# EAST MERCER RESIDENCE

LONG LEG HORIZONTAL

PLASTER

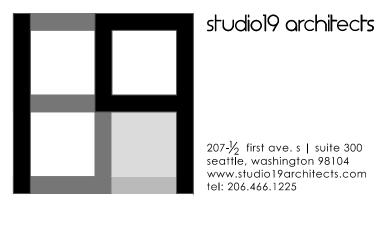
FIRE RETARDANT TREATED

DEMOLITION

4634 EAST MERCER WAY, MERCER ISLAND, WA 98040

# REVISION TO BUILDING PERMIT

ABBREV	IATIONS											SYMBOLS		PROJEC	CT TEAM
		DEDI	DED A DTA (EVIT	FD7	EDEE3ED		LONG LEG VERTICAL	DI D C	DI III ABINIO	CTD			LEVEL A LEVEL	OWNER	
AB AC	ANCHOR BOLT AIR CONDITIONING	DEPT DET	DEPARTMENT DETAIL	FRZ FS	FREEZER FLOOR SINK	LLV LN	LONG LEG VERTICAL LINE	PLBG PLF	PLUMBING POUNDS PER LINEAR FOOT	STD STL	STANDARD STEEL	ELEVATION INDICATOR	◆ LEVEL	BARCELO HON	MES
ACC/ACCESS	ACCESSIBLE	DF	DRINKING FOUNTAIN	FT	FOOT; FEET	LPT	LOW POINT	PLYWD	PLYWOOD	STL JST	STEEL JOIST	BORING INDICATOR	⊕ <sub>EL</sub>	32505 138TH P	
ACOUS	ACOUSTICAL	DIA	DIAMETER	FTD	FACIAL TISSUE DISPENSER	LR	LIVING ROOM	PNL	PANEL	STOR	STORAGE			AUBURN, WA 9 CONTACT: BO	98092 IGDAN MAKSIMCHUI
AD ADD	AREA DRAIN ADDITIONAL	DIAG DIFF	DIAGONAL	FTG FURN	FOOTING FURNITURE	LT	LIGHT	POL	POLISHED	STRG	STRINGER	BREAK, ROUND			in@barcelohomes.co
ADJ	ADJUSTABLE	DIFF	DIFFUSER DIMENSION	FURN	FURNITURE FURRING; FURRED	LVR	LOUVER	PR PRCST	PAIR PRECAST	STRL STRUC	STRUCTURAL STRUCTURAL	BREAK, STRAIGHT		PHONE: 206-72	<u>4</u> 4-1072
ADJA	ADJACENT	DIS	DISABLED	FUT	FUTURE	М	MALE; METER	PREFAB	PREFABRICATED	SUBCAT	SUBCATEGORY	BREAK, STRAIGHT		I	
AF	ACCESS FLOORING (RAISED)	DISP	DISPENSER	FWC	FABRIC WALLCOVERING	MACH	MACHINE	PROJ	PROJECT	SURR	SURROUND	DETAIL INDICATOR		ARCHITECT STUDIO 19 ARC	`UITECT\$
AFF AGGR	ABOVE FINISH FLOOR AGGREGATE	DMPF	DAMPPROOFING	FWP	FABRIC WRAPPED PANE	MAINT	MAINTENANCE	PROP	PROPERTY	SUSP	SUSPENDED		A1.01	207 1/2 1ST AV	
AL	ALUMINUM	DMT DN	DEMOUNTABLE DOWN	GA	GAGE	MAS MATL	masonry material	PSF PT	POUNDS PER SQUARE FOOT POINT; PAINT	SVC SW	SERVICE SWITCH		<u> </u>	SEATTLE, WA 98	8104
ALT	ALTER; ALTERNATE	DO	DOOR OPENING	GALV	GALVANIZED	MAX	MAXIMUM	PTD	PAPER TOWEL DISPENSER;	SYM	SYMMETRICAL				IDREW WISDOM om@studio19archited
ANCH	ANCHOR	DP	DIMENSION POINT	GB	GRAB BAR	MB	MACHINE BOLT		PAINTED	SYS	SYSTEM	DETAIL INDICATOR, (1)	(A1.01)	PHONE: 206-46	
ANOD	ANODIZED	DPTN	DEMOUNTABLE PARTITION	GC	GENERAL CONTRACT(OR)	MBR	MASTER BED ROOM	PTDR	PAPER TOWEL DISPENSER &			LIINE	V(1.01)	CIVII ENCINE	EDC & LAND CUDVEYC
AP APC	ACCESS PANEL ACOUSTICAL PANEL CEILING	DR	DOOR	GFRC	GLASS FIBER REINFORCED CONCRETE	MC	MEDICINE CABINET	PTN	WASTE RECEPTACLE PARTITION	T&G	TONGUE & GROOVE				<b>ERS &amp; LAND SURVEYO</b> Gineering, LLC
APPD	APPROVED	DRN DS	DRAIN DOWNSPOUT	GFRG	GLASS FIBER REINFORCED	MDF MDO	MEDIUM DENSITY FIBERBOARD MEDIUM DENSITY OVERLAY	PTR	PAPER TOWEL RECEPTACLE	TD	TREAD; THERMOSTAT TOWEL BAR	DETAIL INDICATOR, (1)		12840 - 81ST A\	VENUE NE
APPROX	APPROXIMATE	DSP	DRY STANK PIPE	OTRO	GYPSUM	MBO	PLYWOOD	PVC	POLYVINYL CHLORIDE	TBB	TILE BACKER BOARD	LINE WITH TAIL	A1.01	KIRKLAND, WA	A 98034 ITH LITCHFIELD, P.E
ARCH	ARCHITECTURAL	DW	DISHWASHER	GL	GLASS	MECH	MECHANICAL	PVMT	PAVEMENT	TC	TOP OF CURB				field@frontier.com
ATC	ACOUSTICAL TILE CEILING	DWG	DRAWING	GLU-LAM	GLUE LAMINATED WOOD	MEMB	MEMBRANE		OUARRY THE	TD	TRENCH DRAIN	DIAAFNICIONI LINIF	3'-0"	PHONE: 425-82	
AUTO AV	AUTOMATIC AUDIO VISUAL	DWR	DRAWER	GND GR	GROUND GRADE	MEP	MECHANICAL, ELECTRICAL, PLUMBING	QT QTY	QUARRY TILE QUANTITY	TEL	TELEPHONE; TELECOM	DIMENSION LINE		I	
AV	AUDIO VISUAL	<b>(</b> E)	EXISTING	GYP	GYPSUM	MET	METAL	QII	QUANTITI	TEMP	TEMPORARY; TEMPERATURE	DOOR OPENING,		I	
BD	BOARD	(L) F	EAST	GYP BD	GYPSUM BOARD	MEZZ	MEZZANINE	(R)	RELOCATED	TER TGB	TERRAZZO TOGGLE BOLT	DOOR TAG	( )	I	
BLDG	BUILDING	EA	EACH			MFR	MANUFACTURER	R	RISER; RADIUS	THK	THICK; THICKNESS			I	
BLK	BLOCK	EB	EXPANSION BOLT	Н	HIGH/HEIGHT	MH	MANHOLE	RA	RETURN AIR	THRES	THRESHOLD		N	I	
BLKG BM	BLOCKING BEAM	EC	ELASTOMERIC COATING;	HB HC	HOSE BIBB HOLLOW CORE	MIN MIR	MINIMUM MIRROR	RB RCP	RESILIENT BASE REFLECTED CEILING PLAN	THRU	THROUGH	ELEVATION INDICATOR,	$\left(\begin{array}{c} N \end{array}\right) \left(\begin{array}{c} N \end{array}\right)$	I	
BO	BOTTOM OF	EFS	EXPOSED CONSTRUCTION EXTERIOR FINISH SYSTEM	HCP	HANDICAPPED	MISC	MISCELLANEOUS	RD	ROOF DRAIN	TKBD	TACK BOARD	EXTERIOR	(A1.01)	I	
ВОН	BACK OF HOUSE	EIFS	EXTERIOR INSULATION AND	HDW	HARDWARE	MLDG	MOLDING	REBAR	REINFORCING BAR	TMPD TO	TEMPERED TOP OF			I	
BOT	BOTTOM		FINISH SYSTEM	HDWD	HARDWOOD	MM	MILLIMETER	RECOM	RECOMMENDED	TOC	TOP OF CURB; TOP OF	ELEVATION INDICATOR,	∠N \	I	
BR	BED ROOM	EJ 	EXPANSION JOINT	HS	HEAT STRENGTHENED (GLASS)	MO	MASONRY OPENING	RECPT	RECEPTACLE		CONCRETE	INTERIOR	A1.01	I	
BRG	BEARING	EL ELAS	ELEVATION ELASTOMERIC	НМ	HOLLOW METAL (STEEL FRAME)	MOD MR	MODULAR MOISTURE RESISTANT	REC REF	RECESSED REFERENCE	TOP	TOP OF PAVEMENT				
BRK BRKT	BRICK BRACKET	ELEC	ELECTRICAL	HNDRL	HANDRAIL	MS	MACHINE SCREW	REFL	REFLECTED; REFLECTIVE;	TOS	TOP OF SLAB; TOP OF STRUCTURE		1		
BS	BOTH SIDES	ELEV	ELEVATOR	НО	HOLD-OPEN	MTD	MOUNTED	11212	REFLECT	TOW	TOP OF WALL			DRAWING	J INDEX
BSMT	BASEMENT	EMER	EMERGENCY	HORLZ	HORIZONTAL	MTG	MOUNTING	REFR	REFRIGERATOR	TPD	TOILET PAPER DISPENSER	ELEVATION INDICATOR,		GENERAL	
BTWN	BETWEEN	ENCL	ENCLOSURE	HPT	HIGH POINT	MTL	METAL	REG	REGISTER	TPH	TOILET PAPER HOLDER	INTERIOR MULTIPLE	A1.01 2	G0.00	COVERSHEET
BUR	BUILT-UP ROOFING	EOS	EDGE OF SLAB ELECTRICAL PANELBOARD	HR HRC	HOUR HOSE REEL CABINET	MUL MUN	MULLION MUNTIN	REINF REL	REINFORCED; REINFORCING RELOCATE	TRACT	TRACTION			G1.01	CODE SUMMAR
САВ	CABINET	EP EQ	EQUAL	HS	HAND SINK	MUIN	MOMIN	REM	REMOVABLE	TRAN TRD	TRANSITION TREAD		3	I	
CAT	CATEGORY	EQPM	EQUIPMENT	HT	HEIGHT	Ν	NORTH	REQ	REQUIRE; REQUIRED	TS	TOWEL SHELF	FURNITURE, FIXTURES AND		SURVEY 1 OF 2	
СВ	CATCH BASIN	ESCAL	ESCALATOR	HVAC	HEATING, VENTILATING, AIR	NA	NOT APPLICABLE	RESIL	RESILIENT	TV	TELEVISION	EQUIPMENT INDICATOR	AXXX	1 OF 2 2 OF 2	TREE & TOPOGR TREE & TOPOGR
CBU	CEMENTITIOUS BACKER UNIT	EW	EACH WAY	1.1547	CONDITIONING	NC	NOISE CRITERIA	REV	REVISION; REVISED	TW	TOP OF WALL			2012	IKLE & TOT OOK
CEM	CEMENT	EWC	ELECTRICAL WATER COOLER	HW HYDR	HOT WATER HYDRAULIC	NIC	NOT IN CONTRACT	RGH RH	ROUGH	TYP	TYPICAL	KEYNOTE INDICATOR		00.41	
CEM PLAS CER	CEMENT PLASTER CERAMIC	EXH EXP	EXHAUST EXPANSION	TITOK	MUNAULIC	NO NOM	number nominal	RM RM	RIGHT HAND; ROBE HOOK ROOM	UC	UNDERCUT	KETTOTE II ISTOTUTOT	\(\lambda \times	CIVIL C1	COVER SHEET, V
CFCI	CONTRACTOR FURNISHED,	EXPO	EXPOSED	ID	INSIDE DIAMETER (DIMENSION)		NOT TO SCALE	RND	ROUND	III	UNDERWRITERS LABORATORY	LEADER, STRAIGHT	NOTE	C2	TESC PLAN, MISC
G. G.	CONTRACTOR INSTALLED	EXST	EXISTING	IN	INCH			RO	ROUGH OPENING	UNF	UNFINISHED		^	C3 C4	SITE IMPROVEME
CG	CORNER GUARD	EXT	EXTERIOR	INCAND	INCANDESCENT	OA	OVERALL	RTD	RATED	UON	unless otherwise noted	WINDOW TYPE IDENTIFIER	(00)	C5	CONSTRUCTION TEMPORARY EXC
CH	CHANNEL	_		INCL	INCLUSIVE; INCLUDED; INCLUDING	OBS	OBSCURE	RTG	RATING	UR	URINAL	NORTH INDICATOR	N	C6	STORM DRAIN O
CHAN CI	CHANNEL CAST IRON	F FA	FEMALE FIRE ALARM	INFO	INFORMATION	OC OCEW	ON CENTER ON CENTER EACH WAY	RWC RWL	RAIN WATER CONDUCTOR RAIN WATER LEADER	VAC	VENTILATION AND AIR	NORTH INDICATOR		I	
CIP	CAST-IN-PLACE	FAB	FABRICATE	INSUL	INSULATION	OD	OUTSIDE DIAMETER;	KVVL	Will Will ELABER	VAC	CONDITIONING			ARCHITECTUR <i>A</i>	AL
CJ	CONTROL JOINT;	FB	FLAT BAR	INT	INTERIOR		DIMENSION	S	SOUTH	VCT	VINYL COMPOSITION TILE			A1.01	SITE PLAN
	CONSTRUCTION JOINT	FCU	FAN COIL UNIT	INTEG INTERM	INTEGRATED INTERMEDIATE	OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED	SA	SUPPLY AIR	VERT	VERTICAL			A1.02 A2.01	TREE PLAN LEVEL 1 FLOOR F
CL CLG	CENTER LINE CEILING	FD	FLOOR DRAIN	INV	INVERT	OFD	OVER FLOW DRAIN	san sc	SANITARY SOLID CORE	VEST VIF	VESTIBULE		(1) (2)	A2.01.1	LEVEL 1 DIMENSI
CLO	CLOSET	FDC	FIRE DEPARTMENT CONNECTION	IPS	INTERNATIONAL PIPE	OFF	OFFICE	SCD	SEAT COVER DISPENSER	VOL	VERIFY IN FIELD VOLUME	REFERENCE GRID INDICATOR WITH REFERENCE GRID LINES		A2.02 A2.02.1	LEVEL 2 FLOOR F LEVEL 2 DIMENSI
CLR	CLEAR	FDN	FOUNDATION		STANDARD	OFOI	OWNER FURNISHED, OWNER	SCHED	SCHEDULE	VP	VENEER PLASTER	WITH REFERENCE GRID LINES	- $        -$	A2.02.1 A2.03	LEVEL 3 FLOOR F
CMU	CONCRETE MASONRY UNIT	FE	FIRE EXTINGUISHER	IRMA	INVERTED ROOF MEMBRANE ASSEMBLY		INSTALLED	SCP	SCUPPER	VR	VAPOR RETARDER			A2.03.1	LEVEL 3 DIMENSI
CNTR	COUNTER	FEC	FIRE EXTINGUISHER CABINET		ASSEMBET	OH OPH	OVERHEAD OPPOSITE HAND	SCR	SCREEN	VT	VINYL TILE			A2.04 A3.01	ROOF PLAN NORTH ELEVATIO
CO COL	CASED OPENING; CLEANOUT COLUMN	FF&E	Furniture, finishes & Equipment	JAL	JALOUSIE	OPNG	OPENING	SD	STORM DRAIN; SMOKE DETECTOR; SOAP DISPENSER	VTR VWC	VENT THROUGH ROOF			A3.02	EAST ELEVATION
COMP	COMPARTMENT	FFEL	FINISH FLOOR ELEVATION	JAN	JANITOR	OPP	OPPOSITE	SECT	SECTION	VVVC	VINYL WALL COVERING			A3.03	SOUTH ELEVATION
CONC	CONCRETE	FH	FLAT HEAD	JB	JUNCTION BOX	OPP	HD OPPOSITE HAND	SF	SQUARE FEE; FOOT	W/	WITH			A3.04 A4.01	WEST ELEVATION BUILDING SECTION
COND	CONDITION	FHC	FIRE HOSE CABINET	JC JST	Janitor's Closet Joist	OPR	OPERABLE OF SEALING	SG	SAFETY GLASS	W/O	WITHOUT	REVISION INDICATOR (SHOWN WITH REVISION	\ \ \ \ \	A4.02	BUILDING SECTION
CONN	CONNECTION	FIN	FINISH	JS1 IT	JOINT	ORD OVHD	OVERFLOW ROOF DRAIN OVERHEAD	SH	SPRINKLER HEAD	W	WASHER; WIDE; WIDTH; WEST	CLOUD) TYPICAL	$\langle x \rangle$	A4.03	BUILDING SECTION
CONSTR	CONSTRUCTION CONTINUOUS	FIXT	FIXTURE FLOOR	<b>.</b>		OVIID	OVERNIEAD	SHT SHTG	SHEET SHEATHING	WC	WATER CLOSET; WALL COVERING	,		A4.04 A8.01	BUILDING SECTION DETAILS
CONT CONTR	CONTRACTOR	FLASH	FLASHING	K	KIP (1000 LBF)	Р	PAINT	SHR	SHOWER	WD	WOOD	ROOM NAME IDENTIFIER	ROOM	A8.02	DETAILS
COORD	COORDINATE	FLDG	FOLDING	KD	KNOCK DOWN	PA	PUBLIC ADDRESS SYSTEM	SIM	SIMILAR	WDS	WOOD SCREW	WITH ROOM NAME	NAME	A9.01	DOOR & WINDO
CORR	CORRIDOR	FLG	FLOORING	KIT	KITCHEN KICK BLATE	PARTN	PARTITION	SL	SLOPE	WDW	WINDOW	AND NUMBER	XXX	A9.02 A9.03	DOOR & WINDO
CPT	CARPET	FLUOR	FLUORESCENT	KPL KG	KICK PLATE KILOGRAM	PASS PATD	PASSAGE PAPER TOWEL DISPENSER	SLDG	SLIDING	WGL	WIRE GLASS	SECTION INDICATOR		I	_
CRM	CONCRETE RUBBLE MASONRY	FO FOC	FACE OF FACE OF CONCRETE	KO	KNOCKOUT	PAID	PAVING	slnt sm	SEALANT SHEET METAL; SQUARE METER	WH WO	WATER HEATER WHERE OCCURS	FOR BUILDING	▲	STRUCTURAL	
CT	CERAMIC TILE; COOLING TOWER	FOC	FACE OF CONCRETE  FACE OF FINISH			PBD	PARTICLEBOARD	SMD	SANITARY NAPKIN DISPENSER	WO WP	WHERE OCCURS WATERPROOFING			<b>S</b> 1	GENERAL STRUC
CTR	CENTER	FOM	FACE OF MASONRY	L	LONG OR LITER	PC	PRECAST CONCRETE	SDR	SANITARY NAPKIN	WPM	WATERPROOFING MEMBRANE	A	1.01 A1.01	\$1.1	STATEMENT OF S
CTSK	COUNTERSUNK	FOS	FACE OF STUDS; SLAB;	LAD	(METRIC DOCS)	PD	PLANTER DRAIN		RECEPTACLE	WPT	WORK POINT		object referenced	S2 S2.1	FOUNDATION PL RETAINING WALL
CULT	CULTURED	FOW.	STRUCTURE	LAB LAM	LABORATORY LAMINATE; LAMINATION	PDF	POWDER DRIVEN FASTENER	SP	STANDPIPE	WR	WATER RESISTANT; REPELLANT			\$3	MOMENT FRAME
CW	COLD WATER (PIPING)	FOW FP	FACE OF WALL FIRE PROTECTION	LAW	LAVATORY	PERF PERIM	PERFORATED PERIMETER	SPEC SPKR	SPECIFICATION SPEAKER	WS WSCT	WEATHER STRIPPING	SECTION INDICATOR		\$4   \$5	FIRST FLOOR FRA
D	DEEP; DEPTH; DRYER	FPG	FIREPROOFING	LB	POUND	PERP	PERPENDICULAR	SPRK SPRK	SPRINKLER	WSCT WSP	WAINSCOT WET STAND PIPE	FOR PARTIAL BUILDING	1.01	\$5 \$6	SECOND FLOOR WALL & BUILDING
DA	DOUBLE ACTING	FR	FRAME	LDG	LANDING	PH	PENTHOUSE	SQ	SQUARE	WT WT	WEIGHT		object referenced	S7	<b>ROOF FRAMING</b>
DBL	DOUBLE	FRP	FIBERGLASS REINFORCED	LF	LINEAR FOOT	PI -	POINT OF INTERSECTION	SSE	STRUCTURE SLAB ELEVATION	WW	WALL TO WALL	ASSEMBLY	ASSEMBLY GROUP	S8 S9	FIRST FLOOR SHE SECOND & THIRE
DD	DECK DRAIN	FRT	POLYESTER FIRE RETARDANT TREATED	LH LKR	LEFT HAND LOCKER	PL DI A A A	PLATE; PROPERTY LINE	SS	STAINLESS STEEL	WWF	WELDED WIRE FABRIC	TYPE INDICATOR	ASSEMBLY TYPE NUMBER	S10	SOLDIER PILE SHO
DEG	DEGREE	FRTW	FIRE RETARDANT TREATED	LLH	LONG LEG HORIZONTAL	PLAM PLAS	PLASTIC LAMINATE PLASTER	SSK STA	SERVICE SINK			i	X0	\$11	SOLDIER PILE SH



CONSULTANT:

PROFESSIONAL SEAL:



PROJECT:

a project for:

PO BOX 1733 AUBURN, WA 98071 Phone: (206) 724-1072

# AST MERCER RESIDENCE

34 EAST MERCER WAY ERCER ISLAND, WA 98040

8/29/2016 6/05/2017	PERMIT APPROVED REVISION TO PERMIT
	REVISION TO PERMIT
05/08/2018	REVISION TO PERMIT

NICIPALITY REVIEW:

OJECT # MERCER ISLAND 15 - 015

EET TITLE:

VERSHEET

DJECT NO.: TE ISSUED:

20140904

EET NUMBER: G0.01

GENERAL G0.00 G1.01  SURVEY 1 OF 2 2 OF 2  CIVIL C1 C2 C3 C4 C5 C6  ARCHITECTURAL	INDEX  COVERSHEET CODE SUMMARY  TREE & TOPOGRAPHIC SURVEY & GENERAL NOTES TREE & TOPOGRAPHIC SURVEY  COVER SHEET, VICINITY MAP, GENERAL NOTES TESC PLAN, MISC. DETAILS, EROSION CONTROL NOTES SITE IMPROVEMENT PLAN & NOTES CONSTRUCTION DETAILS TEMPORARY EXCAVATION PLAN	
GENERAL G0.00 G1.01  SURVEY 1 OF 2 2 OF 2  CIVIL C1 C2 C3 C4 C5 C6	COVERSHEET CODE SUMMARY  TREE & TOPOGRAPHIC SURVEY & GENERAL NOTES TREE & TOPOGRAPHIC SURVEY  COVER SHEET, VICINITY MAP, GENERAL NOTES TESC PLAN, MISC. DETAILS, EROSION CONTROL NOTES SITE IMPROVEMENT PLAN & NOTES CONSTRUCTION DETAILS	E
OF 2 2 OF 2 CIVIL C1 C2 C3 C4 C5 C6	TREE & TOPOGRAPHIC SURVEY  COVER SHEET, VICINITY MAP, GENERAL NOTES TESC PLAN, MISC. DETAILS, EROSION CONTROL NOTES SITE IMPROVEMENT PLAN & NOTES CONSTRUCTION DETAILS	E
C1 C2 C3 C4 C5 C6	TESC PLAN, MISC. DETAILS, EROSION CONTROL NOTES SITE IMPROVEMENT PLAN & NOTES CONSTRUCTION DETAILS	
A DC LITECTUD A I	STORM DRAIN OUTFALL	
ARCHITECTORAL A1.01 A1.02 A2.01 A2.01.1 A2.02 A2.02.1 A2.03 A2.03.1 A2.04 A3.01 A3.02 A3.03 A3.04 A4.01 A4.02 A4.03 A4.04 A8.01 A8.02 A9.01 A9.02 A9.03	SITE PLAN TREE PLAN LEVEL 1 FLOOR PLAN LEVEL 1 DIMENSION PLAN LEVEL 2 FLOOR PLAN LEVEL 2 DIMENSION PLAN LEVEL 3 TLOOR PLAN LEVEL 3 DIMENSION PLAN ROOF PLAN NORTH ELEVATION EAST ELEVATION SOUTH ELEVATION BUILDING SECTION BUILDING SECTION BUILDING SECTION BUILDING SECTION DETAILS DETAILS DOOR & WINDOW SCHEDULES DOOR & WINDOW SCHEDULES DOOR & WINDOW SCHEDULES	
STRUCTURAL S1 S1.1 S2 S2.1 S3 S4 S5 S6 S7	GENERAL STRUCTURAL NOTES STATEMENT OF SPECIAL INSPECTIONS FOUNDATION PLAN RETAINING WALL SCHEDULE MOMENT FRAME DETAILS & ELEVATION FIRST FLOOR FRAMING PLAN SECOND FLOOR FRAMING PLAN WALL & BUILDING SECTIONS, DETAILS ROOF FRAMING PLAN	A

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#### ZONING CODE ANALYSIS

- CODE REFERENCES:
- MERCER ISLAND MUNICIPAL CODE, ADOPTED DECEMBER 1, 2014
- 2012 INTERNATIONAL BUILDING CODE WITH STATEWIDE AND CITY AMENDMENTS
- 2012 INTERNATIONAL RESIDENTIAL CODE WITH STATEWIDE AND CITY AMENDMENTS
- 2012 SEATTLE ENERGY CODE RESIDENTIAL
- 2012 INTERNATIONAL MECHANICAL CODE WITH STATEWIDE AND CITY AMENDMENTS
- WASHINGTON CITIES ELECTRICAL CODE
- 2012 INTERNATIONAL FIRE CODE WITH STATEWIDE AND CITY AMENDMENTS
- 2012 INTERNATIONAL FUEL GAS CODE WITH STATEWIDE AND CITY AMENDMENTS
- 2012 WASHINGTON STATE PLUMBING CODE WITH CITY AMENDMENTS

SECTION	EXISTING / REQUIRED	PROPOSED	COMPLIES	SHEET
ZONING	R-15	R-15	YES	G0.02
LOT SIZE	21,417.54 SF			G0.02
	STEEP SLOPE			
CRITICAL AREAS	HILLSIDE ( 27.71 % MAX SLOPE )			A1.01
MAXIMUM BUILDABLE AREA	45% of LOT AREA (21,417 SF) = 9,637.65 SF	9,637.65 SF	YES	G0.02
MAXIMUM IMPERVIOUS COVERAGE	30% of LOT AREA (21,417 SF) = 6,425.10 SF	-	-	G0.02
BUILDING HEIGHT LIMIT	30' FROM AVERAGE BUILDING GRADE + 5' FOR ROOF WITH MINIMUM 4:12 PITCH	30'	YES	A3.01 / A3.02
	FRONT = 20' MINIMUM	20'	YES	A1.01
SETBACKS	REAR = 25' MINIMUM	25'	YES	A1.01
	SIDES = 5' MINIMUM	5'	YES	A1.01
PARKING	1 PARKING SPACE / DWELLING UNIT	1 PARKING SPACE / DWELLING UNIT	YES	A2.01
PARKING ACCESS	ACCESS FROM PRIVATE ROAD	10 FT DRIVE	YES	A2.01
LANDSCAPING	TOTAL DIAMETER OF TREES RETAINED OR PLANTED = 2 INCH PER 1000 SF	1	YES	A1.01
FIRE SPRINKLERS	PER NFPA 13D - REQUIRED ON STRUCTURES 5,000 SF OR MORE	YES	YES	DEFERED
PROJECTIONS	36" ROOF EAVES AND GUTTERS		YES	A2.04
CONSTRUCTION TYPE	RESIDENTIAL - TYPE VA			
WATER	WATER DISTRICT			
SEWER / SEPTIC	PUBLIC			
ROAD ACCESS	PRIVATE			
STREET SURFACE	PAVED			

#### **ENERGY CODE ANALYSIS**

LINEROT CODE / IIV/LISIS		
PERFORMANCE REQUIREMENT	MEET OR EXCEED THE 2012 WASHINGTON STATE ENERGY CODE	PROPOSED
TOTAL HEATED FLOOR AREA (GROSS)		3,017.01 SF
LEVEL 1		1,394 SF
LEVEL 2		976.21 SF
LEVEL 3		646.80
GLAZING AREA % OF FLOOR	OPTION III : UNLIMITED	1,310.67 SF
CLIMATE ZONE	MARINE 4	
FENESTRATION U-FACTOR	0.30	SEE WSEC GLAZING SCHEDULE
CEILING R-VALUE	R-49 OR R-38 ADVANCED FRAMED CEILING	R-50 & R-54 (SEE ROOF PLAN)
WOOD FRAME WALL ABOVE GRADE R-VALUE	R-21 (16 OC, HEADERS MIN R-10)	R-21
FLOOR R-VALUE / U-FACTOR	R = 30 / U = 0.029	R-30
SLAB ON GRADE R-VALUE	R = 10, 2'	R-10 (FULL UNDER)
BELOW GRADE U-FACTOR	0.042	0.04200
DOOR U-FACTOR	0.20	0.30000
DOOR U-FACTOR (DEFAULT GLAZED FENESTRATION U-FACTOR, METAL WITH THERMAL BREAK, DOUBLE PANE; TABLE R303.1.3 (1))	0.65	NOT APPLICABLE

#### CONTRACTOR NOTES

- GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL BONDS, CASH DEPOSITS. ETC. THAT THE CITY WILL REQUIRED TO FACILITATE CONSTRUCTION OF THE PROJECT.
- 2. GENERAL CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE WATER, SEWER, POWER AND TELEPHONE CONNECTIONS FOR THE CONSTRUCTION TRAILER.
- 3. UNLESS QUALIFIED, NO PRODUCT SUBSTITUTIONS "OR EQUAL" PRODUCTS. EQUIPMENT OR MATERIALS SHALL BE ALLOWED.
- 4. THE GENERAL CONTRACTOR SHALL OBTAIN AND PAY FOR ALL OTHER PERMITS REQUIRED BY LAW FOR THE EXECUTION OF THIS WORK UNLESS NOTED OTHERWISE. THE BASIC BUILDING PERMIT WILL BE OBTAINED AND PAID FOR BY THE OWNER. ALL TRADE PERMITS, IF REQUIRED BY JURISDICTION AUTHORITIES, AND FEES SHALL BE PAID FOR BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL ALSO OBTAIN AND PAY CERTIFICATES, INSPECTIONS AND OTHER LEGAL FEES REQUIRED, BOTH PERMANENT AND TEMPORARY, INCLUDING PLUMBING, ELECTRICAL AND HIGHWAY PERMITS UNLESS SPECIFICALLY OTHERWISE PROVIDED.
- GENERAL CONTRACTOR HAS RESEARCHED AND VERIFIED ALL TRASH, DEBRIS, AND RECYCLING REQUIREMENTS FOR THE CITY IN WHICH THIS WORK WILL BE PERFORMED AND HAS INCLUDED SUCH COSTS INTO THIS PROPOSAL.
- GENERAL CONTRACTOR IS RESPONSIBLE FOR SITE SURVEYING AND LAYOUT, OWNER TO PROVIDE ONE (1) BENCHMARK FOR GENERAL CONTRACTOR'S USE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO COORDINATE, FURNISH AND INSTALL ALL FRAMING, BACKING AND DEADWOOD REQUIREMENTS FOR
- EQUIPMENT AND MATERIALS INSTALLED IN THE BUILDING. 8. JOINT SEALERS SHALL BE REQUIRED AT THE INTERSECTION OF ALL DISSIMILAR MATERIALS IN INTERIOR AND EXTERIOR CONDITIONS.
- 9. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL PENETRATIONS OF THE BUILDING ENVELOPE INCLUDING EXTERIOR WINDOWS, GRILLES, HVAC DUCTWORK, AND CONDUIT AS REQUIRED THROUGH THE EXTERIOR WALLS, ROOF DECKS, VERTICAL ROOF AND MANSARD WALLS SHALL REQUIRE MECHANICAL FLASHING IN ADDITION TO APPROPRIATE EXTERIOR SEALANTS TO PROVIDE AND ENSURE WATERTIGHT CONDITIONS AT THESE LOCATIONS.
- 10. GUTTERS, DOWNSPOUTS AND ALL EXTERIOR SHEET METALS ARE TO BE PRE-FINISHED AT THE FACTORY. COLOR SHALL BE SELECTED FROM THE MANUFACTURER'S FULL RANGE OF COLOR OPTIONS BY THE ARCHITECT. NO FIELD PAINTING TO BE ALLOWED.
- 11. ALL EXTERIOR LOUVER GRILLES SHALL BE FACTORY PAINTED WITH KYNAR FINISH TO MATCH THE EXTERIOR FIELD COLOR IN WHICH THEY ARE LOCATED. 12. ALL EXTERIOR METALS SHALL BE GALVANIZED, PRE-FINISHED OR FIELD PAINTED PER
- ARCHITECT COORDINATION GC SHALL ASSUME THE MOST STRINGENT FINISH IF NOT INDICATED ON DOCUMENTS. 13. APPLIANCES - GENERALLY, THIS EQUIPMENT IS DELIVERED FACTORY DIRECT. MOUNTING AND CONNECTIONS NOT INCLUDED. GENERAL CONTRACTOR SHALL
- MOUNT AND MAKE UP ALL REQUIRED CONNECTIONS TO MAKE THE EQUIPMENT FUNCTION PROPERLY. 14. GENERAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING A COMPLETE SET OF DRAWINGS TO EACH SUBCONTRACTOR AND FOR INSURING THAT THE WORK OF EACH SUBCONTRACTOR IS COORDINATED WITH THE WORK OF ALL OTHER
- SUBCONTRACTORS. 15. THE LAST DATED REVISION VOIDS AND SUPERSEDES ANY AND ALL PREVIOUS DRAWINGS WITH THE SAME SHEET NUMBER. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RECOVER AN DISPOSE OF ALL SUPERSEDED / PREVIOUSLY ISSUED PLANS FROM ALL SUBCONTRACTORS, SUPPLIES AND MATERIAL PERSONS. ALL COSTS RESULTING FROM A FAILURE TO ISSUE REVISED SHEETS, AND RECOVERY / DISPOSAL OF SUPERSEDED SHEETS IN A TIMELY MANNER, SHALL BE ABSORBED BY THE GENERAL CONTRACTOR. THE OWNER AND ARCHITECT WILL NOT BE RESPONSIBLE FOR ANY COSTS ASSOCIATED WITH THE ABOVE.
- 16. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE ALL EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE, THE CONTRACTOR SHALL BEAR ALL EXPENSES OF REPAIR OR REPLACEMENT OF UTILITIES OR OTHER PROPERTY DAMAGED BY OPERATIONS IN CONJUNCTION WITH THE EXECUTION OF THE WORK.
- ALL FINAL CONNECTIONS TO EXISTING UTILITIES SHALL BE BY THE CONTRACTOR. 17. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SECURITY OF THE SITE THROUGHOUT THE CONSTRUCTION PROCESS.
- 18. GENERAL CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO ENSURE THE SAFETY OF THE OCCUPANTS AND WORKERS AS REQUIRED BY GENERAL CONDITIONS AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- 19. DO NOT OBSTRUCT STREETS, SIDEWALKS, ALLEYS OR OTHER RIGHT-OF-WAYS WITHOUT FIRST OBTAINING PROPER PERMITS.
- 20. ALL FIRE RATED CONSTRUCTION SHALL CONFORM WITH CURRENT UL TESTED STANDARD AND/OR LOCAL REQUIREMENTS.

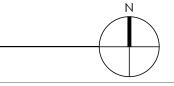
#### GENERAL NOTES

- DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS TAKE PRECEDENCE. DRAWINGS HAVE BEE PREPARED ON AN ORIGINAL SHEET SIZE OF 24" X 36".
- INFORMATION REGARDING EXISTING CONDITIONS USED TO PREPARE THESE DRAWINGS HAS BEEN PROVIDED BY OTHERS. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS PRIOR TO COMMENCING CONSTRUCTION. PROVIDE WRITTEN NOTIFICATION TO THE ARCHITECT OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE DRAWINGS. THE ARCHITECT WILL ISSUE A
- WRITTEN DIRECTIVE IF FURTHER CLARIFICATION IS REQUIRED. 4. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS, DATUM, LEVELS AND CONDITIONS PERTAINING TO THE WORK PRIOR TO COMMENCING CONSTRUCTION, PROVIDE WRITTEN NOTIFICATION TO THE ARCHITECT OF ANY DISCREPANCIES WITH THE DOCUMENTS. THE ARCHITECT WILL ISSUE A WRITTEN DIRECTIVE IF FURTHER CLARIFICATION IS REQUIRED.
- THESE DRAWINGS ARE THE EXCLUSIVE PROPERTY OF STUDIO19 ARCHITECTS, AND HAVE BEEN PREPARED FOR THE USE IN THE EXECUTION OF THE ENCLOSED PROJECT. USE OR REPRODUCTION FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF STUDIO19 ARCHITECTS IS PROHIBITED.
- LEGENDS ON THE PLANS AND SCHEDULE IN THE SPECS SHALL BE COMPLEMENTARY.
- . ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE CODES AND RESTRICTIONS ENFORCED BY AUTHORITIES HAVING JURISDICTION.

