APPLICABLE CODES AND STANDARDS

- 2023 FLORIDA BUILDING CODE (8TH EDITION)
- 2021 INTERNATIONAL BUILDING CODE
- ASCE 7-22: MINIMUM DESIGN LOADS ON BUILDINGS AND OTHER STRUCTURES
- AISC STEEL CONSTRUCTION MANUAL (15TH EDITION)
- ACI 318-14: BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- TMS 402-16: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
- AWS D1.1: STRUCTURAL WELDING

INSTALLATION NOTES AND SPECIFICATIONS

- ROOF PITCH SHALL NOT BE GREATER THAN 12H:4V
- 2. END WALL COLUMNS (POST) AND SIDE WALL COLUMNS ARE THE SAME 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 CHANNELS U.N.O.
- 4. FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS SHALL BE:
- INTERIOR = 9"
- 4.2.
- 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
- ROOF SLOPES OF 18° (4:12 PITCH) OR LESS
- SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
- 6. ANCHORS SHALL BE INSTALLED THROUGH THE BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES AND ENDS.
- STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR WITH WELDED NUT x 30" LONG AND MAY BE USED IN SUITABLE SOILS.
- 7.1. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. SOIL NAILS MAY BE USED FOR WIND SPEEDS LESS THAN OR EQUAL TO 145 MPH

BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS FASTENER SPACING O.C FOR ULT NOMINAL MAXIMUM RAFTERS/PURLINS, & POSTS (INCHES) WIND WIND RAFTER/BOW WIND SPEED SPEED EXPOSURE AND END POST CATEGORY INTERIOR CATEGORY SPACING (FEET) BOWS/RAFTERS BOWS/RAFTERS I, II, III, or IV 115 - 150 89 - 116

4.0

DRAWING INDEX

DESCRIPTION NOTES AND SPECIFICATIONS

BOX-BOW EAVE FRAME RAFTER ENCLOSED BUILDING

BASE RAIL AND ANCHORAGE DETAILS

CONNECTION DETAILS (1 OF 4)

CONNECTION DETAILS (2 OF 4)

CONNECTION DETAILS (3 OF 4)

BOX EAVE RAFTER LEAN-TO OPTIONS

CONNECTION DETAILS (4 OF 4)

OPTIONAL CONCRETE STRIP FOOTING

OPTIONAL HELICAL ANCHORING DETAIL

FREESTANDING BOX EAVE RAFTER LEAN-TO OPTIONS

BOX EAVE RAFTER VERTICAL ROOF-SIDING OPTION

BOX EAVE RAFTER END WALL, SIDE WALL AND OPENING FRAMING

PAGE NO.

S-1

S-2

S-3

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S-6 S-7

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S-10

S-11

S-12

S-13

NOTES:
1. SPECIFICATIONS APPLICABLE TO 26 OR 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 12 OR 14 GAUGE STEEL TUBE BOW FRAMES.
2. FASTENTERS CONSIST OF 1/4*-14X1* SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.

SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14°(3:12 PITCH

151 - 180 | 117 - 139

- SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR 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 RAIL IS ABSENT.

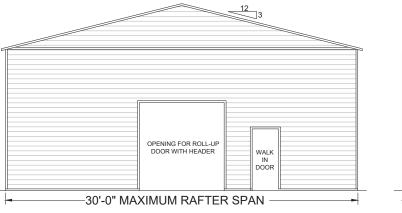
 5. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.

DESIGN LOADS

- DEAD LOAD = 15 PSF
- LIVE LOAD = 20 PSF
- 3. WIND LOAD (SEE TABLE 1)

ENCLOSED METAL BUILDING DESIGN 24 FT WIDE X 40 FT LONG X 10 FT EAVE HT.

LEAN-TO 12FT WIDE X 20FT LONG X 8FT EAVE HT.

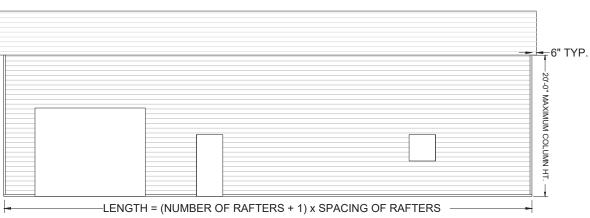




TYPICAL ELEVATION - BOX EAVE

SCALE: NTS

TYPICAL ELEVATION - BOW EAVE SCALE: NTS



TYPICAL SIDE ELEVATION

SCALE: NTS

TABLE 1

MEMBER	PRODUCT	MAX WIND DESIGN
	APPROVAL NUMBER	PRESSURES
ROOF PANELS	FL39466	+41.6 PSF / -31.2 PSF
WALL PANELS	FL39594	+55.4 PSF / -41.6 PSF
GARAGE DOOR	CTP	CTP
WALK-IN DOOR	CTP	СТР

CTP = CONTRACTOR TO PROVIDE 2023 FBC APPROVED PRODUCTS THAT MEET OR EXCEED DESIGN PRESSURES AS TABLULATED.

