

PILOT MOUNTAIN, NORTH CAROLINA

# STRUCTURAL DESIGN **ENCLOSED BUILDING**

# MAXIMUM 30'-0" WIDE X 16'-0" EAVE HEIGHT- BOX EAVE **FRAME**

2 July 2020 **Revision 2** M&A Project No. 18315S/19179S/20176S

Prepared for:

NC Carports and Garages, LLC 309 S. Depot Street Pilot Mountain, NC 27041

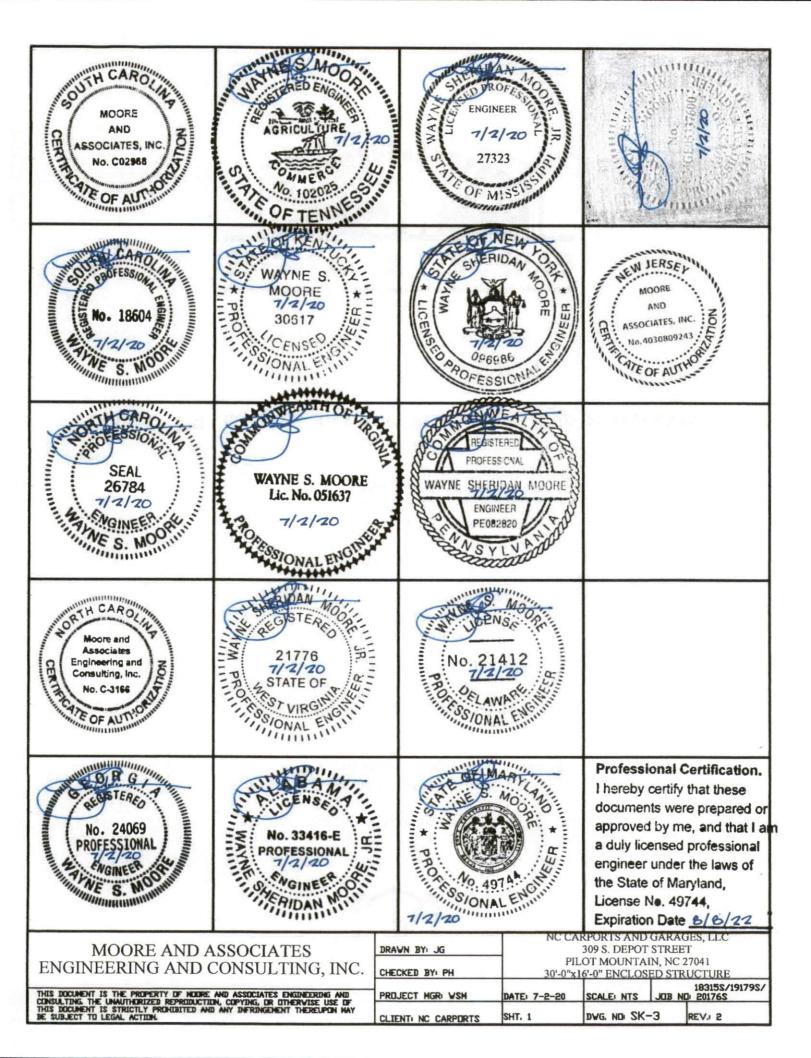
Prepared by:

Moore and Associates Engineering and Consulting, Inc.

> 1009 East Avenue North Augusta, SC 29841

> 401 S. Main St., Suite 200 Mt. Airy, NC 27030





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MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.	DRAWN BY: JG CHECKED BY: PH	PIL	RPORTS AND 309 S. DEPOT OT MOUNTA 6'-0" ENCLOS	STREE IN, NC 2	T 27041
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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 THE 2018 NORTH CAROLINA BUILDING CODE, 2009 INTERNATIONAL BUILDING CODE (IBC), 2012 IBC, 2015 IBC AND 2018 IBC.
- 3. DESIGN LOADS ARE AS FOLLOWS:

A) DEAD LOAD

= 1.5 PSF

B) LIVE LUAD

= 12 PSF

= 35 PSF

C) GROUND SNOW LOAD

= 30 PSF (W & 24'-0' WITH U-CHANNEL COLLAR TIE)

