or 3d. When a housing unit has two pieces of equipment (i.e., two furnaces) both must meet the standard to receive the

credit.

HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM: - 1.0 CREDIT All heating and cooling system components installed inside the conditioned space. This includes all equipment and distribution system components such as forced air ducts, hydronic piping, hydronic floor heating loop, convectors and radiators. All combustion equipment shall be direct vent or sealed combustion.

For forced air ducts: A maximum of 10 linear feet of return ducts and 5 linear feet of supply ducts may be located outside the conditioned space. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices. Flex duct connections must be made with nylon straps and installed using a plastic strapping tensioning tool. Ducts located outside the conditioned space must be insulated to a minimum of $R \square 8$. Locating system components in conditioned crawl spaces is not permitted under this option. Electric resistance heat

and ductless heat pumps are not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this option.

EFFICIENT WATER HEATING 5a: - 0.5 CREDITS

All showerhead and kitchen sink faucets installed in the house shall be rated at 1.75 GPM or less. All other lavatory faucets shall be rated at 1.0 GPM or less. Plumbing Fixtures Flow Ratings. Low flow plumbing fixtures (water closets and urinals) and fittings (faucets and

showerheads) shall comply with the following requirements: 1. Residential bathroom lavatory sink faucets: Maximum flow rate
are 3.8 L/min (1.0 gal/min) when tested in accordance with ASME

A112.18.1/CSA B125.1. 2. Residential kitchen faucets: Maximum flow rate

6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA

B125.1.

3. Residential showerheads: Maximum flow rate

6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

OPENINGS.

LEGEND

	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.)	W-X	REPRESENTS A WINDOW TAG.	 FLOOR PLAN NOTES ALL INTERIOR WALLS TO BE 2x4@ 24" O.C. (U.N.O.) ALL EXTERIOR WALLS 2x6 PER STRUCTURAL HEADERS PER STRUCTURAL WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT. 										
	REPRESENTS NEW WALL.	ROOM NAME XXX	REPRESENTS A ROOM TAG.	 PROVIDE FIF PROVIDE SO IN SEISMIC Z TO EARTHQU OF ITS VERT 	REBLOCKING LID BLOCKIN ONES DO, D' JAKE MOTION ICAL DIMENS	AT ALL PLU IG OVER SUI 1 & D2, WATI N. STRAPPIN SIONS PER IF	MBING OP PPORTS. ER HEATEI NG SHALL E RC R802.11	ENINGS. RS SHALL BE AT POIN	BE ANCHO	DRED TO RE N THE UPPE	ESIST HORIZO	NTAL DISPL AND LOWE	ACEMENT DUE R ONE-THIRD	
	REPRESENTS INSULATION		REPRESENTS OVERHEAD OR BELOW.	PROVIDE OU STAIRS 1. OPEN GUARI FLOOR BELC STAIDMAYC	DRAILS AND		DRAILS ON	DECKS AND SO THAT	D WATER ID STAIRW A 4 INCH	HEATER PE /AYS MORE DIAMETER \$	THAT 30 " AB	o. OVE GRADE NOT PASS T	OR A HROUGH.	CONCRETE PER STRUCTURAL
X	REPRESENTS A WALL TAG.	SD	REPRESENTS A SMOKE DETECTOR.	2. STAIRWAYS 3. STAIRWAY R 4. STRAIRWAY 5. THE LENGTH 6. MINIMUM 3/4	ISES SHALL NOT E ISES SHALL I TREAD SHAL I OF RUN ANI "NOSING	NOT BE GRE LL HAVE A M D THE HEIGH	EATER THA INIMUM RU HT OF RISE	N 7 3/4" JN OF 10" ER SHALL N	NOT VARY	MORE THA	N 3/8" IN THE	ENTIRE RUI	N OF THE STAIR	
	REPRESENTS WALL DIMENSION FROM FACE OF		REPRESENTS A CEILING 100 OR 50 CFM FAN AS NOTED.	PRESCRIPTIVE I	ENERY CODE	COMPLIANC	CE FOR CL	IMATE ZON	NE MARINE	<u>4</u>				
_ 3'-0" 	STRUCTURE UNLESS NOTED OTHERWISE			COMPONENT	FENESTF	RATION	CEILING W/ ATTIC	VAULTED CEILING	WOOD FRAMED WALL	MASS WALL (ABOVE	BELOW-GRAD WALL	E FRAMED FLOOR	SLAB R-VALUE & DEPTH	
XXX X	REPRESENTS A DOOR TAG.		REPRESENTS A CARBON MONOXIDE DETECTOR.		VERTICAL	OVERHEAD			(INT.)	GRADE)				
		(00)		PRESCRIPTIVE VALUE	U. 0.30 MAX.	U. 0.50 MAX.	R-49 MIN.	R-38 MIN.	R-21 MIN	.R-21 MIN.	R-10/15/21 INT. + TB	R-30 MIN	. R-10 MIN. 2".	

NOTES

- 2X6 STUD — 5/8" GWB, TYP. — 5/8" GWB. TYP 3/4" PLYWOOD - BATT R -21 INSULATION - BATT R-21 INSULATION 5/8" SIDING B EXTERIOR WALL TYP. W/ FIRRED

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	CARBON MONOXIDE DETECTORS				
	IRC R315.1 CARBON MONOXIDE ALARMS.				
	FOR NEW CONSTRUCTION. AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATELY VICINITY OF THE BEDROOMS IN DWELLING UNITS AND ON EACH LEVEL OF THE DWELLING AND IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.				
	SMOKE DETECTORS				
	IRC R314.3 SMOKE ALARMS				
	SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS				
	 IN EACH SLEEPING ROOM OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS. ON EACH ADDITIONAL STORY OF THE DWELLING, INCLUDING. 	 _			
	BASEMENTS, BUT NOT INCLUDING CRAWLSPACES AND UNINHABITABLE ATTICS. IN DWELLINGS OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT AN INTERVENING DOOR BETWEEN ADJACENT LEVELS. A SMOKE ALARM INSTALLED ON THE UPPER FLOOR SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT THE LOWER LEVEL IS LESS THAN ONE FULL STORY BELOW THE UPPER LEVEL.			-	¢
	SMOKE DETECTORS TO BE HARDWIRED, INTERCONNECTED, WITH BATTERY BACKUP PER IRC R314.4.			-	3'
	VENTILATION SCHEDULE				
	WHOLE-HOUSE MECHANICAL VENTILATION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH IRC SECTIONS M1507.3.1 THROUGH M1507.3.3.		16'-5"		
	INTERMITTENT WHOLE HOUSE VENTILATION INTEGRATED WITH A FORCED AIR SYSTEM (IRC M1507.3.5) - 90 CFM.				
1 ∟	100 CFM ON SWITCH				
2 ∟ _	50 CFM ON SWITCH				
3┌── └──	90 CFM CONTINUOUSLY OPERATING WHOLE HOUSE FAN, SIZED PER TABLE IRC M1507.3.3(1)				
4 _┌ ┐ └ ┘	MIN 4 SI SCREENED OUTDOOR c.4 AIR INLET - WALL PORT OR WINDOW VENT AS REQUIRED	?			
	MECHANICAL VENTILATING SYSTEMS IN BATHROOMS. LAUNDRY ROOMS	-	-10"		

