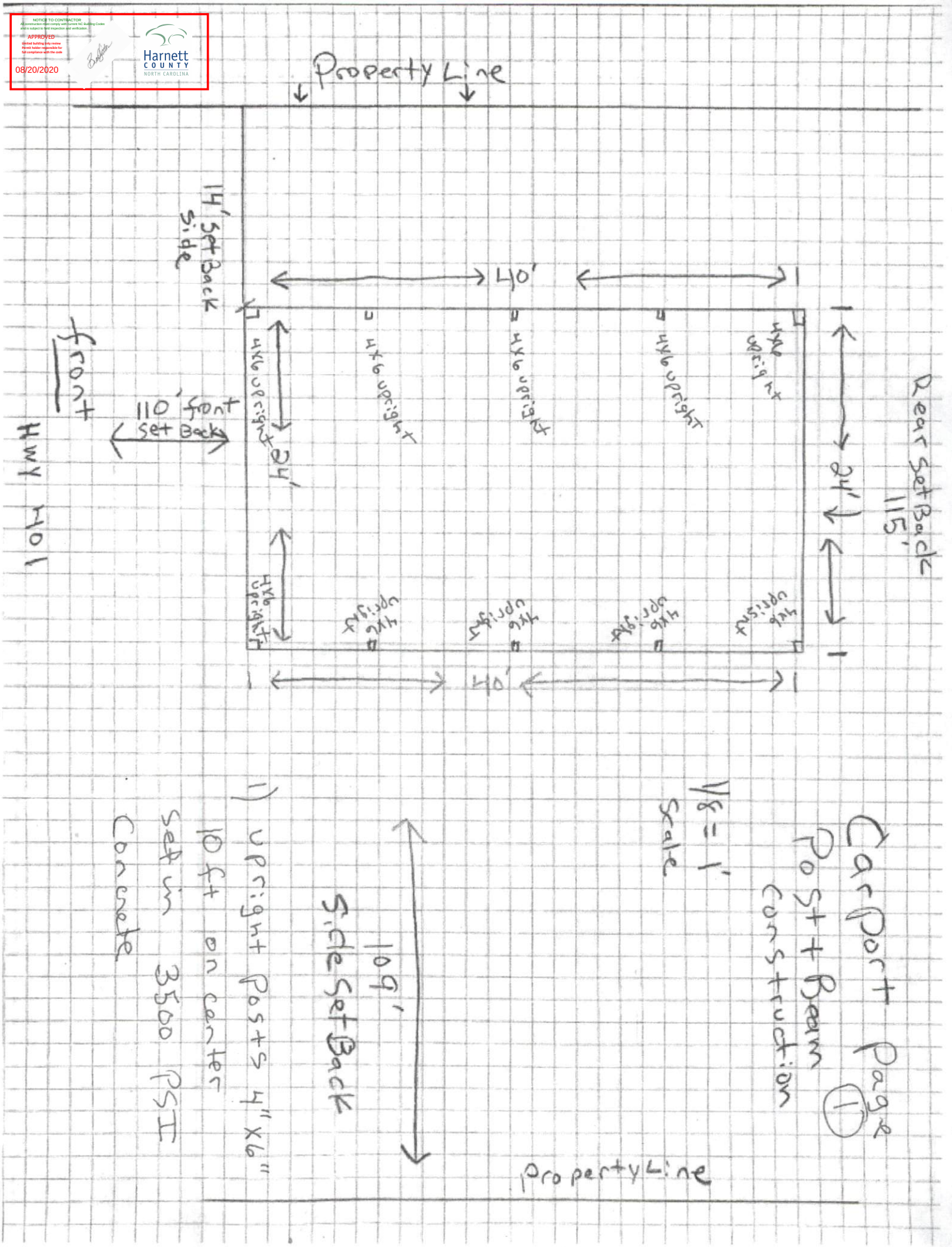
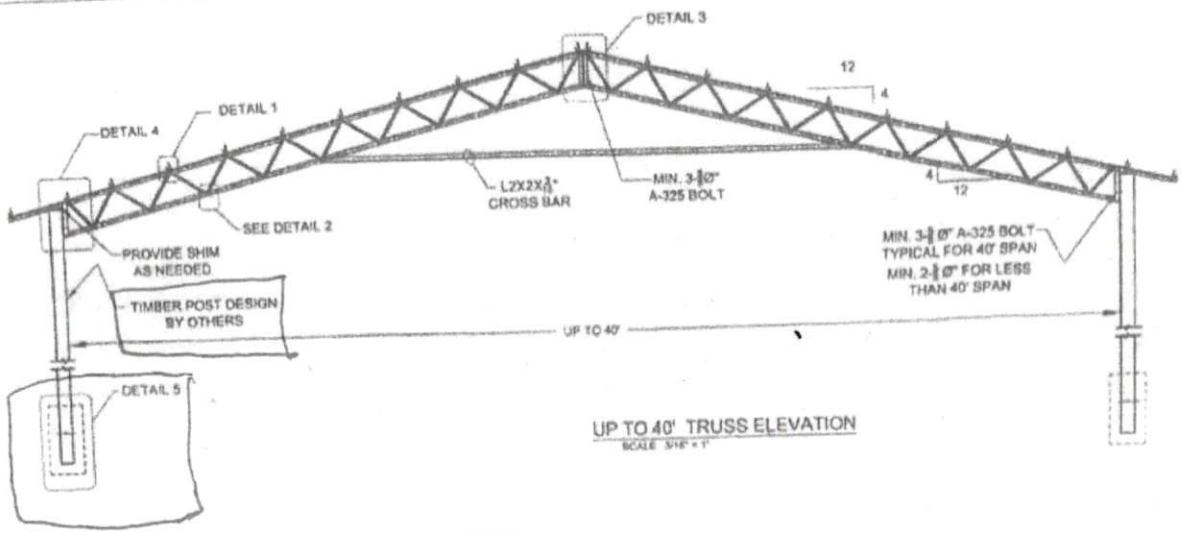