- UNBALANCED SNOW LOADS DUE TO DRIFTING HAVE NOT BEEN EVALUATED. 4. 3-SECOND GUST ULTIMATE WIND SPEED (V<sub>ULT</sub>) 105 TO 145 MPH (NOMINAL WIND SPEED 82 TO 112 MPH).
- 5. MAXIMUM RAFTER/COLUMN AND END COLUMN SPACING = 5.0 FEET (UNLESS NOTED OTHERWISE).
- 6. SIDEWALL COLUMNS AND ENDWALL COLUMNS ARE SIMILAR IN SIZE, UNLESS NOTED OTHERWISE.
- 7. RISK CATEGORY I.
- 8. WIND EXPOSURE CATEGORY B.
- 9. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2' x 2 1/2' 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
- 10. AVERAGE FASTENER SPACING ON-CENTERS ALONG RAFTERS OR HAT CHANNELS, AND COLUMNS (INTERIOR OR END) = 9 INCHES.
- 11. 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.
- 12. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL WITHIN 6' OF EACH COLUMN.
- 13. STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/WELDED NUT 30' LONG. SOIL NAILS MAY BE USED FOR WIND SPEEDS < 145 MPH AND IN SUITABLE SOIL CONDITIONS. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED FOR WIND SPEEDS > 145 MPH AND/OR IN SUITABLE SOILS AS NOTED.
- 14. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:

SDIL SITE CLASS = D RISK CATEGORY I

R= 3.25

]<sub>E</sub>= 1.0

Sps= 2.039

V= CsW

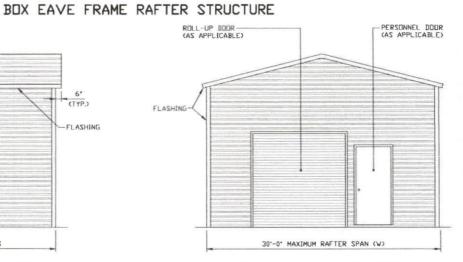
 $S_{Di} = 1.258$ 

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DRAWN BY: JG	NC CARPORTS AND GARAGES, LLC 309 S. DEPOT STREET					
CHECKED BY: PH	PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE					
PROJECT MGR: WSM	DATE: 7-2-20	SCALE: NTS	JOB N	18315S/19179S/ D 20176S		
CLIENT: NC CARPORTS	SHT. 3A	DWG. NO SK	-3	REV. 2		

# VINDOV (AS APPLICABLE) LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

TYPICAL SIDE ELEVATION
SCALE: NTS



TYPICAL END ELEVATION
SCALE: NTS

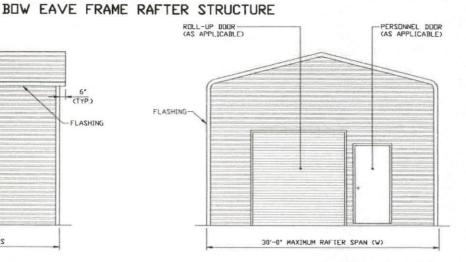
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-	PROJECT MGR: VSM	DATE: 7-2-20	SCALE: NTS	JOB N	18315\$/19179\$/ Di 20176\$
	CLIENT: NC CARPORTS	SHT. ЭВ	DWG. NO SK	-3	REV. 2

# VINDOV (AS APPLICABLE) LENGTH VARIES DEPENDING ON NUMBER AND SPACING OF RAFTERS

TYPICAL SIDE ELEVATION
SCALE: NTS

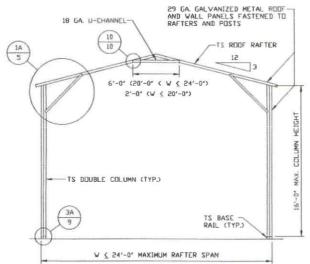


TYPICAL END ELEVATION
SCALE: NTS

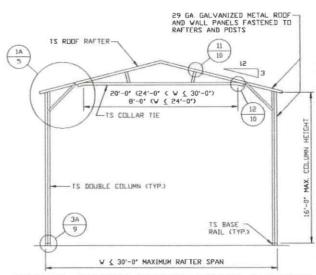
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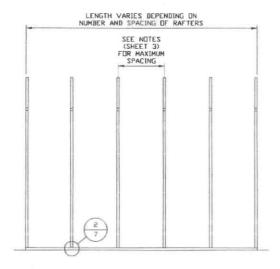
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TYPICAL RAFTER/COLUMN FRAME SECTION
SCALE: NTS

