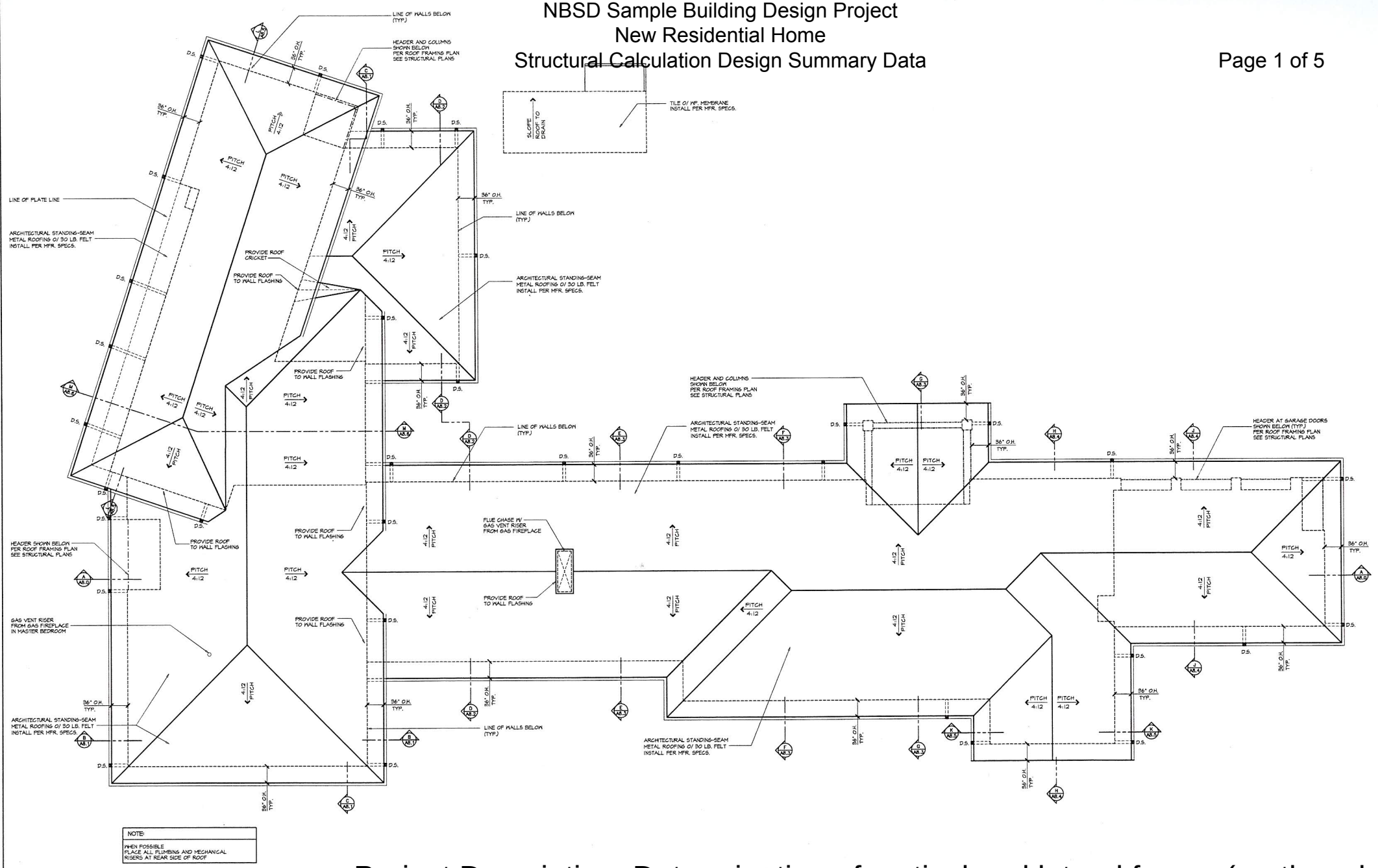
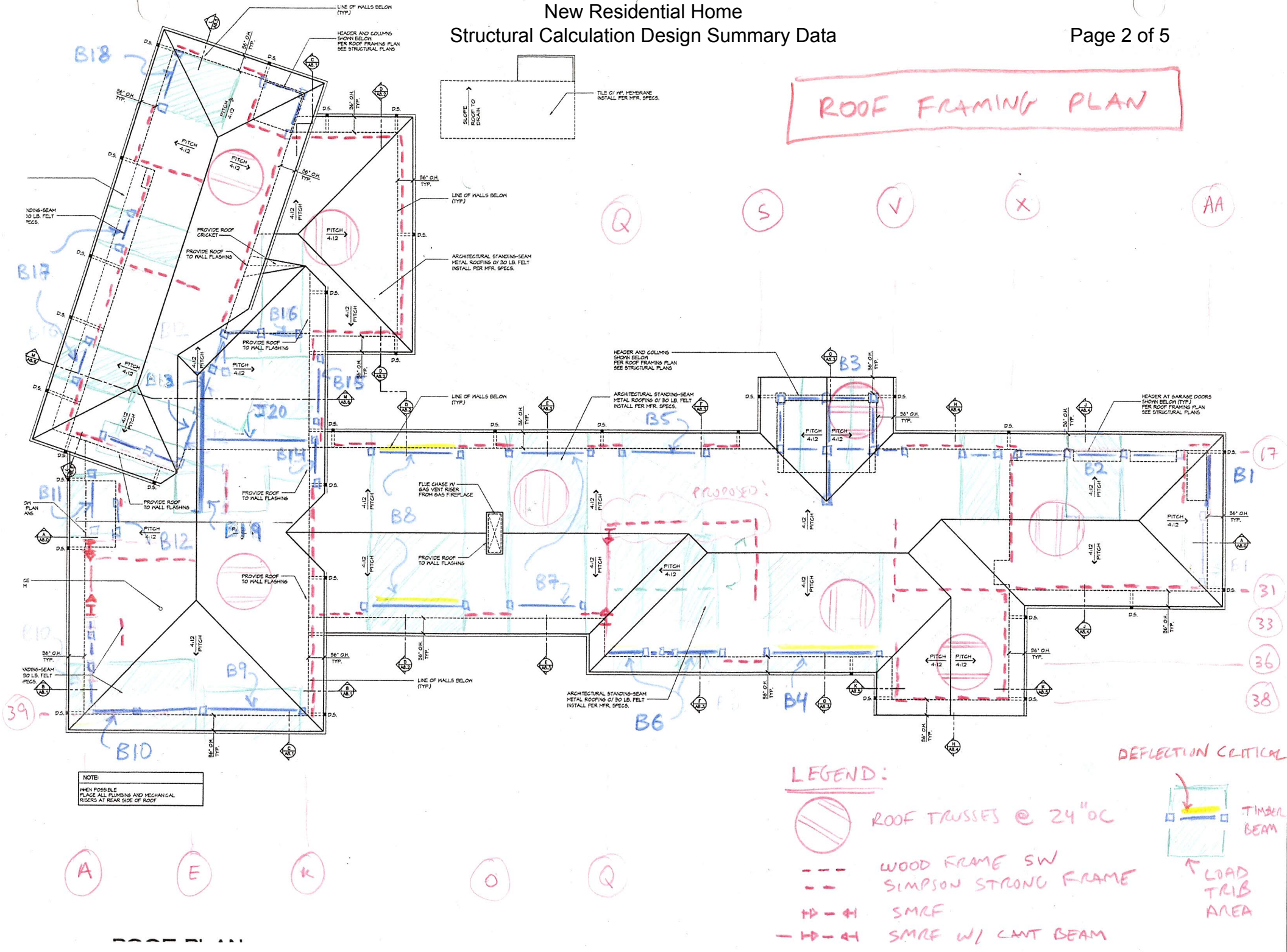