#### VICINTIY MAP



#### PROJECT LOCATION



1,716 SQ FT

2,408 SQ FT

2,364 SQ FT

8,444 SQ FT

3,511 SQ FT

5,877 SQ FT

#### VENTILATION NOTES

WAC 51-13, WASHINGTON STATE VENTILATION AND INDOOR AIR QUALITY CODE SEATTLE RESIDENTIAL CODE (SRC), CHAPTER 15

- 1. WHOLE HOUSE VENTILATION PER IRC M1508.7.
- 2. NOISE: WHOLE HOUSE FANS LOCATED FOUR FEET OR LESS FROM THE INTERIOR GRILLE SHALL HAVE A SONE RATING OF 1.0 OR LESS.
- 3. EXHAUST DUCTS SHALL TERMINATE OUTSIDE OF THE BUILDING.
- 4. OUTDOOR AIR DISTRIBUTION: OUTDOOR AIR SHALL BE DISTRIBUTED TO EACH HABITABLE ROOM BY MEANS SUCH AS INDIVIDUAL INLETS, SEPARATE DUCT SYSTEMS, OR A FORCED-AIR SYSTEM.
- DOORS SHALL BE UNDERCUT TO A MINIMUM OF ONE-HALF INCH ABOVE THE SURFACE OF THE FINISH FLOOR COVERING. DOORS AND OPERABLE LITES IN WINDOWS ARE DEEMED NOT TO MEET THE OUTDOOR AIR SUPPLY INTAKE REQUIREMENTS.
- INTERMITTENTLY OPERATING MINIMUM EXHAUST RATES FOR BATHROOMS = 50 CFM, KITCHENS = 100 CFM. - U.N.O.
- EXHAUST HOOD SYSTEMS CAPABLE OF EXHAUSTING IN EXCESS OF 400 CFM SHALL BE PROVIDED WITH MAKEUP AIR AT A RATE APPROXIMATELY EQUAL TO THE EXHAUST AIR RATE. SUCH MAKEUP AIR SYSTEMS SHALL BE EQUIPPED WITH A MEANS OF CLOSURE AND SHALL BE AUTOMATICALLY CONTROLLED TO START AND OPERATE SIMULTANEOUSLY WITH THE EXHAUST SYSTEM. PER M1503.4

#### SITE DESCRIPTION

PARCEL #

755870-0008

LEGAL DESCRIPTION SANDY BEACH TRS UNREC LOT B CITY OF MERCER ISLAND SHORT PLAT 76-12-036 REC #7701060821 SD SP DAF -LOTS 1-2 & 3

PROPERTY ADDRESS: 4634 EAST MERCER WAY, MERCER ISLAND, WA 98040

LOT SIZE 21,417.54 GSF PER SURVEY

WIDTH 159.65' DEPTH 145.19' WATERFRONT NONE

**ACCESS** PRIVATE ROAD FROM EAST MERCER WAY

EASEMENTS ACCESS EASEMENT AS DEFINED IN SHORT PLAT

# 76-12-036 REC#7701060821

# **ENERGY CODE NOTES**

## WASHINGTON STATE ENERGY CODE

- . BUILDING AIR LEAKAGE TESTING, DEMONSTRATING 2.0 AIR EXCHANGES PER
- HOUR (MAX) IS REQUIRED PRIOR TO FINAL INSPECTION. THE TEST RESULTS SHALL BE POSTED ON THE RESIDENTIAL ENERGY COMPLIANCE CERTIFICATE.
- 2. EACH DWELLING UNIT IS REQUIRED TO BE PROVIDED WITH AT LEAST ONE PROGRAMMABLE THERMOSTAT FOR REGULATION OF TEMPERATURE (WSEC R403.1.1).
- B. A SIGNED AFFIDAVIT DOCUMENTING THE DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR PRIOR TO AN APPROVED FINAL INSPECTION (WSEC R402.4.1.2).
- AND HOMEOWNER PRIOR TO APPROVED FINAL INSPECTION (WSEC R403.2.2 AND WSU RS-33).
- 5. MINIMUM 75% OF ALL INTERIOR LUMINAIRES SHALL BE HIGH EFFICACY LUMINAIRES, AND ALL EXTERIOR LIGHTING SHALL BE HIGH EFFICACY LUMINAIRES (WSEC R404.1).
- 6. ALL HEADERS IN EXTERIOR WALLS TO HAVE A MINIMUM R-10 INSULATION.
- 7. ALL DUCTS NOT LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE SHALL BE INSULATED TO A MINIMUM OF R-8.
- 8. REQUIRED SLAB PERIMETER INSULATION TO BE WATER RESISTANT MATERIAL, MANUFACTURED FOR ITS INTENDED USE, AND INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. FOR SLABS INSIDE FOUNDATION WALL, THE INSULATION SHALL BE INSTALLED TO PROVIDE A THERMAL BREAK BETWEEN THE SLAB EDGE AND THE FOUNDATION. MONOLITHIC SLABS SHALL INCLUDE INSULATION, INSTALLED OUTSIDE THE FOUNDATION WALL, AND SHALL EXTEND DOWNWARD FROM THE TOP OF THE SLAB FOR A MINIMUM DISTANCE OF 24" OR DOWNWARD AND THEN HORIZONTALLY FOR A MINIMUM COMBINED DISTANCE OF 24", AND SHOULD INCLUDE R-10 INSULATION UNDER THE NON-LOAD BEARING PORTIONS OF THE SLAB.
- 9. INSULATION FOR HOT WATER PIPES SHALL BE A MINIMUM OF R-4.

LEAKAGE TO 2.0 AIR CHANGES PER HOUR MAX.

- 10. WASHINGTON STATE ENERGY CREDITS PER TABLE 406.2:
- 1a EFFICIENT BUILDING ENVELOPE PRESCRIPTIVE COMPLIANCE BASED ON †ABLE R402.1 WITH THE FOLLOWING MODIFICATIONS: FENESTRATION U = 0.28 SLAB ON GRADE, R-10 PERIMETER AND UNDER ENTIRE SLAB
  - BELOW GRADE SLAB R-10 PERIMETER AND UNDER ENTIRE SLAB COMPLIANCE BASED ON SECTION R402.1.4: REDUCE TOTAL UA BY 5% CREDITS FROM THIS OPTION = 0.5
- 2b AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION COMPLIANCE BASED ON SECTION R402.4.1.2 REDUCE TESTED AIR
  - ALL WHOLE HOUSE VENTILATION REQUIREMENTS AS DETERMINED BY SECTION M1507.3 OF THE IRC.
  - PROVIDE BALANCED WHOLE HOUSE VENTILATION SYSTEM WITH MINIMUM SENSIBLE HEAT RECOVERY EFFICIENCY OF 0.70 PER WSEC R403.5 CREDITS FROM THIS OPTION = 1.0
- 5a EFFICIENT WATER HEATING GAS, PROPANE, OR OIL WATER HEATER WITH MINIMUM EF OF 0.62 CREDITS FROM THIS OPTION = 0.5

## PROJECT INFORMATION

PROJECT DESCRIPTION: A NEW CONSTRUCTION OF A 3 LEVEL SINGLE FAMILY RESIDENCE

LEVEL 1:

PROPERTY ADDRESS: 4634 EAST MERCER WAY, MERCER ISLAND, WA 98040

SEISMIC ZONE: ZONE 3

PARCEL #: 755870-0008

LOT AREA: 21,417.54 GSF PER SURVEY 4. DUCT LEAKAGE TEST RESULTS SHALL BE PROVIDED TO THE BUILDING INSPECTOR

**BUILDING AREAS:** 

IMPERVIOUS AREAS:

TOTAL IMPERVIOUS AREA:

LEVEL 2: LEVEL 3:

TOTAL LIVABLE AREA: 6,488 SQ FT F.A.R. 30.29 % LEVEL 1 GARAGE: 898 SQ FT LEVEL 2 VIEW DECK 1 431 SQ FT LEVEL 2 VIEW DECK 2: 217 SQ FT LEVEL 3 VIEW DECK 3: 148 SQ FT LEVEL 3 ROOF DECK: 262 SQ FT

TOTAL STRUCTURE SF: STRUCTURE FOOTPRINT:

> 477 SQ FT ENTRY STAIR: LEVEL 1 PATIO: 73 SQ FT LEVEL 2 PATIO: 316 SQ FT DRIVEWAY: 1,500 SQ FT

PERCENTAGE LOT COVERAGE: 27.44 % 

MECHANICAL, ELECTRICAL, AND PLUMBING NOTES

MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS AND CALCULATIONS TO BE DEFERRED.

studiol9 architects



I: 206.466.1225

**CONSULTANT:** 

PROFESSIONAL SEAL:



PROJECT:

PO BOX 1733 AUBURN, WA 98071 Phone: (206) 724-1072

# EAST MERCER RESIDENCE

4634 EAST MERCER WAY MERCER ISLAND, WA 98040

SHEET ISSUE: PERMIT SUBMITTAL 6/24/2015 PERMIT APPROVED 8/29/2016 6/05/2017 REVISION TO PERMIT 05/08/2018 REVISION TO PERMIT

MUNICIPALITY REVIEW:

PROJECT # MERCER ISLAND 15 - 015

SHEET TITLE:

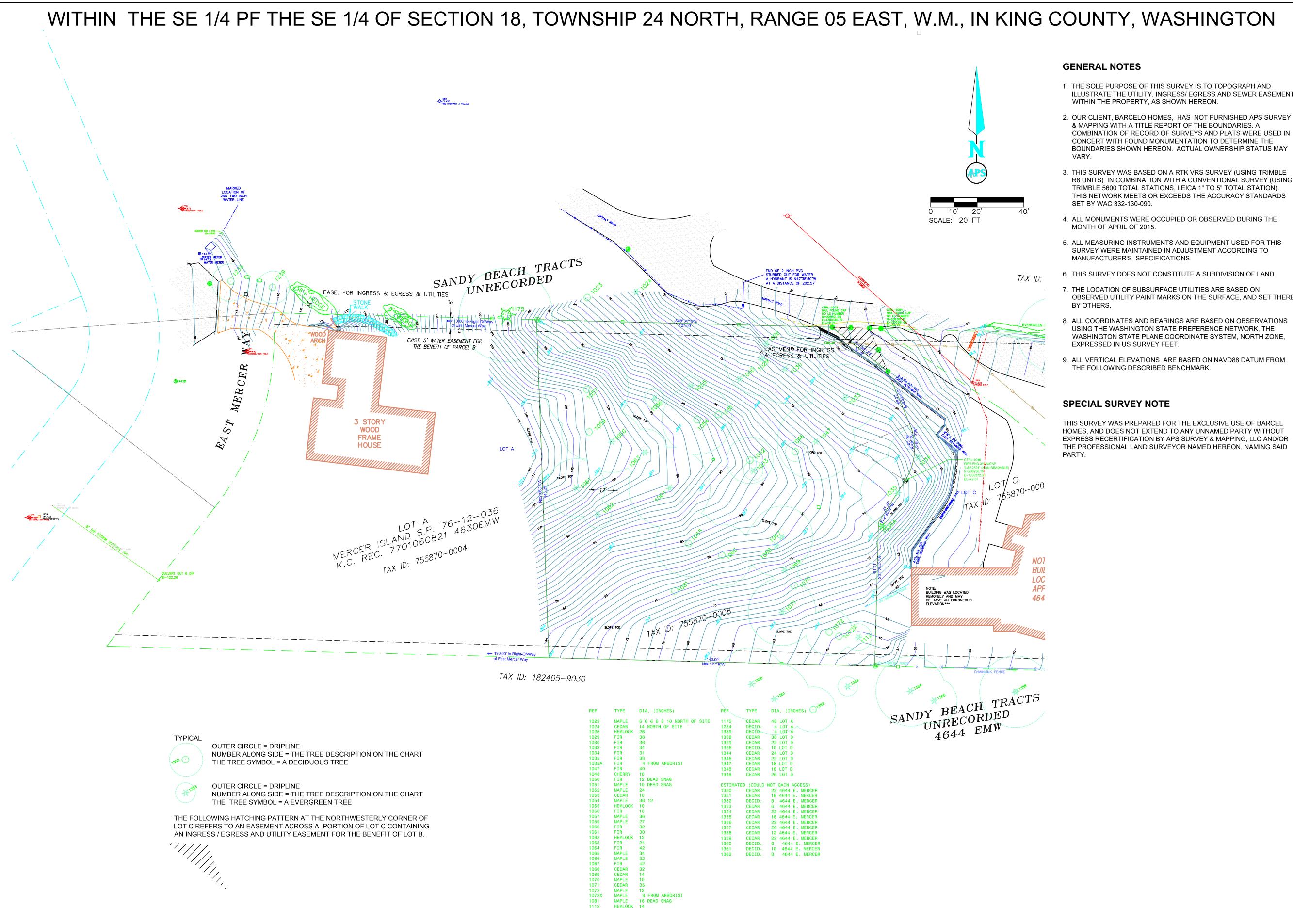
CODE SUMMARY

PROJECT NO.: DATE ISSUED:

SHEET NUMBER:

20140904

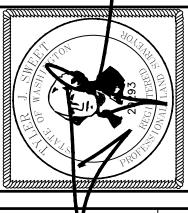
05/08/2018



- ILLUSTRATE THE UTILITY, INGRESS/ EGRESS AND SEWER EASEMENT
- & MAPPING WITH A TITLE REPORT OF THE BOUNDARIES. A COMBINATION OF RECORD OF SURVEYS AND PLATS WERE USED IN CONCERT WITH FOUND MONUMENTATION TO DETERMINE THE BOUNDARIES SHOWN HEREON. ACTUAL OWNERSHIP STATUS MAY
- R8 UNITS) IN COMBINATION WITH A CONVENTIONAL SURVEY (USING TRIMBLE 5600 TOTAL STATIONS, LEICA 1" TO 5" TOTAL STATION). THIS NETWORK MEETS OR EXCEEDS THE ACCURACY STANDARDS
- SURVEY WERE MAINTAINED IN ADJUSTMENT ACCORDING TO
- 7. THE LOCATION OF SUBSURFACE UTILITIES ARE BASED ON OBSERVED UTILITY PAINT MARKS ON THE SURFACE, AND SET THERE
- USING THE WASHINGTON STATE PREFERENCE NETWORK, THE WASHINGTON STATE PLANE COORDINATE SYSTEM, NORTH ZONE,

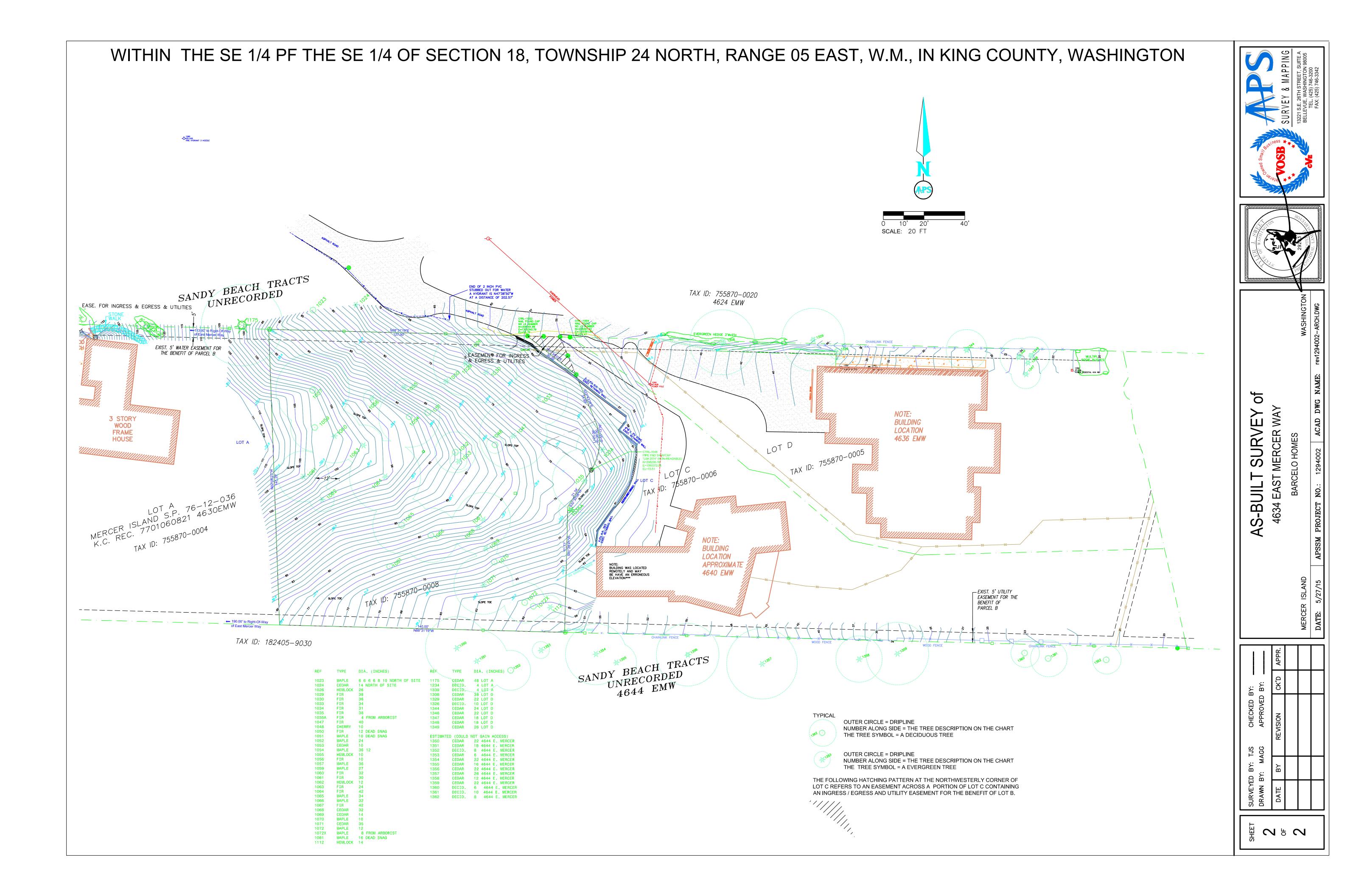
HOMES, AND DOES NOT EXTEND TO ANY UNNAMED PARTY WITHOUT EXPRESS RECERTIFICATION BY APS SURVEY & MAPPING, LLC AND/OR THE PROFESSIONAL LAND SURVEYOR NAMED HEREON, NAMING SAID

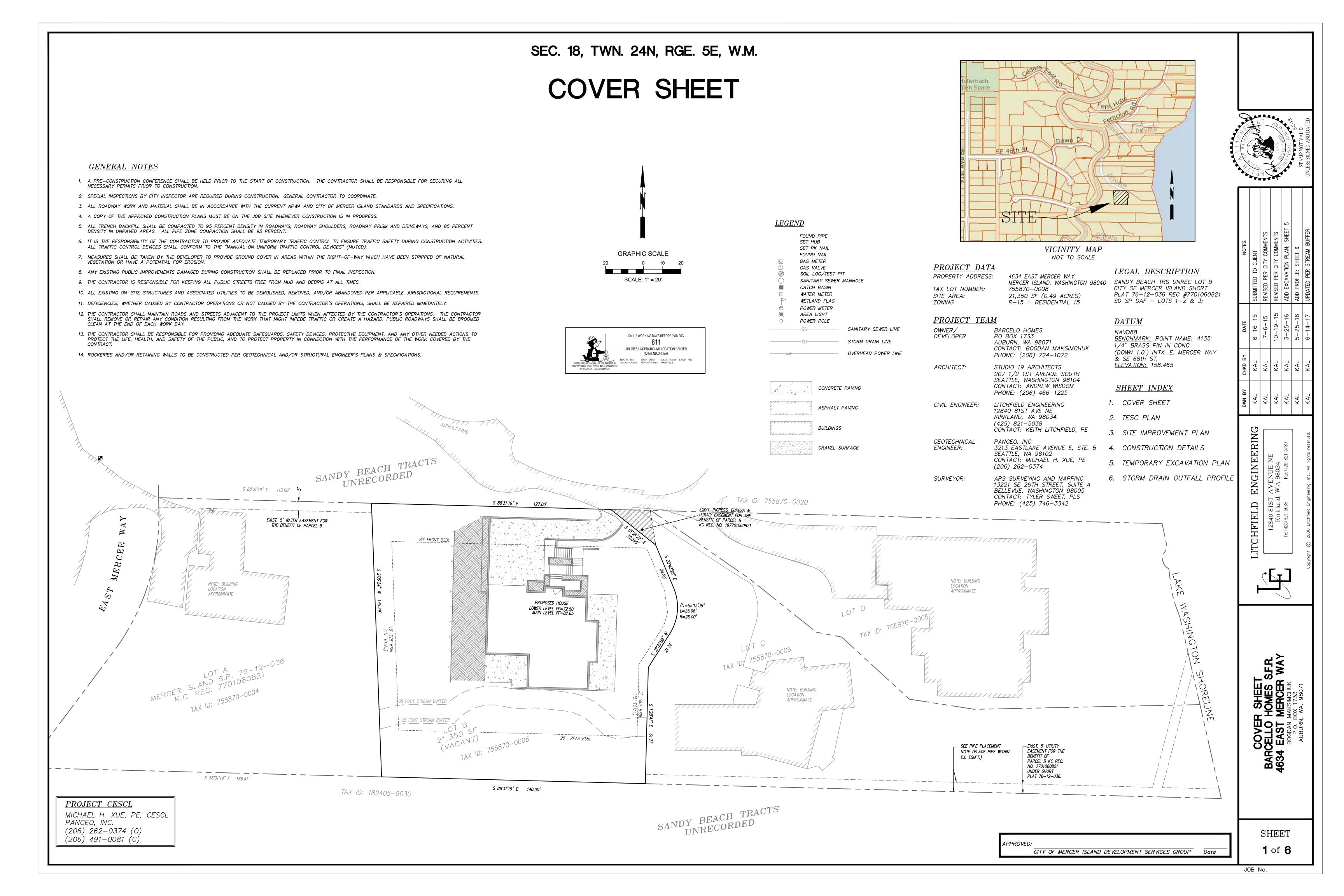


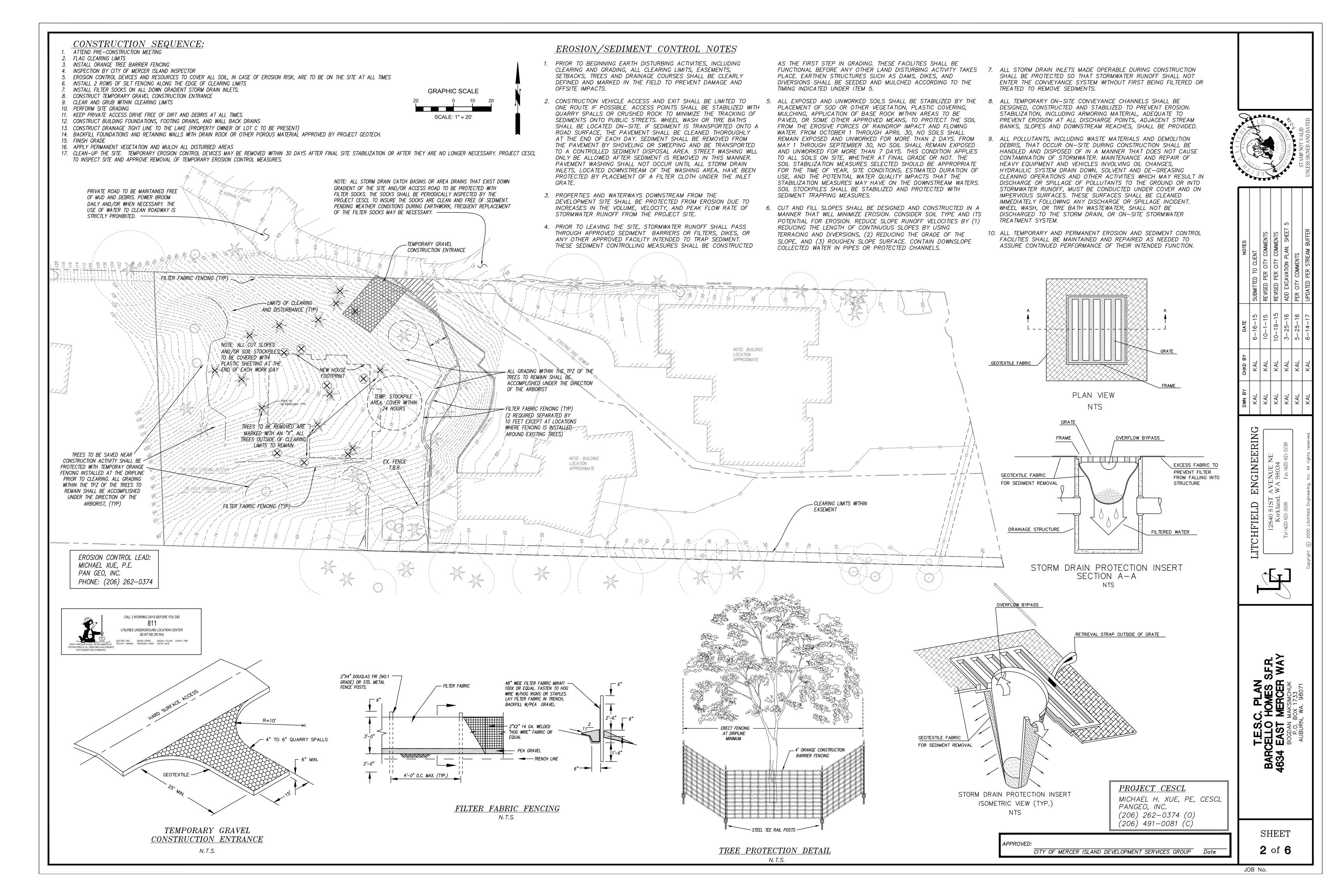


AS-E

**←** ₽ **⊘** 







#### SITE IMPROVEMENT NOTES

- PROOF OF LIABILITY INSURANCE SHALL BE SUBMITTED TO THE CITY PRIOR TO THE PRE-CONSTRUCTION MEETING.
- THESE PLANS ARE APPROVED FOR GRADING, DRAINAGE, AND UTILITY IMPROVEMENTS ONLY. PLANS FOR STRUCTURES REQUIRE A SEPARATE REVIEW
- RETAINING WALLS GREATER THAN FOUR (4) FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT.
- FILL MATERIAL PLACED UNDER BUILDING FOUNDATIONS OR PAVEMENT SHALL BE CRUSHED BASE ROCK OR COMPACTED STRUCTURAL FILL IN ACCORDANCE WITH CITY AND WSDOT STANDARD SPECIFICATIONS.
- ALL DRAINAGE STRUCTURES. SUCH AS CATCH BASINS AND MANHOLES. NOT LOCATED WITHIN A TRAVELED ROADWAY OR SIDEWALK, SHALL HAVE SOLID
- THIS PLAN DOES NOT SHOW THE LOCATION OF ALL EXISTING UTILITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL EXPOSE ALL EXISTING PIPING THAT WILL BE CONNECTED TO WITH NEW PIPING. DEPTH. LOCATION. AND CONDITION SHALL BE RELAYED TO THE ENGINEER IF CONDITIONS VARY SIGNIFICANTLY FROM WHAT IS DETAILED OR ANTICIPATED.
- ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE TO DETAILS AND SPECIFICATIONS OF CITY STANDARDS. ALL CONSTRUCTION DEBRIS GENERATED DURING CONSTRUCTION TO BE REMOVED & DISPOSED OF AT AN APPROVED
- ALL CUT MATERIAL GENERATED DURING THE PROJECT THAT IS NOT ACCEPTABLE FOR USE AS COMPACTED FILL MATERIAL AT ANOTHER LOCATION ON-SITE MUST BE HAULED TO AN APPROVED LOCATION OFF-SITE.

PAINTED LOCATION 2" WATER LINE

INSTALL 1-1/2" WATER METER WITH 2"

CONTRACTOR TO INSTALL NEW WATER

SERVICE TO PARCEL B WITHIN EXISTING

1 METER POWER

NOTE: BUILDING

**APPROXIMATE** 

S 88°31'19" E 188.41'

LOCATION

UTILITY EASEMENT.

SERVICE LINE PER COMI STD DETAIL W-14.

EXISTING PAVEMENT TO BE NEATLY

SAWCUT AND REPAIRED TO CITY OF

MERCER ISLAND STANDARDS.

CULVERT

OUT 8 DIP

\ IE=122.26

**GRAPHIC SCALE** 

SCALE: 1" = 20'

- DRAINAGE GENERAL NOTES
- 1. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION.
- 2. BEFORE ANY CONSTRUCTION MAY OCCUR, THE CONTRACTOR SHALL HAVE PLANS WHICH HAVE BEEN SIGNED AND APPROVED BY THE CITY OF MERCER ISLAND PUBLIC WORKS DEPARTMENT, OBTAINED ALL CITY, COUNTY, STATE, FEDERAL AND OTHER REQUIRED PERMITS, AND HAVE POSTED ALL REQUIRED
- 3. ALL STORM DRAINAGE IMPROVEMENTS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE CITY OF MERCER ISLAND PUBLIC WORKS PRE-APPROVED PLANS AND POLICIES AND THE STANDARD SPECIFICATIONS FOR ROAD, BRIDGE AND MUNICIPAL CONSTRUCTION, PREPARED BY WSDOT AND THE AMERICAN PUBLIC WORKS ASSOCIATION (APWA).
- 4. ANY DEVIATION FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL, ALL CHANGES SHALL BE SUBMITTED TO THE CITY.
- 5. A COPY OF THE APPROVED STORM WATER PLANS MUST BE ON THE JOB SITE WHENEVER CONSTRUCTION IS IN PROGRESS.
- 6. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SIMILARLY STABILIZED TO THE SATISFACTION OF THE CITY OF MERCER ISLAND DEPARTMENT OF PUBLIC WORKS FOR THE PREVENTION OF ON-SITE EROSION AFTER THE COMPLETION OF CONSTRUCTION.
- 7. MINIMUM COVER OVER STORM DRAINAGE PIPES IN ROW OR VEHICULAR PATH SHALL BE 18 INCHES, UNLESS OTHER DESIGN IS APPROVED.
- 8. CONSTRUCTION OF DEWATERING (GROUNDWATER) SYSTEMS SHALL BE IN ACCORDANCE WITH THE APWA STANDARD SPECIFICATIONS.
- 9. ALL TRENCH BACKFILL SHALL BE COMPACTED TO 95 PERCENT DENSITY IN ROADWAYS, ROADWAY SHOULDERS, ROADWAY PRISM AND DRIVEWAYS, AND 85 PERCENT DENSITY IN UNPAVED AREAS. ALL PIPE ZONE COMPACTION SHALL BE 95 PERCENT.

RESTORATION OF ALL CONSTRUCTION

DISTURBANCE AS A RESULT OF THE

WATER SERVICE INSTALLATION SHALL

BE PERFORMED TO THE SATISFACTION

OF THE AFFECTED PROPERTY OWNER.

ALL TRENCHES THAT ARE EXCAVATED WITHIN TREE DRIP LINES SHALL BE

INSTALLED WITHOUT CUTTING MAJOR ROOTS. ROOTS EXPOSED IN OPEN

APPROX. 266 LF WATER SERVICE LINE

EXIST. 5' WATER EASEMENT FOR

THE BENEFIT OF PARCEL B

TRENCHES MUST BE KEPT MOIST BY BEING COVERED WITH MOISTENED

EXCAVATED WITH AN AIR SPADE SO THAT UTILITY LINES CAN BE

BURLAP UNTIL THE TRENCH CAN BE CLOSED.

113.00'

- EX. STONE WALKWAY TO BE

CAREFULLY REMOVED USING HAND

COMPLETION OF THE WATER SERVCE

TOOLS AND RECONSTRUCTED TO

PRE-EXISTING CONDITION UPON

- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE SAFEGUARDS, SAFETY DEVICES, PROTECTIVE EQUIPMENT, CONFINED SPACE PROTECTION, FLAGGERS, AND ANY OTHER NEEDED ACTIONS TO PROTECT THE LIFE, HEALTH, AND SAFETY OF THE PUBLIC, AND TO PROTECT PROPERTY IN CONNECTION WITH THE PERFORMANCE OF WORK COVERED BY THE CONTRACT.
- 11. APPROXIMATE LOCATIONS OF EXISTING UTILITIES HAVE BEEN OBTAINED FROM AVAILABLE RECORDS AND ARE SHOWN FOR CONVENIENCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF EXISTING UTILITY LOCATIONS WHETHER OR NOT THESE UTILITIES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE TO ANY UTILITY. IF CONFLICTS WITH EXISTING UTILITIES ARISE DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTOR AND ANY CHANGES REQUIRED SHALL BE APPROVED BY THE DEVELOPMENT ENGINEER PRIOR TO COMMENCEMENT OF RELATED CONSTRUCTION ON THE PROJECT.
- 12. THE UNDERGROUND UTILITY LOCATION SERVICE SHALL BE CONTACTED FOR FIELD LOCATION OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. THE OWNER OR HIS REPRESENTATIVE SHALL BE CONTACTED IF A UTILITY CONFLICT EXISTS. FOR UTILITY LOCATION IN KING COUNTY, CALL 811. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT UTILITY LOCATES ARE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT.
- 13. OPEN CUT ROAD CROSSINGS FOR UTILITY TRENCHES ON EXISTING TRAVELED ROADWAY SHALL BE BACKFILLED ONLY WITH 5/8" MINUS CRUSHED ROCK AND MECHANICALLY COMPACTED (UNLESS OTHERWISE APPROVED BY THE CITY). CUTS INTO THE EXISTING ASPHALT SHALL BE NEAT LINE CUT WITH SAW OR JACKHAMMER IN A CONTINUOUS LINE. A TEMPORARY COLD MIX PATCH MUST BE PLACED IMMEDIATELY AFTER BACKFILL AND COMPACTION. A PERMANENT HOT MIX PATCH SHALL BE PLACED WITHIN 30 DAYS AND SHALL BE A MINIMUM OF 1" THICKER THAN THE ORIGINAL ASPHALT WITH A MINIMUM THICKNESS OF 2".
- 14. ALL DAMAGES INCURRED TO PUBLIC AND/OR PRIVATE PROPERTY BY THE CONTRACTOR DURING THE COURSE OF CONSTRUCTION SHALL BE PROMPTLY REPAIRED TO THE SATISFACTION OF THE CITY CONSTRUCTION INSPECTOR BEFORE PROJECT APPROVAL AND/OR THE RELEASE OF THE PROJECT'S PERFORMANCE BOND.

6" CONCRETE

PROPOSED HOUSE

CONNECT FOOTING/ DRAINS TO STORM

\_COLLÉCTOR AT/LOWEST

FOOTING ELEXATION

9.0%

-4"/ P.VC ,ROOF COLLECTOR @ 1% MIN. (TYP)-

PATIO FF=82.65

INSTALL 30" HANDKAILING MUEIN WALLS EXCEEDS 36" HEIGHT (TYP) 51'-4" PVC-SD

17'-4" PVC\SS

-SS IE=67.b

**©** SL=0.3000

IE=56.05

-20'-4" PVC SS @ SL=0.4100

-SSCO IE=53.7± VERIFY.

(MATCH EX. IE & SIZE)

FORCÉ MAIN

15. GROUT ALL SEAMS AND OPENINGS IN ALL INLETS, CATCH BASINS, AND MANHOLES.

END OF 2 INCH PVC

CONCRETE

DŘIVEWÁY

TOP=82.7

TOP=94.5~

4" PERF. PVC WALL FOOTING

NOTE: ALL WALL WATERPROOFING

AND RETAINING WALL DRAINAGE

ARCHITECTURAL PLANS AND SPECIFICATIONS SD

CONTROL PER GEOTECHNICAL AND TOP=82.32

IE=79.00

DRAINS (TYP.). CONNECT AT MOST

CONVENIENT DOWNSLOPE BASIN

ALL GRADING WITHIN\THE TPZ OF ⊢

THE TREES TO REMAIN SHALL BE

ACCOMPLISHED UNDER THE

DIRECTION OF THE ARBORIST

TAX ID: 182405-9030

I STUBBED OUT FOR WATER

I A HYDRANI IS N47°38'50"W

TAT A DISTANCE OF 202.57"

## 1 PUMP SYSTEM CALL-OUT

ORENCO 30" PUMP BASIN & COVER W/DUPLEX SUBMERSIBLE PUMPS. PÚMPS TO BE ALTERNATING AND FUNCTION AS A LEAD/LAG SYSTEM RIM = 61.00IE 6" PVC = 55.00 (ALL PIPES)BASE = 51.00(PER PUMP SYSTEM DETAIL)

#### (2) BACK-UP GENERATOR NOTES

SEWER NOTE: CONTRACTOR TO PROVIDE TV INSPECTION OF EXISTING

PUBLIC SEWER MAIN AND REPLACE IF FOUND TO DEFECTIVE.

DRIVEWAY TO BE BRUSHED & SCORED WITH GROOVES

PRIVATE SIDE SEWER LINE BETWEEN NEW CONNECTION POINT AND THE

WHEEL TRACTION ON DRIVEWAY GRADES 20%. NOTE: CITY OF

PERPENDICULAR TO THE DRIVEWAY ALIGNMENT. INTENT: TO IMPROVE

MERCER ISLAND PROHIBITS DRIVEWAY GRADES GREATER THAN 20%.

─ CATCH BASIN TO BE CENTERED ON & INTEGRAL

UTILITY EASEMENT FOR TH

S+KC REG. NO. 197701060821

WALL ELEVATION

SCHEDULE S. SIDE D/W

TOP=72.0 *∆ TOE=65.0* 

TOP = 68.0

 $\triangle$  TOE=62.5

TOP=64.0

<sup>3</sup>∆ *TOE=60.0* TOP = 60.0<sup>4</sup> TOE=58.0

NOTE: ALL SEWER AND DRAINAGE PIPES SHALL

BE BACKFILLED TO 95% MDD (INTENT: TO

RESTRICT SUBSURFACE DRAINAGE FROM

TRAVELING ALONG THE PIPE BARREL)

BENEFIT OF PARCEL B

TO TRENCH DRAIN SYSTEM

VALL ELEVATIONS

ALL/GRADING/WITHIN THE TPZ OF THE TREES TO REMAIN SHALL BE ACCOMPLISHED UNDER THÈ

DIRECTIÓN OF THE ARBÓRIST

W/SOLID LID

TOP=72.0 /E=66.8

DAYLIGHT 6" HDPE @

ABOVE GROUND FOR

IE 65.0 - TO BE

REST OF RUN

SEE SCHEDULE

- 1. ELECTRICAL CONTRACTOR TO PROVIDE GENERATOR AND TRANSFER SWITCH FOR BATTERY BACK-UP & AUTO START FOR SERVICE TO PUMPS DURING UTILITY OUTAGE.
- 2. DUPLEX PUMP CONTROL PANEL & TRANSFER SWITCH TO BE LOCATED IN

#### ARCHITECTURAL, STRUCTURAL & GEOTECHNICAL NOTES

- THESE PLANS ARE APPROVED FOR STANDARD ROAD AND DRAINAGE IMPROVEMENTS ONLY. PLANS FOR STRUCTURES SUCH AS RETAINING WALLS REQUIRE A SEPARATE REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- 2. SPECIAL INSPECTIONS FOR GEOTECHNICAL AND/OR STRUCTURAL ASPECTS OF OF THE PROJECT MAY BE REQUIRED DURING VARIOUS STAGES OF THE PROECT. CONTRACTOR TO BE RESPONSIBLE FOR COORDINATION AND OBTAINING INSPECTIONS WHEN AND WHERE NECESSARY.
- 3. SEE ARCHITECTURAL PLANS FOR BUILDING SECTIONS AND ALL LOCATIONAL/DIMENSIONAL ASPECTS OF BUILDINGS.
- 4. SEE ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL BUILDING AND RETAINING WALL DETAILS.
- 5. COORDINATE ALL SITE CIVIL CONSTRUCTION WITH ARCHITECTURAL, STRUCTURAL. MECHANICAL/PLUMBING AND LANDSCAPE PLANS AND IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS.
- 6. PRIOR TO CONSTRUCTION THE EARTHWORK/GENERAL CONTRACTOR TO BE COMPLETELY FAMILIAR WITH THE GEOTECHNICAL REPORT AND RECOMMENDATIONS. PLEASE REVIEW PANGEO, INC.'S REPORT DATED MARCH 31. 2014 AND CONTACT MICHAEL XUE, PE ON ANY QUESTIONS OR CONCERNS REGARDING HIS RECOMMENDATIONS.

