CITY OF MERCER ISLAND, WASHINGTON
Development Services Group

9611 S.E. 36th St. Mercer Island, WA 98040-3732
(206) 275-7605 FAX: (206) 275-7725 TDD: (425) 803-1751
Inspection Requests:
online: www.MyBuildingPermit.com
voicemail: (206) 275-7730

Updated February 2011

NOTE: ALL RECORDS AND DRAWINGS ARE SUBJECT TO PUBLIC DISCLOSURE AS REQUIRED BY RCW 42.56

TO BE COMPLETED BY APPLICANT

CONTACT INFORMATION:
Applicant is to complete the following information.

Applicant Contact information *prior* to permit issuance:
Name: MARTIN KOENIGS ARCHS
Address: 4212 S. FERDINAND, SEATTLE, WA 98118
Phone: (206) 849-4319
e-mail: mka@seanet.com

Applicant Contact information *after* permit issuance:
Name: DICK HASSLINGER/PETER DAVIS BUILDERS
Address: 7420 SE 24TH ST #1 MERCER ISLAND
Phone: (206) 232-1883
e-mail: dick@peterdavisbuilders.com

REQUIRED SPECIAL INSPECTIONS / STRUCTURAL OBSERVATIONS:
It is the Engineer of Record's responsibility to specify all required Special Inspections or Structural Observation (check items below). The owner is responsible for hiring an approved private Special Inspector for the checked inspections noted below. All Special Inspectors (except Geotechnical) must be WABO certified.

When Special Inspection or Structural Observation is required, the report shall be submitted to the City Building Inspector prior to the City Inspection. **Note: Inspection by the City Inspector is required in addition to the Special Inspection or Structural Observation indicated below. Do not cover or conceal any work prior to the City inspection.**

STRUCTURAL OBSERVATION BY ENGINEER OF RECORD (EOR):
Engineer of Record: NIC ROSSOW Company: GIRAF DESIGN Phone: (206) 621-0060
☒ General Conformance to Construction Documents: ☐ Other:

SOILS / GEOTECHNICAL:
Special Inspector: Company: Phone:
- ☐ Erosion control measures
- ☐ Shoring installation and monitoring
- ☐ Observe and monitor excavation
- ☐ Verification of soil bearing
- ☐ Other:
- ☐ Subsurface drainage placement
- ☐ Verify fill material and compaction
- ☐ Rockery installation
- ☐ Pile placement (auger cast/driven pile)
- ☐ Other:

REINFORCED CONCRETE:
Special Inspector: Company: Phone:
- ☐ Concrete strength
- ☐ Reinforcing steel and concrete placement
- ☐ Shotcrete placement
- ☐ Other:
- ☐ Retaining wall construction
- ☐ Prestressed / Precast construction
- ☐ Other:
- ☐ Other:

STRUCTURAL STEEL:
Special Inspector: Company: Phone:
- ☐ Fabrication and shop welds
- ☐ Structural steel erection, field welds and bolting
- ☐ Other:
- ☐ Moment Frame construction
- ☐ Other:
- ☐ Other:

STRUCTURAL MASONRY:
Special Inspector: Company: Phone:
- ☐ Mortar strength
- ☐ Masonry unit strength
- ☐ Other:
- ☐ Other:
- ☐ Glass unit masonry installation
- ☐ Wall panel and veneer installation
- ☐ Other:
- ☐ Other:

WOOD:
Special Inspector
Engineer of Record: Company: Phone:
- ☐ Lateral resisting system construction
- ☐ Other:
- ☐ High strength diaphragm construction
- ☐ Other:

OTHER SPECIAL INSPECTIONS:
Special Inspector: Company: Phone:
- ☐ Epoxy grout installations
- ☐ Expansion anchor installations
- ☐ Other post installed anchors
- ☐ Exterior Insulation Finish System (EIFS) installation
- ☐ Alternative construction methods:
- ☐ Alternative construction materials:
- ☐ Stucco installation
- ☐ Other:
- ☐ Other:

TO BE COMPLETED BY APPLICANT

DEFERRED SUBMITTALS:
The Applicant is required to select all deferred submittals / shop drawings for submittal to the City for review and approval prior to item fabrication / construction.

- ☐ Connector plate wood trusses
- ☐ Metal joist / metal trusses
- ☐ Premanufactured structures (stairs, etc.)
- ☐ Precast concrete elements
- ☐ Other:
- ☐ Post tension layout
- ☐ Exterior cladding
- ☐ Window wall / curtain wall construction
- ☐ Other:
- ☐ Other:

ENERGY CODE COMPLIANCE INFORMATION:
Indicate where the following information is located in the drawing set. Alternatively, incorporate or include the Residential Energy Code Prescriptive Compliance Form into the drawing set.

☒ Building envelope information: (including U-factors, insulation and moisture control) sheet: A1, A2
☒ Whole house ventilation information: (include ventilation option and duct sizing if applicable) sheet: ENERGY COMPLIANCE FORM
☐ Residential Energy Code Prescriptive Compliance Form incorporated within drawing set.

TO BE COMPLETED BY DSG

PROJECT ALERTS:
Construction of the project shall be from ***approved plans only***. No deviation from the approved project plans is allowed without prior approval from the City of Mercer Island. Approved plans must be kept on site and maintained in good condition.

☑ Refer to "Conditions of Permit Approval" provided at permit issuance for required construction rules and regulations, including (but not limited to):
- Site Considerations
- Hours of work
- Construction vehicle parking restrictions
- Access road requirements
- ROW restrictions
- Drainage requirements
- Sewer requirements
- Water service requirements
- Fire code requirements
- Planning requirements

☐ Refer to "Preconstruction Meeting Checklist" provided at the preconstruction meeting for other development related rules and regulations.
☑ Temporary site address with minimum 6" high numbers visible from the street must be installed.
☑ Erosion control measures must be as shown on approved project drawings. All erosion control is to be in place and inspected prior to the start of any site work.
☑ Tree protection as shown on approved drawings shall be installed at tree dripline prior to start of any site work and must remain in place throughout the project.
☑ No trees shall be cut without a City of Mercer Island tree permit.
☐ Replacement trees must be a minimum of six feet tall at installation. They must be planted and approved prior to final inspection. Health and survival of replacement trees must be guaranteed for two years.
- Trees must be replaced at a ratio of ____ to 1.
- For this project, ____ trees are authorized to be removed and replaced with ____ trees.

☑ Refer to the "Conditions of Permit Approval" for Noise / Sound level certification of mechanical equipment requirements.
☐ Verify all required City of Mercer Island permits have been issued prior to start of the respective work. Possible permits include, but are not limited to:
- ☐ Fire Sprinkler
- ☐ NFPA 13
- ☐ NFPA 13R
- ☐ NFPA 13D
- ☐ Fire Alarm
- ☐ Building
- ☐ Storm Water
- ☐ Right-of-way Use
- ☐ Rockeries / Retaining walls
- ☐ Other:

☑ City of Mercer Island Business License required for all subcontractors. Call (206) 275-7783 for more information.

WATER SUPPLY REQUIREMENTS:
☐ Water Supply system upgrade required.
- ☐ City Installation
- ☐ Applicant Installation

Required Service Line Size: (water main to meter) Required Supply Line Size: (meter to house) Required Meter Size:

☐ Abandonment of existing service and meter required at main.
☑ Pressure reducing valve required if pressure exceeds 80psi.
☑ Reduced pressure backflow assembly (RPBA) required for all waterfront and lots with non-city water supply (private wells or lake irrigation).
☐ Additional water supply requirements:

DRAINAGE REQUIREMENTS:
- ☐ On site detention system required.
- ☐ On site infiltration system required.
- ☐ Connection to public storm drainage conveyance systems required.
- ☐ Direct discharge into the lake.
- ☐ No Storm Water permit required.
- ☐ Other:

SIDE SEWER REQUIREMENTS:
☑ Side sewer requires a backflow preventer when connecting to the lake line or when the elevation of the lowest plumbing fixture is lower than the elevation of the upstream manhole rim.
☐ Video tape of existing sewer required.
☐ New connection. ☐ Connect to existing. ☐ Disconnect permit required. ☐ Reconnect permit required.
☐ Other:

Note: When side sewer is to be connected to the lake line you will need to schedule three (3) days in advance with the City of Mercer Island Maintenance Department at (206) 275-7800.

APPROVED CODE ALTERNATES:
Description:

SURVEY REQUIREMENTS (The following survey information must be submitted when checked):
Surveyor shall verify points chosen for height calculations and point verification shall be submitted at the time of City foundation Inspection. A property survey may be required to verify setbacks and in some cases buildings must be surveyed onto the lot. The City reserves the right to request an impervious area survey at any time prior to issuance of Certificate of Occupancy.

Surveyor: Phone:
- ☐ Building height survey
- ☐ Building setback survey
- ☐ Impervious surface survey
- ☐ Other:

GEOTECHNICAL INFORMATION:
Land clearing, grading, filling and foundation work within geologic hazard areas is **NOT PERMITTED** between October 1 and April 1 without an approved Seasonal Development Limitation Waiver.

☐ Geotechnical Report provided. All construction must comply with the recommendations of the Geotechnical Report. A copy of report and other geotechnical information must be kept on site at all times.

Geotechnical Engineer: Phone:

SEASONAL DEVELOPMENT LIMITATION RESTRICTION:
☐ Applies (Geologic Hazard area). Grading not permitted between October 1 through April 1.
☐ Waiver approved. Grading and excavation permitted subject to all conditions noted in Seasonal Development Limitation Waiver permit.
Permit number: Approved by: Date:

TO BE COMPLETED BY DSG

REQUIRED CONSTRUCTION INSPECTIONS:
It is the applicant's responsibility to contact DSG to schedule the appropriate inspections. Request inspections online at www.MyBuildingPermit.com. Allow at least 24 hours (48 hours for Reinforcing steel) in advance of desired inspection. Be specific as to type of inspection

Inspector shall initial and date appropriate inspection *only* if approved. Note: Items marked with an "*" require a separate permit.

INSPECTIONS:
Listed in order of typical sequencing

Inspector	Date	Approved			
		☐	Pre-construction Meeting to Review Conditions of Permit Approval.		
		☐	Erosion control and tree protection		
		*☐	Right-of-way use or work / easement, material delivery, etc. If applicable, separate ROW permit required		
		☐	Demolition		
		*☐	Sewer disconnect and cap. If applicable, separate side-sewer permit required		
		☐	Land clearing and grading		
		☐	Temporary power		
		☐	Pilings / Shoring / Shotcrete. If applicable, provide survey letter (property line); Geotechnical Engineer / Special Inspector reports of inspections (pile and shoring installation, etc.)		
		☐	Footings, setbacks, UFER ground. If applicable, provide survey letter (building height and setbacks); Geotechnical Engineer / Special Inspector reports of inspections (soil bearing capacity, compaction, earthwork, pile installation, etc.)		
		☐	Foundation walls / concrete columns		
		☐	Roof and footing drains		
		☐	Foundation dampproofing		
		*☐	Storm drainage, including (but not limited to): • Connections to storm main in ROW • Detention systems • Water quality systems • Infiltration systems • Catch basins including oil-water separator tees • Area drains • Conveyance piping / cleanouts • Control structures / manholes • Pump systems • Bio-swales and wet wells • Retaining wall drainage • As-Built Drawings		
		☐	Water Service, including (but not limited to): • As-Built Drawings		
		☐	Water Supply Piping (Meter to Home): • As-Built Drawings		
		*☐	Side sewer installation, including (but not limited to): • Connections to side sewer main • Connections to existing side sewer • Back-flow valves • Grinder pump systems • Sewer manholes • As-Built Drawings		
		☐	Driveway / Access road		
		☐	Underslab electrical / mechanical / plumbing		
		☐	Underslab insulation / vapor barrier / reinforcing		
		☐	Underfloor framing		
		☐	Nailing--Roof sheathing. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection.		
		☐	Nailing--Exterior wall and Shearwall. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection.		
		☐	Rough hydronic installation		
		☐	Rough electric installation		
		☐	Rough fire alarm (wiring inspection)		
		☐	Rough plumbing installation (DWV, water)		
		☐	Rough mechanical		
		☐	Gas Piping		
		☐	Rough fire sprinkler / hydrostatic and flow (bucket) test		
		☐	Framing and glazing. If applicable, provide Engineer / Special Inspection letter for lateral wood inspection, welding epoxy anchors, etc.		
		☐	Masonry construction (fireplace / walls / veneer / etc.)		
		☐	Insulation installation		
		☐	Stucco (paper and lath)		
		☐	Shower pan (or tub)		
		☐	Miscellaneous		
		☐	Final Tree Restoration Inspection		☐ TT
		☐	Final inspection--Fire protection, including (but not limited to): • Sprinkler • Access Road • Fire Alarm • Fuel tank installation • Fire extinguishing system • Fire Plan Review document		☐ TF
		☐	Final inspection--Water supply protection, including (but not limited to) backflow devices for: • Waterfront property • Fire / lawn sprinkler • Well water on property • Boiler		☐ TW
		☐	Final inspection--Site and utility: includes landscape, utilities and ROW. Restoration complete and as-built drawings ready for submittal.		☐ TS
		☐	Final inspection--Building, including electrical / mechanical / plumbing. If applicable, provide closeout (summary) letters from Engineer, Special Inspectors, Geotechnical Engineer, and exterior wall cladding inspectors (EIFS).		☐ TB

90 DAY TEMPORARY CERTIFICATE OF OCCUPANCY (TCO):
Applicant option. Additional fees will be required and must be approved prior to occupancy. TCO requires tree plantings be completed.

ADDITIONAL REQUIRED CITY INSPECTIONS:
Call the appropriate contact to arrange the inspection.

Required Inspection(s):	Contact:	Phone:	Scheduling:

APPROVED DRAWINGS MUST BE KEPT ON THE BUILDING SITE AT ALL TIMES

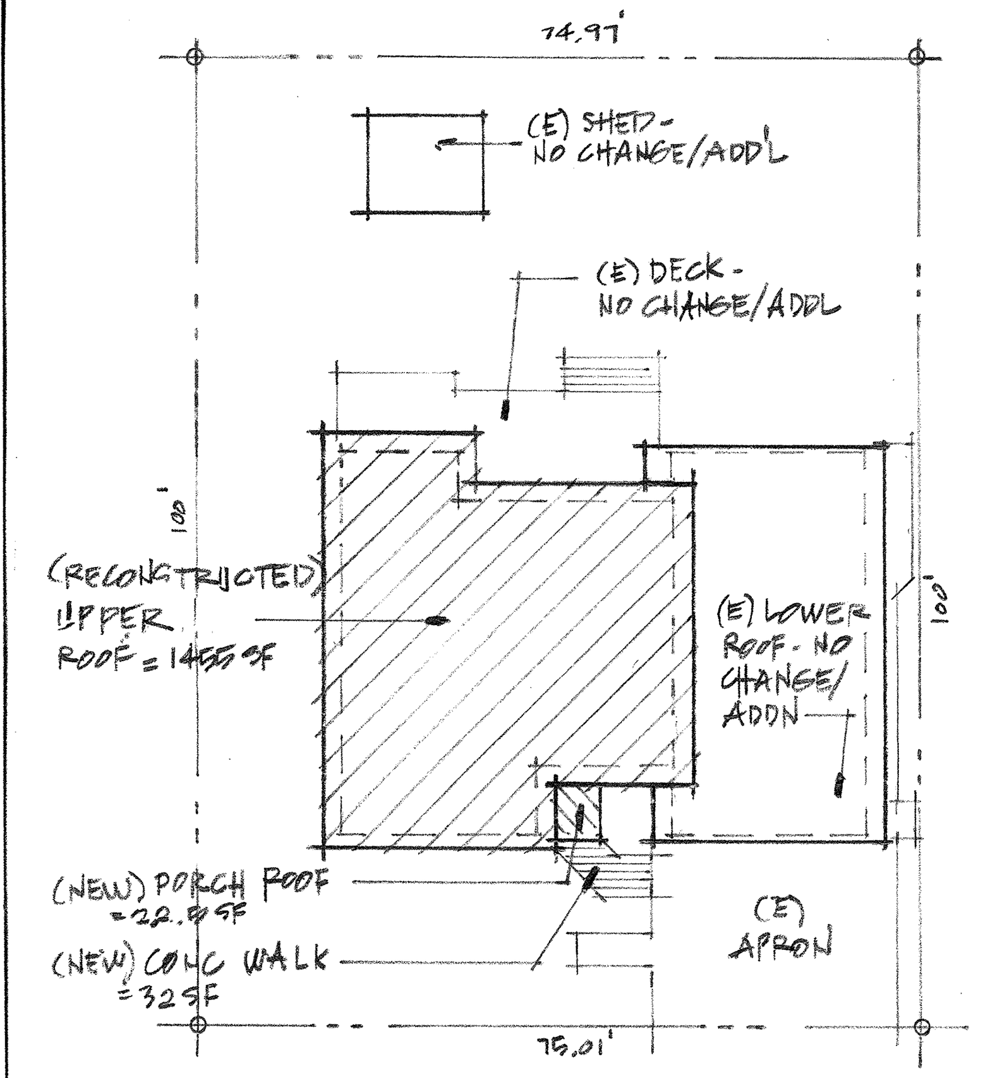
PERMIT NUMBER:

CERTIFICATE OF OCCUPANCY
Issued after all inspections have been performed and approved
Approved Date

PROJECT NAME: ADDITION TO THE RESIDENCE

PROJECT ADDRESS: ZHANG 6612 SE 24TH STREET

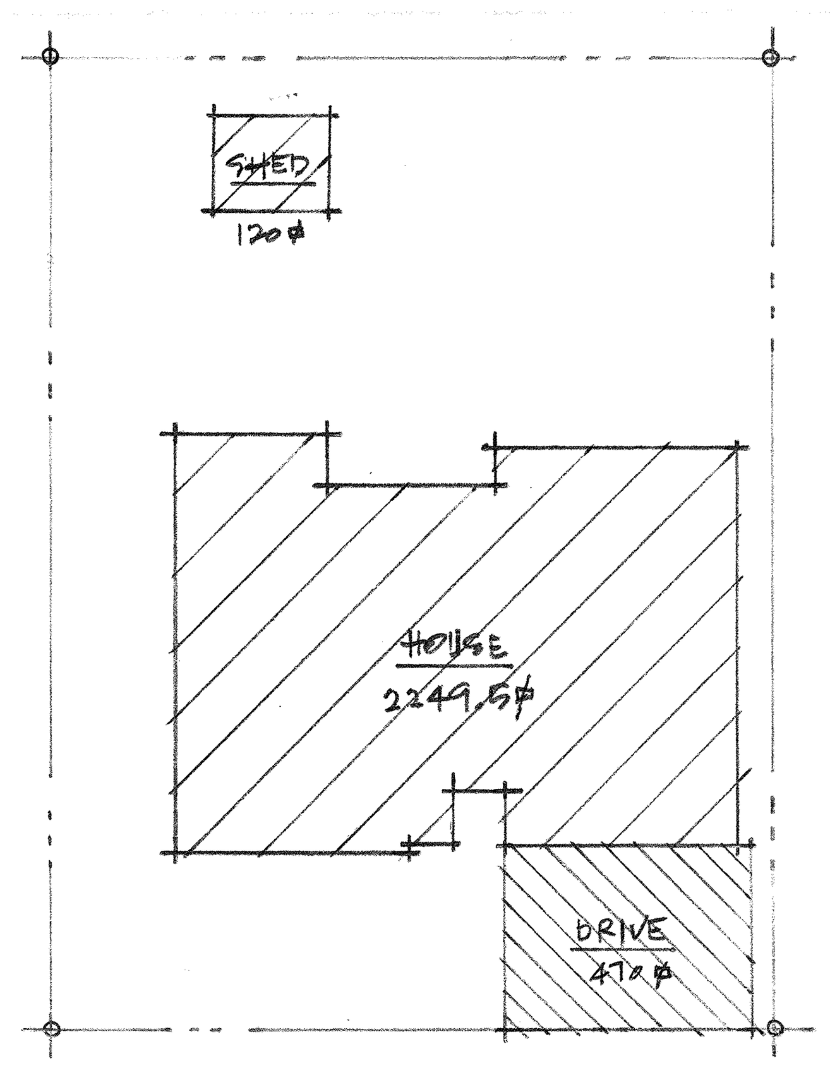
REVIEWED FOR CODE COMPLIANCE
Approved Date



STORMWATER AREA DIAGRAM .1"=20'

HARD STRUCTURE: NEW 54.5 SF
REPLACED 1455 SF
TOTAL 1509.5 SF

1510 < 2000 ⇒ NO DRAINAGE REPORT REQ'D



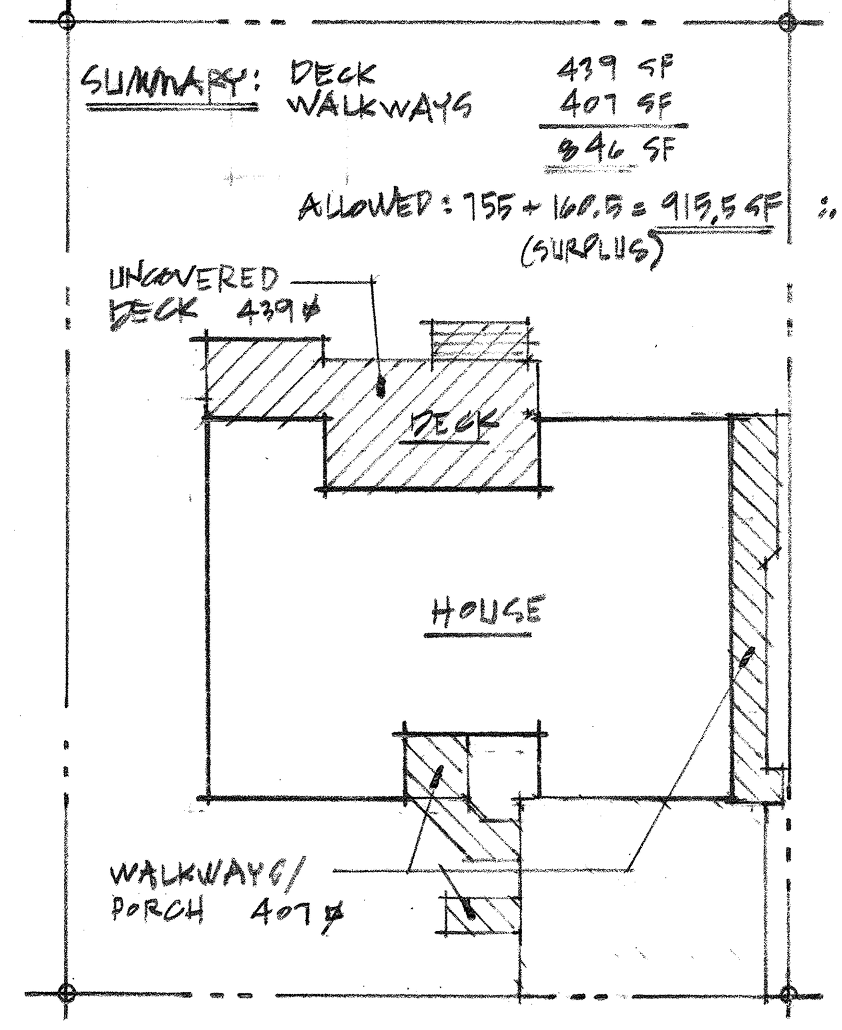
LOT COVERAGE DIAGRAM .1"=20'

