



WAYNE R. DASHIELD, PE
421-B BRIGHT LEAF BLVD.
919-934-0961

COATS AUTO ADDITION
34 NORTH MCKINLEY STREET
COATS, NC 27009
919-934-0961

STRUCTURAL DESIGN

DESIGN LOADS

Importance Factors:

Wind (W) 1.0
Snow (S) 1.0
Seismic (E) 1.0
Live Loads: Roof 20 psf, Mezzanine N/A psf, Floor 100 psf
Snow Load: 10 psf

Wind Load: Basic Wind Speed 110 mph (ASCE-7-98)

Exposure Category B
Wind Borne Shears (for HMFRS) Vx= 1.6 K, Vy= 1.4 K

SEISMIC DESIGN CATEGORY A

Compliance with Section 1616.4 only? Yes No
SEISMIC DESIGN CATEGORY B, C, & D0
Provide the following Seismic Design Parameters

Seismic Use Group 1
Spectral Response Acceleration Ss= 0.2120 S1= 0.0997

Basic structure system (check one)
 Building Frame Dual w / Special Moment Frame
 Moment Frame Dual w / Intermediate R/C or Special Steel
 Inverted Pendulum

Seismic base shear Vx= 12K Vy= 0.59 K
Analysis Procedure Simplified Equivalent Lateral Force
Architectural, Mechanical, Components anchored? YES

LATERAL DESIGN CONTROL: Earthquake Wind

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) N/A pf
Presumptive Bearing capacity 2000 pf
Pile size, type, and capacity N/A

STRUCTURAL NOTES

- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL SYSTEMS AND COMPONENTS INCLUDING ROOF SYSTEMS, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CONTAINERS, OFFSET LOAD BEARING WALLS, PER & GIRDERS SYSTEM AND FOUNDATIONS.
- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE 2009 EDITION OF THE INTERNATIONAL RESIDENTIAL BUILDING CODE PLUS ALL LOCAL CODES AND REGULATIONS.
- DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (DL+LL)
FLOOR (PRIMARY DWELLING)	100	20	N/A
ROOF	20	10	L/240
WIND	15.8 (BASED ON 100 MPH WIND VELOCITY)		
- ALLOWABLE SOIL PRESSURE = 2000 PSF.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 4-INCHES UNLESS OTHER WISE NOTED (U/M).
- ALL BEAMS, GIRDERS SHALL HAVE A MINIMUM BEARING LENGTH OF 1'-3/4-INCHES.
- ALL STRUCTURAL TUBING SHALL BE GRADE B TUBING AND SHALL CONFORM TO ASTM A500 STANDARDS.

