

APPLICABLE CODES AND STANDARDS

1. 2023 FLORIDA BUILDING CODE (8TH EDITION)
2. 2021 INTERNATIONAL BUILDING CODE
3. ASCE 7-22: 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
6. TMS 402-16: BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
7. AWS D1.1: STRUCTURAL WELDING

INSTALLATION NOTES AND SPECIFICATIONS

1. ROOF PITCH SHALL NOT BE GREATER THAN 12H:4V
2. END WALL COLUMNS (POST) AND SIDE WALL COLUMNS ARE THE SAME U.N.O.
3. 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.

3.1. 29 GA METAL PANELS SHALL BE FASTENED DIRECTLY TO 18 GA HAT CHANNELS U.N.O.

3.2. 18 GA HAT CHANNELS SHALL BE SPACED 48" O.C. UNLESS DESIGN PRESSURES FROM TABLE 3 EXCEED THE MAX ALLOWABLE PRESSURES IN TABLE 2. THEN THE SPACING SHALL BE 24" O.C. IN THE ZONES THAT EXCEED THE MAX PRESSURES.
4. FASTENER SPACING ON-CENTERS ALONG RAFTERS OR PURLINS, AND POSTS SHALL BE:

4.1. INTERIOR = 9"

4.2. END = 6".
5. FASTENERS SHALL BE #12-14 x 3/4" SELF-DRILLING SCREWS (SDS), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. APPLICABLE ONLY FOR:

5.1. MEAN ROOF HEIGHT OF 20'-0" OR LESS

5.2. ROOF SLOPES OF 18° (4:12 PITCH) OR LESS.

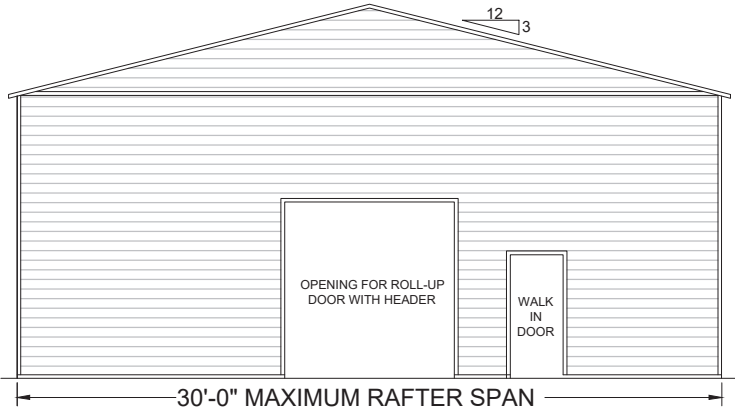
5.3. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
6. ANCHORS SHALL BE INSTALLED THROUGH THE BASE RAIL WITHIN 6" OF EACH RAFTER COLUMN ALONG SIDES AND ENDS.
7. STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR WITH WELDED NUT x 30" LONG AND MAY BE USED IN SUITABLE SOILS.

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.

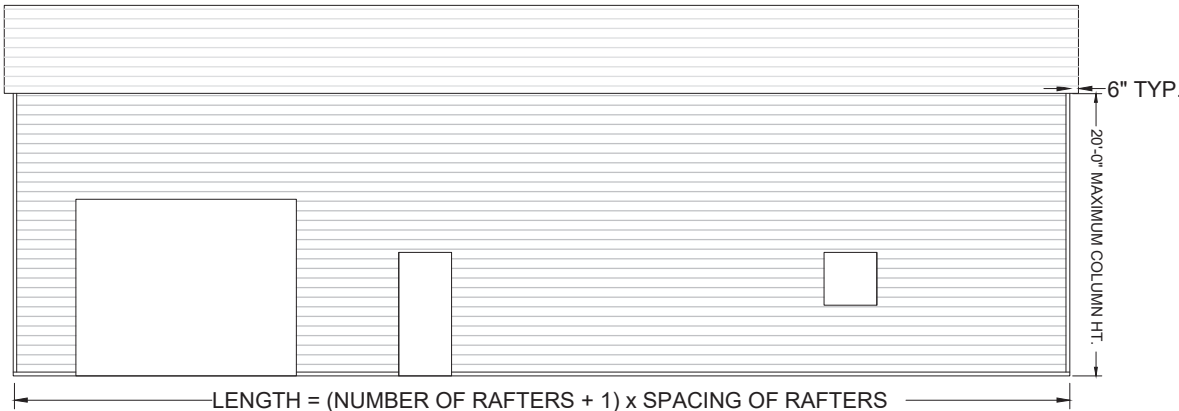
DESIGN LOADS

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

ENCLOSED METAL BUILDING DESIGN  
30FT WIDE X 65FT LONG X 12FT EAVE HT.



TYPICAL ELEVATION - BOX EAVE  
SCALE: NTS



TYPICAL SIDE ELEVATION  
SCALE: NTS

TABLE 1  
BOW/RAFTER FRAME, END POST, GROUND ANCHOR AND PANEL FASTENER SPACING SPECIFICATIONS

| RISK CATEGORY     | WIND EXPOSURE CATEGORY | ULT WIND SPEED (MPH) | NOMINAL WIND SPEED (MPH) | MAXIMUM RAFTER/BOW AND END POST SPACING (FEET) | FASTENER SPACING O.C FOR RAFTERS/PURLINS, & POSTS (INCHES) |                  |
|-------------------|------------------------|----------------------|--------------------------|------------------------------------------------|------------------------------------------------------------|------------------|
|                   |                        |                      |                          |                                                | INTERIOR BOWS/RAFTERS                                      | END BOWS/RAFTERS |
| I, II, III, or IV | B, C, or D             | 115 - 150            | 89 - 116                 | 5.0                                            | 6                                                          | 6                |
|                   |                        | 151 - 180            | 117 - 139                | 4.0                                            | 6                                                          | 6                |

- NOTES:
1. SPECIFICATIONS APPLICABLE TO 26 OR 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 12 OR 14 GAUGE STEEL TUBE BOW FRAMES.
2. FASTENERS CONSIST OF 1/4"-14X1" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.
3. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14°(3:12 PITCH). 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.

TABLE 2

| MEMBER       | PRODUCT APPROVAL NUMBER | MAX WIND DESIGN 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                     | CTP                       |

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

LEAN-TO INDEX

| BUILDING SIDE | LEAN-TO SIZE (FT) |
|---------------|-------------------|
| LEFT          |                   |
| RIGHT         |                   |
| FRONT         |                   |
| REAR          |                   |



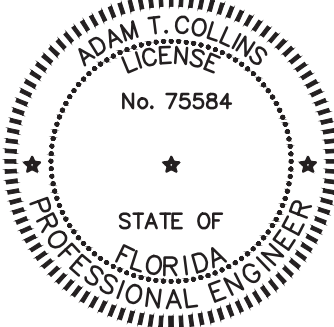
DRAWING INDEX

| PAGE NO. | DESCRIPTION                                             |
|----------|---------------------------------------------------------|
| S-1      | NOTES AND SPECIFICATIONS                                |
| S-2      | BOX-BOW EAVE FRAME RAFTER ENCLOSED BUILDING             |
| S-3      | CONNECTION DETAILS (1 OF 4)                             |
| S-4      | BASE RAIL AND ANCHORAGE DETAILS                         |
| S-5      | BOX EAVE RAFTER END WALL, SIDE WALL AND OPENING FRAMING |
| S-6      | CONNECTION DETAILS (2 OF 4)                             |
| S-7      | CONNECTION DETAILS (3 OF 4)                             |
| S-8      | BOX EAVE RAFTER LEAN-TO OPTIONS                         |
| S-9      | FREESTANDING BOX EAVE RAFTER LEAN-TO OPTIONS            |
| S-10     | CONNECTION DETAILS (4 OF 4)                             |
| S-11     | BOX EAVE RAFTER VERTICAL ROOF-SIDING OPTION             |
| S-12     | OPTIONAL CONCRETE STRIP FOOTING                         |
| S-13     | OPTIONAL HELICAL ANCHORING DETAIL                       |

TABLE 3

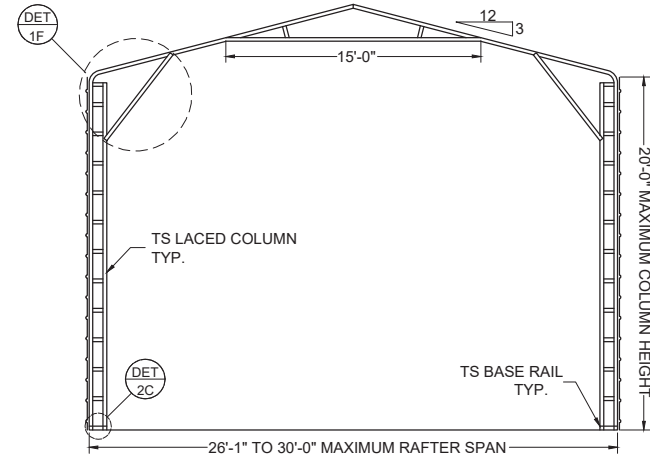
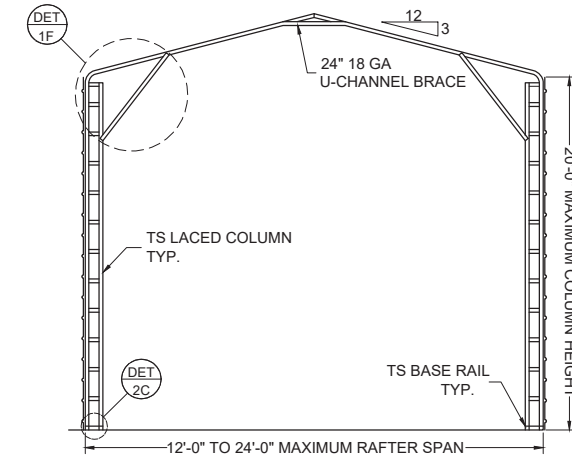
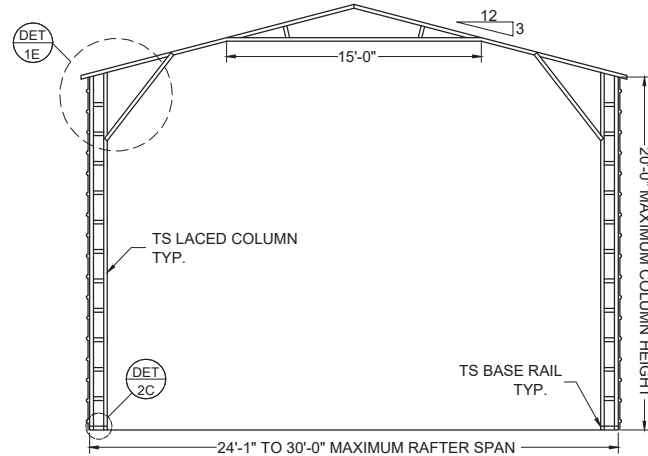
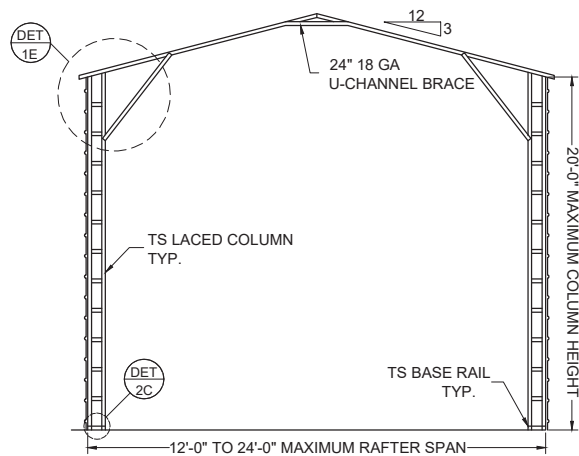
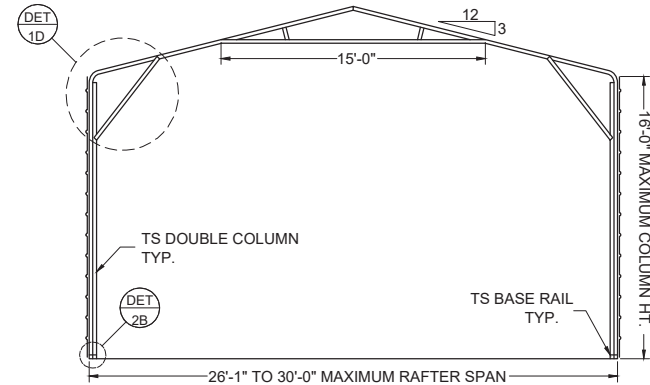
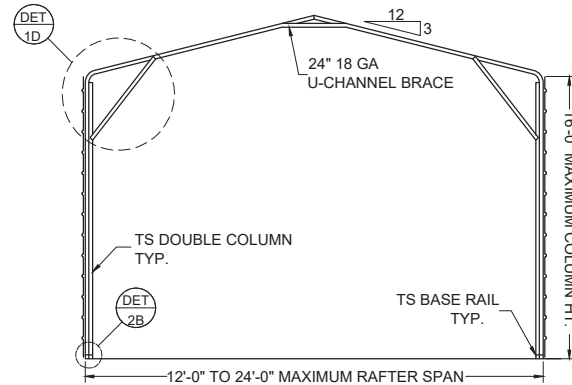
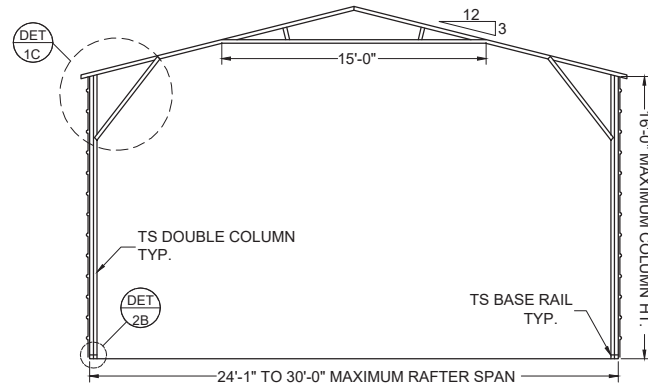
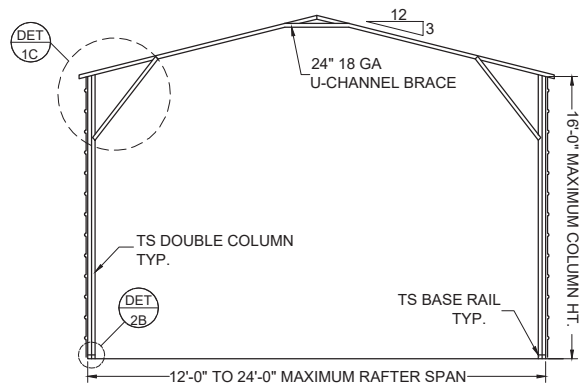
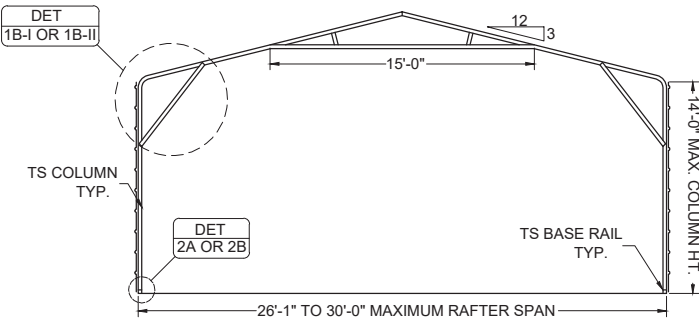
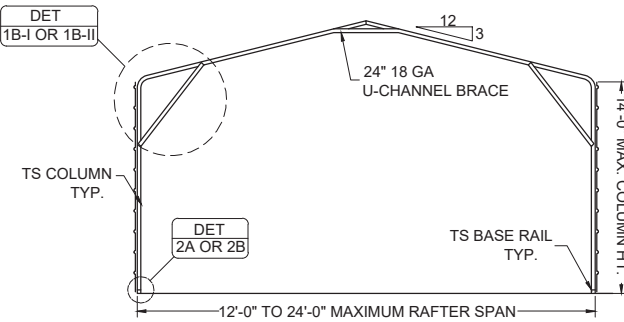
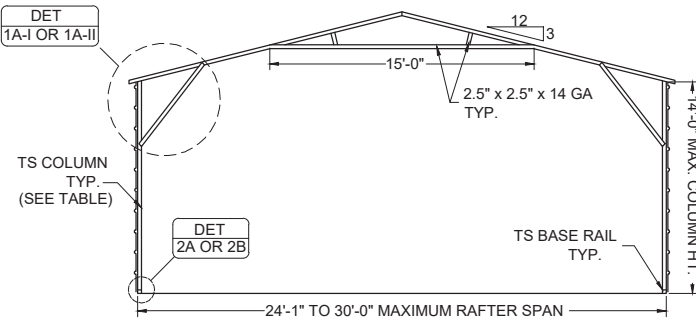
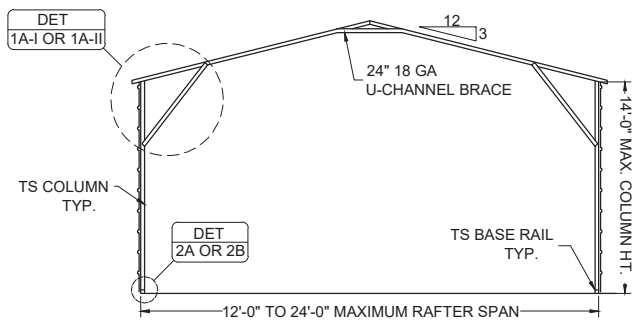
| COMPONENTS AND CLADDING DESIGN PRESSURES MEAN ROOF HT 25 FT, EXPOSURE C (PSF) |      |       |      |       |      |       |      |       |      |       |      |       |      |        |
|-------------------------------------------------------------------------------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|--------|
| Zone                                                                          | 120  |       | 130  |       | 140  |       | 150  |       | 160  |       | 170  |       | 180  |        |
|                                                                               | POS  | NEG   | POS  | NEG   | POS  | NEG   | POS  | NEG   | POS  | NEG   | POS  | NEG   | POS  | NEG    |
| 1                                                                             | 9.7  | -20.7 | 11.5 | -24.3 | 13.2 | -28.2 | 15.3 | -32.4 | 17.4 | -36.9 | 19.6 | -41.6 | 22.0 | -46.6  |
| 2                                                                             | 9.7  | -27.9 | 11.5 | -32.8 | 13.2 | -38.1 | 15.3 | -43.7 | 17.4 | -49.7 | 19.6 | -56.2 | 22.0 | -62.9  |
| 3                                                                             | 11.1 | -44.8 | 13.0 | -52.7 | 15.0 | -61.0 | 17.1 | -70.1 | 19.6 | -79.8 | 22.1 | -90.0 | 24.7 | -100.8 |
| 4                                                                             | 17.8 | -19.6 | 20.9 | -23.1 | 24.3 | -26.7 | 27.9 | -30.6 | 31.7 | -34.8 | 35.8 | -39.4 | 40.1 | -44.1  |
| 5                                                                             | 18.8 | -23.8 | 22.0 | -27.8 | 25.5 | -32.3 | 29.3 | -37.0 | 33.3 | -42.1 | 37.7 | -47.5 | 42.3 | -53.3  |