A5.0

AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL BE AT LEAST THREE FEET FROM ANY OPENING INTO THE BUILDING PER IRC 1502.3

WHOLE HOUSE EXHAUST FANS SHALL HAVE A SONE RATING OF 1.0 OR LESS WHEN LOCATED 4' OR LESS FROM THE INTERIOR GRILLE PER IMC 403.8.6.5/ IRC M1507.3.4.2

PER TABLE M1507.3.3(1) CONTINUOUS WHOLE-HOUSE MECHANICAL VENTILATION SYSTEM AIRFLOW RATE REQUIREMENTS ARE:

DWELLING UNIT FLOOR AREA 3,001-4,500 WITH 4-5 BEDROOMS REQUIRING 90 CFM AIRFLOW

ENERGY EFFICIENCY CREDITS

EFFICIENT BUILDING ENVELOPE 1a: - 0.5 CREDITS

Vertical fenestration U = 0.28 Floor R⊡38

Slab on grade R□10 perimeter and under entire slab Below grade slab R□10 perimeter and under entire slab.

AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2a: - 0.5 CREDITS Compliance based on R402.4.1.2: Reduce the tested air leakage to 3.0 air changes

per hour maximum **AND** All whole house ventilation requirements as determined by Section M1507.3 of the International Residential Code shall be met with a high efficiency fan (maximum 0.35 watts/cfm), not interlocked with the furnace fan. Ventilation systems using a furnace including an ECM motor are allowed, provided that they are controlled to operate at low speed in ventilation only mode.

HIGH EFFICIENCY HVAC EQUIPMENT 3b: - 1.0 CREDIT

Air source heat pump with minimum HSPF of 9.0. Projects may only include credit from one space heating option, 3a, 3b, 3c or 3d. When a housing unit has two pieces of equipment (i.e., two furnaces) both must meet the standard to receive the credit.

HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM: - 1.0 CREDIT

All heating and cooling system components installed inside the conditioned space. This includes all equipment and distribution system components such as forced air ducts, hydronic piping, hydronic floor heating loop, convectors and radiators. All combustion equipment shall be direct vent or sealed combustion.

For forced air ducts: A maximum of 10 linear feet of return ducts and 5 linear feet of supply ducts may be located outside the conditioned space. All metallic ducts located outside the conditioned space must have both transverse and longitudinal joints sealed with mastic. If flex ducts are used, they cannot contain splices. Flex duct connections must be made with nylon straps and installed using a plastic strapping tensioning tool. Ducts located outside the conditioned space must be insulated to a minimum of $R \square 8$. Locating system components in conditioned crawl spaces is not permitted under this option. Electric resistance heat and ductless heat pumps are not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this option.

EFFICIENT WATER HEATING 5a: - 0.5 CREDITS

All showerhead and kitchen sink faucets installed in the house shall be rated at 1.75 GPM or less. All other lavatory faucets shall be rated at 1.0 GPM or less. Plumbing Fixtures Flow Ratings. Low flow plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following requirements: 1. Residential bathroom lavatory sink faucets: Maximum flow rate
3.8 L/min (1.0 gal/min) when tested in accordance with ASME

A112.18.1/CSA B125.1. 2. Residential kitchen faucets: Maximum flow rate \Box 6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA

B125.1. 3. Residential showerheads: Maximum flow rate

6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

OPENINGS.

IEGEND

	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.)	w-x	REPRESENTS A WINDOW TAG.	 FLOOR PLAN NOTES ALL INTERIOR WALLS TO BE 2x4@ 24" O.C. (U.N.O.) ALL EXTERIOR WALLS 2x6 PER STRUCTURAL HEADERS PER STRUCTURAL WINDOW SIZES ARE NOMINAL POLICH OPENING. WIDTH AND HEIGHT 												
	REPRESENTS NEW WALL.	ROOM NAME XXX	REPRESENTS A ROOM TAG.	 WINDOW SIZES ARE NOMINAL ROUGH OPENING, WIDTH AND HEIGHT. PROVIDE FIREBLOCKING AT ALL PLUMBING OPENINGS. PROVIDE SOLID BLOCKING OVER SUPPORTS. IN SEISMIC ZONES DO, D1 & D2, WATER HEATERS SHALL BE ANCHORED TO RESIST HOF TO EARTHQUAKE MOTION. STRAPPING SHALL BE AT POINTS WITHIN THE UPPER ONE-T AND LOWER ONE-THIRD OF ITS VERTICAL DIMENSIONS PER IRC R802.11 				SIST HORIZONTAL DISPLACEMENT D R ONE-THIRD								
	REPRESENTS INSULATION		REPRESENTS OVERHEAD OR BELOW.	 PROVIDE OUTDOOR COMBUSTION AIR FOR FURNACE AND WATER HEATER PER IRC G2407.6. STAIRS 1. OPEN GUARDRAILS AND OPEN HANDRAILS ON DECKS AND STAIRWAYS MORE THAT 30 " ABOVE C FLOOR BELOW SHALL HAVE MEMBERS SPACED SO THAT A 4 INCH DIAMETER SPHERE CANNOT F 					/E GRADE)T PAS B HR	GRADE OR A PAS B HROUGH.						
×	REPRESENTS A WALL TAG.	SD	REPRESENTS A SMOKE DETECTOR.	2. STAIRWAYS 3. STAIRWAY R 4. STRAIRWAY 5. THE LENGTH 6. MINIMUM 3/4	SHALL NOT ISES SHALL TREAD SHA I OF RUN AN " NOSING	BE LESS TH NOT BE GR LL HAVE A M ID THE HEIG	AN 36" IN W EATER THA 11NIMUM RU HT OF RISE	/1011 N 7 3/4" JN OF 10" ER SHALL N	OT VARY	MORE TH	AN 3/8" IN THE EI	ITIRE RUN	N OF THE ST			
	REPRESENTS WALL DIMENSION FROM FACE OF		REPRESENTS A CEILING 100 OR 50 CFM FAN AS NOTED.	CEILING 100 OR 50 CFM FAN AS NOTED.						LIANCE FOR CLIMATE ZONE MARINE 4						
<u>} 3'-0"</u> }	STRUCTURE UNLESS NOTED OTHERWISE			COMPONENT	FENEST	RATION	CEILING W/ ATTIC	VAULTED CEILING	WOOD FRAMED WALL	MASS WALL (ABOVE	BELOW-GRADE WALL	FRAMED FLOOR	SLAB R-VALUE & DEPTH			
XXX X	REPRESENTS A DOOR TAG.		REPRESENTS A CARBON MONOXIDE DETECTOR.		VERTICAL	OVERHEAD			(INT.)	GRADE)						
		(co)		PRESCRIPTIVE VALUE	U. 0.30 MAX.	U. 0.50 MAX.	R-49 MIN.	R-38 MIN.	R-21 MIN.	R-21 MIN.	R-10/15/21 INT. + TB	R-30 MIN	. R-10 MIN. 2".			