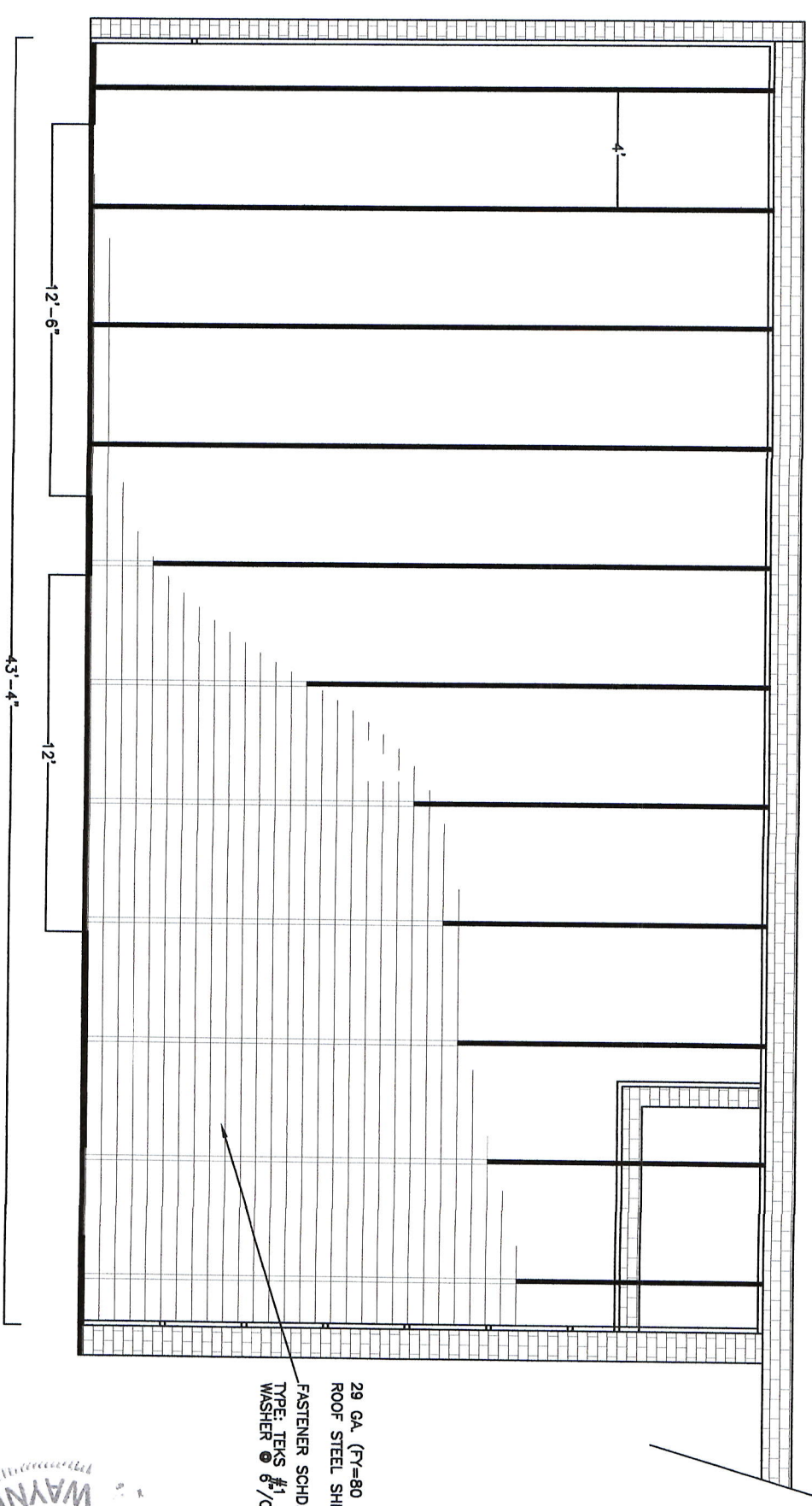
29 GA. (FY=80 KSI)
ROOF STEEL SHEATHING
FASTENER SCHD.

TYPE: TEKS #1 2x1" SCREWS W/NEOPRENE/STEEL WASHER @ 8"/C OF CORNER PANEL AND 8"/C

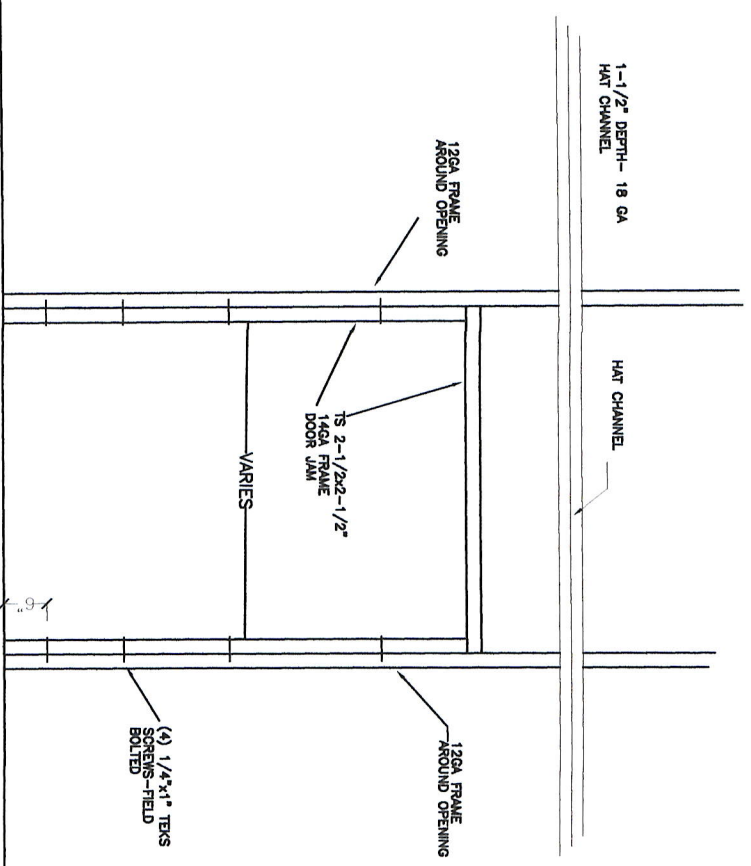


ATTACH DECKING TO BEAMS IN ACCORDANCE TO MANUFACTURER'S SPECIFICATIONS
DECKING SHALL HAVE A MINIMUM CAPACITY OF 20 LBS./SQ. FT.