1) Upright Posts 4" x 6" =

Truss Construction



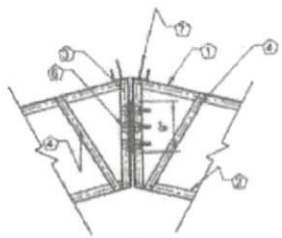
UP TO 40' TRUSS ELEVATION
SCALE: 3/16" = 1'

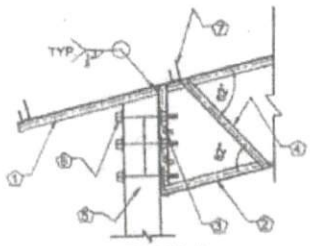
DESIGN CRITERIA

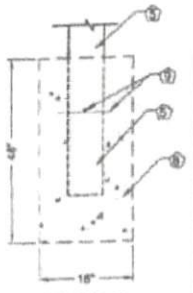
1.	WIND LOAD	V_{ULT}	= 140 MPH
2.	LIVE LOAD		= 10 PSF
3.	DEAD LOAD		= 5 PSF
4.	SNOW LOAD	W_{SNOW}	= 20 PSF
5.	CONCRETE	F'_C	= 3500 PSI

NOTES:
MAXIMUM TRUSS SPACING SHALL BE 10 FT.

FRAMING	
①	L 2X2X3/16"
②	L 2X2X3/16"
③	L 2X2X3/16"
④	L 1X1X1/8"
⑤	6X6 P.T. WOOD POST
⑥	3- 5/8"Ø A325
⑦	BRACKET
⑧	16"Ø X40" FND.
⑨	# 5 BAR 12" LONG







GENERAL NOTES

A. STRUCTURAL STEEL DESIGN, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS," NINTH EDITION.

B. HIGH STRENGTH BOLTING SHALL BE IN ACCORDANCE WITH AISC "SPECIFICATION " FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS" (LATEST EDITION).

C. ALL STRUCTURAL STEEL SHALL HAVE THE FOLLOWING MINIMUM YIELD STRENGTHS, SHALL BE HOT DIP GALVANIZED PER PER SABS 934 AT GROUND FLOOR, UNLESS OTHERWISE NOTED ON THE DRAWINGS.

STRUCTURAL TUBING F_y = 46KSI
ALL OTHER F_y = 36KSI

D. WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY SPECIFICATION AWS A5.1 (1996).

E. WELDING ELECTRODES USED FOR SHOP OR FIELD CONNECTIONS SHALL HAVE A MINIMUM ELECTRODE TENSILE STRENGTH OF 70 KSI. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ELECTRODES SHALL CONFORM TO AWS A5.

