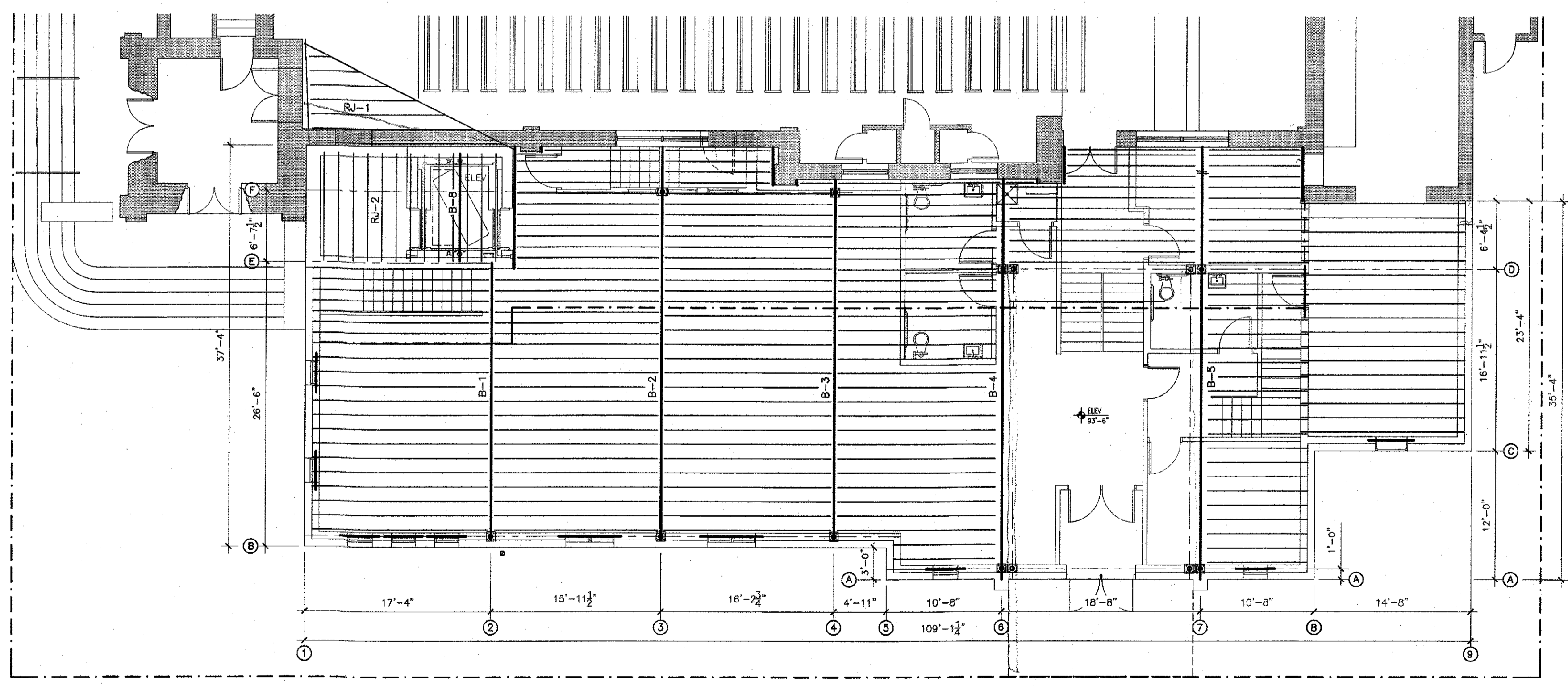


2 ROOF PLAN W/ SNOW LOADS
 1/8" = 1'-0"

3 ROOF PLAN NOTES

NOTES:
 ① BALANCED SNOW LOAD = 33.9 PSF + MECH EQUIP LOAD 20 PSF = 53.9 PSF UNIFORM LOAD
 ② UPPER ROOF SLIDING SNOW DRIFT SURCHARGE SNOW LOAD = 24.8 PSF + 33.9 PSF UNIFORM SNOW LOAD = 58.7 PSF UNIFORM LOAD - OVER 15 FT WIDTH
 ③ ADDITIONAL WINDWARD SNOW DRIFT SURCHARGE TRIANGULAR SNOW LOAD = 34.9 PSF - DRIFT WIDTH = 7 FT
 ④ TAPPED INSULATION - TYPICAL

GRAPHIC KEY:
 [Symbol] BALANCED SNOW LOAD
 [Symbol] UPPER ROOF SLIDING SNOW DRIFT SURCHARGE SNOW LOAD
 [Symbol] ADDITIONAL WINDWARD SNOW DRIFT SURCHARGE TRIANGULAR SNOW LOAD
 [Symbol] TAPPED INSULATION - TYPICAL



1 ADDITION ROOF FRAMING PLAN
 1/8" = 1'-0"

4 GENERAL STRUCTURAL NOTES:

CODE International Building Code 2015

IBC 1603.1 STRUCTURAL DESIGN LOADS

1603.1.1 FLOOR LIVE LOADS: Typical floor live load = 125 psf (storage warehouse - light)

1603.1.2 ROOF LIVE LOADS: Roof live load = 12 psf (over 600 sf)

1603.1.3 ROOF SNOW LOAD DATA: Ground snow load, $P_g = 50$ psf
 Flat-roof snow load, $P_f = 38.5$ psf
 Snow exposure factor, $C_e = 1.0$
 Snow load importance factor, $I_s = 1.0$
 Thermal factor, $C_t = 1.1$
 Drift surcharge load, $P_d = 34.1$ psf
 Width of snow drift, $w = 6.66$ ft (from ridge line down)

