

KENNETH SIDOROWICZ NUMBER E-19986

THIS DRAWING IS THE PROPERTY OF BILLY SPELLERBERG AND IS NOT TO BE REPRODUCED, MODIFIED, OR USED FOR ANY OTHER PROJECT, OR EXTENTION OF THIS PROJECT, EXCEPT BY AGREEMENT WITH THIS COMPANY.

DESCRIPTION:

SECOND ROOF

MODEL:

VISH

DATE:

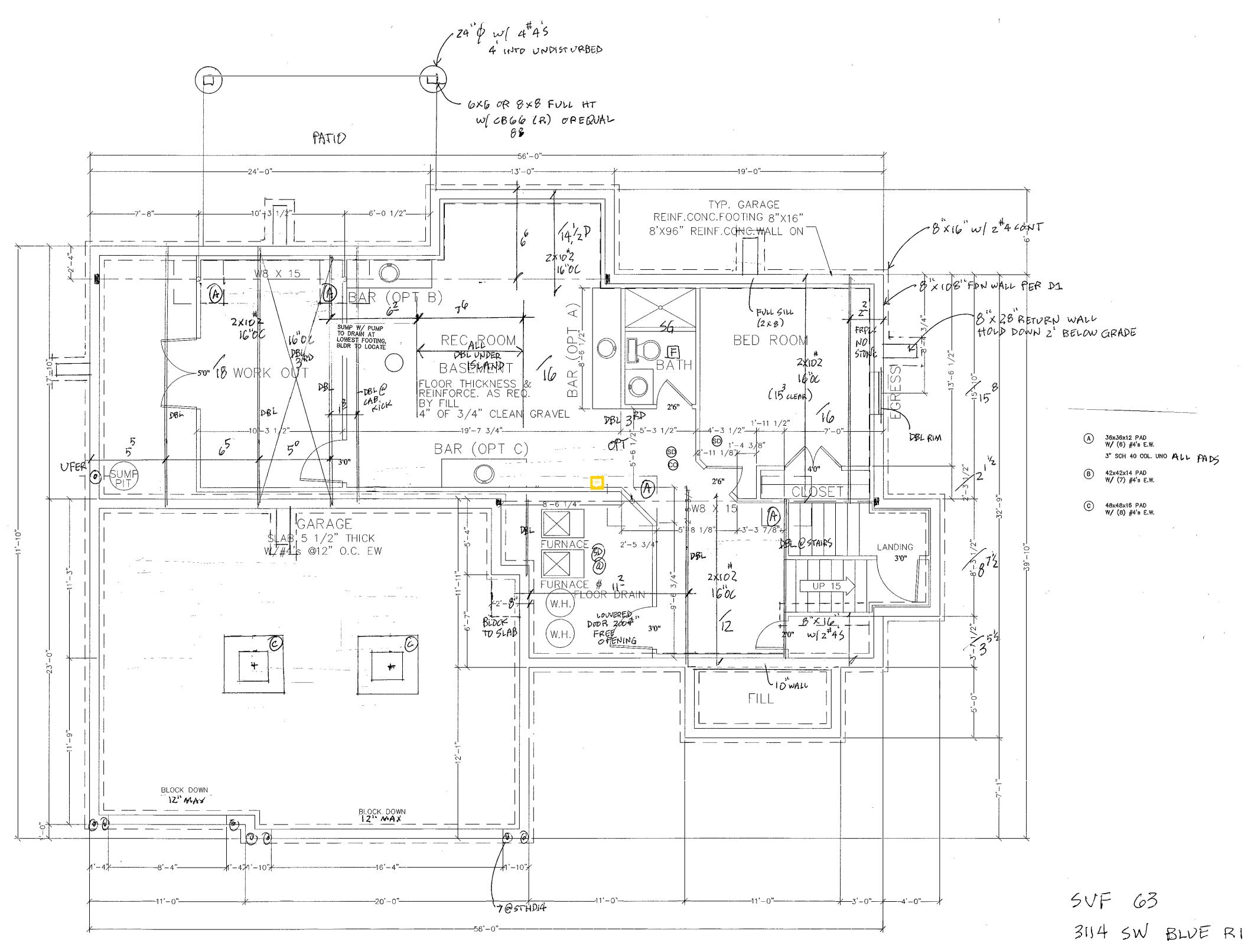
ARCHITECT IS NOT RESPONSIBLE FOR THE STRUCTURAL ELEMENTS OF THESE PLANS. A STRUCTURAL ENGINEER MAY NEED TO VERIFY ALL STRUCTURAL ASPECTS OF THESE PRINTS BEFORE CONSTRUCTION BEGINS. FIELD CONDITIONS MAY BE DIFFERENT FROM PLAN. ALL STATE AND LOCAL CODES TAKE PRECIDENCE OVER

LOCAL CODES TAKE PRECIDENCE OVER THESE PLANS. CONTRACTOR WILL BE RESPONSIBLE FOR PLAN INTEGRITY AND CODE COMPLIANCE

4 of 6 SHEET NO:

BEAMS FIELD VERIFY LENGTH LENGTH SIZE 24'11" W8 X 15 30'0" W18X45

2 POSTS ADJUSTIBLE



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

3114 SW BLUE RIBBON LSMO



THIS DRAWING IS THE PROPERTY OF BILLY SPELLERBERG AND IS NOT TO BE REPRODUCED, MODIFIED, OR USED FOR ANY OTHER PROJECT, OR EXTENTION OF THIS PROJECT, EXCEPT BY AGREEMENT WITH THIS COMPANY.

DESCRIPTION:

FOUNDATION

MODEL:

VISH

DATE:

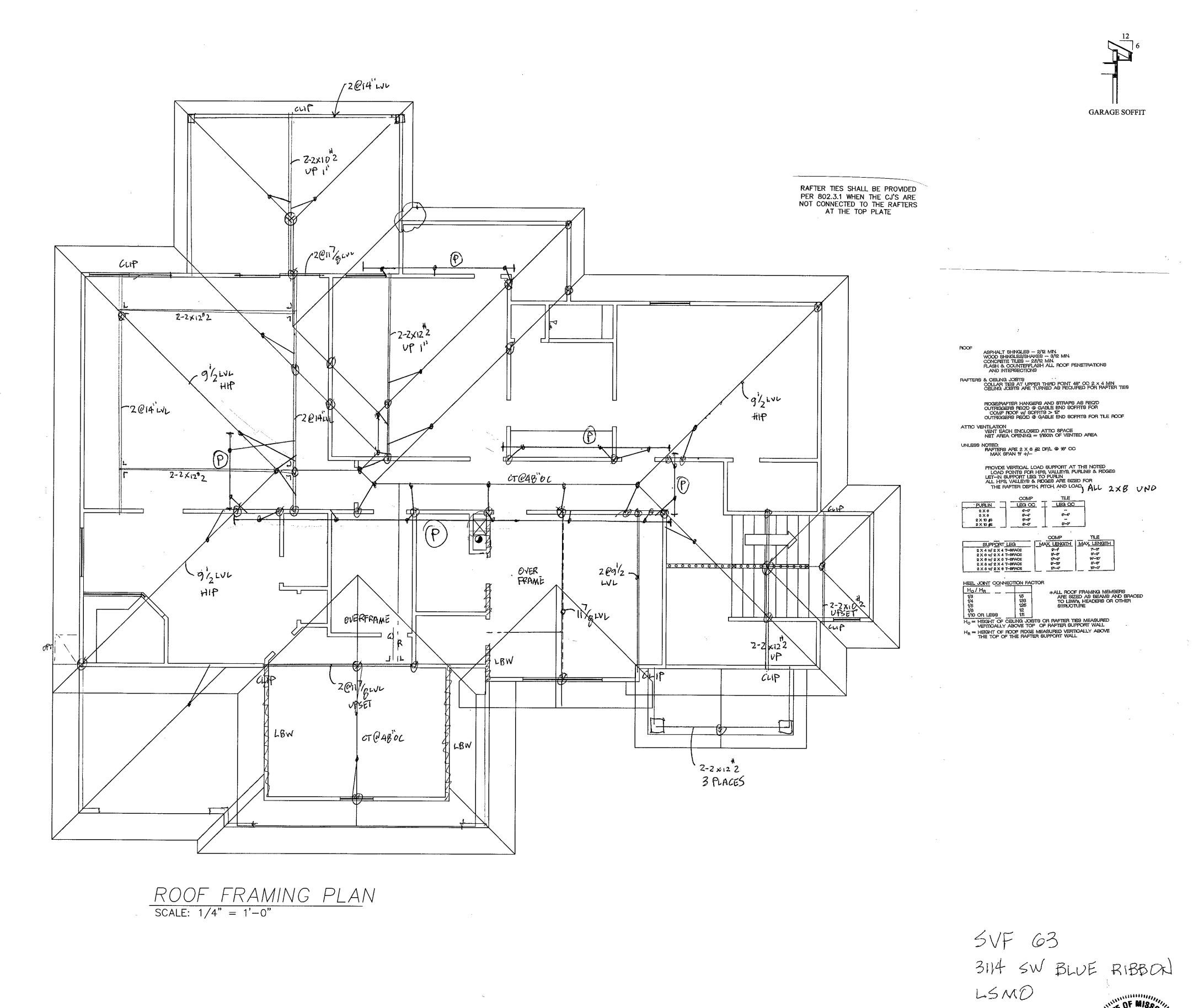
ARCHITECT IS NOT RESPONSIBLE FOR THE STRUCTURAL ELEMENTS OF THESE PLANS. A STRUCTURAL

