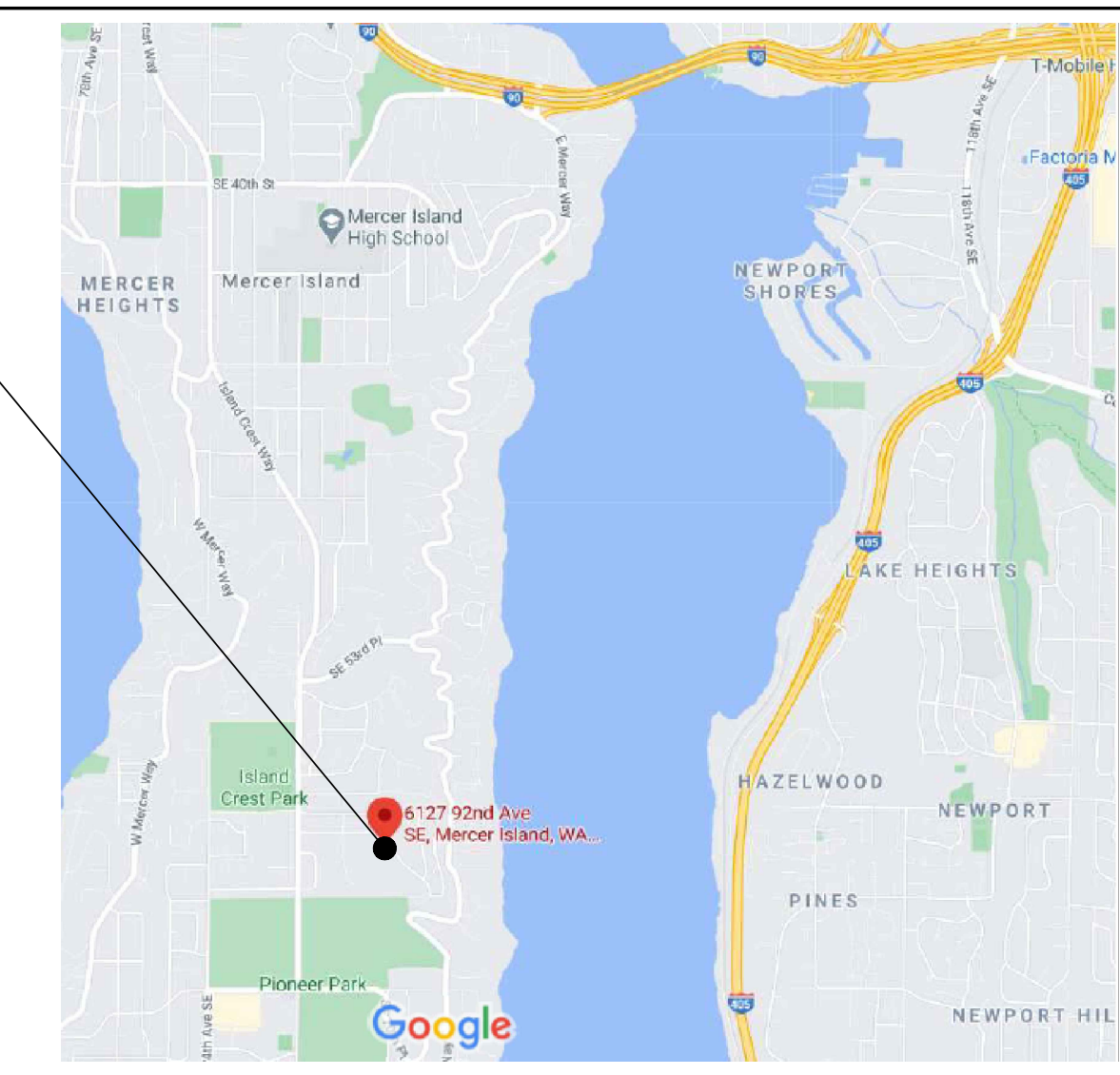


**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782



**VICINITY MAP**  
NO SCALE

**OWNER and SITE ADDRESS**

Cecilia Yeung and Stewart Wang  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

**KING COUNTY PARCEL #**

8651000040

**LEGAL DESCRIPTION**

TIMBERLAND # 5, PLAT LOT 4  
SW QUARTER, 19 SECTION, 24 TOWNSHIP, 5 RANGE

**PROJECT DESCRIPTION**

CONVERT 200 SQFT OF EXISTING GARAGE TO LIVING SPACE, ADD 381 SQFT LIVING SPACE, ADD 190 SQFT TO EXISTING GARAGE (GARAGE ADDITION GOES OVER THE EXISTING DRIVEWAY NO INCREASE TO IMPERVIOUS SURFACE), ADD 79 SQFT COVERED ENTRY PORCH

**BUILDING CODE and LOT COVERAGE**

BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE  
(2018 INTERNATIONAL RESIDENTIAL CODE  
with CITY OF MERCER ISLAND AMENDMENTS)

DESIGN CRITERIA: PER IRC SEC. R301  
DESIGN LOAD CRITERIA: SEE STRUCTURAL NOTES  
CONSTRUCTION TYPE: VB (NON-RATED)  
OCCUPANCY TYPE: R-3; SINGLE FAMILY RESIDENCE

EXISTING RESIDENCE	2000 SQFT
EXISTING GARAGE ADDED TO RESIDENCE	200 SQFT
NEW LIVING SPACE	381 SQFT
TOTAL LIVING SPACE	2581 SQFT

EXISTING GARAGE	280 SQFT
ADDITION TO GARAGE	190 SQFT
COVERED ENTRY PORCH	79 SQFT
DRIVEWAY AND WALKWAY	630 SQFT
TOTAL NON-HEATED OR IMPERVIOUS SURFACE	1179 SQFT

TOTAL IMPERVIOUS PLUS LIVING SPACE 3760 SQFT

TOTAL LOT AREA = 19,657 SQFT, 0.45 ACRES  
PERCENT LOT COVERAGE = 3760 SQFT / 19657 SQFT = 19.22%

**ENERGY CODE**

2018 WASHINGTON STATE ENERGY CODE  
PRESCRIPTIVE REQUIREMENT APPROACH FOR SINGLE FAMILY  
RESIDENTIAL ADDITION > 500 SQFT, TOTAL LIVING SPACE ≥ 1500 SQFT, < 5000 SQFT

- 6.0 ENERGY CREDITS REQUIRED:
- 1.2 TABLE R402.1.1, W/ VERTICAL FENESTRATION = 0.20 (1.0)
  - 2.3 AIR LEAKAGE CONTROL AND EFFICIENT VENT (1.5)
  - 3.5 HIGH EFFICIENCY HVAC EQUIPMENT (1.5)
  - 4.1 HIGH EFFICIENCY HVAC DIST SYSTEM (0.5)
  - 5.3 EFFICIENT WATER HEATING (1.0)
  - 7.1 APPLIANCE PACKAGE OPTION (0.5)

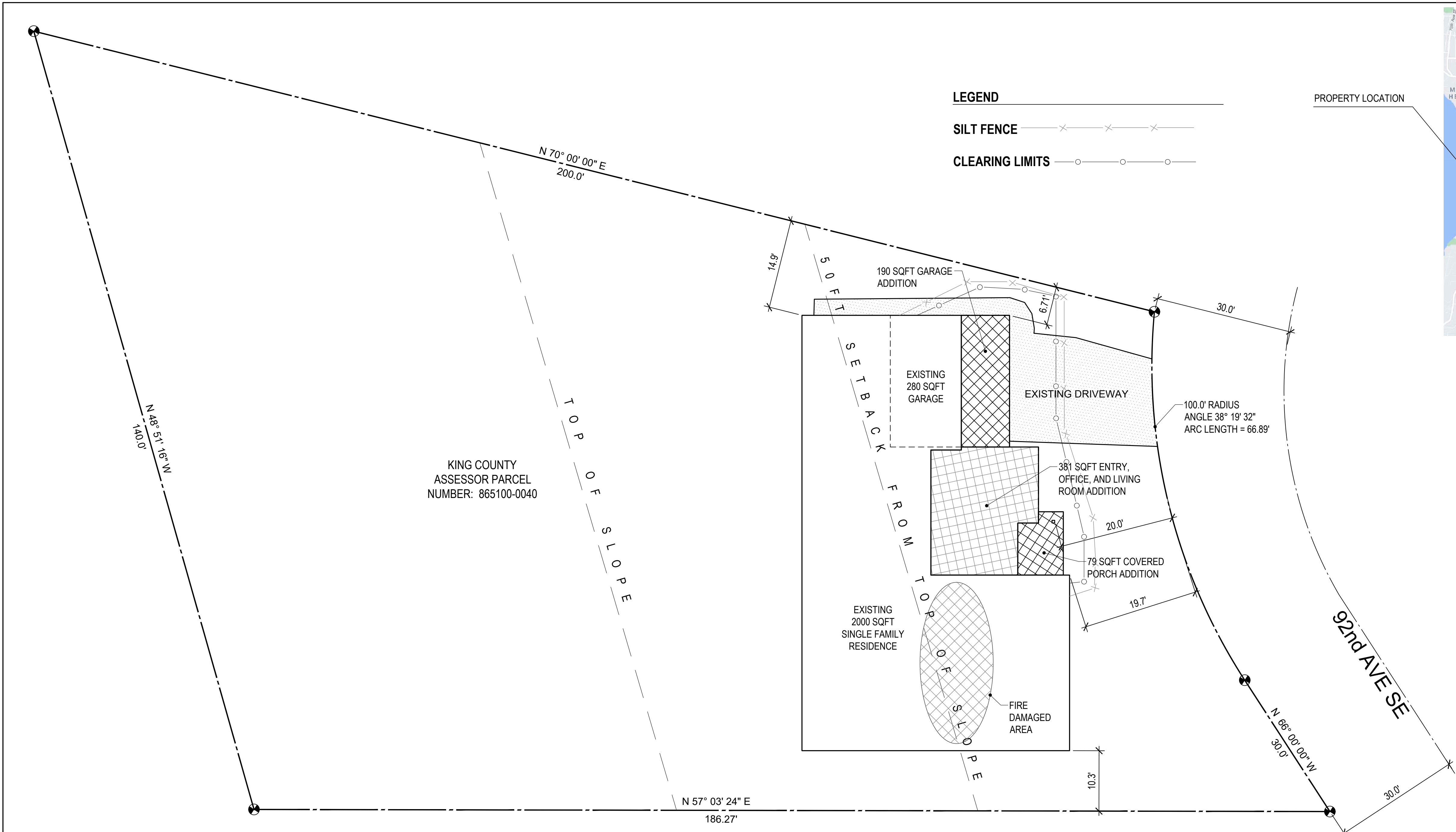
**INDEX**

- A1.1 GENERAL NOTES, SITE MAP, VICINITY MAP, CONTACT INFO
- S1.1 STRUCTURAL NOTES
- A2.1 EXISTING FLOOR AND ROOF PLAN
- A2.2 PROPOSED FOUNDATION PLAN AND DETAILS
- A2.3 PROPOSED FLOOR PLAN AND DETAILS
- A2.4 PROPOSED ROOF PLAN AND DETAILS
- A3.1 TYPICAL SECTION AND DETAILS
- A4.1 EXISTING ELEVATIONS
- A4.2 PROPOSED ELEVATIONS
- RECORD SURVEY, BOUNDARY and TOPOGRAPHIC SURVEY

**LEGEND**

- SILT FENCE ——— X ——— X ——— X ——— X
- CLEARING LIMITS ——— ○ ——— ○ ——— ○ ——— ○

**PROPERTY LOCATION**



**SITE and TESC PLAN - 6127 92nd Avenue Southeast**

1" = 10'

**GENERAL NOTES:**

1. STRUCTURAL GRIDS ARE PROVIDED FOR DESIGN CLARITY ONLY AND REFERENCE TO EXISTING WALLS OR FRAMING - VERIFY LOCATIONS AND DIMENSIONS AND REVISE PER EXISTING CONDITIONS WHERE DISCREPANCIES OCCUR.
2. ELECTRICAL DESIGN BY OWNER/BUILDER & PERMITS BY OWNER/ELECTRICAL CONTRACTOR MECHANICAL DESIGN BY OWNER/BUILDER & PERMITS BY OWNER/MECHANICAL CONTRACTOR.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL WORK AND MATERIALS IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, ORDINANCES, AND REGULATIONS.
4. ALL WORK AFFECTING NEW AND EXISTING UTILITY SERVICE TO THE BUILDING SHALL BE COORDINATED WITH THE UTILITY, PROPERTY OWNER AND CITY OF KIRKLAND.
5. DO NOT SCALE DIMENSIONS FROM DRAWINGS. USE CALCULATED DIMENSIONS ONLY. NOTIFY THE ENGINEER OF RECORD IMMEDIATELY IF CONFLICTS EXIST.
6. CONTRACTOR SHALL VISIT JOB SITE AND VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS, INCLUDING ASSUMPTIONS MADE ABOUT EXISTING FRAMING, BEFORE PROCEEDING WITH THE WORK. DISCREPANCIES, IF ANY, ARE TO BE REFERRED TO THE ENGINEER FOR DIRECTION PRIOR TO PROCEEDING WITH RELATED WORK.
7. VERIFY ALL ROUGH-IN DIMENSIONS FOR EQUIPMENT FIXTURES AND OTHER ITEMS. PROVIDE ALL BUCK-OUTS, BLOCKING, BACKING AND JACKS REQUIRED FOR INSTALLATION.

8. VERIFY LOCATIONS OF ALL EXISTING UTILITIES: CAP, MARK, AND PROTECT AS NECESSARY TO COMPLETE THE WORK.
9. THE OWNER/CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW OF ELECTRICAL DESIGNS AND FOR COORDINATING WITH OWNER/ELECTRICAL CONTRACTORS BEYOND THAT DESCRIBED IN THE PERMIT DOCUMENTS.
10. THE OWNER/CONTRACTOR SHALL CONSULT DRAWINGS AND OTHER DOCUMENTS OF ALL TRADES FOR ALL OPENINGS REQUIRED FOR THE CONSTRUCTION AND INSTALLATION OF DUCTS, PIPES, CONDUITS, EQUIPMENT, FIXTURES, AND CABINETS, AND SHALL VERIFY SIZE AND LOCATION.
11. PROVIDE CLOSURE, MEETING THE REQUIREMENTS OF GOVERNING FIRE AUTHORITIES, BETWEEN ALL FIRE RATED FLOORS, SHAFTS AND BUILDING PARTITIONS, AND ANY PENETRATING DUCTS, PIPES, CONDUIT, MECHANICAL, ELECTRICAL, AND OTHER ITEMS.
12. ALL CONTRACTOR INSTALLED ITEMS SHALL BE SUPPLIED WITH MECHANICAL AND ELECTRICAL SERVICES AS NECESSARY TO PROVIDE FOR THE FULL OPERATION OF THE ITEMS INSTALLED.
13. CONTRACTOR IS RESPONSIBLE FOR ENSURING ADEQUATE WATER PROOFING AND BUILDING ENVELOPE PROTECTION PER DRAWINGS WHERE SPECIFICALLY INDICATED AND PER CURRENT STANDARDS OF RESIDENTIAL CONSTRUCTION OTHERWISE.
14. SLIDING GLASS DOORS AND GLAZING WITHIN 18" OF FLOOR TO HAVE SAFETY GLAZING, LAMINATED OR TEMPERED GLASS.
15. IN EVERY SLEEPING ROOM PROVIDE AN EMERGENCY EXIT WINDOW WITH A MIN. HEIGHT OF 24" & MIN. WIDTH OF 20" AND NOT LESS THAN 5.7 SQ. FT. OPERABLE AREA AND NOT MORE THAN 44" FROM FLOOR TO SILL.
16. FIRE WARNING SYSTEMS: EVERY DWELLING SHALL BE PROVIDED WITH APPROVED DETECTORS OF PRODUCTS OF COMBUSTION OTHER THAT

- HEAT, MOUNTED ON THE CEILING OR WALL AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR WALL AT A POINT CENTRALLY LOCATED IN THE CORRIDOR OR AREAS GIVING ACCESS TO ROOMS USED FOR SLEEPING PURPOSES AND IN EACH SLEEPING ROOM AS REQUIRED BY THE BUILDING OFFICIAL.
17. SMOKE DETECTORS SHALL BE INTERCONNECTED TO A DEVICE AUDIBLE IN SLEEPING AREAS AND SHALL BE POWERED BY THE BUILDING WIRING.
18. ALL NEW INTERIOR WALLS SHALL BE 2x4 @ 16" O.C. U.N.O. ALL EXTERIOR WALLS SHALL BE 2x6 @ 16" O.C. U.N.O.
19. GUARDRAILS SHALL BE MIN. 36" IN HEIGHT AND SHALL HAVE INTERMEDIATE RAILS OR AN ORNAMENTAL DESIGN SUCH THAT A SPHERE 4" IN DIAMETER CANNOT PASS THROUGH.
20. ROOF AND FOOTING DRAINS SHALL BE TIGHT LINED SEPARATELY TO APPROVED DISCHARGE.
21. DEAD BOLT (MIN 1/2" THROW) AND VIEWPOINT REQUIRED @ EXTERIOR DOORS. WINDOWS WITHIN 10' OF GRADE SHALL BE PROVIDED WITH LATCHING DEVICES, ALL LOCKS SHALL BE OPERABLE WITHOUT SPECIAL KNOWLEDGE OR EFFORT.
22. SEPARATE PERMITS REQUIRED FOR:
  - -ELECTRICAL
  - -PLUMBING
  - -MECHANICAL
  - -FURNACE
  - -SEWER
23. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED OR HAVE NATURAL RESISTANCE TO DECAY.
24. ALL FOOTINGS SHALL BE MIN. 18" BELOW GRADE, RESTING ON FIRM, UNDISTURBED EARTH OR COMPACTED FILL.

**PROJECT TEAM**

ENGINEERING:  
sliderule engineering works  
227 'e' street southeast  
auburn, washington 98002  
CONTACT: Andrew Herrick  
PHONE: 206.380.0732  
E-MAIL: ahlpe\_sliderule@q.com

CONTRACTOR:  
WEREMODEL.COM, LLC  
3806 139TH PLACE SOUTHEAST  
BELLEVUE, WASHINGTON 98006  
CONTACT: David Hoffmann  
PHONE: 206.948.3673  
EMAIL: dave@weremodel.com

LICENSE: WEREML\*840DB  
WA UBI NUMBER: 603 583 665

**Yeung-Wang Residence**  
**Fire Repair and Addition/Remodel**  
 6127 92nd Avenue Southeast  
 Mercer Island, Washington 98040

PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.01.21

**PERMIT SUBMITTAL**

Site & TESC Plan,  
Vicinity Map and Project Info



**GENERAL STRUCTURAL NOTES**

(The following apply unless shown otherwise on the plans)

**CRITERIA**

- ALL MATERIALS, WORKMANSHIP, DESIGN, AND CONSTRUCTION SHALL CONFORM TO THE DRAWINGS, SPECIFICATIONS, AND THE 2018 INTERNATIONAL BUILDING CODE (IBC 2018 EDITION).
- DESIGN LOADING CRITERIA  
 ROOF LIVE LOAD ..... 25 PSF (SNOW)  
 FLOOR LIVE LOAD (RESIDENTIAL) ..... 40 PSF  
 BASIC WIND SPEED (3-SEC GUST) ... 110 MPH, MRI 50YR = 85 MPH, EXPOSURE B, Kzt = 1.3, I = 1.0  
 SEISMIC ..... SITE CLASS "D", R=6.0, Ss=1.451, S1=0.556, I = 1.0
- 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.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY PRECAUTIONS AND THE METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES REQUIRED TO PERFORM THE 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 ENTITIES OR PERSONS AT THE PROJECT SITE.
- 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.
- 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.

**GEOTECHNICAL**

- 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. ALL VALUES ARE ASSUMED.

