

GENERAL NOTES

APPLICABLE CODES, REGULATIONS, & STANDARDS

- A. THE 2018 INTERNATIONAL BUILDING CODE
- B. ASCE 7-16 & SEI 7
- C. ACI 318-14 CONCRETE REFERENCE MANUAL
- D. AISC STEEL CONSTRUCTION MANUAL (15TH EDITION)
- E. AWS D1.1: STRUCTURAL WELDING

1. THESE PLANS BELONG EXCLUSIVELY TO THE STRUCTURE, INCLUDING MAIN WIND FORCE RESISTING SYSTEM (MWFERS), COMPONENTS AND CLADDING (C&C), AND BASE RAIL ANCHORAGE. OTHER DESIGN ISSUES, INCLUDING BUT NOT LIMITED TO PROPERTY SET-BACKS, ELECTRICAL, PLUMBING, INGRESS/EGRESS, FINISH FLOOR SLOPES AND ELEVATIONS, OR OTHER LOCAL ZONING REQUIREMENTS ARE THE LIABILITY OF OTHERS.
2. THESE STRUCTURES ARE ENGINEERED AS (RISK CATEGORY II) CAPABLE OF SUPPORTING DEAD LOAD OF THE STRUCTURE AND LIVE AND WIND LOADS. UPGRADES NOT SPECIFICALLY ADDRESSED HEREIN, SUCH AS WINDOWS, DOORS, OR ANOTHER COMPONENT NOT LISTED IN THE INTERNATIONAL BUILDING CODE APPROVED PRODUCT LIST, AND NOT PROVIDED AND INSTALLED BY THE CONTRACTOR, WHICH CAUSE ADDITIONAL LOADS ON THE STRUCTURE SHALL BE AT THE OWNER'S RISK. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR FAILURE OR STRUCTURAL DAMAGE DUE TO THE EXTRA LOAD.
3. ALL STEEL TUBING SHALL BE 50 KSI GALVANIZED STEEL. ALL FASTENERS SHALL BE ZINC COATED HARDWARE.
4. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2" x 2 1/2" - 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS FOR VERTICAL PANELS, 29 GAUGE METAL PANELS SHALL BE FASTENED TO 18 GAUGE HAT CHANNELS (UNLESS OTHERWISE NOTED).
5. FASTENERS CONSIST OF #12-14 x 3/4" SELF DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
6. AVERAGE FASTENER SPACING ON-CENTER ALONG RAFTERS OR PURLINS, AND POSTS, INTERIOR = 9" OR END = 6" (MAX.).

DESIGN LOAD NOTES:

1. WIND FORCES GOVERN OVER SEISMIC FORCES.
2. SEISMIC PARAMETERS ANALYZED ARE:
SOIL SITE CLASS = D
RISK CATEGORY III/III
R = 3.25 Ie = 1.0
Sds = 0.087 g V = Csw
Sdi = 0.084 g
3. BASIC WIND SPEED = 120 MPH
EXPOSURE CATEGORY = C
4. DESIGN LIVE LOAD = 20 PSF
5. DESIGN SNOW LOAD = 20 PSF

PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL No. & DATE
STRUCTURAL COMPONENTS	ROOF DECK	CAPITAL METAL SUPPLY, INC. 29 GA. CAPITAL RIB ROOF PANEL	FL20147-1-R2 10/13/2020
STRUCTURAL COMPONENTS	STRUCTURAL WALL	CAPITAL METAL SUPPLY, INC. 29 GA. CAPITAL RIB WALL PANEL	FL20148-1-R2 10/13/2020
EXTERIOR DOORS	ROLL-UP	JANUS INTERNATIONAL GROUP, LLC SERIES 3652	FL14425-1-R5 12/15/2020
EXTERIOR DOORS	SWINGING	ELUXIR DOOR AND METAL COMPANY SERIES 407	FL17986-5-R2 02/28/2021
EXTERIOR DOORS	SWINGING	JELD-WEN C. DESIGN PRO	FL13541-3-R18 12/17/2020
EXTERIOR DOORS	SWINGING	PELLA CORPORATION 350 SERIES PREMIUM DOUBLE HUNG WINDOW HIGH PERFORMANCE	FL14671-1-R8 11/28/2020
EXTERIOR DOORS	SWINGING	PELLA CORPORATION 350 SERIES PREMIUM DOUBLE HUNG WINDOW 2-WIDE OR 3-WIDE STANDARD PERFORMANCE	FL14671-7-R8 11/28/2020

