



GENERAL NOTES:

CODES:

DESIGN IS IN ACCORDANCE WITH THE 2015 INTERNATIONAL RESIDENTIAL CODE (IRC) AS AMENDED BY THE LOCAL BUILDING DEPARTMENT.

SITE WORK:

UNLESS A SOILS INVESTIGATION REPORT BY A LICENSED SOILS ENGINEER IS PROVIDED THE FOUNDATION DESIGN IS BASED UPON AN ASSUMED AVERAGE SOIL BEARING CAPACITY OF 1500 PSF. EXTERIOR FOOTING SHALL BEAR 18" MINIMUM BELOW FINISHED GRADE UNLESS NOTED OTHERWISE. ALL FOOTINGS TO BEAR ON FIRM, UNDISTURBED EARTH BELOW ORGANIC SURFACE SOIL. ALL BACK FILL MATERIAL SHALL BE THOROUGHLY COMPACTED. FOUNDATION VENTS SHALL NOT INTERFERE WITH OUTSIDE SOIL, AND DIRECT LOAD PATH OF COLOMNS ABOVE.

CONCRETE:

REFER TO STRUCTURAL NOTES.

INSULATION AND MOISTURE PROTECTION:

UNLESS NOTED OTHERWISE, INSULATION SHALL CONFORM TO THE WASHINGTON STATE ENERGY CODES. INSULATION BAFFLES TO MAINTAIN $1\frac{1}{2}$ INCH CLEAR SPACE ABOVE INSULATION. BAFFLES TO EXTEND 6-INCHES ABOVE BATT INSULATION. BAFFLES TO EXTEND 12-INCHES ABOVE LOOSE FILL INSULATION. INSULATE BEHIND BATHTUBS, SHOWERS, PARTITIONS AND CORNERS. FACE STAPLE BATT. FRICTION FIT FACED BATT. USE 4 MIL (0.004") POLYETHYLENE VAPOR BARRIER AT WALLS. USE PVA PAINT WITH A DRY CUP PERM RATING OF ON (MAX) R-10 INSULATION UNDER ELECTRIC WATER HEATERS.

1. EXTERIOR JOINTS AROUND WINDOWS AND DOOR FRAMES, OPENINGS BETWEEN WALLS AND FOUNDATIONS, BETWEEN WALLS AND ROOF AND BETWEEN WALL PANELS, OPENINGS AT PENETRATION OF UTILITY SERVICE THROUGH WALLS, FLOORS, AND ROOF, AND ALL OTHER SUCH OPENINGS IN THE BUILDING ENVELOPE, INCLUDING ACCESS PANELS INTO UNHEATED SPACES, SHALL BE SEALED, CALKED, GASKETED OR WEATHER-STRIPPED TO LIMIT AIR INFILTRATION.

2. ALL EXTERIOR DOORS, OTHER THAN FIRE-RATED DOORS, SHALL BE DESIGNED TO LIMIT AIR INFILTRATION AROUND THEIR PERIMETER WHEN IN A CLOSED POSITION. DOORS BETWEEN RESIDENCE AND GARAGE ARE NOT CONSIDERED "FIRE-RATED" AND MUST MEET THE ABOVE REQUIREMENT.

R-10 INSULATION AT ALL HEADERS, BEAMS ABOVE OPENINGS.

ALL WINDOW, AND DOOR HEADERS SHALL BE INSULATED WITH A MINIMUM OF R-10 INSULATION

VAPOR BARRIERS / GROUND COVERS:

AN APPROVED VAPOR BAARRIER SHALL BE PROPERLY INSTALLED IN FLOOR DECKS, IN ENCLOSED RAFTER SPACES FORMED WHERE CEILINGS ARE APPLIED DIRECTLY TO THE UNDERSIDE OF ROOF RAFTERS, AND AT EXTERIOR WALLS INSETSTAPLED BATT WITH A PERM RATING LESS THAN ONE MAY BE INSTALLED IF THE VAPOR BARRIER IS TO THE WARM SIDE, STAPLES SHALL BE PLACED NOT MORE THAN 8-INCHES AND GAPS BETWEEN THE FACING AND THE FRAMING SHALL NOT EXCEED

A GROUND COVER OF 6 MIL (0.006") BLACK POLYETHYLENE OF EQUIVALENT SHALL BE LAID OVER THE GROUND IN ALL CRAWL SPACES. THE GROUND COVER SHALL BE OVERLAPPED ONE FOOT AT EACH JOINT AND SHALL EXTEND TO THE FOUNDATION WALL

THE NET FREE VENTILATION AREA FOR ATTIC VENTILATION MAY BE $\frac{1}{300}$ OF THE AREA OF THE VENTILATED SPACE PROVIDED THAT A VAPOR BARRIER HAVE A PERM RATING NOT EXCEEDING ONE IN INSTALLED ON THE WARM SIDE OF THE INSULATION.

LANDINGS AT DOORS

R311.3 FLOORS AND LANDINGS AT EXTERIOR DOORS. THERE SHALL BE A LANDING OR FLOOR ON EACH SIDE OF EACH EXTERIOR DOOR. THE WIDTH OF EACH LANDING SHALL BE NOT LESS THAN THE DOOR SERVED. EVERY LANDING SHALL HAVE A DIMENSION OF NOT LESS THAN 36 INCHES MEASURED IN THE DIRECTION OF TRAVEL. THE SLOPE AT EXTERIOR LANDINGS SHALL NOT EXCEED $\frac{1}{4}$ UNIT VERTICAL IN 12 UNIT HORIZONTAL (2 PERCENT).

R311.7 STAIRWAYS: REFER TO STAIR DETAIL ON SHEET A

R311.7.8 HANDRAILS:

HANDRAILS SHALL BE PROVIDED ON NOT LESS THAN ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH FOUR OR MORE RISERS.

R311.7.8.1 HANDRAIL HEIGHT MEASURED VERTICALLY FROM THE SLOPED PLANE ADJOINING THE TREAD NOSING, OR FINISH SURFACE OF RAMP SLOPE, SHALL BE NOT LESS THAN 34 INCHES AND NOT MORE THAN 38 INCHES.

R311.7.8.2 CONTINUITY. HANDRAILS FOR STAIRWAYS SHALL BE CONTINUOUS FOR THE FULL LENGTH OF THE FLIGHT, FROM A POINT DIRECTLY ABOVE THE TOP RISER OF THE FLIGHT TO A POINT DIRECTLY ABOVE THE LOWEST RISER OF THE FLIGHT. HANDRAIL ENDS SHALL BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS. HANDRAILS ADJACENT TO A WALL SHALL HAVE A SPACE OF NOT LESS THAN $1\frac{1}{2}$ INCHES BETWEEN THE WALL AND THE HANDRAILS.

REFER TO STAIR DETAIL ON SHEET A3 FOR MORE INFORMATION.

R312.1 GUARDS FALL PROTECTION

R312.1.1 WHERE REQUIRED. GUARDS SHALL BE LOCATED ALONG OPEN SIDED WALKING SURFACES, INCLUDING STAIRS, RAMPS, AND LANDINGS, THAT ARE LOCATED MORE THAN 30 INCHES MEASURED VERTICALLY TO THE FLOOR OR GRADE BELOW AT ANY POINT WITHIN 36 INCHES HORIZONTALLY TO THE EDGE OF THE OPENING SIDE. INSECT SCREENING SHALL NOT BE CONSIDERED AS A GUARD.

R312.1.2 HEIGHT. REQUIRED GUARDS AT OPEN SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES, OR LANDINGS, SHALL BE NOT LESS THAN 36 INCHES IN HEIGHT AS MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE OR THE LINE CONNECTING THE LANDING EDGES OF THE

R312.2 WINDOW FALL PROTECTION

ASTMF 2090

R312.2.1 WINDOW SILLS. IN DWELLING UNITS, WHERE THE TOP OF THE SILL OF AN OPERABLEWINDOW OPENING IS LOCATED LESS THAN 24 INCHES ABOVE THE FINISHED FLOOR AND GREATER THAN 72 INCHES ABOVE THE FINISHED GRADE OR OTHER SURFACE BELOW ON THE EXTERIOR OF THE BUILDING, THE OPERABLE WINDOW SHALL COMPLY WITH ONE OF THE FOLLOWING:

1. OPERABLE WINDOWS WITH OPENINGS THAT WILL NOT ALLOW A 4 INCHES DIAMETER SPHERE TO PASS THROUGH THE OPENING WHERE THE OPENING IS IN ITS LARGEST OPENED POSITION.

2. OPERABLE WINDOWS THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICE THAT COMPLY WITH

R314 SMOKE ALARMS:

R314.3 LOCATIONS. SMOKE ALARMS SHALL BE INSTALLED IN THE FOLLOWING LOCATIONS:

1. IN EACH SLEEPING ROOM

2. OUTSIDE EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS.

3. ON EACH ADDITIONAL STOY OF THE DWELLING, INCLUDING BASEMENT AND HABITABLE ATTICS. IN DWELLINGS, OR DWELLING UNITS WITH SPLIT LEVELS AND WITHOUT A INTERVENING DOOR BETWEEN THE ADJACENT LEVELS, A SMOKE ALARM INSTALLED ON THE UPPER LEVEL SHALL SUFFICE FOR THE ADJACENT LOWER LEVEL PROVIDED THAT LOWER LEVEL IS LESS THAN ONE FULL STORYBELOW THE UPPER LEVEL.

4. SMOKE ALARMS SHALL BE INSTALLED NOT LESS THAN 3 FEET HORIZONTALLY FROM THE DOOR OR OPENING OF A BATHROOM THAT CONTAINS A BATHTUB OR SHOWER UNLESS THIS WOULD PREVENT PLACEMENT OF A SMOKE ALARM REQUIRED BY SECTION R314.3

R314.6 POWER SOURCE. SMOKE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERICAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY, WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTIONG SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION.

R314.5 COMBINATION ALARMS

COMBINATION SMOKE AND CARBON MONOXIDE ALARMS SHALL BE PERMITTED TO BE USED IN LIEU OF

R315 CARBON MONOXIDE ALARMS

R315.2.1 NEW CONSTRUCTION. FOR NEW CONSTRUCTION, CARBON MONOXIDE ALARMS SHALL BE PROVIDED IN DWELLING UNITS WHERE EITHER OR BOTH OF THE FOLLOWING CONDITION EXIST.

