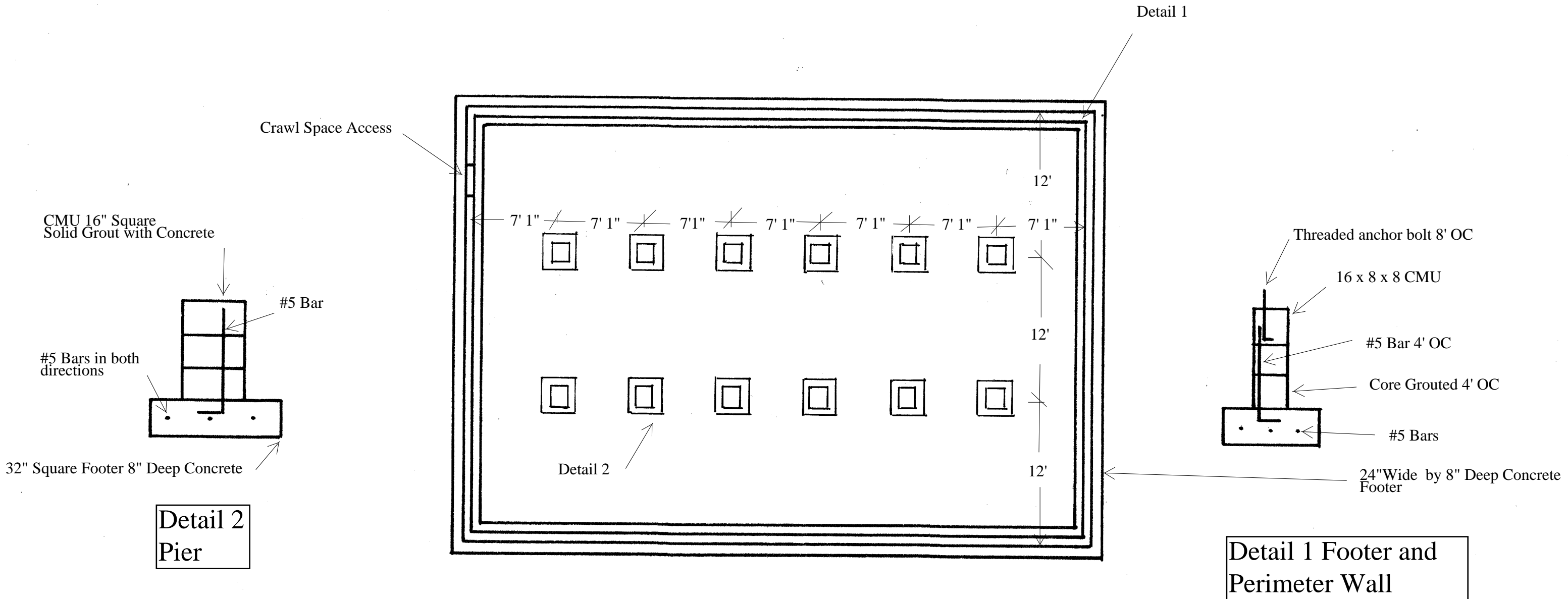


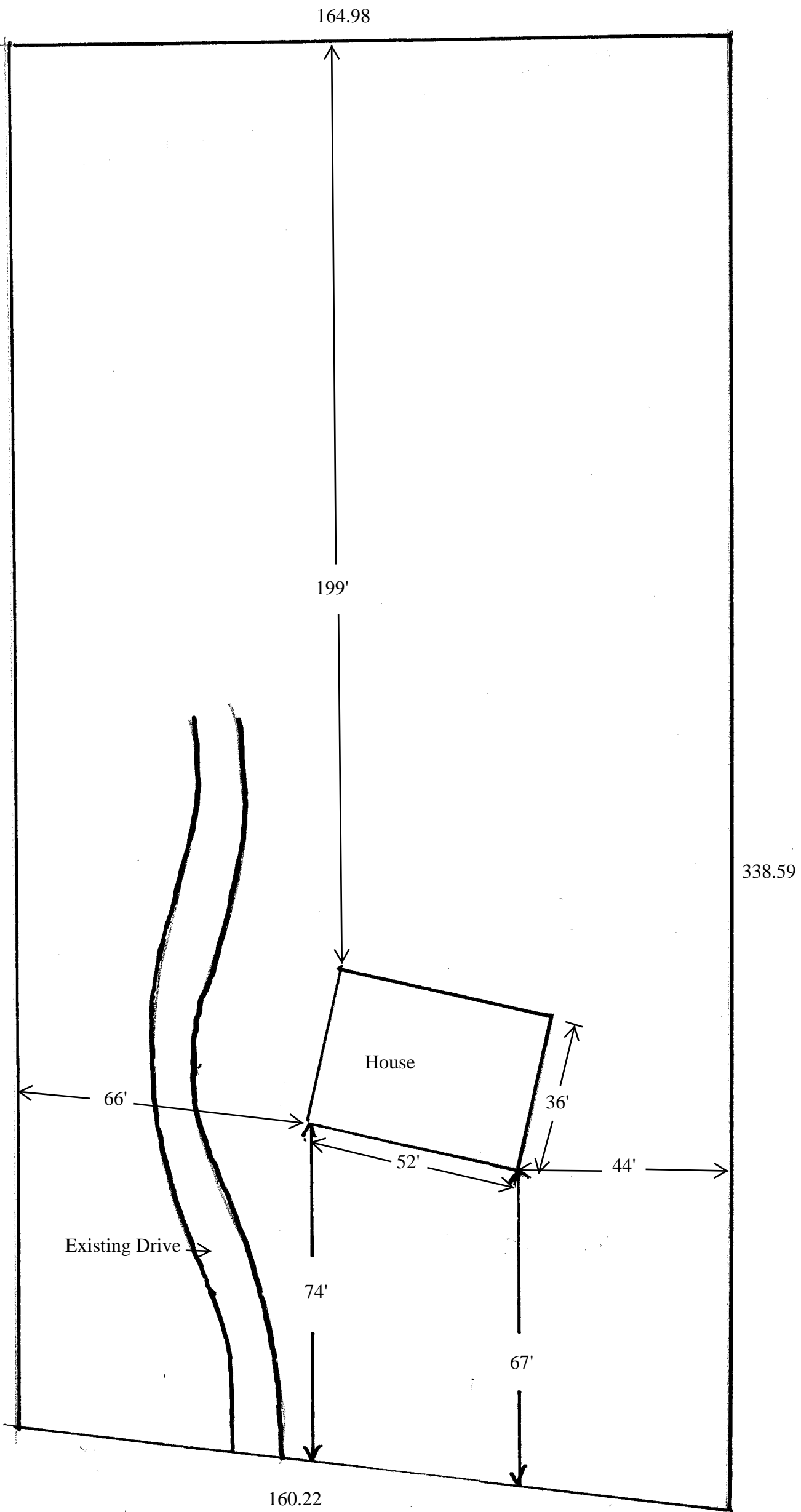
Use this foundation plan

- Notes: 1. Footers to be on undisturbed soil  
2. Foundation work to be performed in accordance to 2018 NC Residential Building Code  
3. Foundation Ventilation to be provided 1 Sq inch per 1 Sq Foot



Scott and Sonya Seagroves Residence  
1377 Delma Grimes Rd  
Coats, NC 27521  
Foundation Plan 09.09.2020

316.27



Scott and Sonya Seagroves Residence  
1377 Delma Grimes Road  
Coats, NC 27521 Site Plan 08.22.2020

NOTICE TO CONTRACTOR  
All construction must comply with current NC Building Codes  
and is subject to field inspection and verification.

