### APPLICABLE CODES AND STANDARDS

- 2023 FLORIDA BUILDING CODE (8TH EDITION)
- 2021 INTERNATIONAL BUILDING CODE
- ASCE 7-16: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
- 4 AISC STEEL CONSTRUCTION MANUAL (15TH EDITION)
- 5. ACI 318-14: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- TMS 402-16: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
- 7. AWS D1.1: STRUCTURAL WELDING

### INSTALLATION NOTES AND SPECIFICATIONS

- 1. MAXIMUM ROOF PITCH 4:12
- END WALL COLUMNS (POST) AND SIDE WALL COLUMNS ARE IDENTICAL, U.N.O.
- 29 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 2.5" x 2.5" x 14 GA TUBE STEEL (TS) FRAMING MEMBERS FOR VERTICAL PANELS. 29 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 18 GA HAT
- 4. FASTENER SPACING ALONG RAFTERS OR PURLINS, AND POSTS SHALL BE AS FOLLOWS: INTERIOR 9" O.C., END 6" O.C.
- 5. FASTENERS SHALL BE #12-14 x 3/4" SELF-DRILLING SCREWS (SDS). USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20'-0" OR LESS AND ROOF SLOPES OF 18" (4:12 PITCH) OR LESS. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS/SLOPES MAY VARY.

  6. ANCHORS SHALL BE INSTALLED THROUGH THE BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG
- SIDES AND ENDS
- 7. STANDARD GROUND ANCHORS (SOIL NAILS) CONSISTING OF 30" LONG #4 REBAR WITH WELDED NUT MAY BE USED IN SUITABLE SOILS AND WIND SPEEDS LESS THAN OR EQUAL TO 145 MPH.

### DESIGN LOADS

DEAL LOAD 15 PSF

LIVE LOAD 20 PSF

108 MPH

140 MPH

ENCLOSED

NOMINAL WIND

ULTIMATE WIND

SPEED WIND EXPOSURE

RISK CATEGORY

ENCLOSURE

CLASSIFIC ATION

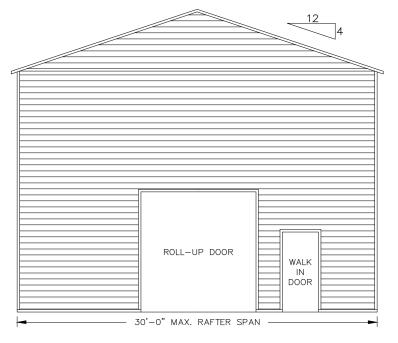
OCCUPANCY

CLASSIFIC ATION

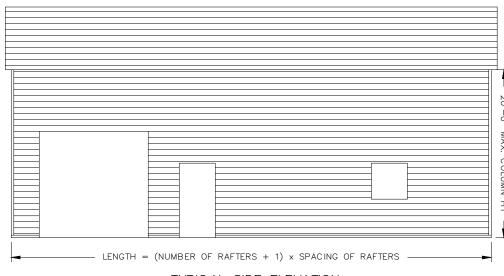
	SPACING SPECIFICATIONS					
RISK C A TEGORY	WIND EXPOSURE C ATEGORY	ULT WND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM RAFTER/BOW AND END POST SPACING (FT)	FASTENER SPACING O.C. FOR RAFTERS/PURLINS & POSTS (IN)	
					INTERIOR	END
I, II, III, or IV	B, C, or D	115-150	89-116	5	6	6
		151-180	117-139	4	6	6

- SPECIFIC ATIONS APPLICABLE TO 26 OR 29 GA METAL PANELS FASTENED DIRECTLY TO 12 OR 14 GA STEEL TUBE FRAMES.
- 2. FASTENERS CONSIST OF  $\#12-14 \times 3/4$ " SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER. 3. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF
- SLOPES OF 4:12 PITCH. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS/SLOPES MAY VARY. 4. GROUND ANCHOR REQUIREMENTS ARE 1 @ EACH CORNER AND ONE EVERY OTHER INTERIOR
- BOW/RAFTER POST LOCATION, AT MAXIMUM OF 10' O.C., AND BOTH SIDES OF OPENINGS WHERE BASE
- 5. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.

# ENCLOSED METAL BUILDING 24FT WIDE x 30FT LONG x 12FT EAVE HT.

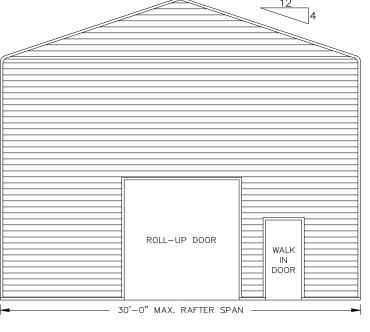


TYPICAL ELEVATION - BOX EAVE SCALE: NTS



#### TYPICAL SIDE ELEVATION SC ALE: NTS

MEMBER	PRODUCT APPROVAL NUMBER	MAX WIND DESIGN PRESSURES
ROOF PANELS	FL39466.1/FL39466.2	+41.6 PSF / -31.2 PSF
WALL PANELS	FL39594.1/FL39594.2	+55.4 PSF / -41.6 PSF
GARAGE DOOR	C TP	C TP
WALK-IN DOOR	C TP	C TP

