



June 5, 2023

Mike Campbell  
25 Burton Street  
Walton, NY 13856  
Email: soup0528@gmail.com

Reference: Engineering Services  
7934 NC-210  
Bunnlevel, NC 28323  
TE&D Project No.: 2301-020499



To Whom It May Concern;

As requested by the client, a representative of Tyndall Engineering & Design, PA (TE&D) was on-site to inspect and observe the existing footing and foundation. We understand the previous home was severely damaged by a fire (as well as the subsequent fire suppression) and was completely removed from the lot. We inspected and observed the following:

- 1) Analysis of the existing soil underlying the existing remaining footing.
- 2) Observe the materials/condition of the existing remaining foundation.

The following conclusions and recommendations were noted:

- 1) The underlying soils were visually observed, qualitatively probed, and subjected to Dynamic Cone Penetrometer (DCP) testing in multiple locations at depths to 2'-0" below existing grade. Hand augers were also advanced to depths of 2'-0" below existing grade. The existing soils were found to equal or be in excess of the minimum 2000 psf bearing capacity required by the 2018 North Carolina Residential Building Code. Based on our observations, analysis, and the results of our field-testing program, the underlying soils are structurally adequate to support the anticipated loading conditions of the existing footing.
- 2) We visually observed the foundation as consisting of 8" x 16" CMU walls at the interior and exterior and 16" x 16" CMU piers at the porches. The foundation was observed to be supported by concrete footings. The existing foundation was visually observed and inspected for damage as well as subjected to non-destructive (Schmidt rebound hammer) testing at the garage slab. The concrete at the garage slab was found to equal or be in excess of the minimum 2500 psi compressive strength required by the 2018 North Carolina Residential Building Code. Based on our observations, analysis, and the results of our field-testing, the existing foundation is to be repaired/enhanced per the following:
  - a. At multiple locations, we observed severe deterioration of the existing mortar joints. Based on our observations and analysis, we recommend the deteriorated mortar joints be removed and repointed with mortar as needed.



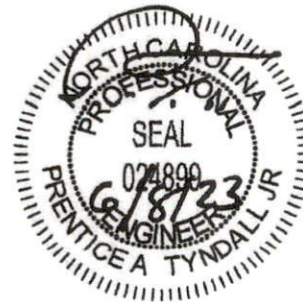
- b. At the front porch piers, we observed several piers as being damaged at the top course. Based on our observations and analysis, we recommend the damaged piers be repaired as needed by removing the topmost course and replacing it with new 16" x 16" CMU blocks.
- c. We also recommend the remaining sill plates be removed and replaced with new pressure treated 2 x 8 sill plates. New sill plates are to be installed so that the existing anchor bolts are within 1'-0" of plate splices. If this cannot be achieved, or the existing anchor bolts are damaged during removal, the sill plate may be fastened to the existing foundation with 1/2" x 8" Simpson Titen HD screws or 1/2" x 12" threaded rods with nuts and washers. The rods are to be embedded a minimum 10" into the turned down footing with Hilti HIT-HY 200 Epoxy per the manufacturer's specifications. Screws and/or rods are to be installed with spacing no greater than 6'-0" o.c. and within 12" of plate splices.