APPROVED

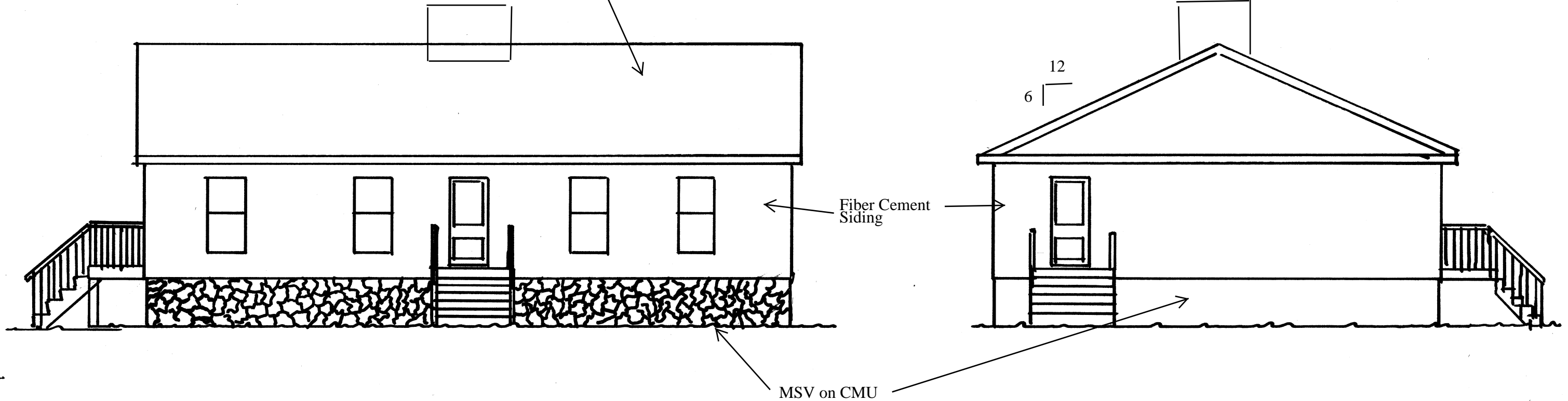
Limited building only review  
Permit holder responsible for  
full compliance with the code