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## BOX EAVE FRAME

SCALE: NTS

## BOW EAVE FRAME

SCALE: NTS

| NO. | REVISIONS | DATE |
|-----|-----------|------|
|     |           |      |
|     |           |      |
|     |           |      |
|     |           |      |

|          |            |
|----------|------------|
| DATE     | 2025.02.27 |
| DRAWN    | SM         |
| DESIGNED | DMC        |
| CHECKED  | ATC        |
| JOB No.  | 22047      |

| SUBMITTALS | DATE |
|------------|------|
|            |      |
|            |      |
|            |      |
|            |      |

PREPARED BY

**ADAM COLLINS**  
ENGINEERING INC.

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

|                                                  |
|--------------------------------------------------|
| CLIENT                                           |
| ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE |

|                                                   |
|---------------------------------------------------|
| SHEET TITLE                                       |
| BOX-BOW EAVE<br>FRAME RAFTER<br>ENCLOSED BUILDING |

|                                                          |
|----------------------------------------------------------|
| PROJECT                                                  |
| Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 |

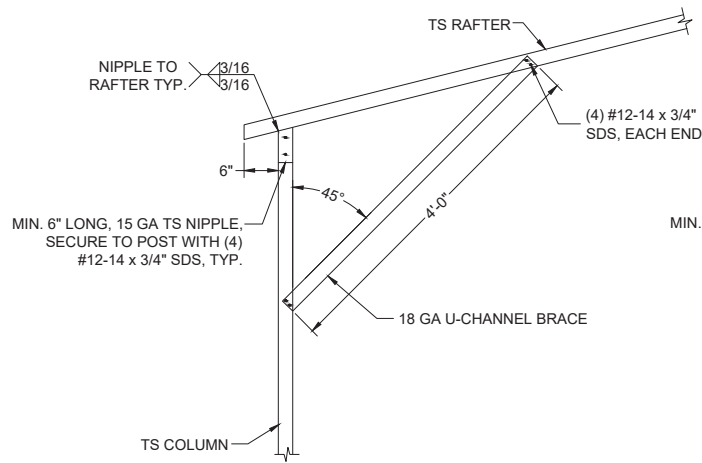
|           |
|-----------|
| SHEET NO. |
| S-2       |
| SCALE     |
| AS-SHOWN  |

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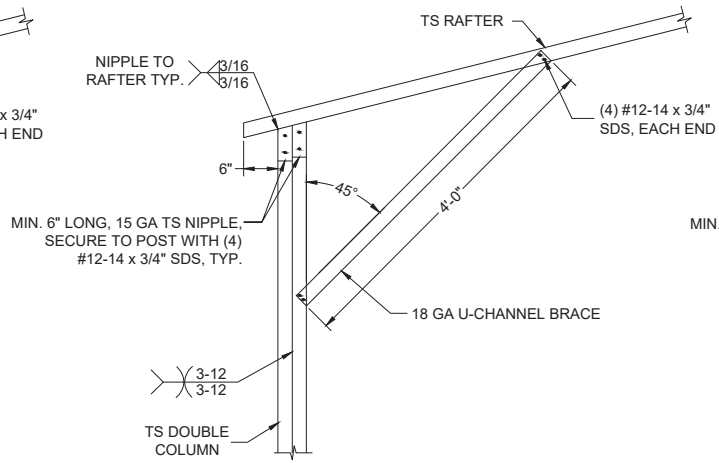
ADAM T. COLLINS  
LICENSE  
No. 75584

STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

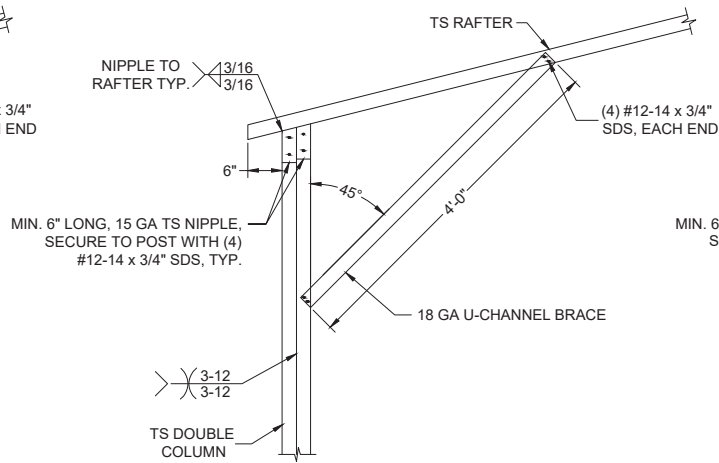
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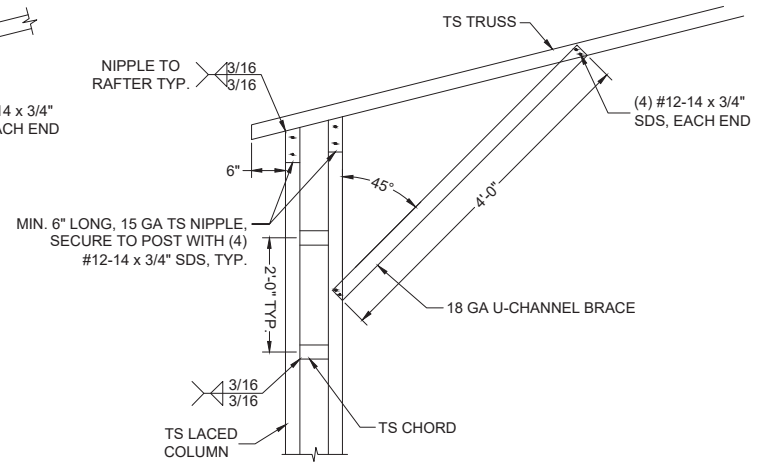
1A-I BOX EAVE RAFTER/CORNER POST  
CONNECTION 30'(MAX.)W x 14'H  
SCALE: NTS



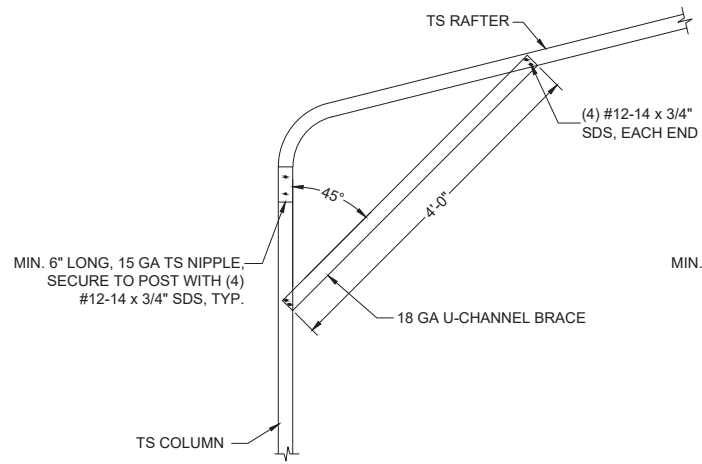
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CONNECTION 30'(MAX.)W x 14'H  
SCALE: NTS



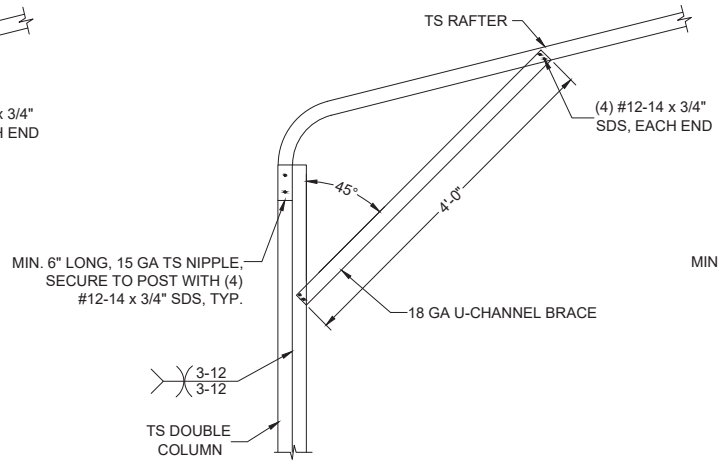
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CONNECTION 30'(MAX.)W x 16'H  
SCALE: NTS