#### GRADING NOTES:

- 1. ALL CUT MATERIAL GENERATED DURING THE PROJECT THAT IS NOT ACCEPTABLE FOR USE AS COMPACTED FILL MATERIAL AT ANOTHER LOCATION ON-SITE MUST BE HAULED TO AN APPROVED LOCATION OFF-SITE.
- 2. THE ON-SITE TOPOGRAPHICAL MAPPING WAS PROVIDED BY EMERALD LAND SURVEYING, INC.
- 3. ALL TEMPORARY OR PERMANENT SLOPES SHALL NOT EXCEED 2H:1V UNLESS APPROVED BY A GEOTECHNICAL ENGINEER.
- 4. FILL MATERIAL PLACED UNDER BUILDING FOUNDATIONS OR PAVEMENT SHALL BE CRUSHED BASE ROCK OR COMPACTED STRUCTURAL FILL IN ACCORDANCE TO WSDOT STANDARD SPECIFICATIONS.
- 5. ROCKERY AND/OR RETAINING WALLS GREATER THAN FOUR (4) FEET IN HEIGHT REQUIRES A BUILDING PERMIT.
- 6. IT WILL BE THE PERMITEE'S RESPONSIBILITY TO SUCCESSFULLY CAP AND ABANDON ALL EXISTING UTILITIES WITHIN THE DEVELOPMENT IN ACCORDANCE TO



NOTES	SUBMITTED TO CLIENT	REVISED PER CITY COMMENTS	REVISED PER CITY COMMENTS	ADD EXCAVATION PLAN: SHEET 5	PER CITY COMMENTS	UPDATED PER STREAM BUFFER	PER CITY COMMENTS	
DATE	6-16-15	7-6-15	10-19-15	3-25-16	5-25-16	6-14-17	10-10-17	
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SITE IMPROV BARCELLO 4634 EAST

SHEET

**3** of **6** 

CALL 3 WORKING DAYS BEFORE YOU DIG UTILITIES UNDERGROUND LOCATION CENTER (ID,MT,ND,OR,WA)

330'-6" HDPE SD @ SLOPE RANGING FROM 3.5% TO 21.0%

NOTE: CONTRACTOR TO INSURE THAT THE FINAL DRIVEWAY

NOTE: BUILDING

LOCA TION

*APPROXIMATE* 

TAX ID: 755870-0020

GRADE, CATCH BASIN/TRENCH DRAIN ELEVATIONS, AND ADJACENT CURB/WALL ARE CONSTRUCTED TO RESTRICT ANY STORM DRAINAGE FROM LEAVING THE DRIVEWAY SURFACE.

APPROVED:

NOTE: HDPE STORM DRAINAGE OUTFALL PIPE TO BE ALIGNED TO AVOID EXISTING TREES

BELOW GRADE PLACEMENT PENDING PROXIMITY OF EX. TREES. WHEN PIPE IS PLACED AT GRADE CONTRACTOR TO INSTALL PIPE ANCHORS AT 40' O.C. PER DETAIL SHEET 4 (ANCHORS DEPICTED ALONG COMPLETE PIPE ALGNMENT BUT ARE ONLY REQUIRED WHEN

AND ROOT SYSTEMS. PIPE INSTALLATION TO BE A COMBINATION OF AT-GRADE AND

PIPE PLACEMENT NOTE: CONTRACTOR TO FIELD ALIGN PIPE TO AVOID ROOTS OF EXISTING TREES

AND SHRUBS. PROPERTY OWNER (OF PARCEL ON WHICH PIPE IS TO BE LOCATED) WILL BE AVAILABLE DURING PLACEMENT OF PIPE TO DIRECT CONTRACTOR TO THE SPECIFIC LOCATION.

– EXIST. 5' UTILITY EASEMENT FOR THE

PARCEL B KC REC. NO. 7701060821 UNDER SHORT PLAT 76-12-036.

BENEFIT OF

NOTE: BUILDING

**APPROXIMATE** 

SEE PIPE PLACEMENT

EX. ESM'T.)

PIPE IS LAID AT GRADE).

NOTE (PLACE PIPE WITHIN

**LOCATION** 

PROJECT CESCL

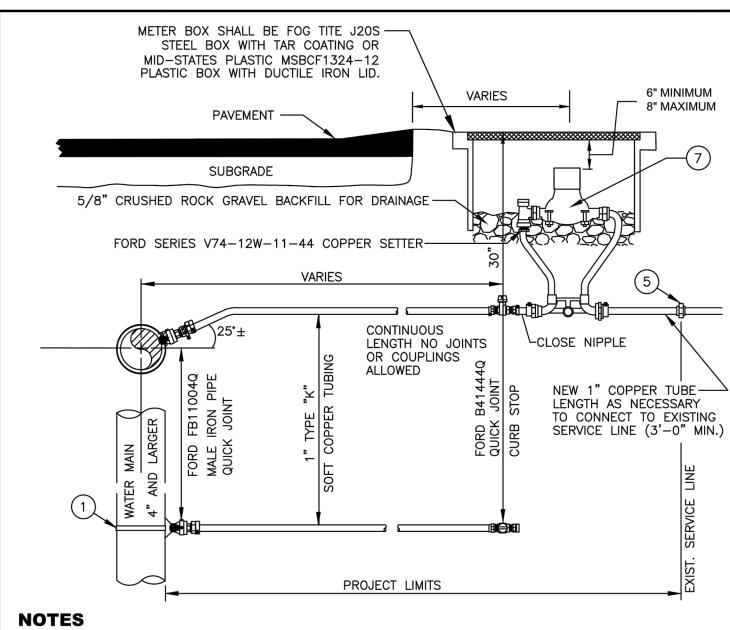
MICHAEL H. XUE, PE, CESCL PANGEO, INC. (206) 262-0374 (0) (206) 491-0081 (C)

CITY OF MERCER ISLAND DEVELOPMENT SERVICES GROUP

OUTFALL 10' UPSTREAM OF EXISTING— SEAWALL. IE=20.0

NOTE: CONSTRUCT GROUTED 3' X 8' ROCK SPLASH PAD AT END OF PIPE FOR ENERGY DISSIPATION.

JOB No.

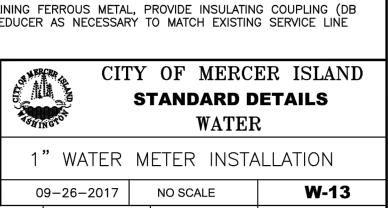


1. WATER SERVICES SHALL COMPLY WITH THE REDUCTION OF LEAD IN DRINKING WATER ACT DATED 01/04/2014. 2. ON EXISTING WATER MAINS USE NYLON COATED D.I. SADDLE WITH STAINLESS STEEL SINGLE STRAP, ROMAC 101NS,

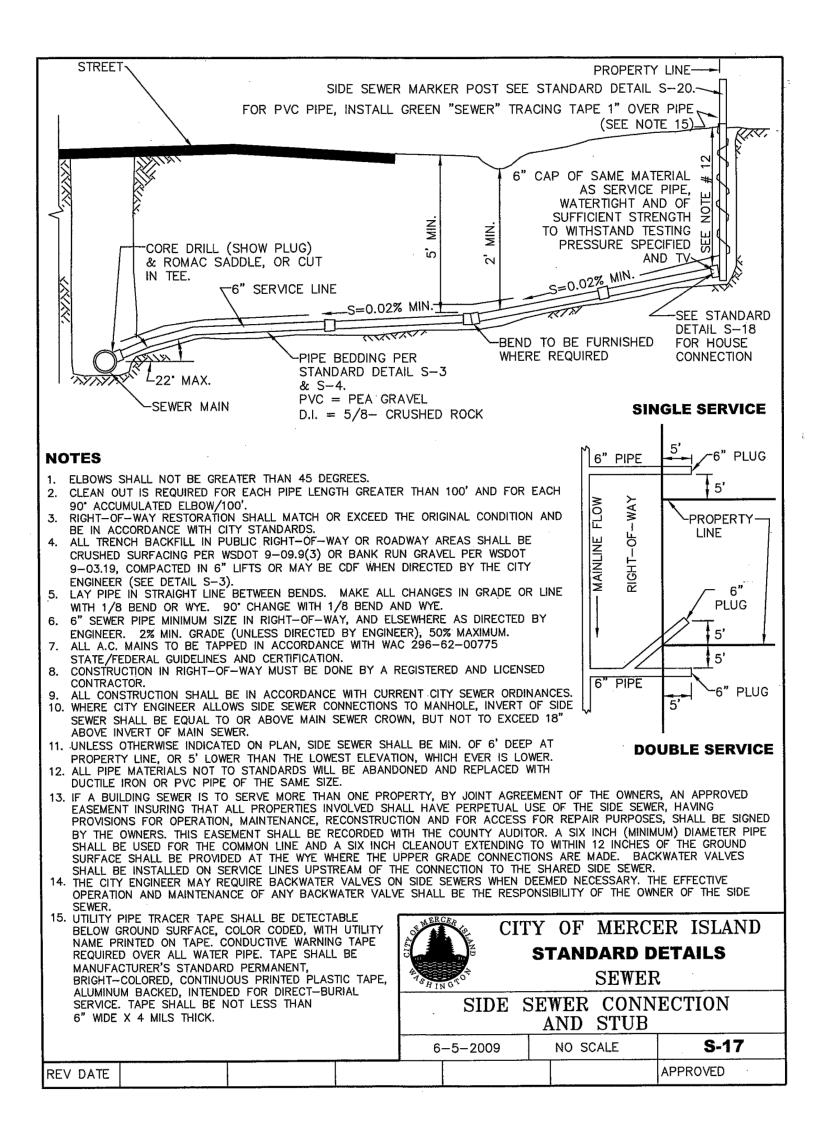
OR APPROVED EQUAL. ON NEW DUCTILE IRON WATER MAIN 6" DIA. OR LARGER, THE SERVICE MAY BE DIRECTLY TAPPED.

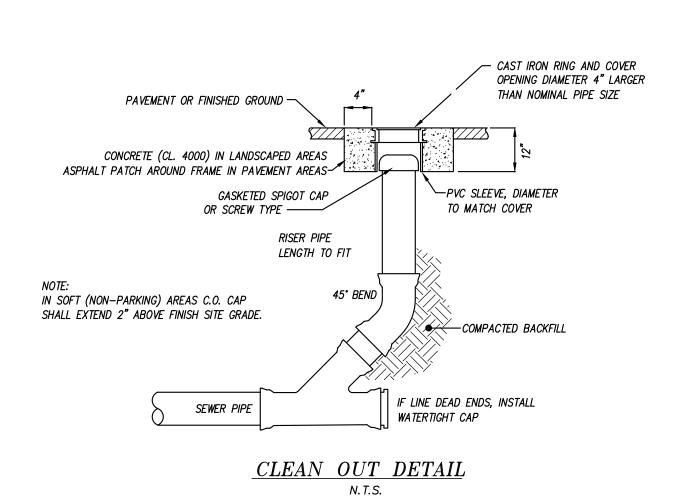
- 3. MINIMUM DISTANCE BETWEEN CORP STOPS SHALL BE 18". MINIMUM DISTANCE BETWEEN TAPS, BETWEEN CORP STOP AND PIPE ENDS SHALL BE 24", ALL HORIZONALLY STAGGERED.
- 4. PLASTIC METER BOXES SHALL NOT BE INSTALLED WITHIN ROADWAY, SIDEWALK, OR DRIVEWAYS.
- 6. WHEN METER BOXES ARE INSTALLED IN PORTLAND CEMENT CONCRETE PAVEMENT OR SIDEWALK, CONTINUOUS FELT EXPANSION MATERIAL SURROUNDING THE PERIMETER OF THE METER BOX SHALL BE PROVIDED.
- . WHEN CONNECTING TO EXISTING SERVICE LINE CONTAINING FERROUS METAL, PROVIDE INSULATING COUPLING (DB SERIES WITH C21 SERIES ADAPTERS) AND PROVIDE REDUCER AS NECESSARY TO MATCH EXISTING SERVICE LINE DIAMETER.
- . SERVICE LINE SHALL BE PERPENDICULAR TO THE WATER MAIN AND STRAIGHT TO WATER METER, UNLESS OTHERWISE APPROVED BY CITY ENGINEER. PROVIDE WINDING SLACK IN THE SERVICE LINE BETWEEN THE MAIN AND WATER METER.
- 8. WATER METER SUPPLIED BY CITY.
- 9. ALL FITTINGS TO BE BRASS COMPRESSION TYPE.

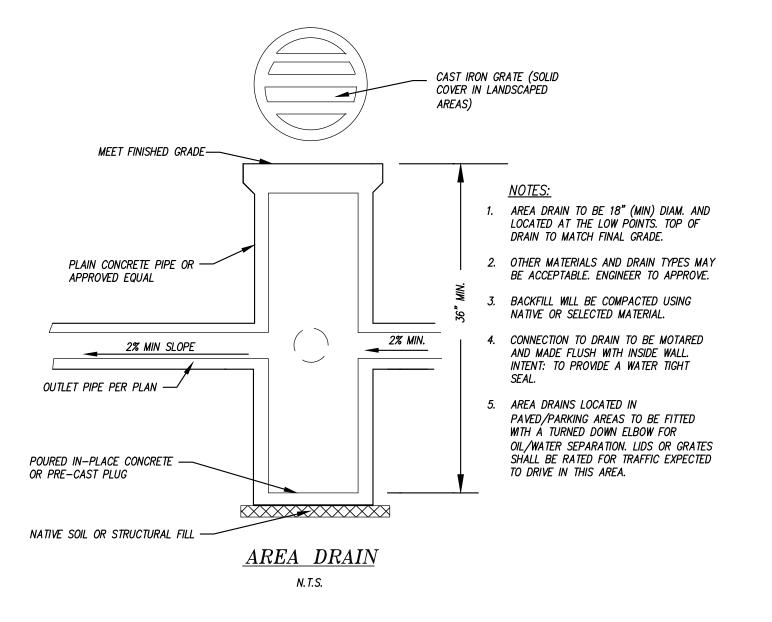
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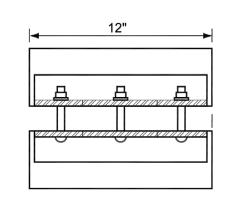




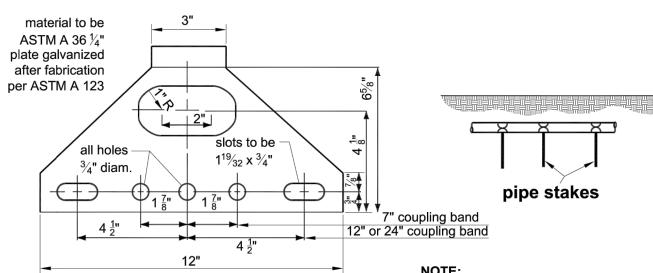


SECTION 4.2 PIPES, OUTFALLS, AND PUMPS

#### FIGURE 4.2.1.C CORRUGATED METAL PIPE COUPLING AND/OR GENERAL PIPE ANCHOR ASSEMBLY



**Smooth Coupling Band** for Smooth Pipe



1. The smooth coupling band shall be used in Plate Detail 2. Concrete pipe without ball and spigot shall coupling band collar (2" pipe) material to be ASTM A 36 galvanized after 1 ⅓" x 6' pipe stakes긔 fabrication per ASTM each side of culvert A 153 flatten to point

**Anchor Assembly** 

Corrugated Metal Pipe

3. The first anchor shall be installed on the first section of the lower end of the pipe and remaining anchors evenly spaced throughout the installation. 4. If the pipe being installed has a manhole or

combination with concrete pipe.

not be installed on grades in excess of 20%.

catch basin on the lower end of the pipe, the first pipe anchor may be eliminated. 5. When CMP is used, the anchors may be attached to the coupling bands used to join the pipe as long as the specified spacing is not exceeded.

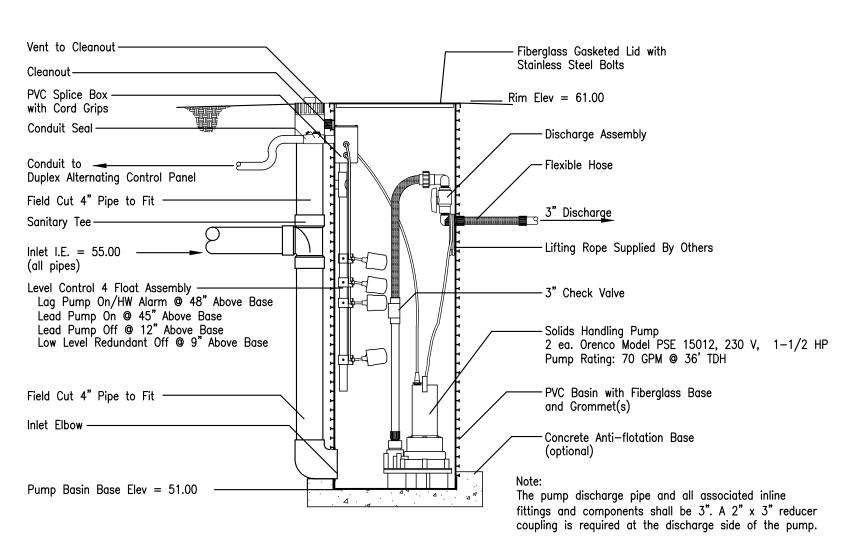
6. All pipe anchors shall be securely installed before backfilling around the pipe.

PUMP SYSTEM SPECIFICATIONS

1. PUMP BASIN, CONTROL PANEL, PUMPS, AND ALL ASSOCIATED COMPONENTS SHALL BE BY ORENCO SYSTEMS, INC. TECHNICAL AND/OR INSTALLATION SUPPORT PHONE NUMBER: TRISTIAN BOUNDS 800-348-9843, EXT 236. ORDER FROM HD FOWLER: KEVIN GABRIEL 425-746-8400.

2. PUMP BASIN TO BE 30" DIAMETER WITH LID MOUNTED WITH STAINLESS STEEL SCREWS.

3. PUMPS TO BE SINGLE PHASE, 230 VOLT, MODEL PSE 15012; CONTROL PANEL TO BE MODEL DAX 2 ETMCT WITH ELAPSED TIME METER AND PUMP COUNTER; FLOAT SWITCHES TO BE MF4A-YP,B,R,W (4 FLOATS REQ'D)



30" PUMP BASIN DETAIL

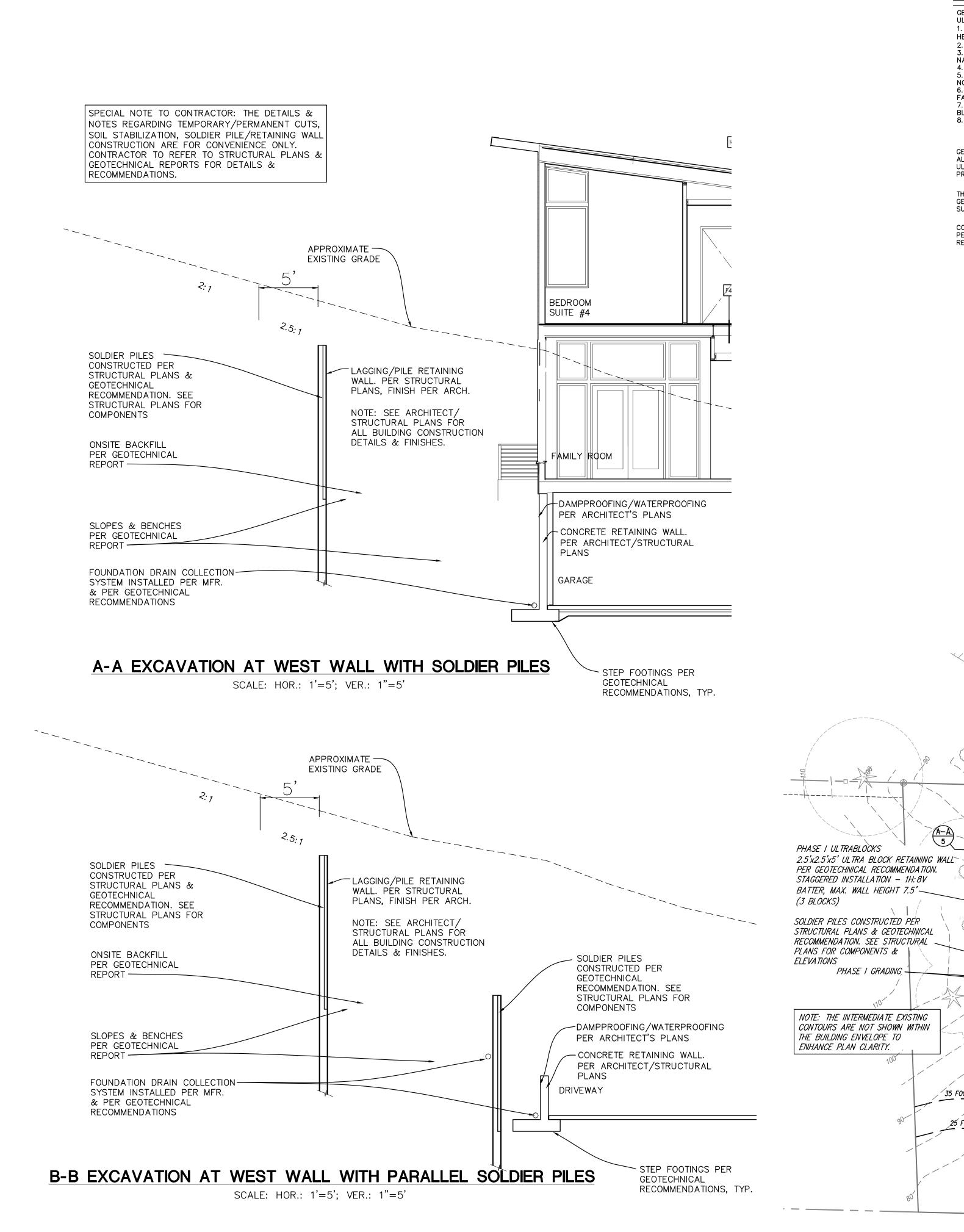
APPROVED: CITY OF MERCER ISLAND DEVELOPMENT SERVICES GROUP Date

NOTES	SUBMITTED TO CLIENT	REVISED PE CITY COMMENTS	ADD EXCAVATION PLAN: SHEET 5	REVISED SITE PLAN	
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**4** of **6** 



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UTILITIES UNDERGROUND LOCATION CENTER

#### SPECIAL GEOTECHNICAL ULTRABLOCK NOTES

GEOTECHNICAL RECOMMENDATIONS FOR TEMPORARY EXCAVATIONS AND SHORING USING 1. THE MAXIMUM WALL HEIGHT OF STAGGERED BLOCKS IS 71/2 FEET (I.E., 3 BLOCKS IN 2. THE VERTICAL WALL FACE IS NO STEEPER THAN 1H (HORIZONTAL): 8V (VERTICAL);
3. THE SUBGRADE AT THE BASE OF THE ULTRABLOCK BLOCKS SHALL CONSIST OF DENSE NATIVE SOIL OR LEVELING CRUSHED ROCK PLACED ON DENSE SOIL; 4. NO EXCAVATION SHALL BE MADE UNTIL BLOCKS ARE AVAILABLE ON SITE; 5. THE WIDTH OF UNSUPPORTED CUT FACE FOR BLOCK PLACEMENT SHALL BE LIMITED TO NO MORE THAN ABOUT 10 FEET AT ANY GIVEN TIME; 6. BLOCKS SHALL BE PLACED IMMEDIATELY AFTER THE CUT IS MADE, OTHERWISE THE CUT FACE SHALL BE BUTTRESSED WITH ON-SITE SOILS UNTIL THE BLOCKS CAN BE PLACED: 7. ANY VOIDS BEHIND BLOCKS SHALL BE BACKFILLED WITH GRAVEL IMMEDIATELY AFTER THE BLOCK WALL ARE INSTALLED: AND 8. PANGEO SHALL PROVIDE FULL TIME OBSERVATION DURING BLOCK WALL INSTALLATION.

GEOTECHNICAL ENGINEER TO REVIEW THESE PLANS AND COORDINATE WITH CONTRACTOR ON ALL EXCAVATION, FOUNDATION DRAINAGE, RETAINING WALLS, SHEET PILING, SHORING, ULTRABLOCK, BACKFILLING AND OTHER EARTHWORK NECESSARY TO CONSTRUCT THIS

THIS PROJECT REQUIRES STAGED FOUNDATION CONSTRUCTION. CONTRACTOR TO WORK WITH GEOTECHNICAL ENGINEER TO DETERMINE THE APPROPRIATE LIMITS AND PROCESSES FOR SUCCESSIVE STAGES OF THE CONSTRUCTION.

— TW=73.0 \_**B**W=68.0

*∟TW=75.5* 

*BW=70.5/* **A** 

GAR FF 72,5

MAIN LEVEL FF: 82.65 LOWER LEVEL FF: 72.5

*BW=68.0* 

25 FOOT STREAM BUFFER

PHASE I GRADING

CONTRACTOR TO COORDINATE WITH ARCHITECT & STRUCTURAL ENGINEER ON ALL PENETRATIONS THROUGH RETAINING WALLS, PROVIDING SLEEVES WHERE SHOWN OR



NOTES	PER STRUCTURAL REVISION	PER ARCH/STRUCT/GEOTECH	ADD EXCAVATION PLAN: SHEET 5	PER CITY COMMENTS	UPDATED PER STREAM BUFFER	PER CITY COMMENTS
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APORARY EXCAVATION F BARCELLO HOMES S.F.R. 4634 EAST MERCER WAY

SHEET **5** of **6** 

APPROVED:

CITY OF MERCER ISLAND DEVELOPMENT SERVICES GROUP Date

**GRAPHIC SCALE** 

SCALE: 1" = 20'

PROJECT CESCL

(206) 262-0374 (0)

(206) 491–0081 (C)

MICHAEL H. XUE, PE, CESCL PANGEO, INC.

. LOT B PROJECT SITE \_APPROX. PROFILE AT STORM DRAIN . NOTE: HDPE STORM DRAINAGE OUTFALL PIPE TO BE ALIGNED TO AVOID EXISTING TREES AND ROOT SYSTEMS. PIPE INSTALLATION TO BE A COMBINATION OF AT-GRADE AND BELOW GRADE PLACEMENT PENDING PROXIMITY OF EX. TREES. WHEN PIPE IS PLACED AT GRADE CONTRACTOR TO INSTALL PIPE ANCHORS AT 40' O.C. PER DETAIL SHEET 4 (ANCHORS DEPICTED .ALONG COMPLETE PIPE .ALIGNMENT BUT. ARE ONLY . REQUIRED WHEN PIPE IS LAID AT GRADE). LSEE PLAN FOR CONTINUATION OF STORM DRAIN PLACED ON GROUND SURFACE WITHIN CREEK
BUFFER. NO TRENCHING,
COMPACTION OR MECHANICAL EQUIPMENT WITHIN CREEK BUFFER └6" HDPE STORM OUTFALL PIPE AT S=0.5% MIN. LOT C EXISTING SEAWALL. IE=20.0 NOTE: CONSTRUCT GROUTED LAKE WASHINGTON ROCK SPLASH PAD AT END OF PIPE FOR ENERGY DISSIPATION. SANITARY SEWER DEPTH, SIZE & LOCATION NOT SURVEYED. CONTRACTOR TO EXERCISE CAUTION 718.0 OUTFALL DURING CONSTRUCTION. NOTIFY DESIGN ENGINEER! IF CONFLICT WITH PROPOSED STORM DRAIN ----APPROX. LOC. EX. SANITARY SEWER 

	DWN BY	снкр ву	DATE	NOTES
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5) 821–5739				
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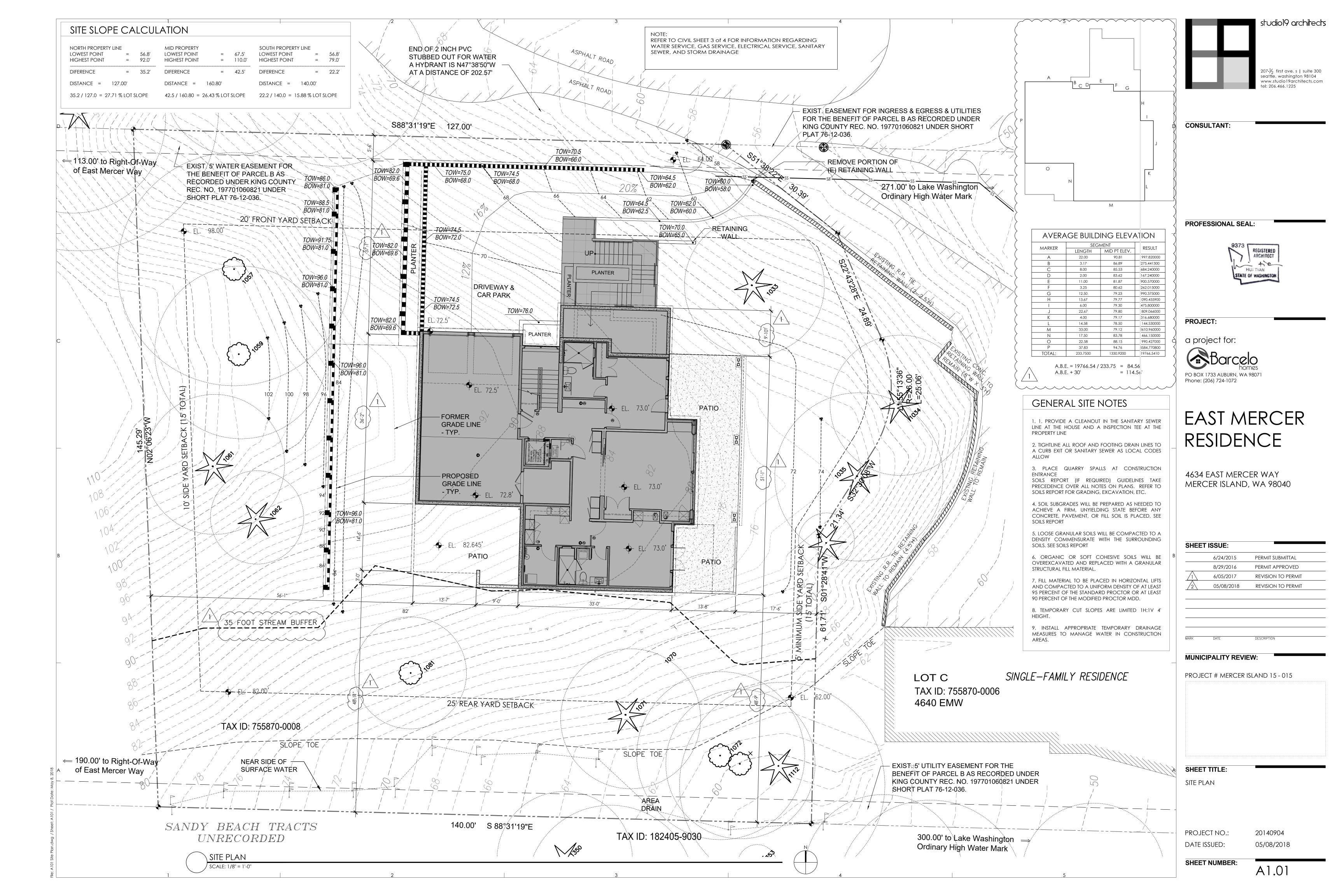
,	LITCHFIELD	ENGIN
.۲_	12840 81ST Kirkland	12840 81ST AVENUE 1 Kirkland, WA 98034
. 7	Tel (425) 821-5038	Fax (425)

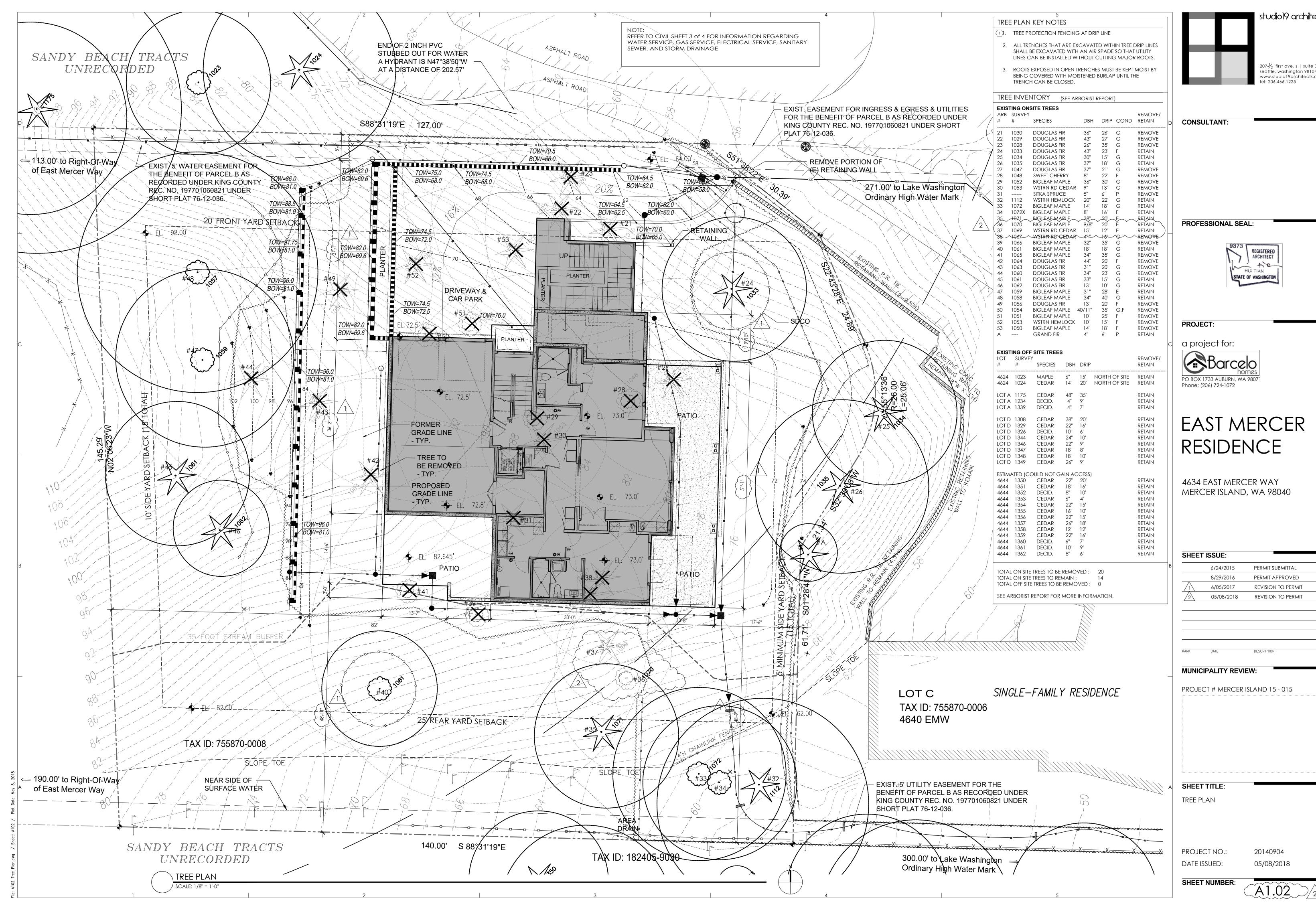
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**6** of **6** 

APPROVED:

CITY OF MERCER ISLAND DEVELOPMENT SERVICES GROUP Date

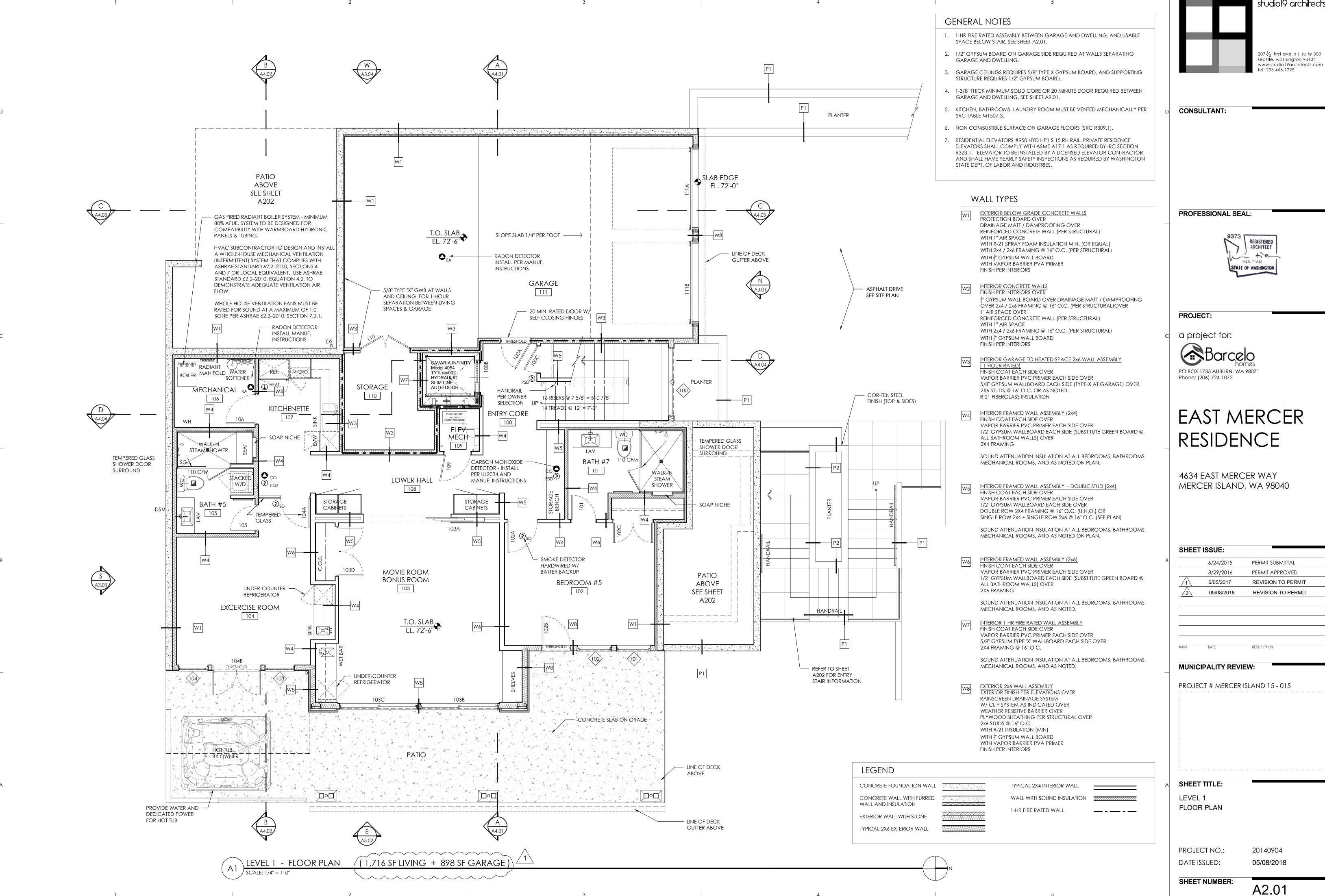




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SHEET	ISSUE:		
	6/24/2015	PERMIT SUBMITTAL	
	8/29/2016	PERMIT APPROVED	
1	6/05/2017	REVISION TO PERMIT	
2	05/08/2018	revision to permit	