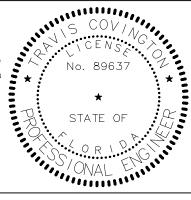


TYPICAL ELEVATION - BOW EAVE SC ALE: NTS

	DRAWING INDEX	
SHEET NO.	DESCRIPTION	
S.1	GENERAL NOTES & SPECIFICATIONS	
S.2	BOX/BOW EAVE TYPICAL FRAMING SECTIONS	
S.3	CONNECTION DETAILS (1 OF 2)	
S.4	BASE RAIL & ANCHORAGE DETAILS	
S.5	END WALL, SIDE WALL, & OPENING TYPICAL FRAMING	
S.6	CONNECTION DETAILS (2 OF 2)	
S.7	BOX EAVE LEAN-TO OPTIONS	
S.8	FREESTANDING LEAN-TO OPTIONS	
S.9	VERTICAL ROOF-SIDING OPTION	
S.10	OPTIONAL CONCRETE STRIP FOOTING DETAILS	
S.11	OPTIONAL HELICAL ANCHORAGE DETAILS	

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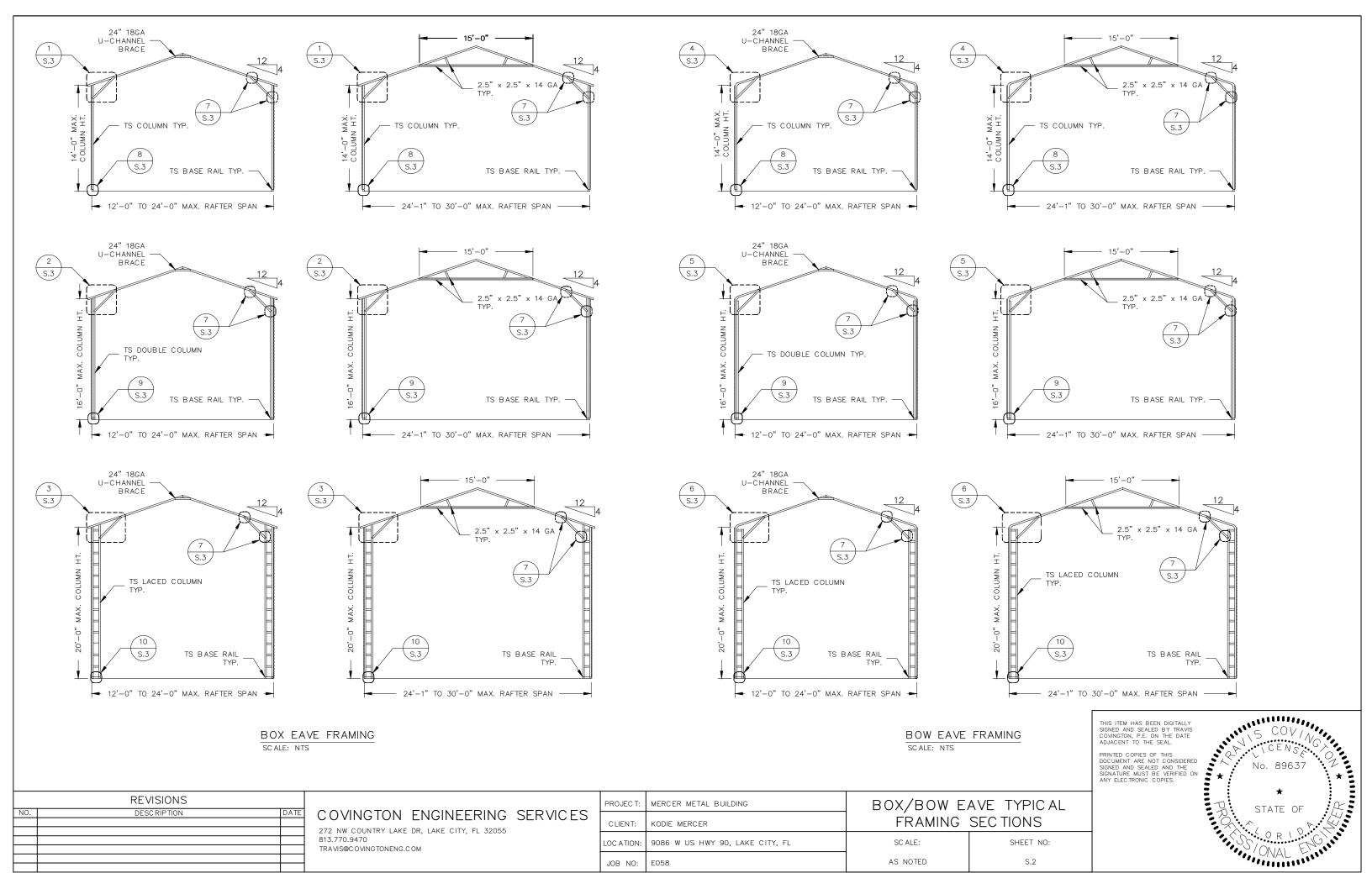
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NO.	DESC RIPTION	DATE

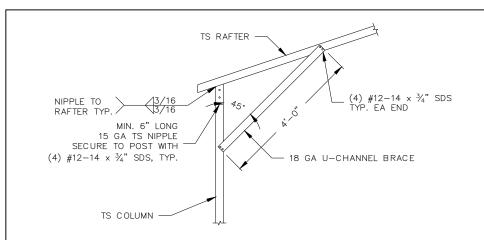
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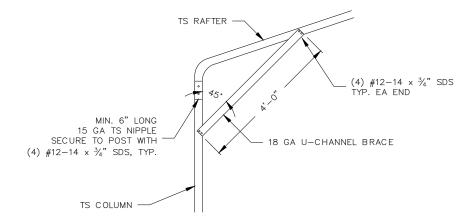
010.770.3170	
TRAVIS@COVINGTONENG.COM	

PROJECT:	MERCER METAL BUILDING	GENERAL NOTES &		
C LIENT:	KODIE MERCER	SPECIFIC ATIONS		
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:	
JOB NO:	E058	AS NOTED	S.1	