KIFAYAT U. KHAN, PE
N.C. REG. NO. 047046
NORTH CAROLINA
PROFESSIONAL
SEAL
047046
ENGINEER
8/10/2018
KIFAYAT U. KHAN

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MILTON, FL 32570
PH: 850-623-2233 FAX: 850-465-2345
EMAIL: KKAHN@SECMCORP.COM

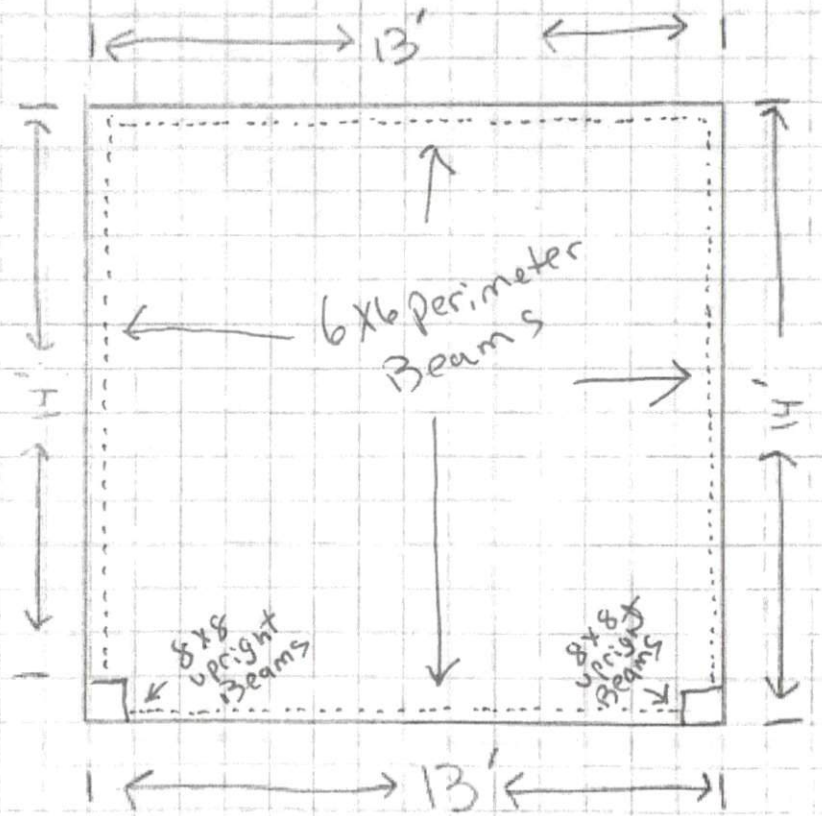
PROJECT NAME:
LOCATION:
COUNTY:

DATE:		SCALE:	
DRAWN:	KK	REVISION:	
CHECKED:	KK	AGENCY #:	
COVER SHEET		SHEET 1 OF 1	

Page 1

Roof over Existing Porch
8x8 + 6x6 Post + Beam construction

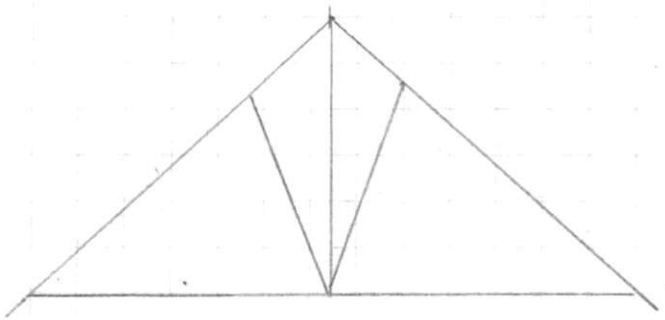
Scale
1/4" to 1 ft



Page (2)

Roof over Existing Porch
Rafter Layout + Design

Scale 1/4" to ft



constructed of 4X6 Beams
3' on center

Wise Engineering
3915 Old Fairground Rd.
Angier, NC 27501
(919)894-2203

August 14, 2020

Jarid James

Subject: 5586 US 401 N, Fuquay Varina, NC 27526

Mr. James,

At your request, I reviewed the proposed roof structure for a deck covering being constructed at your residence. Specifically, I analyzed a timber truss for use as the deck roof structure.

Based on my analysis, the trusses may be constructed of 4x6 sawn lumber (SYP) as described below. The king post truss should consist of a middle "king" post, 2 top chord (or rafter members), and a single bottom chord. The king post trusses should be constructed of 4x6's fastened together with TimberLok screws (4 per connection minimum). The trusses should be spaced 3'-0" on center and span approximately 13 ft. The top chord to bottom cord connections as well as the king post to top and bottom chord connections should be supplemented with "Strap Ties" (or plates) such as Simpson Strong-Tie PS418PC or equivalent. In addition, as an option, the truss may have struts if desired, but are not needed structurally. The actual roof covering can be supported over these trusses by use of purlins and 2x4 rafter plates.

Additionally, the 6x6 beam (truss supports) located on each side of the roof structure should span a maximum of 9' between supports. 6x6 corner braces may be used to reduce the actual span between post.

If you need additional information or have other questions, please let us know.

Sincerely,

Randy K. Wise, PE