



FAST METAL PANELS

GENERAL NOTES:

- ALL WORK SHALL CONFORM TO FLORIDA BUILDING CODE 2023.
- IT IS THE INTENT OF THESE DRAWINGS TO BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MEET WITH ALL APPLICABLE UTILITY COMPANIES TO VERIFY ALL UNDER- GROUND FACILITIES PRIOR TO THE BEGINNING OF CONSTRUCTION. ALL EXCAVATIONS SHALL PROCEED WITH EXTREME CAUTION AT ALL TIMES. IN THE EVENT THAT EXISTING UTILITIES ARE DAMAGED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR OR REPLACE ALL DAMAGES.
- THIS WORK REQUIRES A BUILDING PERMIT. DO NOT BEGIN WORKING UNTIL A BUILDING PERMIT IS OBTAINED.
- CONTRACTOR IS TO FURNISH ALL LABOR, MATERIALS, SERVICES AND EQUIPMENT NECESSARY TO COMPLETE ALL WORK SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.
- DO NOT SCALE DRAWINGS, DIMENSIONS GOVERN.
- ENGINEER'S VISITS TO THE SITE, AS PER G.C OR OWNER'S REQUEST DURING CONSTRUCTION SHALL BE SCHEDULED WITHIN 24 HOURS PRIOR TO INSPECTION.
- THE CONTRACTOR SHALL MAKE REQUIRED ARRANGEMENTS, SECURE AND PAY FOR ALL BARRICADES, ENCLOSURES, AND FENCING AS NEEDED FOR AND DURING THE PROGRESS TO PROTECT ADJACENT PROPERTIES.
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DESIGN LOADS:

FENCE & GATE:

WIND LOAD AS PER ASCE 7-22 KD=0.85

MIAMI-DADE and /or BROWARD
CATEGORY 2 115 mph
AS PER FBC 2023 SECTION 1616.2.1

CALCULATIONS:

1. STRUCTURAL STEEL HAS BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE AND AISC SPECIFICATIONS NINTH EDITION.

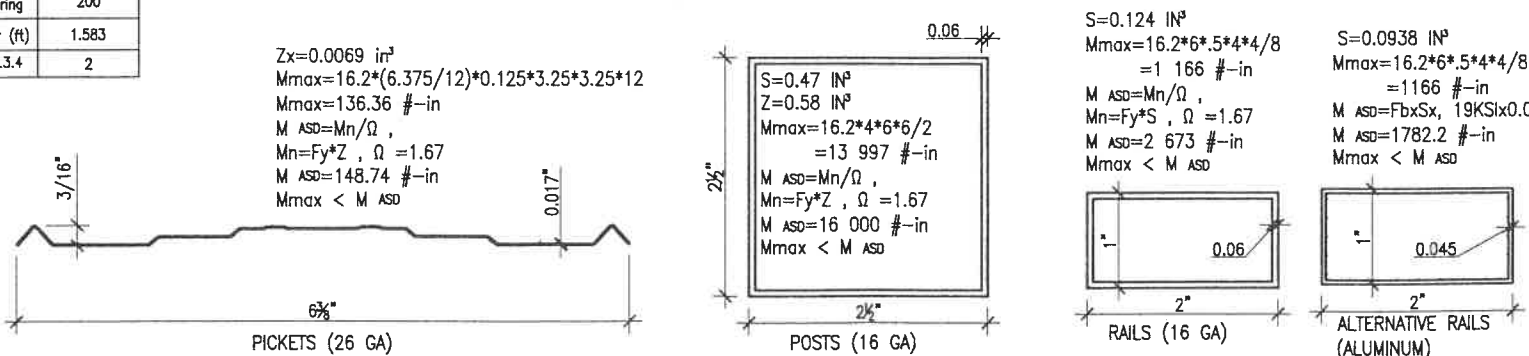
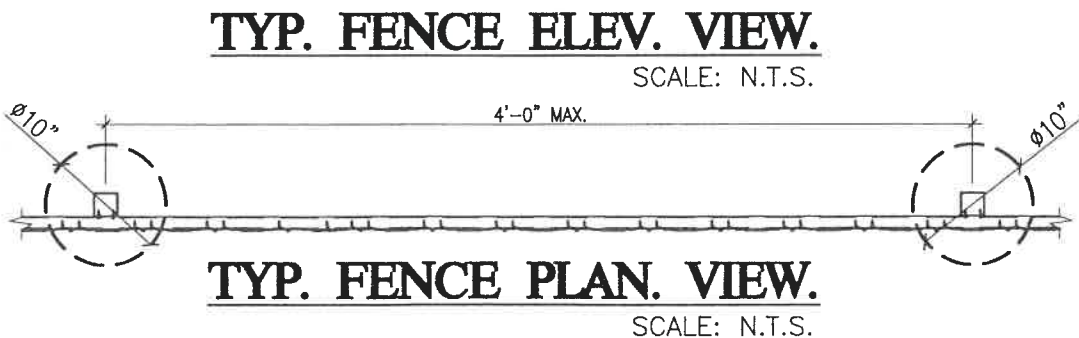
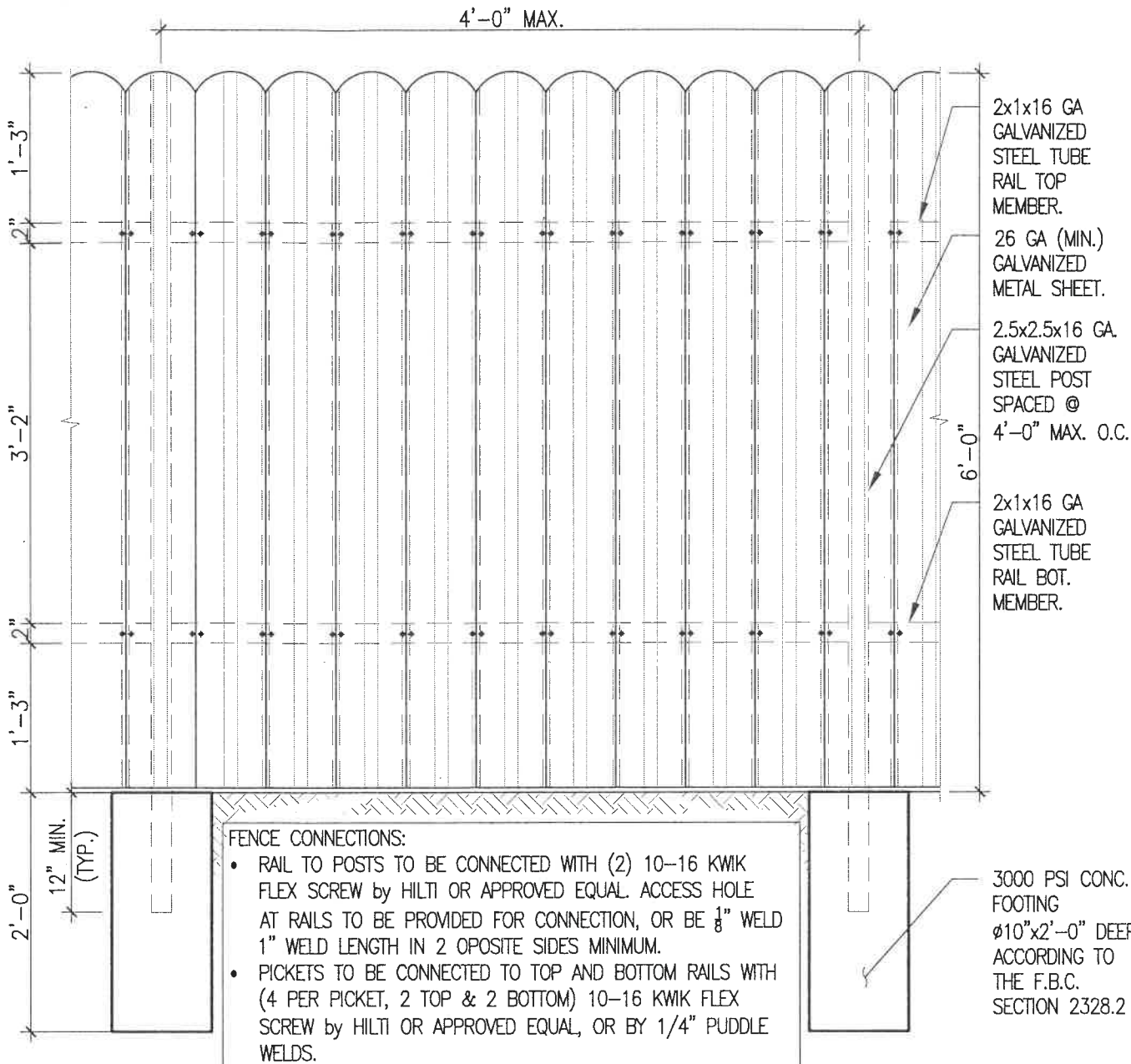
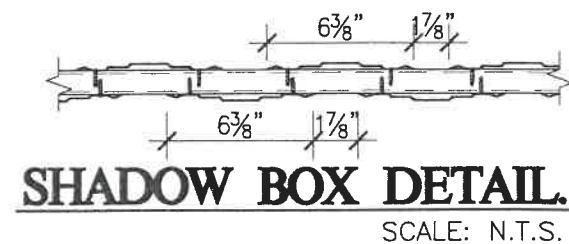
2. STRUCTURAL STEEL SHALL MEET THE FOLLOWING REQUIREMENTS:

TYPE	ASTM	GRADE	Fy
STEEL SHEETS	A36		36 KSI
STRUCTURAL TUBING	A500	B	46 KSI

3. ALL STEEL SHALL BE HOT-DEEP GALVANIZED.

4. PAINT STEEL HOT GALVANIZED SURFACES IN CONTACT WITH CONCRETE WITH ALKALI-RESISTANCE COATINGS, SUCH AS HEAVY-BODIED BITUMINOUS PAINT OR WATHER-WHITE MOTHACRYLATE LACQUER.

IN ACCORDANCE WITH FBC 2023 AND ASCE 7-22			
WIND LOAD CALCULATION:		General Data	Post Design
Category:	II	L (ft):	4
Exposure:	C	Hpost (ft)	6
V (mph):	115.00	Fy (psi)	46000
It:	1.00	Fb (psi)	27600
Kd:	0.85	Fv (psi)	18400
h (ft):	6	Fy (psi)	36000
Pd (psf):	16.2	Fb (psi)	21600
		Fv (psi)	14400
RAIL TO POSTS CONNECTION DESIGN		FOUNDATION DESIGN (NONCONSTRAINED FBC 2023 -1807.3.2.1)	
Actual Pullout	194.4	Using 10-16 Hilti Kwik Flex Screw	P
Allowable Pullout	200		A
OK	OK		d
			Lateral soil bearing
			200
			Footing Diameter (ft)
			1.583
			For poles 1806.3.4
			2



CITY STAMP:



PROJECT NAME:
FLORIDA ALUMINUM SYSTEMS LLC 2024

JOB No.: 22-0616 VERSION: 03 DATE: 4/23/2024

LOCATION: MIAMI, FL

CLIENT:
FLORIDA ALUMINUM SYSTEMS LLC

PM: MARIO MORALES DRAWN BY: M.L.P.
DESIGNED BY: CLAUDIA PROENZA CHECKED BY: GONZALO A. PAZ

No.	DESCRIPTION	DATE	APP'D

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THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY GONZALO A. PAZ, PE. ON 4/23/2024. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

4/23/2024

GONZALO A. PAZ, PE. (Lic No-60734)
CERTIFICATE OF AUTHORIZATION No. 26655

SHEET NAME:
FENCE

X-1.0



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DESIGN LOADS:

FENCE & GATE:

WIND LOAD AS PER ASCE 7-22 KD=0.85

MIAMI-DADE and /or BROWARD
CATEGORY 2 ----- 115 mph
AS PER FBC 2023 SECTION 1616.2.1

CALCULATIONS:

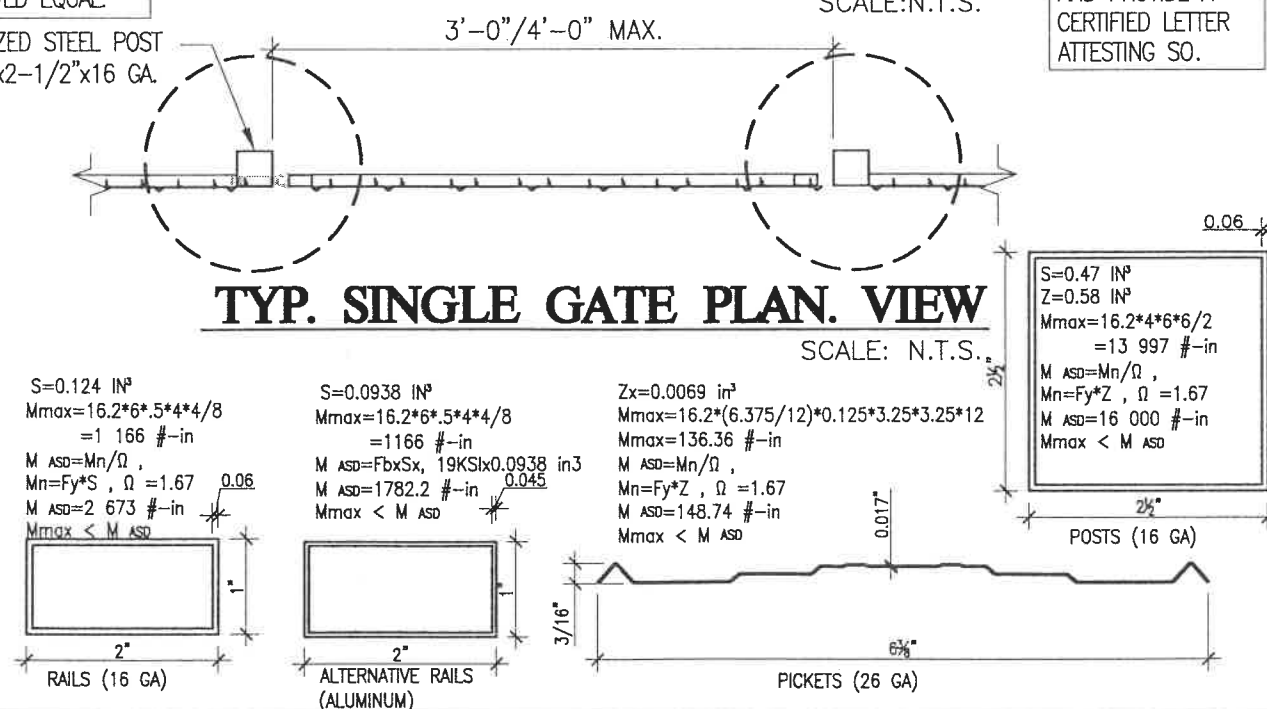
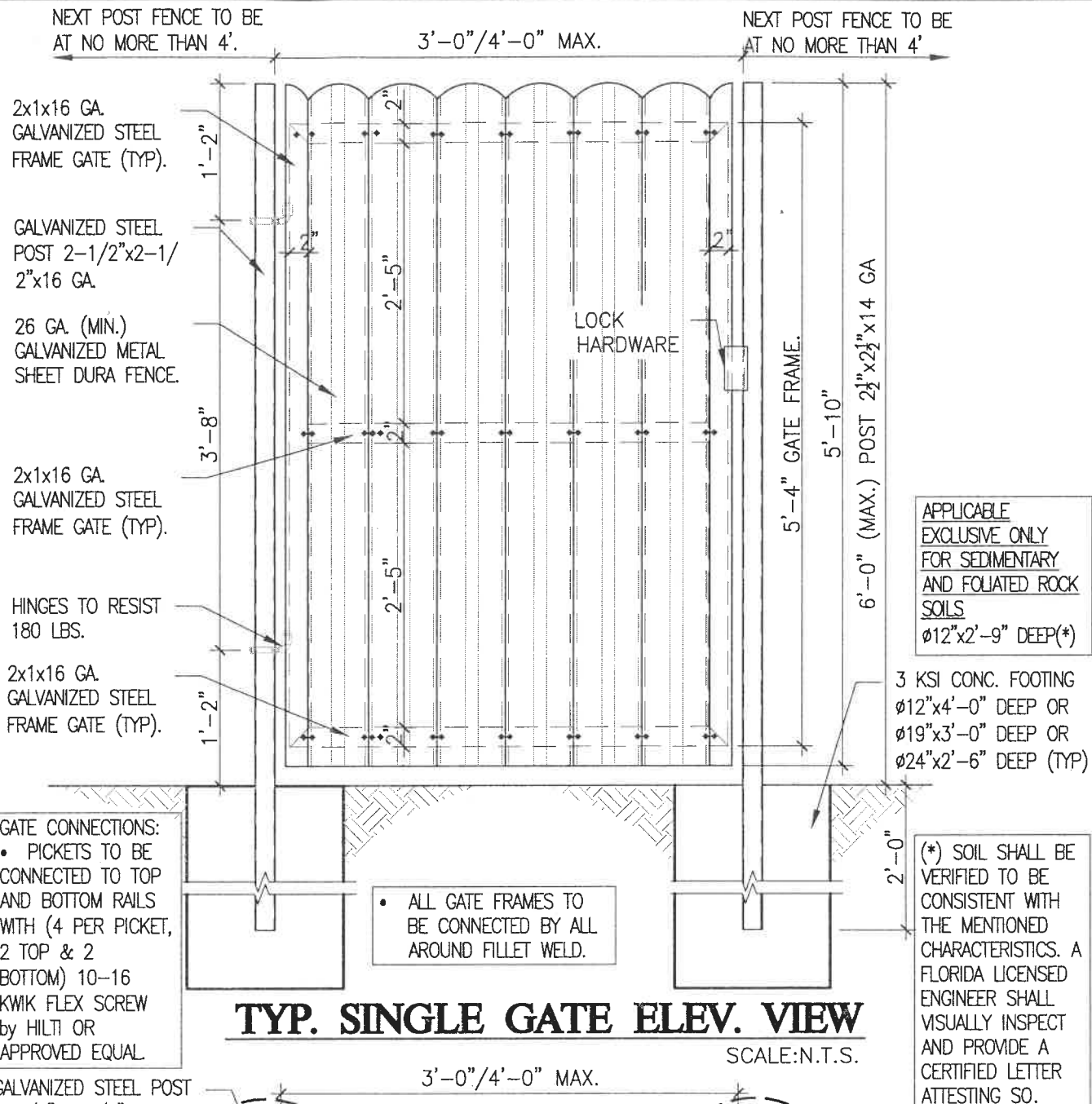
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IN ACCORDANCE WITH FBC 2023 AND ASCE 7-22,