SHED	120
HOUSE	2249.5
DRIVE	470
	2839.5 SF

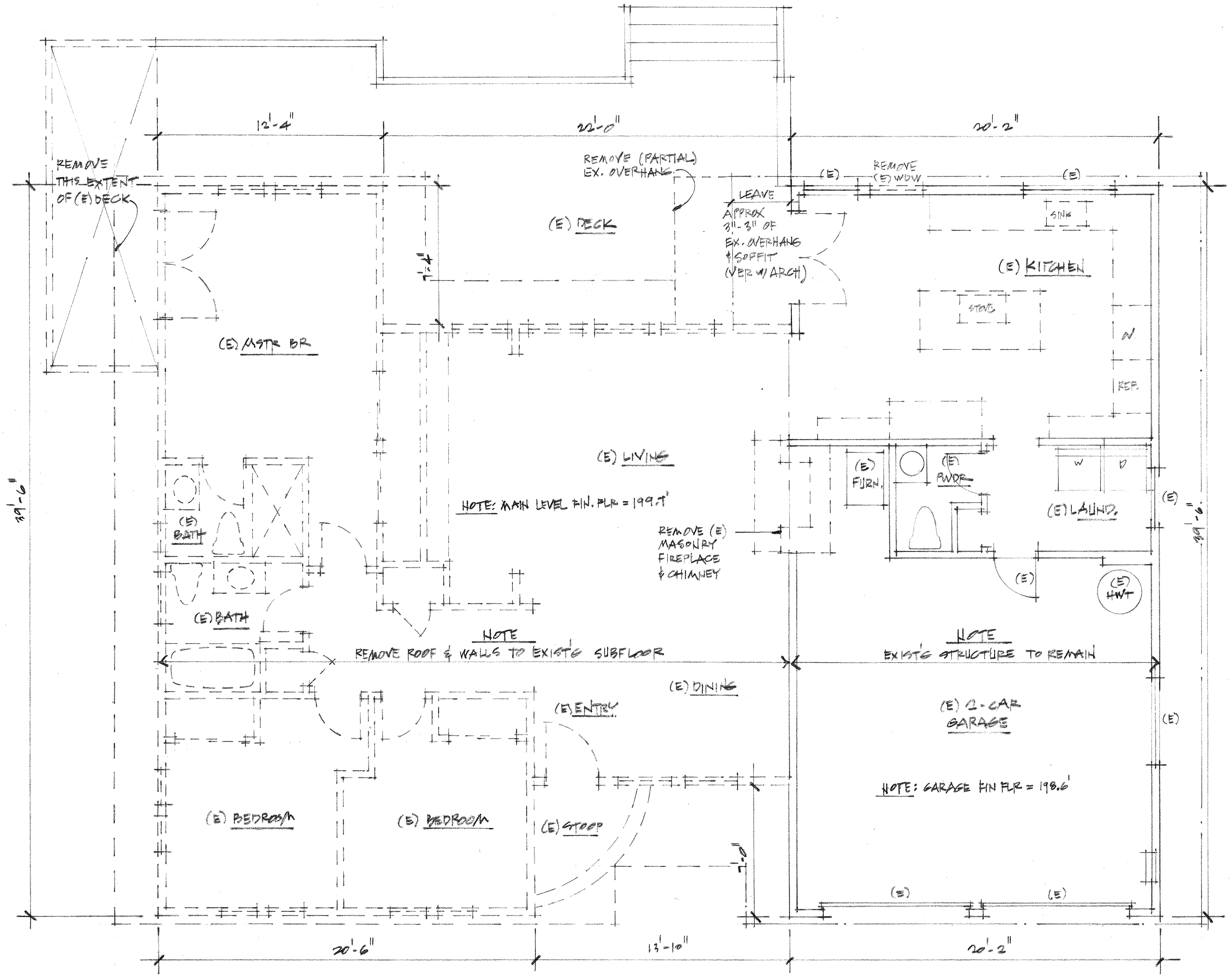
$\frac{2839.5}{7499}$ = 37.9% ∴ OK
⇒ 160.5 SF SURPLUS

SUMMARY: DECK 439 SF
WALKWAYS 407 SF
846 SF

ALLOWED: 755 + 160.5 = 915.5 SF ∴ OK
(SURPLUS)

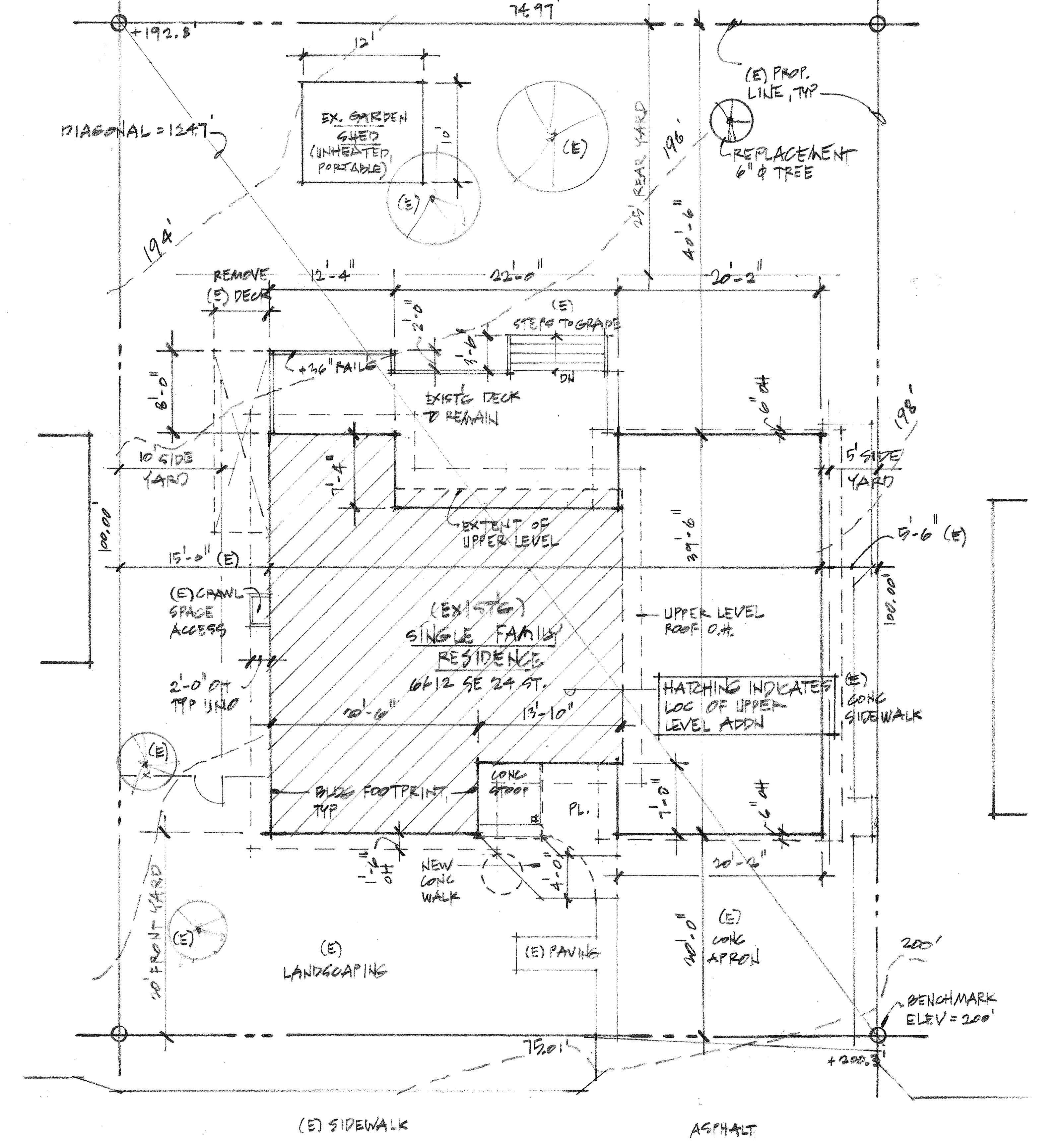


HARDSCAPE DIAGRAM .1"=20'



EXIST'G MAIN LEVEL & DEMOLITION FLOOR PLAN .1/4"

GROSS SQ FTGE = 1895 SF



LOT SLOPE

$\frac{200.3 - 192.8}{124.7} = \frac{7.5}{124.7} = .06 = 6\%$ SLOPE

SE 24TH STREET

NOTE: FIN FLR ELEVS -
GARAGE 198.6'
LOWER LEVEL 199.7'

SIDE YARD SUMMARY
- MAX BLDG HT AT EAST FACADE = 9.5'
⇒ 5' SETBACK OK
- MAX BLDG HT AT WEST FACADE = 28.5'
⇒ MIN SETBACK TO BE 10'
- SETBACKS PROVIDED: EAST 5.5' WEST 15' TOTAL = 20.5' ∴ OK

SITE PLAN

1" = 10'

0 5 10 20 FEET

BUILDING AREA SUMMARY (SF)

	UNHEATED	HEATED	TOTAL
LOWER LEVEL (EXIST'G)	428	1467	1895
UPPER LEVEL (NEW)	0	1145	1145
TOTAL	428	2612	3040

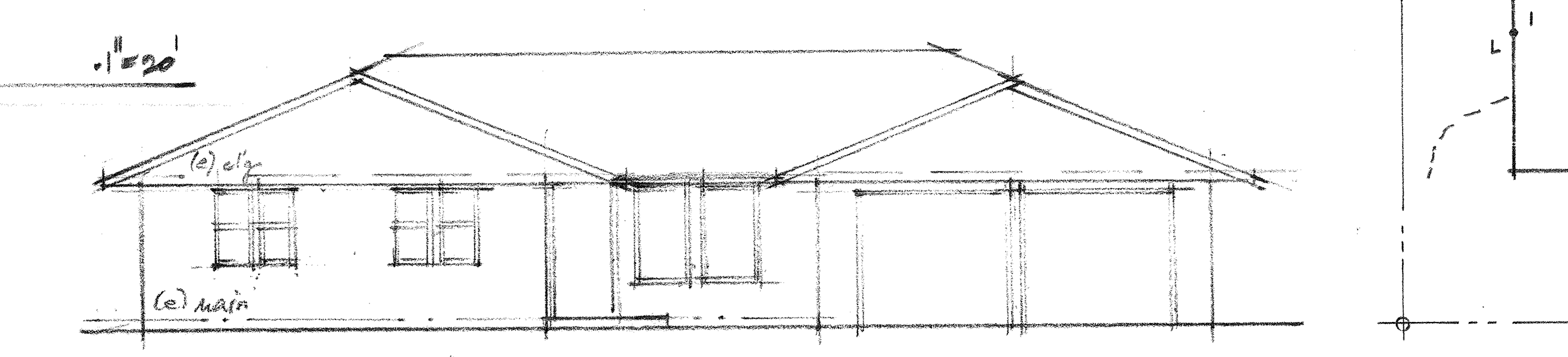
GROSS FLOOR AREA (GFA) CALCULATION

LOT AREA: 7499 SF
MAX ALLOWED GFA: 40%
ALLOWED GFA: (.40) 7499 = 3000 SF
PROPOSED GFA:
LOWER LEVEL: 1895 SF
UPPER LEVEL: 1064 SF (1145 - 85 STAIR)
TOTAL GFA: 2959 SF ∴ OK [39.5%]

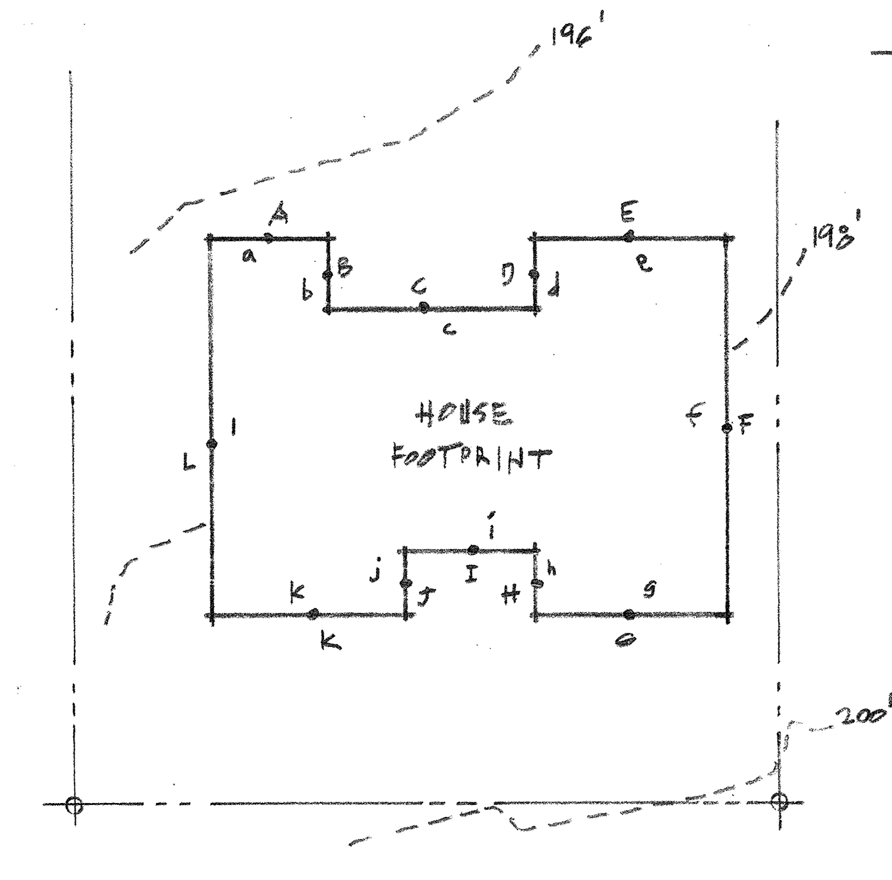
IMPERVIOUS SURFACE CALCULATION (SF)

	EXIST'G (FROM SURVEY)	PROPOSED
HOUSE	1903	1903
SHED	121	121
DECK	547	461
BRICK PAVERS	215	160
CONCRETE	630	675
TOTAL	3416	3320

∴ NET REDUCTION



EXIST'G SOUTH ELEV .1/8"



MIDPOINT ELEV		WALL SEGMENT LENGTH	
A = (196.5)	×	a = (12.4)	= 2437
B = (196.75)	×	b = (7.4)	= 1456
C = (197.0)	×	c = (22.1)	= 4354
D = (197.0)	×	d = (7.3)	= 1438
E = (197.25)	×	e = (20.1)	= 3965
F = (198.25)	×	f = (39.6)	= 7851
G = (199.0)	×	g = (20.2)	= 4020
H = (198.75)	×	h = (7.0)	= 1391
I = (198.5)	×	i = (13.9)	= 2759
J = (198.5)	×	j = (7.0)	= 1389
K = (198.5)	×	k = (20.5)	= 4069
L = (197.5)	×	l = (39.6)	= 7821
		217.1	42950

$ABE = \frac{42950}{217.1} = 197.84' \rightarrow$ MAX HT = 227.84'

AVE BLDG ELEV (ABE) CALCULATION NO SCALE

CONSTRUCTION
- PRIOR TO AND DURING THE WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS. ANY CONDITIONS INCONSISTENT OR PROBLEMATIC WITH REGARD TO THE INTENT OF THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT PRIOR TO STARTING OR CONTINUING WORK IN THE AREA CONCERNED.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON THE DRAWINGS PRIOR TO PROCEEDING WITH WORK. DO NOT SCALE DRAWINGS. DIMENSIONS ARE TO FACE OF CONCRETE, FACE OF FRAMING OR TOP OF STRUCTURAL DECK (FOR VERTICAL DIMENSIONS), EXCEPT WHERE OTHERWISE NOTED.
- ALL WORK SHALL CONFORM TO 2015 IRC AND ALL APPLICABLE MECHANICAL, ELECTRICAL AND ENERGY CODES.
- PROVIDE SOLID WOOD BLOCKING AS SUPPORT FOR ALL WALL-MOUNTED ELEMENTS.
- COORDINATE WORK WITH ALL RELATED TRADES.
- EXTERIOR WALLS 2x6 UNLESS NOTED OTHERWISE. INTERIOR WALLS 2x4.
- PROVIDE PRESSURE-TREATED PLATES AND SILL SEALER BETWEEN CONCRETE AND FRAMING.

MOISTURE PROTECTION
- CAULK ALL OPENINGS AND JOINTS BETWEEN MATERIALS THOROUGHLY.

FIRE SAFETY
- PROVIDE SMOKE DETECTOR WIRED INTO ELECTRICAL SYSTEM AT EACH SLEEPING AREA AND IN ADJACENT CORRIDORS PER IRC SEC. 313. INSTALL A DETECTOR ON EACH STORY.
- PROVIDE FIREBLOCKING, DRAFTSTOPS AND FIRESTOPS PER IRC SEC. 717.
- OPENABLE WINDOWS TO BE EQUIPPED WITH INSIDE LATCHING DEVICES.

GLASS & GLAZING
- ALL WINDOWS TO BE DOUBLE-PANED, INSULATED GLASS. U=0.28. WINDOWS: VINYL.
- GLAZING: GLASS LOCATED IN HAZARDOUS LOCATIONS AS DEFINED IN IRC SEC. 308.4 SHALL BE SAFETY GLAZING.

ENERGY
- BUILDING TO COMPLY WITH THE 2015 WSEC. SEAL ALL TEARS AND JOINTS IN BATT INSULATION WITH TAPE.
- PROVIDE WEATHERSTRIPPING AT ALL WINDOWS AND DOOR THRESHOLDS. ALL OPENINGS TO BE FLASHED, WEATHERSTRIPPED, CAULKED AND SEALED.
- ALLOW 1" MIN. AIR SPACE OVER INSULATION WHEN BATTS ARE USED BETWEEN RAFTERS. ALL WALL & ROOF INSULATION APPLIED DIRECTLY TO EXTERIOR FRAMING MEMBERS SHALL BE PROVIDED WITH A VAPOR BARRIER ON HEATED SIDE.
- SHOWER FLOW 3 GPM MAX. TOILET FLOW 1.6 GAL MAX.
- INSULATION R-VALUES:

EXTERIOR WALLS:	R-21
ROOF/CEILING:	R-49 (AT ATTIC), R-38 (VAULTED)
CRAWL SPACE:	R-38

GENERAL NOTES

PROPOSED PROJECT:
REMODEL AND PARTIAL UPPER-LEVEL ADDITION TO EXIST'G SINGLE-LEVEL SINGLE FAMILY RESIDENCE WITH ATTACHED 2-CAR GARAGE
PROPERTY OWNER:
BOCHAO & VIVIAN ZHANG
PROJECT ADDRESS:
6612 SE 24TH STREET
MERCER ISLAND, WA 98040
PROPERTY TAX NUMBER:
330770-0115
ZONING:
R-9.6
LOT AREA:
7,499 SF
OCCUPANCY GROUP:
GROUP B2, U
CONSTRUCTION TYPE:
V-N
BUILDING CODE:
2015 INTERNATIONAL RESIDENTIAL CODE
LEGAL DESCRIPTION:
LOT 3 BLK 2 HIGHLAND PARK ADDN
SETBACKS:
FRONT: 20 FT
REAR: 25 FT
SIDES: 5 FT MIN, 10 FT MAX, 15 FT MIN TOTAL

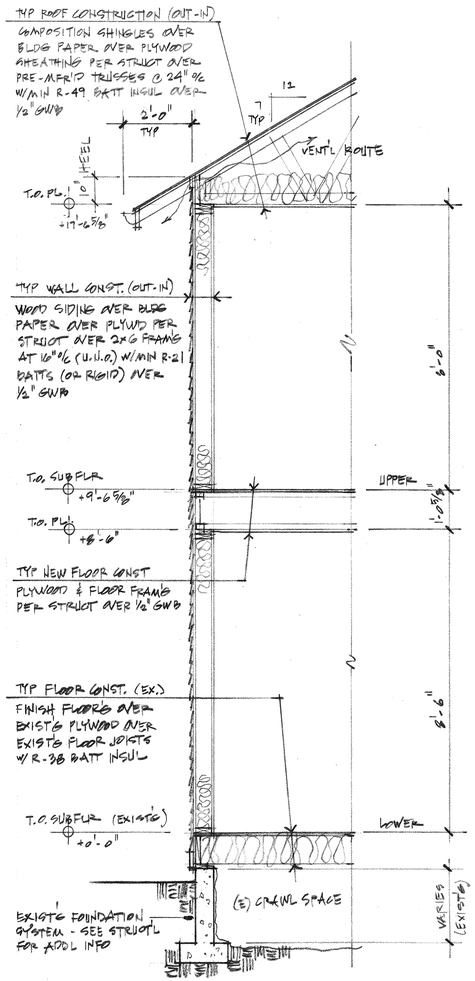
PROJECT INFORMATION

ADDITION TO THE
ZHANG RESIDENCE
6612 SE 24TH ST
MERCER ISLAND, WA 98040

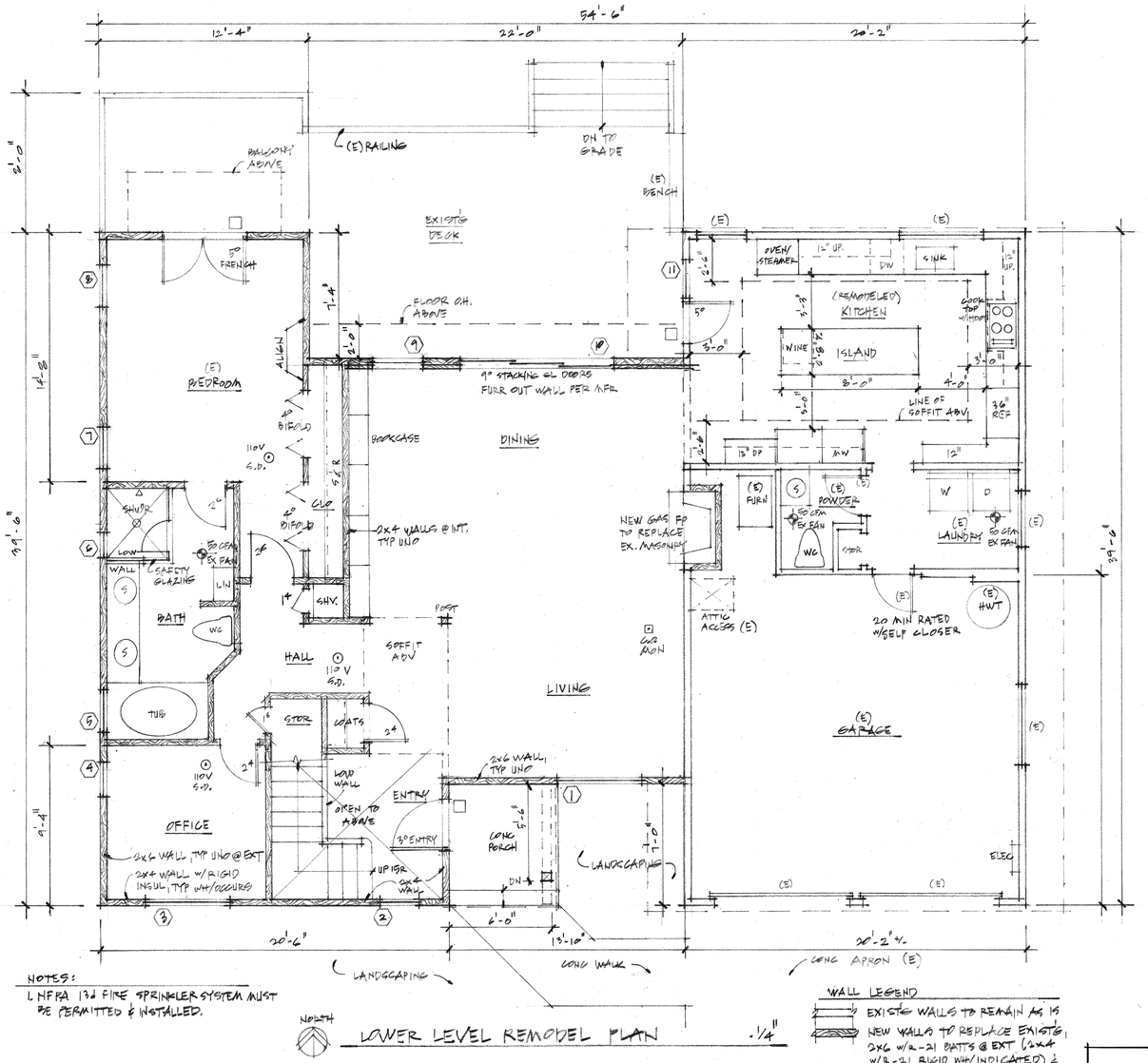
MARTIN KOENIGS ARCHITECTS
4212 S. FERDINAND
SEATTLE, WA 98118
(206) 349-4319 mka@seanet.com

JOB No. 21507
DATE: 1.20.21

A1



TYPICAL WALL SECTION ·½"



NOTES:
1. NFPA 13D FIRE SPRINKLER SYSTEM MUST BE PERMITTED & INSTALLED.

