

# STRUCTURAL DESIGN ENCLOSED BUILDING

MAXIMUM 30'-0" WIDE X 16'- 0" EAVE HEIGHT-BOX EAVE FRAME AND BOW FRAME

> 6 May 2022 Revision 1 M&A Project No. 20217S/22082S

> > Prepared for:

Pre-Built Structures 1330 W Jake Alexander Blvd. Salisbury, NC 28417

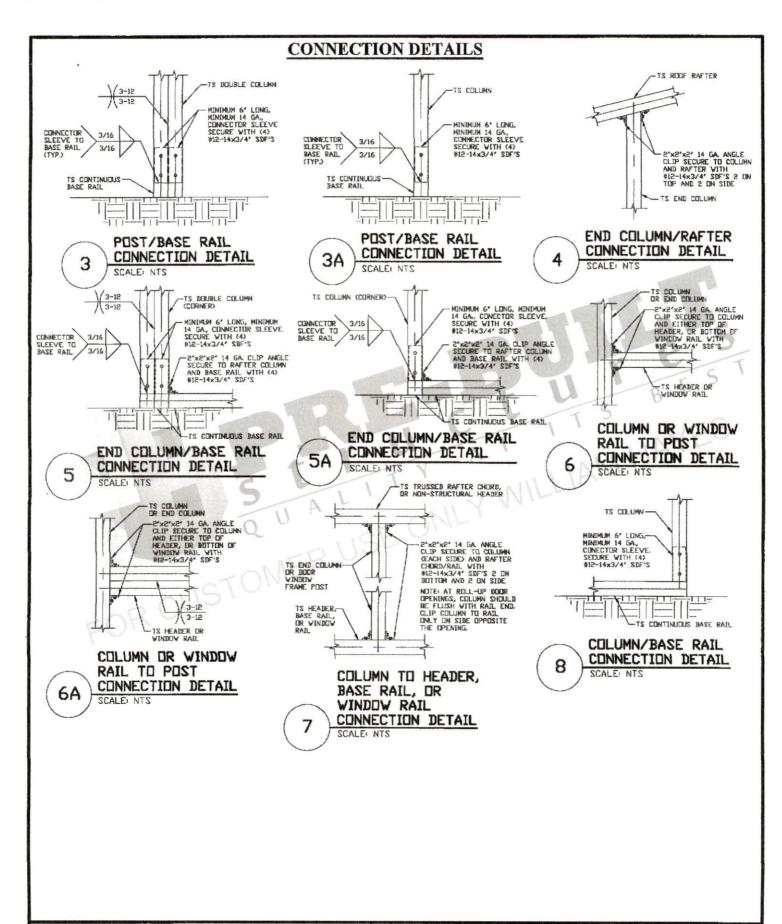
Prepared by:

Moore and Associates Engineering and Consulting, Inc. 1009 East Avenue North Augusta, SC 29841

> 401 S. Main Street, Suite 200 Mount Airy, NC 27030

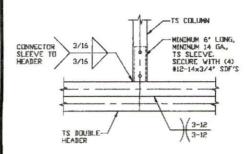


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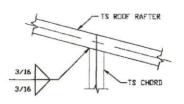


MOORE AND ASSOCIATES	DRAWN BY: LT		RE-BUILT STRUCT V JAKE ALEXANDE		
ENGINEERING AND CONSULTING, INC.			SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE		
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# CONNECTION DETAILS



3-15 MINIMUM 6' LONG, MINIMUM 14 GA., CONNECTOR SLEEVE. SECURE EACH WITH (4) #12-14x3/4' SDF'S TS DOUBLE HEADER CONNECTOR SLEEVE TO HEADER 3/16 3/15 TS COLUMN

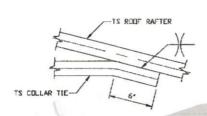


COLUMN/DOUBLE HEADER CONNECTION DETAIL 9

DOUBLE HEADER/COLUMN CONNECTION DETAIL 10 SCALE: NTS

RAFTER TO CHORD CONNECTION DETAIL 11 SCALE: NTS

ILLIAM HAYES



COLLAR TIE CONNECTION DETAIL 12 SCALE: NTS

TS TRUSSED RAFTER CHORD, OR NON-STRUCTURAL HEADER MINIMUM 6' LUNG, MINIMUM 14 GA., CONNECTUR SLEEVE. SECURE EACH WITH (4) \$12-14x3/4' TS END COLUMN-OR DOOR WINDOW FRAME POST

COLUMN TO HEADER OR BASE RAIL CUNNECTION DETAIL FOR CUSTOMER USE

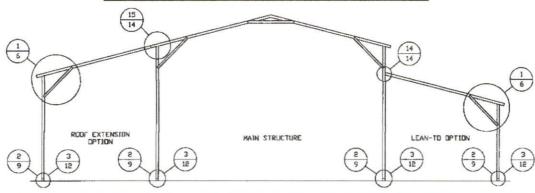
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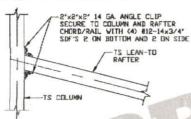
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-	PROJECT HGR: VSM	DATE: 5-6-22	SCALE: NTS	JE18	ND 178/220828	
	CHECKED BY: PDH	30'-0"x	SALISBURY, N 16'-0" ENCLOSE			
	DRAWN BYI LT	1	W JAKE ALEXA			