WIND SPEED FROM FBC 2023, CHAPTER 16, SECTION 1616.2.1 V=115 MPH

WIND LOAD CALCULATION:		General Data:		DL(psf):		Top and Bottom Design	
V (mph):	115.00	Fence Span(ft):	4	Gate Span(ft):	4 (Gate Span = Gate Leaf, not opening)	2x1x0.06 st galvanized	
Exposure:	C	Hpost (ft)	6	POST DESIGN STEEL GALVANIZED A-500			
Gust Factor	0.85	Fy (psi)	46000	A-500			
Cf:	1.30	Fb (psi)	27545	Section	Mwind	MDL	Mmax.(lb-in)
Kd:	0.85	Fv (psi)	18400	2.5x2.5x14Ga	14012	2880	14306
h (ft):	6.00	Fv (psi)	36000				
Kz:	0.85	Fv (psi)	21600				
qz (psf):	16.2	Fv (psi)	14400				
RAIL TO POSTS CONNECTION DESIGN				FOUNDATION DESIGN (NONCONSTRAINED FBC 2023 -1807.3.2.1)			
Actual Pullout	32	Using 10-16 Hilti Kwik Flex Screw		P	583.83	Lateral soil bearing	200
Allowable Pullout	200			A	2.16	Footing Diameter (ft)	1.58333
	OK			d (Depth)	3.95	For poles 1806.3.4	2



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CALCULATIONS:

IN ACCORDANCE WITH FBC 2023 AND ASCE 7-22,

WIND SPEED FROM FBC 2023, CHAPTER 16, SECTION 1616.2.1 V=115 MPH

WIND LOAD CALCULATION:

General Data:	
V (mph):	115.00
Exposure:	C
Gust Factor	0.85
Cf:	1.30
Kd:	0.85
h (ft):	6.00
Kz:	0.85
qz (psf):	16.2

General Data:	
Fence Span(ft):	4
Hpost (ft)	6
Fy (psi)	46000
Fb (psi)	27545
Fv (psi)	18400
Fv (psi)	36000
Fv (psi)	21600
Fv (psi)	14400

