

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

RISK CATEGORY	WIND EXPOSURE CATEGORY	ULTIMATE WIND SPEED (MPH)	NOMINAL WIND SPEED (MPH)	MAXIMUM Rafter/BOW AND END POST SPACING (FEET)	AVERAGE FASTENER SPACING ON CENTERS ALONG RAFTERS OR PURLINS AND POSTS OR GIRTS (INCHES)	INTERIOR BOW/RAFTERS	END BOW/RAFTERS
I, II, III, or IV	B, C, or D	115 TO 150	89 TO 116	5.0	6	6	6
		151 TO 180	117 TO 139	4.0	6	6	6

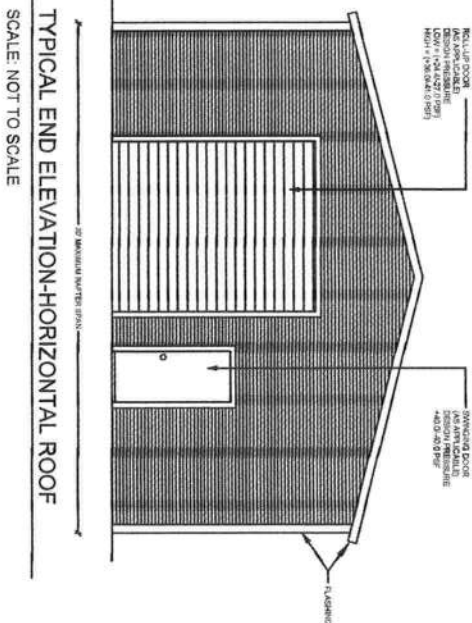
- NOTES: 1. SPECIFICATIONS APPLICABLE TO 26 OR 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 16" O.C. GAUGE STEEL TUBE BOW FRAMES.
2. FASTENERS CONSIST OF "PLATE" SELF-DRILLING SCREWS WITH CONTROL SEAL WASHER.
3. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14:12 PITCH. SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
4. GROUND ANCHORS SHALL BE INSTALLED AT EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST LOCATION, AT MAXIMUM OF 10' O.C. AND BOTH SIDES OF BOW/RAFTER FRAME.
5. GROUND ANCHORS ARE NOT REQUIRED WITH CONCRETE SLAB CONSTRUCTION.

WINDOW AND DOOR NOTE

EXTENSION WINDOW AND GLASS DOORS SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING AGENCY TO DETERMINE THE MANUFACTURER'S PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT EVALUATION ENTRY TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF THE FOLLOWING SPECIFICATION:
ASTM A188-10M/11.207
THE CONSTRUCTION SHALL BE TESTED IN ACCORDANCE WITH ASTM E 526, STANDARD TEST METHOD FOR DETERMINING THE WIND UPLIFT RESISTANCE OF EXTERIOR WINDOW, CURTAIN WALL, AND DOORS BY UNIFORM STATIC AIR PRESSURE.
DESIGN WAS DONE IN ACCORDANCE WITH THE 2020 FLORIDA BUILDING CODE 7TH EDITION (FBC 2020) SUPPLEMENT AMENDMENTS 2020 FBC/2020 FBC, 2020 FBC, 2020 FBC, AND 2020 FBC.

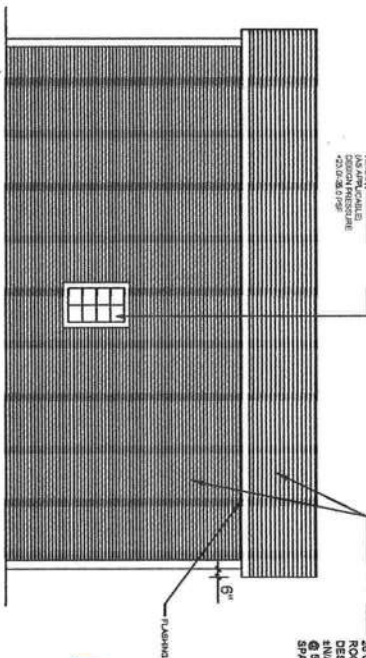
GENERAL NOTES:

1. ALL STEEL SHALL BE 50 KSI STEEL.
2. FASTEN METAL ROOF AND WALL PANELS TO FRAMING WITH 14" X 3/8" SELF-DRILLING FASTENERS WITH CONTROL SEAL WASHER & 6" O.C. AVERAGE.
3. ALL FIELD CONNECTIONS SHALL BE "PLATE" SELF-DRILLING SCREWS.
4. ALL SHOP CONNECTIONS SHALL BE WELDED.
5. CONCRETE EXPANSION ANCHORS SHALL BE WELDED ANCHOR BOLT TYPE. ANCHORS SHALL BE INSTALLED IN CONCRETE SLAB AT EACH CORNER AND ONE EVERY OTHER INTERIOR BOW/RAFTER POST LOCATION. ANCHOR BOLT SHALL BE 1/2" DIA. AND 12" LONG. ANCHORS ARE NOT REQUIRED FOR CONCRETE FOOTING AND/OR CONCRETE SLAB CONSTRUCTION.
6. POST-RAFTER BRACING BRACE ON EVERY POST/RAFTER CONNECTION, EXCEPT FOR END WALL.