ASSUMED ALLOWABLE SOIL PRESSURE.....1500 PSF

**CONCRETE**

- CONCRETE SHALL BE MIXED, PROPORTIONED, CONVEYED AND PLACED IN ACCORDANCE WITH IBC SECTION 1905 AND ACI 301. CONCRETE SHALL ATTAIN A 28-DAY STRENGTH OF  $f_c=3000$  PSI (FOR WEATHERING PURPOSES AND NOT STRENGTH, MIN 2,500 PSI FOR STRENGTH) AND MIX SHALL HAVE A MAXIMUM ABSOLUTE WATER-CEMENT RATIO OF 0.58 FOR NON-AIR ENTRAINED CONCRETE AND 0.46 FOR AIR-ENTRAINED CONCRETE. CONCRETE SHALL BE PROPORTIONED TO PRODUCE A SLUMP OF 5" OR LESS. AIR ENTRAINED CONCRETE SHALL BE USED AT ALL EXTERIOR AND UNHEATED EXPOSURES.  
  
 THE MINIMUM AMOUNTS OF CEMENT AND MAXIMUM AMOUNTS OF WATER MAY BE CHANGED IF A CONCRETE PERFORMANCE MIX IS SUBMITTED TO THE STRUCTURAL ENGINEER AND THE BUILDING DEPARTMENT FOR APPROVAL TWO WEEKS PRIOR TO PLACING ANY CONCRETE. THE CONCRETE PERFORMANCE MIX SHALL INCLUDE THE AMOUNTS OF CEMENT, FINE AND COARSE AGGREGATE, WATER AND ADMIXTURES AS WELL AS THE WATER CEMENT RATIO, SLUMP, CONCRETE YIELD AND SUBSTANTIATING STRENGTH DATA IN ACCORDANCE WITH SBC 1905.3. 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 1904.2.1 OF INTERNATIONAL BUILDING CODE.  
  
 CEMENT CONTENT MAY BE REDUCED 15% - 25% BY VOLUME AND REPLACED WITH FLY ASH SHALL NOT MAKE UP MORE THAN 35% OF THE TOTAL CEMENTITIOUS CONTENT. FLY ASH SHALL COMPLY WITH ASTM C618 OR AASHTO M295.
- A MINIMUM OF 80% OF REINFORCING STEEL SHALL COME FROM RECYCLED MATERIALS. REINFORCING STEEL SHALL CONFORM TO ASTM A615 (INCLUDING SUPPLEMENT S1), GRADE 60,  $F_y=60,000$  PSI. EXCEPTIONS: ANY BARS #5 AND SMALLER CAN BE GRADE 40,  $F_y=40,000$  PSI.
- REINFORCING STEEL SHALL BE DETAILED (INCLUDING HOOKS AND BENDS) IN ACCORDANCE WITH ACI 315 AND 318. LAP ALL CONTINUOUS REINFORCEMENT #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. PROVIDE CORNER BARS AT ALL WALL AND FOOTING INTERSECTIONS. LAP CORNER BARS #5 AND SMALLER 40 BAR DIAMETERS OR 2'-0" MINIMUM. LAPS OF LARGER BARS SHALL BE MADE IN ACCORDANCE WITH ACI 318, CLASS B. 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 STRUCTURAL ENGINEER.
- CONCRETE PROTECTION (COVER) FOR REINFORCING STEEL SHALL BE IN ACCORDANCE WITH IBC SECTION 1907.7.  
  
 FOOTINGS AND OTHER UNFORMED SURFACES CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3"  
 FORMED SURFACES EXPOSED TO EARTH OR WEATHER (#6 BARS OR LARGER) ... 2"  
 (#5 BARS OR SMALLER) ..... 1-1/2"  
 SLABS AND WALLS (INT. FACE) ... GREATER OF BAR DIAMETER PLUS 1/8" OR 3/4"

**WOOD**

- 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. 16. FURNISH TO THE FOLLOWING MINIMUM STANDARDS:  
 2x MEMBERS: HEM-FIR #2 OR BETTER  
 2x STUDS AND PLATES: HEM-FIR STUD GRADE OR BETTER
- STRUCTURAL WOOD PANEL SHEATHING (PLYWOOD) SHALL BE APA RATED PANELS WITH EXPOSURE 1 CLASSIFICATION.  
  
 FLOOR SHEATHING SHALL BE 3/4" T&G MINIMUM, W/ SPAN RATING 48/24 (MIN).  
 ROOF SHEATHING SHALL BE 5/8" (NOMINAL) WITH SPAN RATING 24/16.  
 WALL SHEATHING SHALL BE 1/2" WITH SPAN RATING 24/0.

REFER TO WOOD FRAMING NOTES BELOW FOR TYPICAL NAILING REQUIREMENTS.

- ALL WOOD IN DIRECT CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE-TREATED WITH AN APPROVED PRESERVATIVE OR (2) LAYERS OF 15# ASPHALT IMPREGNATED BUILDING PAPER OR ONE LAYER OF 30# ASPHALT IMPREGNATED BUILDING PAPER SHALL BE PROVIDED BETWEEN UNTREATED WOOD AND CONCRETE OR MASONRY.
- TIMBER CONNECTORS CALLED OUT BY LETTERS AND NUMBERS SHALL BE "STRONG-TIE" BY SIMPSON COMPANY, AS SPECIFIED IN THEIR CATALOG NO. C-2015. EQUIVALENT DEVICES BY OTHER MANUFACTURERS MAY BE SUBSTITUTED, PROVIDED THEY HAVE ICBO APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. PROVIDE NUMBER AND SIZE OF FASTNERS AS SPECIFIED BY MANUFACTURER. CONNECTORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. WHERE CONNECTOR  
  
 UNLESS NOTED OTHERWISE, ALL NAILS SHALL BE COMMON. ALL SHIMS SHALL BE SEASONED AND DRIED AND THE SAME GRADE (MINIMUM) AS MEMBERS CONNECTED.

**WOOD FASTENERS**

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

SIZE	LENGTH	DIAMETER	EQUIV STAPLE	MIN LENGTH
8d	2-1/2"	0.131"	13 GA.	1-3/4"
10d	3"	0.148"	12 GA.	1-3/4"
16d	3-1/2"	0.162"	NO EQUIV	NO EQUIV

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

- NAILS AND STAPLES - PLYWOOD (APA RATED SHEATHING) FASTENERS TO FRAMING SHALL BE DRIVEN FLUSH TO FACE OF SHEATHING WITH NO COUNTERSINKING PERMITTED.
- LAMINATED STRAND LUMBER (LSL) BOARD 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 PARALLEL STRAND LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH NER-292 GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER.  
 $F_b=2325$  PSI,  $E=1550$  KSI,  $F_v=310$  PSI (FOR 1.55E MEMBERS)  
 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 I.C.B.O. APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.
- PARALLEL STRAND LUMBER (PSL) 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 PARALLEL STRAND LUMBER SHALL BE MANUFACTURED IN ACCORDANCE WITH NER-292 GLUED WITH A WATERPROOF ADHESIVE MEETING THE REQUIREMENTS OF ASTM D2559 WITH ALL GRAIN PARALLEL WITH THE LENGTH OF THE MEMBER.  
 $F_b=2900$  PSI,  $E=2000$  KSI,  $F_v=290$  PSI (FOR 2.0E MEMBERS)  
 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 I.C.B.O. APPROVAL FOR EQUAL OR GREATER LOAD CAPACITIES. ALL JOIST HANGERS AND OTHER HARDWARE SHALL BE COMPATIBLE IN SIZE WITH MEMBERS PROVIDED.
- PREFABRICATED PLYWOOD WEB JOISTS SHALL BE DESIGNED BY THE MANUFACTURER FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS AND SHALL BE FURNISHED AND INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S PUBLISHED SPECIFICATIONS. ALL NECESSARY BRIDGING, BLOCKING, BLOCKING PANELS, STIFFENERS, ETC., SHALL BE DETAILED AND FURNISHED BY THE MANUFACTURER. SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. DESIGN SUBMITTALS SHALL BEAR THE STAMP AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER, STATE OF WASHINGTON. PERMANENT AND TEMPORARY BRIDGING SHALL BE INSTALLED IN CONFORMANCE WITH MANUFACTURER'S SPECIFICATIONS.  
 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 STRUCTURAL ENGINEER. 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.

**WOOD (cont)**

- PREFABRICATED CONNECTOR PLATE WOOD ROOF TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH THE "DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSSES, TPI-78" BY THE TRUSS PLATE INSTITUTE FOR THE SPANS AND CONDITIONS SHOWN ON THE PLANS. LOADING SHALL BE AS FOLLOWS:  
  

TOP CHORD LIVE LOAD	25 PSF
TOP CHORD DEAD LOAD	10 PSF
BOTTOM CHORD DEAD LOAD	5 PSF
BOTTOM CHORD LIVE LOAD	5 PSF (not concurrent with top chord)
TOTAL LOAD	40 PSF
WIND UPLIFT (TOP CHORD)	5 PSF (GROSS)

WOOD TRUSSES SHALL UTILIZE APPROVED CONNECTOR PLATES (GANGNAIL OR EQUAL). SUBMIT SHOP DRAWINGS AND DESIGN CALCULATIONS TO THE ARCHITECT AND ENGINEER FOR REVIEW PRIOR TO FABRICATION. SUBMITTED DOCUMENTS SHALL BEAR THE STAMP AND SIGNATURE OF A REGISTERED PROFESSIONAL ENGINEER, 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.

- 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 OF THE IBC. UNLESS OTHERWISE NOTED, ALL NAILS SHALL BE COMMON. COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL AND ARCHITECTURAL DRAWINGS.  
 B. WALL FRAMING: ALL NEW STUD WALLS SHOWN AND NOT OTHERWISE NOTED SHALL BE 2x4 STUDS @ 24" O.C. AT EXTERIOR WALLS. TWO STUDS MINIMUM SHALL BE PROVIDED AT THE END OF ALL WALLS AND AT EACH SIDE OF ALL OPENINGS. TWO 2x8 HEADERS SHALL BE PROVIDED OVER ALL OPENINGS NOT OTHERWISE NOTED.  
 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 SIX 16d NAILS @ 4" O.C. EACH SIDE JOINT.  
 ALL STUD WALLS SHALL HAVE THEIR LOWER WOOD PLATES ATTACHED TO WOOD FRAMING BELOW WITH 16d NAILS @ 12" O.C. STAGGERED OR BOLTED TO CONCRETE WITH 5/8" DIAMETER ANCHOR BOLTS (WITH 7" MINIMUM EMBEDMENT) @ 4'-0" O.C. UNLESS INDICATED OTHERWISE. INDIVIDUAL MEMBERS OF BUILT-UP POSTS SHALL BE NAILED TO EACH OTHER WITH 16d @ 12" O.C. STAGGERED. REFER TO THE PLANS AND SHEARWALL SCHEDULE FOR REQUIRED SHEATHING AND NAILING. WHEN NOT OTHERWISE NOTED, PROVIDE GYPSUM WALLBOARD ON INTERIOR SURFACES NAILED TO ALL STUDS, TOP AND BOTTOM PLATES, AND BLOCKING WITH NAILS @ 7" O.C. USE 5d COOLER NAILS OR 12" GWB AND 6d COOLER NAILS FOR 5/8" GWB. PROVIDE 1/2" (NOMINAL) APA RATED SHEATHING (SPAN RATING 24/0) ON EXTERIOR SURFACES NAILED AT ALL PANEL EDGES (BLOCK UN-SUPPORTED EDGES), AND TOP AND BOTTOM PLATES WITH 8d @ 6" O.C. AND TO ALL INTERMEDIATE STUDS AND BLOCKING WITH 8d @ 12" O.C. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS.  
 C. ROOF FRAMING: UNLESS OTHERWISE NOTED ON THE PLANS, PLYWOOD ROOF SHEATHING SHALL BE LAID UP WITH GRAIN PERPENDICULAR TO SUPPORTS AND NAILED WITH 8d NAILS @ 6" O.C. TO FRAMED PANEL EDGES AND OVER STUD WALLS AS SHOWN ON PLANS AND @ 12" O.C. TO INTERMEDIATE SUPPORTS. PROVIDE APPROVED PLYWOOD EDGE CLIPS CENTERED BETWEEN JOISTS/TRUSSES AT UNBLOCKED ROOFSHEATHING EDGES. ALLOW 1/8" SPACING AT ALL PANEL EDGES AND ENDS OF FLOOR AND ROOF SHEATHING.

**RENOVATION**

- DEMOLITION: VERIFY EXISTING CONDITIONS PRIOR TO DEMOLITION. PROVIDE ADEQUATE SHORING AND BRACING OF STRUCTURAL MEMBERS, EXISTING CONSTRUCTION AND SOIL EXCAVATIONS 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 20 PSF. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND LOCATION OF MEMBERS PRIOR TO CUTTING ANY OPENINGS.  
  
 IN AREAS OF RENOVATION INSPECT EXISTING FRAMING MEMBERS FOR SIGNS OF DRY-ROT DAMAGE OR INSECT INFESTATION. REPORT ALL DRY-ROT DAMAGE TO THE ENGINEER AND OWNER. REPORT ALL INSECT INFESTATION TO ENGINEER AND OWNER.



**sliderule**  
 engineering works, llc  
 221 E Street Southeast  
 Auburn, Washington 98002  
 t: 206 + 360 + 0752

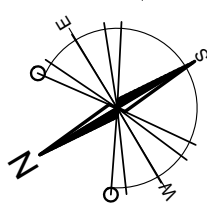
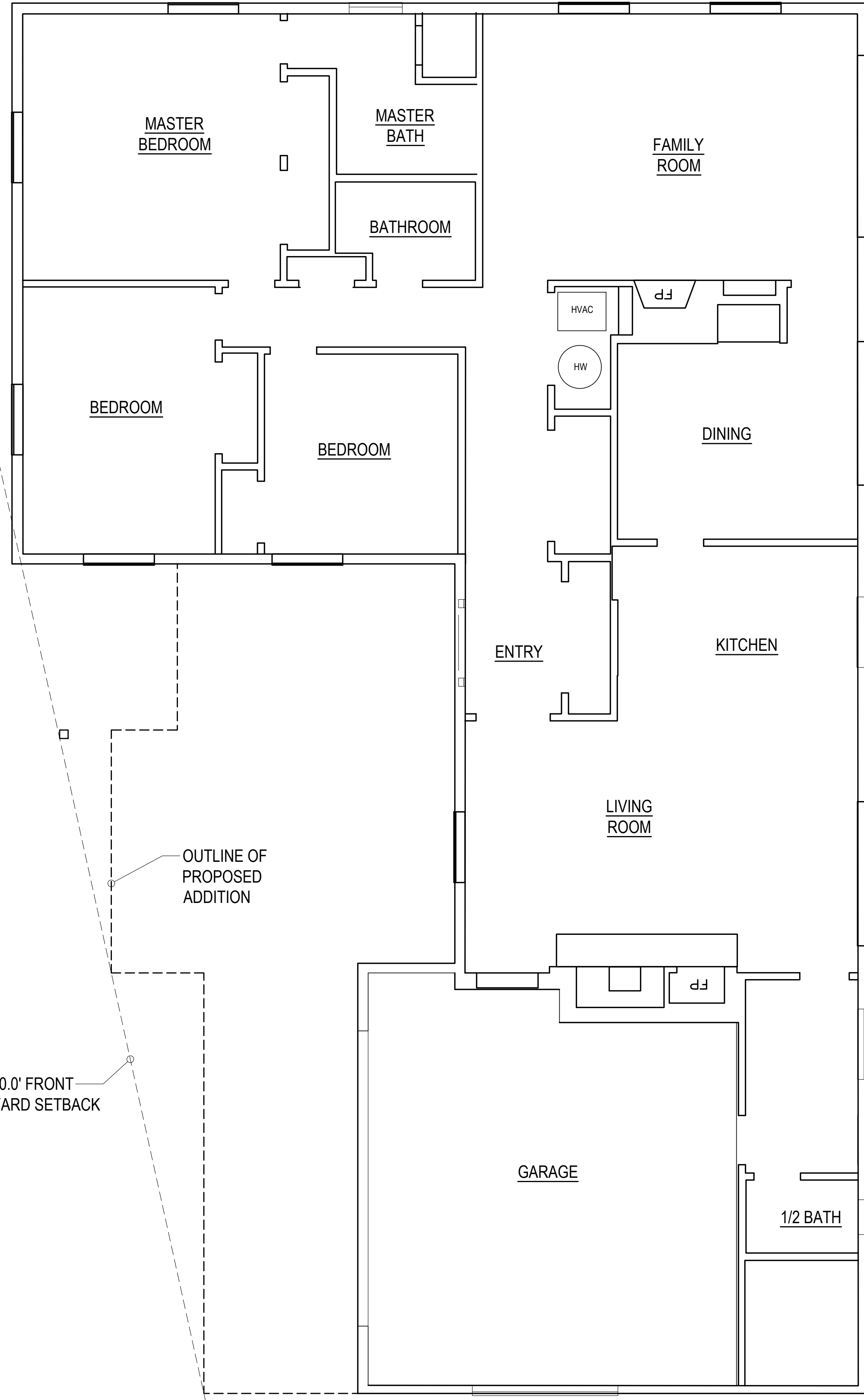
**Young-Nang Residence**  
**Fire Repair and Addition/Remodel**  
 6127 92nd Avenue Southeast  
 Mercer Island, Washington 98040

PROJECT MANAGER: AH  
 DRAWN BY: alh  
 DATE: 04.01.21

**PERMIT**  
**SUBMITTAL**

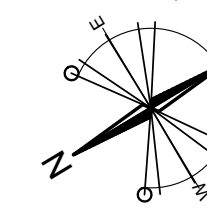
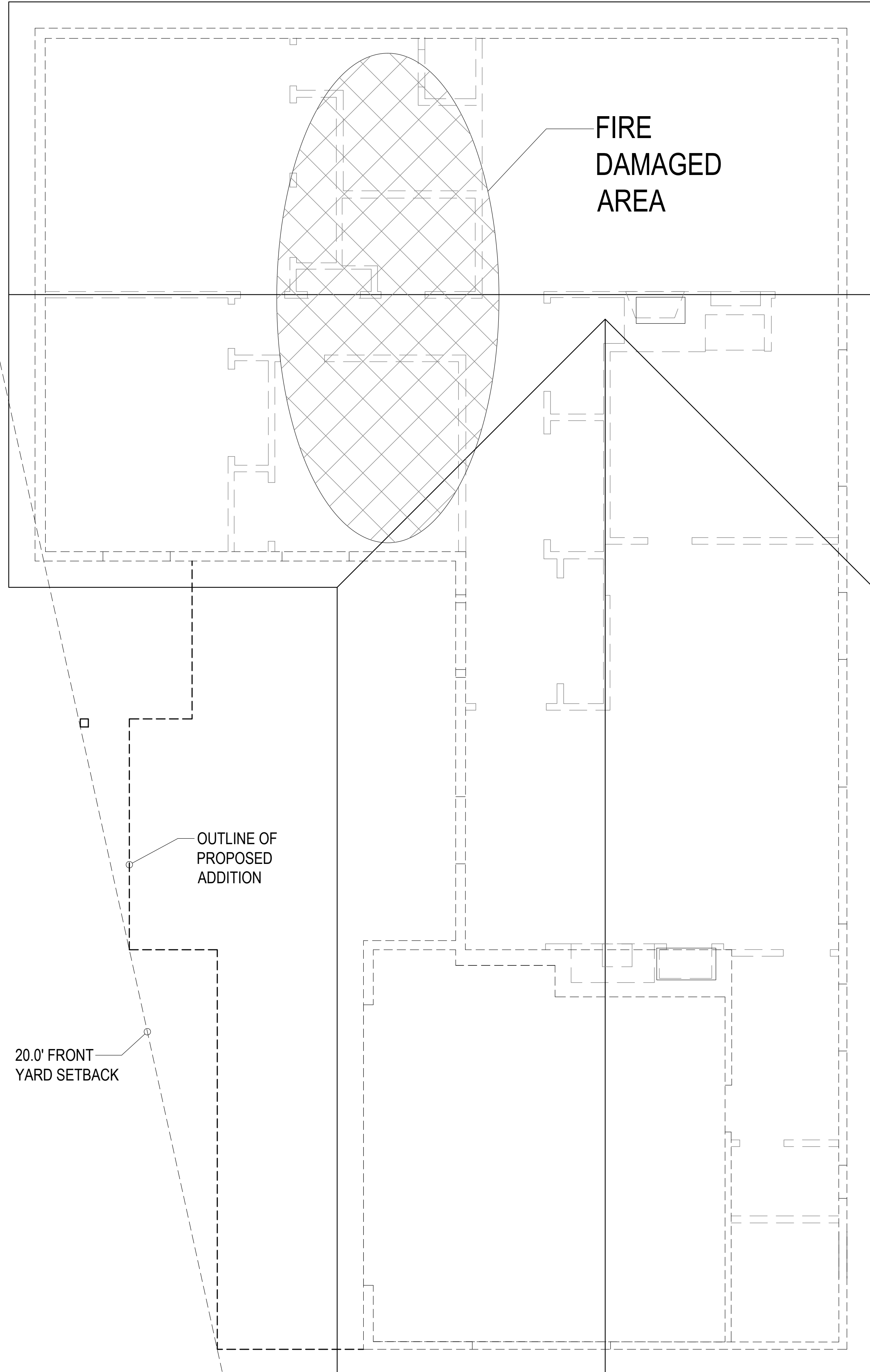
Structural Notes