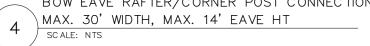


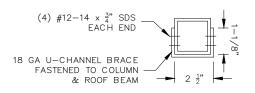


### BOX EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 14' EAVE HT SC ALE: NTS

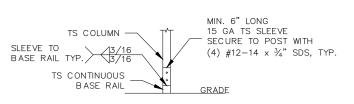


BOW EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 14' EAVE HT SC ALE: NTS



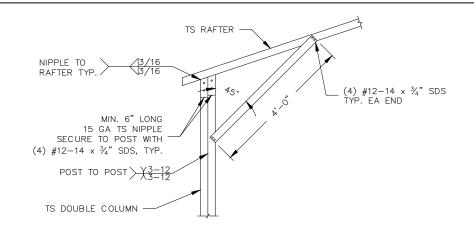


BRACE CONNECTION DETAIL SC ALE: NTS

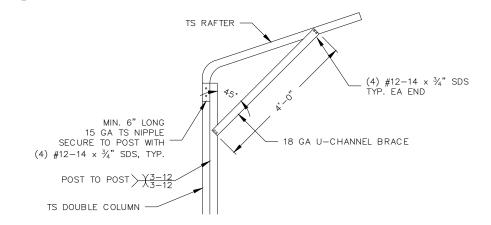


POST/BASE RAIL CONNECTION

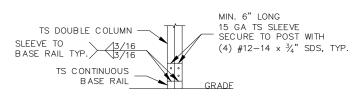
SINGLE COLUMN SCALE: NTS



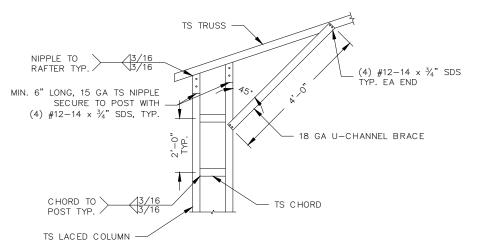
BOX EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 16' EAVE HT SC ALE: NTS



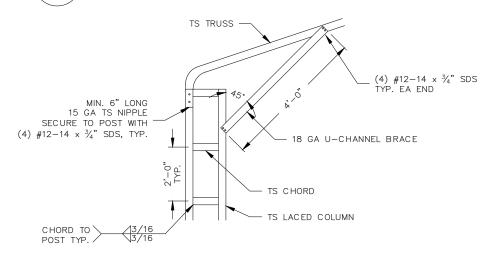
BOW EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 16' EAVE HT SC ALE: NTS



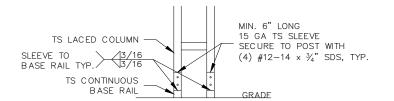
POST/BASE RAIL CONNECTION DOUBLE COLUMN 9 SCALE: NTS



BOX EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 20' EAVE HT SCALE: NTS



BOW EAVE RAFTER/CORNER POST CONNECTION MAX. 30' WIDTH, MAX. 20' EAVE HT SCALE: NTS



POST/BASE RAIL CONNECTION LACED COLUMN SCALE: NTS

S.3

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NO.	DESCRIPTION	DAT

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1.0 20	CLIENT:	KODIE MERCER	
	LOC ATION:	9086 W US HWY	
	JOB NO:	F058	

ROJEC T:	MERCER METAL BUILDING			
LIENT:	KODIE MERCER	CONNECTION DETAILS (1 (		
C ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:	

AS NOTED

### GENERAL NOTES

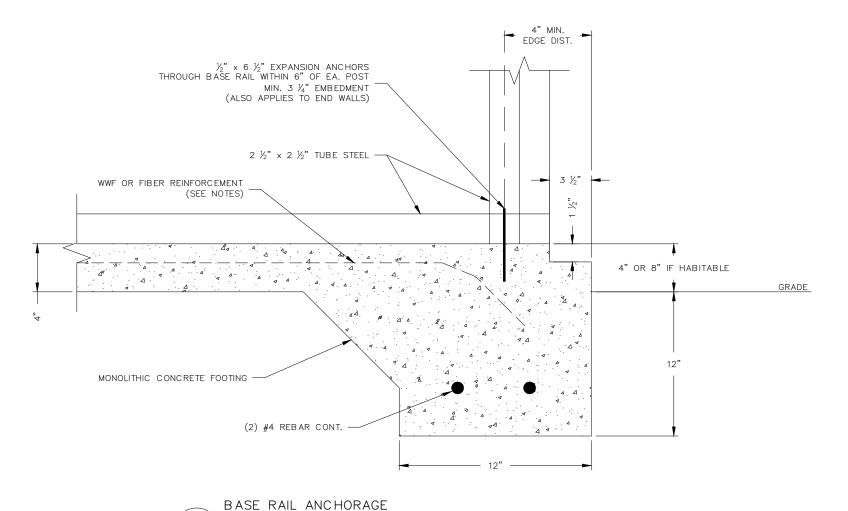
- 1. MINIMUM SOIL BEARING CAPACITY: 1500 PSF 2. CONCRETE STRENGTH: 3000 PSI @ 28 DAYS

