The Florida State University

Signage Style Manual

April, 2012

FSU Facilities

Contains Sections:

A- Design Concepts

B- Sign Types

E- Specifications

EXTERIOR WAYFINDING SIGNAGE AT FLORIDA STATE UNIVERSITY

Consistency of building signage is an important means to identify the University facilities. All exterior sign types shall be designed in accordance with the specifications contained in this Exterior Signage Style Manual. The size, proportion, color etc of the sign must be one of the standard prototype signs and must be of an appropriate size for its function. The campus way-finding signage program is intended to be part of a way-finding system and not commemorative. Building signs identify campus buildings by official name. The name must be limited to key phrases, for example “Mendenhall Maintenance Complex” not “Lt. Colonel Herbert D. Mendenhall Maintenance Complex.”

Since color helps to identify the University, it is important that the identification colors specified below are reproduced faithfully and consistently. All painted surfaces must be finished low gloss to comply with the most current ADA Accessibility Guidelines.

Follow the color identification code below each color for matching.

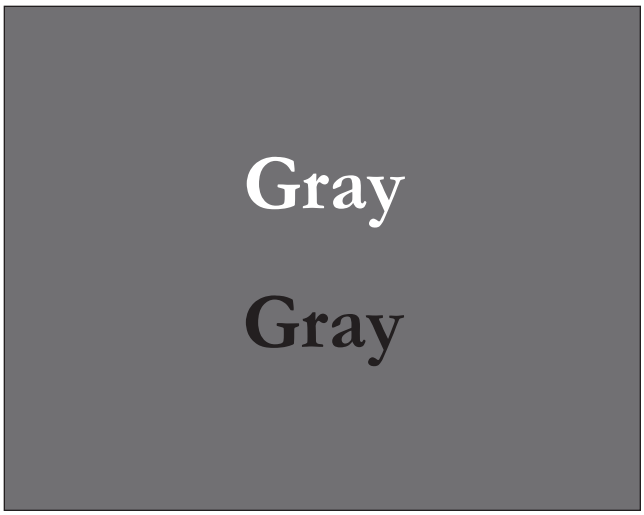
Refer to Manual Section E for paint and finish specifications.

Primary Colors

University sign field color to match PPG color #435-7,Merlot

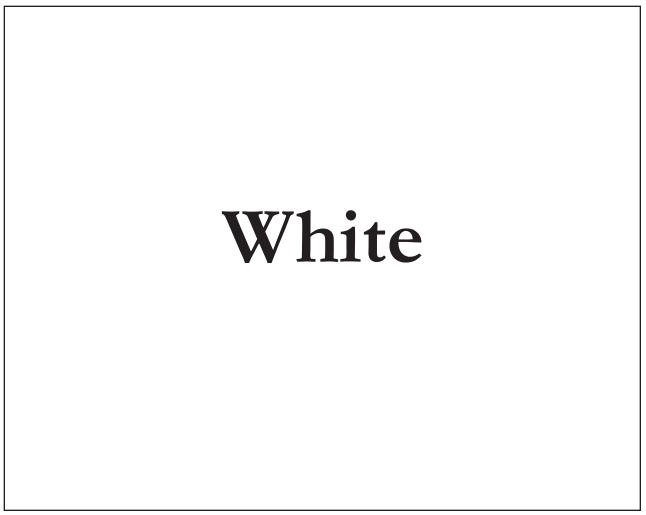
Solid plastic equivalent to match Burgundy
by Laminations, Inc.

University sign field and rule line color to match 3M Company Scotchlite 467 MP



Sign cap and post color to match PPG color# 521-4,
Silver Dollar

Solid plastic equivalent to match Canyon Granite
by Laminations, Inc.



Messages and pictogram figures, white reflective sheeting
3M Company Scotchlite 280-10

The following specified sign colors are to be used consistently in the campus sign program to identify services, parking areas, and regulatory messages. All painted surfaces must be finished low gloss to comply with the most current ADA Accessibility Guidelines.

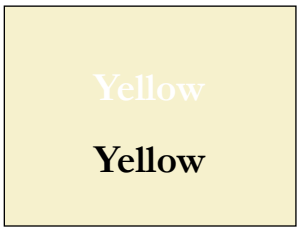
Follow the color identification code below each color for matching.

Refer to Manual Section E for paint and finish specifications.

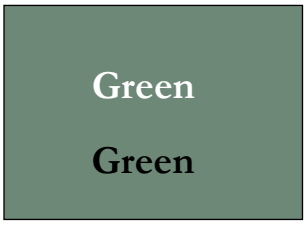
Accessibility symbol and sign field color to match PPG color #150-7, Cobalt glaze
Solid plastic equivalent to match PBlue by Laminations, Inc.

Regulatory sign field color to match PPG color #334-7, Apple A-Day

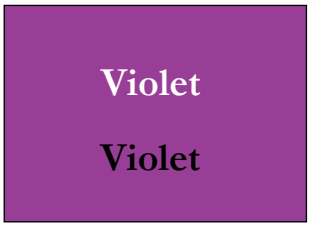
Solid plastic equivalent to match Red by Laminations, Inc.



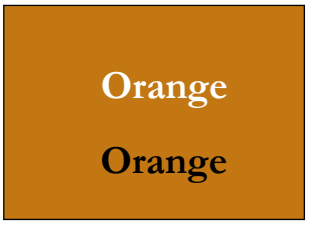
Warning/cautionary sign field color to match PPG color#11707, Fall Gold
Solid plastic equivalent to match Yellow by Laminations, Inc.



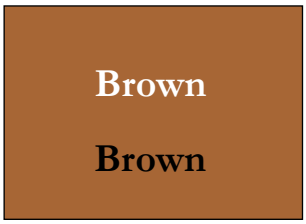
Visitor/Metered parking sign field color to match PPG color# 107-7, Leap Frog
Solid plastic equivalent to match Custom Green by Laminations, Inc.



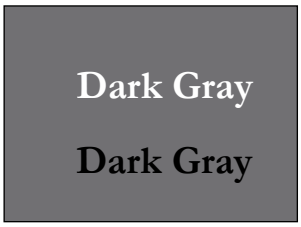
Student/Freshman parking sign field color to match PPG color# 144-7, Dutch Iris
Solid plastic equivalent to match Custom Purple by Laminations, Inc



Student parking sign field color to match PPG color# 125-7, Field Poppy
Solid plastic equivalent to match Custom Orange by Laminations, Inc



Faculty/Staff parking sign field color to match PPG color# 422-7, Covered Bridge
Solid plastic equivalent to match Chocolate Brown by Laminations, Inc.



Motorcycle parking sign field color to match PPG color# 530-5, Antique Silver
Solid plastic equivalent to match Custom Dark Grey by Laminations, Inc.

The primary signage alphabet is Garamond Bold. Alternate weights of the Garamond family of letterforms are specified for special signing conditions. Alternate alphabet is Times New Roman Bold where noted.

Refer to manual pages A 2.01, A 2.02 and A 2.03 for alternate letterform displays and to Manual Section B for special letterform uses.

ABCDEFGH
IJKLMNOPQRS
TUVWXYZ
&
abcdefghijklm
nopqrstuvwxyz
1234567890

An alternate weight letterform is Garamond. Refer to Manual Section B for special letterform uses.

ABCDEFGH
IJKLMNOPQRS
TUVWXYZ

&

abcdefghijklm
nopqrstuvwxyz
1234567890

An alternate weight letterform is Garamond Italic. Refer to Manual Section B for special letterform uses.

ABCDEFGH
IJKLMNOPQRS
TUVWXYZ

&

abcdefghijklm
nopqrstuvwxyz
1234567890

An alternate alphabet is Times New Roman Bold. Applied only on the building exterior.

Refer to Manual Section B for special letterform uses.

ABCDEFGH
IJKLMNOPQRS
TUVWXYZ
&
abcdefghijklm
nopqrstuvwxyz
1234567890

Proper letter and word spacing is essential for legibility. If spacing is too tight, letters will blend together visually and words will be readable only at close range. If spacing is too open, letters will separate making the word forms difficult to read.

All letter and word spacing for non-illuminated signed messages are to be opened (kerned) 25 percent over normal computer generated spacing. When messages are interior illuminated, all kerning is to be increased to 50 percent to compensate for irradiation that causes illuminated letters to appear thicker than non-illuminated letters.

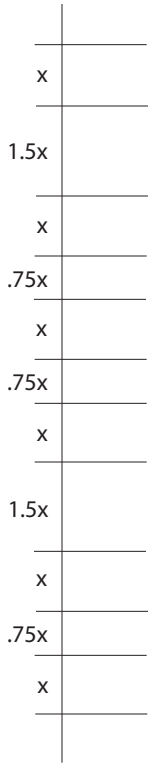
Unique letter combinations having overlapping or angular shaped letterforms will require special kerning to achieve an consistent appearance.

Non-illuminated spacing

Illuminated spacing

Some unique letter combinations requiring special kerning

Proper vertical spacing between individual and multi- line messages is necessary for proper legibility. Measurements for determining proper message spacing are based on the height of the capital letter identified as "x".

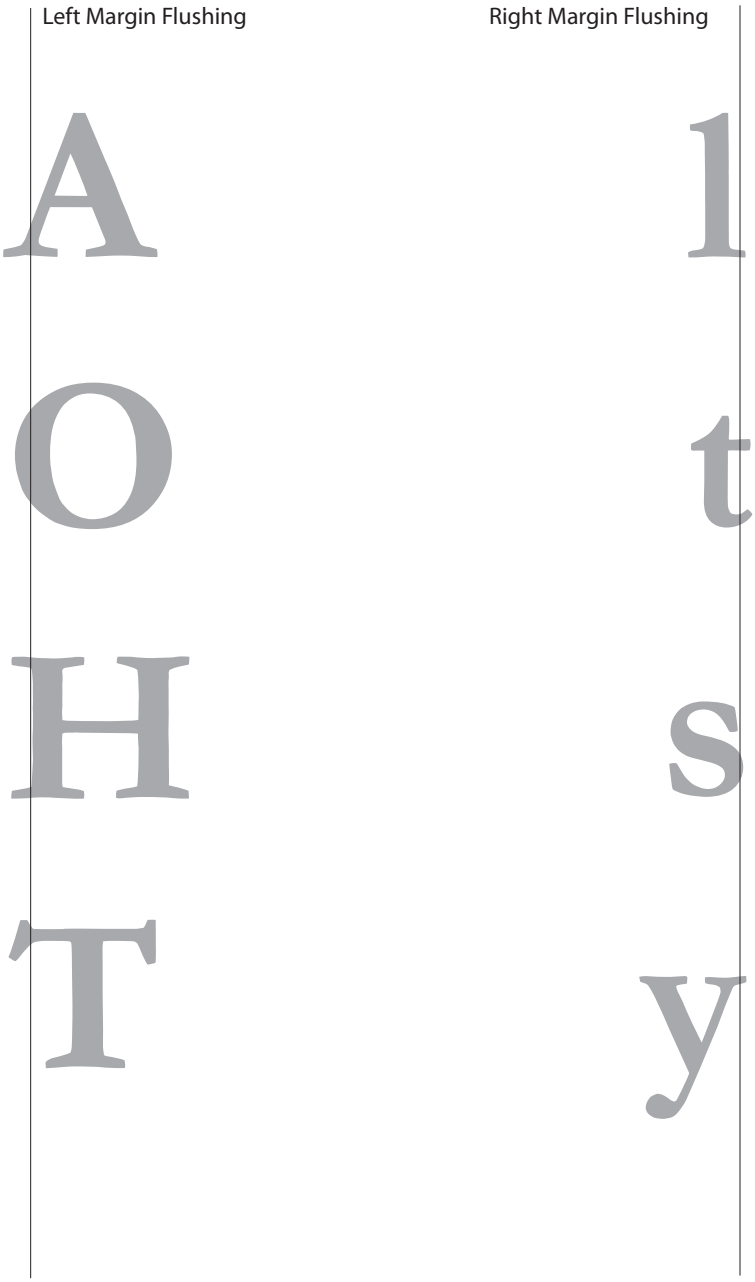


College of Social Sciences

Center for the Study of Critical Issues in Economic Policy and Government

School of Public Administration and Policy

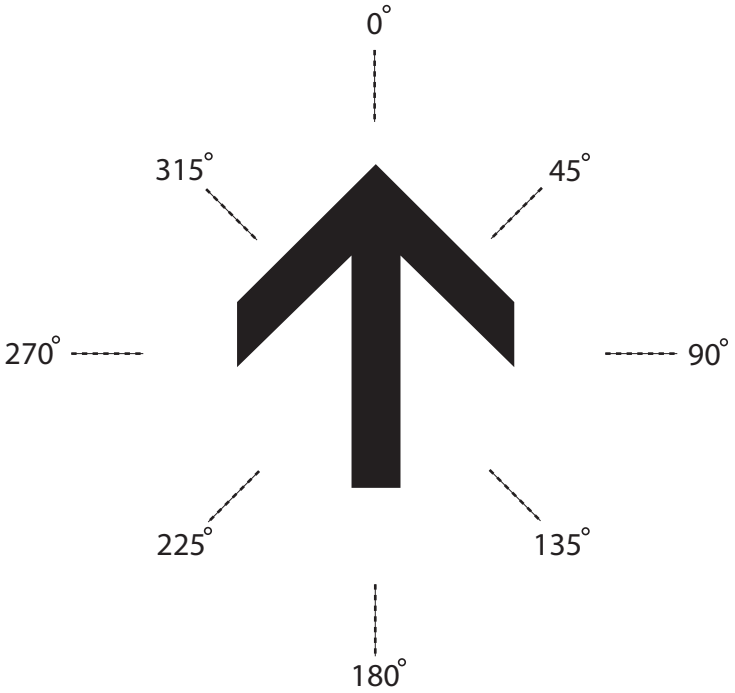
Due to the different characteristics of letterforms, letters must be visually aligned to appear flush and not mechanically aligned.



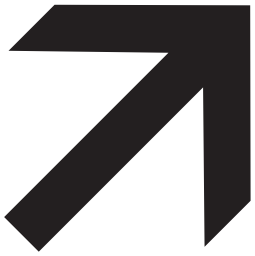
Shown below is the official Seal of the University. Obtain digital art from the University.

Refer to Manual Section B for University Seal applications with regard to placements, sizes, colors, and materials.

Refer to Manual Section B for arrow placements, sizes, color uses, and materials.



Directional Positions



Display

Refer to Manual Section B for pictogram placements and sizes.
Reproduce using white PSV and screened background colors.


Symbol 1


Symbol 2


Symbol 3


Symbol 4


Symbol 5


Symbol 6


Symbol 7


Symbol 8


Symbol 9


Symbol 10


Symbol 11


Symbol 12


Symbol 13


Symbol 14


Symbol 15


Symbol 16


Symbol 17

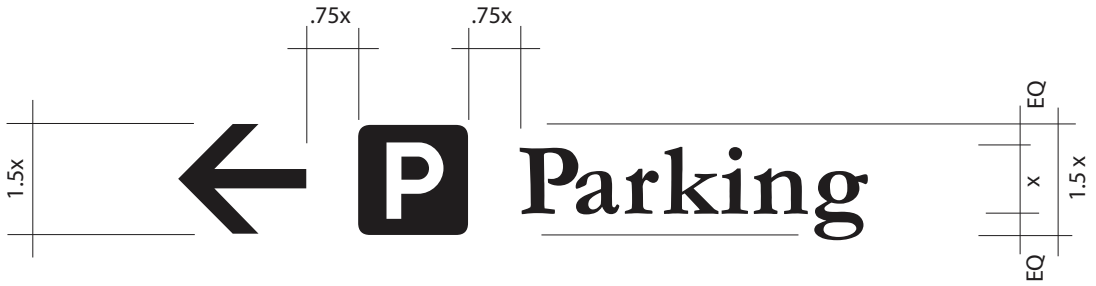

Symbol 18


Symbol 19


Symbol 20

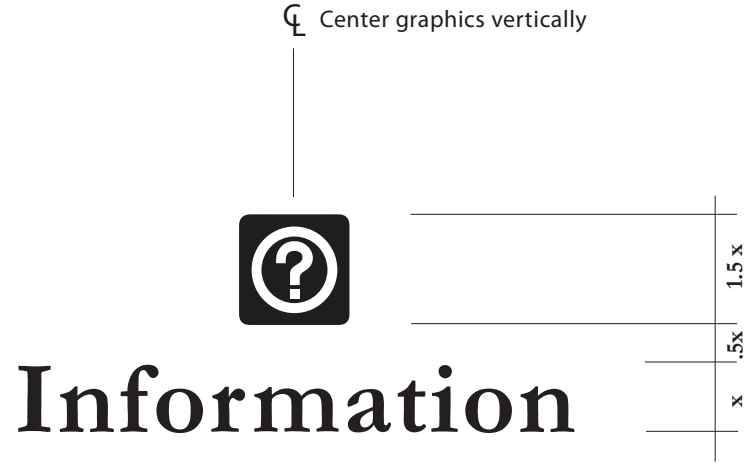

Symbol 21

The graphics relationships shown below are to be consistent on all signage applications. Exceptions to these guidelines are noted and dimensioned on individual sign type illustrations.



Arrow, Symbol, and Letterform Relationship

Multi-Symbol and Letterform Horizontal Relationship



Symbol and Letterform Vertical Relationship

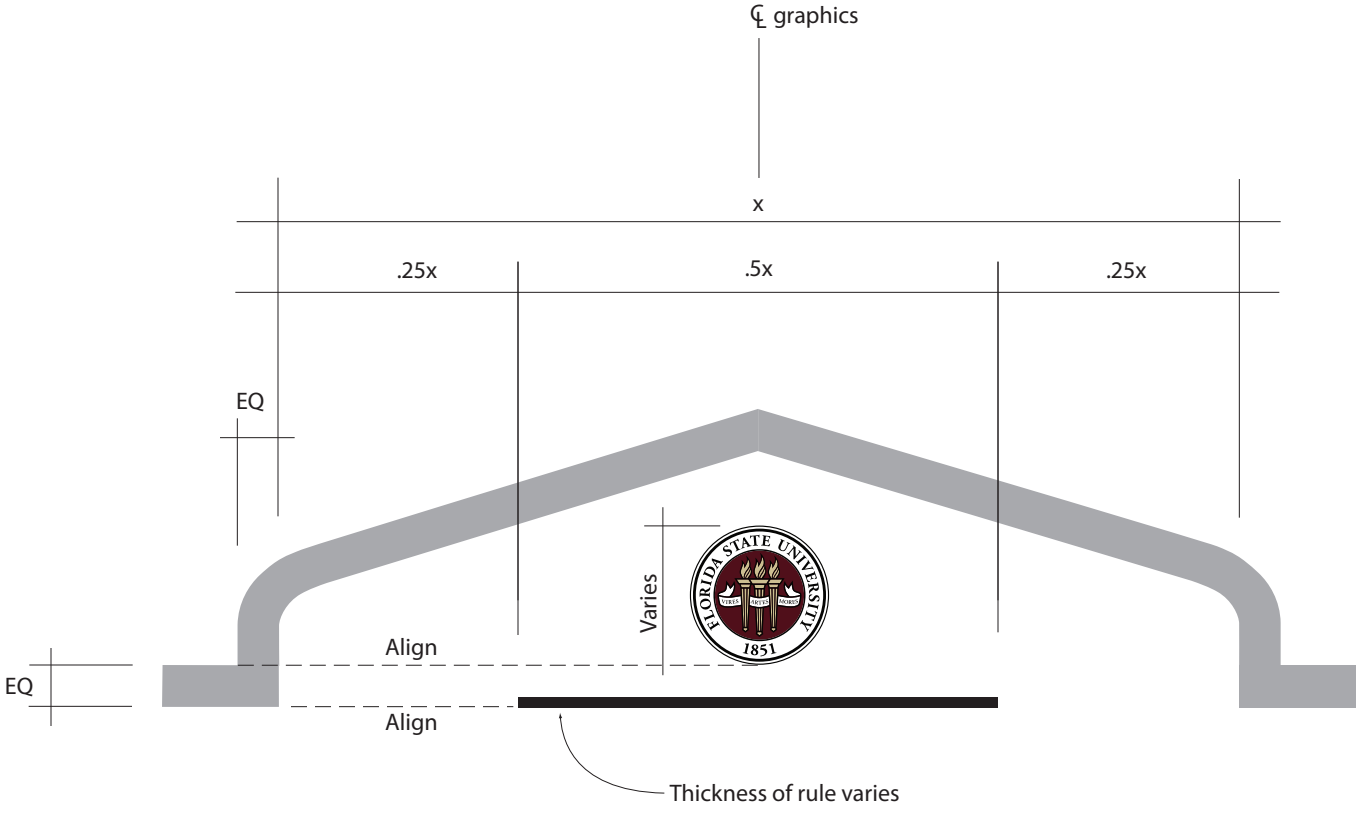
The graphics relationships shown below are to be consistent on all signage applications. Exceptions to these guidelines are noted and dimensioned on individual sign type illustrations.

Arrow, Symbol, and Letterform Relationship for straight ahead and left pointing arrows

Arrow, Symbol, and Letterform Relationship for right pointing arrows

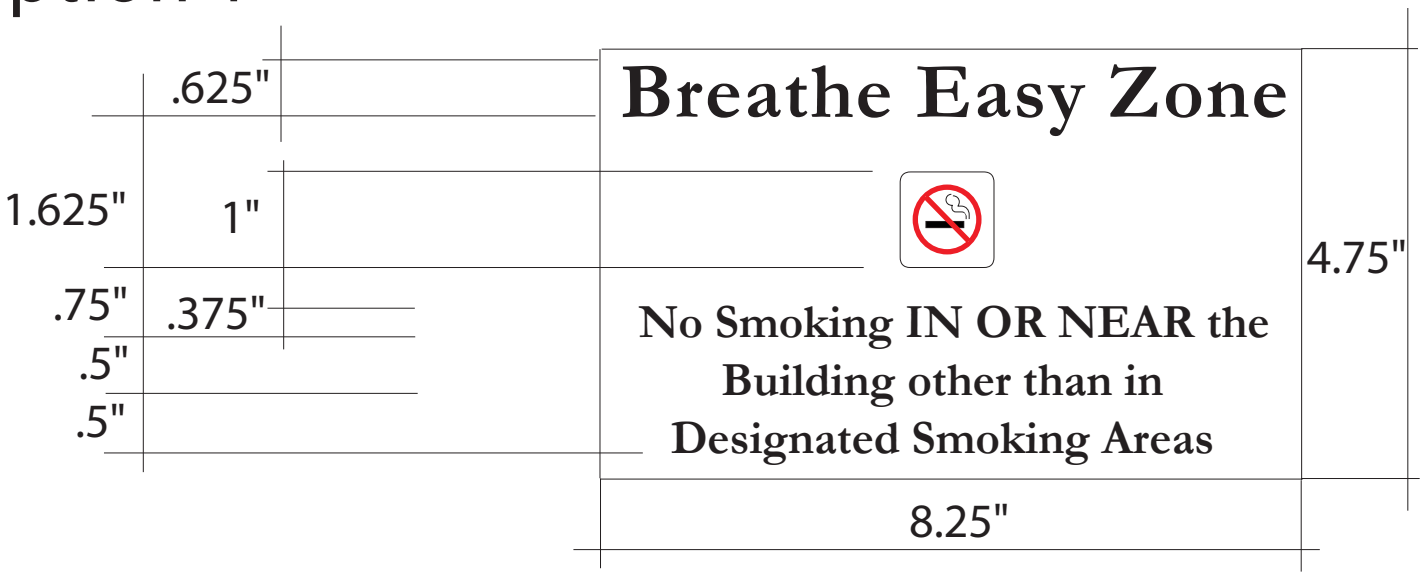
Arrow and Letterform Relationship for right pointing arrows

The graphics relationships shown below are to be consistent on all sign types. Exceptions to these are the height of the University Symbol and the thickness of the rule. Sizes are indicated on individual sign type illustrations. Refer to Manual Section B.

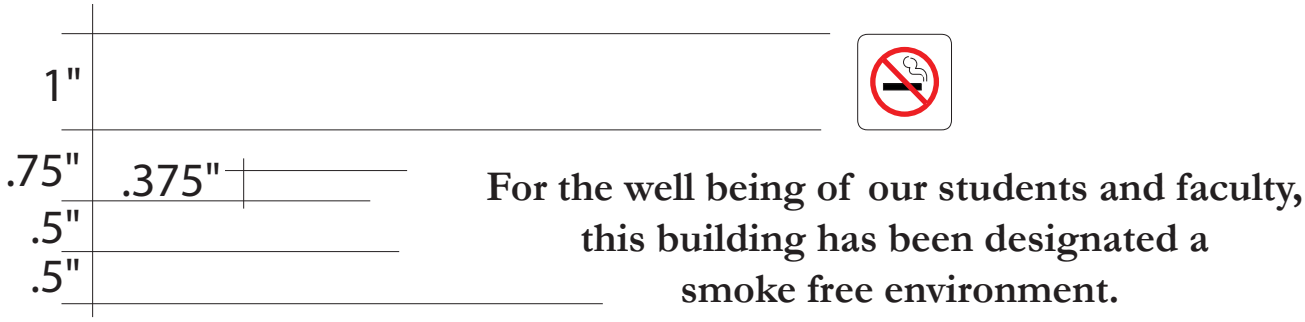


The following no smoking policies are to be selected at the option of each camplus department. Produced as decals.

Option 1



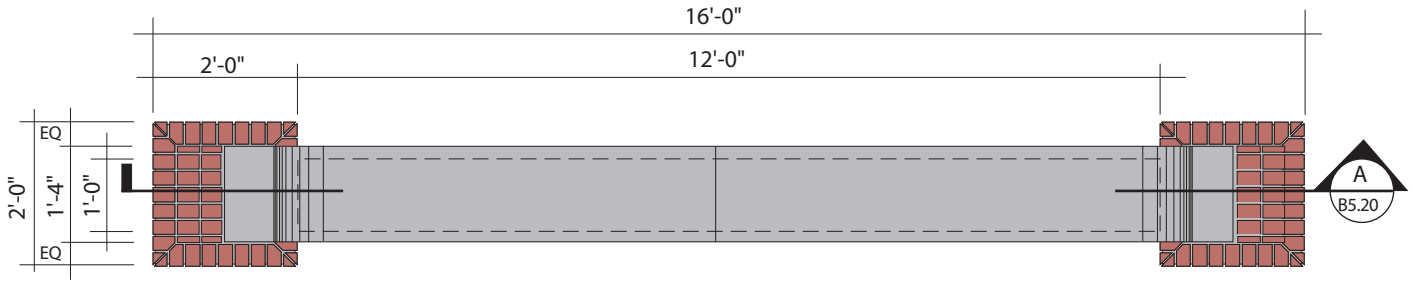
Option 2



Campus Identification Signs are intended to supplement Gateway features. Signs may display a directional arrow if the sign's location is removed from a Gateway or if a Gateway feature does not exist. These internally illuminated signs may be single or double sided.