# BOX EAVE RAFTER LEAN-TO OPTIONS



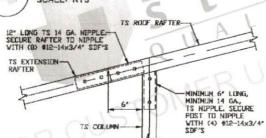
### TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

SCALE) NTS
REFERENCE RAFTER COLUMN CONNECTION DETAILS FOR APPROPRIATE COLUMN HEIGHT AND TUBING SPECIFICATIONS
UTILIZED IN A LEAN-TO CONFIGURATION.

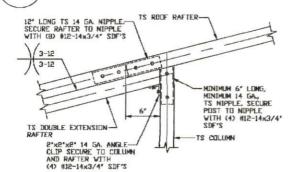


LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS \( \) 12'-0'

14 SCALE NTS



SIDE EXTENSION RAFTER COLUMN
DETAIL FOR SPANS & 12'-0'
SCALE: NTS



SIDE EXTENSION RAFTER COLUMN
DETAIL FOR SPANS 12'-0" < TO \( \) 16'-0"

SCALE: NTS

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15A

2'x2'x2' 14 GA. ANGLE CLIP SECURE TO COLLUMN AND RAFTER CHURD/RAIL WITH (4) #12-14x3/4' SDF'S 2 ON BOTTOM AND 2 ON SIDE

TS LEAN-TO

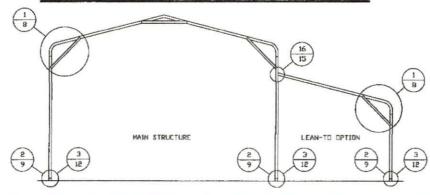
LEAN-TO RAFTER TO RAFTER

SCALE: NTS

COLUMN CONNECTION DETAIL FOR

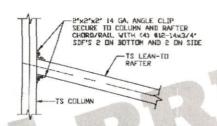
RAFTER SPANS 12'-0" < T□ < 16'-0"

# **BOW EAVE RAFTER LEAN-TO OPTIONS**



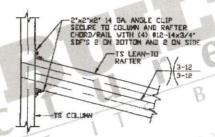
### TYPICAL BOW EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION

SCALE: NTS REFERENCE RAFTER COLUMN CONNECTION DETAILS FOR APPROPRIATE COLUMN HEIGHT AND TUBING SPECIFICATIONS UTILIZED IN A LEAN-TO CONFIGURATION.



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS & 12'-0" 16

SCALE NTS



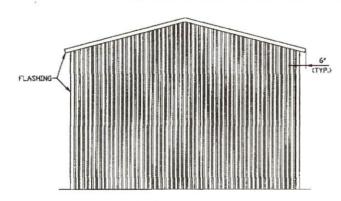
LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < T□ ≤ 16'-0"

16A SCALE: NTS

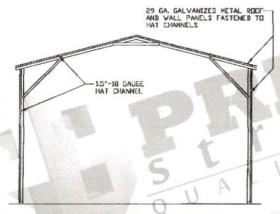
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# BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION

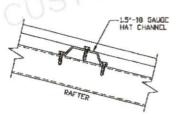


TYPICAL END ELEVATION VERTICAL ROOF/SIDING



TYPICAL SECTION VERTICAL ROOF/SIDING OPTION

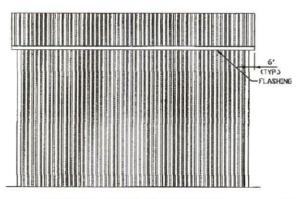
SCALE: NTS



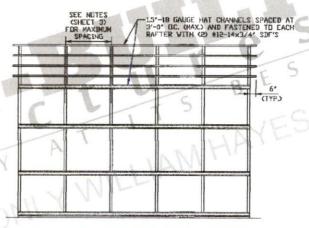
PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS)

SCALE: NTS



#### TYPICAL SIDE ELEVATION VERTICAL ROOF/SIDING



#### TYPICAL FRAMING SECTION VERTICAL RODF/SIDING OPTION WITH TS GIRTS

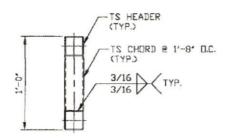
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BRAWN BY: LT		PRE-BUILT STRUCTURES 1330 W JAKE ALEXANDER BLVD.						
CHECKED BY: PDH	30'-0"x	SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE						
PROJECT HGR: WSH	DATE 5-6-22	SCALE: NTS	JOB 12021	ND: 75/220825				
CLIENT) PRE-BUILT	SHT. 16	DVG NO SK-	3	REV. 1				

# SIDE WALL HEADER OPTIONS



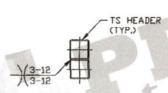
HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 12'-0' < LENGTH ≤ 16'-0' SCALE: NTS