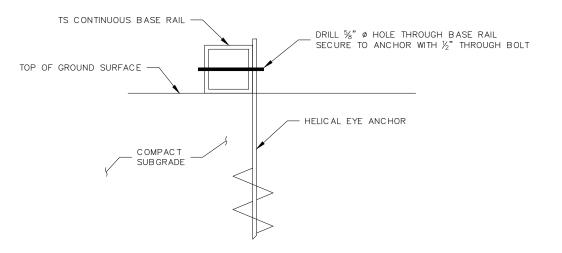
### REINFORCING STEEL NOTES

- REBAR SHALL BE ASTM A615 GRADE 60
- SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
- CONCRETE COVER SHALL BE 3" WHERE CONCRETE IS EXPOSED TO SOIL OR WATER; 2" EVERYWHERE FLSE
- 4. REBAR SHALL BE BENT WITHOUT HEATING; MINIMUM BEND LENGTH = 6 x BAR DIAMETER
  5. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT

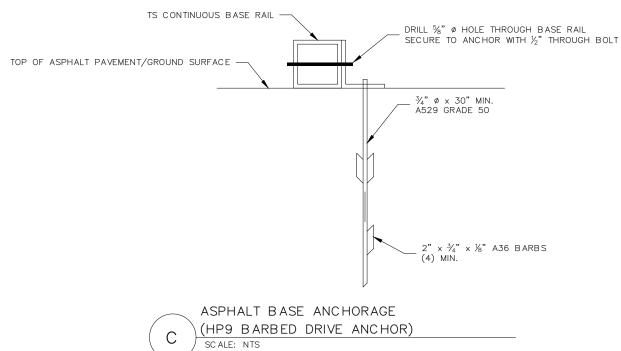
### HELICAL ANCHOR NOTES

- 1. MINIMUM OF (2) 4" HELICES WITH 30" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: VERY DENSE AND OR/OR CEMENTED SOILS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILT AND CLAYS, CORALS, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, AND VERY STIFE SILTS AND CLAYS
- 2. MINIMUM OF (2) 6" HELICES WITH 48" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS, AND ALLUVIAL
- 3. MINIMUM OF (2) 8" HELICES WITH 60" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: VERY LOOSE TO MEDIUM DENSE SANDS AND FIRM TO STIFFER CLAYS AND SILTS





GROUND BASE HELICAL ANCHORAGE SC ALE: NTS



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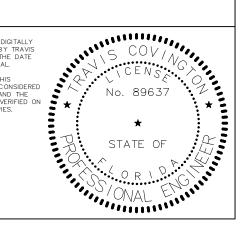
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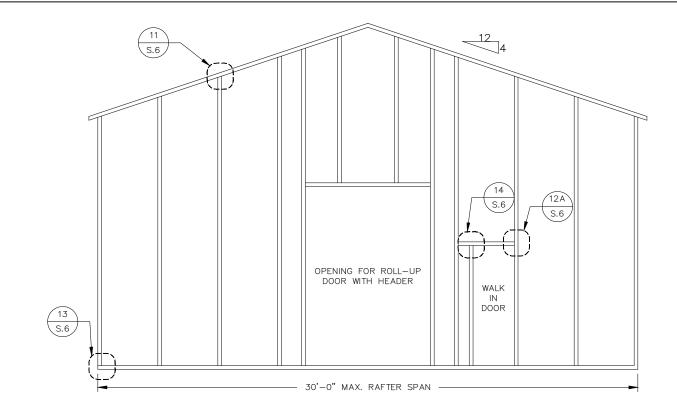
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CONCRETE MONOLITHIC SLAB

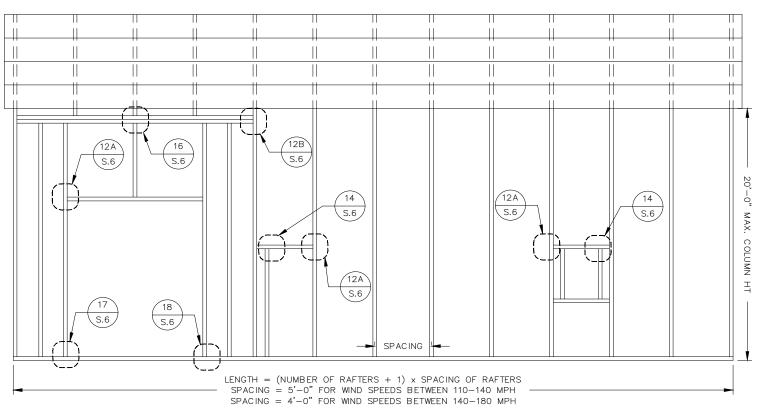
SC ALE: NTS

PROJEC T:	MERCER METAL BUILDING	BASE RAIL & ANCHORAGE		
CLIENT:	KODIE MERCER	DET	AILS	
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:	
JOB NO:	E058	AS NOTED	S.4	





### TYPICAL BOX EAVE RAFTER END WALL FRAMING SCALE: NTS



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

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			TRAVIS@COVINGTONENG.COM

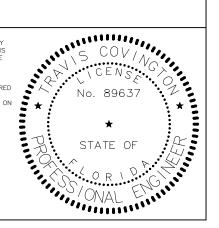
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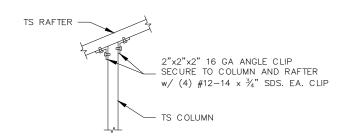
ΓY, FL 32055

PROJECT:	MERCER METAL BUILDING	END WALL, S	SIDE WALL, &
CLIENT:	KODIE MERCER	OPENING TYP	CAL FRAMING
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:
JOB NO:	E058	AS NOTED	S.5