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EXISTING UPPER

STORAGE

UNHEATED

UNTOUCHED

2

CLO.

NOTES

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EXISTING CONC. RETAINING WALL TO REMAIN, SEE STRUCTURAL

LOWER STORAGE CONSTRUCTION PLAN (2) 1/4" = 1'-0"

	C			NOTES
	BLACK SOLID INFILL REPRESENTS EXISTING BUILDING WALLS TO REMAIN (BLOCKWORK, STOREFREONT, STRUCTURE, ETC.)	w-x	REPRESENTS A WINDOW TAG.	SMOKE DETECTORS IRC R314.3 SMOKE ALARMS
	REPRESENTS NEW WALL.	ROOM NAME XXX	REPRESENTS A ROOM TAG.	SMOKE ALARMS SHALL BE IN 1. IN EACH SLEEPING ROO 2. OUTSIDE EACH SEPARA VICINITY OF THE BEDRO
	REPRESENTS INSULATION		REPRESENTS OVERHEAD OR BELOW.	3. ON EACH ADDITIONAL S BASEMENTS, BUT NOT INCLU ATTICS. IN DWELLINGS OR D WITHOUT AN INTERVENING I
X	REPRESENTS A WALL TAG.	SD	REPRESENTS A SMOKE DETECTOR.	SMOKE ALARM INSTALLED C THE ADJACENT LOWER LEVE LESS THAN ONE FULL STOR SMOKE DETECTORS TO BE H BATTERY BACKUR PER IPC F
<mark>↓ 3'-0" ↓</mark>	REPRESENTS WALL DIMENSION FROM FACE OF STRUCTURE UNLESS NOTED OTHERWISE		REPRESENTS A CEILING 100 OR 50 CFM FAN AS NOTED.	IRC M1507.3.4.2
XXX.X	REPRESENTS A DOOR TAG.	\bigcirc	REPRESENTS A CARBON MONOXIDE DETECTOR.	

ALL BE INSTALLED IN THE FOLLOWING LOCATIONS

NG ROOM SEPARATE SLEEPING AREA IN THE IMMEDIATE

BEDROOMS. ONAL STORY OF THE DWELLING, INCLUDING

T INCLUDING CRAWLSPACES AND UNINHABITABLE GS OR DWELLING UNITS WITH SPLIT LEVELS AND ENING DOOR BETWEEN ADJACENT LEVELS. A ALLED ON THE UPPER FLOOR SHALL SUFFICE FOR

ER LEVEL PROVIDED THAT THE LOWER LEVEL IS STORY BELOW THE UPPER LEVEL.

TO BE HARDWIRED, INTERCONNECTED, WITH

ROOF VENTILATION 2	
ROOF VENTILATION TO CONFORM TO	IRC SECTION
ROOF VENTILATION TO CONFORM TO	D IRC SECTION
ROOF AREA: VENTILATION REQUIRED: 3" SCREENED VENT: TOTAL VENTILATION REQUIRED:	1,364 sf (1,364 sf /1 18 sim ea. 1,309 si / 18

April 25, 2018

SITE COPY

R806. ON R806.

1,309 si / 18 si/lf = 72.7 LF PROVIDED: 105 LINEAL FEET OF 3" SCREENED VENT

SHINGLES, TYP.	
NORTHCLAD GS 700 GUTTER W/ METAL FASCIA	
JAMES HARDIE V-GROOVE SIDING PT-2 JAMES HARDIE TRIM BOARD, TYP PT-3	
EXISTING ROOF	
JAMES HARDIE	
JAMES HARDIE TRIM BOARD PT-3	
RAIN LEADER, TYP MATCH GUTTER FASCIA FINISH	
WALL SCONCE, ——— LF-1,TYP.	
WINDOW & DOOR TRIM— PT-3	
EXISTING GRADE	

PT-2

PT-3

BEYOND

BEYOND

PT-3

COMPOSITE ROOF SHINGLES, TYP.

PT-1

SHAKE SIDING

JAMES HARDIE

MPOSITE ROOF NGLES, TYP. M BOARD, TYP 3	5 12		
RTHCLAD GS GUTTER W/ TAL FASCIA - 3			
IN LEADER, TYP — TCH GUTTER SCIA FINISH			
AES HARDIE GROOVE SIDING 2			

Shear wall sheathing with edge - nailing and blocking per shear wall schedule Diaphragm sheathing with edge nailing and blocking per shear wall schedule Floor joist over wall below A35 per shear wall schedule

Shear wall sheathing with edge nailing and blocking per shear wall schedule

Shear Wall Offset Detail 3/4" = 1'-0"

REVIEWED FOR CODE COMPLIANCE April 25, 2018 SITE COPY

F1

(3) #4 bars

continuous

1/2" =

F2

1'-0"

New Foundation Detail

₄6"₄6"₄6" **Entry Foundation Detail**

1/2" = 1'-0"

☑ Denotes (2) 2x6 or (3) 2x4 stud post, typical, unless otherwise noted DS(X') denotes a horizontal CMSTC16 drag strut of length X at the line indicated, per note "DS" in the structural notes and the drag strut typical detail.

☑ Denotes (2) 2x6 or (3) 2x4 stud post, typical, unless otherwise noted DS(X') denotes a horizontal CMSTC16 drag strut of length X at the line indicated, per note "DS" in the structural notes and the drag strut typical detail.

= 1'-0"

S5

October 17, 2018

REVISION 2

S6

Structural Notes:

Applicable Codes and Standards:

2015 International Building Code (IBC) and other applicable local building codes. ASCE/SEI 7-10 - "Minimum Design Loads for Buildings and Other Structures" 2015 NDS for wood structures.

American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material. American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

American Institute of Steel Construction - "Specification for the Design, Fabrication, and **Erection of Structural Steel."**

American Welding Society - AWS Structural Welding Code.

Structural design shall be in accordance with the latest edition of above codes and standards. Contractor shall comply with the latest edition of all applicable codes and standards.