TS HEADER

HEADER DETAIL FOR SIDE WALL DOOR OPENINGS ≤ 12'-0"

SCALE: NTS

# END WALL HEADER OPTIONS

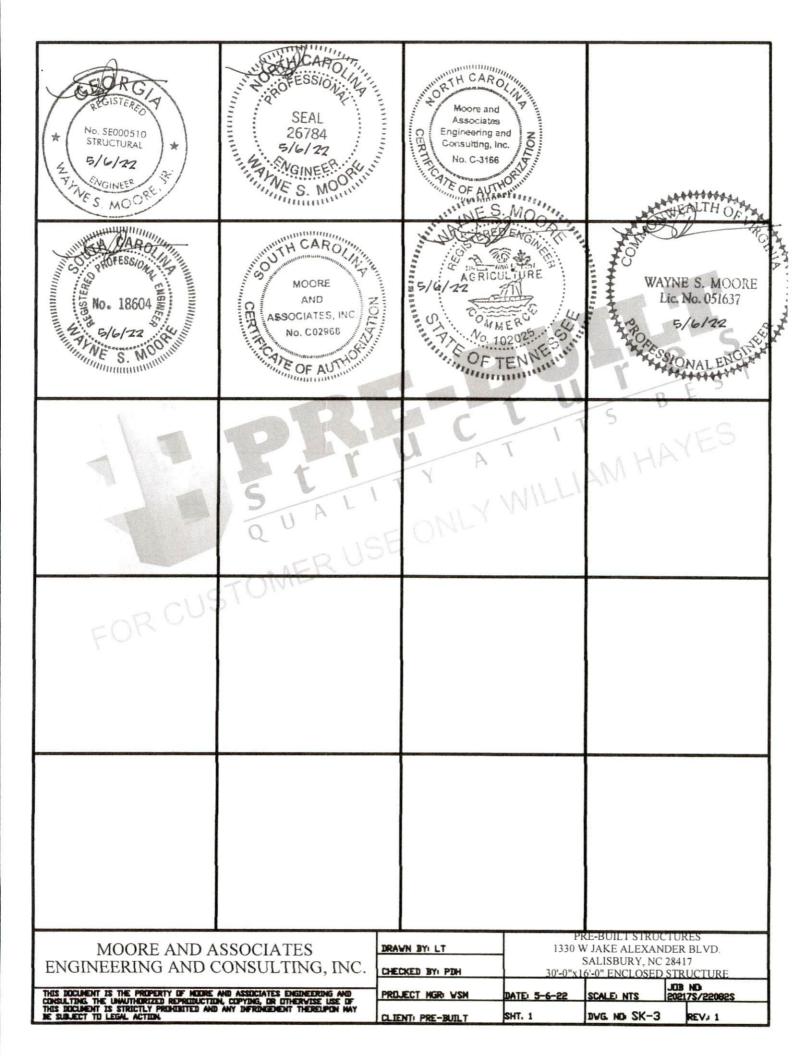


HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 14'-0' < LENGTH ≤ 16'-0' FOR CUSTOMER US

TS HEADER

HEADER DETAIL FOR END WALL DOOR OPENINGS ≤ 14'-0"

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#### INSTALLATION NOTES AND SPECIFICATIONS

- 1. DESIGN IS FOR MAXIMUM 30'-0' WIDE x 16'-0' EAVE HEIGHT ENCLOSED STRUCTURES.
- 2. DESIGN WAS DONE IN ACCORDANCE WITH ALL THE APPLICABLE BUILDING CODES LISTED ON SHEET 3A.
- 3. DESIGN LOADS ARE AS FOLLOWS:

A) ROOF DEAD LOADS!

SELF-WEIGHT = 1.5 PSF MEP = 0 PSF COLLATERAL = 0 PSF

B) ROOF LIVE LOAD = 12 PSF

C) FLOOR LIVE LOAD = 100 PSF (4" CONCRETE SLAB/FOOTING)

D) GROUND SNOW LOAD = 35 PSF

= 30 PSF (WITH U-CHANNEL RAFTER TIE)

NOTE: UNBALANCED LOADING DUE TO SNOW DRIFTING FROM AN ADJACENT TALLER STRUCTURE HAS NOT BEEN EVALUATED,

- 4. 3-SECOND GUST ULTIMATE WIND SPEED (V<sub>ULT</sub>) = \( \) 145 MPH (NOMINAL WIND SPEED = \( \) 112 MPH).
- 5. MAXIMUM RAFTER/COLUMN AND END COLUMN SPACING = 5.0 FEET (UNLESS NOTED OTHERWISE).
- 6. ENDWALL COLUMNS (POSTS) AND SIDE WALL COLUMNS ARE EQUIVALENT IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
- 7. RISK CATEGORY I (NOT FOR HUMAN HABITATION).
- 8. WIND EXPOSURE CATEGORY B.
- 9. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2'x2 1/2'-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED DTHERWISE). 2 1/4'x2 1/4'-12 GAUGE TS MAY BE USED AS OPTIONAL FRAMING MEMBERS.
- 10. CONNECTOR SLEEVES ARE MINIMUM 6' LONG, TS 2 1/4'x2 1/4'-14 GAUGE FOR 2 1/2'x2 1/2'-14 GAUGE AND TS 2'x2'-12 GAUGE FOR 2 1/4'x2 1/4'-12 GAUGE FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
- 11. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 GRADE 50 WITH MINIMUM YIELD STRENGTH (Fy) OF 54 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS OF G60.
- 12. AVERAGE PANEL FASTENER SPACING ON-CENTERS = 10 INCHES.
- 13. FASTENERS CONSIST OF #12-14x3/4' SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS.

  SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 16 FEET OR LESS, AND ROOF SLOPES OF 14' (3:12-PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY. ROOF SLOPES LESS THAN 3:12 REQUIRE USE OF JOINT SEALANT.
- 14. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6' OF EACH COLUMN.
- 15. STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT x 30° LONG AND MAY DNLY BE USED IN CONJUNCTION WITH OTHER (OPTIONAL) ANCHOR DEVICES AND ONLY IN SUITABLE SOILS, OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. COURDINATE WITH LOCAL CODES/ORDINANCES REGARDING MINIMUM LENGTH FOR FROST DEPTH PROTECTION.
- 16. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATION ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN STABILITY BEFORE COMPLETION.
- 17. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE

SDIL SITE CLASS = D

RISK CATEGORY I

R = 3.25  $I_E = 1.0$  $S_{BS} = 2.625$  g  $V = C_S W$ 

 $S_{D1} = 2.13 g$ 

- 18. IF MORE THAN 50% OF COLUMN (LEG) ARE REMOVED IN ANY LONGITUDINAL (SIDE) WALLS OF A BUILDING, THE ENGINEER IS TO BE NOTIFIED TO DETERMINE WHETHER PORTAL FRAMES OR OTHER LONGITUDINAL STABILITY ELEMENTS WILL BE REQUIRED.
- 19. THIS MASTER DESIGN IS A GENERIC MASTER DESIGN PRIMARILY INTENDED FOR PLANT FABRICATION AND ERECTION AKIN TO SHOP DRAWINGS. THE MASTER DESIGN IS NOT PROMARILY INTENDED FOR CONSTRUCTION PERMAT, WHEN APPLYING FOR MULDING PERMAT, THE CERTIFIED BUILDING DEFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR MULDING PERMAT, ANY VARIATION FROM THE ANALYSIS/DESIGN PARAMETERS OF THE MASTER DESIGN REDUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

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#### LIST OF APPLICABLE BUILDING CODES

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

GEORGIA STATE MINIMUM STANDARD BUILDING CODE (ADDPTS THE IBC 2018 WITH AMENDMENTS)

2018 NORTH CAROLINA BUILDING CODE (ADOPTS THE IBC 2015 WITH AMENDMENTS)

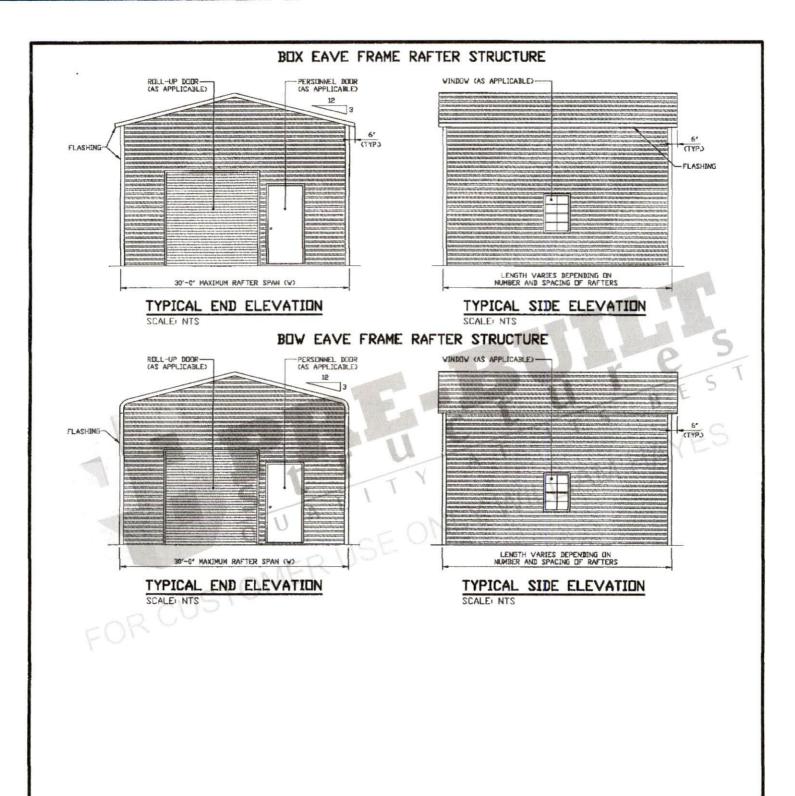
2018 SOUTH CAROLINA BUILDING CODE (ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2012 OF TENNESSEE (ADOPTS THE IBC 2012 WITH AMENDMENTS) BUILDING CODE 2018 OF NASHVILLE AND DAVIDSON COUNTY (ADOPTS THE IBC 2018 WITH AMENDMENTS)