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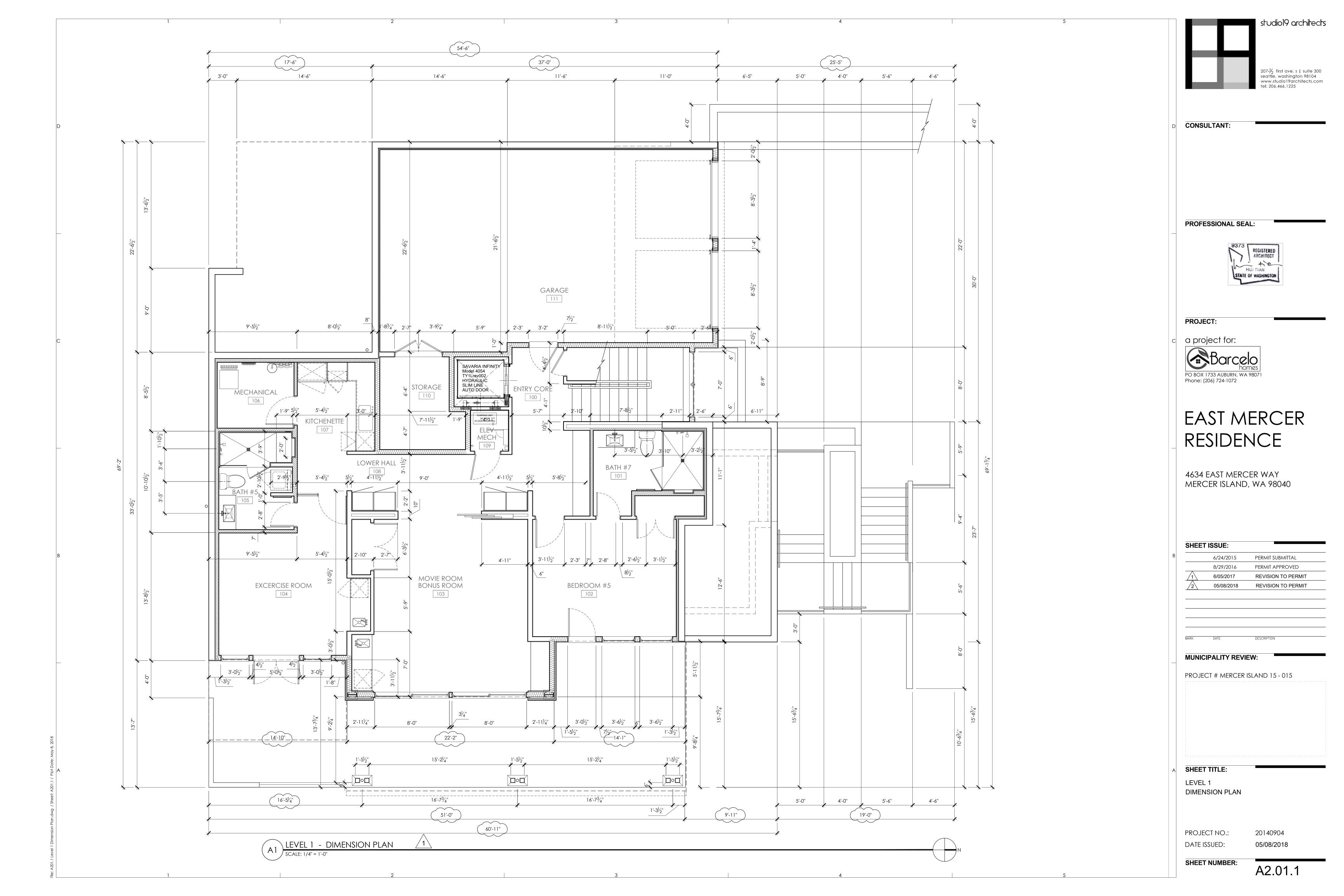
# EAST MERCER RESIDENCE

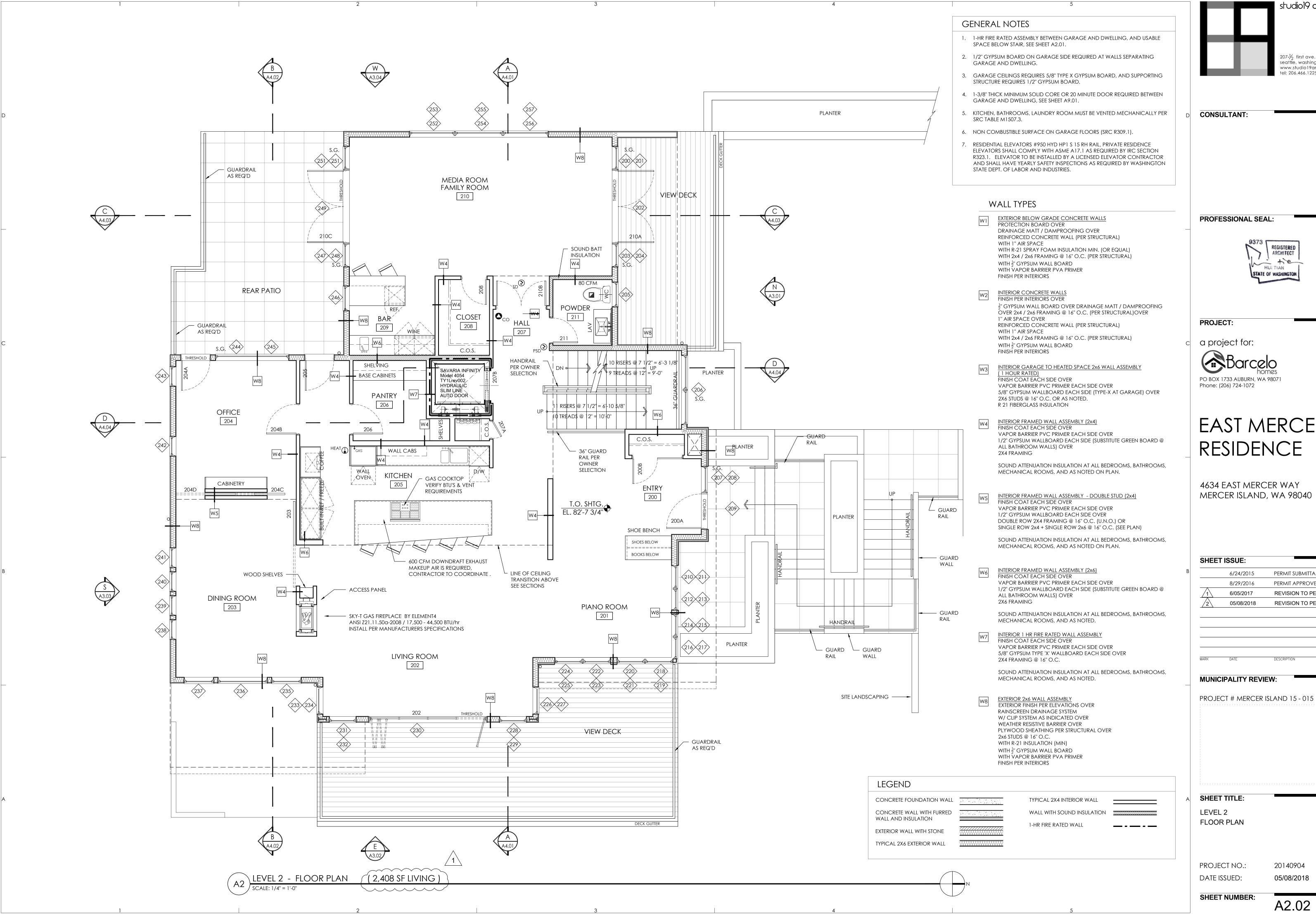
4634 EAST MERCER WAY

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	8/29/2016	PERMIT APPROVED
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A2.01





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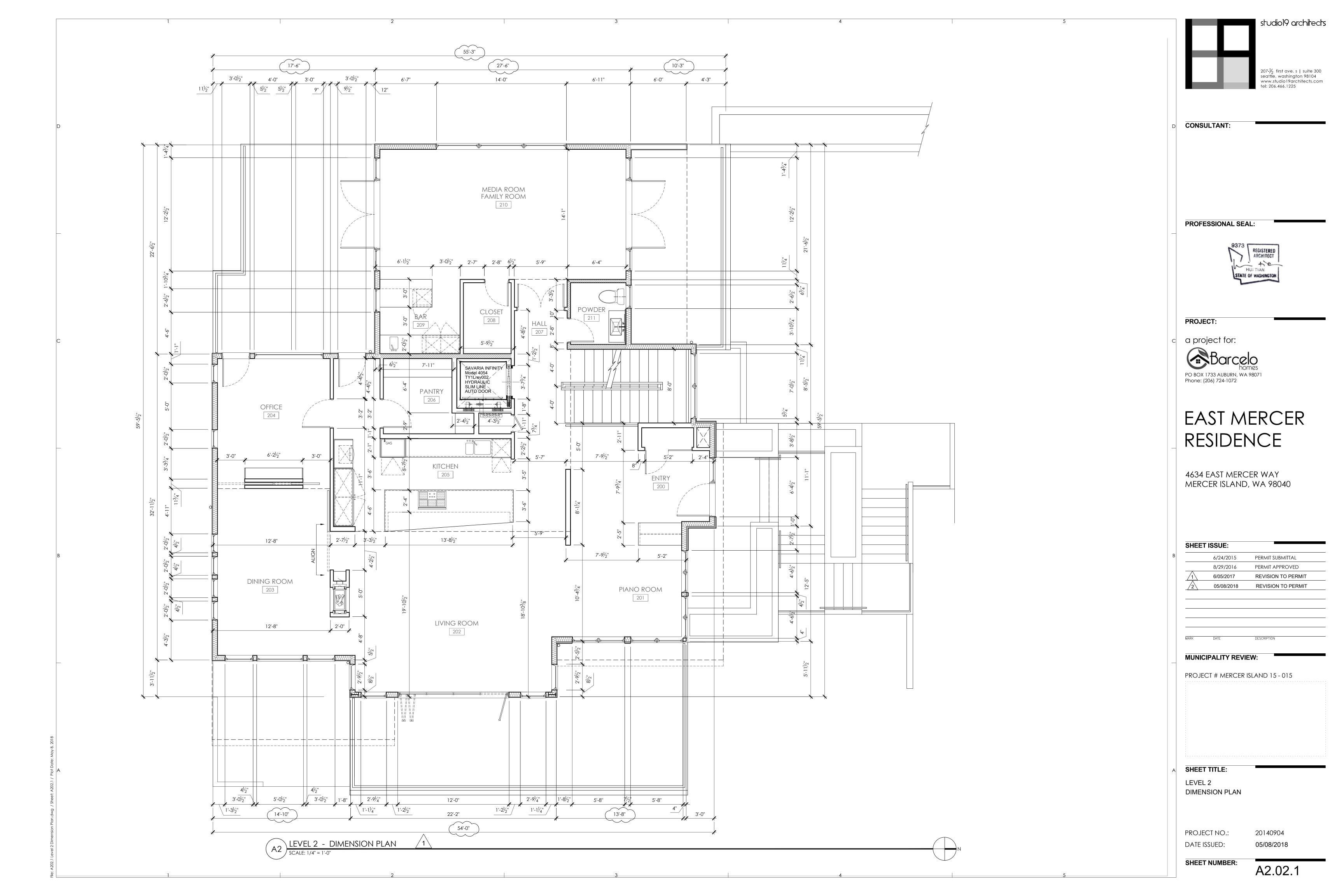


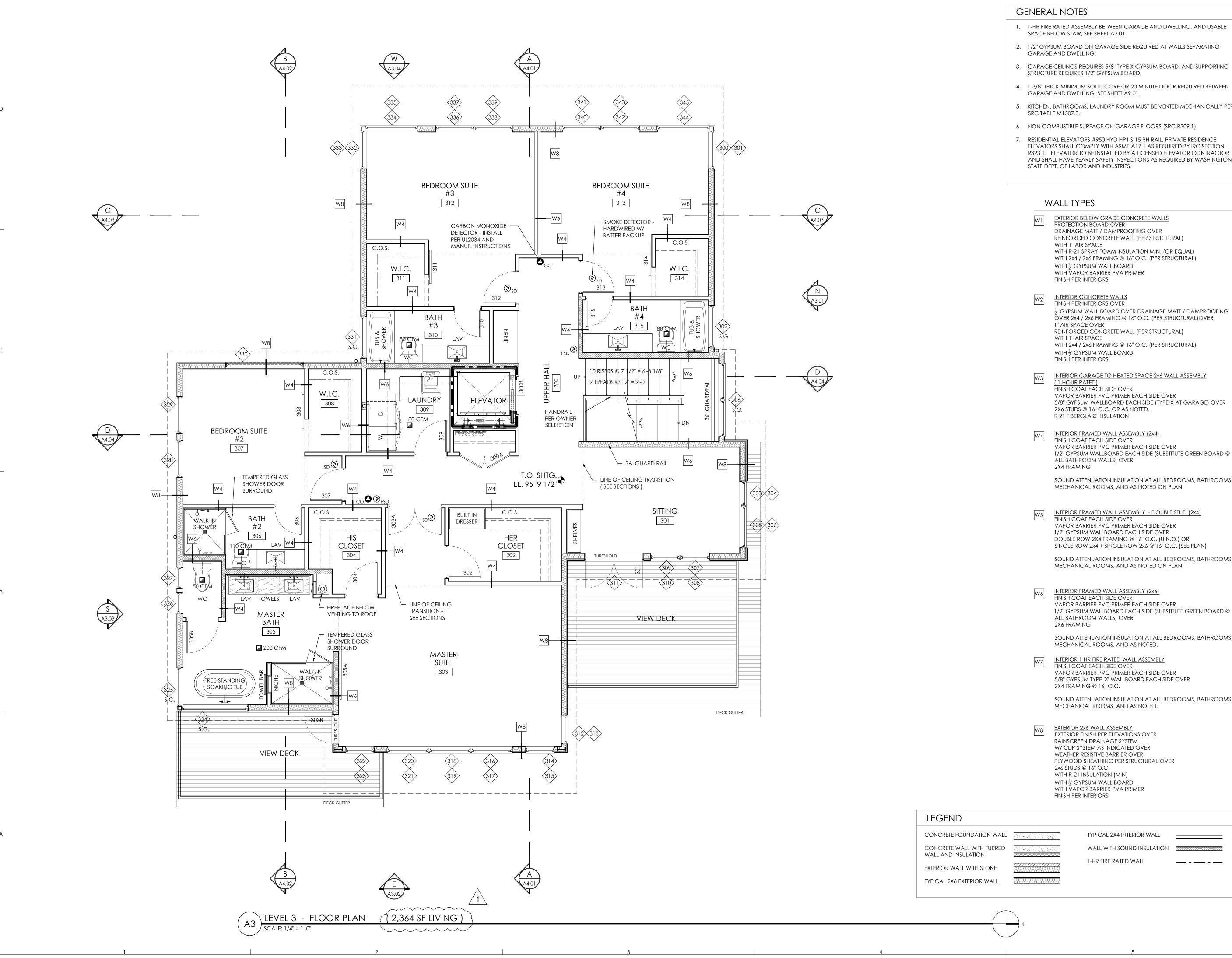
# EAST MERCER RESIDENCE

4634 EAST MERCER WAY

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1	6/05/2017	REVISION TO PERMIT
2	05/08/2018	REVISION TO PERMIT

A2.02





#### GENERAL NOTES

- 1. 1-HR FIRE RATED ASSEMBLY BETWEEN GARAGE AND DWELLING, AND USABLE SPACE BELOW STAIR, SEE SHEET A2.01.
- 2. 1/2" GYPSUM BOARD ON GARAGE SIDE REQUIRED AT WALLS SEPARATING GARAGE AND DWELLING.
- STRUCTURE REQUIRES 1/2" GYPSUM BOARD.
- 4. 1-3/8" THICK MINIMUM SOLID CORE OR 20 MINUTE DOOR REQUIRED BETWEEN GARAGE AND DWELLING, SEE SHEET A9.01.
- 5. KITCHEN, BATHROOMS, LAUNDRY ROOM MUST BE VENTED MECHANICALLY PER SRC TABLE M1507.3.
- 6. NON COMBUSTIBLE SURFACE ON GARAGE FLOORS (SRC R309.1).
- RESIDENTIAL ELEVATORS #950 HYD HP1 S 15 RH RAIL, PRIVATE RESIDENCE ELEVATORS SHALL COMPLY WITH ASME A17.1 AS REQUIRED BY IRC SECTION R323.1. ELEVATOR TO BE INSTALLED BY A LICENSED ELEVATOR CONTRACTOR AND SHALL HAVE YEARLY SAFETY INSPECTIONS AS REQUIRED BY WASHINGTON STATE DEPT. OF LABOR AND INDUSTRIES.

#### **WALL TYPES**

- EXTERIOR BELOW GRADE CONCRETE WALLS PROTECTION BOARD OVER DRAINAGE MATT / DAMPROOFING OVER REINFORCED CONCRETE WALL (PER STRUCTURAL) WITH 1" AIR SPACE WITH R-21 SPRAY FOAM INSULATION MIN. (OR EQUAL) WITH 2x4 / 2x6 FRAMING @ 16" O.C. (PER STRUCTURAL) WITH 1" GYPSUM WALL BOARD WITH VAPOR BARRIER PVA PRIMER FINISH PER INTERIORS
- FINISH PER INTERIORS OVER 1" GYPSUM WALL BOARD OVER DRAINAGE MATT / DAMPROOFING OVER 2x4 / 2x6 FRAMING @ 16" O.C. (PER STRUCTURAL)OVER 1" AIR SPACE OVER REINFORCED CONCRETE WALL (PER STRUCTURAL) WITH 1" AIR SPACE WITH 2x4 / 2x6 FRAMING @ 16" O.C. (PER STRUCTURAL) WITH  $\frac{1}{2}$ " GYPSUM WALL BOARD FINISH PER INTERIORS
- INTERIOR GARAGE TO HEATED SPACE 2x6 WALL ASSEMBLY 1 HOUR RATED) FINISH COAT EACH SIDE OVER VAPOR BARRIER PVC PRIMER EACH SIDE OVER 5/8" GYPSUM WALLBOARD EACH SIDE (TYPE-X AT GARAGE) OVER 2X6 STUDS @ 16" O.C. OR AS NOTED. R 21 FIBERGLASS INSULATION
- INTERIOR FRAMED WALL ASSEMBLY (2x4) FINISH COAT EACH SIDE OVER VAPOR BARRIER PVC PRIMER EACH SIDE OVER 1/2" GYPSUM WALLBOARD EACH SIDE (SUBSTITUTE GREEN BOARD @ ALL BATHROOM WALLS) OVER 2X4 FRAMING
- SOUND ATTENUATION INSULATION AT ALL BEDROOMS, BATHROOMS, MECHANICAL ROOMS, AND AS NOTED ON PLAN.
- INTERIOR FRAMED WALL ASSEMBLY DOUBLE STUD (2x4) FINISH COAT EACH SIDE OVER VAPOR BARRIER PVC PRIMER EACH SIDE OVER 1/2" GYPSUM WALLBOARD EACH SIDE OVER DOUBLE ROW 2X4 FRAMING @ 16" O.C. (U.N.O.) OR SINGLE ROW 2x4 + SINGLE ROW 2x6 @ 16" O.C. (SEE PLAN)
  - SOUND ATTENUATION INSULATION AT ALL BEDROOMS, BATHROOMS, MECHANICAL ROOMS, AND AS NOTED ON PLAN.
- INTERIOR FRAMED WALL ASSEMBLY (2x6) FINISH COAT EACH SIDE OVER VAPOR BARRIER PVC PRIMER EACH SIDE OVER 1/2" GYPSUM WALLBOARD EACH SIDE (SUBSTITUTE GREEN BOARD @ ALL BATHROOM WALLS) OVER 2X6 FRAMING
- SOUND ATTENUATION INSULATION AT ALL BEDROOMS, BATHROOMS, MECHANICAL ROOMS, AND AS NOTED.
- INTERIOR 1 HR FIRE RATED WALL ASSEMBLY FINISH COAT EACH SIDE OVER VAPOR BARRIER PVC PRIMER EACH SIDE OVER 5/8" GYPSUM TYPE 'X' WALLBOARD EACH SIDE OVER 2X4 FRAMING @ 16" O.C.
  - SOUND ATTENUATION INSULATION AT ALL BEDROOMS, BATHROOMS, MECHANICAL ROOMS, AND AS NOTED.
- EXTERIOR 2x6 WALL ASSEMBLY EXTERIOR FINISH PER ELEVATIONS OVER RAINSCREEN DRAINAGE SYSTEM W/ CLIP SYSTEM AS INDICATED OVER WEATHER RESISTIVE BARRIER OVER PLYWOOD SHEATHING PER STRUCTURAL OVER 2x6 STUDS @ 16" O.C. WITH R-21 INSULATION (MIN) WITH ½" GYPSUM WALL BOARD WITH VAPOR BARRIER PVA PRIMER FINISH PER INTERIORS

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TYPICAL 2X4 INTERIOR WALL WALL WITH SOUND INSULATION 1-HR FIRE RATED WALL

PROJECT NO.: DATE ISSUED:

SHEET TITLE:

FLOOR PLAN

LEVEL 3

**SHEET NUMBER:** 

A2.03

20140904

05/08/2018

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PROFESSIONAL SEAL:

CONSULTANT:



PROJECT:

a project for:



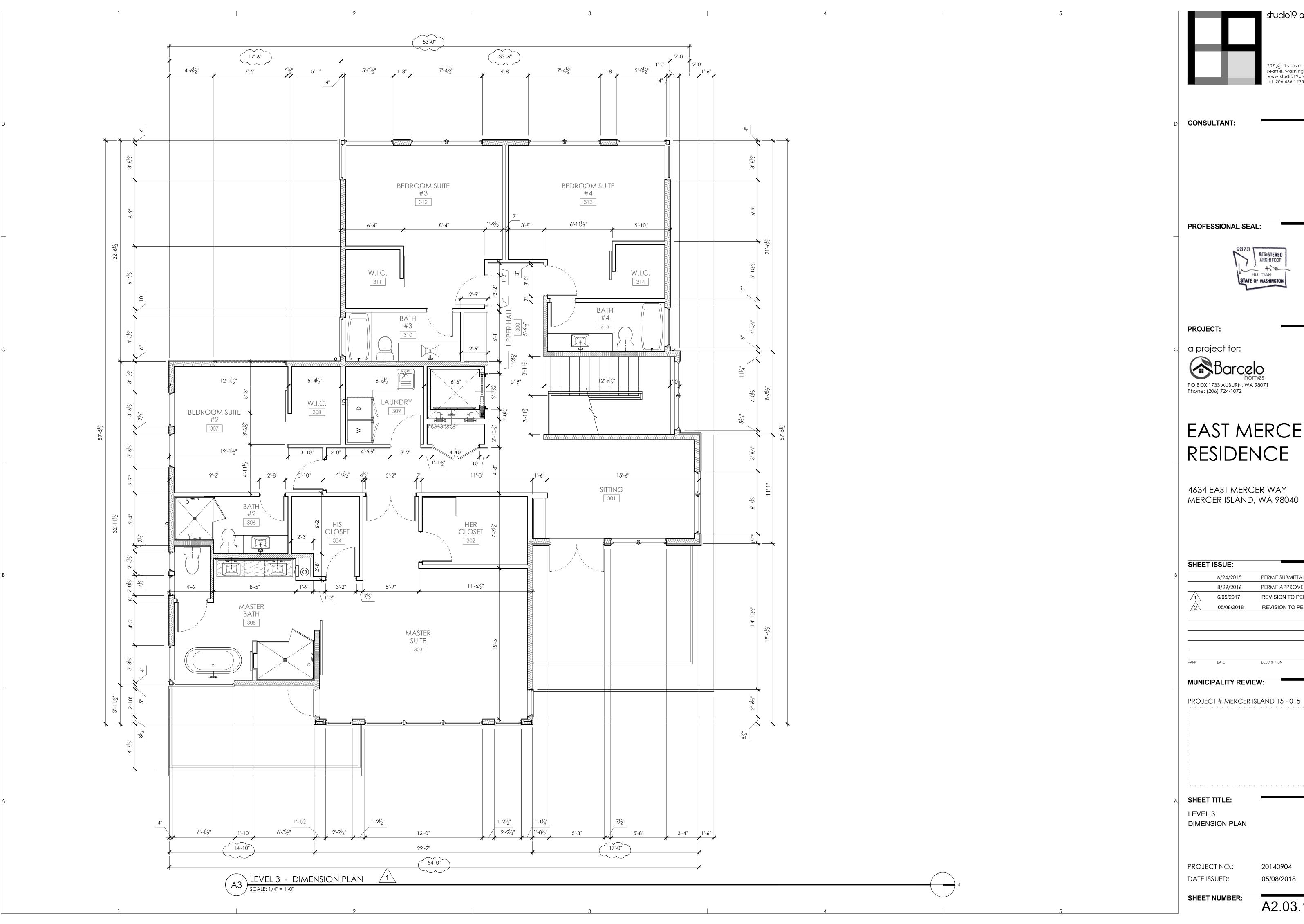
# EAST MERCER RESIDENCE

4634 EAST MERCER WAY MERCER ISLAND, WA 98040

	6/24/2015	PERMIT SUBMITTAL
	8/29/2016	PERMIT APPROVED
1	6/05/2017	REVISION TO PERMIT
2	05/08/2018	REVISION TO PERMIT

MUNICIPALITY REVIEW:

PROJECT # MERCER ISLAND 15 - 015



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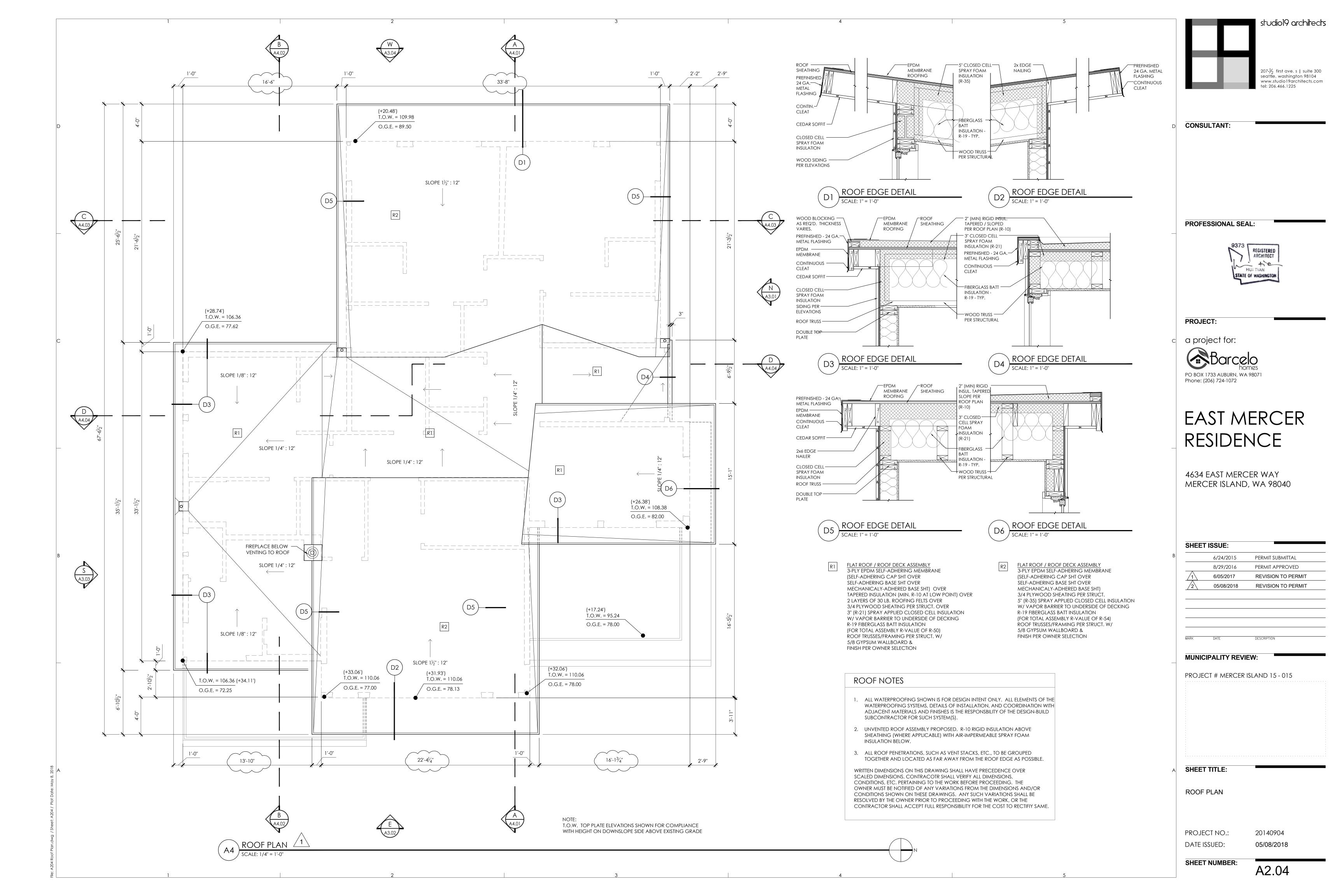
# EAST MERCER

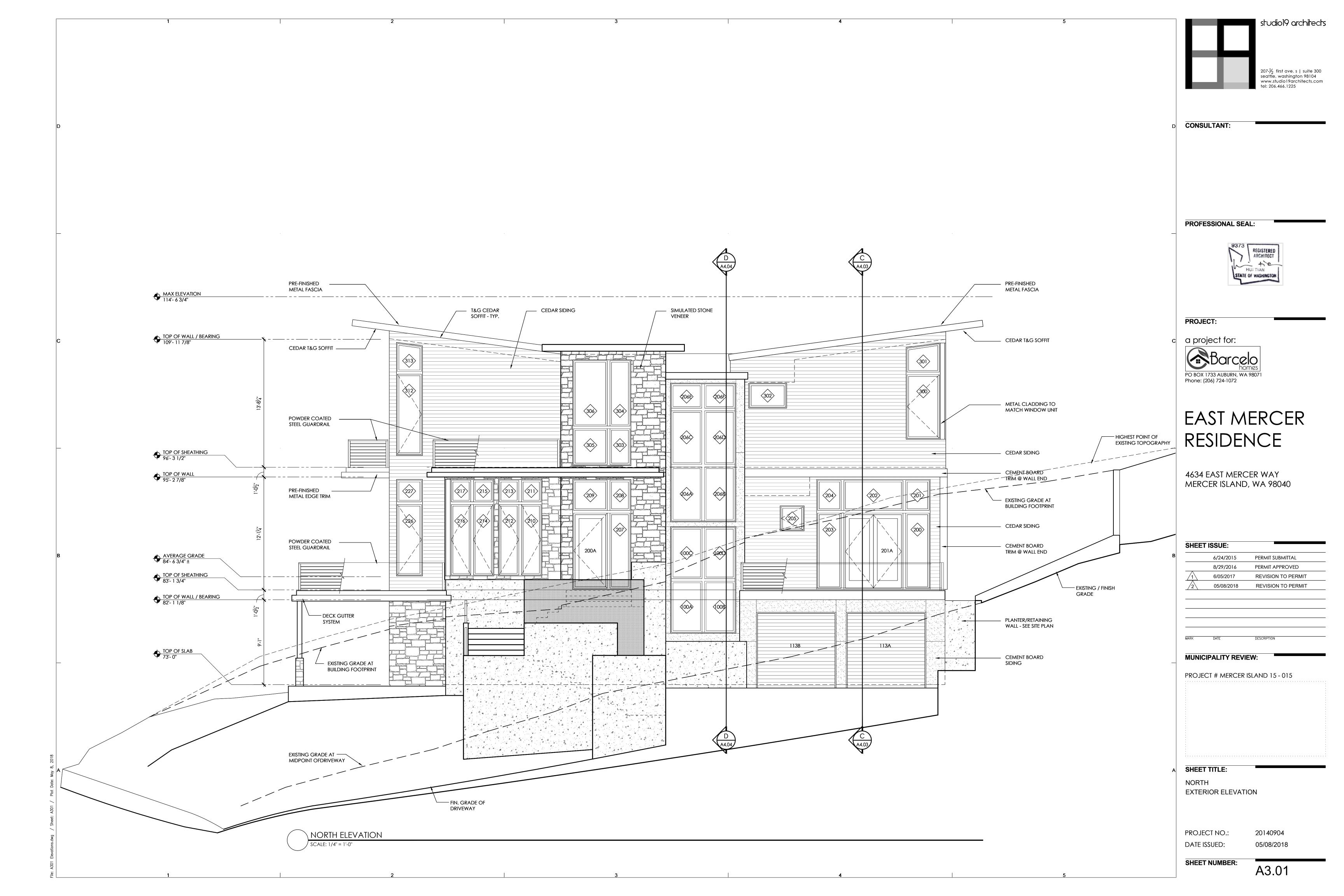
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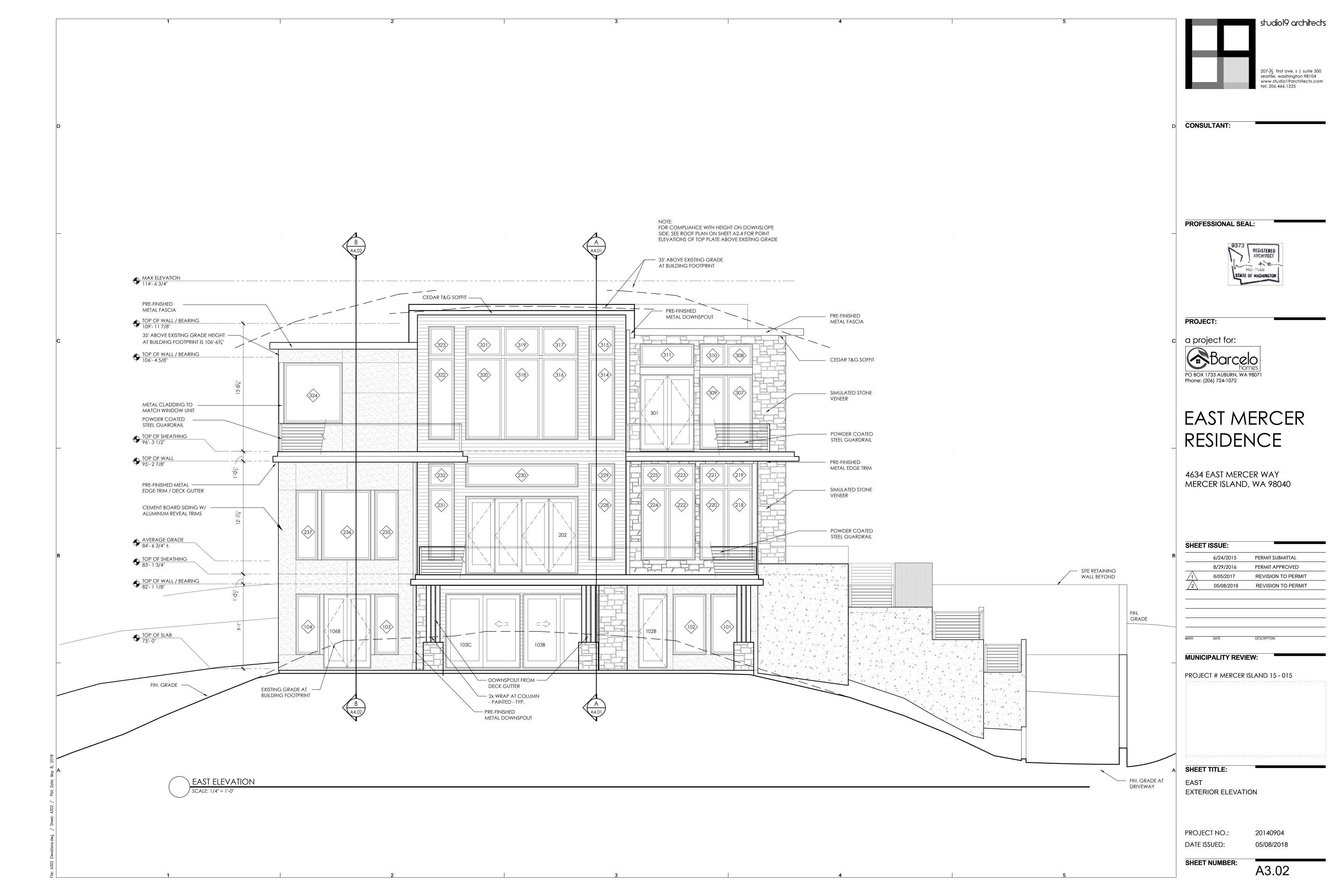
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/1	6/05/2017	REVISION TO PERMIT
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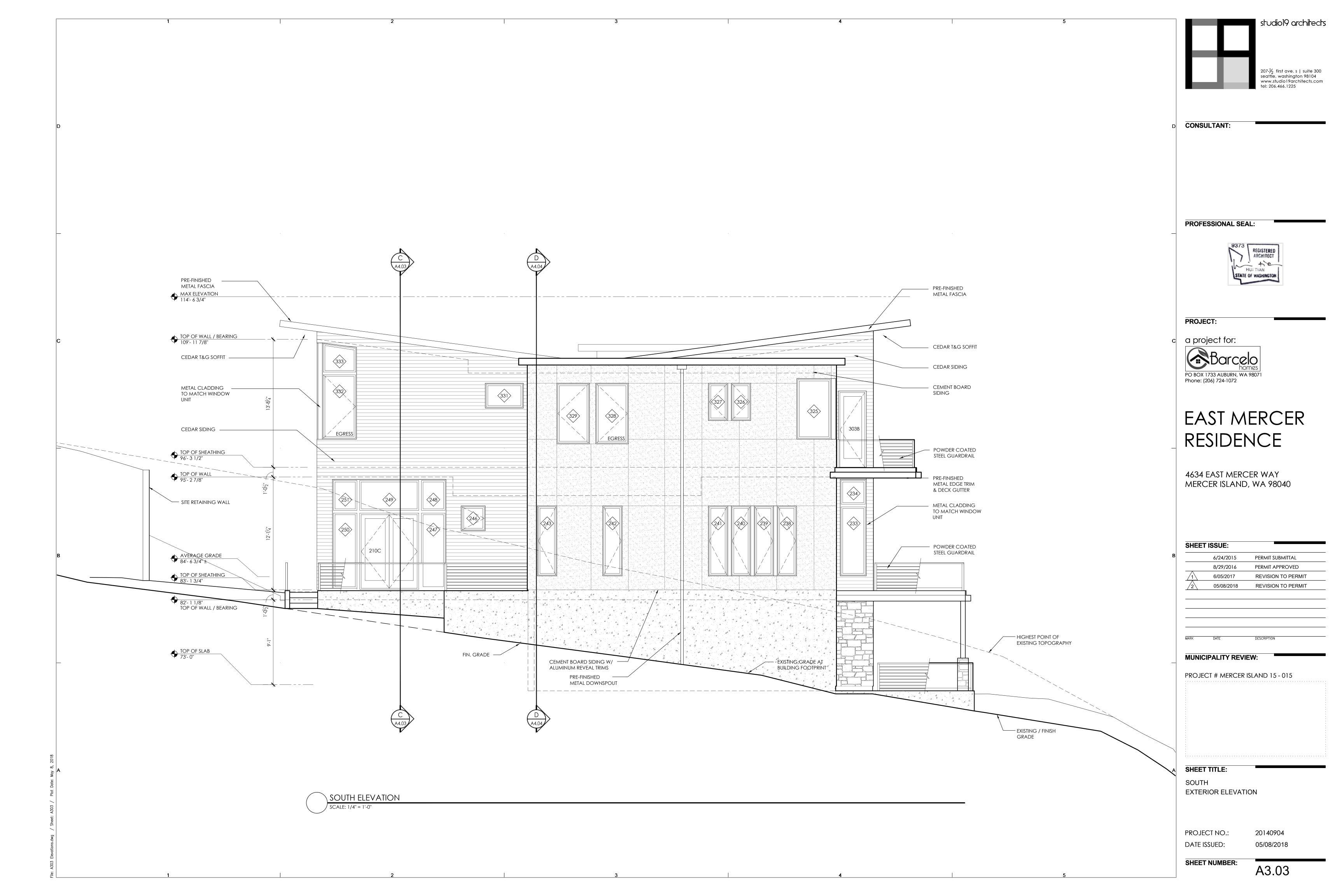
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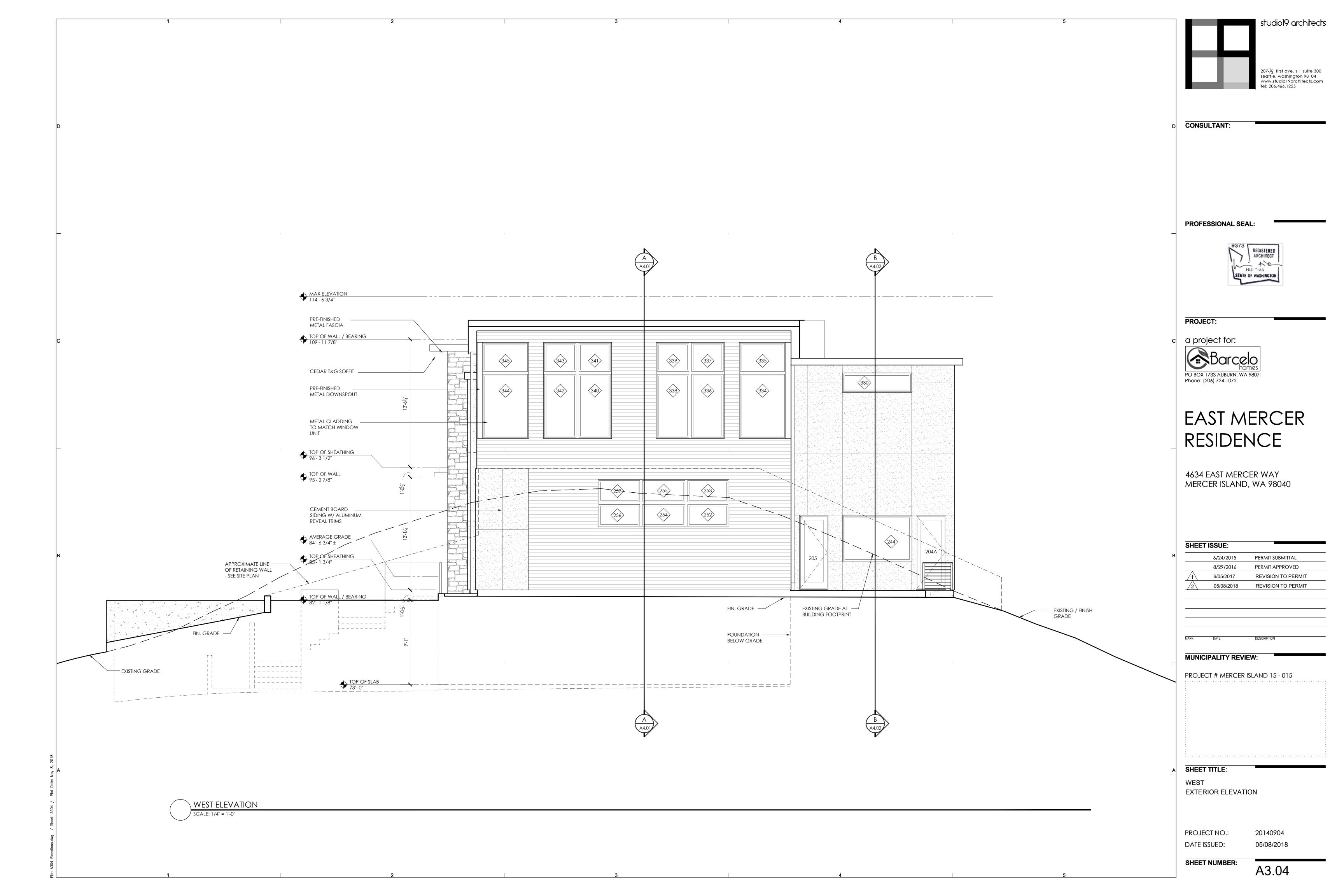
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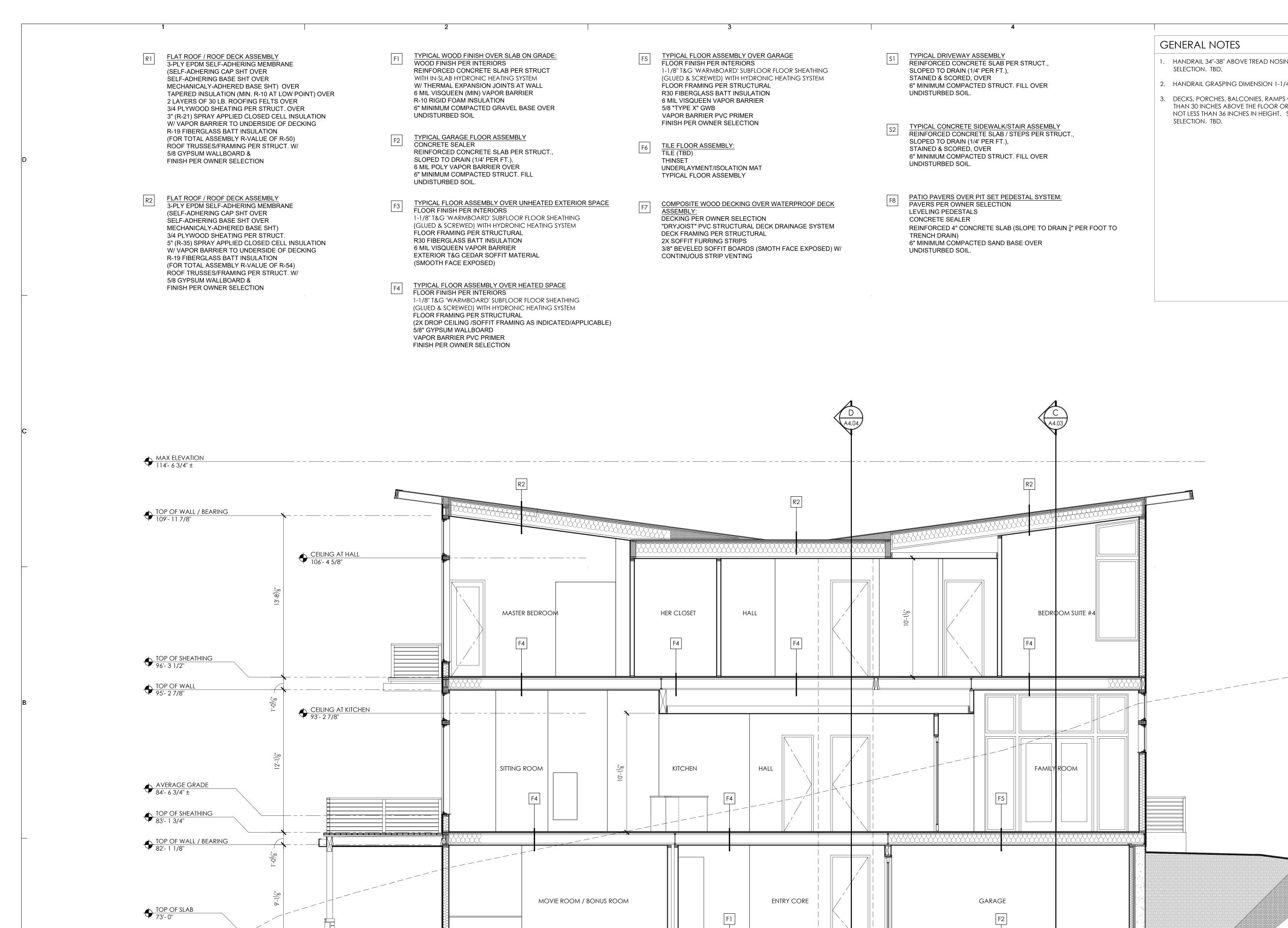