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TS COLUMN OR END COLUMN

2"x2"x2" 16 GA ANGLE CLIP
SECURE TO COLUMN AND EITHER
TOP OF HEADER OR BOTTOM OF WINDOW RAIL

W/ (4) #12-14 x 3/4" SDS, EA. CLIP

# 12A HEADER TO POST CONNECTION SCALE: NTS

SCALE: NTS

TS COLUMN OR END COLUMN

2"x2"x2" 16 GA ANGLE CLIP
SECURE TO COLUMN AND EITHER
TOP OF HEADER OR BOTTOM OF WINDOW RAIL

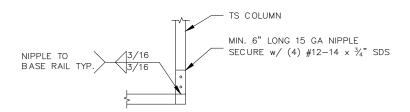
W/ (4) #12-14 x 3/4" SDS, EA. CLIP

TS HEADER OR WINDOW RAIL

DOUBLE HEADER TO POST

12B HORIZONTAL CONNECTION

SCALE: NTS



POST/BASE RAIL CONNECTION END WALL FRAMING

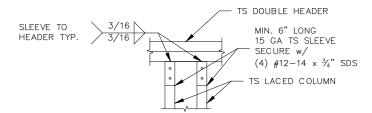
13 | SCALE: NTS

TS TRUSSED RAFTER CHORD OR NON-STRUCTURAL HEADER TS END COLUMN OR DOOR/WINDOW FRAME POST

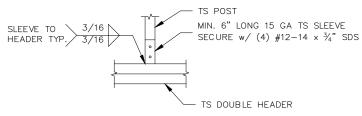
TS HEADER/BASE RAIL/WINDOW RAIL

2"x2"x2" 16 GA ANGLE CLIP SECURE TO COLUMN (EA. SIDE) AND RAFTER CHORD/RAIL w/ (4) #12-14 x 3/4" SDS, EA. CLIP

# POST TO HEADER, BASE RAIL, OR WINDOW RAIL CONNECTION SCALE: NTS



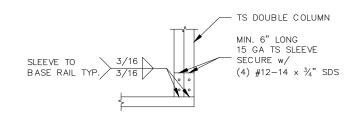
# DOUBLE HEADER TO LACED COLUMN CONNECTION SCALE: NTS



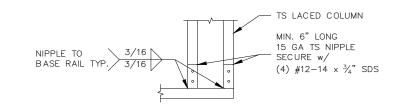
DOUBLE HEADER TO POST

VERTICAL CONNECTION

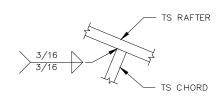
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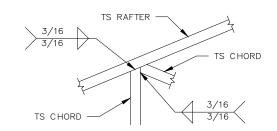
17 DOUBLE COLUMN TO BASE RAIL CONNECTION SCALE: NTS



18 LACED COLUMN TO BASE RAIL CONNECTION SCALE: NTS



19 RAFTER TO CHORD CONNECTION
SCALE: NTS



20 RAFTER TO CHORD CONNECTION SCALE: NTS

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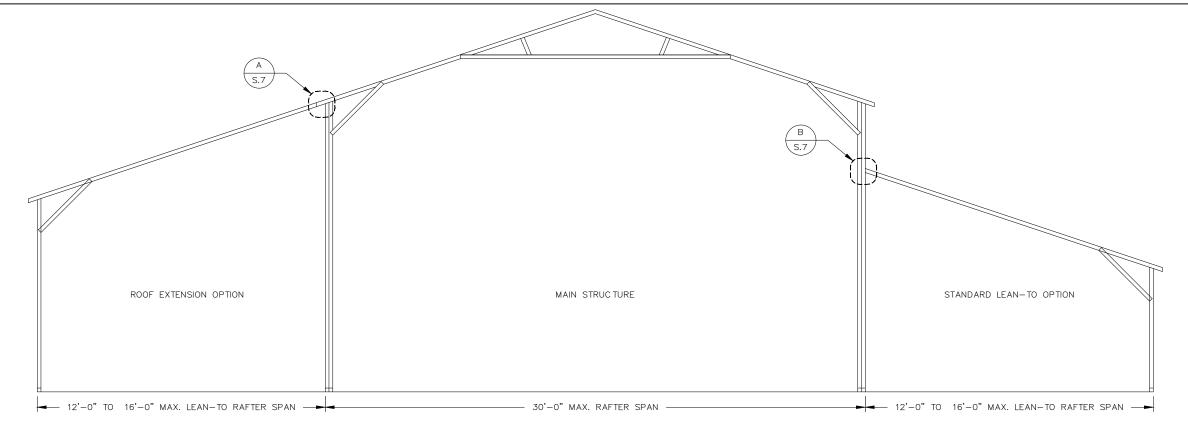
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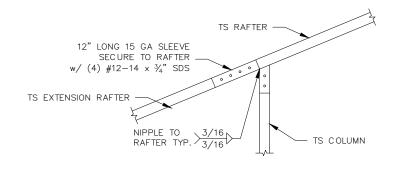
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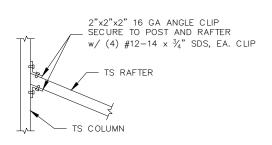
PROJEC T:	MERCER METAL BUILDING	CONNECTION DETAILS (2 OF	
CLIENT:	KODIE MERCER		
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:
JOB NO:	E058	AS NOTED	S.6



### TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS SC ALE: NTS



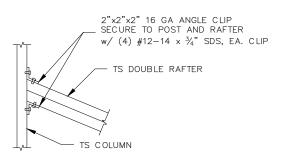
SIDE EXTENSION RAFTER/POST CONNECTION RAFTER SPAN LESS THAN 12'-0" SC ALE: NTS



LEAN-TO RAFTER/COLUMN CONNECTION RAFTER SPAN LESS THAN 12'-0" SC ALE: NTS

TS RAFTER 12" LONG 15 GA SLEEVE SECURE TO RAFTER  $w/(4) #12-14 \times \frac{3}{4}$ " SDS NIPPLE TO RAFTER TYP. TS EXTENSION RAFTER TS COLUMN 2"x2"x2" 16 GA ANGLE CLIP SECURE TO COLUMN w/ (4) #12-14 x  $\frac{3}{4}$ " SDS