NORTH

LOWER LEVEL REMODEL PLAN ·¼"

WALL LEGEND

EXIST'G WALLS TO REMAIN AS IS

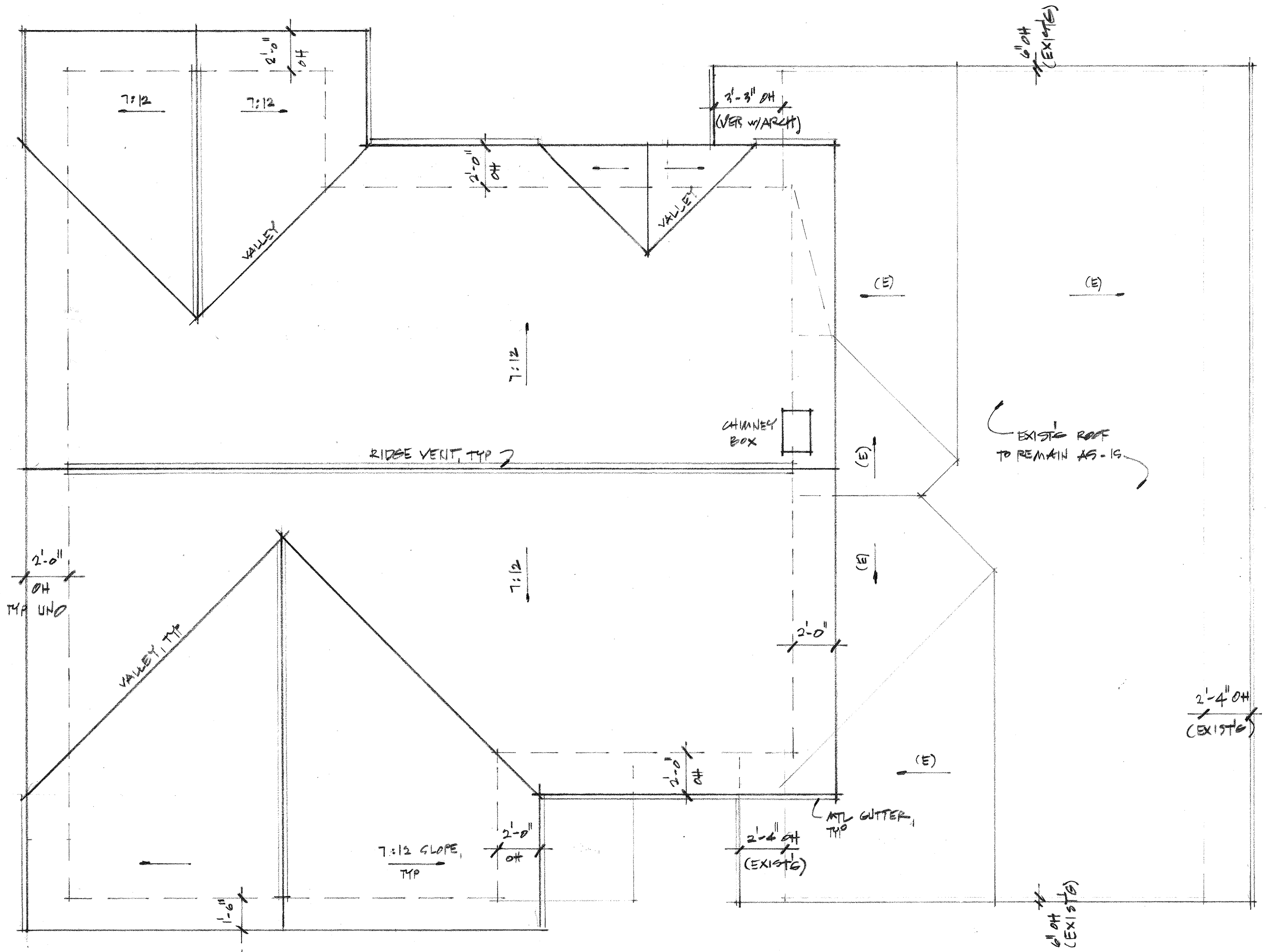
NEW WALLS TO REPLACE EXIST'G, 2x6 W/R-21 BATTS @ EXT (2x4 W/R-21 RIGID WH/INDICATED) & 2x4 @ INT.

ADDITION TO THE
ZHANG RESIDENCE
6612 SE 24TH ST
MERCER ISLAND, WA 98040

MARTIN KOENIG ARCHITECTS
4012 S. FERDINAND
SEATTLE, WA 98118
(206)849-4319 mka@seanet.com

JOB NO. 21807
DATE: 1-18-21

A2

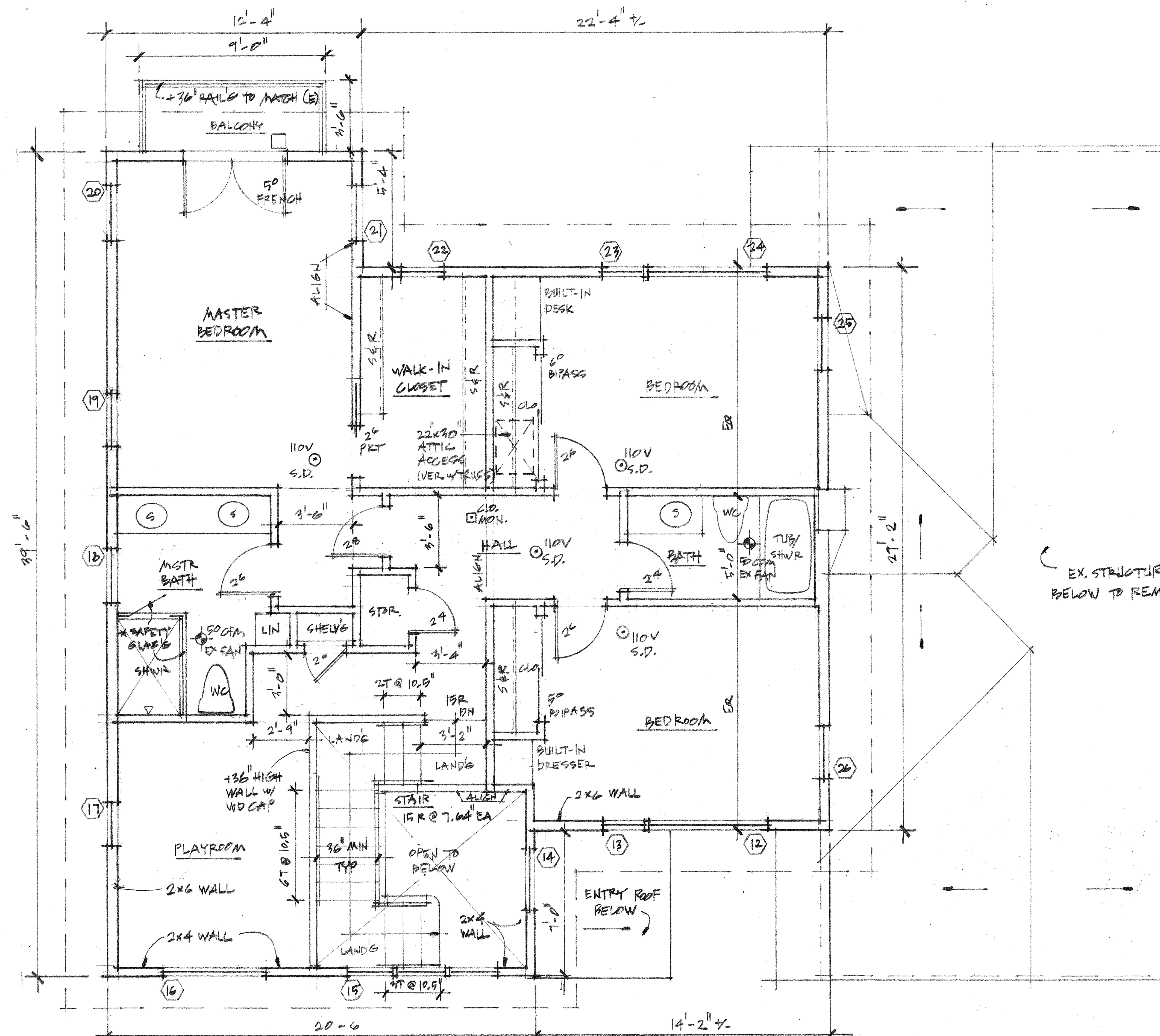


ROOF NOTES
1. RE-ROOF EXIST'G AND ROOF NEW W/ASPHALT SHINGLES
2. TIGHTLINE ALL DOWNSPOUTS TO EXIST'G STORM DRAINAGE SYSTEM, TYP

NORTH

ROOF PLAN 1/4"

ATTIC VENTILATION	
ROOF FRAMING ASSEMBLY:	PRE-MFR'D TRUSSES
NEW ATTIC AREA:	1150 SF
ATTIC VENTILATION REQUIRED:	1150 / 300 = 3.83 SQ FT = 552 SQ IN
PROVIDE 1/2 VENTILATION AT	
EAVES, 1/2 AT RIDGE:	REQUIRES 276 SQ IN AT EACH
EAVE VENT:	7.5 SQ IN PER LINEAR FOOT
EAVE VENT'L REQUIRED:	276 / 7.5 = 37 LIN FT
PROVIDED:	45 LIN FT (7.5 SQ IN/LIN FT) = 337 SQ IN OK
RIDGE VENT:	12 SQ IN PER LINEAR FOOT
RIDGE VENT'L REQUIRED:	276 / 12 = 23 LIN FT
PROVIDED:	60 LIN FT (12 SQ IN/LIN FT) = 720 SQ IN OK
TOTAL ATTIC VENTILATION PROVIDED:	337 + 720 = 1057 SQ IN OK



PLAN NOTES
1. ALL WALLS THIS LEVEL ARE NEW AND 2x6 @ 16" o/c U.N.O.

NORTH

UPPER LEVEL ADDITION PLAN 1/4"

WINDOW SCHEDULE								
NO.	ROOM LOC	QTY	TYPE	SIZE (R.O.)	MFR	MTL	FIN	NOTES
1	LIVING	1	FX	5-0x4-0		VINYL		
2	STAIR	1	CSMT	2-3x3-0				*SAFETY GL
3, 16	OFFICE, PLAYROOM	2	H.SL.	5-0x3-0				
4, 17	OFFICE, PLAYROOM	2	SH	2-0x3-6				
5	BATH	1	FX	2-6x2-6				*SAFETY GL, FROSTED
6	BATH	1	SH	1-6x2-0				*SAFETY GL, FROSTED
7, 8, 19, 20, 21	BEDRM, MSTR BR	5	SH	2-6x4-0				
9, 14	DINING, ENTRY	2	FX	3-0x4-0				
10	DINING	1	SGD	9-0x6-6				
11	KITCHEN	1	FX	2-0x4-6				
12, 24	BEDROOM	2	FX	5-0x3-6				
13, 23	BEDROOM	2	CSMT	2-6x3-6				EGRESS
15	STAIR	1	FX	2-3x4-0				*SAFETY GL
18	MSTR BATH	1	H.SL.	2-8x2-6				
22	W.I. CLOSET	1	SH	2-0x2-4				
25, 26	BEDROOM	2	SH	2-6x3-6				

NOTE: ALL WDWS U=0.28

ADDITION TO THE
ZHANG RESIDENCE
6612 SE 24th ST
MERCER ISLAND, WA 98040

MARTIN KOENIGS ARCHITECTS
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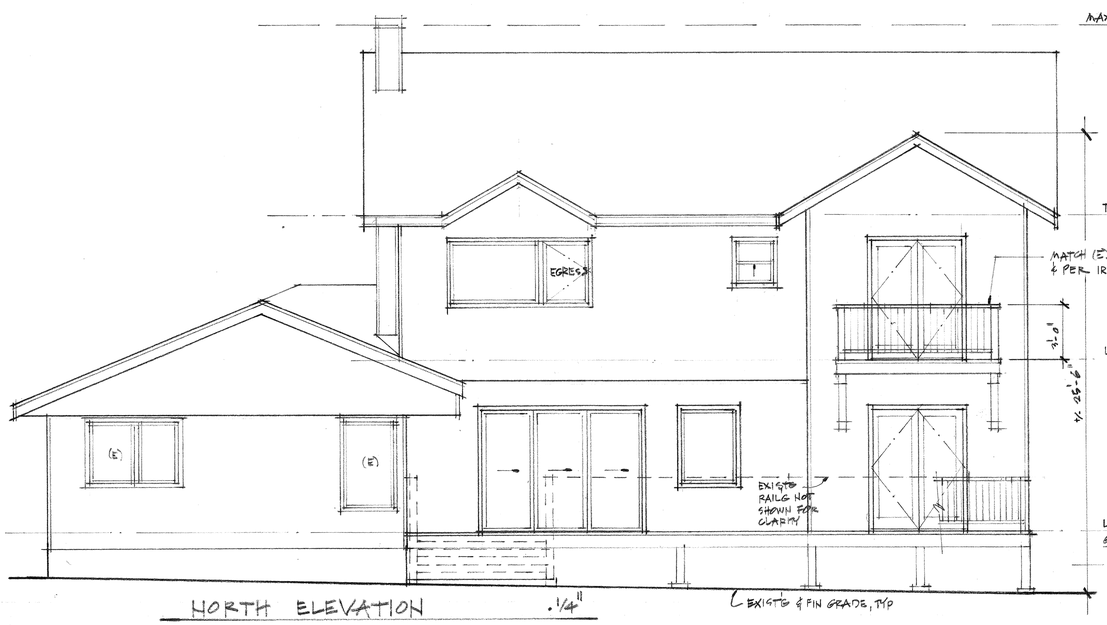
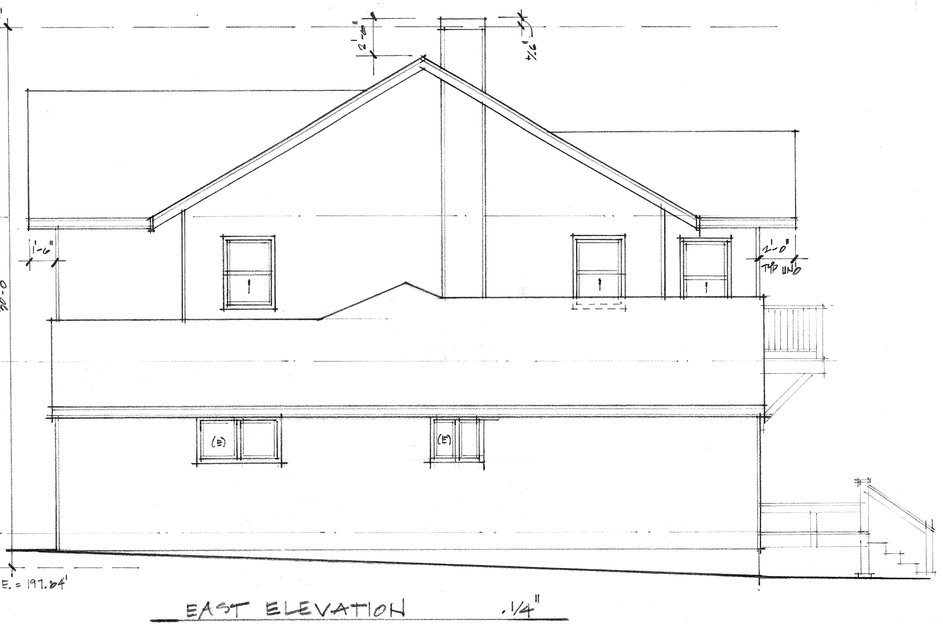
JOB NO. 2180?
DATE: 1.20.21

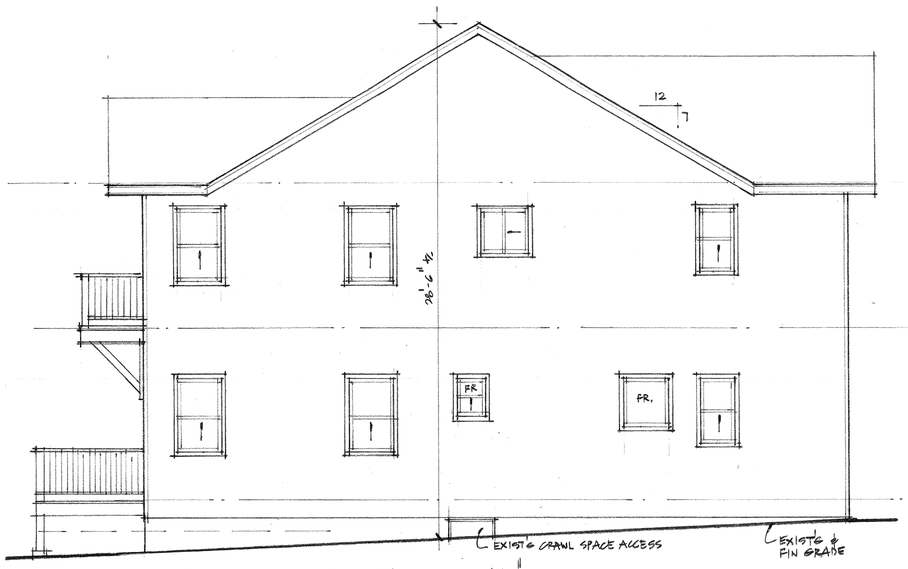
A3



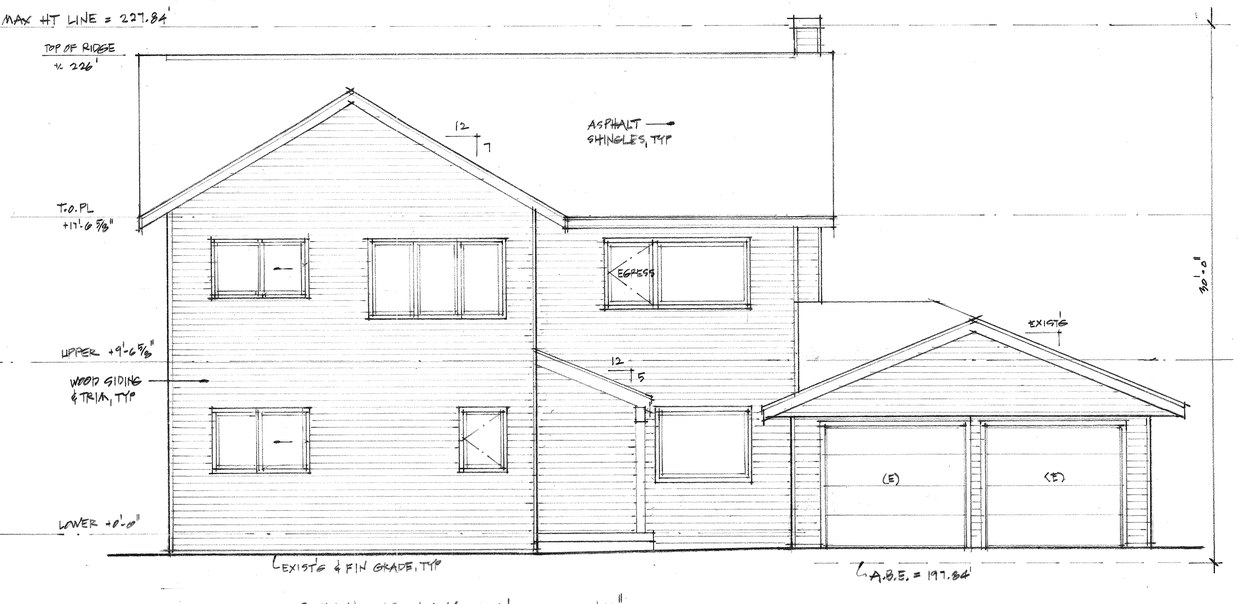
NORTH ELEVATION .1/4"



EAST ELEVATION .1/4"



WEST ELEVATION .1/4"



SOUTH ELEVATION .1/4"

ADDITION TO THE
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MERCER ISLAND, WA 98040

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JOB NO. 21807
DATE: 1-20-21

A4

2018 Washington State Energy Code – Residential
Prescriptive Energy Code Compliance for All Climate Zones in Washington
Single Family – New & Additions (effective February 1, 2021)

These requirements apply to all IRC building types, including detached one- and two-family dwellings and multiple single-family dwellings (townhouses).

Project Information	*Contact Information*
ZHANG REMODEL/ADDN	MARTIN KOENIGS ARCH'S
6612 SE 24TH ST	(206) 349-4319 mka@seanet.com

Instructions: This single-family project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. Based on the size of the structure, the appropriate number of additional credits are checked as chosen by the permit applicant.

Provide all information from the following tables as building permit drawings: Table R402.1 - Insulation and Fenestration Requirements by Component, Table R406.2 - Fuel Normalization Credits and 406.3 - Energy Credits.