CONTRACTOR	TOP RANK STEEL STRUCTURES
PROJECT ADDRESS	GENERIC METAL BUILDINGS
DESIGN DATE	04/22/2021
REVISION 1 DATE	
REVISION 2 DATE	
DRAWN BY	KMV
SCALE	NTS
PAGE	1



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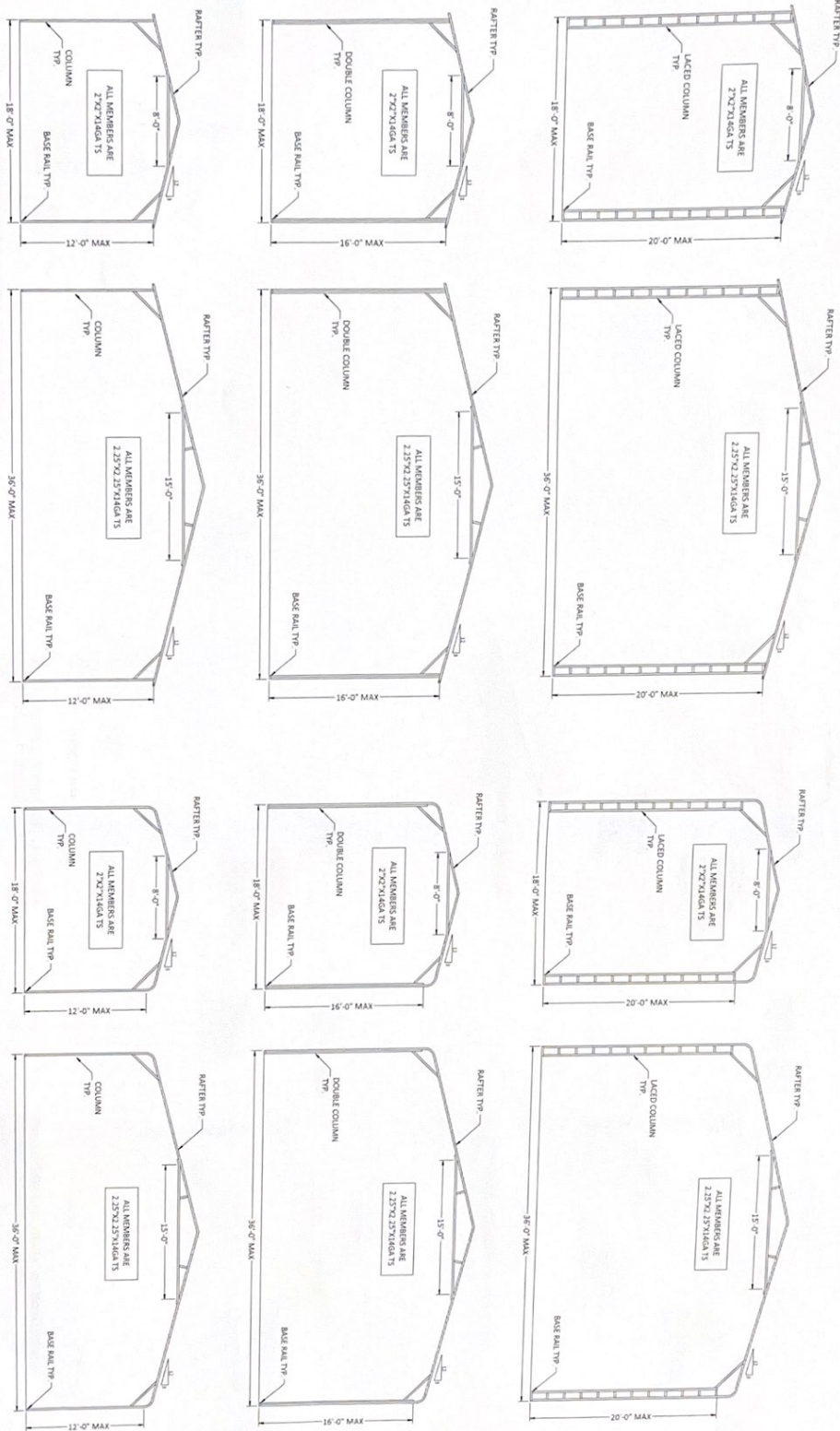
PROJECT NO. 2109069

LICENSE # P-2016

[Signature]