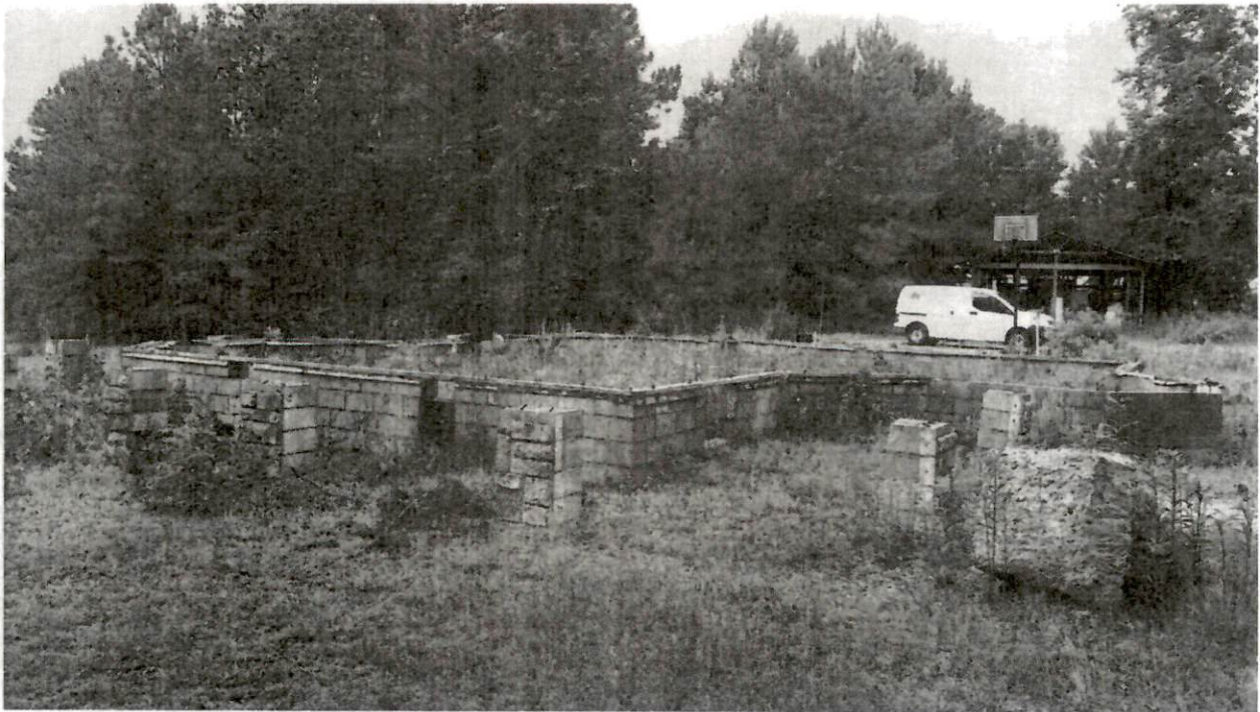
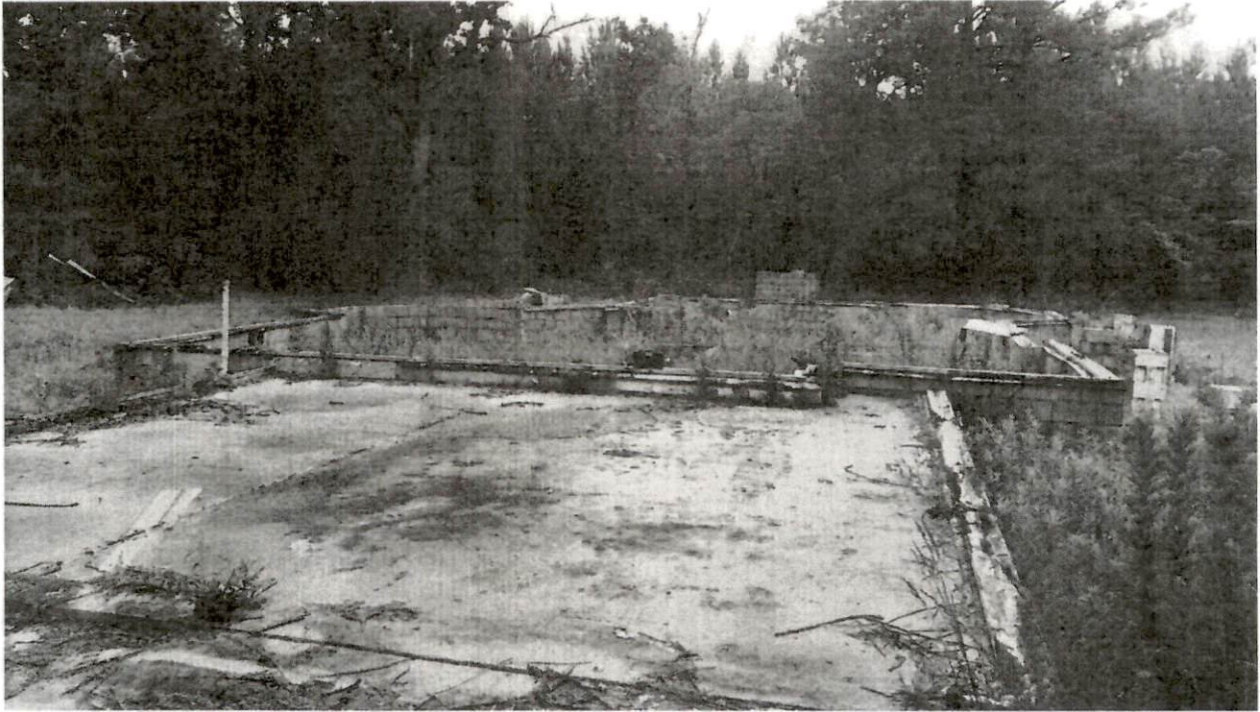
We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely,  
Tyndall Engineering & Design