Special Inspections:

Special Inspections are required for: Structural Steel Erection

<u>Design Loads:</u>

Live load:	roof	25 psf (snow)
	floors	40 psf floor live load
	Decks	60 psf floor live load
Wind load:	Basic wind speed	110 mph, exposure B, KzT=1.01
	Building Category: H	Enclosed, Wind Important Factor Iw = 1.0
	Refer to calculation p	age L1 for design wind forces.
	Internal pressure 5 ps	sf, Components and cladding design per 1609.6.1.2
Seismic loadi The ba panels Seismi Design Peak (PGA 1 Seismi	ng per IBC Sections 160 asic structural type is a l . Rw = 6.5 (wood struct ic importance factor 1.0, and Analysis by Simpli Ground Accelerations (P sec = .553 PGA .2 s ic base shear = 0.149 * I	3 and 1613 through 1622, Site Class D. bearing wall system with light framed walls with shea cural panels), soil type D. , Seismic Use Group I (fied Design Procedure PGA) based on USGS Hazards Program, by lat/long. ec = 1.448 Dead Load
Foundatio	ons:	
Refer to geote	ech report by PanGeo, d	ated March 3, 2017, File No. 17-014.

Soil drainage, backfill, and site preparation are per the geotech report.

Soil bearing pressure: 2,000 psf (1,500 psf used for new footings) Soil active pressure: 35 pcf Soil passive pressure: 250 pcf Seismic loading: 7H Friction coefficient: 0.3

Steel pipe pile capacity: 6.000 lbs

Tiebacks:

Refer to geotech addendum letter by PanGeo, dated November 28, 2017. Tieback capacity: 2,000 plf for 6" diameter pressure-grouted anchors.

Cast in Place Concrete:

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-1/2 sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable. Reinforcing steel shall conform to ASTM A-615, Grade 40 (Fy=40,000 psi) for all bars except retaining wall vertical bars, which shall be Grade 60 (Fy=60,000 psi). Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 32 bar diameters for Grade 40 bars, and 48 bar diameters for Grade 60 bars.

Concrete protection for reinforcement shall be: Concrete exposed to earth or weather Concrete cast against earth Slabs

1.5" (#5 & smaller) 2" (#6 & larger) 3" 0.75"

Structural steel:

Plates and shapes, ASTM A572, Fy=50 ksi. Structural Steel Tube (HSS) per ASTM A500, Fy=46 ksi. Structural Steel Pipe per ASTM A53, Fy=35 ksi.

Bolts:

Bolts which are used in connections of steel beams to other steel beams or to the concrete supporting structure shall conform to ASTM A325. Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307. Minimum anchor bolt size and spacing shall be ¹/₂" diameter bolts @ 6' o.c. Shear wall anchor

bolts per the shear wall schedule. For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation.

For retrofitted anchors, provide 5" minimum embedment into the existing concrete foundation. Epoxy grout with Simpson SET epoxy.

Provide 3"x3" square x 0.229" thick bolt washers where anchor bolts connect the sill plate to the concrete foundation. For SW3 and greater, the bolt must be placed such that the washer edge is within ¹/₂" of the sheathing. the rim joist or blocking may be notched to fit the anchor, or the washer may be increased in size.

Welding:

Use E70xx electrodes for welding. All fillet welds shall be 3/16" or equal to minimum thickness of member being welded, whichever is greater, unless otherwise shown. All welding shall conform to the provisions of AWS and shall be performed by welders certified in accordance with AWS and WABO.

Wood Framing Specifications:

All sill plates and other wood framing which is in contact with concrete or masonry must be pressure treated. For anchor bolts connecting wood sill plates to concrete or masonry, provide galvanized steel washers on top of the sill, minimum size 3" x 3" x 1/4" thick.

Where toenails are used for stud wall construction, a minimum of (2) toenails at top and bottom of each stud shall be provided. Toenails shall be 16d nails driven at approximately a 45 degree angle, with a minimum of 1-1/2" of the nail shank shall be embedded in both the stud and the plate. End nails driven through the plate and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

Wherever joists bear on a wall or beam, either a continuous rim joist or solid wood blocking must be provided. Blocking shall be connected to the joists with A35 angles at each end. Individual blocks may be omitted to allow for ducting or other openings. Consult with the engineer of record if more than 25% of the blocking is omitted.

Where LVLs are specified with a thickness greater than 1-3/4", the beam may be built up out of multiple 1-3/4" LVL beams connected per the Truss-Joist TJ-9000 Specifier's Guide.

Unless noted otherwise, the following grades and species shall be used for structural lumber: 2x joists Hem_Fir #7

2A JUISUS	
2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls
	Hem-Fir standard for other walls
4x and 6x beams	DF-L #2
Microllam LVL lumber	LVL 1.9E, Fb = 2600 psi, Fv = 285 psi (minimums)
Parallam lumber	2.0 WS, Fb = 2900 psi, Fv = 290 psi (minimums)
Glu-lam lumber	24F-V4 or 24F-V8 as applicable
All framing connections sha	Ill be per Table 2304.9.1 of the IBC, unless otherwise noted.

<u>Plywood Thickness, Grade, and Nailing:</u>

Install plywood sheets with face grain perpendicular to framing. Stagger joints in adjacent sheets. If not otherwise noted, use nailing schedule, Table 2304.9.1 of the IBC.

Existing sheathing may be used if it is free of damage. Nail holes may not be closer than 1-1/2" o.c., existing nails must be free of rust and in good condition.

Metal Framing Connectors:

Unless otherwise noted: Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist, and H6 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PC or PCC post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson PB post bases to connect posts to concrete foundations.

Roof Over Framing Note, Note OF:

The new roof area shown hatched consists of new roof framing constructed over the existing roof framing below. The over built framing shall be constructed in such a way as to distribute the roof loads from the new framing uniformly to the existing roof structure (for example, no new concentrated loads, such as from a beam, shall be added to the existing roof structure). This equal distribution may be accomplished by constructing the new overbuild roof using framed 2x4 cripple walls spaced at 2 feet on center, located on top of and perpendicular to the existing roof sheathing supported by the existing roof framing. No sheathing is required for these cripple walls.

The new cripple walls and roof rafters (spanning 2 feet, perpendicular to the cripple walls) may be constructed using 2x4 lumber, stud grade at minimum. The new plates shall be nailed to each existing rafter with (2) 16d nails minimum. New roof sheathing shall be per the diaphragm schedule

A new 2x plate shall be constructed along the new valley lines, and nailed to each existing rafter, along its entire length, with (2) 16d nails per existing rafter. If desired, an alternate method for distributing the loads may be submitted to the structural engineer of record, for review and approval prior to construction.

Connection of New Foundation to Existing, Note NF:

At each location where the new concrete foundation abuts the existing foundation, connect the new to the existing using minimum (3) #4 by 18" long rebar dowels, epoxy grouted into 5/8" diameter by 5" deep holes drilled into the existing foundation. Each dowel shall be no closer than 3" to any edge or corner of concrete. Minimum spacing between dowels shall be 6". For concrete wall intersections longer than 3'-0" in any direction, additional dowels shall be located at 12" o.c. for the full height or length of the new foundation concrete.