BUILDING SECTION 'A'

- 1. HANDRAIL 34"-38" ABOVE TREAD NOSING. STYLE & CONFIGURATION PER OWNER
- 2. HANDRAIL GRASPING DIMENSION 1-1/4" MINIMUM 2" MAXIMUM.
- DECKS, PORCHES, BALCONIES, RAMPS OR RAISED FLOOR SURFACES LOCATED MORE THAN 30 INCHES ABOVE THE FLOOR OR GROUND BELOW SHALL HAVE GUARDRAILS NOT LESS THAN 36 INCHES IN HEIGHT. STYLE & CONFIGURATION PER OWNER

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**CONSULTANT:** 

PROFESSIONAL SEAL:



PROJECT:

a project for:



# EAST MERCER RESIDENCE

4634 EAST MERCER WAY MERCER ISLAND, WA 98040

	6/24/2015	PERMIT SUBMITTAL
	8/29/2016	PERMIT APPROVED
1	06/05/2017	REVISION TO PERMIT
$\sqrt{2}$	05/08/2018	REVISION TO PERMIT

**MUNICIPALITY REVIEW:** 

PROJECT # MERCER ISLAND 15 - 015

SHEET TITLE:

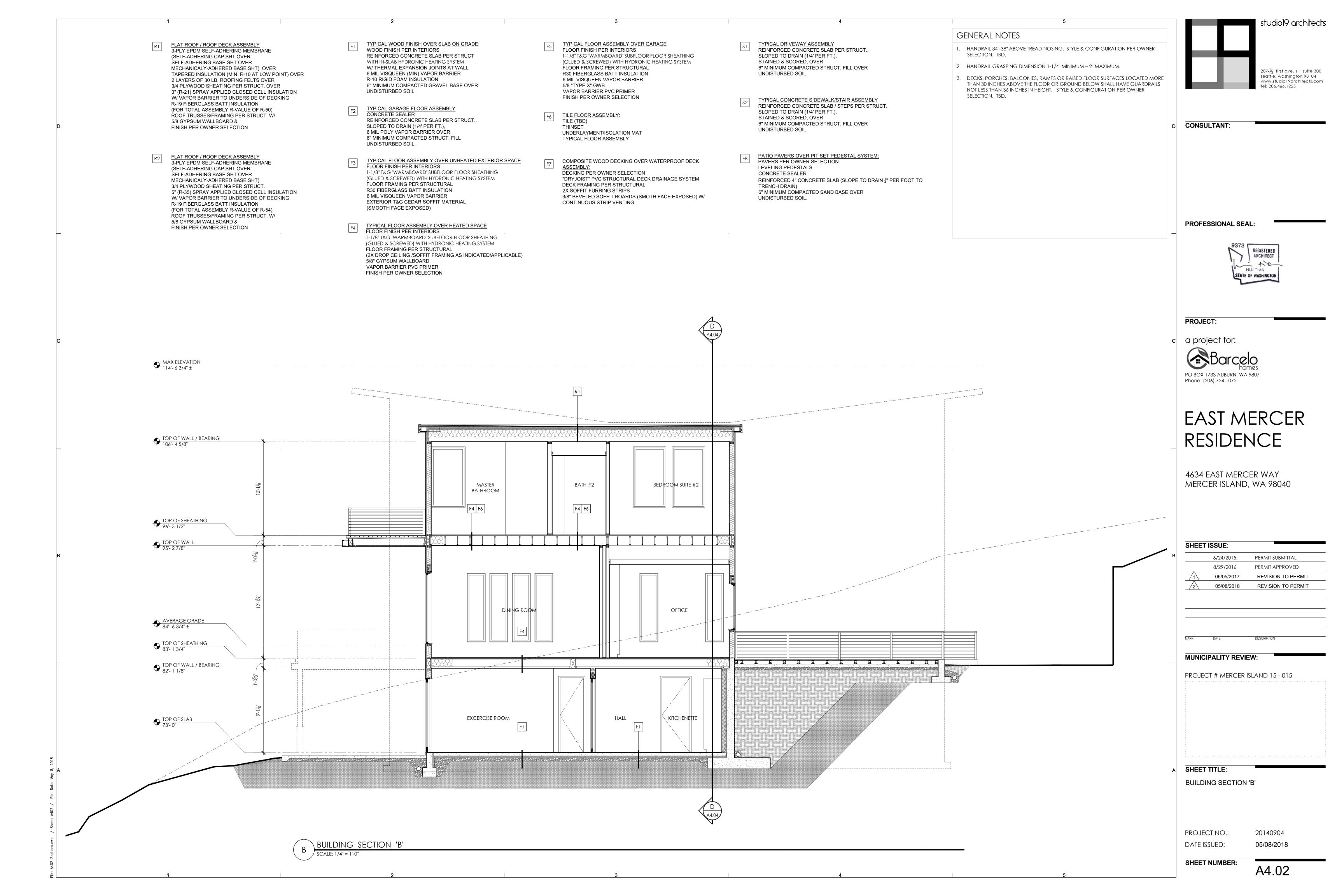
BUILDING SECTION 'A'

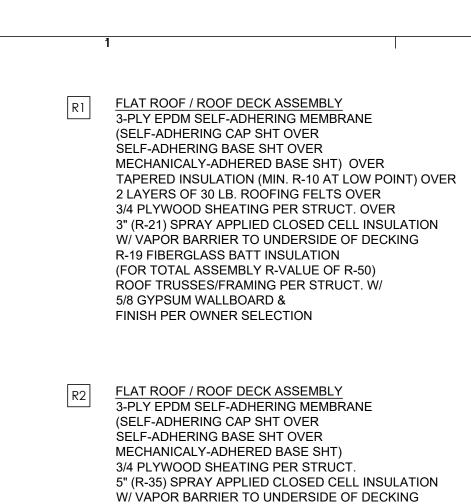
PROJECT NO.: DATE ISSUED:

20140904 05/08/2018

SHEET NUMBER:

A4.01





R-19 FIBERGLASS BATT INSULATION

5/8 GYPSUM WALLBOARD &

FINISH PER OWNER SELECTION

(FOR TOTAL ASSEMBLY R-VALUE OF R-54) ROOF TRUSSES/FRAMING PER STRUCT. W/

- TYPICAL WOOD FINISH OVER SLAB ON GRADE: WOOD FINISH PER INTERIORS REINFORCED CONCRETE SLAB PER STRUCT WITH IN-SLAB HYDRONIC HEATING SYSTEM W/ THERMAL EXPANSION JOINTS AT WALL 6 MIL VISQUEEN (MIN) VAPOR BARRIER R-10 RIGID FOAM INSULATION 6" MINIMUM COMPACTED GRAVEL BASE OVER UNDISTURBED SOIL
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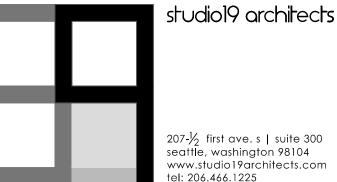
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- THINSET UNDERLAYMENT/ISOLATION MAT TYPICAL FLOOR ASSEMBLY

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- COMPOSITE WOOD DECKING OVER WATERPROOF DECK ASSEMBLY: DECKING PER OWNER SELECTION "DRYJOIST" PVC STRUCTURAL DECK DRAINAGE SYSTEM DECK FRAMING PER STRUCTURAL 2X SOFFIT FURRING STRIPS 3/8" BEVELED SOFFIT BOARDS (SMOTH FACE EXPOSED) W/ CONTINUOUS STRIP VENTING
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#### GENERAL NOTES

- 1. HANDRAIL 34"-38" ABOVE TREAD NOSING. STYLE & CONFIGURATION PER OWNER SELECTION. TBD.
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**MUNICIPALITY REVIEW:** 

PROJECT # MERCER ISLAND 15 - 015

SHEET TITLE:

BUILDING SECTION 'C'

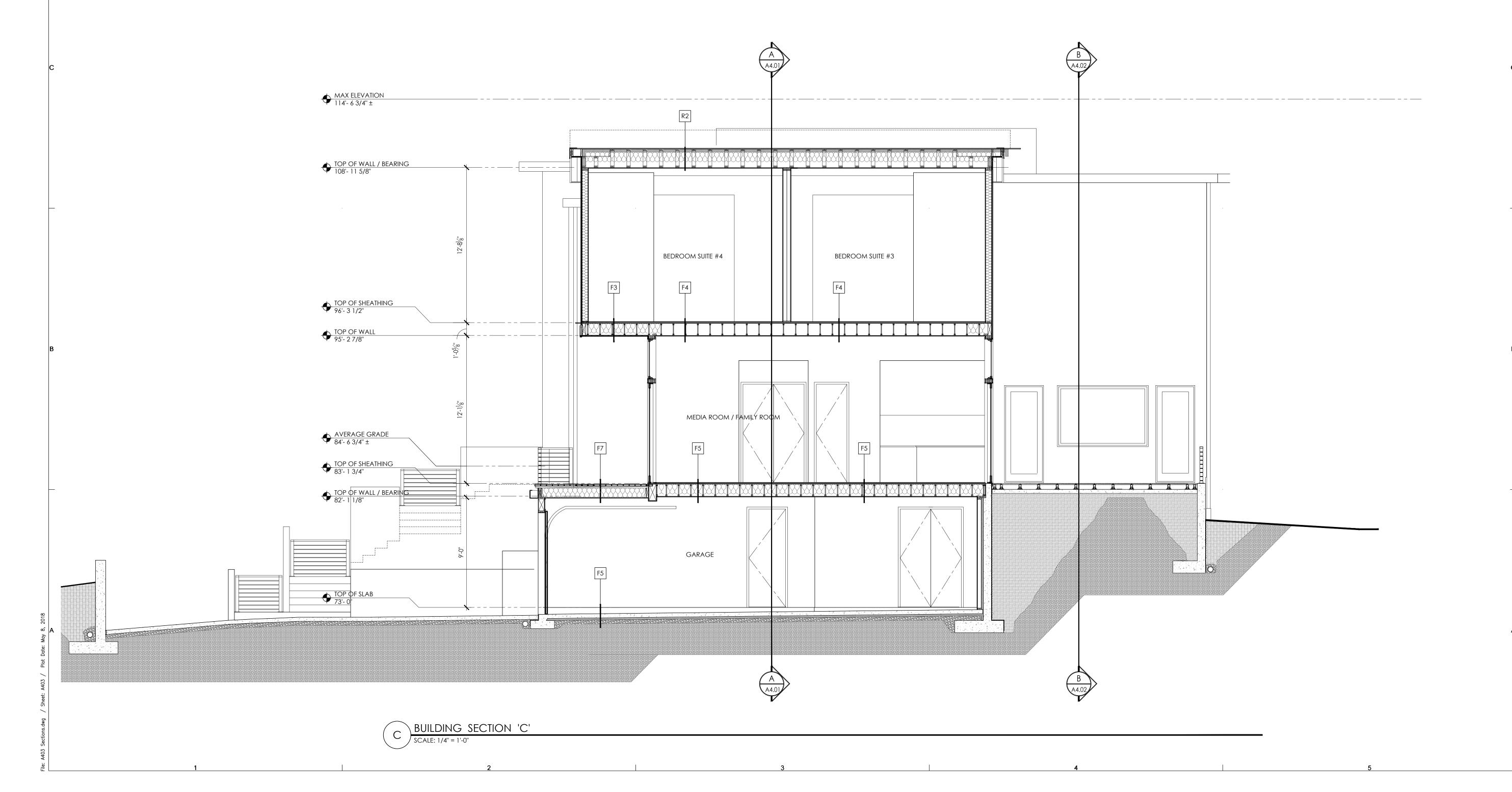
PROJECT NO.:

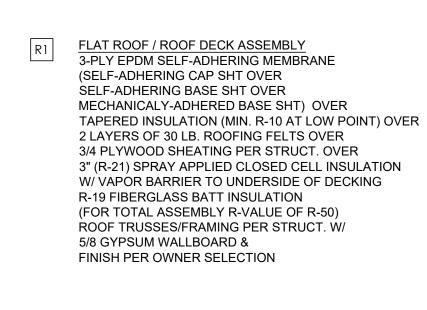
DATE ISSUED:

20140904 05/08/2018

SHEET NUMBER:

A4.03





- FLAT ROOF / ROOF DECK ASSEMBLY 3-PLY EPDM SELF-ADHERING MEMBRANE (SELF-ADHERING CAP SHT OVER SELF-ADHERING BASE SHT OVER MECHANICALY-ADHERED BASE SHT) 3/4 PLYWOOD SHEATING PER STRUCT. 5" (R-35) SPRAY APPLIED CLOSED CELL INSULATION W/ VAPOR BARRIER TO UNDERSIDE OF DECKING R-19 FIBERGLASS BATT INSULATION (FOR TOTAL ASSEMBLY R-VALUE OF R-54) ROOF TRUSSES/FRAMING PER STRUCT. W/ 5/8 GYPSUM WALLBOARD & FINISH PER OWNER SELECTION
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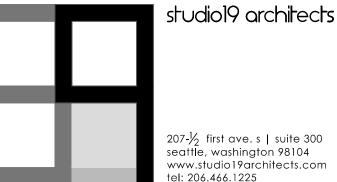
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**MUNICIPALITY REVIEW:** 

PROJECT # MERCER ISLAND 15 - 015

SHEET TITLE:

BUILDING SECTION 'D'

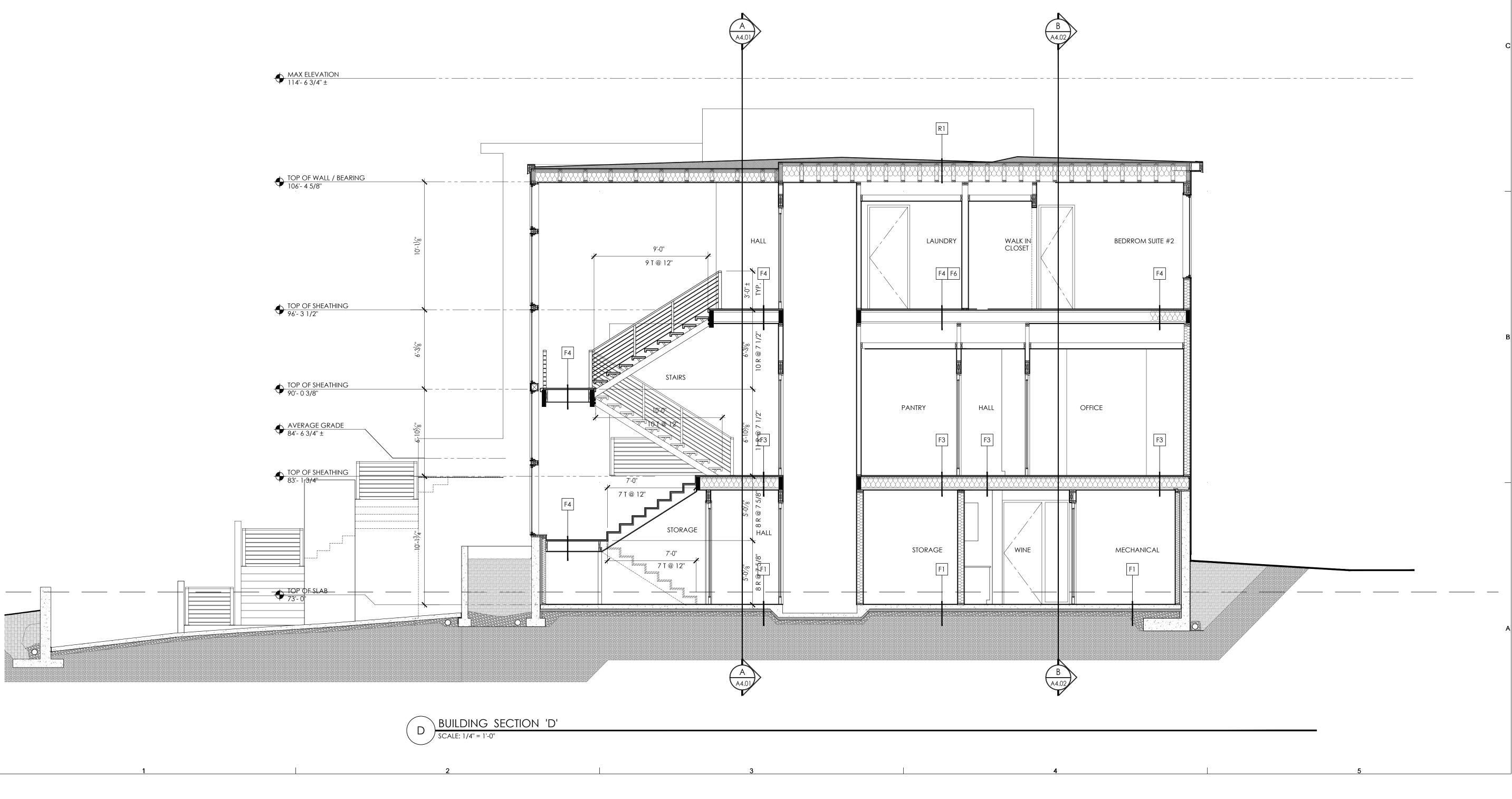
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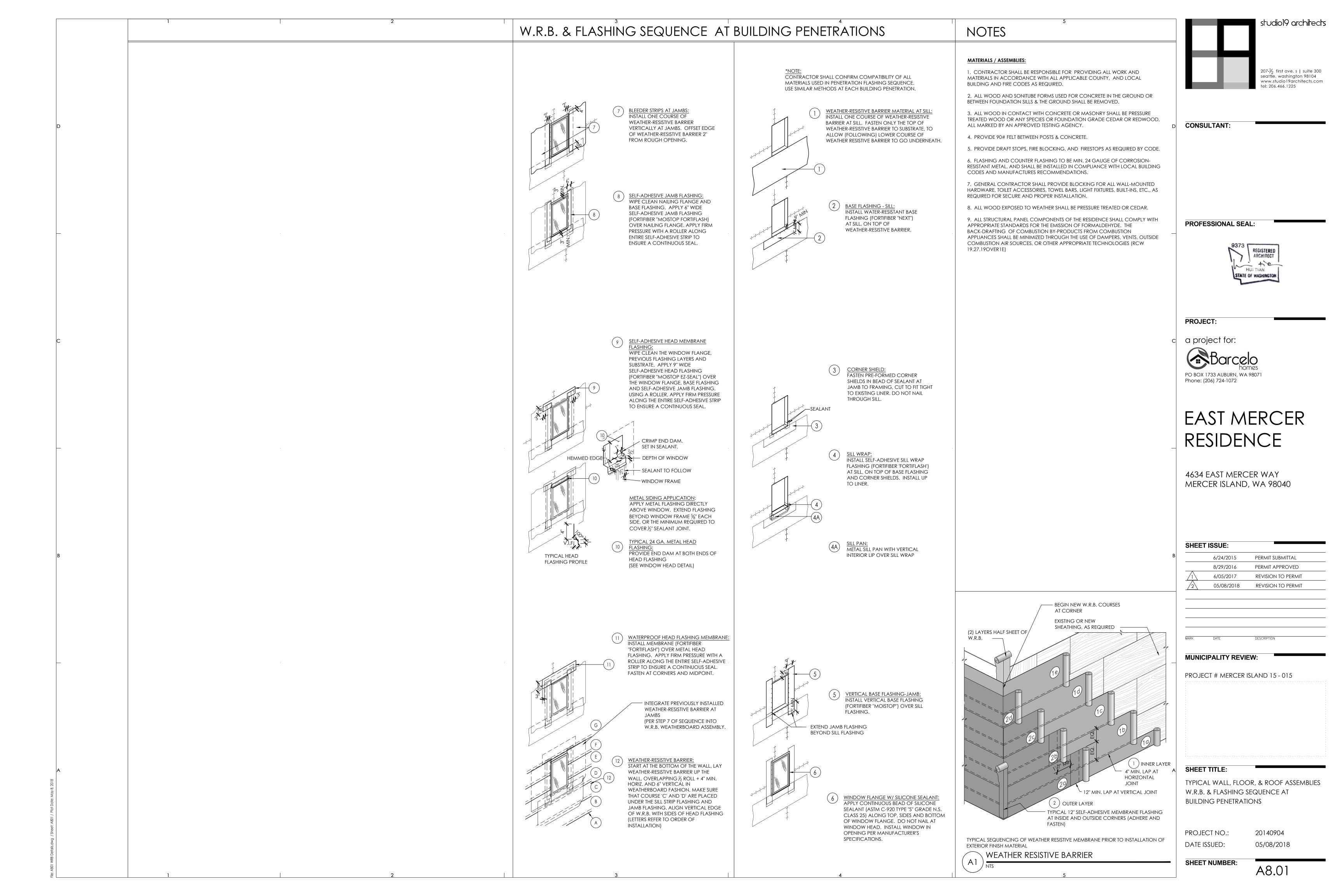
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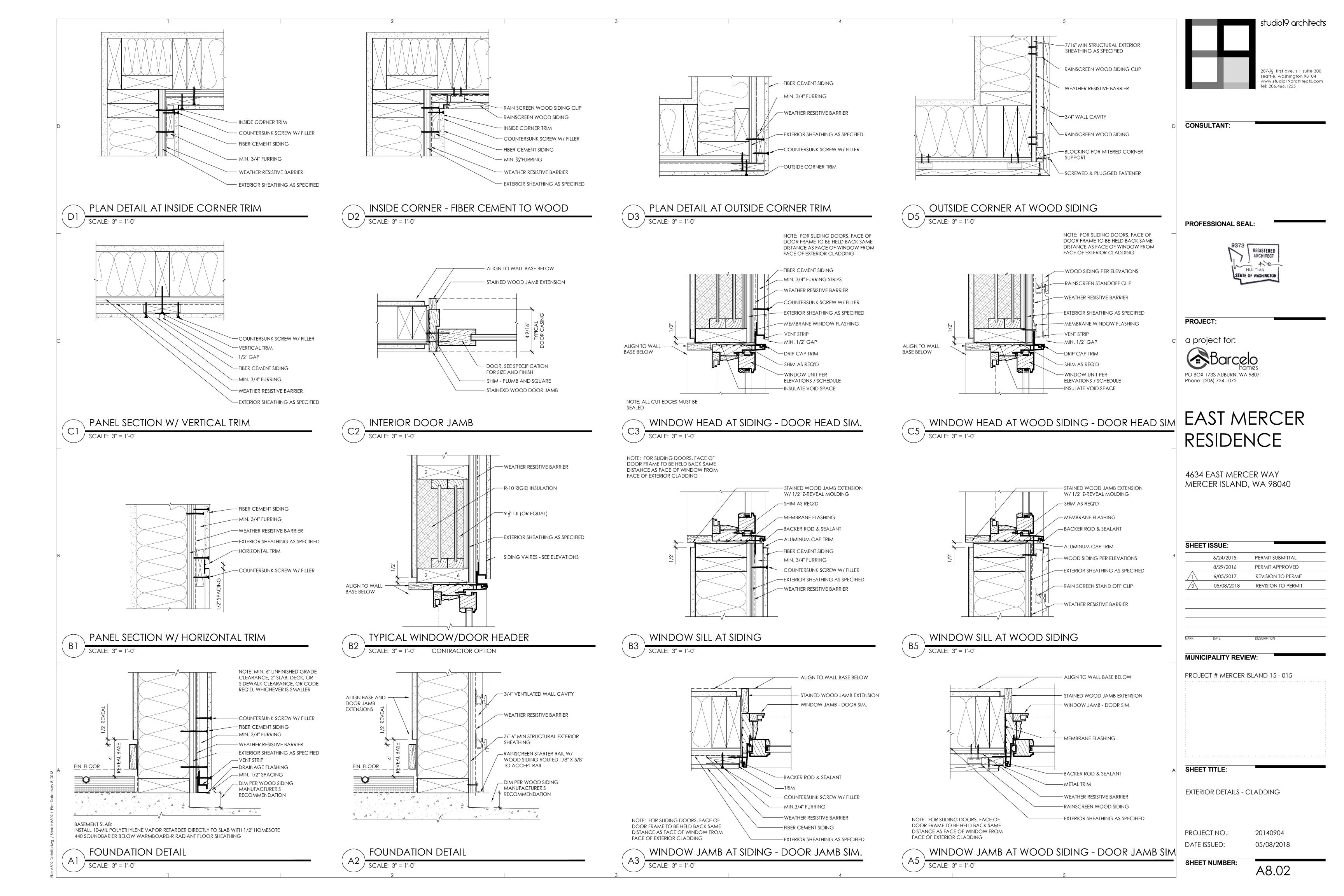
20140904 05/08/2018

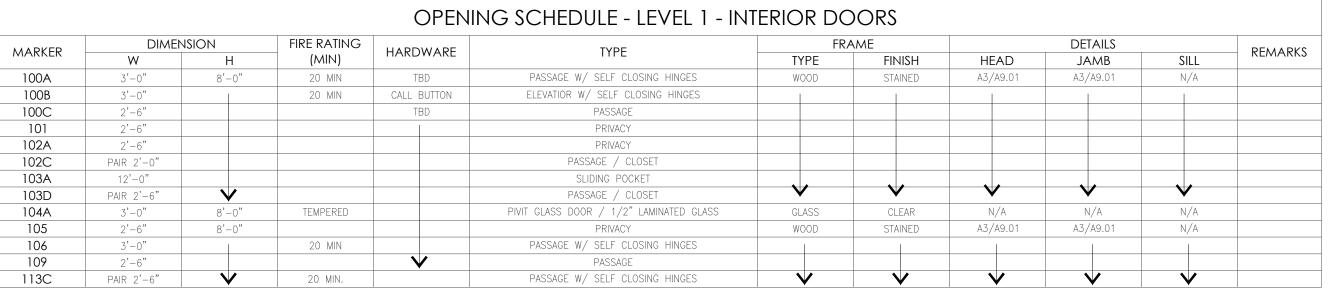
SHEET NUMBER:

A4.04









113C	PAIR 2'-6"	V	20 MIN.	<b>,</b>	PASSAGE W/ SELF CLOSING HINGES	<b>V</b>	V	V	V	V	
				OPENIN	G SCHEDULE - LEVEL 2 - IN	NTERIOR DC	ORS				
A A DIVED	DIMENSION FIRE RATI	DIMENSION FIRE RA		FIRE RATING HARBAMARE		FRA	AME		DELLADIC		
MARKER	W	Н	(MIN)	HARDWARE	TYPE	TYPE	FINISH	HEAD	JAMB	SILL	REMARKS
200B	PAIR 2'-6"	8'-0"		TBD	PASSAGE / CLOSET	WOOD	STAINED	A3/A9.01	A3/A9.01	N/A	
203	4'-6"				BARN SLIDER						
204B	3'-0"				PASSAGE						
204C	3'-0"				POCKET/PASSAGE						
204D	3'-0"				POCKET/PASSAGE						
206	3'-0"				PASSAGE						
207A	2'-4"				PASSAGE / CLOSET						
207B	3'-0"		20 MIN		PASSAGE						
208	2'-4"				PASSAGE / CLOSET						
209	2'-8"				PRIVACY						

MARKER	DIMENSION		FIRE RATING	HARDWARE	TYPE	FRAME			DETAILS		DEMARK
MARKER	W	Н	(MIN)	HARDWARE	(MIN) MARDYVAKE ITPE	TYPE	FINISH	HEAD	JAMB	SILL	REMARKS
300A	PAIR 2'-4"	8'-0"		TBD	PASSAG / CLOSET	WOOD	STAINED	A3/A9.01	A3/A9.01	N/A	
300B	3'-0"				PASSAGE				ı	ı	
302	3'-0"				PASSAGE / CLOSET						
303A	PAIR 2'-4"				PASSAGE / CLOSET						
304	3'-0"				PASSAGE / CLOSET						
305A	5'-0"				BARN SLIDER						
305B	2'-8"				PRIVACY						
306	2'-6"				PRIVACY						
307	3'-0"				PRIVACY						
308	3'-0"				BARN SLIDER						
309	3'-0"				PASSAGE						
310	2'-6"				PRIVACY						
311	3'-0"				PASSAGE / CLOSET						
312	3'-0"				PRIVACY						
313	3'-0"				PRIVACY						
314	3'-0"				BARN SLIDER						
315	2'-6"	V		V	PRIVACY		V	V	V	V	

6'-4''

104A

104B

SG\

					OPENING SCHE	DULE - LEVE	EL 1 - EXTE	ERIOR WINI	DOWS		
MARKER	DIMENSION		NSION	HEAD HEIGHT	TVDF	FRA	ME		DETAILS		DELLADIC
				ABOVE SUBFLOOR	TYPE	TYPE	FINISH	HEAD	JAMB	SILL	REMARKS
100	SEE EL	EVATIONS	SEE ELEVATIONS	SEE ELEVATIONS	GANGED PICTURE	CLAD WOOD	BRONZE	SEE SHT A8.02	SEE SHT A8.02	SEE SHT A8.02	SAFETY GLAZING NOTED ON ELEVATIONS — TYP.
101		1			PICTURE						
102					PICTURE						
103					PICTURE						
104					PICTURE						
	1	/	V	V		V	V	V	V	V	V

MADVED	MARKER DIMENSION FIRE RATING (MIN)	DIMENSION		HARDWARE	TYPE	FRA	ME		DETAILS		REMARK
MAKKEK		1IM) H	(MIN)	HARDWARE	ITE	TYPE	FINISH	HEAD	JAMB	SILL	REMARK
111A	SEE ELEVATIONS	SEE ELEVATIONS	N/A	TBD	OVERHEAD SECTIONAL	N/A	N/A	TBD	TBD	TBD	
111B					OVERHEAD SECTIONAL	N/A	N/A	TBD	TBD	TBD	
102B					INSWING — FULL LITE	CLAD WOOD	BRONZE	SEE SHT A8.02	SEE SHT A8.02	FACTORY	
103B					SLIDING PATIO DOOR						
103C					SLIDING PATIO DOOR						
104B					OUTSWING - FULL LITE - DOUBLE DOOR						
	V	V	V	V		V	V	V	V	V	

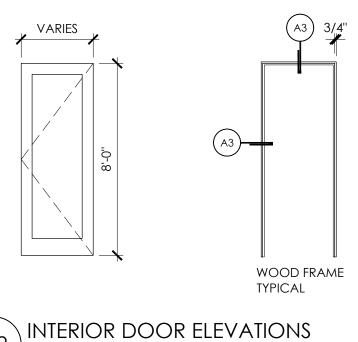
						OPENIN	IG SCHEDULE - LEVEL 2  - EX	xterior do	OORS				
A A A DVED	R DIMENSION H				LIA DDWA DE	HADDWADE TYPE		FRAME		DETAILS			
MARKER					HARDWARE	TYPE	TYPE	FINISH	HEAD	JAMB	SILL	REMARKS	
200A	SEE EL	EVATIONS	SEE EL	EVATIONS	N/A	TBD	INSWING — FULL LITE	CLAD WOOD	BRONZE	SEE SHT A8.02	SEE SHT A8.02	FACTORY	
202		1					STACKING BIFOLD						
204A							INSWING — FULL LITE						
205							INSWING — FULL LITE						
210A							OUTSWING — FULL LITE — DOUBLE DOOR						
210C							OUTSWING - FULL LITE - DOUBLE DOOR						
	•	<b>/</b>	\	/	V	V		V	V	V	V	V	