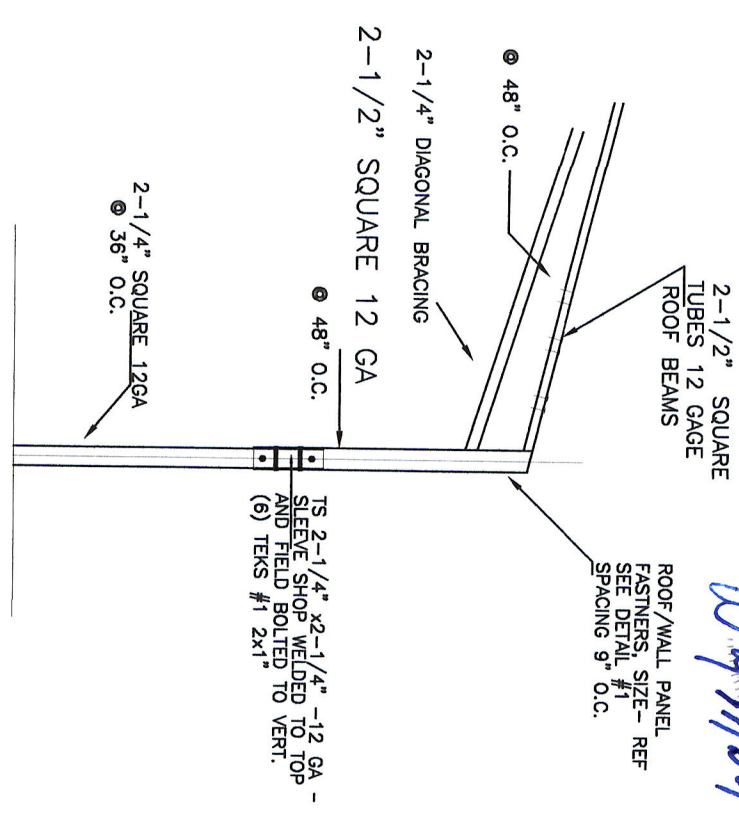
SCALE: NOT TO SCALE
NOTE: DIMENSIONS MAY VARY



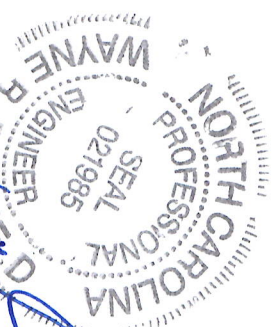
TYPICAL ROOF FRAMING PLAN
SCALE NTS



TYPICAL MAN DOOR FRAMING
SCALE 1/4"=1'