SIDE EXTENSION RAFTER/POST CONNECTION RAFTER SPAN BETWEEN 12'-0" AND 16'0" SC ALE: NTS



LEAN-TO RAFTER/COLUMN CONNECTION RAFTER SPAN BETWEEN 12'-0" AND 16'-0" SCALE: NTS

В1

REVISIONS			
NO.	DESC RIPTION	DATE	

Α1

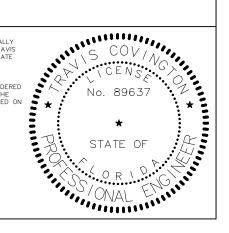
COVINGTON ENGINEERING SERVICES

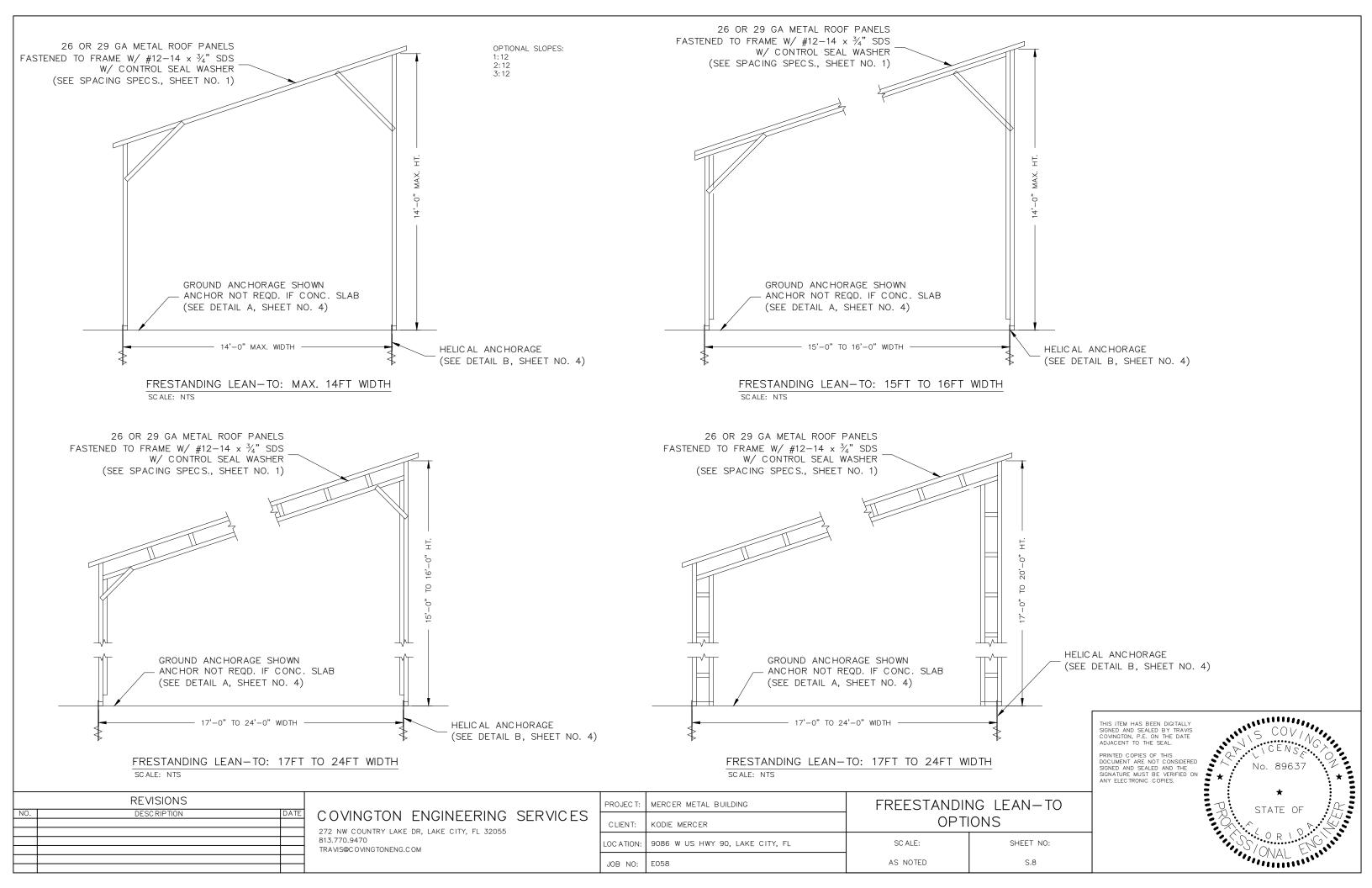
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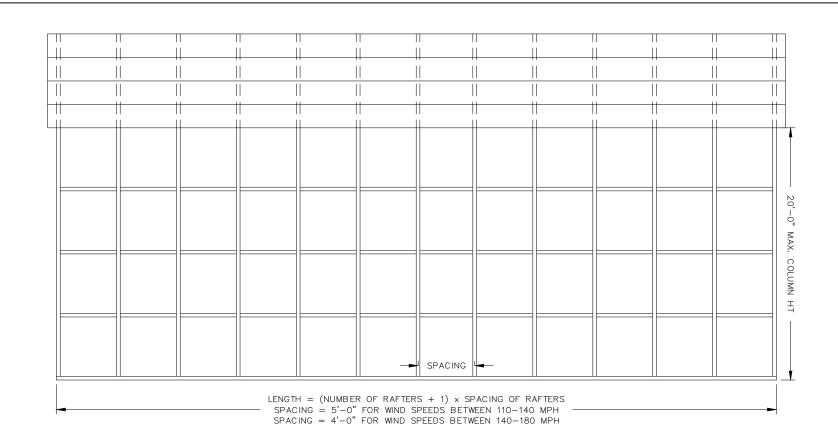
PROJEC T:	MERCER METAL BUILDING	BOX EAVE LEAN—TO OPTIONS	
C LIENT:	KODIE MERCER BOX EAVE		N-10 OPTIONS
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:
JOB NO:	E058	AS NOTED	S.7