Tripp Amos  
PT III | 2301-020499

Prentice Tyndall Jr., P.E.





**Site of Inspection**

Drive way

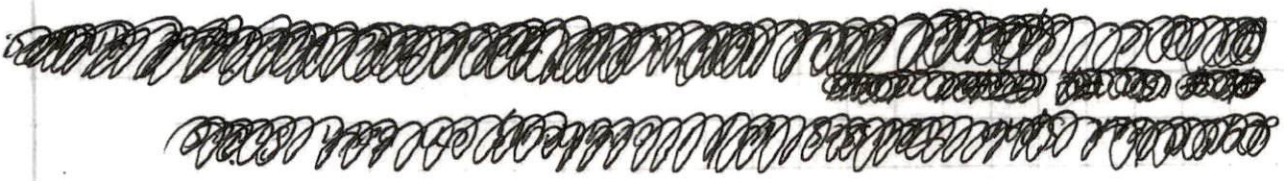
New Backed Entrance  
TO NEW MAJOR PM  
INSTALLED 7/5/2023

Proposed  
GARAGE  
24' X 30'  
ON EXISTING SLAB  
4 windows  
1 main door  
1 overhead door.

EXISTING  
parking  
SLAB  
24' X 30'

EXISTING  
CRAWL  
SPA

STICK FRAME ROOF 2" OC 2 1/2 pitch

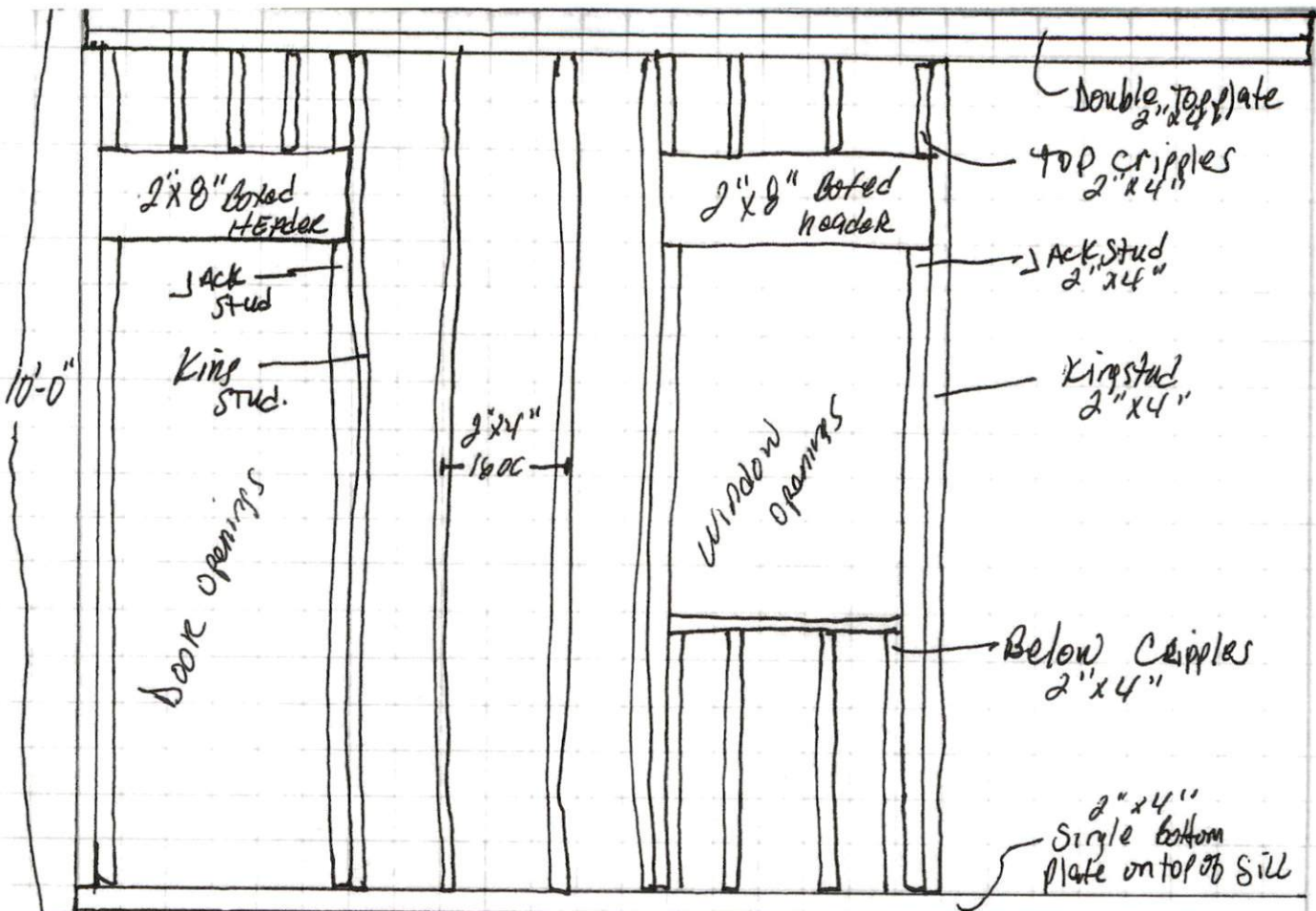


pin: 0536-25-5048.000  
p.i.o: 010536 0080  
7934 NC 2105  
Bunnlevel, NC 28323

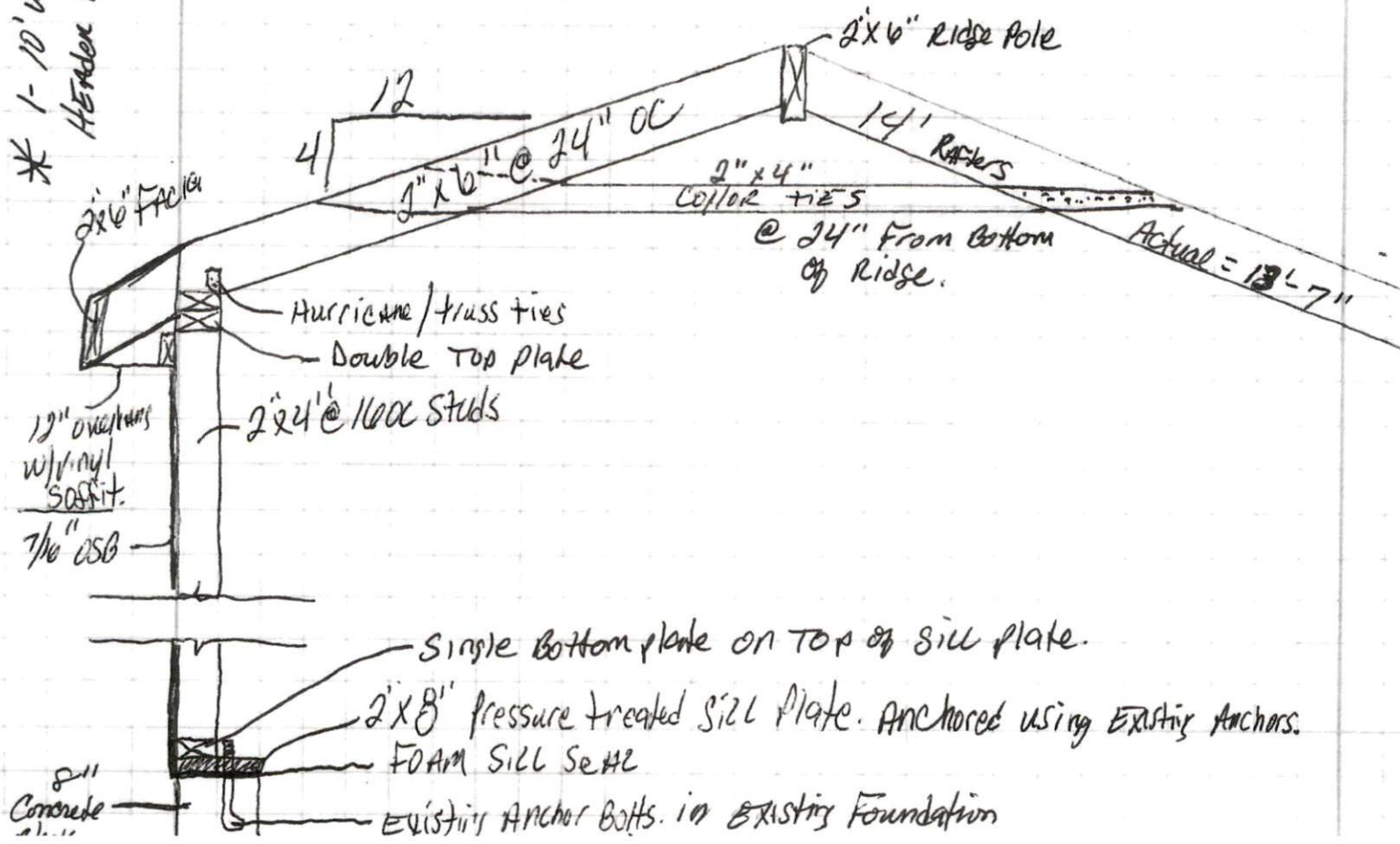
Set BRKS From property lines  
Right = 110'  
Left = 65'  
Front = 215'  
Back = 165'