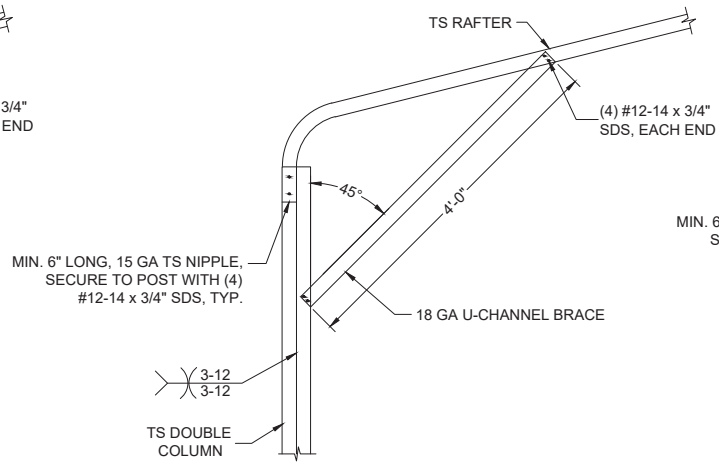
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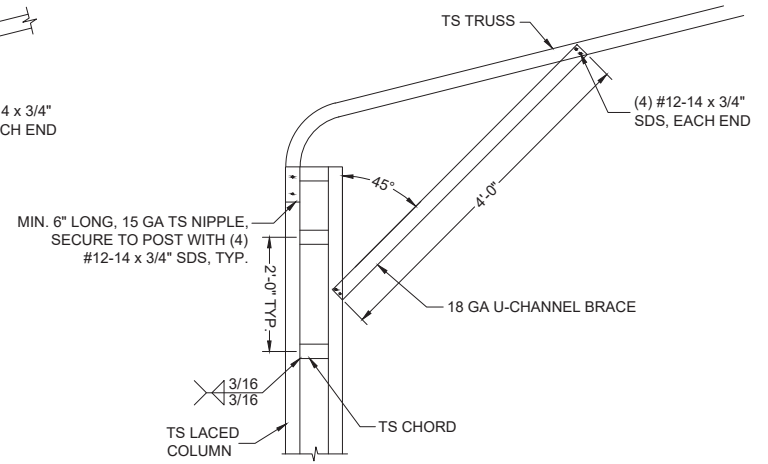
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CONNECTION 30'(MAX.)W x 14'H  
SCALE: NTS



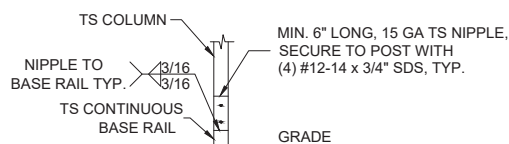
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CONNECTION 30'(MAX.)W x 14'H  
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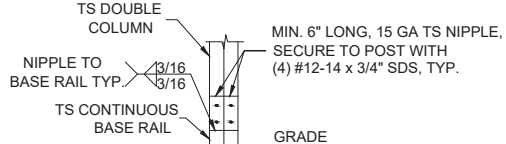
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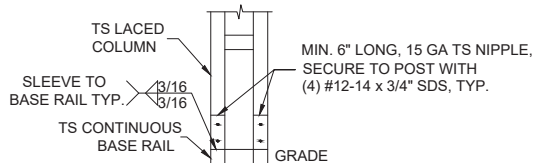
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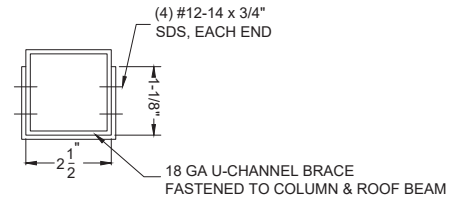
2A POST/BASE RAIL CONNECTION  
SCALE: NTS



2B POST/BASE RAIL CONNECTION  
SCALE: NTS

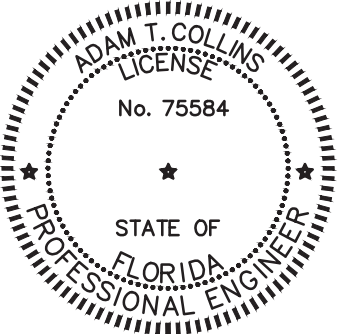


2C POST/BASE RAIL CONNECTION  
SCALE: NTS



BRACE SECTION  
SCALE: NTS

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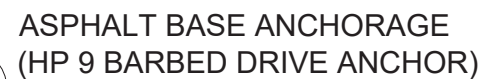


| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE     | PREPARED BY                                                                                                                                                                       | CLIENT                                           | SHEET TITLE                    | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |          |  <b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | CONNECTION DETAILS<br>(1 OF 4) | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-3       |
|     |           |      | DESIGNED | DMC        |            | SCALE    |                                                                                                                                                                                   |                                                  |                                |                                                          |           |
|     |           |      | CHECKED  | ATC        |            | AS-SHOWN |                                                                                                                                                                                   |                                                  |                                |                                                          |           |
|     |           |      | JOB No.  | 22047      |            |          |                                                                                                                                                                                   |                                                  |                                |                                                          |           |

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

1. REBAR SHALL BE ASTM A615 GRADE 60
2. SLAB REINFORCEMENT = WELDED WIRE FABRIC PER ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT
3. 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.
5. MINIMUM BEND = 6 X BAR DIAMETER
6. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.

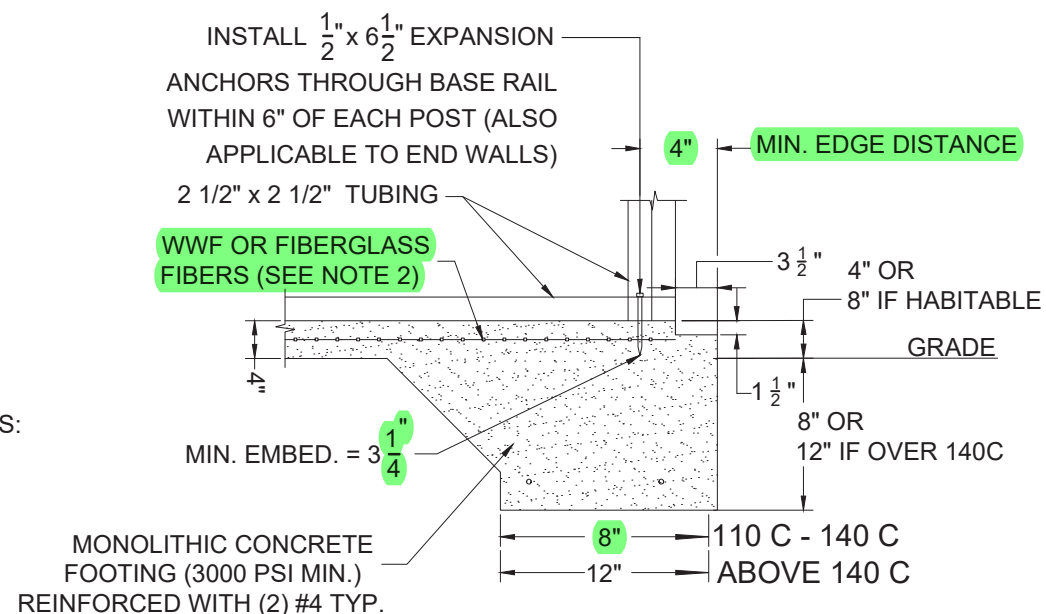
1. USE MINIMUM (2) 4" HELICES WITH 30" EMBEDMENT FOR THE FOLLOWING SOILS:
  - 1.1. VERY DENSE AND/OR CEMENTED SANDS
  - 1.2. COARSE GRAVEL AND COBBLES
  - 1.3. CALICHE
  - 1.4. PRELOADED SILTS AND CLAYS
  - 1.5. CORALS
  - 1.6. MEDIUM DENSE COARSE SANDS
  - 1.7. SANDY GRAVEL
  - 1.8. VERY STIFF SILTS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



3C

SCALE: NTS

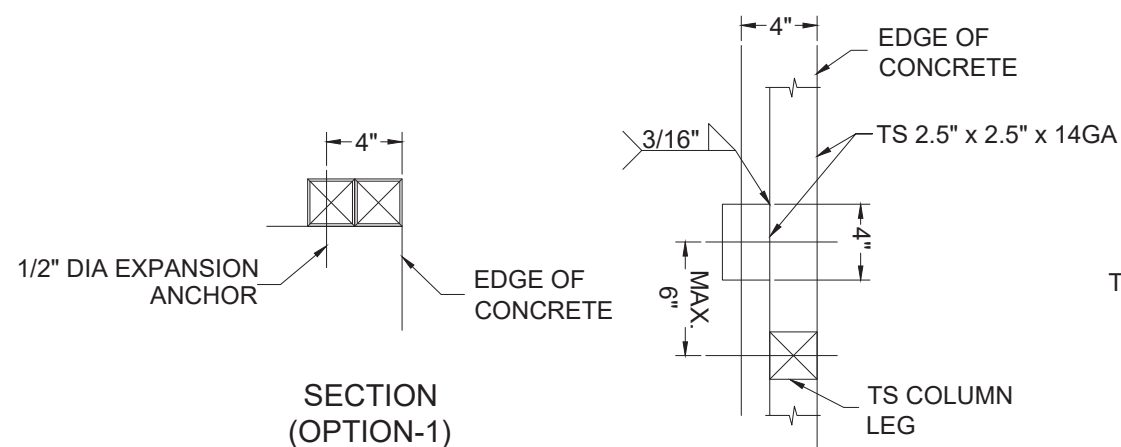
| MONOLITHIC FOOTER SIZE |                    |
|------------------------|--------------------|
| 110 C - 140 C          | 8" x 12" - (2) #4  |
| ABOVE 140 C            | 12" x 16" - (2) #4 |



## CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

3A

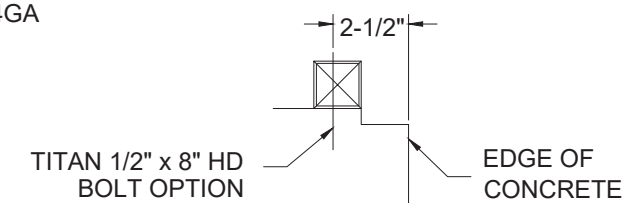
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TOP VIEW  
(OPTION-1)

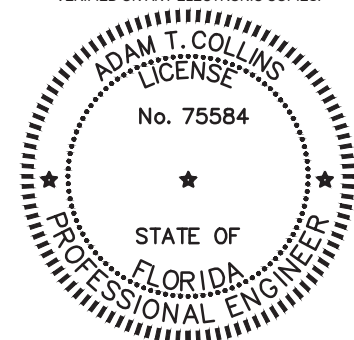
TYPICAL ANCHOR DETAIL WHEN BASE  
RAIL IS NEAR EDGE OF CONCRETE

SCALE: NTS

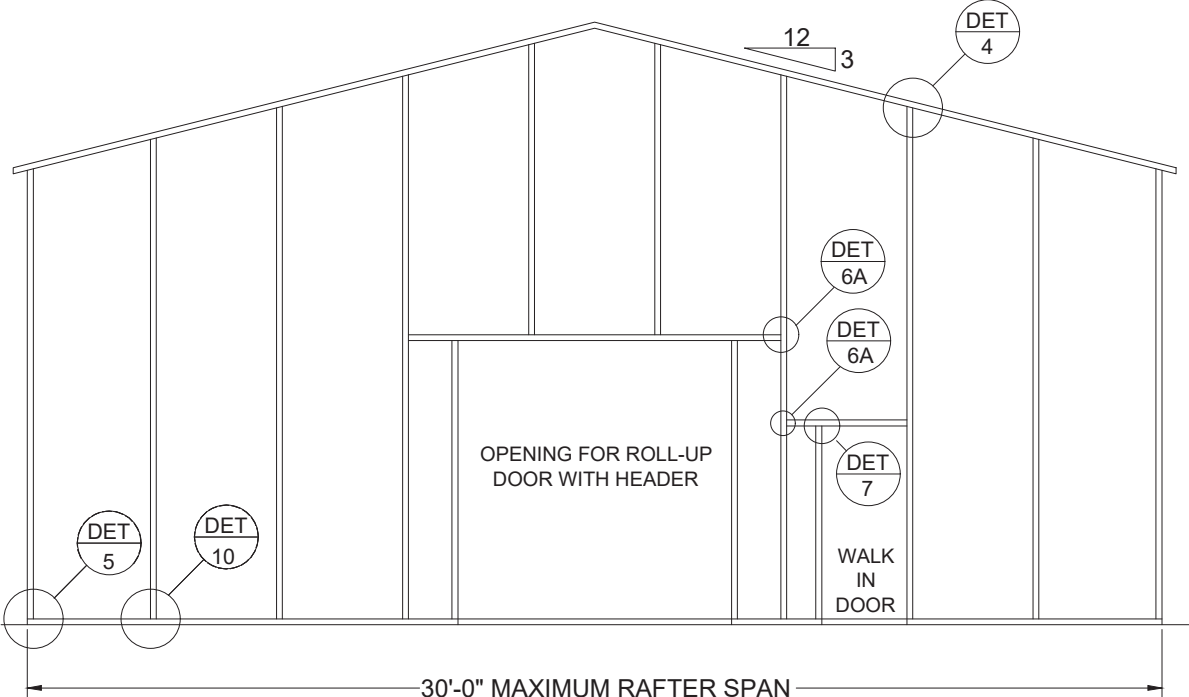


SECTION  
(OPTION-2)