Authorized Representative	MARTY KOENIGS	*Date*	1/20/21

All Climate Zones (Table R402.1.1)		
	R-Value [a]	U-Factor [a]
Fenestration U-Factor [b]	n/a	~~0.30~~ 0.28
Skylight U-Factor [b]	n/a	0.50
Glazed Fenestration SHGC [b,e]	n/a	n/a
Ceiling [e]	49	0.026
Wood Frame Wall [g,h]	21 int	0.056
Floor	~~30~~ 38	0.029
Below Grade Wall [c,h]	10/15/21 int + TB	0.042
Slab [d,f] R-Value & Depth	10, 2 ft	n/a

a	*R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity that is less than the label or design thickness of the insulation, the compressed *R*-value of the insulation from Appendix Table A101.4 shall not be less than the *R*-value specified in the table.
b	The fenestration *U*-factor column excludes skylights.
c	"10/15/21 +5TB" means R-10 continuous insulation on the exterior of the wall, or R-15 continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. "10/15/21 +5TB" shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. "5TB" means R-5 thermal break between floor slab and basement wall.
d	R-10 continuous insulation is required under heated slab on grade floors. See Section R402.2.9.1.
e	For single rafter- or joist-vaulted ceilings, the insulation may be reduced to R-38 if the full insulation depth extends over the top plate of the exterior wall.
f	R-7.5 continuous insulation installed over an existing slab is deemed to be equivalent to the required perimeter slab insulation when applied to existing slabs complying with Section R503.1.1. If foam plastic is used, it shall meet the requirements for thermal barriers protecting foam plastics.
g	For log structures developed in compliance with Standard ICC 400, log walls shall meet the requirements for *climate zone* 5 of ICC 400.
h	Int. (intermediate framing) denotes framing and insulation as described in Section A103.2.2 including standard framing 16 inches on center, 78% of the wall cavity insulated and headers insulated with a minimum of R-10 insulation.

NOTES:
1. HEAT PUMP UNIT TO BE FROM EQUIPMENT LISTED IN TABLE C403.3.2(1) OR C403.3.2(2)
2. DUCTLESS MINI-SPLIT HEAT PUMP SYSTEM, ZONAL CONTROL.
3. MAX 10 LF OF RETURN DUCT & 5 LF SUPPLY DUCT CONNECTIONS TO MECH'L EQUIP MAY BE OUTSIDE DEEPLY BURIED INSUL. SEAL EXPOSED METALLIC DUCTS W/ TRANSVERSE & LONGITUDINAL JOINTS W/ MASTIC. NO SPLICING OF FLEX DUCTS. DUCT LEAKAGE MAX 3 CFM PER 100 SF CONDITIONED AREA.
4. ELEC HEAT PUMP WATER HEATER WITH MIN UEF OF 2.9 & UTILIZING SPLIT SYSTEM CONFIGURATION W/ HEAT EXCHANGER LOCATED OUTDOORS.

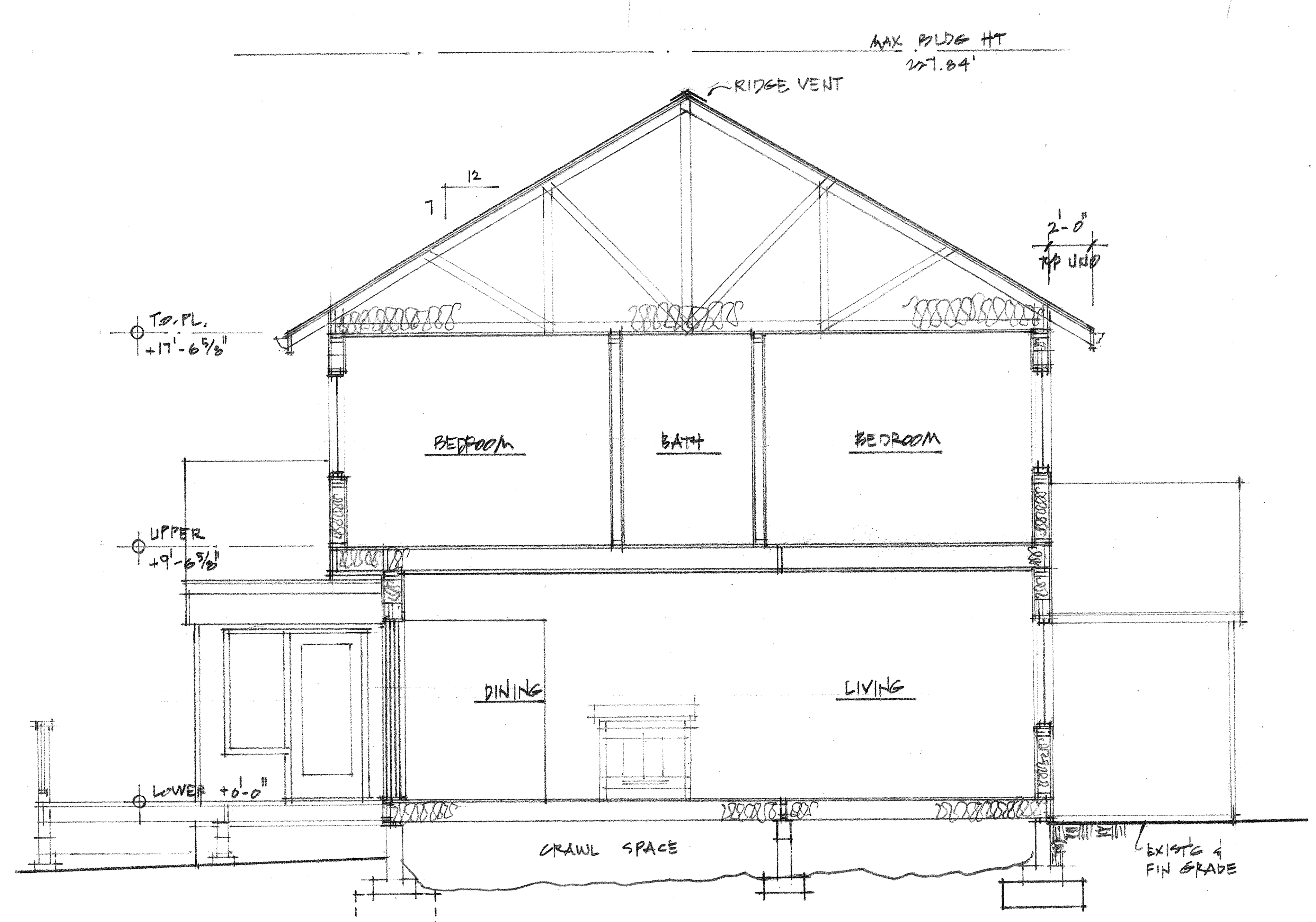
Each dwelling unit ***in a residential building*** shall comply with sufficient options from Table R406.2 (fuel normalization credits) and Table 406.3 (energy credits) to achieve the following minimum number of credits. To claim this credit, the building permit drawings shall specify the option selected and the maximum tested building air leakage, and show the qualifying ventilation system and its control sequence of operation.

1. **Small Dwelling Unit: 3 credits**
   Dwelling units less than 1,500 sf in conditioned floor area with less than 300 sf of fenestration area. Additions to existing building that are greater than 500 sf of heated floor area but less than 1,500 sf.
2. [✓ **Medium Dwelling Unit: 6 credits**]
   All dwelling units that are not included in #1 or #3
3. **Large Dwelling Unit: 7 credits**
   Dwelling units exceeding 5,000 sf of conditioned floor area
4. **Additions less than 500 square feet: 1.5 credits**
   All other additions shall meet 1-3 above

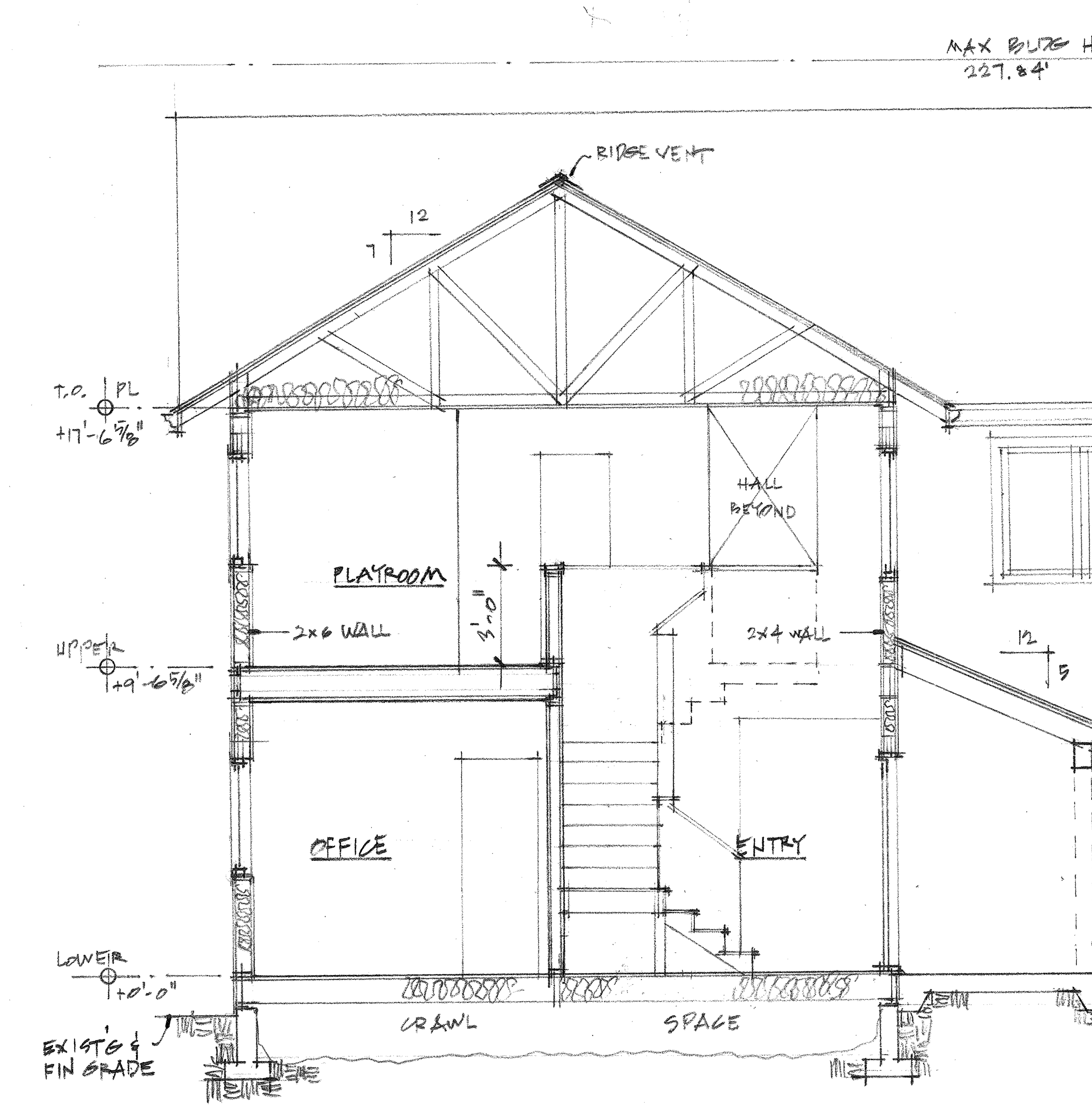
Summary of Table R406.2				
Heating Options	Fuel Normalization Descriptions	Credits - select ONE heating option		User Notes
1	Combustion heating minimum NAECA[b]	0.0	☐	
[✓ 2]	Heat pump[c]	1.0	☒	
3	Electric resistance heat only - furnace or zonal	-1.0	☐	
4	DHP with zonal electric resistance per option 3.4	0.5	☐	
5	All other heating systems	-1.0	☐	
Energy Options	Energy Credit Option Descriptions	Credits - select ONE energy option from each category [d]		
1.1	Efficient Building Envelope	0.5	☐	
1.2	Efficient Building Envelope	1.0	☐	
[✓ 1.3]	Efficient Building Envelope	0.5	☒	
1.4	Efficient Building Envelope	1.0	☐	
1.5	Efficient Building Envelope	2.0	☐	
1.6	Efficient Building Envelope	3.0	☐	
1.7	Efficient Building Envelope	0.5	☐	
2.1	Air Leakage Control and Efficient Ventilation	0.5	☐	
2.2	Air Leakage Control and Efficient Ventilation	1.0	☐	
2.3	Air Leakage Control and Efficient Ventilation	1.5	☐	
2.4	Air Leakage Control and Efficient Ventilation	2.0	☐	
3.1[a]	High Efficiency HVAC	1.0	☐	
3.2	High Efficiency HVAC	1.0	☐	
3.3[a]	High Efficiency HVAC	1.5	☐	
[✓ 3.4]	High Efficiency HVAC	1.5	☒	
3.5	High Efficiency HVAC	1.5	☐	
3.6[a]	High Efficiency HVAC	2.0	☐	
[✓ 4.1]	High Efficiency HVAC Distribution System	0.5	☒	
4.2	High Efficiency HVAC Distribution System	1.0	☐	

Summary of Table R406.2 (cont.)				
Energy Options	Energy Credit Option Descriptions (cont.)	Credits - select ONE energy option from each category [d]		User Notes
5.1[d]	Efficient Water Heating	0.5	☐	
5.2	Efficient Water Heating	0.5	☐	
5.3	Efficient Water Heating	1.0	☐	
5.4	Efficient Water Heating	1.5	☐	
5.5	Efficient Water Heating	2.0	☐	
[✓ 5.6]	Efficient Water Heating	2.5	☒	
6.1[e]	Renewable Electric Energy (3 credits max)	1.0		
7.1	Appliance Package	0.5	☐	
	Total Credits	6.0	0.0	CLEAR FORM

a. An alternative heating source sized at a maximum of 0.5 W/sf (equivalent) of heated floor area or 500 W, whichever is bigger, may be installed in the dwelling unit.
b. Equipment listed in Table C403.3.2(4) or C403.3.2(5)
c. Equipment listed in Table C403.3.2(1) or C403.3.2(2)
d. **You cannot select more than one option from any category EXCEPT in category 5. Option 5.1 may be combined with options 5.2 through 5.6. See Table 406.3.**
e. 1.0 credit for each 1,200 kWh of electrical generation provided annually, up to 3 credits max.
See the complete Table R406.2 for all requirements and option descriptions.



BUILDING SECTION (N-S) 1/4"



BLDG SECTION AT ENTRY (W-E) 1/4"

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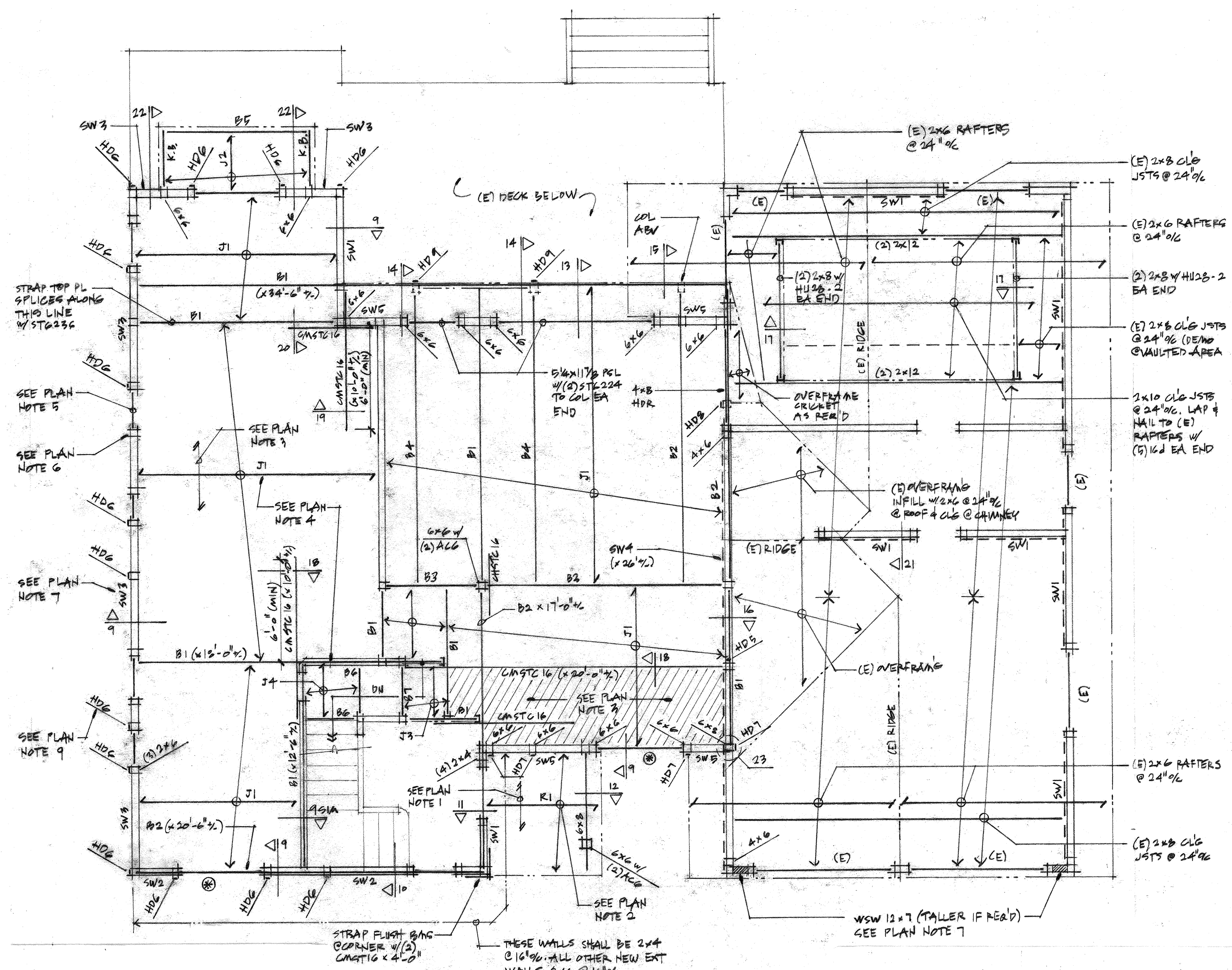
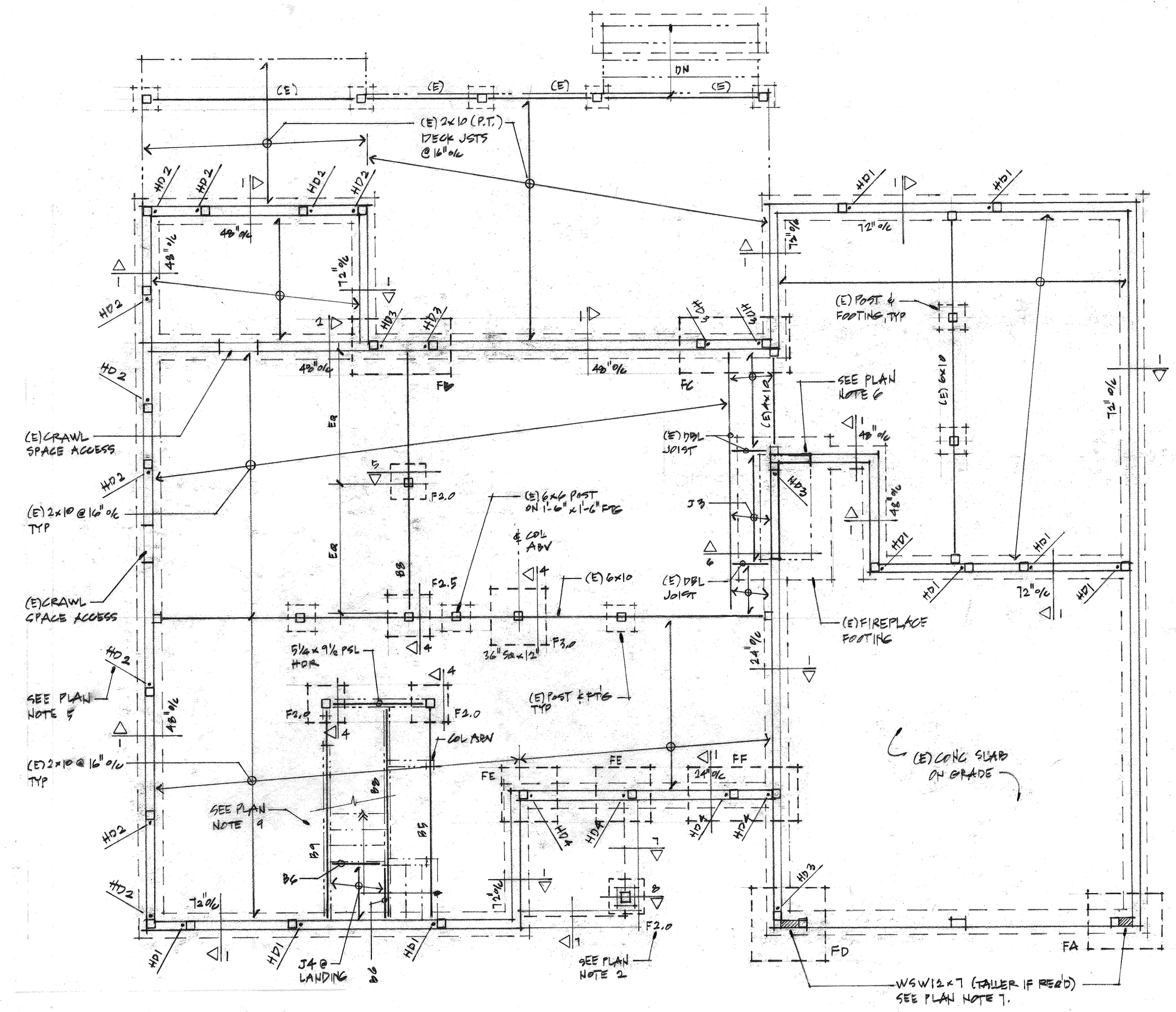
JOB NO. 21807
DATE: 1-20-21