Craig E. Gunderson, P.E. #048404


DATE: 12/15/2021

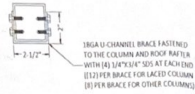


DESIGN DATE: 04/22/2021
 REVISION 1 DATE
 REVISION 2 DATE
 DRAWN BY: KJV
 SCALE: NTS
 PAGE: 2

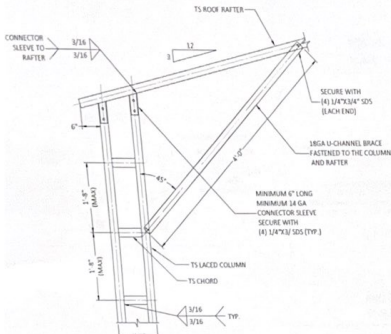
CONTRACTOR
TOP RANK STEEL STRUCTURES
 PROJECT ADDRESS
GENERIC METAL BUILDINGS

GE GUNDERSON ENGINEERING
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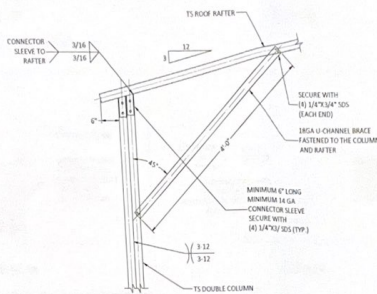

 Craig E. Gunderson, P.E. #048404
 DATE: 12/15/2021



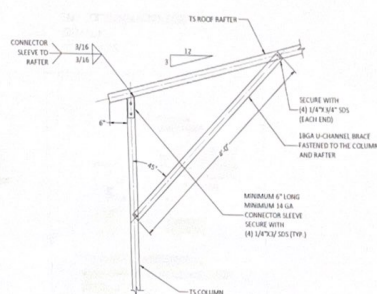
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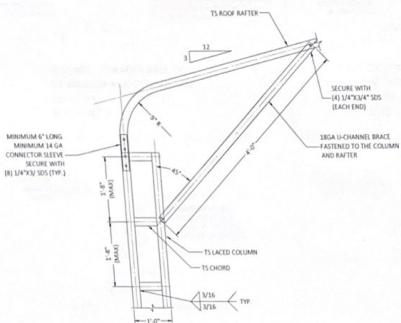
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DETAIL 1A
SCALE: N.T.S.



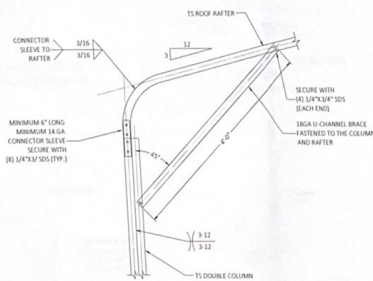
BOX EAVE RAFTER / CORNER POST CONNECTION FOR HEIGHTS 12'-0" TO 16'-0"
DETAIL 1B
SCALE: N.T.S.



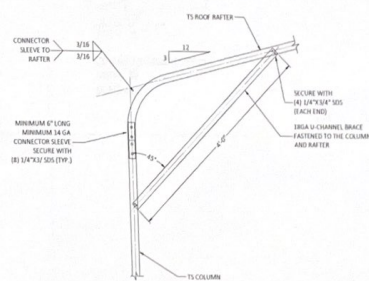
BOX EAVE RAFTER / CORNER POST CONNECTION FOR HEIGHTS OF 12'-0" OR LOWER
DETAIL 1C
SCALE: N.T.S.



BOW EAVE RAFTER / CORNER POST CONNECTION FOR HEIGHTS 16'-0" TO 20'-0"
DETAIL 2A
SCALE: N.T.S.



BOW EAVE RAFTER / CORNER POST CONNECTION FOR HEIGHTS 12'-0" TO 16'-0"
DETAIL 2B
SCALE: N.T.S.