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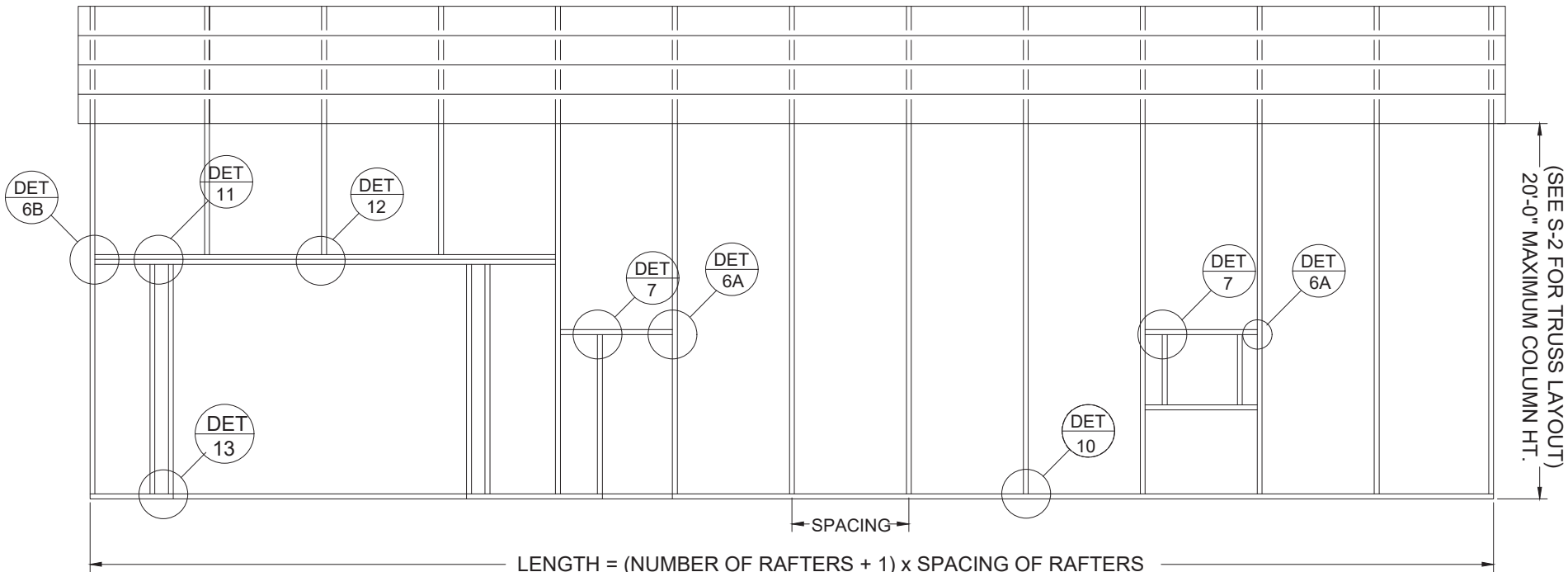


|     |           |      |          |            |            |      |                                                                                                                                                                                    |                                                  |                                    |                                                          |           |
|-----|-----------|------|----------|------------|------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------|----------------------------------------------------------|-----------|
| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                                                                                                        | CLIENT                                           | SHEET TITLE                        | PROJECT                                                  | SHEET NO. |
|     |           |      | DRAWN    | SM         |            |      |  <b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 - P: 386.320.7400 - WWW.COLLINSFENG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | BASE RAIL AND<br>ANCHORAGE DETAILS | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-4       |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                                                                                                                    |                                                  |                                    |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                                                                                                                    |                                                  |                                    |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                                                                                                                    |                                                  |                                    |                                                          |           |



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

| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                                                            | CLIENT                                           | SHEET TITLE                                                   | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|------|----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |      | <div>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM</div> <div><div>AC</div><div>ADAM COLLINS</div><div>ENGINEERING INC.</div></div> | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | BOX EAVE RAFTER END<br>WALL, SIDE WALL AND<br>OPENING FRAMING | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-5       |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                                                                        |                                                  |                                                               |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                                                                        |                                                  |                                                               |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                                                                        |                                                  |                                                               |                                                          |           |

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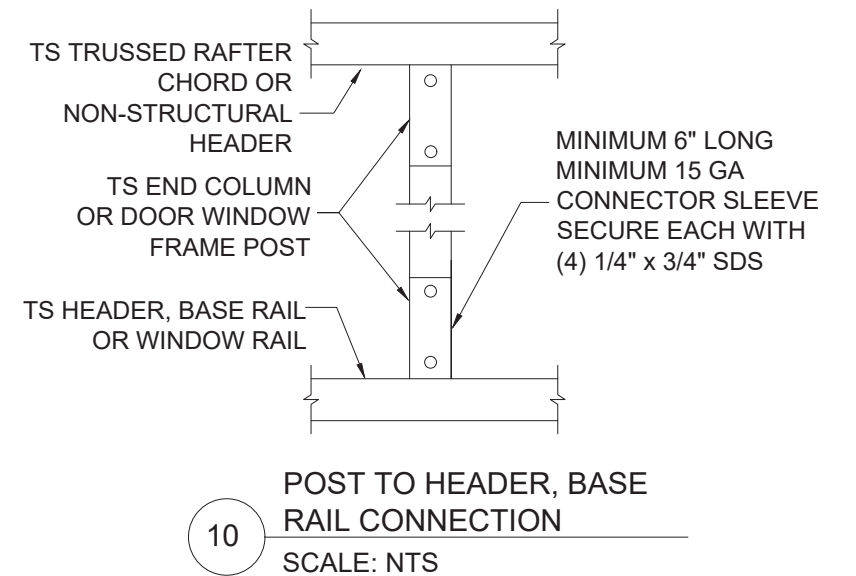
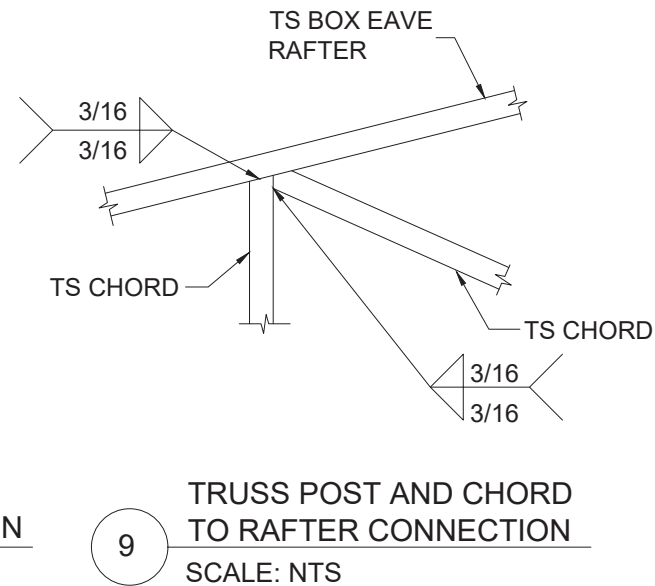
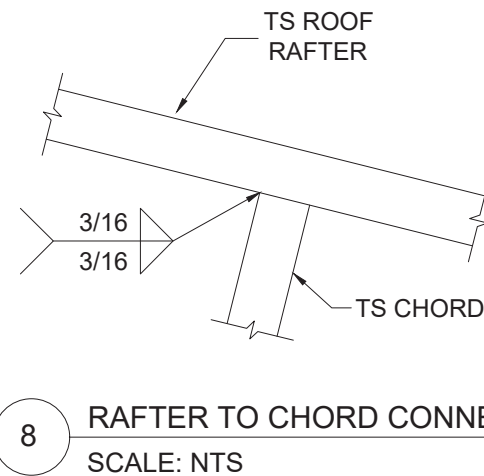
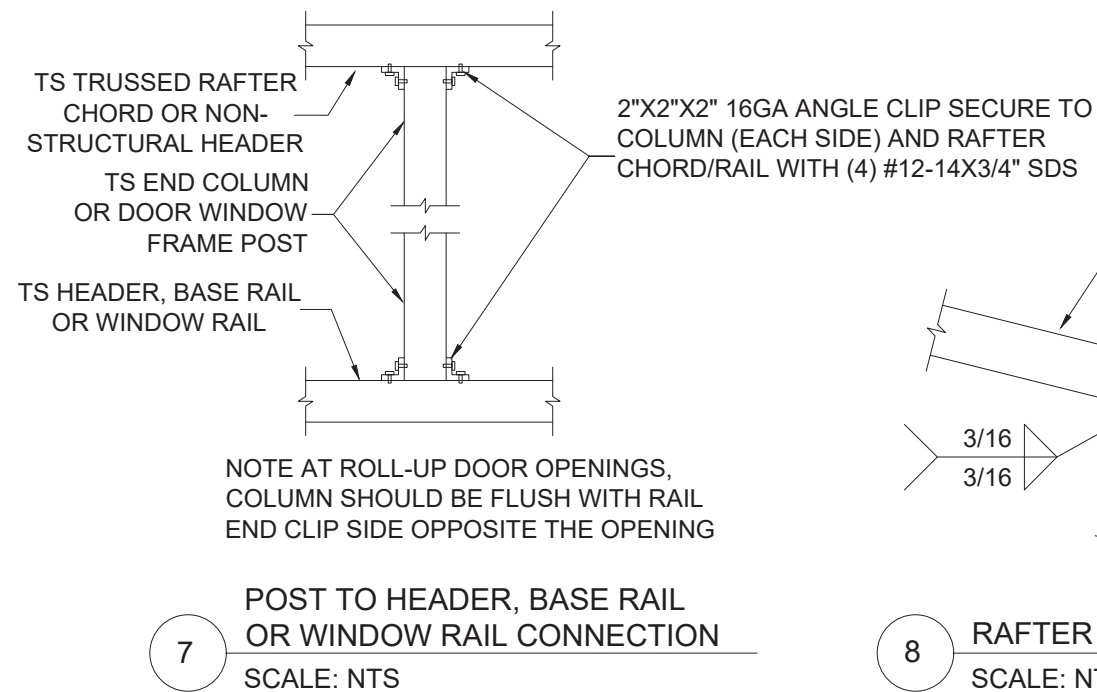
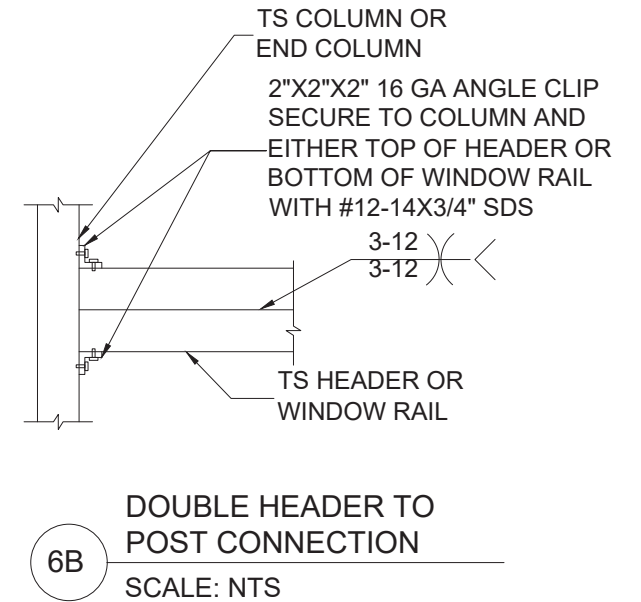
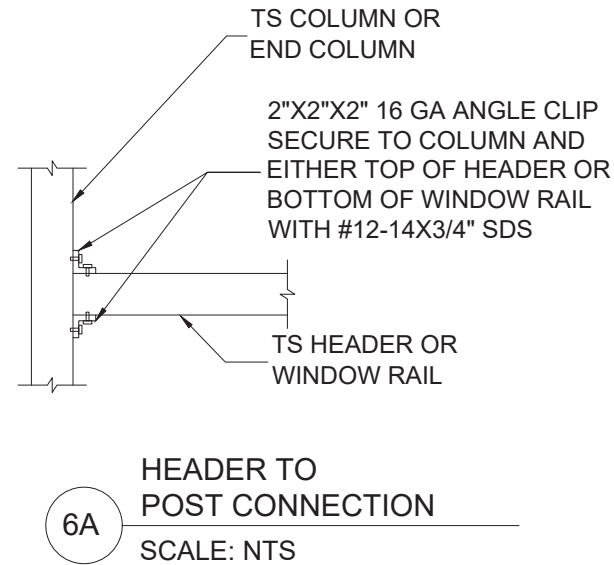
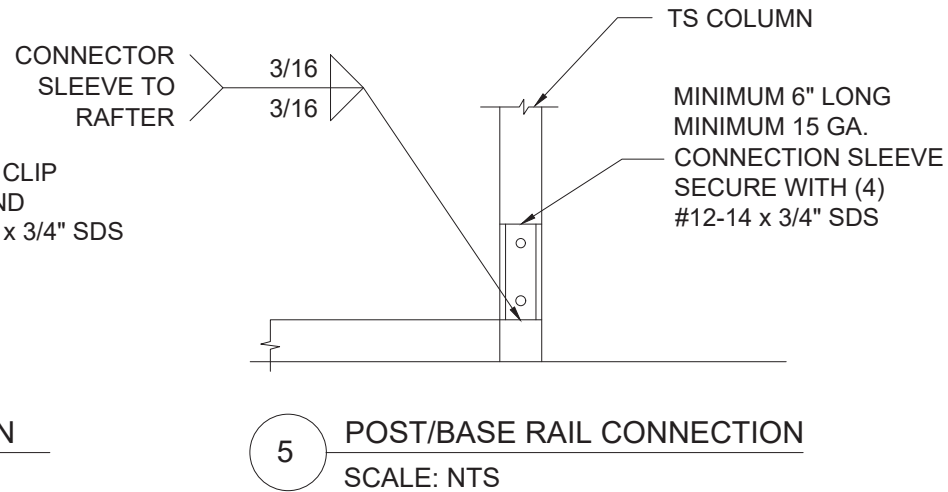
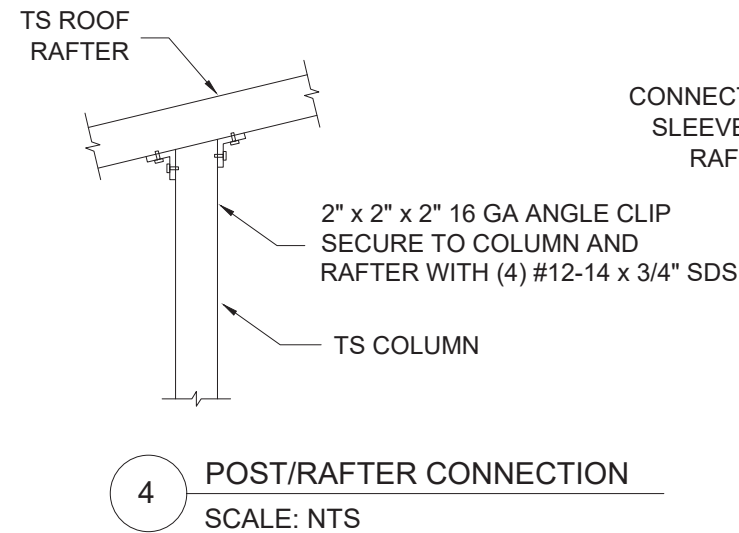
LICENSE

No. 75584

STATE OF FLORIDA

PROFESSIONAL ENGINEER

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| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE |
|-----|-----------|------|----------|------------|------------|------|
|     |           |      | DRAWN    | SM         |            |      |
|     |           |      | DESIGNED | DMC        |            |      |
|     |           |      | CHECKED  | ATC        |            |      |
|     |           |      | JOB No.  | 22047      |            |      |

| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE |
|-----|-----------|------|----------|------------|------------|------|
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|     |           |      | DESIGNED | DMC        |            |      |
|     |           |      | CHECKED  | ATC        |            |      |
|     |           |      | JOB No.  | 22047      |            |      |

PREPARED BY

**ADAM COLLINS**  
ENGINEERING INC.

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

CLIENT

ELITE METAL  
MANUFACTURING  
10121 88TH TRACE

SHEET TITLE

CONNECTION DETAILS  
(2 OF 4)

PROJECT

Bert Herrero  
644 SW Miracle St  
Lake City, FL 32024

SHEET NO.