1. THE DWELLING UNIT CONTAINS A FUEL FIRED APPLIANCE.

2. THE DWELLING UNIT HAS AN ATTACHED GARAGE WITH AN OPENING THAT COMMUNICATES WITH THE DWELLING UNIT.

R315.5 POWER SOURCE. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERICAL SOURCE AND, WHERE PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM A BATTERY. WIRING SHALL BE PERMANENT AND WITHOUT A DISCONNECTIONG SWITCH OTHER THAN THOSE REQUIRED FOR OVERCURRENT PROTECTION.

R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED.
BASEMENT, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY.

R310.2.1 MINIMUM OPENING AREA. EMERGENCY AND ESCAPE RESCUE OPENING SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET. THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENING FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24 INCHES AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES.

R310.2.2 WINDOW SILL HEIGHT. WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES ABOVE THE FLOOR.

R310.2.3 WINDOW WELLS. THE HORIZONTAL AREA OF THE WINDOW WELL SHALL BE NOT LESS THAN 9 SQUARE FEET, WITH THE HORIZONTAL PROJECTION AND WIDTH OF NOT LESS THAN 36 INCHES. THE AREA OF THE WINDOW WELL SHALL ALLOW THE EMERGENCY ESCAPE AND RESCUE OPENING TO BE FULLY OPENED.

R311 MEANS OF EGRESS

R311.2 EGRESS DOOR.

NOT LESS THAN ONE EGRESS DOOR SHALL BE PROVIDED FOR EACH DWELLING UNIT. THE EGRESS DOOR SHALL BE SIDE-HINGED, AND SHALL PROVIDE A CLEAR WIDTH OF NOT LESS THAN 32 INCHES WHERE MEASURED BETWEEN THE FACE OF THE DOOR AND THE STOP, WITH THE DOOR OPEN 90 DEGREES. THE CLEAR HEIGHT OF THE DOOR OPENING SHALL BE NOT LESS THAN 78 INCHES IN HEIGHT MEASURED FROM THE TOP OF THE THRESHOLD TO THE BOTTOM OF THE STOP.

R325 MEZZANINES

R325.2 THE CLEAR HEIGHT ABOVE AND BELOW MEZZANINE FLOOR CONSTRUCTION SHALL BE NOT LESS THAN 7 FEET.

R325.5 MEZZANINES SHALL BE OPEN AND UNOBSTRUCTED TO THE ROOM IN WHICH THEY ARE LOCATED EXCEPT FOR WALLS NOT MORE THAN 42 INCHES IN HEIGHT, COLUMNS, AND POSTS.

R1004 FACTORY BUILT FIREPLACES

R1004.1 GENERAL. FACTORY-BUILT FIREPLACES SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED IN ACCORDANCE WITH THE CONDITIONS OF THE LISTINGS. FACTORY-BUILT FIREPLACES SHALL BE TESTED IN ACCORDANCE WITH UL 127.

R1004.2 HEARTH EXTENSIONS. HEARTH EXTENSIONS OF APPROVED FACTORY-BUILT FIREPLACES SHALL BE INSTALLED IN ACCORDANCE WITH THE LISTING OF THE FIREPLACE. THE HEARTH EXTENSION SHALL BE READILY DISTINGUISHABLE FROM THE SURROUNDING FLOOR AREA. LISTED AND LABELED HEARTH EXTENSIONS SHALL COMPLY WITH UL 1618.

R1005 FACTORY-BUILT CHIMNEYS

R100.5.1 LISTING. FACTORY-BUILT CHIMNEYS SHALL BE LISTED AND LABELED AND SHALL BE INSTALLED AND TERMINATED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

R1006.1 EXTERIOR AIR

R1006.1.1 FACTORY-BUILT FIREPLACE. EXTERIOR COMBUSTION AIR DUCTS FOR THE FACTORY-BUILT FIREPLACE SHALL BE LISTED COMPONENT OF THE FIREPLACE AND SHALL BE INSTALLED IN ACCORDANCE WITH THE FIREPLACE MANUFACTURER'S INSTRUCTION.

R311.6 HALLWAYS:

THE WIDTH OF HALLWAYS SHALL BE NOT LESS THAN 3 FEET

M1602 RETURN AIR

M1602.2 RETURN AIR OPENINGS. RETURN AIR OPENINGS FOR HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS SHALL COMPLY ALL OF THE FOLLOWING:

1. OPENINGS SHALL NOT BE LOCATED LESS THAN 10 FEET MEASURED IN ANY DIRECTION FROM AN OPEN COMBUSTION CHAMBER OR DRAFT HOOD OF ANOTHER APPLIANCE LOCATED IN THE SAME ROOM OR SPACE.

2. THE AMOUNT OF RETURN AIR TAKEN FROM ANY ROOM OR SPACE SHALL BE NOT GREATER THAN THE FLOW RATE OF SUPPLY AIR DELIVERED TO SUCH ROOM OR SPACE.

3. RETURN AND TRANSFER OPENING SHALL BE SIZED IN ACCORDANCE WITH THE APPLIANCE OR EQUIPMENT MANUFACTURERS' INSTALLATION INSTRUCTIONS, MANUAL D OR THE DESIGN OF REGISTERED DESIGN PROFESSIONAL.

4. RETURN AIR SHALL NOT BE TAKEN FROM A CLOSET, BATHROOM, TOILET ROOM, KITCHEN, GARAGE, MECHANICAL ROOM, BOIL ROOM, FURNACE ROOM OR UNCONDITIONED ATTIC.

M1502.4 CLOTHES DRYER:

DRYER EXHAUST DUCTS SHALL CONFORM TO THE REQUIREMENT SECTION M1502.4.1 THROUGH M1502.4.7

R302.5 DWELLING-GARAGE OPENING AND PENETRATION PROTECTION R302.5.1 OPENING BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS

THAN 1 $\frac{3}{8}$ INCHES IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 $\frac{3}{8}$ THICK, OR 20 MINUTE FIRE RATED DOOR, EQUIPPED WITH A SELF-CLOSING DEVICE.

PROVIDE ONE LAYER }" GWB TYPE "X" AT CEILINGS COMMON WITH HABITABLE AREAS ABOVE
-WHERE THE SEPARATION IS A FLOOR-CEILING ASSEMBLY, CLAD ALL SUPPORT COLUMNS, BEAMS AND WALLS WITH ONE
LAYER \" GWB.
-THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE AND ATTIC AREA WITH NO LESS THAN \" GWB ON THE

OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSE SHALL NOT BE PERMITED.

R302.5.2 DUCT PENETRATION. DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE SHEET STEEL OR OTHER APPROVED MATERIAL AND SHALL NOT HAVE OPENING INTO THE GARAGE.

R807 ATTIC ACCESS:

GARAGE SIDE.

R807.1 THE ROUGH-FRAMED OPENING SHALL BE NOT LESS THAN 22 INCHES BY 30 INCHES AND SHALL BE LOCATED IN A HALLWAY OR OTHER READILY ACCESSIBLE LOCATION. WHERE LOCATED IN A WALL, THE OPENING SHALL BE NOT LESS THAN 22 INCHES WIDE BY 30 INCHES HIGH. WHERE THE ACCESS IS LOCATED IN THE CEILING, MINIMUM UNOBSTRUCTED HEAD-ROOM IN THE ATTIC SPACE SHALL BE 30 INCHES AT SOME POINT ABOVE THE ACCESS MEASURED VERTICALLY FROM THE BOTTOM OF THE CEILING FRAMING MEMBERS.

R311.7.1 STAIR WIDTH:

STAIRWAYS SHALL NOT BE LESS THAN 36" IN CLEAR WIDTH AT ALL POINTS ABOVE THE HANDRAIL HEIGHT AND BELOW THE REQUIRED HEADROOM HEIGHT. HANDRAILS SHALL NOT POJECT MORE THAN 4-1/2" ON EITHER SIDE OF THE STAIRWAY AND THE MINIMUM CLEAR WIDTH OF THE STAIRWAY AT AND BELOW THE HANDRAIL HEIGHT, INCLUDING TREADS AND LANDINGS, SHALL NOT BE LESS THAN 31-1/2" WHERE THE HANDRAIL IS INSTALLED ON ONE SIDE AND 27" WHERE HANDRAILS ARE INSTALLED ON BOTHE SIDES.

R311.7.5.1 RISERS

THE RISER HEIGHT SHALL BE NOT MORE THAN $7\frac{3}{4}$ INCHES. THE RISER TO BE MEASURED VERTICALLY BETWEEN LEADING EDGES OF THE ADJACENT TREADS. THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN $\frac{3}{8}$ INCH.

OPEN RISERS ARE PERMITTED PROVIDED THAT THE OPENING LOCATE MORE THAN 30 INCHES, AS MEASURED VERTICALLY, TO THE FLOOR OR GRADE BELOW DO NOT PERMIT THE PASSAGE OF 4 INCHES DIAMETER SPHERE.

R311.7.5.2 TREADS

THE TREAD DEPTH SHALL BE NOT LESS THAN 10 INCHES. THE TREAD DEPTH SHALL BE MEASURED HORIZONTALLY BETWEEN THE VERTICAL PLANES OF THE FOREMOST PROJECTION OF ADJACENT TREADS AND AT A RIGHT ANGLE TO THE TREAD'S LEADING EDGE. THE GREATEST TREAD DEPTH WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN $\frac{3}{8}$ INCH.

R311.7.10.1 SPIRAL STAIRS:

SPIRAL STAIRWAYS ARE PERMITTED, PROVIDED THAT THE CLEAR WIDTH AT AND BELOW THE HANDRAIL IS NOT LESS THAN 26 INCHES AND THE WALKLINE RADIUS IS NOT GREATER THAN $24\frac{1}{2}$ INCHES. EACH TREAD SHALL HAVE A DEPTH OF NOT LESS THAN $6\frac{3}{4}$ INCHES AT THE WALKLINE. ALL TREADS SHALL BE IDENTICAL, AND THE RISE SHALL BE NOT MORE THAN $9\frac{1}{2}$ INCHES. HEADROOM SHALL BE NOT LESS THAN 6 FEET 6 INCHES.