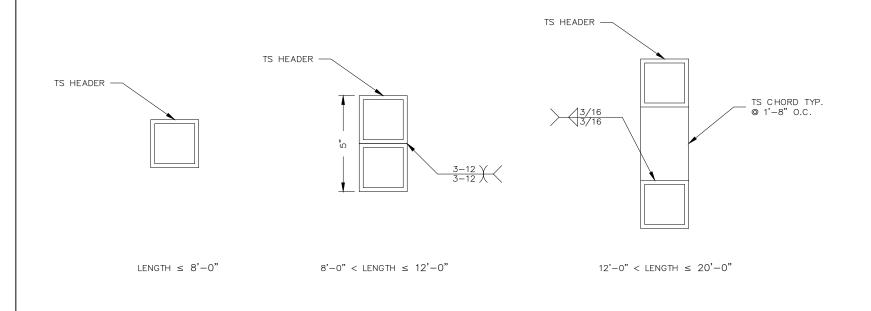
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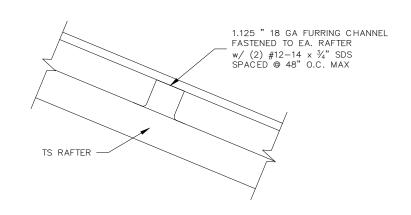
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### VERTICAL ROOF PANEL ATTACHMENT SCALE: NTS

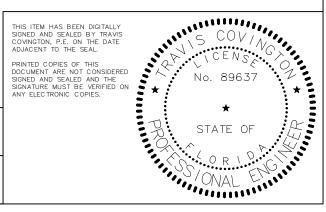
OPTIONAL SIDE WALL HEADERS SCALE: NTS

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PROJEC T:	MERCER METAL BUILDING	VEDTIC AL DOGE	CIDING ODTION
CLIENT:	KODIE MERCER	VERTICAL ROOF-SIDING OF	
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:
JOB NO:	E058	AS NOTED	S.9

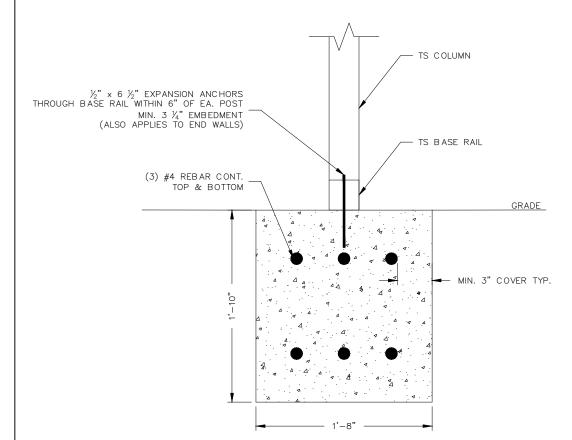


### GENERAL NOTES

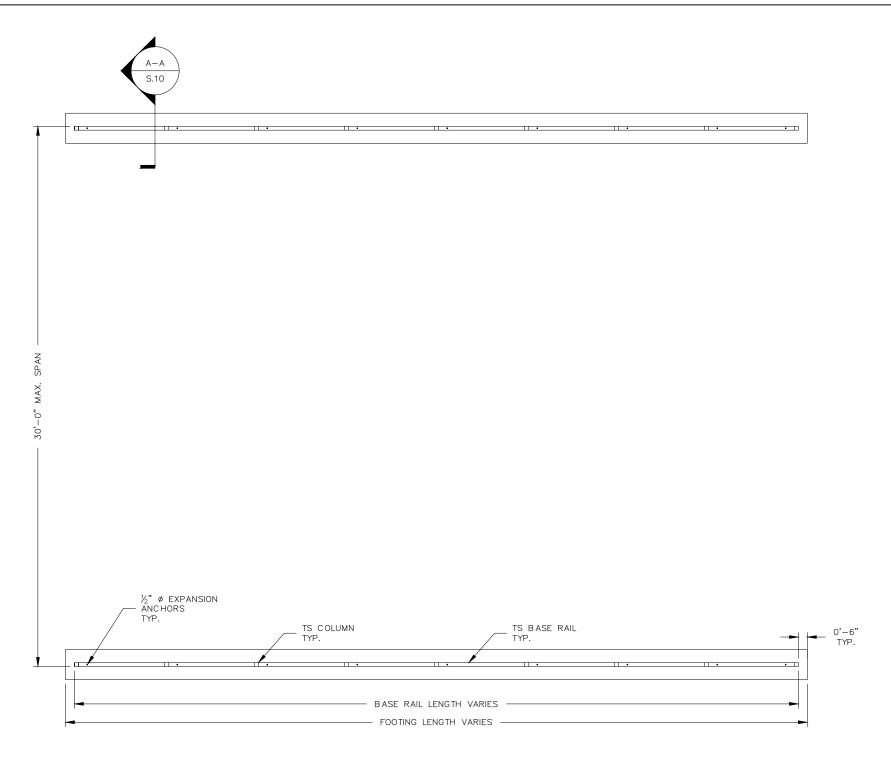
1. MINIMUM SOIL BEARING CAPACITY: 1500 PSF 2. CONCRETE STRENGTH: 3000 PSI @ 28 DAYS