S-6

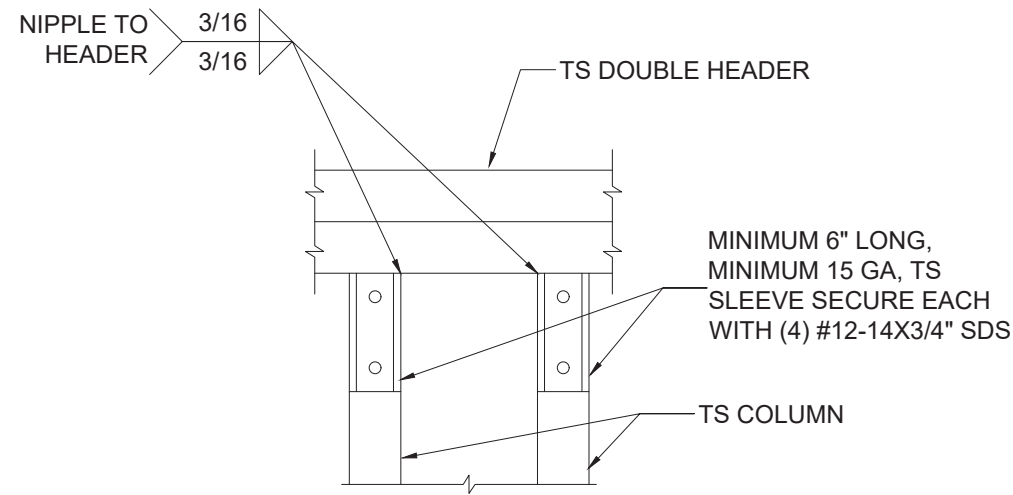
SCALE

AS-SHOWN

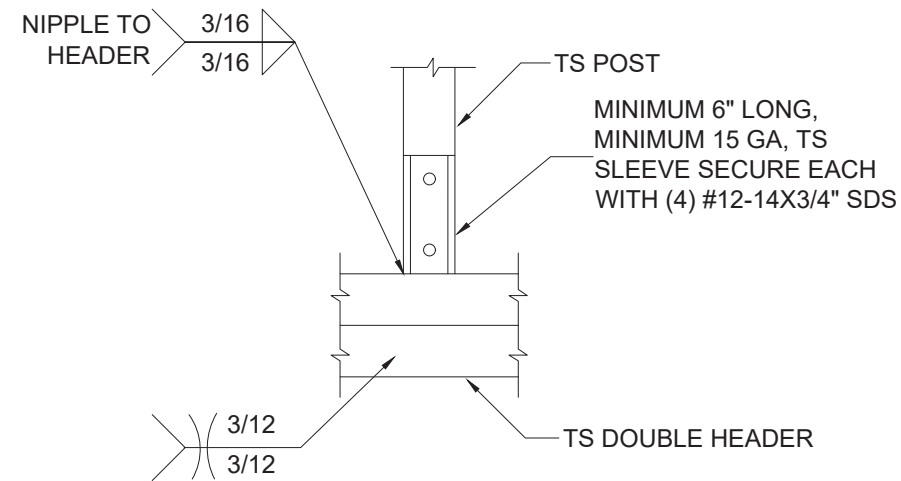
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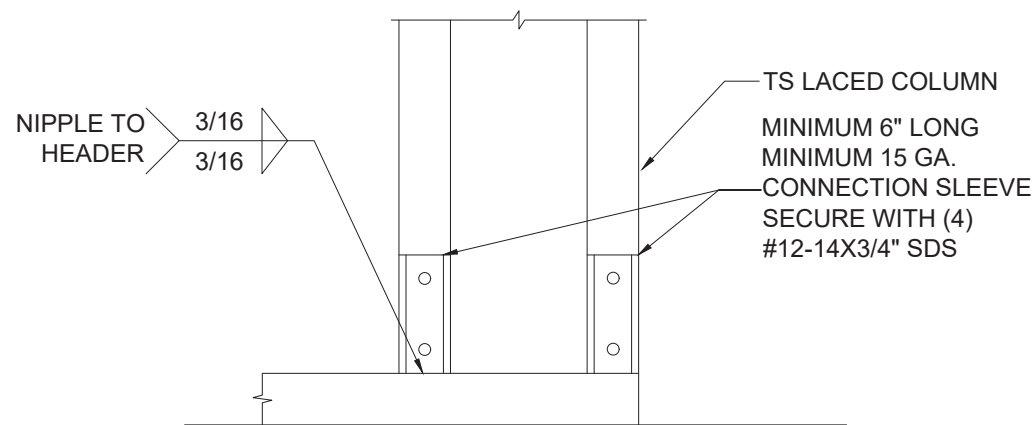
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FLORIDA  
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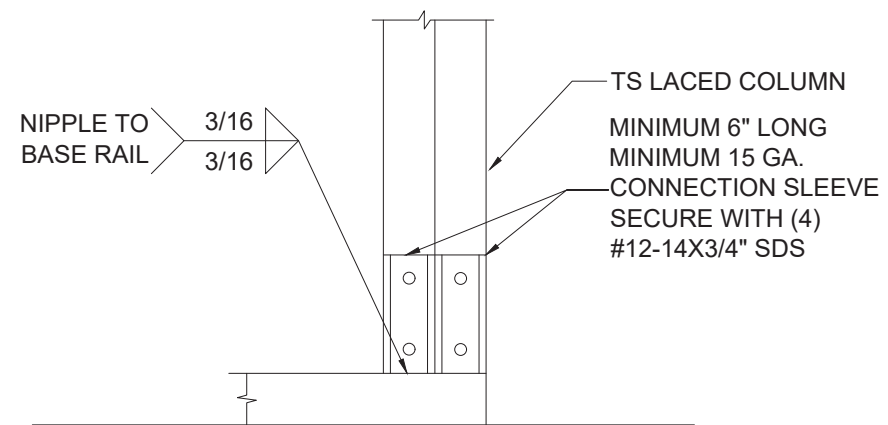
**11** DOUBLE HEADER TO POST CONNECTION  
SCALE: NTS



**12** POST/DOUBLE HEADER CONNECTION  
SCALE: NTS



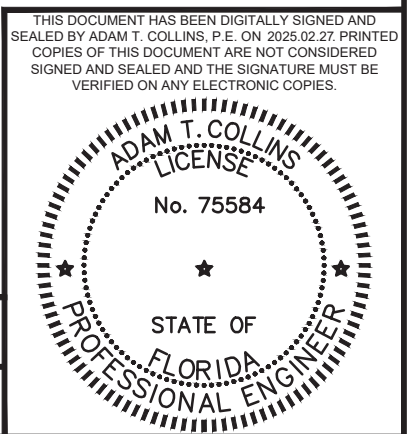
**13A** POST/BASE RAIL CONNECTION  
SCALE: NTS

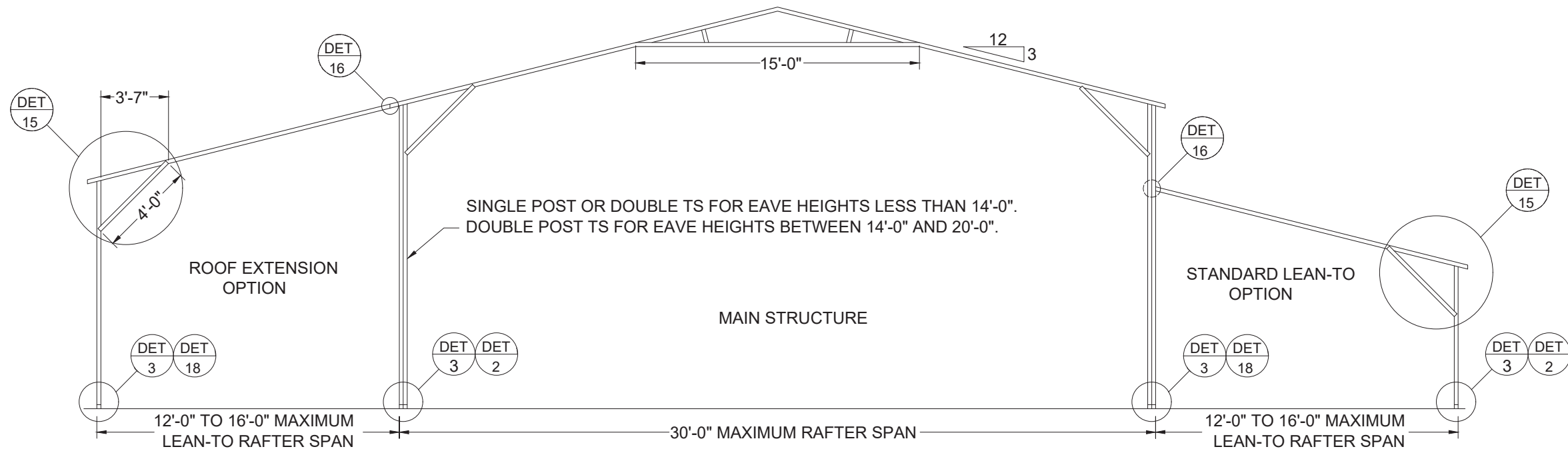


**13B** POST/BASE RAIL CONNECTION  
SCALE: NTS

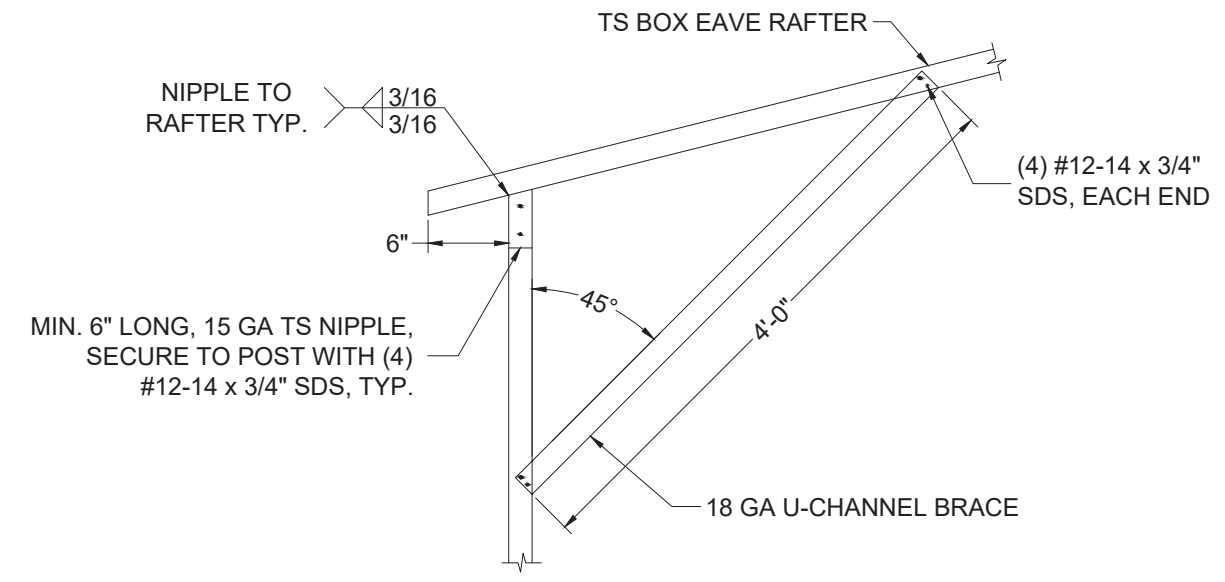
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| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                                                                                                       | CLIENT                                           | SHEET TITLE                    | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |      |  <b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | CONNECTION DETAILS<br>(3 OF 4) | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-7       |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                                                                                                                   |                                                  |                                |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                                                                                                                   |                                                  |                                |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                                                                                                                   |                                                  |                                |                                                          |           |





**TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION**  
SCALE: NTS

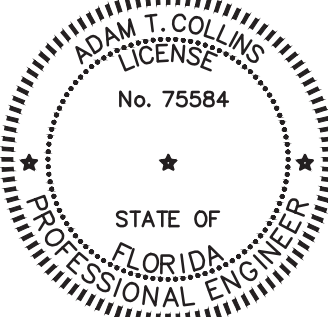


**LEAN-TO RAFTER/CORNER POST CONNECTION**  
SCALE: NTS

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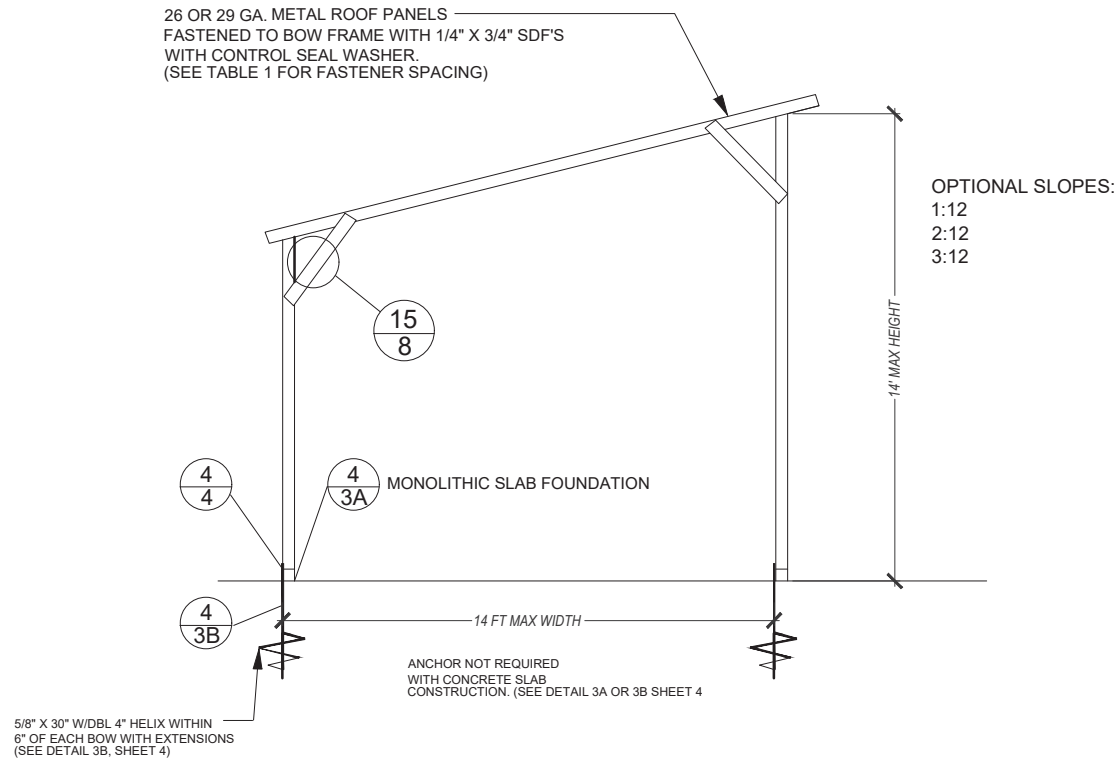
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|-----|-----------|------|----------|------------|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------|----------------------------------------------------------|-----------|
| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE     | PREPARED BY                                                                                                                                                                       | CLIENT                                           | SHEET TITLE                        | PROJECT                                                  | SHEET NO. |
|     |           |      | DRAWN    | SM         |            |          |  <b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | BOX EAVE RAFTER<br>LEAN TO OPTIONS | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-8       |
|     |           |      | DESIGNED | DMC        |            | SCALE    |                                                                                                                                                                                   |                                                  |                                    |                                                          |           |
|     |           |      | CHECKED  | ATC        |            | AS-SHOWN |                                                                                                                                                                                   |                                                  |                                    |                                                          |           |
|     |           |      | JOB No.  | 22047      |            |          |                                                                                                                                                                                   |                                                  |                                    |                                                          |           |

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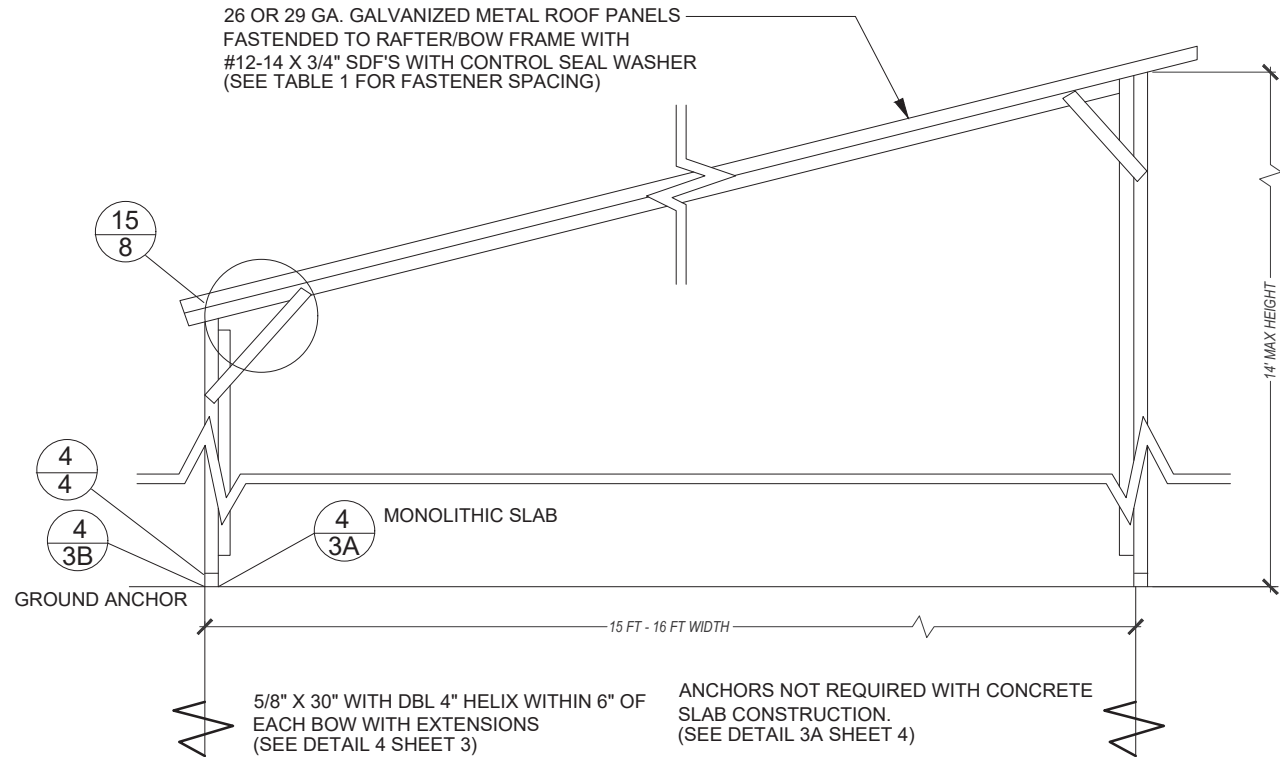


ADAM T. COLLINS  
LICENSE  
No. 75584  
STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

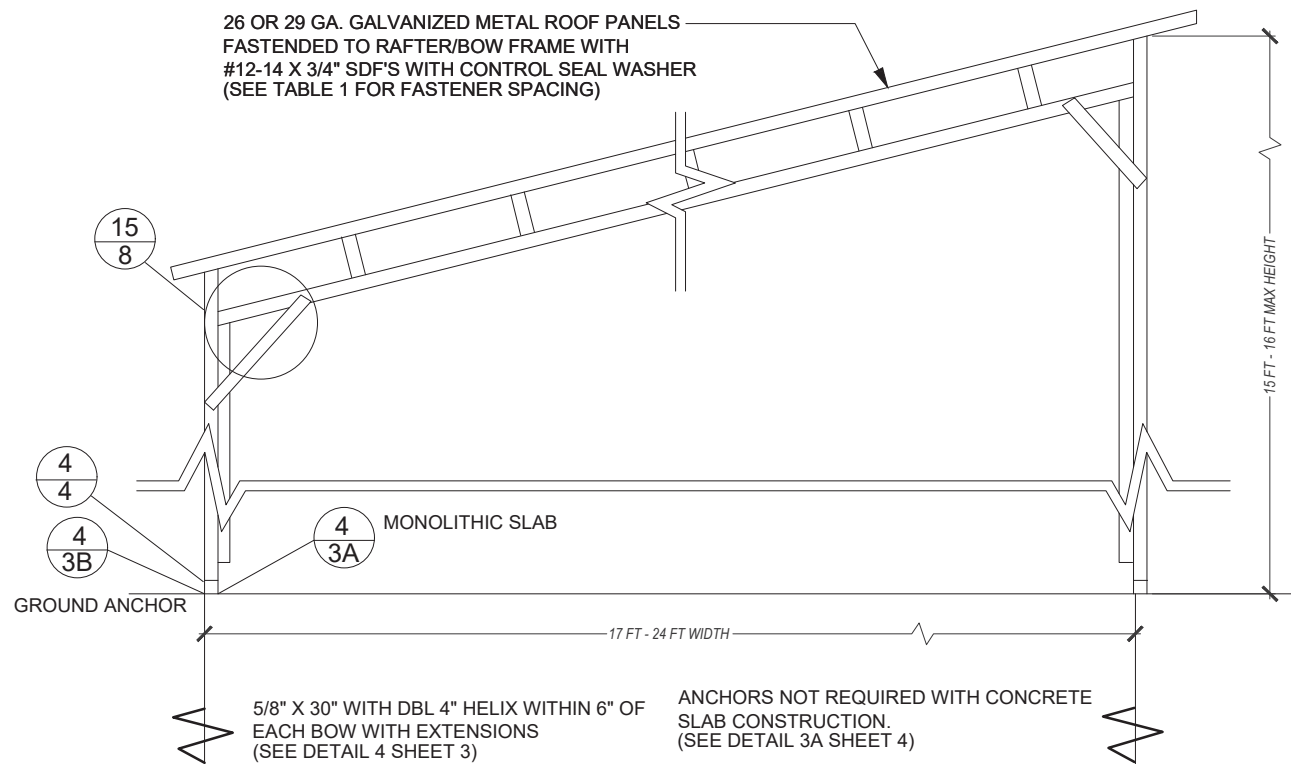
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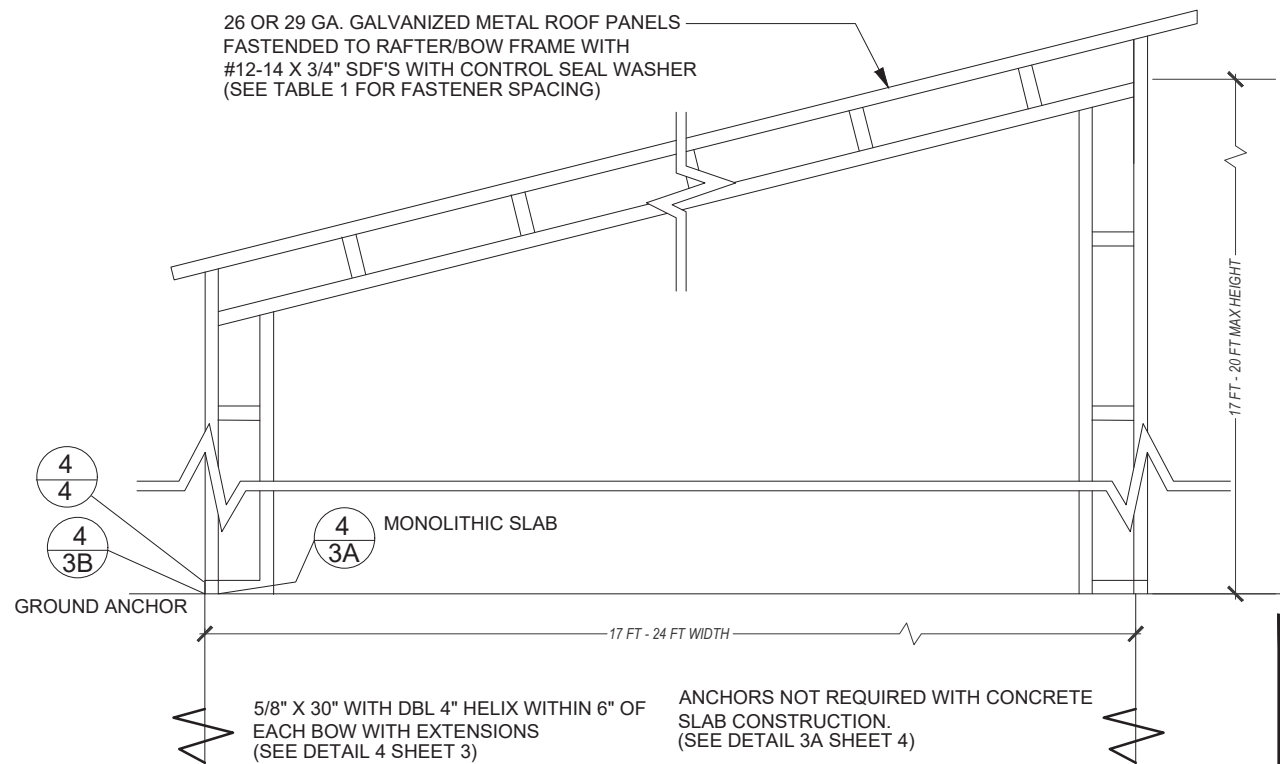
**14 FT MAX WIDTH FREESTANDING LEAN-TO**  
SCALE: NTS