R311.7.9 ILLUMINATION:

STAIRWAYS SHALL BE PROVIDED WITH ILLUMINATION IN ACCORDANCE WITH SECTION R303.7

R308-SAFETY GLAZING

R308.4 HAZARDOUS LOCATIONS. THE LOCATIONS SPECIFIED IN SECTIONS R308.4.1 TO R.308.4.7 SHALL BE CONSIDERED TO BE SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSE OF GLAZING.

R308.4.1 GLAZING IN DOORS. GLAZING IN FIXED AND OPERABLE PANELS OF SWINGING, SLIDING, AND BIFOLD DOORS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

R308.4.2 GLAZING ADJACENT TO DOORS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR SHALL BE CONSIDERED A HAZARDOUS LOCATION WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE FLOOR OR WALKING SURFACE AND IT MEETS EITHER OF THE FOLLOWING CONDITIONS:

1. WHERE THE GLAZING IS WITHIN 24 INCHES OF EITHER SIDE OF THE DOOR IN THE PLANE OF THE DOOR IN A CLOSED POSITION.

2. WHERE THE GLAZING IS ON A WALL PERPENDICULAR TO THE PLANE OF THE DOOR IN A CLOSED POSITION AND WITHIN 24 INCHES OF THE HINGE SIDE OF AN IN-SWINGING DOOR

R308.4.3 GLAZING IN WINDOWS. GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL THAT MEETS ALL OF THE FOLLOWING CONDITIONS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION:

1. THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 18 INCHES ABOVE THE FLOOR

R308.4.5 GLAZING AND WET SURFACES. GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS, WHIRLPOOLS, SAUNAS, STEM ROOMS, BATHTUBS, SHOWERS AND INDOOR OR OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES (1524 MM) MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION. THIS SHALL APPLY TO SINGLE GLAZING AND EACH PANE IN MULTIPLE GLAZING.

R308.4.6 GLAZING ADJACENT TO STAIRS AND RAMPS. GLAZING WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS LESS THAN 36 INCHES (914 MM) ABOVE THE PLANE OF THE ADJACENT WALKING SURFACES OF STAIRWAYS, LANDINGS,S BETWEEN FLIGHTS OF STAIRS AND RAMPS SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION

R308.4.7 GLAZING ADJACENT TO THE BOTTOM STAIR LANDING AT THE BOTTOM OF THE STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60 INCHES HORIZONTAL ARCH LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED TO BE A HAZARDOUS LOCATION.

PARCEL NUMBER: 252404-9217

2015 ENERGY GLAZING:

U-FACTORS OF FENESTRATION PRODUCTS (WINDOWS, DOORS AND SKYLIGHTS) SHALL BE DETERMINED IN ACCORDANCE WITH NFRC 100 BY AN ACCREDITED, INDEPENDENT LABORATORY. WINDOWS SHALL BE NFRC CERTIFIED OR USE DEFAULT GLAZE FENESTRATION VALUES, PER 303.1.3

TABLE R402.1.1

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT CLIMATE ZONE 5 AND MARINE 4 ENESTRATION U-FACTOR 0.28 0.50 SKYLIGHT U-FACTOR GLAZED FENESTRATION SHGC NR CEILING R-VALUE 49 WOOD FRAME WALL RªVALUE 21 int Mass Wall R-Value 21/21 FLOOR R-VALUE BELOW-GRADE WALL R-VALUE 10/15/21 int + TB SLAB R-VALUE & DEPTH 10, 2 ft

	TABLE 406.2-ENERGY CREDITS	
OPTION	DESCRIPTION	CREDIT(S)
1a	EFFICIENT BUILDING ENVELOPE 1a	0.5
1b	EFFICIENT BUILDING ENVELOPE 1b	1.0
1c	EFFICIENT BUILDING ENVELOPE 1c	2.0
1d ^a	EFFICIENT BUILDING ENVELOPE 1d	0.5
2a	AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2a	0.5
2b	AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2b	1.0
2c	AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION 2c	1.5
3a ⁵	HIGH EFFICIENT HVAC EQUIPMENT 3a	1.0
3b ^b	HIGH EFFICIENT HVAC EQUIPMENT 3b	1.0
3c ^b	HIGH EFFICIENT HVAC EQUIPMENT 3c	1.5
3d ^⁵	HIGH EFFICIENT HVAC EQUIPMENT 3d	1.0
4	HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM	1.0
5a	EFFICIENT WATER HEATING 5a	0.5
5b	EFFICIENT WATER HEATING 5b	1.0
5c	EFFICIENT WATER HEATING 5c	1.5
5d	EFFICIENT WATER HEATING 5d	0.5
6	RENEWABLE ELECTRIC ENERGY	0.5

FOOTNOTES:

a. PROJECTS USING THIS OPTION MAY NOT USE OPTION 1a, 1b or 1c.

M1507 MECHANICAL VENTILATION

BOTH MUST MEET THE STANDARD TO RECEIVE THE CREDIT

b. PROJECTS MAY ONLY INCLUDE CREDIT FROM ONE SPACE HEATING OPTION, 3a, 3b, 3c or 3d. WHEN A HOUSING UNIT HAS TWO PIECES OF EQUIPMENT (I.E.,TWO FURNACES)

c. PLUMBING FIXTURES FLOW RATINGS, LOW FLOW PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING REQUIREMENTS:

1. RESIDENTIAL BATHROOM LAVATORY SINK FAUCETS: MAXIMUM FLOW RATE-3.8L/MIN (1.0 GAL/MIN) WHEN TESTED IN ACCORDANCE WITH ASME A112.18.1/CSA B125.1

2. RESIDENTIAL KITCHEN FAUCETS: MAXIMUM FLOW RATE-6.6 L/MIN (1.75 GAL/MIN) WHEN TESTED IN ACCORDANCE WITH ASME A 112.18.1/CSA B125.1.

3. RESIDENTIAL SHOWERHEADS: MAXIMUM FLOW RATE-6.6 L/MIN (1.75 GAL/MIN) WHEN TESTED IN ACCORDANCE WITH ASME A112.18.1/CSA B125.1.

M1507.1 GENERAL. WHERE LOCAL EXHAUST OR WHOLE-HOSUE MECHANICAL VENTILATION IS PROVIDED, THE EQUIPMENT SHALL BE DESIGNED IN ACCORDANCE WITH THIS SECTION & TABLE BELOW:

TABLE M1506.2 DUCT LENGTH

DUCT TYPE			Fl	EX DU	CT						SMOO	TH-WA	LL DUC	T		
FAN AIRFLOW RATING (CFM @ 0.25 INCH wc) a	50	80	100	125	150	200	250	300	50	80	100	125	150	200	250	300
Diameter ^b (inches)						Max	kimum I (feet)	ength	a, d, e)						
3	Х	Х	Х	Х	Х	Х	Х	Х	5	Х	Х	Х	Х	Х	Х	Х
4	56	4	Х	Х	Х	Х	Х	Х	114	31	10	Х	Х	Х	Х	Х
5	NL	81	42	16	2	Х	Х	Х	NL	152	91	51	28	4	Х	Х
6	NL	NL	158	91	55	18	1	Х	NL	NL	NL	168	112	53	25	9
7	NL	NL	NL	NL	161	78	40	19	NL	NL	NL	NL	NL	148	88	54
8 and above	NL	NL	NL	NL	NL	189	111	69	NL	NL	NL	NL	NL	NL	198	133

or SI: 1 foot = 304 8 mm

For SI: 1 foot = 304.8 mm
a. Fan airflow rating shall be in accordance with ANSI/AMCA 210-ANSI/ASHRAE 51

b. For noncircular ducts, calculate the diameter as four times the cross-sectional area divided by the perimeter.

c. This table assumes that elbows are not used. Fifteen feet of allowable duct length shall be deducted for each elbow installed in the duct run.
d. NL = no limit on duct length of this size.
e. X = not allowed. Any length of duct of this size with assumed turns and fittings will exceed the rate pressure drop.

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

SOM THOUSE WE SEE THE								
DWELLING UNIT	NUMBER OF BEDROOMS							
FLOOR AREA	0 - 1	0-1 2-3 4-5			8 - 9			
(square feet)		AIRFLOW IN CFM						
< 1,500	30	45	60	75	90			
1,501 - 3,000	45	60	75	90	105			
3,001 - 4,500	60	75	90	105	120			
4,501 - 6,000	75	90	105	120	135			
6,001 - 7,500	90	105	120	135	150			
> 7 500	105	120	135	150	165			

For SI: 1 foot = 0.0929 m, 1 cubi 2 foot per minute = 0.0004719 m /s.

TABLE M1507.3.3(2) INTERMITTENT WHOLE-HOUSE MECHANICAL VENTILATION RATE FACTORS a, b							
RUN-TIME PERCENTAGE IN EACH 4-HOUR SEGMENT	25%	33%	50%	66%	75%	100%	
Factor a	4.0	3.0	2.0	1.5	1.3	1.0	

a. For ventilation system run time values between those given, the factors are permitted tobe determined by interpolation b. Extrapolation beyond the table is prohibited.