09/15/2020



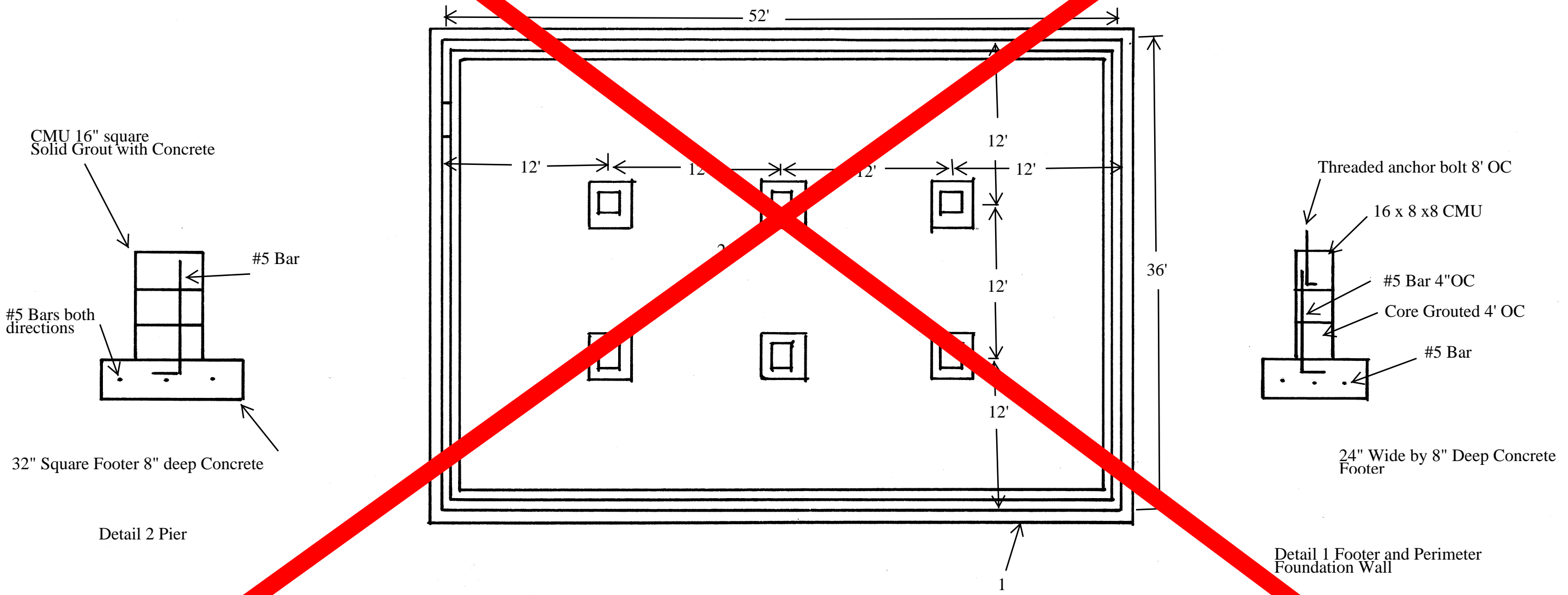
Asphalt Shingles

Wood Framed Chimney Box

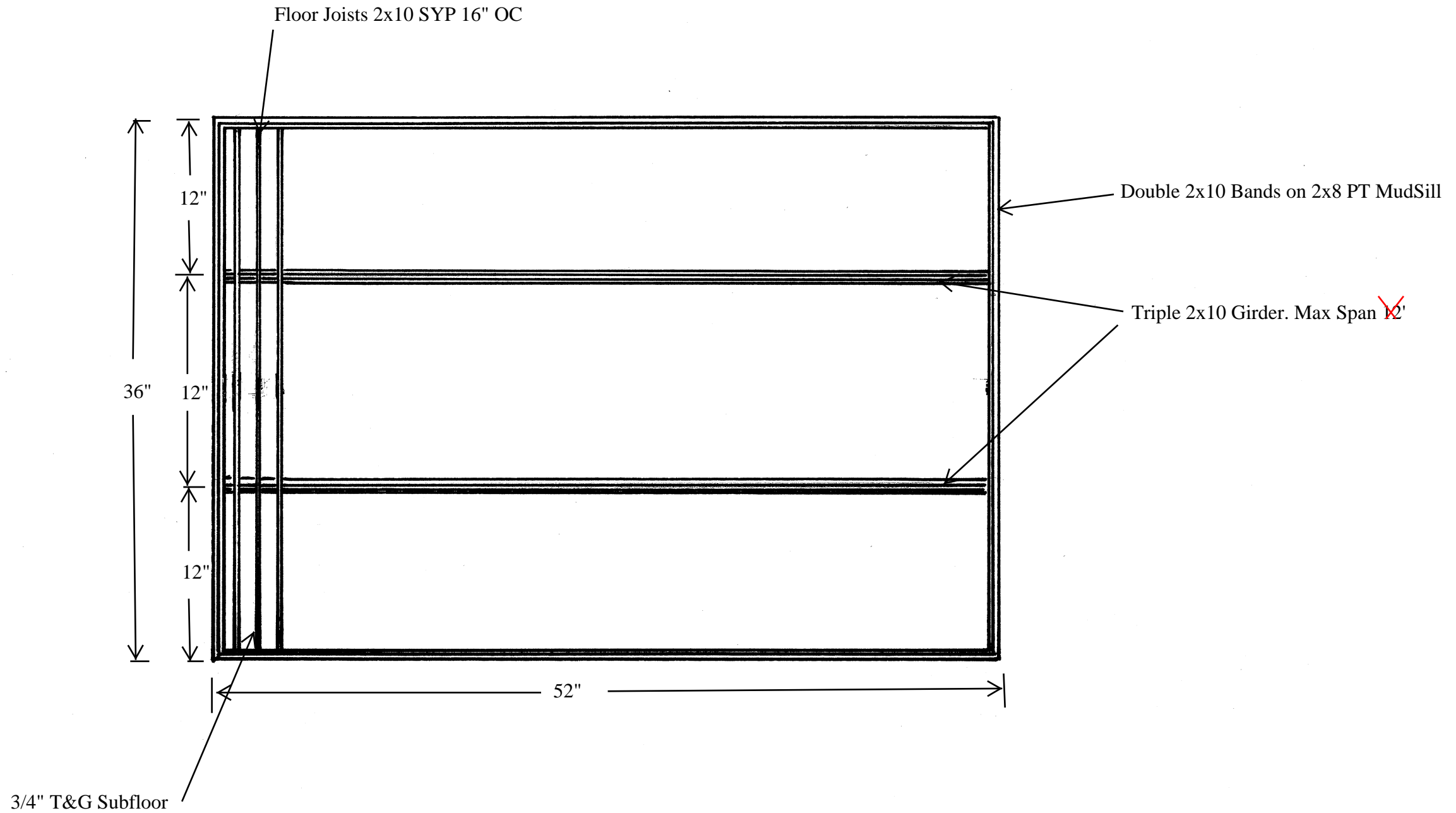


Scot and Sonya Seagroves Residence  
1377 Delma Grimes Rd  
Coats, NC 27521 Exterior Elevations 08.22.2020

- Notes: 1. Footers to be on undisturbed soil  
 2. Foundation work to be performed in Accordance to 2018 NC Residential Building Code  
 3. Foundation Ventilation to be provided 1 sq inch per 1 sq ft.



Scott and Sonya Seagroves Residence  
 1377 Delma Grimes Rd  
 Coats, NC 27521 Foundation Plan 08.22.2020



Scott and Sonya Seagroves Residence  
 1377 Delma Grimes Rd  
 Coats NC 27521    Floor Frame Plan    08.22.2020

