

STRUCTURAL DESIGN ENCLOSED BUILDING

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

3 February 2025 Revision 9 M&A Project No. 17232S/18070S/18094S/19050S/20127S/23045S/24328S

Prepared for:

Elephant Structures 1804 River Street Wilkesboro, NC 28697

Prepared by:

Moore and Associates Engineering and Consulting, Inc.

1009 East Avenue North Augusta, SC 29841

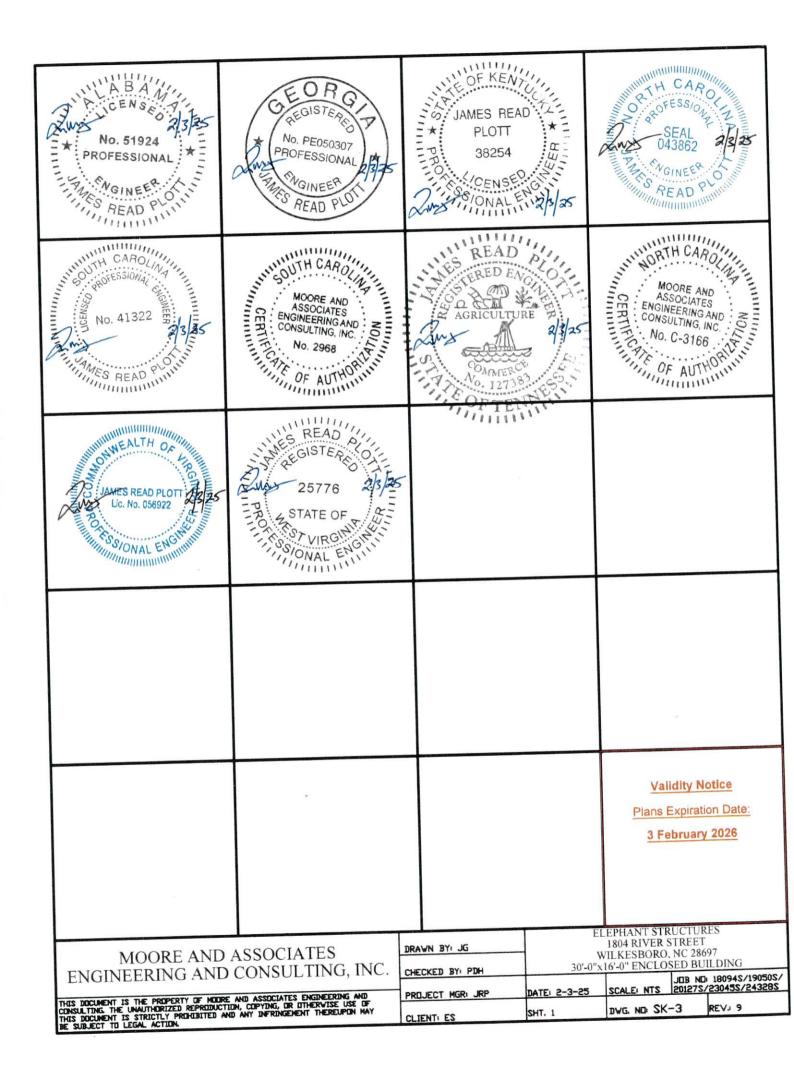
401 S. Main Street, Suite 200 Mount Airy, NC 27030



Validity Notice

Plans Expiration Date: <u>3 February 2026</u>
Plans are valid for one year from issuance date

Moore and Associates Engineering and Consulting, Inc. ("Moore & Associates") is the author and owner of all plans, drawings, specifications, etc. ("Instruments of Service") provided by it, and retains all common law, statutory, and other reserved rights, including without limitation copyrights. A limited license is granted to you for use of the Instruments of Service solely and exclusively in connection with the specific project for which the Instruments of Service were created by Moore & Associates. All other uses, including without limitation transfer to a third party, are strictly prohibited. Acceptance of the Instruments of Service constitutes your agreement to indemnify and to hold Moore & Associates harmless from all cost, expenses, damages, and attorney's fees arising from or relating to any unauthorized use or transfer of the Instruments of Service.



DRAWING INDEX						
SHEET 1	PE SEAL COVER SHEET					
SHEET 2	DRAWING INDEX					
SHEET 3	INSTALLATION NOTES AND SPECIFICATIONS					
SHEET 3A	LIST OF APPLICABLE BUILDING CODES					
SHEET 4	TYPICAL SIDE AND END ELEVATIONS					
SHEET 5	TYPICAL RAFTER/COLUMN FRAMING AND SIDE FRAMING SECTIONS					
011221	(ROX FAVE RAFTER)					
SHEET 5A	TYPICAL RAFTER/COLUMN FRAMING AND SIDE FRAMING SECTIONS (BOX EAVE RAFTER)					
SHEET 6	COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO < 150 MPH					
SHEET 6A	COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO < 150 MPH					
SHEET 6B	COLUMN CONNECTION DETAILS FOR WIND SPEEDS < 105 MPH					
SHEET 6C	COLUMN CONNECTION DETAILS FOR WIND SPEEDS < 105 MPH					
SHEET 7	TYPICAL RAFTER/COLUMN FRAMING AND SIDE FRAMING SECTIONS (BOW EAVE RAFTER)					
SHEET 7A	TYPICAL RAFTER/COLUMN FRAMING AND SIDE FRAMING SECTIONS (BOW EAVE RAFTER)					
SHEET 8	COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < 10 < 150 MPH					
SHEET 8A	COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 K IU & 150 MPH					
SHEET 8B	COLUMN CONNECTION DETAILS FOR WIND SPEEDS & 105 MPH					
SHEET 8C	COLUMN CONNECTION DETAILS FOR WIND SPEEDS & 105 MPH					
SHEET 9	BASE RAIL ANCHURAGE OPTIONS					
SHEET 9A	BASE RAIL ANCHURAGE OPTIONS					
SHEET 9B	BASE RAIL ANCHURAGE OPTIONS					
SHEET 9C	BASE RAIL ANCHORAGE OPTIONS BASE RAIL ANCHORAGE OPTIONS FOR WIND SPEEDS 105 MPH < TO < 150 MPH					
SHEET 9D	BASE RAIL ANCHORAGE OPTIONS FOR < 105 MPH					
SHEET 9E	BOX EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS					
SHEET 10	BOW EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS					
SHEET 11						
SHEET 12	CONNECTION DETAILS					
SHEET 13	CONNECTION DETAILS CONNECTION DETAILS					
SHEET 14	CONNECTION DETAILS					
SHEET 15	BOX EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)					
SHEET 16	BOX EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)					
SHEET 16A	BOX EAVE RAFTER LEAN-TO OPTIONS (1:12 LEAN-TO ROOF PITCH)					
SHEET 16B	BOW EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)					
SHEET 16C	BOW EAVE RAFTER LEAN-TO OPTIONS (1:12 LEAN-TO ROOF PITCH)					
SHEET 16D	BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION					
SHEET 17	DPTIONAL CONCRETE STRIP FOOTING WITH ATTACHED					
SHEET 18	LEAN-TO AND WIND SPEEDS 105 < TO < 150 MPH					
SHEET 18A	OPTIONAL CONCRETE STRIP FOOTING WITH ATTACHED					
311221 1011	LEAN-TO AND WIND SPEEDS ≤ 105 MPH					
SHEET 18B	OPTIONAL CONCRETE STRIP FOOTING WITHOUT ATTACHED LEAN-TO AND WIND SPEEDS 105 < TO ≤ 150 MPH Place Expiration Date:					
SHEET 19	SIDE WALL HEADER OPTIONS GROUND SNOW LOADS & 35 PSF					
SHEET 19A	AND 35 PSF < TO < 45 PSF FOR TS DOUBLE COLUMNS END WALL HEADER OPTIONS GROUND SNOW LOADS < 35 PSF					
Grand of Discontinuous Committee	AND 35 PSF < TO < 45 PSF FOR TS DOUBLE COLUMNS					
SHEET 19B	END WALL HEADER OPTIONS GROUND SNOW LOADS < 35 PSF AND 35 PSF < TO < 45 PSF FOR TS SINGLE COLUMNS					
CHEET 100	END WALL HEADER OPTIONS GROUND SNOW LOADS 435 PSF					
SHEET 19C	AND 25 PSF / TO / 45 PSF FIR IS SINGLE CULUMNS					
Note surviva	ELEPHANI STRUCTURES					
MO	OORE AND ASSOCIATES WILKESBORO, NC 28697					
ENGINEE	INTR. NO. 18094S/19050S					
THIS DOCUMENT IS THE	PATE: 2-3-25 SCALE: NTS 20127S/23045S/24326S					
THIS DOCUMENT IS STE	RETLY PROMUNITED AND ANY INFRINCEMENT THEREUPON MAY CHIEFLY S. SHT. 2 DVG. NO. SK-3 REV. 9					
BE SUBJECT TO LEGAL	- Re-Luro					

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 LITADS ARE AS FOLLOWS:

A) ROOF DEAD LOADS:

SELF-WEIGHT = 1.5 PSF

MFP = 0 PSF

COLLATERAL = 0 PSF = 12 PSF B) ROOF LIVE LOAD

C) FLOOR LIVE LOAD

= 100 PSF (4" CONCRETE SLAB-ON-GRADE) = 45 PSF MAX. AT 4'-0" RAFTER/POST SP SPACING D) GROUND SNOW LOAD

= 35 PSF MAX. AT 5'-0" RAFTER/POST SPACING

= 20 PSF WITH U-CHANNEL RAFTER TIE AND W ≤ 16'-0"

NOTE: UNBALANCED LOADING DUE TO SNOW DRIFT/SLIDING FROM AN ADJACENT TALLER STRUCTURE HAS NOT BEEN EVALUATED, DROP-DOWN LEAN-TO'S (THOSE CAUSING A HEIGHT DIFFERENTIAL FROM THE MAIN STRUCTURE) SHALL ONLY BE USED FOR GROUND SNOW LOADS ≤ 30 PSF.