TABLE M1507.4 MINIMUM REQUIRED LOCAL EXHAUST RATES FOR

ONE AND TWO-FAMILY DWELLINGS							
AREA TO BE EXHAUSTED	EXHAUST RATES						
KITCHENS	100 CFM intermittent or 25 CFM continuous						
BATHROOM, TOILET ROOMS , LAUNDRY/UTILITY ROOM	50 CFM intermittent or 90 CFM continuous						

DATE REVISION REV. BY: 10-05-2020 REVISION T.N. INTAKE COMMENTS 04-19-2021 02 T.N. REVIEW COMMENTS Image: Company of the property o

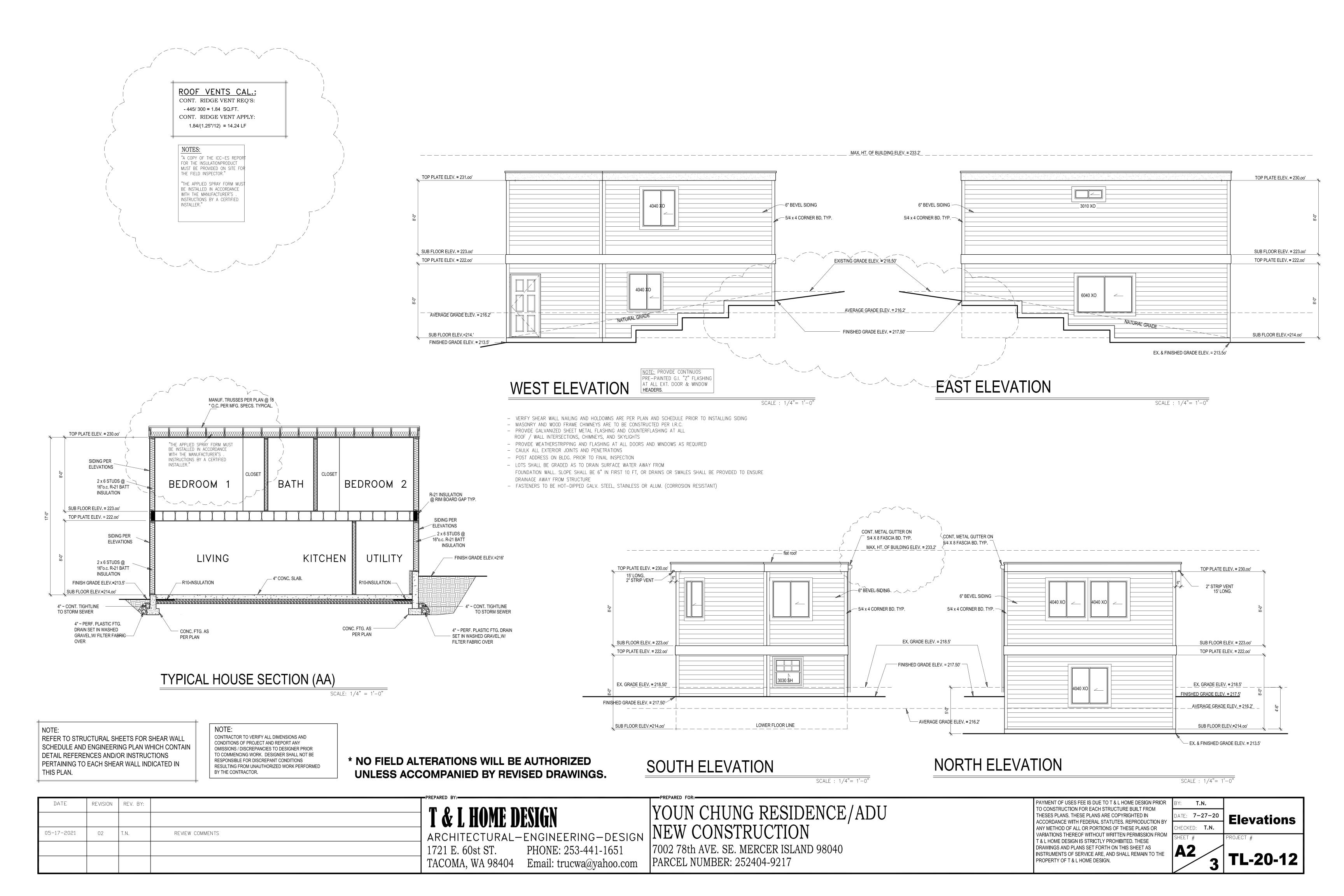
T & L HOME DESIGN

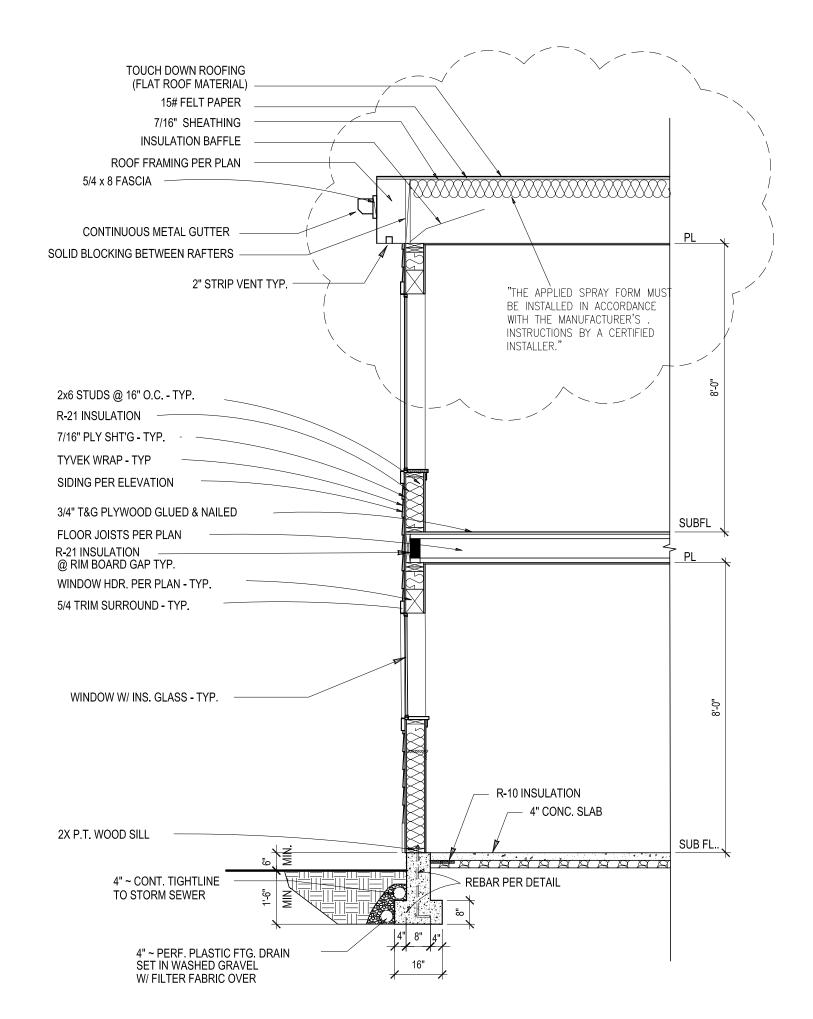
ARCHITECTURAL—ENGINEERING—DESIGN 1721 E. 60st ST. PHONE: 253-441-1651 TACOMA, WA 98404 Email: trucwa@yahoo.com

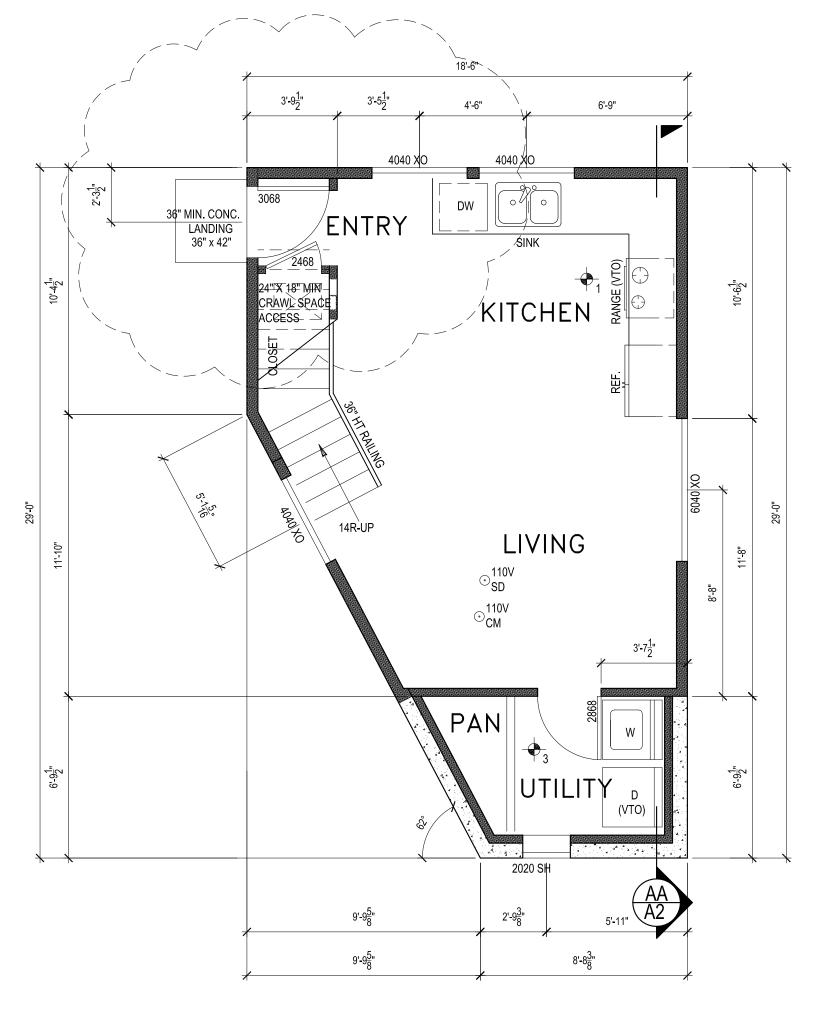
YOUN CHUNG RESIDENCE/ADU NEW CONSTRUCTION
7002 78th AVE. SE. MERCER ISLAND 98040