TYPICAL COLUMN TO ROOF BEAM DETAIL
SCALE: NTS



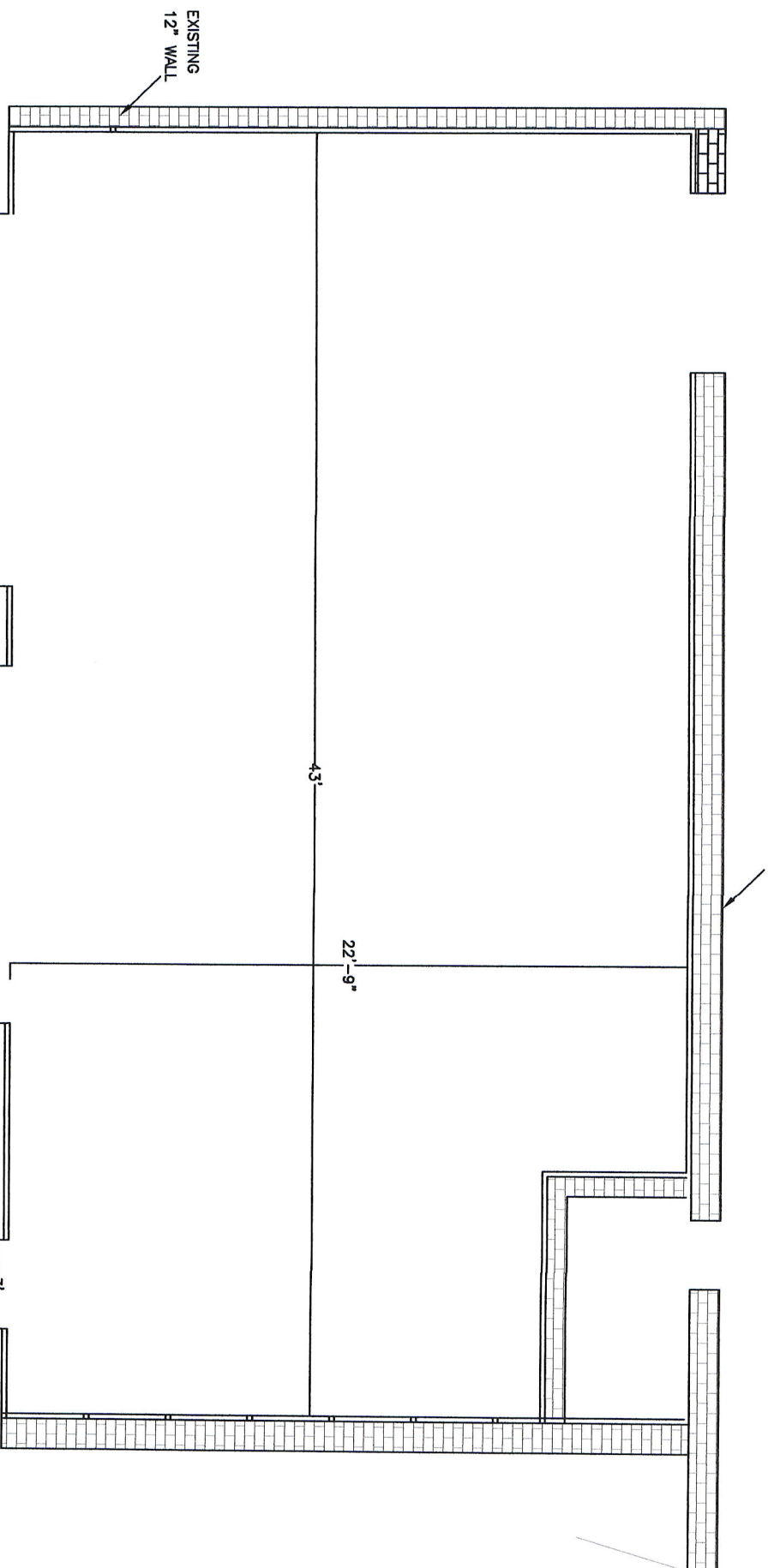
29 GA. (FY=80 KSI)
ROOF STEEL SHEATHING
FASTENER SCHD.
TYPE: TEKS #1 2x1" SCREWS W/NEOPRENE/STEEL WASHER @ 8"/C OF CORNER PANEL AND 8"/C

ROOF/WALL PANEL FASTENERS, SIZE- REF SEE DETAIL #1
SPACING 9" O.C.