TYPICAL END ELEVATION-HORIZONTAL ROOF

SCALE: NOT TO SCALE



TYPICAL SIDE ELEVATION-HORIZONTAL ROOF

SCALE: NOT TO SCALE

NOTE: THIS PLAN HAS BEEN SIGNED AND SEALED BY DR. RAM A. GOEL, P.E. 47431, FOR THE DESIGN OF THE OCCUPANT ARE NOT BE VERIFIED BY ANY ELECTRONIC CODES.



PREFABRICATED UTILITY STRUCTURE

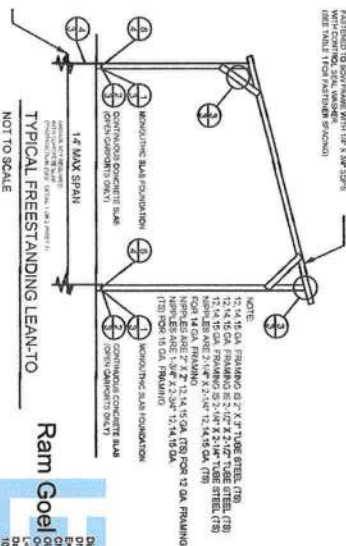
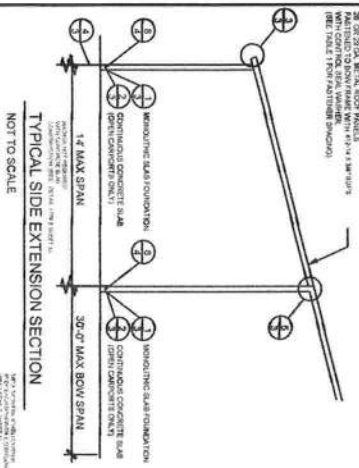
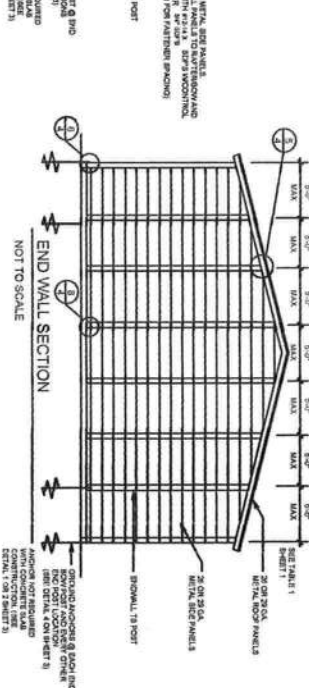
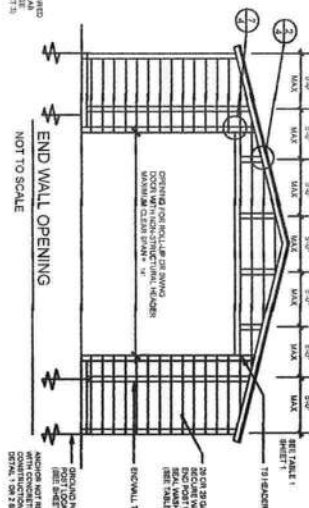
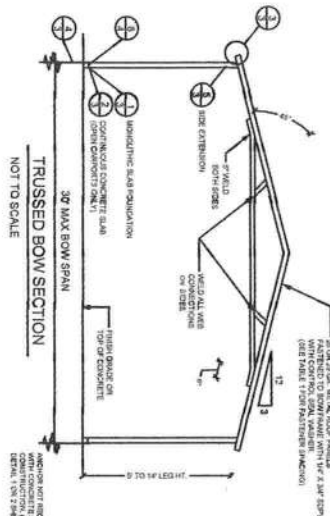
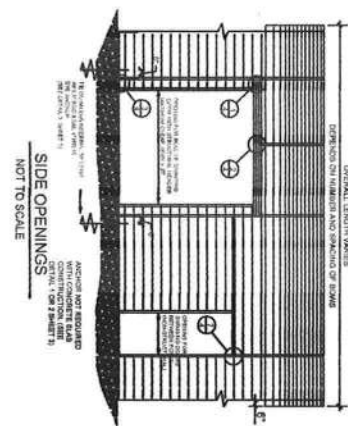
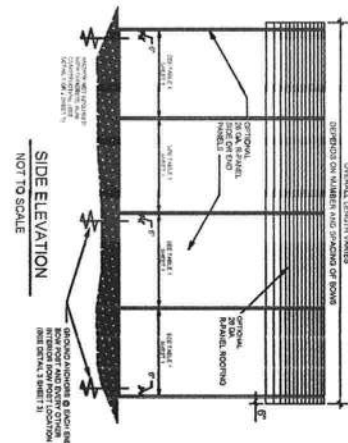
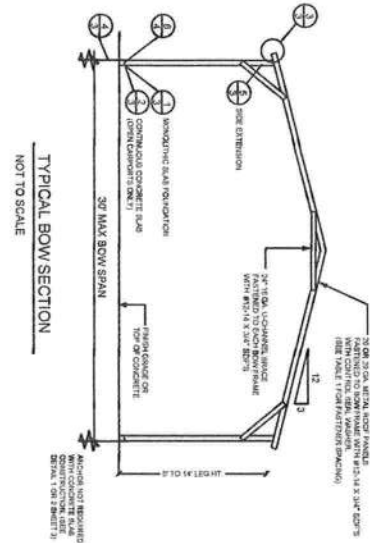
ELITE METAL MANUFACTURING, LLC
10121 88TH TRACE
LIVE OAK, FL 32060