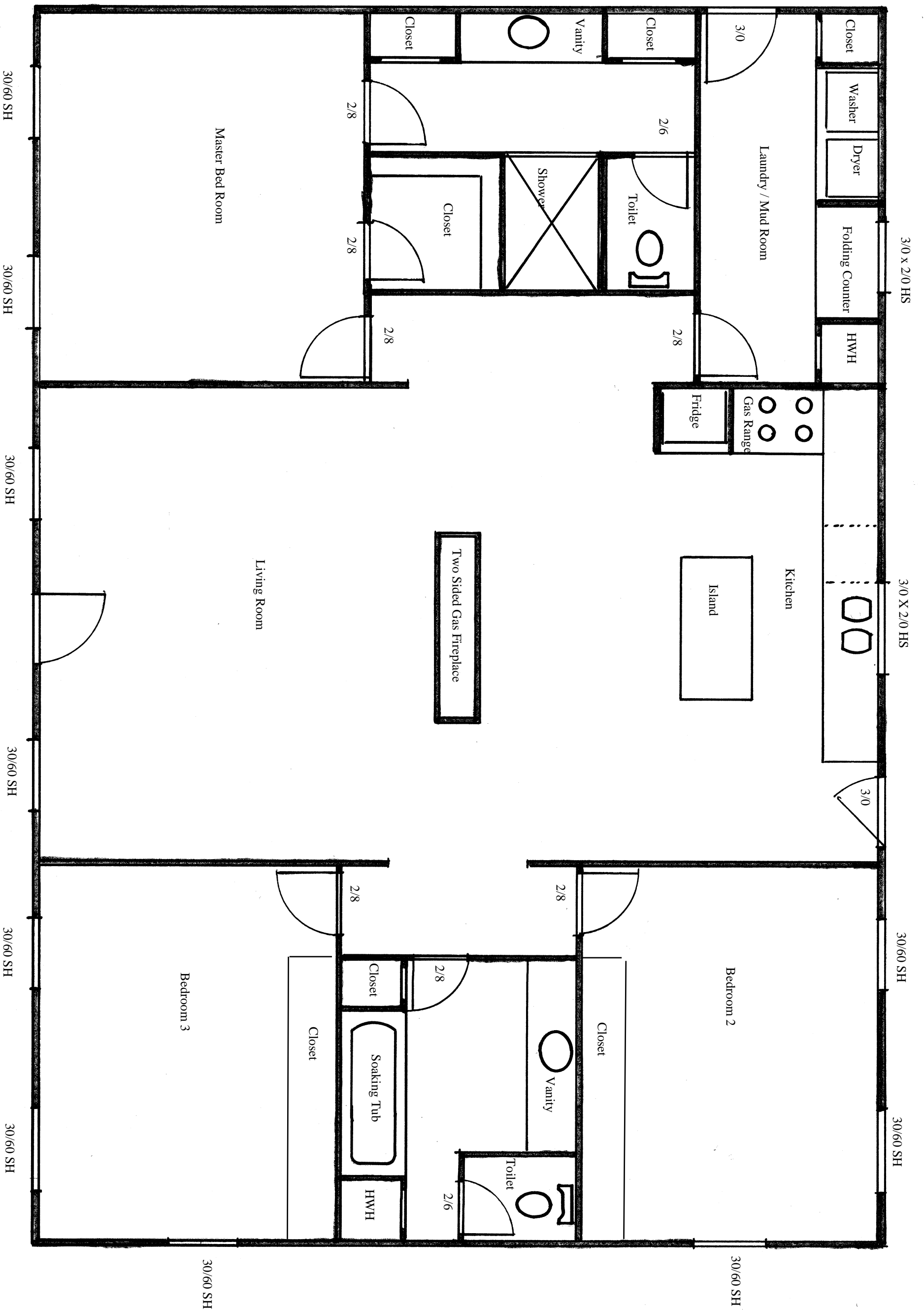
Scott and Sonya Seagroves Residence

1377 Delma Grimes

Coats, NC 27521

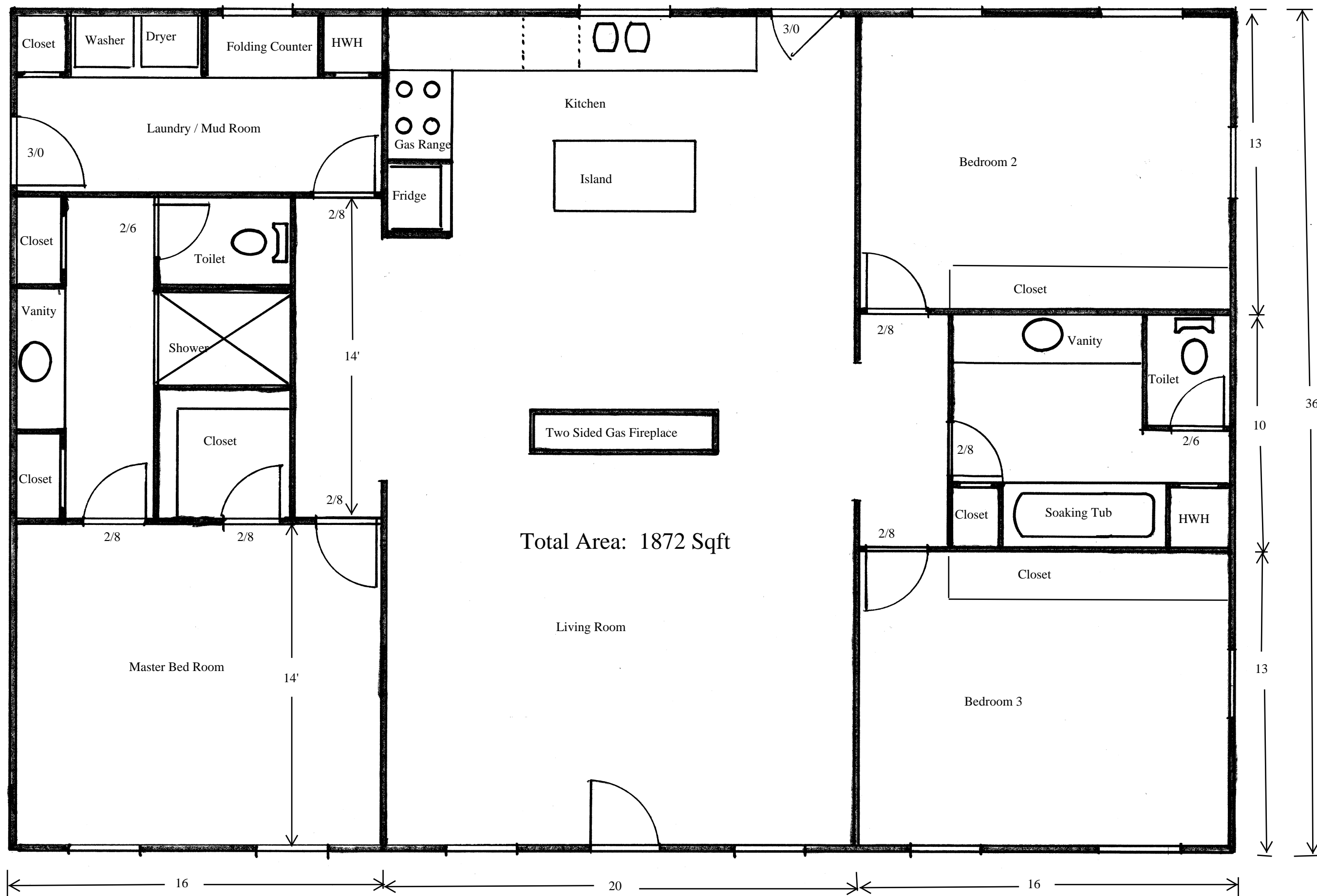
Date: 08.22.2020

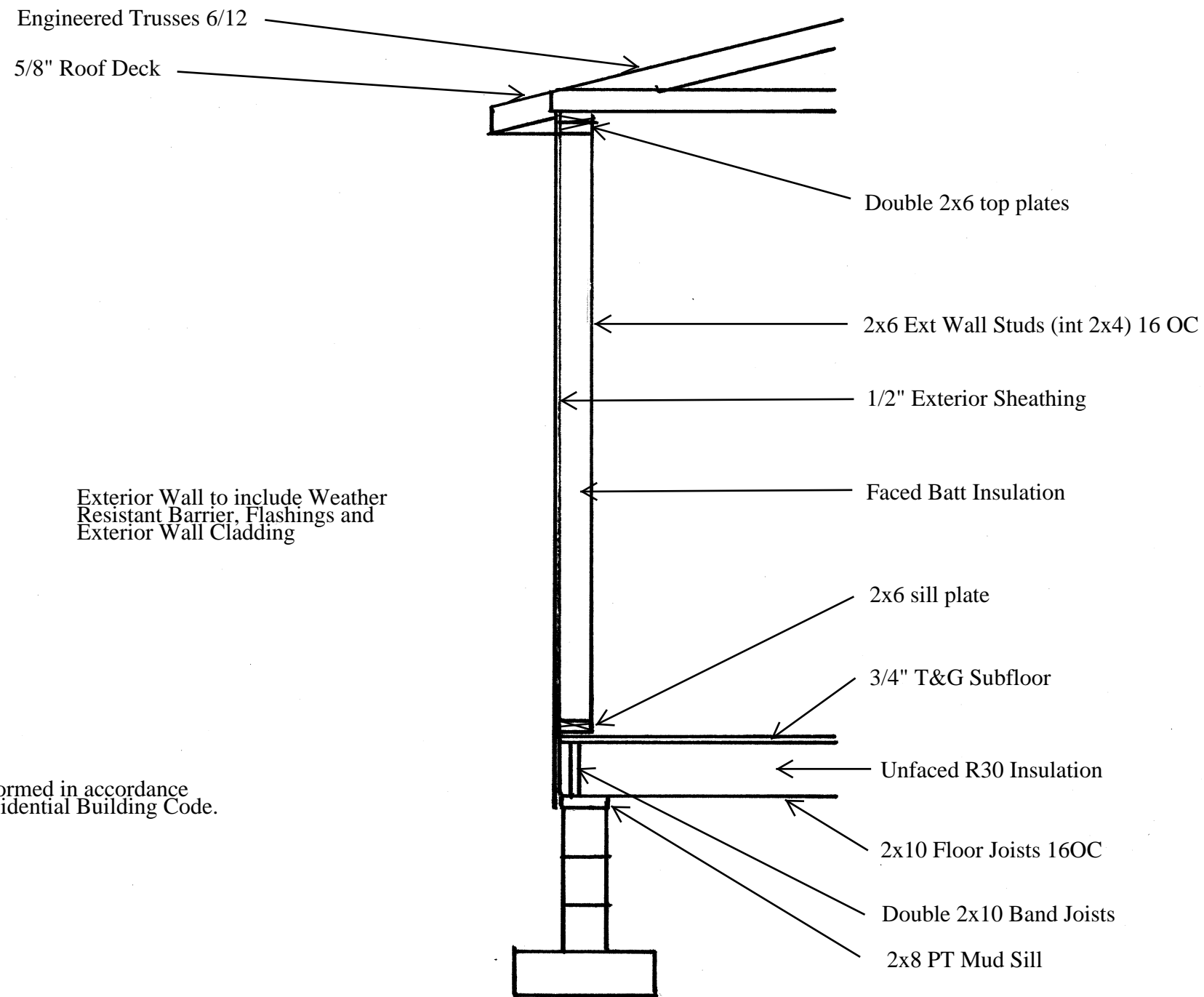
Floor Plan



Scott and Sonya Seagroves Residence  
1377 Delma Grimes  
Coats, NC 27521

Floor Plan 2 Dimensions  
Date: 08.22.2020





Note: All work to be performed in accordance to the 2018 NC Residential Building Code.

