

1025 Main St., La Crosse, WI 54601

Design and Elevations

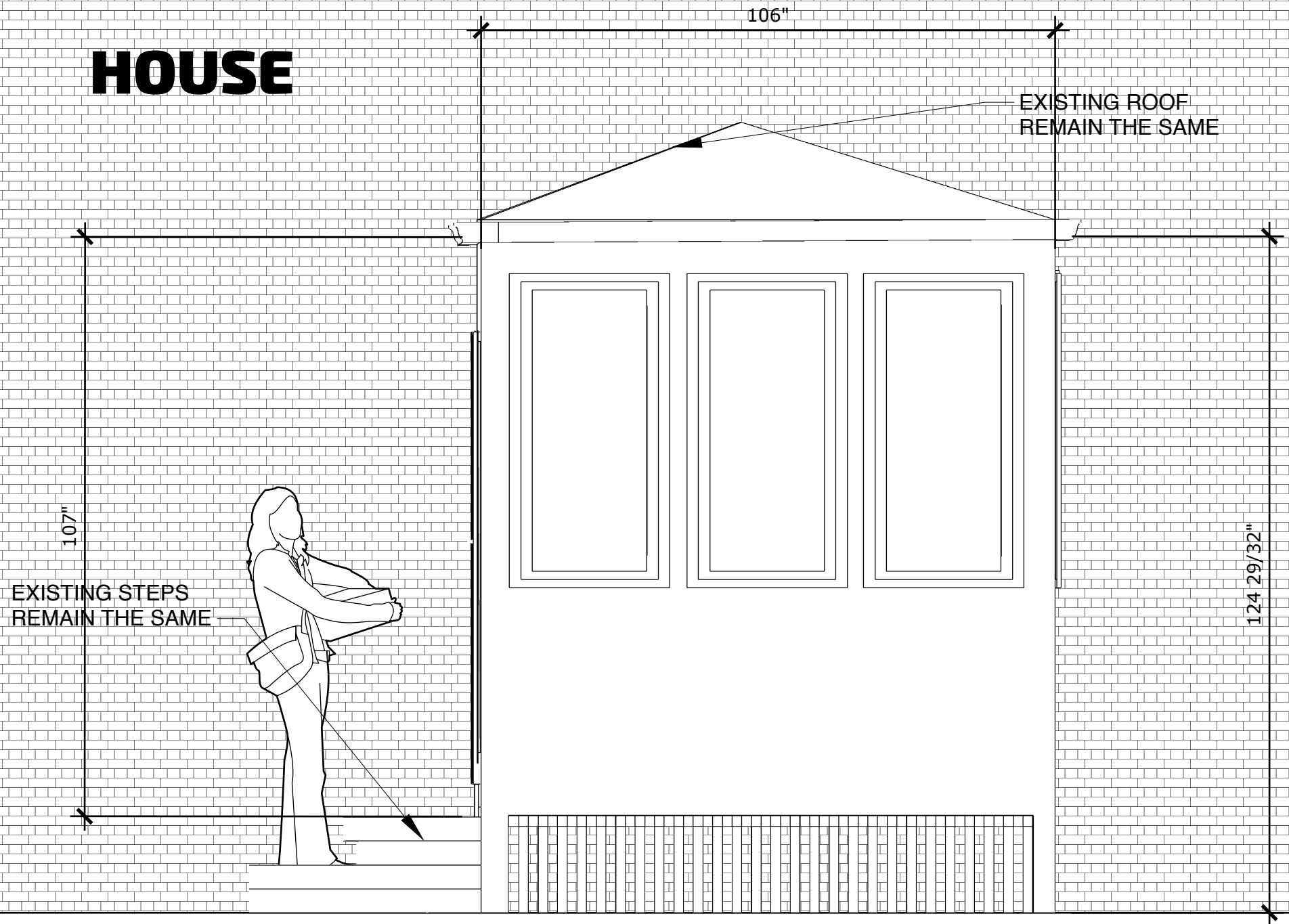
March 25, 2021

BluffView
development group