Issue Date: 08-18-21
Revisions:

Job # 2173
Drawn By: S.K.
Checked By: R.G.

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Ram Goel
Professional Engineer
No. 47431
State of Florida

NOTE:
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2. ANY CHANGES TO THIS DRAWING MUST BE APPROVED BY THE DESIGNER.
3. THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE, 2018 EDITION AND ADOPTED FOR THE COUNTY OF HILLSBORO.



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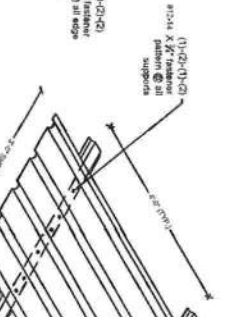
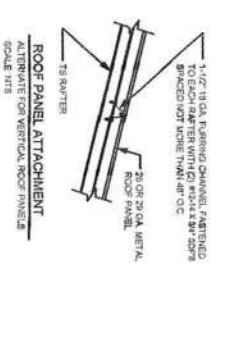
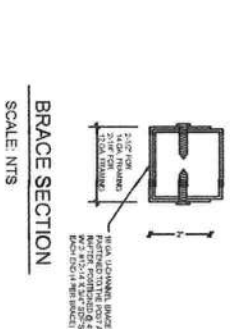
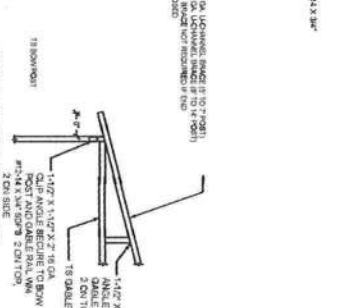
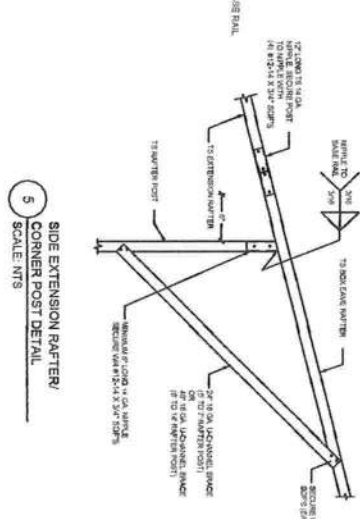
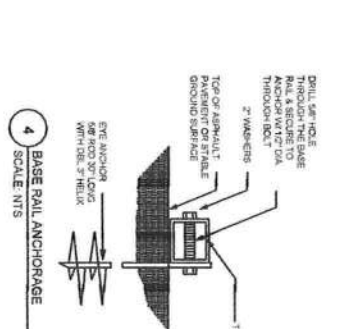
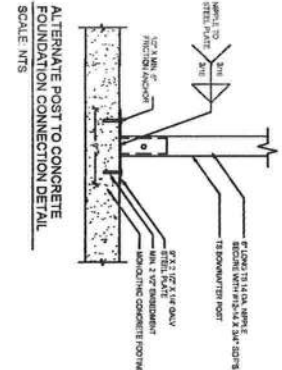
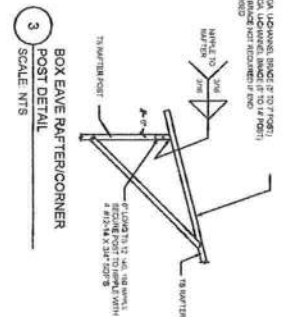
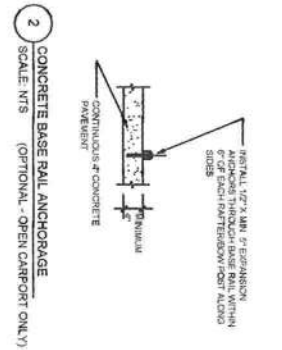
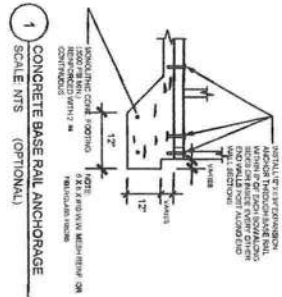
ELITE METAL MANUFACTURING, LLC
10121 88TH TRACE
LIVE OAK, FL 32060