SCALE = 8' per block.

\* 1-10' wide Garage Door on Gable End Header will be 126" To Accomodate 2 JACK STUDS ON EACH SIDE

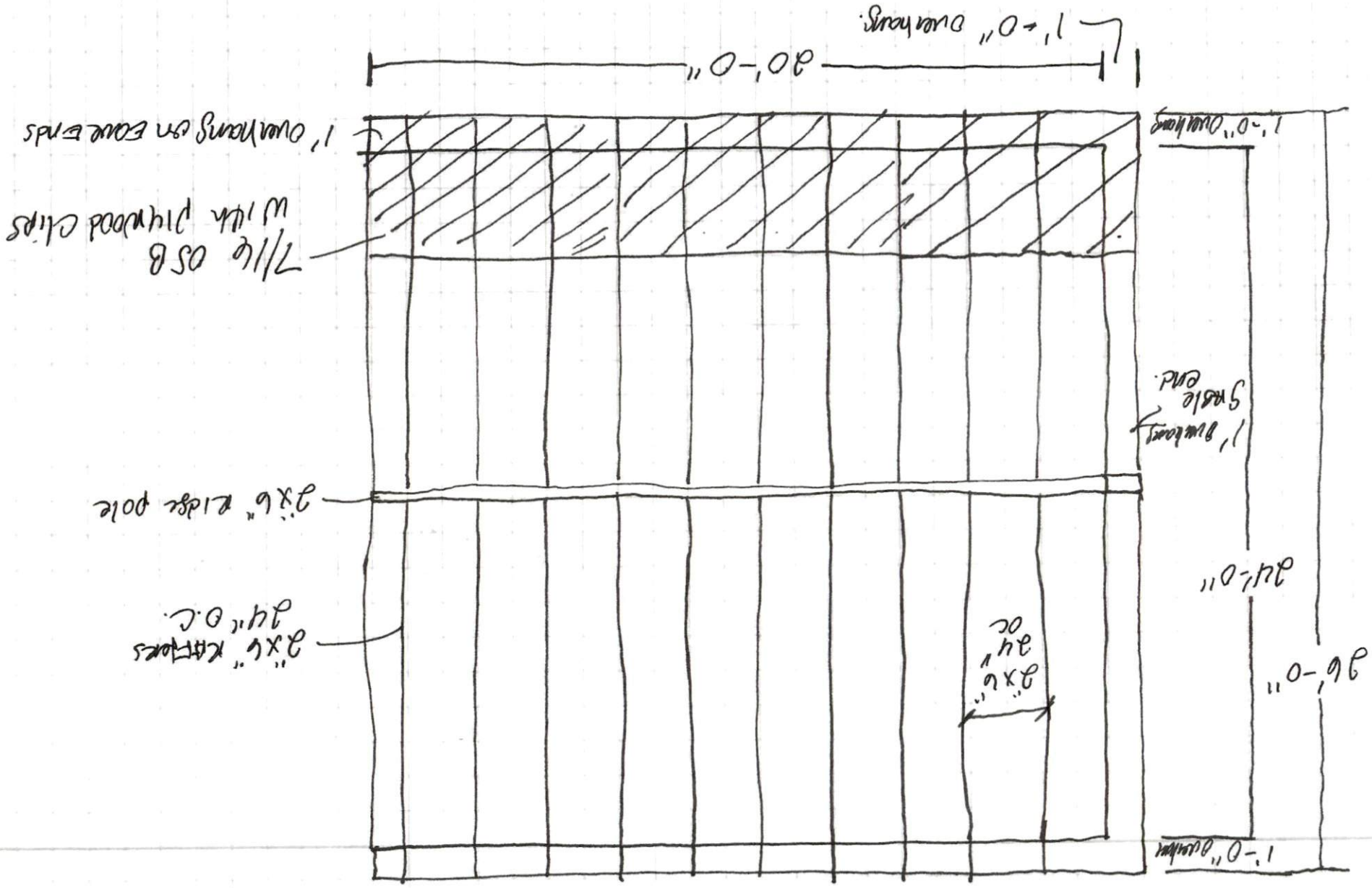


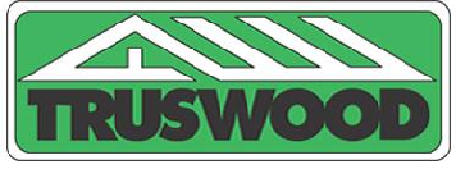