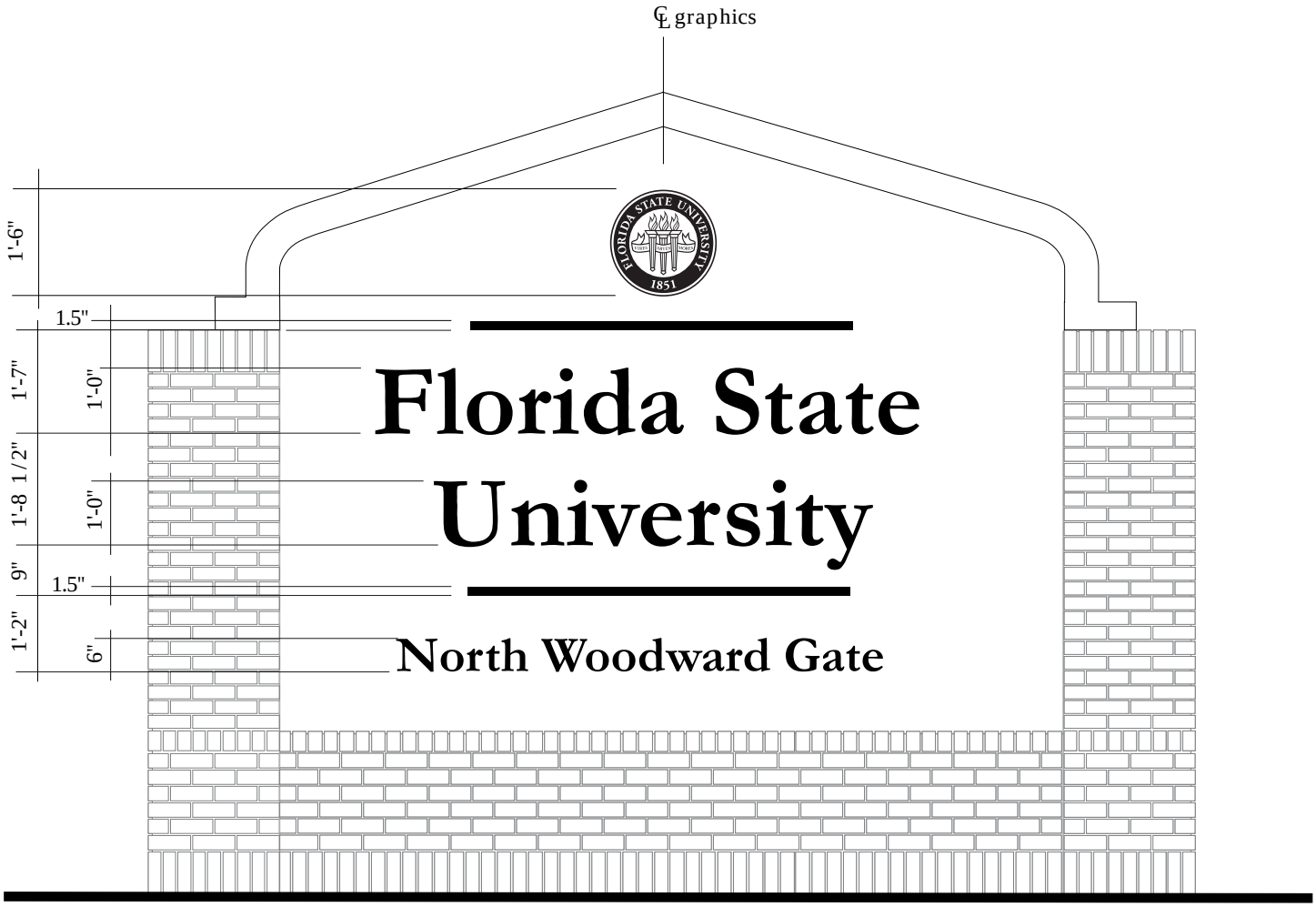
Fabrication Guidelines: Base, CMU substrate with face brick veneer; Foundation, formed concrete footing, Sign Cabinet, formed aluminum with garnet polyurethane finish and internal structure with internal light track behind routed graphics; Cornice, foremed aluminum with light gray textured coating; Interior Illumination, 277 v., white message, gold university symbol, and rules; Lamps, H.O. fluorecent daylight.

Refer to manual pages B 5.01 for graphics measurements, B 5.10 for placement guidelines, and B 5.20 for design intent drawings.



Plan View

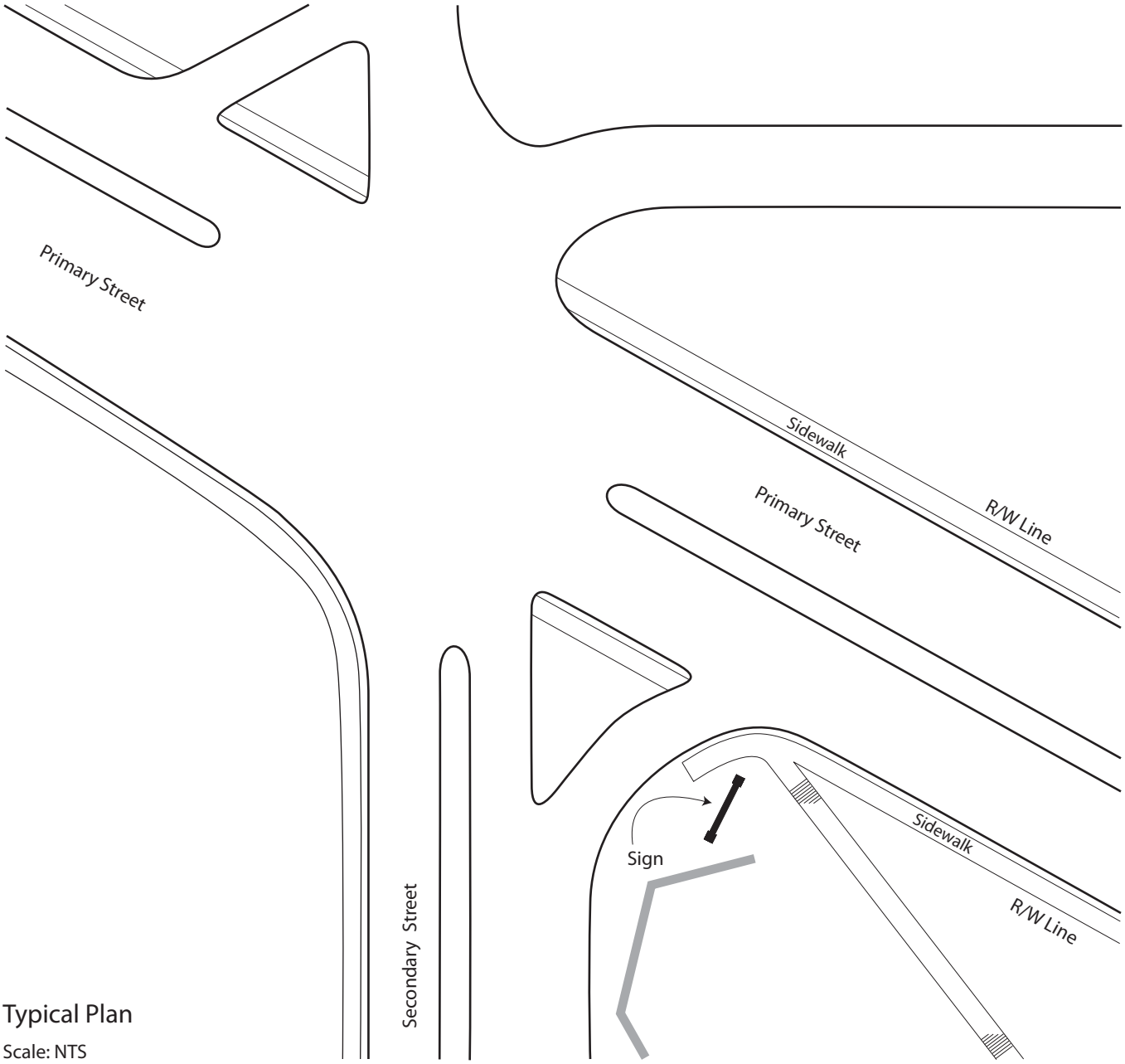
Elevation
Scale: 3/8"=1'-0"



Elevation
Scale: 3/8"=1'-0"

Signs are to be positioned perpendicular to street from which they are to be viewed and behind street right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

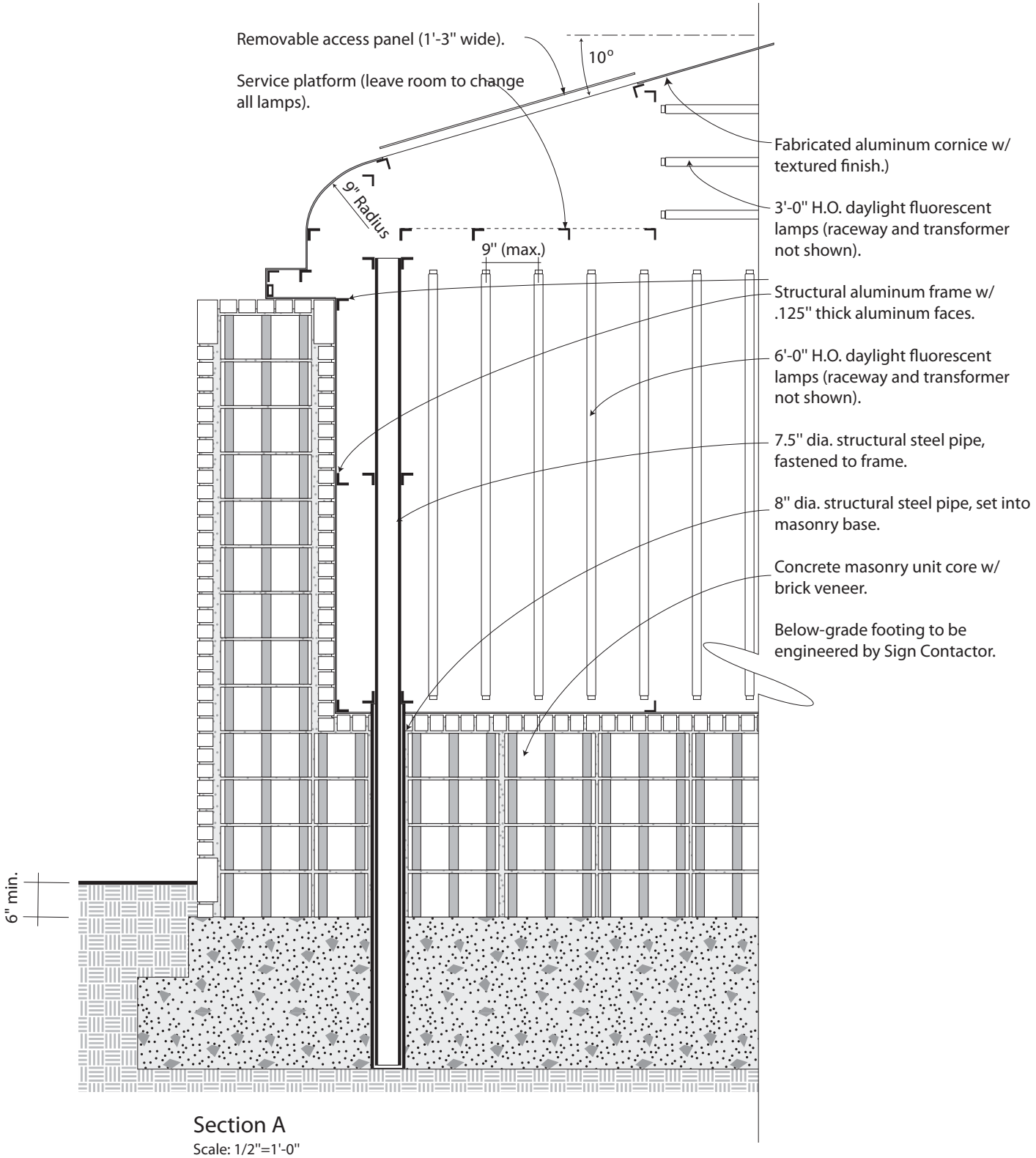
Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.



Typical Plan

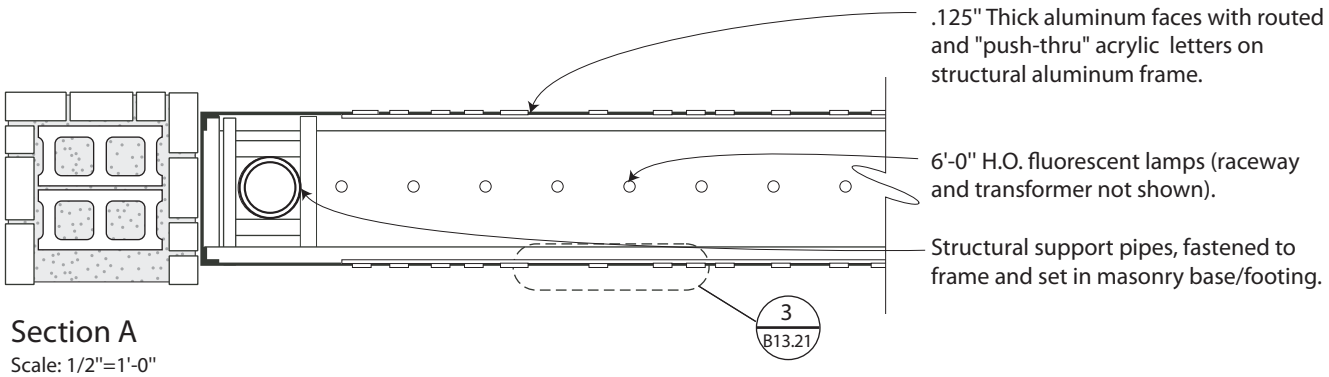
Scale: NTS

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.

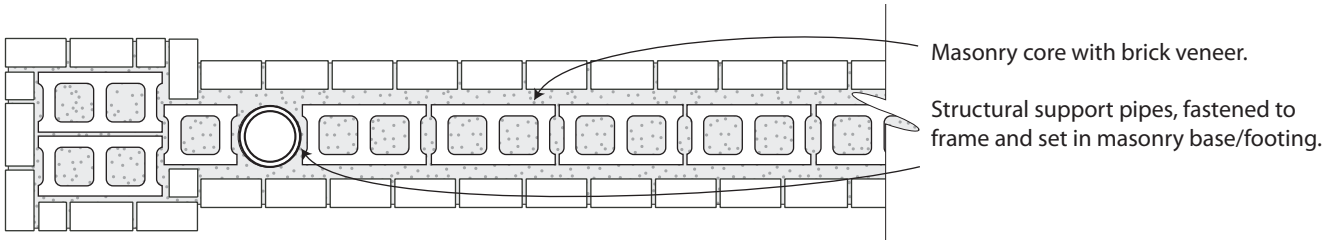


Section A
Scale: 1/2"=1'-0"

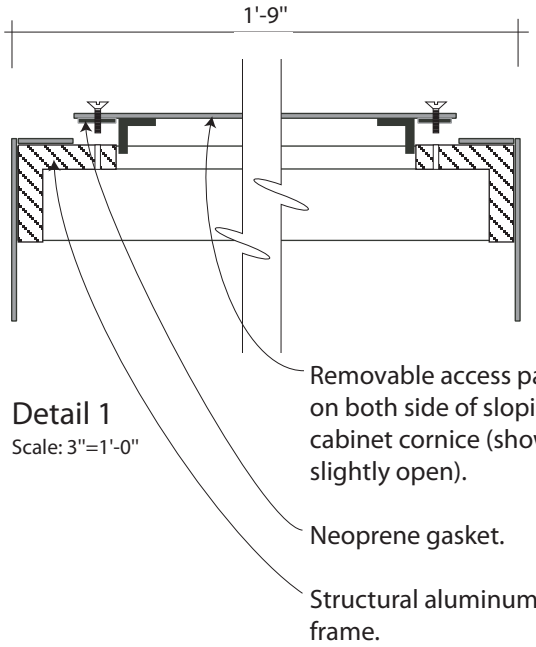
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



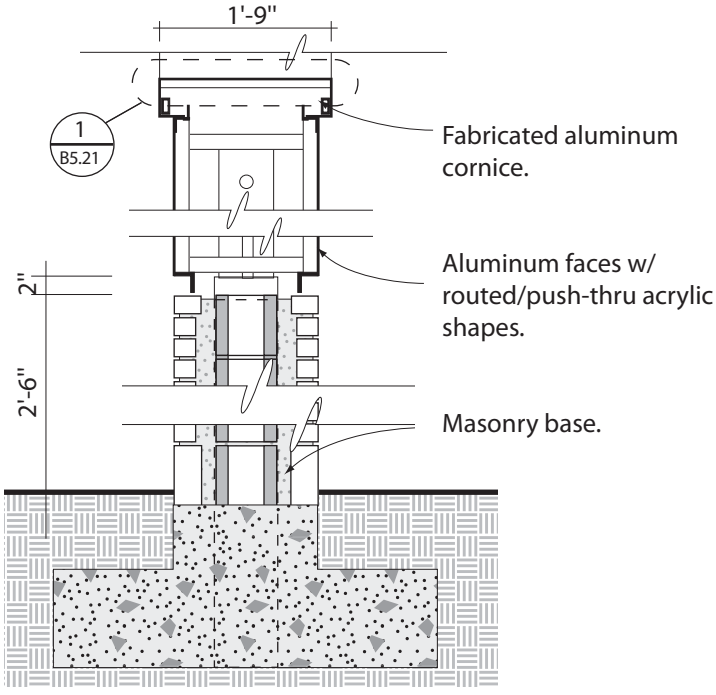
Section A
Scale: 1/2"=1'-0"



Section B
Scale: 1/2"=1'-0"

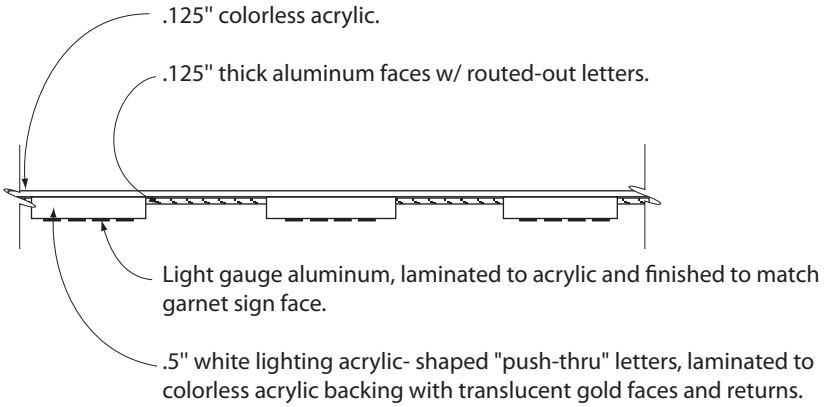


Detail 1
Scale: 3"=1'-0"



Section C
Scale: 1/2"=1'-0"

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



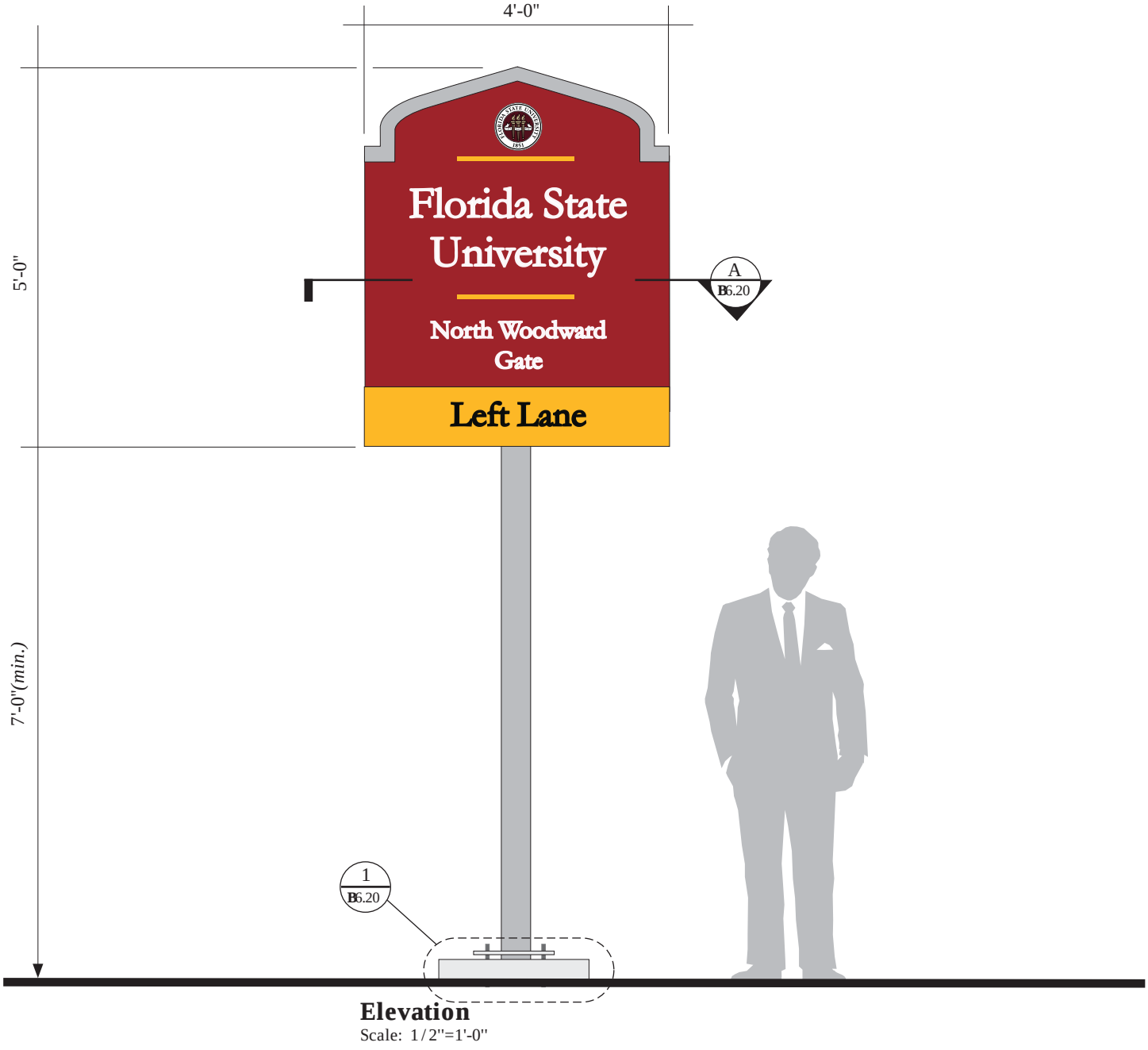
Section A thru University Symbol

Scale: 3"=1'-0"

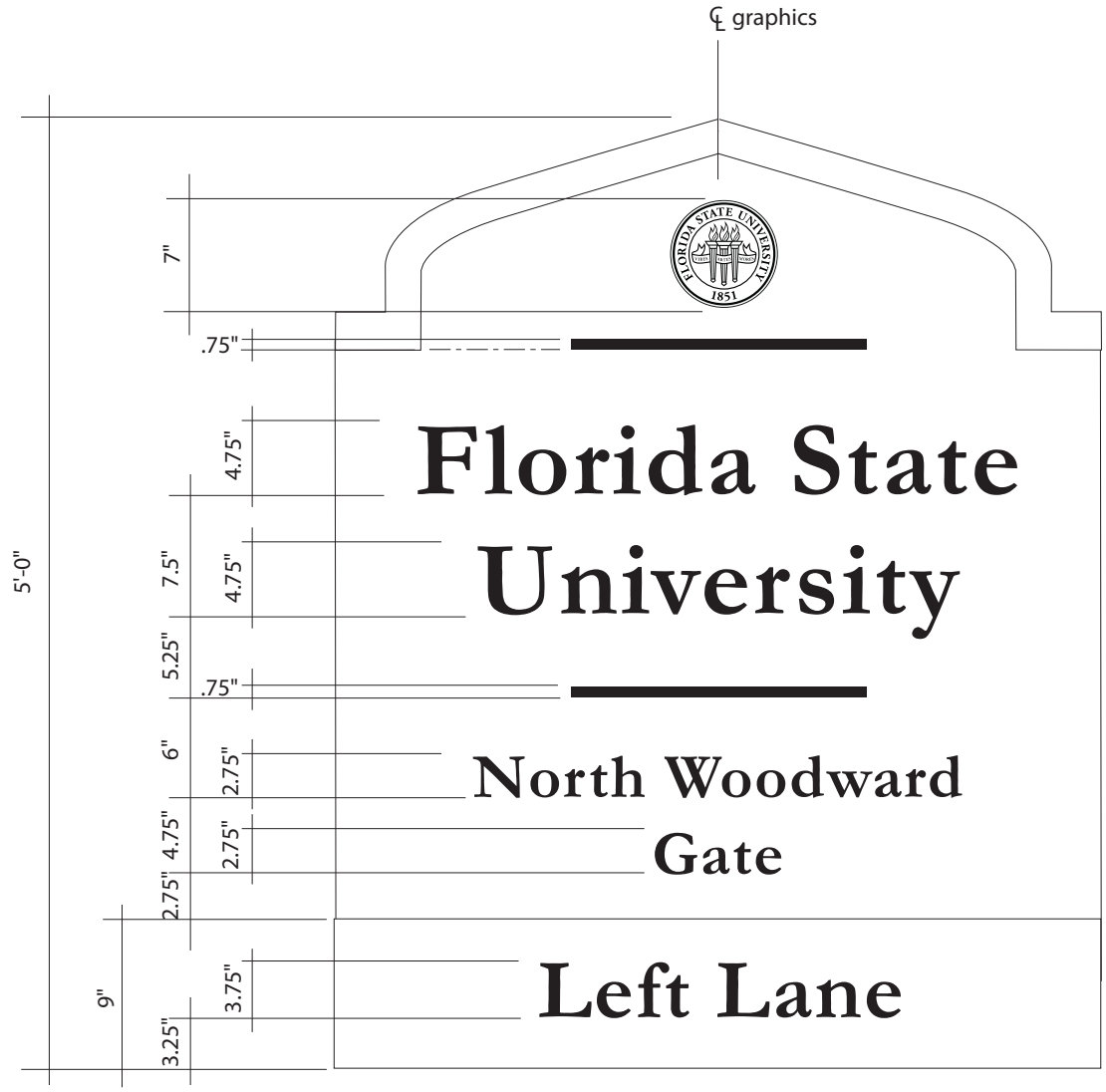
Primary Vehicular Directives are designed for congested areas where message height is important and available ground space is limited. These may be located prior to a decision point and display advanced information as illustrated below or may be located adjacent to a decision point and display arrows.

Fabrication Guidelines: *Post*, structural aluminum section with fragible mount, light gray polyurethane finish; *Foundation;* formed concrete footing; *Graphics Panel*, solid plastic panel - burgundy color; *Graphics*, reflective sheeting, light gray cornice gold university symbol and rules, white and black copy.

Refer to manual page **B** 601 for graphics measurements, **B** 610 for placement guidelines, and manual page **B** 620 for design intent drawings.