1603.1.4 WIND DESIGN DATA: Ultimate design wind speed, Vult (3-sec gust) = 115 mph
 Nominal design wind speed, $V_{nd} = 89.1$ mph
 Risk category = II
 Wind exposure category = B
 Applicable internal pressure coefficient = +/- 0.18
 Vertical walls wind base pressure, $q_h = +/- 20.2$ psf
 Roof wind base pressure, $q_h = +/- 20.2$ psf
 Exterior components & cladding pressure, $q_h = +/- 25.2$ psf

1603.1.5 EARTHQUAKE DESIGN DATA: Risk category = II
 Seismic importance factor, $I_e = 1.0$
 Mapped spectral accel parameters, $S_s = .05\%g$ $S_1 = .04\%g$
 Site class = D
 Design spectral response coef, $S_{ds} = .001$ $S_{d1} = .001$
 Seismic design category = A
 Basic seismic force-resisting system: conc block shear walls
 Design base shear, $V = .010W$
 Seismic response coefficient, $C_s = .010$
 Response modification coefficient, $R = 2$
 Analysis procedure used: Equivalent Lateral-Force Analysis

1603.1.6 GEOTECHNICAL INFO: Allowable Design soil bearing, $Q_s = 2000$ paf (assumed)

GENERAL STRUCTURAL MATERIAL SPECS

- DESIGN CODES - (ALL LATEST EDITIONS)
 - AMERICAN CONCRETE INSTITUTE (ACI)
 - CONCRETE REINFORCING STEEL INSTITUTE (CRSI)
 - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
 - NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)
 - 2015 INTERNATIONAL BUILDING CODE
- SOIL
 - 2000 PSF - ASSUMED
 - 2000 PSF SAFE BEARING USED FOR DESIGN
 - FOOTINGS SHALL BEAR ON UNDISTURBED NATURAL SOIL OR COMPACTED ENGINEERED FILL - ENGINEERED FILL SHALL BE A WELL GRADED GRANULAR MATERIAL COMPACTED TO 98% STANDARD PROCTOR DENSITY.
- CAST-IN-PLACE CONCRETE
 - ARRANGEMENTS, BENDING, DETAILING AND SUPPORT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI AND CRSI STANDARDS.
 - WHERE REINFORCING BARS ARE SHOWN CONTINUOUS LAP BARS #4-20", #5-26", #6-33"
 - REINFORCEMENT STEEL BARS - ASTM A615 GRADE 60 (60 KSI)
 - MAXIMUM SIZE OF AGGREGATE IS 1 1/2"
 - MAXIMUM SLUMP IS 3"
 COMPONENT CONC STRENGTH @ 28 DAYS
 - BLOCK/MASONRY FILL 2500 PSI
 - FOOTINGS & FOUNDATION WALLS 3500 PSI
 - INTERIOR & EXTERIOR SLABS 4000 PSI
- MASONRY
 - MASONRY BLOCK UNITS - NORMAL WEIGHT
 - MORTAR TO BE TYPE S - CONFORMING TO ASTM C270
 - INSTALL FLASHINGS AT BASE & ALL OPENINGS
 - INSTALL BLOCK ANCHORS TO PILASTER COLUMNS
 - INSTALL WEEP HOLES AT 48"oc

5 ROOF FRAMING PLAN NOTES

NOTES:
 ①
 ②

6 STRUCTURAL SCHEDULE

MARK	SECTION	REMARKS
B-1	W18 x 35 BEAM - GRADE A992-50	ROOF BEAM
B-2	W18 x 76 BEAM - GRADE A992-50	ROOF BEAM
B-3	W18 x 76 BEAM - GRADE A992-50	ROOF BEAM
B-4	W18 x 35 BEAM - GRADE A992-50	ROOF BEAM
B-5	W18 x 76 BEAM - GRADE A992-50	ROOF BEAM
RJ-1		
H-1	(2)-1.75 x 9.25 IN / 2.0E MICROLAMS - MAX SPAN 9'-4"	
RT-1	18" DEPTH PARALLEL CHORD - 3 1/2" WIDTH LOW ROOF JOISTS	
RT-2		

NOTES:
 ① ROOF TRUSS SPACING @ 18" OC. LOADING INCLUDES 25.0 PSF ROOF SYSTEM
 ② ANGLE ANCHORED TO MASONRY WALL WITH 5/8" EXPANSION ANCHORS @ 24" OC W/ MIN 5" EMBEDMENT
 ③ 6" x 9" x 1/2" THICK JOIST BEARING PLATE W/ TWO(2) NELSON STUDS AT ALL JOIST BRG LOCATIONS.
 ④ ALL STD STEEL COMPONENTS, JOISTS & GIRDERS TO BE PRIME-PAINTED LT GRAY.

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A duly REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

DATE: _____
 NUMBER: _____

JOB # 18026
 MAR 19, 2019
 REVISIONS

PLOT 1/8" = 1'-0"

ROOF PLAN
 ROOF FRAMING PLAN

A102