A5



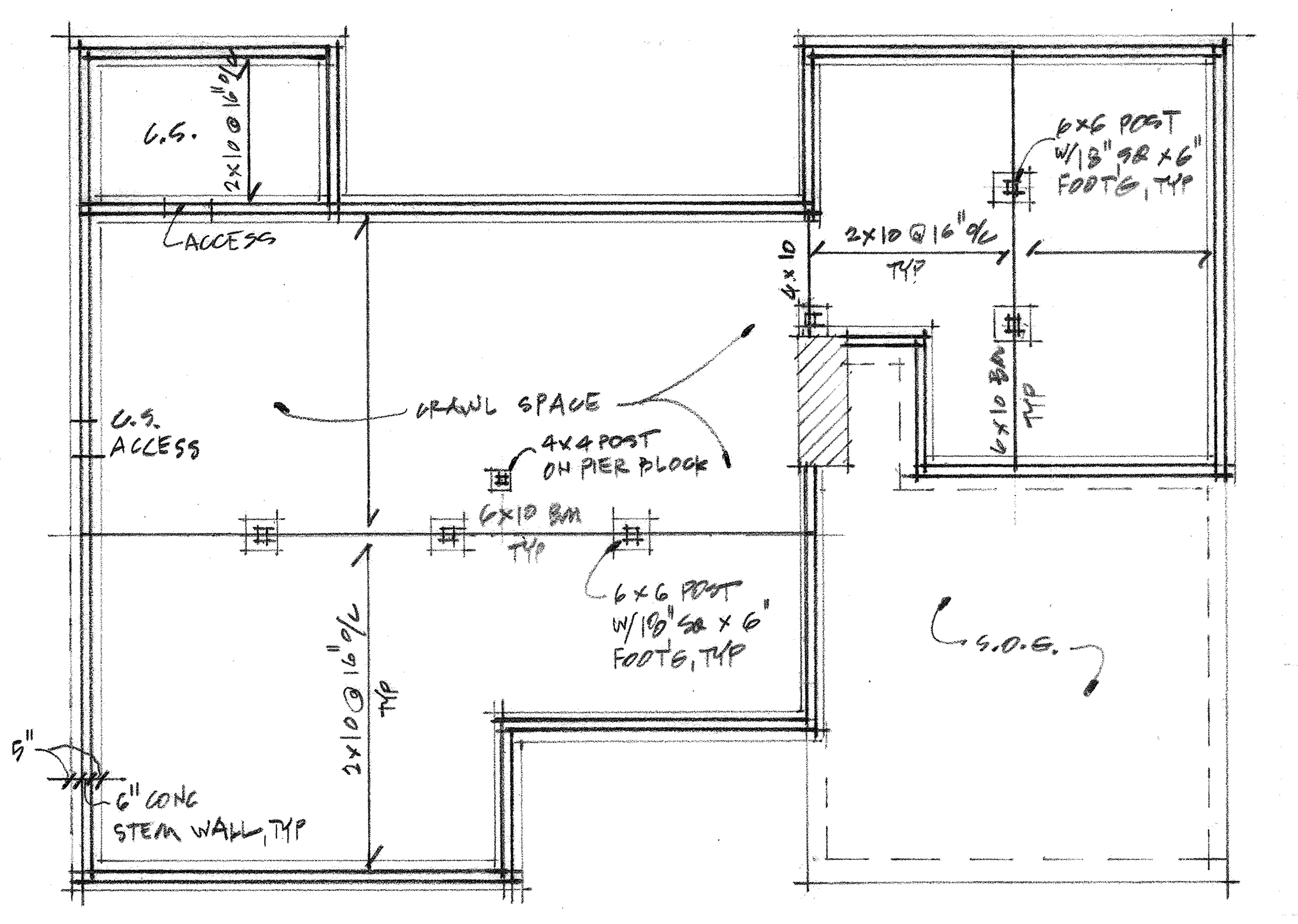
UPPER FLOOR & LOWER ROOF FRAMING PLAN .1/4"
(MAIN FLOOR WALLS SHOWN)



MAIN FLOOR FRAMING & FOUNDATION PLAN .1/4"

UPPER FLOOR & LOW ROOF FRAMING PLAN NOTES:
(TYPICAL, UNLESS NOTED OTHERWISE)

1. ROOF SHEATHING SHALL BE 1/2" CDX PLYWOOD PANELS (EXPOSURE 1, SPAN RATING 24/16). NAIL AT ALL FRAMED PANEL EDGES AND OVER ALL WALLS SHOWN ON PLAN WITH 8d @ 6"o.c. AND TO ALL INTERMEDIATE FRAMING @ 6"o.c.
2. ROOF FRAMING SHALL BE 2x6 RAFTERS @ 24"o.c.
3. FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE CDX PLYWOOD PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL AT ALL FRAMED PANEL EDGES AND OVER ALL WALLS SHOWN ON PLAN WITH 8d @ 6"o.c. AND TO ALL INTERMEDIATE FRAMING @ 12"o.c.
   ▨ IN SHADED AREA BLOCK ALL UNFRAMED JOINTS AND NAIL TO ALL FRAMING WITH 8d @ 6"o.c. SEE **DETAIL S** FOR BLOCKING AT UNFRAMED SHEATHING JOINTS.
4. FLOOR JOISTS SHALL BE AS NOTED ON PLAN AND SCHEDULE
   J # INDICATES JOIST MARK
   B # INDICATES FLUSH BEAM MARK
5. NEW HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2) 2x8 MINIMUM.
   STRAP ABOVE AND BELOW OPENINGS NOTED THUS PER **DETAIL N**.
6. NEW COLUMNS SHALL BE DOUBLE STUDS MINIMUM. SEE **DETAIL O** FOR INSTALLATION.
7. **SW #** INDICATES SHEAR WALL. SEE **SHEAR WALL SCHEDULE** FOR CONSTRUCTION REQUIREMENTS. NEW EXTERIOR WALLS SHALL BE **SW 1** MINIMUM. **WSW#x#** INDICATES PREFABRICATED WOOD SHEAR WALL, SEE **WSW_** DETAILS FOR CONSTRUCTION REQUIREMENTS.
8. SPLICE ALL TOP PLATES PER **DETAIL P**. ADD STRAPS AT JOINTS WHERE NOTED ON PLAN.
9. HD# INDICATES HOLD-DOWN AT END OF SHEAR WALL ABOVE. SEE **HOLD-DOWN SCHEDULE** FOR HARDWARE AND INSTALLATION REQUIREMENTS.
10. SEE ARCHITECTURAL FOR ALL DIMENSIONS.
11. LOW ROOF FRAMING IS EXISTING AND UN-ALTERED EXCEPT AS NOTED. INFORM ENGINEER OF RECORD IF EXISTING CONDITIONS ARE SUBSTANTIALLY DIFFERENT THAN SHOWN OR IF THERE IS ANY QUESTION ABOUT THE INTEGRITY OF EXISTING STRUCTURAL ELEMENTS.



EX. FDN & FLR FRAMING PLAN .1/8"

REINFORCING SPLICE AND DEVELOPMENT LENGTH SCHEDULE

FOR f_c = 2500 PSI, GRADE 60 REINFORCING

(I) MINIMUM STRAIGHT DEVELOPMENT LENGTH (L_d)

BAR SIZE	TOP BARS	OTHER BARS
#3	24"	18"
#4	32"	24"
#5	39"	30"

(II) MINIMUM LAP SPLICE LENGTH (L_s)

BAR SIZE	TOP BARS	OTHER BARS
#3	32"	24"
#4	42"	32"
#5	51"	39"

- TOP BARS ARE HORIZONTAL BARS W/MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THEM
- IF CLEAR CONC COVER IS NOT GREATER THAN THE DIAMETER OF THE BAR, OR THE CENTER TO CENTER SPACING IS NOT GREATER THAN 3 BAR DIAMETERS, THEN LENGTHS SHALL BE INCREASED BY 50%

(III) MINIMUM EMBEDMENT LENGTHS (L_{dh}) FOR STANDARD END HOOKS

BAR SIZE	LENGTH
#3	9"
#4	12"
#5	15"

NOTES: 1. SIDE COVER MUST BE EQUAL TO OR GREATER THAN 2½"
2. END COVER FOR 90° HOOKS MUST BE EQUAL TO OR GREATER THAN 2"

HOLD-DOWN SCHEDULE

MARK	HARDWARE	REFERENCE DTL
HD1	HDU4-SDS2.5	(H)
HD2	HDU5-SDS2.5	(H)
HD3	HDU8-SDS2.5	(H)
HD4	HDU14-SDS2.5	(H)
HD5	HDU14-SDS2.5	(K)
HD6	CS14	(L)
HD7	CMST14	(L)
HD8	MSTC48B3	(M)
HD9	MSTC66B3	(M)

FOOTING SCHEDULE

MARK	SIZE (MIN)	REINFORCING
F2.0	2'-0"x2'-0"x12"	(2)#5 EA WAY, BOTTOM
F2.5	2'-6"x2'-6"x12"	(3)#5 EA WAY, BOTTOM
FA	3'-0"x4'-0"x14"	(3)#5 LONGITUDINAL & (4)#5 TRANSVERSE, BOTTOM
FB	3'-0"x5'-4"x14"	(3)#5 LONGITUDINAL & (5)#5 TRANSVERSE, BOTTOM
FC	3'-0"x6'-0"x14"	(3)#5 LONGITUDINAL & (6)#5 TRANSVERSE, BOTTOM
FD	4'-0"x4'-0"x14"	(4)#5 EA WAY, BOTTOM
FE	3'-0"x3'-0"x16"	(2)#5 EA WAY, TOP & BOTTOM
FF	3'-0"x6'-0"x16"	(2)#5 LONGITUDINAL & (4)#5 TRANSVERSE, TOP & BOTTOM

MAIN FLOOR FRAMING AND FOUNDATION PLAN NOTES:
(TYPICAL, UNLESS NOTED OTHERWISE)

1. SEE REINFORCING SPLICE LENGTH AND DEVELOPMENT LENGTH SCHEDULE FOR REINFORCING DETAILS.
2. **F #** INDICATES FOOTING MARK. SEE **FOOTING SCHEDULE** FOR SIZE AND REINFORCING.
3. FLOOR SHEATHING SHALL BE 3/4" TONGUE AND GROOVE CDX PLYWOOD PANELS (EXPOSURE 1, SPAN RATING 48/24). GLUE AND NAIL AT ALL FRAMED PANEL EDGES AND OVER ALL WALLS SHOWN ON PLAN WITH 8d @ 6"o.c. AND TO ALL INTERMEDIATE FRAMING @ 12"o.c.
4. FLOOR JOISTS SHALL BE AS NOTED ON PLAN AND SCHEDULE
   J # INDICATES JOIST MARK
   B # INDICATES FLUSH BEAM MARK
5. HD# INDICATES HOLD-DOWN AT END OF SHEAR WALL ABOVE. SEE **HOLD-DOWN SCHEDULE** FOR HARDWARE AND INSTALLATION REQUIREMENTS.
6. DOWEL NEW CONCRETE TO EXISTING PER GENERAL STRUCTURAL NOTE # 4.2.D.
7. **WSW#x#** INDICATES PREFABRICATED WOOD SHEAR WALL, SEE **WSW_** DETAILS FOR CONSTRUCTION REQUIREMENTS.
8. SEE ARCHITECTURAL FOR ALL DIMENSIONS.
9. MAIN FLOOR FRAMING AND FOUNDATIONS ARE EXISTING AND UN-ALTERED EXCEPT AS NOTED. INFORM ENGINEER OF RECORD IF EXISTING CONDITIONS ARE SUBSTANTIALLY DIFFERENT THAN SHOWN OR IF THERE IS ANY QUESTION ABOUT THE INTEGRITY OF EXISTING STRUCTURAL ELEMENTS.

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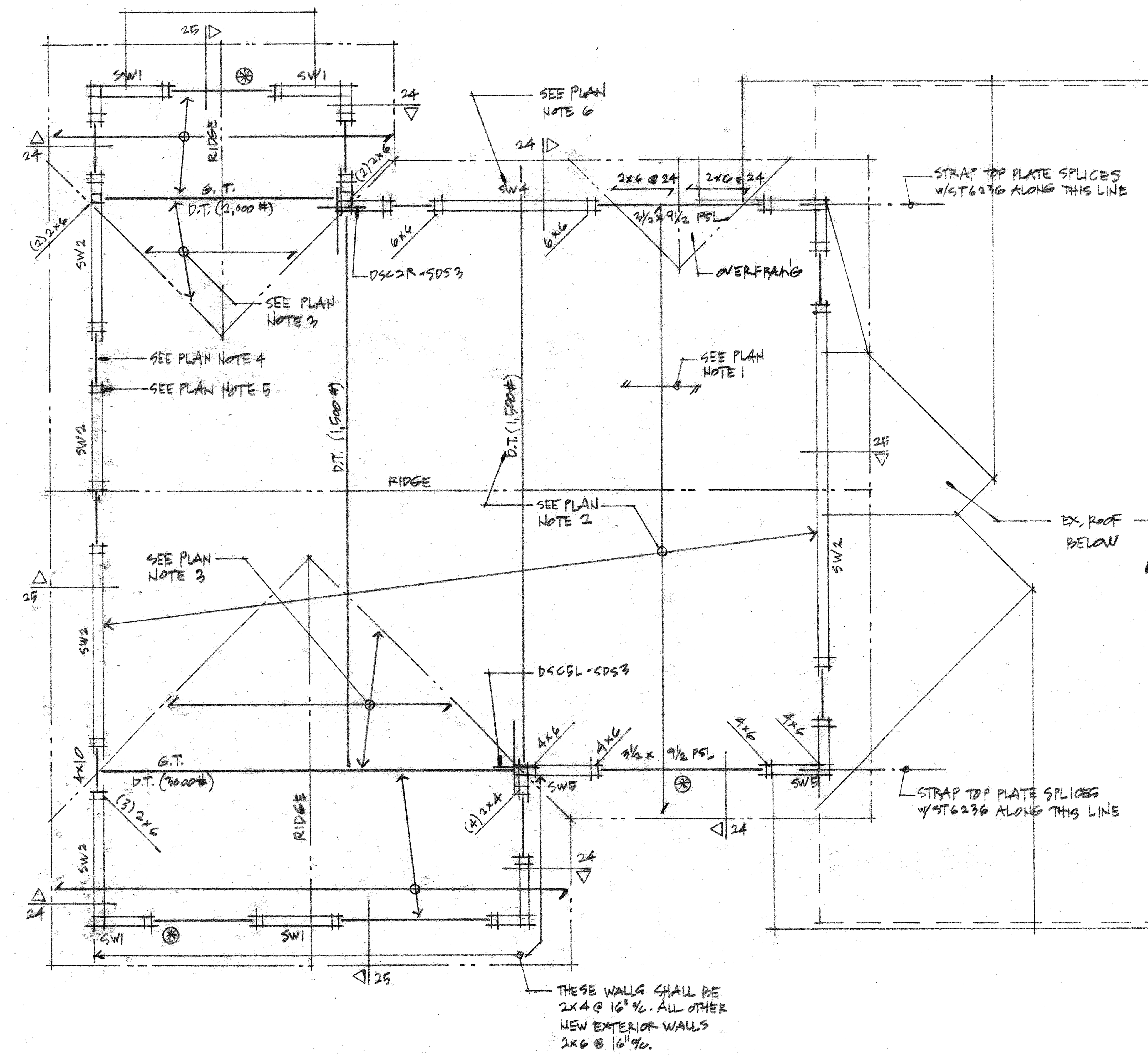

NORTH

ROOF FRAMING PLAN 1/4"
(UPPER FLOOR WALLS SHOWN)

SHEAR WALL SCHEDULE

MARK	SHEATHING (4)	PANEL EDGE NAILING (6) (7)	TOP PLATE CONNECTION		BOTTOM PLATE CONNECTION	
			SELF DRILLING SCREW OPTION (9)	FRAMING CLIP OPTION (9)	TO WOOD BELOW (10)	TO CONCRETE BELOW (11)
SW1 (1)	1/2" CDX (24/16) PLY. ONE SIDE	8d @ 6" o/c	16" o/c	24" o/c	SDS25412 @ 16" o/c	5/8" ϕ @ 48" o/c
SW2 (1)	1/2" CDX (24/16) PLY. ONE SIDE	8d @ 4" o/c	10" o/c	16" o/c	SDS25412 @ 10" o/c	5/8" ϕ @ 32" o/c
SW3 (2)	1/2" CDX (24/16) PLY. ONE SIDE	8d @ 3" o/c	8" o/c	12" o/c	SDS25412 @ 8" o/c	5/8" ϕ @ 24" o/c
SW4 (2)	1/2" CDX (24/16) PLY. ONE SIDE	8d @ 2" o/c	6" o/c	8" o/c	SDS25412 @ 6" o/c	5/8" ϕ @ 16" o/c
SW5 (3)	5/8" CDX (40/20) PLY. (5) ONE SIDE	10d @ 2" o/c (8)	4" o/c	6" o/c	SDS25800 @ 4" o/c	3/4" ϕ @ 32" o/c
SW6 (3)	1/2" CDX (24/16) PLY. BOTH SIDES	10d @ 2" o/c (8)	3" o/c	4 1/2" o/c	SDS25800 @ 3" o/c	3/4" ϕ @ 16" o/c

SHEAR WALL SCHEDULE NOTES

1. SW1 & SW2 WALLS SHALL BE FRAMED WITH 2x_ STUDS @ 16"o.c. WITH DOUBLE STUDS (MIN.) AT EACH END, 2x_ BOTTOM PLATE AND (2) 2x_ TOP PLATE.
2. SW3 & SW4 WALLS SHALL BE FRAMED WITH 2x_ STUDS @ 16"o.c. WITH DOUBLE STUDS AT ALL VERTICAL PLYWOOD JOINTS (SEE **DETAIL A)** & DOUBLE STUDS (MIN.) AT EACH END, 2x_ BOTTOM PLATE AND (2) 2x_ TOP PLATE.
3. SW5 & SW6 WALLS SHALL BE FRAMED WITH 3x_ (OR 4x_) STUDS @ 16"o.c. & 4x_ (MIN.) STUD AT EACH END, 3x_ (OR 4x_) BOTTOM PLATE AND (2) 2x_ TOP PLATE. ALL FRAMING IN SW5 & SW6 WALLS SHALL BE DOUGLAS FIR/LARCH.
4. O.S.B. OF EQUIVALENT NOMINAL THICKNESS AND SPAN RATING MY BE SUBSTITUTED WITH ARCHITECT'S PRE-APPROVAL.
5. 3/4" (48/24) PLYWOOD OR 1/2" (32/16) STRUCTURAL I PLYWOOD MAY BE SUBSTITUTED AT SW5 WALLS.
6. 8d NAILS SHALL BE 0.131"Ø x 2 1/2" (COMMON). 10d NAILS SHALL BE 0.148"Ø x 3" (COMMON). 16d NAILS SHALL BE 0.135"Ø x 3 1/2" (BOX).
7. PROVIDE BLOCKING PER **DETAIL E** AT ALL UNFRAMED HORIZONTAL JOINTS IN SHEAR WALL. NAIL @ 12"o.c. TO ALL INTERMEDIATE FRAMING.
8. STAGGER PANEL EDGE NAILS AT SHEATHING JOINTS AT SW5 & SW6 WALLS AND ON OPPOSITE SIDES OF WALL AT SW6 WALLS.
9. SEE **DETAIL D** FOR TOP PLATE CONNECTION SIZES AND OPTIONS.
10. SEE **DETAIL C** FOR BOTTOM PLATE CONNECTION TO WOOD BELOW.
11. SEE **DETAIL B** FOR BOTTOM PLATE CONNECTION TO CONCRETE BELOW.

JOIST & FLUSH BEAM SCHEDULE

MARK	SIZE & SPACING	COLUMN	HANGERS
J1	11 7/8" TJI /210 @ 16" o/c	N/A	IUS 2.06/11.88
J2	2x12 @ 16" o/c (RIP TO SLOPE w/ 9 1/4" MIN DEPTH	N/A	LU210 OR LUC210Z
J3	2x10 @ 16" o/c	N/A	LU210 OR LUC210Z
J4	2x8 @ 16" o/c	N/A	LU28 OR LUC26Z
J5	2x6 @ 16" o/c	N/A	LU26 OR LUC26Z
B1	3 1/2 x 11 7/8	N/A	HU412 OR HUC412
B2	3 1/2 x 11 7/8 PSL	(2) 2x_	HHUS412 OR HUCQ412
B3	5 1/4 x 11 7/8 PSL	(3) 2x_	HHUS 5.50/10 OR HUCQ612
B4	7 x 11 7/8 PSL	(4) 2x_	HGUS 7.25/12
B5	4x10	(2) 2x_	HU410 OR HUC410
B6	4x8	(2) 2x_	HU48 OR HUC48
B7	4x6	(2) 2x_	HU46 OR HUC46
B8	(2) 1 3/4 x 9 1/4 LVL (1)	N/A	HHUS410 OR HUCQ410
B9	(3) 1 3/4 x 9 1/4 LVL (1)	N/A	HHUS 5.50/10 OR HUCQ610

NOTES: (1) NAIL MULTI-LVL BMS w/(2) 16d @ 8" o/c EA PIECE

ROOF FRAMING PLAN NOTES:
(TYPICAL, UNLESS NOTED OTHERWISE)

1. ROOF SHEATHING SHALL BE 1/2" CDX PLYWOOD PANELS (EXPOSURE 1, SPAN RATING 24/16). NAIL AT ALL FRAMED PANEL EDGES AND OVER ALL WALLS SHOWN ON PLAN WITH 8d @ 6"o.c. AND TO ALL INTERMEDIATE FRAMING @ 6"o.c.
2. ROOF FRAMING SHALL BE PREFABRICATED CONNECTOR PLATE ROOF TRUSSES @ 24"o.c. SEE GENERAL STRUCTURAL NOTE # 9.7 FOR DESIGN CRITERIA.
   G.T. # INDICATES GIRDER TRUSS. SEE SCHEDULE FOR LOADING TO TRUSSES.
   D.T. (___#) INDICATES DRAG TRUSS (HORIZONTAL LOAD)
3. PREFABRICATED TRUSSED OVERFRAMING TO CREATE SLOPE. SEE **DETAIL T** FOR CONNECTION TO TRUSSES BELOW.
4. HEADERS OVER DOOR AND WINDOW OPENINGS SHALL BE (2) 2x8 MINIMUM.
   ⊛ STRAP ABOVE AND BELOW OPENINGS NOTED THUS PER **DETAIL N.**
5. COLUMNS SHALL BE DOUBLE STUDS MINIMUM. SEE **DETAIL O** FOR INSTALLATION.
6. **SW #** INDICATES SHEAR WALL. SEE **SHEAR WALL SCHEDULE** FOR CONSTRUCTION REQUIREMENTS. EXTERIOR WALLS SHALL BE **SW 1** MINIMUM.
7. SPLICE ALL TOP PLATES PER **DETAIL P.** ADD STRAPS AT JOINTS WHERE NOTED ON PLAN.
8. SEE ARCHITECTURAL FOR ALL DIMENSIONS.