PLANS PREPARED BY:

12558 BASS ROAD, LIVE OAK, FLORIDA 32060 P:386.320.7400 F: 850.807.7309 WWW.COLLINSENG.COM

CERTIFICATE OF AUTHORIZATION: 31728

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			CHECKED	ATC			ENGINEERING INC.
			JOB No.	22047			CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM

ELITE METAL MANUFACTURING 10121 88TH TRACE

NOTES AND SPECIFICATIONS

Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025

SCALE AS-SHOWN

S-1

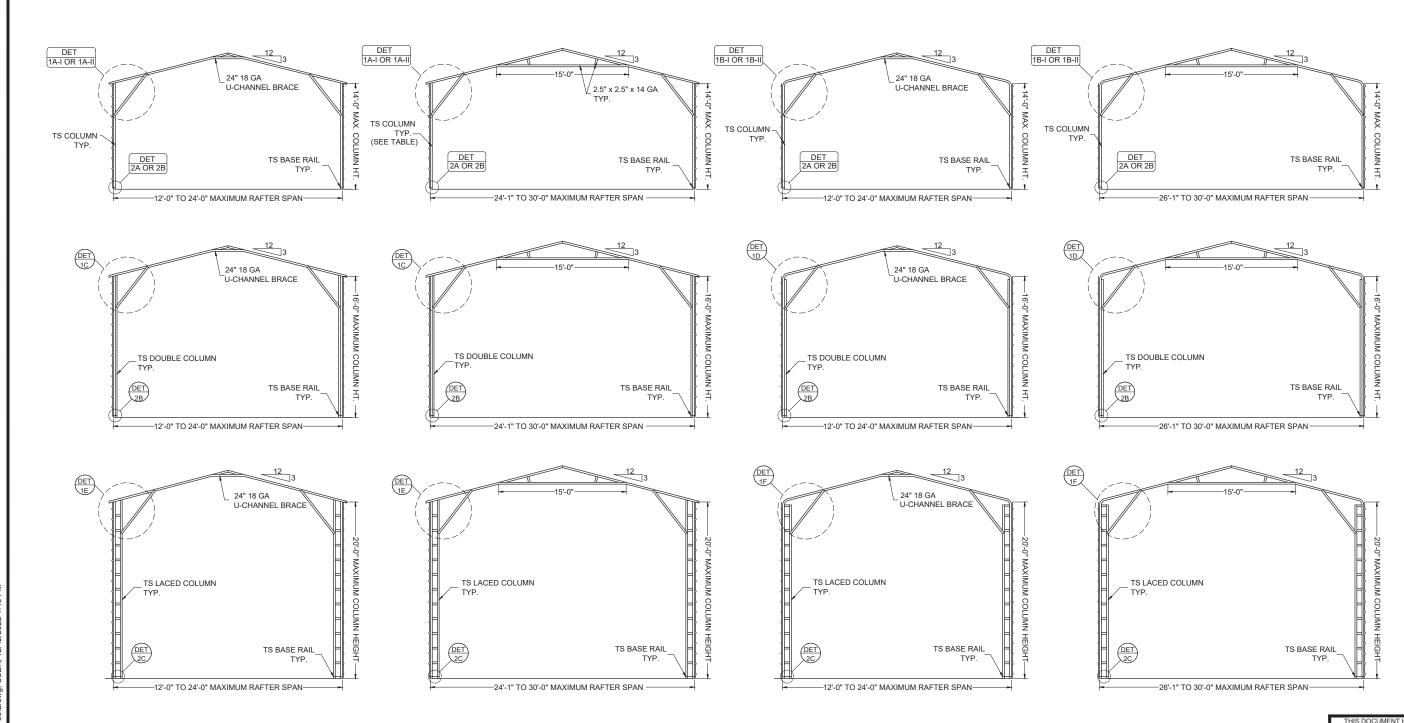
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BOX EAVE FRAME

SCALE: NTS

BOW EAVE FRAME

SCALE: NTS

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			JOB No.	22047			CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM	

