

STRUCTURAL LOADS

GROUND SNOW LOAD 50 LBS/FT²
 DIMENSIONAL LUMBER MOE=1,400,000
 ENGINEERED LVL LUMBER MOE=2,000,000
 DEFLECTION AT ALL ROOMS = L/480

FRAMING DESIGNED TO MEET OR EXCEED IRC 2009

ENGINEERED LUMBER DESIGNED TO WEYERHAUSER TRUS JOIST "2.0E MICROLAM LVL" USING WEYERHAUSER #TJ-9000 SPECIFIER'S GUIDE, MAY 2015, SUBMITTED WITH THIS DRAWING.

BEAM 1
 2ND FLOOR
 JOIST SPAN: 24'/2 = 12'
 30LL+10DL = 40 LBS/FT²
 CONTRIBUTORY LOAD: 12 x 40 = 480 LBS/FT

3RD FLOOR
 JOIST SPAN: 24'/2 = 12'
 40LL+10DL = 50 LBS/FT²
 CONTRIBUTORY LOAD: 12 x 50 = 600 LBS/FT

ROOF LOAD: N/A (BEARS ON EXTERIOR WALL)

TOTAL UNIFORM LOAD: 480 LBS/FT + 600 LBS/FT = 1080 LBS/FT
 BEAM LENGTH 15'-4"

BEAM SIZE FROM WEYERHAUSER TJ-9000 SPECIFIER'S GUIDE P. 19:
 3 1/2" X 20" 2.0E MICROLAM LVL (RATED FOR 1365 LBS/FT AT 16'-6" SPAN WITH sL/360 DEFLECTION BELOW 1330 LBS/FT)
 MINIMUM SPECIFIED END BEARING: 4.4" (USE 3 1/2" X 5 1/4" LVL POST ORIENTED AS SHOWN)

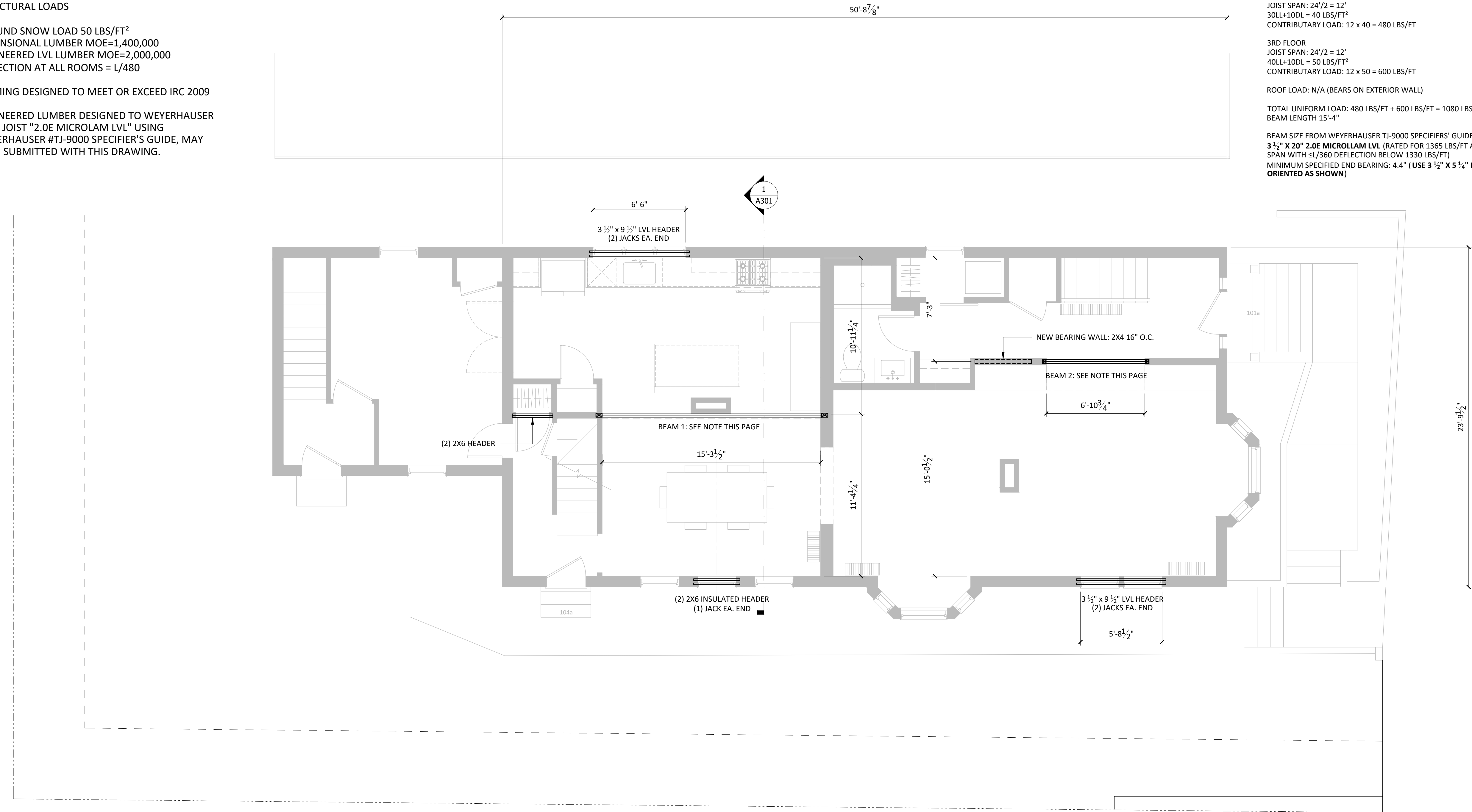
BEAM 2
 2ND FLOOR
 JOIST SPAN: 24'/2 = 12'
 30LL+10DL = 40 LBS/FT²
 CONTRIBUTORY LOAD: 12 x 40 = 480 LBS/FT

3RD FLOOR
 JOIST SPAN: 24'/2 = 12'
 40LL+10DL = 50 LBS/FT²
 CONTRIBUTORY LOAD: 12 x 50 = 600 LBS/FT

ROOF LOAD: N/A (BEARS ON EXTERIOR WALL)

TOTAL UNIFORM LOAD: 480 LBS/FT + 600 LBS/FT = 1080 LBS/FT
 BEAM LENGTH 7'-0"

BEAM SIZE FROM WEYERHAUSER TJ-9000 SPECIFIER'S GUIDE P. 18:
 3 1/2" X 9 3/4" 2.0E MICROLAM LVL (RATED FOR 1391 LBS/FT AT 8' SPAN WITH sL/360 DEFLECTION BELOW 1169 LBS/FT)
 MINIMUM SPECIFIED END BEARING: 2.1" (USE DOUBLE 2X4 POST EACH END)



1 SECOND FLOOR FRAMING PLAN
 1/4" = 1'-0"