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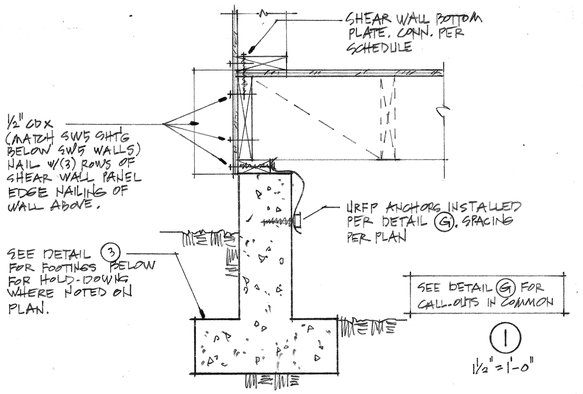
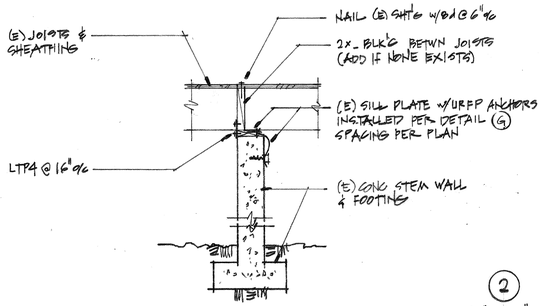
JOB NO. 21807
DATE: 1.20.21

A7



1
1½"=1'-0"



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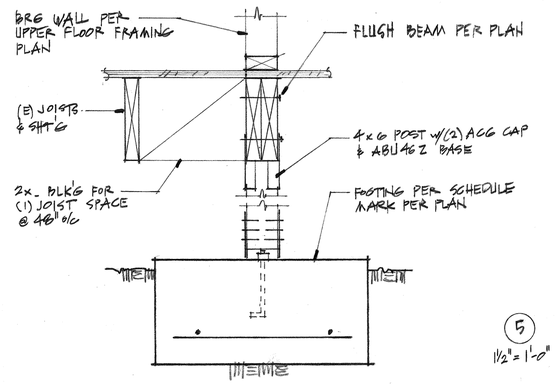

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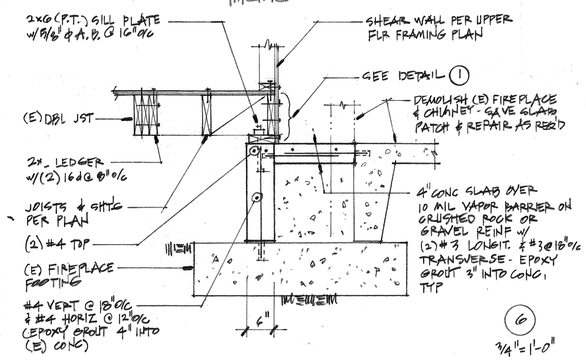

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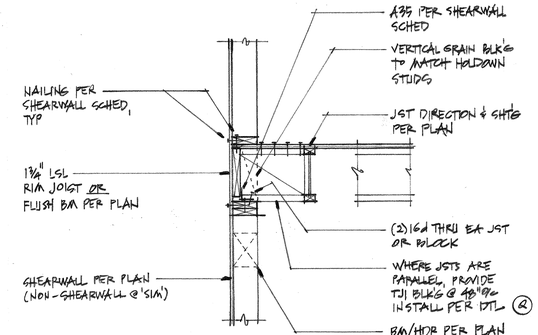

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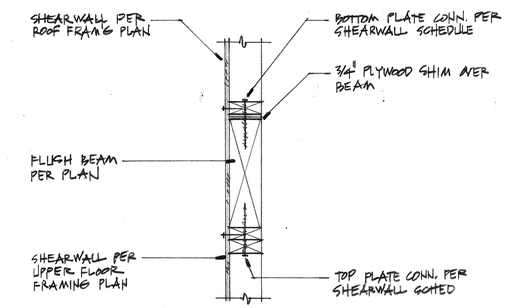

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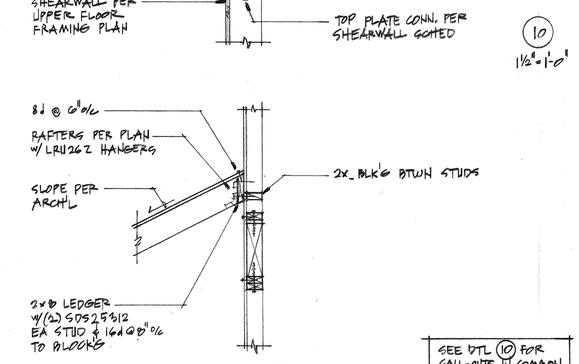
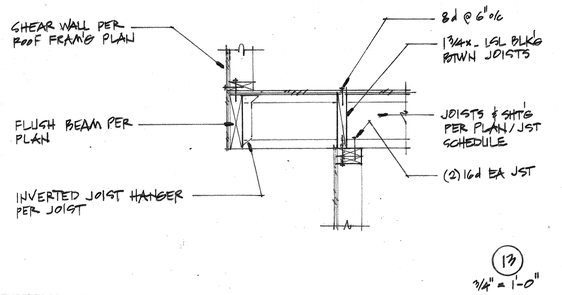


SEE DTL 10 FOR CALL-OUTS IN COMMON

11
3/4"=1'-0"



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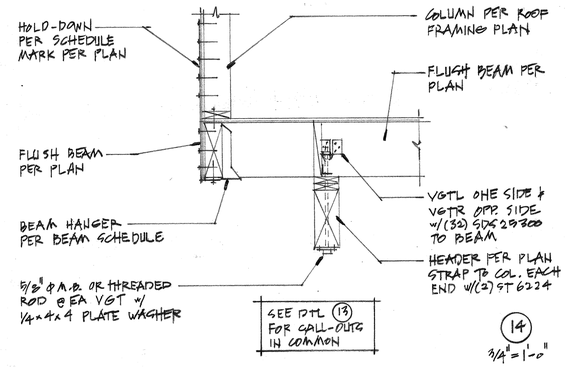

SEE DTL 13 FOR CALL-OUT IN COMMON

14
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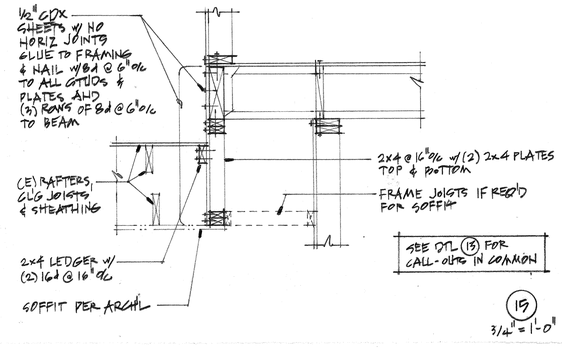

SEE DTL 13 FOR CALL-OUTS IN COMMON

15
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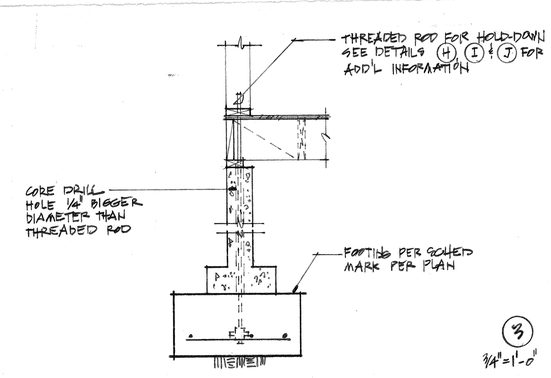

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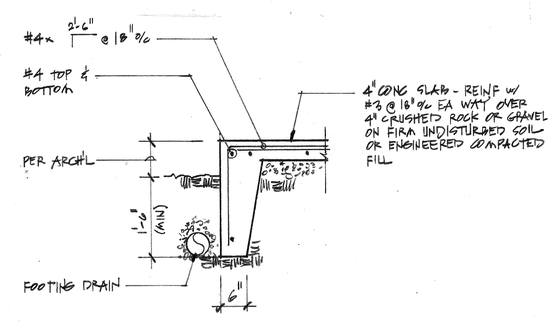

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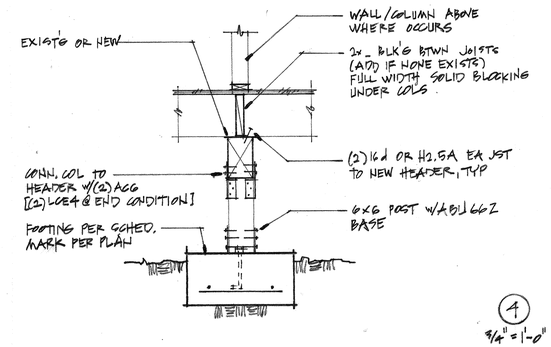

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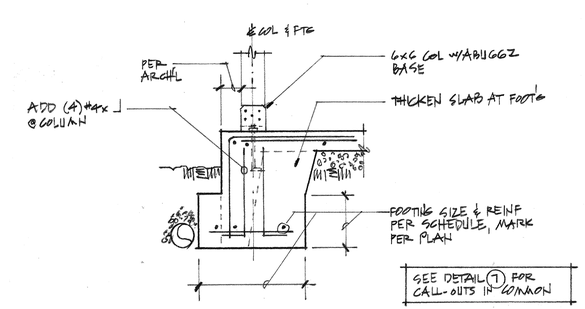
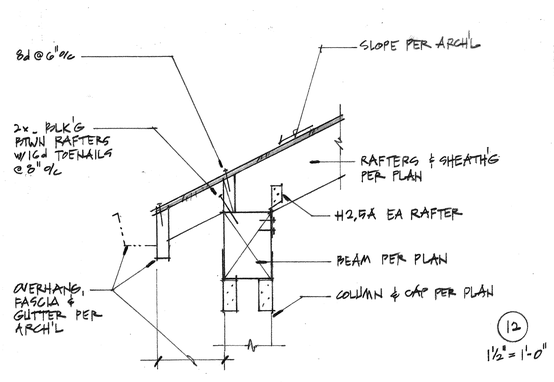
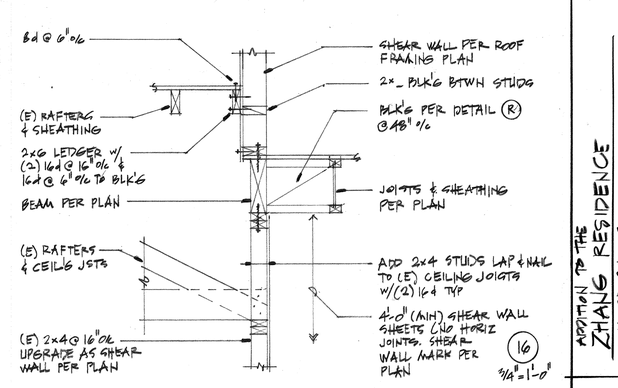


SEE DETAIL 7 FOR CALL-OUTS IN COMMON

8
3/4"=1'-0"



12
1½"=1'-0"



16
3/4"=1'-0"

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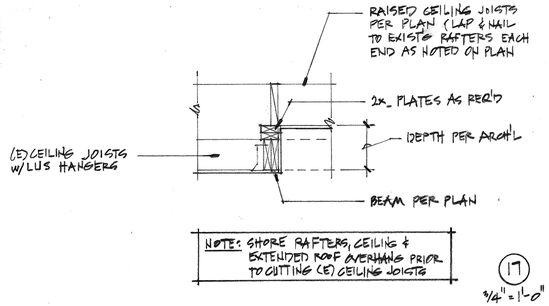
DATE: 1.24.21

A8



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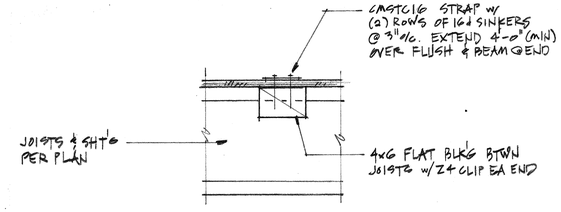
3/4" = 1'-0"



18
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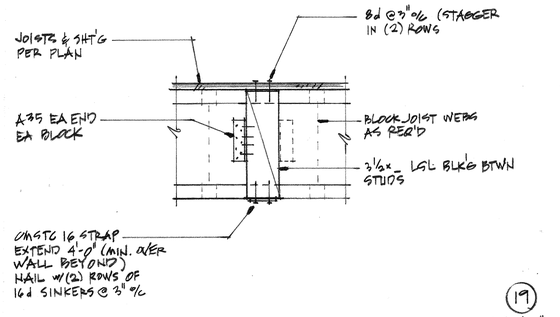

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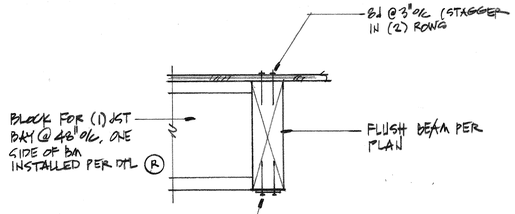

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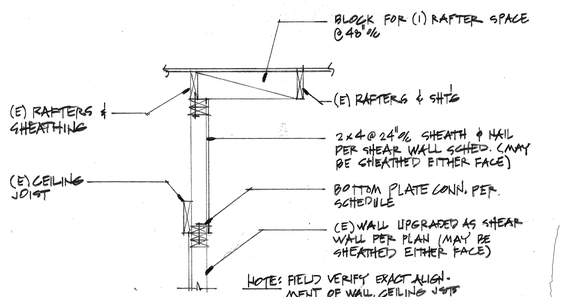

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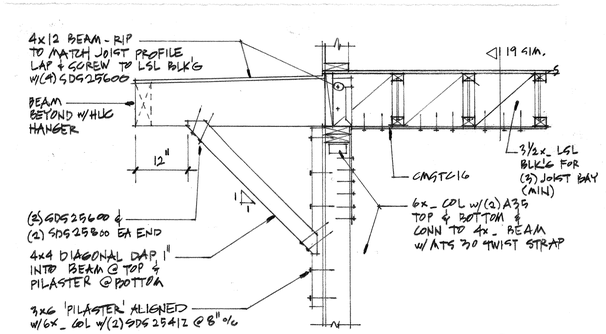
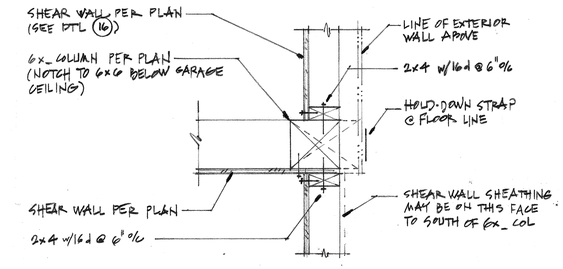
3/4" = 1'-0"



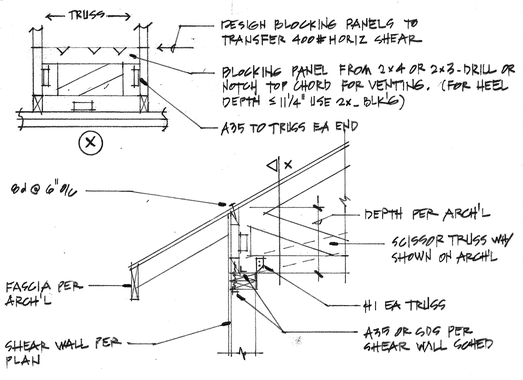
KNEE-BRACE DETAIL

22
3/4" = 1'-0"



PLAN VIEW

23
1½" = 1'-0"



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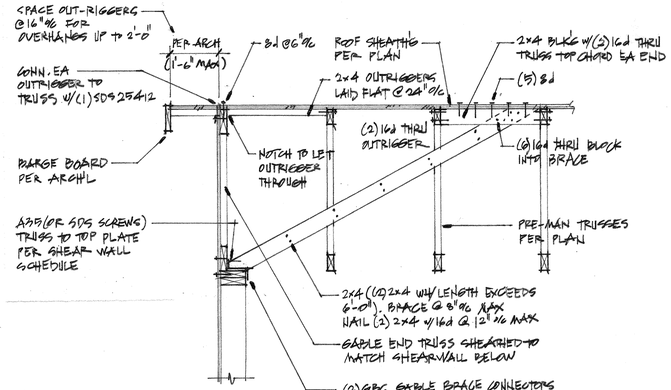

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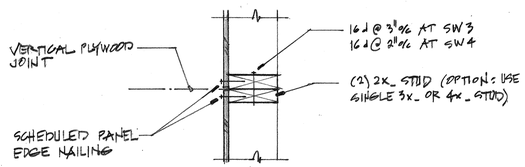
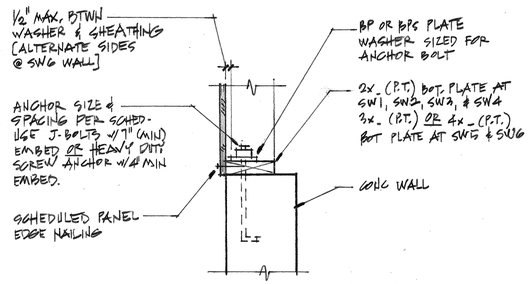


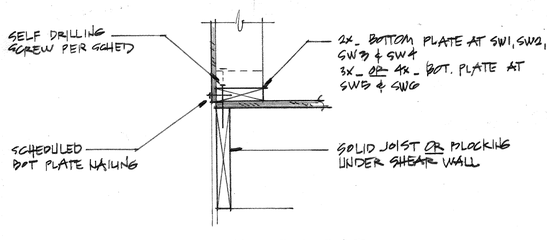
VERTICAL JOINTS AT SW3 & SW4 WALLS

A
1½" = 1'-0"



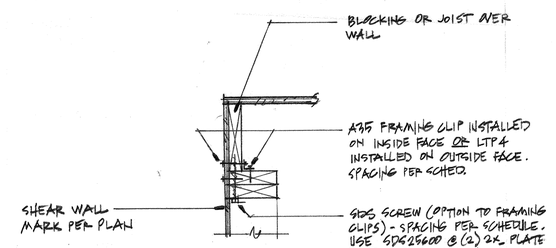
SHEAR WALL BOTTOM PLATE AT CONCRETE BELOW

B
1½" = 1'-0"



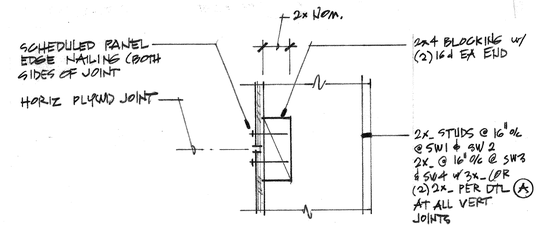
SHEAR WALL BOTTOM PLATE AT WOOD BELOW

C
1½" = 1'-0"

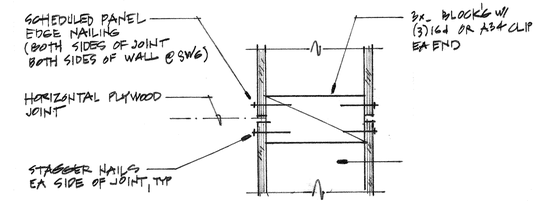


SHEAR WALL TOP PLATE CONNECTION OPTIONS

D
1½" = 1'-0"



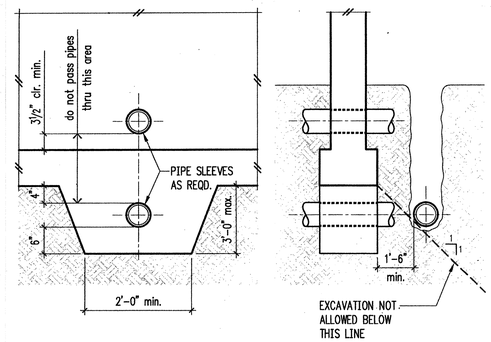
SW1-4 WALL BLOCKING



SW5-6 WALL BLOCKING

SHEAR WALL BLOCKING DETAIL

E
3" = 1'-0"



Pipe and Trench Locations

F
3/4" = 1'-0"

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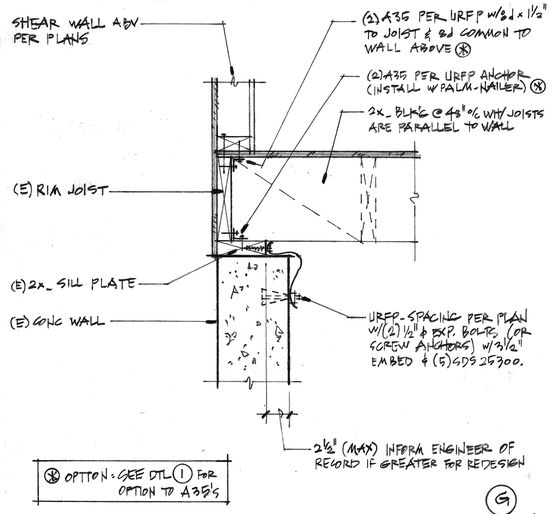
JOB NO. 21807
DATE: 1.30.21

A9



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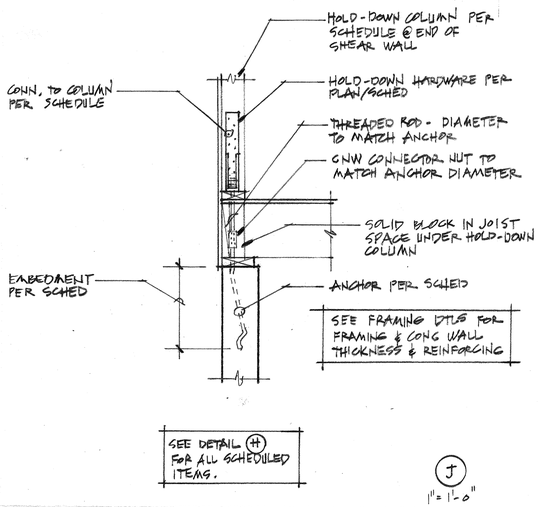

J
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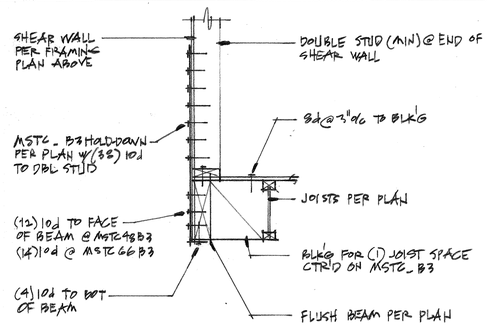
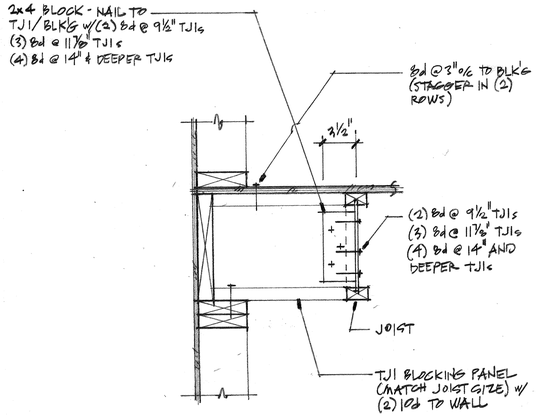


¾" = 1'-0"
M

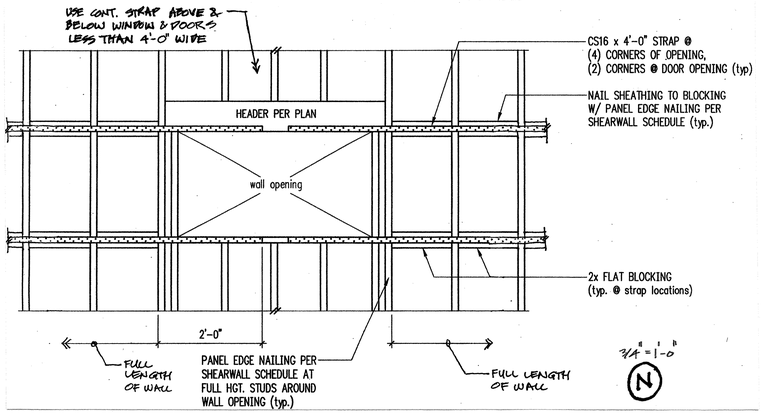


SEE FRAMING DTLS FOR BLOCKS LOCATIONS & SPACING

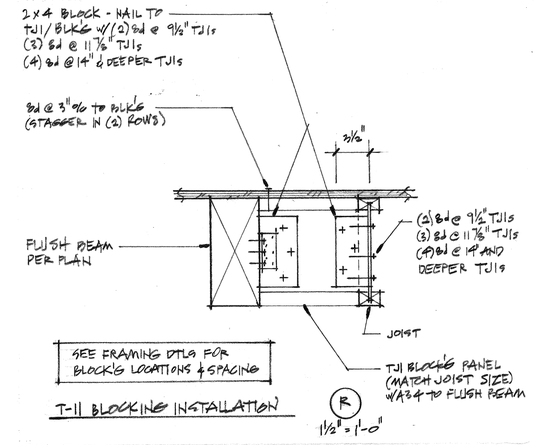
NOTE: SEE DTL (R) FOR BLOCK'G CONN. TO FLUSH BEAMS.