BOX-BOW EAVE ELITE METAL FRAME RAFTER MANUFACTURING 10121 88TH TRACE **ENCLOSED BUILDING**

Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025

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S-2

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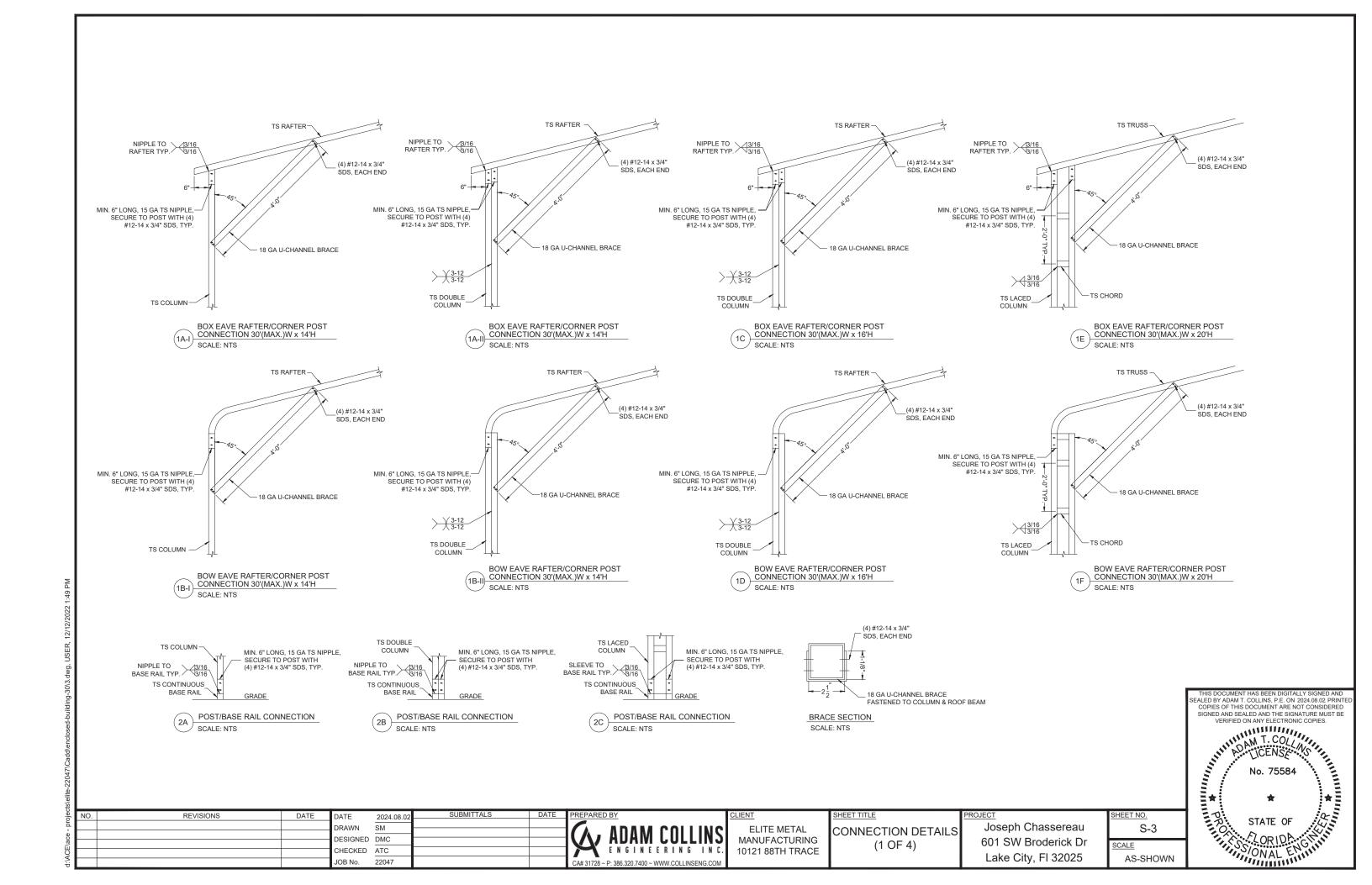
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GENERAL NOTES

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

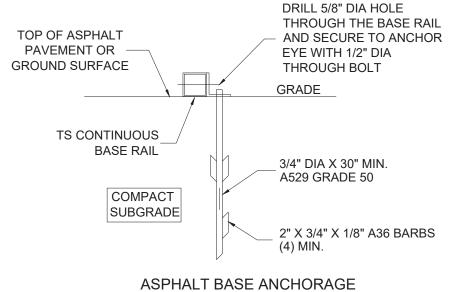
MONOLITHIC FOOTER SIZE 110 C - 140 C 8" x 12" - (2) #4 12" x 16" - (2) #4 ABOVE 140 C

REINFORCING STEEL

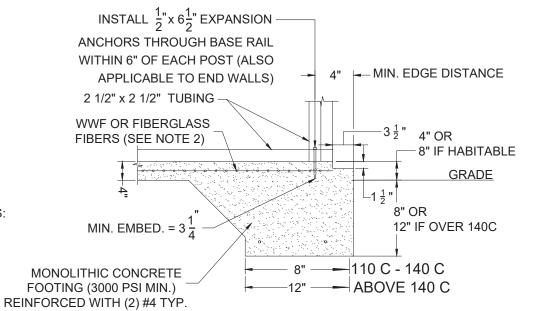
- REBAR SHALL BE ASTM A615 GRADE 60
- SLAB REINFORCEMENT = WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
- CONCRETE COVER SHALL BE
- 3.1. 3" WHERE EXPOSED TO SOIL OR WATER.
- 2" EVERYWHERE ELSE.
- 4. REBAR SHALL BE BENT WITHOUT HEATING.
- MINIMUM BEND = 6 X BAR DIAMETER
- REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD

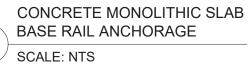
HELIX ANCHOR NOTES

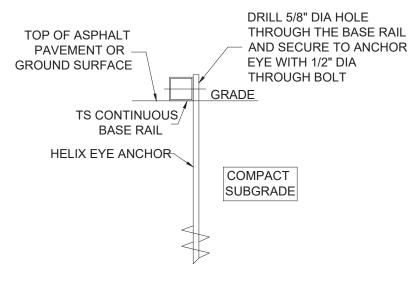
- 1. USE MINIMUM (2) 4" HELICES WITH 30" EMBEDMENT FOR THE FOLLOWING SOILS:
- 1.1. VERY DENSE AND/OR CEMENTED SANDS
- COARSE GRAVEL AND COBBLES 1.2.
- 1.3. CALICHE
- PRELOADED SILTS AND CLAYS 1.4.
- CORALS 1.5.
- MEDIUM DENSE COARSE SANDS 1.6.
- SANDY GRAVEL 1.7.
- VERY STIFF SILTS AND CLAYS 1.8.
- 2. USE MINIMUM (2) 6" HELICES WITH MINIMUM 48" EMBEDMENT FOR
- LOOSE TO MEDIUM DENSE SANDS
- 2.2. FIRM TO STIFF CLAYS AND SILTS
- ALLUVIAL FILL
- 3. USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.
- 3.1. FOR VERY LOOSE TO MEDIUM DENSE SANDS
- FIRM TO STIFFER CLAYS AND SILTS
- ALLUVIAL FILL.



