

Conforms to the requirements of the 7th Edition (2020) of the Florida Building Code sections 1609 and 3107, V(ult) = 120 mph, Exposure category = C, Risk category = II
John J. Orlando P.E. LLC - 165 Old Ridge Road - Macon, GA 31211 - 478 731 5394 - jlorlando@cox.net - Florida registration # 0044089 sheet 1 of 2

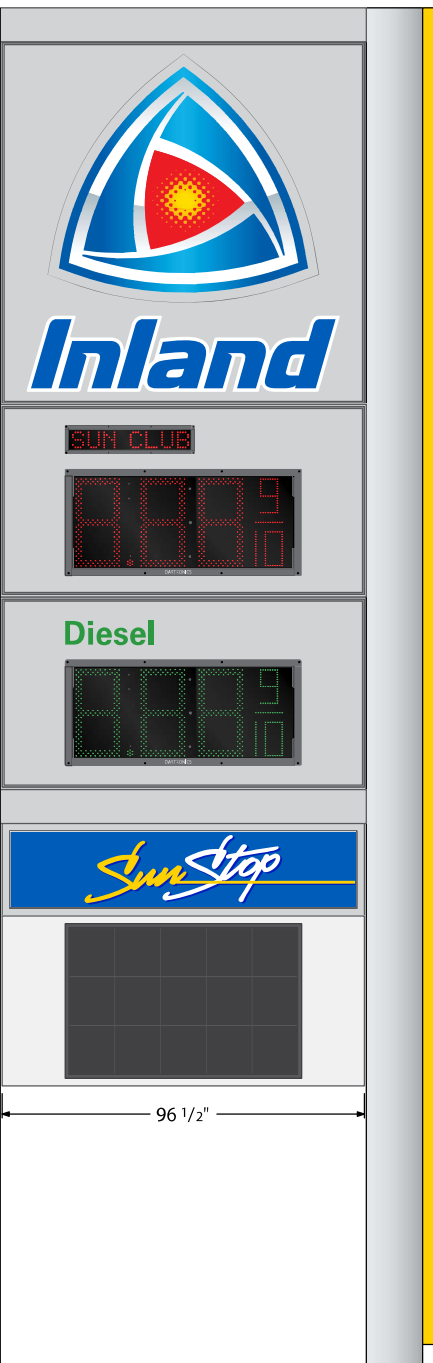
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30' 0"

45"

75"



NEW EMC
CABINET

96 1/2"



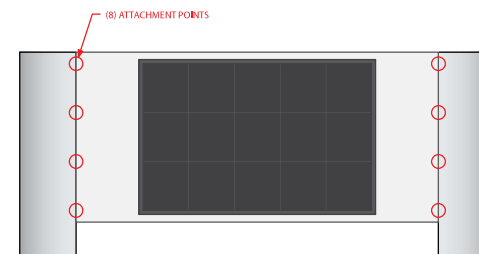
CURRENT SIGN



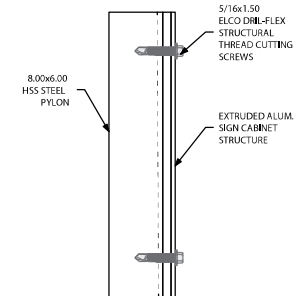
PROPOSED CHANGES

ADD EMC TO EXISTING STRUCTURE

1. Fabricate new 45"x96.50"x24" sign cabinet to attach to existing poles.
2. Re-purpose existing 41"x63" EMC from Shell #303.



ATTACHMENT DETAIL



SECTION DETAIL



251 FORTUNE BLVD
MIDWAY, FL 32343
PH: 850.224.7446
FX: 850.224.8936
ApogeeSigns.com
STATE CERTIFIED
SIGN CONTRACTOR
LIC# ES12000314

DRAWN BY:
ERIC LARSON
EMAIL:
Eric.Larson@ApogeeSigns.com
DRCT LINE:
850.999.6042



Inland #341
4047 SW SR 47
Lake City, FL.

JOB NUMBER:
31710
DATE:
01/26/2022

SHEET NUMBER
A.1

Job name Inland #341
Job# 0322APG
Sign company: Apogee Signs
Installation location: 4047 SW SR 47, Lake City, FL 32055

Section 3107 and 1609 of Florida Building Code 2020 and Chapter 30 ASCE 7-16 applies.
Application of wind pressures using the alternative all heights method for components and cladding

Type of structure: new EMC sign cabinet fastened to existing sign poles

Occupancy Category: II

Wind velocity (3 sec gust), FBC 2020, section 1609.3: 120 mph

Wind pressure (qz) 36.9 psf

Net Pressure Coefficient (Cnet) from Figure 30.7-2
Components and cladding not in areas of discontinuity - walls and parapets -1.09
Wind Pressure -40.2 psf

Wind load applied between wall and structure, pulling structure away from wall
Load carried by tension in fasteners connecting structure to wall

- maximum height of structure to be attached	3.75 ft
- maximum width of structure to be attached	8.04 ft
- fill factor	1.00
- projected area of each component to be attached	30.2 ft ²
- wind load	-1213 lbs
- design limit tension load per fastener to	200 lbs
- even number of fasteners minimum of 2 =	-8
- number of fasteners practically required due to structure shape	8
- weight of structure is approximately	181 lbs
- design limit shear load per fastener to	100 lbs
- average shear load per fastener =	22.6 lbs

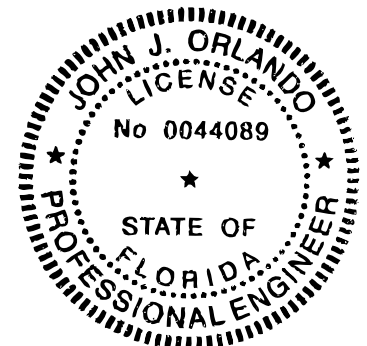
Mounting surface construction is: 8.00 x 6.00 HSS steel pylon

Method - 5/16" Drill-Flex screws
http://anchors.dewalt.com/anchors/documents/uploads/elco_drilflex_a_manual.pdf?1589229775

References:
ASCE 7-16
The 7th Edition (2020) of the Florida Building Code

John J. Orlando PE LLC 0044089
165 Old Ridge Road
Macon, GA 31211
(478) 731-5394
jjorlando@cox.net

sheet: 2 of 2



John Orlando Digitally signed by John Orlando
Date: 2022.02.03 16:18:57 -05'00'

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