TJI BLOCKING INSTALLATION

Q
1½" = 1'-0"

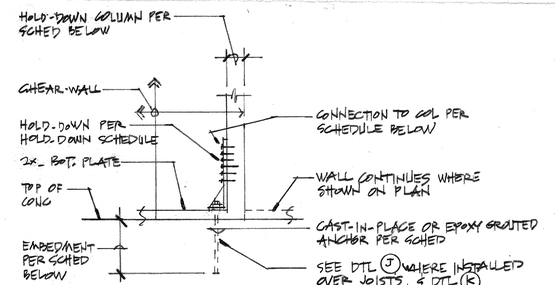


¾" = 1'-0"
N



T-II BLOCKING INSTALLATION

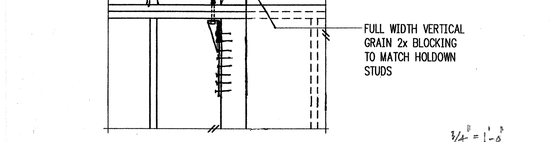
R
1½" = 1'-0"



SCHEDULE				
HARDWARE	CAST-IN-PLACE	EPOXY GROUTED	HOLD-DOWN QTY (MIN)	CONN TO COLUMN
HDU4-SDS2.5	N/A	⅝" Ø THREADED ROD w/ 10" (MIN) EMBEDMENT	(2) 2x_	(10) SDS25212
HDU5-SDS2.5	N/A	⅝" Ø THREADED ROD w/ 14" (MIN) EMBEDMENT	(2) 2x_	(14) SDS25212
HDU8-SDS2.5	PAB7 (SEE DTL (I))	⅞" Ø THREDED ROD w/ 8" (MIN) EMBED IN CE FIREPLACE FTG	4x6	(20) SDS25212
HDU14-SDS2.5	PAB8 (SEE DTL (I))	N/A	6x6	(36) SDS25212

HOLD-DOWN DETAIL

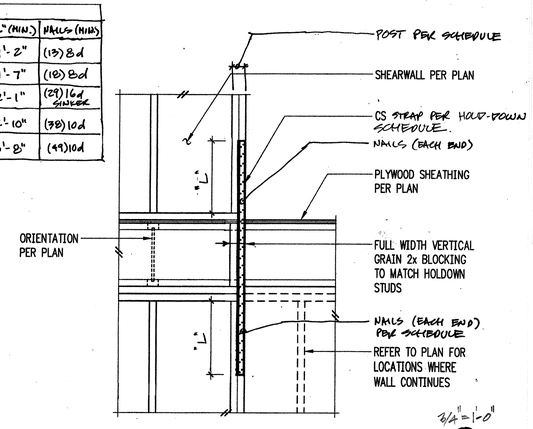
H
1½" = 1'-0"



Typical HD Holdowns

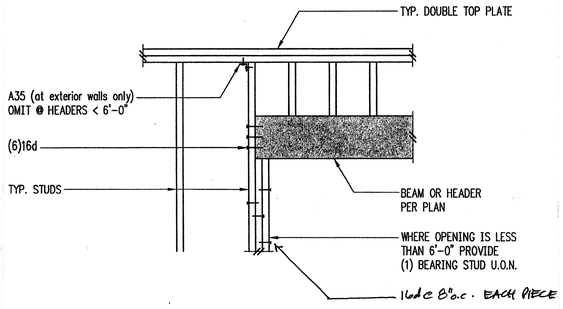
K
¾" = 1'-0"

SCHEDULE			
STRAP	POST (MIN.)	"L" (MIN.)	NAILS (MIN.)
CS16	(2) 2x_	1'-2"	(13) 8d
CS14	(2) 2x_	1'-7"	(18) 8d
CMSTC16	4x_	2'-1"	(29) 16d SINKER
CMST14	4x_	2'-10"	(38) 10d
CMST12	6x_	3'-8"	(49) 10d



Typical CS Holdown

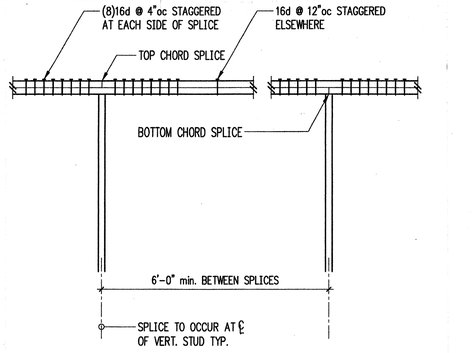
L
¾" = 1'-0"



¾" = 1'-0"

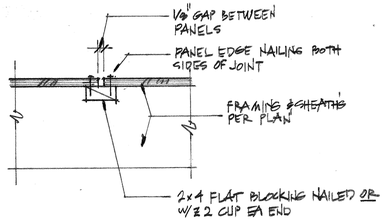
Typical Header Support

O

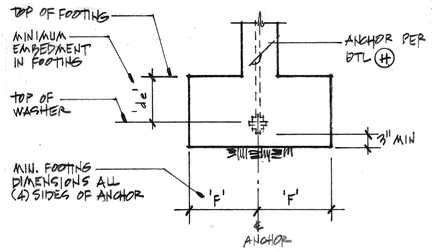


Typical Top Plate Splice

P



S
NO SCALE



SCHEDULE		
ANCHOR	'de' (MIN)	'F' (MIN)
PAB7	9"	13½"
PAB8	11"	16½"

I

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JOB NO. 21 807
DATE: 1.20.21

A10

GENERAL STRUCTURAL NOTES

(The following apply unless shown otherwise on the plans)

CRITERIA

1.1 ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE INTERNATIONAL BUILDING CODE (2015 EDITION).

1.2 DESIGN LOADING CRITERIA

ROOF SNOW LOAD . . . . 25 PSF
FLOOR LIVE LOAD (RESIDENTIAL) . . . . 40 PSF
FLOOR LIVE LOAD (RESIDENTIAL DECKS AND BALCONIES). . . . . 60 PSF
GUARDRAILS/BALCONY RAILS CONCENTRATED LOAD . . . . .200 LBS
WIND . . . .RISK FACTOR = II, Kzt=1.60, GCpi=0.18, 85 MPH, EXPOSURE "C"
EARTHQUAKE:
1. SEISMIC IMPORTANCE FACTOR = 1.0, RISK FACTOR = II
2. Ss = 1.372, S1 = .529
3. SITE CLASS = D
4. Sds = .915, SD1 = .529
5. SEISMIC DESIGN CATEGORY = D
6. LATERAL SYSTEM: LIGHT-FRAMED SHEAR WALLS
7. BASE SHEAR V (ASD) = 14.68 KIPS
8. Cs (ASD) = 0.09854
9. R = 6.5
10. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

SEE PLANS FOR ADDITIONAL LOADING CRITERIA

1.3 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 OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.

1.4 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, MEMBER SIZES, AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS ARE INTENDED AS GUIDELINES ONLY AND MUST BE VERIFIED.

1.5 CONTRACTOR SHALL PROVIDE TEMPORARY BRACING FOR THE STRUCTURE AND STRUCTURAL COMPONENTS UNTIL ALL FINAL CONNECTIONS HAVE BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

1.6 CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE CONTRACTORS WORK. THE ENGINEER OF RECORD 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 ENGINEER OF RECORD HAS NO DUTY TO INSPECT, SUPERVISE, NOTE, CORRECT, OR REPORT ANY HEALTH OR SAFETY DEFICIENCIES TO THE OWNER, CONTRACTORS, OR OTHER ENTITIES OR PERSONS AT THE PROJECT SITE.

1.7 CONTRACTOR-INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO THE ARCHITECT AND ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION OR CONSTRUCTION. CHANGES SHOWN ON SHOP DRAWINGS ONLY WILL NOT SATISFY THIS REQUIREMENT.

1.8 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 ENGINEER OF RECORD.

1.9 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.

1.10 SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION OF THESE ITEMS.

CONNECTOR PLATE WOOD ROOF TRUSSES

APPROVED SETS OF ALL SHOP DRAWINGS SHALL ALSO BE SUBMITTED TO THE BUILDING DEPARTMENT.

1.11 SHOP DRAWING REVIEW: DIMENSIONS AND QUANTITIES ARE NOT REVIEWED BY THE ENGINEER OF RECORD, THEREFORE MUST BE VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL REVIEW AND STAMP DRAWINGS PRIOR TO REVIEW BY ENGINEER OF RECORD. CONTRACTOR SHALL REVIEW DRAWINGS FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION, AND ALL SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO. SUBMITTALS SHALL INCLUDE A REPRODUCIBLE AND ONE COPY; REPRODUCIBLE WILL BE MARKED AND RETURNED WITHIN TWO WEEKS OF RECEIPT WITH A NOTATION INDICATING THAT THE SUBMITTAL HAS BEEN FOUND TO BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE SUBMITTED ITEMS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS. THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, BY INDICATING WHICH MATERIAL IS INTENDED TO BE FURNISHED AND INSTALLED AND BY DETAILING THE INTENDED FABRICATION AND INSTALLATION METHODS. IF DEVIATIONS, DISCREPANCIES, OR CONFLICTS BETWEEN SHOP DRAWING SUBMITTALS AND THE CONTRACT DOCUMENTS ARE DISCOVERED EITHER PRIOR TO OR AFTER SHOP DRAWING SUBMITTALS ARE PROCESSED BY THE ENGINEER, THE DESIGN DRAWINGS AND SPECIFICATIONS SHALL CONTROL AND SHALL BE FOLLOWED.

1.12 SHOP DRAWINGS OF DESIGN BUILD COMPONENTS INCLUDING CONNECTOR PLATE WOOD ROOF TRUSSES SHALL INCLUDE THE DESIGNING PROFESSIONAL ENGINEER'S STAMP, STATE OF WASHINGTON AND SHALL BE APPROVED BY THE COMPONENT DESIGNER PRIOR TO REVIEW OF THE ARCHITECT OR ENGINEER OF RECORD FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SHOP DRAWINGS SHALL INDICATE MAGNITUDE AND DIRECTION OF ALL LOADS IMPOSED ON BASIC STRUCTURE. DESIGN CALCULATIONS SHALL BE SUBMITTED WITH THE SHOP DRAWINGS.

1.14 DEFLECTION OF CANTILEVERS SHALL BE CLOSELY MONITORED BY THE CONTRACTOR DURING CONSTRUCTION. CONTRACTOR TO VERIFY AND ENSURE ALL POST CAPS AND POST BEARING CONDITIONS ARE INSTALLED IN STRICT CONFORMANCE TO THE STRUCTURAL PLANS. CANTILEVERS IN WOOD FRAMING CAN DEFLECT UP TO 1/8" PER FOOT (I.E. 4' CANTILEVER MAY DEFLECT 1/2"). IF DEFLECTION EXCEEDS 1/8" PER FOOT NOTIFY STRUCTURAL ENGINEER IMMEDIATELY. BEFORE FINISHES ARE INSTALLED, FLOORS AT OR ABOVE CANTILEVERS MAY REQUIRE LEVELING COMPOUND AND SOFFITS FURRED TO MAKE THEM LEVEL.

QUALITY ASSURANCE

2.1 SPECIAL INSPECTION SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SECTIONS 110 AND 1705 OF THE INTERNATIONAL BUILDING CODE BY A QUALIFIED TESTING AGENCY DESIGNATED BY THE ARCHITECT, AND RETAINED BY THE BUILDING OWNER. THE ARCHITECT, STRUCTURAL ENGINEER, AND BUILDING DEPARTMENT SHALL BE FURNISHED WITH COPIES OF ALL INSPECTION AND TEST RESULTS. SPECIAL INSPECTION OF THE FOLLOWING TYPES OF CONSTRUCTION

EXPANSION BOLTS AND SCREW ANCHORS	PER MANUFACTURER
EPOXY GROUTED INSTALLATIONS	PER MANUFACTURER

2.4 STRUCTURAL OBSERVATION SHALL BE PERFORMED IN ACCORDANCE WITH SECTIONS 1709 OF THE INTERNATIONAL BUILDING CODE FOR THE FOLLOWING BUILDING ELEMENTS:

SHEARWALLS
HOLDDOWNS

THE CONTRACTOR SHALL PROVIDE THE ENGINEER OF RECORD ADEQUATE NOTICE TO SCHEDULE APPROPRIATE SITE VISITS FOR STRUCTURAL OBSERVATION.

STRUCTURAL OBSERVATION MEANS THE VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM, FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS, AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTIONS REQUIRED BY SECTION 109 OR OTHER SECTIONS OF THE INTERNATIONAL BUILDING CODE.

THE OWNER SHALL EMPLOY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN, TO PERFORM STRUCTURAL OBSERVATION. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER'S REPRESENTATIVE, SPECIAL INSPECTOR, CONTRACTOR, AND THE BUILDING OFFICIAL. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFYING ANY REPORTED DEFICIENCIES WHICH, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

GEOTECHNICAL

3.1 FOUNDATION NOTES: ALLOWABLE SOIL PRESSURE AND COEFFICIENT OF FRITION ARE ASSUMED AND THEREFORE MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER OR APPROVED BY THE BUILDING OFFICIAL. IF SOILS ARE FOUND TO BE OTHER THAN ASSUMED, NOTIFY THE ENGINEER OF RECORD FOR POSSIBLE FOUNDATION REDESIGN.

FOOTINGS SHALL BEAR ON FIRM, UNDISTURBED EARTH AT LEAST 18" BELOW ADJACENT FINISHED GRADE. UNLESS OTHERWISE NOTED, FOOTINGS SHALL BE CENTERED BELOW COLUMNS OR WALLS ABOVE.

BACKFILL BEHIND ALL RETAINING WALLS WITH FREE DRAINING, GRANULAR FILL AND PROVIDE FOR SUBSURFACE DRAINAGE.

ALLOWABLE SOIL PRESSURE. . . . . 2000 PSF
COEFFICIENT OF FRICTION (FACTOR OF SAFETY OF 1.5 INCLUDED) 0.35

RENOVATION

4.1 DEMOLITION: CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. SHORING SHALL BE INSTALLED TO SUPPORT EXISTING CONSTRUCTION AS REQUIRED AND IN A MANNER SUITABLE TO THE WORK SEQUENCES. DEMOLITION DEBRIS SHALL NOT BE ALLOWED TO DAMAGE OR OVERLOAD THE EXISTING STRUCTURE. LIMIT CONSTRUCTION LOADING (INCLUDING DEMOLITION DEBRIS) ON EXISTING FLOOR SYSTEMS TO 40 PSF.

4.2 EXISTING REINFORCING SHALL BE SAVED WHERE AND AS NOTED ON THE PLANS. SAW CUTTING, IF AND WHERE USED, SHALL NOT CUT EXISTING REINFORCING THAT IS TO BE SAVED.

A. ALL NEW OPENINGS THROUGH EXISTING WALLS, SLABS AND BEAMS SHALL BE ACCOMPLISHED BY SAW CUTTING WHEREVER POSSIBLE.
B. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.
C. SMALL ROUND OPENINGS SHALL BE ACCOMPLISHED BY CORE DRILLING, IF POSSIBLE.
D. WHERE NEW REINFORCING TERMINATES AT EXISTING CONCRETE, DOWELS EPOXY GROUTED INTO EXISTING CONCRETE SHALL BE PROVIDED TO MATCH HORIZONTAL REINFORCING WITH 4" MINIMUM EMBEDMENT IN EXISTING CONCRETE, UNLESS OTHERWISE NOTED ON PLANS.

4.5 CONTRACTOR SHALL CHECK FOR DRYROT AT ALL AREAS OF NEW WORK. ALL ROT SHALL BE REMOVED AND DAMAGED MEMBERS SHALL BE REPLACED OR REPAIRED AS DIRECTED BY THE ENGINEER OF RECORD OR ARCHITECT.

TREAT ALL ROTTED WOOD LEFT IN PLACE WITH 'PC ROT TERMINATOR' RESIN FOR DECAY TREATMENT AND HARDENING, AS MANUFACTURED BY PROTECTIVE COATINGS CO. OR APPROVED EQUAL

CONCRETE

5.1 CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC SECTION 1904 AND ACI 301-10. STRENGTHS AT 28 DAYS AND MIX CRITERIA SHALL BE AS FOLLOWS:

TYPE OF CONSTRUCTION	28 DAY STRENGTH (f'c)	MAXIMUM ABSOLUTE WATER- CEMENT RATIO NON-AIR ENTRAINED CONCRETE	AIR ENTRAINED CONCRETE
A. ALL STRUCTURAL CONCRETE	3,000 PSI	0.58	0.46

5.2 THE MINIMUM AMOUNTS OF CEMENT MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE ENGINEER OF RECORD AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FLYASH, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH IBC 1905.6. THE USE OF A PERFORMANCE MIX REQUIRES BATCH PLANT INSPECTION, THE COST OF WHICH SHALL BE PAID BY THE GENERAL CONTRACTOR. REVIEW OF MIX SUBMITTALS BY THE ENGINEER OF RECORD INDICATES ONLY THAT INFORMATION PRESENTED CONFORMS GENERALLY WITH CONTRACT DOCUMENTS. CONTRACTOR OR SUPPLIER MAINTAINS FULL RESPONSIBILITY FOR SPECIFIED PERFORMANCE.

ALL CONCRETE WITH SURFACES EXPOSED TO STANDING WATER SHALL BE AIR-ENTRAINED WITH AN AIR-ENTRAINING AGENT CONFORMING TO ASTM C260, C494, and C618. TOTAL AIR CONTENT FOR FROST-RESISTANT CONCRETE SHALL BE IN ACCORDANCE WITH TABLE 1904.2 OF THE INTERNATIONAL BUILDING CODE.

5.4 REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60, fy = 60,000 PSI.

5.7 DETAILING OF REINFORCING STEEL (INCLUDING HOOKS AND BENDS) SHALL BE IN ACCORDANCE WITH ACI 315-99 AND 318-14. 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.

NO BARS PARTIALLY EMBEDDED IN HARDENED CONCRETE SHALL BE FIELD BENT UNLESS SPECIFICALLY SO DETAILED OR APPROVED BY THE ENGINEER OF RECORD.

5.8 CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE AS FOLLOWS:
FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH . . . . 3"
FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#5 BARS OR SMALLER) . . 1-1/2"

ANCHORAGE

6.1 EXPANSION BOLTS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "STRONG-BOLT" ANCHORS AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY AND INSTALLED IN STRICT CONFORMANCE TO ICC-ES REPORT NO. 1771, INCLUDING MINIMUM EMBEDMENT REQUIREMENTS. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SPECIAL INSPECTION IS REQUIRED FOR ALL EXPANSION BOLT INSTALLATION.

6.2 EPOXY-GROUTED ITEMS (THREADED RODS OR REINFORCING BAR) SPECIFIED ON THE DRAWINGS INTO EXISTING CONCRETE AND GROTED CMU SHALL BE INSTALLED USING "SET-XP" EPOXY AS MANUFACTURED BY THE SIMPSON STRONG TIE COMPANY. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. 2508. SPECIAL INSPECTION OF INSTALLATION IS REQUIRED. RODS SHALL BE ASTM A-36 UNLESS OTHERWISE NOTED.

6.4 SCREW ANCHORS INTO CONCRETE AND CONCRETE MASONRY UNITS SHALL BE "TITEN HD" HEAVY DUTY SCREW ANCHORS AS MANUFACTURED BY SIMPSON STONG-TIE. BOLTS INTO CONCRETE MASONRY OR BRICK MASONRY UNITS SHALL BE INTO FULLY GROUTED CELLS. SUBSTITUTES PROPOSED BY CONTRACTOR SHALL BE SUBMITTED FOR REVIEW WITH ICBO, OR ICC REPORTS INDICATING EQUIVALENT OR GREATER LOAD CAPACITIES. INSTALL IN STRICT ACCORDANCE WITH ICC-ES REPORT NO. 1056.

WOOD

9.1 FRAMING LUMBER SHALL BE KILN DRIED OR MC-19, AND GRADED AND MARKED IN CONFORMANCE WITH W.C.L.B. STANDARD GRADING RULES FOR WEST COAST LUMBER NO. 17. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:

JOISTS AND BEAMS:	(2X & 3X MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1000 PSI
	(2X, 3X & 4X PRESSURE TREATED MEMBERS)	HEM-FIR NO. 2 MINIMUM BASE VALUE, Fb = 850 PSI
BEAMS:	(INCL. 6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fb = 1350 PSI
POSTS:	(4X MEMBERS)	DOUGLAS FIR-LARCH NO. 2 MINIMUM BASE VALUE, Fc = 1350 PSI
	(6X AND LARGER)	DOUGLAS FIR-LARCH NO. 1 MINIMUM BASE VALUE, Fc = 1000 PSI

2 X 4 STUDS, PLATES & MISC. FRAMING: DF/L OR HF STUD GRADE

2 X 6 STUDS, PLATES & MISC. FRAMING: DF/L OR HF #2

9.3 MANUFACTURED LUMBER, PSL, LVL, AND LSL SHALL BE MANUFACTURED UNDER A PROCESS APPROVED BY THE NATIONAL RESEARCH BOARD. EACH PIECE SHALL BEAR A STAMP OR STAMPS NOTING THE NAME AND PLANT NUMBER OF THE MANUFACTURER, THE GRADE, THE NATIONAL RESEARCH BOARD NUMBER, AND THE QUALITY CONTROL AGENCY. ALL PSL, LVL, LSL AND TJ INSULATED LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH ICC-ES REPORT ESR-1387 USING DOUGLAS FIR VENEER GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER. THE MEMBERS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES:

PSL (2.2E)	Fb = 2900 PSI,	E = 2200 KSI,	Fv = 290 PSI
LVL (2.0E)	Fb = 2600 PSI,	E = 2000 KSI,	Fv = 285 PSI
LSL (1.55E)	Fb = 2250 PSI,	E = 1550 KSI,	Fv = 310 PSI

DESIGN SHOWN ON PLANS IS BASED ON LUMBER MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER, ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE ICC APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.

MANUFACTURED LUMBER PRODUCTS SHALL BE INSTALLED WITH A MOISTURE CONTENT OF 12% OR LESS. THE CONTRACTOR SHALL MAKE PROVISIONS DURING CONSTRUCTION TO PREVENT THE MOISTURE CONTENT OF INSTALLED BEAMS FROM EXCEEDING 12%. EXCESSIVE DEFLECTIONS MAY OCCUR IF MOISTURE CONTENT EXCEEDS THIS VALUE.

9.5 PREFABRICATED PLYWOOD WEB JOIST DESIGN SHOWN ON PLANS IS BASED ON JOISTS MANUFACTURED BY THE TRUS-JOIST CORPORATION. ALTERNATE PLYWOOD WEB JOIST MANUFACTURERS MAY BE USED SUBJECT TO REVIEW AND APPROVAL BY THE ARCHITECT AND ENGINEER OF RECORD. ALTERNATE JOIST HANGERS AND OTHER HARDWARE MAY BE SUBSTITUTED FOR ITEMS SHOWN PROVIDED THEY HAVE I.C.B.O. APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH PLYWOOD WEB JOIST PROVIDED.