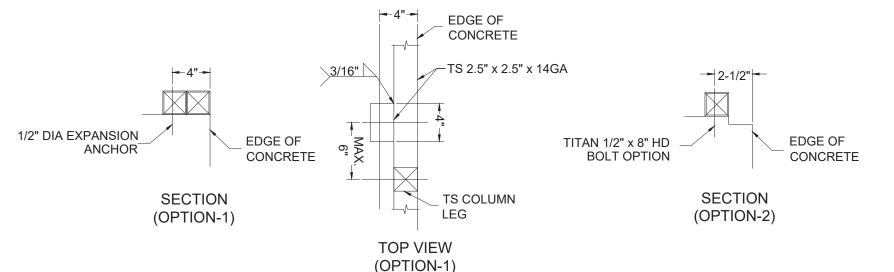








GROUND BASE HELIX ANCHORAGE SCALE: NTS



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

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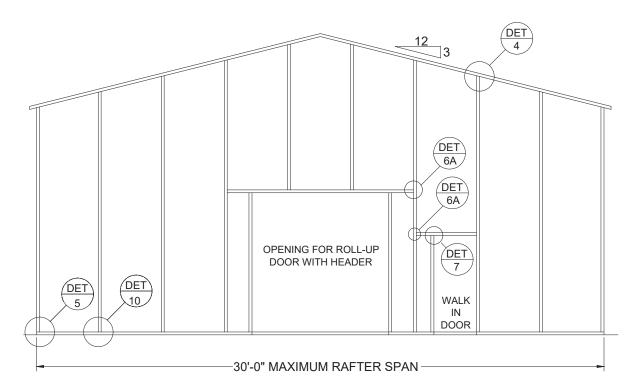
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				DMC			(🗘 ADAM COLLINS
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ELITE METAL MANUFACTURING 10121 88TH TRACE

BASE RAIL AND ANCHORAGE DETAILS

Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025

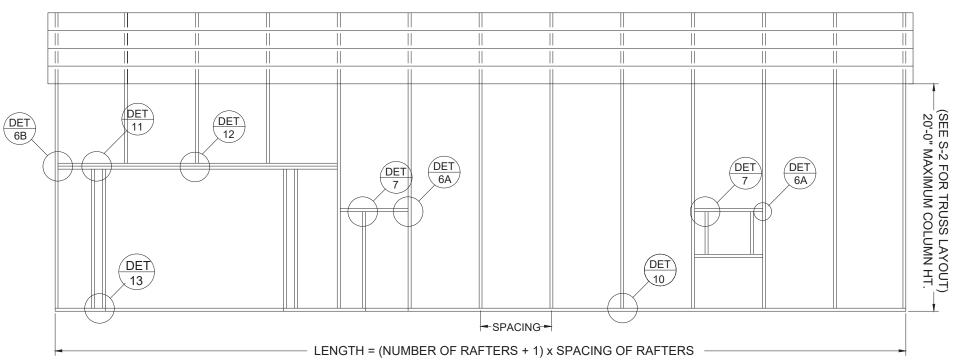
S-4 SCALE AS-SHOWN



SPACING = 5'-0" FOR WIND SPEEDS BETWEEN 110 MPH AND 140 MPH SPACING = 4'-0" FOR WIND SPEEDS BETWEEN 140 MPH AND 180 MPH

TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS



SPACING = 5'-0" FOR WIND SPEEDS BETWEEN 110 MPH AND 140 MPH SPACING = 4'-0" FOR WIND SPEEDS BETWEEN 140 MPH AND 180 MPH

TYPICAL BOX EAVE RAFTER SIDE FRAMING SECTION

SCALE: NTS

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ELITE METAL MANUFACTURING 10121 88TH TRACE