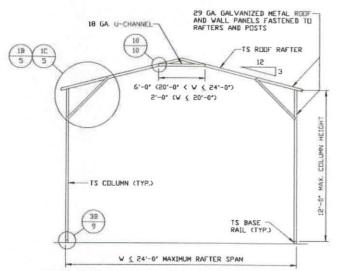


TYPICAL RAFTER/COLUMN FRAME SECTION
SCALE: NTS



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION
SCALE: NTS

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# TYPICAL RAFTER/COLUMN FRAME SECTION

29 GA. GALVANIZED METAL ROLLF
AND VALL PANELS FASTENED TO
RAFTERS AND POSTS

15 ROUF RAFTER

10 12

20'-0' (24'-0' ( V ( 30'-0') 12)

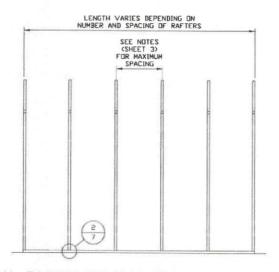
17 COLLAR TIE

18 TO TS COLLAR TIE

19 TS BASE RAIL (TYP)

V ( 30'-0' MAXIMUM RAFTER SPAN

TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS

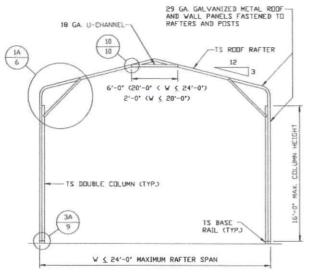


TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION SCALE: NTS

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ENGINEERING AND CONSULTING,	INC.

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PROJECT MGR: VSM	DATE: 7-2-20	SCALE: NTS	JOB N	18315S/19179S/ ID 20176S
CLIENTI NC CARPORTS	SHT. 4A	DVG. NO SK	-3	REV.: 2



### TYPICAL RAFTER/COLUMN FRAME SECTION

29 GA. GALVANIZED METAL RODF
AND VALL PANELS FASTENED TO
RAFTERS AND POISTS

TS ROOF RAFTER

10

12

20'-0' (24'-0' ( V ( 30'-0')

8'-0' (V ( 24'-0')

TS COLLAR TIE

10

12

13

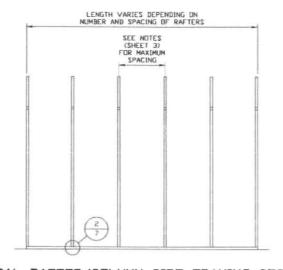
44

49

TS BASE
RAIL (TYP.)

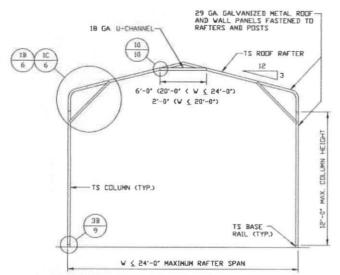
V ( 30'-0' MAXIMUM RAFTER SPAN

TYPICAL RAFTER/COLUMN FRAME SECTION
SCALE: NTS

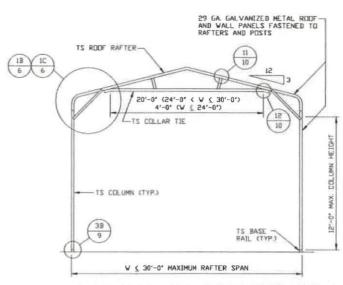


TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION SCALE: NTS

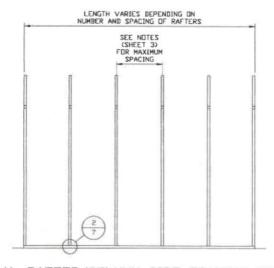
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MOORE AND ASSOCIATES	DRAWN BY: JG	NC CA	NC CARPORTS AND GARAGES, LLC 309 S. DEPOT STREET			



# TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS



TYPICAL RAFTER/COLUMN FRAME SECTION
SCALE: NTS

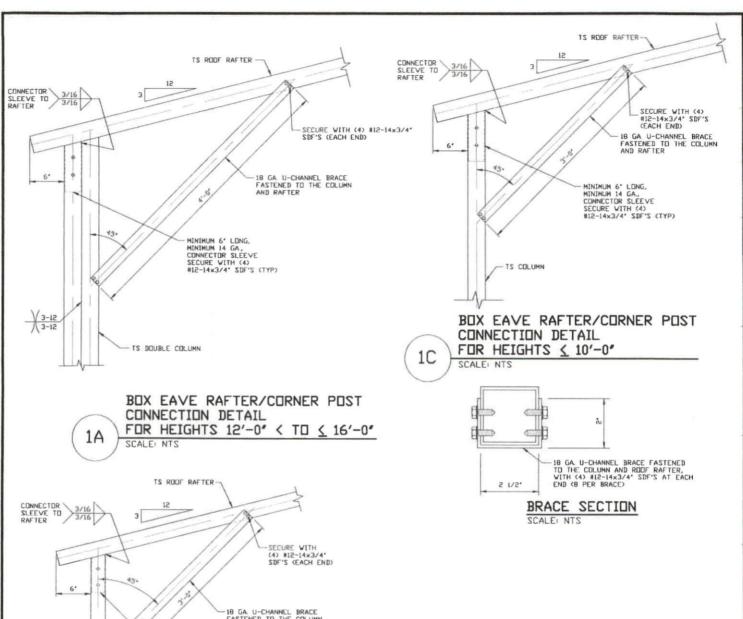


TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION SCALE: NTS

MOORE A	ND ASSOCIATES
ENGINEERING A	ND CONSULTING, INC.

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DRAWN BY: JG CHECKED BY: PH	NC CARPORTS AND GARAGES, LL 309 S. DEPOT STREET PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTUR				
PROJECT MGR: WSM CLIENT: NC CARPORTS	DATE: 7-2-20 SHT. 4C	SCALE: NTS	JOB 1	183155/191795/	



SECURE VITH

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

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

HINIMUM 6' LONG, HINIMUH 14 GA.,
CONNECTOR SLEEVE SECURE VITH

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

TS COLUMN

TS COLUMN

TS COLUMN

TS COLUMN

SIDES OF COLUMN

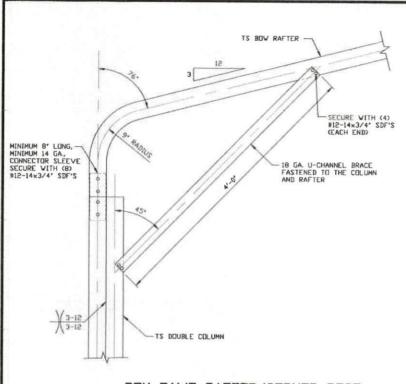
BOX EAVE RAFTER/CORNER POST CONNECTION DETAIL FOR HEIGHTS 10'-0' < TO < 12'-0' SCALE: NTS

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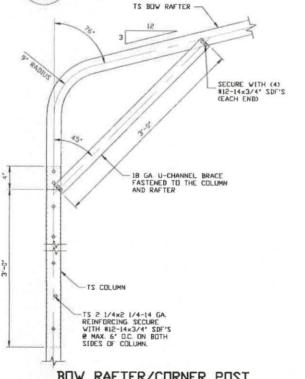
	CLIENT: NC CARPORTS	SHT. 5	DVG. NO SK	-3	REV. 2	
-	PROJECT MGR: WSM	DATE: 7-2-20	SCALE: NTS	JOB	18315S/19179S/ ND 20176S	
	CHECKED BY: PH		LOT MOUNTA 16'-0" ENCLOS			
	DRAWN BY: JG	NC CARPORTS AND GARAGES, LLC 309 S. DEPOT STREET				



BOX EAVE RAFTER/CORNER POST CONNECTION DETAIL 1A

FOR HEIGHTS 12'-0" < TO ≤ 16'-0"

SCALE: NTS



BOW RAFTER/CORNER POST CONNECTION DETAIL FOR HEIGHTS 10'-0" < TO < 12'-0"

SCALE: NTS

1B

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ENGINEERING AND CONSULTING, INC.	CHECKED BY: PH			IN, NC 27041 SED STRUCTURE
MOORE AND ASSOCIATES	DRAWN BY: JG	이 경제를 보고 있는데 나를 보면 되었다.	RPORTS AND 309 S. DEPOT	GARAGES, LLC STREET

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CLIENT: NC CARPORTS	SHT, 6	DWG. ND: SK		REV. 2		

TS BOW RAFTER

SECURE WITH (4) #12-14×3/4" SDF'S (EACH END)

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

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

1C

TS COLUMN

CONNECTION DETAIL

SCALE: NTS

2 1/2\*

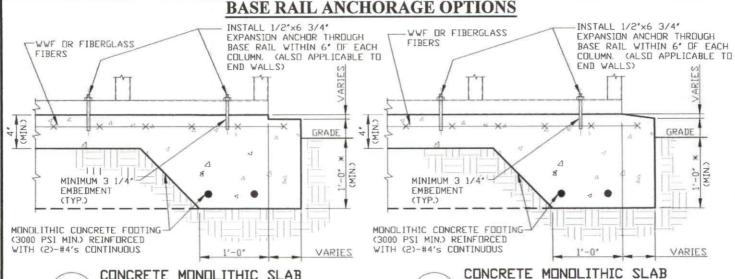
FOR HEIGHTS ≤ 10'-0"