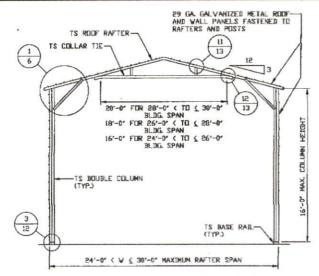
2018 VIRGINIA CONSTRUCTION CODE



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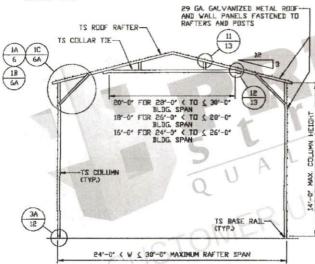


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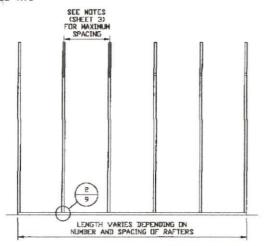


# TYPICAL RAFTER/COLUMN FRAME SECTION

SCALE: NTS



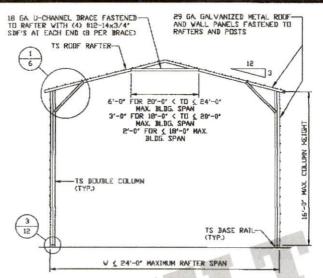
#### TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS



# TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

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# TYPICAL RAFTER/COLUMN FRAME SECTION

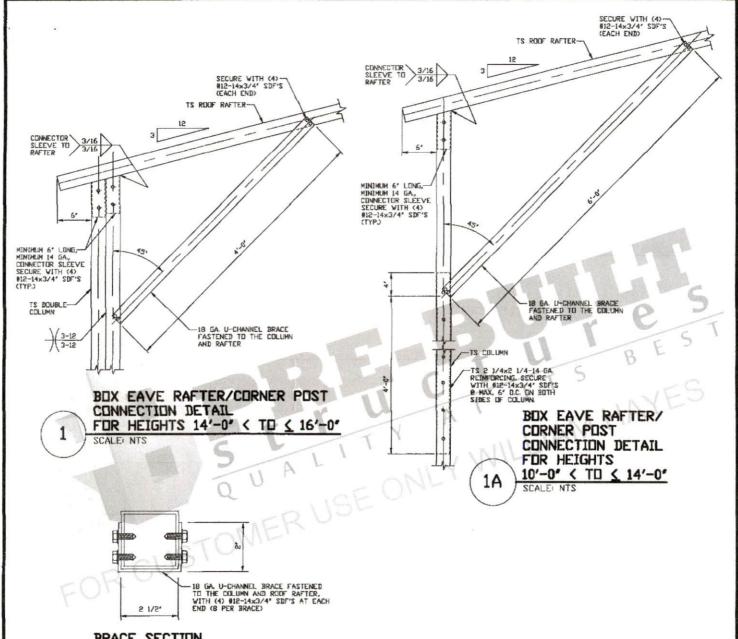
SCALE: NTS 29 GA. GALVANIZED METAL RODF AND WALL PANELS FASTENED TO RAFTERS AND POSTS TS ROOF RAFTER 12 73 5'-0' FOR 20'-0' < TO \( 24'-0' \)
MAX. BLDG, SPAN
3'-0' FOR 18'-0' < TO \( 20'-0' \)
MAX. BLDG, SPAN 2'-0' FOR ( 18'-0" MAX. BLDG, SPAN CDLUMN TS COLUMN MAX. 14,-0, 3A 12 TS BASE RAIL

#### TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS

W C 24'-8" MAXIMUM RAFTER SPAN

#### PRE-BUILT STRUCTURES DRAWN BY: LT 1330 W JAKE ALEXANDER BLVD. SALISBURY, NC 28417 CHECKED BY: PDH 30'-0"x16'-0" ENCLOSED STRUCTURE JOB NO

PROLIECT MGR: VSM DATE: 5-6-22 SCALE NTS 202175/220828 SHT. 5 DVG NO SK-3 EV. CLIENT: PRE-BUILT

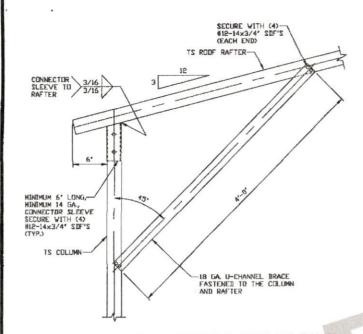


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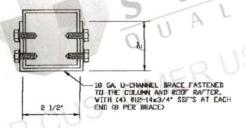
l <sub>c</sub>	LIENTI PRE-BUILT	SHT. 6	DWG. NO SK-	3	REV. 1		
P	ROJECT MGR VSH	DATE: 5-6-22	SCALE NTS	202 203	ND: 75/220828		
c	HECKED BY PDH	SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE					
D	RAVN BY LT	1330 W JAKE ALEXANDER BLVD.					