DL(psf):	5
Gate Span(ft):	5.5 (Gate Span = Gate Leaf, not opening)
POST DESIGN STEEL GALVANIZED A-500	
Section	Mwind MDL Mmax.(lb-in) Zx (in ³) fb (psi)
2.5x2.5x14Ga	19245.6 5951.25 20144.73 0.755 26674.7
fb (psi)<Fb	OK

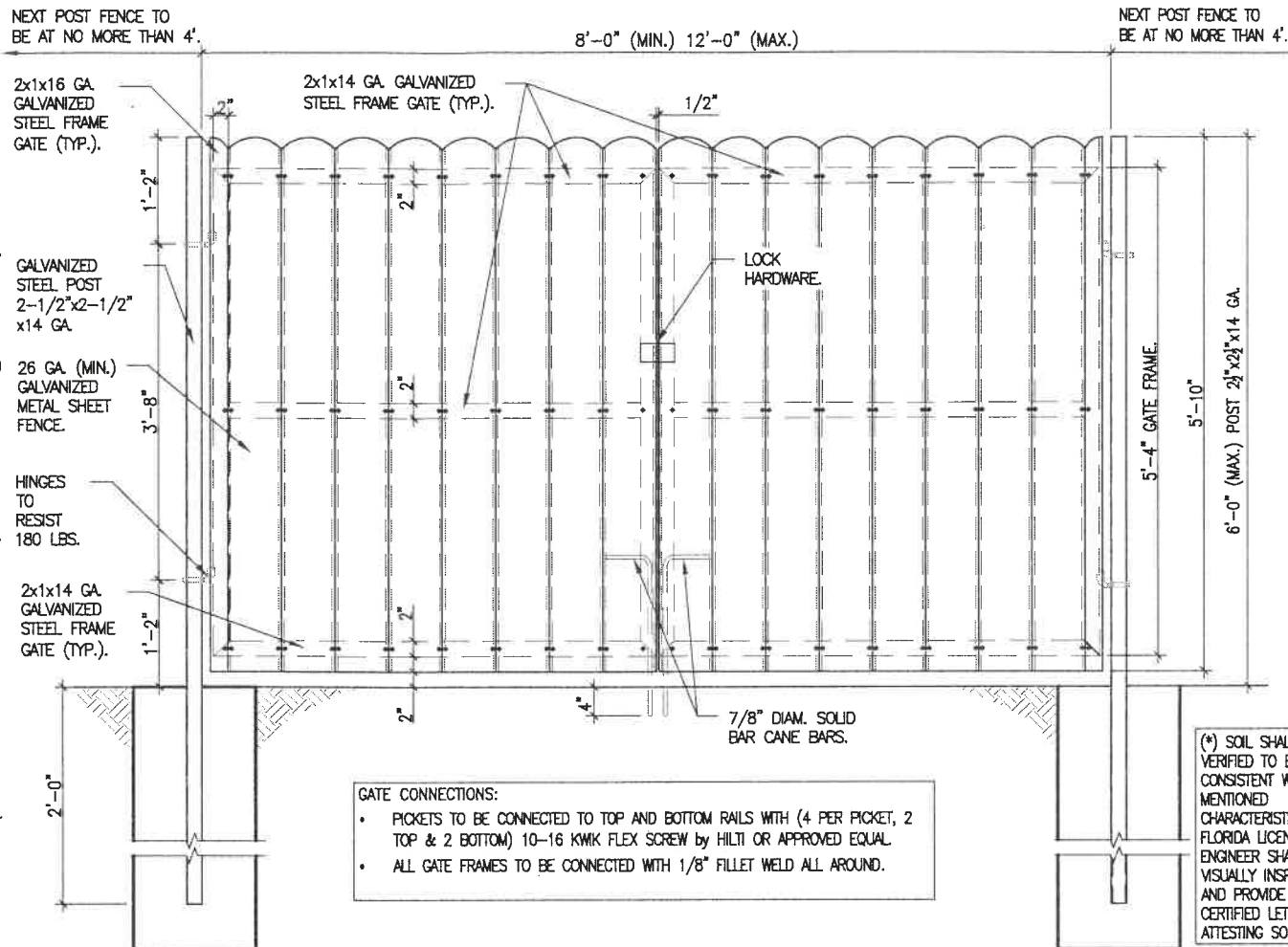
FOUNDATION DESIGN (NONCONSTRAINED FBC 2023 -1807.3.2.1)