BOX EAVE RAFTER/CORNER POST

18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND ROOF RAFTER, WITH (4) #12-14×3/4' SDF'S AT EACH END (8 PER BRACE)

BRACE SECTION

SCALE: NTS



2A

#### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHURAGE

MINIMUM ANCHOR EDGE DISTANCE IS 4". \* COORDINATE WITH LOCAL BUILDING CODE AND/ORD REGARDING MINIMUM FROST DEPTH

# **2B**

#### BASE RAIL ANCHORAGE

MINIMUM ANCHOR EDGE DISTANCE IS 4". \* COORDINATE WITH LOCAL BUILDING CODE AND/ORD REGARDING MINIMUM FROST DEPTH

#### GENERAL NOTES

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

#### CONCRETE

CUNCRETE 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:

1. REINFORCEMENT IS BENT COLD.

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

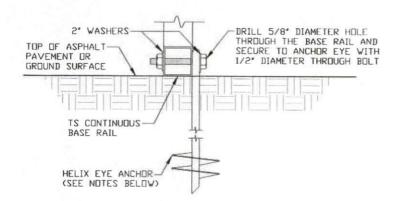
  3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT
- BE FIELD BENT.

#### 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
- 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.
- FOR LODSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6' HELICES WITH MINIMUM 50' EMBEDMENT.
- 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.

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### BASE RAIL ANCHORAGE OPTIONS

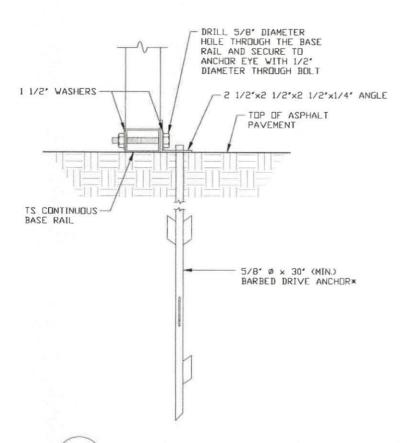


# 20

#### GROUND BASE HELIX ANCHORAGE

SCALE: NTS (CAN BE USED FOR ASPHALT)

\* COURDINATE WITH LOCAL BUILDING CODE AND/ORD REGARDING MINIMUM FROST DEPTH (LENGTH).



# SD

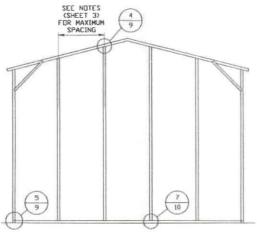
#### ASPHALT BASE ANCHORAGE

SCALE: NTS

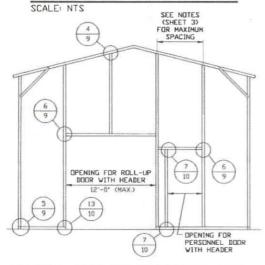
\* COORDINATE WITH LOCAL BUILDING CODE AND/ORD REGARDING MINIMUM FROST DEPTH

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ENGINEERING AND CONSULTING, INC.	CHECKED BY: PH	PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE					
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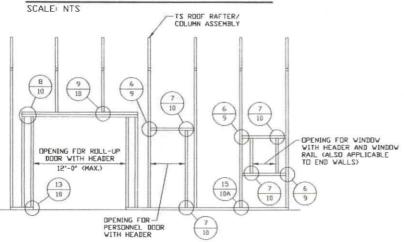
#### BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS



# TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION



# TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION



# TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION SCALE: NTS

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CHECKED BY: PH		LOT MOUNTA 16'-0" ENCLOS		
PROJECT MGR: WSM	DATE: 7-2-20	SCALE: NTS	JOB N	18315\$/19179\$/ D: 20176\$
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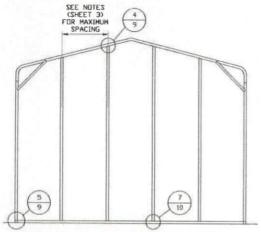
KIT T'ADDISD'TE AKIISTEAD ATERE TIT