ENGINEER MAY NEED TO VERIFY ALL STRUCTURAL ASPECTS

OF THESE PRINTS BEFORE CONSTRUCTION BEGINS. FIELD CONDITIONS MAY BE DIFFERENT

FROM PLAN. ALL STATE AND

LOCAL CODES TAKE PRECIDENCE OVER
THESE PLANS. CONTRACTOR WILL BE
RESPONSIBLE FOR PLAN INTEGRITY
AND CODE COMPLIANCE



FLOOR FRAMING

DESCRIPTION FIRST FLOOF

MODEL:

VISH

DATE:

2/20/20

ARCHITECT IS NOT RESPONSIBLE FOR THE STRUCTURAL ELEMENTS OF THESE PLANS. A STRUCTURAL ENGINEER MAY NEED TO VERIFY ALL STRUCTURAL ASPECTS OF THESE PRINTS BEFORE CONSTRUCTION BEGINS. FIELD CONDITIONS MAY BE DIFFERENT FROM PLAN. ALL STATE AND LOCAL CODES TAKE PRECIDENCE OVER THESE PLANS. CONTRACTOR WILL BE RESPONSIBLE FOR PLAN INTEGRITY AND CODE COMPLIANCE

BUILD
SET

THIS DRAWING IS THE PROPERTY OF BILLY SPELLERBERG AND IS NOT TO BE REPRODUCED, MODIFIED, OR USED FOR ANY OTHER PROJECT, OR EXTENTION OF THIS PROJECT, EXCEPT BY AGREEMENT WITH THIS COMPANY.

KENNETH SIDOROWICZ

NUMBER E-19986

6 of 6

HEET N

DIVISION 1 — GENERAL REQUIREMENTS 1. DESIGN AND CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 IRC. 2. FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK AS SHOWN OR INFERRED BY THE DRAWINGS. 3. DESIGN FACTORS: A) GROUND SNOW LOAD (INCLUDING DRIFTING SNOW)\_20 PSF B) WIND SPEED (EXPOSURE B)\_ \_115 MPH C) SEISMIC CATEGORY (A), GROUND ACCELERATION = NA 4. DESIGN LOADS (PSF, UNLESS NOTED OTHERWISE): A) ROOF (LL/DL)\_ SEE TABLE B) FLOOR (LL/DL) \_\_SEE TABLE C) CEILING (LL/DL)\_ \_SEE TABLE, (0/10 TRUSSES) 5. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, OBTAIN CLARIFICATION FROM A / E BEFORE CONTINUING 6. THE CONTRACTOR SHALL EXAMINE ACTUAL JOB CONDITIONS AND BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE PLANS. IF ERRORS, OMISSIONS, OR DISCREPANCIES ARE FOUND THEY SHALL BE REPORTED TO THE DESIGN PROFESSIONAL BEFORE PROCEEDING WITH THE WORK. 7. DIMENSIONS FOR NEW CONSTRUCTION ARE TO FACE OF FINISH OR COLUMNS AND FACE OF CONCRETE, WOOD, OR MASONRY WALLS UNLESS OTHERWISE INDICATED. DIMENSIONS INDICATE NOMINAL DIMENSIONS RATHER THAN ACTUAL DIMENSIONS. 8. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL TRADES EVEN IF THE TRADE IS UNDER A SEPARATE CONTRACT 9. PROVIDE SUFFICIENT STUDS AND BLOCKING WHERE REQUIRED TO SUPPORT EQUIPMENT AND/OR MISCELLANEOUS ITEMS, I.E., LOAD POINTS, TYPICAL CASEWORK, CABINETS, GRAB BARS ETC. 10. PRETREAT FOUNDATION FOR TERMITES AS REQUIRED. 11. GARAGE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115 MPH WIND LOAD RESISTANCE REQUIREMENTS OF DASMA 108 AND ASTM E 330. 12. ALL EXTERIOR DOORS, INCLUDING THE DOOR LEADING FROM THE GARAGE TO THE DWELLING UNIT, SHALL INCORPORATE THE PHYSICAL SECURITY PROVISIONS OF THE JURISDICTION IN WHICH THE CONSTRUCTION TAKES PLACE. <u>DIVISION 2</u> — EARTHWORK 1. ALL PROPERTY MARKERS SHALL BE EXPOSED. 2. ALL FOOTINGS ARE DESIGNED TO BEAR ON NATURAL UNDISTURBED SOIL CAPABLE OF ADEQUATELY SUSTAINING A MINIMUM BEARING PRESSURE OF 1,500 PSF. IF SUITABLE UNDISTURBED BEARING CAPACITY IS NOT ENCOUNTERED AT THE ELEVATION INDICATED ON THE DRAWINGS, CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY. 3. ALL TOPSOIL, ORGANIC MATERIAL, AND EXISTING STRUCTURES SHALL BE REMOVED FROM BUILDING AREA AND FROM AREAS TO BE PAVED. STOCKPILE ALL TOPSOIL FOR REUSE. 4. REFERENCE THE SOILS REPORT FOR ALL FILL CONDITIONS. 5. OVEREXCAVATE BUILDING AREA BELOW SLAB SUBGRADE ELEVATION AND REPLACE WITH MATERIAL PER SOILS REPORT, 6. SITE EROSION CONTROL SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES. 7. IN-SITU SOIL CONDITIONS, SEE SOILS REPORT OR 1,500 PSF BEARING & 60 PCF EQUIVALENT FLUID WEIGHT. 8. SOIL CONDITIONS AT THE DEPTH OF EXCAVATION FOR THE FOOTING SHALL BE UNIFORM AND CONSISTENT. NOTIFY THE ENGINEER OF RECORD OF ANY INCONSISTENCIES. 9. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND DISPOSING OF ANY EXCESS EXCAVATION MATERIALS AND FOR OBTAINING AND SUPPLYING ADDITIONAL FILL MATERIAL AS 48" LONG MIN. \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ ----DIAGONAL STEEL > 0.58 NO ISTRESS ZONE

DETAIL MAY VARY

FOOTING STRESS ZONE

48" X 48" X 16" FTG.