**15 FT - 16 FT WIDTH FREESTANDING LEAN-TO LEAN-TO**  
SCALE: NTS



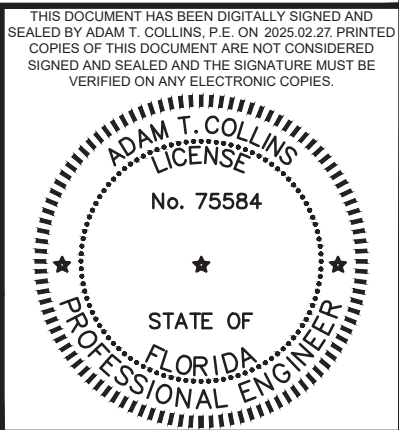
**17 FT - 24 FT WIDTH FREESTANDING LEAN-TO LEAN-TO**  
SCALE: NTS

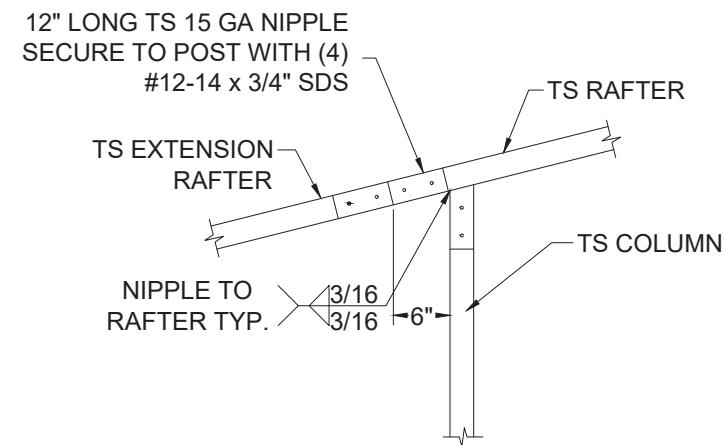


**17 FT - 24 FT WIDTH FREESTANDING LEAN-TO LEAN-TO**  
SCALE: NTS

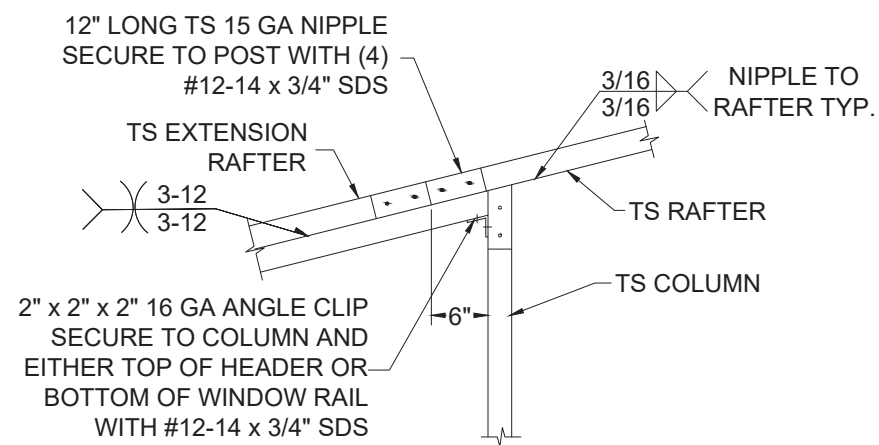
| NO. | REVISIONS | DATE | DATE       | REVISIONS | DATE | PREPARED BY   | CLIENT                    | SHEET TITLE                                  | PROJECT             | SHEET NO. |
|-----|-----------|------|------------|-----------|------|---------------|---------------------------|----------------------------------------------|---------------------|-----------|
|     |           |      | 2023.02.27 |           |      | ADAM COLLINS  | ELITE METAL MANUFACTURING | FREESTANDING BOX EAVE RAFTER LEAN-TO OPTIONS | Bert Herrero        | S-9       |
|     |           |      | 2023.02.27 |           |      | DESIGNED DMC  | 10121 88TH TRACE          |                                              | 644 SW Miracle St   | SCALE     |
|     |           |      | 2023.02.27 |           |      | CHECKED ATC   |                           |                                              | Lake City, FL 32024 | AS-SHOWN  |
|     |           |      | 2023.02.27 |           |      | JOB No. 22047 |                           |                                              |                     |           |

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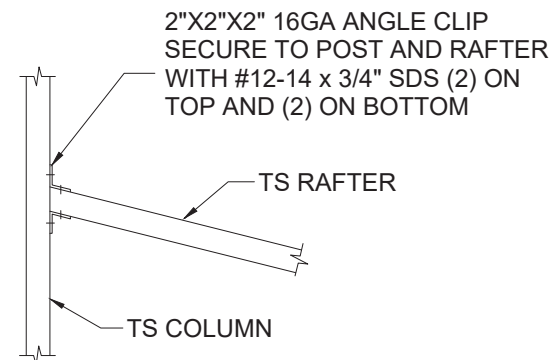




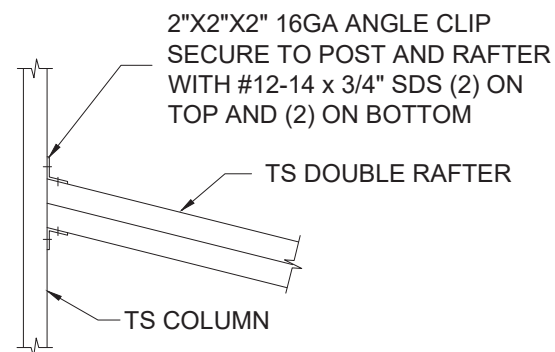
16A SIDE EXTENSION RAFTER/POST CONNECTION  
RAFTER SPAN LESS THAN 12'-0"  
SCALE: NTS



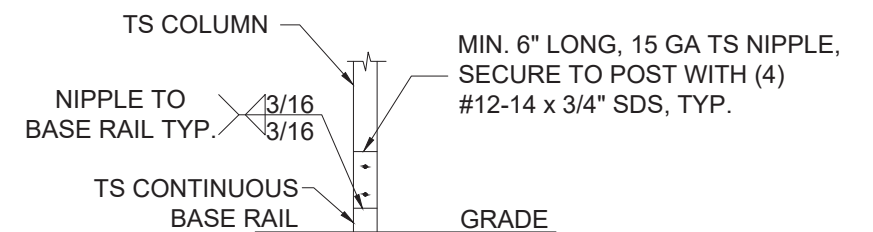
16B SIDE EXTENSION RAFTER/POST CONNECTION  
RAFTER SPAN BETWEEN 12'-0" AND 16'-0"  
SCALE: NTS



17A LEAN TO RAFTER/COLUMN CONNECTION  
RAFTER SPAN LESS THAN 12'-0"  
SCALE: NTS



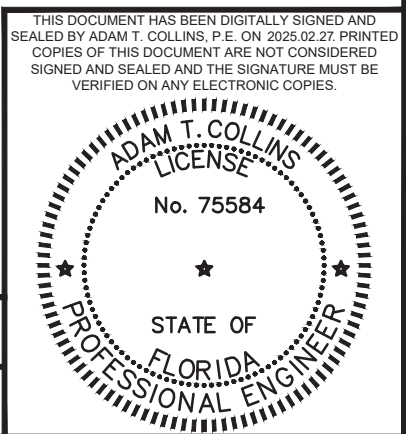
17B LEAN TO RAFTER/COLUMN CONNECTION  
RAFTER SPAN BETWEEN 12'-0" AND 16'-0"  
SCALE: NTS



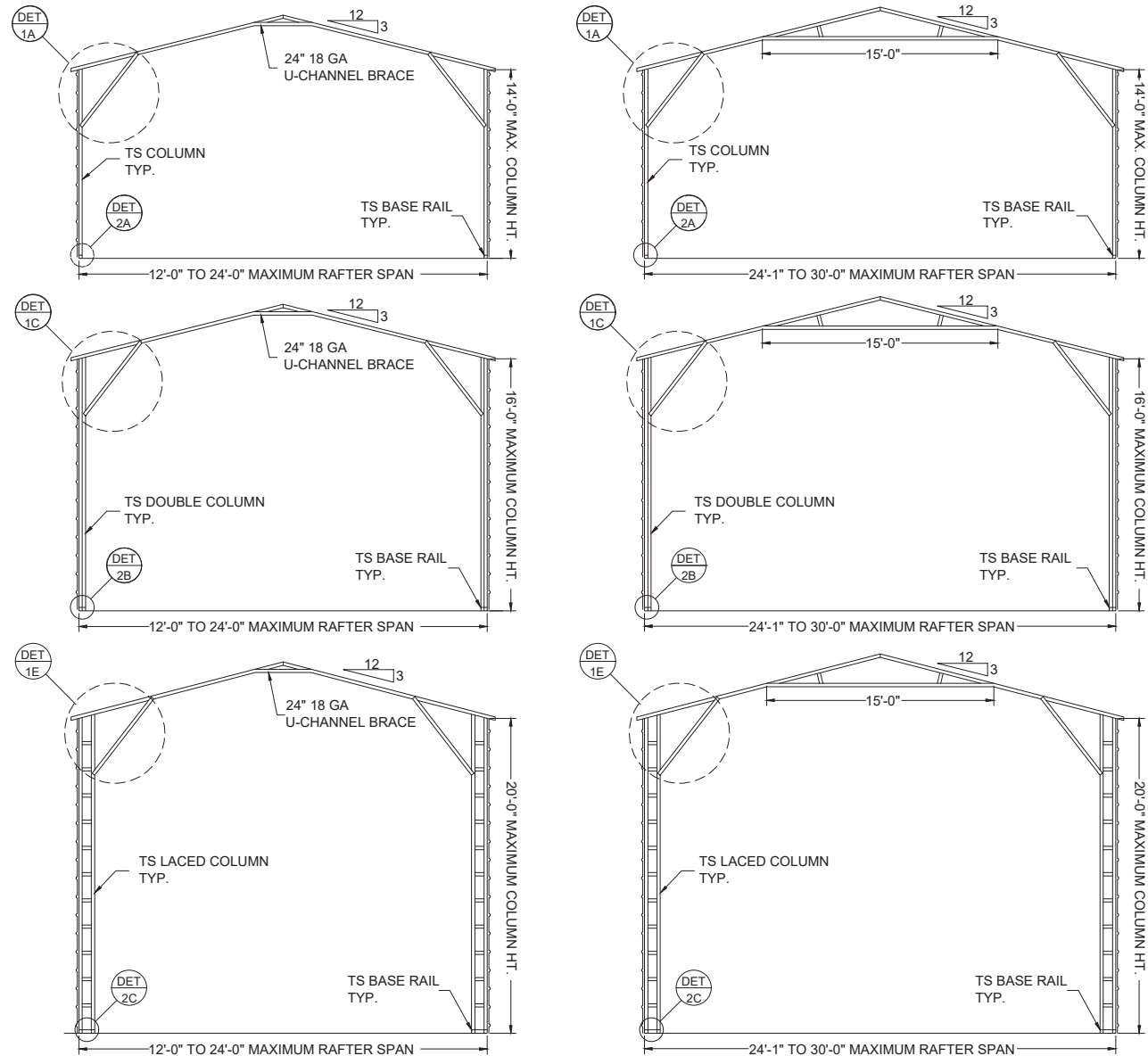
18 LEAN-TO POST CONNECTION  
SCALE: NTS

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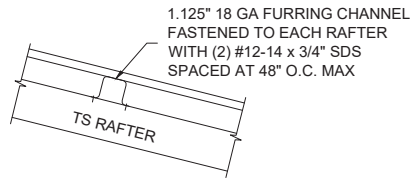
| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE     | PREPARED BY                                                                                                                                                                        | CLIENT                                           | SHEET TITLE                    | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |          | <br><b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINEG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | CONNECTION DETAILS<br>(4 OF 4) | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-10      |
|     |           |      | DESIGNED | DMC        |            | SCALE    |                                                                                                                                                                                    |                                                  |                                |                                                          |           |
|     |           |      | CHECKED  | ATC        |            | AS-SHOWN |                                                                                                                                                                                    |                                                  |                                |                                                          |           |
|     |           |      | JOB No.  | 22047      |            |          |                                                                                                                                                                                    |                                                  |                                |                                                          |           |



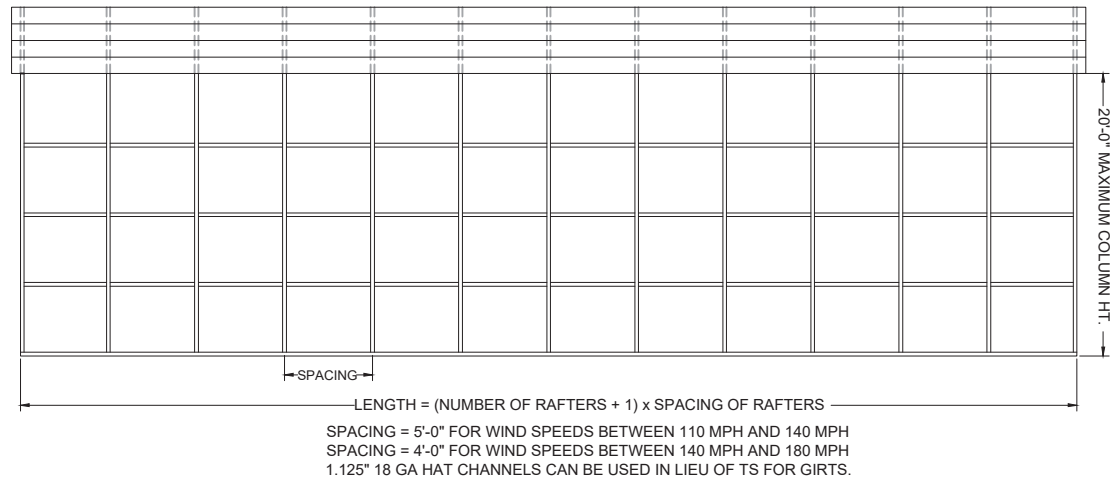
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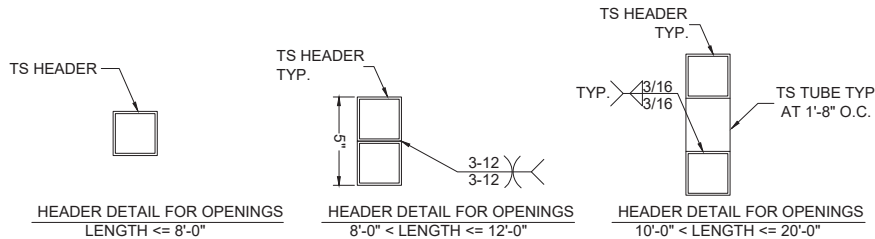
**BOX EAVE FRAME**  
SCALE: NTS