EXISTING MAIN FLOOR PLAN

SCALE: 1/4" = 1'-0"



EXISTING ROOF PLAN

SCALE: 1/4" = 1'-0"



**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782

**Yeung-Nang Residence**  
**Fire Repair and Addition/Remodel**  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

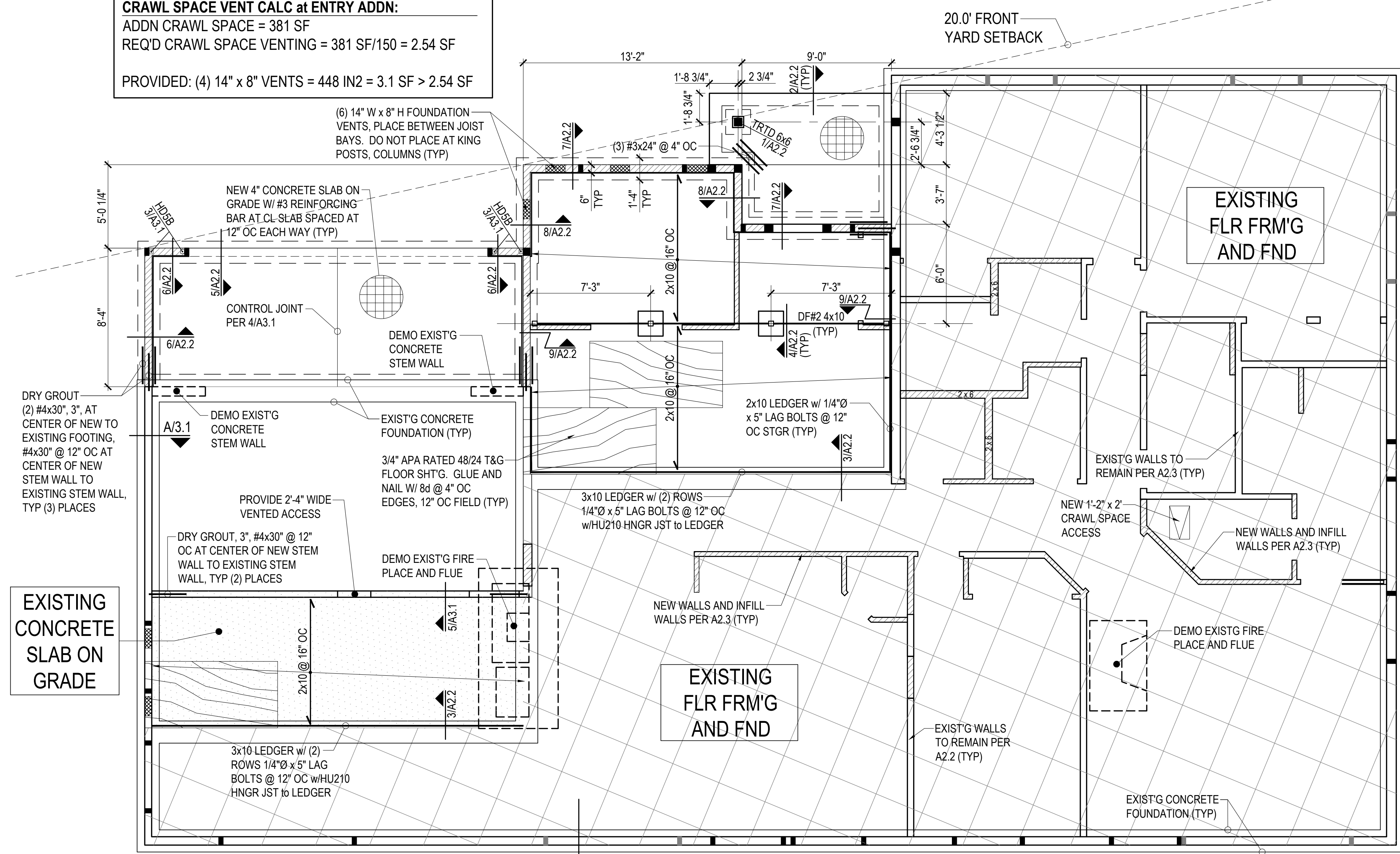
PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.07.21

**PERMIT  
SUBMITTAL**

Existing Floor and  
Roof Plan



**CRAWL SPACE VENT CALC at ENTRY ADDN:**  
 ADDN CRAWL SPACE = 381 SF  
 REQ'D CRAWL SPACE VENTING = 381 SF/150 = 2.54 SF  
 PROVIDED: (4) 14" x 8" VENTS = 448 IN<sup>2</sup> = 3.1 SF > 2.54 SF



**CRAWL SPACE VENT CALC at GARAGE ADDN:**  
 ADDN CRAWL SPACE = 165 SF  
 REQ'D CRAWL SPACE VENTING = 165 SF/150 = 1.10 SF  
 PROVIDED: (2) 14" x 8" VENTS = 224 IN<sup>2</sup> = 1.55 SF > 1.10 SF