# SEE NOTES CSHEET 3 FOR MAXIMUM SPACING DPENING FOR ROLL-UP DOOR WITH HEADER 20'-0' (MAX.) TOPENING FOR PERSONNEL DOOR WITH HEADER

TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION

SCALE: NTS

## **BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS**



# TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

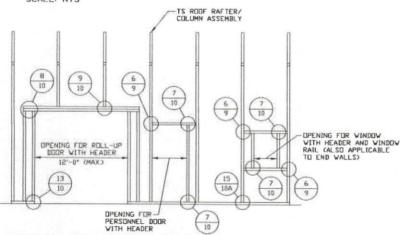
SCALE: NTS

SEE NOTES
(SHEET 3)
FOR MAXIMUM
SPACING

OPENING FOR ROLL-UP
BOOR VITH HEADER
12"-0" (MAX.)

7
DPENING FOR
PERSONNEL DOOR
VITH HEADER
VITH HEADER
VITH HEADER

# TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

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SCALE: NTS

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	CHECKED BY: PH		LOT MOUNTA 16'-0" ENCLOS	STATE OF STATE OF	
	PROJECT MGRI WSM	DATE: 7-2-20	SCALE: NTS	JOB	18315\$/19179\$/ ND: 20176\$
	CLIENTI NC CARPERTS	SHT. BA	DWG. ND SK	-3	REV. 2

# SEE NOTES (SHEET 3) FOR MAXIMUM SPACING DPENING FOR ROLL-UP DOOR VITH HEADER 20'-0' (MAX.) 7 DPENING FOR PERSONNEL DOOR PERSONNEL DOOR VITH HEADER VITH HEADER

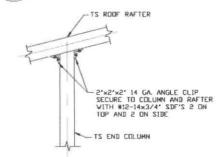
TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION

SCALE: NTS

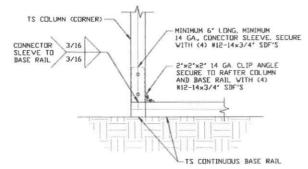
# CONNECTION DETAILS TS DDUBLE COLUMN MINIMUM 6' LONG, MINIMUM 14 GA, CONNECTOR SLEEVE SECURE VITH (4) HI2-14x3/4' SDF'S CONNECTOR SLEEVE TO BASE RAIL CONNECTOR SLEEVE TO BASE RAIL CONNECTOR SLEEVE TO BASE RAIL

3A POST/BASE RAIL
CONNECTION DETAIL
SCALE: NTS

TS CONTINUOUS BASE RAIL



# 4 END COLUMN/RAFTER CONNECTION DETAIL SCALE NTS



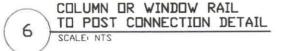
# 5B END COLUMN/BASE RAIL CONNECTION DETAIL

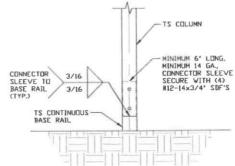
SCALE: NTS

TS COLUMN
OR END COLUMN

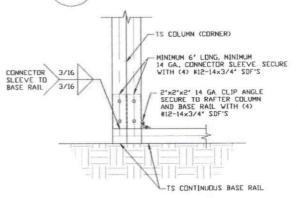
2'\*2'\*2' 14 GA. ANGLE CLIP
SECURE TO COLUMN AND
EITHER TOP OF HEADER, OR
BOTTOM OF VINDOV RAIL
VITH #12-14x3/4' SDF'S

TS HEADER OR
VINDOV RAIL





3B POST/BASE RAIL
CONNECTION DETAIL
SCALE: NTS



5A END COLUMN/BASE RAIL CONNECTION DETAIL

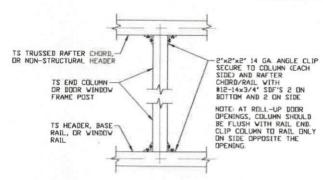
SCALE: NTS

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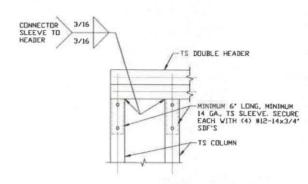
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PROJECT MGR: WSM	DATE: 7-2-20	18315S/19179S/ ND: 20176S		
CLIENT: NC CARPORTS	SHT. 9	DWG. ND SK	-3	REVJ 2