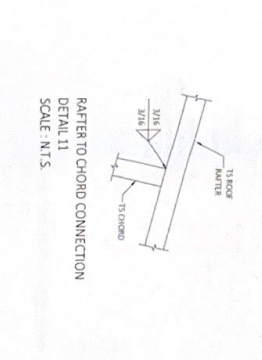
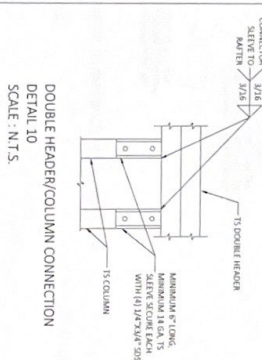
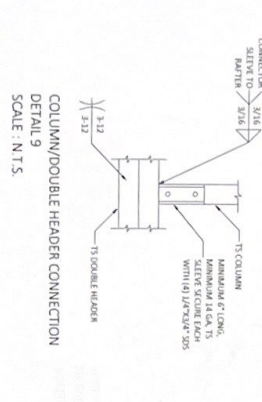
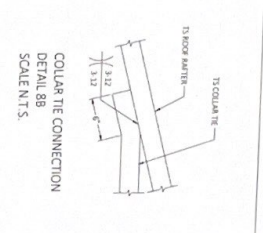
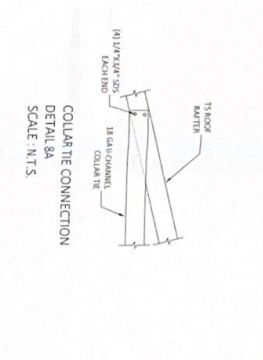
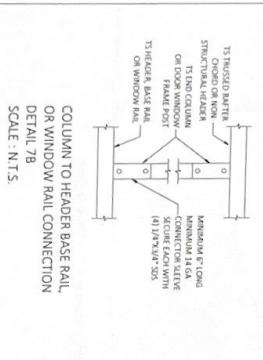
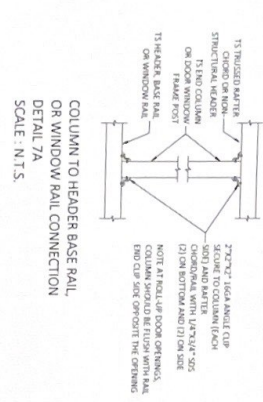
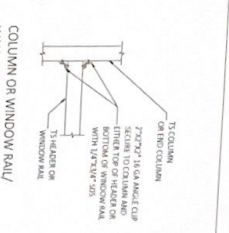
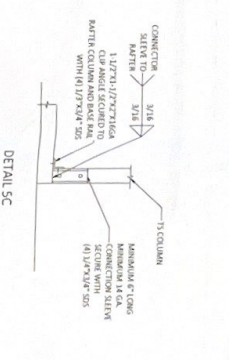
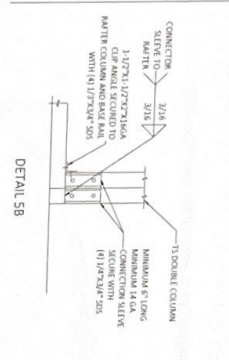
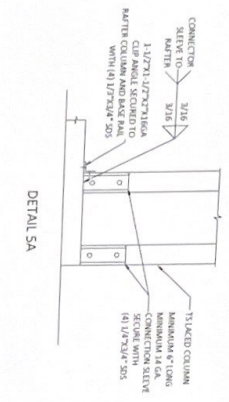
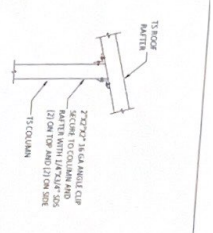
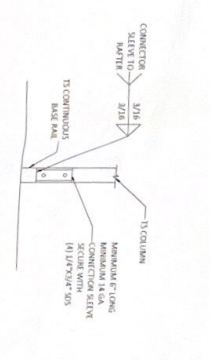
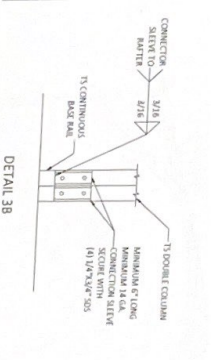
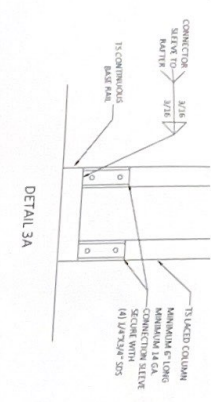


BOW EAVE RAFTER / CORNER POST CONNECTION FOR HEIGHTS OF 12'-0" OR LOWER
DETAIL 2C
SCALE: N.T.S.

Chris E. Gunderson, P.E. 8048404
DATE: 12/15/2021

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(941) 391-5980
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PROJECT NO. 2109069
LICENSE # P-2018

CONTRACTOR TOP RANK STEEL STRUCTURES	PROJECT ADDRESS GENERIC METAL BUILDINGS
DESIGN DATE: 04/22/2021	REVISION 1: DATE
REVISION 2: DATE	PAGE: 3
DRAWN BY: KHV	SCALE: NTS