w/ 8 #4's EW

**PEDESTAI** 

3" MIN COVER

PED @ FTG

UNDISTURBED

FOOTING

DETAIL MAY VARY

**PEDESTAL** 

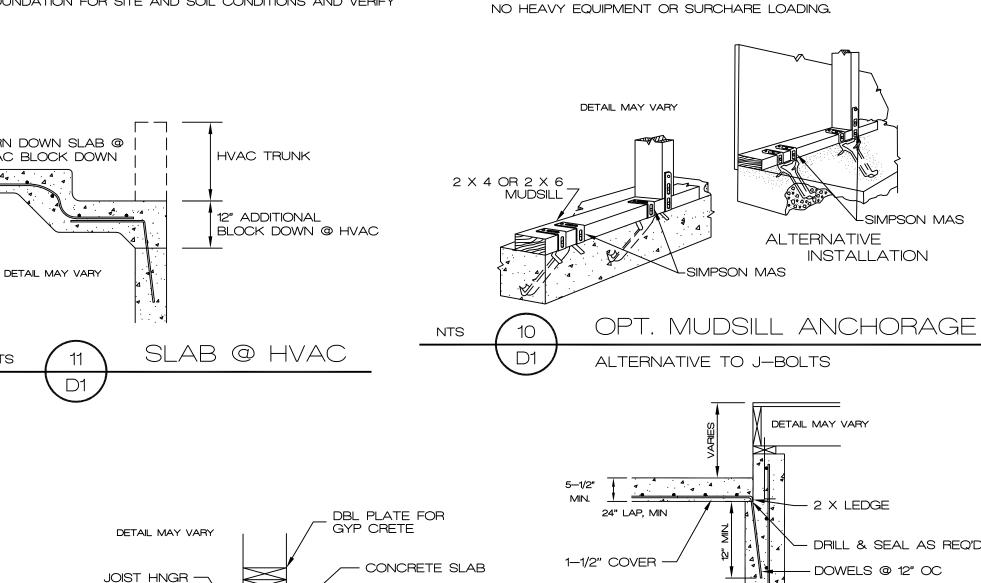
SLAB @ PE

SLAB ON FILL

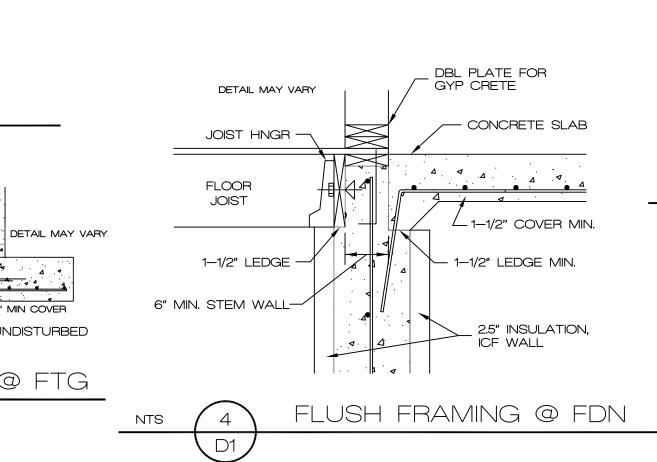
CAST w/ SLAE

3" MIN. COVER

DIVISION 3 — CONCRETE 1. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND ACI 332 "REQUIREMENTS FOR RESIDENTIAL CONCRETE CONSTRUCTION." 2. CONCRETE MATERIALS SHALL COMPLY WITH: A) CEMENT - ASTM C 150 TYPE 1 B) AGGREGATE - ASTM C 33, MAXIMUM AGGREGATE SIZE 3/4" C) WATER — POTABLE, WATER/CEMENT RATIO .5 (MAX.) D) AIR-ENTRAINING ADMIXTURE - ASTM C 260 E) WATER-REDUCING ADMIXTURE - ASTM C 494, INCLUDING SUPERPLASTICIZERS. F) FLY ASH - ASTM C 618, CLASS C 3. CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM 28 DAY DESIGN COMPRESSIVE STRENGTH (f'c): TYPE OF CONSTRUCTION COMP. STRENGTH (f'c) A) FOOTINGS, WALLS, AND SLABS SEE TABLE B) EXTERIOR SLABS AND CURBS SEE TABLE (AIR-ENTRAINED CONCRETE) CONCRETE PROPORTIONS SHALL BE ESTABLISHED ON THE BASIS OF FIELD EXPERIENCE AND/OR TRIAL MIXTURES IN ACCORDANCE WITH ACI 318-89 SECTIONS 5.2 AND 5.3, WHEN FLY ASH IS UTILIZED IN THE MIX, MIX SHALL CONTAIN A WATER-REDUCER. FLY ASH SHALL BE ADDED AT THE RATE OF NOT MORE THAN 100 POUNDS PER CUBIC YARD AND CEMENT SHALL BE REDUCED BY NOT MORE THAN 15 PERCENT BY WEIGHT. 4. PROPORTION AND DESIGN MIXES TO RESULT IN CONCRETE SLUMP AT A POINT OF PLACEMENT OF NOT MORE THAN 4" TO 5". 5. USE AIR-ENTRAINING ADMIXTURES IN EXTERIOR EXPOSED CONCRETE TO RESULT IN CONCRETE AT POINT OF PLACEMENT HAVING AIR CONTENT OF 5 TO 7 PERCENT ENTRAINED AIR. 6. ALL PLUMBING AND ELECTRICAL ROUGH-INS MUST BE COMPLETE, INSPECTED AND APPROVED BEFORE REQUESTING THE SLAB INSPECTION. 7. CONCRETE WORK EXECUTION: A) MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE, UNLESS NOTED OTHERWISE ON DRAWINGS: CAST AGAINST AND EXPOSED TO EARTH\_ EXPOSED TO EARTH OR WEATHER\_ NOT EXPOSED TO EARTH OR WEATHER B) IN CORNERS OF GRADE BEAMS PROVIDE CORNER REINFORCEMENT LAP TWO FEET EACH DIRECTION IN OUTSIDE FACE, MATCHING SIZE AND SPACING OF HORIZONTAL REINFORCEMENT. C) PROVIDE CONTROL JOINTS IN SLABS-ON-GRADE AT NOT GREATER THAN 20 FEET ON CENTER IN EACH DIRECTION. SAW CUT CONTROL JOINTS MINIMUM 1/4 OF THE SLAB DEPTH, AS SOON AFTER SLAB FINISHING AS POSSIBLE WITHOUT DISLODGING AGGREGATE. (DO NOT SAW CUT STRUCTURAL SLABS w/o 8. BATCH TICKETS SHALL BE SUBMITTED TO A CONTRACTORS REPRESENTATIVE PRIOR TO OFF LOADING. ANY CONCRETE MORE THAN 45 MINUTES OUT PRIOR TO STARTING PLACEMENT SHALL BE 9. THE MAXIMUM ADDITION OF WATER SHALL BE LIMITED TO 1 GALLON PER YARD; NOTE THAT THIS ADDITION SHALL BE USED TO CONTROL HEAT ONLY (NOT SLUMP). 10. PUMPS SHALL NOT BE PRIMED IN FORMS. 11. REINFORCEMENT: A) ALL REINFORCING BARS SHALL BE A615, GR40 MIN. LAP SPLICES 18" MIN FOR #4 BAR. SEE TABLE B) WELDED WIRE FABRIC SHALL BE ASTM A185, LAP AT LEAST ONE FULL MESH AND LACE SPLICES WITH WIRE. C) REBAR SHALL BE CLEAN, AND FREE FROM RUST AND OIL PRIOR TO THE PLACEMENT OF CONCRETE. REBAR SHALL BE TIED AND SECURED AS REQUIRED TO PREVENT DISPLACEMENT IN THE FORMS D) TIE STEEL TO PREVENT DISPLACEMENT. HOOK AND TIE STEEL AS POSSIBLE. TIES, CHAIRS, OR OTHER PRODUCTS SHALL BE PROTECTED WHEN LOCATED NEAR EXPOSED SURFACES. E) STEEL SHALL BE STORED ON SITE ABOVE GRADE, AND COVERED AS REQUIRED FOR PROTECTION FROM RAIN AND OTHER POSSIBLE 12. ADJUST FOUNDATION FOR SITE AND SOIL CONDITIONS AND VERIFY WITH EOR. TURN DOWN SLAB @ HVAC BLOCK DOWN DETAIL MAY VARY - LOAD PLANE STRESS ZONE



NTS



DIVISION 4 - MASONRY

1. COMPRESSIVE STRENGTH OF CONCRETE MASONRY CONSTRUCTION (CMU) SHALL BE AS FOLLOWS (PSI). MASONRY STRENGTH NOT SPECIFICALLY NOTED ON PLAN SHALL BE (f'm) 1500 PSI.