Elevation
Scale: 1/2"=1'-0"



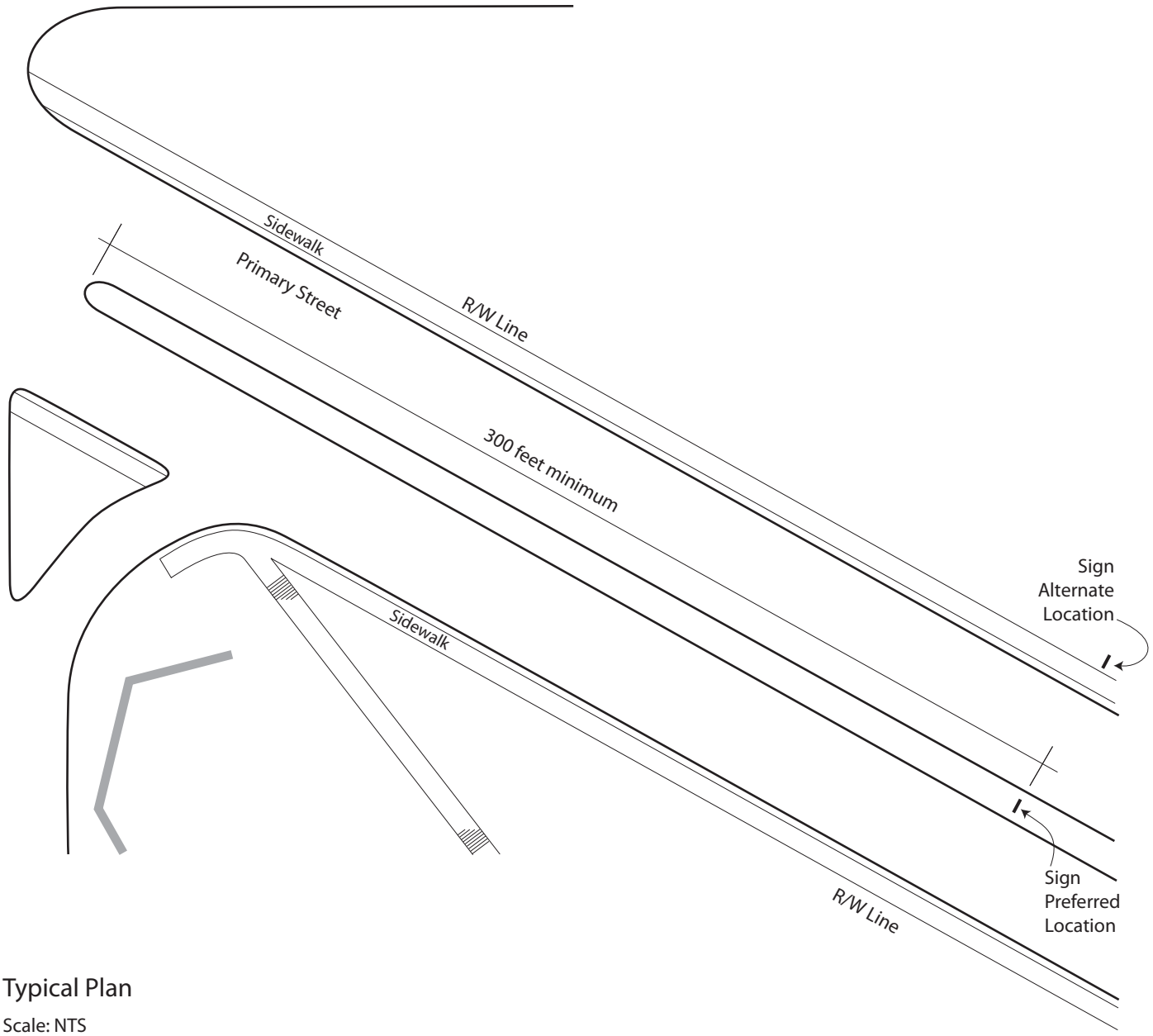
Elevation
Scale: 1"=1'-0"

Type 5 signs used as advance directional signs must be located the proper distance ahead of the intersection to permit vehicular traffic sufficient time to safely merge into the proper turning lane. Those used as directional signs may be located at closer distances.

Signs are to be positioned perpendicular to street from which they are to be viewed.

Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would obscure visibility.

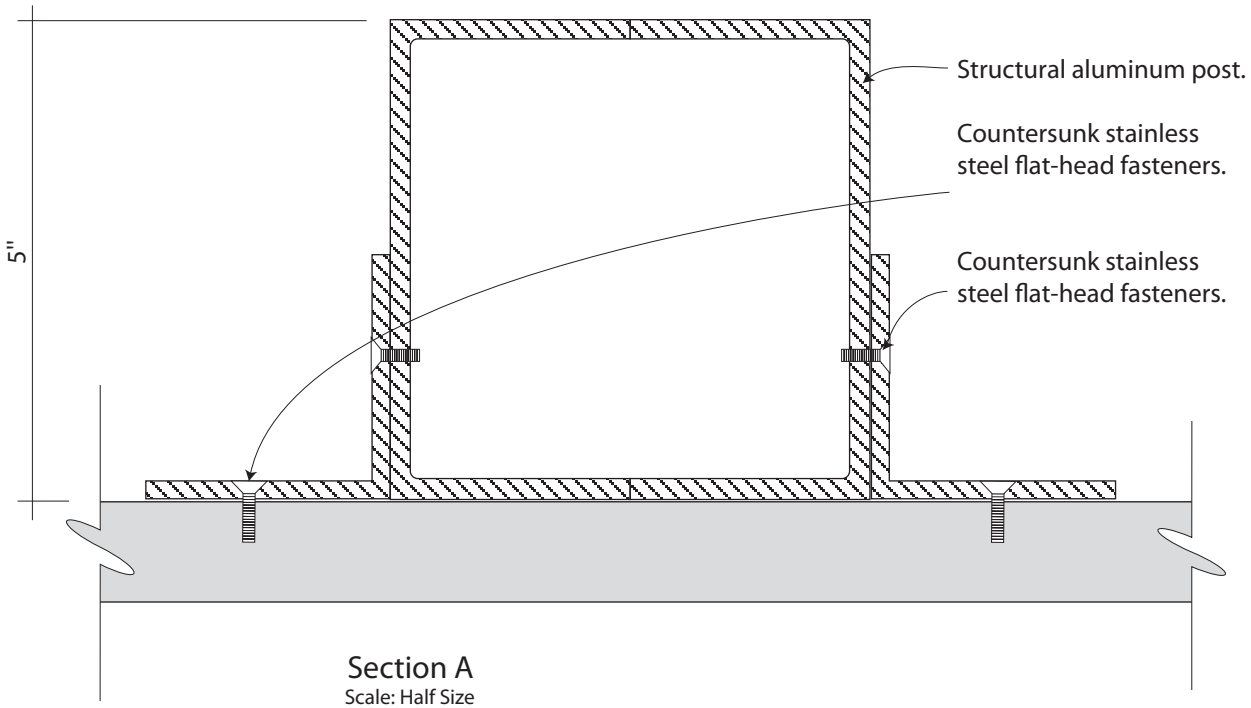
Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.



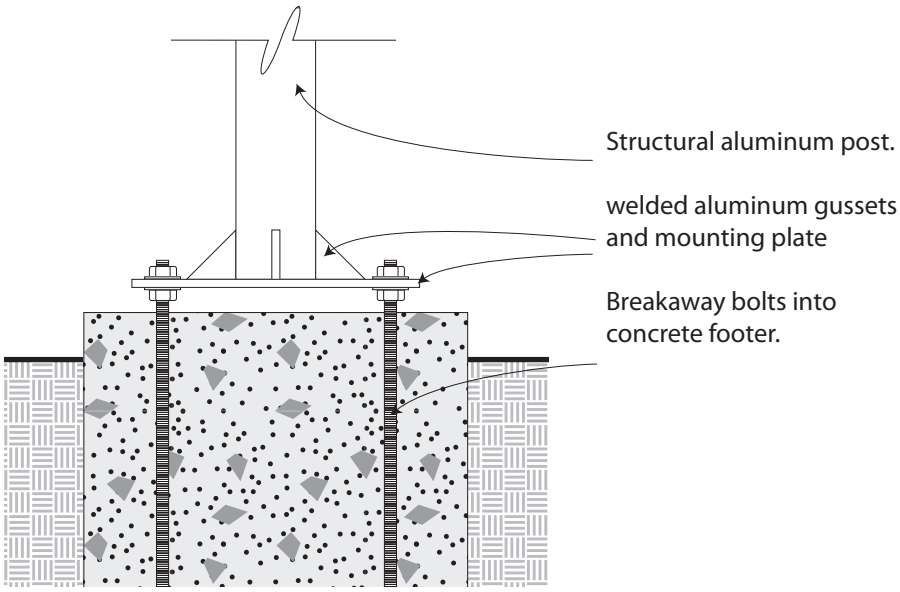
Typical Plan

Scale: NTS

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: Half Size

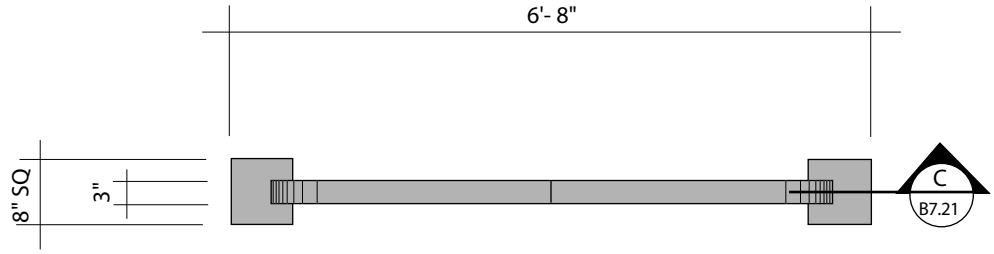


Detail 1
Scale: 1"=1'-0"

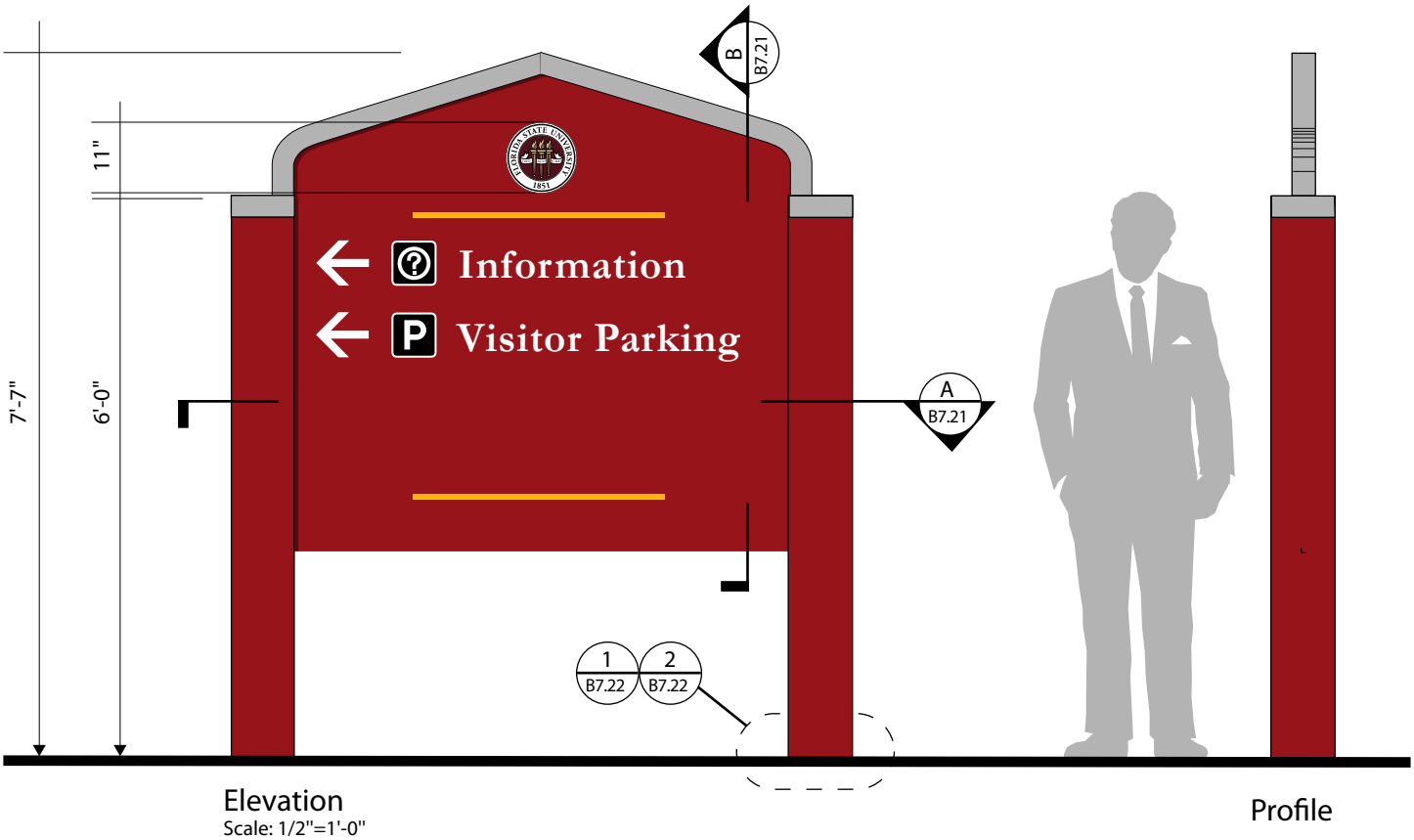
Secondary Vehicular Directive signs serve a similar function as the Primary Vehicular Directives. Due to their smaller size these signs are better suited for less congested areas with slower moving traffic. These non-illuminated signs can be single or double sided and display a maximum of four message lines per side.

Fabrication Guidelines: Posts, formed from interlocking solid plastic set into packed sand footings, burgundy posts and canyon granite caps ; Graphics Panel, solid plastic- burgundy color; Cornice; formed solid plastic shape with caps, Canyon Granite color; Graphics, reflective sheeting, gold university symbol and rules, white message and arrows, white and black pictograms.

Refer to manual pages B 7.01 for graphics measurements, B 7.10 for placement guideline and B 7.20 for design intent drawings.

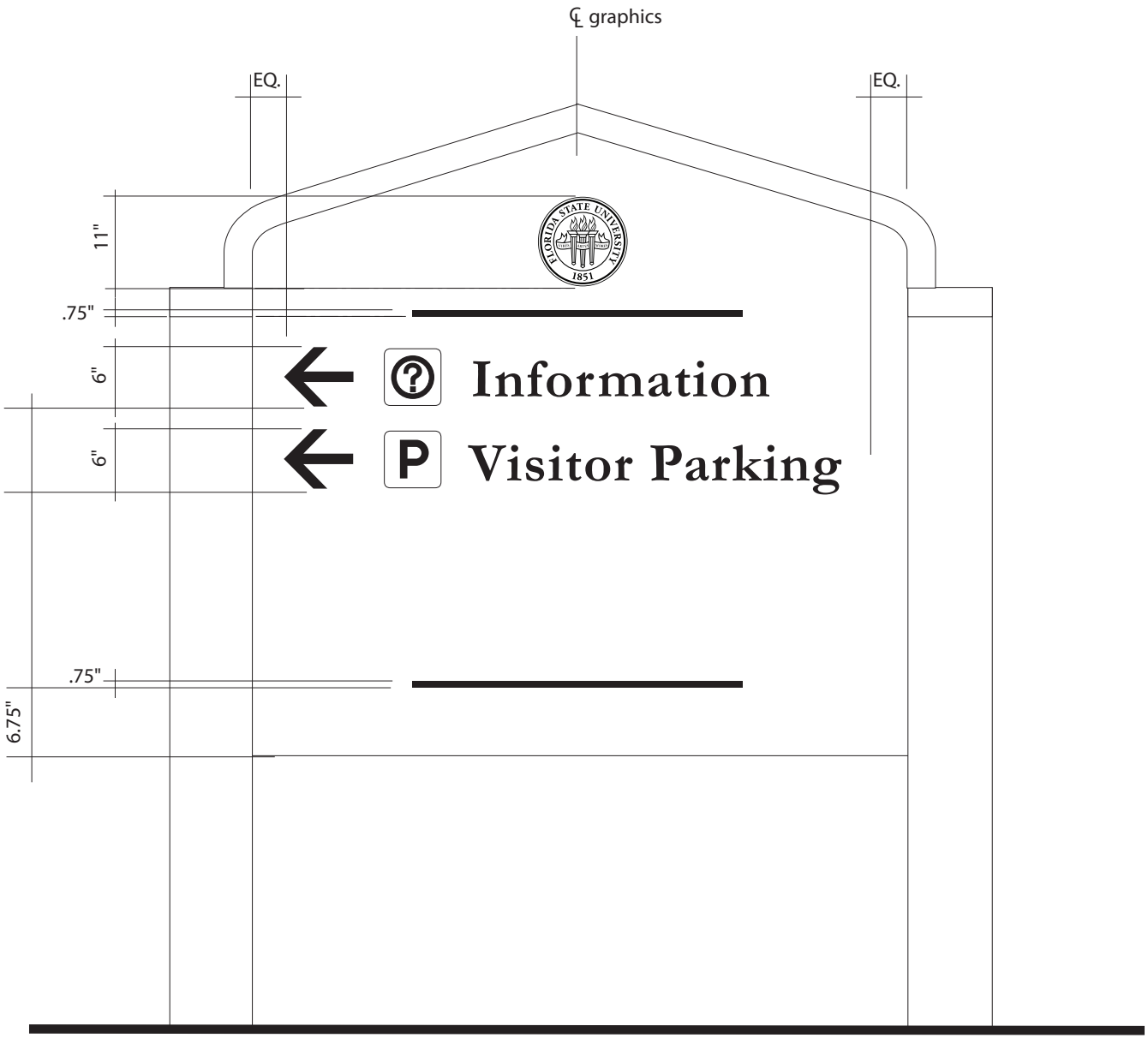


Plan



Elevation
Scale: 1/2"=1'-0"

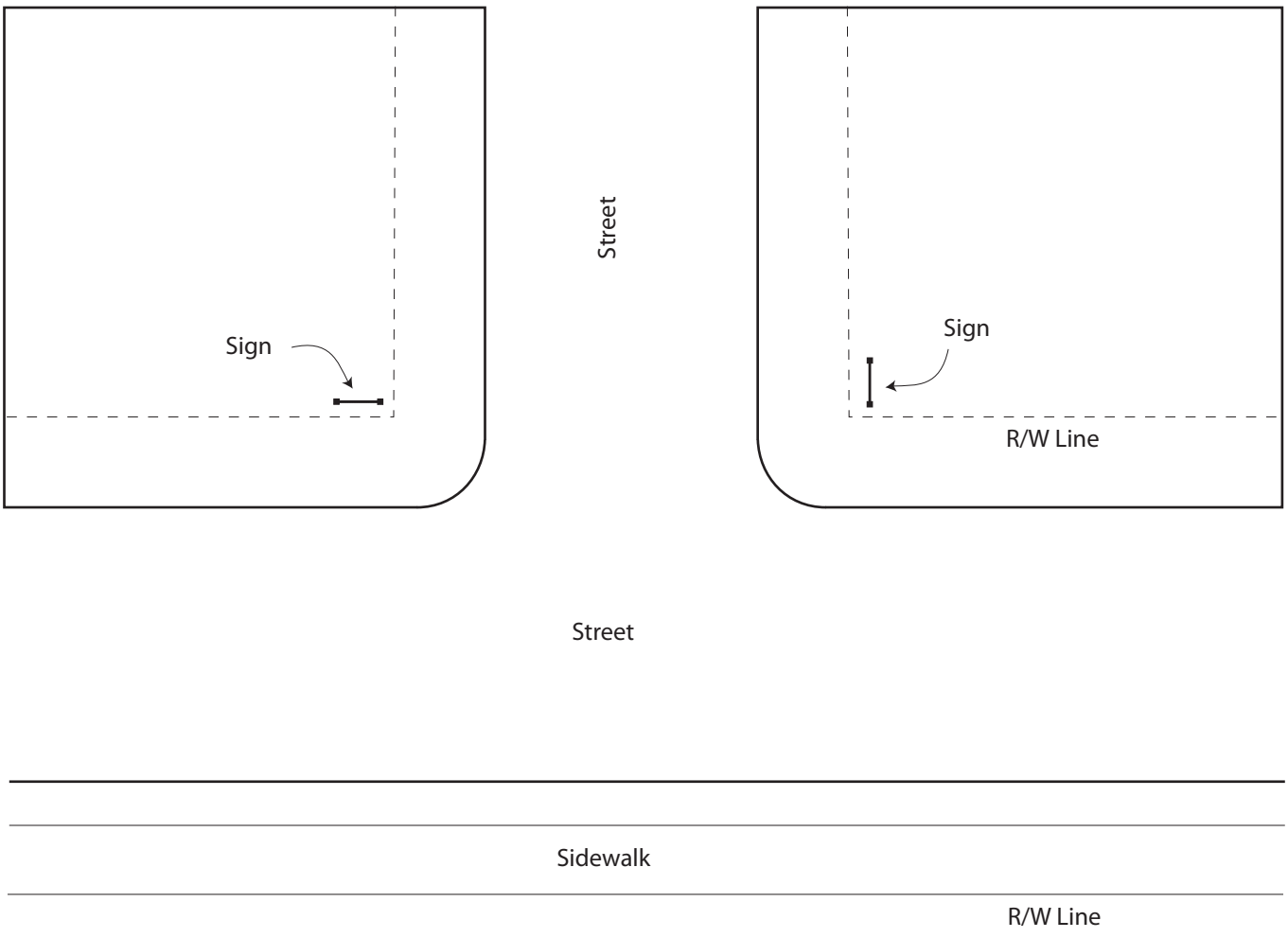
Profile



Elevation
Scale: 3/4"=1'-0"

Signs are to be positioned perpendicular to street from which they are to be viewed and behind street right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.



Typical Plan

Scale: NTS

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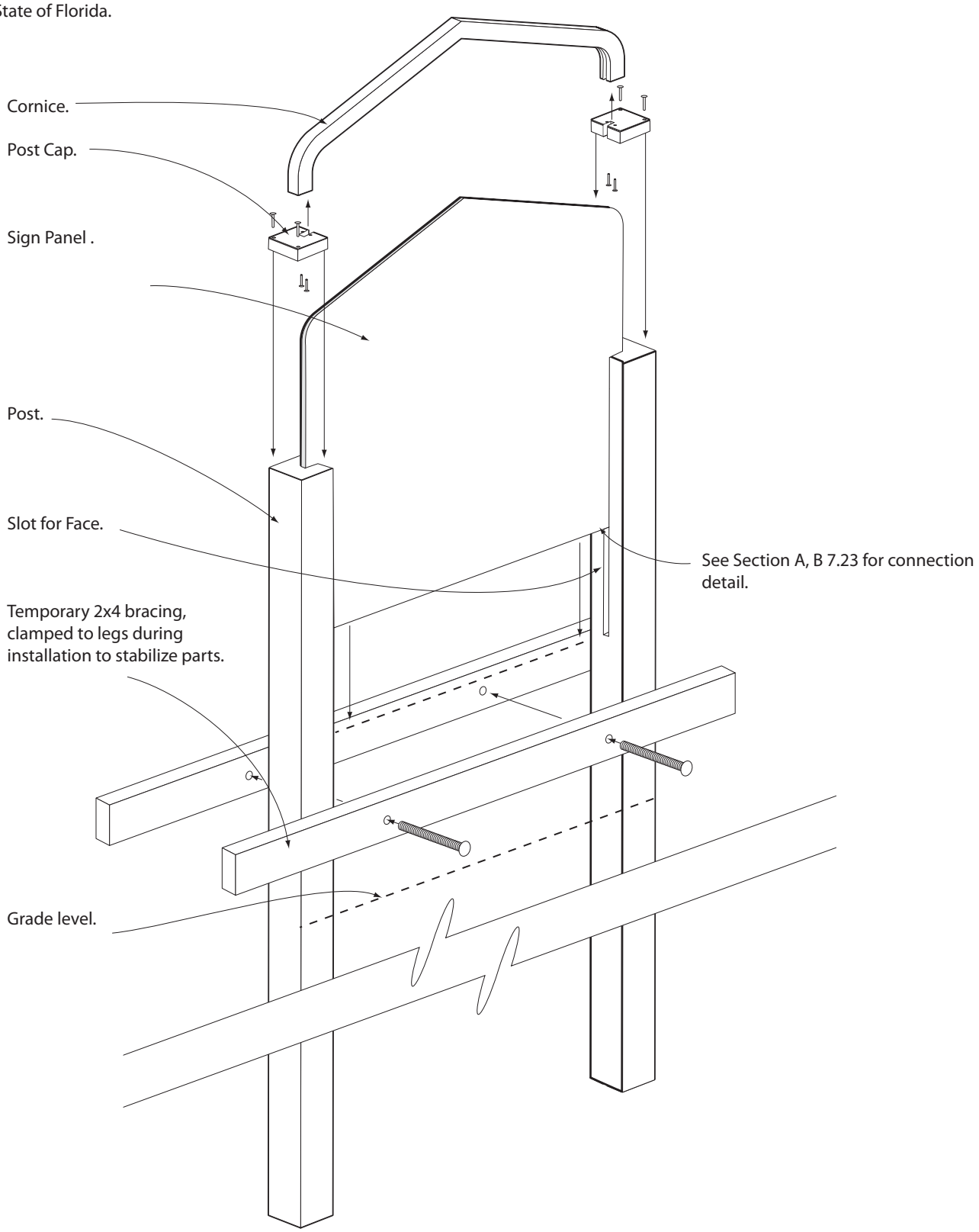
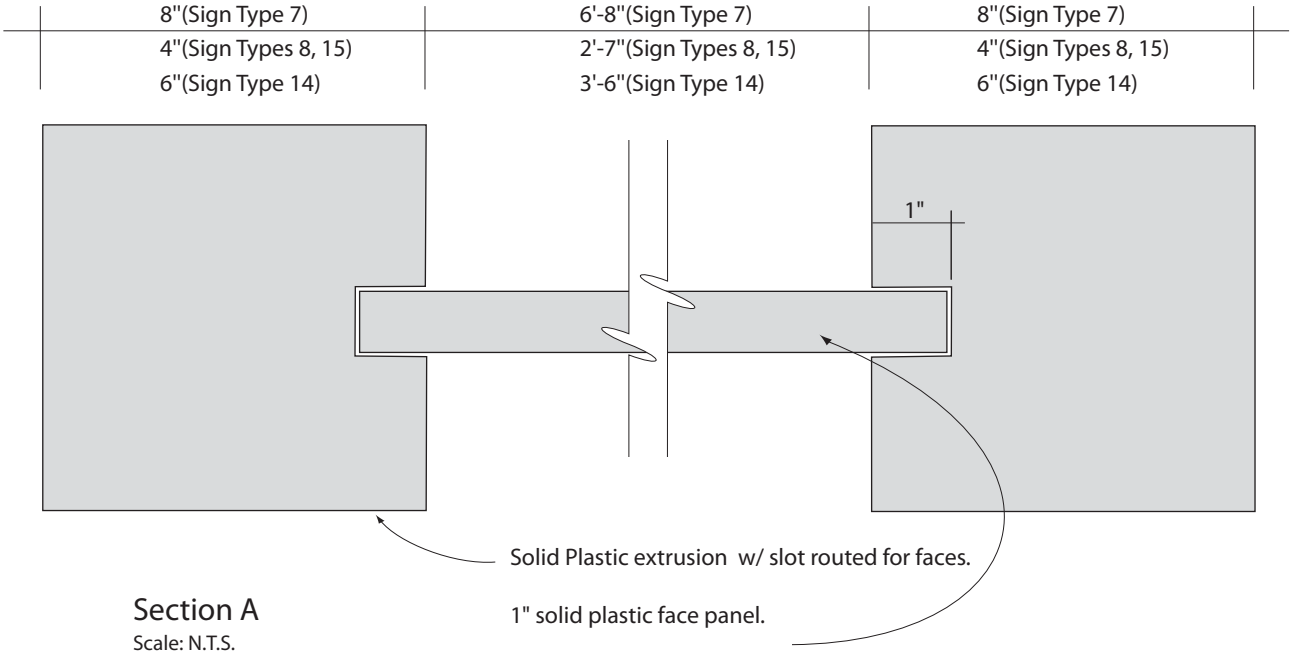
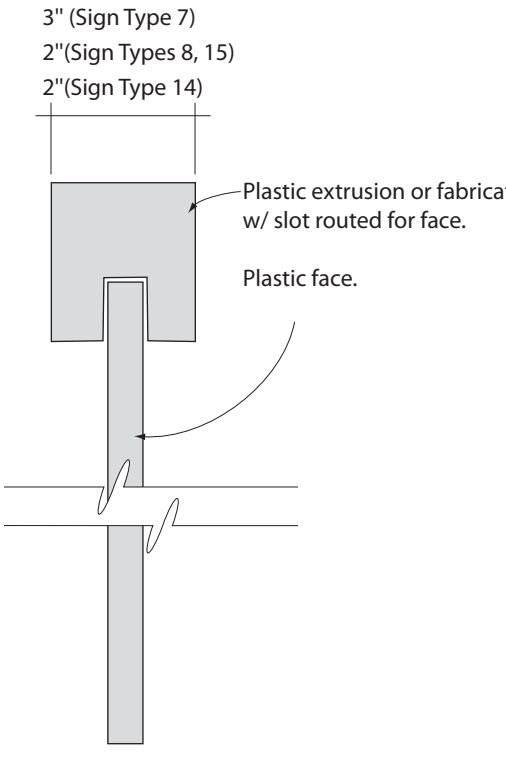


Exploded View
Scale: N.T.S.