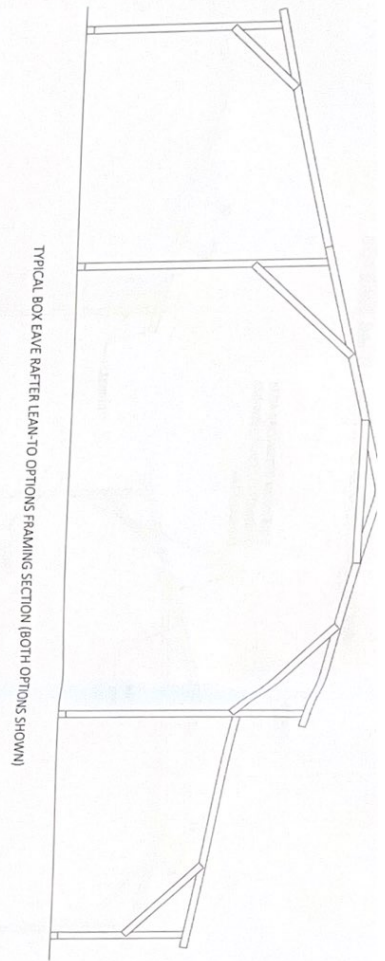


CONTRACTOR TOP RANK STEEL STRUCTURES		 GUNDERTSON ENGINEERING PLLC 4161 TAMiami TRAIL, UNIT 101 PORT CHARLOTTE, FLORIDA 33952 (941) 391-5980 www.gundersonengineering.com	 Craig E. Gunderson, P.E. #048404
PROJECT ADDRESS GENERIC METAL BUILDINGS			
DESIGN DATE 04/22/2021	REVISION 1 DATE DATE	REVISION 2 DATE DATE	PAGE 4
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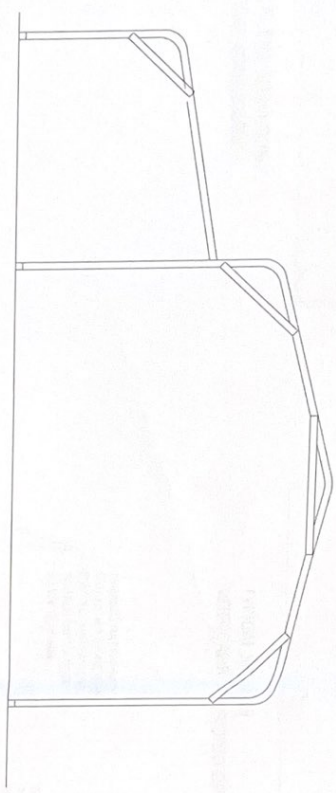
PROJECT NO. 2109069

LICENSE # P-2016

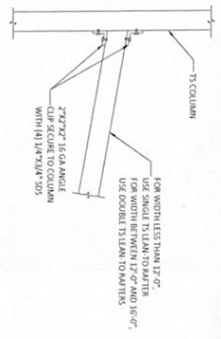
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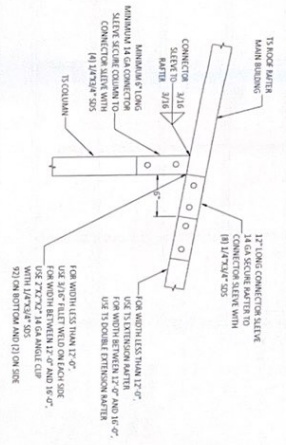
TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)





TYPICAL BOW AFTER LEAN-TO OPTION FRAMING SECTION

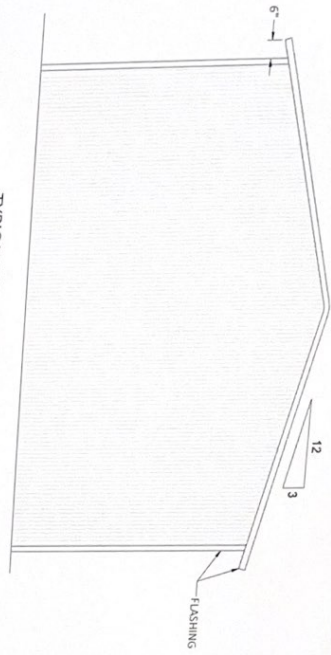


LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION
DETAIL 12
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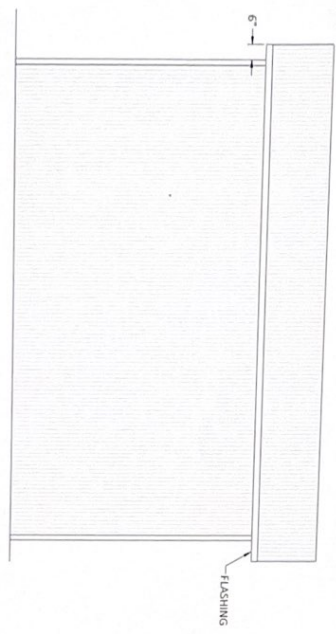


SIDE EXTENSION RAFTER/COLUMN
DETAIL 13
SCALE : N.T.S.