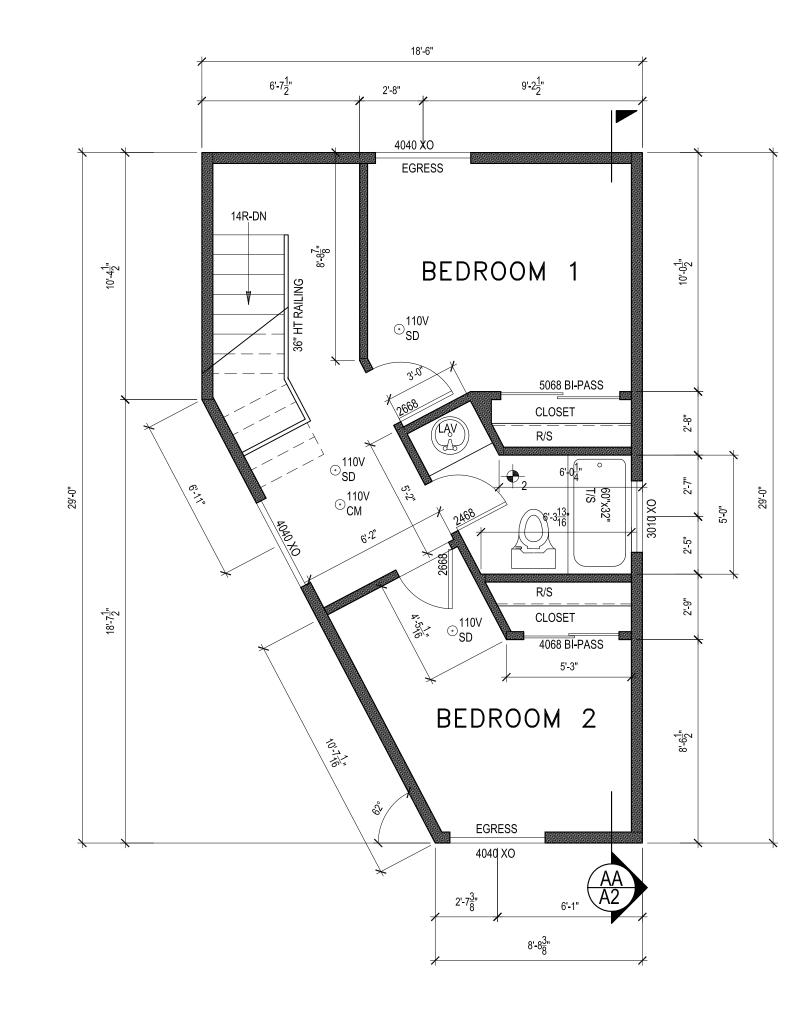
PAYMENT OF USES FEE IS DUE TO T & L HOME DESIGN PRIOR TO CONSTRUCTION FOR EACH STRUCTURE BUILT FROM THESES PLANS. THESE PLANS ARE COPYRIGHTED IN ACCORDANCE WITH FEDERAL STATUTES. REPRODUCTION BY ANY METHOD OF ALL OR PORTIONS OF THESE PLANS OR VARIATIONS THEREOF WITHOUT WRITTEN PERMISSION FROM T & L HOME DESIGN IS STRICTLY PROHIBITED. THESE DRAWINGS AND PLANS SET FORTH ON THIS SHEET AS INSTRUMENTS OF SERVICE ARE, AND SHALL REMAIN TO THE PROPERTY OF T & L HOME DESIGN.

IOR	BY: T.N.	Gararal
L DV	DATE: 7-27-20	General
N BY	CHECKED: T.N.	Notes
ROM	SHEET #	PROJECT #
HE	A1	T I 60 4
	3	TL-20-12









TYPICAL WALL SECTION AT HOUSE

UPPER FLOOR PLAN =445 SF.

445 SF. LOWER LEVEL: TOTAL: 845 SF.

AREA SUMMARY

A WRITTEN REPORT OF THE TEST RESULTS BE SIGNED BY THE

TESTING PARTY AND PROVIDED TO THE BUILDING INSPECTOR,

HTTP://WWW.ENERGY.SWU.EDU/BUILDINGEFFICIENCY/ENERGYCODE.ASPX.

PRIOR TO CALL FOR INSPECTION." THE AIR LEAKAGE TEST

RESULT SHALL BE DOCUMENTED ON THE FORM WHICH IS

BUILDER SHALL COMPLETE AND POST AN "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN 3' OF

PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY

REFER TO STRUCTURAL SHEETS FOR SHEAR WALL SCHEDULE AND ENGINEERING PLAN WHICH CONTAIN DETAIL REFERENCES AND/OR INSTRUCTIONS PERTAINING TO EACH SHEAR WALL INDICATED IN THIS PLAN.

SPACE CONDITIONING SYSTEM WITHIN THE DWELLING UNIT.

ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.

AVAILABLE ON-LINE AT

UPPER LEVEL:

NOTE:

LIGHTING SECTION (IECC/WSEC R404) A MINIMUM OF 75% OF PERMANENTLY INSTALLED LAMPS IN LIGHT ALL LIGHTING FIXTURES SHALL BE HIGH-EFFICACY LAMPS

400 SF.

LUMINAIRES PROVIDING OUTDOOR LIGHTING AND PERMANENTLY MOUNTED TO A RESIDENTIAL BUILDING OR TO OTHER BUILDING ON THE SAME LOT SHALL BE HIGH EFFICACY LUMINAIRES

SMOKE DETECTORS

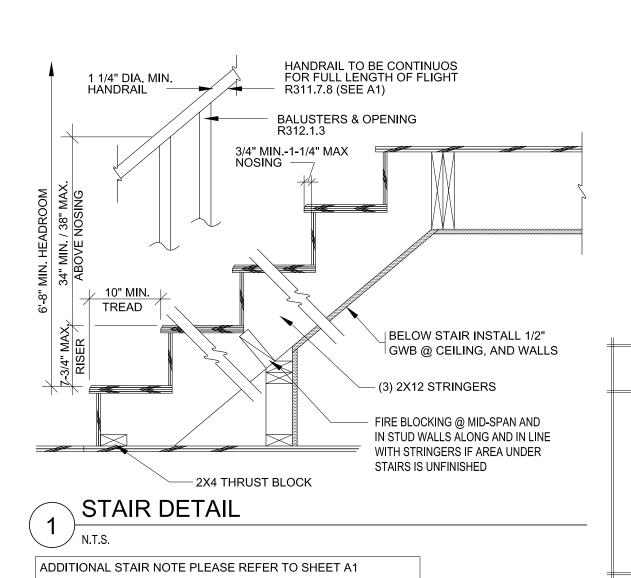
○ SD INSTALL SMOKE DETECTORS PER CODE, 110V/9V INTERCONNECTED

NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSIDE OF EACH SEPERATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS, SEE SECTION R315

VENTILATION SCHEDULE

AINIMI IM SOLIDCE SPECEIC VENTU ATION CAPACITY DEC. TARLE M1507 4

MINIMUM SOURCE SPECFIC VENTILATION CAPACITY REQ. TABLE M1507.4								
SYMBOL								
1	KITCHENS	100 CFM INTERMITTENT OR 25 CFM CONTINUOUS						
	BATHROOMS, TOILET ROOMS AND LAUNDRY/UTILITY ROOM	MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS						
3	WHOLE HOUSE FAN	60 CF. CONTINUOS (WHOLE HOUSE FAN LOCATED (INSIDE LAUNDRY/UTILITY U.N.O.)						



BASEMENT FLOOR AREA CALCULATION: RESULT WALL SEGMENT LENGHT x COVERAGE= 18'-6" 0 % 0 % 29'-0" 30.21 % 8.8 % 8'-8" 5.5 % 21'-1" 41.66 % 8.8 % 10'-5" 11.45 % 1.2 % TOTALS 87 75' 24.3 % n/a $\frac{445 \text{ sf. x } 24.3 \%}{87.75} = 123 \text{ sf.}$ EXCLUDED FROM THE GROSS FLOOR AREA =

MAIN FLOOR PLAN = 400 SF

2015 STATE ENERGY CODE (WSEC) ENERGY CREDIT OPTION SHALL BE USE FOR THIS PROJECT:

OPTION 5a -Kitchen Sink and Showerhead < 1.75 GPM, lavatory faucets < 1.0 GPM = 0.5 CREDITS OPTION 5c -Gas water header > 0.91EF OR electric water header > 2.0 EF = 1.0 CREDITS TOTAL = 1.5 CREDITS

HEATING EQUIPMENT SIZE FORM TO BE SUBMITTED

TO INSPECTIOR. SEPARATELY UPLOADED FROM PLAN SET.

NOTE: CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED BY THE CONTRACTOR.

EXHAUST PAN VENTS SHALL TERMINATE OUTDOOR AND NOT IN ATTIC, SOFFITS, RIDGE VENT OR IN CRAWL SPACE. EXHAUST VENT CLEARANCES MUST BE 3 FEET FROM PROPERTY LINE,3 FEET FROM OPERABLE OPENINGS INTO THE BUILDING AND 10 FEET FROM MECHANICAL AIR INTAKE.

PROVIDE A PROGRAMMABLE THERMOSTAT FOR THE PRIMARY SPACE CONDITIONING SYSTEM WITHIN THE DWELLING UNIT.

BUILDER SHALL COMPLETE AND POST AN "INSULATION CERTIFICATE FOR RESIDENTIAL CONSTRUCTION" WITHIN 3 OF ELECTRICAL PANEL PRIOR TO FINAL INSPECTION.

NORTH

* NO FIELD ALTERATIONS WILL BE AUTHORIZED UNLESS ACCOMPANIED BY REVISED DRAWINGS.

			(INGIDE EAGNDICTIONELL CO.N.O.)	_
-				- 1
DATE	REVISION	REV. BY:		-
05-17-2021	02	T.N.	REVIEW COMMENTS	

T & L HOME DESIGN

ARCHITECTURAL-ENGINEERING-DESIGN PHONE: 253-441-1651 1721 E. 60st ST. TACOMA, WA 98404 Email: trucwa@yahoo.com

YOUN CHUNG RESIDENCE/ADU NEW CONSTRUCTION

7002 78th AVE. SE. MERCER ISLAND 98040 PARCEL NUMBER: 252404-9217

TO CONSTRUCTION FOR EACH STRUCTURE BUILT FROM THESES PLANS. THESE PLANS ARE COPYRIGHTED IN	BY: DATE:	T.N. 7-27-20	Floor plans
ACCORDANCE WITH FEDERAL STATUTES. REPRODUCTION BY ANY METHOD OF ALL OR PORTIONS OF THESE PLANS OR VARIATIONS THEREOF WITHOUT WRITTEN PERMISSION FROM T & L HOME DESIGN IS STRICTLY PROHIBITED. THESE	CHECKE SHEET	ED: T.N.	PROJECT #
DRAWINGS AND PLANS SET FORTH ON THIS SHEET AS INSTRUMENTS OF SERVICE ARE, AND SHALL REMAIN TO THE PROPERTY OF T & L HOME DESIGN.	A:	3	TL-20-12

GENERAL NOTES

BUILDING CODE

2015 IBC EDITION OF THE INTERNATIONAL BUILDING CODE AS AMENDED BY LOCAL JURISDICTION.

ROOF LIVE LOAD = 25 PSF (SNOW)

ROOF DEAD LOAD = 15 PSF FLOOR LIVE LOAD = 40 PSF (REDUCIBLE)

FLOOR DEAD LOAD = 12 PSF

FLOOR LIVE LOAD = 60 PSF FOR DECK/BALCONY WIND LOAD = 110 MPH WIND SPEED, EXPOSURE "C"

SOIL SITE CLASS "D"

CONSTRUCTION TYPE: V-B OCCUPANCY GROUP: R-3

DEFERRED SUBMITTAL ITEMS

THE FOLLOWING IS A LIST OF ITEMS THAT ARE NOT INCLUDED IN THIS PLAN AND SHOULD BE PROVIDED BY THE BUILDER AT TIME OF APPLICATION FOR PERMIT OR AS A DEFERRED SUBMITTAL ITEM: - ALTERNATIVE I-JOIST/BEAM MANUFACTURER PLANS.