BUILD TO INSPIRE

CLIENT
Kelly Nowicki

DRAWN BY
Bluffview Development Group
Olana Belka

HOUSE



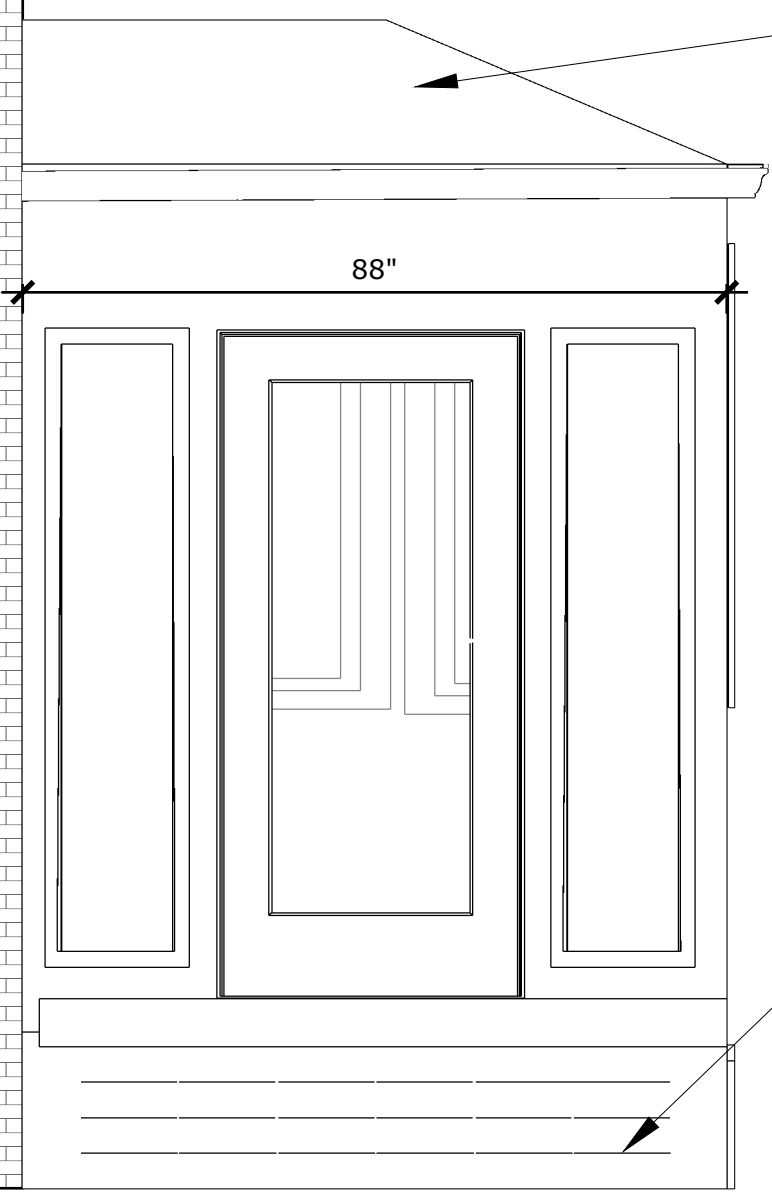
123 11/16"

88"