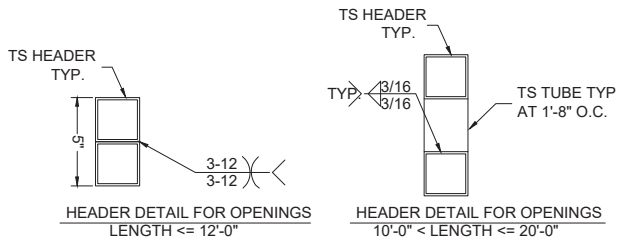
**PANEL ATTACHMENT**  
(ALTERNATE FOR VERTICAL ROOF PANELS)  
SCALE: NTS



**TYPICAL SIDE FRAME SECTION**  
SCALE: NTS

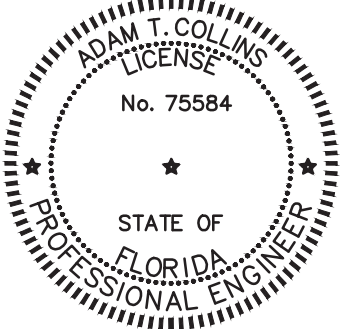


**SIDE WALL OPTION HEADER**  
SCALE: NTS



**END WALL OPTION HEADER**  
SCALE: NTS

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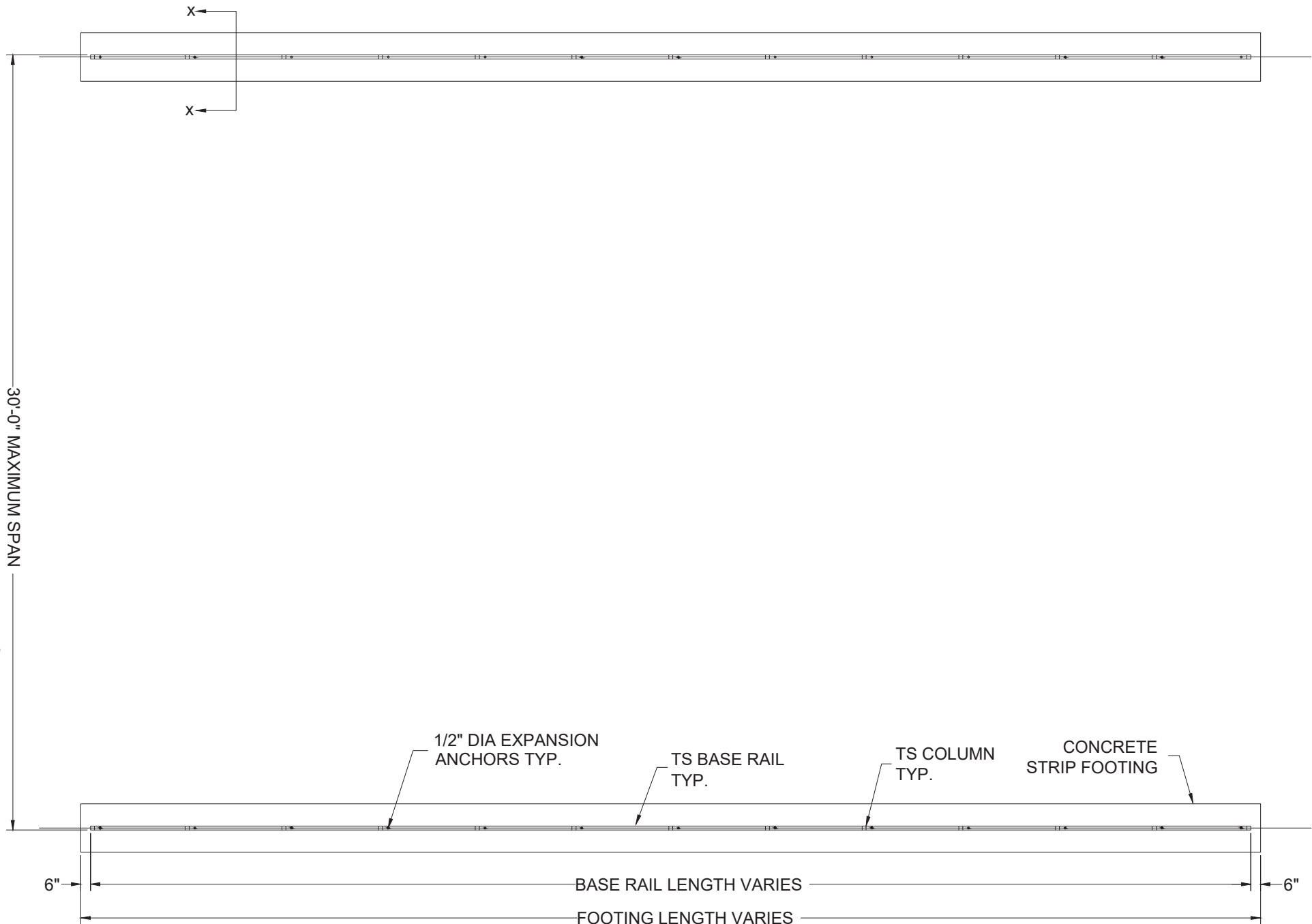
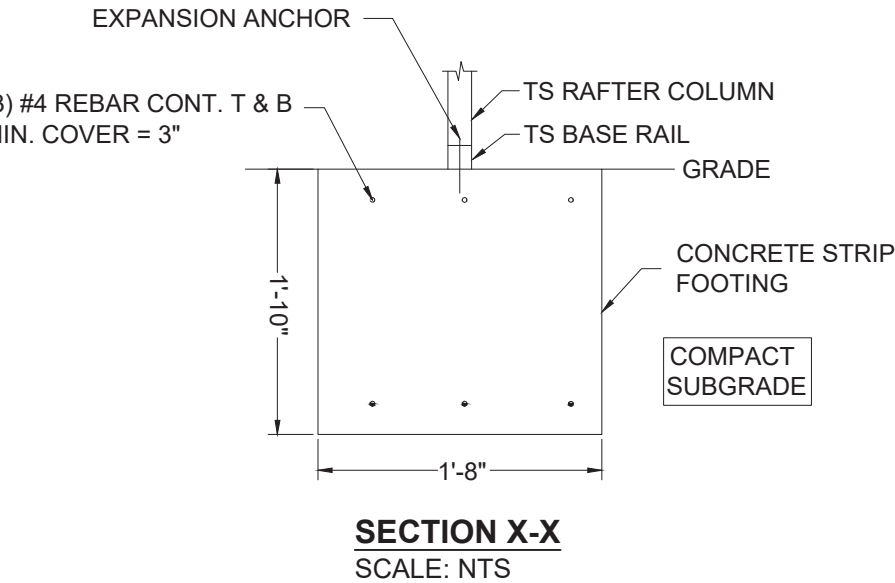
| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                 | CLIENT                                           | SHEET TITLE                                       | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|------|---------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |      | <b>ADAM COLLINS</b><br>ENGINEERING INC.<br>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | BOX EAVE RAFTER<br>VERTICAL<br>ROOF-SIDING OPTION | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-11      |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                             |                                                  |                                                   |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                             |                                                  |                                                   |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                             |                                                  |                                                   |                                                          |           |

GENERAL NOTES

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
- 3. 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.
- 5. MINIMUM BEND = 6 X BAR DIAMETER
- 6. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.



CONCRETE STRIP FOOTING PLAN  
SCALE: NTS

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| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                              | CLIENT                                           | SHEET TITLE                        | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|------|----------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |      | <div>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM</div> <div>ADAM COLLINS<br/>ENGINEERING INC.</div> | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | OPTIONAL CONCRETE<br>STRIP FOOTING | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-12      |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                                          |                                                  |                                    |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                                          |                                                  |                                    |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                                          |                                                  |                                    |                                                          |           |

HELIX ANCHOR NOTES

1. USE MINIMUM (2) 4" HELICES WITH 30" EMBEDMENT FOR THE FOLLOWING SOILS:
- 1.1. VERY DENSE AND/OR CEMENTED SANDS

1.2. COARSE GRAVEL AND COBBLES

1.3. CALICHE

1.4. PRELOADED SILTS AND CLAYS

1.5. CORALS

1.6. MEDIUM DENSE COARSE SANDS

1.7. SANDY GRAVEL

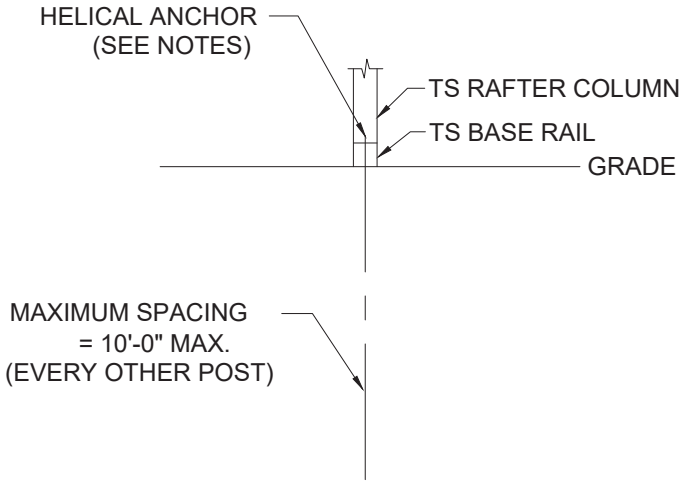
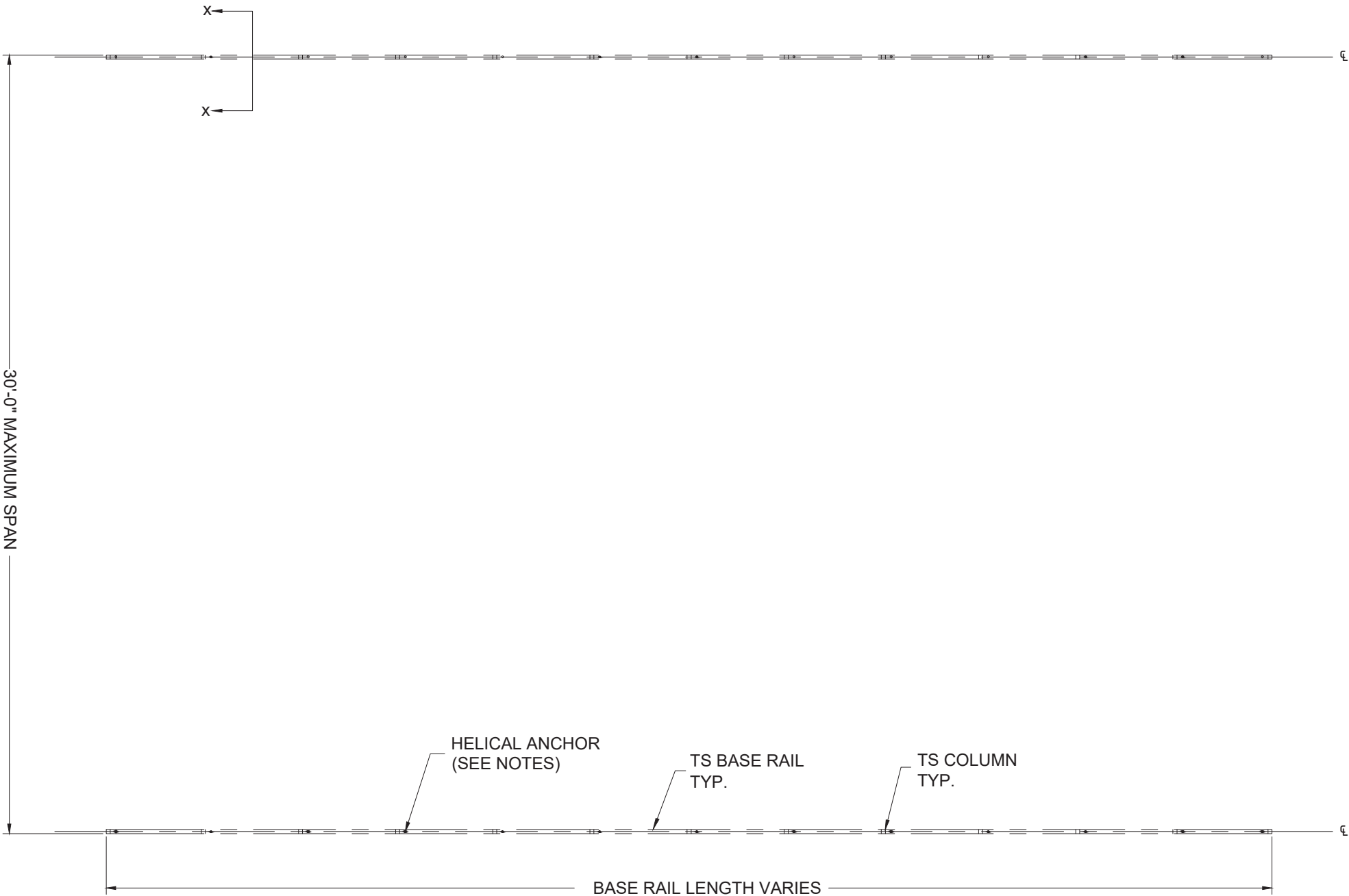
1.8. VERY STIFF SILTS AND CLAYS
2. USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT FOR
- 2.1. LOOSE TO MEDIUM DENSE SANDS

2.2. FIRM TO STIFF CLAYS AND SILTS

2.3. ALLUVIAL FILL
3. USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.
- 3.1. FOR VERY LOOSE TO MEDIUM DENSE SANDS

3.2. FIRM TO STIFFER CLAYS AND SILTS

3.3. ALLUVIAL FILL,



SECTION X-X  
SCALE: NTS

BASE RAIL PLAN  
SCALE: NTS

| NO. | REVISIONS | DATE | DATE     | 2025.02.27 | SUBMITTALS | DATE | PREPARED BY                                                                                                                         | CLIENT                                           | SHEET TITLE                          | PROJECT                                                  | SHEET NO. |
|-----|-----------|------|----------|------------|------------|------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------|----------------------------------------------------------|-----------|
|     |           |      | DRAWN    | SM         |            |      | <div><div></div><div>ADAM COLLINS</div><div>ENGINEERING INC.</div><div>CA# 31728 ~ P: 386.320.7400 ~ WWW.COLLINSENG.COM</div></div> | ELITE METAL<br>MANUFACTURING<br>10121 88TH TRACE | OPTIONAL HELICAL<br>ANCHORING DETAIL | Bert Herrero<br>644 SW Miracle St<br>Lake City, FL 32024 | S-13      |
|     |           |      | DESIGNED | DMC        |            |      |                                                                                                                                     |                                                  |                                      |                                                          | SCALE     |
|     |           |      | CHECKED  | ATC        |            |      |                                                                                                                                     |                                                  |                                      |                                                          | AS-SHOWN  |
|     |           |      | JOB No.  | 22047      |            |      |                                                                                                                                     |                                                  |                                      |                                                          |           |

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ADAM T. COLLINS

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