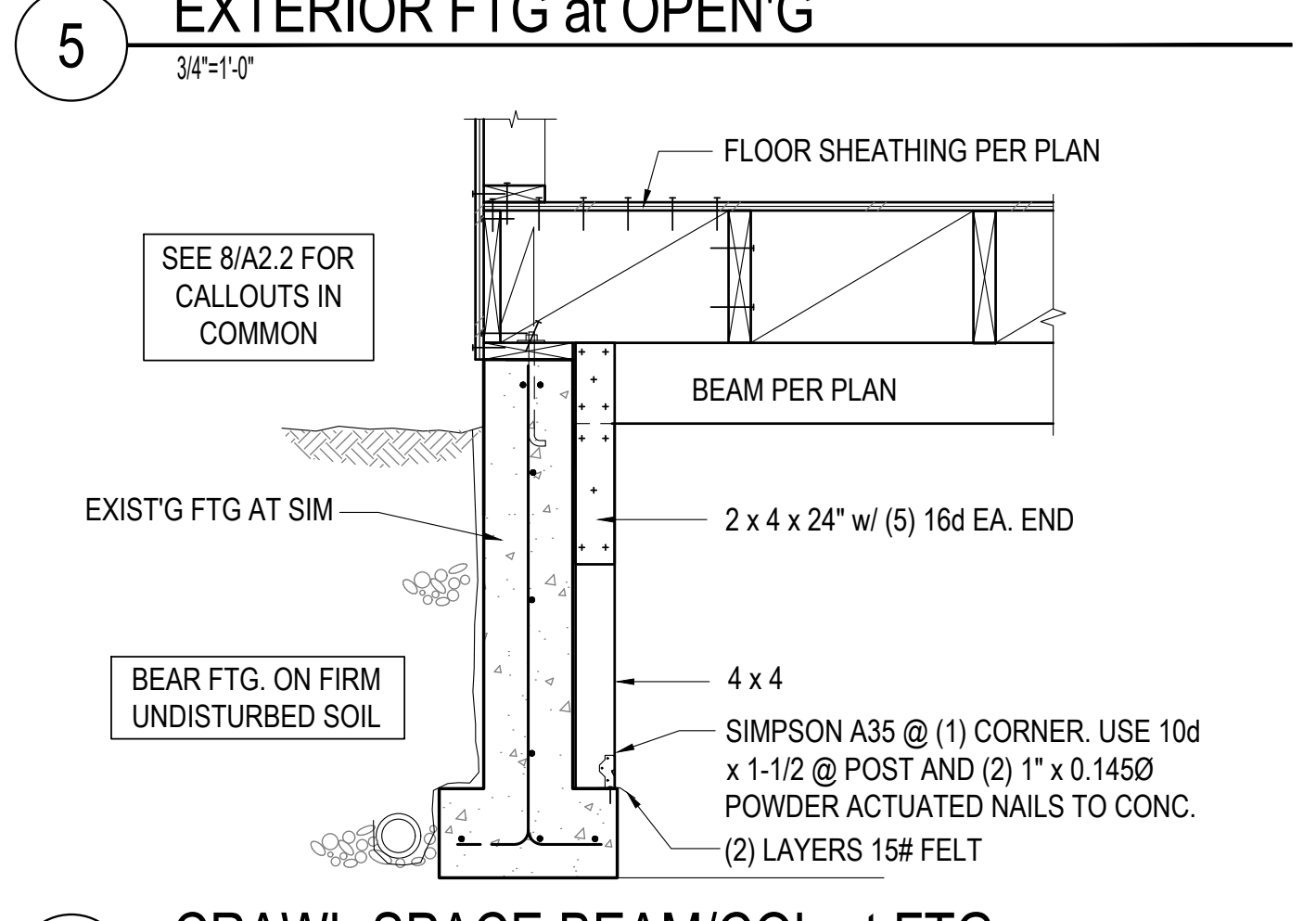
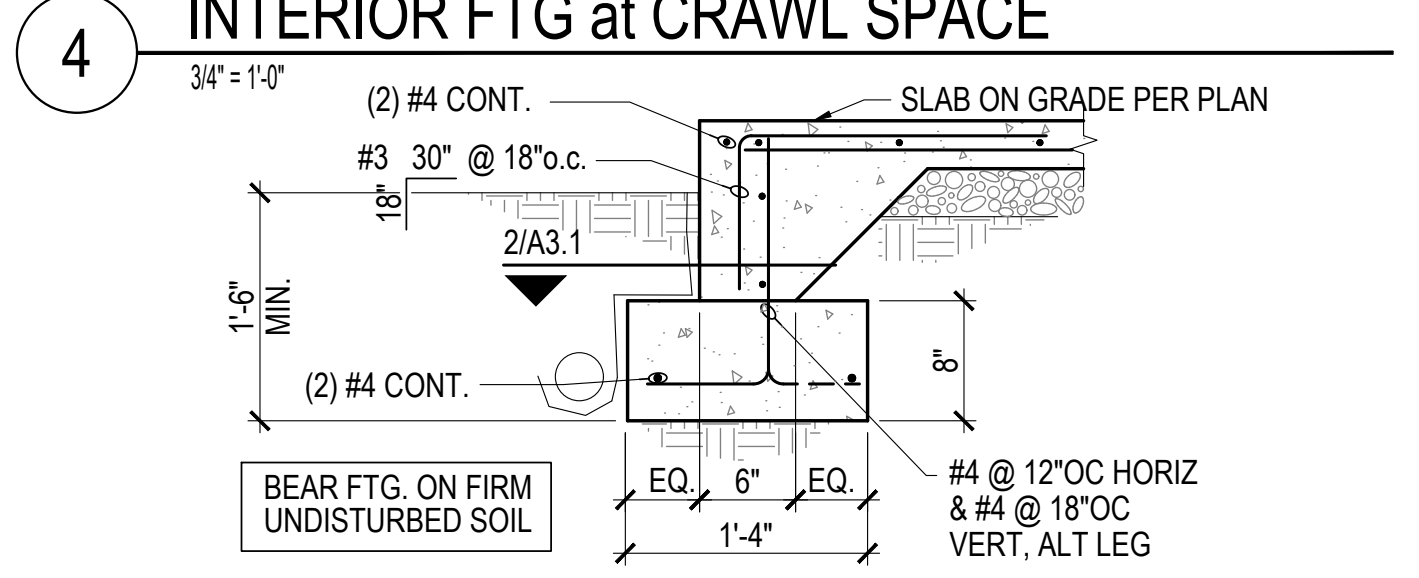
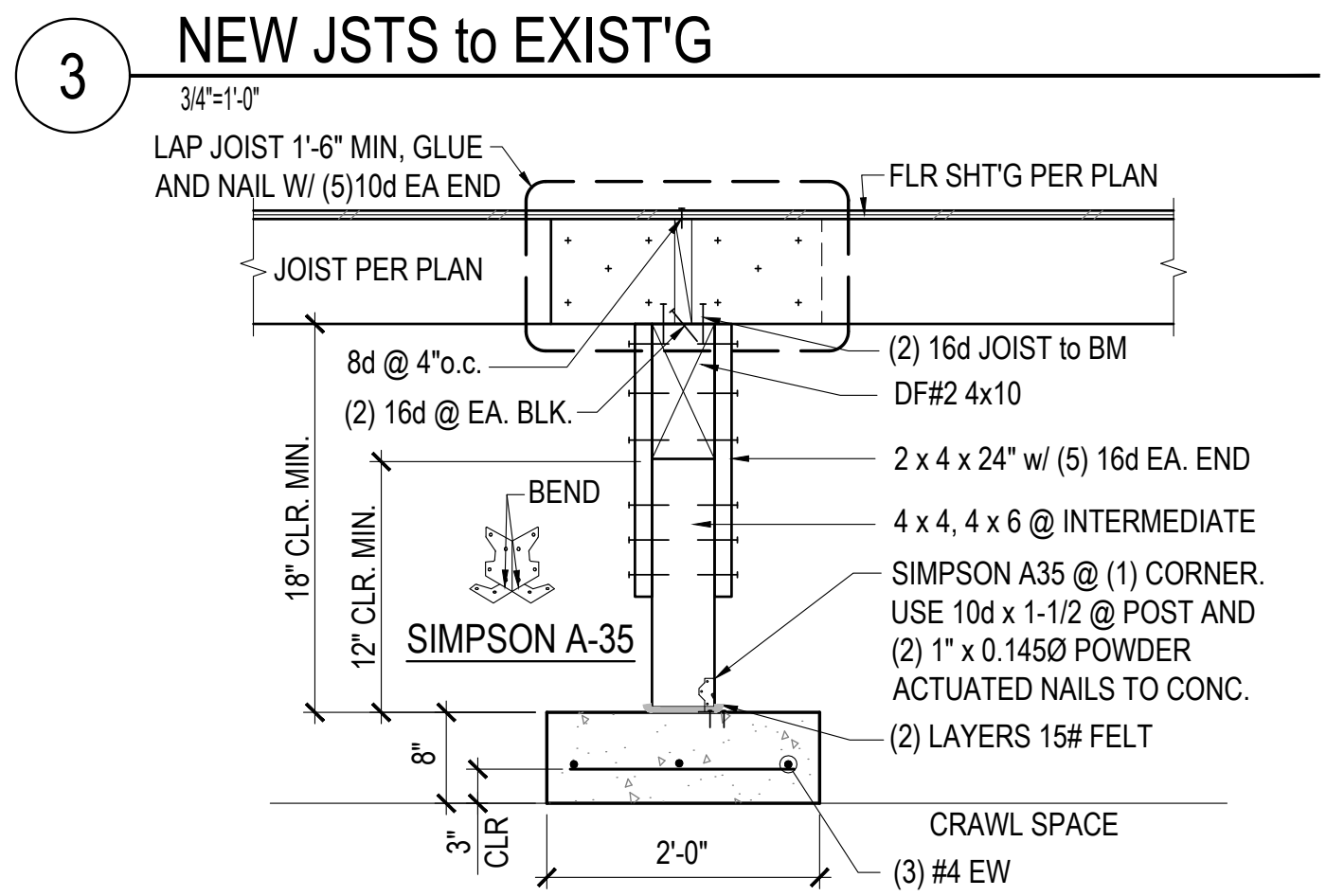
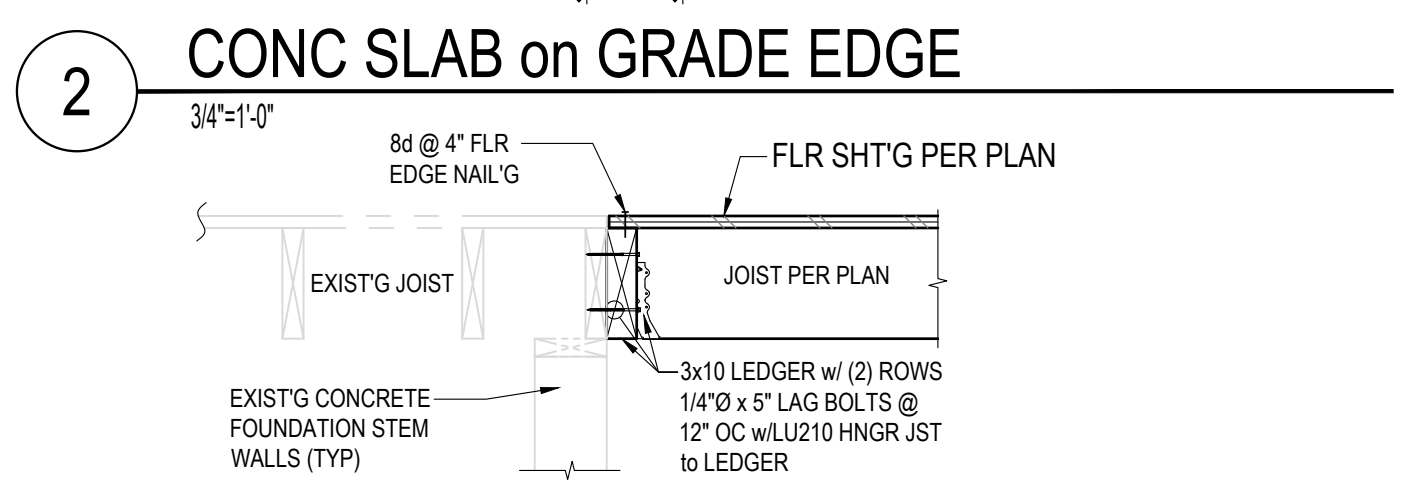
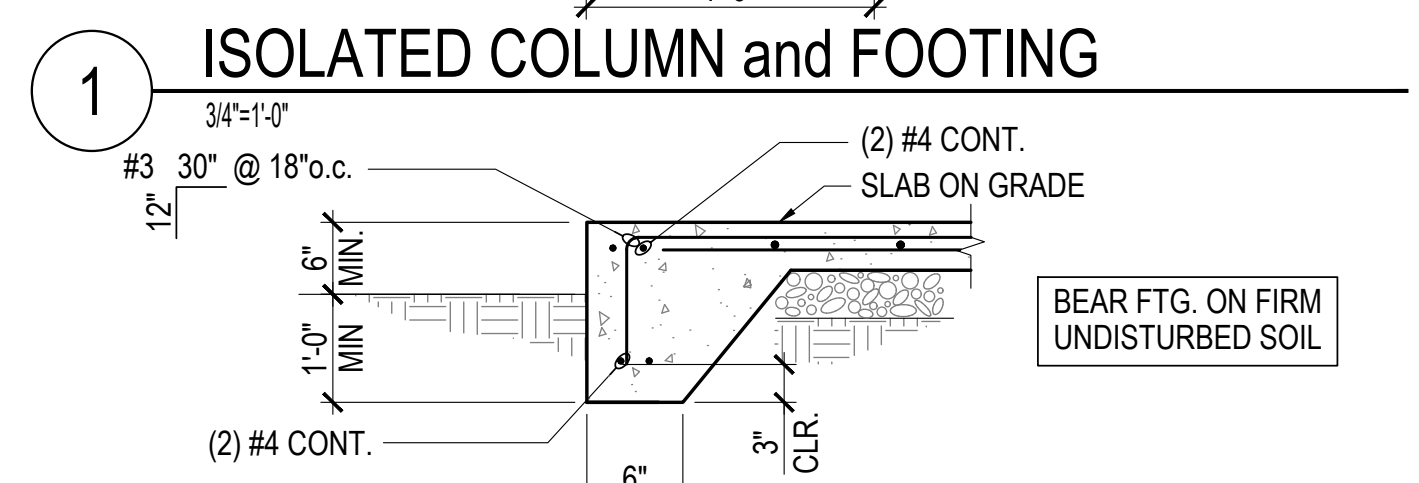
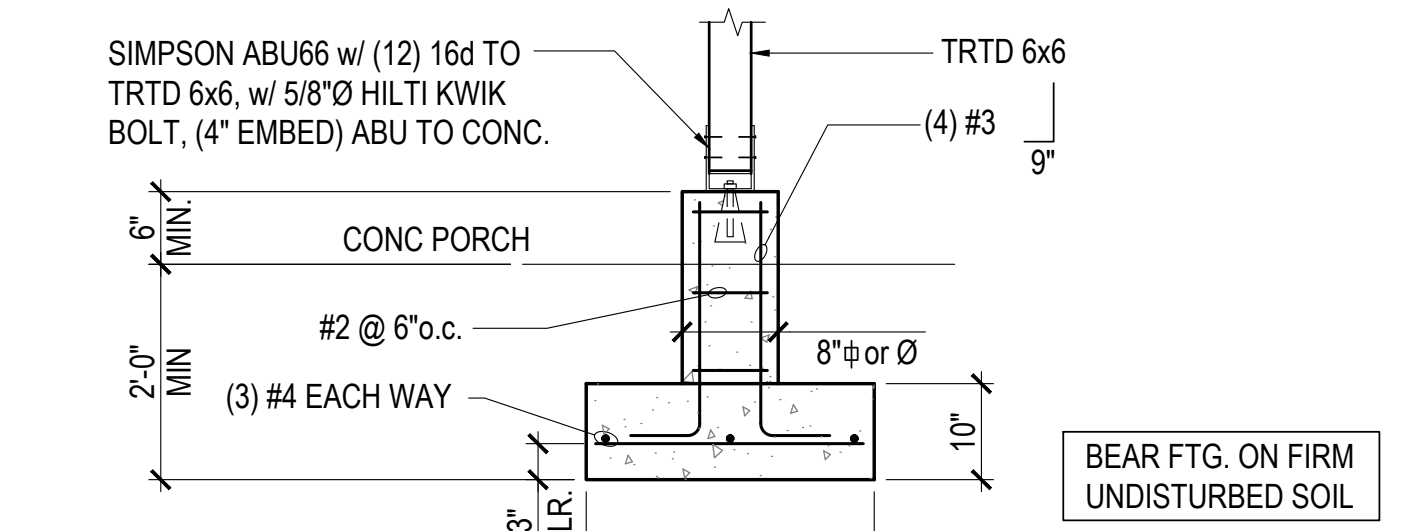
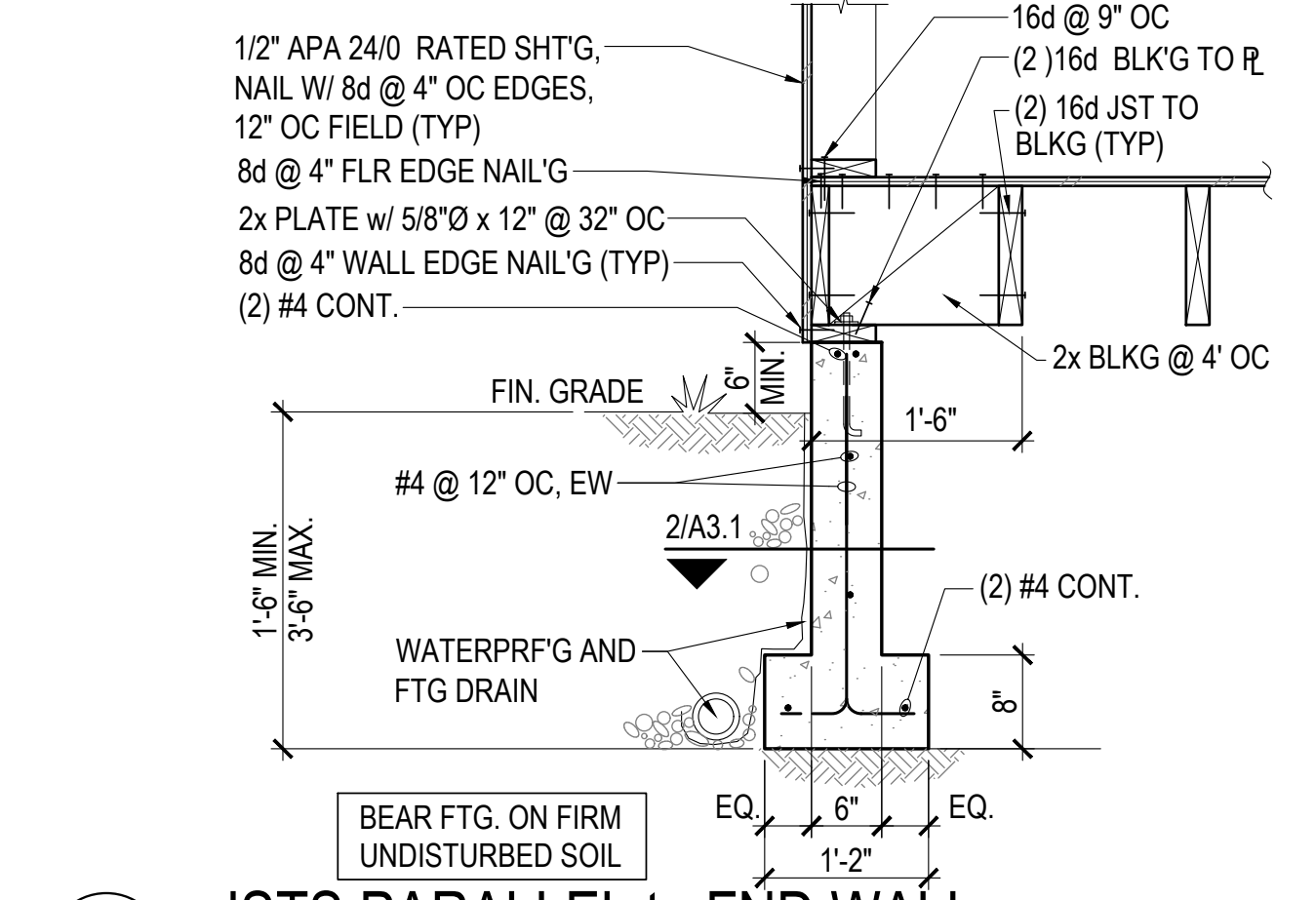
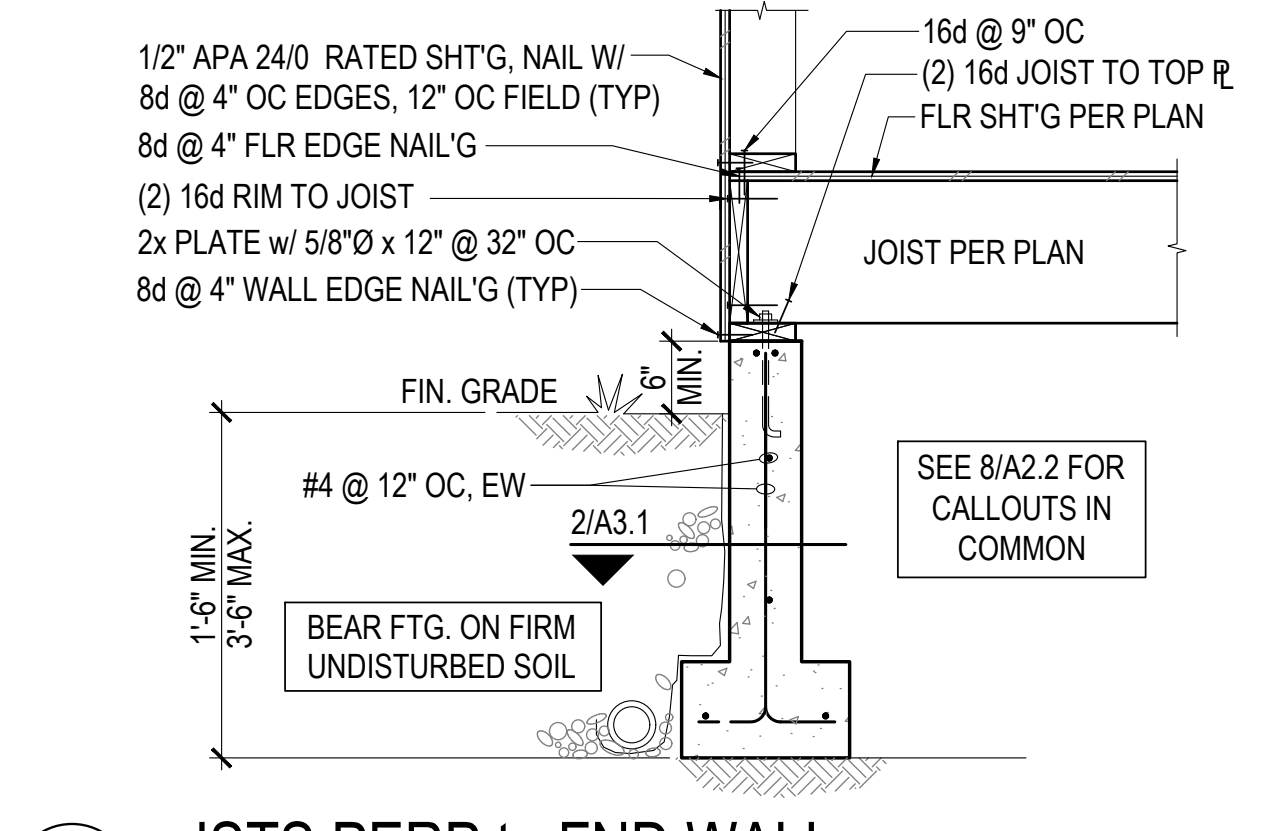
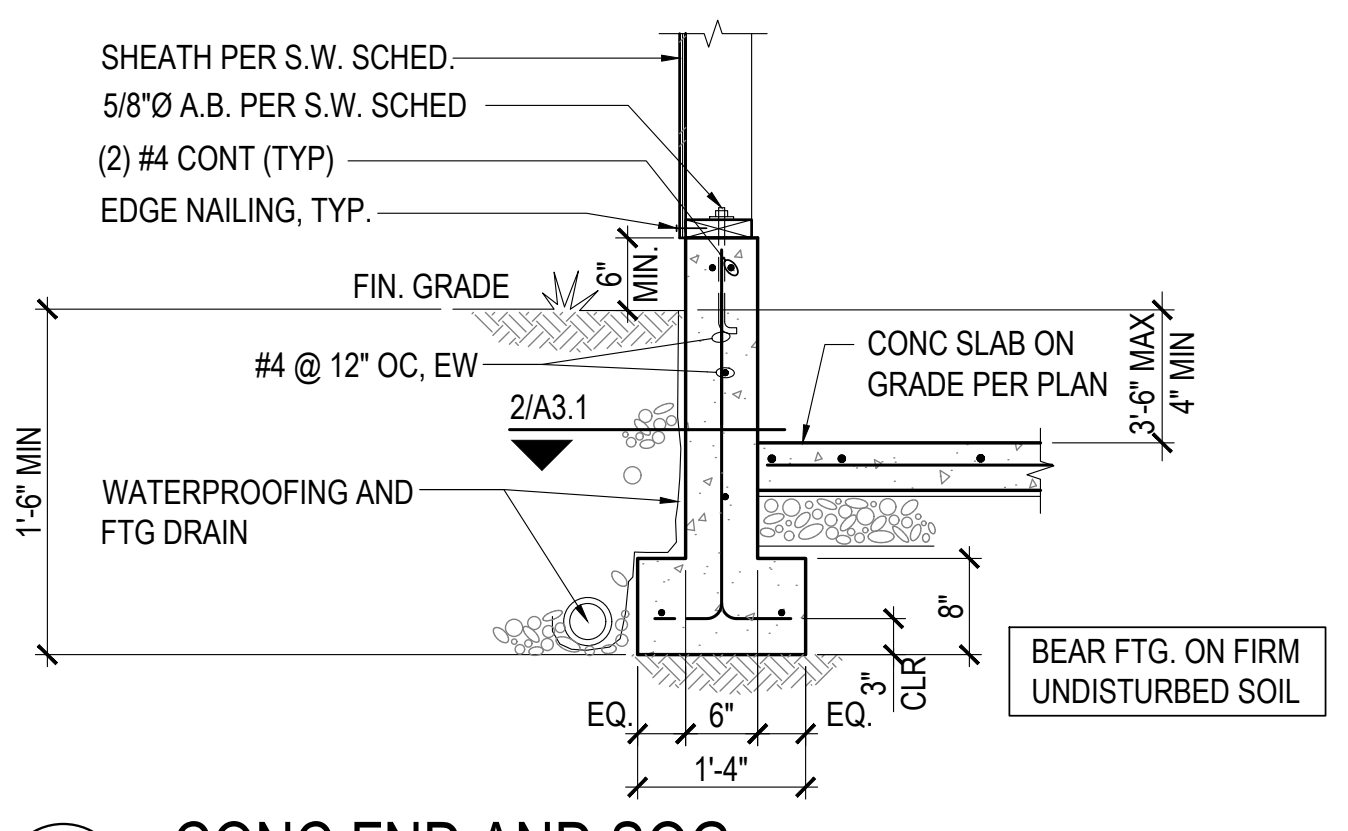
- PLAN NOTES:**
- ALL CONNECTORS BY SIMPSON STRONG-TIE INSTALL PER MANUFACTURER'S SPECIFICATIONS.
  - AT BM/HEADER OF WOOD FRAMED WALLS, PROVIDE (1) KING STUD, AT SPAN < 5'-0" PROVIDE (1) TRIMMER STUD, AT SPAN > 5'-0" PROVIDE (2) TRIMMER STUDS, UNLESS NOTED OTHERWISE, SEE DETAIL 1/A3.1.
  - BOTTOM OF ALL FOOTINGS SHALL BE 18" (MINIMUM), BELOW FINISH GRADE, UNLESS NOTED OTHERWISE. ALL FOOTINGS SHALL BEAR ON FIRM UNDISTURBED SOIL. FINAL ELEVATIONS SHALL BE DETERMINED BY ONSITE VERIFICATION BY BUILDING INSPECTOR. ANY ELEVATIONS GIVEN ARE FOR CONTRACTOR CONVENIENCE ONLY AND BIDDING PURPOSES. VERIFY ALL ELEVATIONS WITH ENGINEER.
  - MINIMUM PROTECTION REQUIRED FOR BOLTS, NAILS, AND METAL CONNECTORS IN CONTACT WITH TREATED MATERIAL SHALL MEET THE MINIMUM REQUIREMENTS: TRIPLE ZINC ZMAX (G185 ASTM A653) FOR METAL PLATES, HOT DIP GALVANIZE (ASTM A123 FOR CONNECTORS AND ASTM 152 FOR FASTENERS AND ANCHORS).
  - FLOOR SHEATHING 3/4" APA RATED 48/24 T&G SHEATHING, GLUE AND NAIL W/ 8d AT 4" OC EDGES, 12" OC FIELD, TYPICAL AT FLOORS.
  - ALL NEW EXTERIOR WALLS PER DETAIL 1/A3.1, UNLESS NOTED OTHERWISE. RETRO-FIT EXIST'G ANCHOR BOLTS W/ PLATE WASHER PER 1/A3.1.

CALL BEFORE YOU DIG:  
 1-800-424-5555

- LEGEND**
- COLUMN ORIGINATES OR CONTINUES
  - COLUMN BELOW

**FOUNDATION and FLOOR FRAMING**

SCALE: 1/4" = 1'-0"



**sliderule**  
 engineering works, llc  
 221 E Street Southeast  
 Auburn, Washington 98002  
 t: 206 + 360 + 0782

**Yeung-Nang Residence**  
 Fire Repair and Addition/Remodel  
 6127 92nd Avenue Southeast  
 Mercer Island, Washington 98040

PROJECT MANAGER: AH  
 DRAWN BY: alh  
 DATE: 04.01.21

**PERMIT SUBMITTAL**

Foundation Plan and Details

**A2.2**





**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782

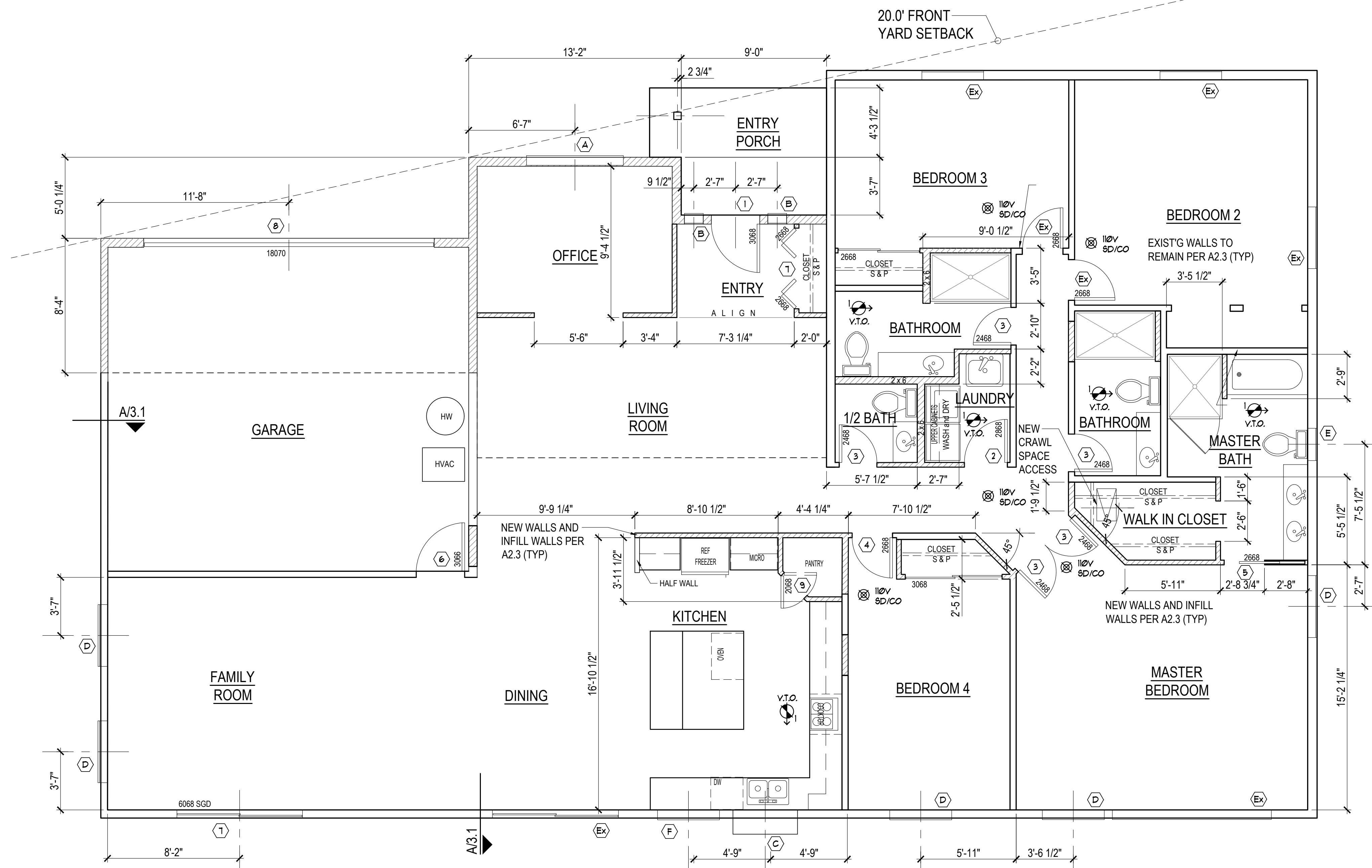
**Yeung-Nang Residence**  
**Fire Repair and Addition/Remodel**  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.01.21

**PERMIT  
SUBMITTAL**

Proposed  
Main Floor Plan

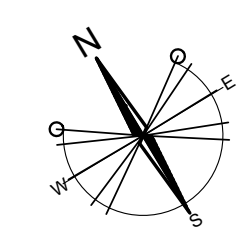
**A2.3**



**MAIN FLOOR PLAN**

SCALE: 1/4" = 1'-0"

- LEGEND**
- COLUMN ORIGINATES OR CONTINUES
  - COLUMN BELOW
  - WALL BELOW
  - //// NEW WALL OR INFILL WALL PER 1/A3.1
  - ⊗ 110V SMOKE/CARBON DIOXIDE ALARM, 110V, WIRED W/0 DISCONNECT SWITCH, INTERCONNECTED, W/ BATTERY BACKUP.