- 4. 3-SECOND GUST ULTIMATE WIND SPEED (V_{ULT}) = 105 TO 150 MPH (NOMINAL WIND SPEED = 81 TO 116 MPH).
- 5. MAXIMUM RAFTER/POST AND END POST SPACING = 5.0 FEET FOR GROUND LOAD & 35 PSF AND 4'-0" D.C. FOR GROUND SNOW LOAD BETWEEN 35 PSF AND 45 PSF
- 6. END WALL COLUMNS/POSTS ARE EQUIVALENT TO SIDE WALL COLUMNS/POSTS IN SIZE AND SPACING UNLESS NOTED OTHERWISE.
- 7. RISK CATEGORY I (NOT FOR HUMAN OCCUPANCY).
- 8. WIND EXPOSURE CATEGORY B.
- 9. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 GRADE 50 WITH MINIMUM YIELD STRENGTH (Fy) OF 50 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS OF G60.
- 10. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2" x 3" 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE)
- 11. CONNECTOR SLEEVES ARE MINIMUM 6" LONG, TS 1 3/4" x 2 3/4" 14 GAUGE FOR 2" x 3" 14 GAUGE FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
- 10. AVERAGE PANEL FASTENER SPACING DN-CENTERS = 10" D.C. (MAX.)
- 11. FASTENERS CONSIST OF #12-14×3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS.
 SPECIFICATIONS APPLICABLE ONLY FOR ROOF SLOPES OF 14" (3:12 PITCH) OR LESS. ROOF SLOPES LESS THAN 3:12 REQUIRE USE OF JOINT SEALANT.
- 12. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES.
- 13. 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.
- 14. 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.
- 15. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:

SDIL SITE CLASS = D RISK CATEGORY I

 $I_E = 1.0$ R = 3.25 $\sqrt{\ } = C_S W$

S_{DS} = 2.625 g $S_{D1} = 2.13 g$

- 16. APPLY LAP SEALANT TO METAL ROOF PANELS FOR 1:12 ROOF SLOPES.
- 17. IF MORE THAN 50% OF COLUMNS (LEGS) 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.
- 18. ANALYSIS/DESIGN OF THIS STRUCTURE WAS BASED ON THE LOADS, BUILDING CODE, AND STRUCTURAL GEOMETRY NOTED HEREIN. NO CHANGES SHALL BE MADE TO THE STRUCTURE WITHOUT EXPRESS WRITTEN PERMISSION FROM THE DESIGN ENGINEER. ANY CHANGES IN THE USE OR GEOMETRY OF THE STRUCTURE IN ANY MANNER IS A VIOLATION OF THE BUILDING CODE AND NEGATES ANY LIABILITY ON THE PART OF MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.
- 19. USE E70 ELECTRODES FOR WELDED CONNECTIONS. ALL WELDING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF AWS D1.3.
- 20. WHEN USING GENERIC MASTER DESIGNS TO OBTAIN BUILDING PERMIT, IT MUST BE ACCOMPANIED BY SUFFICIENT ADDITIONAL INFORMATION TO INDICATE THE LOCATION, NATURE, AND EXTENT OF THE CONSTRUCTION AND SHOW IN DETAIL THAT IT WILL CONFIRM TO ALL APPLICABLE CODES, LAWS, ORDINANCES, RULES, AND REGULATIONS.
- WHEN APPLYING FOR BUILDING PERMIT, THE BUILDING OFFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR OBTAINING A BUILDING PERMIT, GENERIC MASTER DESIGNS CAN NOT BE USED WHERE A SITE-SPECIFIC DESIGN IS REQUIRED.
- 22. ANY VARIATION FROM THE ANALYSIS/DESIGN PARAMETERS OF THE MASTER DESIGN REQUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

Validity Notice

Plans Expiration Date:

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRUCTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUB-EXT. TO LEGAL ACTION.	CLIENTLES	SHT. 3	DVG. ND SK	-3	REV. 9	
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25			18094S/19050S/ /23045S/24328S	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		VILKESBORO 16'-0" ENCLO			
MOORE AND ASSOCIATES	DRAWN BY: JG	El	ELEPHANT STRUCTURES 1804 RIVER STREET			

LIST OF APPLICABLE BUILDING CODES

2021 INTERNATIONAL BUILDING CODE (IBC 2021)

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

ALABAMA BUILDING CODE 2021 (ADDPTS THE IBC 2021 WITHOUT AMENDMENTS) (IBC 2015, IBC 2018, IBC 2021 (DEPENDENT UPON LOCAL JURISDICTION))

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

KENTUCKY BUILDING CODE 2018
(ADOPTS THE IBC 2015 WITH AMENDMENTS)

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

SOUTH CAROLINA BUILDING CODE 2021 (ADOPTS THE IBC 2021 WITH AMENDMENTS)

TENNESSEE BUILDING CODE 2012
(ADOPTS THE IBC 2012 WITH AMENDMENTS)
KNOXVILLE BUILDING CODE 2024
(ADOPTS THE IBC 2024 WITHOUT AMENDMENTS)
BUILDING CODE OF METROPOLITAN NASHVILLE AND
DAVIDSON COUNTY (ADOPTS THE IBC 2018 WITH AMENDMENTS)
(IBC 2012, IBC 2018, 1BC 2021 (DEPENDENT UPON LOCAL JURISDICTION))

VIRGINIA UNIFORM STATEWIDE BUILDING CODE, PART I, CONSTRUCTION/VIRGINIA CONSTRUCTION CODE (VCC) (ADOPTS THE IBC 2021 WITH AMENDMENTS)

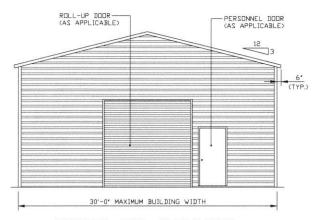
WEST VIRGINIA BUILDING CODE 2018 (ADOPTS THE IBC 2018 WITH AMENDMENTS)

Validity Notice

Plans Expiration Date:

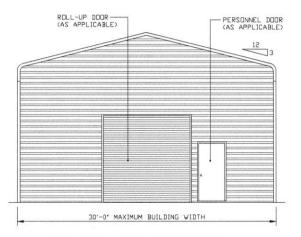
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	DRAWN BY: JG	ELEPHANT STRUCTURES 1804 RIVER STREET WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			
THIS DOCUMENT IS THE PROPERTY OF MOURE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SID BOTT TO LEGAL ACTION.	ICIATES ENGINEERING AND PROJECT MGR: JRP DATE: 2-3-25			JOB ND 180945/190505/ 201275/230455/243285 -3 REV. 9	

TYPICAL SIDE AND END ELEVATIONS

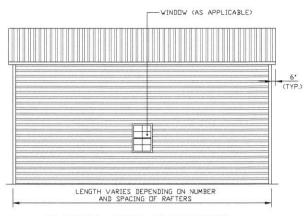


TYPICAL END ELEVATION

SCALE: NTS

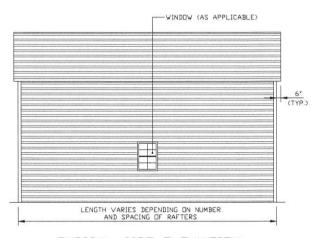


TYPICAL END ELEVATION SCALE: NTS



TYPICAL SIDE ELEVATION

SCALE: NTS
NDTE: HDRIZONTAL ROOF PANELING ONLY
APPLICABLE FOR WIND SPEEDS
120 MPH
AND GROUND SNOW LOADS
25 PSF.

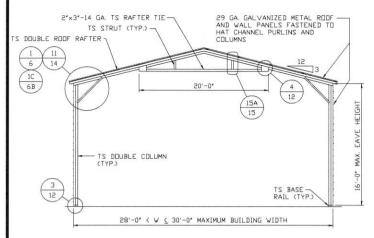


TYPICAL SIDE ELEVATION

SCALE: NTS
NOTE: HORIZONTAL ROOF PANELING ONLY
APPLICABLE FOR WIND SPEEDS & 120 MPH
AND GROUND SNOW LOADS & 25 PSF.

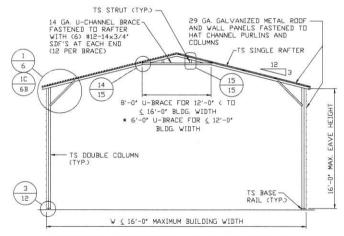
ENCINEEDING AND CONGULTING INC	DRAWN BY: JG	EI	ELEPHANT STRUCTURES 1804 RIVER STREET			
	CHECKED BY: PDH		WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25			18094S/19050S/ /23045S/24328S	
CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROMUNITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 4	DVG. ND SK-	-3	REV₁ 9	

TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE STRUCTURE)



TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

SCALE: NTS NOTE: SINGLE TUBE RAFTER ALLOWED FOR GROUND SNOW LOADS & 30 PSF.



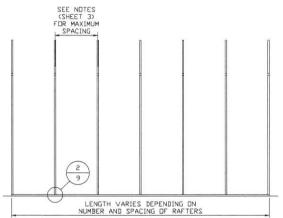
TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

SCALE: NTS * NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.

29 GA. GALVANIZED METAL ROOF AND WALL PANELS FASTENED TO HAT CHANNEL PURLINS AND COLUMNS 2'x2'-14 GA. TS RAFTER TIE-15A TS STRUT (TYP.) 15 4 TS SINGLE-RAFTER 6 10 6B 15'-0' FOR 20'-0' < TO < 28'-0' BLDG. WIDTH 10'-0' FOR 16'-0' < TO < 20'-0' HEIGHT BLDG. WIDTH ★ 8'-0" FOR 12'-0" < TO ≤ 16'-0" BLDG. WIDTH EAVE * 6'-0' FOR < 12'-0' BLDG. WIDTH MAX. TS DOUBLE COLUMN 16'-0" 12 16'-0" < W < 28'-0" MAXIMUM BUILDING WIDTH

TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

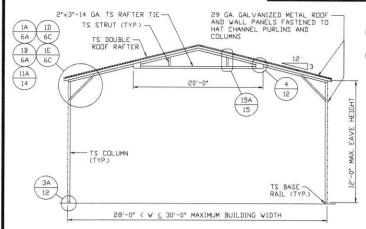
SCALE: NTS * NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

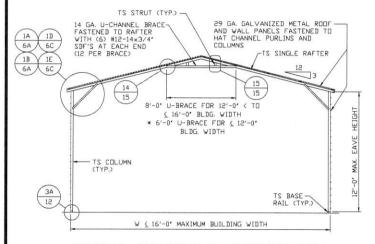
					9094S/19050S/ 045S/24328S
ENCINEEDING AND CONCULTING INC	DRAWN BY: JG CHECKED BY: PDH	ELEPHANT STRUCTURES 1804 RIVER STREET WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			

TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE STRUCTURE)



TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

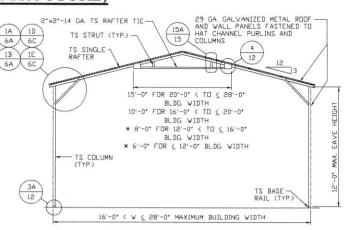
SCALE: NTS NOTE: SINGLE TUBE RAFTER ALLOWED FOR GROUND SNOW LOADS ≤ 30 PSF.



TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

SCALE: NTS

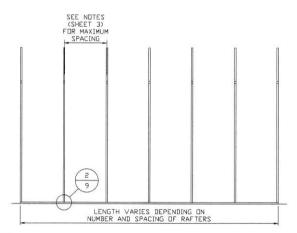
* NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



TYPICAL INTERIOR RAFTER/COLUMN FRAMING SECTION

SCALE: NTS

* NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

Validity Notice

Plans Expiration Date:

3 February 2026

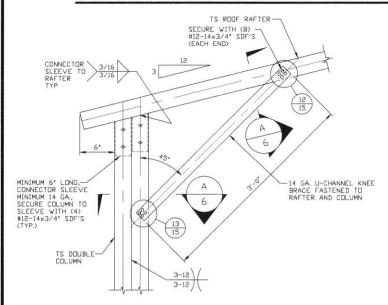
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRUCTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

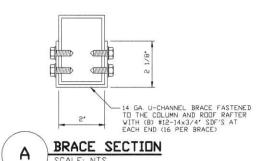
PROJECT MGR: JRP DATE: 2-3-25 SCALE: NTS 201275/230455/243285

CLIENT: ES SHT. 5A DVG. ND: SK-3 REV. 9

COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO ≤ 150 MPH



BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 12'-0' < TO < 16'-0' SCALE: NTS

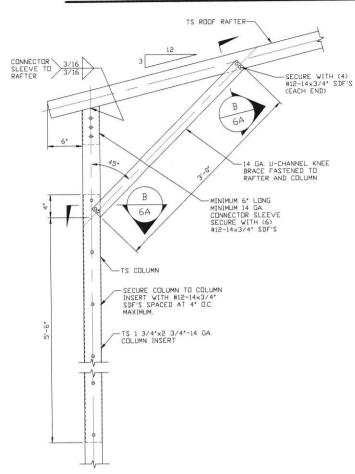


Validity Notice

Plans Expiration Date:

THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THERELPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 6	DVG. NO SK	(-3	REV. 9		
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS		18094S/19050S/ /23045S/24328S		
ENGINEERING AND CONSULTING, INC.					WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING		
MOORE AND ASSOCIATES	ELEPHANT STRUCTURES 1804 RIVER STREET						

COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO ≤ 150 MPH



CONNECTOR 3/16
SLEEVE TO 3/16

AND SECURE VITH (4)
BI2-14×3/4' SDF'S
CEACH END)

B

AND SECURE VITH (4)
BI2-14×3/4' SDF'S
CEACH END)

B

AND SECURE VITH (4)
BI2-14×3/4' SDF'S
CEACH END)

B

AND SECURE VITH (4)
BI2-14×3/4' SDF'S
CEACH END)

TS COLUMN TO
RAFTER AND COLUMN

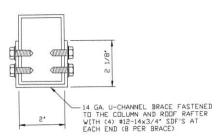
TS COLUMN

TS COLUMN

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS <u>(</u> 9'-0"

1B SCALE: NTS

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 9'-0" < TO \(\) 12'-0"



BRACE SECTION

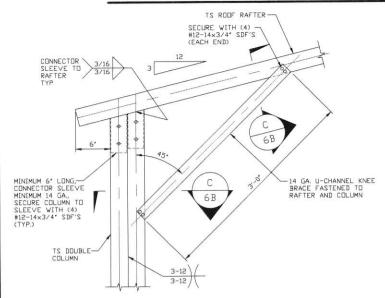
SCALE: NTS

Validity Notice

Plans Expiration Date:

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISSE USE OF THIS DOCUMENT IS STRUCKLY PRODUCTED AND ANY INFRINGEMENT THERELIPON MAY BE SUBJECT TO LEGISL ACTION.	CLIENT: ES	SHT. 6A	DVG. ND SK	-3	REV. 9	
THE DECIMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 20127S	18094S/19050S/ /23045S/24328S	
ENGINEERING AND CONSULTING, INC.						
MOORE AND ASSOCIATES	DRAWN BY: JG		ELEPHANT STRUCTURES 1804 RIVER STREET			

COLUMN CONNECTION DETAILS FOR WIND SPEEDS ≤ 105 MPH



BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 14'-0" < TO < 16'-0"

14 GA. U-CHANNEL BRACE FASTENED
TO THE COLUMN DA RODE RAFTER
WITH (4) #12-14x3/4* SDF'S AT
EACH END (8 PER BRACE)

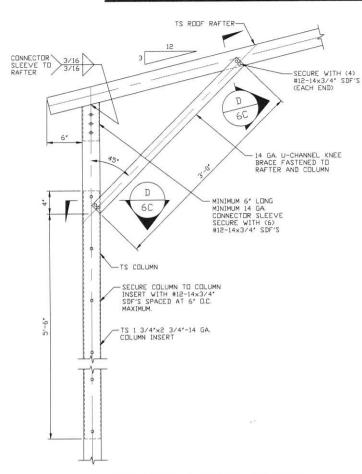
C BRACE SECTION

Validity Notice

Plans Expiration Date:

CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THERELPON MAY BE SUBJUECT TO LEGAL ACTION.	CLIENT: ES	SHT. 6B	DVG. ND SK	-3	REV. 9
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094S/19050S/ /23045S/24328S
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	CHECKED BY PDH	WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			597
MOODE AND AGGOCIATEG	DRAVN BY: JG	EI	EPHANT STF 1804 RIVER S		

COLUMN CONNECTION DETAILS FOR WIND SPEEDS ≤ 105 MPH



CONNECTOR 3/16

SLEEVE TO 3/16

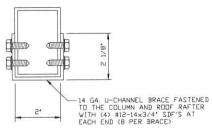
MINIMUM 6' LONG,
CONNECTOR SLEEVE
MINIMUM 16 GA,
SECURE COLLUMN TO
SLEEVE WITH (6)
H12-14×3/4' SDF'S

BRACE FASTENED TO
RAFTER AND COLUMN

TS COLUMN

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS & 13'-0'

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 13'-0' < TO < 14'-0' SCALE: NTS



D BRACE SECTION
SCALE: NTS

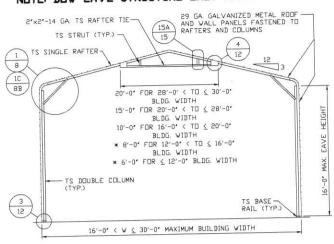
Validity Notice

Plans Expiration Date:

21.011.22.11.0		DATE: 2-3-25		JOB NO 201275/	18094S/19050S/ /23045S/24328S REVJ 9
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	DRAWN BY: JG	1804 RIVER STREET WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			97
		FI	EPHANT ST	RUCTUR	ES

TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOW EAVE STRUCTURE)

NDTE: BOW EAVE STRUCTURE ONLY APPLICABLE FOR WIND SPEED ≤ 120 MPH AND GROUND SNOW LOAD ≤ 25 PSF.



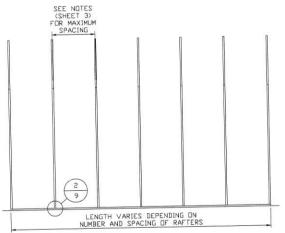
14 GA. U-CHANNEL BRACE-FASTENED TO RAFTER WITH (6) #12-14x3/4" SDF'S AT EACH END (12 PER BRACE) 29 GA. GALVANIZED METAL ROOF AND WALL PANELS FASTENED TO RAFTERS AND COLUMNS TS SINGLE RAFTER 1 1C 8B 15 14 8'-0' U-BRACE FOR 12'-0' < TO \(\) 16'-0' BLDG. WIDTH * 6'-0' U-BRACE FOR \(\) 12'-0' HEIGHT BLDG. WIDTH EAVE MAX. TS DOUBLE COLUMN (TYP.) 16'-0" 3 TS BASE -RAIL (TYP.) W ≤ 16'-0' MAXIMUM BUILDING WIDTH

TYPICAL RAFTER/COLUMN END FRAME SECTION

SCALE: NTS * NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.

TYPICAL RAFTER/COLUMN END FRAME SECTION

SCALE: NTS * NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

SCALE: NTS

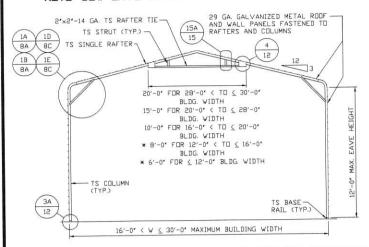
Validity Notice

Plans Expiration Date:

MOORE AND ASSOCIATES	DRAWN BY: JG	ELEPHANT STRUCTURES 1804 RIVER STREET WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			
ENGINEERING THE CONSCIENCE,	PREJECT MGR: JRP			. ICTR NO	18094S/19050S/ /23045S/24328S
THIS DOCUMENT IS THE UNMATHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 7	DWG. NO SK-	-3	REV. 9

TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOW EAVE STRUCTURE)

NOTE: BOW EAVE STRUCTURE ONLY APPLICABLE FOR WIND SPEED & 120 MPH AND GROUND SNOW LOAD & 25 PSF.



TS STRUT (TYP.) 29 GA. GALVANIZED METAL ROOF AND WALL PANELS FASTENED TO RAFTERS AND COLUMNS 14 GA. U-CHANNEL BRACE-FASTENED TD RAFTER WITH (6) #12-14x3/4' SDF'S AT EACH END (12 PER BRACE) 1A 1D 8A 8C TS SINGLE RAFTER 1E 8C 1B 15 15 14 8'-0' U-BRACE FOR 12'-0' < TO ≤ 16'-0' BLDG. WIDTH * 6'-0' U-BRACE FOR ≤ 12'-0' BLDG. WIDTH EAVE MAX. TS COLUMN (TYP.) 15'-0" 3A 12 W < 16'-0' MAXIMUM BUILDING WIDTH

TYPICAL RAFTER/COLUMN END FRAME SECTION

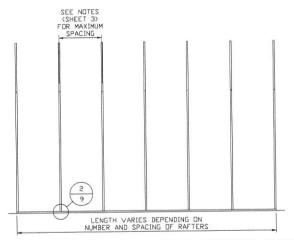
SCALE: NTS

* NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.

TYPICAL RAFTER/COLUMN END FRAME SECTION

SCALE: NTS

* NOTE: VERTICAL STRUTS NOT REQUIRED FOR THESE TIE LENGTHS.



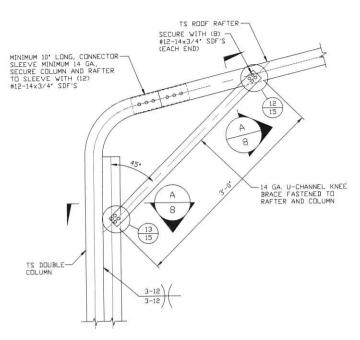
TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

Validity Notice

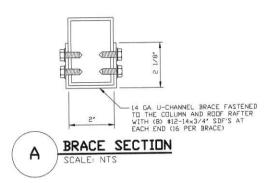
Plans Expiration Date:

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRUCTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 7A	DWG. NO SK	-3	REV. 9	
THE ROUGHS IN THE REPORTETY OF MODES AND ASSISTATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JEB NO 20127S	18094S/19050S/ /23045S/24328S	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		VILKESBORO, (16'-0" ENCLO			
MOORE AND ASSOCIATES DRAWN BY: JG			ELEPHANT STRUCTURES 1804 RIVER STREET			

COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO ≤ 120 MPH



BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 12'-0' < TO < 16'-0' SCALE: NTS

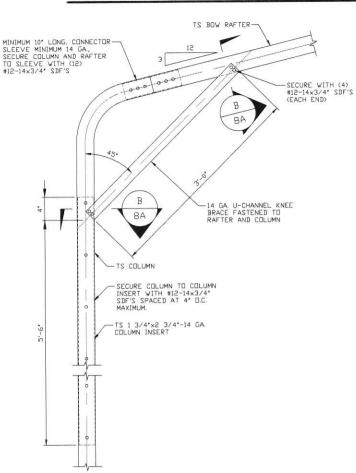


Validity Notice

Plans Expiration Date:

CONSULTING THE UNAITHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHOBITED AND ANY DIFRINGEMENT THEREUPON MAY BE SEET TO LEGAL ACTION.	CLIENT: ES	SHT. 8	DWG. NO SK	-3	REV. 9
THE POPULATION OF THE PROPERTY OF MOTHER AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201278) 18094S/19050S/ /23045S/24328S
MOURE AND ASSOCIATES	CHECKED BY: PDH	30'-0"x	WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING		
	DRAWN BY: JG		ELEPHANT STRUCTURES 1804 RIVER STREET		