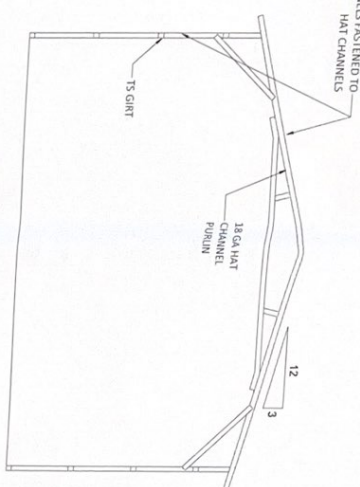
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PROJECT NO. 2109069 LICENSE # P-2016		PAGE: 5				



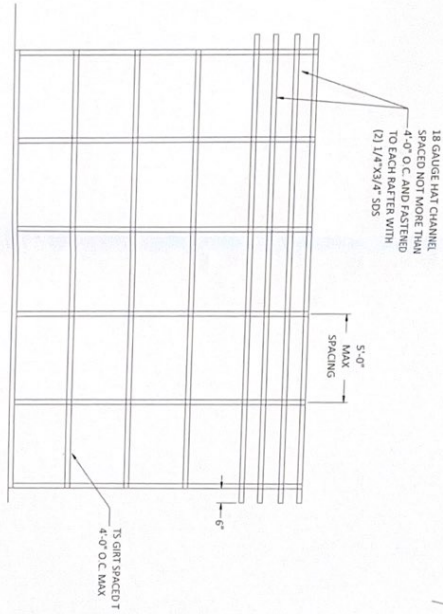
TYPICAL END ELEVATION
VERTICAL ROOF/SIDING



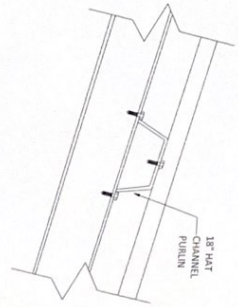
TYPICAL SIDE ELEVATION
VERTICAL ROOF/SIDING





TYPICAL SECTION
VERTICAL ROOF/SIDING OPTION



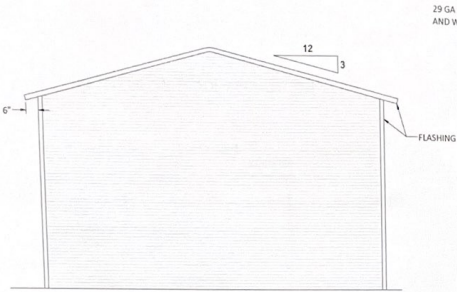
TYPICAL FRAMING SECTION
VERTICAL ROOF/SIDING OPTION



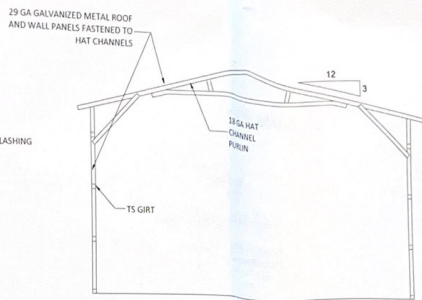
PANEL ATTACHMENT
DETAIL 14
SCALE : N.T.S.

CONTRACTOR TOP RANK STEEL STRUCTURES		 GUNDERSON ENGINEERING GUNDERSON ENGINEERING PLLC 4161 TAMiami TRAIL, UNIT 101 PORT CHARLOTTE, FLORIDA 33952 (941) 391-5980 www.gundersonengineering.com	 Craig E. Gunderson, P.E. #048404 DATE: 12/15/2021
PROJECT ADDRESS: GENERIC METAL BUILDINGS			
DESIGN DATE: 04/22/2021 REVISION 1: DATE REVISION 2: DATE DRAWN BY: KXV SCALE: NTS	PROJECT NO. 2109069	LICENSE # P-2016	PAGE: 6A

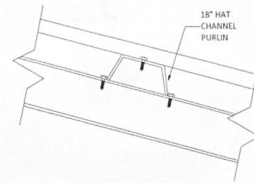
BOX EAVE RAFTER HORIZONTAL ROOF/SIDING OPTION



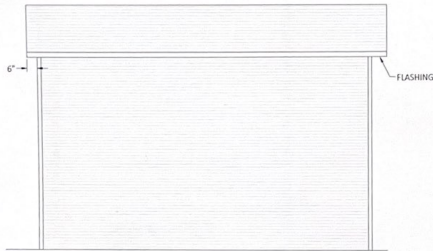
TYPICAL END ELEVATION
HORIZONTAL ROOF/SIDING