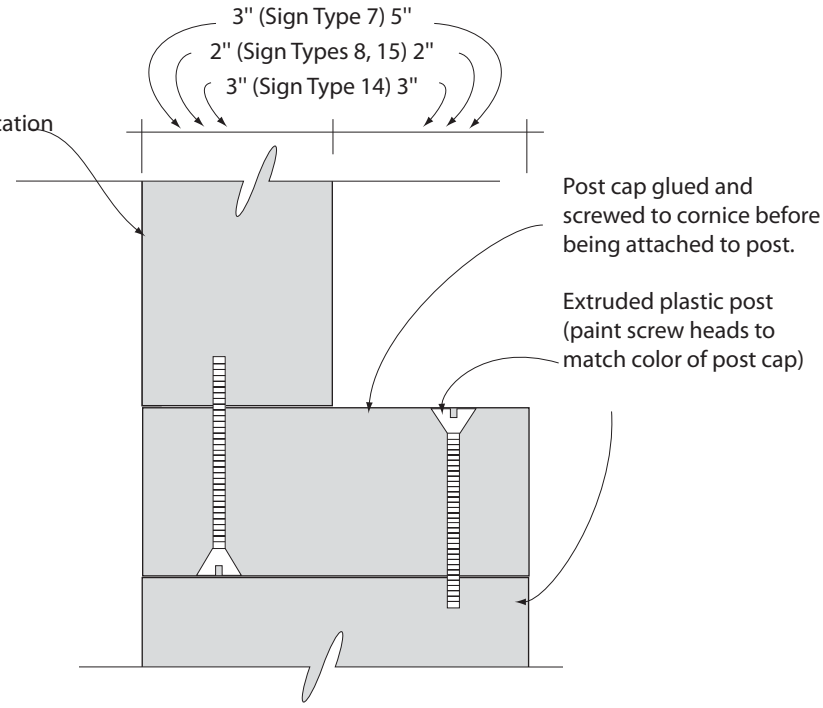
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: N.T.S.

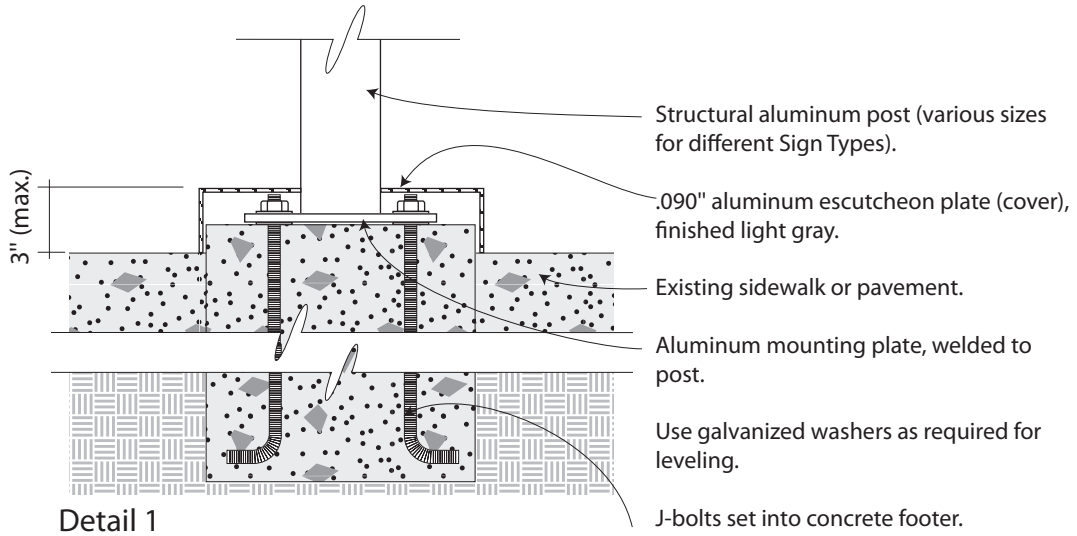


Section B
Scale: N.T.S.

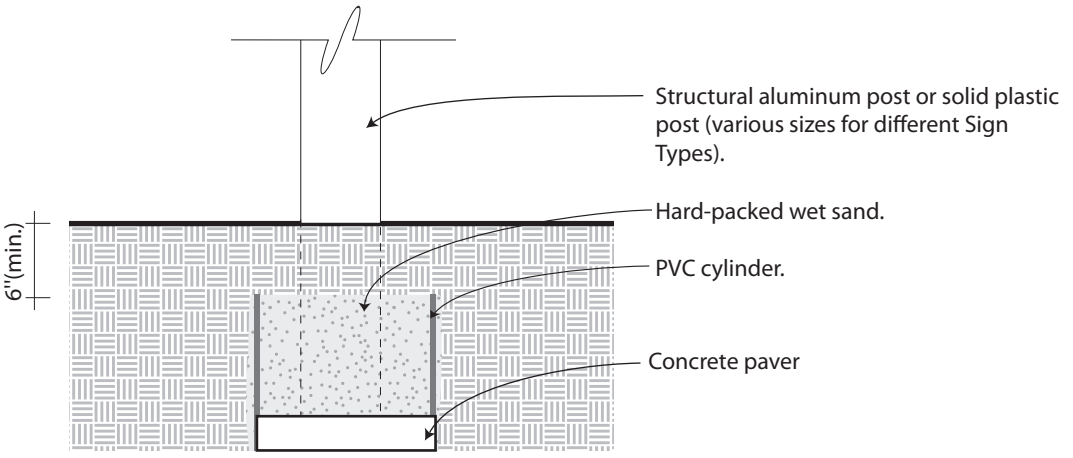


Section C
Scale: N.T.S.

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.

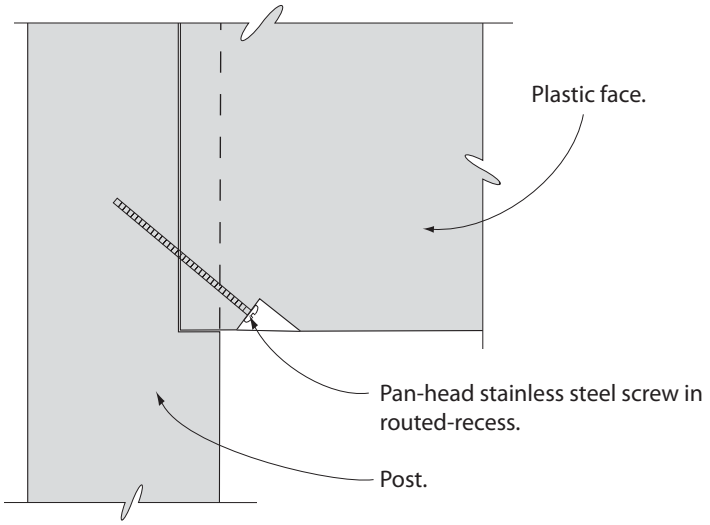


Detail 1
Scale: N.T.S.



Detail 2
Scale: N.T.S.

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.

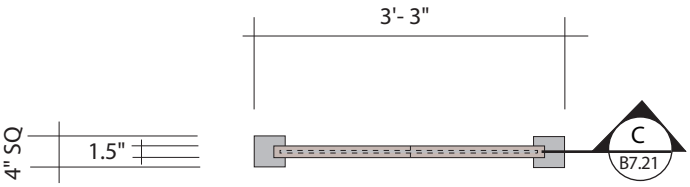


Section A
Scale: N.T.S.

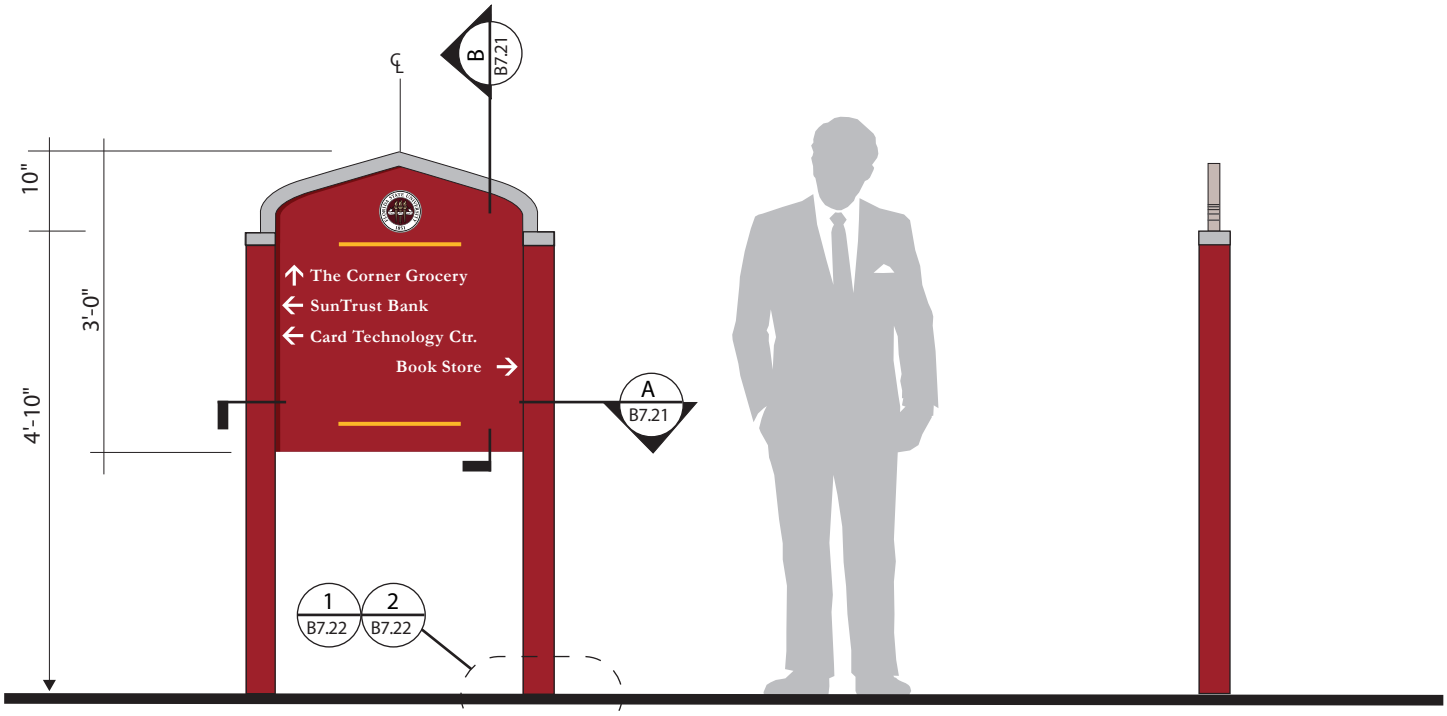
Small Building Identification Signs are scaled for pedestrian viewing and are recommended for placement along walkways. These non-illuminated signs can be single or double sided and display a maximum of five message lines per side.

Fabrication Guidelines: Posts, formed from solid plastic set into packed sand footings, burgundy posts and canyon granite caps; Graphics Panel, solid plastic-burgundy color; Cornice; formed solid plastic shape with caps, canyon granite color; Graphics, reflective sheeting, gold university symbol and rules, white message and arrows, white and black pictograms.

Refer to manual pages B 8.01 for graphics measurements, B 8.10 for placement guideline and B 7.20 for design intent drawings.

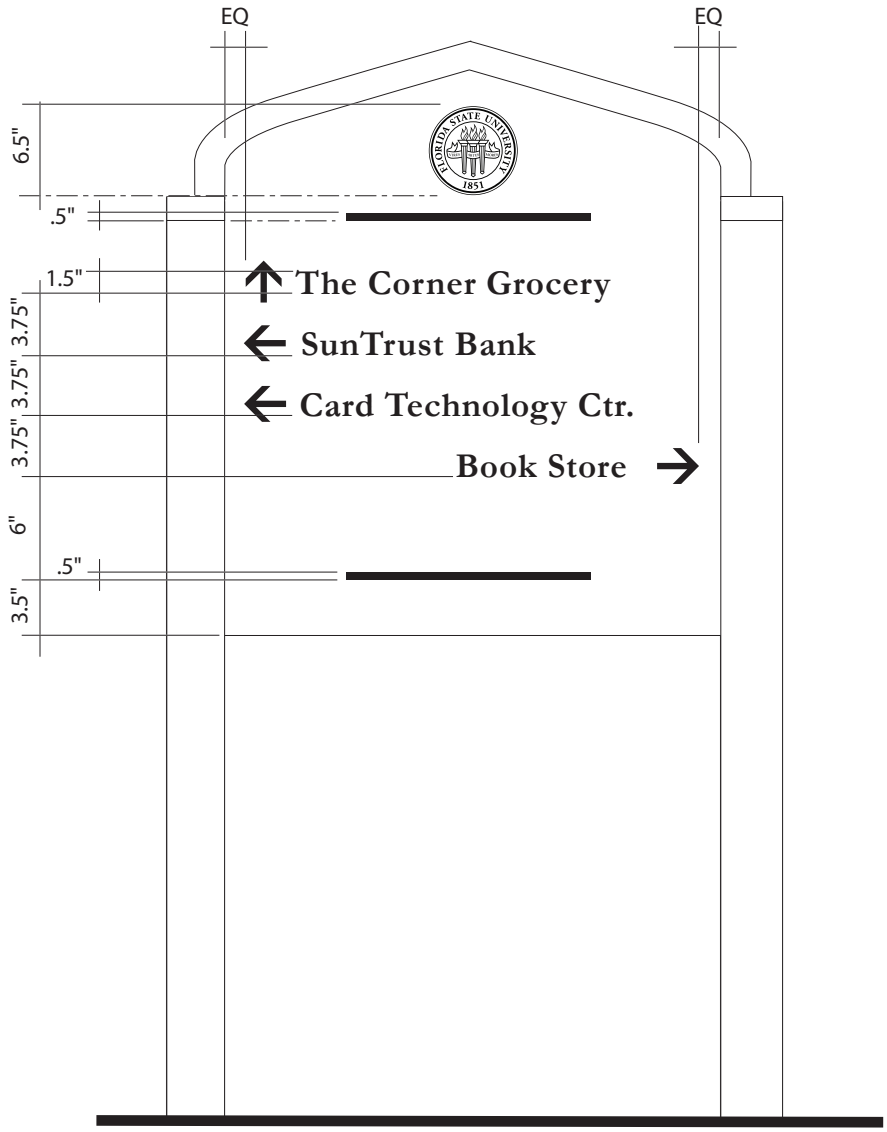


Plan



Elevation
Scale: 1/2"=1'-0"

Profile

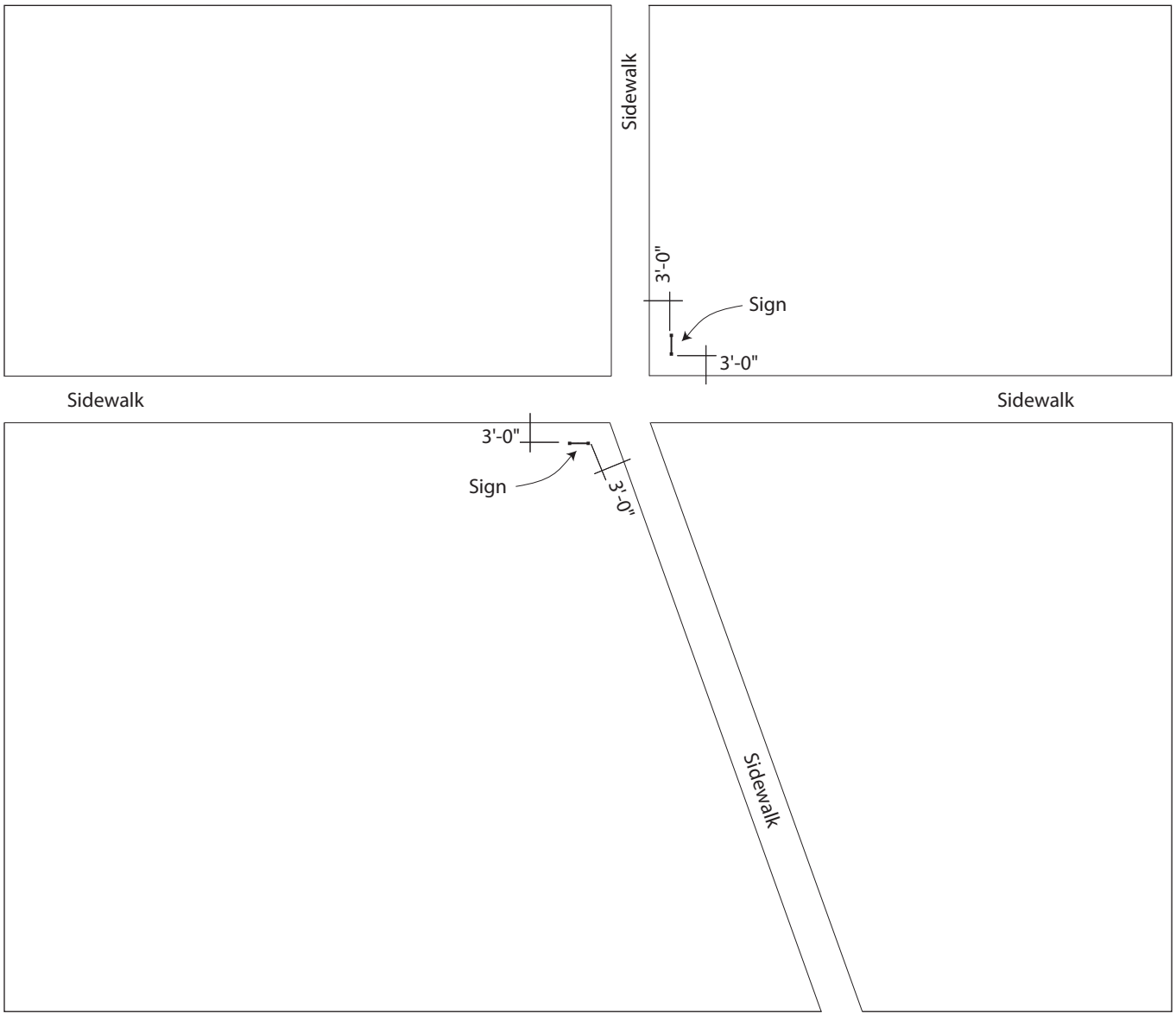


Elevation
Scale: 1"=1'-0"

Signs are to be located at primary pedestrian decision points and positioned perpendicular to the walkway from which they are to be viewed. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block them from viewers.

Since the location, quantity, and size of the signs may exceed local zoning ordinances, approval from the appropriate regulatory agency is recommended prior to fabrication.

It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximity prior to digging foundations.



Typical Plan

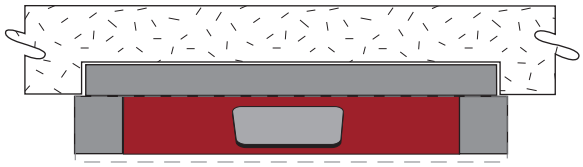
Scale: NTS

Interactive Information Kiosks are intended for use at sheltered pedestrian traffic decision points. They display overall campus and immediate area orientation maps, an on-line campus building/service directory accessed via a touchscreen monitor, plus an autodial telephone. Requires custom sofware.

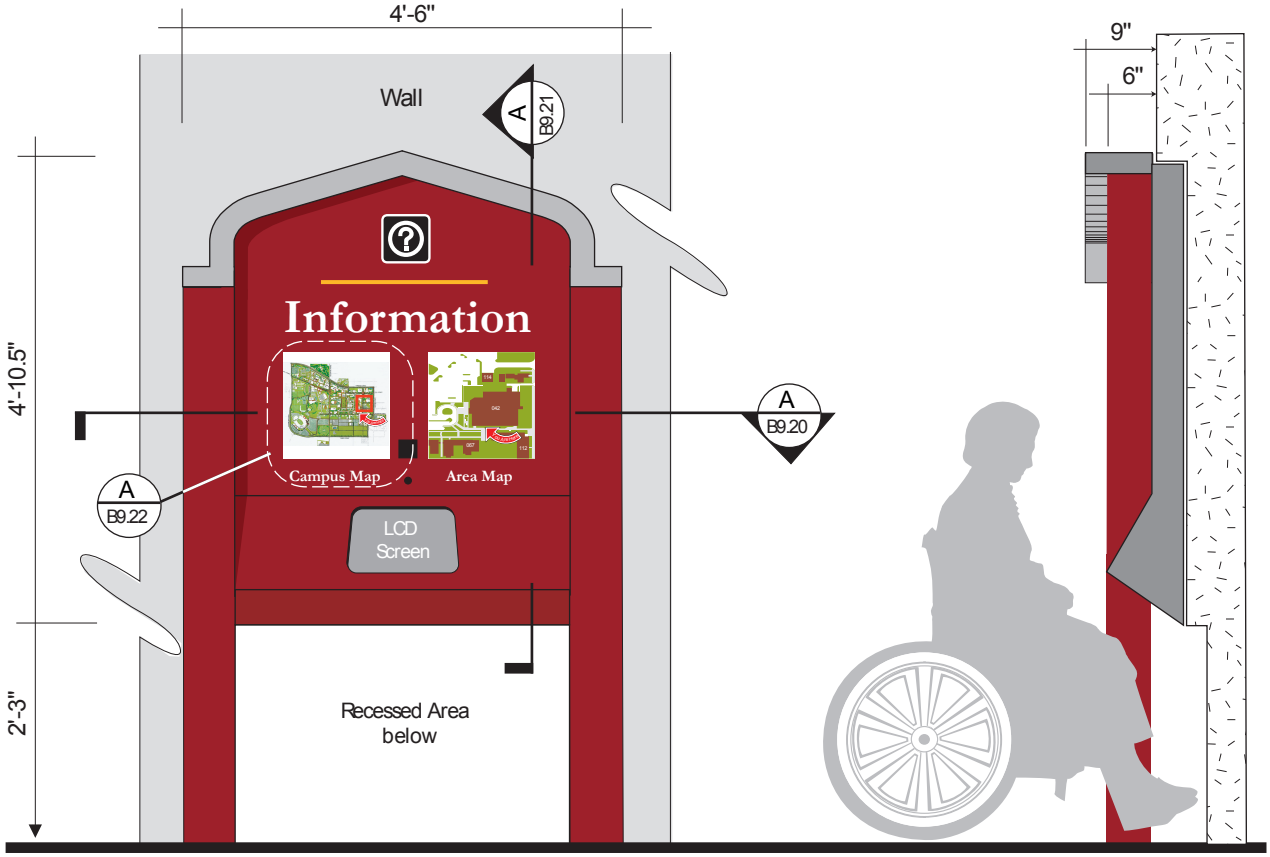
This sign type is intended to be installed into an existing wall having a recessed bottom space, as shown, for wheelchair access.

Fabrication Guidelines: Posts, extruded solid plastic-burgundy color; Graphics Cabinet, formed plastic with recessed pockets for maps, burgundy color, flush mounted to wall opening; Cornice; solid plastic section with caps, canyon granite color; Graphics, reflective sheeting, white and black pictogram, white messages, gold rule; Graphics Inserts, full color digital PSV prints adhered to second surface of clear polycarbonate cover; Monitor, active matrix thru glass LCD touch-screen hardwired to internal CPU and modem; Microphone and Speaker; flush mounted to vertical panel, internal modem.

Refer to manual pages B 9.01 for graphics measurements, B 9.20 for design intent drawings, and B 9.22 for graphics insert dimensions.