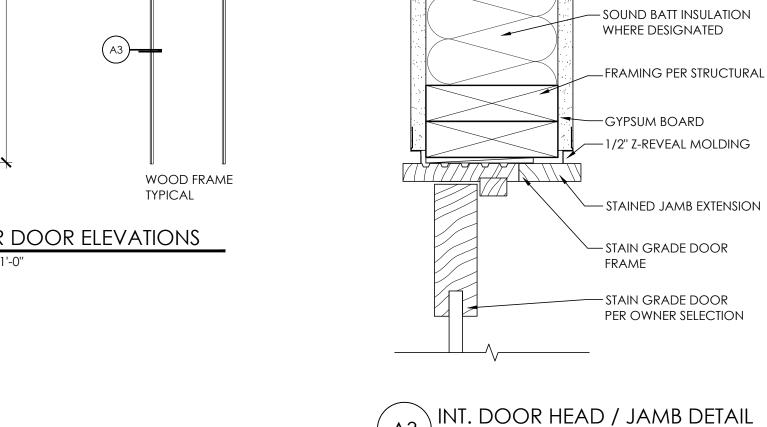
	OPENING SCHEDULE - LEVEL 3 - EXTERIOR DOORS												
MARKER	DIMENSION		FIRE RATING	HARDWARE TYPE		FRAME		DETAILS		REMARKS			
MARKER	W	Н	(MIN)	HARDWARE	TYPE	TYPE	FINISH	HEAD	JAMB	SILL	KEIVIAKKS		
301	SEE ELEVATIONS	SEE ELEVATIONS	N/A	TBD	OUTSWING — FULL LITE — DOUBLE DOOR	CLAD WOOD	BRONZE	SEE SHT A8.02	SEE SHT A8.02	FACTORY			
303B					OUTSWING - FULL LITE		[						

#### GENERAL FINISH NOTES

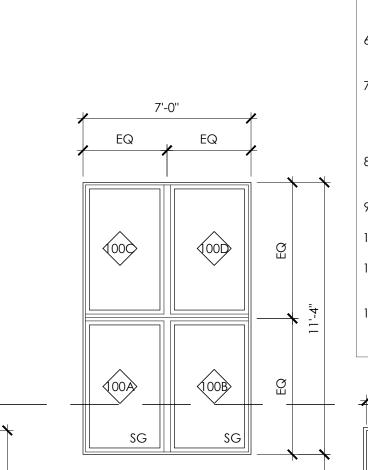
2012 IBC INTERIOR FINISH (CHAPTER 7, 8, 12 & 16)

- 1. THE FACING OF ANY EXPOSED INSULATION MUST MEET A FLAME SPREAD INDEX OF 25 OR LESS IBC SECTION 719.2).
- REFER TO TABLE 721.1 FOR RATED FIRE RESISTANCE PERIODS FOR WALLS AND PARTITIONS (2012 IBC)
- 3. THE MAXIMUM FLAME-SPREAD CLASS OF FINISH MATERIALS USED ON INTERIOR WALLS & CEILINGS SHALL NOT EXCEED THE FLAME-SPREAD LIMITATIONS OF IBC
- 4. INTERIOR WALL AND CEILING FINISH MATERIALS SHALL MEET WITH ASTM E84 OR UL
- 5. INTERIOR FLOOR FINISHES TO COMPLY WITH 2012 IBC SECTION 804, AND NFPA 253
- 6. INSULATION TO COMPLY WITH 2012 IBC SECTION 720
- 7. DECORATIVE MATERIALS AND TRIMS SHALL BE RESTRICTED BY COMBUSTIBILITY AND THE FLAME PROPAGATION PERFORMANCE CRITERIA OF NFPA 701, IN ACCORDANCE WITH SECTION 806 (2012 IBC)





103B & 103C

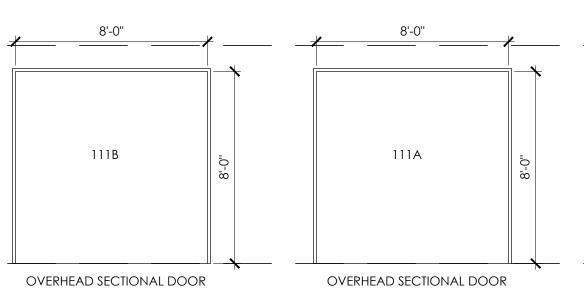


102 101

102B

## GENERAL NOTES

- ALL WINDOW DIMENSIONS AR NOMINAL. REFER TO MANUFACTURERS RECOMMENDATIONS FOR ROUGH OPENING DIMENSIONS.
- 2. CONTRACTOR TO VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION.
- 3. ALL GLAZING IN OR WITHIN 24" OF A DOOR, OR WITHIN 18" OF FLOOR, OR WITHIN 60" OF TUB FLOOR, GLAZING ADJACENT TO STAIRS AND STAIR LANDINGS, OR ANY OTHER HAZARDOUS AREA IS TO BE TEMPERED SAFETY GLAZING. PROVIDE SAFETY GLAZING WHERE REQUIRED PER APPLICABLE CODE REQUIREMENTS.
- 4. DOORS AND CASED OPENINGS LOCATED NEAR WALL INTERSECTIONS SHALL BE LOCATED SO THAT THE EDGE OF FINISHED OPENING IS 3" FROM FACE OF NEARBY WALL, UNLESS NOTED OTHERWISE.
- 5. ALL WINDOWS TO BE DOUBLE GLAZED WITH A MINIMUM U-VALUE OF 0.30 OR BETTER.
- 6. SEE SHEETS A-301 AND A-302, EXTERIOR ELEVATIONS FOR OPENING DIRECTION OF OPERABLE UNITS.
- EACH BEDROOM WINDOW MUST BE 5.7 SF MINIMUM NET CLEAR AREA (GRADE FLOOR OPENINGS CAN BE MINIMUM NET CLEAR OPEN AREA OF 5 SF), WITH 20" MINIMUM CLEAR OPEN WIDTH, 24" CLEAR OPEN HEIGHT, 44" MAXIMUM SILL
- 8. CAULK AND SEAL ALL WINDOW AND DOOR OPENINGS AND EXTERIOR PENETRATIONS.
- 9. MINIMUM 1/2" THROW ON DEAD BOLT OR DEAD LATCH FOR DOORS.
- 10. NOT USED
- 11. WINDOWS WITHIN 10' OF GRADE (OR ACCESSIBLE DECK) CAPABLE OF BEING
- 12. MINIMUM 1 3/8" SOLID CORE OR 20 MINUTE DOOR REQUIRED BETWEEN GARAGE AND DWELLING.



EXTERIOR DOOR AND WINDOW ELEVATIONS - LEVEL 1

SHEET TITLE:

WINDOW & DOOR SCHEDULES

PROJECT NO.: DATE ISSUED:

**SHEET NUMBER:** 

A9.01

20140904

05/08/2018

studio19 architects

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**CONSULTANT:** 

PROFESSIONAL SEAL:

PROJECT:

a project for:

Phone: (206) 724-1072

SHEET ISSUE:

6/24/2015

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MUNICIPALITY REVIEW:

PROJECT # MERCER ISLAND 15 - 015

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PERMIT SUBMITTAL

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REVISION TO PERMIT

REVISION TO PERMIT

PO BOX 1733 AUBURN, WA 98071

EAST MERCER

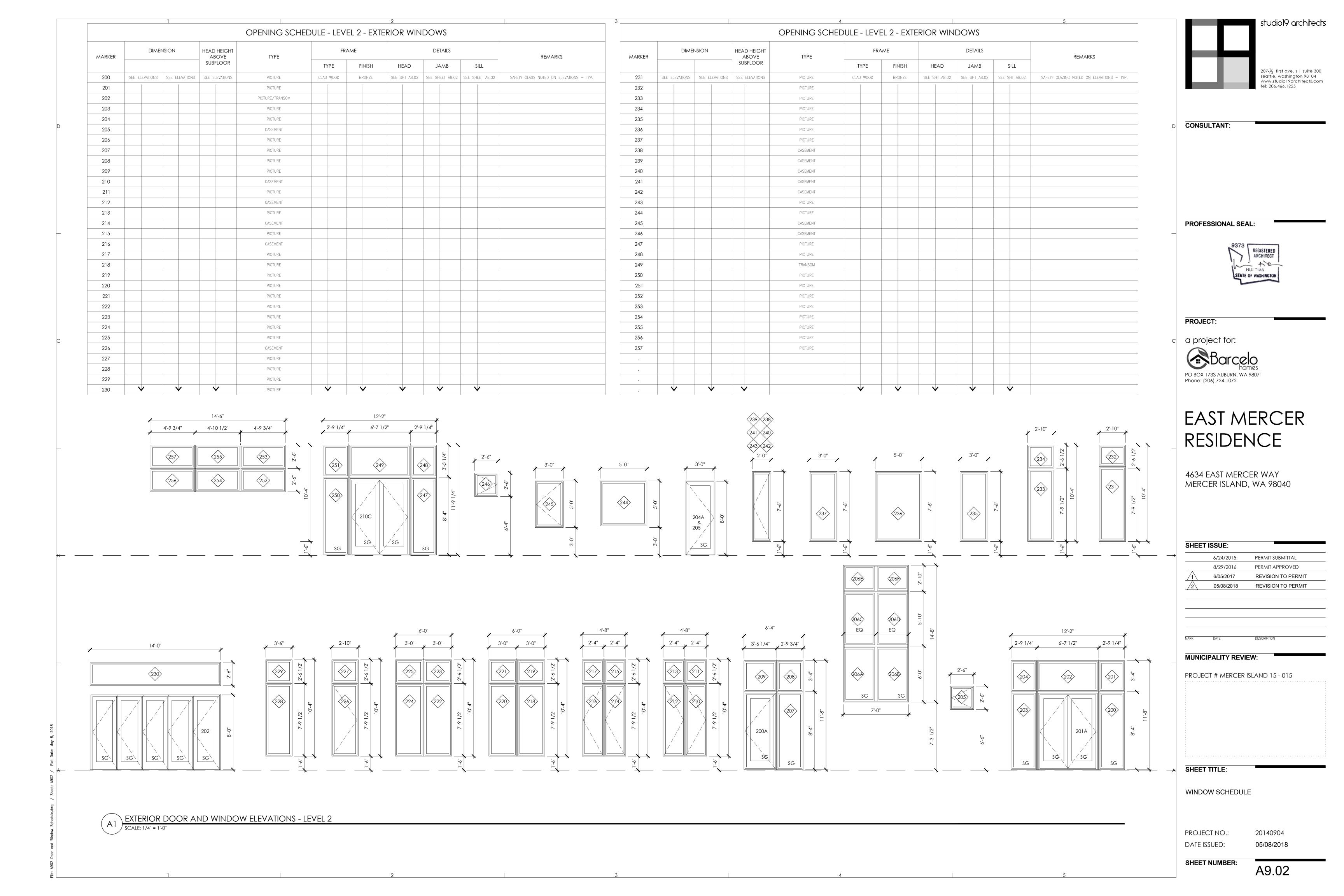
RESIDENCE

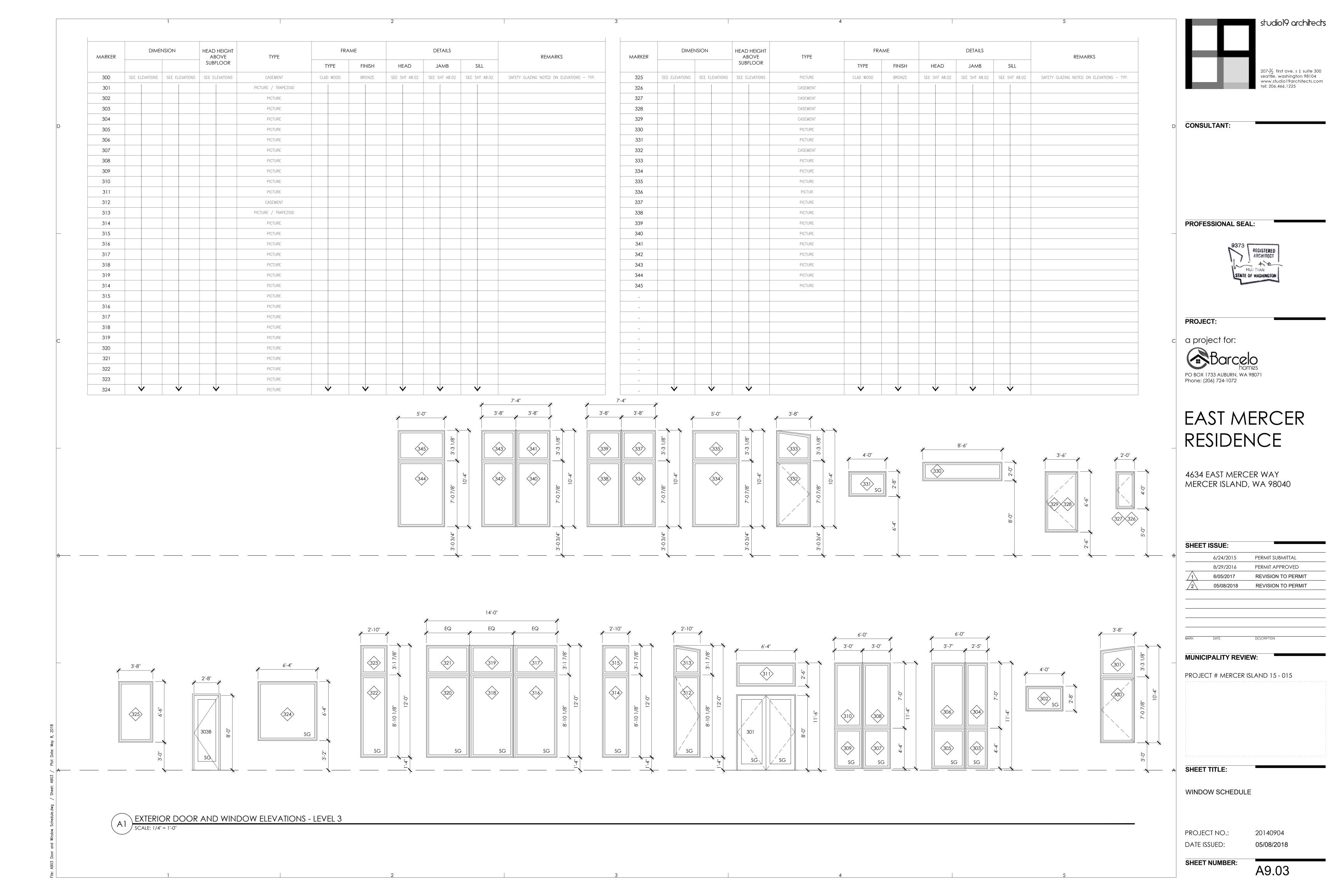
4634 EAST MERCER WAY

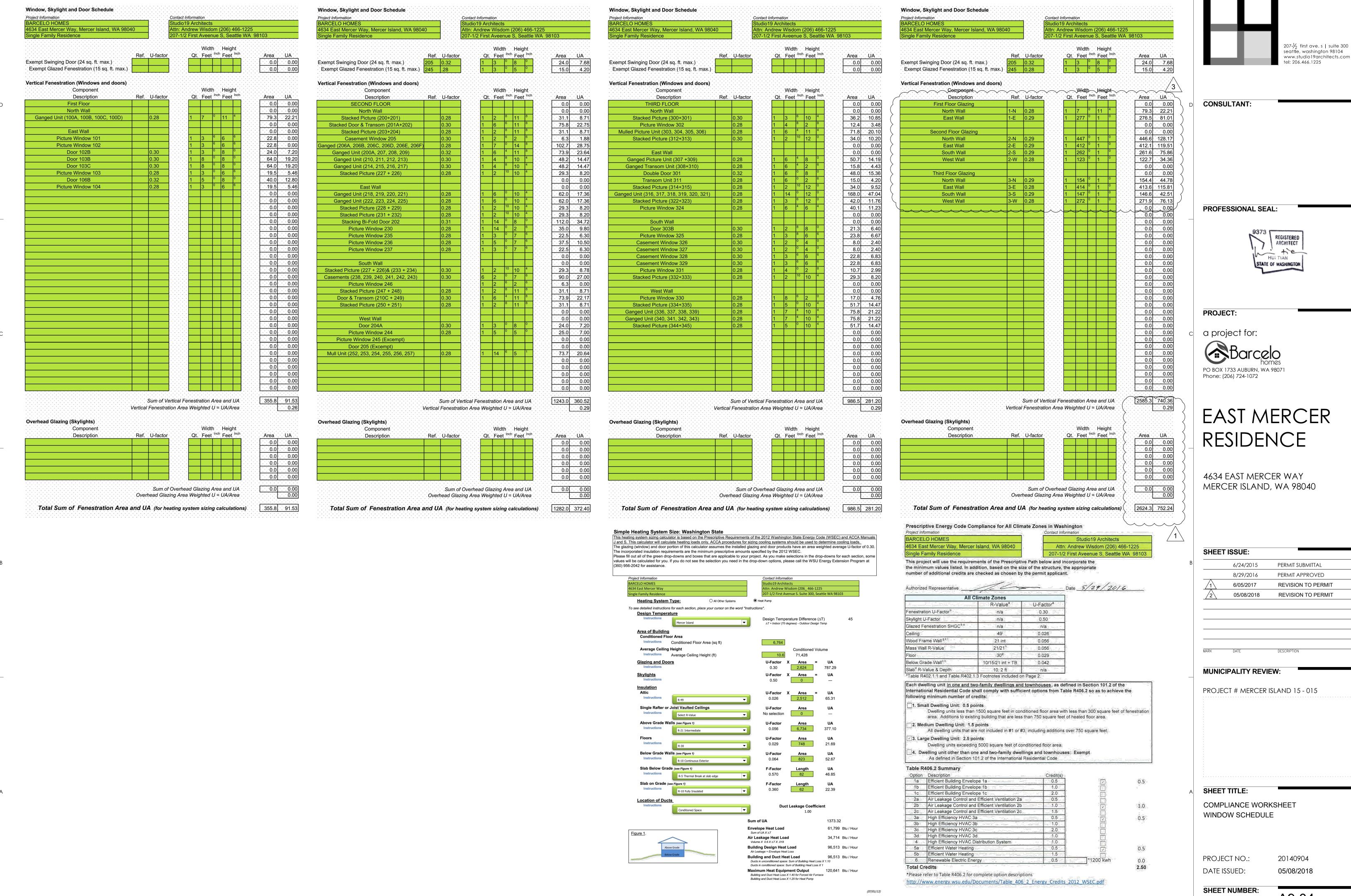
MERCER ISLAND, WA 98040

REGISTERED ARCHITECT

HUI TIAN STATE OF WASHINGTON







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SHEET	ΓISSUE:	
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A9.04

#### GENERAL STRUCTURAL NOTES

- 1. ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS. SPECIFICATIONS, THE INTERNATIONAL BUILDING CODE (2012 EDITION) AND MODIFICATIONS TO THE INTERNATIONAL BUILDING CODE. BY THE LOCAL JURISDICTION.
- 2. DESIGN LOAD CRITERIA

#### DEAD LOADS

	ROOF FLOORS DECKS EXTERIOR WALLS INTERIOR WALLS		25 PSF N/A N/A 10 PSF 8 PSF
LIVE LOADS	ROOF FLOOR / LIVING SPACE DECKS / BALCONIES		20 PSF N/A N/A
SNOWLOADS			
	GROUND LOAD ROOF SNOW LOAD		25 PSF 25 PSF
	EXPOSURE FACTOR IMPORTANCE FACTOR THERMAL FACTOR	$C_C = I_s = C_t =$	1.0
WIND			
	ULTIMATE DEIGN WIND SPEED (NASD WIND SPEED ( $V_{asd}$ ) WIND EXPOSURE IMPORTANCE FACTOR $I_W = ADJUSTMENT FACTOR \lambda = WIND SPEED UP FACTOR ROOF SLOPE$	ult)	110 MPH 85 MPH C 1.0 1.0 1.0 flat
SEISMIC			
SEISIVIIC	SEISMIC USE GROUP IMPORTANCE FACTOR I <sub>E</sub> SITE CLASS SEISMIC DESIGN CATEGORY RESPONSE FACTOR FOR		I 1.0 D D
	LIGHT FRAME CONSTRUCTION RESPONSE FACTOR FOR	R =	6.5
	ORDINARY STEEL MOMENT FRAMMAPPED ACCELERATION (PER USGS) BASE SHEAR SEISMIC RESPONSE COEFFICIEN	$S_S = S_1 = V =$	1.276 0.434 29,350

#### PER GEOTECHNICAL REPORT FILE NO. 14-128, 02/02/2015, PanGEO

ALL SOIL PRESURE	2,500 PSF
FRICTION COEFFICIANT	0.4
EQUIVALENT FLUID PRESSURE	35 PSF
AT REST	45 PSF
AT REST WITH BACKSLOPE	55 PSF
PASSIVE	300 PSF
SEISMIC HORIZONTAL PRESSURE	<i>§</i> 8H
(PASSIVE)	375 pcf)
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

- 3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH ARCHITECTURAL DRAWINGS FOR BIDDING AND CONSTRUCTION. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS FOR COMPATIBILITY AND SHALL NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
- 4. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.
- 5. CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE STRUCTURAL ENGINEER HAS NO OVERALL SUPERVISORY AUTHORITY OR ACTUAL AND/OR DIRECT RESPONSIBILITY FOR THE SPECIFIC WORKING CONDITIONS AT THE SITE AND/OR FOR ANY HAZARDS RESULTING FROM THE ACTIONS OF ANY TRADE CONTRACTOR. THE STRUCTURAL ENGINEER HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES OF THE OWNER, CONTRACTORS, OR OTHER SITE ENTITIES OR PERSONS AT THE PROJECT SITE.
- 7. CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.
- 8. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
- 9. ALL STRUCTURAL SYSTEMS WHICH ARE TO BE COMPOSED OF COMPONENTS TO BE FIELD ERECTED SHALL BE SUPERVISED BY THE SUPPLIER DURING MANUFACTURING, DELIVERY, HANDLING, STORAGE AND ERECTION IN ACCORDANCE WITH INSTRUCTIONS PREPARED BY THE SUPPLIER.

#### **FOUNDATIONS**

- 10. ALL FOOTINGS AND FOUNDATIONS SHALL BE SUPPORTED BY COMPETENT NATIVE SOIL 18" BELOW FINISHED GRADE FOR EXTERIOR SIDE AND 12" FOR INTERIOR FOOTINGS, FREE OF ORGANIC MATERIALS. OVEREXCAVATION MIGHT BE NEEDED TO REACH THE COMPETENT SOIL.
- 11. FOOTINGS AND FOUNDATION EXCAVATION SHALL BE FREE OF LOOSE SOILS, SLOUGHS, DEBRIS, AND FREE OF WATER AT ALL TIMES.
- 12. FOUNDATION WALL BACKFILL SHALL BE PLACED SIMULTANEOUSLY ON BOTH SIDES OF WALL PROVIDING 4" PERFORATED PIPE (AS REQUIRED) FOR SUBSURFACE DRAINAGE.
- 13. U.N.O. IN AN APPROVED GEOTECHNICAL REPORT, THE FOLLOWING METHOD FOR BACKFILL PLACEMENT AND COMPACTION IS TO BE USED:

EXCEPT FOR BACKFILL AGAINST BELOW-GRADE WALLS OR RETAINING WALLS, ALL OTHER STRUCTURAL FILL AND STRUCTURAL BACKFILL MATERIALS SHALL BE PLACED IN RELATIVELY HORIZONTAL LOOSE LIFTS NOT EXCEEDING 10 INCHES IN THICKNESS AND COMPACTED TO AT LEAST 95 PERCENT OF THE MODIFIED PROCTOR (ASTM D1557) MAXIMUM DENSITY AT MOISTURE CONTENTS WITHIN TWO (2) PERCENT OF OPTIMUM. THE SPECIFIED COMPACTION DENSITY AND MOISTURE CONTENT OF EACH LIFT MUST BE VERIFIED BY INSPECTION, PRIOR TO PLACEMENT OF SUBSEQUENT LIFTS. BACKFILL AGIANST BELOW-GRADE WALLS AND RETAINING WALLS SHOULD BE COMPACTED AS DESCRIBDED ABOVE TO ONLY 90 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM

- 14. FOOTING SIZE SHALL BE AS INDICATED ON DRAWINGS OR MIN. AS PER IBC SECTION 1806.
- WHERE THE SURFACE IS SLOPED MORE THAN OE (1) FOOT IN TEN (10) FEET THE FOUNDATION SHALL BE LEVEL OR STEPPED SO THAT BOTH, TOP AND BOTTOM, OF SUCH FOUNDATION ARE LEVEL PER IBC.
- 16 WHERE STRUCTURAL COLUMNS AND POSTS ARE EXPOSED TO WATER SPLASH ABOVE, A CONCRETE SURFACE OR TO THE WEATHER, PROVIDE A MIN. OF 1" ABOVE CONCRETE SURFACE, OR 8" ABOVE THE EXPOSED EARTH PER IBC.

#### CONCRETE

17 CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC SECTION 1905, 1906, AND ACI 301. STRENGTH AT AGE 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS, U.N.O.:

MEMBER TYPE (IN)	PSI	MAX AGGR MAX W/C RATIO		
SLABS ON GRADE FOUNDATIONS WALLS COLUMNS	2,500 2,500 4,500 4,500	1 1 1 3⁄4	0.45 0.45 0.50 0.40	
ELEVATED SLABS & BEAMS	4,500	3/4	0.40	

CONCRETE MIX FOR FOUNDATION AND SLAB: CEMENT: 5.5 SACK TYPE I NORMAL PORTLAND CEMENT 1,210 LBS OF WET SAND 1,925 LBS GRAVEL

- 19 REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FY = 60,000 PSI, UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM-185.
- 20. DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-92 AND ACI 318-08. LAP ALL REINFORCEMENTS IN ACCORDANCE WITH "THE REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE".PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP ADJACENT MATS OF WELDED WIRE FABRIC A MINIMUM OF 8" AT SIDES AND ENDS.
- 21 NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED AND APPROVED BY THE STRUCTURAL ENGINEER.
- 22. CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3" FORMED SURFACES EXPOSED TO EARTH OR WEATHER (NO. 6 BARS OR LARGER) (NO 5 BARS OR SMALLER) 1-1/2" COLUMN TIES OR SPIRALS AND BEAM STIRRUPS 1-1/2"

SLABS AND WALLS: GREATER OF BAR DIAMETER + 1/8 OR 3/4"

FOOTINGS AND OTHER UNFORMED SURFACES

- 23. CAST-IN-PLACE CONCRETE: SEE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS AND DIMENSIONS OF DOOR AND WINDOW OPENINGS IN ALL CONCRETE WALLS. SEE MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF MISCELLANEOUS MECHANICAL OPENINGS THROUGH CONCRETE WALLS.
- 24. NON-SHRINK GROUT SHALL BE FURNISHED BY AN APPROVED MANUFACTURER AND SHALL BE MIXED AND PLACED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S PUBLISHED RECOMMENDATIONS. GROUT STRENGTH SHALL BE AT LEAST EQUAL TO THE MATERIAL ON WHICH IT IS PLACED (2,500 PSI MIN).

#### **ANCHORAGE**

- 25. POXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BARS) SPECIFIED ON THE DRAWINGS SHALL BE INSTALLED WITH SIMPSON EPOXY "SET-XP" OR EQUAL. SPECIAL INSPECTION IS REQUIRED. RODS SHALL BE ASTM A-36 UNLESS NOTED OTHERWISE.
- DRIVEN PINS AND OTHER POWDER ACTUATED FASTENERS SHALL BE LOW VELOCITY TYPE. INSTALL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MINIMUM EMBEDMENT IN CONCRETE SHALL BE 1" UNLESS OTHERWISE NOTED. MAINTAIN AT LEAST 3" TO NEAREST CONCRETE

#### **STEEL**

STRUCTURAL STEEL FABRICATION, ERECTION AND WELDING INSPECTION SHALL COMPLY WITH THE SPECIAL INSPECTION SCHEDULE.

STRUCTURAL STEEL SHALL BE GRADE A-36 UNLESS NOTED OTHERWISE.

ARCHITECTURALLY EXPOSED STEEL SHALL CONFORM TO SECTION 10 OF THE AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

- ALL ANCHORS EMBEDED IN MASONRY OF CONCRETE SHALL BE A307 HEADED BOLTS OR A36 THREADED ROD.
- 31. ALL WELDING SHALL BE IN CONFORMANCE WITH AISC AND A.W.S STANDARDS AND SHALL BE PERFORMED BY W.A.B.O. CERTIFIED WELDERS USING E70 XX ELECTRODES. ONLY PREQUALIFIED WELDS(AS DEFINED BY A.W.S.) SHALL BE USED ALL COMPLETE JOINT PENETRATION GROOVE WELDS SHALL BE MADE WITH A FILLER MATERIAL THAT HAS A MINIMUM CVN TOUGHNESS OF 20 FT LBS AT -20 DEGREES F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION
- 32. WELDING INSPECTION SHALL BE IN COMPLIANCE WITH AWS D1.1.

#### WOOD

33. ALL SOLID LUMBER TO BE GRADED BY WCLIB OR WWSA. ALL LUMBER SHALL BE HEM-FIR #2 (HF #2) OR BETTER. ALL SOLID LUMBER 5" X 4" OR LARGER SHALL BE DOUGLAS FIR #2 (DF #2) U.N.O. ALL GLUE-LAMINATED LUMBER SHALL BE GLULAM 24F-1.8E WS.

#### DESIGN VALUES FOR GLULAM BEAMS

FLEXURAL STRESS TENSION ZONE	2,400 PSI
FLEXURAL STRESS COMPRESSION ZONE	1,850 PSI
COMPRESSION PERPENDICULAR TO GRAIN	650 PSI
SHEAR	266 PSI
APPARENT E	1.8x16 lb-in <sup>2</sup>
TRUE E	1.9x10 lb-in <sup>2</sup>

- 34. LUMBER IN CONTACT WITH CONCRETE AND ALL EXTERIOR WOOD SHALL BE PRESSURE TREATED. ALL CONNECTORS GALVANIZED.
- 35. INSTALL SOLID BLOCKING BTWN JOISTS AT ALL BEARING POINTS.
- 36. THROUGH BOLTS AND LAG BOLTS SHALL BE ASTM A307. PROVIDE MALLEABLE IRON WASHER AT ALL BOLT AND LAG BOLT LOATIONS. PROVIDE CUT WASHER FOR ALL BOLTS PROTRUDING BEARING WOOD.
- 37. ALL METAL (CONNECTORS, NAILS, BOLTS, ETC.) IN CONTACT WITH P.T. WOOD SHALL BE HOT DIPPED GALVANIZED.
- 38. U.N.O. CONNECTORS AND FASTENERS SHALL COMPLY WITH IBC TABLE 2304.9.1

#### **OPEN WEB TRUSSES**

39. PER IBC 2012 1704.2.2, PREFABRICATED OPEN-WEB JOISTS SHALL BE FABRICATED BY A REGISTERED AND APPROVED FABRICATOR. AT COMPLETION OF FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANNCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

#### NOTE:

NO STRUCTURAL CHANGES FROM THE APPROVED PLANS SHALL BE MADE IN THE FIELD UNLESS PRIOR TO MAKING CHANGES, WRITTEN APPROVAL IS OPTAINED FROM THE ENGINEER OF RECORD. IF CHANGES ARE MADE WITHOUT WRITTEN APPROVAL SUCH CHANGES SHALL BE THE LEGAL AND FINANCIAL RESPONSIBILITY OF THE CONTRACTOR OR SUB-CONTRACTORS INVOLVED AND SHALL BE THEIR RESPONSIBILITY TO REPLACE OR REPAIR THE CONDITION AS DIRECTED BY THE ENGINEER.

COMPARISON OF COMMON, BOX AND SINKER NAIL DIMENSIONS (inches) OF THE SAME PENNYWEIGHT.											
TYPE	FEATURE		PE	NNYWEIG	HT						
		6d	8d	10d	12d	16d					
COMMON	Length	2	2-1/2	3	3-1/4	3-1/2					
	Diameter	0.113	0.131	0.148	0.148	0.162					
	Head	0.226	0.281	0.312	0.312	0.344					
BOX	Length	2	2-1/2	3	3-1/4	3-1/2					
	Diameter	0.099	0.113	0.128	0.128	0.135					
	Head	0.266	0.297	0.312	0.312	0.344					
SINKER	Length	1-7/8	2-3/8	2-7/8	3-1/8	3-1/4					
	Diameter	0.092	0.113	0.120	0.135	0.148					
	Head	0.231	0.266	0.281	0.312	0.344					

PROTECTION FOR REINFORCEMENT OF	MIN.
CAST IN-PLACE CONCRETE	COVER
Concrete cast against and permanently exposed to earth	3"
Concrete exposed to earth or weather	
Wall panels:	
No. 6 through No. 18 bars	2"
No. 5 bars, W31 or D31 wire, and smaller	1 ½"
Concrete exposed to neither earth or weather	
Slabs, walls, and joists:	
No. 14 and no. 18 bars	1 ½"
No. 11 and smaller bars	3/4"
Beams and Columns:	
Primary reinforcement, ties, stirrups, and spirals	1 ½"
Shells and folded-plate members:	
No. 6 bars and larger	3/4"
No. 5 bars, W31 or D31 or smaller	3/4"



## **REVISION 07/13/16**



	LINOINEL	.1 (11140			
BUILDER:	Barcelo Hom	SHEET			
JOB SITE:	4634 E Merc	er Way,	Mercer Islai	nd	
PARCEL NO.:				WA 98040	04
DESCRIPTION:	new SFR				<b>S</b> 1
DATE:	03/11/15	SCALE:	as noted		
ENGINEER:	Roland Hei	misch, F	P. E.		

# **Statement of special inspections**

### General

The owner shall comply an approved agency for the special inspections for the construction of this project

A quality assurance and inspection plan from an AISC approved fabrictor is required to satisfy the inspection requirements.

The following systems and components shall be inspected

Type

Standard

At completion of fabrication, the approved fabricator shall submit a certificate of compliance to the building official stating that the work was performed in accordance with the approved construction documents

## **Special inspections for structural steel**

Steel sections, steel grade, location of installation

all elements AISC 360

# Special inspections for steel construction other than structural steel

Inspection of welding

periodic

AWS D1.3

## **Special inspections for concrete construction**

Inspection of reinforcing steel Inspection of anchors post-installed in hardened concrete members Verifying use of required design mix Inspect formwork for shape, locations, and dimensions

periodic periodic periodic periodic

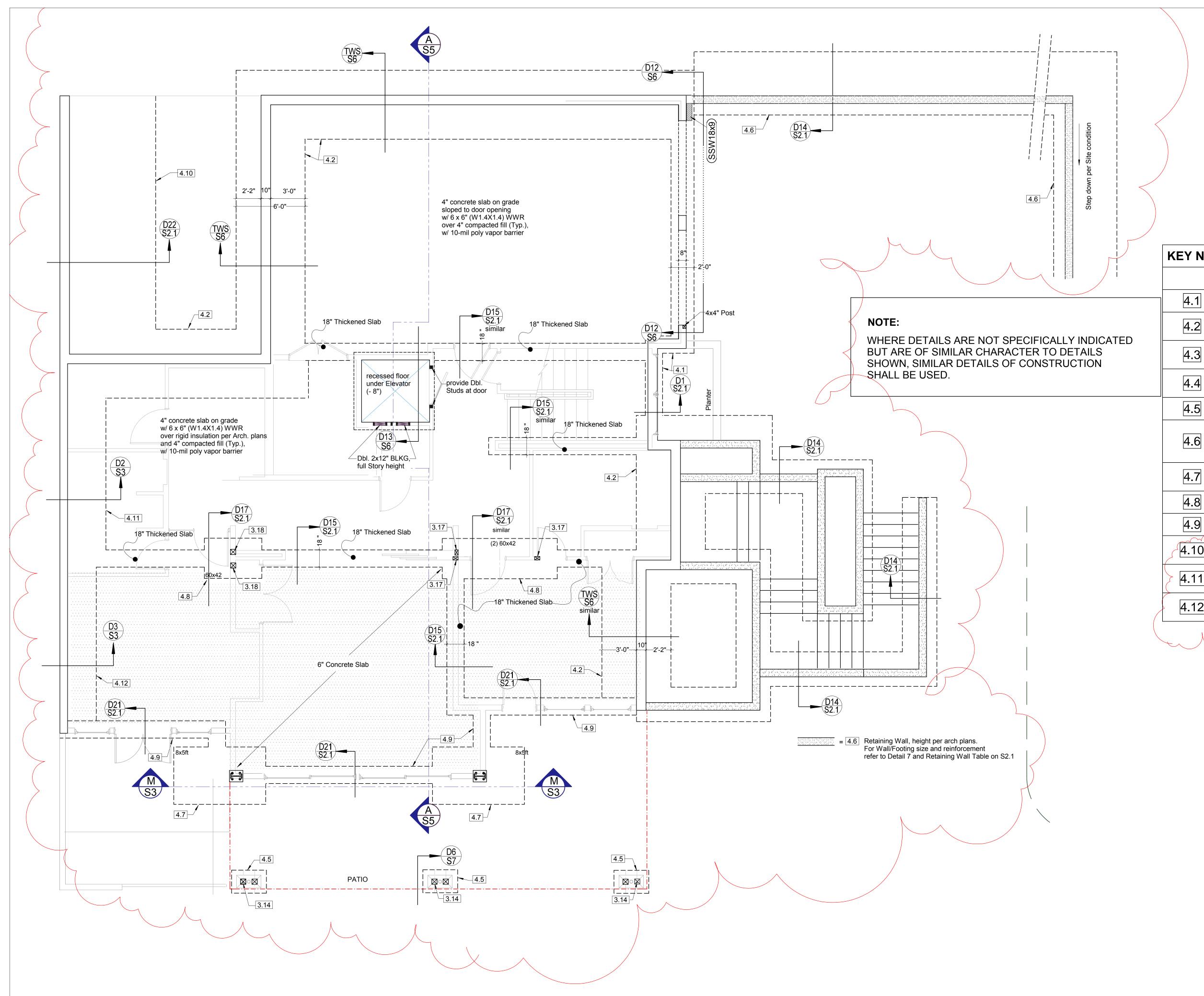
ACI 318 3.5, 7.1-7.7 ACI 318 3.8.6, 8.13, 21.2.8 ACI 318 Ch 4,5.2-5.4 ACI 318 6.1.1

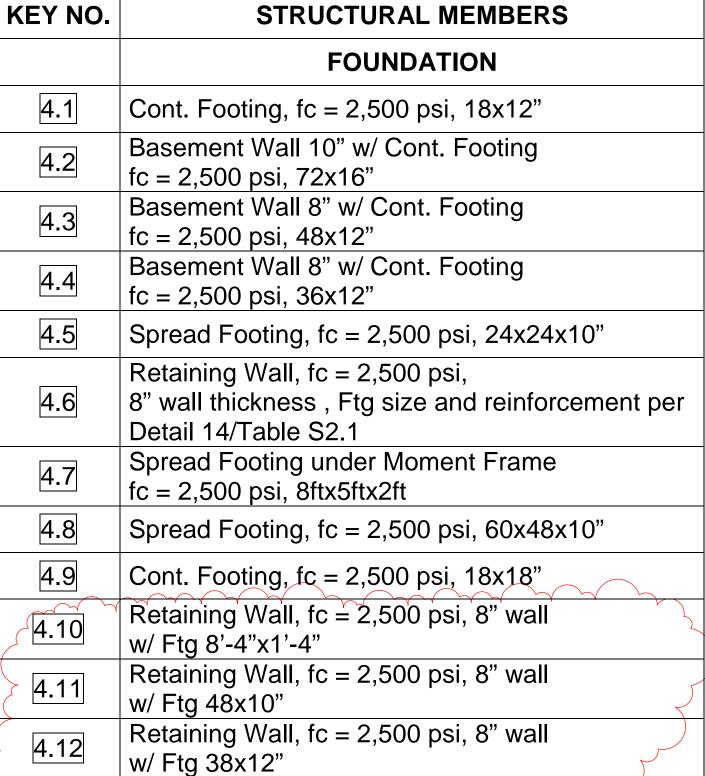


# **REVISION 05/29/16**

	6830 NE Bothe	II Way - Suite 6) 553 9076 - F	C, PMB 181, Kenmore Fax (206) 529 4408		
BUILDER:	Barcelo Hon	nes			SHEET
JOB SITE:	4634 E Mer	cer Way,	Mercer Island	t	
PARCEL NO.:			WA 98040	)	C1 1
DESCRIPTION:	new SFR				S1.1
DATE:	03/11/15	SCALE:	as noted		

Roland Heimisch, P. E.