- TRUSS DESIGN FOR ROOF FRAMING - ELECTRICAL PLANS & SPECIFICATIONS (IF REQUIRED)

SITE WORK

UNLESS A SOILS INVESTIGATION BY A QUALIFIED SOILS ENGINEER IS PROVIDED. FOUNDATION DESIGN IS BASED ON AN AVERAGE SOIL BEARING OF 2000 PSF PER SOILS REPORT EXTERIOR FOOTINGS SHALL BEAR 18" (MINIMUM) BELOW FINISHED GRADE. ALL FOOTINGS TO BEAR ON FIRM UNDISTURBED EARTH BELOW ORGANIC SURFACE SOILS. BACKFILL TO BE THOROUGHLY COMPACTED.

BOLTS HEADS AND NUTS BEARING AGAINST WOOD TO BE PROVIDED WITH 3"x3"x1/4" PLATE WASHERS. WOOD BEARING ON OR INSTALLED WITHIN 1" OF MASONRY OR CONCRETE TO BE PRESSURE TREATED WITH AN APPROVED PRESERVATIVE.

FOUNDATION SILL BOLTS TO BE 5/8" DIAMETER AT 5'-0" O.C. U.N.O. WITH MIN. 7" EMBEDMENT METAL FRAMING CONNECTORS TO BE MANUFACTURED BY SIMPSON OR APPROVED EQUAL.

CONCRETE

MINIMUM CONCRETE COMPRESSIVE STRENGTH (f'c) AT 28 DAYS TO BE 2,500 PSI WITH 6% AIR ENTRAINED +/- 1% (FOR WEATHERING) WITH 5-1/2 MIX SACK

CONCRETE "BATCH TICKET" SHALL BE AVAILABLE ON SITE PER BUILDING INSPECTOR REINFORCEING STEEL TO COMPLY WITH ASTM A615 GRADE 40 OR BETTER.

LUMBER GRADES

FRAMING LUMBER SHALL COMPLY WITH THE LATEST EDITION OF THE GRADING RULES OF THE WESTERN PRODUCTS ASSOCIATION OR THE WEST COST LUMBER INSPECTION BUREAU. ALL SAWN LUMBER SHALL BE STAMPED WITH THE GRADE MARK OF AN APPROVED LUMBER GRADING AGENCY AND SHALL HAVE THE

FOLLOWING UNADJUSTED DESIGN MINIMUM PROPERTIES:

FOLLOWING UNADJUSTED DESIGN MINIMUM PROPERTIES:						
JOISTS:	WOOD TYPE:					
2X4	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
2X6 OR LARGER	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
BEAM						
4X	DF-L #2 - Fb=900 psi, Fv=180 psi, Fc=1350 psi, E=1600000psi					
6X OR LARGER	DF-L #2 - Fb=875 psi, Fv=170 psi, Fc=600 psi, E=1300000psi					
STUDS						
2X4	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
2X6 OR LARGER	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
POSTS						
4X4	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
4X6 OR LARGER	HF #2 - Fb=975 psi, Fv=150 psi, Fc=1300 psi, E=1300000psi					
6X6 OR LARGER	DF-L #2 - Fb=750 psi, Fv=170 psi, Fc=700 psi, E=1300000psi					

GLUED-LAMINATED BEAM (GLB)

SHALL BE 24F-V4 FOR SINGLE SPANS & 24F-V8 FOR CONTINUOUS OR CANTILEVER SPANS WITH THE FOLLOWING MINIMUM PROPERTIES:

Fb = 2,400 PSI, Fv = 165 PSI, Fc = 650 PSI (PERPENDICULAR), E = 1,800,000 PSI.

ENGINEERED WOOD BEAMS AND I-JOIST

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND SPECIFICATIONS FOR APROVAL BY BUILDING OFFICIAL, DESIGN, FABRICATION AND ERECTION IN ACCORDANCE WITH THE LATEST ICC EVALUATION REPORT.

PARALLAM (PSL) BEAMS SHALL HAVE THE MINIMUM PORPERTIES: Fb = 2,900 PSI, Fv = 290 PSI, Fc = 750 PSI (PERPENDICULAR), E = 2,000,000 PSI. MICROLLAM (LVL) BEAMS SHALL HAVE THE MINIMUM PORPERTIES:

Fb = 2,600 PSI, Fv = 285 PSI, Fc = 750 PSI (PERPENDICULAR), E = 1,900,000 PSI. CALCULATION SHALL INCLUDE DEFLECTION AND CAMBER REQUIREMENTS.

DEFLECTION SHALL BE LIMTED AS FOLLOWS: FLOOR LIVE LOAD MAXIMUM = L/480, FLOOR TOTAL LOAD MAXIMUM = L/240.

PREFABRICATED WOOD TRUSSES:

PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED TO SUPPORT SELF WEIGHT PLUS LIVE LOAD AND SUPERIMPOSED DEAD LOADS AS STATED IN THE GENERAL NOTES TRUSSES SHALL BE DESIGNED & STAMPED BY A REGISTERED WASHINGTON STATE PROFESSIONAL ENGINEER AND FABRICATED FROM ONLY THOSE DESIGNS.

NONBEARING WALLS SHALL BE HELD AWAY FROM THE TRUSS BOTTOM CHORD WITH AN APPROVED FASTENER (SUCH AS SIMPSON STC) TO ENSURE THAT THE TRUSS BOTTOM CHORD WILL NOT BEAR ON THE WALL.

APPROVED HANGERS SHALL BE USED AT ALL CONNECTIONS OF RAFTERS, JACK OR HIP TRUSSES TO MAIN GIRDER TRUSS.

MANUFACTURER-DESIGNED AND APPROVED DIAGONAL AND SWAY BRACING SHALL BE INSTALLED AS REQUIRED.

ROOF/WALL SHEATHING

TYPICAL WALL SHEATHING SHALL BE 7/16" AND ROOF SHEATHING SHALL BE 7/16" UNLESS OTHERWISE SPECIFIED. MINIMUM NAILING SHALL BE 8d @ 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD. U.N.O. ON SHEARWALL SCHEDULE. SPAN INDEX SHALL BE 24/0. PLYWOOD FLOOR SHEATHING SHALL BE 3/4" T&G SHEATHING, UNLESS OTHERWISE SPECIFIED. MINIMUM NAILING SHALL BE 8d COMMOM OR 6d RING SHANK AT 6" O.C. @ PANEL EDGES AND 12" O.C. IN FIELD. SPAN INDEX SHALL BE 40/20. STAGGER END LAPS AT ROOF AND FLOOR SHEATHING. OSB SHEATHING PRODUCTS OF EQUIVALENT SPAN RATINGS SHALL BE ALLOWED.

SHEAR WALL SCHEDULE

WALL MARK	SHEATING TYPE	SIDES	SHEAR PANEL EDGE NAILING	FIELD NAILING	PANEL EDGES	BASE PLATE NAILING	ANCHOR BOLT DIA. & SPACING	SILL PLATE SIZE	HOLDOWN TYPES
P1-6	7/16"	ONE	8d @ 6" O.C.	12" O.C.	2X	16d NAILS @ 12" O.C.	5/8"∅ @ 60" O.C.	2X	PER PLAN
P1-4	7/16"	ONE	8d @ 4" O.C.	12" O.C.	2-2X	16d NAILS @ 4" O.C.	5/8"∅ @ 48" O.C.	2X	PER PLAN
P1-3	7/16"	ONE	8d @ 3" O.C.	12" O.C.	2-2X	16d NAILS @ 3" O.C.	5/8"∅ @ 29" O.C.	2-2X	PER PLAN
P2-3	7/16"	ONE	8d @ 2" O.C.	12" O.C.	2-2X	16d NAILS @ 2.3" O.C. STAGGER	5/8"∅ @ 20" O.C.	2-2X	PER PLAN

1. FRAMING SHALL BE HEM-FIR #2 @ 16" O.C. MAX (U.N.O.). THICKNESS OF STUDS TO BE 2x UNLESS NOTED IN SCHEDULE.

2. SHEATHING PANELS MAY BE LAYED VERTICAL OR HORIZONTAL. BLOCK ALL HORIZONTAL EDGES W/ 2x OR 3x BLOCKING PER SCHEDULE (U.N.O.)

3. ALL EXTERIOR WALLS NOT DESIGNATED AS SHEARWALLS SHALL RECEIVE APA RATED SHEATHING OR ALL VENEER PLYWOOD SIDING OF EQUIVALENT THICKNESS AT POINT OF FASTENING ON PANEL EDGES, FULLY BLOCKED WITH MINIMUM NAILING OF 8d @ 6" O.C. EDGE, 12" O.C. FIELD.

4. NAILING APPLIES TO ALL STUDS, TOP AND BOTTOM PLATES, AND BLOCKING. PLYWOOD JOINT AND SILL PLATE NAILING SHALL BE STAGGERED PER IBC TABLE 2306.3, NOTE

5. ANCHOR BOLT SPACING IS 6'-0" O.C. UNLESS NOTED OTHERWISE IN SCHEDULE. MINIMUM OF 2 ANCHOR BOLTS PER PIECE OF FOUNDATION PLATE. ANCHOR BOLTS SPACED NO GREATER THAN 12" AND NO LESS THAN 7 TIMES THE ANCHOR BOLT DIAMETER AT ENDS AND SPLICES. PROVIDE ¼"x3"x3" WASHERS AT ANCHOR BOLTS. DO NOT RECESS BOLTS.