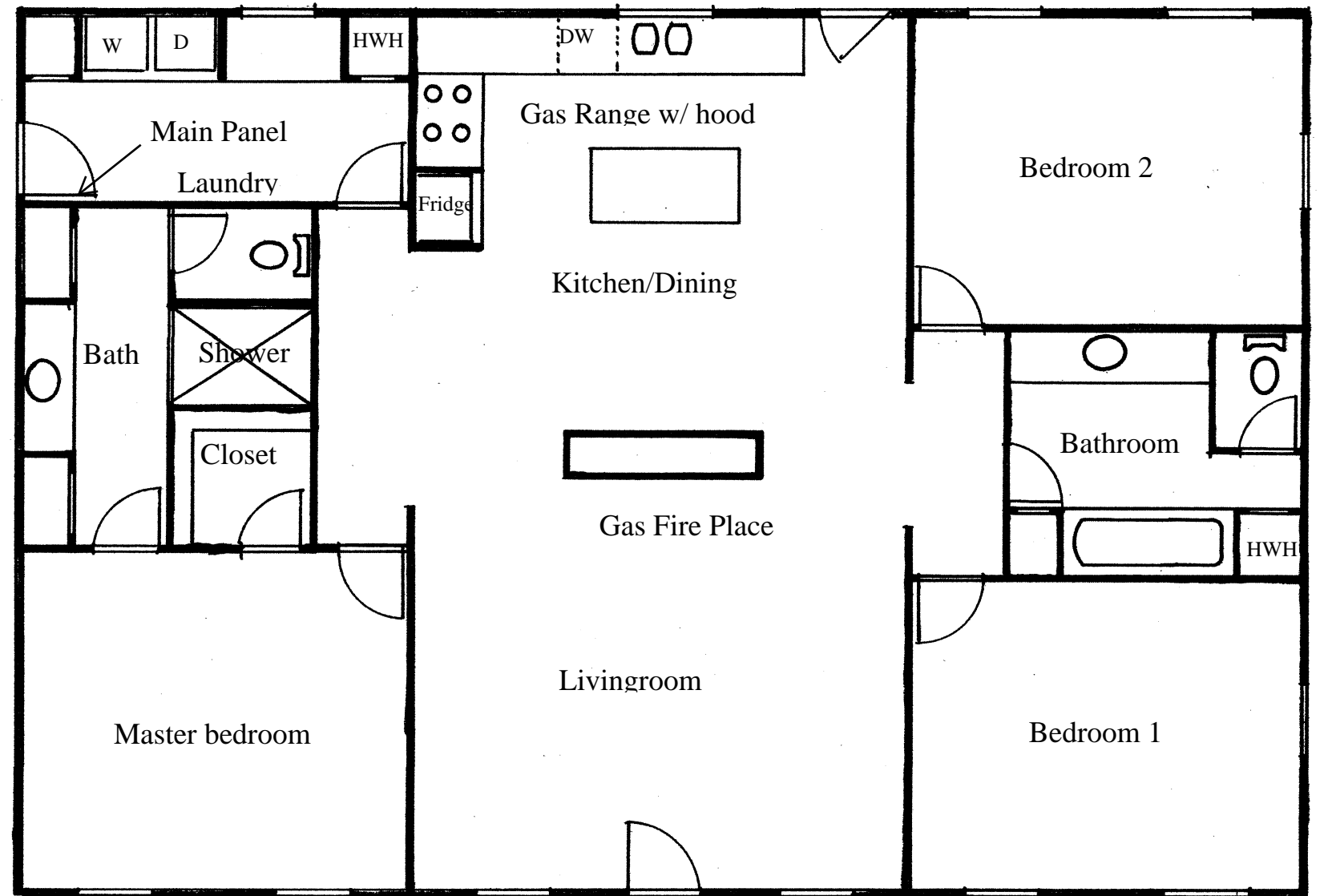
Scott and Sonya Seagroves Residence  
 1377 Delma Grimes Rd  
 Coats NC 27521 Typical Exterior Wall Section 08.22.2020



Electric Washer and Dryer

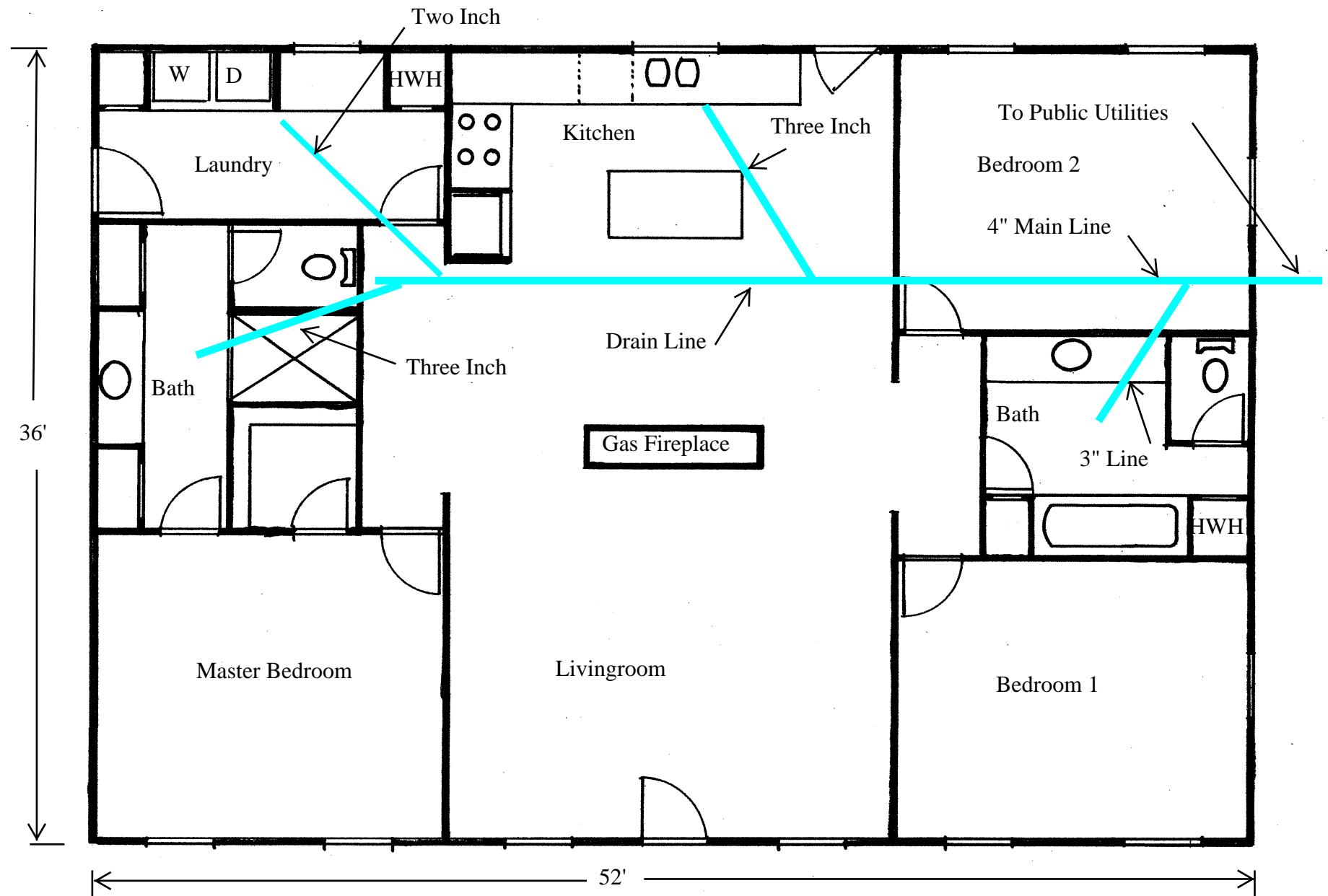
- Notes: 1. All electrical work to be performed in accordance to 2018 NC Residential Electrical Code.  
2. Mechanical Equipment to be electric  
3. Hot water heaters Electric  
4. All electrical penetrations through frame to be fire caulked