EXISTING ROOF
REMAIN THE SAME

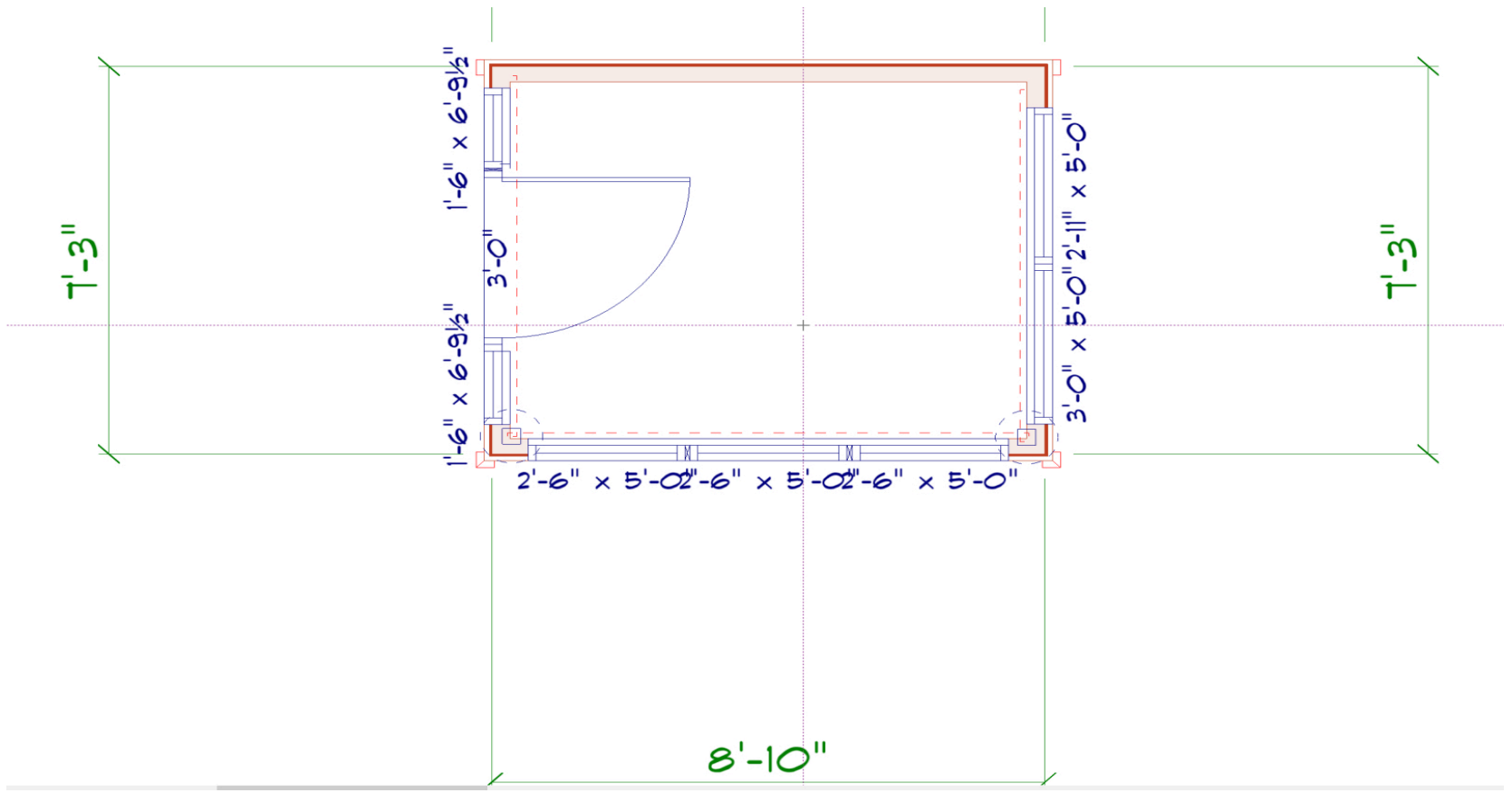
HOUSE

HOUSE



EXISTING ROOF
REMAIN THE SAME

EXISTING STEPS
REMAIN THE SAME



STRUCTURAL CALCULATIONS

Project Name: New Porch Framing
1025 Main Street
La Crosse, WI

Prepared by: Andrew D. Clements, P.E.

Date Issued: 3-19-2021

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DESIGN PER 2015 IBC AND ASCE 7-10