MASONRY STRENGTH (F'm DESIGN)\_ BLOCK STRENGTH\_ 1900 MORTAR STRENGTH GROUT STRENGTH

- 2. CONCRETE BLOCK SHALL BE HOLLOW LOAD-BEARING CONCRETE MASONRY UNITS CONFORMING TO ASTM C 90, TYPE N-II. ALL BLOCKS SHALL BE PLACED IN RUNNING BOND CONSTRUCTION (UNLESS OTHERWISE NOTED) WITH ALL VERTICAL CELLS IN
- 3. MORTAR MIX SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 270, TYPE M OR S. TYPE M MORTAR SHALL BE USED WHERE MASONRY IS IN CONTACT WITH SOIL.
- 4. GROUT SHALL CONFORM TO THE REQUIREMENTS OF ASTM C 476. USE SUFFICIENT WATER FOR GROUT TO FLOW INTO ALL JOINTS OF THE MASONRY WITHOUT SEGREGATION. ALL CELLS IN CONCRETE BLOCKS CONTAINING REINFORCING SHALL BE FILLED SOLID WITH GROUT. ALL MASONRY BELOW FINISHED FLOOR OR GRADE SHALL BE GROUTED SOLID. HOLD GROUT DOWN 1-1" BELOW TOP OF BLOCK AT GROUT LIFT JOINTS AND AT CONCRETE PLACED OVER
- 5. MINIMUM LINTEL, WHERE NOT ON PLANS, SHALL HAVE A MINIMUM OF 2 - #5's CONTINOUS HORIZONTAL BARS IN BOTTOM OF BOND BEAM OR LINTEL BLOCK AND SHALL BE GROUTED SOLID TO A MIN. DEPTH OF 24." ALL LINTEL REINFORCING AND GROUT SHALL EXTEND 2' MINIMUM PAST JAMBS UNLESS NOTED OTHERWISE ON PLANS OR DETAILS.
- 6. LAP REINFORCING 48 BAR DIAMETERS. STAGGER LAP SPLICES A MINIMUM OF ONE LAP LENGTH.
- 7. MASONRY VENEER SHALL BE ATTACHED TO SUPPORT WALL FRAMING WITH &" DIAMETER WALL TIES OR DOVETAIL-TYPE METAL TIES OF EQUIVALENT STIFFNESS EMBEDDED INTO HORIZONTAL MORTAR JOINTS. MAXIMUM VERTICAL SPACING OF TIES SHALL BE 16." MAXIMUM HORIZONTAL SPACING SHALL BE 24." TIES IN ALTERNATE COURSES SHALL BE STAGGERED. PROVIDE #9 WIRE REINFORCING IN HORIZONTAL MORTAR JOINTS AT 16" OC." ENGAGE #9 WIRE WITH WALL ANCHOR TIES. CONSTRUCTION JOINTS IN MASONRY VENEER WALLS SHALL BE LOCATED PER THE DRAWINGS.
- 8. WATERPROOFING, DRAINAGE PLANE, AND INSTALLATION PER ADOPTED BUILDING CODE.
- DIVISION 5.5 MISC. STRUCTURAL STEEL
- 1. ALL MISCELLANEOUS STRUCTURAL STEEL WORK SHALL CONFORM TO THE REQUIREMENTS OF AISC "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR
- 2. MISCELLANEOUS STRUCTURAL STEEL MATERIAL SHALL COMPLY
  - A) STRUCTURAL STEEL ASTM A992 B) STEEL PIPE COLUMNS - ASTM A53 GRADE B(Sch 40 TYP) C) ANCHOR BOLTS - ASTM A307 GRADE A, NON-HEADED TYPE UNLESS OTHERWISE NOTED.
- 3. FLITCH PLATES SHALL HAVE 1" DIA. BOLTS @ 16" OC, STAGGERED FOP AND BOTTOM BETWEEN JOIST LAYOUT.

RE7	TURN WALLS	
WALL HT. ABOVE FLOOR	RETURN SPACING (hold down 24" below grade)	
LESS THAN 4'	RETURN WALLS NOT REQ'D	
>4' TO 9'	16'-4" ON CENTER (MAX.), AND WITHIN 8' OF STEP DOWN OR AS SHOWN	

## REQUIREMENTS OF NFPA "NATIONAL DESIGN SPECIFICATION OF WOOD CONSTRUCTION". TPI "DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES", APA "PLYWOOD DESIGN SPECIFICATIONS", DOC PS 1 "PRODUCT STANDARD FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD", DOC PS 56 "STRUCTURAL GLUED LAMINATED TIMBER", AND APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE.

- 2. ROUGH CARPENTRY MATERIALS SHALL COMPLY WITH: A) LUMBER - S4S, S-DRY, KD, OR S-GRN GRADE MARKED COMPLYING WITH PS 20, GRADED UNDER WWPA OR SPIB RULES: STUD GRADE #2 DOUGLAS FIR MIN TYPICAL
  - RAFTER: #2 DOUGLAS FIR PLATES: #2 DOUGLAS FIR BLOCKING: #2 DOUGLAS FIR

<u>DIVISION 6</u> — ROUGH CARPENTRY

1. ALL ROUGH CARPENTRY WORK SHALL CONFORM TO THE

B) METAL FRAMING FASTENERS - ASTM A 153, HOT-DIP GALVANIZED FASTENERS; EQUAL TO SIMPSON STRONG-TIE CONNECTORS COMPLYING WITH APPLICABLE ICC-ES REPORTS. C) PLYWOOD - APA RATED SHEATHING, COMPLYING TO PS 1. D) LVL - LAMINATED VENEER LUMBER SHALL BE GRADE 2800

F-2.0E AND SHALL MEET THE REQUIREMENTS OF APPLICABLE

- ICC-ES REPORTS. E) GLULAM BEAMS - COMBINATION 24F-V3 IN ACCORDANCE WITH AITC A190.1
- 3. EXTERIOR WALL AND ROOF SHEATHING SHALL BE 16" APA RATED SHEATHING 24/0 EXTERIOR GLUED (MIN) FOR 16" OC STUD SPACING. NAIL SHEATHING TO SUPPORT MEMBERS WITH 8D COMMON NAILS AT 6" ON CENTER ALONG EDGE SUPPORTS AND 12" ON CENTER ALONG FIELD SUPPORTS UNLESS NOTED OTHERWIDE, PROVIDE SOLID BLOCKING AT ALL UNSUPPORTED PANEL EDGES; 4/8 GUN NAILS.

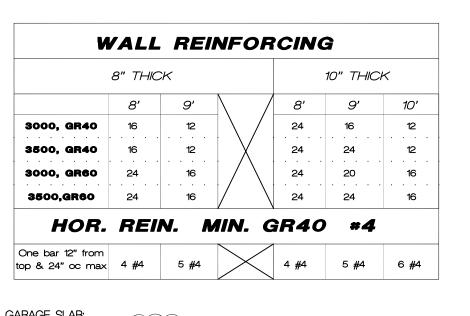
NOTE: ROOF SHEATHING SHALL BE  $\S$ " APA RATED SHEATHING FOR TILE ROOF, OR AS REQUIRED BY MANUFACTURER.