6. ALL NAILS FOR SHEAR WALLS SHALL BE COMMON OR GALVANIZED BOX NAILS (U.N.O.) PER IBC TABLE 2306.3. ALL SPECIFIED NAILS SHALL HAVE THE FOLLOWING DIMENSIONS: 8d COMMON (0.131" DIA., 2½" LONG), 8d BOX (0.113" DIA., 2½" LONG), 10d COMMON (0.148" DIA., 3" LONG), 10d BOX (0.128" DIA., 3" LONG), 16d COMMON (0.162" DIA., 3½" LONG), 16d SINKER (0.148" DIA., $3\frac{1}{4}$ " LONG), 5d COOLER (0.086" DIA., $1\frac{5}{8}$ " LONG), 6d COOLER (0.092" DIA., $1\frac{7}{8}$ " LONG)

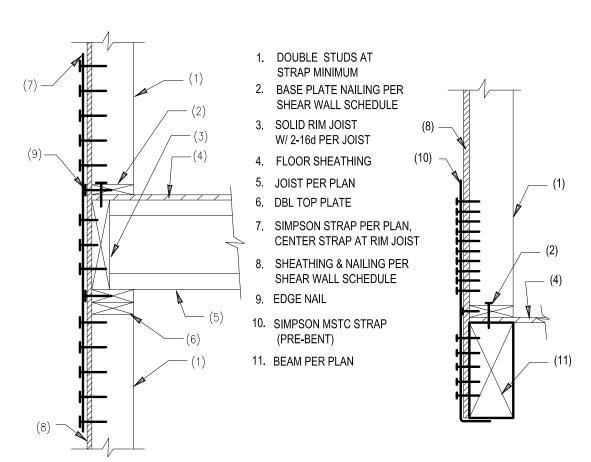
7. 11/4" No. 6 DRYWALL SCREWS (TYPE W OR S) MAY BE SUBSTITUTED FOR NAILS LISTED AS 5d COOLER OR 6d COOLER FOR GYPSUM WALL BOARD SHEARWALLS PER IBC TABLE 2306.7.

8. IN LIEU OF 3x VERTICALS AND BLOCKING AT PANEL EDGES, 2-2x'S W/ 10d FACE NAILS STAGGERED AT THE SAME SPACING AS PANEL EDGE NAILING MAY BE SUBSTITUTED. PLYWOOD EDGES TO BE CENTERED BETWEEN THE 2-2x MEMBERS (THIS ALTERNATIVE DOES NOT APPLY TO WALLS WITH 8d EDGE NAILING AT 2" O.C. OR 10d EDGE NAILING AT 3" OR 2" O.C. OR WALLS SHEATHED ON BOTH SIDES)

9. HOLDDOWNS AND STRAPS OF EQUIVALENT UPLIFT CAPACITY MAY BE SUBSTITUTED FOR THOSE LISTED IN THE SHEARWALL SCHEDULE. COORDINATE WITH MANUFACTURER TO VERIFY APPLICABILITY AND PROPER INSTALLATION METHODS OF SUBSTITUTED HARDWARE.

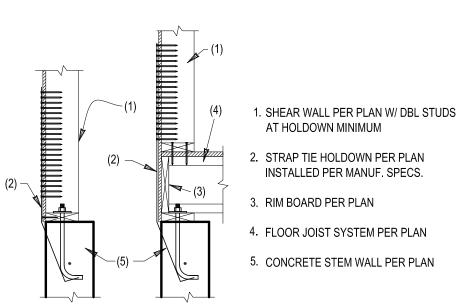
10. SQUASH BLOCKS REQUIRED AT ENDS OF SHEAR WALLS WHERE FULL BEARING IS NOT PROVIDED BY THE FRAMING BELOW.

11. SIMPSON MASP MUDSILL ANCHORS, EVENLY SPACED, MAY BE SUBSTITUTED (2) FOR (1) FOR THE 5/8" DIA. SILL PLATE ANCHOR BOLTS SPECIFIED. (I.E. (2) MASP REPLACE (1) 5/8" DIA ANCHOR BOLT)

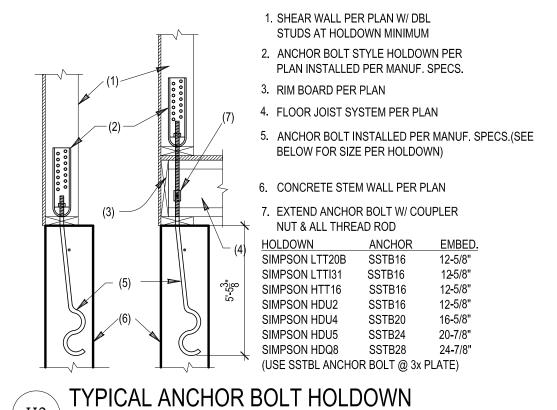


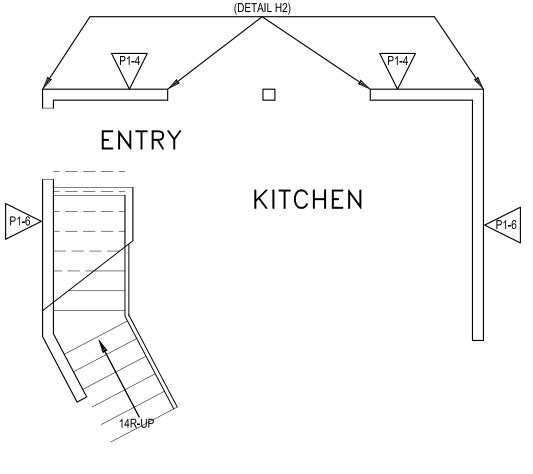
TYPICAL SIMPSON STRAP WALL TO WALL



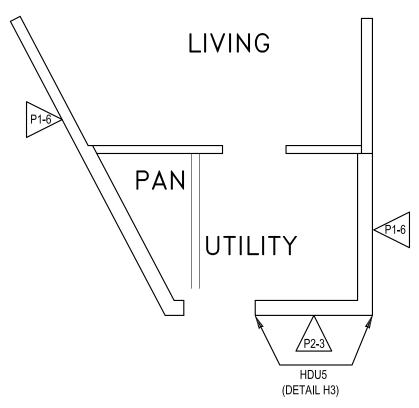




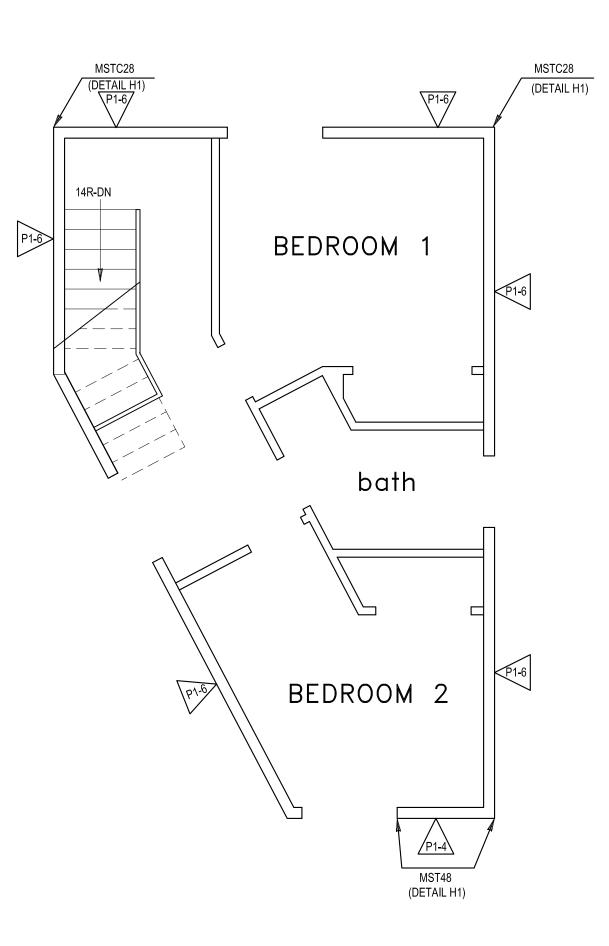




STHD14RJ

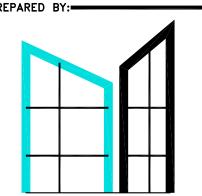


LOWER FLOOR KEY PLAN



UPPER FLOOR KEY PLAN

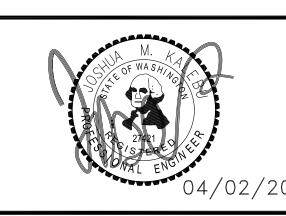
DATE REVISION | REV. BY: 10-19-2020 INTAKE COMMENTS 05-17-2021 REVIEW COMMENTS



DESIGNS * ENGINEERS * BUILDS 33505 13th Place S, Suite A Federal Way, WA 98003

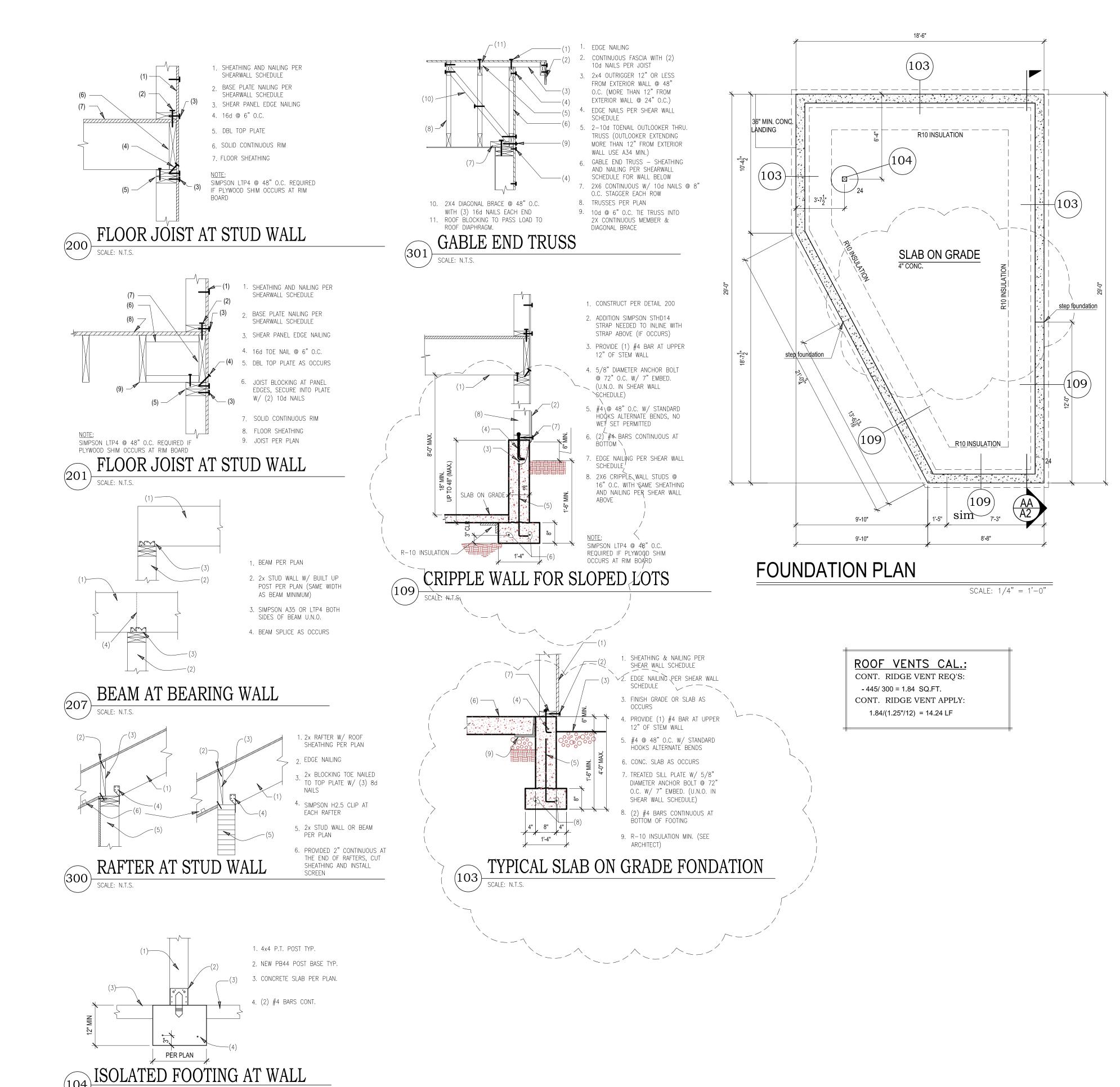
Phone: 253-517-8773 Web: www.urbandevelopment.com, Ph. 253-835-1516 YOUN CHUNG RESIDENCE/ADU NEW CONSTRUCTION