Contact the engineer (prior to construction) for evaluation and approval of the existing engineer prior to filling the cracks. foundation system, if there are any significant cracks in the existing foundation within 6 feet of Contact the engineer of record prior to proceeding if any of the new foundation, or if there is any indication that the existing foundation is in poor condition, these requirements are not met, or if the installation of the hold downs including visible rock pockets, non-uniform concrete, spalling, noticeable settlement of the results in any visible damage to the existing foundation. existing footing, or other distress.

Drag Strut Note "DS"

Provide a continuous horizontal connection between the indicated beams, walls, and blocking, using the following method.

Provide a horizontal Simpson CMSTC16 drag strut connector strap, minimuim 6 feet long, and centered between the structural items being connected, either wood beams or wall top plates. The strap must have a minimum of 36" end length attached to each item being connected. The strap may be installed either on top of the plywood floor diaphragm, or connecting a beam or joist, as applicable and feasible.

Beams or joists may be connected to a wall top plate by (8) A35s

If desired, it is acceptable to rout a channel up to 1/8" deep in the 3/4" T&G plywood floor sheathing, to provide a flush surface.

Where no joists occur below the strap, provide 3-1/2" wide by 3-1/2" deep (minimum) solid wood blocking in the floor framing, below the strap, for nailing. The blocking should be attached to the perpendicular joists with Simpson A35 framing anchors at both ends of each block.

Refer to the latest edition of the Simpson Catalog for required nailing and other requirements.

Refer to the Drag Strut Typical Detail provided with these plans.

Hold Down Notes

<u>Convention for showing shear walls and hold downs:</u> Shear walls are shown on the framing plan for the floor above. (For example, first floor shear walls will be shown on the second floor framing plan, and the shear walls for the topmost floor will be shown on the roof framing plan.) Hold downs are located at the <u>bottom</u> of that shear wall, and connect the end of the shear wall to wall framing or a structural beam located in the floor below the shear wall. Contact the engineer of record for clarification if needed

Hold downs for each floor must be continuously connected to hold downs on the floor below (or to other intermediate wood framing where so indicated), until they are finally connected to the concrete foundation.

Hold downs shall be installed so as to be as far apart as is reasonable. Hold downs may be located on either the near side or the far side of the post or double stud to which they are attached. In no case shall a hold down bolt be located farther than 6" from the end of the shear wall, except with prior written approval of the engineer. Refer to the latest edition of the Simpson Catalog for details.

Where multiple studs are called out at a hold down, nail studs together with (2) 16d nails at 8" o.c. or 1/4" x 3" Simpson SDS Screws at 12" o.c.

Strap Hold Downs:

Provide a vertically oriented strap hold down consisting of one or two of the Simpson vertical strap ties listed below, connecting the end stud or post of the shear wall indicated to new or existing studs in the wall framing below, or to a wood beam supporting the shear wall, where applicable.

Straps shall be installed so that the minimum end length is provided to both connected posts or

Where a strap is connected to a below below, the strap shall be wrapped around the beam until the minimum end length is reached.

CS16 denotes a Simpson CS16 strap, with a minim end length of 14", and (13) 8d nails each end.

CMSTC16 denotes a Simpson CMSTC16 strap, with a minim end length of 25", and (29) 16d sinker nails each end.

Rod Hold Downs:

denotes a Simpson HDU(2,4,5,8,or 11)-SDS2.5 hold HDUx down. For hold down bolts at existing concrete foundations, use the following bolts:

> For HDU2,4,5: 5/8" diameter A307 threaded steel rod may be used, which shall be epoxy grouted into a 3/4" diameter hole with a minimum embedment of 10".

For hold downs at new concrete foundations, provide the following bolts.

For HDU2.4.5: 5/8" diameter A307 threaded steel rod may be used, which shall be cast in place with a minimum embedment of 10".

Special Note:

All holes for hold down bolts which are installed into existing foundations must be inspected during the installation of the hold down. Either the building inspector, the structural engineer of record, or the special inspection agency must perform the inspection and approve it before the bolts may be epoxy grouted into the holes. The epoxy grout used must be Simpson SET-XP unless otherwise noted by the engineer of record.

For drilled holes into existing concrete, no less than 2" must be provided between the edge of the hole and the face of concrete. The Engineer of Record or Special Inspector must witness the installation of hold down bolts, including cleaning the holes with compressed air and a wire brush before the anchor is installed. The hole shall be filled with enough epoxy that when the anchor is inserted, the epoxy rises to the top of the concrete. Care shall be taken that no air bubbles persist in the epoxy.

The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The

existing concrete foundation stem wall shall be at least 6" thick and 2'-6" in height. The concrete shall be of good quality, hard and uniform, with appropriate aggregate type, size and distribution, and with no visible rock pockets or other similar deficiencies.

Any existing cracks located within 10' of any hold down must be completely filled with an appropriate epoxy based concrete repair product. The product to be used shall be approved in writing by the

(Lumber fo Edge Nailing Type Material Unblocked 15/32" WSP one 8d @ 6" Wall side, unblocked 15/32" WSP 8d @ 6" SW1 one side 15/32" WSP 8d @ 4" SW2 one side 15/32" WSP 10d @ 3" SW3 one side

a minimum length of "v" feet

• For SW3 and greater: studs, plates, and blocking where two WSP panels abut shall have a minimum 3" nominal thickness. Double 2x members may be used for studs if the members are connected by plate nailing. Note 10d nails at WSP panel edges.

 "WSP" refers to "Wood Structural Panel", either plywood or other wood materials. Provide double stud minimum at both ends of all shear walls. At the roof or top level of any shear wall, "A35 spacing", and all other relevant connector specifications, apply to assemblies at both the top and bottom of the shear wall. At lower levels, apply to the bottom of the wall only. • Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates (whichever applies) of all shear walls.

• Provide 3x plates, and 4x rim joists, minimum, where lag screws are specified for plate nailing.

• Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members receiving edge nailing from abutting panels shall not be less than a single 3x member. • Provide 4x_ or double 2x_ framing where A35 angles are used on both sides of one piece of wood.

• Where a shear wall terminates above the foundation level (no shear wall below), provide minimum 4x blocking or double joist framing (as applicable) below the shear wall."&" Plate nailing per this schedule shall be nailed into this blocking at the bottom of the shear wall.

Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud.

 Maximum spacing between nails shall not exceed 12ⁿ. • Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall not be hot dipped or tumbled

Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".

 Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.

• Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down.

•Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation.

 Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation. Plate nails shall be nailed into a solid wood rim joist.

• 2x_plates may be substited for 3x_plates if panels are nailed with edge nailing directly to the rim joist.

• Where 3x plates are used, (2) 20d common nails must be used instead of (2) 16d common nails to connect studs to the bottom plate. Where Roof ventilation is required over a shear wall, see roof ventilation detail.