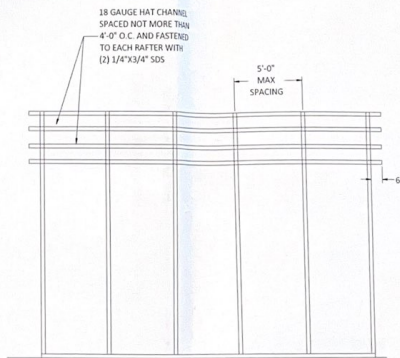
TYPICAL SECTION
HORIZONTAL ROOF/SIDING OPTION



PANEL ATTACHMENT
DETAIL 14
SCALE : N.T.S.



TYPICAL SIDE ELEVATION
HORIZONTAL ROOF/SIDING



TYPICAL FRAMING SECTION
HORIZONTAL ROOF/SIDING OPTION

(Signature)
Craig E. Gunderson, P.E. #04804
DATE: 12/15/21

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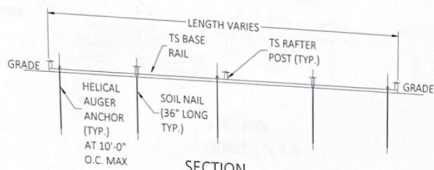
LICENSE # P-2018
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CONTRACTOR:
TOP RANK STEEL
STRUCTURES

PROJECT ADDRESS:
GENERIC METAL
BUILDINGS

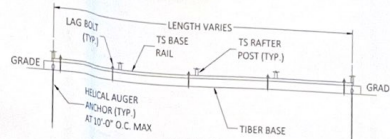
DESIGN DATE:	04/22/2021
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DRAWN BY:	KHV
SCALE:	NTS

BASE RAIL ON GRADE APPLICATION

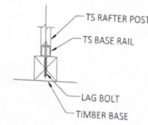


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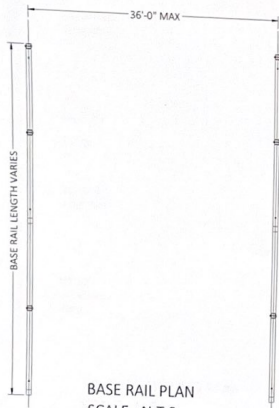
OPTIONAL BASE RAIL ON TIMBER BEAM



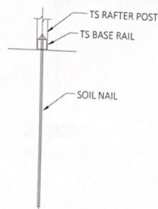
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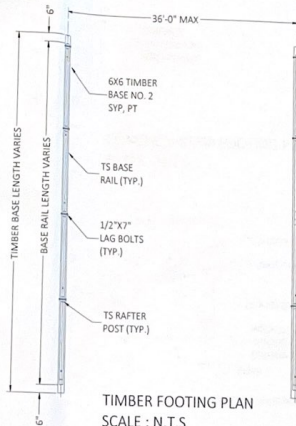
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BASE RAIL PLAN
SCALE : N.T.S.



SECTION
SCALE : N.T.S.



TIMBER FOOTING PLAN
SCALE : N.T.S.



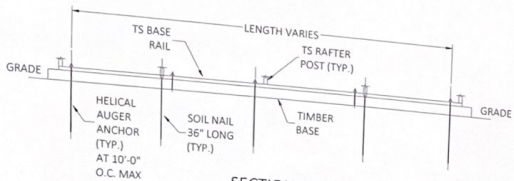
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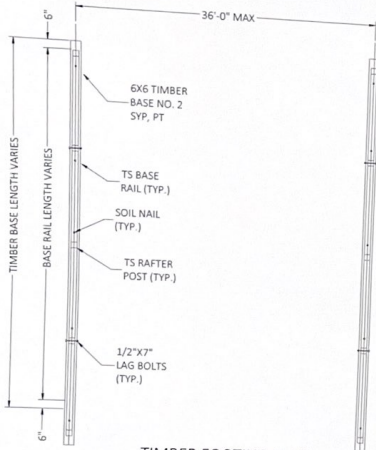
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CONTRACTOR: TOP RANK STEEL STRUCTURES		PROJECT ADDRESS: GENERIC METAL BUILDINGS	
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REVISION 2:		DATE	
DRAWN BY:	KHV	PAGE	7
SCALE:	NTS		

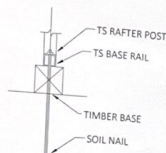
OPTIONAL BASE RAIL ON TIMBER BEAM WITH SOIL NAIL



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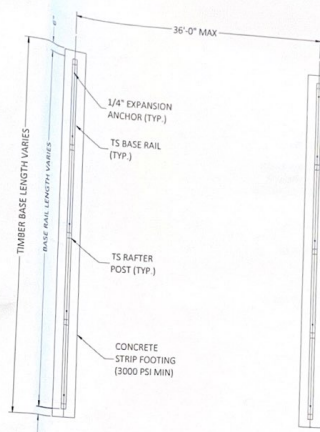


TIMBER FOOTING PLAN SCALE : N.T.S.