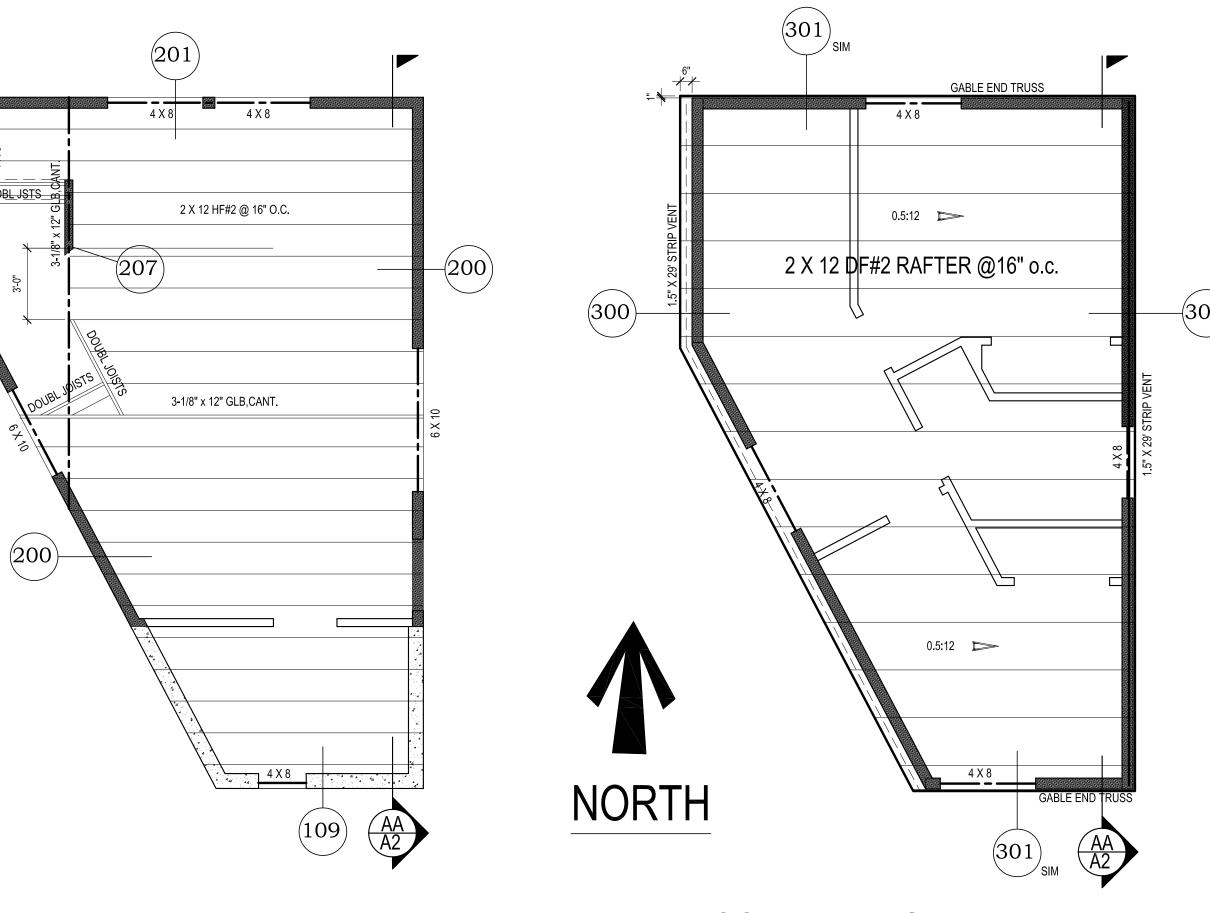
7002 78th AVE. SE. MERCER ISLAND 98040 PARCEL NUMBER: 252404-9217



Y: T.N.	Engi
ATE: 07/25/20	Ke
HECKED: BT	MC,
HEET #	PROJECT #
S1 ₂	20

ineering y plans





UPPER FLOOR FRAMING PLAN

- ALL DOOR/WINDOW HEADERS TO BE 6X8 DF#2 AT 2X6 BEARING WALLS , U.N.O. SCALE: 1/4" = 1'-0"
- PROVIDE FIREBLOCKING AS REQUIRED PER I.R.C. - WINDOW HEADERS AT 6'-8" ABOVE SUB FLOOR, U.N.O.
- EXTERIOR WALLS TO BE 2X6 AT 16" O.C., U.N.O.
- INTERIOR PARTITIONS TO BE 2X4 AT 16" O.C. (2X6 @ PLUMBING WALLS) U.N.O.
- PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)
- FLOOR JOISTS AND BEAMS OF EQUAL OR BETTER CAPACITY MAY BE SUBSTITUTED FOR THOSE SHOWN ON THIS PLAN, "EQUAL" IS DEFINED AS HAVING MOMENT CAPACITY, SHEAR CAPACITY, AND STIFFNESS WITHIN 3% OF THE SPECIFIED JOISTS OR BEAMS.

ROOF FRAMING PLAN

- ALL BEAMS AND HEADERS TO BE 6X8 DF #2 AT BEARING WALLS, U.N.O. - SHADED AREAS INDICATE OVERFRAMING, 2X6 @ 24" O.C., U.N.O.
- BEARING WALLS ARE INDICATED AS SHADED WALLS
- PROVIDE VENTED BLOCKING AT REQUIRED TRUSS/RAFTER BAYS
- ALL MANUFACTURED TRUSSES: * SHALL NOT BE FIELD ALTERED WITHOUT ENGINEER'S APPROVAL
- * SHALL HAVE DESIGN DETAILS AND DRAWINGS ON SITE FOR FRAMING INSPECTION
- * SHALL BE INSTALLED AND BRACED TO MANUFACTURER'S SPECIFICATION

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

- * SHALL CARRY MANUFACTURER'S STAMP ON EACH TRUSS
- IF AN ENGINEERED ROOF FRAMING LAYOUT IS PROVIDED BY THE TRUSS SUPPLIER, THAT TRUSS LAYOUT SHALL SUPERCEDE THE TRUSS LAYOUT INDICATED IN THE PLANS. PROVIDE TRUSS LAYOUT AND SPECS ON SITE FOR INSPECTION.
- □ PROVIDE SOLID FRAMING EQUAL TO THE WIDTH OF THE MEMBER BEING SUPPORTED (U.N.O.)

FOUNDATION FOOTING SCHEDULE

NOTE: USE MIN. 6" WIDE POST BELOW BEAM SPLICES USE P.T. 4 X 4 POSTS BELOW 4 X BEAMS U.N.O.

USE P.T. 6 X 6 POST BELOW 6 X BEAMS U.N.O.

() 24 P.T. POST ON 24" DIA. X 10" THICK CONC. FOOTING 24 P.T. POST ON 24" DIA. X 10" THICK CONC. FOOTING W/ (3) #4 BARS EACH. WAY

■ 30 P.T. POST ON 30" X 30" X 12" THICK CONC. FOOTING W/(3) # 5 BARS EACH WAY

■ 36 P.T. POST ON 36" X 36" X 12" THICK CONC. FOOTING W/ (4) # 5 BARS EACH WAY

■ 42 P.T. POST ON 42" X 42" X 12" THICK CONC. FOOTING W/ (4) # 5 BARS EACH WAY

■ 48 P.T. POST ON 48" X 48" X 12" THICK CONC. FOOTING W/ (5) # 5 BARS EACH WAY

FOOTING SIZES BASED ON 1500 psf SOIL BEARING CAPACITY

DATE	REVISION	REV. BY:	
10-19-2020	01	T.N.	INTAKE COMMENTS
05-17-2021	02	T.N.	REVIEW COMMENTS



DESIGNS * ENGINEERS * BUILDS 33505 13th Place S, Suite A Federal Way, WA 98003 Phone: 253-517-8773

YOUN CHUNG RESIDENCE/ADU NEW CONSTRUCTION

7002 78th AVE. SE. MERCER ISLAND 98040 PARCEL NUMBER: 252404-9217



CONTRACTOR TO VERIFY ALL DIMENSIONS AND

TO COMMENCING WORK. DESIGNER SHALL NOT BE RESPONSIBLE FOR DISCREPANT CONDITIONS RESULTING FROM UNAUTHORIZED WORK PERFORMED

CONDITIONS OF PROJECT AND REPORT ANY OMISSIONS / DISCREPANCIES TO DESIGNER PRIOR

BY THE CONTRACTOR.

BY: T.N.
DATE: 07/25/20
CHECKED: BT
SHEET #
S2 /

Framing plans

20-29E