**VENTILATION SCHEDULE**  
SEE 2012 WASHINGTON STATE VENTILATION & INDOOR AIR QUALITY CODE (WSVIAQCC)

SYMBOL	MIN. REQUIRED CFM
	100

NOTES: -ALL FANS TO VENT TO OUTSIDE  
-ALL OTHER W.S.V.I.A.Q.C. REQUIREMENTS MUST BE MET

- PLAN NOTES:**  
(SEE SHEET A1.1 FOR ADDITIONAL NOTES)
- CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
  - INFILL WALLS AS NOTED PER 1/A3.1
  - NEW EXTERIOR WALLS TO BE 2x6 STUDS @ 16" O.C. (U.N.O.)
  - NEW INTERIOR WALLS TO BE 2x4 STUDS @ 16" O.C. (U.N.O.)
  - PROVIDE FIRE BLOCKING @ ALL PLUMBING AND STAIR PENETRATIONS, AND OTHER LOCATIONS PER IRC SEC R602.8.
  - SAFETY GLAZE HAZARDOUS LOCATIONS PER IRC SEC R308.4.
  - PROVIDE EMERGENCY ESCAPE PER IRC SEC. 310.1
  - PROVIDE GUARD & GUARDRAILS PER IRC SEC R312.2.
  - INSTALL SMOKE/CARBON DIOXIDE ALARMS IN LOCATIONS PER IRC SEC R313.1. CARBON DIOXIDE AND SMOKE DETECTORS TO BE 110V, PERMANENTLY WIRED W/0 DISCONNECT SWITCH, INTERCONNECTED, W/ BATTERY BACKUP.
  - INSTALL A VAPOR RETARDER ON THE WARM-IN-WINTER SIDE OF THE INSULATION PER IRC SEC. R316.1.

**DOOR SCHEDULE**

DOOR MARK	UNIT SIZE WIDTH x HEIGHT	TYPE	MIN. "U"	LOCATION	QUANTITY	REMARKS
1	3'-0" x 6'-8"	SOLID WOOD DOOR, EXTERIOR	0.30	ENTRY DOOR	1	OWNER SELECT
2	2'-8" x 6'-8"	SOLID WOOD DOOR, INTERIOR	EXEMPT	LAUNDRY DOOR	1	OWNER SELECT
3	2'-4" x 6'-8"	HOLLOW WOOD DOOR, INTERIOR	EXEMPT	BATH RM, MASTR BR	4	OWNER SELECT
4	2'-6" x 6'-8"	HOLLOW WOOD CLOSET DOOR, INTR	EXEMPT	BEDROOM 4	1	OWNER SELECT
5	2'-6" x 6'-8"	HOLLOW WOOD PKCT DOOR, INTERIOR	EXEMPT	MASTER BATHROOM	1	OWNER SELECT
6	3'-0" x 6'-8"	SOLID WOOD DOOR, EXTERIOR	0.30	GARAGE/FAMILY RM	1	OWNER SELECT
7	(2) 3'-0" x 6'-8"	SLIDING GLASS DOOR, EXTERIOR	0.30	FAMILY ROOM	1	OWNER SELECT
8	18'-0" x 7'-0"	SECTIONAL ROLL-UP GARAGE DOOR	EXEMPT	GARAGE	1	OWNER SELECT
9	2'-0" x 6'-8"	HOLLOW WOOD DOOR, DUAL SWING, INTR	EXEMPT	KITCHEN PANTRY	1	OWNER SELECT
Ex	VARIES	VARIES	-	-	-	AS NOTED

VERIFY ROUGH OPENINGS AND SIZES

**WINDOW SCHEDULE**

WINDOW MARK	UNIT SIZE WIDTH x HEIGHT	TYPE	FRAME MTL	GLAZING	MIN. "U"	MFR	MODEL	NOMINAL HEAD HT	QTY	REMARKS
A	6'-0" x 4'-0"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	OFFICE
B	1'-0" x 5'-0"	FIXED	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	2	ENTRY - SG
C	4'-0" x 4'-0"	GARDEN WINDOW	PER OWNER	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	KITCHEN
D	4'-0" x 4'-9"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER SELECT	RELOCATE EXISTG WINDOWS	6'-8"	5	BEDROOMS - EG
E	2'-0" x 2'-0"	CASEMENT	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	MSTR BATH - PV
F	4'-0" x 4'-0"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	KITCHEN
Ex	AS NOTED	VARIES	-	-	-	NO CHANGE	-	6'-8"	-	AS NOTED

PV = FROST OR PRIVACY GLASS EG = EGRESS SG = SAFETY GLASS  
VERIFY ROUGH OPENINGS AND SIZES





**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782

**Yeung-Nang Residence**  
Fire Repair and Addition/Remodel  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

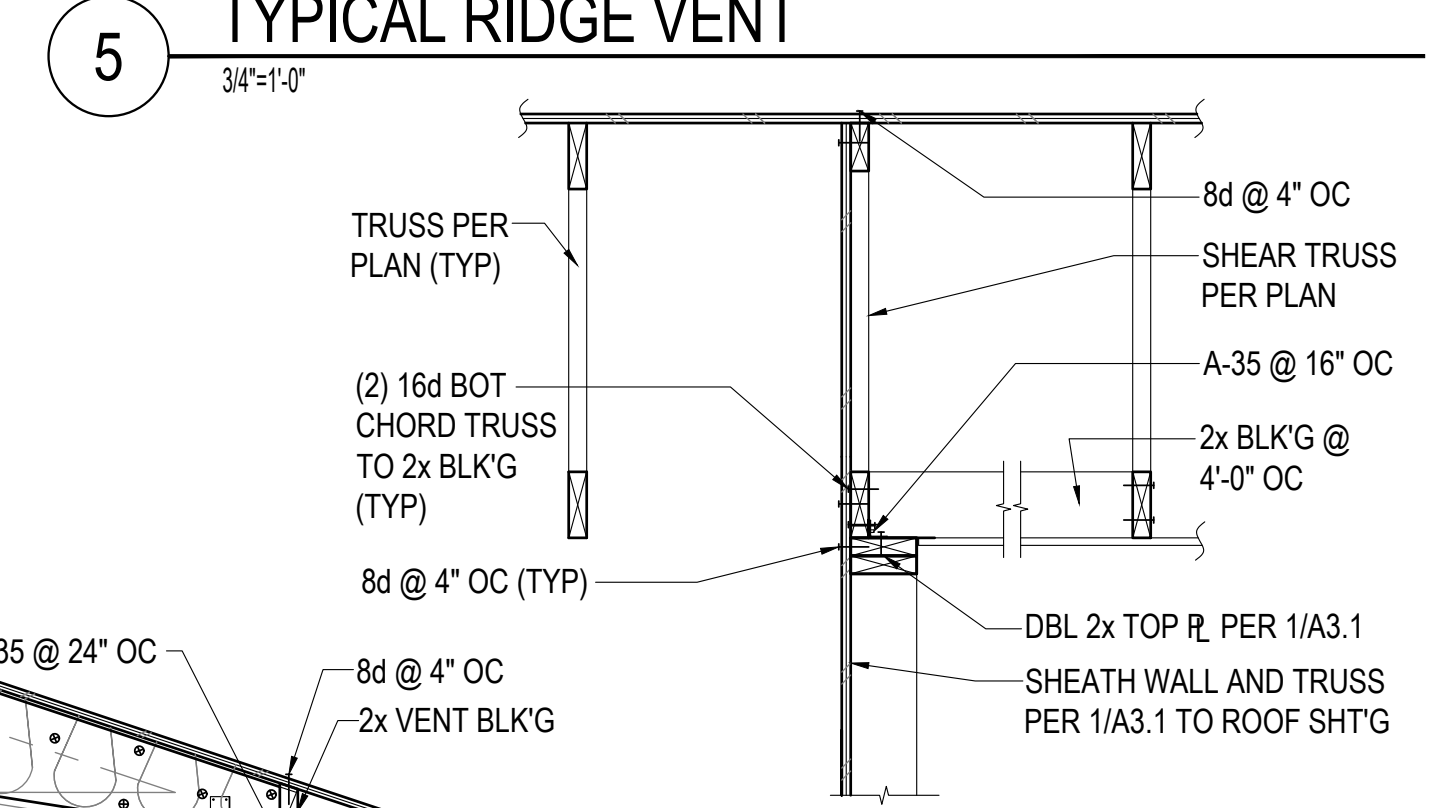
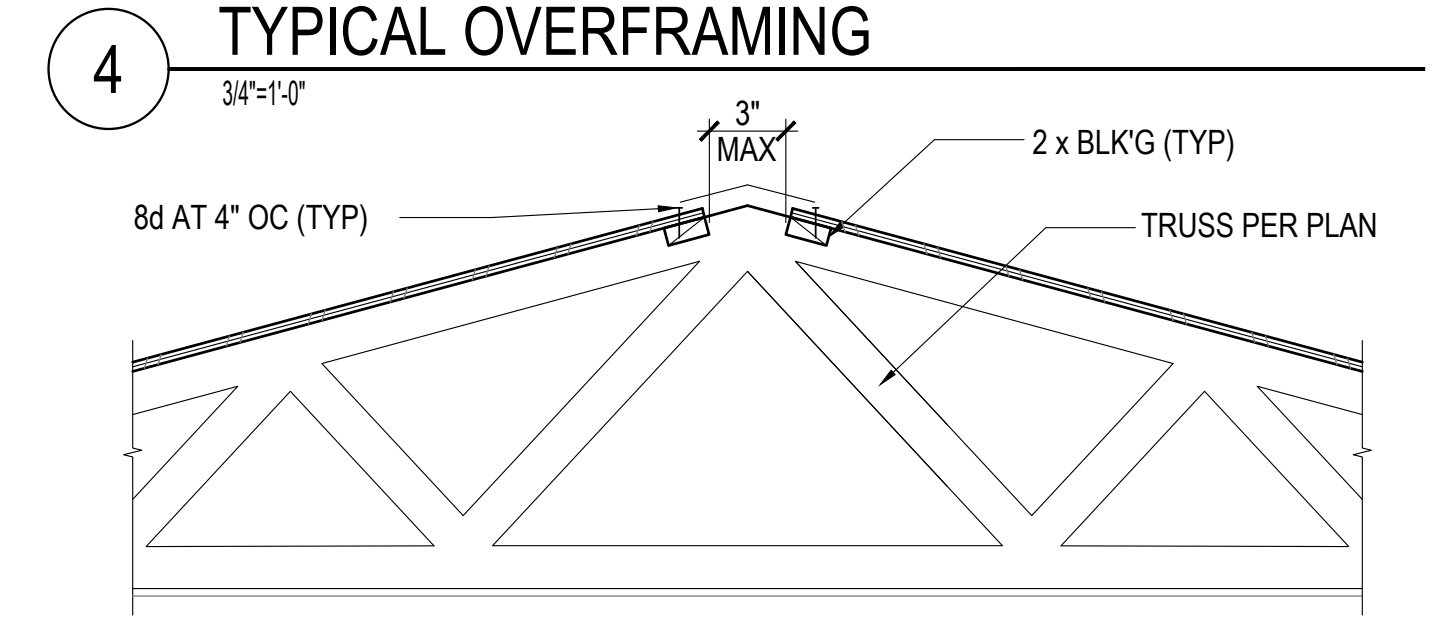
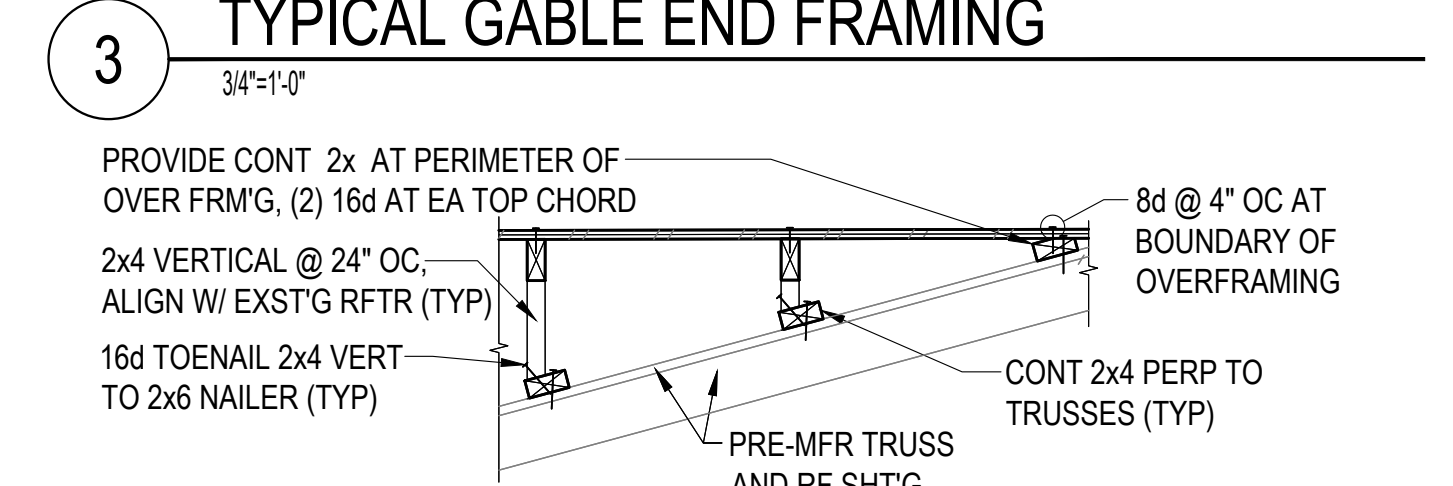
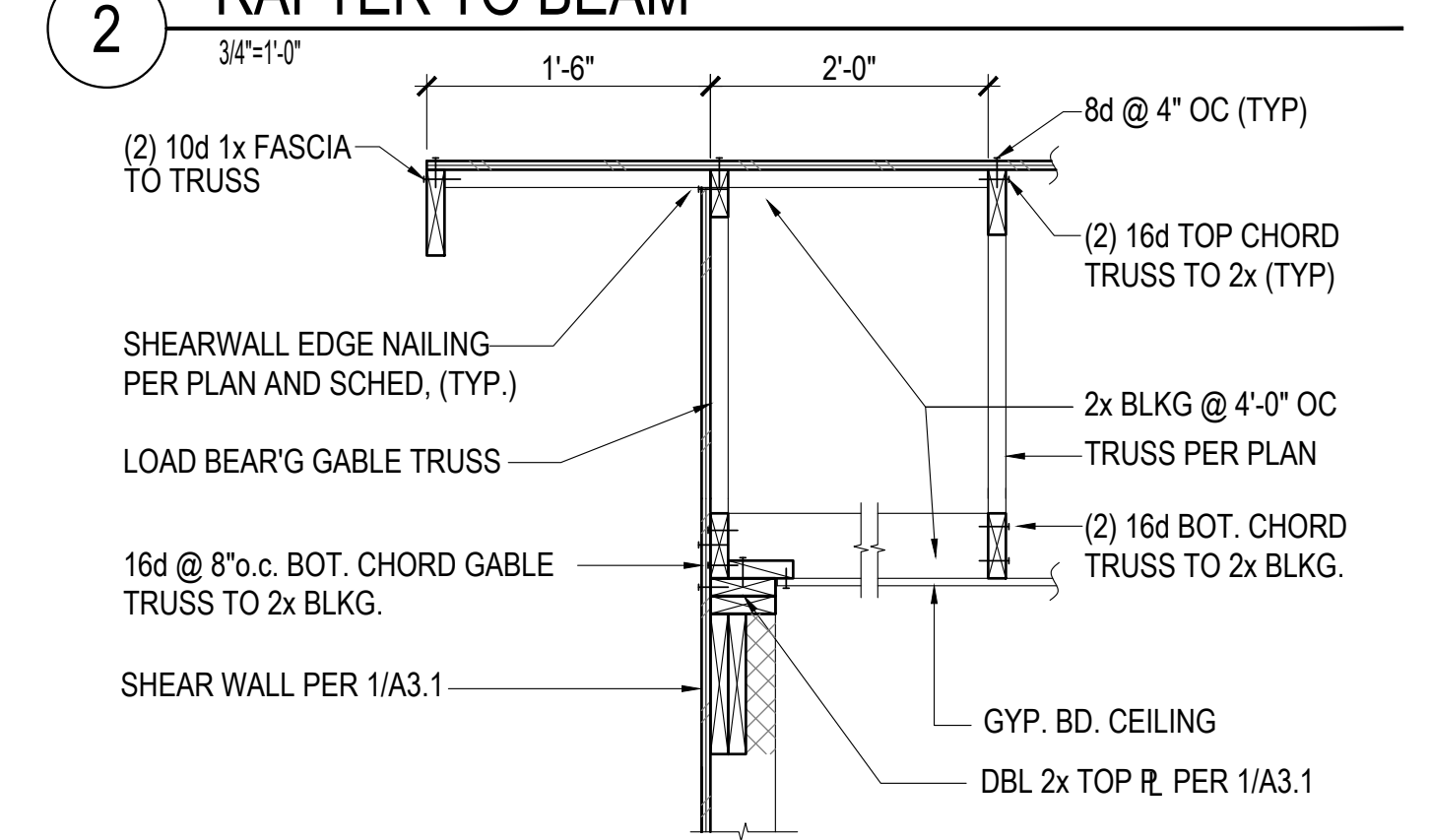
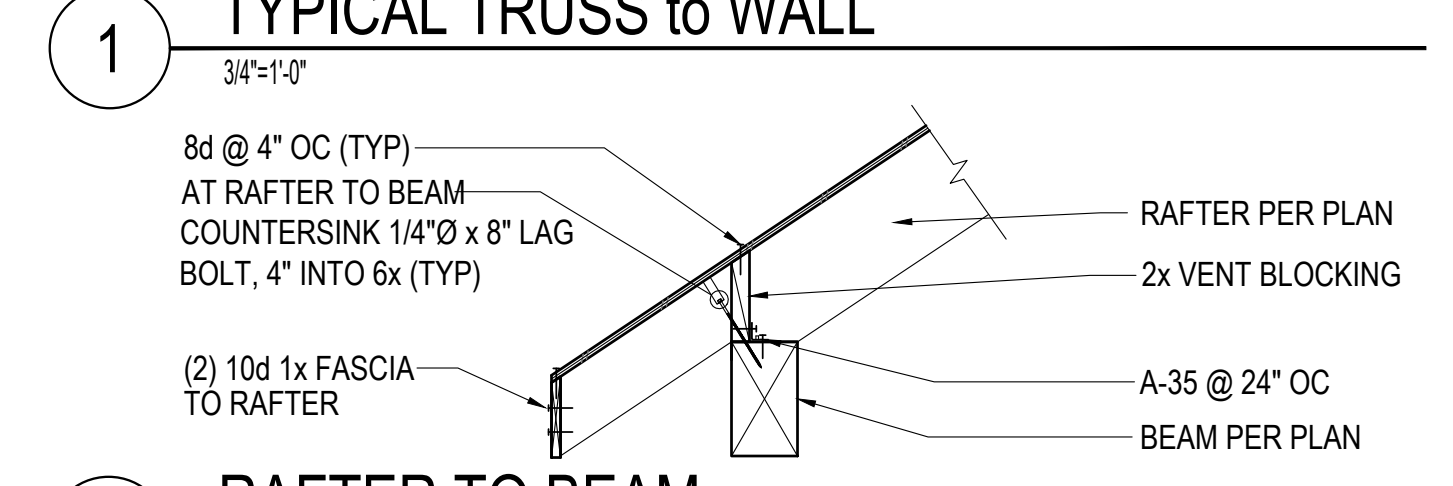
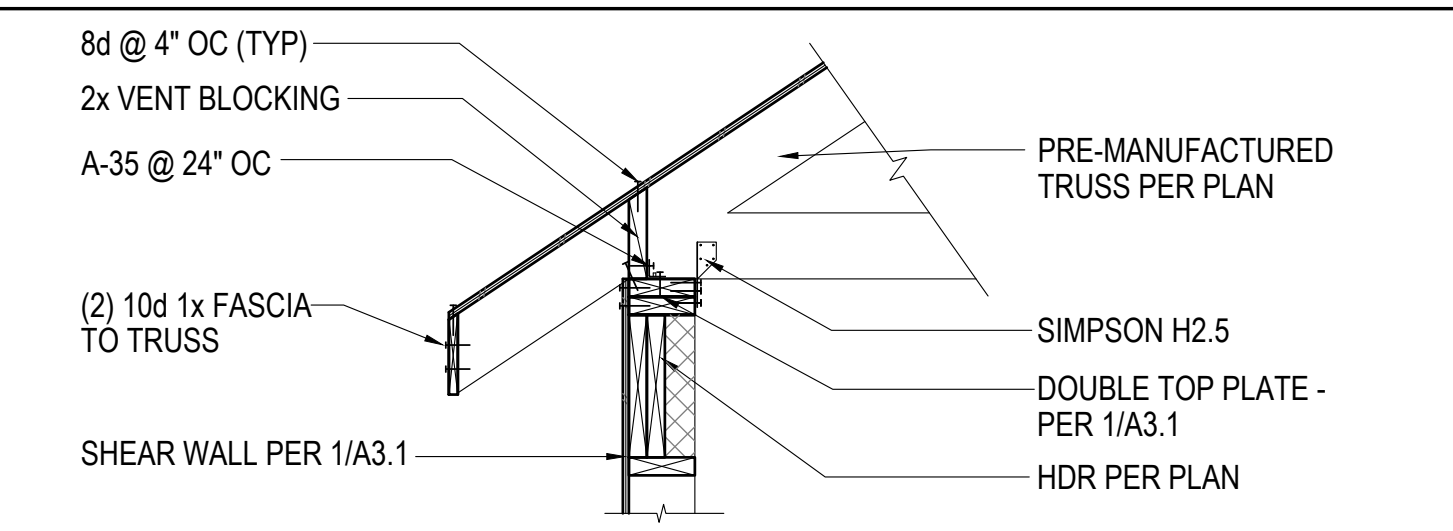
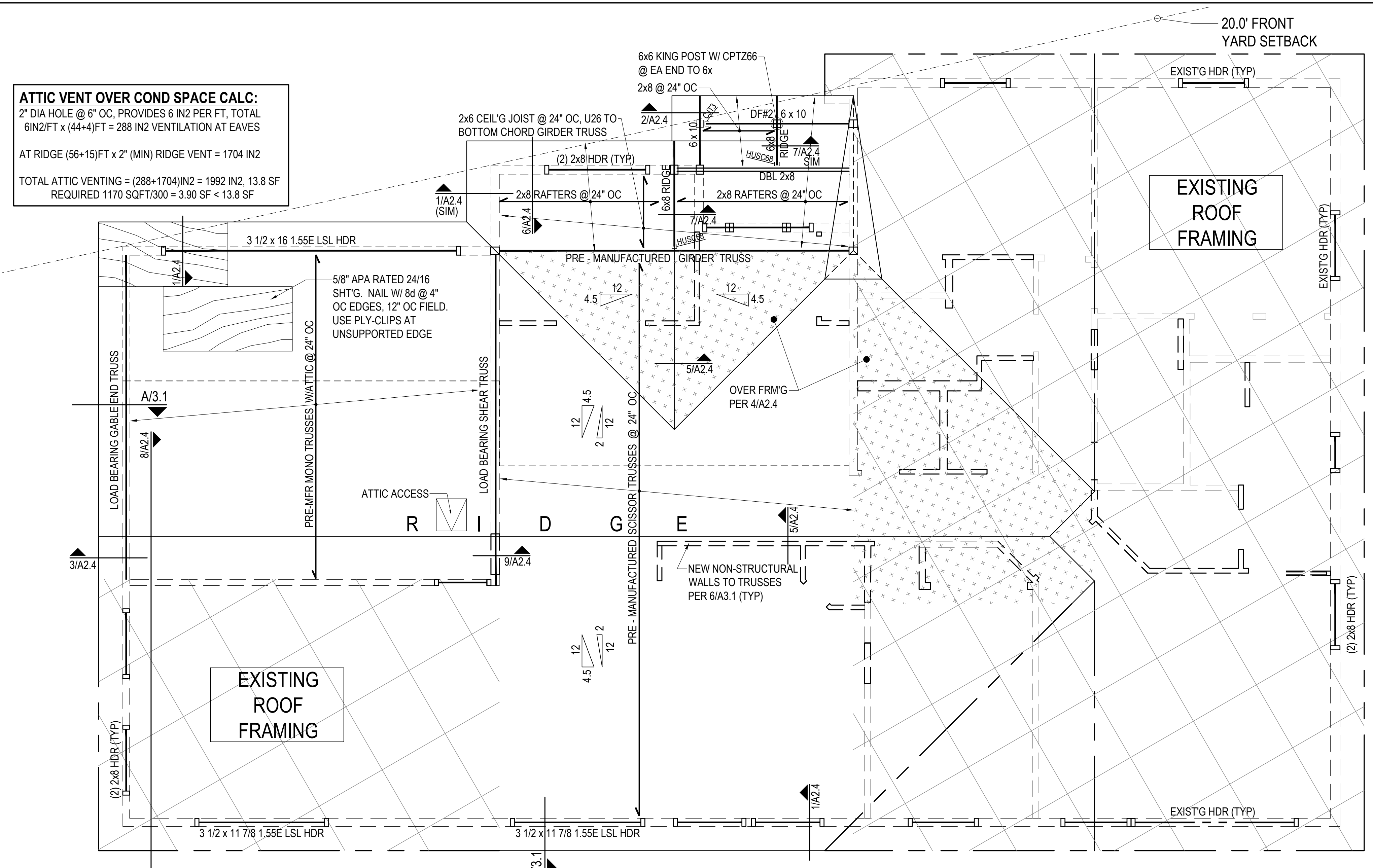
PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.01.21