- 4. INTERIOR SHEAR WALL SHEATHING WHERE NOTED SHALL BE 7 APA RATED SHEATHING 24/0 EXTERIOR GLUED (MIN) FOR 16" OC STUD SPACING. NAIL SHEATHING TO SUPPORT MEMBERS WITH 8D COMMON NAILS AT 4" ON CENTER ALONG EDGE SUPPORTS AND 6" ON CENTER ALONG FIELD SUPPORTS UNLESS NOTED OTHERWISE. PROVIDE SOLID BLOCKING AT ALL UNSUPPORTED PANEL EDGES.
- 5. ATTACH METAL FRAMING FASTENERS TO FRAMING MEMBERS WITH MINIMUM NUMBER AND SIZE OF NAILS LISTED IN THE APPLICABLE ICC-ES REPORTS.
- 6. WOOD TRUSS SYSTEM; TRUSS JOIST SYSTEM AND GLULAM SYSTEM A) DESIGN, FABRICATE, AND ERECT IN ACCORDANCE WITH BCSI STANDARDS AND NDS SPECIFICATIONS. B) DESIGN LOADS:
  - 25 PSF SNOW LIVE LOAD 10 PSF DEAD LOAD TOP CHORD (20 TILE) 10 PSF DEAD LOAD BOTTOM CHORD C) SUBMIT SHOP DRAWINGS, INCLUDING DESIGN CALCULATIONS, MATERIAL STRESSES, GRADE AND SPECIES OF WOOD, AND PLACEMENT DRAWING.
- 7. DEFAULT HEADER SIZE NOT SPECIFIED SPANNING 8'-0" MAX SHALL BE  $2-2 \times 10$  #2, WITH 2 STUD SUPPORT.
- 8. ALL HEADERS OVER 4'-0" SHALL HAVE DOUBLE TRIMMER @ EACH SUPPORT, OR AS SPECIFIED, UNO.
- 9. SOLID BLOCKING BETWEEN JOISTS @ 36" OC FOR JOISTS PARALLEL TO THE EXTERIOR FOUNDATION WALL, MIN. 48" OR 3 JOIST SPACES.
- 10. ALL FLUSH FRAMING @ HEADERS OR GIRDERS SHALL BE HANGERED
- 11. BLOCK BETWEEN JOISTS @ SUPPORTS OR OVER BEAMS.

WALLS AS NOTED ON PLANS.

- 12. RATED CONSTRUCTION FOR PROJECTIONS INTO SETBACKS AS REQ'D.
- 13. DOUBLE JOIST BELOW PARALLEL NONBEARING WALLS ON LAYOUT SINGLE JOIST OFF LAYOUT. STRUCTURE BELOW LOAD-BEARING





BASEMENT SLAB:

GARAGE SLAB: ~ 100 # /中' (LL) ` 67 # /中'(DL)  $w_u = 1.2(DL) + 1.6(LL)$ = 240 # / φ' (TL)

 $M_{\text{max}} = \frac{W_1 * L^2}{14} - 27,206 \# \text{in}$ 40,000 \* 0.2

12'-6" (+/-) MODULE

 $\phi M_N = *\phi A * f(d - a/2)$ = 0.9(0.2)(40000)(4-0.22/2)= 28,008 # in > 27,206 (OKAY)∴ Use #4 @ 12" OC EW

SLAB @ WALL

CONCRETE OR CMU

SLAB ON FILL

REQ'D STRENGTH

3,000 psi

3,500 psi

3,500 psi

7 SACK MIX

**CONC STRENGTH** 

FTG

SUS-SLAB

 $\phi M = *\phi A * f(d - a/2)$ = 0.9(0.2)(40000)(4-0.22/2)= 28.008 # in > 25.951 (OKAY)

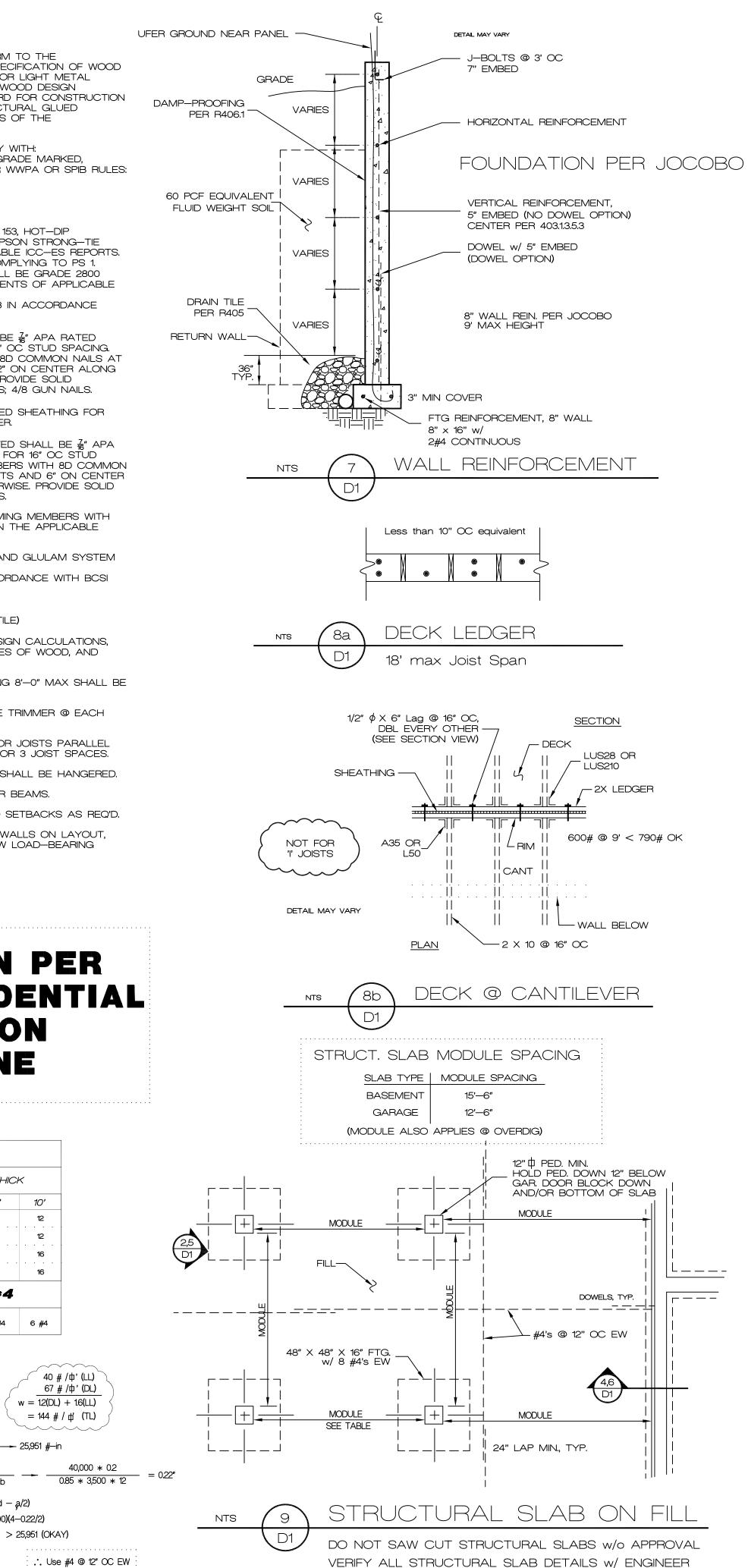
... Use #4 @ 12" OC EW 15'-6" (+/-) MODULE

40 # /中' (LL)

67 # /中'(DL)

w = 1.2(DL) + 1.6(LL)