			Diap	hragm Schedu	le			
	(Lumber for diaphragm construction is HF#2 or better, unless otherwise noted.)							
Туре	Mater	rial	Edge Nailing	Field Nailing	Edge Bloc	king	Re	emarks
Roof	15/32" CI	OX 24/0	8d @ 6" o.c.	8d @ 12" o.c.	no		Minimu	m Standard
Floor	23/32" CD	X 48/24	8d @ 6" o.c.	. 8d @ 12" o.c.	no		Minimu	m Standard
STROD2 C			54 A A	a a	1			

• Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24" Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists. • This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.

			SHEAR WALL SCHEDULE					
		(Lumber :	for shear walls	is HF#2 or better,	unless otherwise	e noted.)		
		Edge	Field	A.B.			A35	Shear
Туре	Material	Nailing	Nailing	Size/Spacing	Plate Nailing	Plates	Spacing	Capacity
Unblocked Wall	15/32" WSP one side, unblocked	8d @ 6"	8d @ 12"	1/2"Ø @ 72"	(2) 16d @ 12"	2x_	24"	100 plf
SW1	15/32" WSP one side	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf
SW2	15/32" WSP one side	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf
SW3	15/32" WSP one side	10d @ 3"	10d @ 12"	5/8"Ø @ 24"	(2) 16d @ 4"	3x_	12"	550 plf

"WSP" refers to "Wood Structural Panel", either plywood or other wood materials.

Structural Notes:

Applicable Codes and Standards:

2015 International Building Code (IBC) and other applicable local building codes. ASCE/SEI 7-10 - "Minimum Design Loads for Buildings and Other Structures" 2015 NDS for wood structures.

American Wood Preservers Bureau - AWPB Standards for Pressure Treated Material. American Concrete Institute - ACI 315, ACI 318, ACI 301, ACI 307.

American Institute of Steel Construction - "Specification for the Design, Fabrication, and **Erection of Structural Steel."** American Welding Society - AWS Structural Welding Code.

Structural design shall be in accordance with the latest edition of above codes and standards. Contractor shall comply with the latest edition of all applicable codes and standards.

Special Inspections:

Special Inspections are required for: Structural Steel Erection

Design Loads:

Live load:	roof	25 psf (snow)
	floors	40 psf floor live load
	Decks	60 psf floor live load
Wind load:	Basic wind speed	110 mph, exposure B, KzT=1.01
	Building Category: E	nclosed, Wind Important Factor Iw = 1.0
	Refer to calculation pa	ge L1 for design wind forces.
	Internal pressure 5 ps	f, Components and cladding design per 1609.6.1.2
Seismic loadin	g per IBC Sections 1603	and 1613 through 1622, Site Class D.
The ba	sic structural type is a b	earing wall system with light framed walls with shear
panels.	Rw = 6.5 (wood structu	iral panels), soil type D.
Seismie	e importance factor 1.0, 3	Seismic Use Group I
Design	and Analysis by Simplif	ied Design Procedure
Peak G	round Accelerations (PC	GA) based on USGS Hazards Program, by lat/long.
PGA 1	sec = .553 PGA .2 sec	c = 1.448
Seismic	c base shear = 0.149 * D	ead Load
Foundation	<u>ns:</u>	
Refer to geote	ch report by PanGeo, da	ited March 3, 2017, File No. 17-014.
Soil drainage,	backfill, and site prepar	ation are per the geotech report.

Soil bearing pressure: 2,000 psf (1,500 psf used for new footings) Soil active pressure: 35 pcf Soil passive pressure: 250 pcf

Seismic loading: 7H Friction coefficient: 0.3 Steel pipe pile capacity: 6,000 lbs

<u>Tiebacks:</u>

Refer to geotech addendum letter by PanGeo, dated November 28, 2017. Tieback capacity: 2,000 plf for 6" diameter pressure-grouted anchors.

Cast in Place Concrete:

Concrete shall attain a minimum compressive strength of 2,500 psi at 28 days (5-1/2 sack mix). An alternate mix provided by the concrete supplier and pre-approved by the building department is acceptable. Reinforcing steel shall conform to ASTM A-615, Grade 40 (Fy=40,000 psi) for all bars except retaining wall vertical bars, which shall be Grade 60 (Fy=60,000 psi). Provide all wall and footing horizontal bars with 2'-0" x 2'-0" corner bars of the same size at all corners and wall intersections. Minimum lap splice 32 bar diameters for Grade 40 bars, and 48 bar diameters for Grade 60 bars.

Concrete protection for reinforcement shall be: Concrete exposed to earth or weather **Concrete cast against earth** Slabs

1.5" (#5 & smaller) 2" (#6 & larger) 3" 0.75"

Structural steel:

Plates and shapes, ASTM A572, Fy=50 ksi. Structural Steel Tube (HSS) per ASTM A500, Fy=46 ksi. Structural Steel Pipe per ASTM A53, Fy=35 ksi.

Bolts:

Bolts which are used in connections of steel beams to other steel beams or to the concrete supporting structure shall conform to ASTM A325. Anchor bolts shall conform to F1554. All other bolts shall conform to ASTM A307. Minimum anchor bolt size and spacing shall be ¹/₂" diameter bolts @ 6' o.c. Shear wall anchor

bolts per the shear wall schedule. For cast-in-place anchors, provide 7" minimum embedment into the new concrete foundation.

For retrofitted anchors, provide 5" minimum embedment into the existing concrete foundation **Epoxy grout with Simpson SET epoxy.** Provide 3"x3" square x 0.229" thick bolt washers where anchor bolts connect the sill plate to th

concrete foundation. For SW3 and greater, the bolt must be placed such that the washer edge is within ¹/₂" of the sheathing. the rim joist or blocking may be notched to fit the anchor, or the washer may be increased in size.

Welding:

Use E70xx electrodes for welding. All fillet welds shall be 3/16" or equal to minimum thickness of member being welded, whichever is greater, unless otherwise shown. All welding shall conform to the provisions of AWS and shall be performed by welders certified in accordance with AWS and WABO.

Wood Framing Specifications:

All sill plates and other wood framing which is in contact with concrete or masonry must be pressure treated. For anchor bolts connecting wood sill plates to concrete or masonry, provide galvanized steel washers on top of the sill, minimum size 3" x 3" x 1/4" thick.

Where toenails are used for stud wall construction, a minimum of (2) toenails at top and botton of each stud shall be provided. Toenails shall be 16d nails driven at approximately a 45 degree angle, with a minimum of 1-1/2" of the nail shank shall be embedded in both the stud and the plate. End nails driven through the plate and into the stud end grain are not permitted. Simpson A34 clips at top and bottom of each stud are permitted where correct toenailing is not provided.

Wherever joists bear on a wall or beam, either a continuous rim joist or solid wood blocking must be provided. Blocking shall be connected to the joists with A35 angles at each end. Individual blocks may be omitted to allow for ducting or other openings. Consult with the engineer of record if more than 25% of the blocking is omitted.