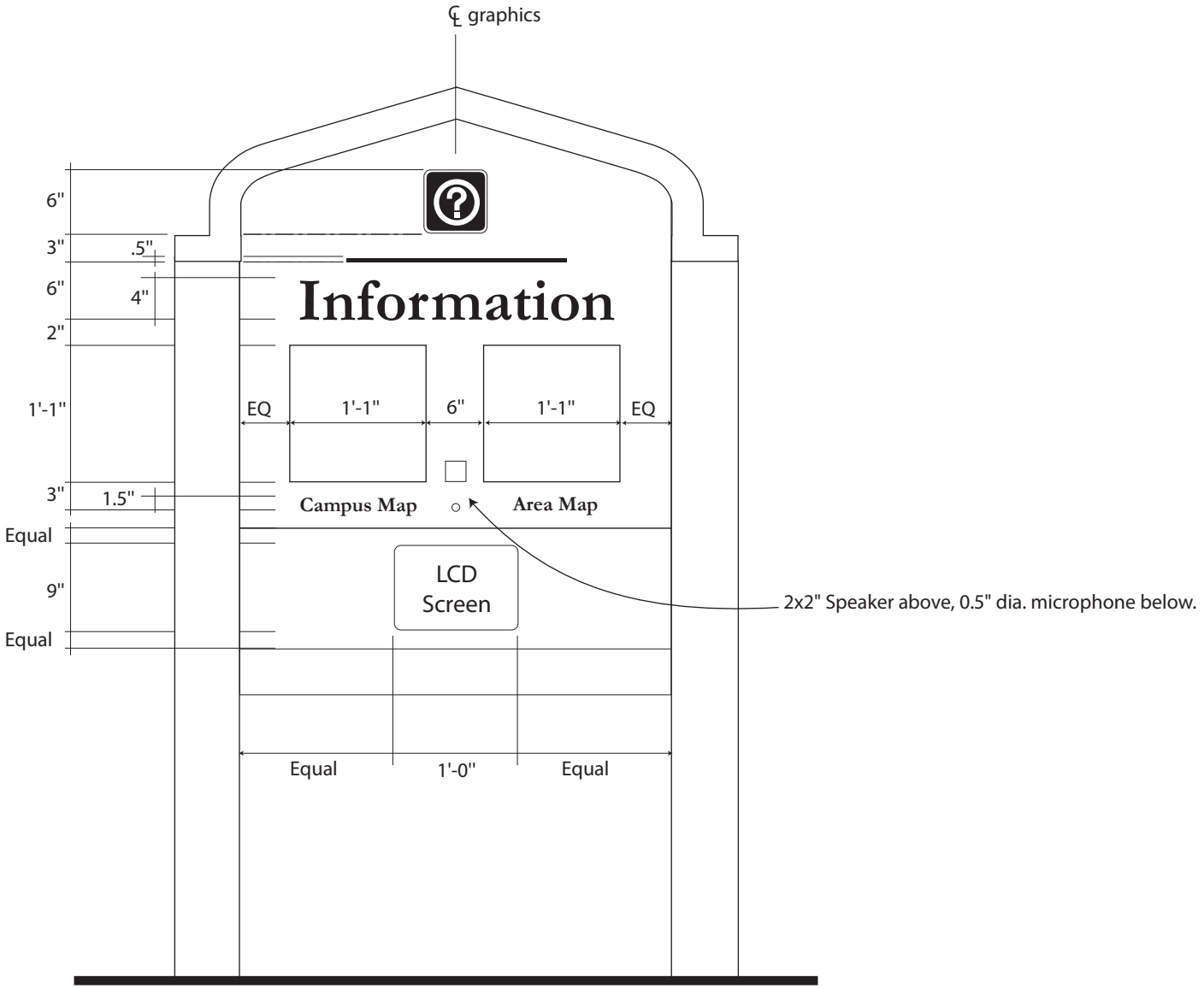


Plan Section

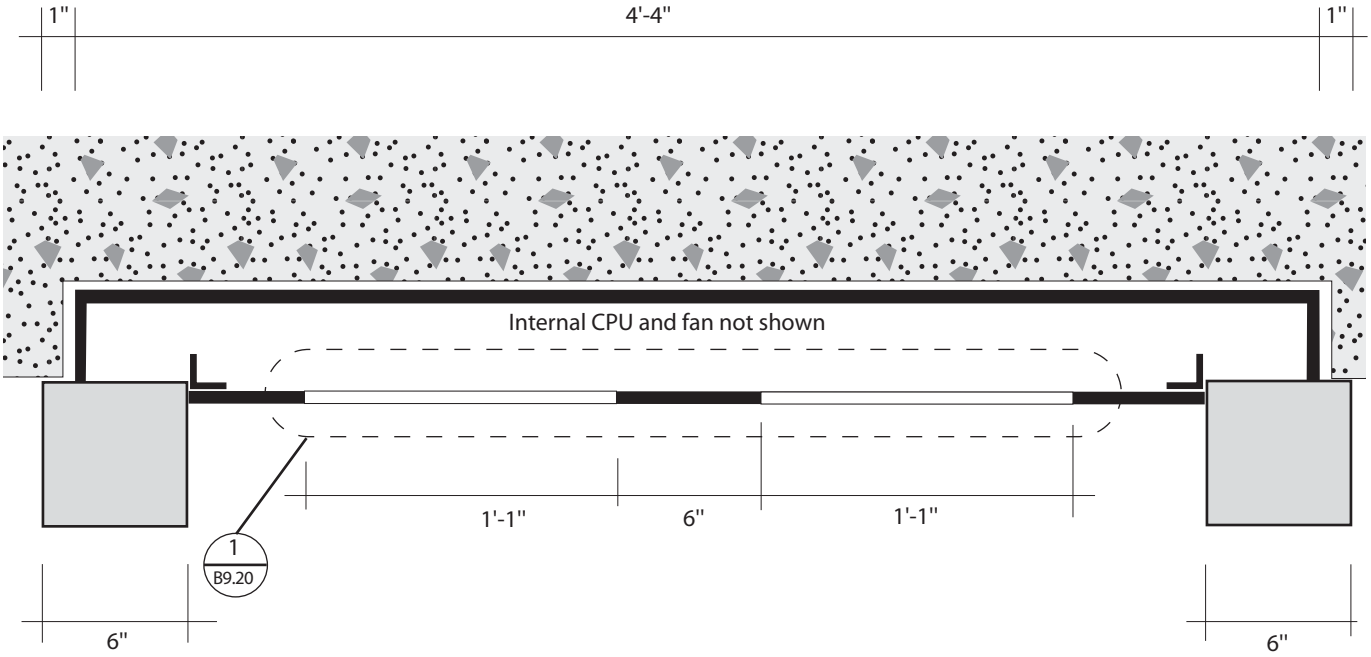


Elevation
Scale: 1/2"=1'-0"

Vertical Section

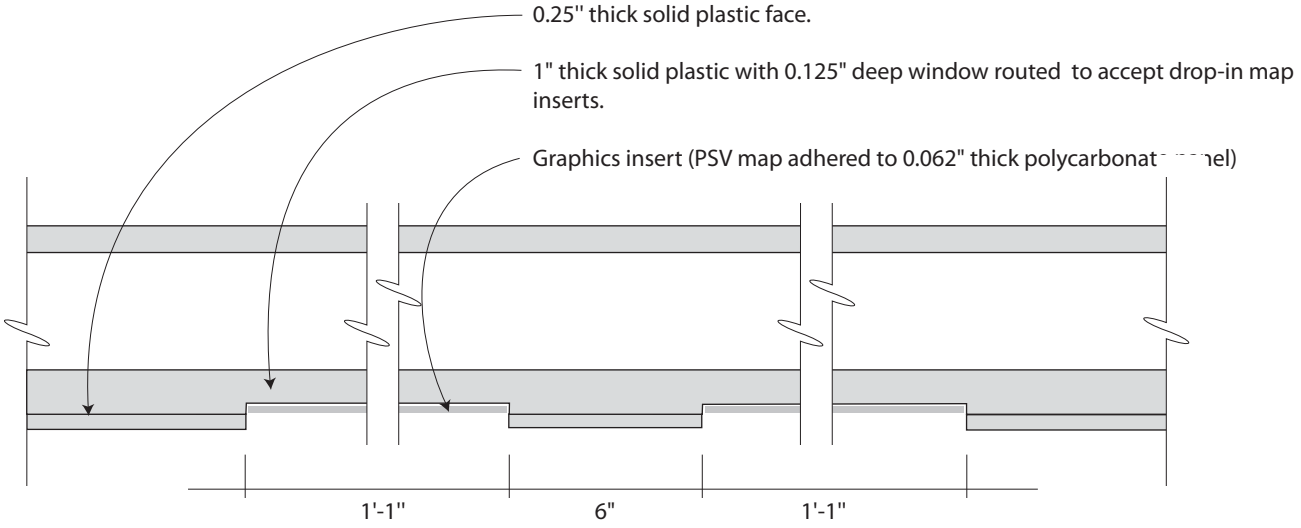


Elevation
Scale: 3/4"=1'-0"



Section A

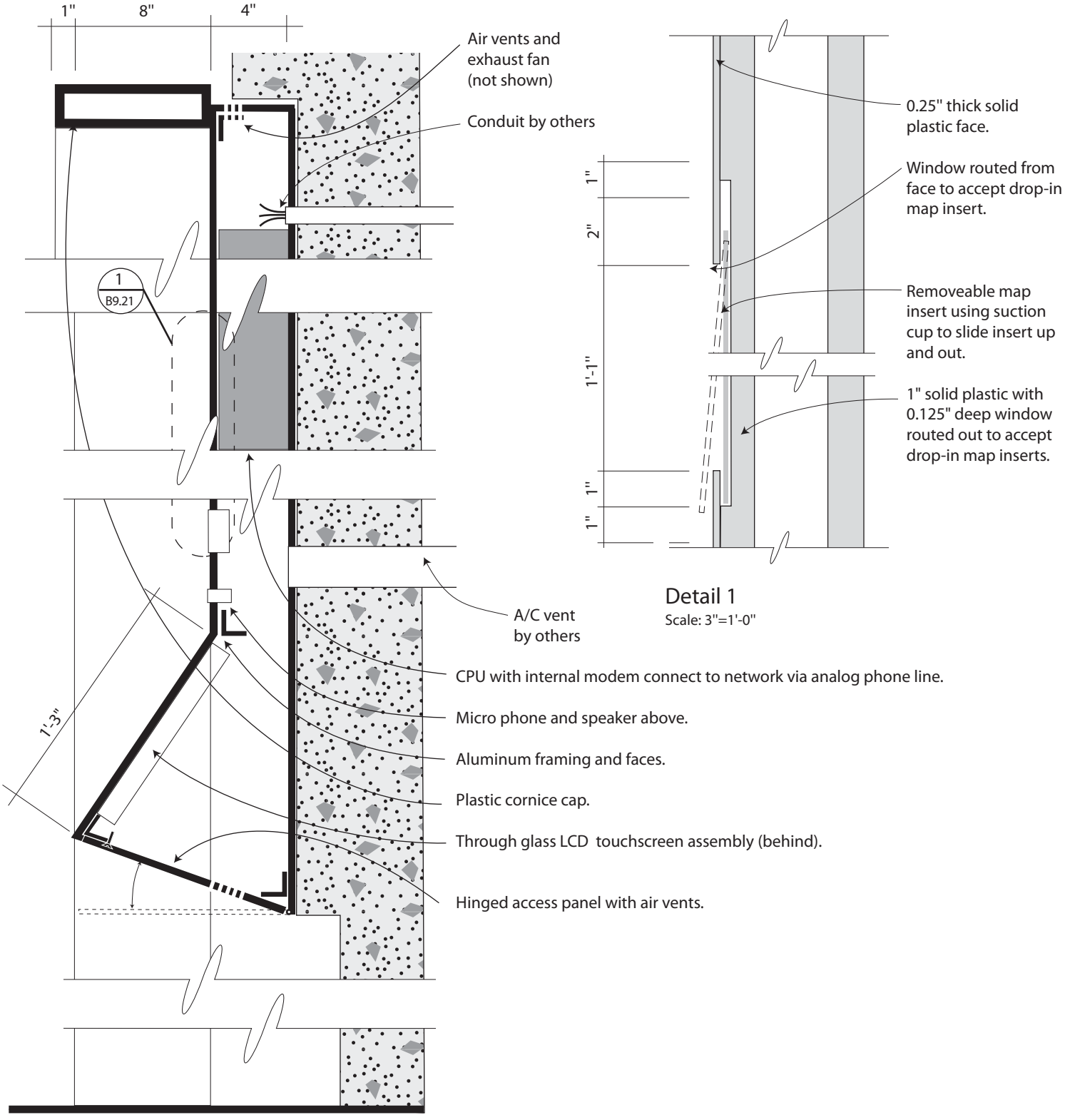
Scale: 1-1/2"= 1'- 0"



Detail 1

Scale: 3"=1'-0"

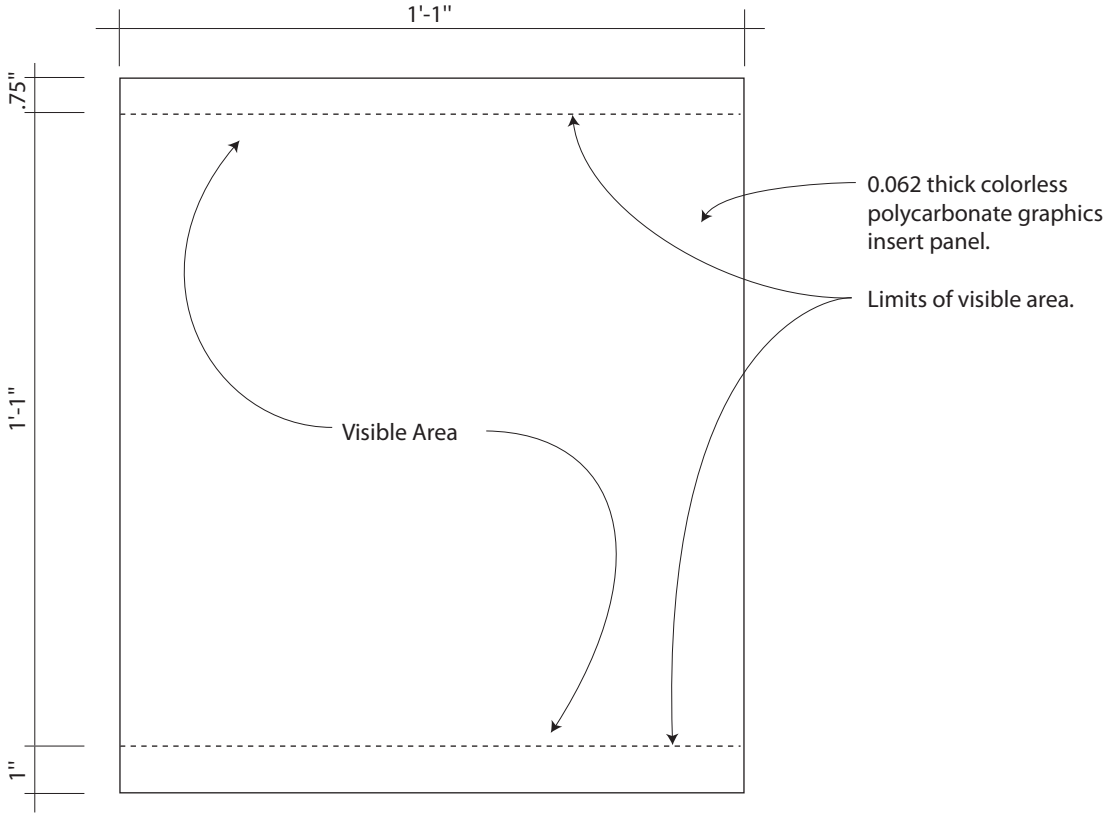
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida. Required wiring and communication cables not shown.



Section A
Scale: 1 1/2"=1'-0"

Detail 1
Scale: 3"=1'-0"

Note: Material dimensions and configurations shown are for design intent only. Map artwork to be provided by Owner.

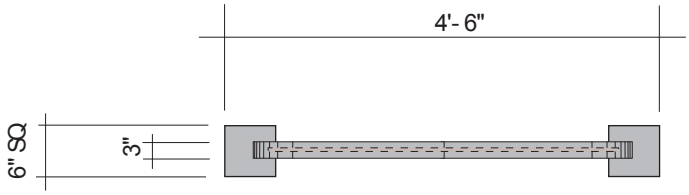


Layout A
Scale: 3"=1'-0"

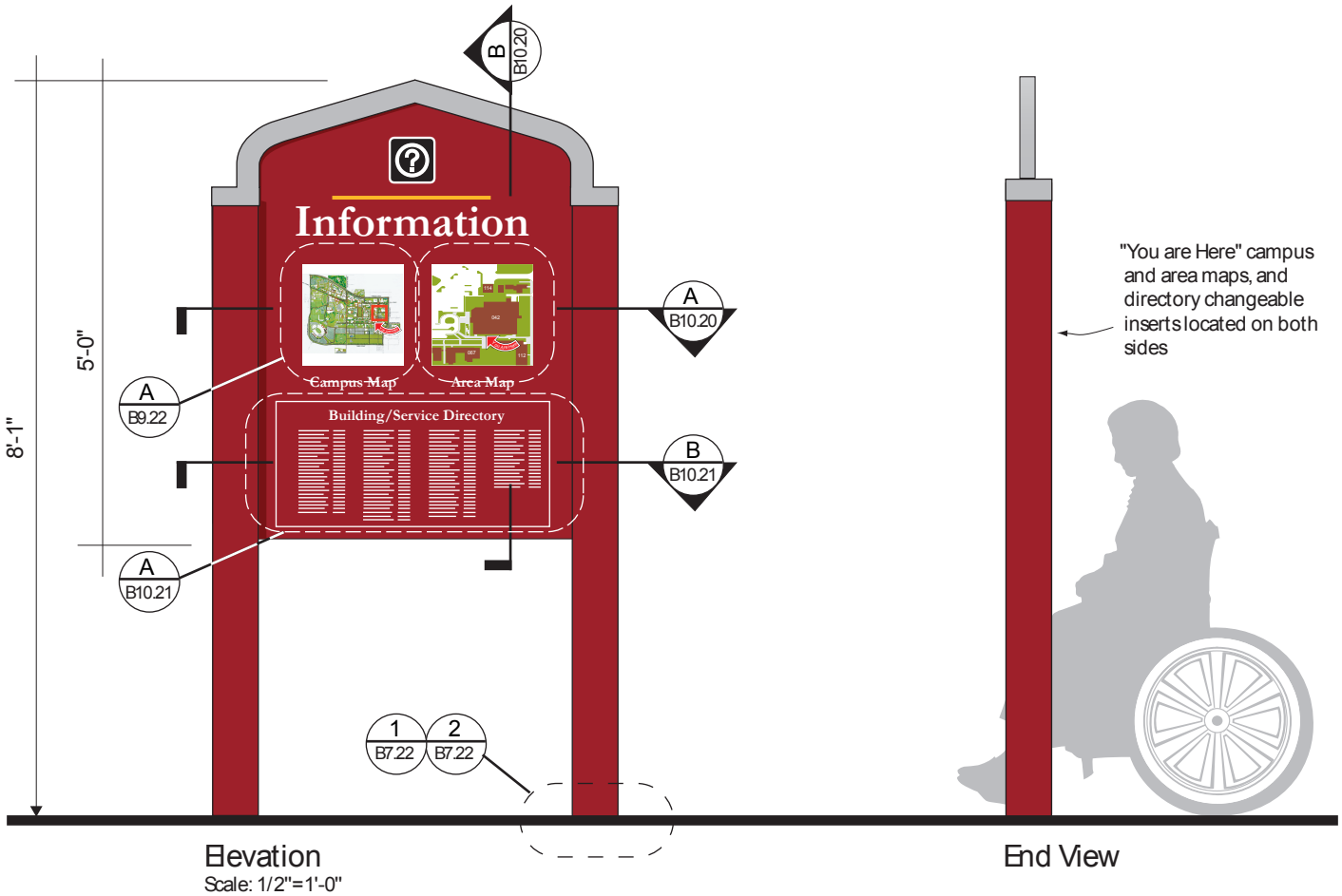
Information Kiosks are intended for use at major pedestrian traffic intersections and decision points. These non- illuminated signs are double sided and contain changeable graphics inserts displaying "you are here" maps and building directories. Their purpose is to provide campus information and orientation.

Fabrication Guidelines: Posts, extruded plastic- burgundy color cored through concrete and set into packed sand footings; Graphics Panel, formed plastic with recessed pockets for maps, burgundy; Cornice; solid plastic section with caps, canyon granite color; Graphics, reflective sheeting, white and black pictogram, white messages, gold rule; Graphics Inserts, full color digital prints on PSV adhered to second surface of clear polycarbonate cover.

Refer to manual pages B 10.01 for graphics measurements, B 10.10 for placement guidelines, B 10.20 for design intent drawings, and B 9.22 and B 10.21 for graphics insert dimensions.

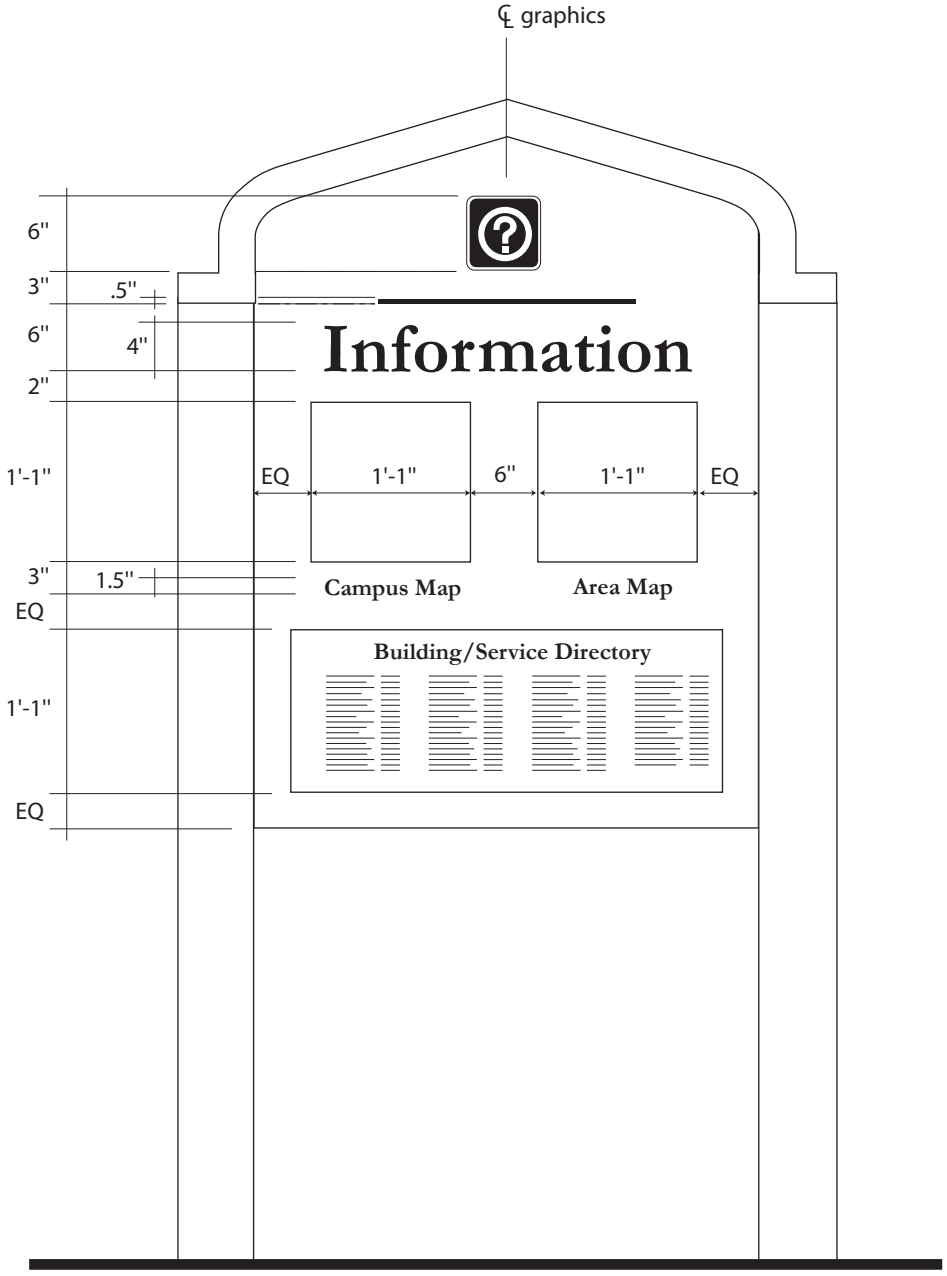


Plan



Elevation
Scale: 1/2"=1'-0"

End View

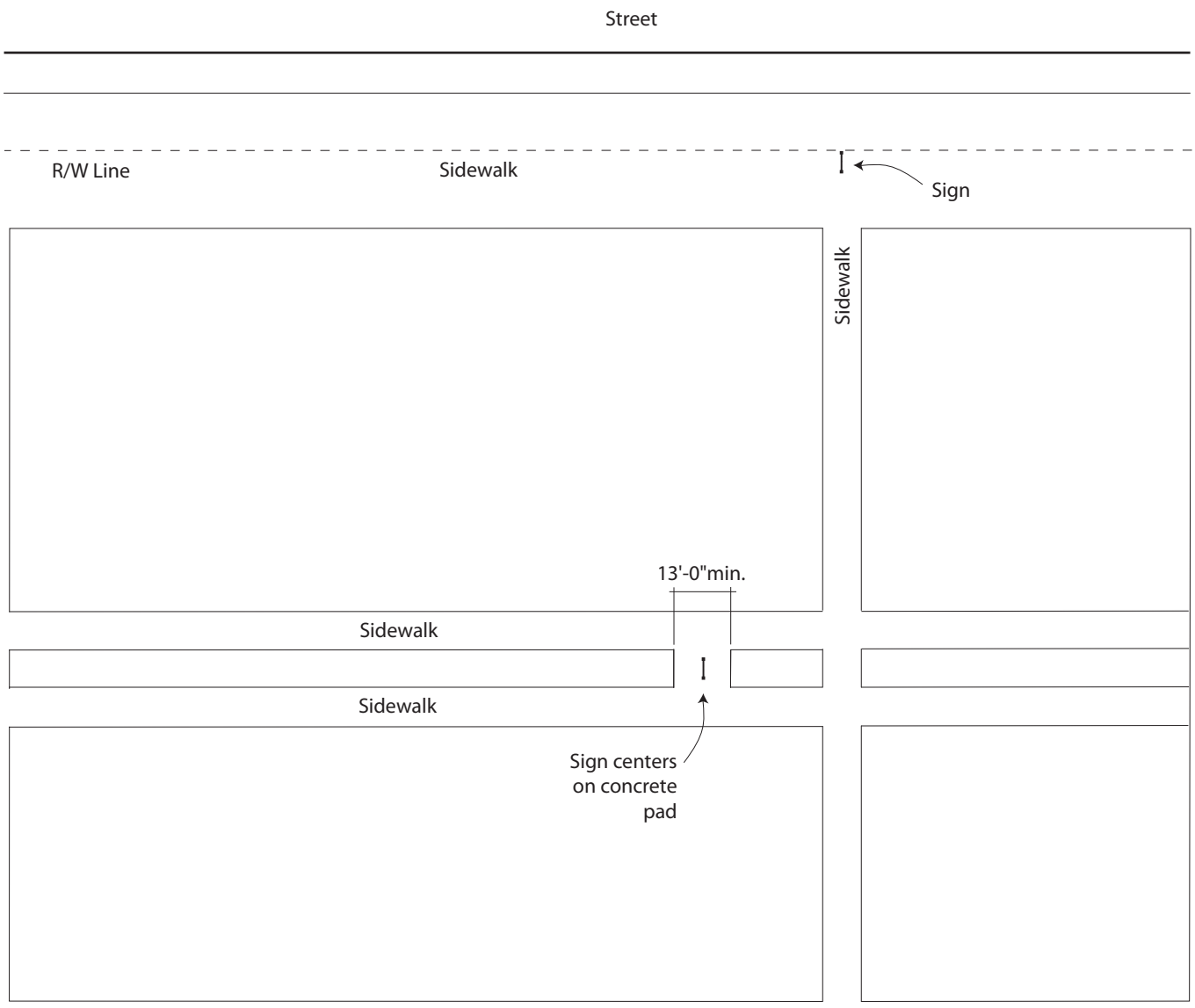


Elevation
Scale: 3/4"=1'-0"

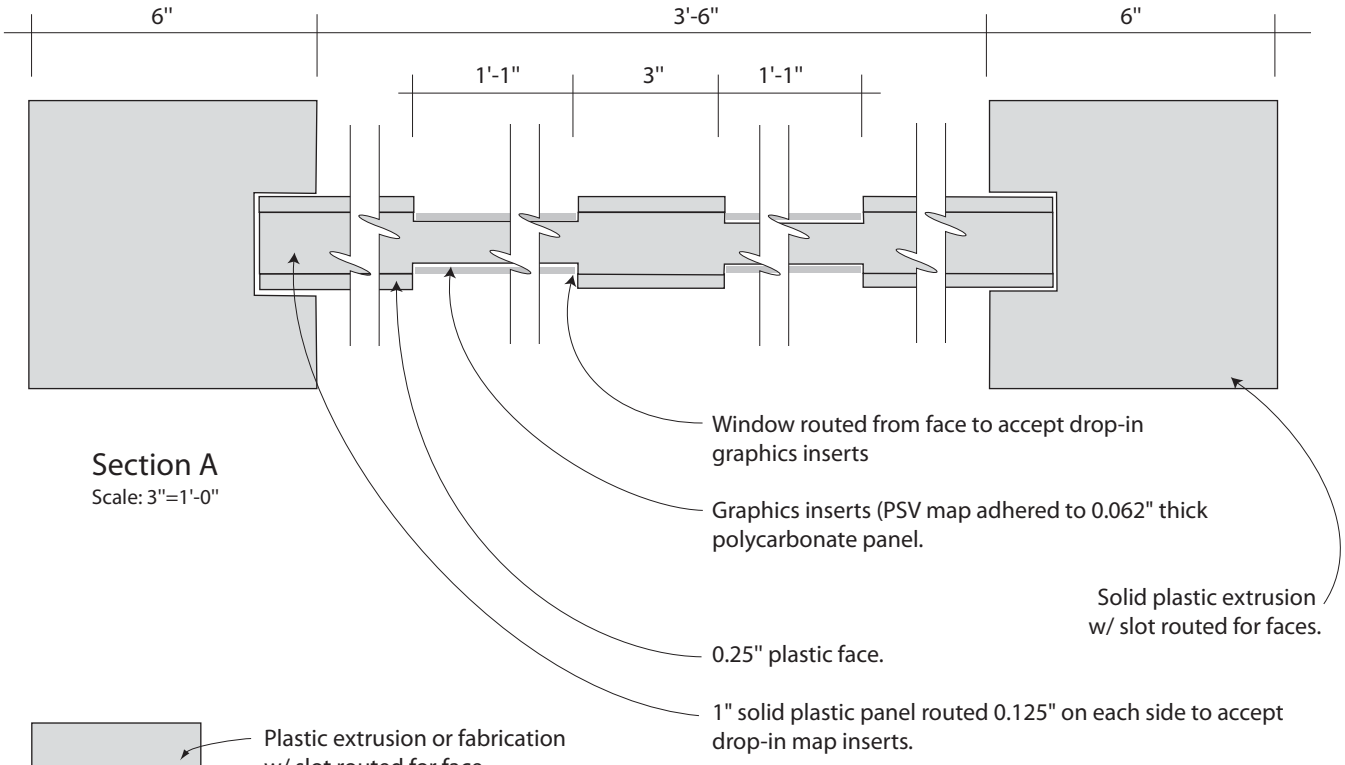
Kiosks are to be located in positions that will permit close viewing byboth abled and non-able bodied pedestrians. They need to be mounted to hard surfaces allowing wheelchair access. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block them from viewers.

