



Bldg. Permit # _____

COA# 18-57

Certificate of Appropriateness Application

Building & Site Information

Address of the Site: 100 S 2ND ST 106

Parcel ID #: 2410-503-0108-000/6

Type of Designation: Contributing Non-contributing Site within the _____ Historic District

Individually Designated Site, City Commission Resolution No. _____

Property Owner/ Applicant Information

Property Owner(s) Name(s): Galleria @ Downtown Fort Pierce LLC

Mailing Address: 1239 ATTON Rd MIAMI BEACH FL 33139

Phone Number(s): 772 370-1113 Email: _____

Applicant

Name(s): _____

Mailing Address: _____

Phone Number(s): _____ Email: _____

Representative

Name(s): _____

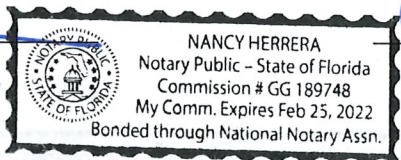
Mailing Address: _____

Phone Number(s): _____ Email: _____

Property Owner(s) Acknowledgements:- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein. The undersigned consents to inspection and photographing of the subject property by the Historic Preservation staff for purposes of consideration of this Application and/or presentation to the Historic Preservation Board.

I / We, Gustavo Gutierrez as Owner(s) of the subject property do hereby authorize the filing of this application on my/our behalf.

[Signature]
Signature of Owner



6/26/18
Date

Description of Requested Work

Please indicate the type of work requested:

- Fence
- Shed
- Door(s)
- Roof
- Window(s)
- Signage
- Shutter(s)
- Porch
- Rehabilitation
- New Construction
- Demolition
- Relocation

Site Improvements (describe) _____

Other (describe) Sign _____

Please provide a detailed description of the proposed work to be performed: _____

Have other alterations been made to the site within the last 12 months? No Yes, _____

Will the proposed work require a Zoning Variance? No Yes, Code Section(s): _____

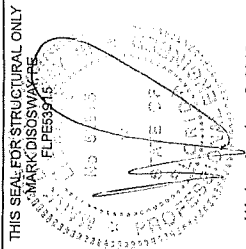
Application Requirements

- \$10.00 Application fee
- Site Plan with dimensions.
- Architectural Drawings:
 - Drawings should show all current and proposed floor plans and elevations, fences, walls, and any other landscape features.
 - Drawings should indicate materials to be used.
- Photos - One (1) color photograph of the main façade of the site and photographs of any areas affected by the proposed project.
- Material(s) specifications and/or sample(s)
- Color samples.
- Demolition – Plans for what will be taking the demolished structure’s place should be submitted.

CERTIFICATION: To best of my knowledge, I certify this sign meets structural requirements of:

6th EDITION FLORIDA BUILDING CODE (2017)

LIMITATION: Valid for only one sign, at one location. This seal is not a structural requirement, scope of work, and installer, nfg, owner responsibilities control.



THIS SEAL FOR STRUCTURAL ONLY

Signature

Signs-N-Lettering

Galleria
of Pierce Harbor
Blade Sign Engineering

LOCATION OF SIGN:
108 S 2nd St
Fl. Pierce 34950

Mark Discosway P.E.
163 SW Midtown Place, #103
Lake City, Florida 32025
Phone: (386) 754 - 5419
Fax: (386) 269 - 4871
Email:
engineer@mysignengineering.com
Web Site:
www.mysignengineering.com

PRINTED DATE:

Wednesday, June 6, 2018

DRAWN BY:
Evan Beamsley

CHECKED BY:
Mark Discosway P.E.

FINALS DATE:
2018-06-06

LAST REVISED:

JOB NUMBER:
180614

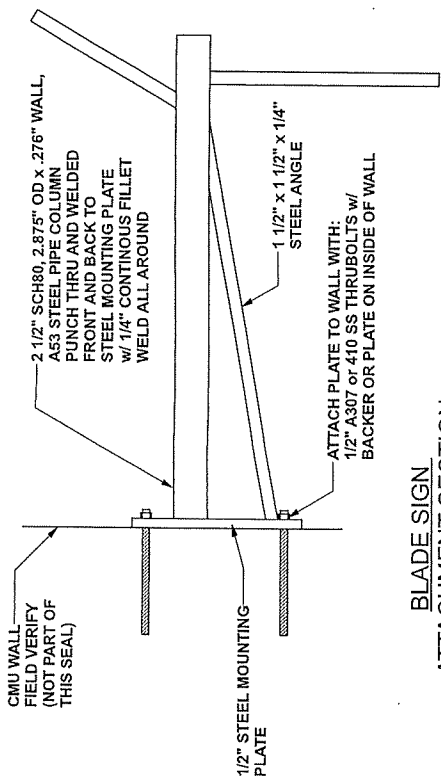
DRAWING NUMBER

S-1

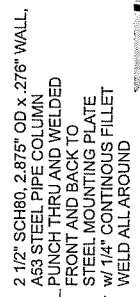
OF 1 SHEET

- SIGN INSTALLER AND MANUFACTURER RESPONSIBILITIES:** By using this generic sign attachment engineering the owner, manufacturer, and installer accept responsibility to:
 - Design sign faces, letters, cabinets, raceways, and attachment brackets according to sign code, building code, and UL.
 - Verify site conditions including wind speed, deck exposure and top factors.
 - Verify all conditions meet minimum code requirements for sign attachment engineering, by verifying existing wall, which is not known at the time of this seal; for this reason various construction options for various wall construction types are specified.
 - Attachment design is by the architect of record. By submitting this attachment engineering for building design accept responsibility to verify with architect that building structure will support these loads.
- ENGINEER'S SCOPE OF WORK:** This design establishes minimum structural requirements for attachment of generic signs to wall based on stated (not verified) wind & gravity loads.
 - Wind controls structural design. This design only MWFRS; not C&C.
 - Size, solid area & weight of generic signs is limited as specified in the outline drawing.
- WIND DESIGN DATA:**
 - Basic Wind Speed, $V = 160$ MPH (3 second gust), 33ft, Exp. D).
 - Risk Category II, (MRI = 700 yr)
 - Wind Directionality Factor, $K_d = .85$, (attached signs)
 - Wind Exposure = D, (tower & sign installer must verify)
 - gust-effect factor, $G = .85$, (rigid structure)
 - Internal Pressure Coefficient, $C_{pi} = N/A$
- WIND LOADS BY ASCE 7-10 (Ch. 28, Fig. 28.4-1, Solid Freestanding Walls and Signs)**
 - Sign Height = 20 ft max, $K_z = 1.08$
 - Sign Exposure = D, $K_{zt} = 1.0$
 - Exposure Coefficient, $C_e = 1.0$
 - Case A&B, $C_f = 1.45$, Case C, $C_f = N/A$
 - Velocity Pressure, $q_h = 0.00256 \cdot K_z \cdot K_{zt} \cdot K_d \cdot V^2 = .00256 \cdot 1.08 \cdot 1.85 \cdot 160^2 = 60.1$ psf
 - Factored Wind Pressure, $P = q_h \cdot G \cdot C_f = 60.1 \cdot .85 \cdot 1.45 = 74$ psf
 - Wind Force on Sign, $F = P \cdot A$ (area of sign)
 - Moment at wall = 301 lbs-ft, $Z = 2.71 = 3513$ lb-ft (800) per column
 - Tension load at fasteners = 3513 lb-ft / $11 = 3513$ lbs tension per fastener row
- SIGN COLUMN BENDING AND ATTACHMENT:** $M_x = 3513$ lb-ft
 - Required $S_x = M_x / F_{by} = 3513 \text{ lb-ft} / 35 \text{ ksi} = 100 \text{ in}^3$
 - 1 1/2" SCH80, 2.875" OD x 2.76" wall, A53 Steel Pipe Column, $S_x = 103 \text{ in}^3$, OK
 - 1 1/2" steel angle, 2x4 SPP, 0.42 s.g. w/ fasteners in mid 1/2" of 1.5" edge. Attached to front and back to 1/2" steel mounting plate with 1/4" continuous fillet weld all around both sides
 - Tension load at fasteners = 3513 lbs / 2 = 1757 lbs tension per fastener
 - attachment = 2 rows of (2) fasteners with 1757 lbs allowable load 12" min between rows
- Referenced Code Requirements:** ASTM specifications, ACI-318 for reinforced concrete, American Welding Society Code for Welding in Building Construction, AWS Specification for Design, Fabrication, and Erection of Structural Steel for Buildings.
- Wall material specs for attachment only:**
 - CMU shall be 8" ASTM C90 with fasteners in 1.25" face shell.
 - Wood framing shall be 2x4 SPP, 0.42 s.g. w/ fasteners in mid 1/2" of 1.5" edge.
 - Cold Formed Steel Framing shall be 1035, .38ksi w/ fasteners in flange.
 - Sign attachment shall be 7/16" CS or plywood.
 - Concrete shall be 3000 psi min compressive strength.
- Contractor shall verify all wall materials and construction, dimensions, and conditions in the field before erection and notify the engineer of any discrepancies.
- FASTENERS:** (all allowable loads are per allowable stress design)
 - 1/2" A307 OR 410 SS THROUGH BOLTS (CMU, C, S)
 - Install w/ 3/4" steel or alum. backer plate on inside of wall as needed to transfer loads to building structure
 - Allowable max tension load = 2720 lb

NOTE: THIS SIGN IS ADDING LOAD TO THE EXISTING BUILDING STRUCTURE. THE BUILDING OWNER AND THE BUILDING DESIGNER MUST VERIFY THAT THE BUILDING CAN SUPPORT THE ADDITIONAL SIGN LOADS



BLADE SIGN ATTACHMENT SECTION



MOUNTING PLATE DETAIL FOR (4) BOLT ATTACHMENT