Meter, Base →



Scott and Sonya Seagroves Residence  
1377 Delma Grimes Rd  
Coats, NC 27512 Electrical Plan 08.22.2020

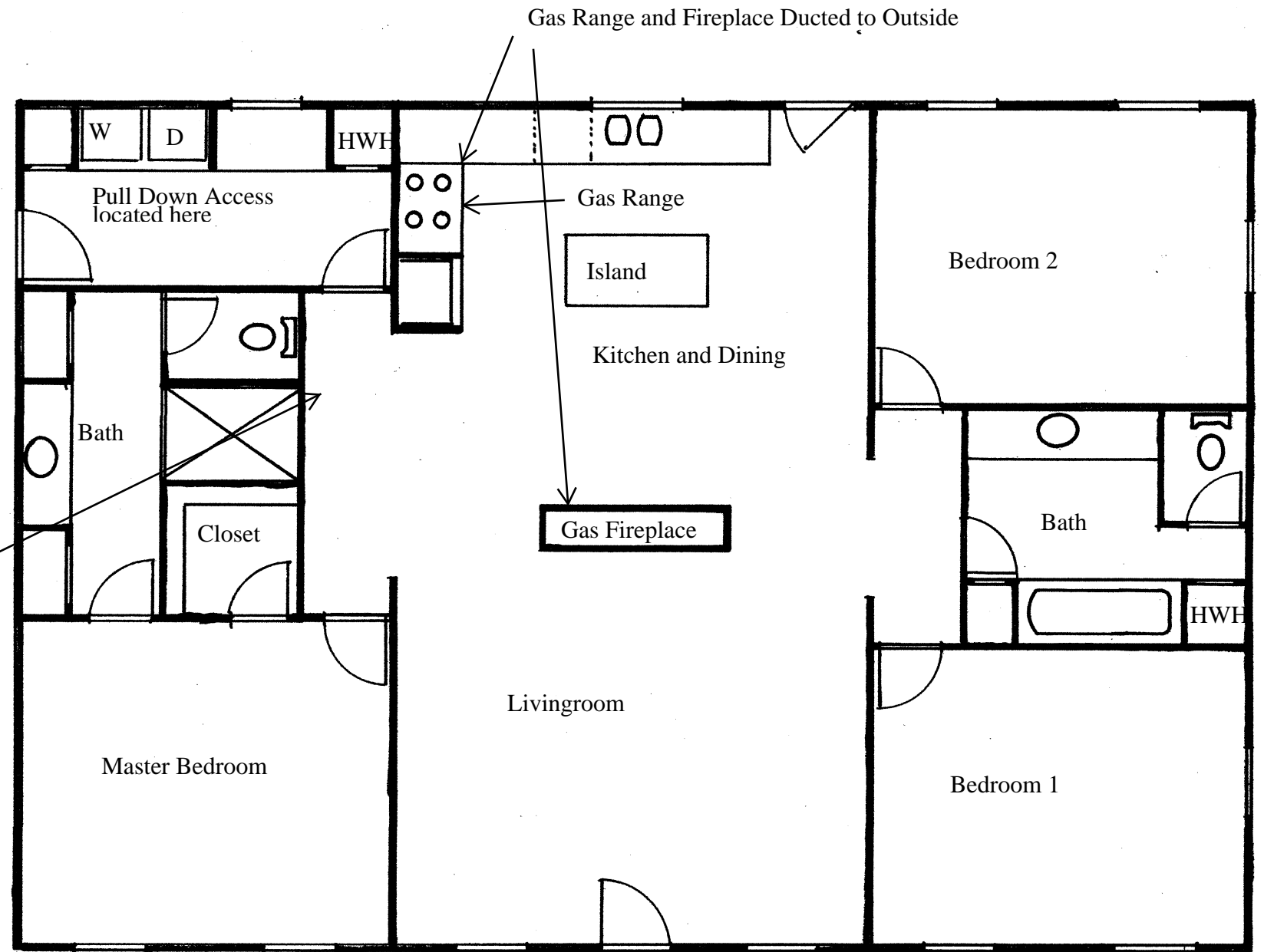
Notes: All Plumbing to be performed in accordance to the 2018 NC Residential Plumbing Code  
Drain lines to be PVC  
Supply Lines to be PEX