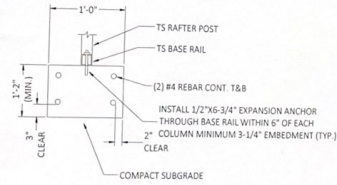


SECTION SCALE : N.T.S.

OPTIONAL CONCRETE STRIP FOOTING



CONCRETE STRIP FOOTING PLAN SCALE : N.T.S.



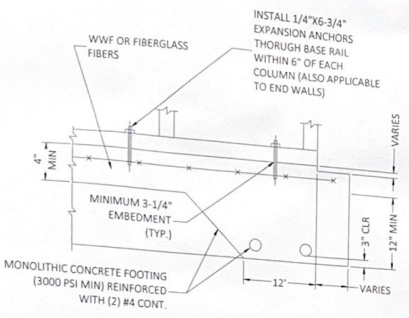
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 Paul E. Gunderson, P.E. #048424
 DATE: 12/15/2021

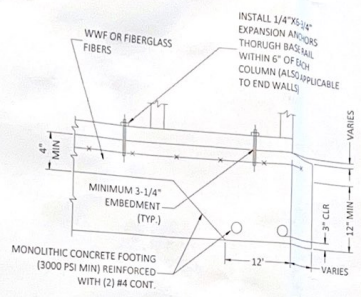
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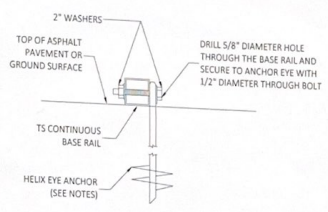
ANCHORAGE OPTIONS



CONCRETE MONOLITHIC SLAB
BASE RAIL ANCHORAGE
DETAIL 14
SCALE : N.T.S.



CONCRETE SLAB
BASE RAIL ANCHORAGE
DETAIL 15
SCALE : N.T.S.



GROUND BASE
HELIX ANCHORAGE
DETAIL 16
SCALE : N.T.S.

GENERAL NOTES:
CONCRETE
CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE
STRENGTH OF 3,000 PSI AT 28 DAYS.

COVER OVER REINFORCING STEEL
FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER
REINFORCING BARS SHALL BE PER ACI-318.
3" IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND
PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE
EARTH OR WEATHER, AND 1-1/2" ELSEWHERE.

REINFORCING STEEL
THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60
THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING
ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.
REINFORCING MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED
1. REINFORCEMENT IS BENT COLD.
2. THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE
BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
3. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT
BE FIELD BENT.

HELIX ANCHOR NOTES
1. FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND
CORBELS, CALICHE, PRELOADED SILTS AND CLAYS, USE MINIMUM (2)
4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX
WITH MINIMUM 50" EMBEDMENT.
2. FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM 30"
EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF
SILTS AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30
INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50"
EMBEDMENT.
4. FOR LOOSE TO MEDIUM DENSE SANDS FIRM TO STIFF CLAYS AND
SILTS ALLUVIAL FILL USE MINIMUM (2) 6" HELICES WITH MINIMUM
50" EMBEDMENT.
5. FOR VERY LOOSE TO MEDIUM DENSE SANDS FIRM TO STIFFER CLAYS
AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 8" HELICES WITH
MINIMUM 60" EMBEDMENT.

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GE
GUNDERSON
ENGINEERING

CONTRACTOR
TOP RANK STEEL
STRUCTURES

PROJECT ADDRESS
GENERIC METAL
BUILDINGS

DESIGN DATE: 04/22/2021
REVISION 1 DATE
REVISION 2 DATE
DRAWN BY: KHV
SCALE: NTS

PROJECT NO. 2109069
LICENSE # P-2016 DATE 12/15/2011
Craig E. Gunderson, P.E. #048404

DESIGN DATE:	04/22/2021
REVISION 1 DATE:	
REVISION 2 DATE:	
DRAWN BY:	KHV
SCALE:	NTS
PAGE:	9

SCALE: NTS