COLUMN CONNECTION DETAILS FOR WIND SPEEDS 105 < TO ≤ 120 MPH

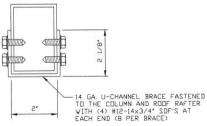


TS BOW RAFTER MINIMUM 10' LONG, CONNECTOR-SLEEVE MINIMUM 14 GA., SECURE COLUMN AND RAFTER TO SLEEVE WITH (12) #12-14×3/4' SDF'S -SECURE WITH (4) #12-14×3/4" SDF'S (EACH END) -0-0-0 B 84 В 14 GA. U-CHANNEL KNEE BRACE FASTENED TO RAFTER AND COLUMN 84 TS COLUMN

> BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS ≤ 9'-0" 1B

SCALE: NTS

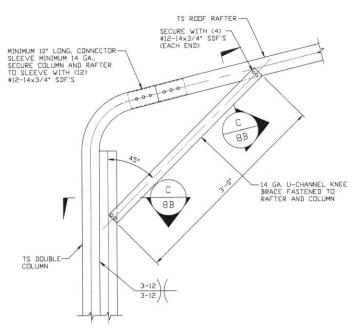
BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 9'-0" < T□ < 12'-0" 1A SCALE: NTS



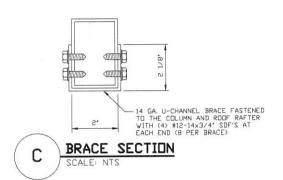
BRACE SECTION B SCALE: NTS

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STREETLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. BA	DVG. ND SK	-3	REV. 9
THUS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JUB NO 20127S	18094S/19050S/ 1/23045S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		VILKESBORO. (16'-0" ENCLO:		
MOORE AND ASSOCIATES	DRAWN BY: JG		LEPHANT STR 1804 RIVER S	TREET	,

COLUMN CONNECTION DETAILS FOR WIND SPEEDS ≤ 105 MPH



BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 14'-0' < TO < 16'-0' SCALE: NTS

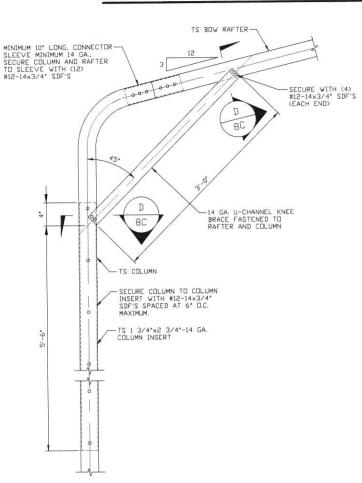


Validity Notice

Plans Expiration Date:

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROMOTED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 8B	DVG. ND: SK-	-3	REV. 9
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25			18094\$/19050\$/ /23045\$/24328\$
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		TLKESBORO, 16'-0" ENCLOS		
MOORE AND ASSOCIATES	DRAVN BY: JG		EPHANT STR 1804 RIVER S	TREET	

COLUMN CONNECTION DETAILS FOR WIND SPEEDS ≤ 105 MPH



MINIMUM 10' LONG, CONNECTOR
SLEEVE MINIMUM 14 GA,
SECURE COLUMN AND RAFTER
TO SLEEVE WITH (12)
#12-14x3/4' SDF'S

BC

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

CEACH END)

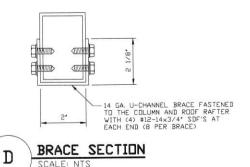
TS COLUMN

TS COLUMN

BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS & 13'-0'

1E

BDW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 13'-0' < TO < 14-0' SCALE: NTS



Validity Notice

Plans Expiration Date:

3 February 2026

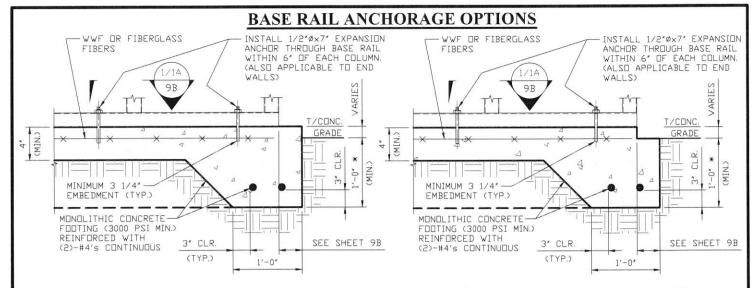
MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

THUS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROMOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 20127S	18094S/19050S/ /23045S/24328S
CHECKED BY: PDH		VILKESBORO (16'-0" ENCLO		
DRAWN BY: JG		LEPHANT STI 1804 RIVER	STREET	

 PROJECT NGR: JRP
 DATE: 2-3-25
 SCALE: NTS
 201275/230455/243285

 CLIENT: ES
 SHT. 8C
 DVG. ND: SK-3
 REV. 9



2

CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS NOTE: SEE SHEET 9B FOR MINIMUM EDGE DISTANCE. * COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH.

GENERAL NOTES

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

CONCRETE:

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

COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, 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 1 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 OR FIBERGLASS FIBER REINFORCEMENT.

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

REINFORCEMENT IS BENT COLD.
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 FIFI D BENT.

CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE WITH NOTCH 24

SCALE: NTS NOTE: SEE SCALE: NIS
NOTE: SEE SHEET 9B FOR MINIMUM EDGE DISTANCE.
** COORDINATE WITH LOCAL BUILDING CODE
AND/OR BUILDING OFFICIAL REGARDING
REQUIRED FOOTING DEPTH.

Validity Notice

Plans Expiration Date:

3 February 2026

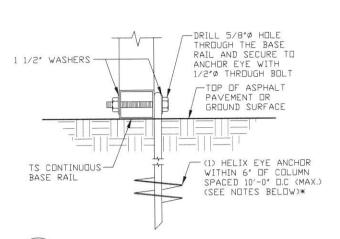
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNMUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRONGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

ELEPHANT STRUCTURES DRAWN BY: JG 1804 RIVER STREET WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING CHECKED BY: PDH

JUB ND 18094S/19050S/ 20127S/23045S/24328S PROJECT MGR: JRP SCALE: NTS DATE: 2-3-25 DWG. ND: SK-3 REV. 9 SHT. 9 CLIENT: ES

BASE RAIL ANCHORAGE OPTIONS



GROUND BASE HELIX ANCHURAGE

SCALE: NTS (CAN BE USED FOR ASPHALT)

* COORDINATE WITH LOCAL CODES/ORD.

REGARDING MIN. FROST DEPTH (LENGTH).

ANGLE BRACKET, ASPHALT ANCHOR AND ATTACHMENT BY OTHERS TOP OF ASPHALT PAVEMENT OR GROUND SURFACE TS CONTINUOUS BASE RAIL TS CONTAINING SOILS 5/8' Ø x 36' (MIN.) BARBED DRIVE ANCHOR WITHIN 6' OF EACH COLUMN*

(SC)

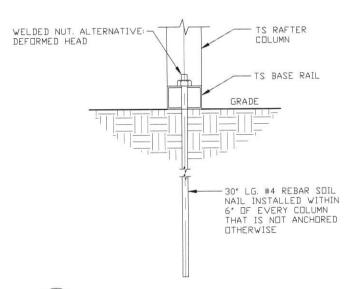
ALTERNATE DRIVE ANCHORAGE

* COORDINATE WITH LOCAL CODES/ORD.
REGARDING MIN. FROST DEPTH (LENGTH).

GENERAL NOTES

HELIX ANCHOR NOTES:

- 1. 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.
- 3. 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 LODSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" FMBEDMENT.
- 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.



(SD

GROUND BASE SOIL NAIL ANCHORAGE SCALE: NTS (CAN BE USED FOR ASPHALT)

Validity Notice

Plans Expiration Date:

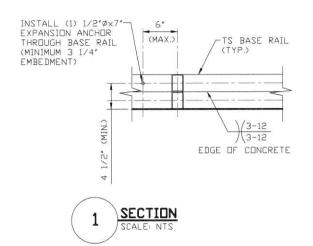
3 February 2026

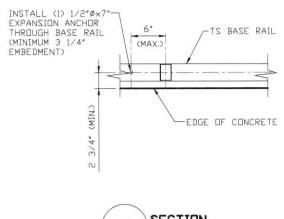
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING, THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

| ELEPHANT STRUCTURES | 1804 RIVER STREET | WILKESBORO, NC 28697 | WILKESBORO, NC 28697 | 30'-0"x16'-0" ENCLOSED BUILDING | PROJECT MGR: JRP | DATE: 2-3-25 | SCALE: NTS | 20127S/23045S/24328S | CLIENT: ES | SHT. 9A | DVG. ND: SK-3 | REV. 9

BASE RAIL ANCHORAGE OPTIONS

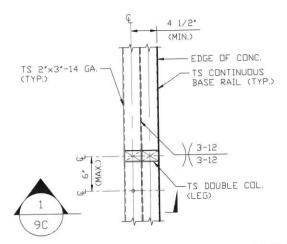




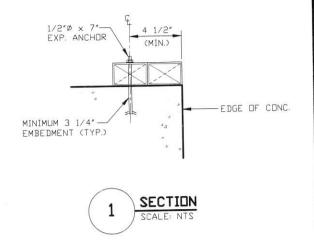
1A SECTION SCALE: NTS

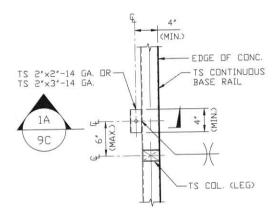
CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRUCTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 9B	DVG. ND: SK	-3	REV. 9
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25			18094S/19050S/ /23045S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		VILKESBORO 16'-0" ENCLO		
MOORE AND ASSOCIATES	DRAWN BY: JG	El	LEPHANT STF 1804 RIVER S		

BASE RAIL ANCHORAGE OPTIONS

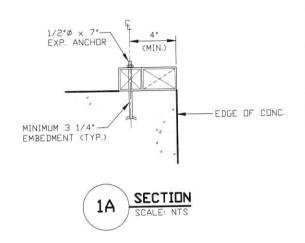


TYPICAL ANCHOR DETAIL WHEN BASE RAIL IS FLUSH WITH EDGE OF CONCRETE SCALE: NTS





TYPICAL ANCHOR DETAIL WHEN BASE RAIL IS FLUSH WITH EDGE OF CONCRETE

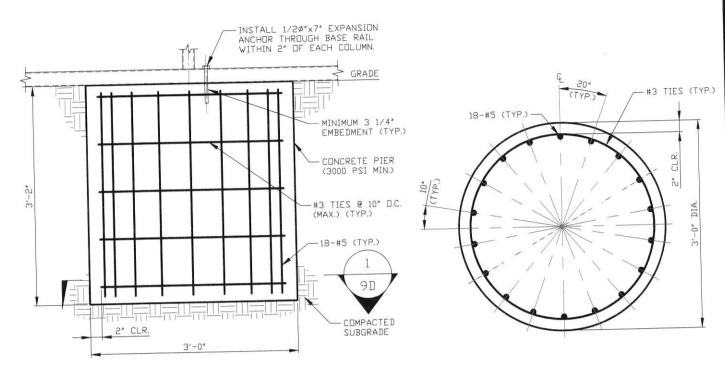


Validity Notice

Plans Expiration Date:

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROMINTED AND ANY INFRINGEMENT THEREUPON MAY BE SIGNACET TO LEGAL ACTION.	CLIENT: ES		DWG. NO SK		REV. 9
	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094S/19050S/ /23045S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	30'-0"x	16'-0" ENCLO	SED BU	ILDING
MOORE AND ASSOCIATES	DRAWN BY: JG		LEPHANT STF 1804 RIVER : VILKESBORO	STREET	

BASE RAIL ANCHORAGE OPTIONS FOR WIND SPEEDS 105 MPH < TO ≤ 150 MPH



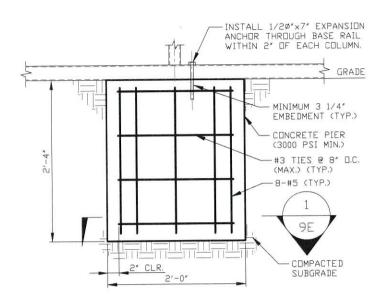
2E

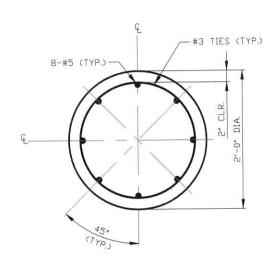
DRILLED CONCRETE PIER BASE RAIL ANCHORAGE

* COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH. 1 SECTION SCALE: NTS

CONSULTING THE UNAUTHORIZED REPORTED LINE, CONTINUE OR STRUCTURE THE STRUCTLY PROMISEDED AND ANY INFRINGEMENT THEREUPON MAY THE SIZE FOR THE LEGAL ACTION.	CLIENT: ES	על זווו	240 10 0.	***********	
THIS DOCUMENT IS THE PROPERTY OF PRODUCTION, COPYING, OR OTHERWISE USE OF CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF		SHT. 9D	DWG. NO SK	-3	REV₁9
AND ASSOCIATES PHEINFERDIG AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS		18094S/19050S/ /23045S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	30'-0"2	WILKESBORO (16'-0" ENCLO	SED BU	ILDING
MOORE AND ASSOCIATES	DRAWN BY: JG		LEPHANT STI 1804 RIVER	STREET	

BASE RAIL ANCHORAGE OPTIONS **FOR WIND SPEEDS ≤ 105 MPH**





2F

DRILLED CONCRETE PIER BASE RAIL ANCHORAGE

SCALE: NTS * COORDINATE WITH LOCAL BUILDING CODE AND/OR BUILDING OFFICIAL REGARDING REQUIRED FOOTING DEPTH.

SECTION 1 SCALE: NTS

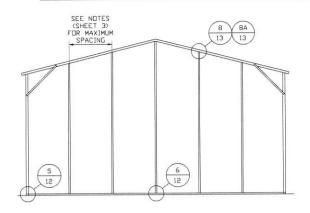
Validity Notice

Plans Expiration Date:

3 February 2026

CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THOS DOCUMENT IS STRUCTLY PROHIBITED AND ANY INFRINGEMENT THERELIPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 9E	DWG. NO SK	-3	REV. 9
THUS DOCUMENT IS THE PROPERTY OF HOUSE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094S/19050S/ /23045S/24328S
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		VILKESBORO 16'-0" ENCLO	NC 286	597
A COOPE AND A GGOCIA TEG	DRAVN BY: JG	E	LEPHANT STE 1804 RIVER S		

BOX EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



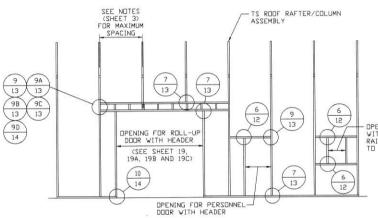
TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS

SEE NOTES (SHEET 3) FOR MAXIMUM (BA) 8 SPACING 6 13 6 9B 13 9C 13 9 OPENING FOR ROLL-UP (SEE SHEET 19, 19A, 19B AND 19C) 6 10 12 14 OPENING FOR PERSONNEL DOOR WITH HEADER

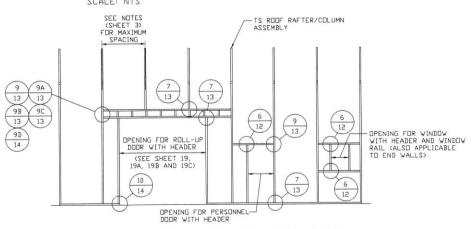
TYPICAL BOX EAVE RAFTER END WALL OPENING FRAMING SECTION

SCALE: NTS



- OPENING FOR WINDOW WITH HEADER AND WINDOW RAIL (ALSO APPLICABLE TO END WALLS)

TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION FOR GROUND SNOW LOADS & 35 PSF



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION FOR GROUND SNOW LOADS 35 PSF < TO < 45 PSF

SCALE: NTS

Validity Notice

Plans Expiration Date:

3 February 2026

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC

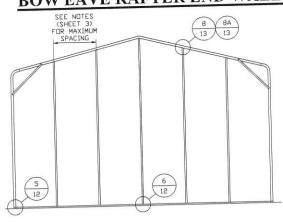
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRUCTLY PROHIBITED AND MAY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

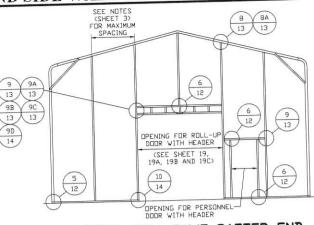
	ELEDUANT CEDUCTUDES
DOMESTICAL PROPERTY AND ADDRESS OF THE PROPERTY ADDRES	ELEPHANT STRUCTURES
DRAWN BY: JG	1804 RIVER STREET
	WILKESBORO, NC 28697
CHECKED BY: PDH	30'-0"x16'-0" ENCLOSED BUILDING
	JOB NO 18094S/1905

PROJECT HGR: JRP DATE: 2-3-25 SCALE: NTS 20127\$/2304\$\$/24328\$

CLIENT: ES SHT. 10 DVG. ND: SK-3 REV. 9

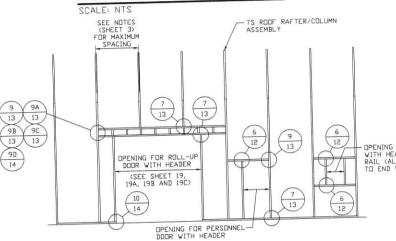
BOW EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS





TYPICAL BOW EAVE RAFTER END WALL FRAMING SECTION

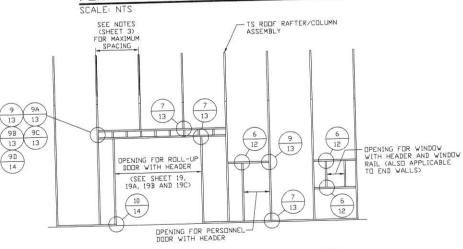
TYPICAL BOW EAVE RAFTER END WALL OPENING FRAMING SECTION



OPENING FOR WINDOW WITH HEADER AND WINDOW RAIL (ALSO APPLICABLE TO END WALLS)

SCALE: NTS

TYPICAL BOW EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION FOR GROUND SNOW LOADS & 35 PSF



Validity Notice

Plans Expiration Date:

3 February 2026

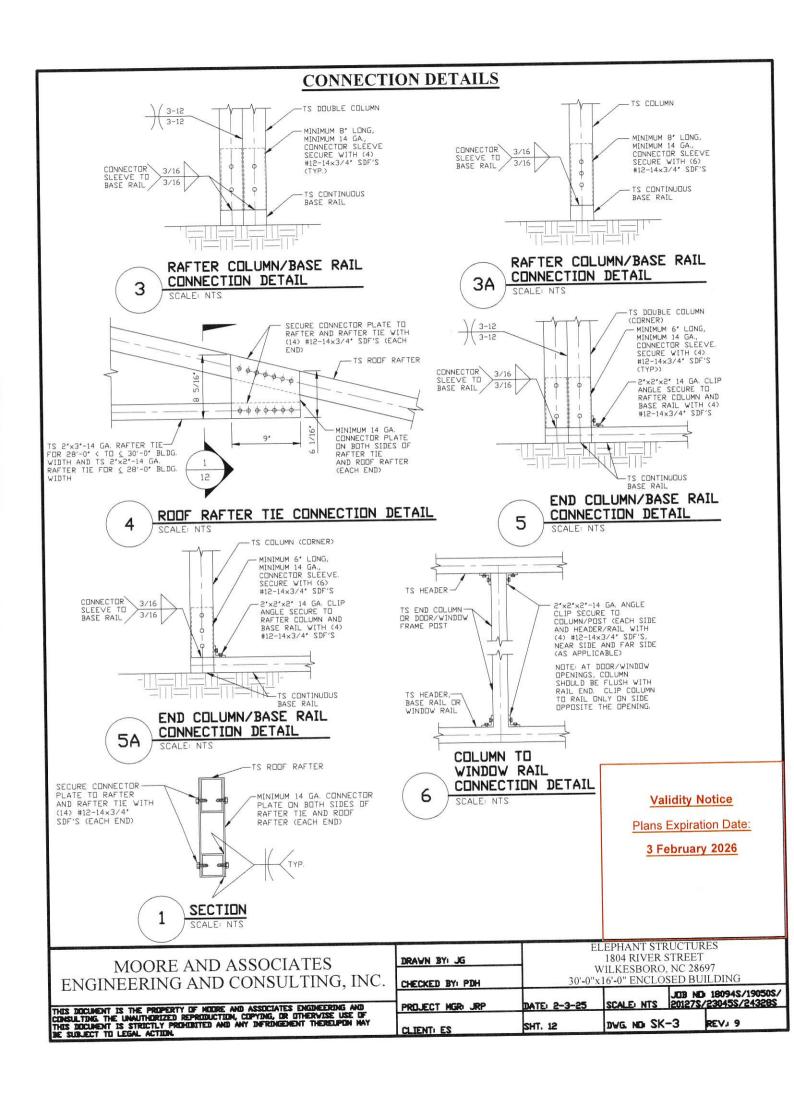
TYPICAL BOW EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION FOR GROUND SNOW LOADS 35 PSF < TO < 45 PSF