**PERMIT**  
**SUBMITTAL**

Roof Framing Plan  
and Details

**A2.4**

**ATTIC VENT OVER COND SPACE CALC:**  
2" DIA HOLE @ 6" OC, PROVIDES 6 IN2 PER FT, TOTAL  
6IN2/FT x (44+4)FT = 288 IN2 VENTILATION AT EAVES  
AT RIDGE (56+15)FT x 2" (MIN) RIDGE VENT = 1704 IN2  
TOTAL ATTIC VENTING = (288+1704)IN2 = 1992 IN2, 13.8 SF  
REQUIRED 1170 SQFT/300 = 3.90 SF < 13.8 SF



**PLAN NOTES:**

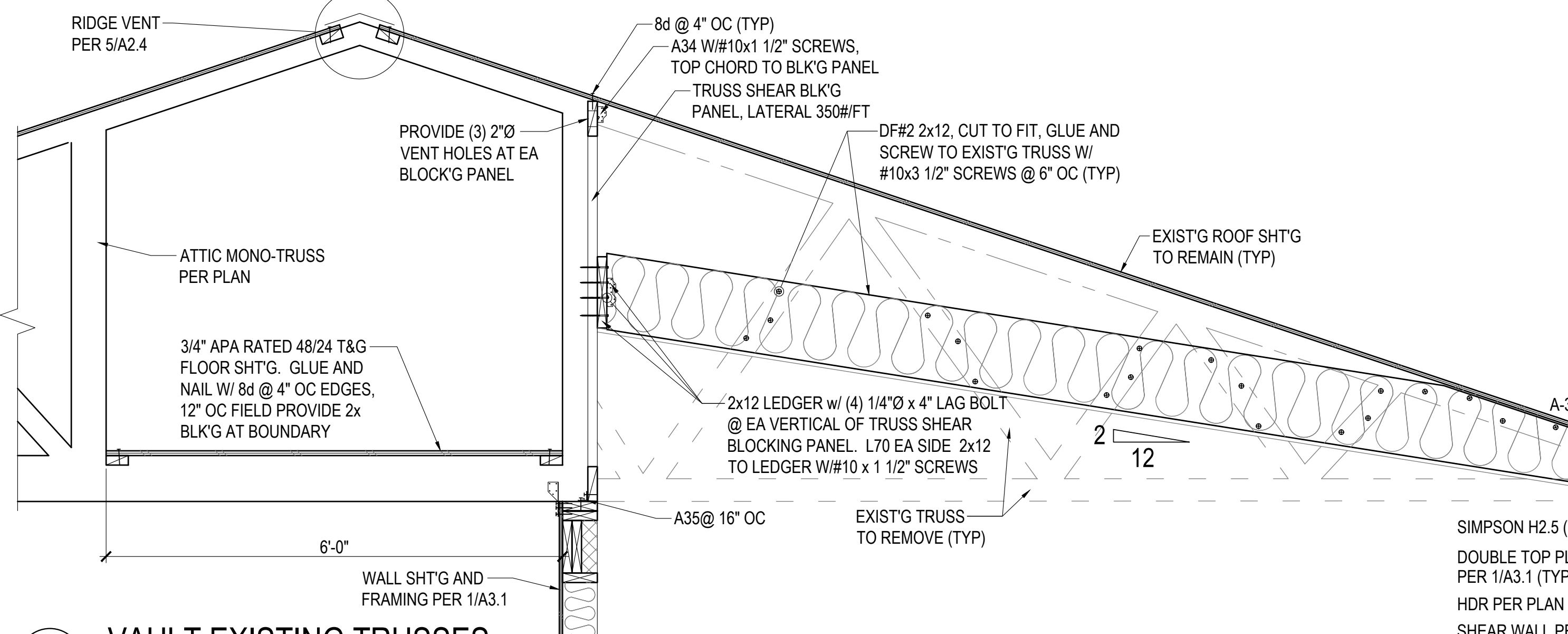
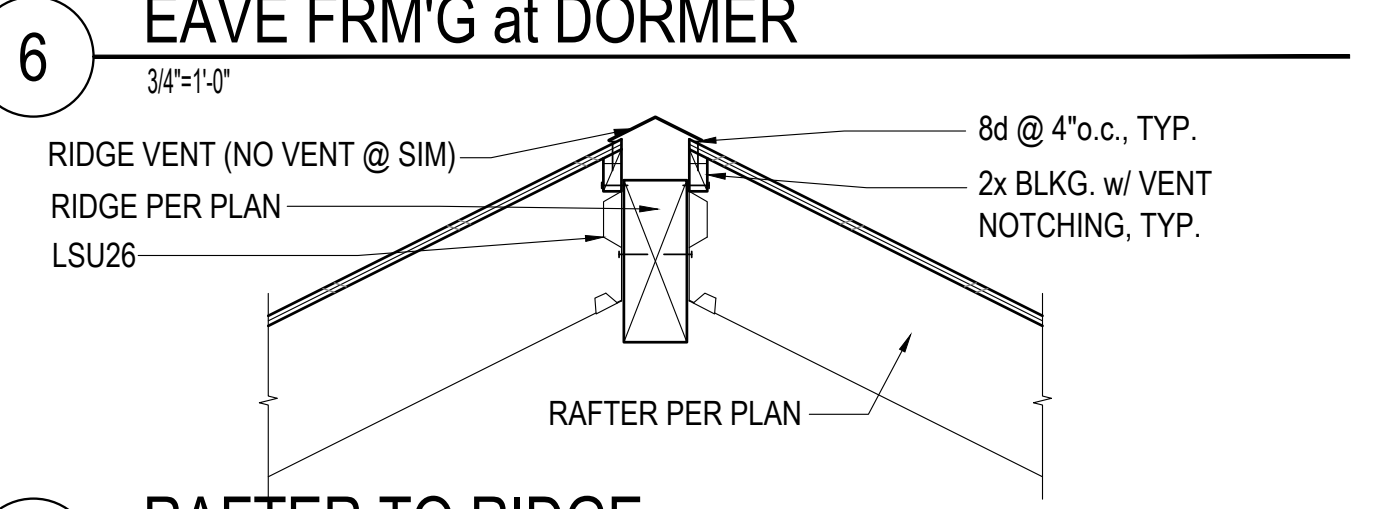
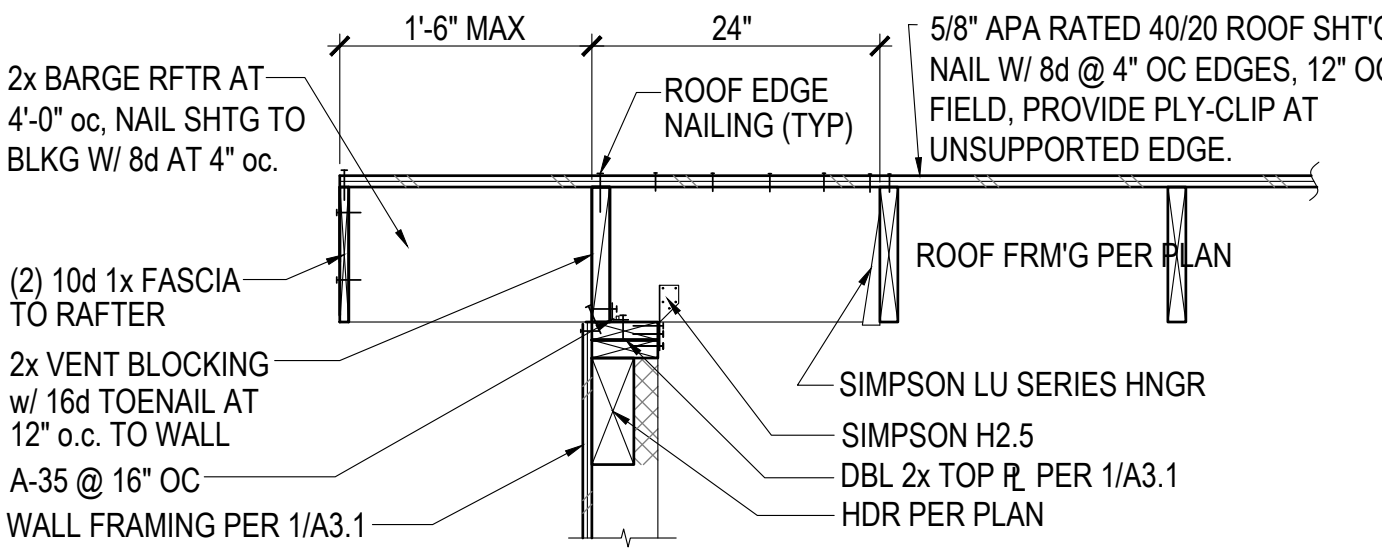
- ALL CONNECTORS BY SIMPSON STRONG-TIE INSTALL PER MANUFACTURER'S SPECIFICATIONS.
- AT BM/HEADER OF WOOD FRAMED WALLS, PROVIDE (1) KING STUD, AT SPAN < 5'-0" PROVIDE (1) TRIMMER STUD, AT SPAN > 5'-0" PROVIDE (2) TRIMMER STUDS, UNLESS NOTED OTHERWISE, SEE DETAIL 1/A3.1.
- MINIMUM PROTECTION REQUIRED FOR BOLTS, NAILS, AND METAL CONNECTORS IN CONTACT WITH TREATED MATERIAL SHALL MEET THE MINIMUM REQUIREMENTS: TRIPLE ZINC ZMAX (G185 ASTM A653) FOR METAL PLATES, HOT DIP GALVANIZE (ASTM A123 FOR CONNECTORS AND ASTM 152 FOR FASTENERS AND ANCHORS).
- ROOF SHT'G, 5/8" APA RATED 24/16 PLYWOOD. NAIL W/ 8d @ 4" OC EDGES, 12" OC FIELD, PROVIDE PLY-CLIP AT UNSUPPORTED EDGE.
- ALL NEW EXTERIOR WALLS PER DETAIL 1/A3.1, UNLESS NOTED OTHERWISE.