SECURE WITH (4)— #12-14x3/4' SDF'S (EACH END) TS RODF RAFTER-CONNECTOR 3/16
SLEEVE TO 3/16
RAFTER 3/16 MINIMUM 6' LONG,— MINIMUM 14 GA., CONNECTOR SLEEVE SECURE WITH (4) #12-14x3/4' SDF'S (TYP.) TS COLUMN -18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND RAFTER

BOX EAVE RAFTER/CORNER POST CONNECTION DETAIL FOR HEIGHTS 8'-0" < TO & 10'-0" SCALE: NTS

BUX EAVE RAFTER/CURNER POST CONNECTION DETAIL FOR HEIGHTS & 8'-0" ONLY WILLIAM HA



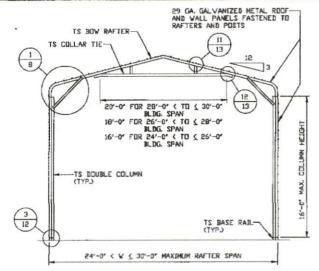
BRACE SECTION

1B

THES DOCUME	ENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT HER: VSM	DATE 5-6-22	SCALE: NTS	JQB ND 202175/2
ENG	INEERING AND CONSULTING, INC.	CHECKED BY: PDH		SALISBURY, NO 6'-0" ENCLOSEI	
	MOORE AND ASSOCIATES	DRAWN BY LT		KE-BUILT STRU V JAKE ALEXA	

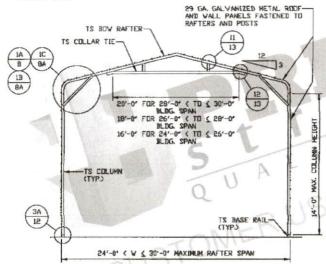
CENSULTING. THE IMMUTHERIZED REPREDICTION, COPYING, OR CITHERVISE USE OF THUS ROCHMENT IS STRUCTLY PRODUCTED AND ANY INTRINGENERY THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

CLIENT: PRE-BUILT	SHT. 6A	DVG. ND SK-	3 REV. 1					
PROJECT HGR: VSM	DATE 5-6-22	SCALE: NTS	JOB NO 20217S/22082S					
CHECKED BY: PDH	SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE							
DRAWN BY LT	1330 W JAKE ALEXANDER BLVD.							
	The second of th							



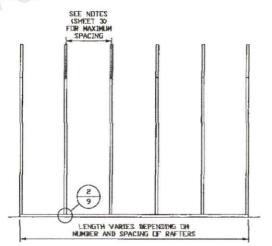
### TYPICAL RAFTER/COLUMN FRAME SECTION

SCALE: NTS



### TYPICAL RAFTER/COLUMN FRAME SECTION

SCALE NTS



#### TYPICAL RAFTER/CULUMN SIDE FRAMING SECTION

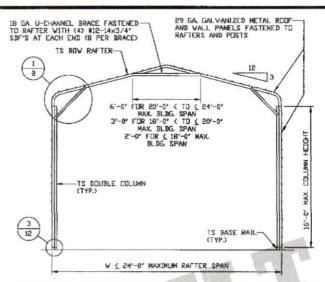
SCALE: NTS

ENGINEERING AND CONSULTING, INC.

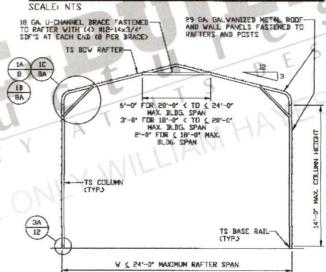
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CLIEN

MOORE AND ASSOCIATES

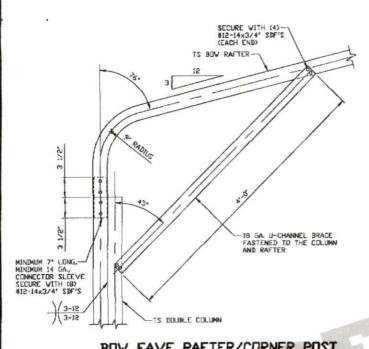


# TYPICAL RAFTER/COLUMN FRAME SECTION



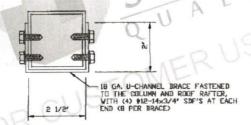
# TYPICAL RAFTER/COLUMN FRAME SECTION

CLIENT) PRE-BUILT	SHT. 7	DVG. NO SK-	3	REV. 1	
PROJECT MGR VSM	DATE 5-6-22	SCALE NTS	JOB 2021	ND 75/220825	
CHECKED BY: PDH	SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRU				
DRAWN BY: LT	1 (Access to 1)	W JAKE ALEXA	NDER	BLVD.	