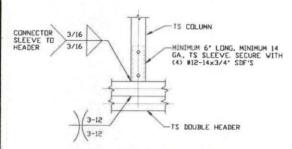
#### **CONNECTION DETAILS**



COLUMN TO HEADER, BASE RAIL, OR WINDOW RAIL CONNECTION DETAIL SCALE: NTS

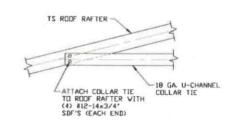


DOUBLE HEADER/COLUMN CONNECTION DETAIL 8



COLUMN/DOUBLE HEADER CONNECTION DETAIL

9

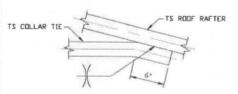


COLLAR TIE CONNECTION DETAIL

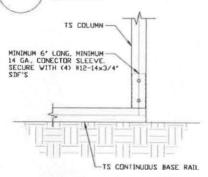
10

TS ROOF RAFTER 3/16 TS CHORD 3/16

RAFTER TO CHORD CONNECTION DETAIL 11



COLLAR TIE CONNECTION DETAIL 12 SCALE: NTS



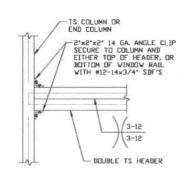
COLUMN/BASE RAIL CONNECTION DETAIL 13 SCALE: NTS

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CHECKED BY: PH	PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE				
PROJECT MGR: WSM	DATE: 7-2-20	SCALE: NTS	JOB	18315S/19179S/ ND 20176S	
CLIENTI NC CARPORTS	SHT. 10	DVG. ND. SK	-3	REV. 2	

#### **CONNECTION DETAILS**



DOUBLE HEADER TO COLUMN CONNECTION DETAIL SCALE: NTS

14

TS TRUSSED RAFTER CHURD,-OR NON-STRUCTURAL HEADER TS END COLUMN — OR DOOR WINDOW FRAME POST -MINIMUM 6' LONG, MINIMUM 14 GA., TS SLEEVE. SECURE WITH (4) #12-14×3/4' SDF'S TS HEADER OR BASE RAIL

> COLUMN TO HEADER OR BASE RAIL CONNECTION DETAIL

SCALE: NTS

15

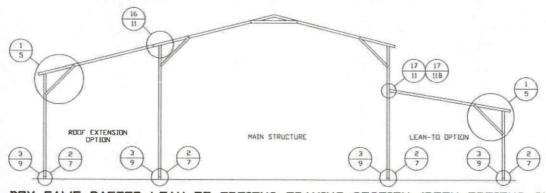
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NC CARPORTS AND GARAGES, LLC DRAWN BY JG 309 S. DEPOT STREET PILOT MOUNTAIN, NC 27041 CHECKED BY: PH 30'-0"x16'-0" ENCLOSED STRUCTURE 18315S/19179S/ JOB NO: 20176S DATE: 7-2-20 PROJECT MGRI WSM SCALE: NTS SHT. 10A DWG. NO SK-3 REV. 2

CLIENT: NC CARPORTS

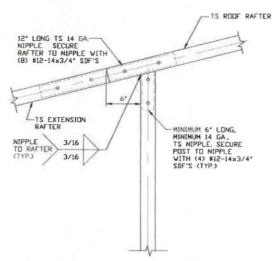
#### **BOX EAVE RAFTER LEAN-TO OPTIONS**

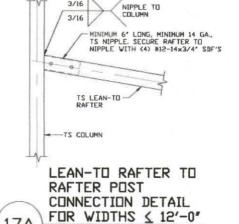


#### TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

17A

SCALE: NTS MAXIMUM WIDTH OF SINGLE MEMBER ROOF EXTENSION AND LEAN-TO OPTION IS 12'-0'. MAXIMUM WIDTH OF DOUBLE MEMBER ROOF EXTENSION AND LEAN-TO OPTION IS 16'-0'





3/16

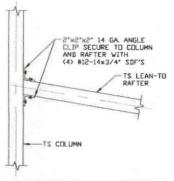
SCALE: NTS

ROOF EXTENSION RAFTER/CORNER POST DETAIL FOR WIDTHS < 12'-0'

SCALE: NTS

17B

16



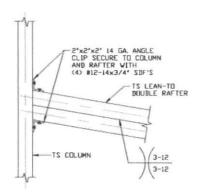
LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS < 12'-0" SCALE: NTS