### REINFORCING STEEL NOTES

- 1. REBAR SHALL BE ASTM A615 GRADE 60
  2. SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
  3. CONCRETE COVER SHALL BE 3" WHERE CONCRETE IS EXPOSED TO SOIL OR WATER; 2" EVERYWHERE ELSE
- 4. REBAR SHALL BE BENT WITHOUT HEATING; MINIMUM BEND LENGTH = 6 x BAR DIAMETER
- 5. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT







### CONCRETE STRIP FOOTING PLAN

SC ALE: NTS

AS NOTED

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NO.	DESCRIPTION	DATE

COVINGTON ENGINEERING SERVICES

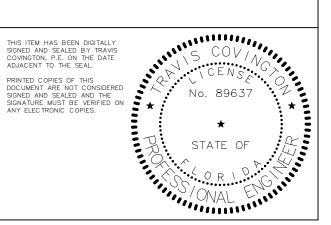
272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055 813.770.9470 TRAVIS@COVINGTONENG.COM

_	PROJECT: MERCER METAL BUILDING		O
S	CLIENT:	KODIE MERCER	
	LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	
	JOB NO:	E058	

OPTIONAL COI	NCRETE STRIP
FOO	TING
SC ALE:	SHEET NO:

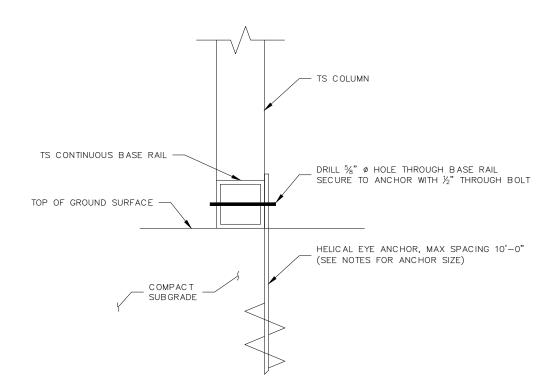
S.10

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### HELICAL ANCHOR NOTES

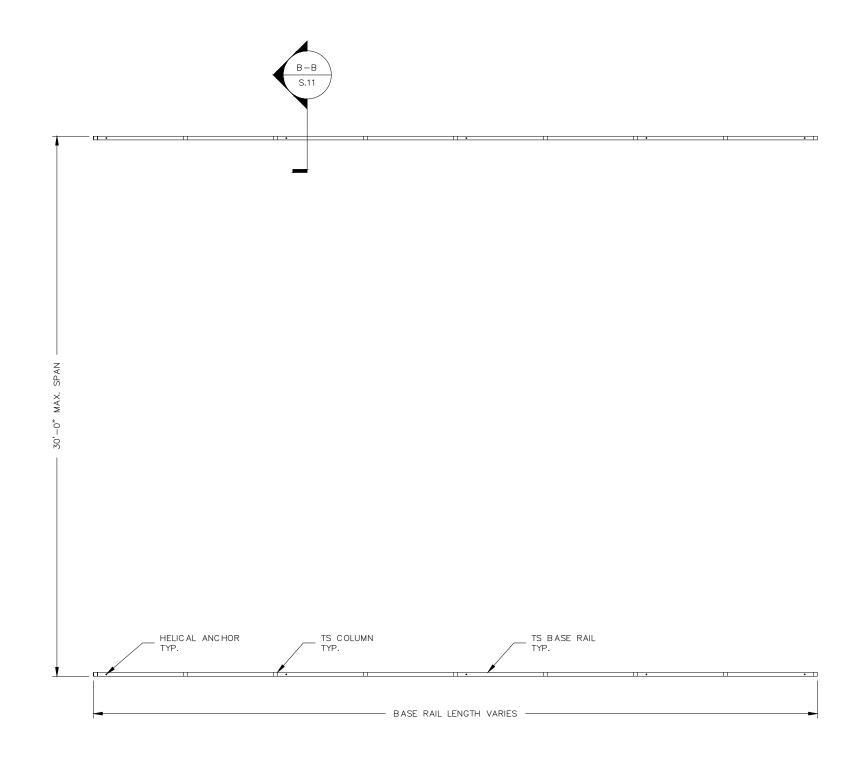
- 1. MINIMUM OF (2) 4" HELICES WITH 30" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: VERY DENSE AND OR/OR CEMENTED SOILS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILT AND CLAYS, CORALS, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, AND VERY STIFF SILTS AND CLAYS
- 2. MINIMUM OF (2) 6" HELICES WITH 48" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS, AND ALLUVIAL FILL
- 3. MINIMUM OF (2) 8" HELICES WITH 60" MIN. EMBEDMENT SHALL BE USED FOR THE FOLLOWING SOILS: VERY LOOSE TO MEDIUM DENSE SANDS AND FIRM TO STIFFER CLAYS AND SILTS





REVISIONS

DESCRIPTION



# HELICAL ANCHORAGE PLAN

SC ALE: NTS

COVINGTON ENGINEERING SERVICES

272 NW COUNTRY LAKE DR, LAKE CITY, FL 32055 813.770.9470 TRAVIS@COVINGTONENG.COM

PROJEC T:	MERCER METAL BUILDING		A
CLIENT:	KODIE MERCER	OPTIONAL HELIC	AL ANCHORAGE
LOC ATION:	9086 W US HWY 90, LAKE CITY, FL	SC ALE:	SHEET NO:
JOB NO:	F058	AS NOTED	S.11