SHEET TITLE
BOX EAVE RAFTER END
WALL, SIDE WALL AND
OPENING FRAMING

Joseph Chassereau 601 SW Broderick Dr Lake City, Fl 32025 SHEET NO.
S-5
SCALE
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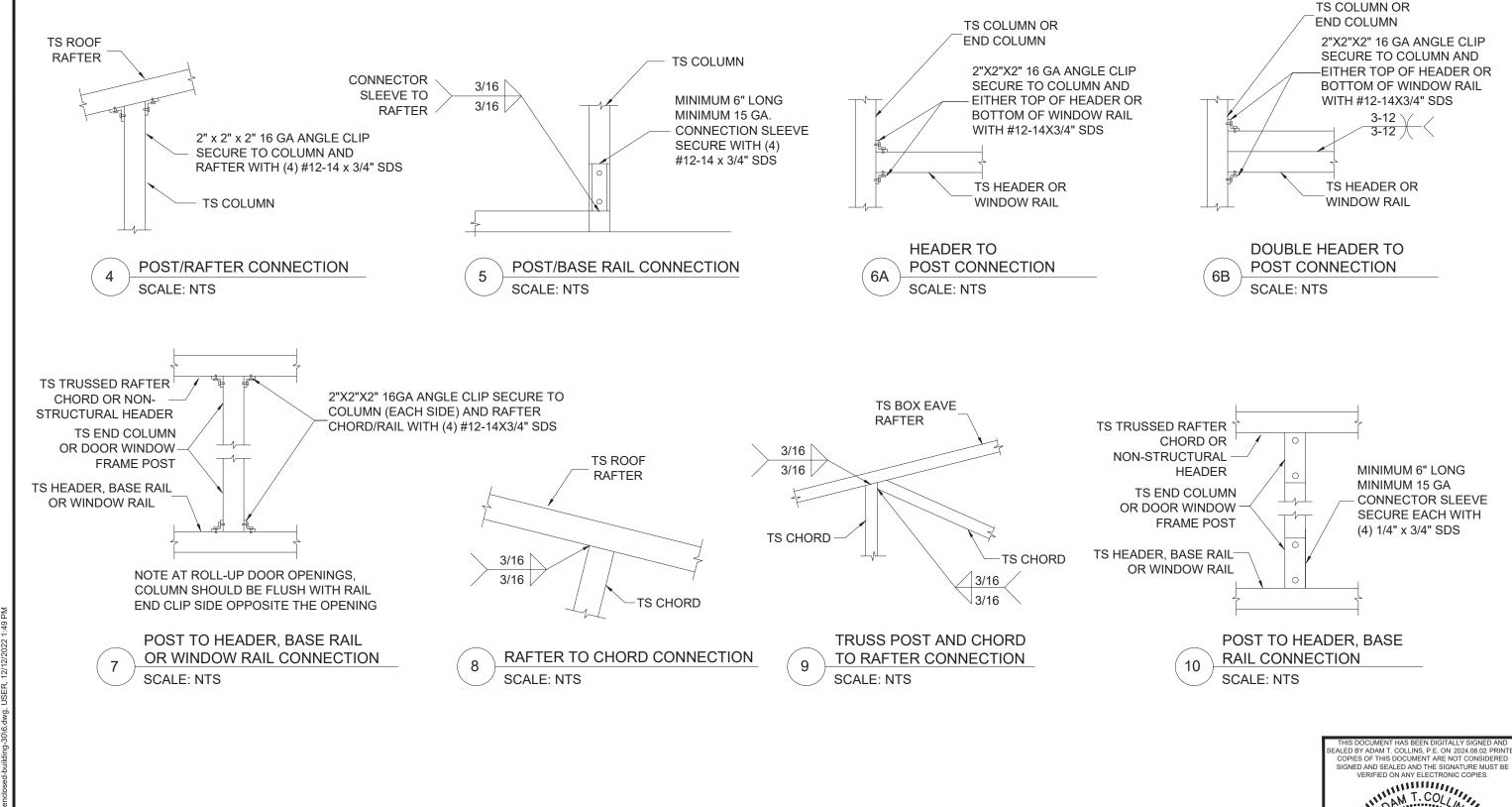
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ELITE METAL MANUFACTURING 10121 88TH TRACE CONNECTION DETAILS (2 OF 4)

SHEET TITLE

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S-6

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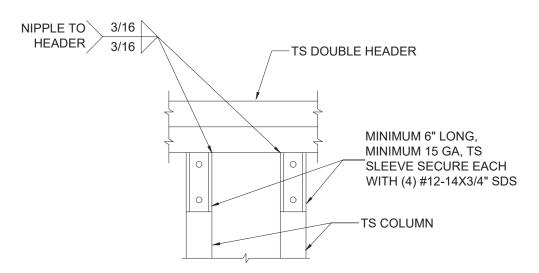
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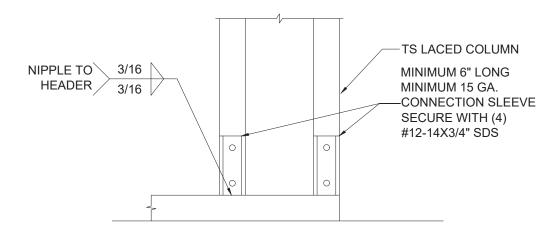
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DOUBLE HEADER TO POST CONNECTION
SCALE: NTS



POST/BASE RAIL CONNECTION

NIPPLE TO 3/16
HEADER 3/16

TS POST

MINIMUM 6" LONG,

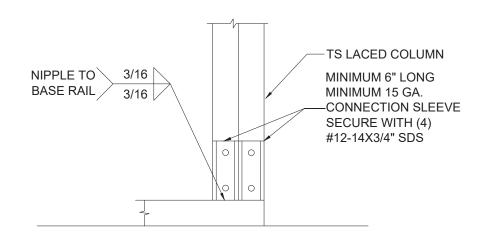
MINIMUM 15 GA, TS

SLEEVE SECURE EACH

WITH (4) #12-14X3/4" SDS

TS DOUBLE HEADER

POST/DOUBLE HEADER CONNECTION
SCALE: NTS



POST/BASE RAIL CONNECTION
SCALE: NTS

			_				
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SCALE: NTS

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ELITE METAL CONNECT MANUFACTURING 10121 88TH TRACE

CONNECTION DETAILS
(3 OF 4)

Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025 SHEET NO.
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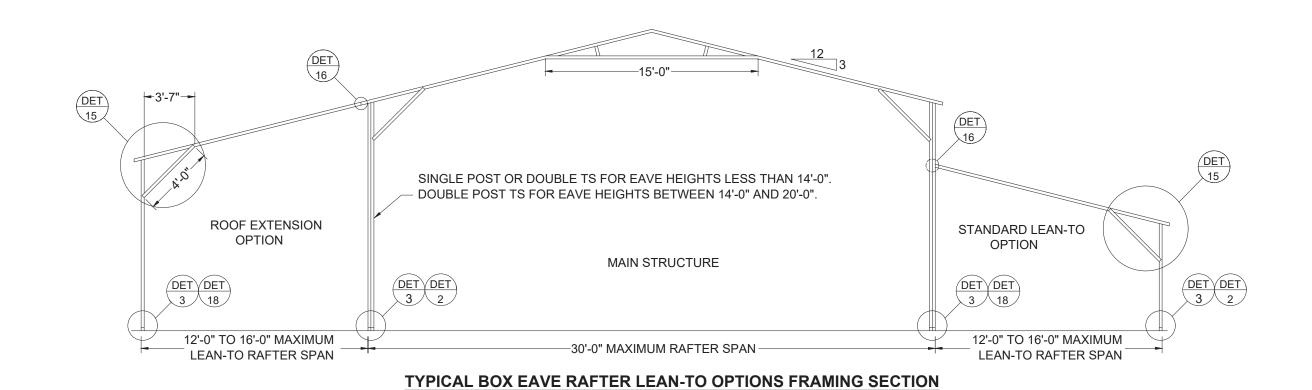
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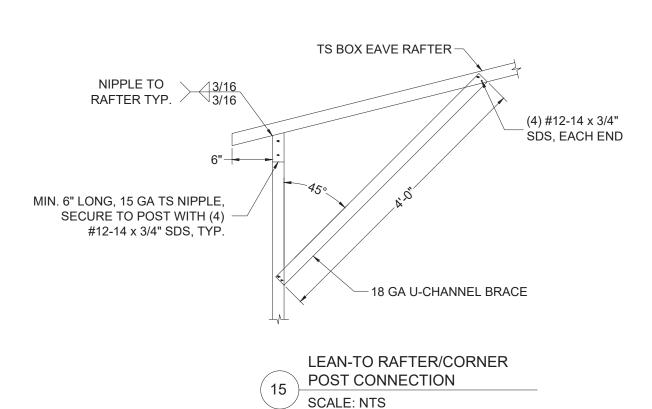
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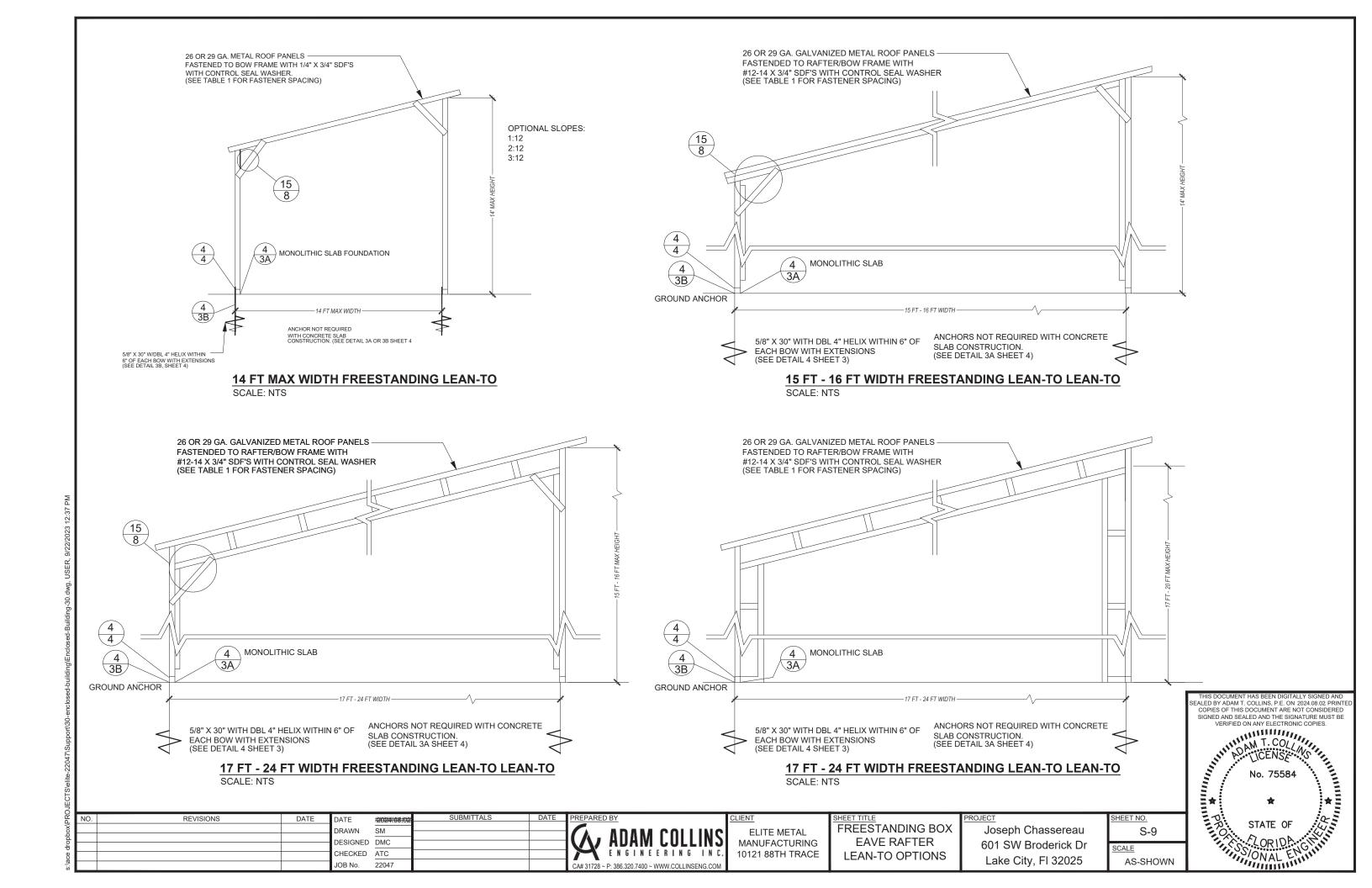
BOX EAVE RAFTER LEAN TO OPTIONS