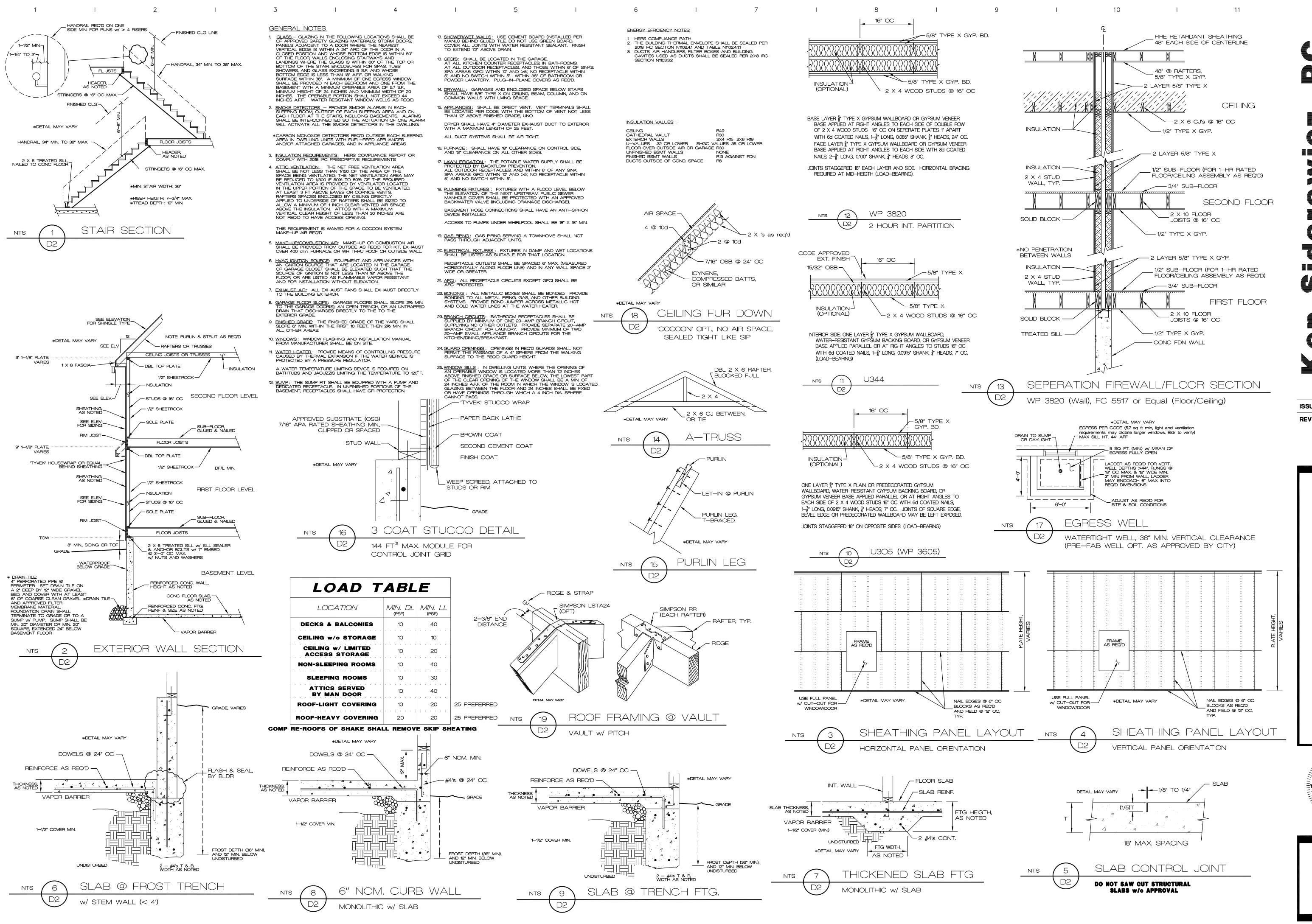
= 144 # / # (TL)