Since the location, quantity, and size of the signs may exceed local zoning ordinances, approval from the appropriate regulatory agency is recommended prior to fabrication.

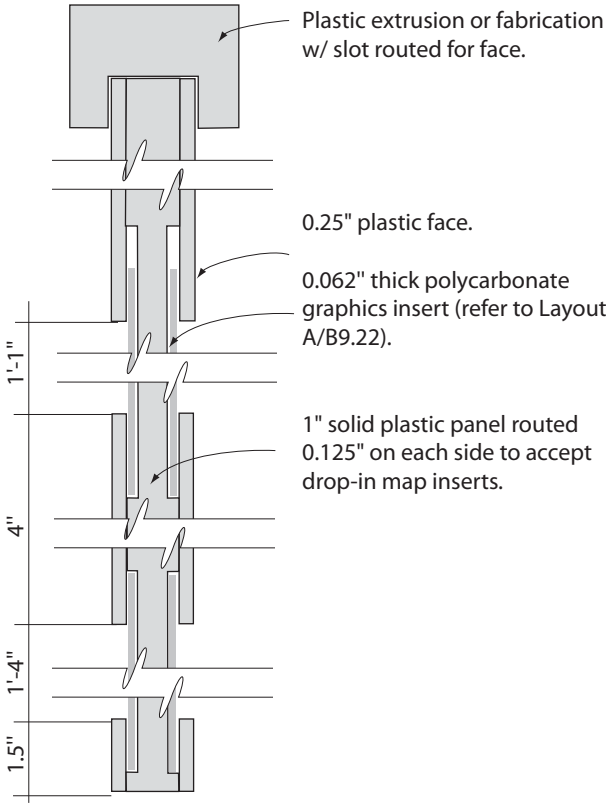
It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximity prior to digging foundations.



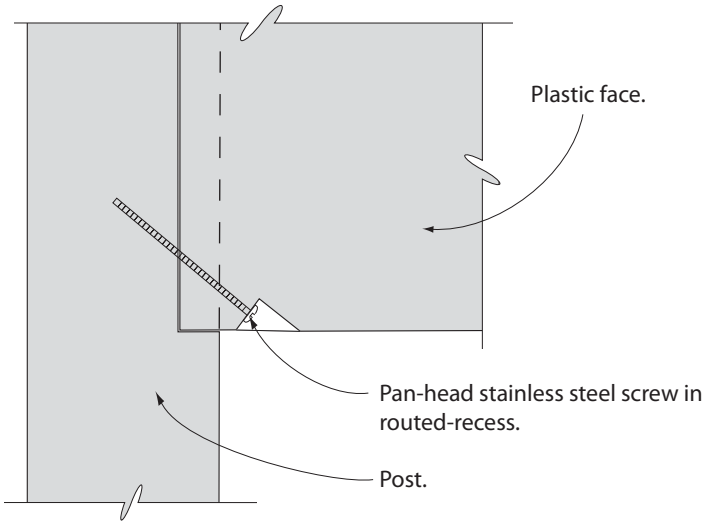
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: 3"=1'-0"



Section B
Scale: 3"=1'-0"

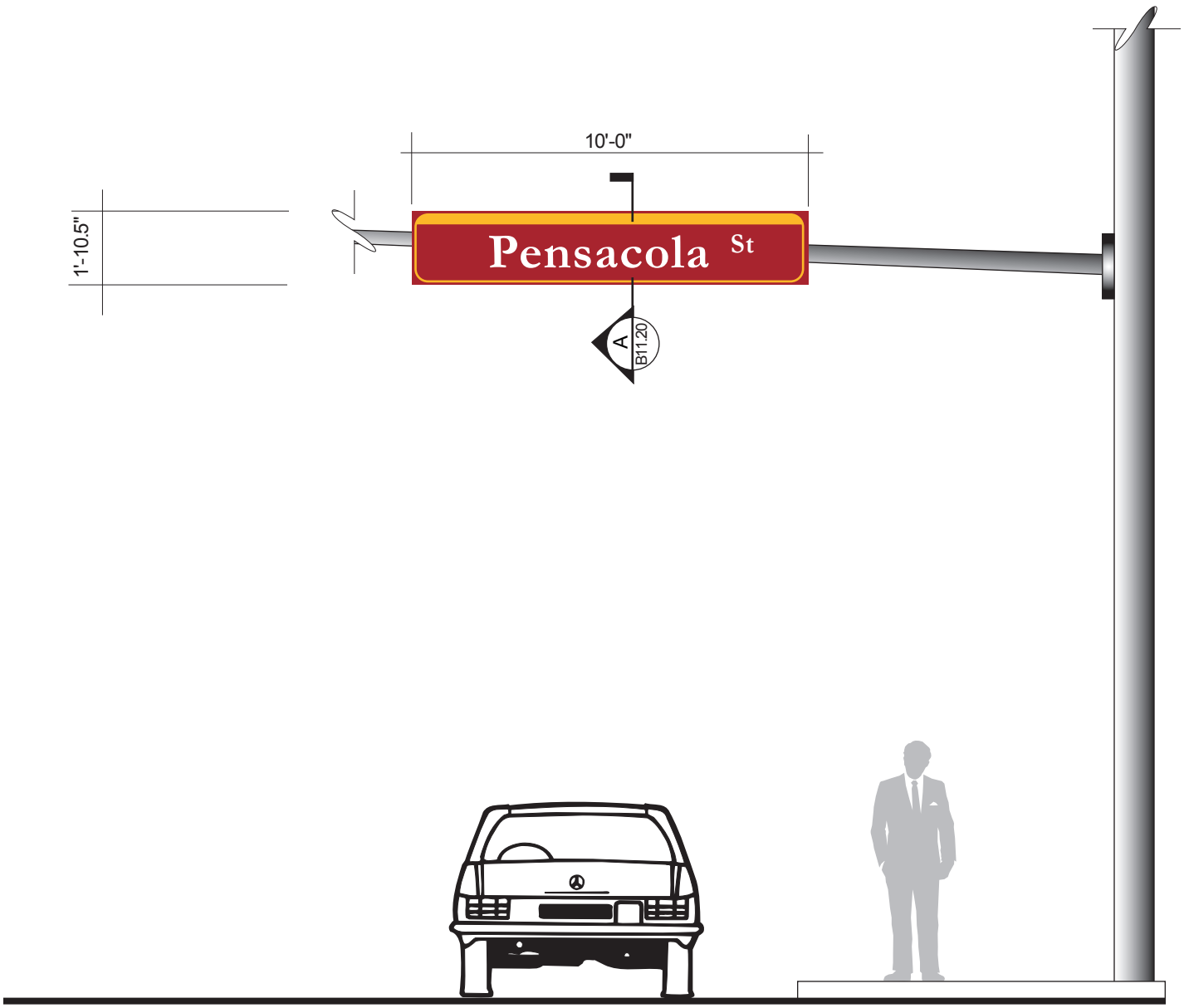


Section C
Scale: N.T.S.

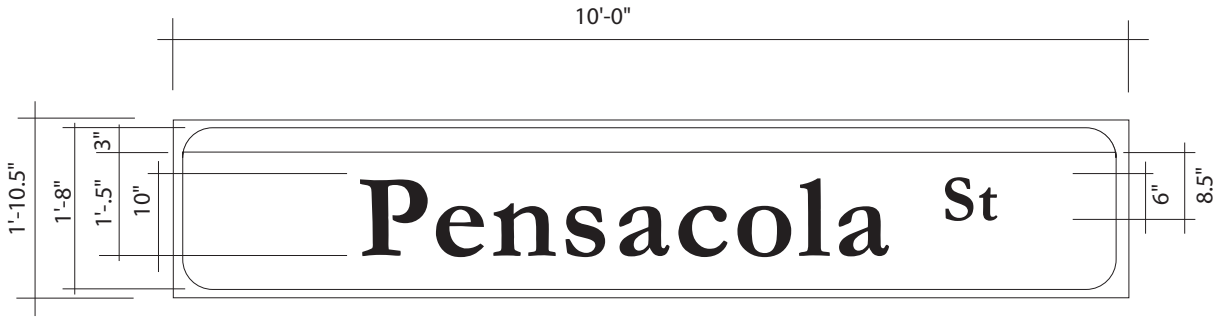
Street Identification Panels are to replace existing overhead panels and be mounted over the intersection on existing light standard arms. These non-illuminated signs consist of single sided panels that are mechanically mounted display either a one or two line streets name as shown.

Fabrication Guidelines: Graphics Panels, solid plastic plate-burgundy color attached to existing stanchion arm with adjustable metal straps; Graphics, reflective sheeting, white message, gold top band and border.

Refer to manual pages B 11.01 for graphics measurements, B 11.10 for placement guidelines, and B 11.20 for design intent drawings.



Elevation
Scale: 1/4"=1'-0"

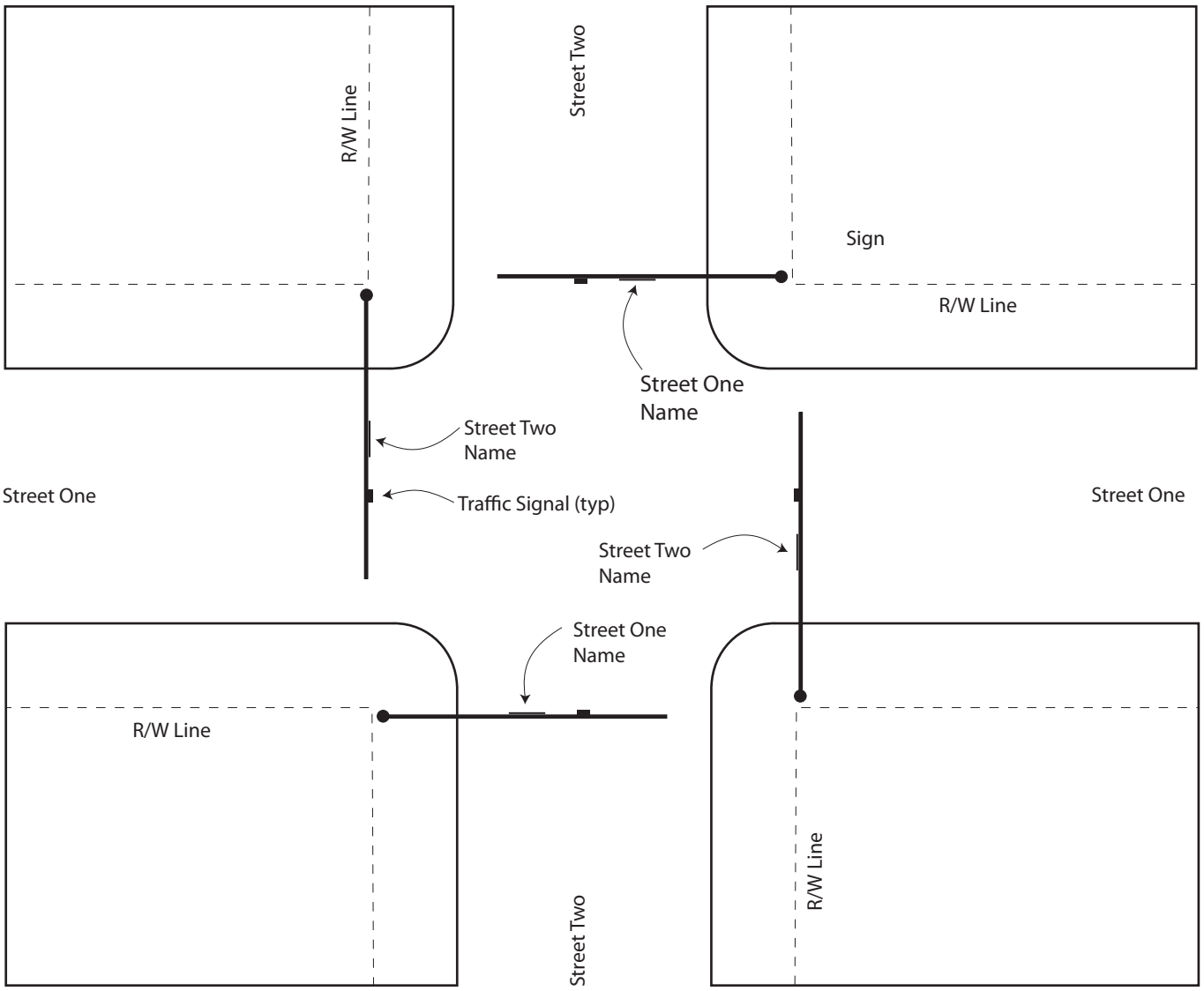


Elevation for Single Line Message
Scale: 1/2"=1'-0"

Elevation for Double Line Message
Scale: 1/2"=1'-0"

Signs are to be mounted to the intersection side of the arms of existing light standards and are to replace street identification panels provided by the City and/or the State. The purpose of these signs is to mark University boundaries at major inter-sections.

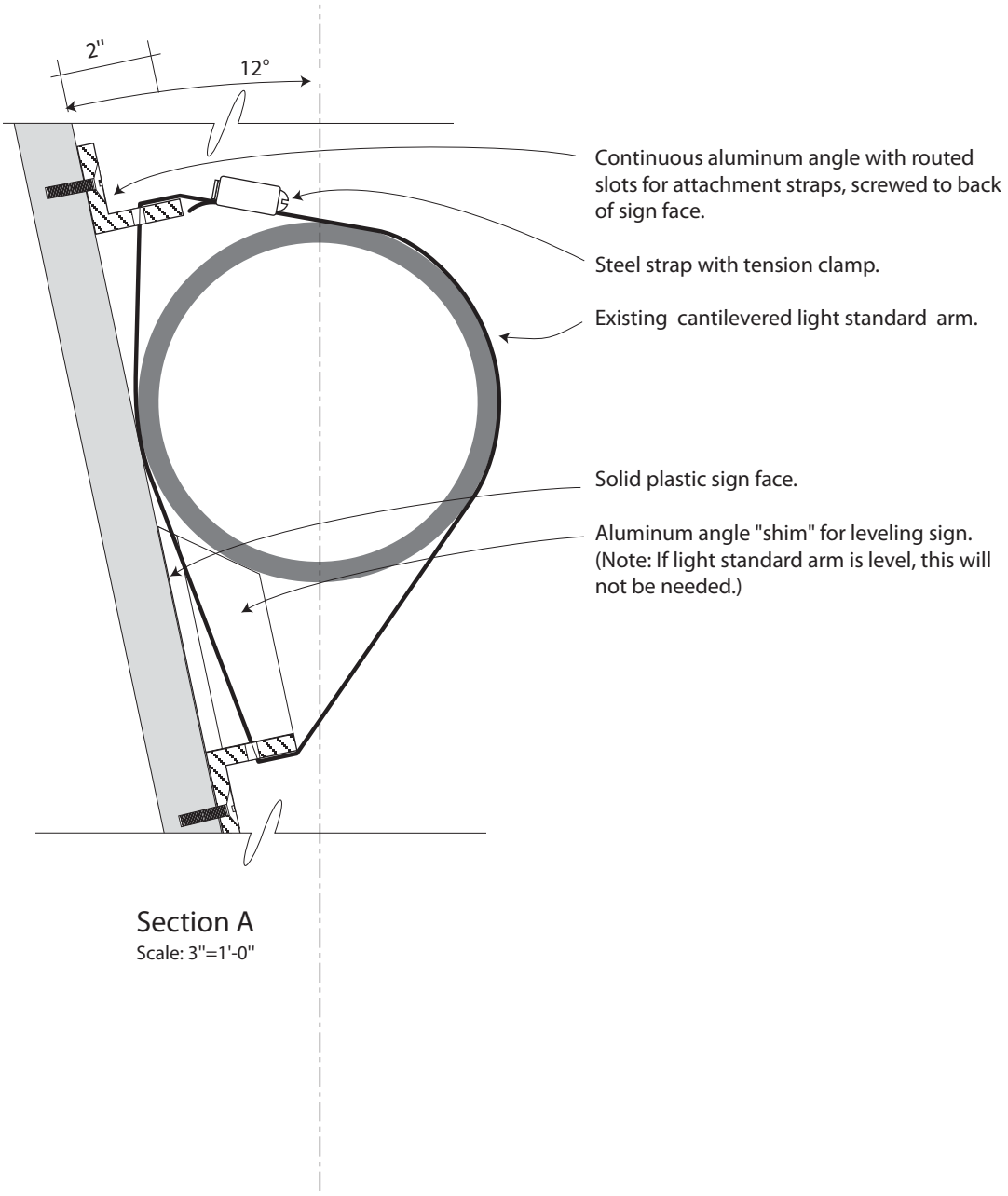
Since these signs are replacing existing signs and are located over City and/or State right-of-ways, approval to install these signs is recommended from the appropiate regulatory agencies prior to fabrication.



Typical Plan

Scale: NTS

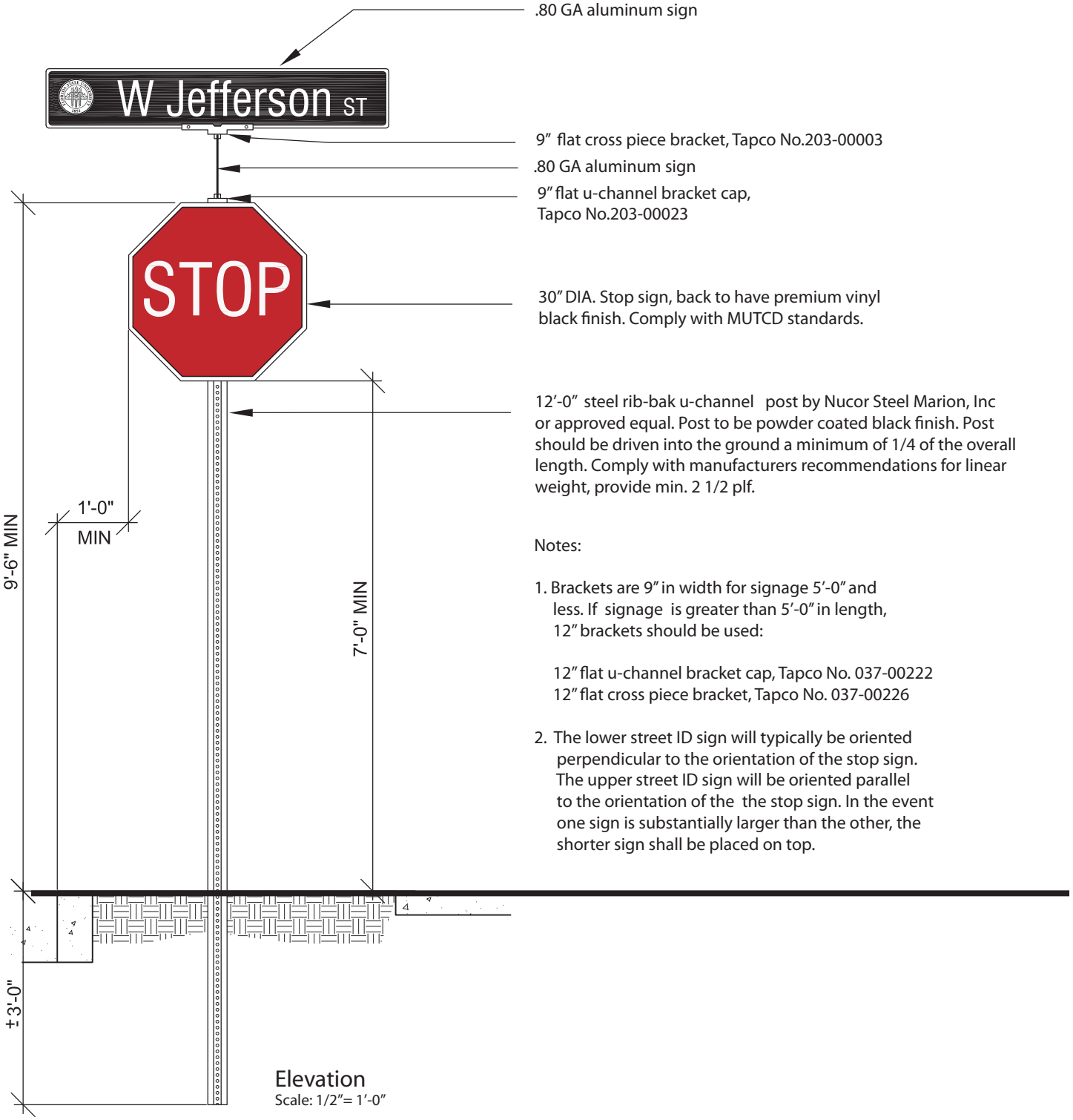
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: 3"=1'-0"

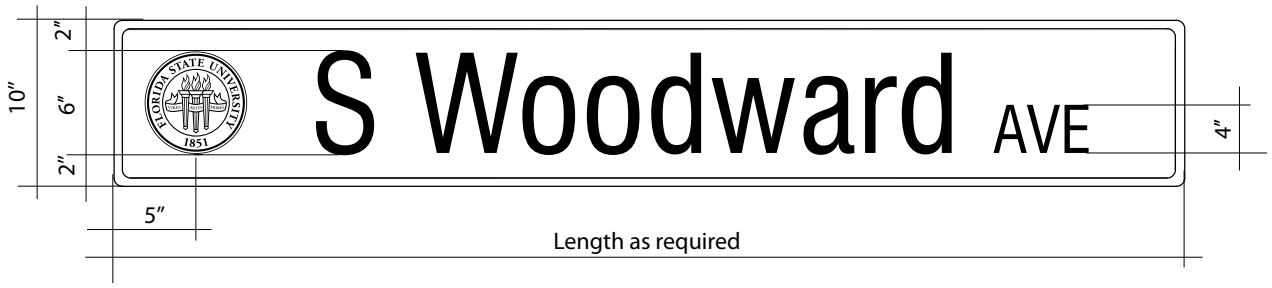
Street Indentification Signs are used throughout the campus to name all vehicular and pedestrian traffic thoroughfares These non-illuminated signes are double sided and can display two single line street names on separate panels set perpendicular to each other.

Fabrication Guidelines: Post, steel u-channel with powder coat black paint finish Graphics Panels, aluminum - black color; Graphics, reflective sheeting, white messages, FSU seal decal. Refer to manual pages B 12.01 for graphics measurements, B12.10 for placement guidelines.



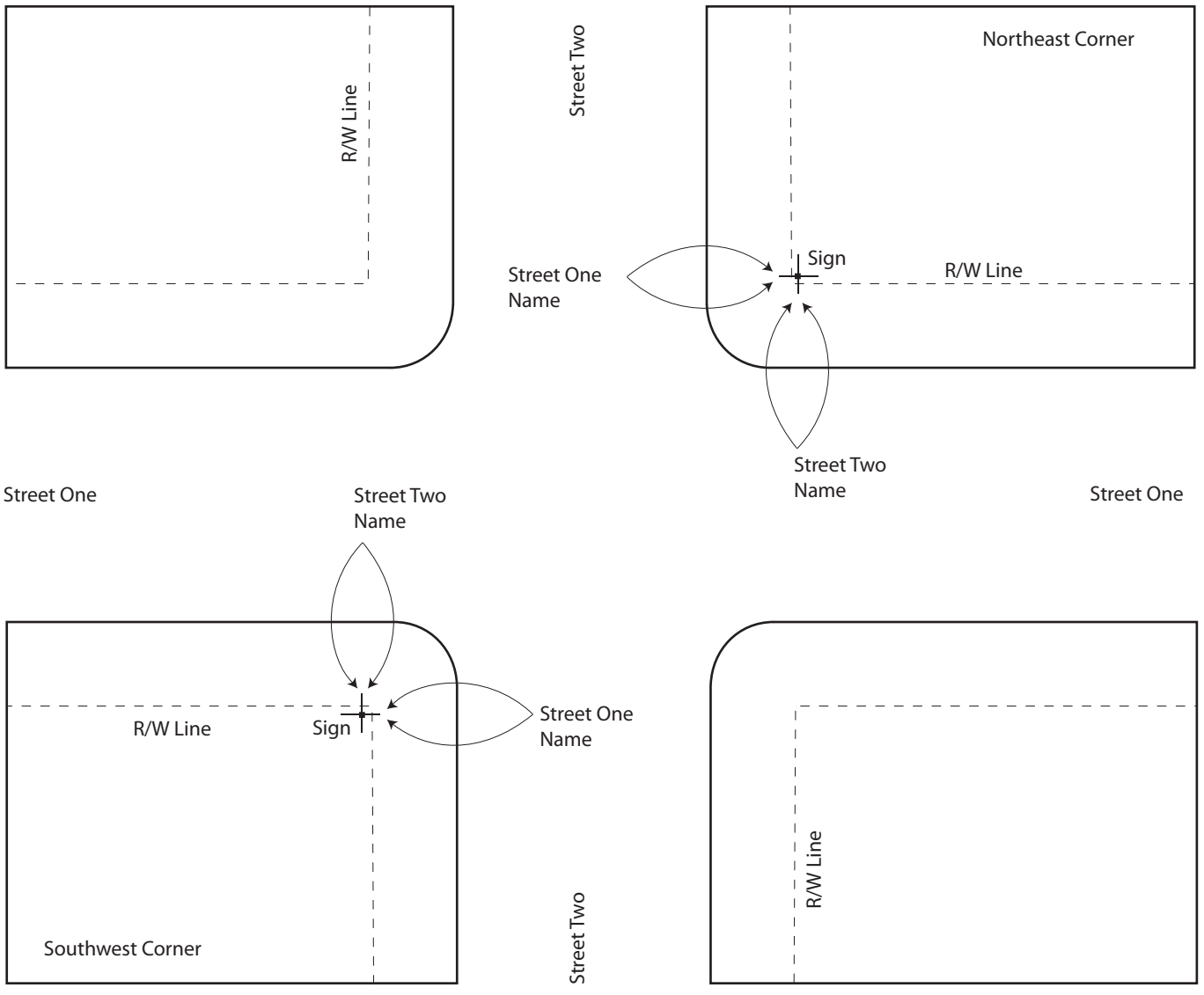
Elevation
Scale: 1/2"= 1'-0"

Font to be Swiss 721 CN BT, upper & lower case.