BOW EAVE RAFTER/CORNER POST CONNECTION DETAIL FOR HEIGHTS 14'-0' < TO < 16'-0'

SCALE: NTS



BRACE SECTION

ING, OR UTHERVISE USE OF
STICIATES ENGINEERING AND PROJECT MGR VSM DATE 5-6-22 SCALE NTS 202175/220825  PROJECT MGR VSM DATE 5-6-22 SCALE NTS 202175/220825  CLIENT: PRE-BUILT SHT. 8 DVG. ND SK-3 REV. 1
NSULTING, INC. CHECKED BY PDH SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE
OCIATES  DRAWN BY LT  PRE-BUILT STRUCTURES 1330 W JAKE ALEXANDER BLVD.
OCIATES DRAWN BY LT 1330 W JAKE ALEXANDER BLVD.

SECURE WITH (4)-#12-14x3/4' SDF'S (EACH END)

MINIMUM 7' LONG, MINIMUM 14 GA., CONNECTOR SLEEVE SECURE WITH (8) #12-14x3/4" SDF'S

BOW EAVE RAFTER/

CONNECTION DETAIL

10'-0" < T□ < 14'-0"

CORNER POST

FOR HEIGHTS

SCALE: NTS

-TS COLUMN

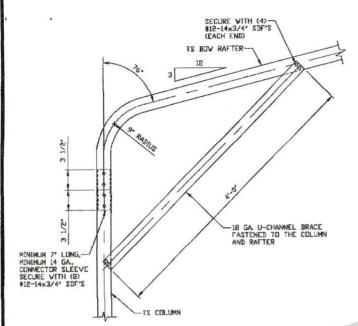
TS 2 1/4x2 1/4-14 GA REINFORCING SECURE WITH #12-14x3/4' SDF'S 2 MAX. 6' LLC. ON BOTH SIDES OF COLUMN.

TS COLUMN

1A

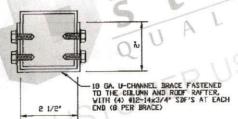
-18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND RAFTER

-NATTER-



BOW EAVE RAFTER/CORNER POST CONNECTION DETAIL FOR HEIGHTS 8'-0' < TO < 10'-0"

1B ) FUR HELL



SECURE WITH (4)— HI2-14x3/4* SDF*S (EACH END)	
TS BOV RAFTER	
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MINIMUM 7' LONG,	
MINIMUM 14 GA., CONNECTOR SLEEVE 18 GA. U-CHANNEL BRACE	
SECURE WITH (B) #12-14x3/4' SDF'S AND RAFTER	
	g and
TS COLUMN	
1000 UNIONI TORRESTOR SECTION OF THE PARTY O	

BOW EAVE RAFTER/CORNER POST
CONNECTION DETAIL.
FOR HEIGHTS & 8'-0'
SCALE NTS

BRACE SECTION

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR DITHERWISE USE OF	CLIENT PRE-BUILT	SHT. 8A	DVG ND SK-3	REVs 1	
	PROJECT MGR VSM	DATE 5-6-22	SCALE: NTS 2	DB ND 0217S/22002S	
THE TOTAL PROPERTY AND CONTENT TIME THE	CHECKED BY: PDH		SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE		
MOORE AND ASSOCIATES	DRAWN BY: LT	1330 \	RE-BUILT STRUCT W JAKE ALEXAND	ER BLVD.	

#### INSTALL 1/2'x6 1/2' -WWF OR FIBERGLASS EXPANSION ANCHOR THROUGH BASE RAIL WITHIN 6' OF FIBERS FACH COLUMN. (ALSO APPLICABLE TO END WALLS VARIE GRADE 4 1 0-MINIMUM 3 1/ EMBEDMENT (TYP.) MONOLITHIC CONCRETE FOOTING (3000 PSI MIN.) REINFORCED WITH (2)-#4's CONTINUOUS 1'-0' VARIES



#### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

MINIMUM ANCHOR EDGE DISTANCE IS 4".
\* CODRDINATE WITH LOCAL CODES/DRD. REGARDING MINIMUM FROST DEPTH REQ.

# GENERAL NOTES

NOTE: CONCRETE MONDLITHIC SLAB DESIGN BASED ON MINIMUM SOIL BEARING CAPACITY OF 1,500 PSF.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.

COVER OVER REINFORCING STEEL!

FOR FDUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:
3' IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER, AND L 1/2' ELSEWHERE.

REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 DR FIBERGLASS FIBER REINFORCEMENT.

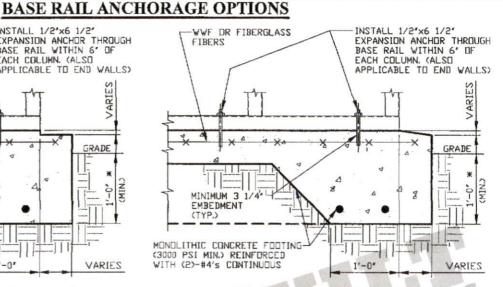
#### REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:

- REINFORCEMENT IS BENT COLD.
- 2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.