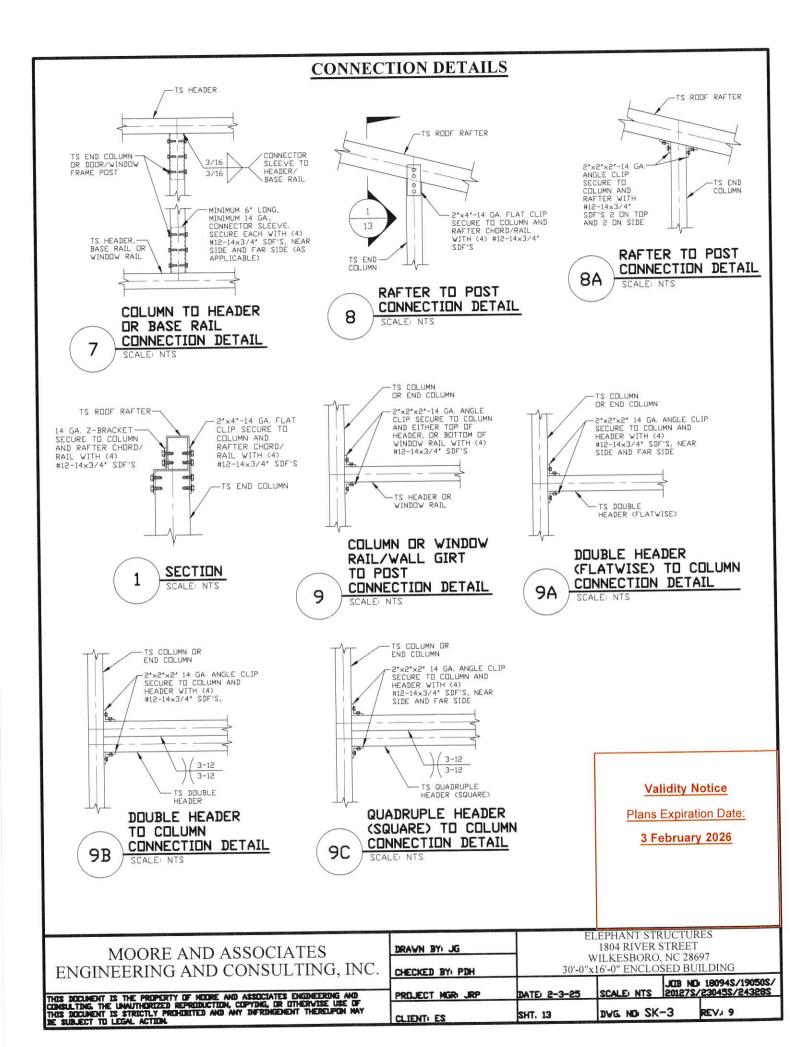
MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.
ENGINEERING AND CONSCITING, INC.

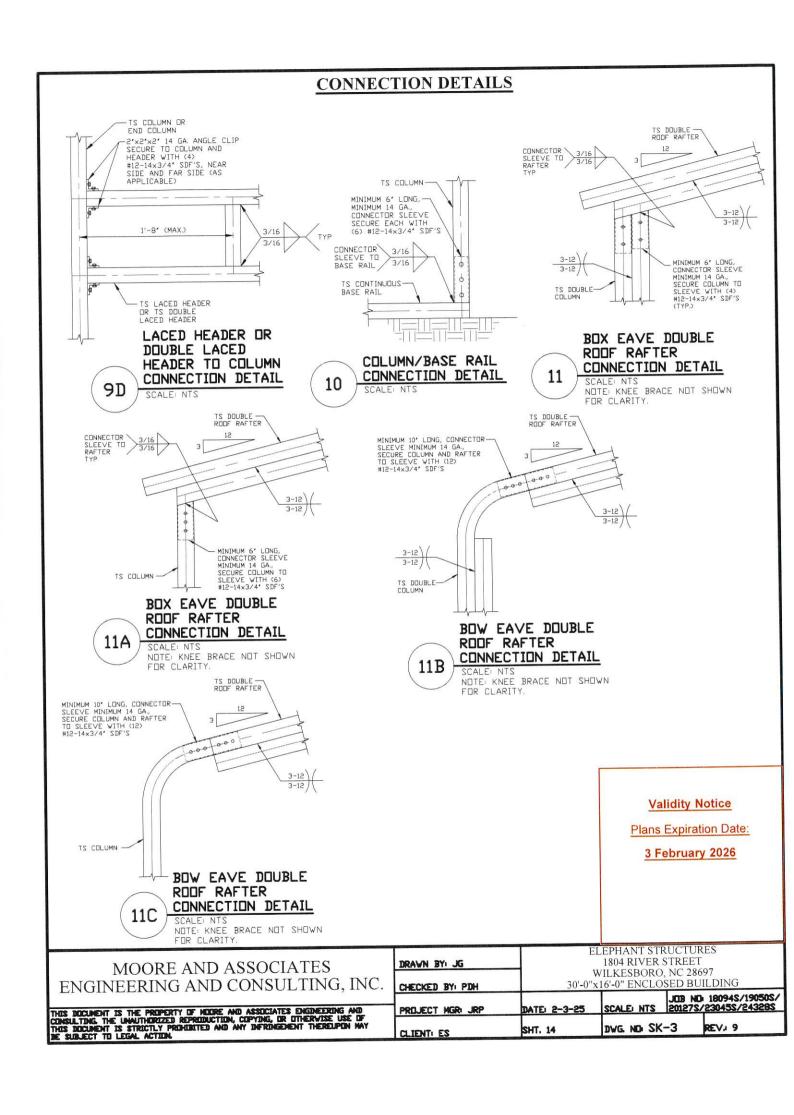
SCALE: NTS

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING, THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRUCTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

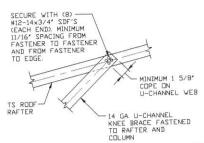
CLIENTLES	TENT. ES SHT. 11		(-3	REV. 9			
 PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 20127S.	18094\$/19050\$/ /23045\$/24328\$			
CHECKED BY: PDH	30'-0"	x16'-0" ENCLO	SED BU	ILDING			
DRAWN BY: JG	ELEPHANT STRUCTURES 1804 RIVER STREET WILKESBORO, NC 28697						





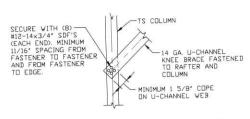


CONNECTION DETAILS



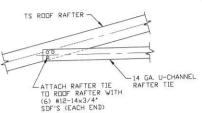
12 U-CHANNEL TO RAFTER CONNECTION DETAIL

SCALE: NTS

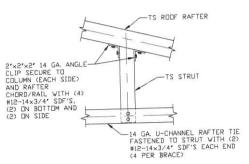


U-CHANNEL TO RAFTER CONNECTION DETAIL

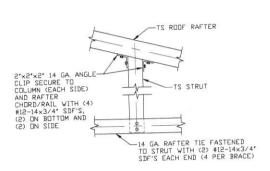
SCALE: NTS



RAFTER TIE CONNECTION DETAIL
SCALE: NTS



RAFTER/U-CHANNEL
TO CHORD
CONNECTION DETAIL
SCALE: NTS

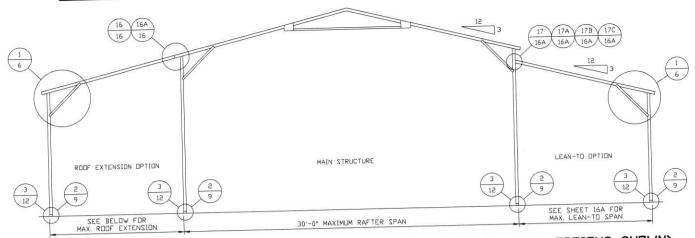


ROOF RAFTER/RAFTER
TIE TO CHORD
CONNECTION DETAIL

SCALE: NTS
NOTE: DOUBLE TUBE RAFTER NOT
SHOWN FOR CLARITY.

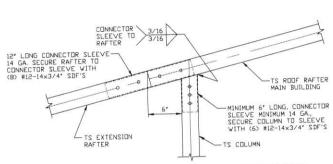
THIS DICLURAL IS STRUCTLY PROPERTY.	CLIENT: ES	The second secon				
THIS DOCUMENT IS THE PROPERTY OF PROJECTION, COPYING, OR OTHERWISE USE OF CONSULTING. THE UNANTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY	a 1017 F0	SHT. 15	DVG. ND SK-	-3	REV. 9	
AND ASSESSMENT AND ASSESSMENT AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	201275	/23045\$/24328\$	_
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	30'-0"x	(16'-0" ENCLOS		180945/190505/	150S/ 329S
MOORE AND ASSOCIATES	DRAWN BY: JG		1804 RIVER S WILKESBORO,	NC 286	97	
	TO STATE OF THE VALUE OF THE PARTY OF THE PA	F	LEPHANT STR	UCTUR	ES	- 1

BOX EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)



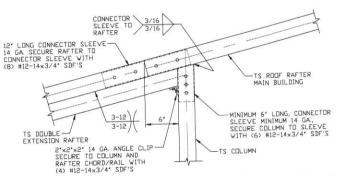
TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

SCALE: NTS REFER TO SHEETS 6, 6A, 6B AND 6C FOR COLUMN HEIGHTS AND TYPES. LEAN-TO COLUMN SPACING SHALL MATCH MAIN BUILDING.



SIDE EXTENSION RAFTER/COLUMN
DETAIL FOR RAFTER SPANS & 12'-0"

SCALE: NTS



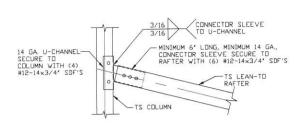
SIDE EXTENSION RAFTER/COLUMN DETAIL FOR RAFTER SPANS 12'-0" < TO \(\) 15'-0"

Validity Notice

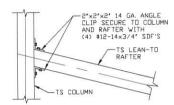
Plans Expiration Date:
3 February 2026

THIS DOCUMENT IS THE PROPERTY OF HOLDS AND ANY INFRINGEMENT THEREUPON MAY THIS DOCUMENT IS STRICTLY PROMOBILED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 16	DWG. NO SK	-3	REV. 9
AND ACCOUNT THE MADE AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS		18094\$/19050\$/ /23045\$/24328\$
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	30'-0">	(16'-0" ENCLO		
MOORE AND ASSOCIATES	DRAWN BY: JG		LEPHANT STI 1804 RIVER WILKESBORO	STREET , NC 286	597

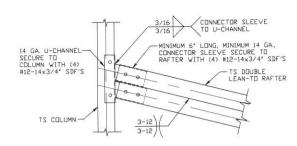
BOX EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)



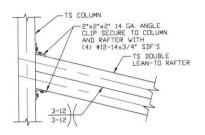
LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS & 12'-0'



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



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0' < TO < 15'-0'



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0' < TO < 15'-0'

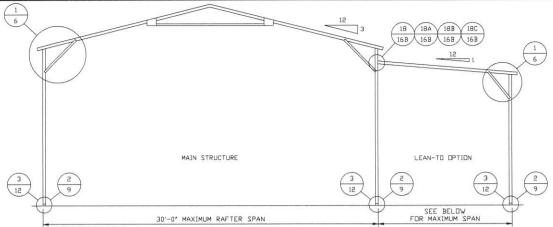
17C SCALE: NTS

Validity Notice

Plans Expiration Date:

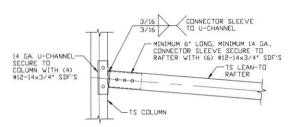
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRUCTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY SEE THE LEGAL ACTION.	CLIENTI ES	SHT. 16A	DWG. NO SK	-3	REV. 9
Response to a constitutiva and constitutiva and constitutiva and constitutiva and constitutiva and constitutiva	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 20127S	18094S/19050S/ /23045S/24328S
THE TERRITOR AND CONCLUSION TIME INC.	CHECKED BY: PDH		697 ILDING		
MOORE AND ASSOCIATES	DRAWN BY: JG	EI	LEPHANT STI 1804 RIVER		

BOX EAVE RAFTER LEAN-TO OPTIONS (1:12 LEAN-TO ROOF PITCH)



TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION

SCALE: NTS REFER TO SHEETS 8, 8A, 8B AND 8C FOR COLUMN HEIGHTS AND TYPES. LEAN-TO COLUMN SPACING SHALL MATCH MAIN BUILDING.