Andrew D. Clements
3.19.2021



3400 Losey Boulevard South
La Crosse, WI 54601

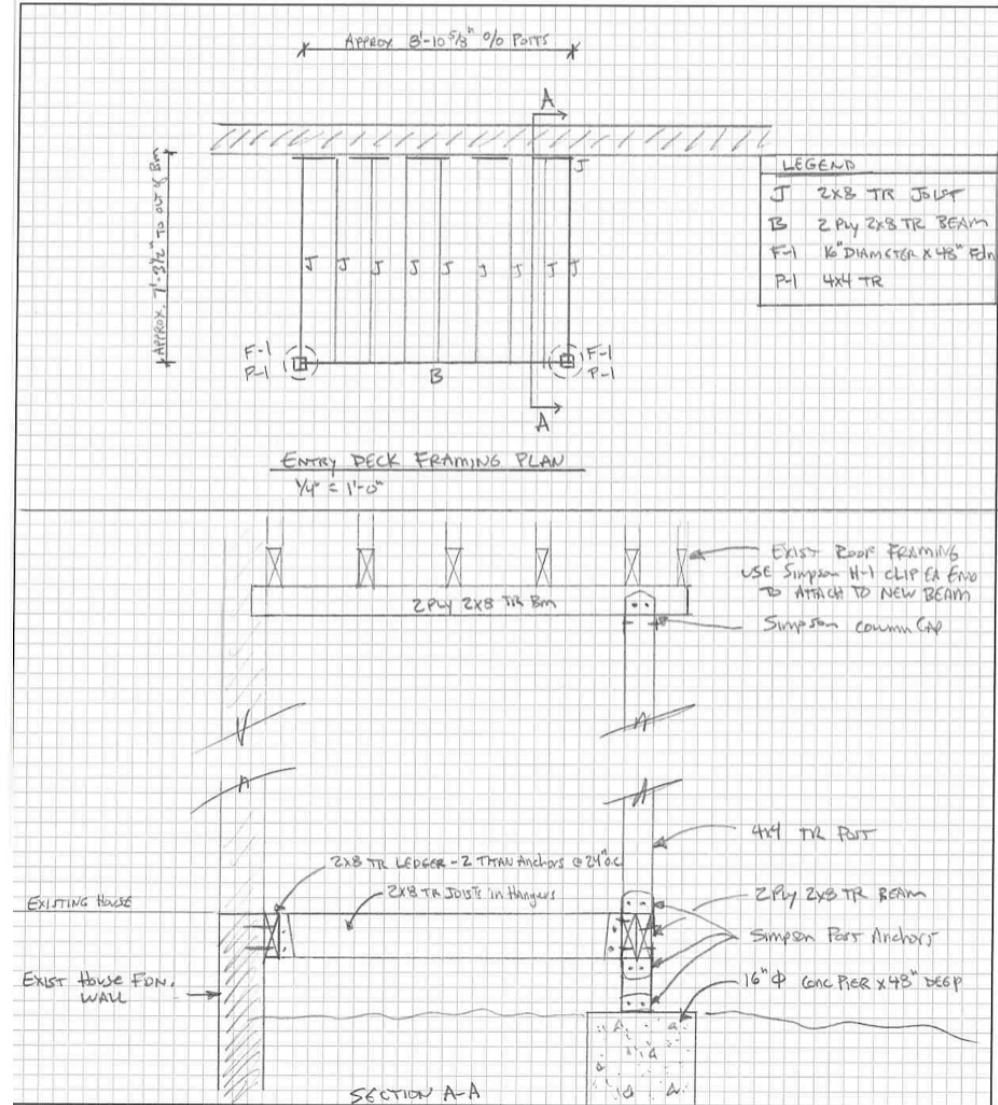
Project BLUFFVIEW DEVELOPMENT

Subject 1025 MAIN ST.

Date 3-19-2021

PG 1/3

Signed AOC





Project BUFFVIEW DEVELOPMENT
 Subject 1025 MAIN ST.
CANDY FRAMING PB 2/3

Date 3-19-2021
 Signed ADC

ENTRY FRONT DECK DESIGN:

LOADS: 15 PSF DEAD FLOOR
 40 PSF LIVE FLOOR
 15 PSF DEAD ROOF
 31 PSF LIVE ROOF

Joints 7' Long

$$LOAD = 55 \text{ PSF} (1.33) = 73 \text{ PLF}$$

16" o.c.

$$M = \frac{wL^2}{8} = \frac{73(7)^2}{8} = 448 \text{ lb-ft}$$

$$S_x = \frac{bd^2}{6} = \frac{1.5(7.25)^2}{6} = 13.14 \text{ in}^3$$

$$F_b \text{ REQ'D} = \frac{M}{S_x} = \frac{448(12)}{13.14} = 409 \text{ PSI}$$

$$F_b \text{ PROVIDED} = 1500(1.15)(1.15) \left(\frac{140}{100}\right)^4 = 1540 \text{ PSI} > 409 \text{ PSI} \quad \text{OK}$$

#1 SYP TREATED cm Cr C_F 1.05

USE 2x8 TR JOIST @ 16" o.c.

BEAM DESIGN

$$LOAD = 3.5(55) = 193 \text{ PLF}$$

$$M = \frac{wL^2}{8} = \frac{193(9)^2}{8} = 1954 \text{ lb-ft}$$

TRY 2 PLY 2x8 SYP TR #1

$$S_x = \frac{bd^2}{6} = \frac{3(7.25)^2}{6} = 26.28 \text{ in}^3$$

$$F_b \text{ REQ'D} = \frac{M}{S_x} = \frac{1954(12)}{26.28} = 892 \text{ PSI}$$

$$F_b \text{ PROVIDED} = 1500(.85) = 1275 \text{ PSI} > 892 \text{ PSI} \quad \text{OK}$$

USE 2 PLY 2x8 TR SYP BEAM



Project BUFFVIEW DEVELOPMENT
 Subject 1025
 PB 3/3

Date 3-19-2021
 Signed ADC

ROOF SUPPORT BEAMS

$$LOAD = 46(5) = 230 \text{ PLF}$$

$$M = \frac{wL^2}{8} = \frac{230(7.5)^2}{8} = 1618 \text{ lb-ft}$$

TRY 2 PLY 2x8 TR SYP

$$S_x = 26.28 \text{ in}^3$$

$$F_b \text{ REQ'D} = \frac{M}{S_x} = \frac{1618(12)}{26.28} = 738 \text{ PSI}$$

$$F_b \text{ PROVIDED} = 1275 \text{ PSI} > 738 \text{ PSI} \quad \text{OK}$$