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Revisions:
1. 08-18-21
2. 08-18-21
3. 08-18-21

DR. RAM A. GOEL, PH.D., P.E.
F.P.E. 47431

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NOTE:
1. THIS RAIL WAS BENT, SPOKE AND SEALED BY
2. PREPARED COILS OF THIS OCCUPANT ARE
3. CONSIDERED SEALED & SEALED THE SIGNATURE MUST
BE OBTAINED ON ANY ELECTRICAL COVER.

THE FOLLOWING IS COMPLIANT TO THE FLORIDA
WIND LOADS OF 150 MPH



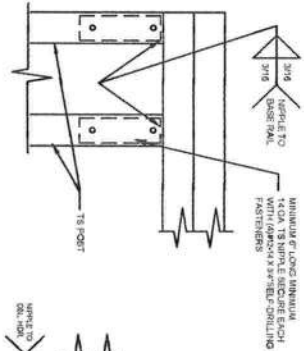
Ram Goel
DIGITALLY SIGNED BY Ram Goel
DN: cn=Ram Goel, o=Goel, ou=Goel, email=ramgoel@goel.com, c=US
GOEL, RAM A. GOEL, P.E. # 47431
10/06/12/007

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ELITE METAL MANUFACTURING, LLC
10121 88TH TRACE
LIVE OAK, FL 32060

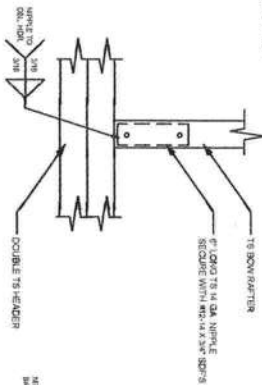
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10/06/12/007			
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10/06/12/007			
10/06/12/007			

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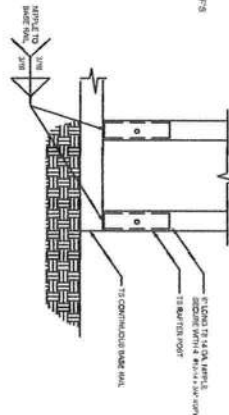




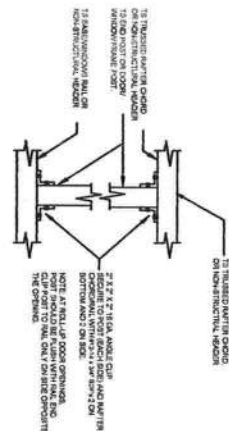
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SCALE: NTS



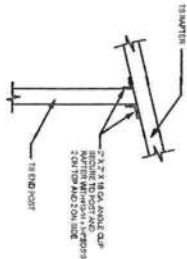
2 RAFTER POST/POST
BASE RAIL CONNECTION DETAIL
SCALE: NTS



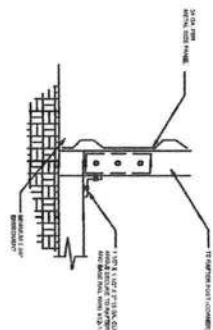
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SCALE: NTS



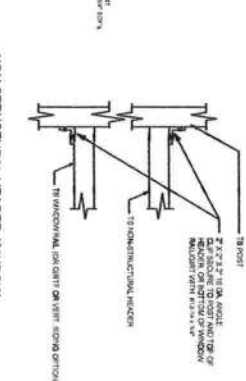
4 POST TO RAIL TRUSS CHORD OR
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SCALE: NTS



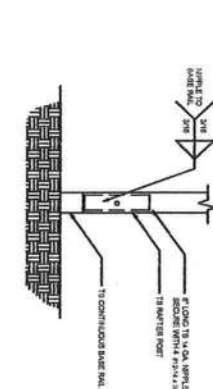
5 END POST/RAFTER CONN. DETAIL
SCALE: NTS