# **REVISION 06/18/17**

tecinstruct LLC
6830 NE Bothell Way - Suite C, PMB 181, Kenmore, WA 98028
Telephone (206) 553 9076 - Fax (206) 529 4408

ENGINEERING

BUILDER: Barcelo Homes SHEET

JOB SITE: 4634 E Mercer Way, Mercer Island

PARCEL NO.: WA 98040

DESCRIPTION: new SFR

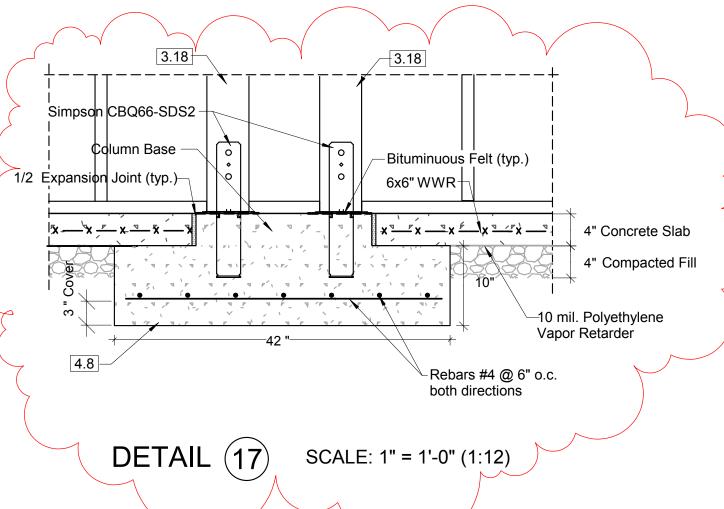
DATE: 03/11/15 SCALE: as noted

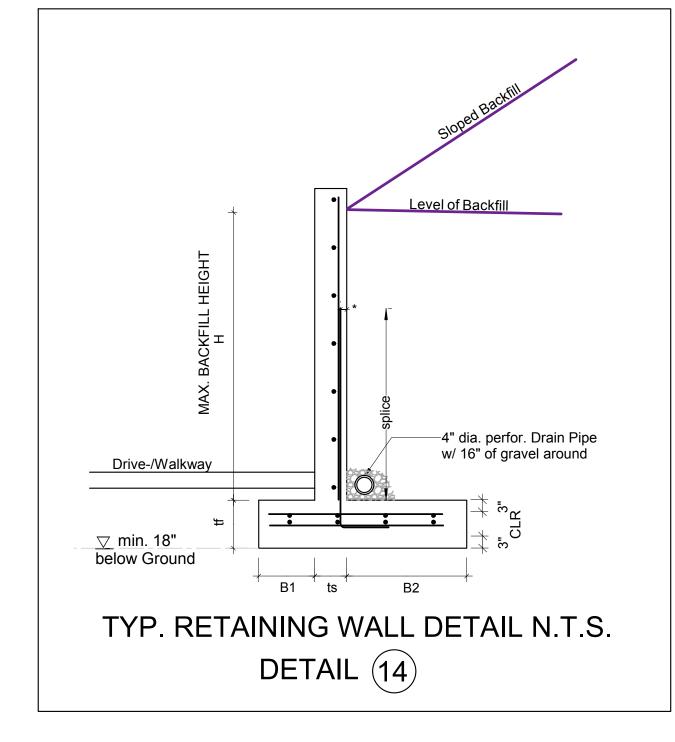
ENGINEER: Roland Heimisch, P. E.

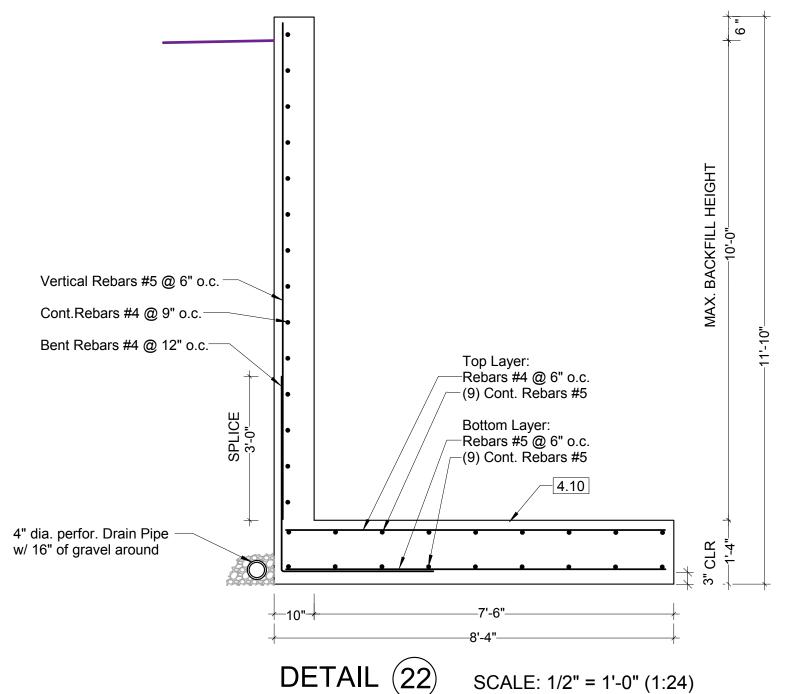
## RETAINING WALL SCHEDULE

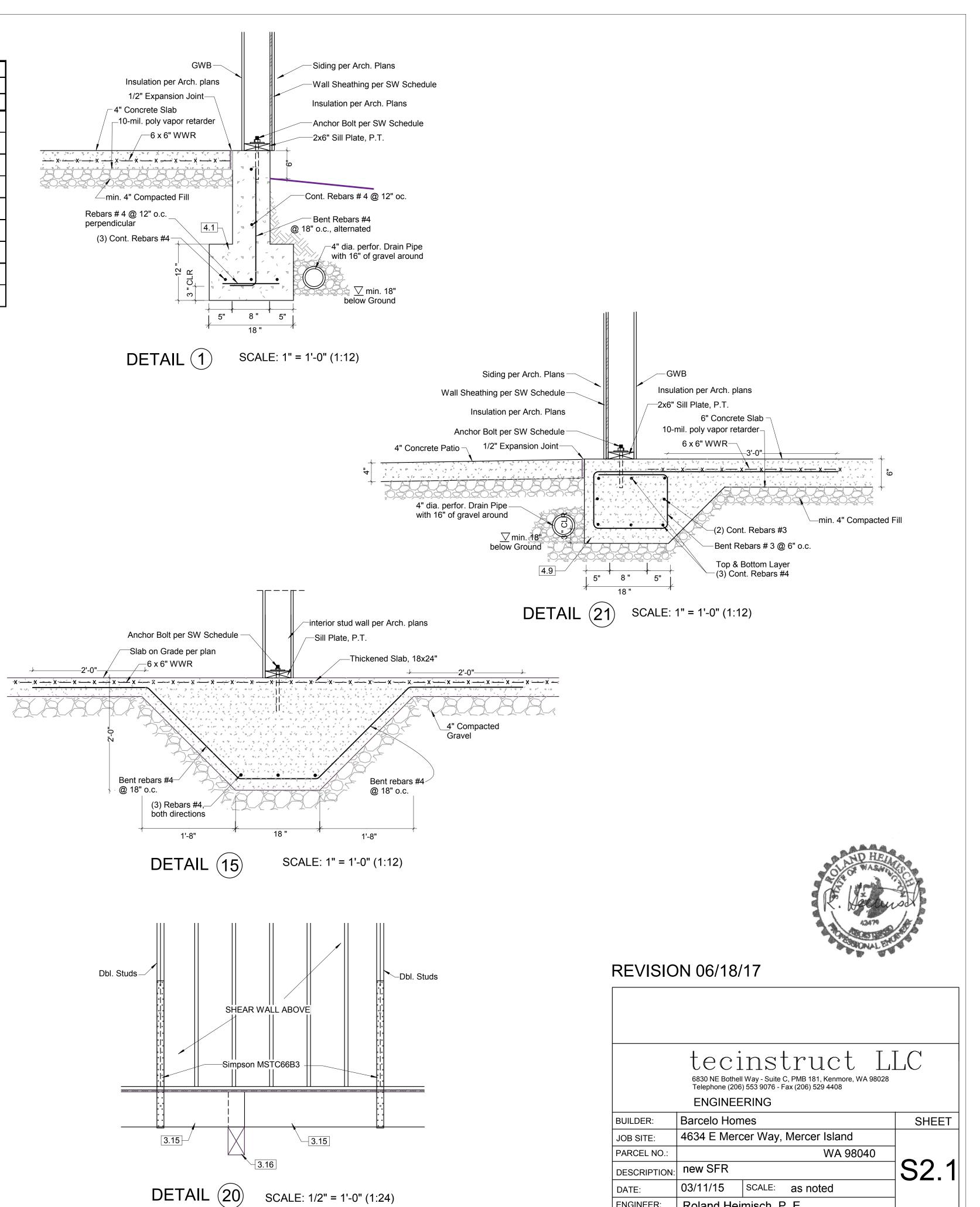
					Stem Re	inforcing			Footing R	einforcing	9
								T	op Layer	Bot	ttom Layer
H (ft.)	B1	ts	B2	tf	horiz.	vert.	splice	cont.	perp.	cont.	perp.
3'-0"	1'-0"	8"	1'-0"	12"	#4 @ 12" o.c.	#4 @ 12" o.c.	2ft	-	-	(2) #4	#4 @ 12" o.c.
4'-0"	1'-0"	8"	1'-4"	12"	#4 @ 12" o.c.	#4 @ 12" o.c.	2ft	-	1	(3) #4	#4 @ 12" o.c.
5'-0"	1'-4"	8"	1'-6"	10"	#4 @ 12" o.c.	#4 @ 16" o.c.	3ft	-	-	(3) #4	#4 @ 16" o.c.
6'-0"	1'-4"	8"	2'-0"	10"	#4 @ 12" o.c.	#4 @ 12" o.c.	3ft	-	-	(4) #4	#4 @ 12" o.c.
8'-0"	1'-10"	8"	2'-9"	12"	#4 @ 12" o.c.	#5 @ 9" o.c.	3ft	(6) # 4	#4 @ 9" o.c.	(6) #4	#4 @ 9" o.c.
10'-0"	2'-0"	10"	3'-10"	14"	#5 @ 12" o.c.	#5 @ 8" o.c.	4ft	(8) #4	#5 @ 8" o.c.	(8) #4	#4 @ 8" o.c.
12'-0"	2'-6"	10"	4'-2"	10"	#5 @ 12" o.c.	#6 @ 6" o.c.	4ft	(8) #4	#5 @ 6" o.c.	(8) #4	#4 @ 6" o.c.
RETAINII	NG WALL	WITH S	LOPED BA	ACKFILL							
12'-0"	3'-0"	12"	5'-0"	16"	#5 @ 12" o.c.	#6 @ 6" o.c.	4ft	(8) #4	#5 @ 6" o.c.	(8) #4	#4 @ 6" o.c.

	PROTECTION FOR REINFORCEMENT OF	MIN.
	CAST IN-PLACE CONCRETE	COVER
	Concrete cast against and permanently exposed to earth	3"
	Concrete exposed to earth or weather	
*	Wall panels:	
	No. 6 through No. 18 bars	2"
	No. 5 bars, W31 or D31 wire, and smaller	1 1/2"
	Concrete exposed to neither earth or weather	
	Slabs, walls, and joists:	
	No. 14 and no. 18 bars	1 1/2"
	No. 11 and smaller bars	3/4"
	Beams and Columns:	
	Primary reinforcement, ties, stirrups, and spirals	1 1/2"
	Shells and folded-plate members:	
	No. 6 bars and larger	3/4"
	No. 5 bars, W31 or D31 or smaller	3/4"



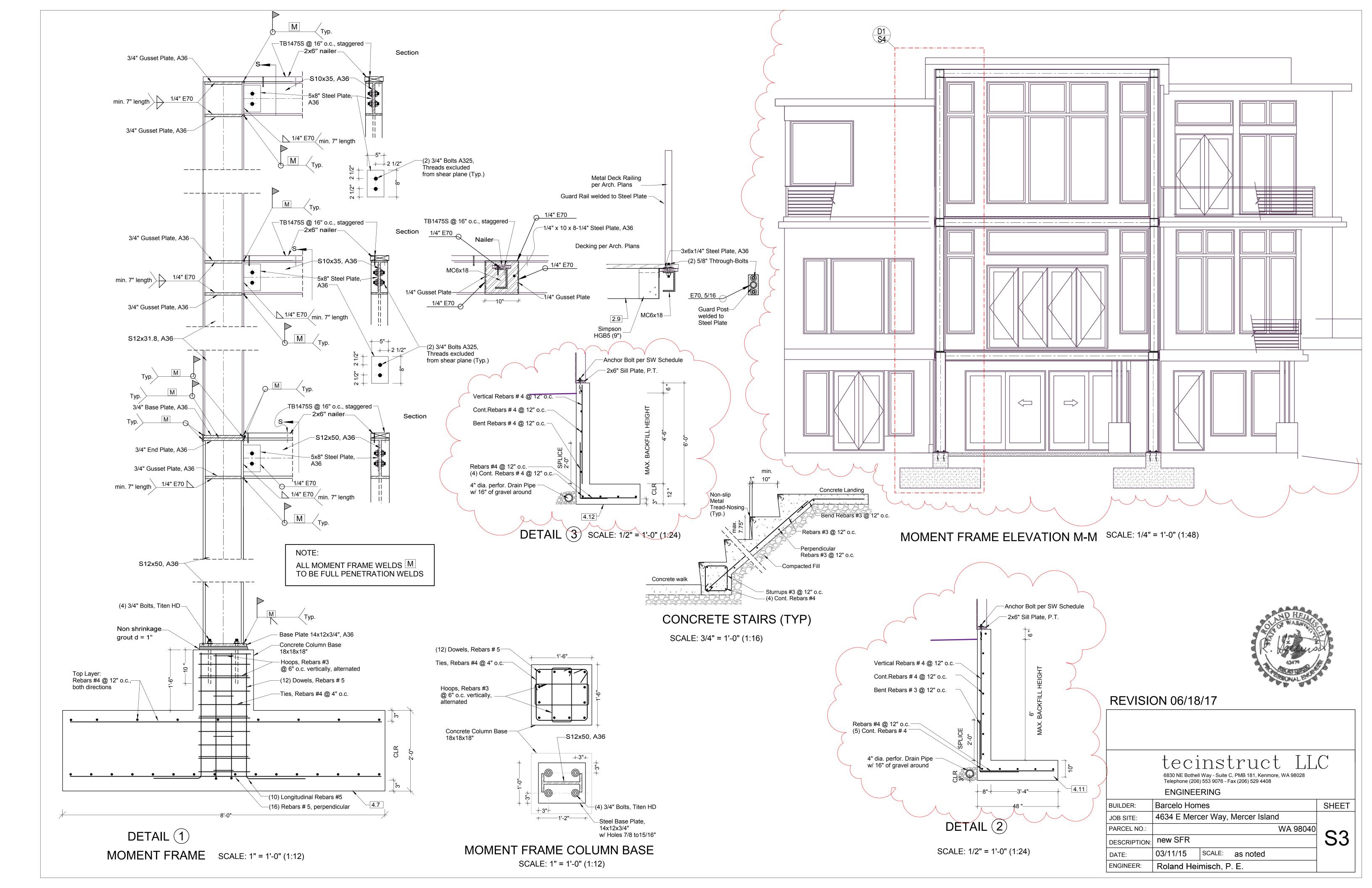


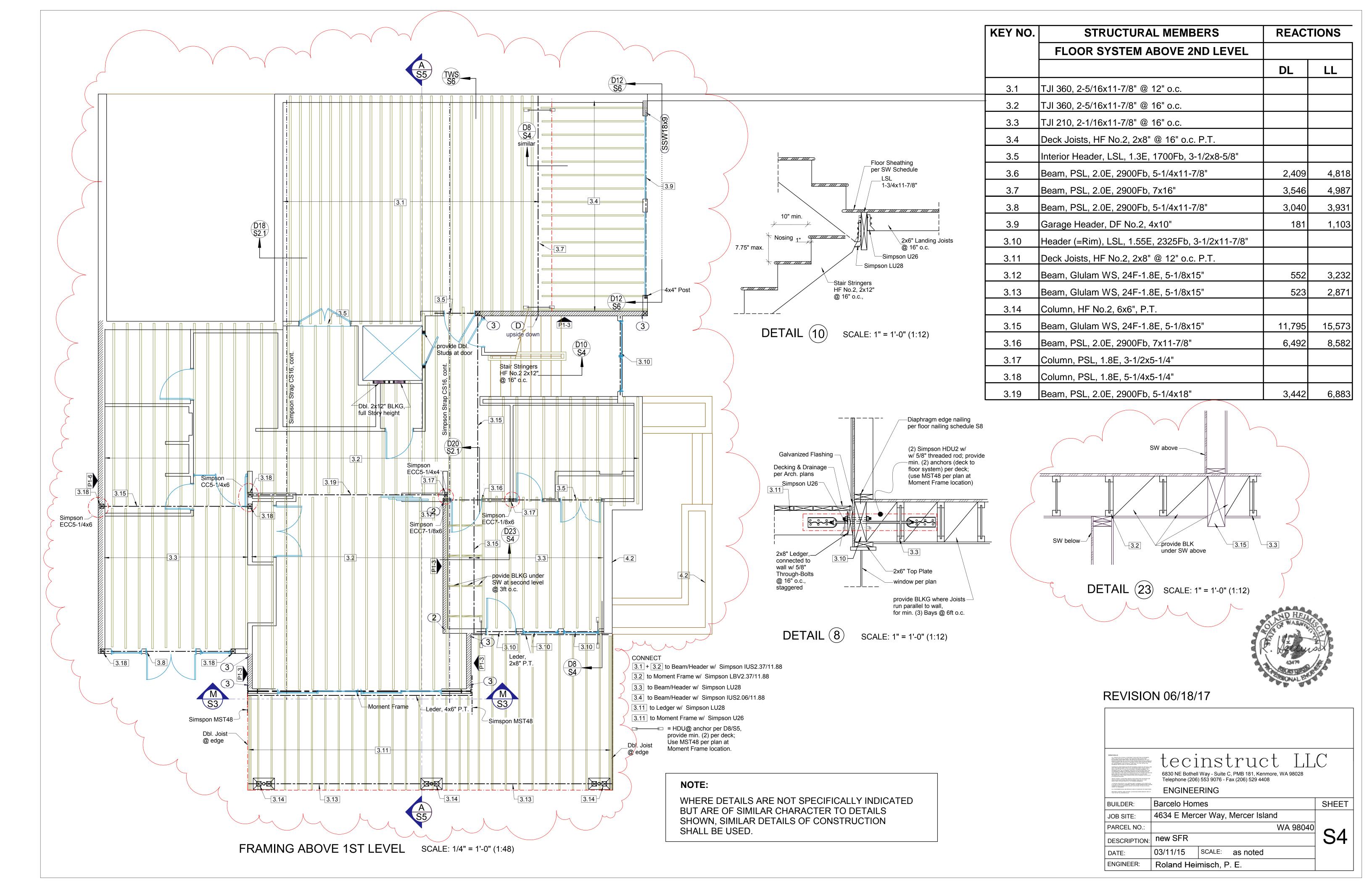


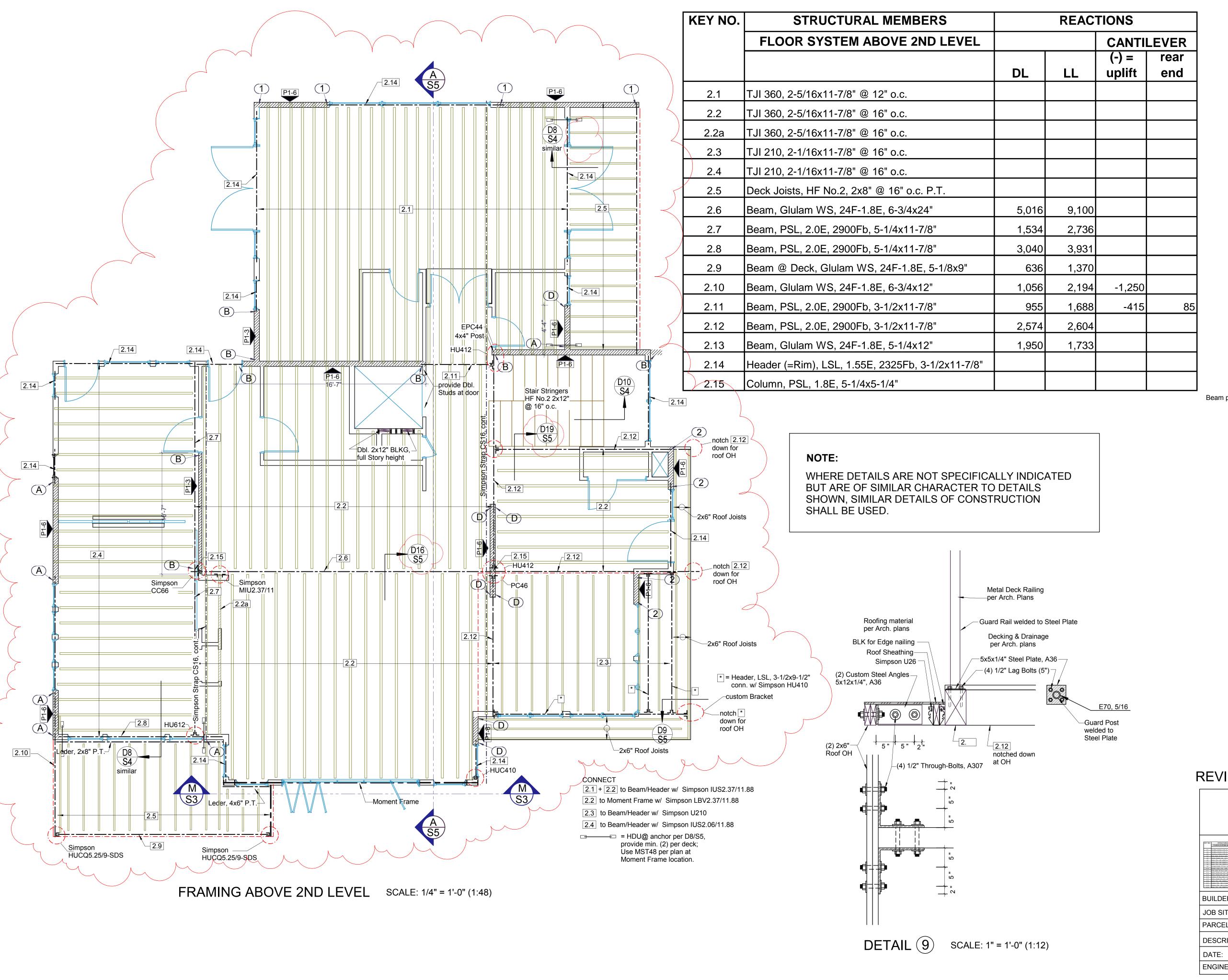


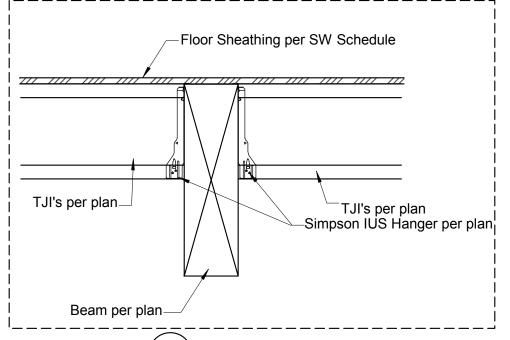
**ENGINEER:** 

Roland Heimisch, P. E.



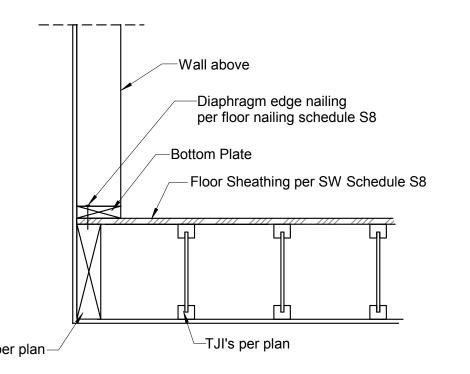






DETAIL 16 SCALE: 1" = 1'-0" (1:12)

TJI'S TO BEAM (TYP.)



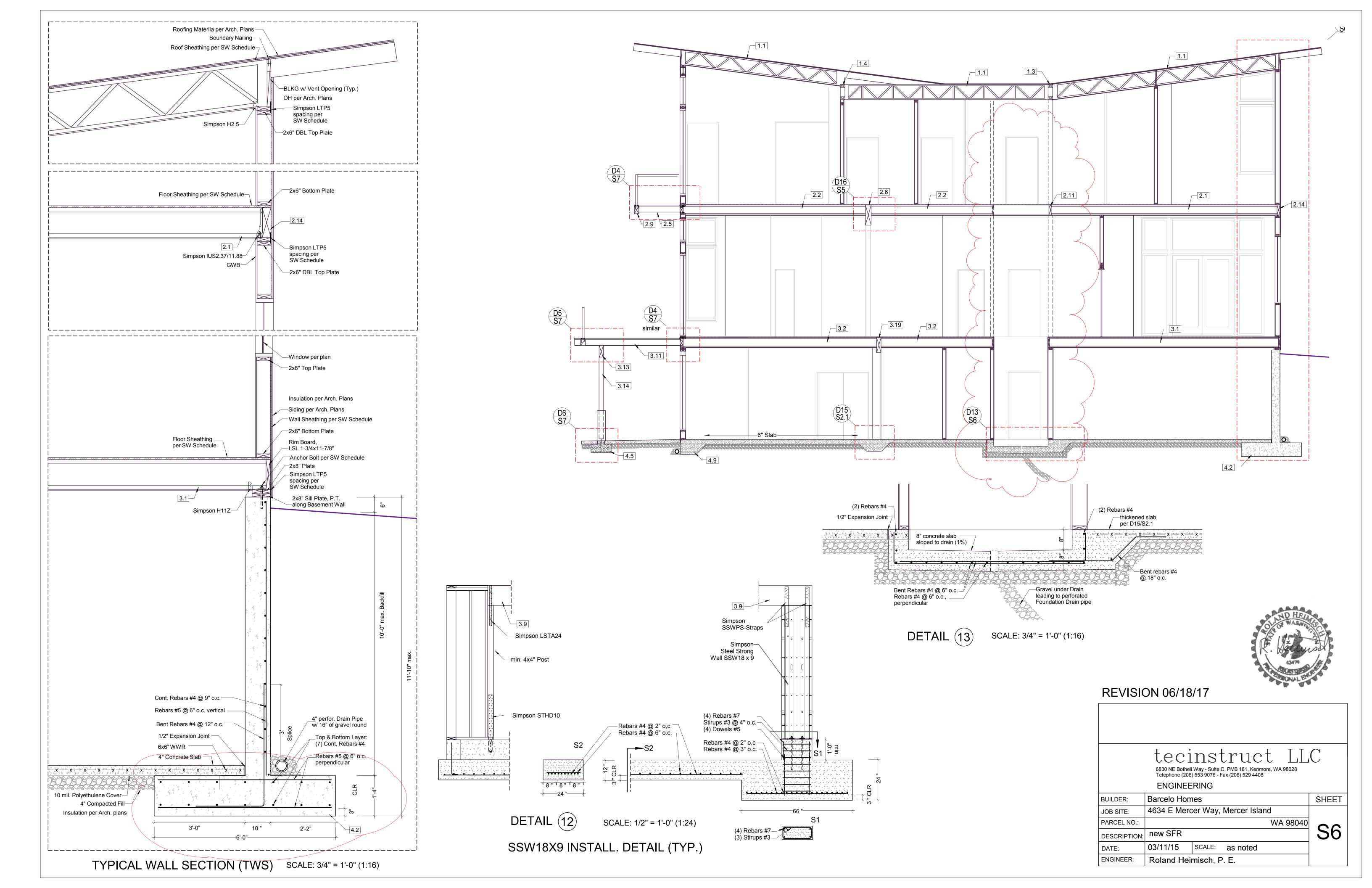
ETAIL (19) SCALE: 1" = 1'-0" (1:12)

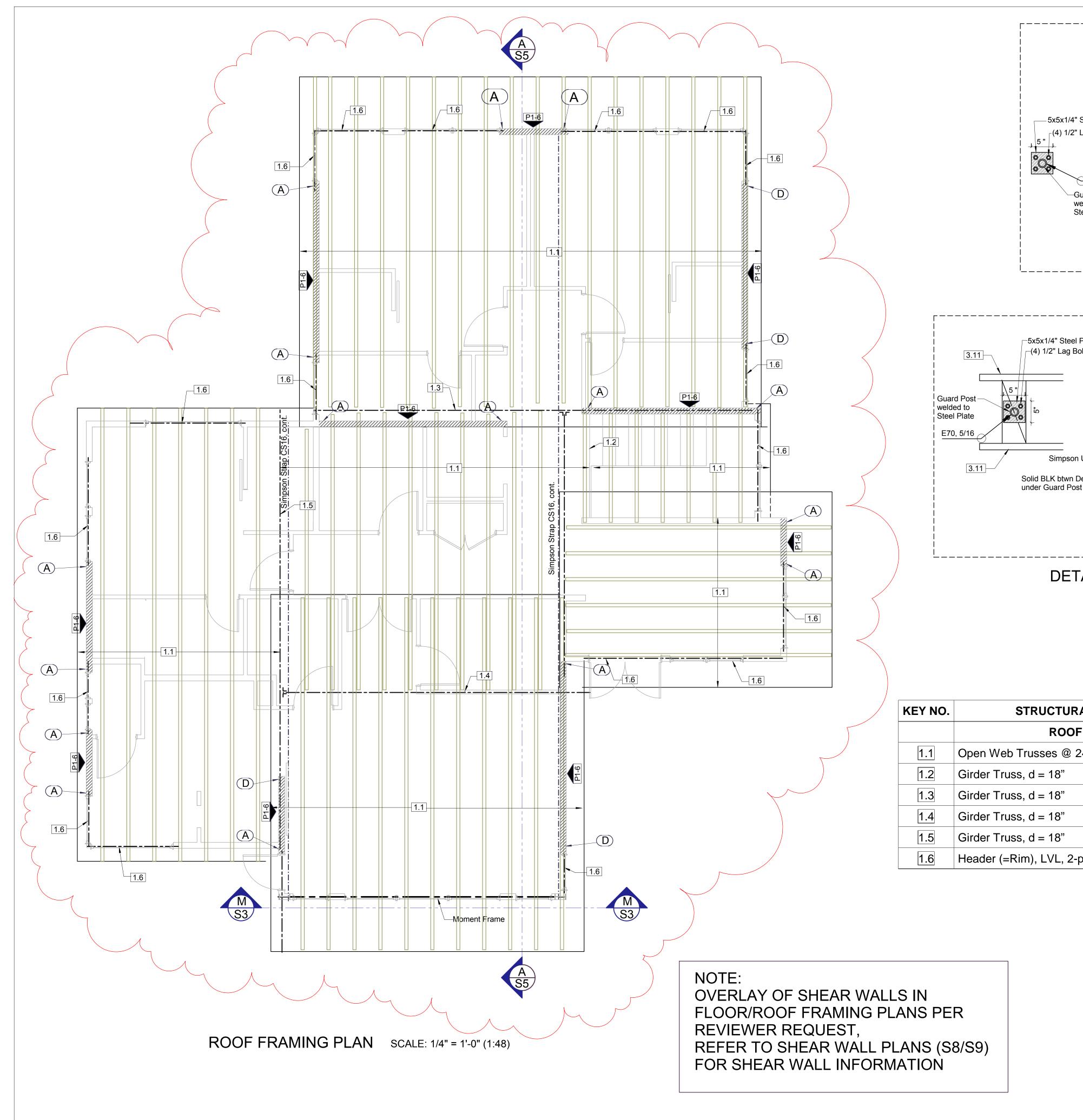


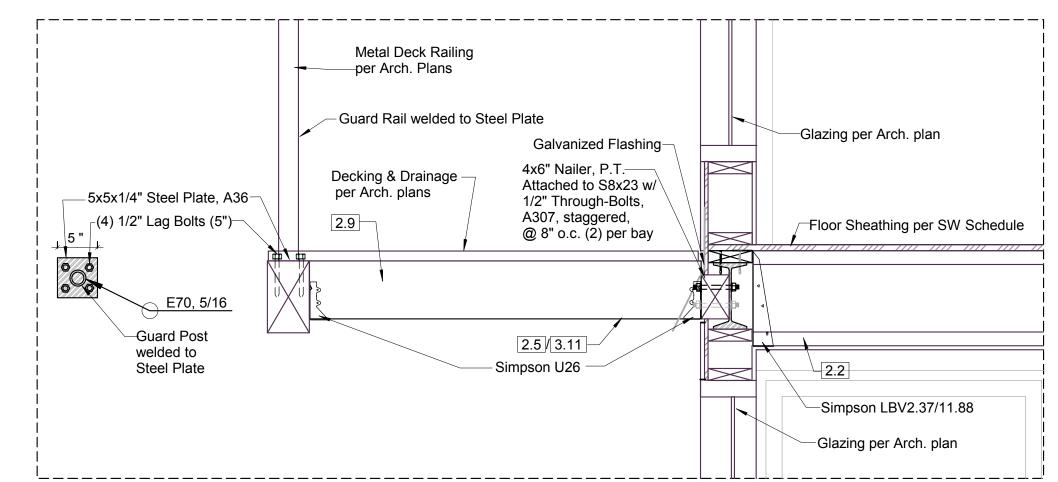
## **REVISION 06/18/17**

37 Rean PSL 205 2900Fb 7x16" 3.546 4.	tecinstruct LL  6830 NE Bothell Way - Suite C, PMB 181, Kenmore, WA 98028 Telephone (206) 553 9076 - Fax (206) 529 4408  ENGINEERING	C
BUILDER:	Barcelo Homes	SHEE

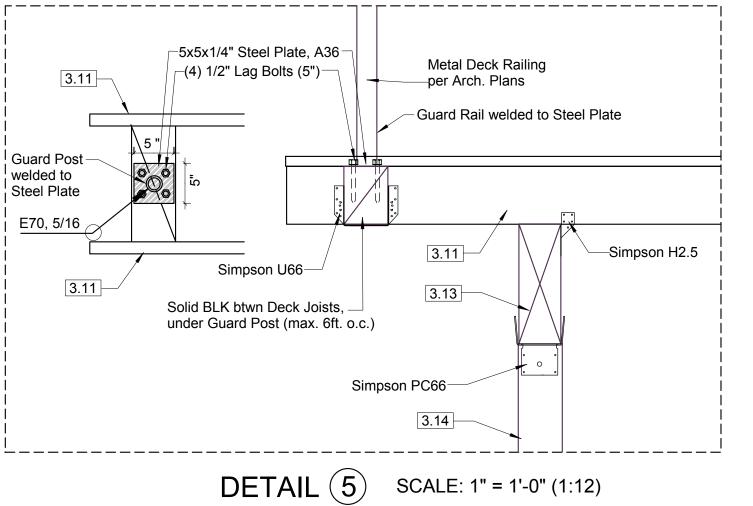
BUILDER:	Barcelo Hom	ies			SHE		
JOB SITE:	4634 E Merc	4634 E Mercer Way, Mercer Island					
PARCEL NO.:				WA 98040			
DESCRIPTION:	new SFR				S		
DATE:	03/11/15	SCALE:	as noted				
ENGINEER:	Roland Hei	misch, P	. E.		l		
				•			

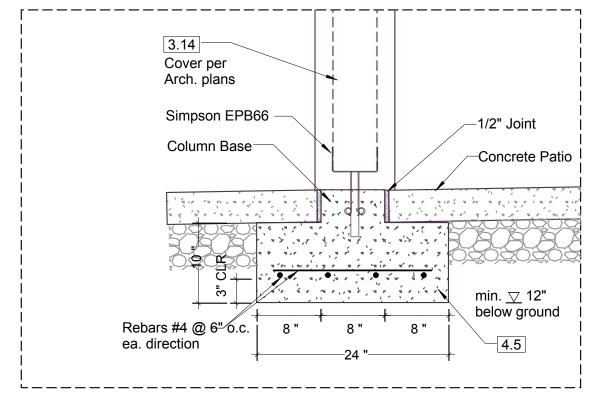






**DETAIL** 4 SCALE: 1" = 1'-0" (1:12)



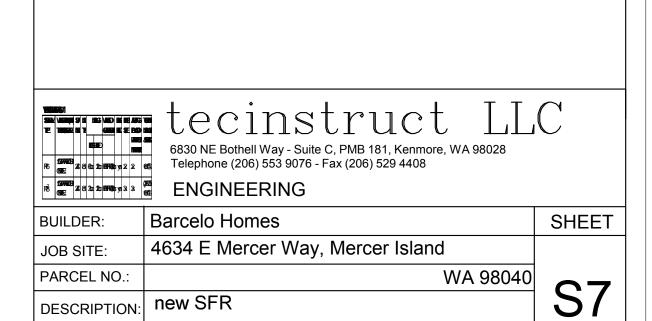


**DETAIL** 6 SCALE: 1" = 1'-0" (1:12)

KEY NO.	STRUCTURAL MEMBERS
	ROOF LEVEL
1.1	Open Web Trusses @ 24" o.c., d = 18"
1.2	Girder Truss, d = 18"
1.3	Girder Truss, d = 18"
1.4	Girder Truss, d = 18"
1.5	Girder Truss, d = 18"
1.6	Header (=Rim), LVL, 2-ply, (2) 1-3/4x18"



# **REVISION 06/18/17**



02/23/15 SCALE: as noted

Roland Heimisch, P. E.