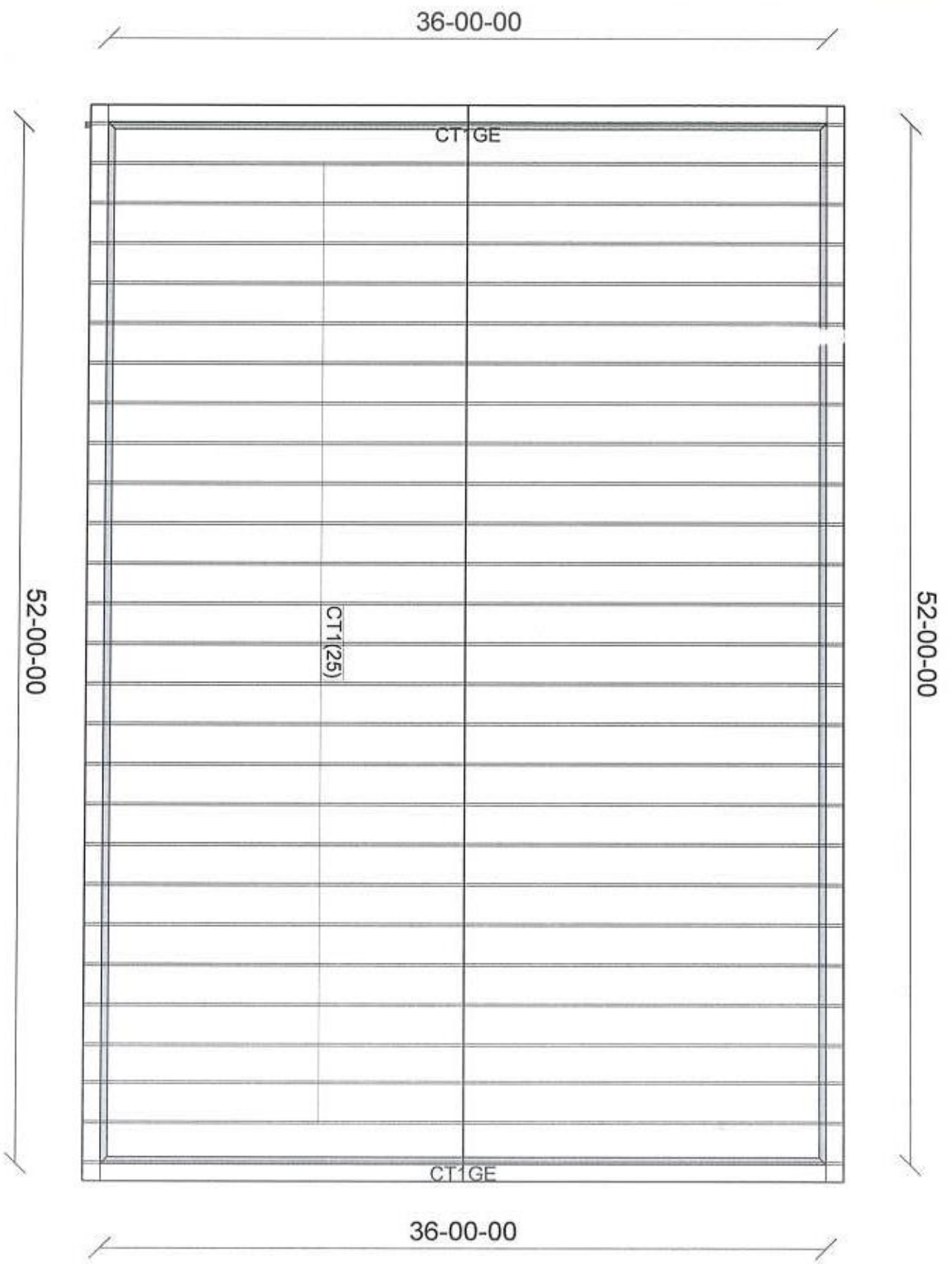
Scott and Sonya Seagroves Residence  
1377 Delma Grimes Rd  
Coats NC 27521 Plumbing Plan 08.22.2020

- Notes: 1. All Mechanical work to be performed in accordance to the 2018 NC Residential Mechanical Code  
 2. Air conditioning and Heat to be Split unit with air handler in attic and compressor unit outside.  
 3. Duct work to be in the Attic and supply registers in the ceiling.  
 4. Air handler size to be calculated by a licensed Heating and Air installer.  
 5. All bathroom and dryer exhausts to outside.

Attic Unit Location



Scott and Sonya Seagroves Residence  
 1377 Delma Grimes Rd  
 Coats NC 27521 Mechanical Plan 08.22.2020



10401 Chapel Hill Rd  
 Morrisville, NC 27560  
 Ph. 919-467-9988  
 Fax. 919-481-3255

DO200916  
 SCOTT SEAGROVES  
 1377 DELMA GRIMES RD  
 COATES, NC

**Trenco**

818 Soundside Rd  
Edenton, NC 27932

Re: DO200916  
SCOTT SEAGROVES

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Truss Builders, Inc..

Pages or sheets covered by this seal: E14850014 thru E14850015

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



September 10, 2020

Gilbert, Eric

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	SCOTT SEAGROVES	E14850014
DO200916	CT1	Common	25	1		

Truss Builders, Inc., Morrisville, NC

6.240 s Mar 9 2020 MiTek Industries, Inc. Thu Sep 10 12:17:46 2020 Page 1

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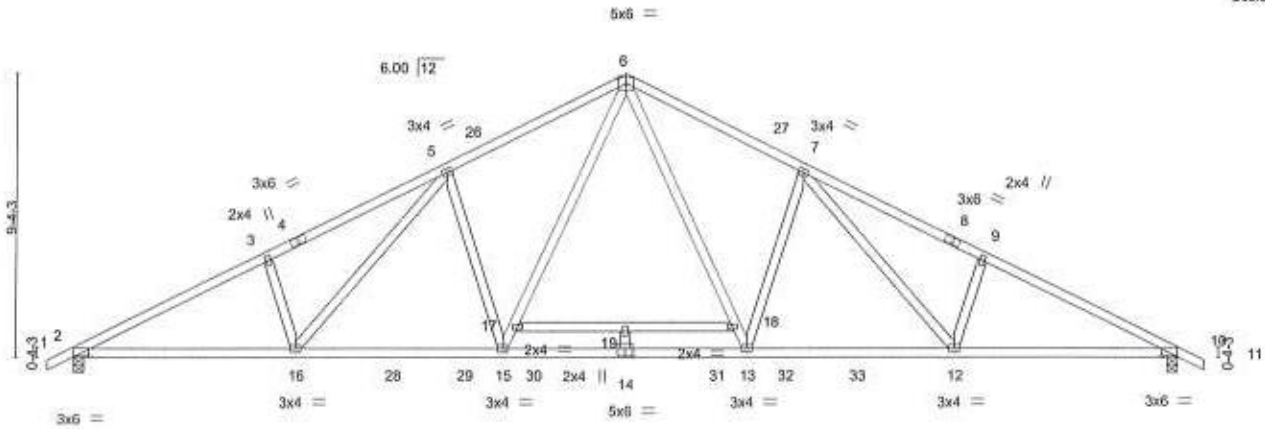


Plate Offsets (X,Y)- [2-0-6-0,0-0-6], [10-0-6-0,0-0-6], [14-0-3-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI,</b>	<b>DEFL.</b>	in	(loc)	I/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof)	Plate Grip DOL	1.15	TC	Vert(LL)	-0.24	14	>999	240	MT20	244/190
Snow (Pf)	Lumber DOL	1.15	BC	Vert(CT)	-0.53	14	>809	180		
TCDL	Rep Stress Incr	NO	WB	Horz(CT)	0.13	10	n/a	n/a		
BCLL	Code	IBC2015/TPI2014	Matrix-MR						Weight: 207 lb	FT = 6%
BCDL										