DO NOT ISOLATE COLUMNS FROM STRUCTURAL SLABS

ISSUE DATE 11/2/15 REVISIONS

KENNETH SIDOROWICZ NUMBER E-19986



ISSUE DATE
REVISIONS

SHEET

2018 DETAIL SHEE

KENNETH SIDOROWICZ

NUMBER
E-19986

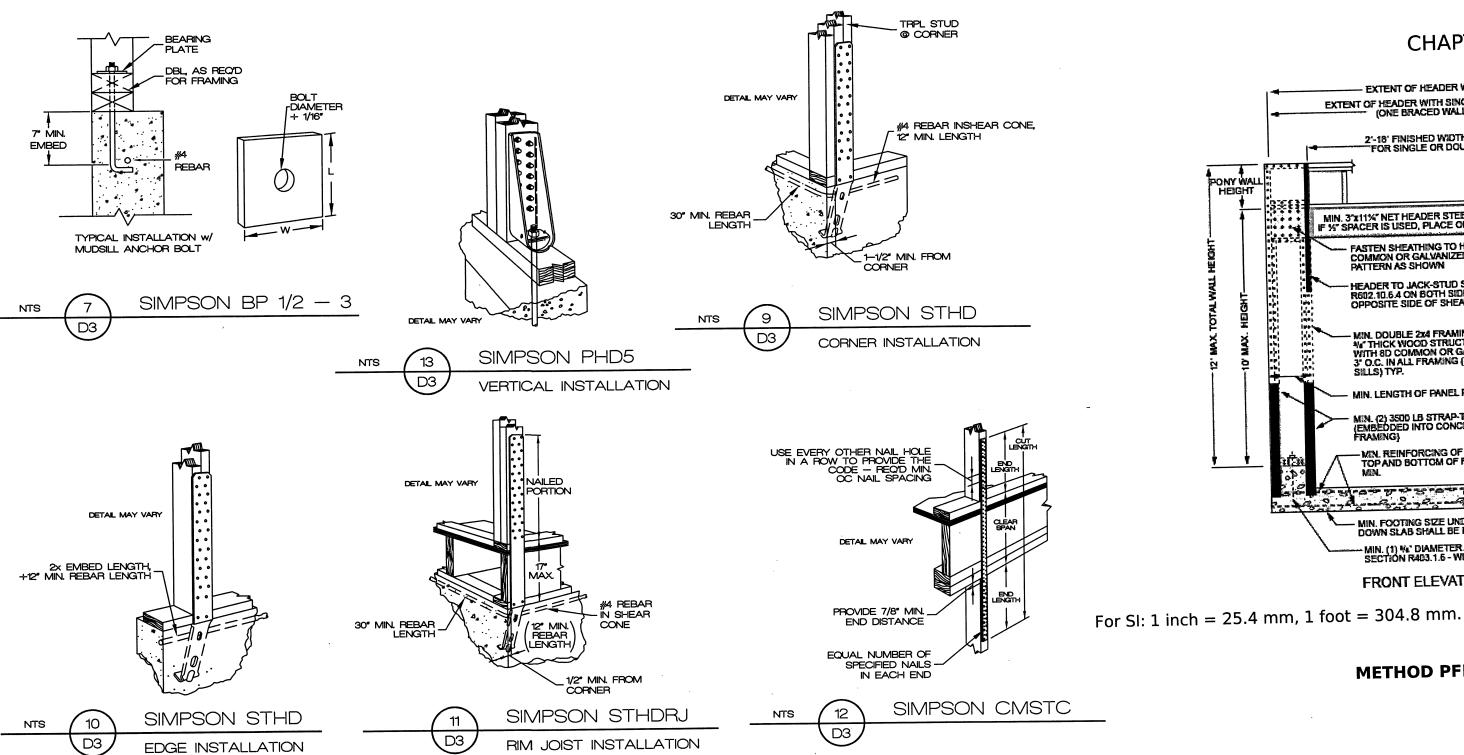
D2

## STAPLES NOT PERMITTED IN KCMO

				MEMBERS
Item	Description of building e	ements	Number & type of fastener (notes: a, b, c)	Spacing of fasteners
1	Blocking between joists or rafters to	top plate, toe nail	3-8d (2-1/2" x 0.113")	<del> <del>.</del></del>
··. · ·	Ceiling joists to plate, toe nail		3-8d (2-1/2" × 0.113")	<del>.</del>
. <u>-</u>	Ceiling joists not attached to parallel	rafter, laps over partitions, face nail	3-10d	<del>.</del>
· <u>a</u>	Collar tie rafter face nail or 1–1/4" ×	20 ga. ridge strap	3-10d (3" × 0.128")	<del>.</del>
5	Rafter to plate toe nail note trusses	use STC clips at NLB walls and spec'd holdowns	3-16d or 3-10d (3-1/2" x 0.135", 0.148")	2 toe nails side 1, 1 toe nail side 2 (note i)
.6	Roof rafters to ridge, valley or hip ra	afters:	1	<del>-</del>
•	Toe nail:		4-16d (3-1/2" x 0.135")	<del>-</del>
	Face nail:		3-16d (3-1/2" x 0.135")	_
.7	Built-up studs-face nail		10d (3" × 0.128")	24° o.c
'в	Abutting studs at intersecting wall of	orners, face nail	16d (3-1/2" x 0.135")	
9	Built-up header, two pieces w/ 1/2*	spacer	16d (3-1/2" x 0.135")	16" o.c. along each edge
10	Continued header, two pieces		16d (3-1/2" x 0.135")	16" o.c. along each edge
11	Continuous header to stud, toe nail		4-8d (2-1/2° × 0.113°)	<u> </u>
12	Double studs, face nail		10d (3" × 0.128")	24° o.c.
13	Double top plates, face nail		10d (3" x 0.128")	24" o.c.
14		end joints, face nail in lapped area	8-16d (3-1/2" x 0.135")	
15	Sole plate to joist or blocking, face		16d (3–1/2" x 0.135")	
46	Sole plate to joist or blocking at bra	aced wall panels	3-16d (3-1/2" × 0.135")	16° o.c.
.10 17	Stud to sole plate, toe nail		3-8d (2-1/2" x 0.113") or	_
			2-16d (3-1/2" × 0.135") 2-16d (3-1/2" × 0.135")	
.18	Top or sole plate to stud, end nail		2-10d (3-1/2 × 0.135) 2-10d (3" × 0.128")	<u> </u>
.19	Top plates, laps at corners and into		2-8d (2-1/2" × 0.113")	<u>-</u>
20	1" brace to each stud and plate, fa	ce nail	2 staples 1-3/4"	- · · · · · · · · · · <u>-</u> · · · · · · · · · ·
			2-8d (2-1/2" × 0.113")	_
.21	T x 6 sheathing to each bearing, 1	1" x 6" sheathing to each bearing, face nail		· · · · · · · · · · · · <u>-</u> · · · · · · · · · ·
~	# Of shorthing to cook begring t	aca neil	2 staples 1-3/4" 2-8d (2-1/2" x 0.113")	<del>-</del>
.22	1" x 8" sheathing to each bearing, 1	ace nail	3 staples 1-3/4"	· · · · · · · · · · <del>-</del> · · · · · · · · · ·
23	23 Wider than 1" x 8" sheathing to each bearing, face nail		3-8cb(2pl6/2*1+30/173*)	_
or				
	Joist to sill or girder, toe nail		3-8d (2-1/2" x 0.113")	<del>-</del>
.24 .25	Rim joist to top plate, toe nail (roof	applications also)	8d (2-1/2" × 0.113")	6° o.c.
26	26 Rim joist or blocking to sill plate, toe nail		8d (2-1/2" × 0.113")	6° o.c.
c 27	1" x 6" subfloor or less to each jois		2-8d (2-1/2" x 0.113")	_
			2 staples 1-3/4"	L <del></del>
28	2º subfloor to joist of girder, blind a	nd face nail	2-16d (3-1/2" × 0.135")	<u> </u>
29   2" planks (plank & beam - floor and roof) 30   Built-up girders and beams, 2" lumber layers		2-16d (3-1/2" x 0.135")	@ each bearing Nail each layer as follows: 32" o.c. at top	
30	Built-up girders and beams, 2" lumber layers		10d (3" × 0.128")	and bottom and staggered. Two nails at ends
				and at each splice
٠, ٠	· li adais intrini aliminatina injeta or rat		3-16d (3-1/2" × 0.135")	@ each joist or rafter
31	Ledger strip supporting joists or rat			f Fasteners
			Spacing 0	1
	Description of building	Description of fastener	Edges (inches)	Intermediate supports (inches)
	materials	(notes: b, c, e)	(note: i)	(notes: c, e)
vd atrair		wall sheathing to framing and particleboard wall sheath	ing to framing	
32 32	3/8" to 1/2"	6d common (2" x 0.113") nail (subfloor, wall) (note j)	6	12 (note: g)
32	3/8 10 1/2	8d common (2-1/2" x 0.131") nail (roof)		1
33	19/32" to 1"	8d common nail (2-1/2" × 0.131")	6	12 (note: g)
.33 <sub>.</sub> .	1–1/8" to 1–1/4"	10d common (3" × 0.148") nail or	6	12
<del>-</del>	. , , .	8d deformed (2-1/2" x 0.131") nail		
er wall •	sheathing (note h)			
35	1/2" structural cellulosic fiberboard	1-1/2" galv. roofing nail, 7/16" crown or	3	6
	sheathing	1° crown staple 16 ga., 1-1/4° long	1	1
 36	25/32" structural cellulosic	1-3/4" galv. roofing nail, 7/16" crown or	3	6
	fiberboard sheathing	1" crown staple 16 ga., 1-1/2" long	1	<u>.</u>
37	1/2" gypsum sheathing (note d)	1-1/2" galvanized roofing nail; staple galv.	7	7
		1-1/2" long; 1-1/4" screws, Type W or S	1	
38	5/8" gypsum sheathing (note d)	1-3/4" galvanized roofing nail, staple galv.	7	/
		1-5/8" long; 1-5/8" screws, Type W or S	1	
od struc	ctural panels, combination subfloor und	erlayment to framing		_
39	3/4" and less	6d deformed (2" x 0.120") nail or	6	12
	,	8d common (2-1/2" x 0.131") nail	1	<u>.</u>
	3			
40	7/8" to 1"	8d common (2-1/2" x 0.131") nail or	6	12
40	7/8° to 1°	8d common (2-1/2" x 0.131") nail or 8d deformed (2-1/2" x 0.120") nail	6	12
40	7/8° to 1°	8d common (2-1/2" x 0.131") nail or	6 	12

For St 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa

- a. All nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi (551 MPa) for shank diameter of 0.192 inch (20d common nail), 90 ksi (620 MPa) for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi (689 MPa) for shank diameters of 0.142 inch or less.
- Staples are 16 gage wire and have a minimum 7/16-inch on diameter crown width. c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
- Four-foot-by-8-foot or 4-foot-by-9-foot panels shall be applied vertically. e. Spacing of fasteners not included in this table shall be verified w/ EOR.
- f. For regions having basic wind speed of #10 mph or greater, 8d deformed nails shall be used for attaching plywood and wood structural panel roof sheathing to framing within minimum 48-inch distance from gable end walls, if mean roof height is more than 25 feet, up to 35 feet maximum.
- g. For regions having basic wind speed of 100 mph or less, nails for attaching wood structural panel roof sheathing to gable endwall framing shall be spaced 6 inches on center. When basic wind speed is greater than 100 mph, nails for attaching panel roof sheathing to intermediate supports shall be spaced 6 inches on center for minimum 48-inch distance from ridges, eaves and gable end walls; and 4 inches on center to gable end wall framing.
- h. Gypsum sheathing shall conform to ASTMC 1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C 208. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and at all floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing
- members and at all roof plane perimeters. Blocking of roof or floor sheathing panel edges perpendicular to the framing members shall not be required except at intersection of adjacent roof planes. Floor and roof perimeter shall be supported by Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the
- opposite side of the rafter shall not be required.



NAIL TOP AND BOTTOM PLATES OF BP's TO JOISTS ABOVE AND BELOW W/ 3 @ 16d @ 16" OC ALL METHODS CONSTRUCTION DESCRIPTION SHEAR WALL SIMPSON CS16 STRAP NAILED TO STUDS SPACED METAL STRAP METHOD AT 16" OC MAXIMUM. STRAPS SHALL BE INSTALLED IN 'V' OR 'X' PATTERN AT THE BRACE LOCATION AND FOR THE SPECIFIED LENGTH, ALTERNATIVE TO \*DBL JOIST MIN. BELOW BRACED WALL WHEN FRAMING BELOW IS PARALLEL TO WALL LINE, OR SOLID BLOCK @ 16" OC BELOW BRACED WALL WHEN FRAMING BELOW IS PERPENDICULAR TO WALL LINE. COLLECTOR OR DRAG STRUT OVER. 7/16" STRUCTURAL SHEATHING OVER STUDS SPACED 16" OC w/ 8d COMMON NAILS AT 6" OC EDGE AND 12" FIELD, HORIZONTAL JOINTS SHALL BE SHEATHING METHOD BLOCKED FOR ANCHORAGE. \*DBL JOIST MIN. BELOW BRACED WALL WHEN FRAMING BELOW IS PARALLEL TO WALL LINE, OR SOLID BLOCK @ 16" OC BELOW BRACED WALL WHEN FRAMING BELOW IS PERPENDICULAR TO WALL LINE. 6 TO 1 ASPECT RATIO, HEADER LENGTH AS SPECIFIED WITH FULL PANEL SHEATHING AT UPPER CORNERS CUTOUT FOR THE OPENING. BLOCKING AT HORIZONTAL JOINTS. NOTE FULL 4' WIDTH CUTOUT PANELS REQ'D AT CORNERS. STHD10 & LSTA STRAPS GARAGE DOOR PORTAL PFH HEADER LENGTH AS SPECIFIED EXTENDED TO NEXT PORTALS CS-PF LAYOUT STUD, 18" MINIMUM WIDTH. FULL PANEL SHEATHING REQ'D WITH CUTOUTS FOR OPENINGS. HORIZONTAL BLOCKING AT EDGES. 'J' BOLT SPACING FOR SHEAR WALLS IS 3' OC WITH STRAPS AS NOTED.