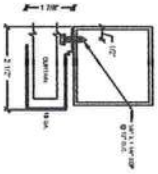
6 END POST/BASE RAIL CONN.
SCALE: NTS



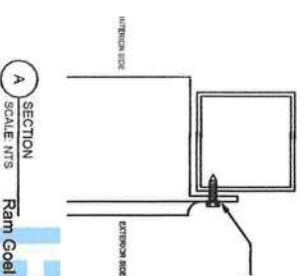
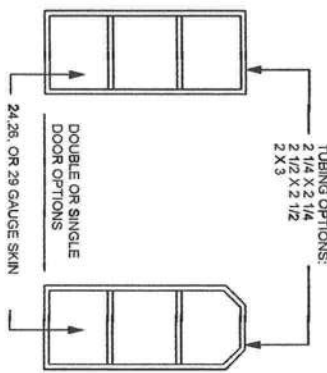
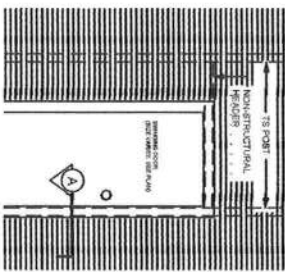
7 NON-STRUCTURAL HEADER, WINDOW
RAIL, OR GIRTS TO POST CONN. DETAIL
SCALE: NTS