**ROOF FRAMING PLAN**

SCALE: 1/4" = 1'-0"

**LEGEND**

- COLUMN ORIGINATES OR CONTINUES
- COLUMN BELOW
- WALL BELOW



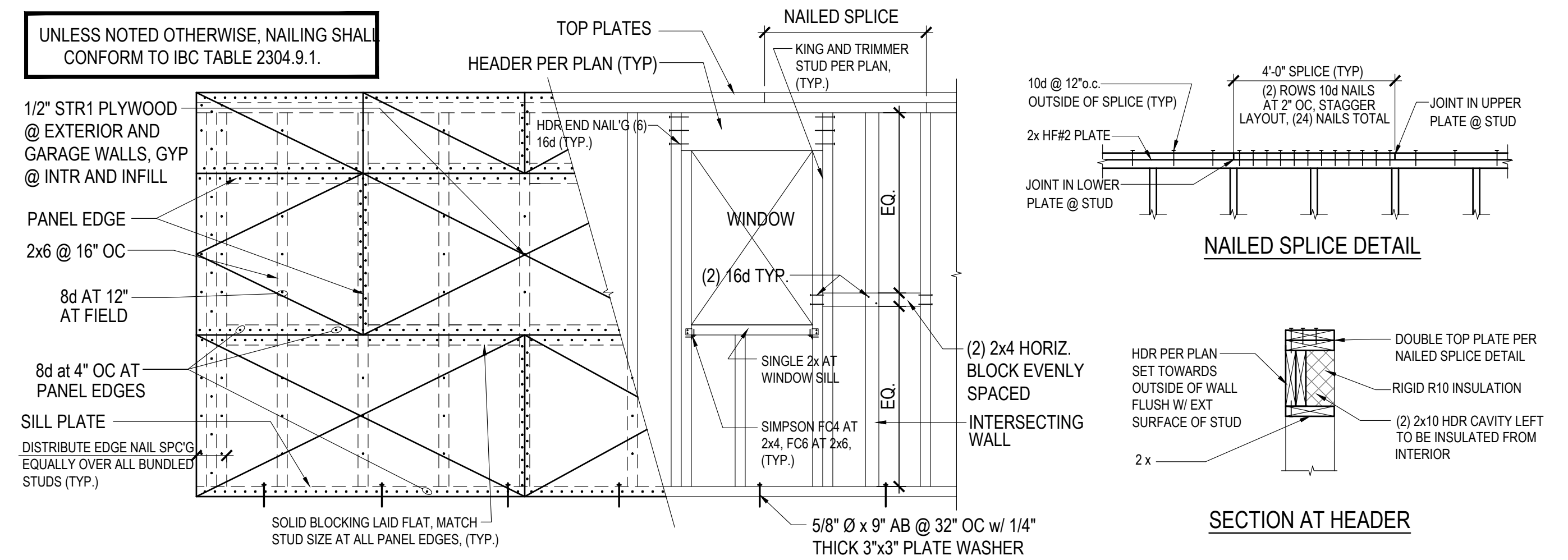
**8 VAULT EXISTING TRUSSES**  
not to scale

**7 RAFTER TO RIDGE**  
3/4"=1'-0"

**6 EAVE FRM'G at DORMER**  
3/4"=1'-0"

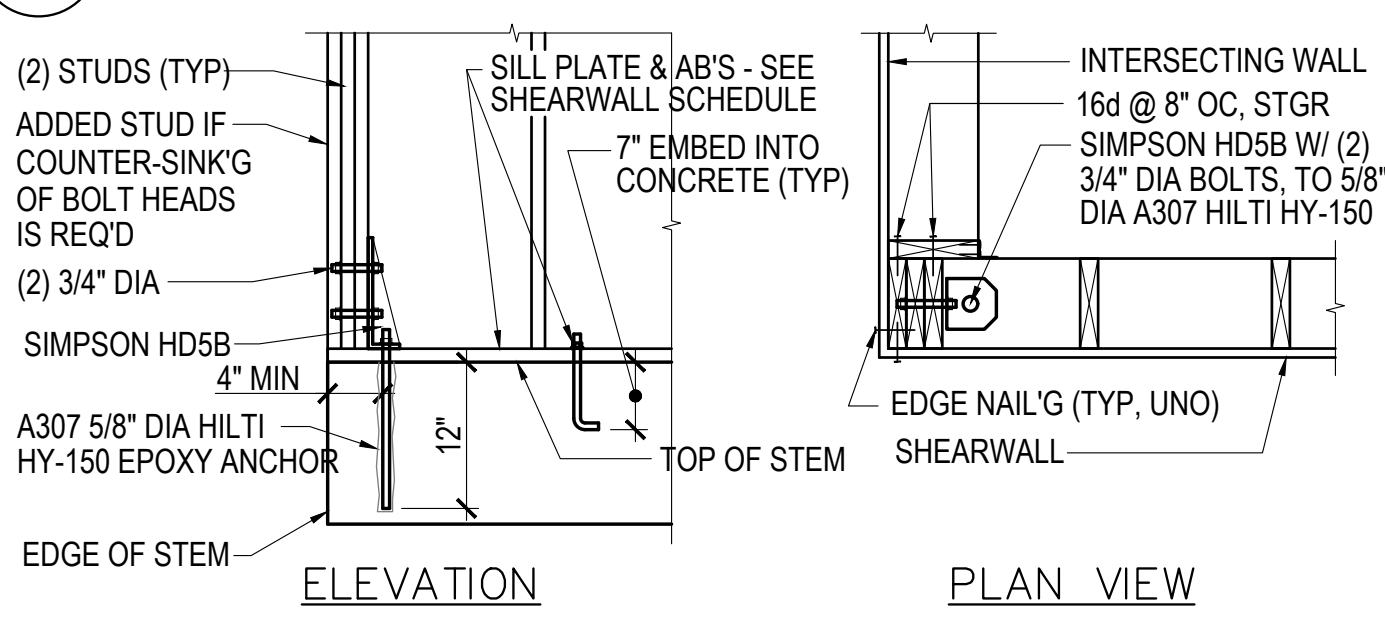
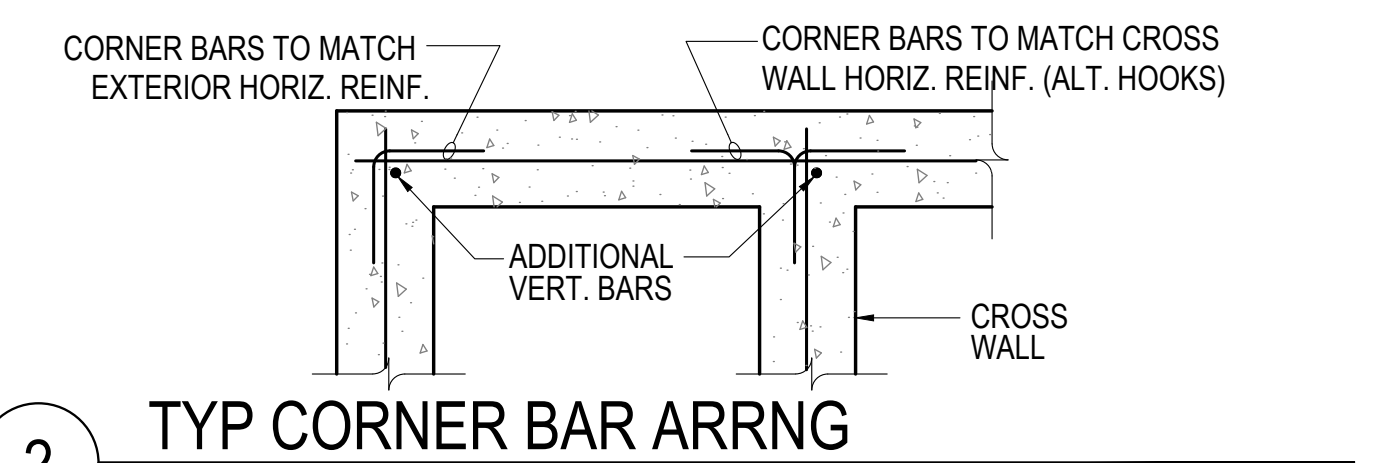
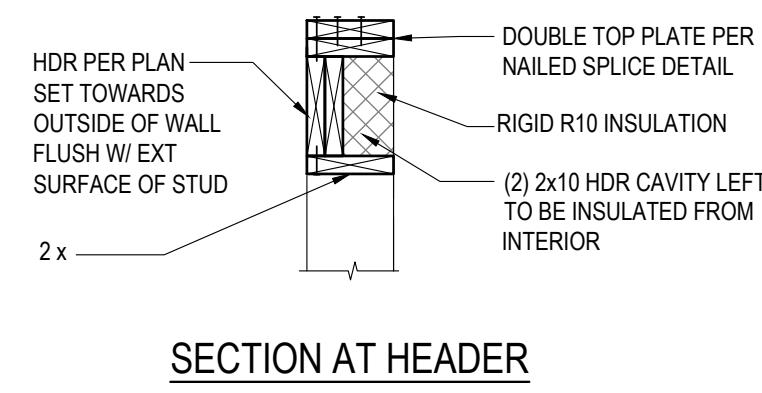


UNLESS NOTED OTHERWISE, NAILING SHALL CONFORM TO IBC TABLE 2304.9.1.

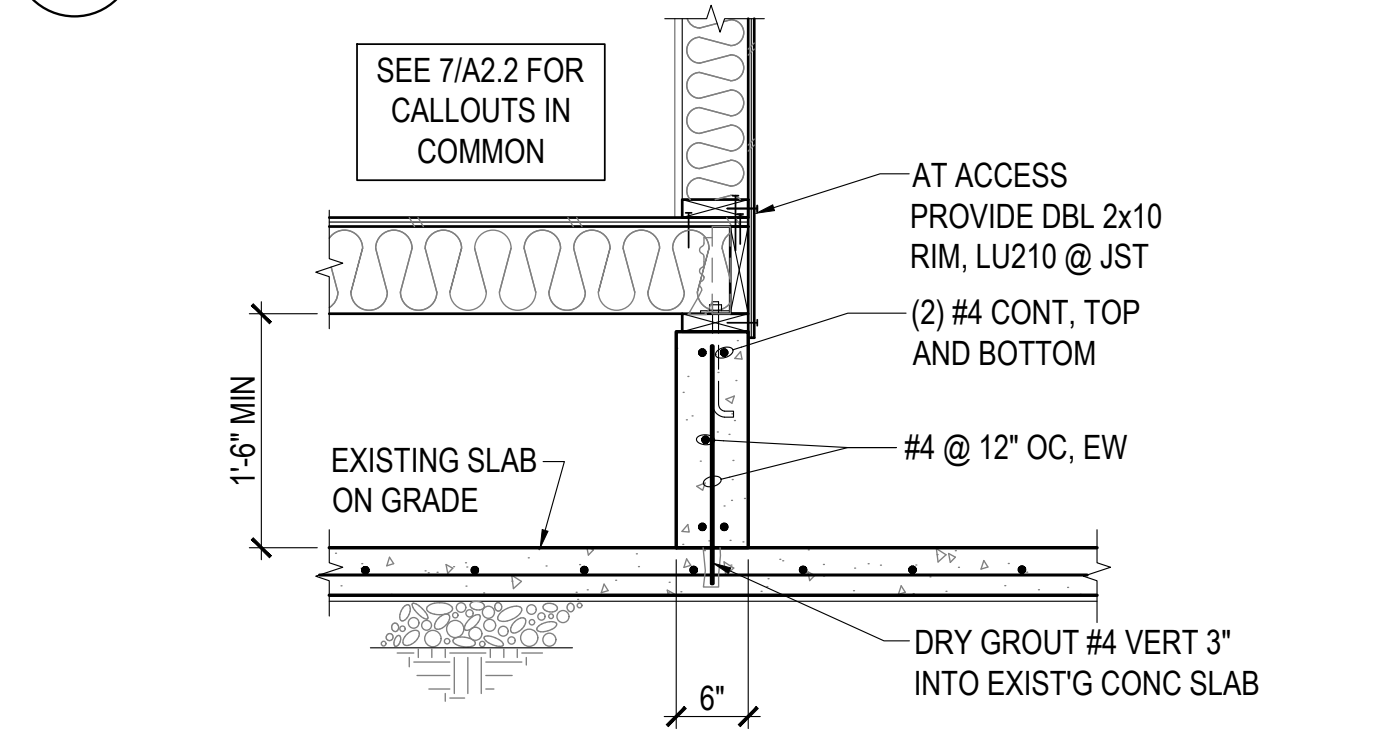
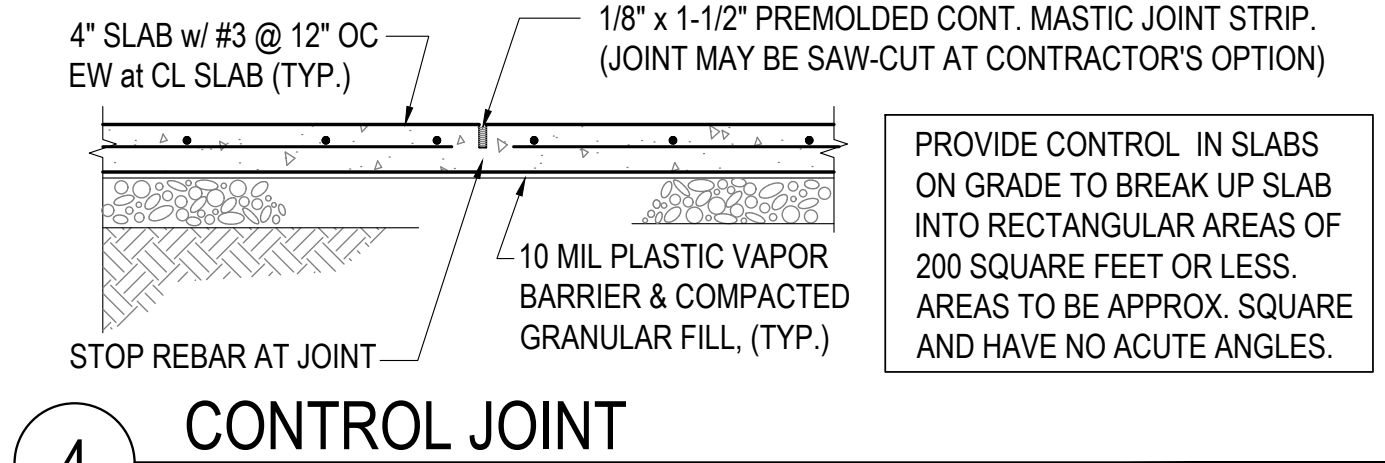


**1 TYPICAL FRAMED WALL ELEVATION**  
not to scale

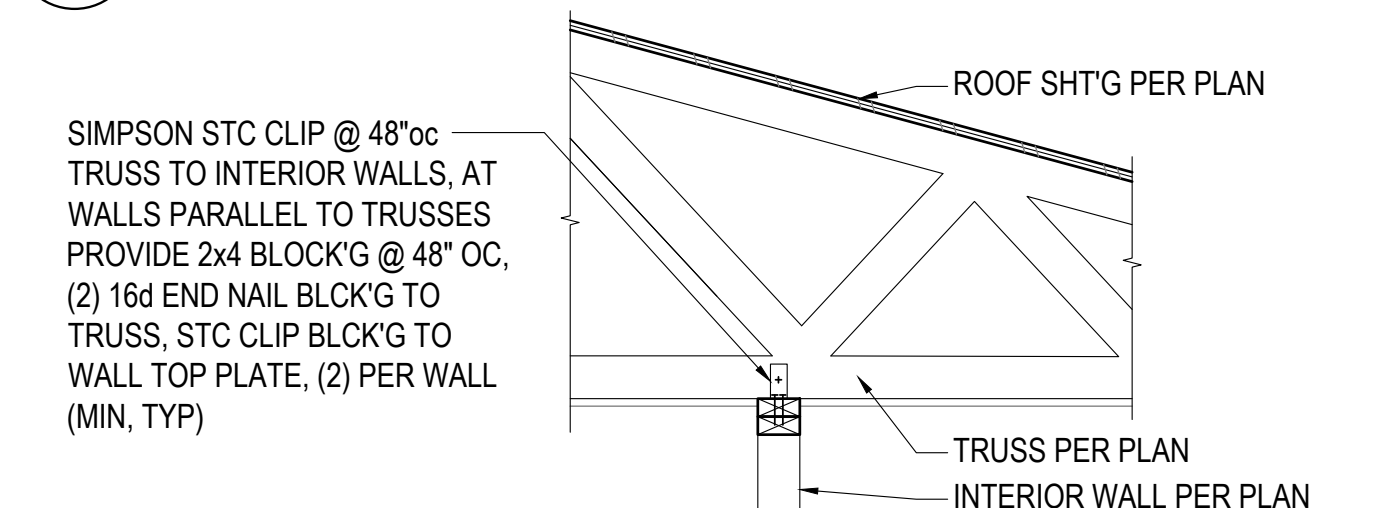
**NAILED SPLICE DETAIL**



**HD5B HOLDOWN DETAIL**  
not to scale



**NEW CONC STEM @ EXIST'G SLAB**  
3/4"=1'-0"



**INTERIOR WALL TO TRUSS**  
3/4"=1'-0"

**TYPICAL SECTION NOTES:**

**TYPICAL ROOF CONSTRUCTION**

- COMPOSITION ASPHALT SHINGLES
- o/ 15# ROOFING FELT
- o/ SHEATHING PER PLAN
- o/ PRE-MFR TRUSSES PER PLAN
- w/ R-41 (MIN) INSULATION
- w/ BAFFLE & MIN 1" AIR SPACE
- o/ 5/8" GWB CEILING

**TYPICAL WALL CONSTRUCTION**

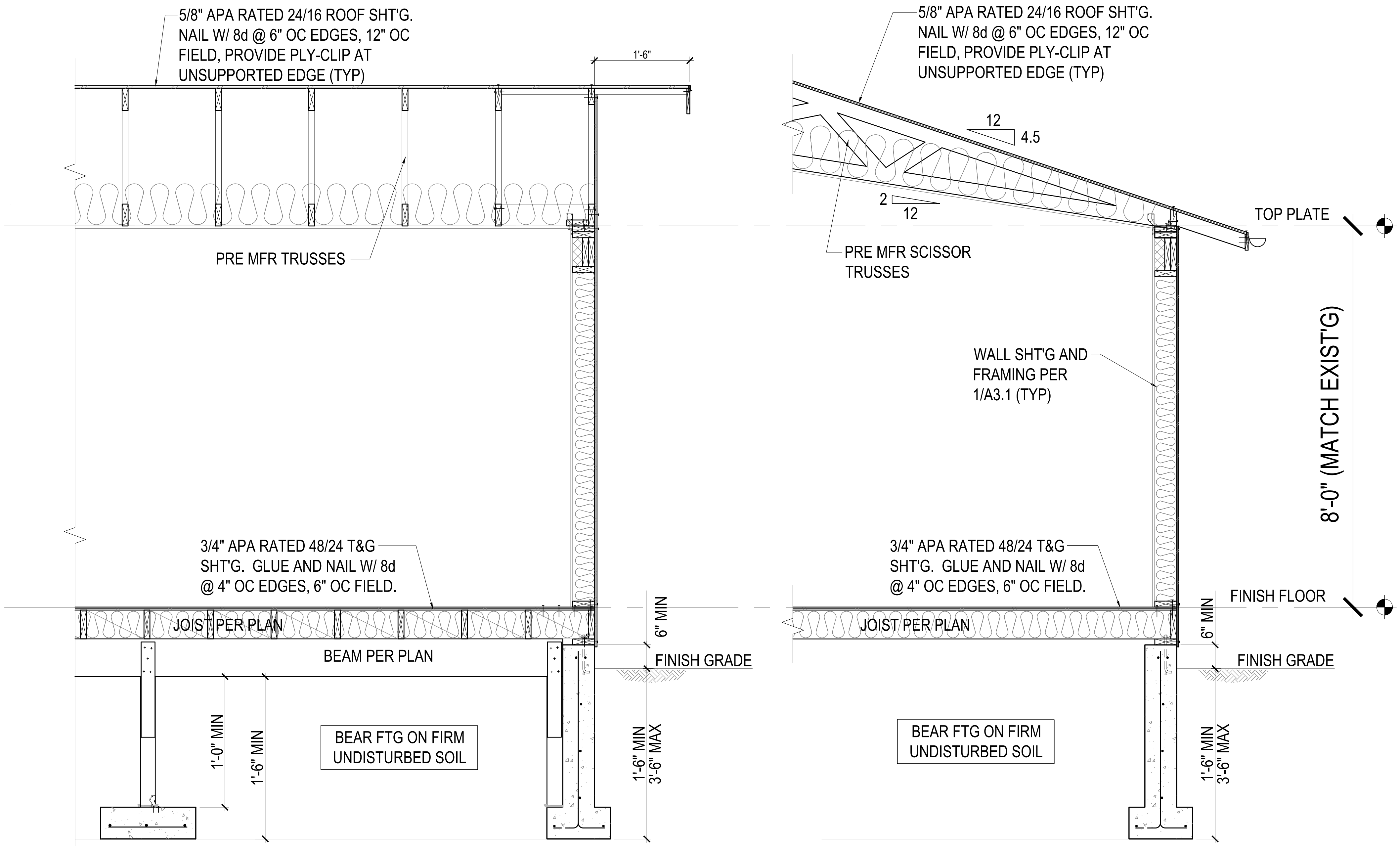
- SIDING PER ELEVATIONS
- o/ 7# ROOFING FELT
- o/ SHEATHING PER PLAN
- o/ 2x6 STUDS @ 16" OC, PER PLAN
- w/ R-21 (MIN) INSULATION (UNFACED)
- o/ 1/2" GWB
- w/ VAPOR PERMEABLE PAINT