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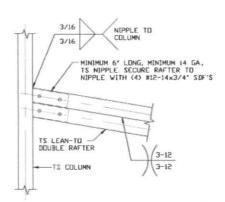
DRAWN BY: JG CHECKED BY: PH	PI	NC CARPORTS AND GARAGES, LLC 309 S. DEPOT STREET PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE			
PROJECT MGR: VSM				18315\$/19179\$/	
CLIENT: NC CARPORTS	SHT. 11	DVG. ND: SK	-3	REV, 2	

### BOX EAVE RAFTER LEAN-TO OPTIONS



LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS 12'-0" < T□ < 16'-0" 17C

SCALE: NTS



LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS 12'-0" < T□ < 16'-0"

17D SCALE: NTS

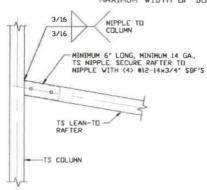
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MOORE AND ASSOCIATES	DRAWN BYI JG	NC CA	NC CARPORTS AND GARAGES, LLC 309 S. DEPOT STREET			

# **BOW EAVE RAFTER LEAN-TO OPTIONS** 118 MAIN STRUCTURE LEAN-TO DPTION 3

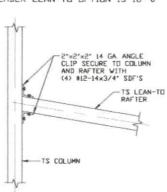
#### TYPICAL BOW EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION

SCALE: NTS MAXIMUM WIDTH OF SINGLE MEMBER LEAN-TO OPTION IS 12'-0'. MAXIMUM WIDTH OF DOUBLE MEMBER LEAN-TO OPTION IS 16'-0"

18B

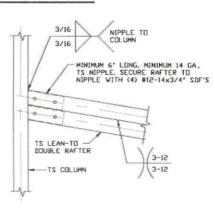


LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS ≤ 12'-0' SCALE: NTS



LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS ≤ 12'-0" SCALE: NTS

18C



LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS 12'-0' < T□ <u><</u> 16'-0' SCALE: NTS

2'x2'x2' 14 GA. ANGLE CLIP SECURE TO COLUMN AND RAFTER WITH (4) #12-14x3/4' SDF'S TS LEAN-TO DOUBLE RAFTER TS COLUMN 3-12 3-12

LEAN-TO RAFTER TO RAFTER POST CONNECTION DETAIL FOR WIDTHS

18D

18A

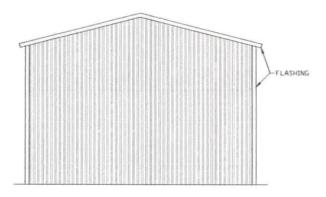
12'-0" < T□ < 16'-0" SCALE: NTS

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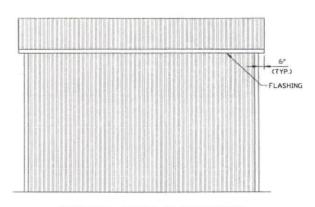
DRAWN BY: JG		309 S. DEPOT	STREE	T	
CHECKED BY: PH	PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE				
PROJECT MGR: VSM	DATE: 7-2-20	SCALE: NTS	JDB N	18315S/19179S/ D 20176S	
CLIENTI NC CARPORTS	SHT. 11B	DVG. ND SK	-3	REV. 2	

### BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



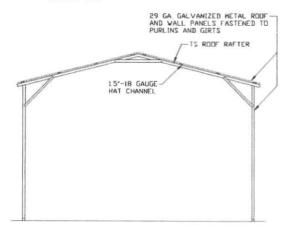
# TYPICAL END ELEVATION VERTICAL ROOF/SIDING

SCALE: NTS



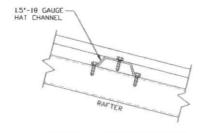
# TYPICAL SIDE ELEVATION VERTICAL ROOF/SIDING

SCALE: NTS



# TYPICAL SECTION VERTICAL ROOF/SIDING OPTION

SCALE: NTS



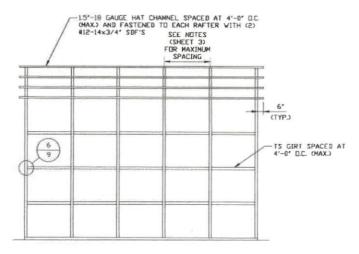
PANEL ATTACHMENT
(ALTERNATE FOR VERTICAL ROOF PANELS)
SCALE: NTS

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# BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



TYPICAL FRAMING SECTION VERTICAL ROOF/SIDING OPTION WITH TS GIRTS

SCALE: NTS

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	CHECKED BY: PH	PILOT MOUNTAIN, NC 27041 30'-0"x16'-0" ENCLOSED STRUCTURE					
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