Signs are to be located consistently on the NE and SW corners of the street intersection with sign panels positioned parallel to the street that the sign is identifying. Sign posts are to be located behind street right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

Since these signs may replace existing street identification signs installed by the City, approval to replace existing City signs is recommended prior to fabrication.



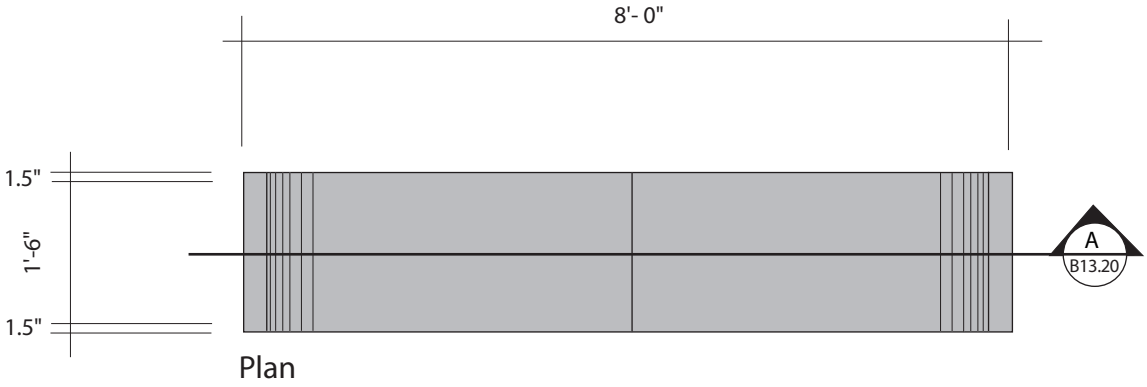
Typical Plan

Scale: NTS

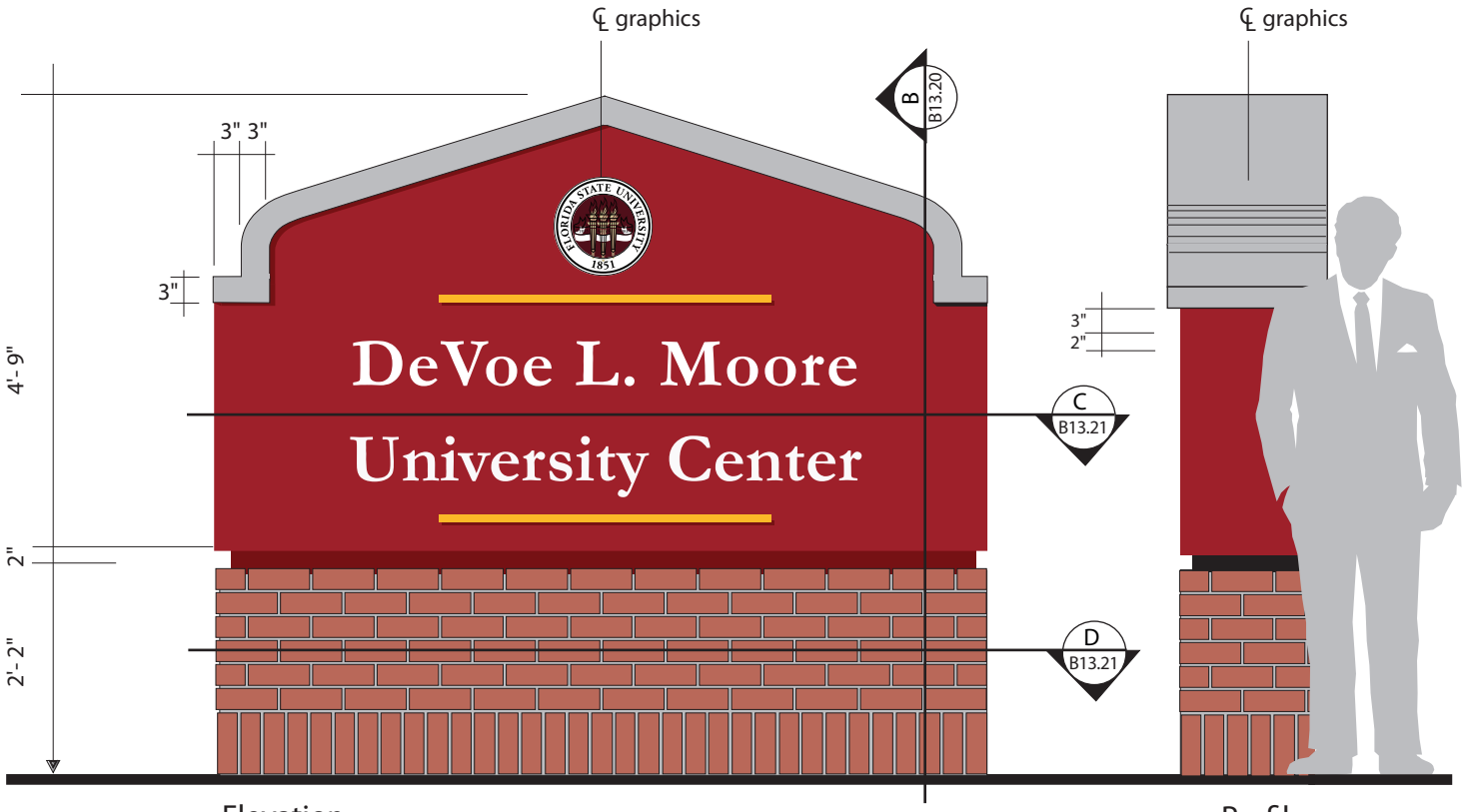
Type 13 signs are intended for identifying building clusters, major campus areas, and quadrangles located along vehicular routes or as subject to approval by Administration. Signs may be single sided or double sided, internally illuminated or non-illuminated. If illuminated, only the message is to be lit.

Fabrication Guidelines: Base, CMU substrate with face brick veneer; Foundation, formed concrete footing; Sign Cabinet, formed aluminum with garnet polyurethane finish and internal structure with internal light track behind copy; Cornice, formed aluminum with light gray textured coating; Graphics; reflective sheeting, gold university symbol and rules; Interior Illumination, 277v., white message; Lamps, H.O. fluorescent daylight.

Refer to manual pages B 13.01 for graphic measurements, B 13.10 for sign placement guidelines, and B 13.20 for design intent drawings. Refer to A 2.10 for illuminated signs letter spasing.

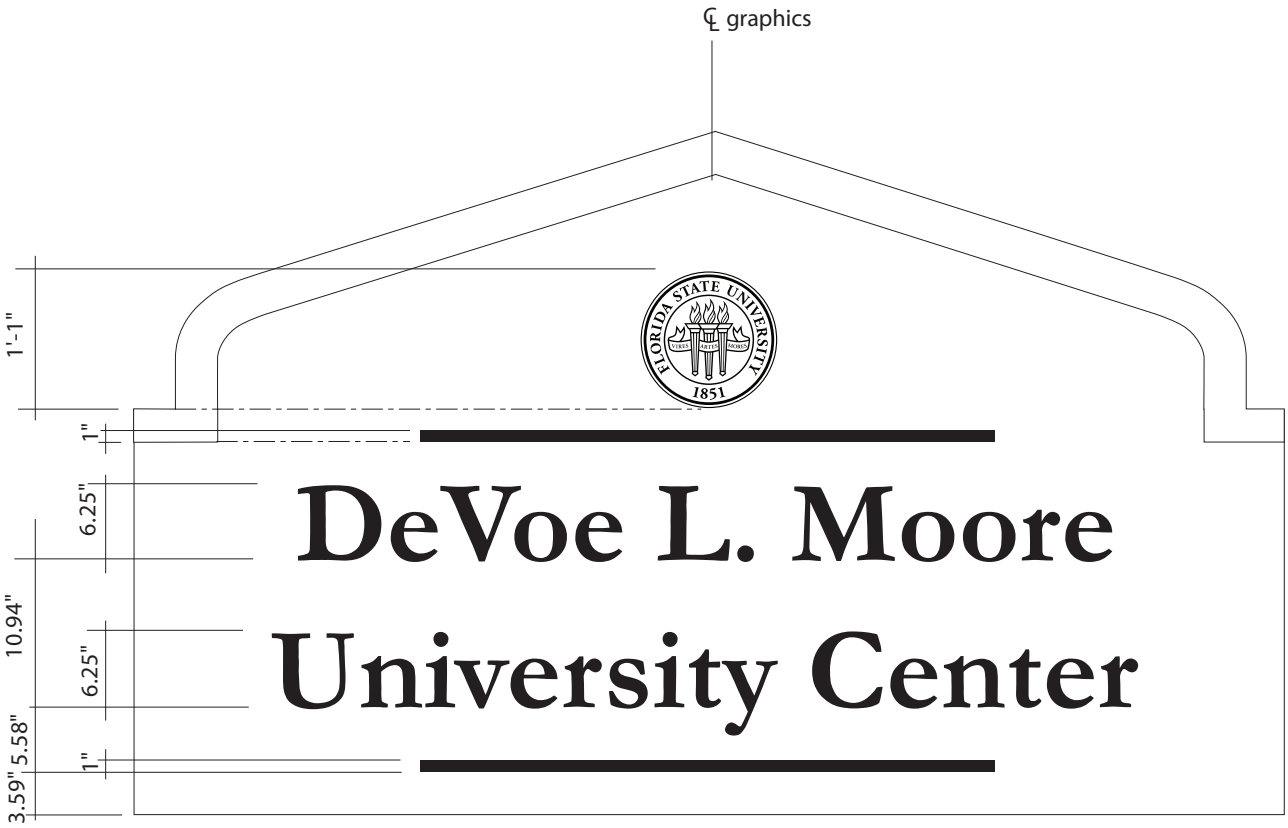


Plan

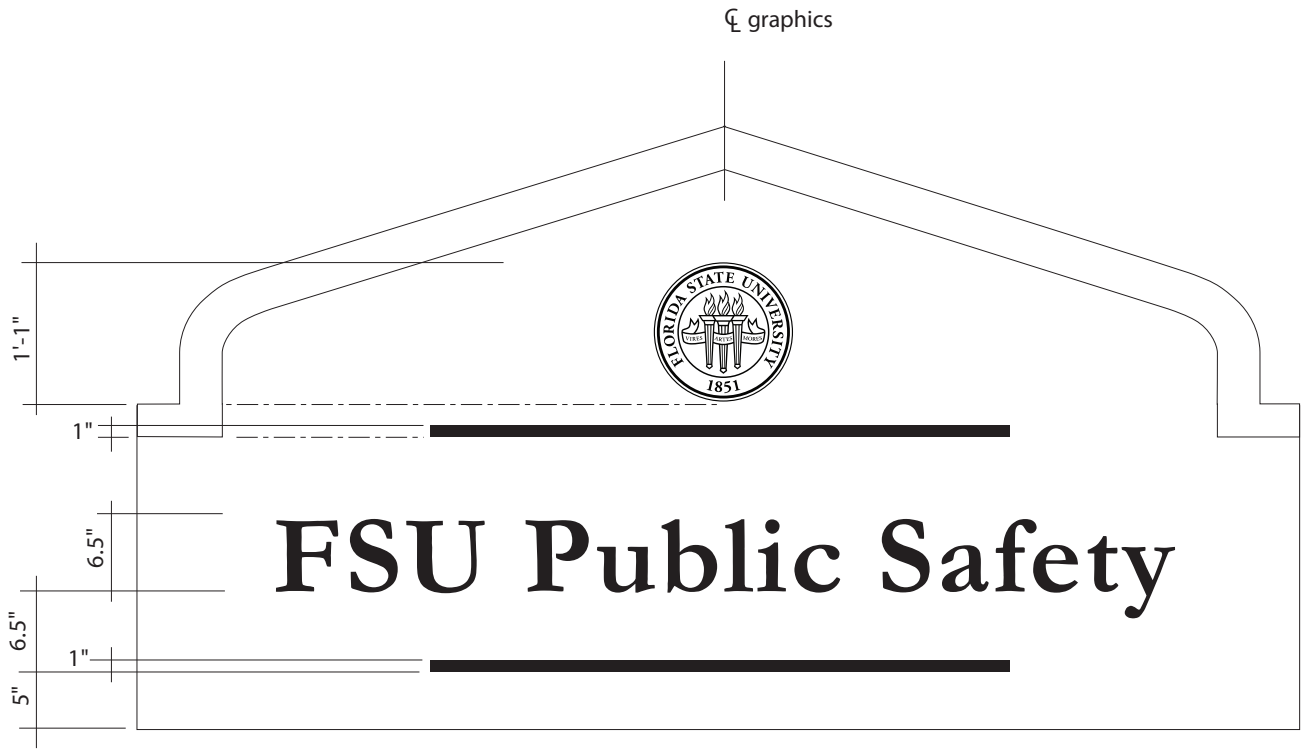


Elevation
Opposite side similar
Scale: 1/2" = 1'-0"

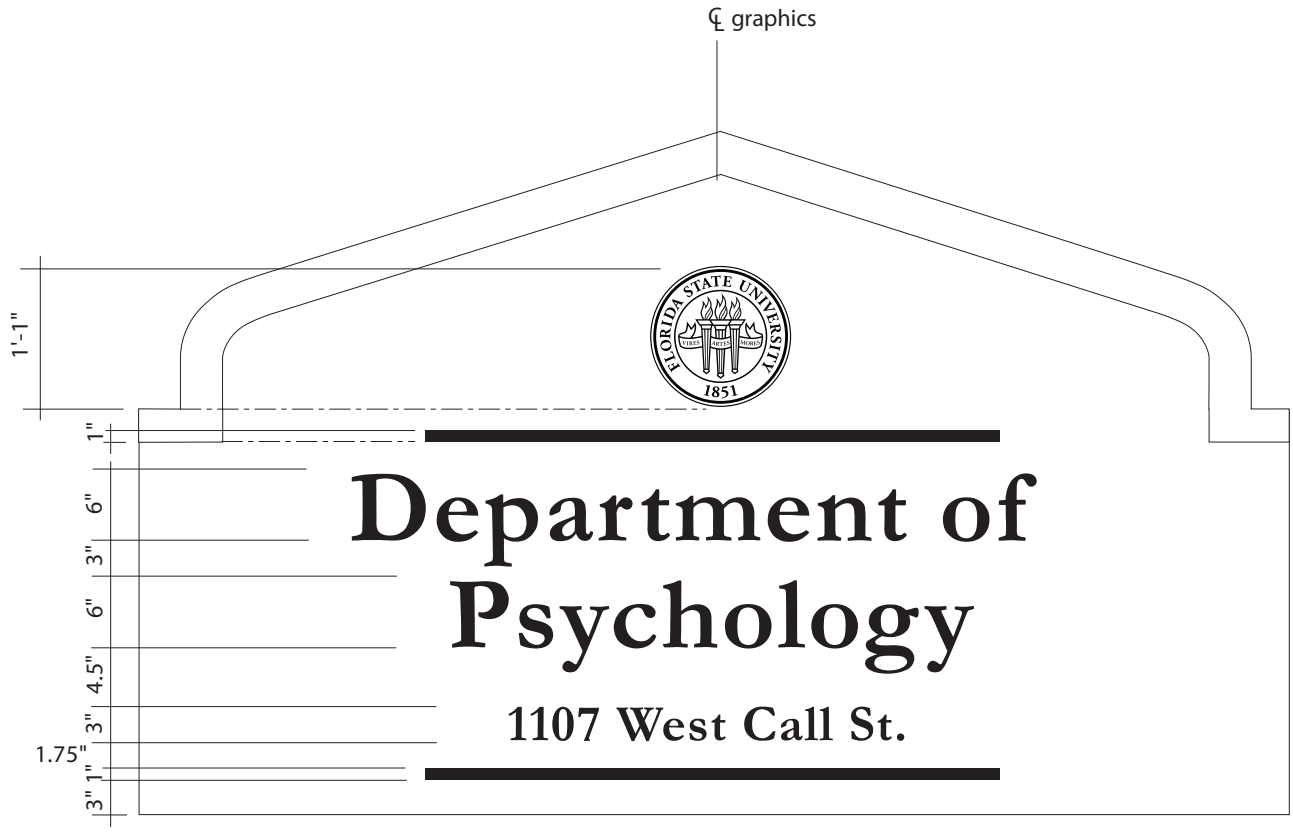
Profile
Number faces street



Elevation
Scale: 3/4"=1'-0"



Elevation
Scale: 3/4"=1'-0"



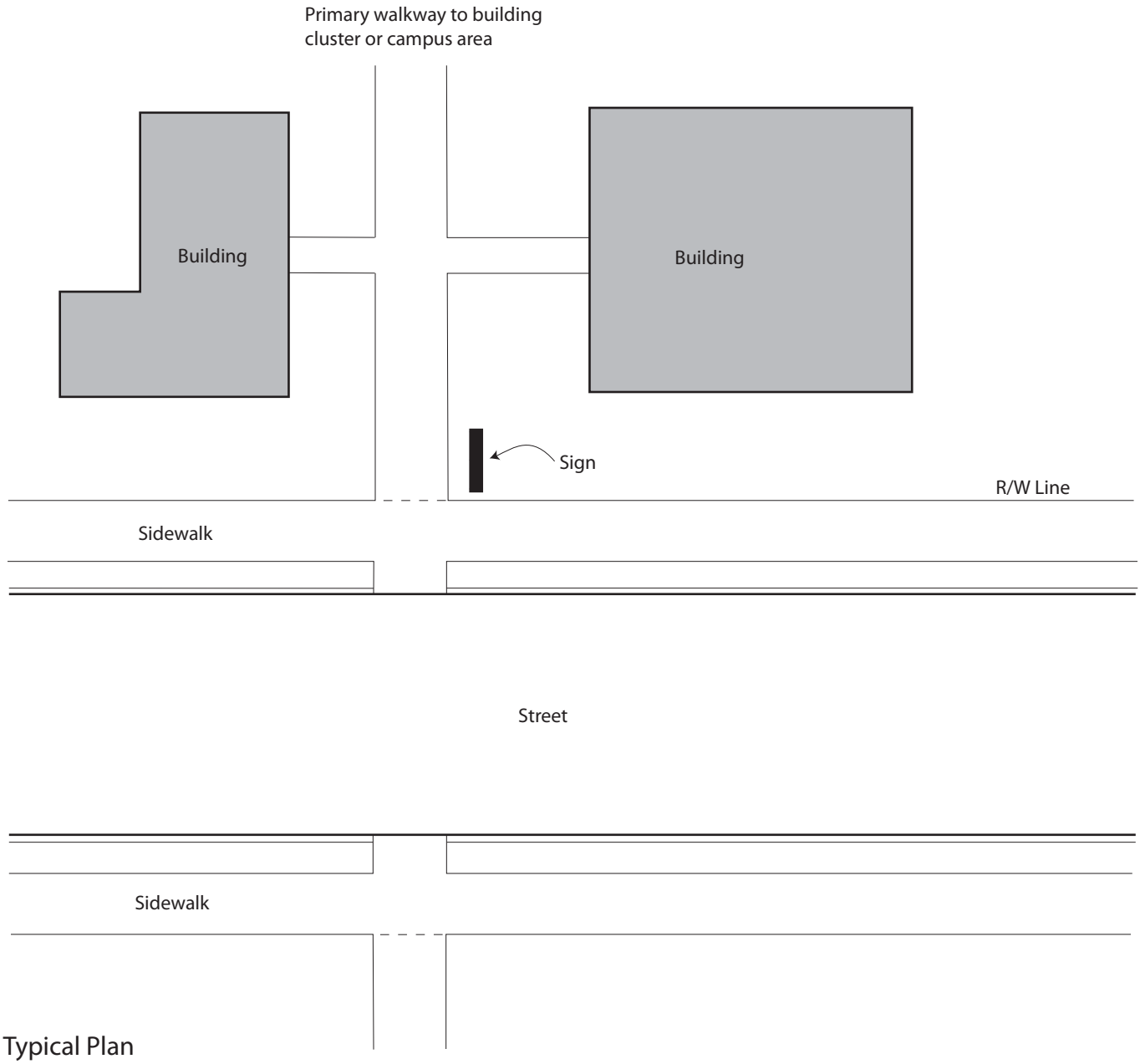
Elevation with Street Address
Scale: 3/4"=1'-0"

Type 13 signs are to be positioned perpendicular to the street from which they are to be viewed and behind street right-of-way and setback lines. If the building or area to be signed is located at a street intersection, the sign is to be located along the major artery. Two signs may be used if both roads are equally important.

Sign locations are site specific; therefore, care must be taken to place signs in areas free from obstructions that would block them from viewers.

Since the location, quantity, and size of these signs may ex-ceed local zoning ordinances, approval from the appropriate regulatory agencies is recommended prior to fabrication.

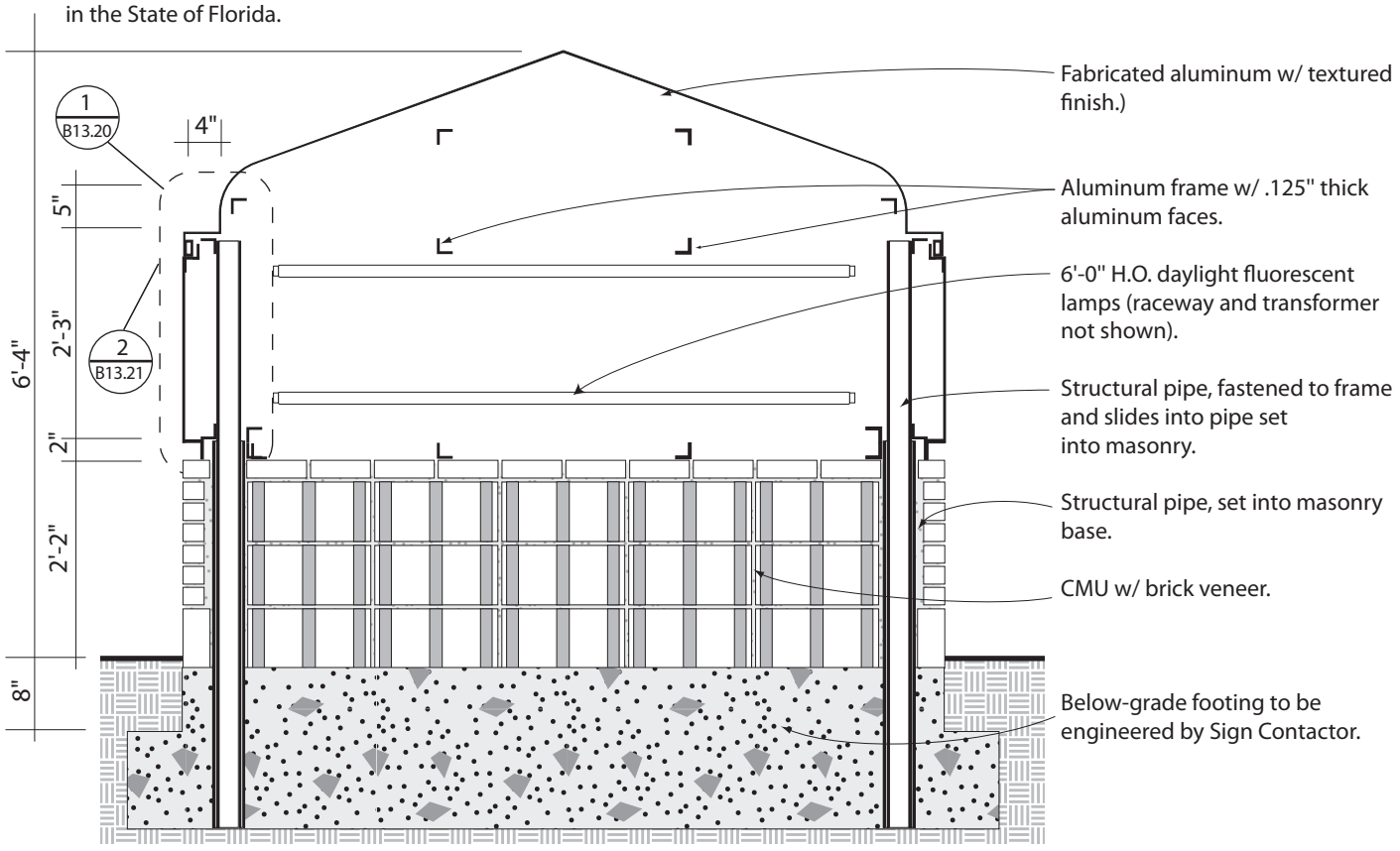
It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximities prior to digging foundations.