8 POST/BASE RAIL CONN. DETAIL
SCALE: NTS



SECTION THROUGH ROLL UP
DOOR HEADER
SCALE: NTS



SECTION
SCALE: NTS



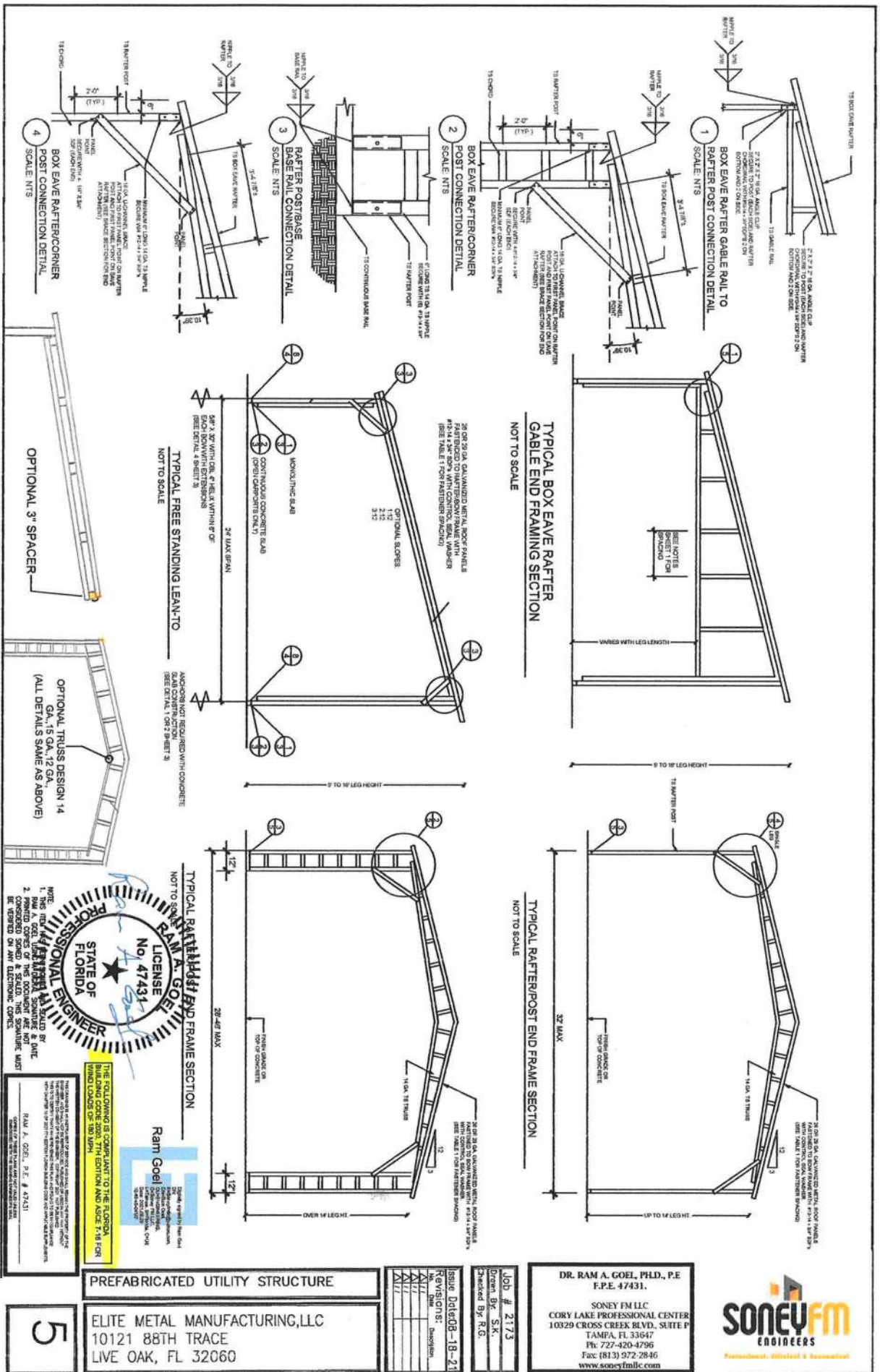
PREFABRICATED UTILITY STRUCTURE

ELITE METAL MANUFACTURING, LLC
10121 88TH TRACE
LIVE OAK, FL 32060

Job #	2173
Drawn By	S.R.G.
Checked By	R.G.
Issue Date	08-18-21
Revisions:	
1.	Revisions:
2.	Revisions:
3.	Revisions:
4.	Revisions:
5.	Revisions:

DR. RAM A. GOEL, PH.D., P.E.
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STATE OF FLORIDA
PROFESSIONAL ENGINEER
No. 47431
DR. RAM A. GOEL, P.E.

THE FOLLOWING IS COMPLIANT TO THE FLORIDA BUILDING CODE 2001, 7TH EDITION AND ASCE 7-16 FOR WIND LOADS OF 150 MPH.

Ram A. Goel, P.E. # 47431

PREFABRICATED UTILITY STRUCTURE

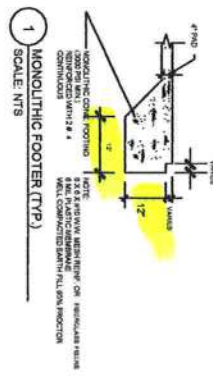
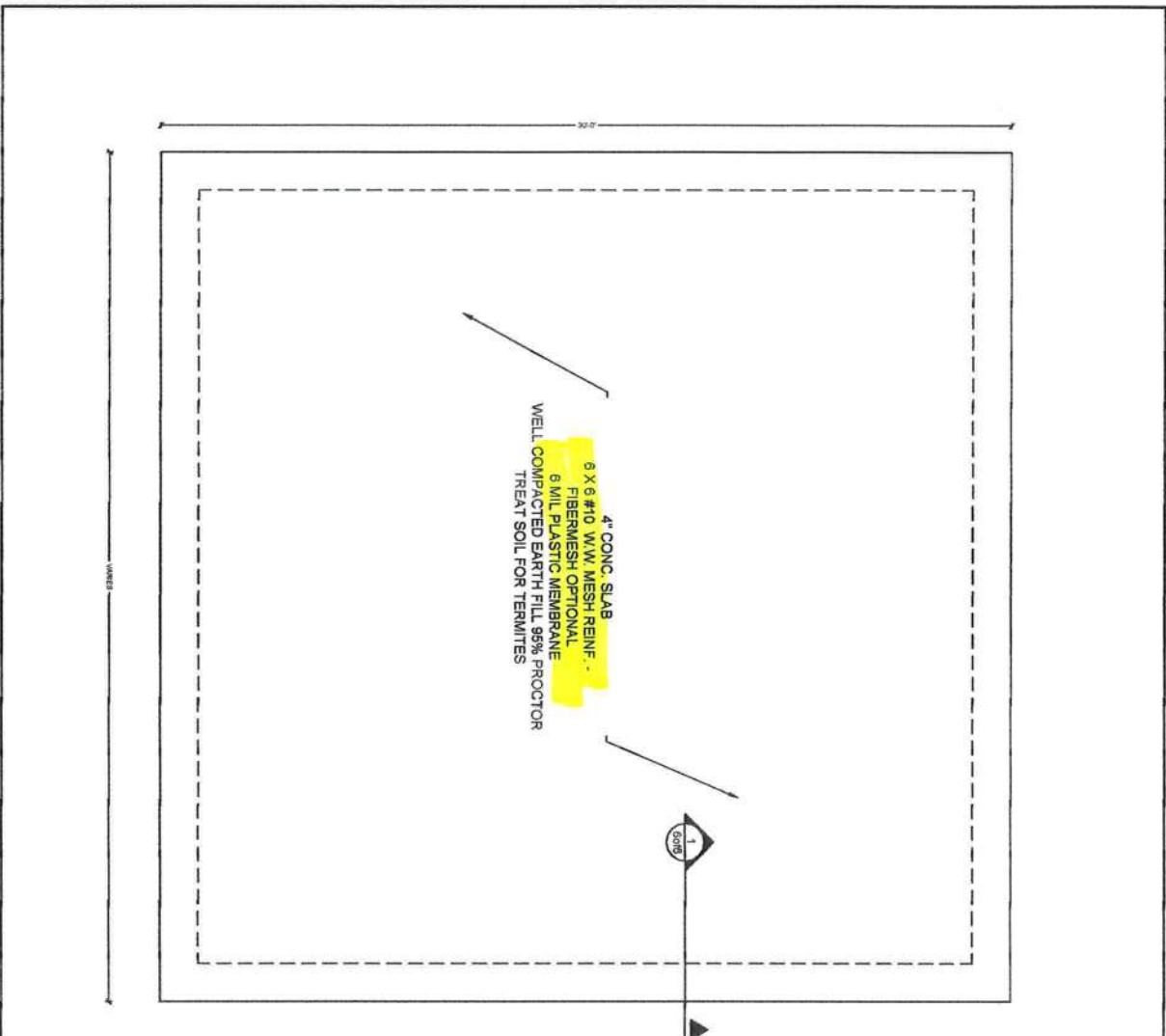
ELITE METAL MANUFACTURING, LLC
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Issue	Date	Revisions
Issue	08-18-21	
Drawn By	S.K.	
Checked By	R.G.	