**FLOOR CONSTRUCTION**

- FIN FLOOR PER OWNER
- FLOOR SHEATHING PER PLAN
- o/ FLOOR JOISTS PER PLAN
- w/ R30 (MIN) INSULATION

**GARAGE FLOOR CONSTRUCTION**

- 4" CONCRETE SLAB
- w/ #3 @ 12" oc EACH WAY AT CENTER OF SLAB
- o/ 2" SAND
- o/ 10 MIL VISQUEEN
- o/4" COMPACTED 5/8" CRUSHED CLASS 2 GRAVEL



**A BUILDING SECTION at EXTERIOR WALLS**  
3/4"=1'-0"



**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782

**Yeung-Nang Residence**  
Fire Repair and Addition/Remodel  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.01.21

**PERMIT SUBMITTAL**

Building Section and Details





**sliderule**  
engineering works, llc  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0782

**Yeung-Nang Residence**  
**Fire Repair and Addition/Remodel**  
6127 92nd Avenue Southeast  
Mercer Island, Washington 98040

PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.07.21

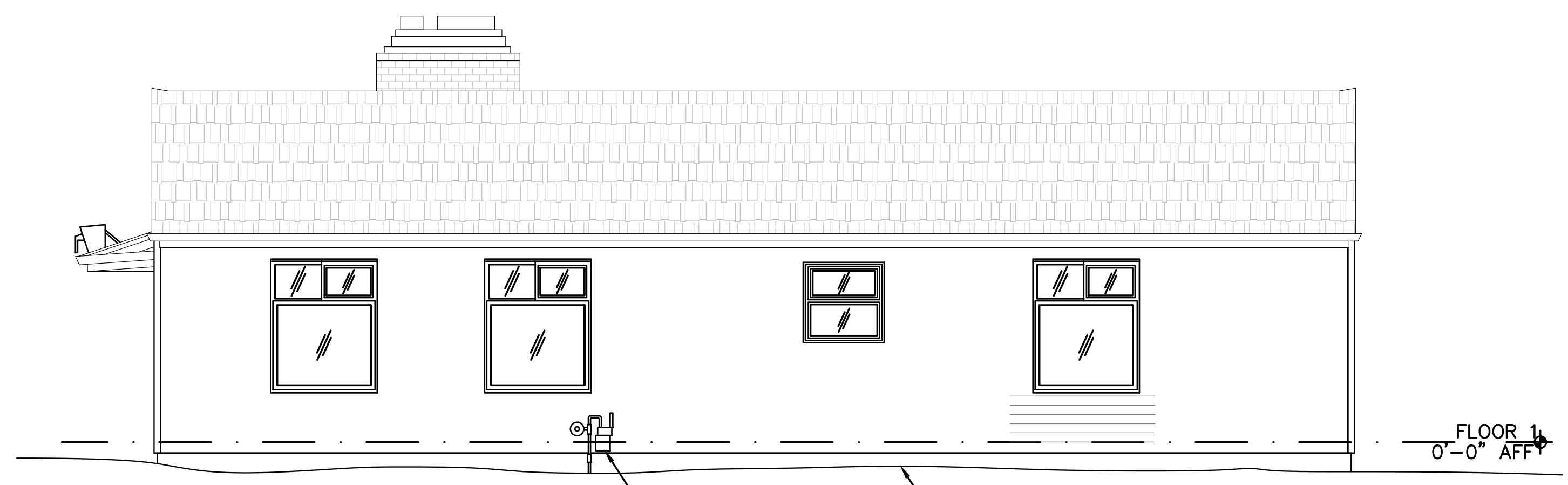
**PERMIT  
SUBMITTAL**

Existing Elevations

**A4.1**



APPROXIMATE  
GROUND SLOPE  
**NORTHEAST ELEVATION**  
SCALE: 1/4" = 1'-0"



GAS METER  
APPROXIMATE  
GROUND SLOPE  
**SOUTHEAST ELEVATION**  
SCALE: 1/4" = 1'-0"



RETRACTABLE AWNING  
APPROXIMATE  
GROUND SLOPE  
**SOUTHWEST ELEVATION**  
SCALE: 1/4" = 1'-0"



APPROXIMATE  
GROUND SLOPE  
**NORTHWEST ELEVATION**  
SCALE: 1/4" = 1'-0"





**sliderule**  
Engineering Works, LLC  
221 E Street Southeast  
Auburn, Washington 98002  
t: 206 + 360 + 0752

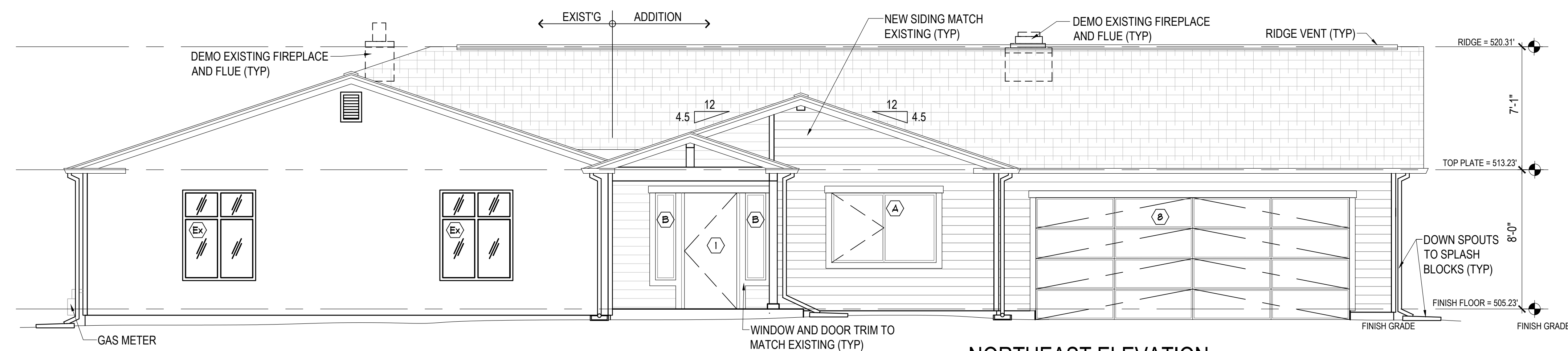
**Yeung-Nang Residence**  
**Fire Repair and Addition/Remodel**  
 6127 92nd Avenue Southeast  
 Mercer Island, Washington 98040

PROJECT MANAGER: AH  
DRAWN BY: alh  
DATE: 04.07.21

**PERMIT**  
**SUBMITTAL**

Proposed Elevations

**A4.2**



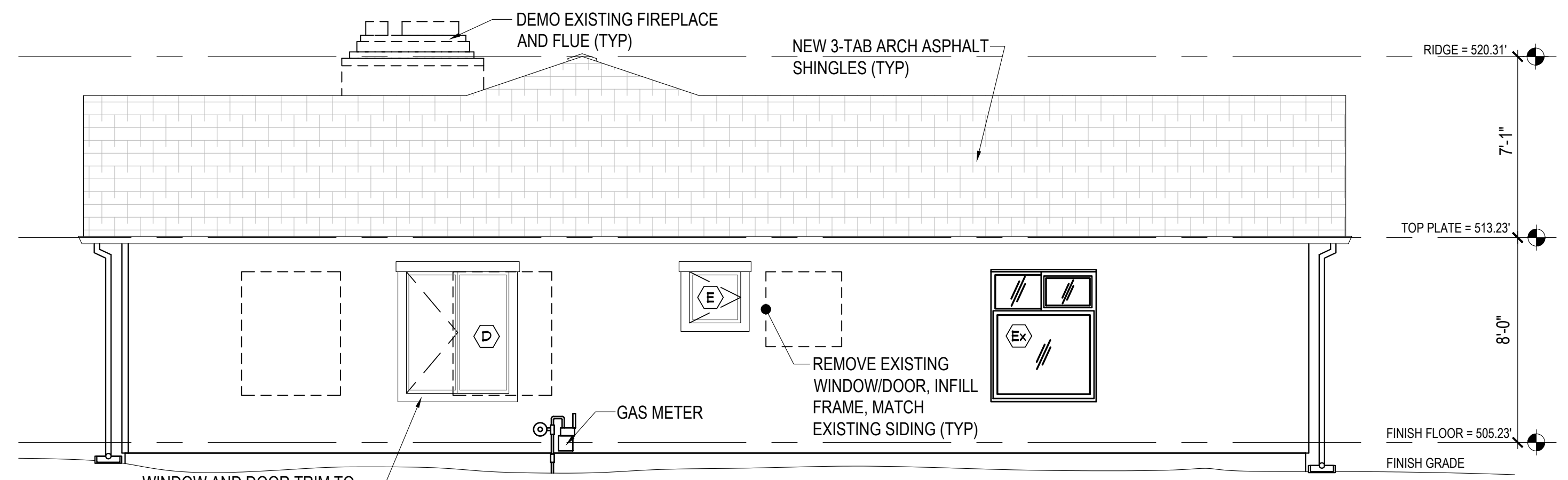
**NORTHEAST ELEVATION**

SCALE: 1/4 = 1'-0"

**DOOR SCHEDULE**

DOOR MARK	UNIT SIZE WIDTH x HEIGHT	TYPE	MIN. "U"	LOCATION	QUANTITY	REMARKS
1	3'-0" x 6'-8"	SOLID WOOD DOOR, EXTERIOR	0.30	ENTRY DOOR	1	OWNER SELECT
2	2'-8" x 6'-8"	SOLID WOOD DOOR, INTERIOR	EXEMPT	LAUNDRY DOOR	1	OWNER SELECT
3	2'-4" x 6'-8"	HOLLOW WOOD DOOR, INTERIOR	EXEMPT	BATH RM, MASTR BR	4	OWNER SELECT
4	2'-6" x 6'-8"	HOLLOW WOOD CLOSE DOOR, INTR	EXEMPT	BEDROOM 4	1	OWNER SELECT
5	2'-6" x 6'-8"	HOLLOW WOOD PORT DOOR, INTERIOR	EXEMPT	MASTER BATHROOM	1	OWNER SELECT
6	3'-0" x 6'-8"	SOLID WOOD DOOR, EXTERIOR	0.30	GARAGE/FAMILY RM	1	OWNER SELECT
7	(2) 3'-0" x 6'-8"	SLIDING GLASS DOOR, EXTERIOR	0.30	FAMILY ROOM	1	OWNER SELECT
8	18'-0" x 7'-0"	SECTIONAL ROLL-UP GARAGE DOOR	EXEMPT	GARAGE	1	OWNER SELECT
9	2'-0" x 6'-8"	HOLLOW WOOD DOOR DUAL SWING, INTR	EXEMPT	KITCHEN PANTRY	1	OWNER SELECT
EX	VARIES	VARIES	-	-	-	AS NOTED

VERIFY ROUGH OPENINGS AND SIZES



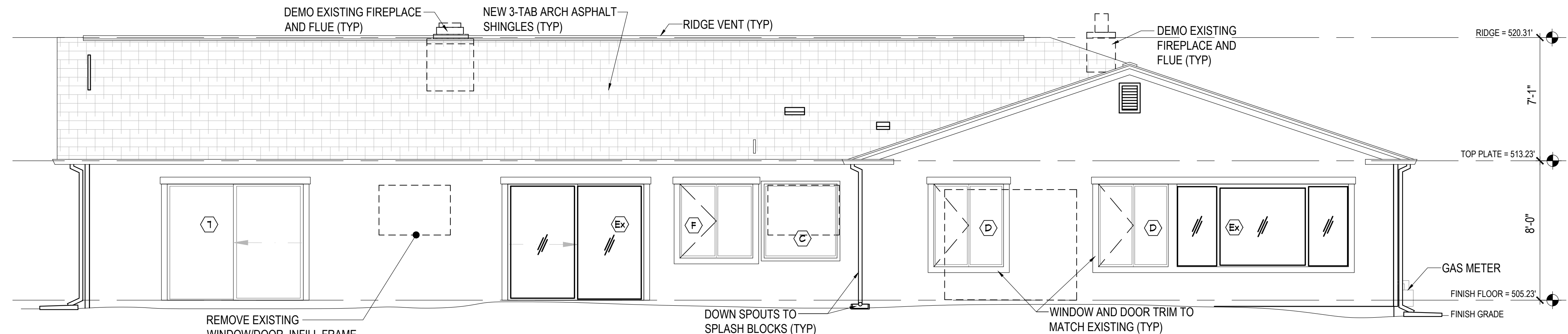
**SOUTHEAST ELEVATION**

SCALE: 1/4 = 1'-0"

**WINDOW SCHEDULE**

WINDOW MARK	UNIT SIZE WIDTH x HEIGHT	TYPE	FRAME MTL	GLAZING	MIN. "U"	MFR	MODEL	NOMINAL HEAD HT	QTY	REMARKS
A	6'-0" x 4'-0"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	OFFICE
B	1'-0" x 5'-0"	FIXED	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	2	ENTRY - SG
C	4'-0" x 4'-0"	GARDEN WINDOW	PER OWNER	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	KITCHEN
D	4'-0" x 4'-9"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER SELECT - RELOCATE EXISTG WINDOWS	SELECT	6'-8"	5	BEDROOMS - EG
E	2'-0" x 2'-0"	CASEMENT	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	MSTR BATH - PV
F	4'-0" x 4'-0"	SLIDE	MATCH EXISTG	INSULATED LOW E II	0.30	OWNER	SELECT	6'-8"	1	KITCHEN
EX	AS NOTED	VARIES	-	-	-	NO CHANGE	-	6'-8"	-	AS NOTED

PV = FROST OR PRIVACY GLASS EG = EGRESS SG = SAFETY GLASS  
VERIFY ROUGH OPENINGS AND SIZES



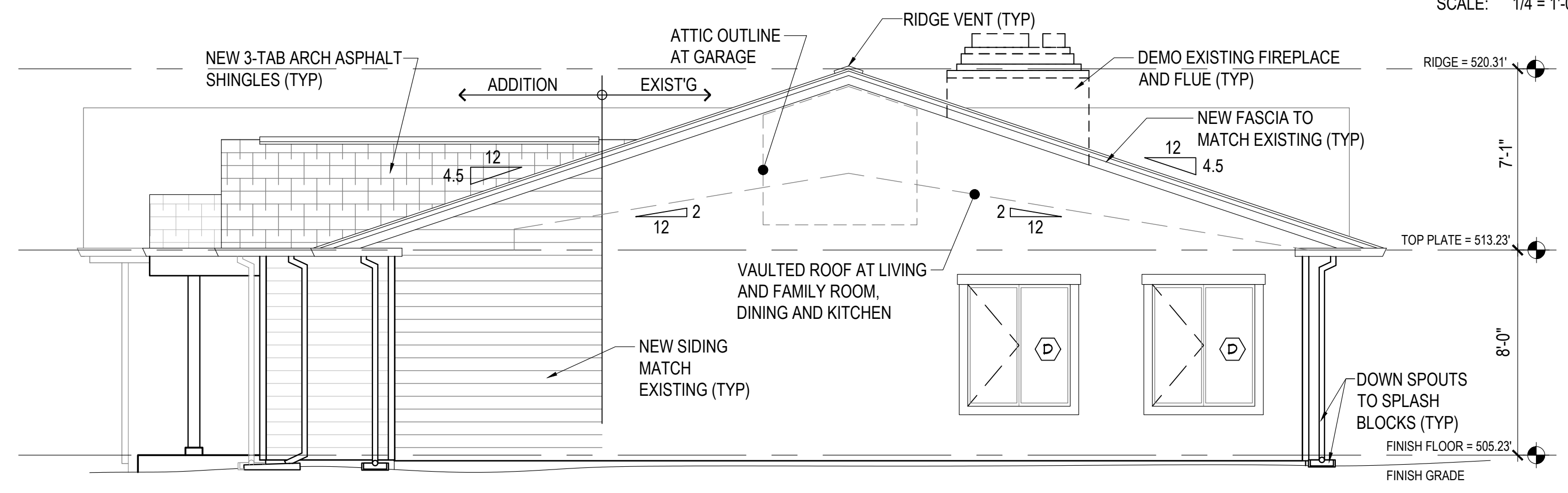
**SOUTHWEST ELEVATION**

SCALE: 1/4 = 1'-0"

**CALL BEFORE YOU DIG:**  
**1-800-424-5555**

**EXTERIOR ELEVATION NOTES:**

- (SEE SHEET A1.1 and S1.1 FOR ADDITIONAL NOTES)
- CONTRACTOR SHALL VERIFY ALL NOTES, DIMENSIONS & CONDITIONS PRIOR TO CONSTRUCTION.
  - VERIFY SHEAR WALL NAILING & HOLD-DOWNS PER PLAN & SCHEDULE PRIOR TO INSTALLING SIDING.
  - THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED & WEATHERSTRIPPED TO LIMIT AIR LEAKAGE. PROVIDE INFILTRATION CONTROL @ WINDOW & DOOR FRAMES AND PENETRATIONS & OPENINGS AT WALLS, FLOORS & ROOFS.
  - EXTERIOR WALLS TO BE 2X6 STUDS @ 16" OC (U.N.O.), INTERIOR WALLS TO BE 2X4 STUDS @ 16" OC (U.N.O.)
  - PROVIDE FIRE BLOCKING @ ALL PLUMBING AND STAIR PENETRATIONS, AND OTHER LOCATIONS PER IRC SEC R602.8. THE BUILDING ENVELOPE SHALL BE SEALED, CAULKED, GASKETED & WEATHERSTRIPPED TO LIMIT AIR LEAKAGE. PROVIDE INFILTRATION CONTROL @ WINDOW & DOOR FRAMES AND PENETRATIONS & OPENINGS AT WALLS, FLOORS & ROOFS.
  - PROVIDE GALVANIZED OR ANODIZED SHEET METAL FLASHING & COUNTER FLASHING AT ALL ROOF PENETRATIONS, CHIMNEYS, & SKYLIGHTS PER IRC SEC. R703.8.
  - SAFETY GLAZE HAZARDOUS LOCATIONS PER IRC SEC R308.4. SG = SAFETY GLASS, EG = EGRESS.
  - PROVIDE EMERGENCY ESCAPE PER IRC SEC. 310.1
  - TOP OF HANDRAIL SHALL BE NOT LESS THAN 34" OR MORE THAN 38" ABOVE THE TREAD NOSINGS. HANDRAILS SHALL BE CONTINUOUS THE FULL LENGTH OF THE FLIGHT. THE HAND GRIP PORTION SHALL NOT BE LESS THAN 1-1/4" OR MORE THAN 2" IN CROSS SECTIONAL DIMENSION. HANDRAILS ADJACENT TO WALLS SHALL HAVE MIN 1-1/2" SPACE BETWEEN THE WALL & HANDRAIL, SEE 1/A2.1.
  - PROVIDE GUARD & GUARDRAILS PER IRC SEC R312.1.
  - INSTALL SMOKE DETECTORS PER IRC R314, CARBON DIOXIDE DETECTORS PER IRC R315. CARBON DIOXIDE AND SMOKE DETECTORS TO BE 110V, PERMANENTLY WIRED W/O DISCONNECT SWITCH, INTERCONNECTED, W/ BATTERY BACKUP.
  - INSTALL A VAPOR RETARDER ON THE WARM-IN-WINTER SIDE OF THE INSULATION PER IRC SEC. R702.7.
  - PROVIDE P.T. LUMBER IN LOCATIONS PER IRC SEC. R319.1.
  - PROVIDE ROOF COVERING PER IRC SEC. R905. -INSTALL PER MFR'S SPECS.
  - PROVIDE EXTERIOR WALL COVERING PER IRC SEC. R703.
  - PROVIDE CONTINUOUS GUTTERS & DOWNSPOUTS @ EAVES AS SHOWN.
  - SITE SHALL BE GRADED & HARD SURFACES SLOPED, SO AS TO DRAIN SURFACE WATER AWAY FROM BUILDING.



**NORTHWEST ELEVATION**

SCALE: 1/4 = 1'-0"