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

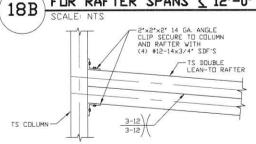
2"x2"x2" 14 GA ANGLE
CLIP SECURE TO COLUMN
AND RAFTER WITH
(4) #12-14x3/4" SDF'S

TS LEAN-TO
RAFTER

TS COLUMN

18

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



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < TO < 15'-0"

SCALE: NTS

18C

3/16 CONNECTOR SLEEVE
TO U-CHANNEL

MINIMUM 6' LDNG, MINIMUM 14 GA.,
CDNNECTOR SLEEVE SECURE TO
RAFTER VITH (4) H12-14x3/4' SDF'S

TS COLUMN WITH (4)
H12-14x3/4' SDF'S

TS COLUMN

TS COLUMN

TS COLUMN

TS COLUMN

TS COLUMN

LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < TO ≤ 15'-0"

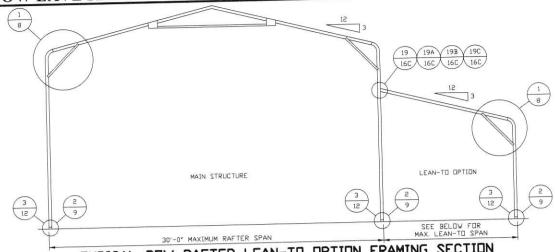
18A) SPANS 12'-U' (

Validity Notice

Plans Expiration Date:

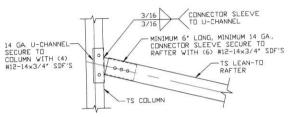
CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHOBITED AND ANY INFRINGEMENT THEREUPON MAY	CLIENT, ES	SHT. 16B	DVG. ND SK	-3 REV	و با
THIS DOCUMENT IS THE PROPERTY OF NOORE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JUB ND 180 201275/2304	94S/19050S/ 45S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	WILKESBORO, NC 28 30'-0"x16'-0" ENCLOSED B			ING
MOORE AND ASSOCIATES	DRAWN BY: JG	/ ■ 1		RUCTURES STREET	

BOW EAVE RAFTER LEAN-TO OPTIONS (3:12 LEAN-TO ROOF PITCH)

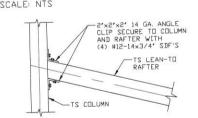


TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING SECTION

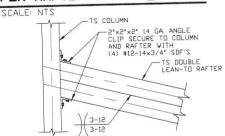
SUALE: NIS REFER TO SHEETS 8, 8A, 8B AND 8C FOR COLUMN HEIGHTS AND TYPES. LEAN-TO COLUMN SPACING SHALL MATCH MAIN BUILDING.



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



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

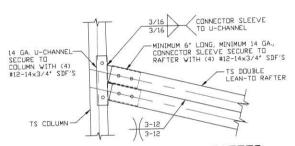


LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < T□ ≤ 15'-0"

19C SCALE: NTS

19

19B



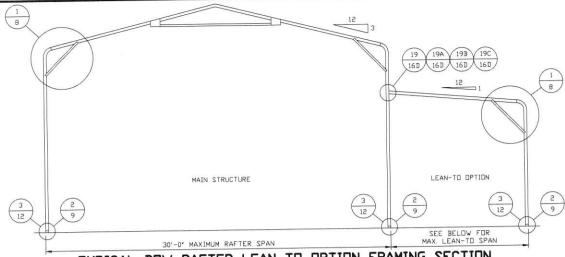
LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < T□ < 15'-0" 19A

Validity Notice

Plans Expiration Date:

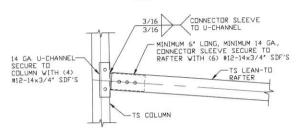
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES CHARACTES USE OF CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF CONSULT IN STREET, OF COMPANY OF STREET TO LEGAL ACTION.	CLIENT: ES	SHT. 16C	DAC NO 2K-3	REV. 9
AND ACCRETATES EMERGEDING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS 2012	ND: 18094S/19050S 7S/23045S/24328S
MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	DRAWN BY: JG CHECKED BY: PDH		WILKESBORO, NC 2 x16'-0" ENCLOSED E	28697 Building
	BOALDI BY. IC	Е	LEPHANT STRUCT 1804 RIVER STRE	URES ET

BOW EAVE RAFTER LEAN-TO OPTIONS (1:12 LEAN-TO ROOF PITCH)



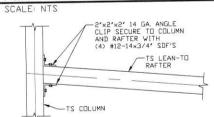
TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING SECTION

SCALE: NTS REFER TO SHEETS 8, 8A, 8B AND 8C FOR COLUMN HEIGHTS AND TYPES. LEAN-TO COLUMN SPACING SHALL MATCH MAIN BUILDING.

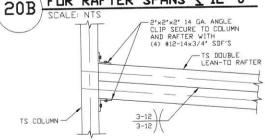


20

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



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



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0' < TO < 15'-0'

3/16 CONNECTOR SLEEVE
TO U-CHANNEL

MINIMUM 6' LONG, MINIMUM 14 GA.,
CONNECTOR SLEEVE SECURE TO
RAFTER VITH (4) #12-14x3/4' SDF'S

TS DOUBLE
LEAN-TO RAFTER

TS COLUMN

TS COLUMN

LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL FOR
RAFTER SPANS 12'-0" < TO < 15'-0"

Validity Notice

Plans Expiration Date:

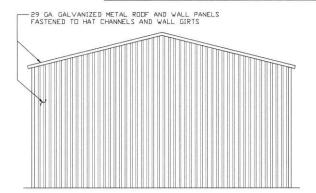
3 February 2026

MOORE AND ASSOCIATES	
ENGINEERING AND CONSULTING, INC	

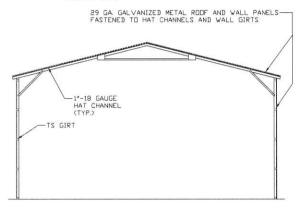
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UMAINTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROMONITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

		DVG. NO SK	REV. 9	
PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094S/19050S/ /23045S/24328S
CHECKED BY: PDH	30'-0":	WILKESBORC x16'-0" ENCLC	SED BU	ILDING
DRAWN BY: JG		LEPHANT ST 1804 RIVER	STREET	

BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION

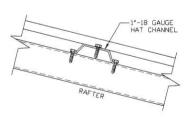


TYPICAL END ELEVATION VERTICAL ROOF/SIDING



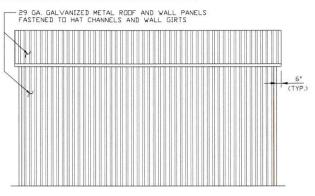
TYPICAL SECTION VERTICAL ROOF OPTION

SCALE: NTS

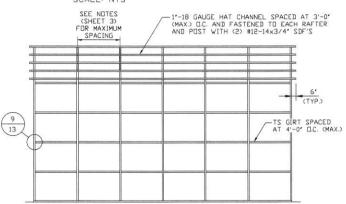


ROOF PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS) SCALE: NTS



TYPICAL SIDE ELEVATION VERTICAL ROOF/SIDING



TYPICAL FRAMING SECTION VERTICAL ROOF/SIDING OPTION

Validity Notice

Plans Expiration Date:

3 February 2026

REV. 9

MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYDING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRONGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

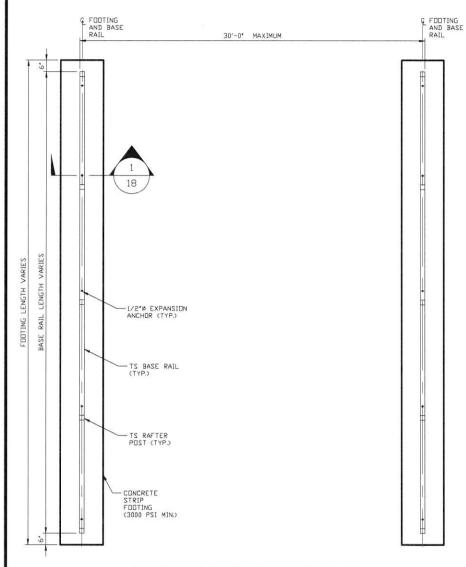
-	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JUB ND 18094S/19050S/ 20127S/23045S/24328S
	CHECKED BY PDH		WILKESBORC x16'-0" ENCLC), NC 28697 OSED BUILDING
	DRAWN BY: JG	E	LEPHANT ST 1804 RIVER	

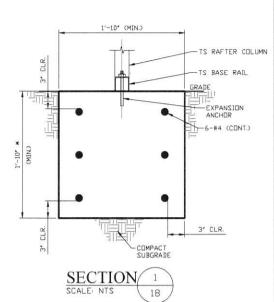
SHT. 17

CLIENT: ES

DVG. ND: SK-3

OPTIONAL CONCRETE STRIP FOOTING WITH ATTACHED LEAN-TO AND WIND SPEEDS 105 MPH < TO ≤ 150 MPH





*COORDINATE WITH LOCAL CODES/ORD.
TO ENSURE COMPLIANCE WITH LOCAL
FROST DEPTH REQUIREMENTS.

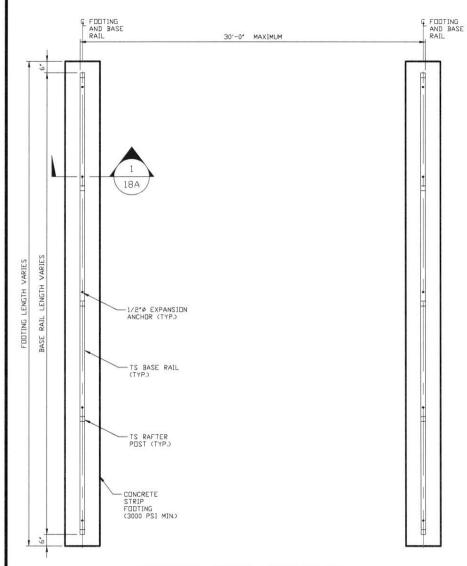
CONCRETE STRIP FOOTING PLAN
SCALE: NTS

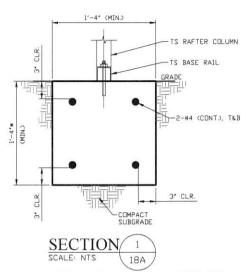
Validity Notice

Plans Expiration Date:

CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISSE USE OF THIS DOCUMENT IS STRICTLY PROHUBITED AND ANY INFRINGENENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 18	DVG. ND SK	-3 REV₁9			
THUS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JUB ND: 18094S/19050S/ 20127S/23045S/24328S			
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING					
MOORE AND ASSOCIATES	DRAWN BY: JG	ELEPHANT STRUCTURES 1804 RIVER STREET					

$\frac{\text{OPTIONAL CONCRETE STRIP FOOTING WITH ATTACHED LEAN-TO}}{\text{AND WIND SPEEDS} \leq 105 \text{ MPH}}$



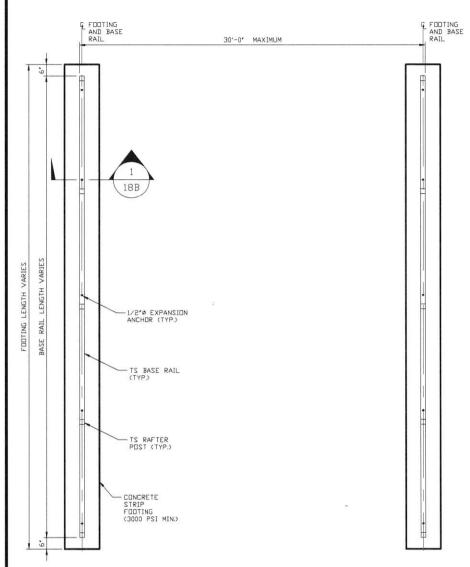


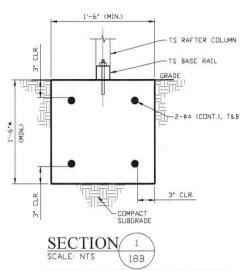
*COORDINATE WITH LOCAL CODES/ORD.
TO ENSURE COMPLIANCE WITH LOCAL
FROST DEPTH REQUIREMENTS.