SHEAR WALL SCHEDULE

CHAPTER 6 WALL CONSTRUCTION

FIGURE R602.10.6.2

METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

TYPICAL PORTAL FRAME CONSTRUCTION —

MIN. 1000 LB. HOLD-DOWN
DEVICE (EMBEDDED INTO
CONCRETE AND NAILED

SECTION

EXTENT OF HEADER WITH SINGLE PORTAL FRAME
(ONE BRACED WALL PANEL)

MIN. 3"x11%" NET HEADER STEEL HEADER PROHIBITED IF %" SPACER IS USED, PLACE ON BACK-SIDE OF HEADEL

- FASTEN SHEATHING TO HEADER WITH 8D COMMON OR GALVANIZED BOX NAILS IN 3" GRID PATTERN AS SHOWN

HEADER TO JACK-STUD STRAP PER TABLE —— R602, 10.6 A ON BOTH SIDES OF OPENING OPPOSITE SIDE OF SHEATHING

MIN. DOUBLE 214 FRAMING COVERED WITH MIN. No THICK WOOD STRUCTURAL PANEL SHEATHING WITH 8D COMMON OR GALVANIZED BOX NAILS AT 3' O.C. IN ALL FRAMING (STUDS, BLOCKING, AND DIELES TOTAL

IIN. LENGTH OF PANEL PER TABLE RE02.10.5

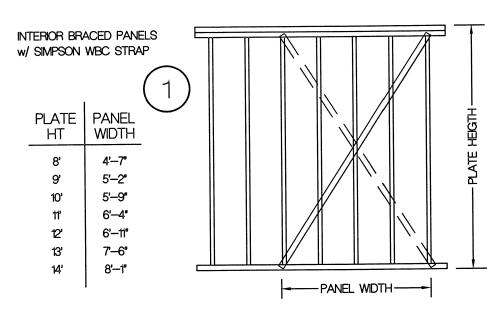
TOP AND BOTTOM OF FOOTING, LAP BARS 15"

Mon has hope has has has de A service and a service and a service and are MIN. FOOTING SIZE UNDER OPENING IS 12"x12". A TURNED DOWN SLAB SHALL BE PERMITTED AT DOOR OPENINGS.

FRONT ELEVATION

--- MIN. (1) % DIAMETER ANCHOR BOLT INSTALLED PER SECTION R483.1.6 - WITH 2"X 2" X746" PLATE WASHER

LOAD TABLE LOCATION MIN. DL | MIN. LL (PSF) (PSF) 10 60 **EXTERIOR BALCONIES** 10 40 **DECKS** 10 CEILING W/o STORAGE 10 20 CEILING W/ STORAGE 40 10 NON-SLEEPING ROOMS 30 SLEEPING ROOMS 10 10 25 ROOF-LIGHT COVERING 20 25 ROOF-HEAVY COVERING



10

INT. BRACED WALL PANEL LIB, METAL STRAP ALT. TO LET IN 1 X 4

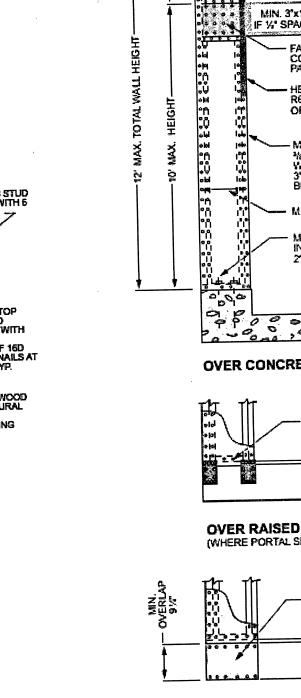
> 2018 International Residential Code Third Printing: Sep 2019

11

0

ISSUE DATE

**REVISIONS** 



DIGITAL CODES

WOOD STRUCTURAL PANEL NAIL SOLE PLATE-SHEATHING TO TOP OF BAND TO JOIST PER

 WOOD STRUCTURAL PANEL SHEATHING OVER APPROVED BAND OR RIM JOIST OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD) FRONT ELEVATION

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4 METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

CHAPTER 6 WALL CONSTRUCTION · CONTINUOUSLY SHEATHED BRACED WALL PANEL MEETING MINIUM LENGTH REQUIREMENTS OF TABLE R602.10.5 ----- EXTENT OF HEADER WITH DOUBLE PORTAL FRAMES (TWO BRACED WALL PANELS) EXTENT OF HEADER WITH SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) TO HEADER WITH 6 16D SINKERS 2'-18' FINISHED WIDTH OF OPENING FOR SINGLE OR DOUBLE PORTAL PONY WALL BRACED WALL LINE
-CONTINUOUSLY SHEATHED
WITH WOOD STRUCTURAL MIN. 3"x11%" NET HEADER STEEL HEADER PROHIBITED IF W' SPACER IS USED, PLACE ON BACK-SIDE OF HEADER PANELS IF NEEDED, PANEL
SPLICE EDGES SHALL
OCCUR OVER AND BE
NAILED TO COMMON
BLOCKING WITHIN THE
MIDDLE 24" OF THE
PORTAL- LEG HEIGHT.
ONE ROW OF 3" O.C. FASTEN SHEATHING TO HEADER WITH 8D COMMON OR GALVANIZED BOX NAILS IN 31 GRID PATTERN AS SHOWN ROWS OF 16D HEADER TO JACK-STUD STRAP PER TABLE —— R602.10.6.4 ON BOTH SIDES OF OPENING SINKER NAILS AT 3" O.C. TYP. OPPOSITE SIDE OF SHEATHING IN EACH PANEL EDGE. - MIN. DOUBLE 2"x4" FRAMING COVERED WITH MIN. -MIN. DOUBLE 2 X4 FRAMING OF THICK WOOD STRUCTURAL PANEL SHEATHING WITH 8D COMMON OR GALVANIZED BOX NAILS AT 3' O.C. IN ALL FRAMING (STUDS, BLOCKING, AND SILLS) TYP. TYPICAL PORTAL FRAME CONSTRUCTION-PANEL SHEATHING -MIN. DOUBLE 2x4 POST (KING AND JACK STUD) NUMBER OF JACK STUDS PER TABLES - MIN. LENGTH OF PANEL PER TABLE R602.10.5 0 MIN. (2) 1/2 DIAMETER ANCHOR BOLTS INSTALLED PER SECTION R403.1.6 WITH R602.7(1) & (2) 2'x2"x"1:6' PLATE WASHER OVER CONCRETE OR MASONRY BLOCK FOUNDATION (2) FRAMING ANCHORS APPLIED ACROSS SHEATHING JOINT WITH A CAPACITY OF 670 LBS IN -WOOD STRUCTURAL PANEL SHEATHING TO TOP OF BAND TO JOIST PER TABLE R602.3(1) THE HORIZONTAL AND " VERTICAL DIRECTIONS TE OF MISS **~•**~ KENNETH PPROVED BAND SIDOROWICZ WOOD STRUCTURAL PANEL SHEATHING OVER APPROVED BAND OR RIM JOIST-OR RIM JOIST OVER RAISED WOOD FLOOR - FRAMING ANCHOR OPTION NUMBER (WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) E-19986 ATTACH SHEATHING TO BAND OR RIM JOIST WITH 8D COMMON NAILS AT 3" O.C. TOP AND BOTTOM

2/14/21

SECTION