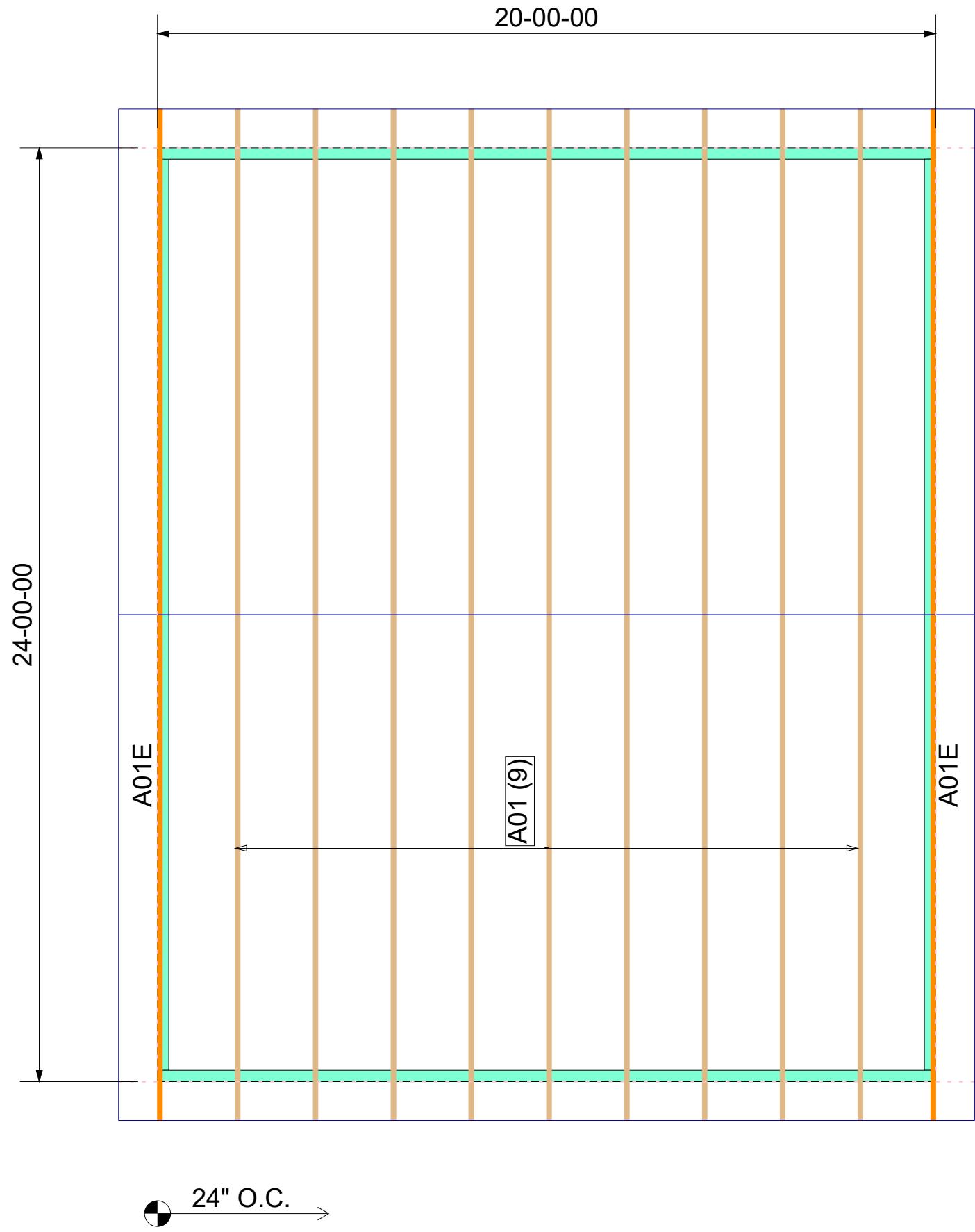
4 Windows @ 34" x 49" Double Hung.  
 Headers will be 37" wide To Accomodate JACK studs.  
 1 Door @ 36" Header will be 39" To Accomodate JACK studs.