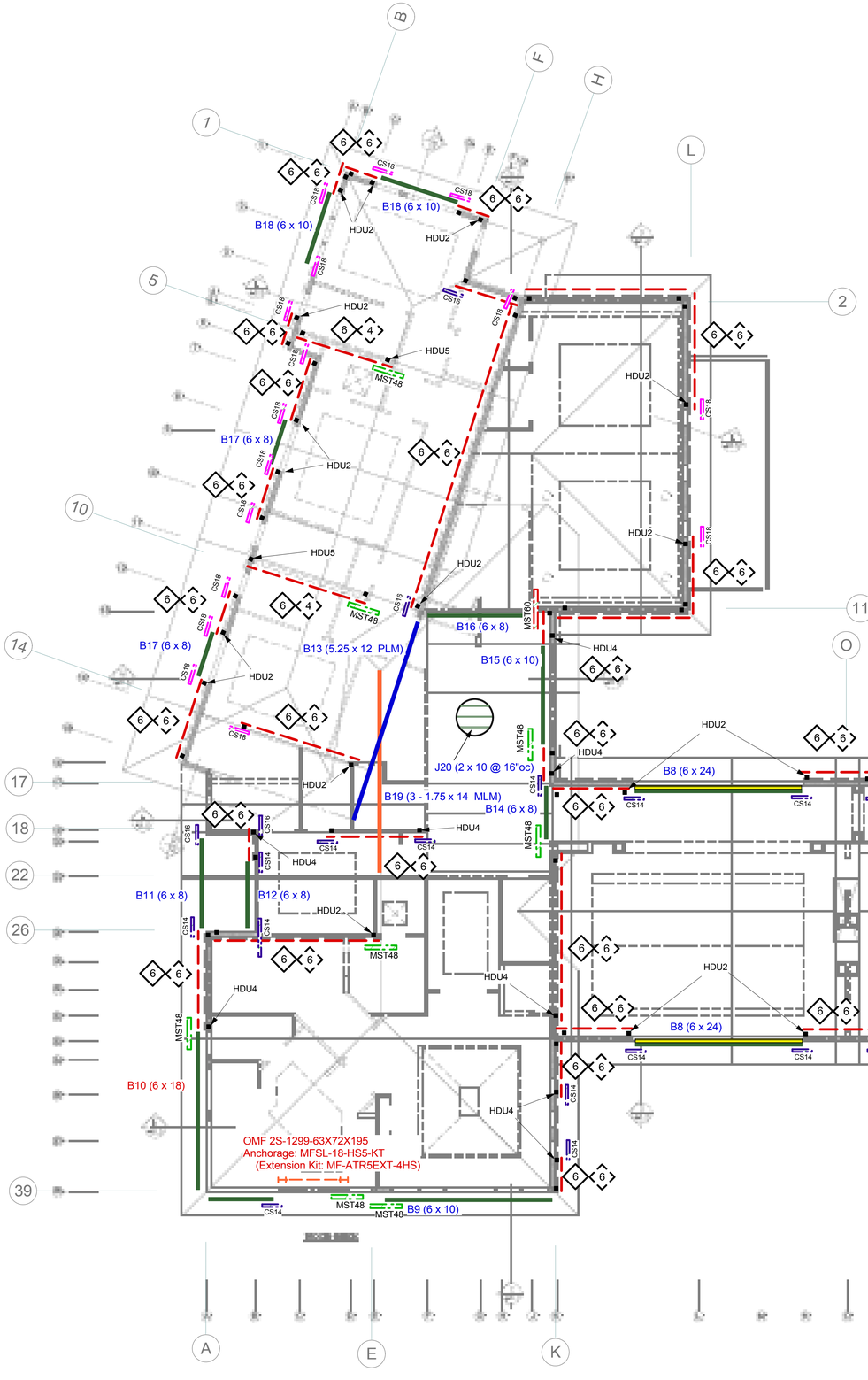