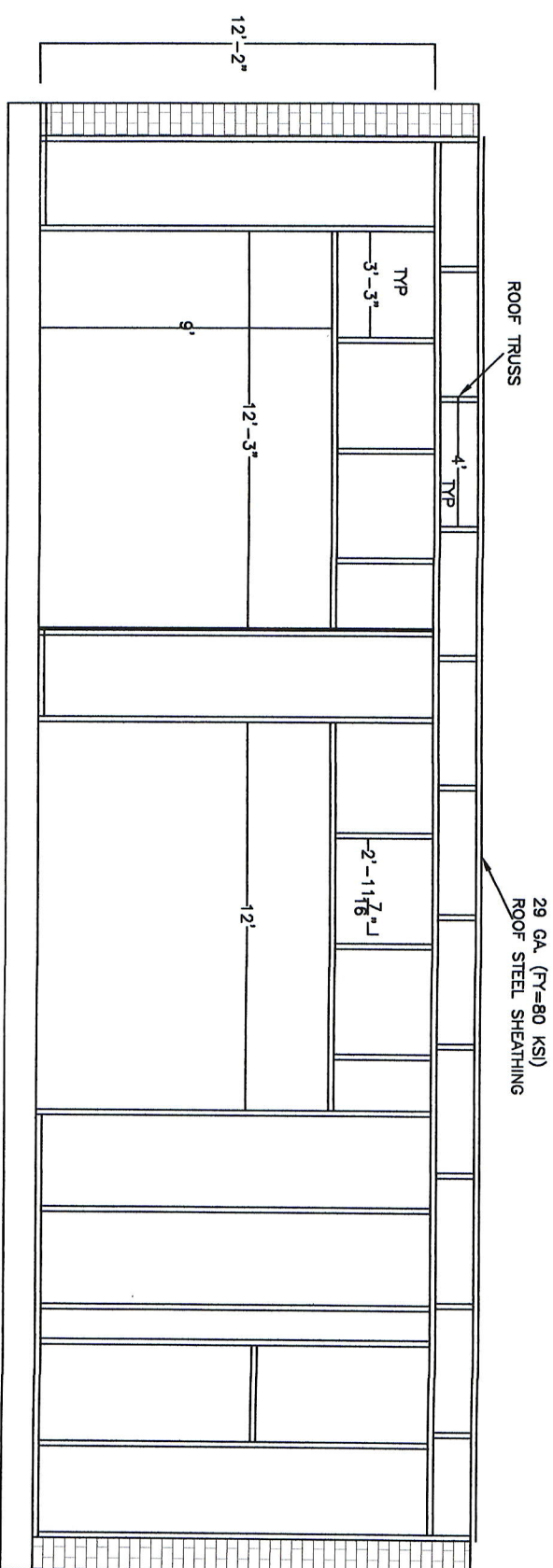
TS 2-1/4" x2-1/4" -12 GA - SLEEVE SHOP WELDED TO TOP AND FIELD BOLTED TO VERT.
(6) TEKS #1 2x1"