CONCRETE STRIP FOOTING PLAN
SCALE: NTS

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROMINITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	PROJECT MGR: JRP	DATE: 2-3-25 SHT. 18A	SCALE: NTS	201275	/23045S/24328S REV. 9	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		16'-0" ENCLC	SED BU		
MOORE AND ASSOCIATES	DRAWN BY: JG		ELEPHANT STRUCTURES 1804 RIVER STREET WILKESBORO, NC 28697			

OPTIONAL CONCRETE STRIP FOOTING WITHOUT ATTACHED LEAN-TO AND WIND SPEEDS 105 MPH < TO \leq 150 MPH





*COORDINATE WITH LOCAL CODES/ORD.
TO ENSURE COMPLIANCE WITH LOCAL
FROST DEPTH REQUIREMENTS.

CONCRETE STRIP FOOTING PLAN

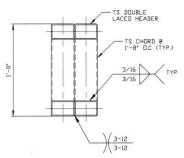
Validity Notice

Plans Expiration Date:

DRAVN BY: JG		EET			
CHECKED BY: PDH		WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			
PROJECT MGR: JRP	DATE: 2-3-25		ND 18094S/19050S/ 27S/23045S/24328S		
CLIENT: ES	SHT. 183	DVG. ND: SK-3	REV. 9		
	CHECKED BY: PDH PROJECT MGR: JRP	DRAVN BY: JG CHECKED BY: PDH 30'-0"X PROJECT MGR: JRP DATE: 2-3-25	CHECKED BY: PDH 30'-0"x16'-0" ENCLOSED PROJECT MGR: JRP DATE: 2-3-25 SCALE: NTS 201		

SIDE WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS AND GROUND SNOW LOADS 35 < TO ≤ 45 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES. NOTE: SINGLE TUBE HEADERS CAN BE USED FOR FRAME-OUTS THAT DON'T CUT COLUMNS.



HEADER DETAIL FOR 12'-0' < LENGTH <u>{</u> 16'-0' 3-12 TYP
3-12 TYP
TS QUADRUPLE
HEADER (SQUARE)

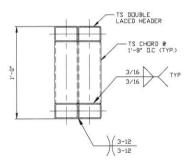
HEADER DETAIL FOR 8'-0" < LENGTH <u>\(\)</u> 12'-0" TS DOUBLE HEADER (FLATWISE)

HEADER DETAIL FOR LENGTH & 8'-0"

SCALE: NTS

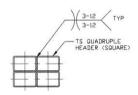
SIDE WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS AND GROUND SNOW LOADS ≤ 35 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.
NOTE: SINGLE TUBE HEADERS CAN BE USED FOR FRAME-DUTS THAT DON'T CUT COLUMNS.



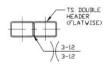
HEADER DETAIL FOR 13'-0' < LENGTH <u>⟨</u> 16'-0'

SCALE: NTS



HEADER DETAIL FOR 8'-0' < LENGTH \(\square\) 13'-0'

SCALE: NTS



HEADER DETAIL FOR LENGTH & 8'-0"

SCALE: NTS

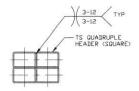
Validity Notice

Plans Expiration Date:

THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SIGLECT TO LEGAL ACTION.	CLIENT: ES	SHT. 19	DVG. NO SK	-3	REV. 9			
THIS DOCUMENT IS THE PROPERTY OF HOUSE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF	PROJECT MGR: JRP	DATE: 2-3-25			0 18094S/19050S/ 2/23045S/24328S			
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING					
MOORE AND ASSOCIATES	DRAWN BY: JG		ELEPHANT STRUCTURES 1804 RIVER STREET					
		F	I EPHANT ST	RUCTU	RES			

END WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS AND GROUND SNOW LOADS 35 < TO ≤ 45 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES. NOTE: SINGLE TUBE HEADERS CAN BE USED FOR FRAME-DUTS THAT DON'T CUT COLUMNS.



TS DDUBLE
HEADER
(FLATWISE)

3-12

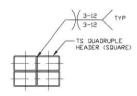
3-12

HEADER DETAIL FOR

HEADER DETAIL FOR 11'-0" < LENGTH ≤ 16'-0"

END WALL HEADER OPTIONS FOR TS DOUBLE COLUMNS AND GROUND SNOW LOADS ≤ 35 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES. NOTE: SINGLE TUBE HEADERS CAN BE USED FOR FRAME-DUTS THAT DON'T CUT COLUMNS.



TS DDUBLE
HEADER
(FLATVISE)

3-12
3-12

HEADER DETAIL FOR

HEADER DETAIL FOR 11'-0" < LENGTH <u>≤</u> 16'-0"

LENGTH & 11'-0'

SCALE: NTS

Validity Notice

Plans Expiration Date:

MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

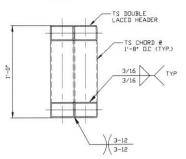
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES EN CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTH	GINEERING AND
CONSIL TIME THE IMMITURETEEN DESCRIPTION CONVINC OR OTH	EDVISE INC UE
CONSULTING THE CHAPTER AND REPRESENTATION, CONTINUE OR STATE	EKAISE OSE OF
THIS DOCUMENT IS STRUCTLY PROHIBITED AND ANY INFRINGEMENT	INERCLUPUN MAT
BE SUBJECT TO LEGAL ACTION.	

William Committee of the Committee of th		
CHECKED BY: PDH	30'-0"x16'-	0" ENCLOSED BUILDING
	WILI	KESBORO, NC 28697
DRAWN BY: JG	18	04 RIVER STREET
	ELEP	HANT STRUCTURES
	THE RESERVE THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.	

CLIENT: ES	SHT. 19A	DVG. ND SK	-3 REV. 9	ı
PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JUB ND 18094S/19050S/ 20127S/23045S/24328S	
CHECKED BIT PUR	SED BUILDING	4		

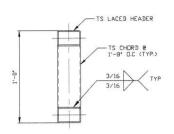
SIDE WALL HEADER OPTIONS FOR TS SINGLE COLUMNS AND GROUND SNOW LOADS $35 < TO \le 45$ PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



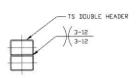
HEADER DETAIL FOR 13'-0' < LENGTH ≤ 16'-0'

SCALE: NTS



HEADER DETAIL FOR 8'-0" < LENGTH ≤ 13'-0"

SCALE: NTS



HEADER DETAIL FOR 5'-0" < LENGTH \(\) 8'-0"

SCALE: NTS

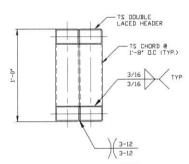


HEADER DETAIL FOR LENGTH & 5'-0"

SCALE: NTS

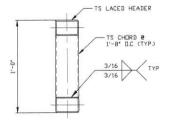
SIDE WALL HEADER OPTIONS FOR TS SINGLE COLUMNS AND GROUND SNOW LOADS ≤ 35 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



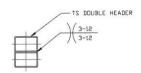
HEADER DETAIL FOR 14'-0' < LENGTH <u>(</u>16'-0'

SCALE: NTS



HEADER DETAIL FOR 8'-0" < LENGTH <u><</u> 14'-0"

SCALE: NTS



HEADER DETAIL FOR 5'-0" < LENGTH < 8'-0"

SCALE: NTS



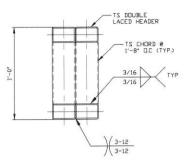
HEADER DETAIL FOR LENGTH < 5'-0"

SCALE: NTS

CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRUCTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 19B	DVG. ND: SK	-3	REV. 9
THUS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094S/19050S/ /23045S/24328S
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		/ILKESBORO 16'-0" ENCLO		
MOORE AND ASSOCIATES	DRAWN BY: JG	ELEPHANT STRUCTURES 1804 RIVER STREET			

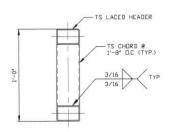
END WALL HEADER OPTIONS FOR TS SINGLE COLUMNS AND GROUND SNOW LOADS $35 < TO \le 45$ PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



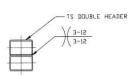
HEADER DETAIL FOR 13'-0" < LENGTH \(\) 16'-0"

SCALE: NTS



HEADER DETAIL FOR 12'-0" < LENGTH \(\) 13'-0"

SCALE: NTS



HEADER DETAIL FOR 7'-0" < LENGTH <u>⟨ 12'-0"</u>

SCALE: NTS

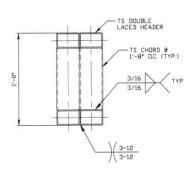


HEADER DETAIL FOR LENGTH & 7'-0"

SCALE: NTS

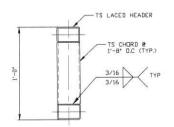
END WALL HEADER OPTIONS FOR TS SINGLE COLUMNS AND GROUND SNOW LOADS ≤ 35 PSF

NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.



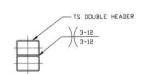
HEADER DETAIL FOR 13'-0" < LENGTH \(\) 16'-0"

SCALE: NTS



HEADER DETAIL FOR 12'-0' < LENGTH <u><</u> 13'-0'

SCALE: NTS



HEADER DETAIL FOR 7'-0" < LENGTH ≤ 12'-0"

SCALE: NTS



HEADER DETAIL FOR LENGTH ≤ 7'-0"

SCALE: NTS

CONSULTING THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: ES	SHT. 19C	DVG. ND SK-	-3	REV. 9	
THUS DOCUMENT IS THE PROPERTY OF HOORE AND ASSOCIATES ENGINEERING AND	PROJECT MGR: JRP	DATE: 2-3-25	SCALE: NTS	JOB NO 201275	18094\$/19050\$/ /23045\$/24328\$	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		WILKESBORO, NC 28697 30'-0"x16'-0" ENCLOSED BUILDING			
MOORE AND ASSOCIATES	DRAWN BY: JG		1804 RIVER STREET			