Project Description: Determination of vertical and lateral forces (earthquake, wind) to 13,500 square foot single family home in Napa County for engineer client. Design of members for vertical and lateral loads.

ROOF PLAN

SCALE 1/4" = 1'-0"


ROOF FRAMING PLAN
LINE OF WALLS BELOW (TYP.)
HEADER AND COLUMNS SHOWN BELOW PER ROOF FRAMING PLAN SEE STRUCTURAL PLANS
36" O.H. TYP.
PITCH 4:12
PROVIDE ROOF CRICKET
PROVIDE ROOF TO WALL FLASHING
ARCHITECTURAL STANDING-SEAM METAL ROOFING O/ 30 LB. FELT INSTALL PER MFR. SPECS.
TILE O/ WP. MEMBRANE INSTALL PER MFR. SPECS.
SLOPE ROOF TO DRAIN
HEADER AT GARAGE DOORS SHOWN BELOW (TYP.) PER ROOF FRAMING PLAN SEE STRUCTURAL PLANS
FLUE CHASE W/ GAS VENT RISER FROM GAS FIREPLACE
PROPOSED
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
J20
NOTE:
WHEN POSSIBLE PLACE ALL PLUMBING AND MECHANICAL RISERS AT REAR SIDE OF ROOF
LEGEND:
ROOF TRUSSES @ 24"OC
WOOD FRAME SW
SIMPSON STRONG FRAME
SMRF
SMRF W/ CANT BEAM
DEFLECTION CRITICAL
TIMBER BEAM
LOAD TRIB AREA



LFRS LEGEND:

- Shear Wall Above Floor, 10d Edge Nailing
- Shear Wall Below Floor, 10d Edge Nailing
- Holdown EA Side, as Specified
- Plywood Shear Wall (> 4 ') w/ 1/2" Sheathing
- Simpson Strong Frame

WOOD FRAME CONNECTION LEGEND:

- CS18 Strap w/ 18-10d (1,370 #)
- CS16 Strap w/ 22-10d (1,705 #)
- CS14 Strap w/ 30-10d (2,490 #)
- MST48 Strap w/ 26-16d (3,215 #)
- MST48 Strap w/ 34-16d (4,205 #)
- MST60 Strap w/ 46-16d (6,235 #)

Note: unless Otherwise Noted, all Top and Bottom Splices shall be 48" w/ 12-16d.