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EXISTING

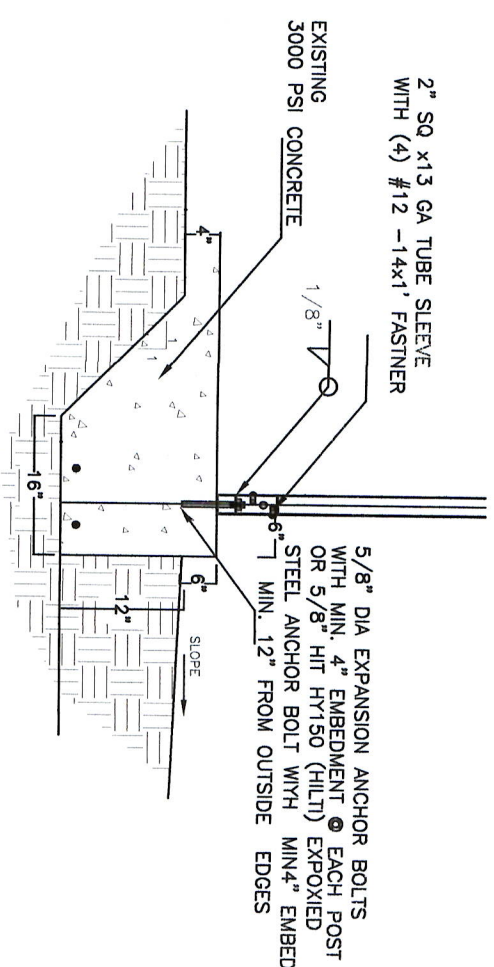


EXISTING FLOOR PLAN
 SCALE NTS

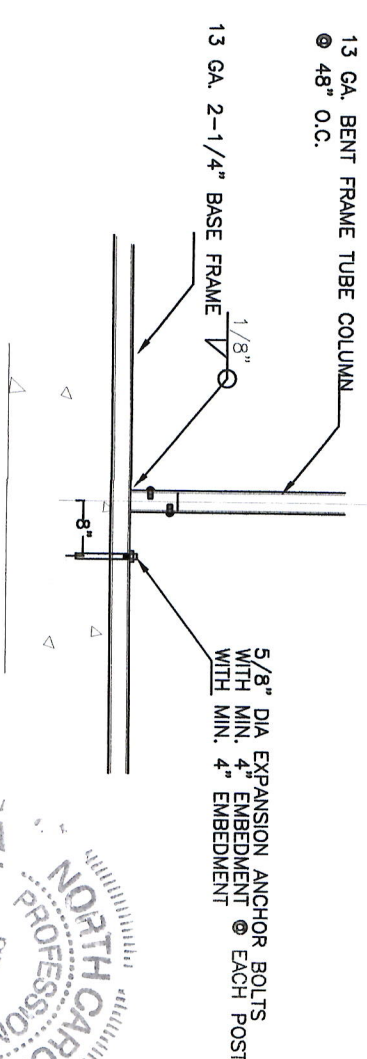


TYPICAL FRONT FRAMING PLAN
 SCALE NTS

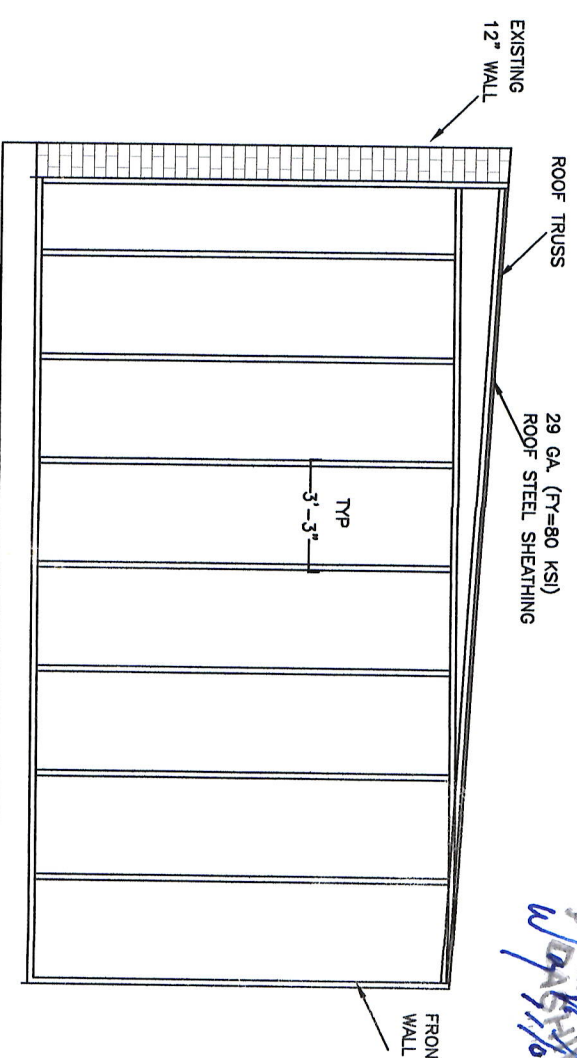
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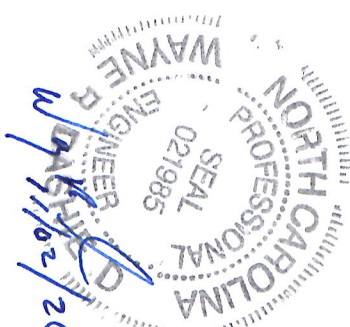
FOOTING DETAIL
 SCALE 1/2"=1'



FOOTING DETAIL
 SCALE 1/2"=1'



TYPICAL SIDE FRAMING PLAN
 SCALE NTS



Wayne R. Dashfield, PE

421-B South Bright Leaf Blvd. Smithfield, NC 27577

(919) 934-0961

November 2, 2020

Re: Structural Inspection of Existing Added Auto Garage
34 N McKinley Street
Coats, NC

Att. Town of Coats Inspection

Dear Sir, Madame

On October 24, 2020 I made an onsite visit to Coats Auto located at 34 North McKinley Street in Coats, NC to make a structural inspection with drawings of the existing garage addition. Upon my visit I inspected the existing, load bearing walls and the roof rafters. During my review of these items I will certify that the garage addition is structurally sound. I have included a drawing of the garage addition. The State of North Carolina 2018 Building Code was used during this inspection.

If I can be of any more assistance, please feel free to contact me.

Yours truly,

Wayne R. Dashfield, PE