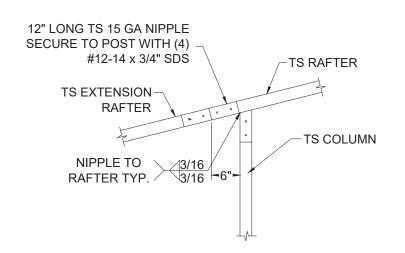
Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025

S-8 SCALE

HEET TITLE

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12" LONG TS 15 GA NIPPLE SECURE TO POST WITH (4) / NIPPLE TO #12-14 x 3/4" SDS RAFTER TYP. TS EXTENSION **RAFTER** 3-12 TS RAFTER TS COLUMN 2" x 2" x 2" 16 GA ANGLE CLIP -6"= SECURE TO COLUMN AND EITHER TOP OF HEADER OR-**BOTTOM OF WINDOW RAIL** WITH #12-14 x 3/4" SDS

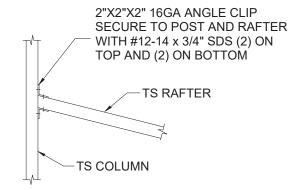
SIDE EXTENSION RAFTER/POST CONNECTION RAFTER SPAN LESS THAN 12'-0"

SCALE: NTS

SCALE: NTS

SIDE EXTENSION RAFTER/POST CONNECTION RAFTER SPAN BETWEEN 12'-0" AND 16'-0"

SCALE: NTS



2"X2"X2" 16GA ANGLE CLIP
SECURE TO POST AND RAFTER
WITH #12-14 x 3/4" SDS (2) ON
TOP AND (2) ON BOTTOM

TS DOUBLE RAFTER

TS COLUMN

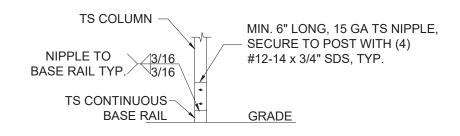
LEAN TO RAFTER/COLUMN CONNECTION
RAFTER SPANLESS THAN 12'-0"

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

ELITE METAL

MANUFACTURING

10121 88TH TRACE



LEAN-TO POST CONNECTION
SCALE: NTS

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CONNECTION DETAILS

(4 OF 4)

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601 SW Broderick Dr
Lake City, FI 32025

SHEET NO.
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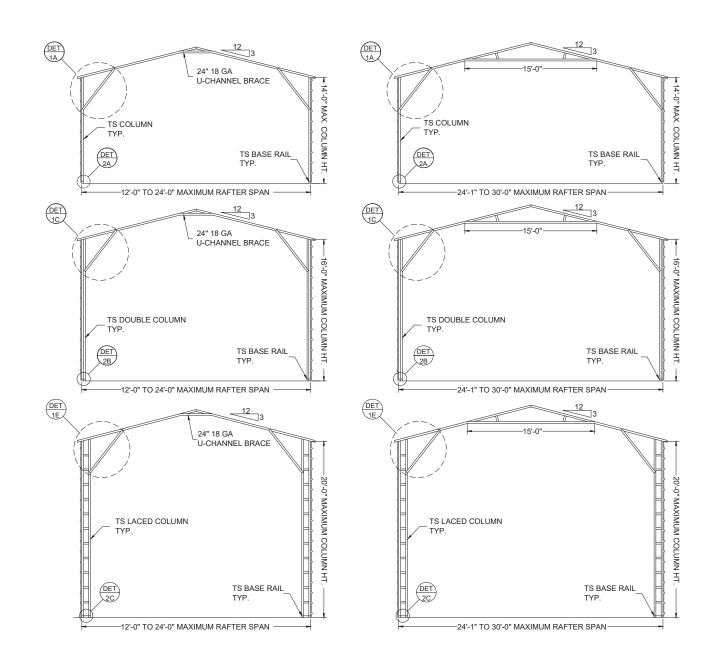
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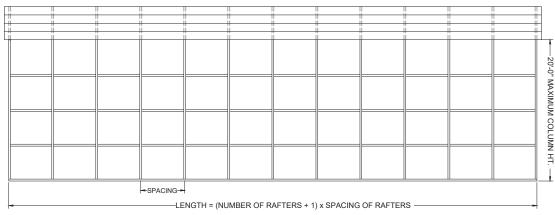
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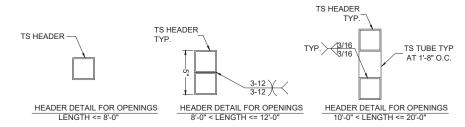