Where LVLs are specified with a thickness greater than 1-3/4", the beam may be built up out of multiple 1-3/4" LVL beams connected per the Truss-Joist TJ-9000 Specifier's Guide.

Unless noted otherwise, the following grades and species shall be used for structural lumber: 2x joists

2x joists	Hem-Fir #2
2x, 3x, and 4x studs	DF/L standard for plywood or WSP shear walls
	Hem-Fir standard for other walls
4x and 6x beams	DF-L #2
Microllam LVL lumber	LVL 1.9E, Fb = 2600 psi, Fv = 285 psi (minimums)
Parallam lumber	2.0 WS, Fb = 2900 psi, Fv = 290 psi (minimums)
Glu-lam lumber	24F-V4 or 24F-V8 as applicable
All framing connections s	hall be per Table 2304.9.1 of the IBC, unless otherwise noted.

Plywood Thickness, Grade, and Nailing:

Install plywood sheets with face grain perpendicular to framing. Stagger joints in adjacent sheets. If not otherwise noted, use nailing schedule, Table 2304.9.1 of the IBC.

Existing sheathing may be used if it is free of damage. Nail holes may not be closer than 1-1/2" o.c., existing nails must be free of rust and in good condition.

Metal Framing Connectors:

Unless otherwise noted: Metal framing connectors shall be manufactured by the Simpson company, or approved equal. Unless noted otherwise, use U-series joist hangers to match joist size (e.g., U210 for 2x10 joist). Provide H1 or H2.5 hurricane ties, or other connectors with similar capacity, at every roof joist, and H6 or H7 at ends of roof beams and girder trusses. Where supported by wood posts, wood beams shall be connected to the tops of the posts using Simpson AC, PC or PCC post caps, and to the bottoms of the posts bearing on wood framing using Simpson AC connectors. Where supported by perpendicular beams, wood beams shall be connected by HU-series face mount beam hangers. Provide Simpson PB post bases to connect posts to concrete foundations.

Roof Over Framing Note, Note OF:

The new roof area shown hatched consists of new roof framing constructed over the existing roof framing below. The over built framing shall be constructed in such a way as to distribute the roof loads from the new framing uniformly to the existing roof structure (for example, no new concentrated loads, such as from a beam, shall be added to the existing roof structure). This equal distribution may be accomplished by constructing the new overbuild roof using framed 2x4 cripple walls spaced at 2 feet on center, located on top of and perpendicular to the existing roof sheathing supported by the existing roof framing. No sheathing is required for these cripple walls.

The new cripple walls and roof rafters (spanning 2 feet, perpendicular to the cripple walls) may be constructed using 2x4 lumber, stud grade at minimum. The new plates shall be nailed to each existing rafter with (2) 16d nails minimum. New roof sheathing shall be per the diaphragm schedule.

A new 2x plate shall be constructed along the new valley lines, and nailed to each existing rafter, along its entire length, with (2) 16d nails per existing rafter. If desired, an alternate method for distributing the loads may be submitted to the structural engineer of record, for review and approval prior to construction.

Connection of New Foundation to Existing, Note NF:

At each location where the new concrete foundation abuts the existing foundation, connect the new to the existing using minimum (3) #4 by 18" long rebar dowels, epoxy grouted into 5/8" diameter by 5" deep holes drilled into the existing foundation. Each dowel shall be no closer than 3" to any edge or corner of concrete. Minimum spacing between dowels shall be 6". For concrete wall intersections longer than 3'-0" in any direction, additional dowels shall be located at 12" o.c. for the full height or length of the new foundation concrete.

Contact the engineer (prior to construction) for evaluation and approval of the existing engineer prior to filling the cracks. foundation system, if there are any significant cracks in the existing foundation within 6 feet of Contact the engineer of record prior to proceeding if any of the new foundation, or if there is any indication that the existing foundation is in poor condition. these requirements are not met, or if the installation of the hold downs including visible rock pockets, non-uniform concrete, spalling, noticeable settlement of the results in any visible damage to the existing foundation. existing footing, or other distress.

Drag Strut Note "DS"

Provide a continuous horizontal connection between the indicated beams, walls, and blocking, using the following method.

Provide a horizontal Simpson CMSTC16 drag strut connector strap, minimum 6 feet long, and centered between the structural items being connected, either wood beams or wall top plates. The strap must have a minimum of 36" end length attached to each item being connected. The strap may be installed either on top of the plywood floor diaphragm, or connecting a beam or joist, as applicable and feasible.

Beams or joists may be connected to a wall top plate by (8) A35s

If desired, it is acceptable to rout a channel up to 1/8" deep in the 3/4" T&G plywood floor sheathing, to provide a flush surface.

Where no joists occur below the strap, provide 3-1/2" wide by 3-1/2" deep (minimum) solid wood blocking in the floor framing, below the strap, for nailing. The blocking should be attached to the perpendicular joists with Simpson A35 framing anchors at both ends of each block.

Refer to the latest edition of the Simpson Catalog for required nailing and other requirements.

Refer to the Drag Strut Typical Detail provided with these plans.

Hold Down Notes

<u>Convention for showing shear walls and hold downs:</u> Shear walls are shown on the framing plan for the floor above. (For example, first floor shear walls will be shown on the second floor framing plan, and the shear walls for the topmost floor will be shown on the roof framing plan.) Hold downs are located at the **bottom** of that shear wall, and connect the end of the shear wall to wall framing or a structural beam located in the floor below the shear wall. Contact the engineer f record for clarification if needed

Hold downs for each floor must be continuously connected to hold downs on the floor elow (or to other intermediate wood framing where so indicated), until they are finally onnected to the concrete foundation

Hold downs shall be installed so as to be as far apart as is reasonable. Hold downs may be located on either the near side or the far side of the post or double stud to which they are attached. In no case shall a hold down bolt be located farther than 6" from the end of the shear wall, except with prior written approval of the engineer. Refer to the latest edition of the Simpson Catalog for details.

Where multiple studs are called out at a hold down, nail studs together with (2) 16d nails at 8" o.c. or 1/4" x 3" Simpson SDS Screws at 12" o.c.

Strap Hold Dow

Provide a vertically oriented strap hold down consisting of one or two of the Simpson vertical strap ties listed below, connecting the end stud or post of the shear wall indicated to new or existing studs in the wall framing below, or to a wood beam supporting the shear wall, where applicable.

Straps shall be installed so that the minimum end length is provided to both connected posts or

Where a strap is connected to a below below, the strap shall be wrapped around the beam until the minimum end length is reached.

CS16 denotes a Simpson CS16 strap, with a minim end length of 14", and (13) 8d nails each end.

CMSTC16 denotes a Simpson CMSTC16 strap, with a minim end length of 25", and (29) 16d sinker nails each end.