ROOF FRAMING LEGEND:

- 6 X DF-L No.1 Beam (As indicated)
- Deflection Critical Beam
- 2 X @ 16" oc DF-L No.1 Framing (As indicated)
- 2.0E Parallam (As indicated)
- 1.9E MIcrollam (As Indicated)

Project	Atlas Peak Residence, Napa
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North Bay Seismic Design
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PO Box 55, Inverness CA 94937
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www.NorthBaySeismicDesign.com

DETERMINATION OF SEISMIC LOADS TO LFRS AT GRIDLINES
ASCE 7-05 CHAPTER 12 - SEISMIC REQUIREMENTS FOR BUILDING STRUCTURES
ATLAS PEAK RESIDENCE, NAPA

Loading Direction	House Section	Wall Gridline Location	Floor Level	Seismic Load		Wind Load		Controlling Design Values			
				At Floor Level (lbs)	Sum (lbs)	At Floor Level (lbs)	Sum (lbs)	Control Load	At Floor Level (lbs)	Sum (lbs)	Control Load
N-S	BLDG 1	AA	Roof	1,459		6,047		Wind	6,047		
		X	Roof	1,935		6,079		Wind	6,079		
		V	Roof	2,579		7,013		Wind	7,013		
		S	Roof	2,846		6,450		Wind	6,450		
		Q	Roof	4,335		11,422		Wind	11,422		
			Floor	2,317	6,652	2,790	14,212			14,212	Wind
	BLDG 2	K	Roof	6,704		13,863		Wind	13,863		
			Floor	9,556	16,261	3,539	17,402			17,402	Wind
		A	Roof	2,789		5,681		Wind	5,681		
			Floor	4,506	7,295	2,099	7,780			7,780	Wind
		C	Roof	2,456		2,768		Wind	2,768		
			Floor	3,159	5,614	839	3,607			5,614	EQ
		H	Roof	2,585		3,653		Wind	3,653		
			Floor	3,722	6,306	560	4,213			6,306	EQ
		L	Roof	1,785		3,291		Wind	3,291		
			Floor	1,361	3,146	609	3,900			3,900	Wind
W-E	BLDG 2	1	Roof	456		1,717		Wind	1,717		
			Floor	449	905	468	2,184			2,184	Wind
		2	Roof	680		2,757		Wind	2,757		
			Floor	948	1,628	869	3,626			3,626	Wind
		5	Roof	1,539		5,501		Wind	5,501		
			Floor	2,055	3,594	1,745	7,246			7,246	Wind

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				At Floor Level (lbs)	Sum (lbs)	At Floor Level (lbs)	Sum (lbs)	Control Load	At Floor Level (lbs)	Sum (lbs)	Control Load
W-E	BLDG 2	10	Roof	1,897		6,781		Wind	6,781		
			Floor	2,422	4,318	3,630	10,410			10,410	Wind
		14	Roof	1,372		4,313		Wind	4,313		
			Floor	1,485	2,857	2,226	6,538			6,538	Wind
		18	Roof	1,082		4,490		Wind	4,490		
			Floor	2,209	3,291	954	5,444			5,444	Wind
		26	Roof	2,087		5,801		Wind	5,801		
			Floor	3,710	5,797	1,840	7,641			7,641	Wind
		39	Roof	1,800		5,265		Wind	5,265		
			Floor	2,700	4,500	1,540	6,805			6,805	Wind
	BLDG 1 (K - S)	17	Roof	1,859		3,419		Wind	3,419		
			Floor	3,240	5,099					5,099	EQ
		33	Roof	1,859		3,419		Wind	3,419		
			Floor	3,240	5,099					5,099	EQ
		36	Roof	459		2,642		Wind	2,642		
	BLDG 1 (S - AA)	17	Roof	3,041		4,941		Wind	4,941		
		31	Roof	3,808		3,419		EQ	3,808		
		39	Roof	437		1,336		Wind	1,336		