9.7 PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "NATIONAL DESIGN STANDARD FOR METAL PLATE-CONNECTED WOOD TRUSS CONSTRUCTION, ANSI/TPI 1" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:

TOP CHORD SNOW LOAD	25 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD DEAD LOAD	10 PSF
TOTAL LOAD	45 PSF
WIND UPLIFT (TOP CHORD)	15 PSF
BOTTOM CHORD LIVE LOAD	10 PSF

(BOTTOM CHORD LIVE LOAD DOES NOT ACT CONCURRENTLY WITH THE ROOF SNOW LOAD)

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BE SIGNED AND STAMPED BY A ENGINEER OF RECORD REGISTERED IN THE STATE OF WASHINGTON. PROVIDE FOR SHAPES, BEARING POINTS, INTERSECTIONS, HIPS, VALLEYS, ETC., SHOWN ON THE DRAWINGS. EXACT COMPOSITION OF SPECIAL HIP, VALLEY, AND INTERSECTION AREAS (USE OF GIRDER TRUSSES, JACK TRUSSES, STEP-DOWN TRUSSES, ETC.) SHALL BE DETERMINED BY THE MANUFACTURER UNLESS SPECIFICALLY INDICATED ON THE PLANS. PROVIDE ALL TRUSS TO TRUSS AND TRUSS TO GIRDER TRUSS CONNECTION DETAILS AND REQUIRED CONNECTION MATERIALS. PROVIDE FOR ALL TEMPORARY AND PERMANENT TRUSS BRACING AND BRIDGING.

9.9 PREFABRICATED SHEAR WALLS SHALL BE "STRONG-WALLS" AS MANUFACTURED BY SIMPSON STRONG-TIE. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH ICC-ES REPORTS NO. 1679 FOR STEEL WALLS AND NO. 2652 FOR WOOD WALLS, THE MANUFACTURER'S CURRENT PRODUCT LITERATURE AND THE STRUCTURAL DRAWINGS.

9.10 PLYWOOD SHEATHING SHALL BE GRADE C-D, EXTERIOR GLUE OR STRUCTURAL II, EXTERIOR GLUE IN CONFORMANCE WITH DOC PS 1. ORIENTED STRAND BOARD OF EQUIVALENT THICKNESS, EXPOSURE RATING AND PANEL INDEX MAY BE USED IN LIEU OF PLYWOOD.

ROOF SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 32/16.

FLOOR SHEATHING SHALL BE 3/4" (NOMINAL) WITH SPAN RATING 48/24.

WALL SHEATHING SHALL BE 1/2" (NOMINAL) WITH SPAN RATING 24/16.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

9.12 ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.

PRESSURE TREATED WOOD SHALL BE TREATED PER AWPA STANDARD C2 FOR LUMBER OR C9 FOR PLYWOOD. WOOD IN CONTINUOUS CONTACT WITH FRESH WATER OR SOIL SHALL BE TREATED TO A RETENTION OF 0.40 PCF. PRESSURE TREATED WOOD FOR ABOVE GROUND USE SHALL BE TREATED TO A RENTION OF 0.25 PCF. SODIUM BORATE (SBX) TREATED WOOD SHALL NOT BE USED WHERE EXPOSED TO WEATHER. FASTENERS (NAILS, SCREWS, BOLTS AND ANCHOR BOLTS) AND TIMBER CONNECTORS IN DIRECT CONTACT WITH ACQ-A, CBA-A, CA-B, OR SBX TREATED WOOD SHALL BE G185 OR A185 HOT DIPPED OR CONTINUOUS HOT-GALVANIZED PER ASTM A653. FASTENERS AND TIMBER CONNECTORS IN DIRECT CONTACT WITH ACZA TREATED WOOD SHALL BE TYPE 304 OR 316 STAINLESS STEEL.

9.15 TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CURRENT CATALOG. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICC-ES APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTENERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

ALL 2X JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "LU" SERIES JOIST HANGERS. ALL TJI JOISTS SHALL BE CONNECTED TO FLUSH BEAMS WITH "ITT" SERIES JOIST HANGERS. ALL DOUBLE-2X JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "HU" SERIES JOIST HANGERS. ALL DOUBLE-TJI JOIST BEAMS SHALL BE CONNECTED TO FLUSH BEAMS WITH "MIT" SERIES JOIST HANGERS.

WHERE CONNECTOR STRAPS CONNECT TWO MEMBERS, PLACE ONE-HALF OF THE NAILS OR BOLTS IN EACH MEMBER.

ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

9.16 WOOD FASTENERS

A. NAIL SIZES SPECIFIED ON DRAWINGS ARE BASED ON THE FOLLOWING SPECIFICATIONS:

SIZE	LENGTH	DIAMETER
6d	2"	0.113"
8d	2-1/2"	0.131"
10d	3"	0.148"
12d	3-1/4"	0.148"
16d BOX	3-1/2"	0.135"
16d SINKER	3-1/2"	0.148"
16d COMMON	3-1/2"	0.162"

IF CONTRACTOR PROPOSES THE USE OF ALTERNATE NAILS, THEY SHALL SUBMIT NAIL SPECIFICATIONS TO THE ENGINEER OF RECORD (PRIOR TO CONSTRUCTION) FOR REVIEW AND APPROVAL.

NAILS - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITED.

B. ALL BOLTS IN WOOD MEMBERS SHALL CONFORM TO ASTM A307. PROVIDE WASHERS UNDER THE HEADS AND NUTS OF ALL BOLTS AND LAG BOLTS BEARING ON WOOD. INSTALLATION OF LAG BOLTS SHALL CONFORM TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (2005 EDITION) WITH A LEAD BORE HOLE OF 60 TO 70 PERCENT OF THE SHANK DIAMETER. LEAD HOLES ARE NOT REQUIRED FOR 3/8" DIAMETER AND SMALLER LAG SCREWS.

9.17 WOOD FRAMING NOTES--THE FOLLOWING APPLY UNLESS OTHERWISE SHOWN ON THE PLANS:

A. ALL WOOD FRAMING DETAILS NOT SHOWN OTHERWISE SHALL BE CONSTRUCTED TO THE MINIMUM STANDARDS OF THE INTERNATIONAL BUILDING CODE. MINIMUM NAILING, UNLESS OTHERWISE NOTED, SHALL CONFORM TO TABLE 2304.9.1. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.

B. WALL FRAMING: REFER ARCHITECTURAL DRAWINGS FOR THE SIZE OF ALL WALLS. ALL STUDS SHALL BE SPACED AT 16" O.C. UNO. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS, AND AT BEAM OR HEADER BEARING LOCATIONS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED. SOLID BLOCKING FOR WOOD COLUMNS SHALL BE PROVIDED THROUGH FLOORS TO SUPPORTS BELOW. PROVIDE CONTINUOUS SOLID BLOCKING AT MID-HEIGHT OF ALL STUD WALLS OVER 10'-0" IN HEIGHT.

ALL WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND A DOUBLE TOP PLATE. END NAIL TOP PLATE TO EACH STUD WITH TWO 16d NAILS, AND TOENAIL OR END NAIL EACH STUD TO BOTTOM PLATE WITH TWO 16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 16d @ 12" O.C. AND LAP MINIMUM 4'-0" AT JOINTS AND PROVIDE EIGHT 16d NAILS @ 4" O.C. EACH SIDE JOINT.

ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH TWO ROWS OF 16d NAILS @ 12" ON-CENTER, OR ATTACHED TO CONCRETE BELOW WITH 5/8" DIAMETER (HOT-DIP GALVANIZED) ANCHOR BOLTS @ 4'-0" ON-CENTER EMBEDDED 7" MINIMUM WITH 1/4" x 3" x 3" (HOT-DIP GALVANIZED) PLATE WASHERS, UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH TWO ROWS OF 16d @ 12" ON-CENTER. UNLESS OTHERWISE NOTED, GYPSUM WALLBOARD SHALL BE FASTENED TO THE INTERIOR SURFACE OF ALL STUDS AND PLATES WITH NO. 6 X 1-1/4" TYPE S OR W SCREWS @ 8" ON-CENTER. UNLESS INDICATED OTHERWISE, 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/16) SHALL BE NAILED TO ALL EXTERIOR SURFACES WITH 8d NAILS @ 6" ON-CENTER AT PANEL EDGES AND TOP AND BOTTOM PLATES (BLOCK UNSUPPORTED EDGES) AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d NAILS @ 12" ON-CENTER ALLOW 1/8" SPACING AT ALL PANEL EDGES AND PANEL ENDS.

C. FLOOR AND ROOF FRAMING: PROVIDE DOUBLE JOISTS UNDER ALL PARALLEL PARTITIONS THAT EXTEND OVER MORE THAN HALF THE JOIST LENGTH AND AROUND ALL OPENINGS IN FLOORS OR ROOFS UNLESS OTHERWISE NOTED. PROVIDE SOLID BLOCKING AT ALL BEARING POINTS. TOENAIL JOISTS TO SUPPORTS WITH TWO 16d NAILS. ATTACH TIMBER JOISTS TO FLUSH HEADERS OR BEAMS WITH SIMPSON METAL JOIST HANGERS IN ACCORDANCE WITH NOTES ABOVE. NAIL ALL MULTI-JOIST BEAMS TOGETHER WITH TWO ROWS 16d @ 12" ON-CENTER.

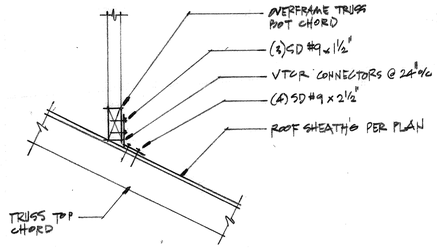
UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF AND FLOOR SHEATHING SHALL BE LAID UP WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS AND NAILED AT 6" ON-CENTER WITH 8d NAILS TO FRAMED PANEL EDGES, STRUTS AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" ON-CENTER TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/ TRUSSES AT UNBLOCKED ROOF SHEATHING EDGES. ALL FLOOR SHEATHING EDGES SHALL HAVE APPROVED T&G JOINTS OR SHALL BE SUPPORTED WITH SOLID BLOCKING. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING. TOENAIL BLOCKING TO SUPPORTS WITH 16d @ 12" ON-CENTER UNLESS OTHERWISE NOTED.

ADDITION TO THE
ZHANG RESIDENCE
6612 SE 24TH ST
MERCER ISLAND, WA 98040

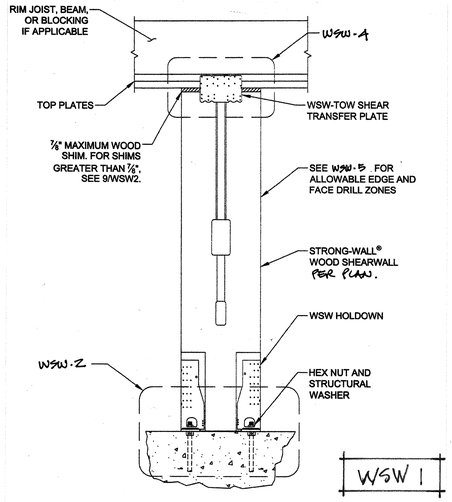
MARTIN KOENIGS ARCHITECTS
4212 S. FERDINAND
SEATTLE, WA 98118
(206)249-4319 aka@seanet.com

JOB NO. 21807
DATE: 1.20.21

A11



T
4" SCALE

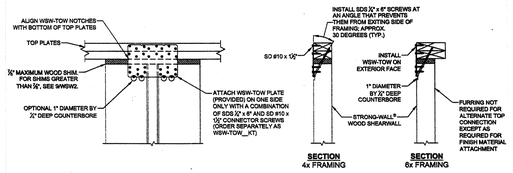


WSW 1

WSW DESIGNED TO PROVIDE ⅛" GAP BETWEEN LSL AT BASE OF WSW AND CONCRETE. ENSURE CONCRETE IS LEVEL AND SMOOTH BENEATH PANEL. GRIND OR FILL AS NECESSARY.

WSW-TOW ALTERNATE CONNECTION KIT		
MODEL NO.	FASTENER QUANTITY	
	SD #10 x 1½"	SDS ¼" x 6"
WSW-TOW12KT	20	2
WSW-TOW18KT	28	4
WSW-TOW24KT	40	8

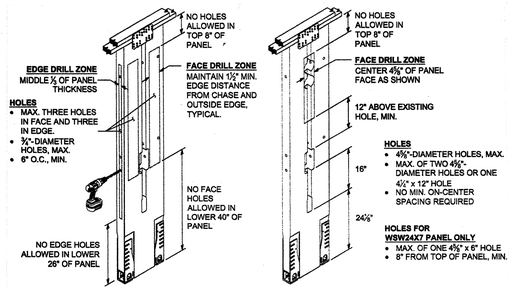
REGISTERED DESIGN PROFESSIONAL IS PERMITTED TO MODIFY DETAILS FOR SPECIFIC CONDITIONS.



SECTION
4x FRAMING

SECTION
6x FRAMING

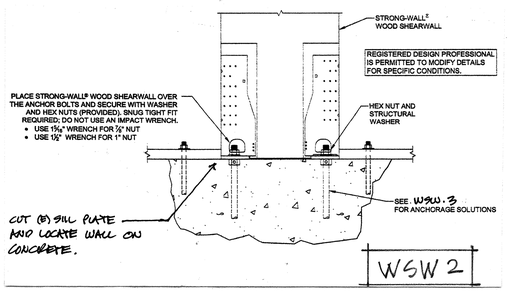
WSW 4



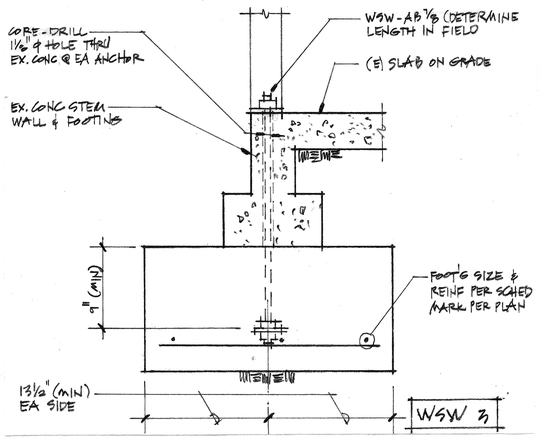
ALLOWABLE SMALL HOLES
FACE AND EDGE DRILL ZONES

ALLOWABLE LARGE HOLES
IN ADDITION TO ALLOWABLE SMALL HOLES

WSW 5



WSW 2



WSW 3

ADDITION TO THE
ZHANG RESIDENCE
8612 SE 24TH ST
MERCER ISLAND, WA 98040

MARTIN KOELLING ARCHITECTS
4212 S. FERDINAND
SEATTLE, WA 98118
(206) 849-4319 mak@seanet.com

JOB NO. 21307
DATE: 1.20.21

A12

N
W E
S

GRAPHIC SCALE

5 0 5 10 20

1INCH = 10 FT.

LEGEND

◕	FOUND MONUMENT AS DESCRIBED	—OHP—	OVERHEAD POWER
○	FOUND REBAR AS DESCRIBED	—OHU—	OVERHEAD UTILITIES
⌧	TACK IN LEAD FOUND	—X—	CHAINLINK FENCE
●	SET 5/8" X 24" IRON ROD W/1" YELLOW PLASTIC CAP	—□—	WOOD FENCE
Ⓟ	POWER METER	▨	CONCRETE WALL
⌀	UTILITY POLE	▢	ROCKERY
◎	GAS METER	▩	ASPHALT SURFACE
▣	SANITARY SEWER CLEANOUT	▢	CONCRETE SURFACE
◯	SANITARY SEWER MANHOLE	▢	GRAVEL SURFACE
⋈	WATER VALVE	CE	CEDAR
⚲	FIRE HYDRANT	DS	DECIDUOUS
⊞	WATER METER	SP	SPRUCE
—o—	SIGN	BI	BIRCH
—SS—	APPROXIMATE LOCATION SANITARY SEWER LINE	PI	PINE
—SD—	APPROXIMATE LOCATION STORM DRAIN LINE		* INDICATES MULTI-TRUNK

LEGAL DESCRIPTION

LOT 3, BLOCK 2, HIGHLAND PARK ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 38 OF PLATS, PAGE 15, RECORDS OF KING COUNTY, WASHINGTON;

SITUATE IN THE CITY OF MERCER ISLAND, COUNTY OF KING, STATE OF WASHINGTON.

BASIS OF BEARINGS

THE PLAT OF HIGHLAND PARK ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN VOLUME 38 OF PLATS, PAGE 15, RECORDS OF KING COUNTY, WASHINGTON.

PROJECT INFORMATION

SURVEYOR:	SITE SURVEYING, INC. 21923 NE 11TH ST SAMMAMISH, WA 98074 PHONE: 425.298.4412
PROPERTY OWNER:	BACHAO ZHANG 6612 SE 24TH STREET MERCER ISLAND, WA 98040
TAX PARCEL NUMBER:	330770-0115
PROJECT ADDRESS:	6612 SE 24TH STREET MERCER ISLAND, WA 98040
ZONING:	R 9.6
JURISDICTION:	CITY OF MERCER ISLAND
PARCEL ACREAGE:	7,499 S.F. (± 0.172 ACRES) AS SURVEYED

GENERAL NOTES

1. THIS SURVEY WAS COMPLETED WITHOUT BENEFIT OF A CURRENT TITLE REPORT. EASEMENTS AND OTHER ENCUMBRANCES MAY EXIST ON THIS PROPERTY THAT ARE NOT SHOWN HEREON.
2. INSTRUMENTATION FOR THIS SURVEY WAS A 3-SECOND NIKON NIVO 5.C TOTAL STATION. PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET BY WAC 332-130-090.
3. THE INFORMATION ON THIS MAP REPRESENTS THE RESULTS OF A SURVEY MADE IN OCTOBER 2018 AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
4. UTILITIES SHOWN ON THIS SURVEY ARE BASED UPON ABOVE GROUND OBSERVATIONS AND AS-BUILT PLANS WHERE AVAILABLE. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES MAY VARY AND UTILITIES NOT SHOWN ON THIS SURVEY MAY EXIST ON THIS SITE.
5. ALL MONUMENTS WERE LOCATED DURING THIS SURVEY UNLESS OTHERWISE NOTED.

VERTICAL DATUM & CONTOUR INTERVAL

DATUM

ELEVATIONS SHOWN ON THIS DRAWING WERE DERIVED FROM INFORMATION PROVIDED BY WCCS SURVEY CONTROL DATABASE.

THE MARK IS A MONUMENT IN CASE AT THE THE INTERSECTION OF 66TH AVENUE SE AND SE 24TH STREET.

POINT ID NO. 6993;
ELEVATION: 191.293 FEET - NAVD 88

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

IMPERVIOUS SURFACES

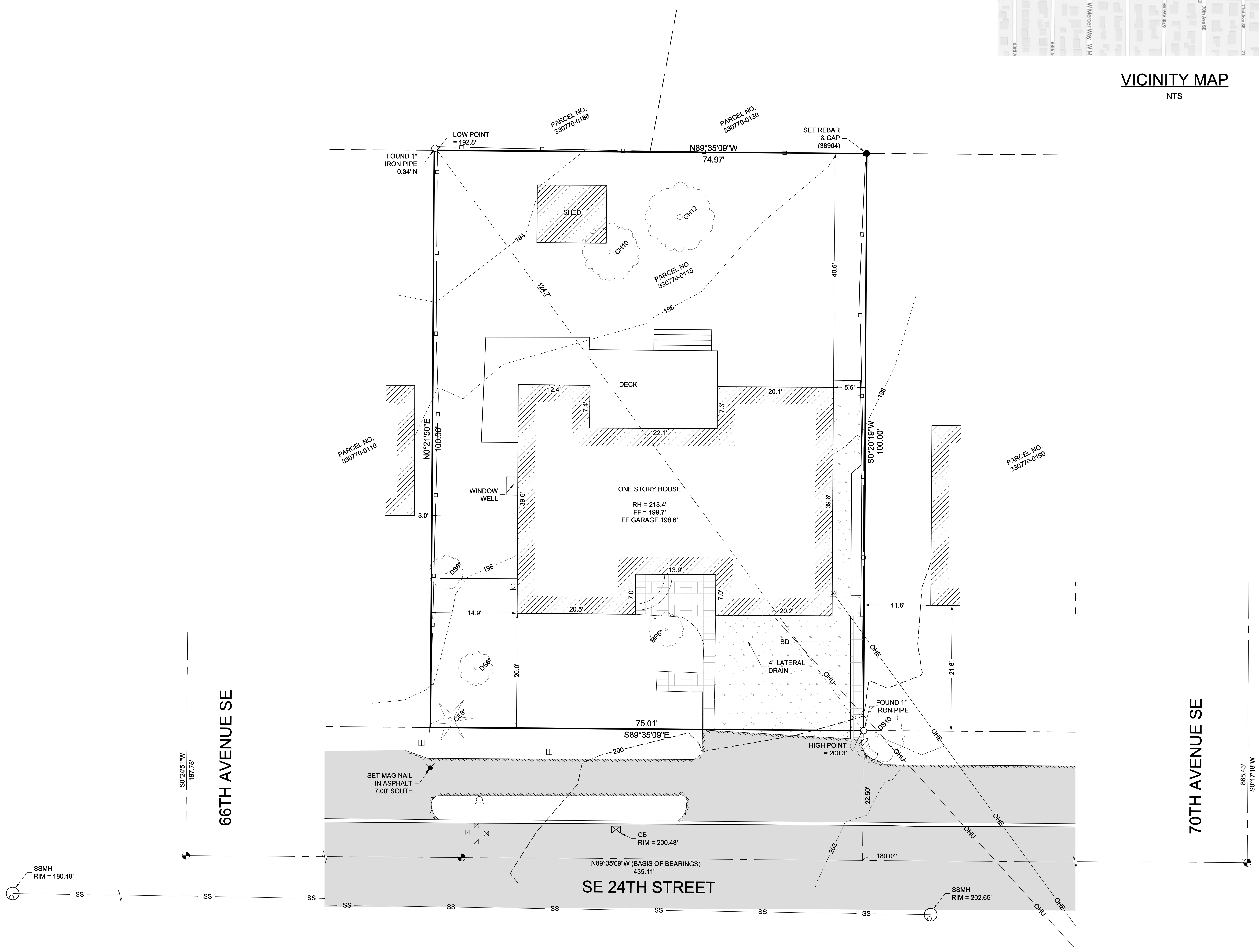
HOUSE = 1,903 S.F.
SHED = 121 S.F.
DECK = 547 S.F.
BRICK PAVERS = 215 S.F.
CONCRETE = 630 S.F.

TOTAL IMPERVIOUS = 3,416 S.F

LOT SLOPE

HIGH POINT = 200.3'
LOW POINT = 192.8'
HEIGHT DIFFERENCE = 7.5'
DISTANCE = 124.7'

LOT SLOPE = 6.0%



VICINITY MAP

NTS

SW 1/4, SW 1/4, SEC 01, TWP 24N, RNG 4E, W.M.

Site Surveying, Inc.
www.sitesurveymapping.com
21923 NE 11th Street Sammamish, WA 98074
Phone: 425.298.4412

THOMAS N. WOLDENDORP
STATE OF WASHINGTON
REGISTERED PROFESSIONAL LAND SURVEYOR
[illegible]
7/21/21

DATE	REVISION	DRN
12/16/2020	IMPERVIOUS SURFACE & LOT SLOPE	MS

TOPOGRAPHIC SURVEY

BACHOA ZHANG
6612 SE 24TH STREET
MERCER ISLAND, WA 98040

PROJECT NO. 18-460

DRAWN BY: EFJ
CHECKED BY: TNW
DATE: 10/24/18

SHEET 1 OF 1