**LUMBER-**  
 TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 2-8-3 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-4-0, 10=0-4-0  
 Max Horz 2=123(LC 12)  
 Max Uplift 2=62(LC 12), 10=62(LC 13)  
 Max Grav 2=1630(LC 2), 10=1630(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**TOP CHORD** 2-3=-3027/104, 3-5=-2947/160, 5-6=-2353/156, 6-7=-2353/156, 7-9=-2947/160, 9-10=-3027/105  
**BOT CHORD** 2-16=-141/2662, 15-16=-57/2196, 14-15=0/1717, 13-14=0/1717, 12-13=0/2196, 10-12=-18/2662  
**WEBS** 6-18=-95/932, 13-18=-97/868, 7-13=-574/172, 7-12=-72/590, 9-12=-344/140, 15-17=-98/868, 6-17=-95/932, 5-15=-574/172, 5-16=-71/590, 3-16=-344/140

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCCL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
  - TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
  - Unbalanced snow loads have been considered for this design.
  - This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
  - In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced); Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-50, 6-11=-50, 20-30=-20, 30-31=-60(F=-40), 23-31=-20



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIPIT Quality Criteria, DSB-88 and BCSI Building Component Safety Information available from Truss Plate Institute, 2070 Grain Highway, Suite 203 Waldorf, MD 20601



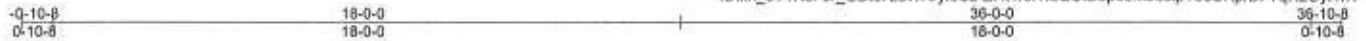
818 Soundside Road  
 Edenton, NC 27932

Job DO200916	Truss CT1GE	Truss Type Common Supported Gable	Qty 2	Ply 1	SCOTT SEAGROVES	E14850015
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Truss Builders, Inc., Morrisville, NC

8:240 s Mar 9 2020 MITek Industries, Inc. Thu Sep 10 12:17:48 2020 Page 1  
ID:kn\_6Y1R8Fjr\_GDtc7zdWRryf5Sz-Z7k4rdTILQUID3p89MbestpT55URprB7YqH2Oyf1h1

Job Reference (optional)



Scale = 1:62.2

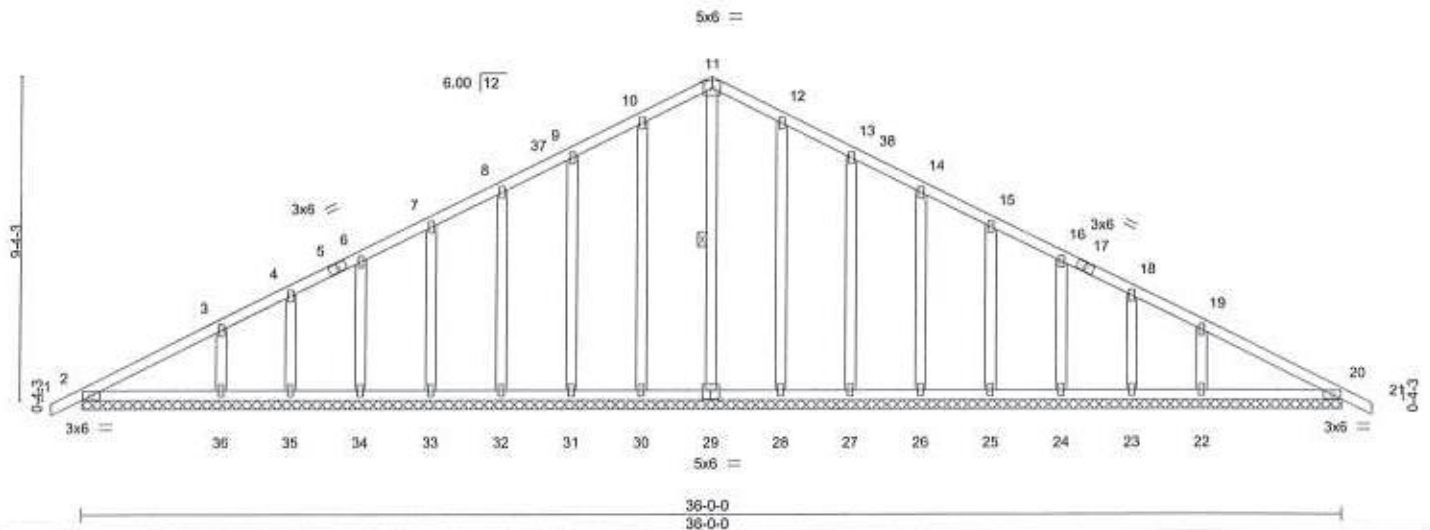


Plate Offsets (X,Y)- [29:0-3-0,0-3-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof) 20.0	Plate Grip DOL	1.15	TC 0.16	Vert(LL)	0.00	21	n/r	120	MT20	244/190
Snow (Pf) 15.0	Lumber DOL	1.15	BC 0.11	Vert(CT)	0.01	21	n/r	120		
TCDL 10.0	Rep Stress Incr	YES	WB 0.21	Horz(CT)	0.01	20	n/a	n/a		
BCLL 0.0 *	Code IBC2015/TPI2014		Matrix-R							
BCDL 10.0									Weight: 230 lb	FT = 6%

**LUMBER-**

TOP CHORD	2x4 SP No.2
BOT CHORD	2x4 SP No.2
OTHERS	2x4 SP No.3

**BRACING-**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 11-29

**REACTIONS.** All bearings 36-0-0.  
 (lb) - Max Horz 2=123(LC 16)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 30, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 22  
 Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 31, 32, 33, 34, 35, 26, 27, 26, 25, 24, 23, 20  
 except 36=314(LC 30), 22=314(LC 31)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 30, 31, 32, 33, 34, 35, 36, 28, 27, 26, 25, 24, 23, 22.



September 10, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-1473 rev. 5/19/2020 BEFORE USE.**

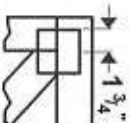
Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



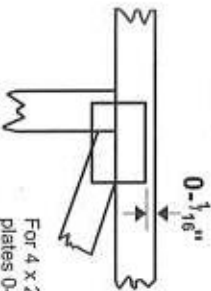
818 Soundside Road  
Edenton, NC 27932

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in 1/16-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- $\frac{1}{16}$ " from outside edge of truss.

— This symbol indicates the required direction of slots in connector plates.

\* Plate location details available in MITek 20/20 software or upon request.

## PLATE SIZE

4 X 4

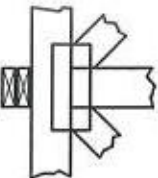
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

## BEARING



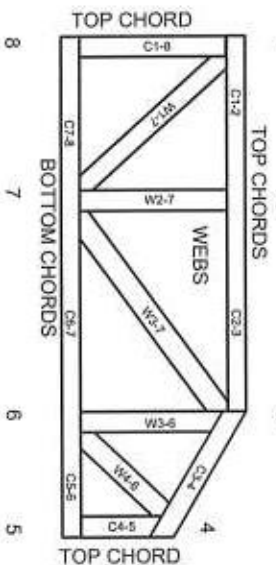
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in 1/16-in-sixteenths (Drawings not to scale)



JOINTS ARE GENERALLY NUMBERED/CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.  
Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020



# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative for l bracing should be considered.
3. Never exceed the design loading shown and never slack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless expressly noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.