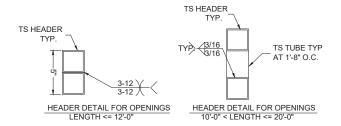
SPACING = 5'-0" FOR WIND SPEEDS BETWEEN 110 MPH AND 140 MPH SPACING = 4'-0" FOR WIND SPEEDS BETWEEN 140 MPH AND 180 MPH 1.125" 18 GA HAT CHANNELS CAN BE USED IN LIEU OF TS FOR GIRTS.

TYPICAL SIDE FRAME SECTION

SCALE: NTS



SIDE WALL OPTION HEADER



END WALL OPTION HEADER

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BOX EAVE FRAME

1.125" 18 GA FURRING CHANNEL FASTENED TO EACH RAFTER WITH (2) #12-14 x 3/4" SDS SPACED AT 48" O.C. MAX TS RAFTER

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

REVISIONS DATE 2024.08.0 HEET NO. **BOX EAVE RAFTER** Joseph Chassereau S-11 ORAWN SM **ELITE METAL** VERTICAL MANUFACTURING DESIGNED DMC 601 SW Broderick Dr SCALE CHECKED ATC 10121 88TH TRACE **ROOF-SIDING OPTION** Lake City, FI 32025 AS-SHOWN 22047 CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM



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

REINFORCING STEEL

- 1. REBAR SHALL BE ASTM A615 GRADE 60
- 2. SLAB REINFORCEMENT = WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
- CONCRETE COVER SHALL BE
- 3.1. 3" WHERE EXPOSED TO SOIL OR WATER.
- 3.2. 2" EVERYWHERE ELSE.
- 4. REBAR SHALL BE BENT WITHOUT HEATING.
- MINIMUM BEND = 6 X BAR DIAMETER

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2024.08.0

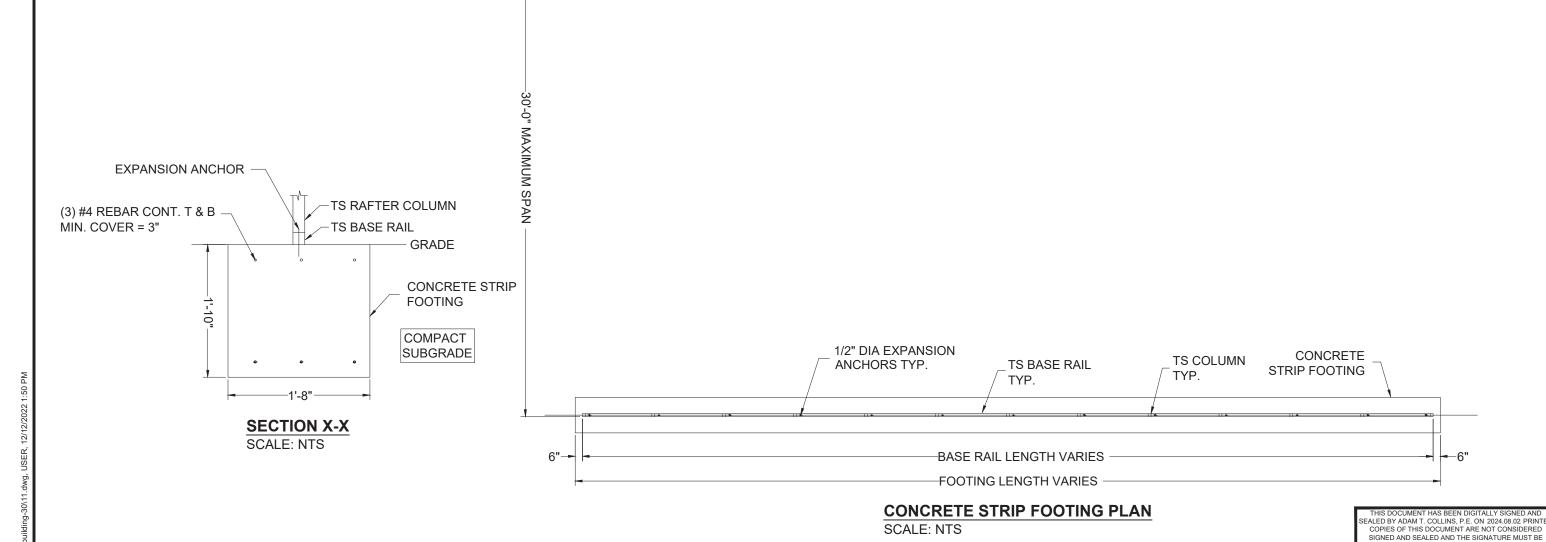
22047

DRAWN

DESIGNED DMC

CHECKED ATC

REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



ADAM COLLINS CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM

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ELITE METAL MANUFACTURING 10121 88TH TRACE OPTIONAL CONCRETE STRIP FOOTING

HEET TITLE

Joseph Chassereau 601 SW Broderick Dr Lake City, FI 32025

HEET NO. S-12 SCALE

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