  3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT
- BE FIELD BENT.

#### HELIX ANCHOR NOTES:

- FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILTS AND CLAYS, USE MINIMUM (2) 4' HELICES WITH MINIMUM 30' EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT
- 2. FOR CORAL USE MINIMUM (2) 4' HELICES WITH MINIMUM 30' EMBEDMENT OR SINGLE 6' HELIX WITH MINIMUM 50' EMBEDMENT.
- FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50' EMBEDMENT.
- 4. FOR LOUSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6' HELICES WITH MINIMUM
- 5. FOR VERY LOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8' HELICES WITH MINIMUM 60' EMBEDMENT.

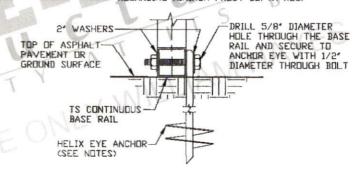


# CONCRETE SLAB BASE RAIL ANCHORAGE

MINIMUM ANCHOR EDGE DISTANCE IS 4.

\* CODRDINATE WITH LOCAL CODES/DRD.

REGARDING MINIMUM FROST DEPTH REQ.



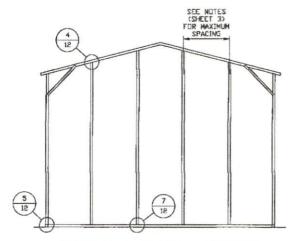
# GROUND BASE HELIX ANCHORAGE

(CAN BE USED FOR ASPHALT) \* COORDINATE WITH LOCAL CODES/ORD. REGARDING MINIMUM FROST DEPTH REQ.

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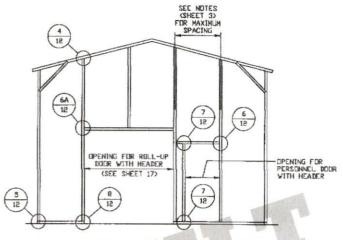
	CLIENT: PRE-BUILT	SHT. 9	DVG. NO SK-	3	REV. 1				
-	PROJECT MGR: VSM	DATE 5-6-22	SCALE NTS	30B	ND: 75/220825				
	CHECKED BY: PDH	30'-0"x	SALISBURY, N 16'-0" ENCLOSE						
	DRAWN BY: LT	200000000000000000000000000000000000000	RE-BUILT STR W JAKE ALEXA	NDER					

# BOX EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

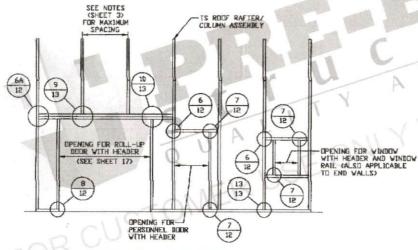
SCALE: NTS



TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION

WILLIAM HAYES

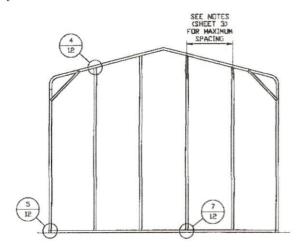
SCALE NTS



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

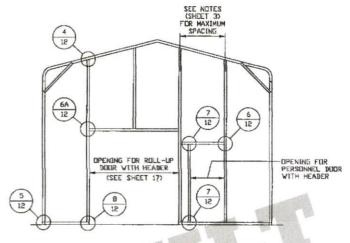
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ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		SALISBURY, NC 2 6'-0" ENCLOSED S	
MOORE AND ASSOCIATES	DRAWN BY: LT		RE-BUILT STRUC V JAKE ALEXANI	

# BOW EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



# TYPICAL BOW EAVE RAFTER END WALL FRAMING SECTION

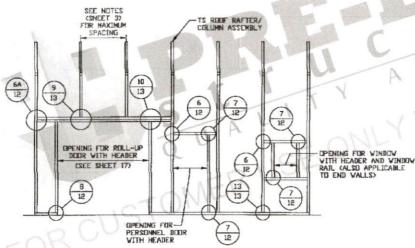
SCALE: NTS



# TYPICAL BOW EAVE RAFTER END WALL OPENINGS FRAMING SECTION

WILLIAM HAYES

SCALE: NTS



TYPICAL BOW EAVE RAFTER
SIDE WALL OPENINGS FRAMING SECTION

CLOSULTIME THE CHARLES RETRIEVED AND ANY DIFFERENCEMENT THERELIPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: PRE-BUILT	SHT. 11	DVG. ND SK-3	RI	EV# 1
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ENCRIEEDING AND CONCULTING INC	CHECKED BY: PBH	SALISBURY, NC 28417 30'-0"x16'-0" ENCLOSED STRUCTURE			CTURE
MOORE AND ASSOCIATES	BRAWN BY: LT	1330 W	E-BUILT STRUC JAKE ALEXAN	DER B	
		PR	EGEINININ SINCE	שעוויף	