DR. RAM A. GOEL, PH.D., P.E.
F.P.E. 47431.

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SONEY FM
ENGINEERS
Professional, Diligent & Innovative



CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. CONCRETE SHALL BE PLACED IN A MINIMUM 12 INCHES THICK LAYER OVER REINFORCING BARS. FOR FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PREVIOUSLY IN CONTACT WITH EARTH OR EXPOSED TO THE EARTH OR WEATHER AND 1/2" ELSEWHERE, REINFORCING BARS EMBEDDED IN GROUTED CELLS SHALL HAVE A MINIMUM CLEAR DISTANCE OF 1/4" FOR FINE GROUT OR 1/2" FOR COARSE GROUT BETWEEN REINFORCING BARS AND ANY FACE OF A CELL. REINFORCING BARS USED IN MONOLITHIC FOOTERS SHALL HAVE A MINIMUM COVER (INCLUDING GROUT) OF NOT LESS THAN 2" FOR MASSIVE UNITS AND 1 1/2" FOR OTHER UNITS EXPOSED TO EARTH OR WEATHER. 1/2" FOR MASSIVE UNITS NOT EXPOSED TO EARTH OR WEATHER.

REINFORCING STEEL SHALL BE MINIMUM GRADE 40. THE REINFORCING STEEL SHALL BE MINIMUM GRADE 40.

GALVANIZATION: METAL ACCESSORIES FOR USE IN EXTERIOR WALL CONSTRUCTION NOT DIRECTLY EXPOSED TO THE WEATHER SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153, CLASS B-2, METAL PLATE CONNECTORS, SCREWS, BOLTS AND NAILS EXPOSED DIRECTLY TO THE WEATHER SHALL BE IN STAINLESS STEEL, OR HOT DIPPED GALVANIZED.

REINFORCEMENT MAY BE BENT IN THE SHOP ON THE FIELD PROVIDED:
 1. ALL REINFORCEMENT SHALL BE BENT TO THE INSIDE OF THE BEND.
 2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN 8 BAR DIAMETERS AND
 3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT.
 EXCEPTION: WHERE BENDING IS NECESSARY TO ALIGN BARS WITH A VERTICAL CELL, BARS PARTIAL EMBEDDED IN CONCRETE SHALL BE BENT TO BE BENT IN A SLOPE NOT MORE THAN 1" OF THE HORIZONTAL DISPLACEMENT TO 8" OF VERTICAL BAR LENGTH.



NOTE:
 1. THIS FID HAS BEEN SIGNED AND SEALED BY
 RAM A. GOEL, USING A DIGITAL SIGNATURE & DATE
 2. CONSIDERED SIGNED & SEALED. THIS SIGNATURE MUST
 BE VERIFIED ON ANY ELECTRONIC COPIES.

THE FOLLOWING IS COMPLIANT TO THE FLORIDA
 BUILDING CODE, CHAPTER 63, PART 1, SECTION 63.09, FOR
 WIND LOADS OF 180 MPH.

6

CONCRETE
 ELITE METAL MANUFACTURING, LLC
 10121 88TH TRACE
 LIVE OAK, FL 32060

Revisions:	Issue Date:	18-21
1	18-21	18-21
2	18-21	18-21
3	18-21	18-21
4	18-21	18-21
5	18-21	18-21
6	18-21	18-21
7	18-21	18-21
8	18-21	18-21
9	18-21	18-21
10	18-21	18-21

DR. RAM A. GOEL, PH.D., P.E.
 F.P.E. 47431.
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HEADER DETAIL FOR DOOR
OPENINGS 12'-0" < LENGTH < 20'-0"

Digitally signed by Ram Goel
DN:
E=Sony@rediffmail.com,
O=Ram Goel,
OU=ENCIPHERING,
CN=Sony Inc LLC,
C=India, SN=Ram Goel,
19 50 2641407



THE FOLLOWING IS CONFORMANT TO THE FLORIDA BUILDING CODE 2020, 7TH EDITION AND ASCE 7-16 FOR WIND LOADS OF 180 MPH.