P	559	Lateral soil bearing	200
A	2	Footing Diameter (ft)	1.58333
d (Depth)	3.17	For poles 1806.3.4	2

Top and Bottom Design	
2x1x0.071 st galvanized	
A-500	
Mmax. (lb-in)	4074
Sx (in ³)	0.155
fb (psi)	Mmax/Sx
fb (psi)	26287
fb (psi)<Fb	OK
(2023 -1806.2)	

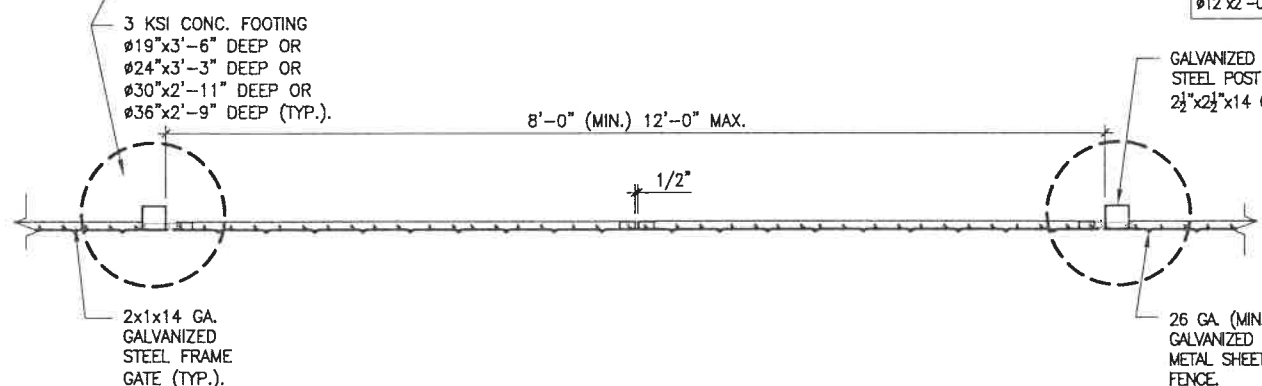
Actual Pullout	32
Allowable Pullout	200
OK	

Using 10-16 Hilti Kwik Flex Screw



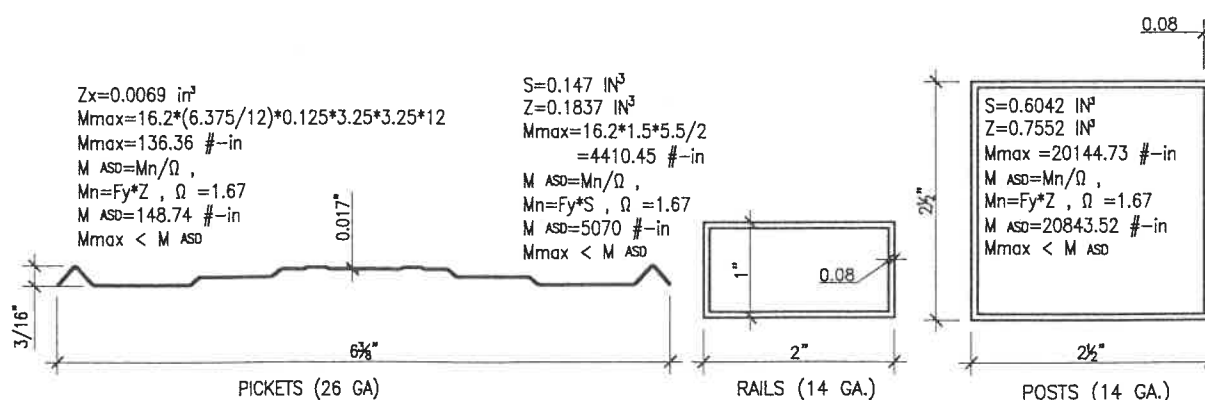
TYP. DOUBLE SWING GATE ELEV. VIEW.

SCALE: N.T.S.



TYP. DOUBLE SWING GATE PLAN VIEW.

SCALE: N.T.S.



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