## HOLDOWN SCHEDULE

SYMBOL	HOLDOWN	EMBED.	BOLT TYPE	MIN. WOOD MEMBER THICKNESS
1	Simpson HDU2	18"	SB5/8x24	(2) 2x
2	Simpson HDU4	18"	SB5/8x24	(2) 2x
3	Simpson HDU8	18"	SB7/8x24	DF 6x6"
4	Simpson HDU11	24"	SB1x30	DF 6x6"

P1-6

# VERTICAL DIAPHRAGM

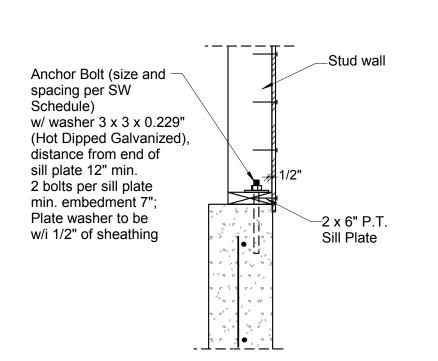
SHEARWALL TYPE	WALL SHEATHING (PANEL) THICKNESS & GRADE	SPAN INDEX	NAIL TYPE	NAI	ILING	WALL STUD GRADE & SPACING	BLKG REQ'D	BLOCK SIZE	ABUTTING PLYWOOD	TOP PLATE NAILING SIZE	SOLE PLATE	FOUNDATION ANCHOR BOLTS	ALLOWABLE LOAD	SIMPSON CLIPS
				EDGE	FIELD				PANEL EDGE MEMBER SIZE	& SPACING	NAILING SIZE &	SIZE & SPACING	SEISMIC / WIND	
P1-6	15/32" APA RATED/OSB ONE FACE	24/0	8d	6" o.c.	12" o.c.	HEM-FIR @ 16" o.c.	yes	2x	2x	16d @ 5"	16d @ 5"	5/8" @ 48" o.c.	244 PLF / 342 PLF	LTP5 @ 24" o.c.
P1-3 <sup>2</sup>	15/32" APA RATED/OSB ONE FACE	24/0	8d	3" o.c.	12" o.c.	HEM-FIR @ 16" o.c.	yes	3x	3x	(2) ROWS 16d @4"	(2) ROWS 16d @4"	5/8" @ 24" o.c.	564 PLF / 790 PLF	LTP5 @ 12" o.c.

#### NOTE:

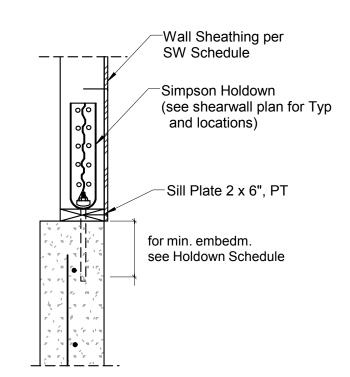
For all non-Shear Walls use nailing pattern, bolt and clip size/spacing for P1-6

# STRAP SCHEDULE

SYMBOL	STRAP	WOOD MEMBER	NAILS
A	MST48	(2) 2x	34 -16d
В	MST60	(2) 2x	46 - 16d
<b>(C)</b>	HTS20	(2) 2x	20 - 16d
D	MSTC66B3	(2) 2x	38 - 10d



# ANCHOR BOLT DETAIL (TYP.) SCALE: 1" = 1'-0" (1:12)



HOLDOWN DETAIL (TYP.) SCALE: 1" = 1'-0" (1:12)

FIRST LEVEL SHEAR WALL PLAN SO

N N N N N 2 -Moment Frame

SCALE: 1/4" = 1'-0" (1:48)

IORIZONTAL DIAPHRAGM							
	THICKNESS & GRADE	SPAN	NAIL		NAILIN	G	
		INDEX	TYPE	BDRY	EDGE	FIELD	
FLOOR NAILING	3/4" CDX T&G APA RATED/OSB	48/24	10d	6" o.c.	6" o.c.	12" o.c.	
ROOF NAILING	7/16" APA RATED/OSB	24/0	8d	6" o.c.	6" o.c.	12" o.c.	

#### SHEAR WALLS

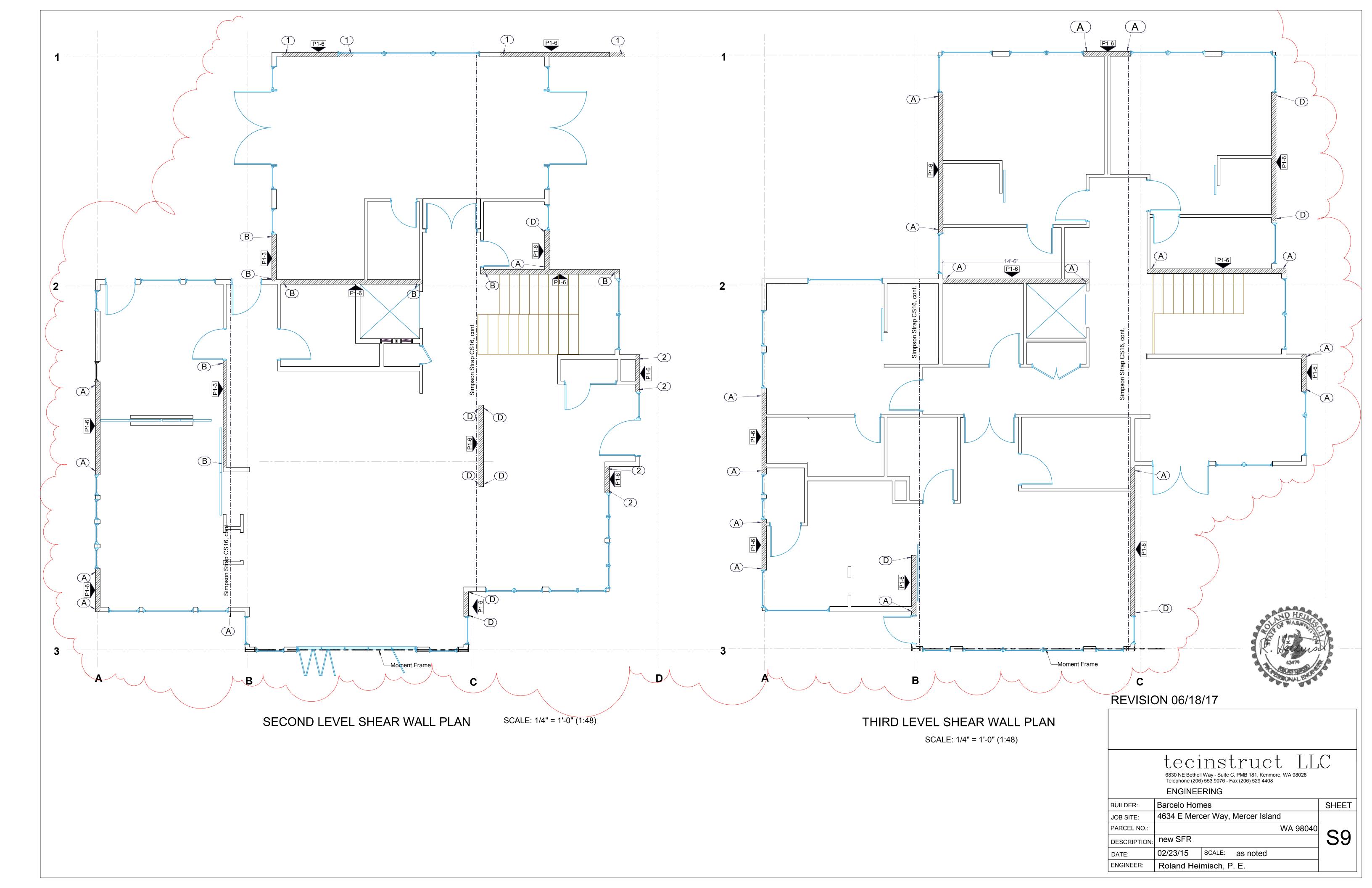
- 1. ALL SHEAR WALLS SHALL CONFORM TO IBC SECTION 23 REQMNTS. APPLY NAILING TO ALL STUDS, TOP AND BOTTOM PLATES AND BLOCKINGS. SHEATHING SHALL BE INSTALLED VERTICALLY W/ 4x10 SHEETS FROM THE SILL PLATE AT THE FOUNDATION TO THE LOWER OF THE DOUBLED TOP PLATES AT THE MAIN LEVEL AND FROM THE UPPER OF THE DOUBLED TOP PLATES AT THE WALL TO THE TOP OF THE DOUBLED TOP PLATES AT THE UPPER LEVEL.
- 2. WHERE APA SHEATHING IS APPLIED ON BOTH FACES OF THE WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBER, OR FRAMING SHALL BE 3x NOMINAL AND NAILS ON EACH SIDE SHALL BE STAGGERED. WHERE ALLOWABLE SHEAR VALUES EXCEED 350 PLF (NAIL SPACING 4" OR LESS, OR SHEAR WALLS W/ PLYWOOD APPLIED ON EACH SIDE OF THE STUD WALL) FOUNDATION SILL PLATES AND FRAMING ABUTTING PANEL EDGES SHALL BE 3x NOMINAL OR (2) 2x W/ STAGGERED NAILING.
- 3. ABOVE LISTED ALLOWABLE SHEAR CAPACITIES ARE ADJUSTED FOR USE OF HEM-FIR STUDS, SPACED NO MORE THAN 16" O.C. AND SHEATHING APPLIED DIRECTLY TO FRAMING MEMBERS.
- 4. 14 GAUGE STAPLES W/ 7/16" CROWN AND 2" NOMINAL LEG LENGTH OR 0.131 DIA. P-NAILS W/ 2" NOMINAL LENGTH CAN BE SUBSTITUTED FOR 8D COMMON NAILS W/ REDUCED SHEAR CAPACITIES TO USE STAPLES. VERIFY W/ ENGINEER.
- 5. ALL FASTENERS SHALL BE DRIVEN FLUSH W/ SURFACE OF SHEATHING.
- 6. PROVIDE A SINGLE JOIST OR MIN. 2x SOLID BLOCKING BELOW AND AT THE TOP OF ALL SHEARWALLS.

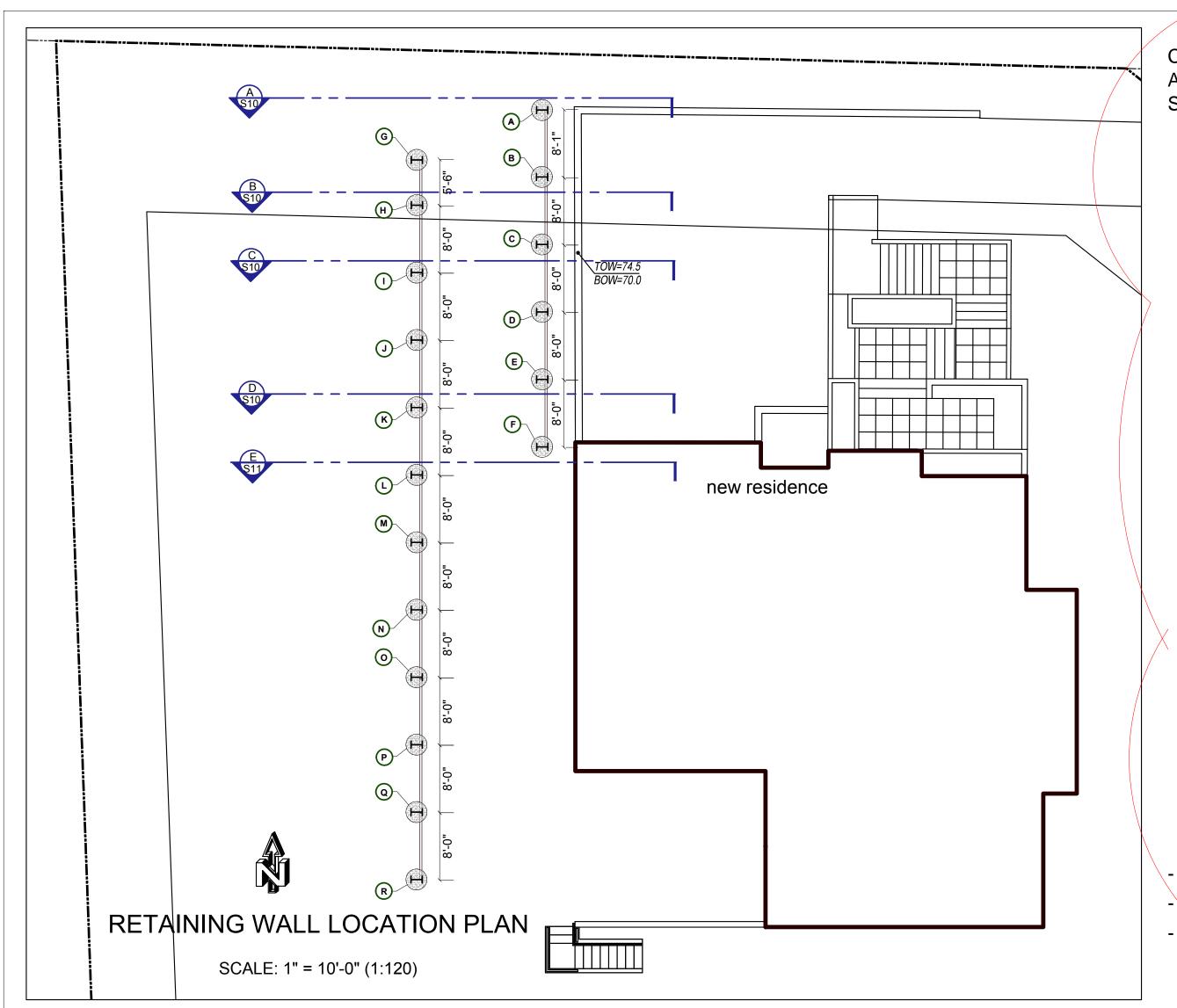


# **REVISION 06/18/17**

tecinstruct LLC
6830 NE Bothell Way - Suite C, PMB 181, Kenmore, WA 98028
Telephone (206) 553 9076 - Fax (206) 529 4408
ENGINEERING

BUILDER:	Barcelo Hom	Barcelo Homes					
JOB SITE:	4634 E Mercer Way, Mercer Island						
PARCEL NO.:				WA 98040			
DESCRIPTION:	new SFR				58		
DATE:	02/23/15	SCALE:	as noted				
ENGINEER:	Roland Hei	misch, P	. E.				



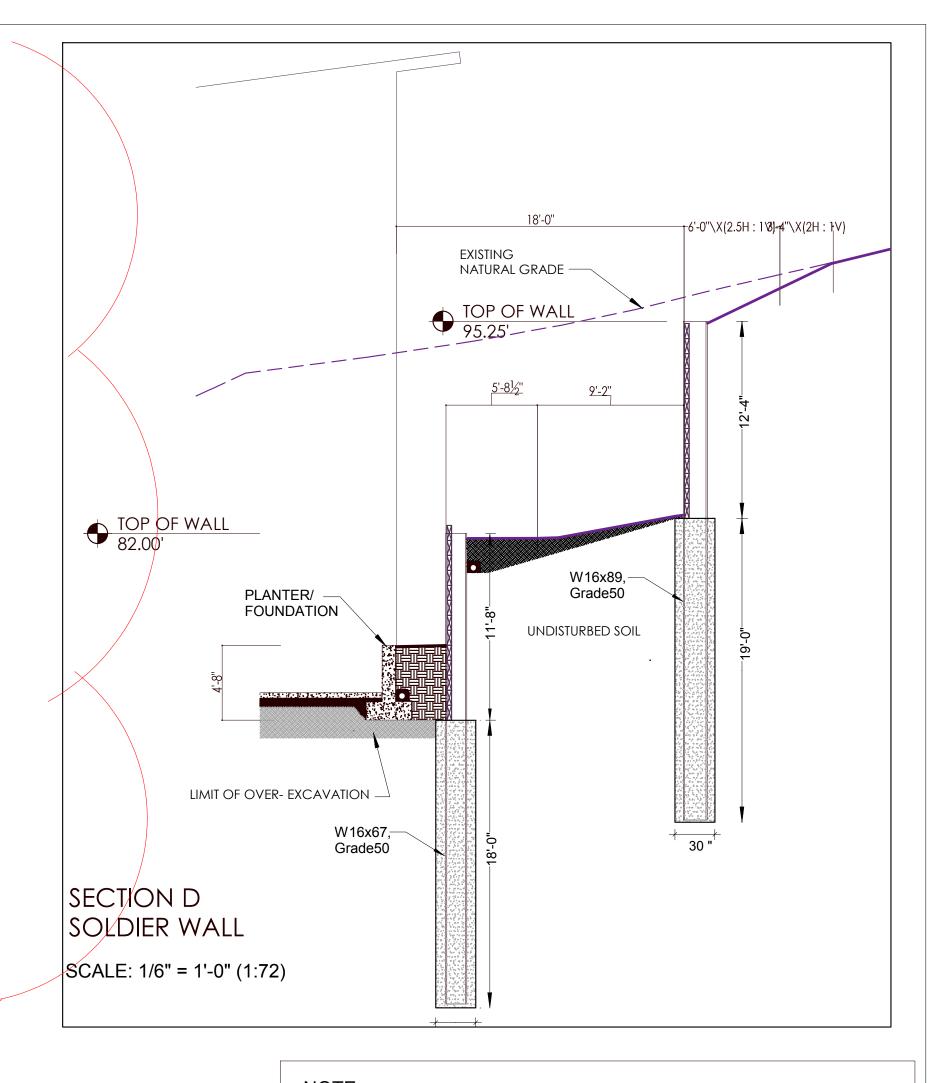


CONTRACTOR TO COORDINATE WITH ARCHITECT & STRUCTURAL ENGINEER ON ALL PENETRATIONS THROUGH RETAINING WALLS, PROVIDING SLEEVES WHERE SHOWN OR REQUIRED.

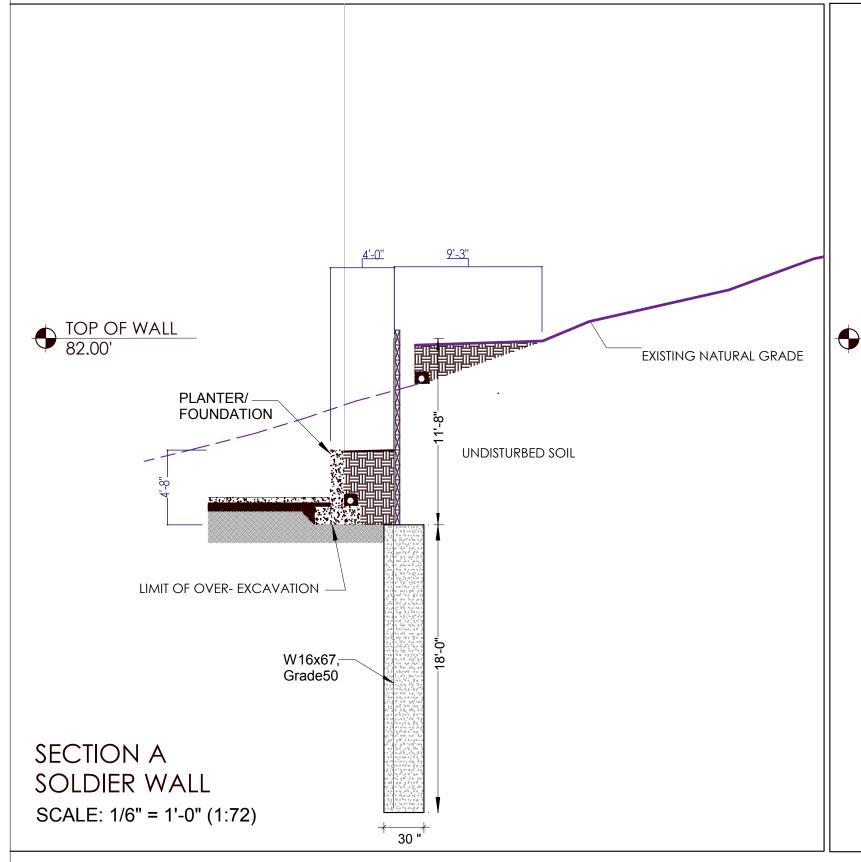
#### PILE/LAGGING TABLE

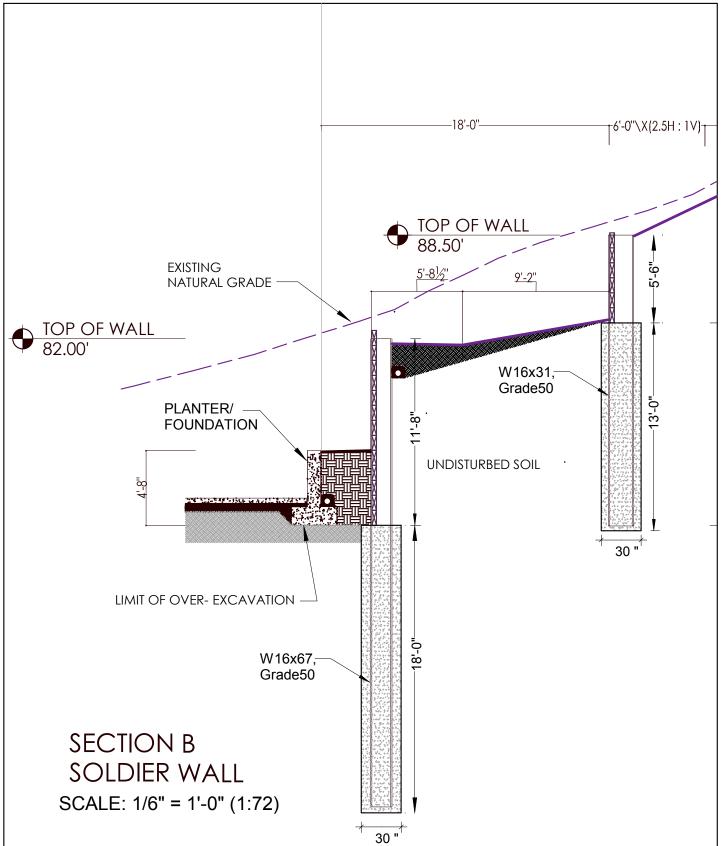
PILE/LAGGING TABLE							
TOP OF	TOP	BOTTOM	TOP	BOTTOM	MIN. PILE		
PILE	LAGGING	LAGGING	LAGGING	LAGGING	EMBEDMENT		
	(N)	(N)	(S)	(S)			
	LOWER SO	LIDER PILES	S, SPACING	PER PLAN			
82.0	N/A	N/A	82.0	70.3	18ft		
82.0	82.0	70.3	82.0	70.3	18ft		
82.0	82.0	70.3	82.0	70.3	18ft		
82.0	82.0	70.3	82.0	70.3	18ft		
82.0	82.0	70.3	82.0	70.3	18ft		
82.0	82.0	70.3	N/A	N/A	18ft		
	UPPER SOI	LIDER PILES	, SPACING	PER PLAN			
86.0	N/A	N/A	86.0	83.0	13ft		
88.5	86.0	83.0	88.5	83.0	13ft		
91.75	88.5	83.0	91.75	83.0	14ft		
91.75	91.75	83.0	91.75	83.0	14ft		
95.3	91.75	83.0	95.3	83.0	19ft		
95.3	95.3	83.0	95.3	83.0	28ft		
95.3	95.3	83.0	95.3	83.0	28ft		
95.3	95.3	83.0	95.3	83.0	28ft		
95.3	95.3	83.0	95.3	83.0	28ft		
95.3	94.0	83.0	95.3	83.0	28ft		
94.0	94.0	83.0	91.75	83.0	28ft		
91.75	91.75	83.0	N/A	N/A	28ft		

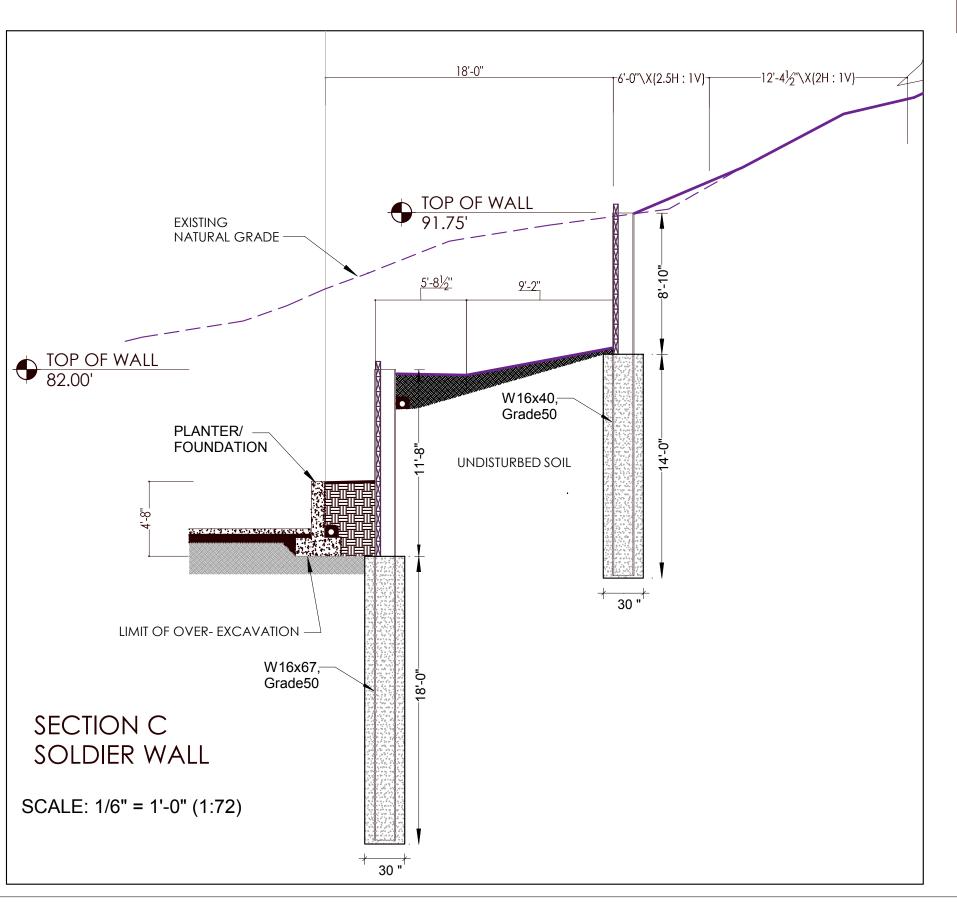
- ALL LAGGING TO BE PRESSURE TREATED.
- PILES SHALL BE COATED WITH CORROSION PROTECTION PAINT.
- USE CONCRETE fc = 2,500 psi TO EMBED PILES



NOTE:
REFER TO GEOTECHNICAL REPORT ADDENDUM
EVALUATION OF SURCHARGE LOAD ON THE SOLDIER PILE WALL
PROPOSED SIGLE-FAMILY RESIDENCE
4634 E MERCER WAY, MERCER ISLAND, WA
FOR FURTHER INFORMATION.





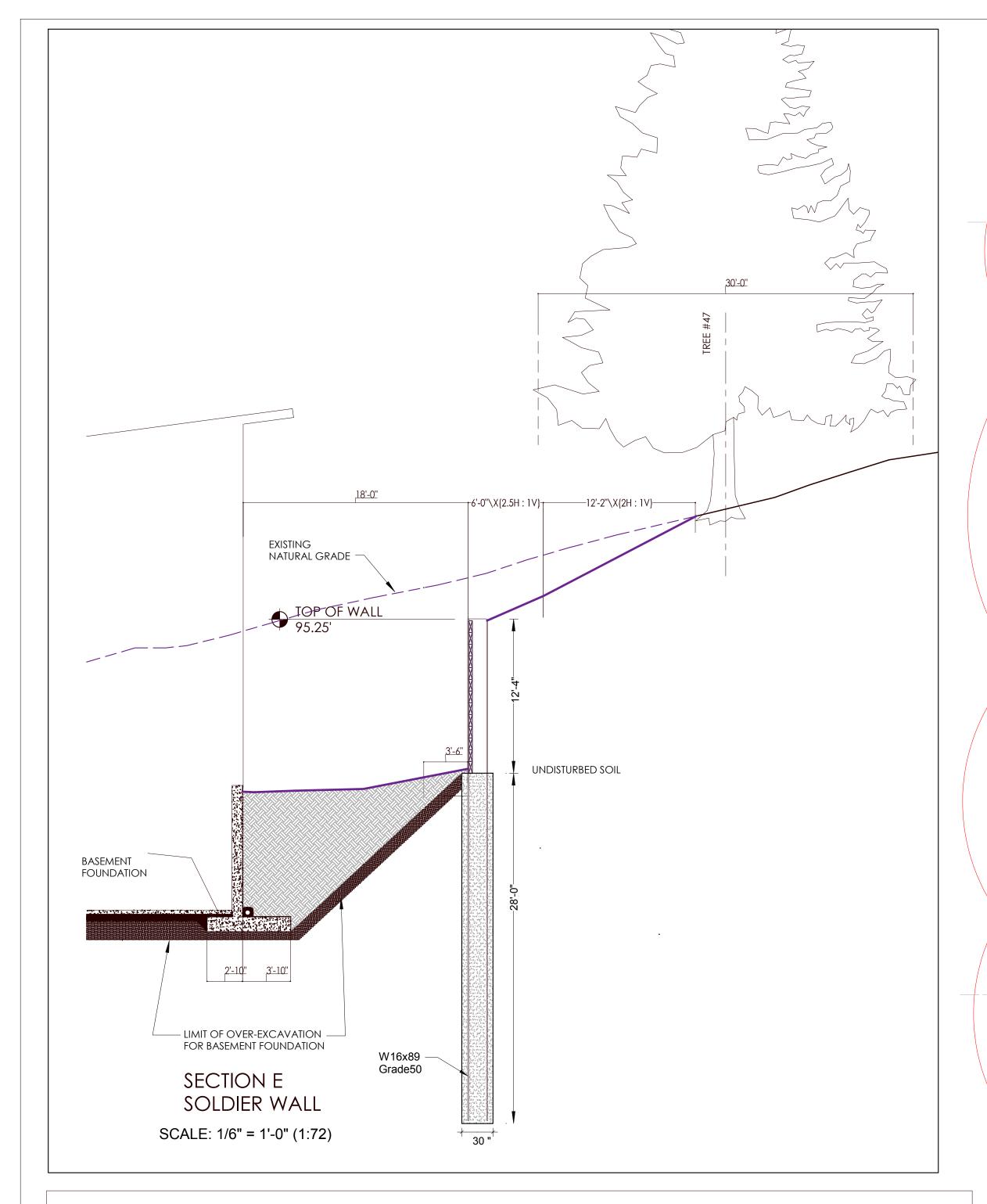


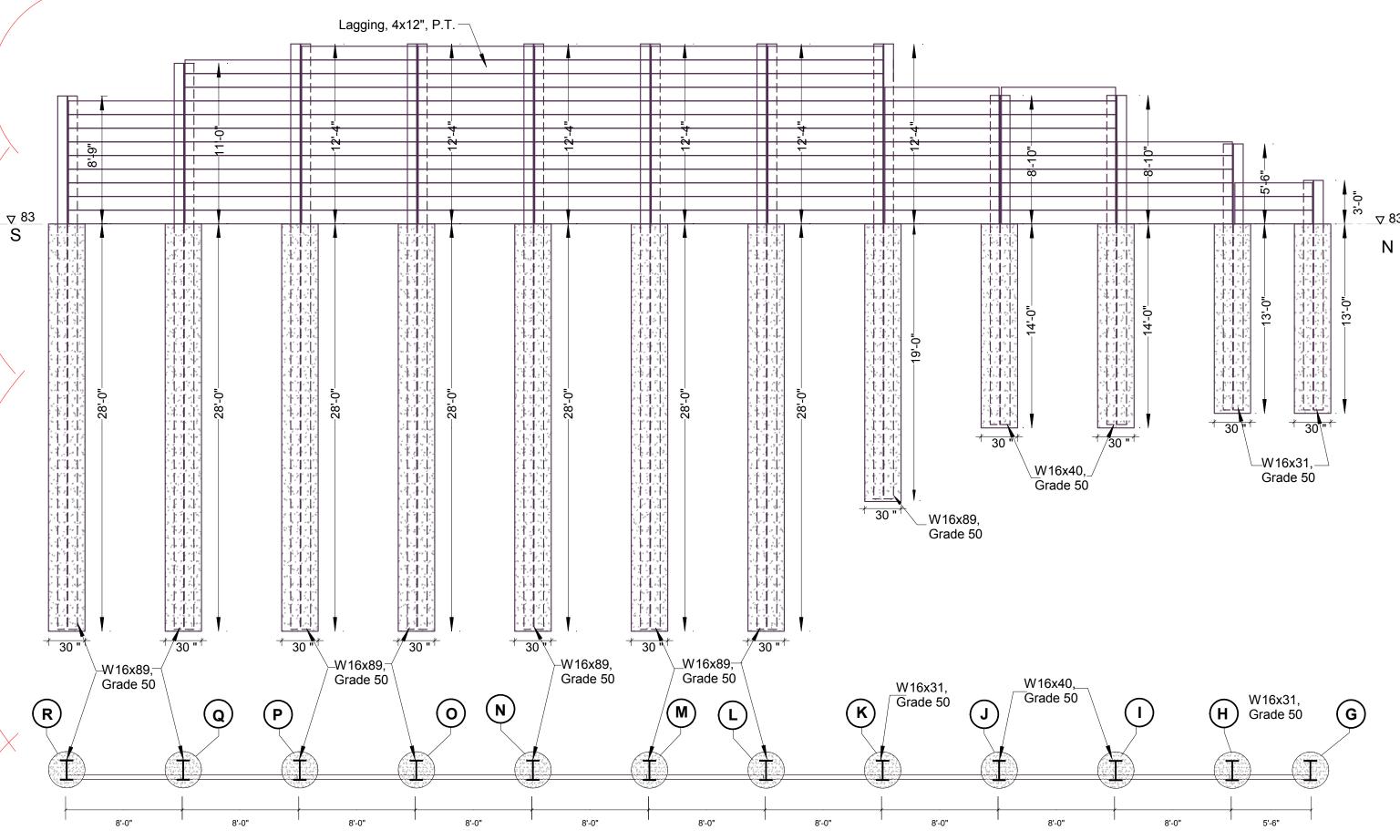


# **REVISION 08/12/16**

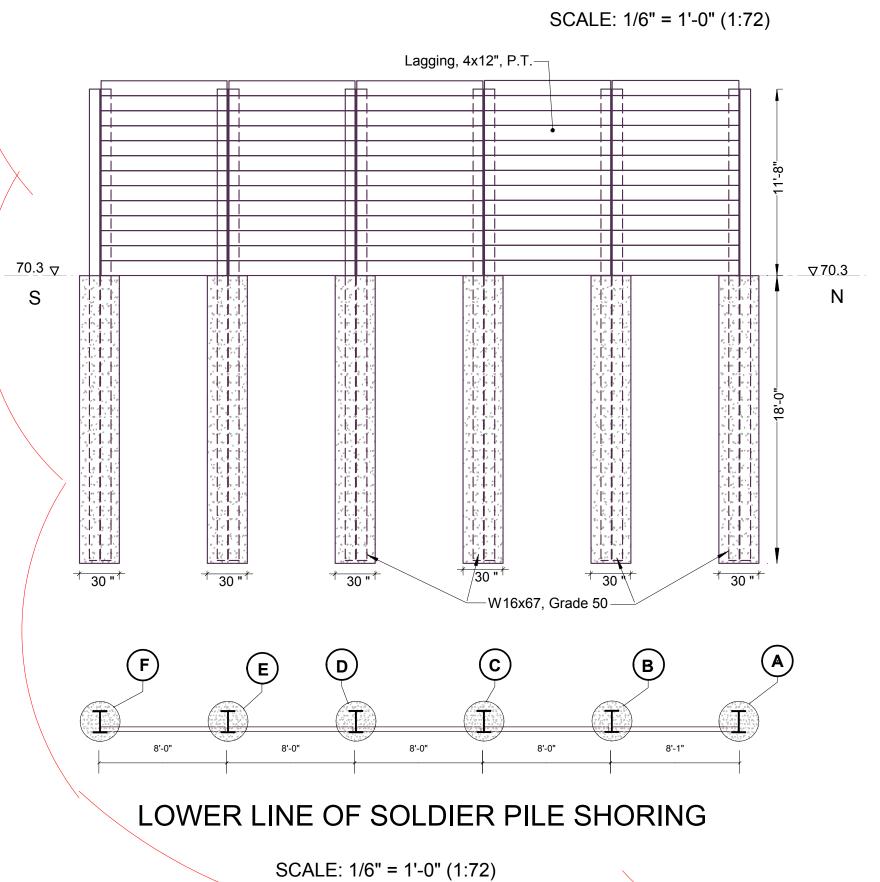


BUILDER:	Barcelo Hom	nes		SHEE
JOB SITE:	4634 E Merc			
PARCEL NO.:			WA 98040	
DESCRIPTION:	Solider Pile	S10		
DATE:	03/11/15	SCALE:	as noted	
ENGINEER:	Roland Hei			
·			·	·





# UPPER LINE OF SOLDIER PILE SHORING



KEY NO.	STRUCTURAL MEMBERS
	FOUNDATION
4.9	Lower soldier Pile Wall, all Sections, W16x67, Grade 50
4.10	Upper Soldier Pile Wall, Section B, W16x31, Grade 50
4.11	Upper Soldier Pile Wall, Section C, W16x40, Grade 50
4.12	Upper Soldier Pile Wall, Section D, W16x89, Grade 50
4.13	Soldier Pile Wall, Section E, W16x89, Grade 50



# **REVISION 08/12/16**



tecinstruct LLC
6830 NE Bothell Way - Suite C, PMB 181, Kenmore, WA 98028
Telephone (206) 553 9076 - Fax (206) 529 4408

	ENGINEE	RING		
BUILDER:	Barcelo Homes			SHE
JOB SITE:	4634 E Mercer Way, Mercer Island			
PARCEL NO.:			WA 98040	
DESCRIPTION:	Soldier Pile Shoring			S1
DATE:	03/11/15	SCALE:	as noted	
ENGINEER:	Roland Heimisch, P. E.			

# **Shoring Construction Sequence**

- 1. Grade and excavate to the top of the upper wall
- 2. Drill 2.5 ft dia. holes for upper wall to bottom of embedment and install steel piles
- 3. Dig soil in sections only deep enough to immediately install lagging Install lagging following the excavation to the top level of the lower wall
- 4. Drill 2.5 ft dia. holes for lower wall to bottom of embedment and install steel piles
- 5. Dig soil in sections only deep enough to immediately install lagging Install lagging following the excavation to the bottom level of the wall