2" Concrete

Roof layout





NC 1-919-787-8787 / 1-800-473-8787  
Fax 1-919-783-0617

VA 1-757-833-5300 / 1-800-868-8787  
Fax 1-757-833-5400

**THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.**

These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the entire truss support structure including, but not limited to headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult "Bracing of wood trusses" available from the Truss Plate Institute, 583 D'Onifrio Drive, Madison, WI 53179

**TRUSS TO BEARING DESIGN RESPONSIBILITY.**

Truss to bearing connections if shown on this layout are suggested by Truswood based solely on the uplift reactions and considerations for the truss component. All truss to bearing connections must be specified or approved by the Building Designer to adequately transfer all loads to the building system and foundation. Consult hardware manufacturer's specifications for all installation requirements.

**GENERAL NOTES:**

- 1.) REFER TO INDIVIDUAL TRUSS DRAWINGS FOR ADDITIONAL .....INFO.
- 2.) DIMENSIONS SHOWN ARE FROM FACE OF STUD OF BEARING .....WALL U.N.O.
- 3.) DIMENSIONAL VERIFICATION IS THE RESPONSIBILITY OF THE .....SITE CONTRACTOR AND /OR ARCHITECT.
- 4.) ALL INTERIOR HEADERS TO BE DROPPED EXCEPT AS NOTED.
- 5.) ALL TRUSSES MUST BE SPACED AT A MAXIMUM OF 24" OC .....UNLESS OTHERWISE NOTED.
- 6.) \*DO NOT CUT, DRILL, OR ALTER ANY TRUSS WITHOUT THE .....\*WRITTEN CONSENT FROM A REGISTERED ENGINEER.

CUSTOMER NAME:	Cambell Garage		
PROJECT:	Cambell Garage		
DATE:	8/2/23	FILENAME:	R
SCALE:	SCALE	LOT:	
REVISION:		DATE:	
		BY:	
REVISION:		DATE:	
		BY:	
REVISION:		DATE:	
		BY:	
DESIGNED BY:	psc		CHECKED BY:

JOB NUMBER: 2300753