1. THIS FILE HAS BEEN SEARCHED AND SCANNED BY
 RALPH A. GALT USING A DIGITAL SIGNATURE & DATE
 2. PRINTED COPIES OF THIS DOCUMENT ARE NOT
 CONSIDERED SIGNED & SEALED. THIS SIGNATURE
 IS VALID ON ANY ELECTRONIC COPIES.

Cr. Rem. A. Gmel PE # 4743

ELITE METAL MANUFACTURING,LLC
10121 88TH TRACE
LIVE OAK, FL 32060

7

Job # 2173
Drown By: S.K.
Checked By: R.G.

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Checked By: R.G.

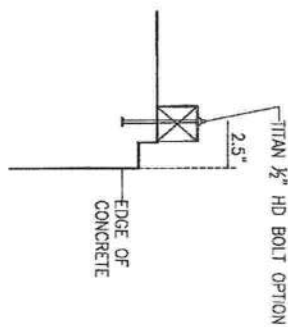
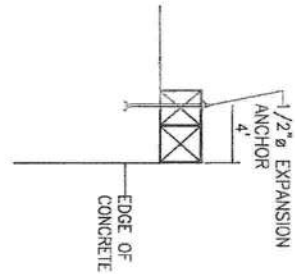
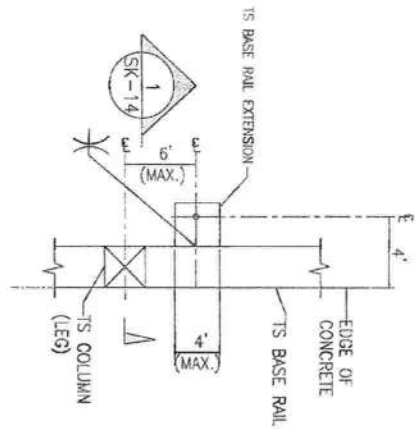
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Revisions:
Rev. Date Description

DR. RAM A. GOEL, PH.D., P.E
F.P.E. 47431.

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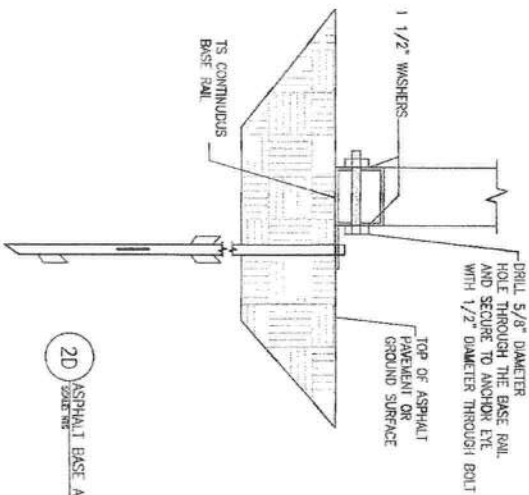


ADDITIONAL BASE RAIL ANCHORAGE OPTION

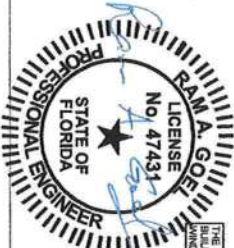


TYPICAL ANCHOR DETAIL WHEN
BASE RAIL IS NEAR EDGE OF CONCRETE
SCALE: N.T.S.

SECTION
1
SCALE: N.T.S.



2D
SCALE: N.T.S.



THE FOLLOWING IS COMPLIANT TO THE FLORIDA
BUILDING CODE, EDITION AND ABOVE 7-18 FOR
WIND LOADS OF 150 MPH

THIS RAIL HAS BEEN DESIGNED AND SEALED BY
RAM A. GOEL, ENGINEER, LICENSE NO. 47431, STATE OF
FLORIDA. THE DESIGNER HAS REVIEWED THE
CONSTRUCTION DETAILS AND SPECIFICATIONS AND
HAS VERIFIED THE DESIGN IS CORRECT.

DR. RAM A. GOEL, P.E. # 47431
CORY LAKE PROFESSIONAL CENTER
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WWW.SONEYFMLE.COM

ADDITIONAL BASE RAIL ANCHORAGE OPTION

ELITE METAL MANUFACTURING, LLC
10121 88TH TRACE
LIVE OAK, FL 32060

Job #	2173
Drawn By	S.K.
Checked By	R.G.
Issue Date	08-18-21
Revisions:	1. Revision: 08/18/21
By	SK
Date	08/18/21

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