Rod Hold Downs:

HDUx denotes a Simpson HDU(2,4,5,8,or 11)-SDS2.5 hold down. For hold down bolts at existing concrete foundations, use the following bolts:

> For HDU2,4,5: 5/8" diameter A307 threaded steel rod may be used, which shall be epoxy grouted into a 3/4" diameter hole with a minimum embedment of 10".

For hold downs at new concrete foundations, provide the following bolts.

For HDU2,4,5: 5/8" diameter A307 threaded steel rod may be used, which shall be cast in place with a minimum embedment of 10".

Special Note:

All holes for hold down bolts which are installed into existing foundations must be inspected during the installation of the hold down. Either the building inspector, the structural engineer of record, or the special inspection agency must perform the inspection and approve it before the bolts may be epoxy grouted into the holes. The epoxy grout used must be Simpson SET-XP unless otherwise noted by the engineer of record.

For drilled holes into existing concrete, no less than 2" must be provided between the edge of the hole and the face of concrete. The Engineer of Record or Special Inspector must witness the installation of hold down bolts, including cleaning the holes with compressed air and a wire brush before the anchor is installed. The hole shall be filled with enough epoxy that when the anchor is inserted, the epoxy rises to the top of the concrete. Care shall be taken that no air bubbles persist in the epoxy.

The contractor must verify that the existing foundation stem wall is uncracked and continuous, and is sound and in good condition, within 5 feet of any retrofitted shear wall or hold down, in any direction, except with prior written approval of the engineer. The existing concrete foundation stem wall shall be at least 6" thick and 2'-6" in height. The concrete shall be of good quality, hard and uniform,

with appropriate aggregate type, size and distribution, and with no visible rock pockets or other similar deficiencies. Any existing cracks located within 10' of any hold down must

completely filled with an appropriate epoxy based concrete repair product. The product to be used shall be approved in writing by the

		SHEAR WALL SCHEDULE							
		(Lumber for shear walls is HF#2 or better, unless otherwise noted.)							
		Edge	Field	A.B.			A35	Shear	
Туре	Material	Nailing	Nailing	Size/Spacing	Plate Nailing	Plates	Spacing	Capacity	
Unblocked	$15/32"\ WSP$ one	8d @ 6"	8d @ 12"	1/2"Ø @ 72"	(2) 16d @	2x_	24"	100 plf	
Wall	side, unblocked	0	Ũ	C C	12"	_		-	
SW1	15/32" WSP	8d @ 6"	8d @ 12"	1/2"Ø @ 48"	(2) 16d @ 9"	2x_	24"	230 plf	
	one side								
SW2	15/32" WSP	8d @ 4"	8d @ 12"	1/2"Ø @ 32"	(2) 16d @ 6"	2x_	16"	350 plf	
	one side								
SW3	15/32" WSP	10d @ 3"	10d @ 12"	5/8"Ø@24"	(2) 16d @ 4"	3x	12"	550 plf	
	one side				_				
For shear wall callouts on the Structural Framing Plans: SW x (v) denotes a shear wall type "x" with									
a minimum length of "v" feet.									
• For SW3 and greater: studs, plates, and blocking where two WSP panels abut shall have a minimum 37 nominal thickness. Double 2v									
members may be used for studs if the members are connected by plate nailing. Note 10d nails at WSP panel edges.									
• "WSP" refers to "Wood Structural Panel" either plywood or other wood materials									
Provide double stud minimum at both ends of all shear walls.									
• At the roof or top level of any shear wall, "A35 spacing" and all other relevant connector specifications, apply to assemblies at both the top									
and bottom of the shear wall. At lower levels, apply to the bottom of the wall only.									
• Provide floor diaphragm edge nailing per diaphragm schedule through floor plywood into blocking, parallel joist framing, or top plates									
(whichever applies) of all shear walls.									
 Provide 3x_ plates, and 4x_ rim joists, minimum, where lag screws are specified for plate nailing. 									
• Where shear wall edge nails are spaced closer than 3" o.c., or spaced 3" o.c. with 10d nails, foundation sill plates and all framing members									
receiving edge nailing from abutting panels shall not be less than a single 3x_member.									
 Provide 4x or double 2x training where A35 angles are used on both sides of one piece of wood. Where a cheer well terminates along the four dation level (as cheer well below) considered in the black of the second state o									
• where a shear wall terminates above the foundation level (no shear wall below), provide minimum $4x_{\rm blocking}$ or double joist framing (as applicable) below the shear wall "&". Diste nation per this schedule shall be nation this blocking at the bottom of the shear wall									
• Shear wall nails shall be placed no closer than 3/8" from a panel edge or perpendicular face of stud									
 Maximum spacing between nails shall not exceed 12" 									
Shear wall nailing shall be common or galvanized box nails, unless lag screws are noted. Galvanized nails shall not be hot dipped or									
tumbled.									
• Lag screw plate connectors shall penetrate 3.5" minimum, and plates or beams receiving lag screws shall have a minimum width of 3.5".									
• Where hold downs are specified, the shear wall bolt shall be located within 6 inches of the end of the shear wall, unless otherwise approved									
by the engineer of record. Minimum end studs shall be as specified in the most recent Simpson catalog.									
 Shear wall edge nailing through shear wall sheathing shall be provided into all studs attached to a hold down. 									
 Retrofit anchor bolts shall have a minimum embedment of 5" into the concrete foundation. 									
 Cast in place anchor bolts shall have a minimum embedment of 7" into the concrete foundation. 									
Plate nails shall be nailed into a solid wood rim joist.									
• 2x_plates may be substited for 5x_plates if panels are nailed with edge nailing directly to the rim joist.									
 where 5x_plates are used, (2) 20d common nails must be used instead of (2) 10d common nails to connect study to the bottom plate. Where Reef wortilation is required even a cheer well, see reef wortilation data? 									
• where Roo	i venuiauon is requ	lied over a sne	ear wall, see 1001	venuiauon detaii.					
Dianhraam Cahadula									
(Lumbor for dianhragm construction is UE#2 or better unloss otherwise rated)									
	<u>(L</u>		pinagin constru		Jetter, unless oth	erwise no	ieu.)		
Type	Mater	ial	Edge Nailing	Field Nailing	Edge Bloc	king	Re	marks	
Roof	15/32" CD	X 24/0	8d @ 6" o c	8d @ 12" o c	no		Minimum Standard		
Floor	23/32" CDX 48/24		8d @ 6" o.c.	@ 6" o.c. 8d @ 12" o.c.		no Min		mum Standard	
 "WSP" refers to "Wood Structural Panel", either plywood or other wood materials. 									
• Rim joists at exterior walls shall be continuous for tension. At rim joist splice locations, provide (2) CS16 horizontal straps, minimum 24"									
• Where roof or floor framing is cantilevered over an exterior wall below, provide solid blocking with Diaphragm edge nailing between joists.									

• This is the minimum required diaphragm construction. Where otherwise noted on the plans, additional blocking or nailing may be required.