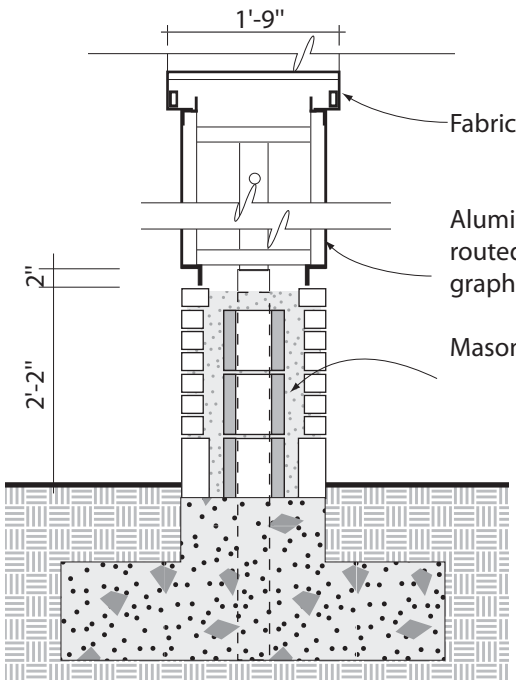
Typical Plan

Scale: NTS

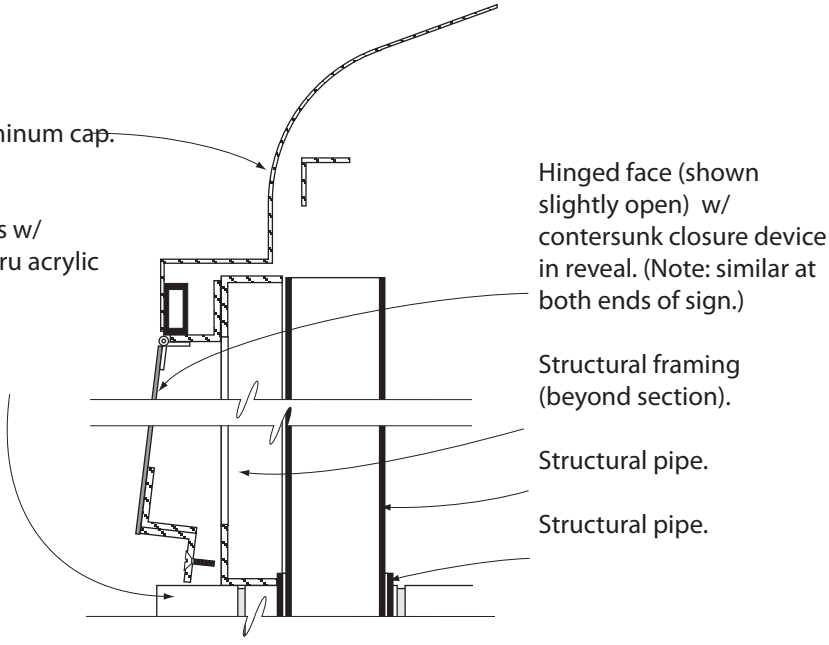
*Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: 1/2"=1'-0"

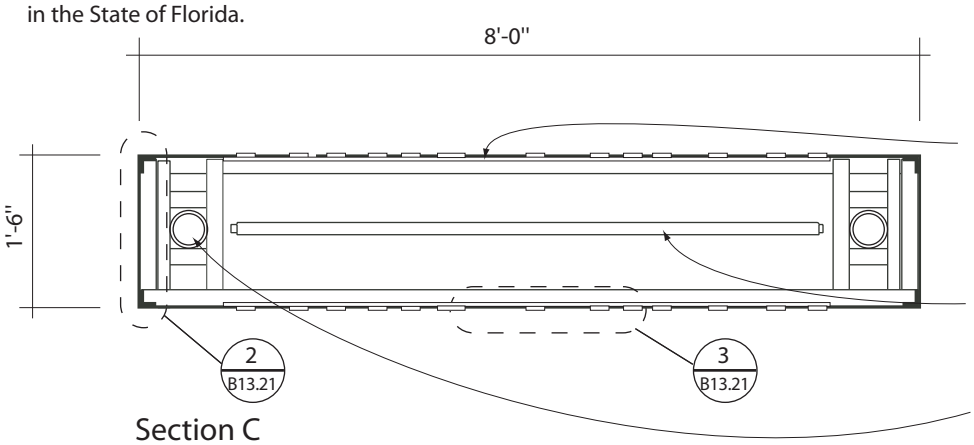


Section B
Scale: 1/2"=1'-0"



Detail 1
Scale: 1 1/2"=1'-0"

*Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



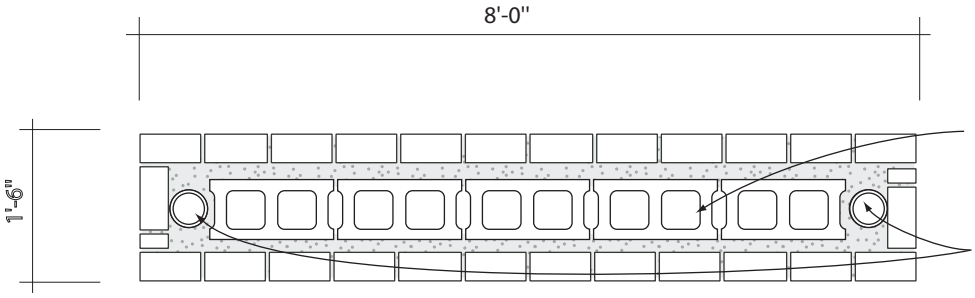
.125" Thick aluminum faces with routed and "push-thru" acrylic letters on structural aluminum frame.

Note: Access panels on both ends of sign cabinet.

6'-0" fluorescent lamps (raceway and transformer not shown).

Structural support pipes, fastened to frame and set in masonry base/footing.

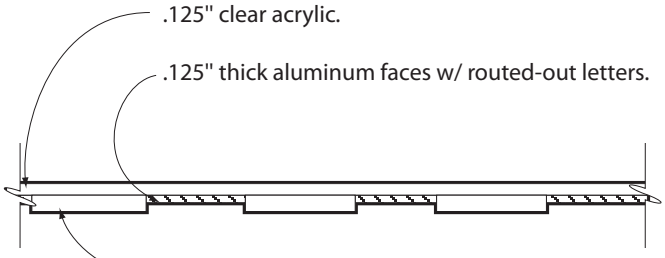
Section C
Scale: 1/2"=1'-0"



CMU core with brick veneer.

Structural support pipes, fastened to frame and set in masonry base/footing.

Section D
Scale: 1/2"=1'-0"

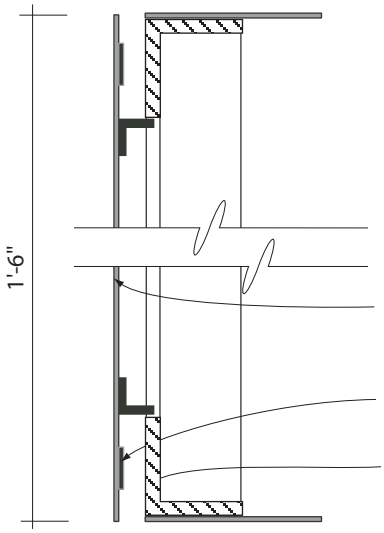


.125" clear acrylic.

.125" thick aluminum faces w/ routed-out letters.

.375" white lighting acrylic- shaped "push-thru" letters, chemically welded to clear acrylic backing.

Detail 3
Scale: Half Size



Hinged access panel at both ends of cabinet (shown slightly open).

Neoprene gasket.

Structural aluminum frame.

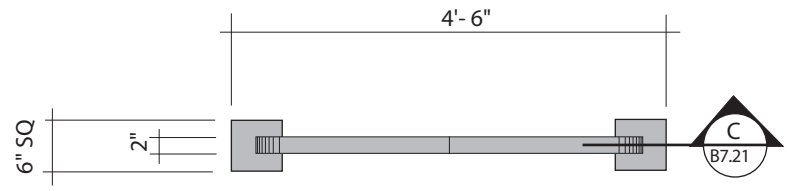
Detail 2
Scale: 3"=1'-0"

Large Building Identification Signs are intended for build-ings that have direct access from the street and available space to locate a free-standing sign.

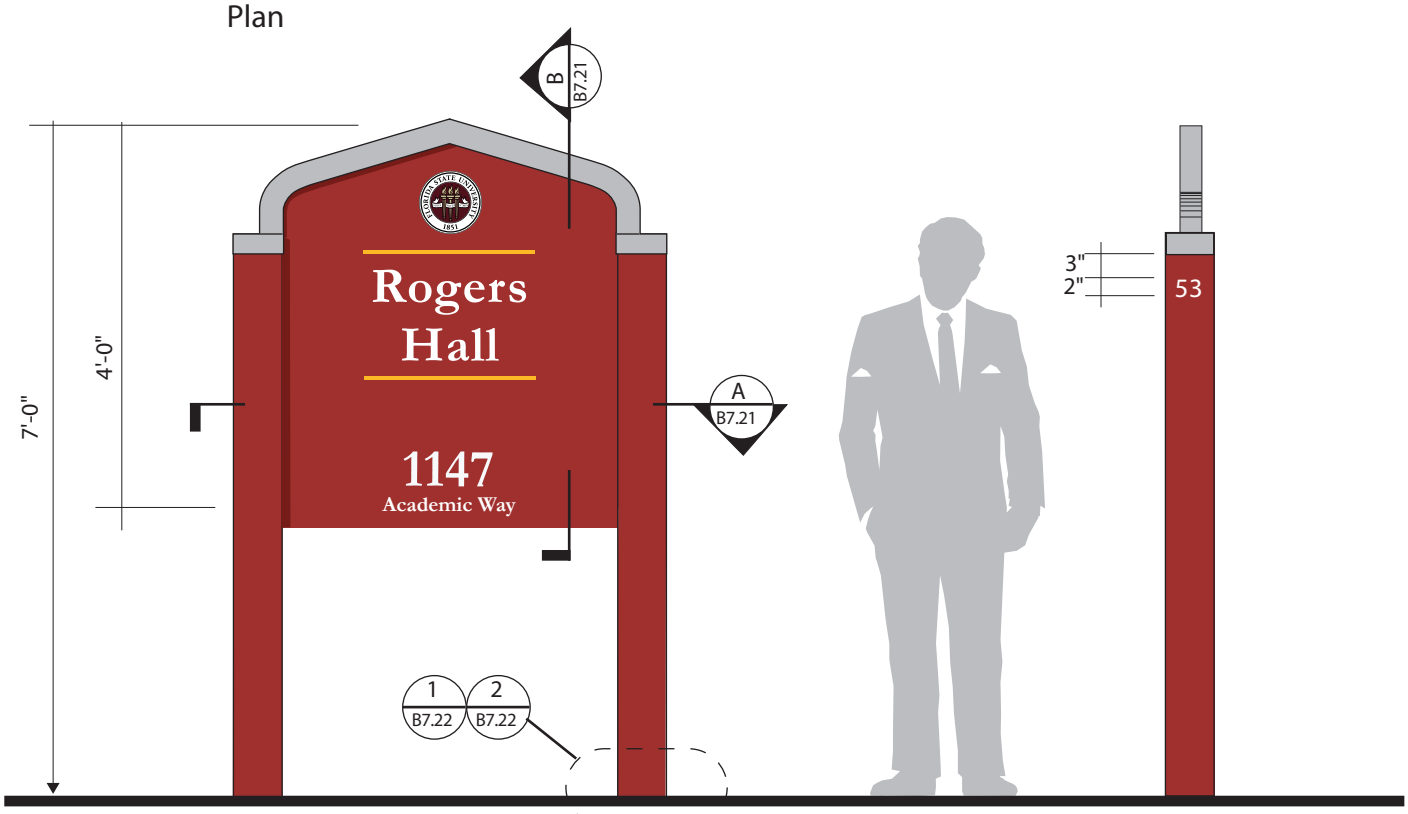
Two graphics panel sizes are provided. The shorter panel is recommended for displaying the building name only, as shown below. The taller panel is for displaying the build-ing name, plus a listing of the major colleges, schools, and departments that are located within.

Fabrication Guidelines: Posts, formed from extruded solid plastic into packed sand footings, burgundy posts and canyon granite caps ; Graphics Panel, solid plastic-burgundy color; Cornice; formed solid plastic shape with caps, canyon granite color; Graphics, reflective sheeting, gold university symbol and rules, white message and arrows, white and black pictograms.

Refer to manual pages B 14.01 for graphics measurements, B 14.10 for sign placement guide-lines, and B 7.20 design intent drawings.

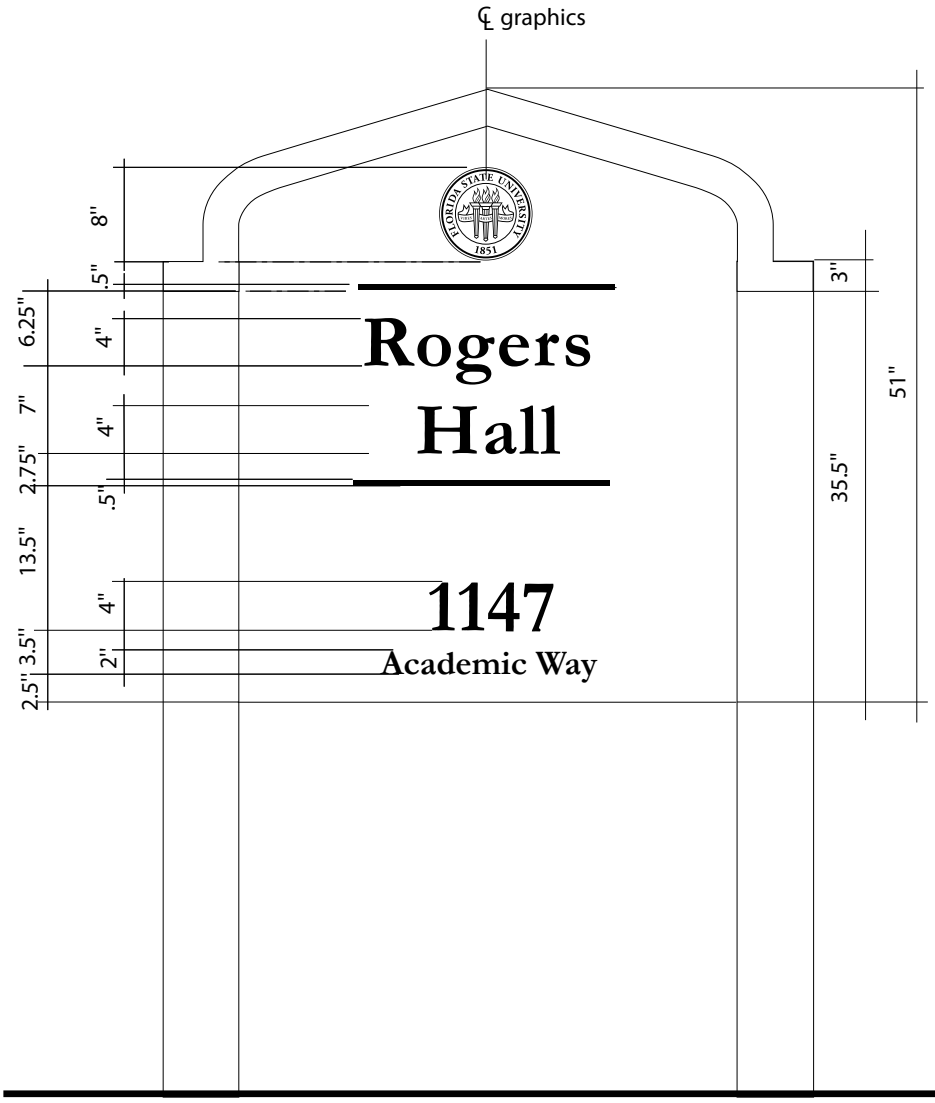


Plan



Elevation with Building Name
Scale: 1/2" = 1'-0"

Profile



Elevation with Building Name
Scale: 3/4" = 1'-0"

When the building name does not clearly indicate its aca-demic function or functions, then the taller panel is to be used. The taller graphics panel permits the additional display of individual listing of colleges, schools, and major campus departments that are located within the building being identified.

Buildings having inaccessible entrances, must display a route map to an accessible entrance below the building name.

See manual pages B 14.06 and B 14.07 for graphic measurements and B 14.10 for sign placement guidelines.

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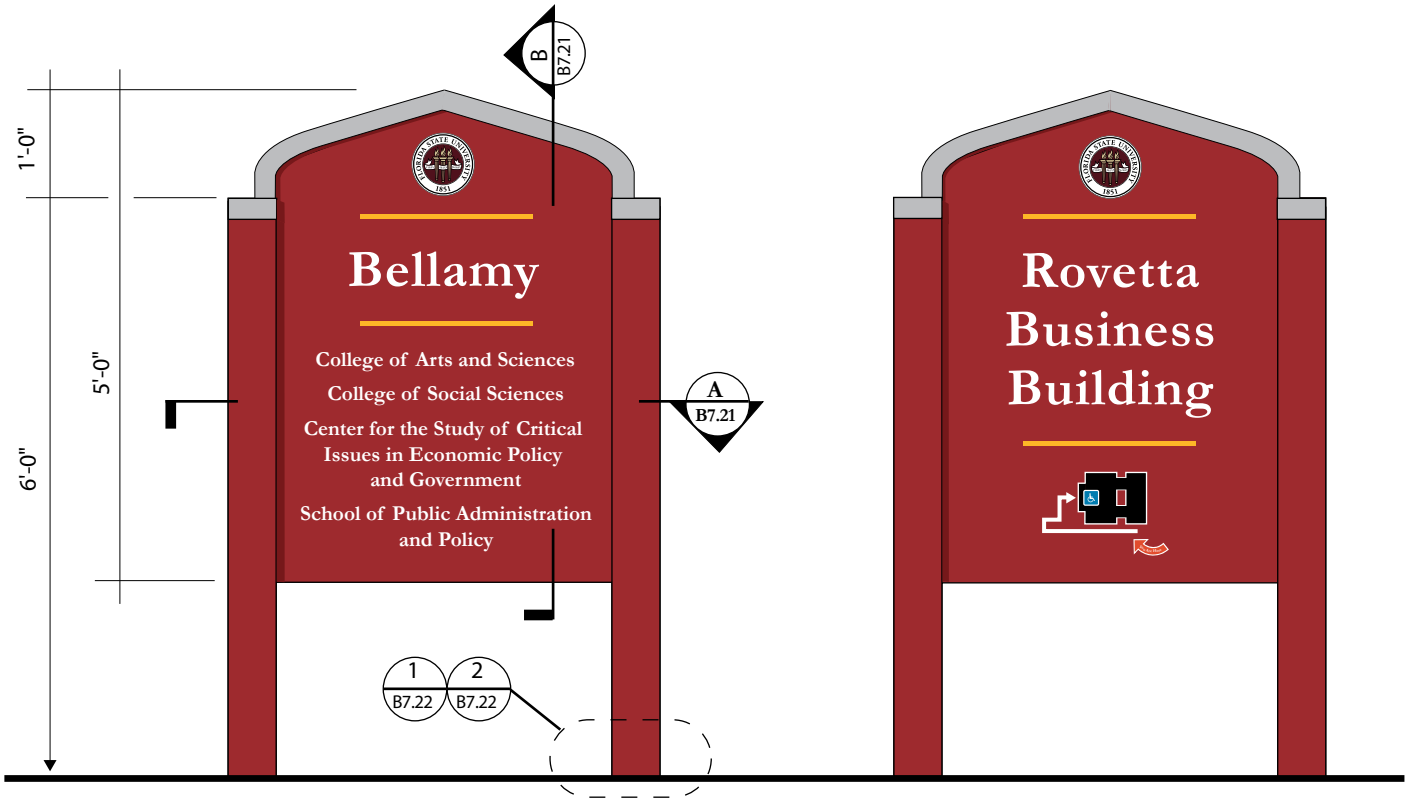
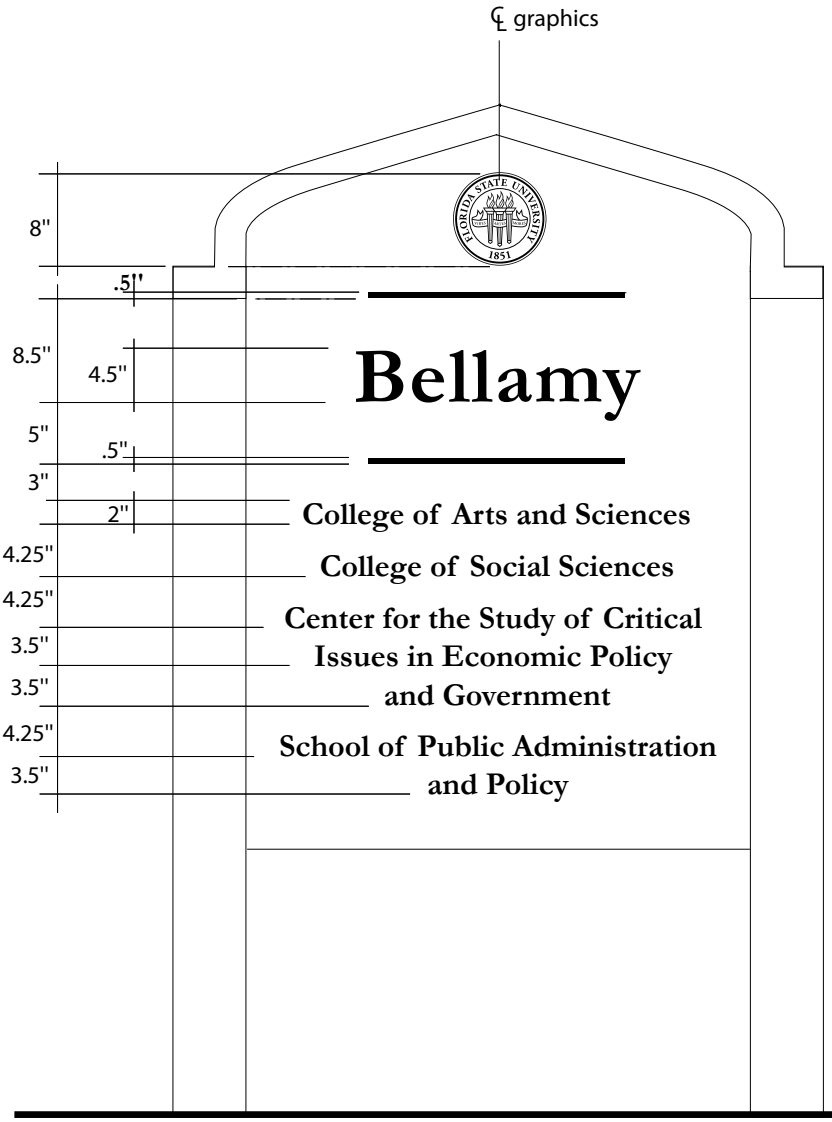


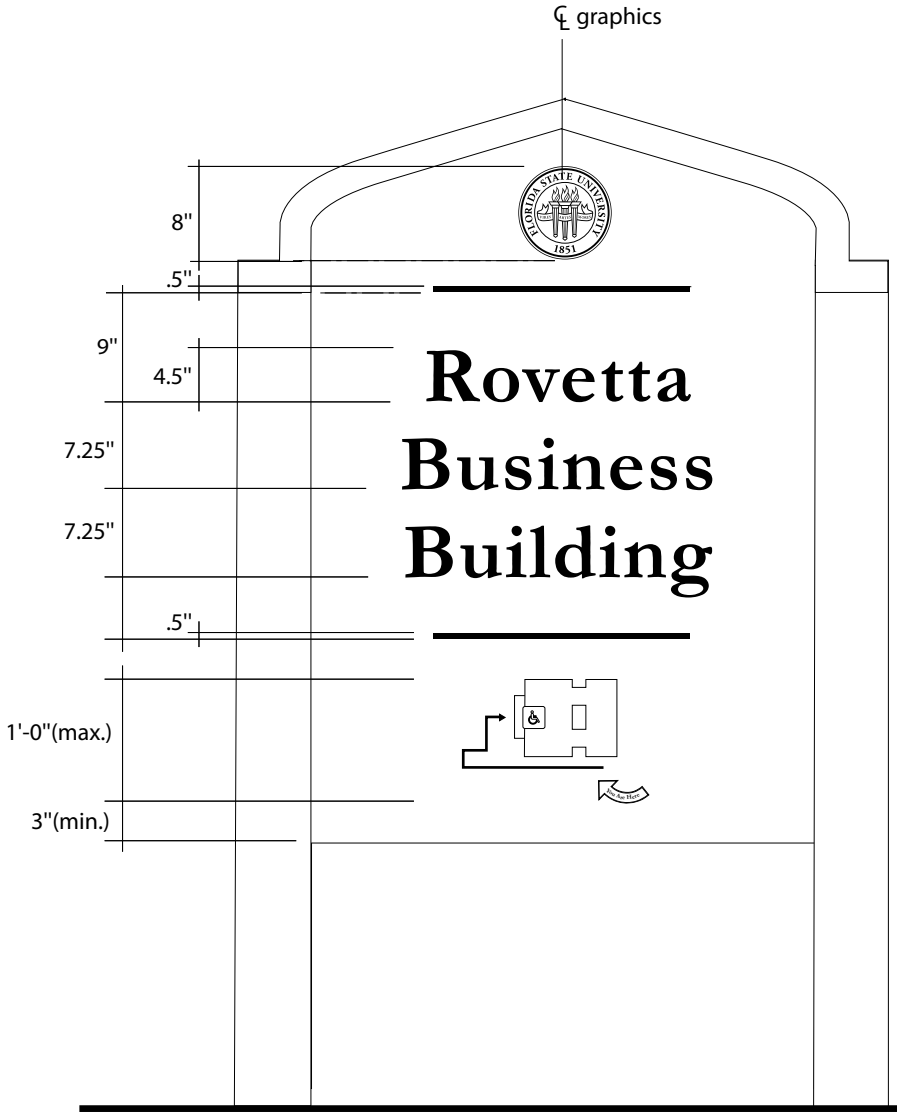
Elevation with Building Name and Internal Destinations

Scale:1/2"=1'-0"

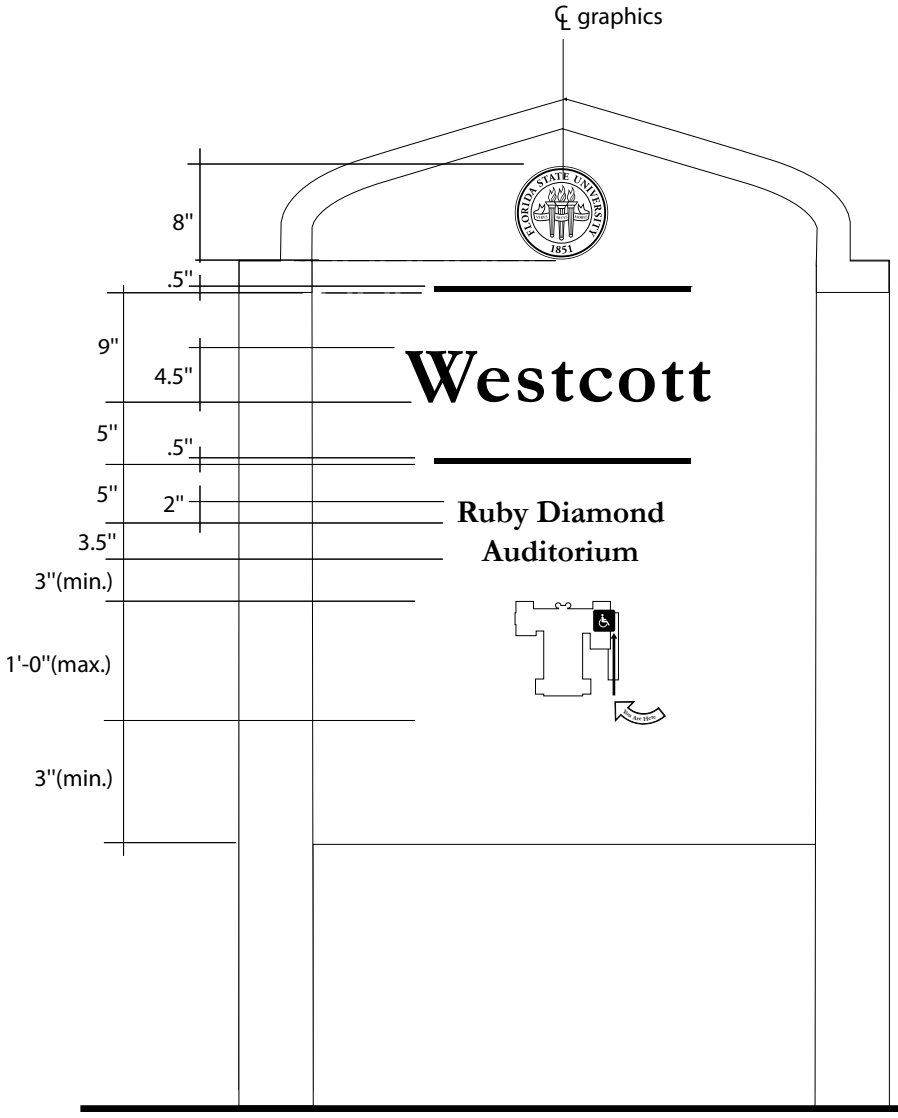
Elevation with Accessible Route Map



Elevation with Building Name
and Internal Destinations
Scale: 3/4" = 1'-0"

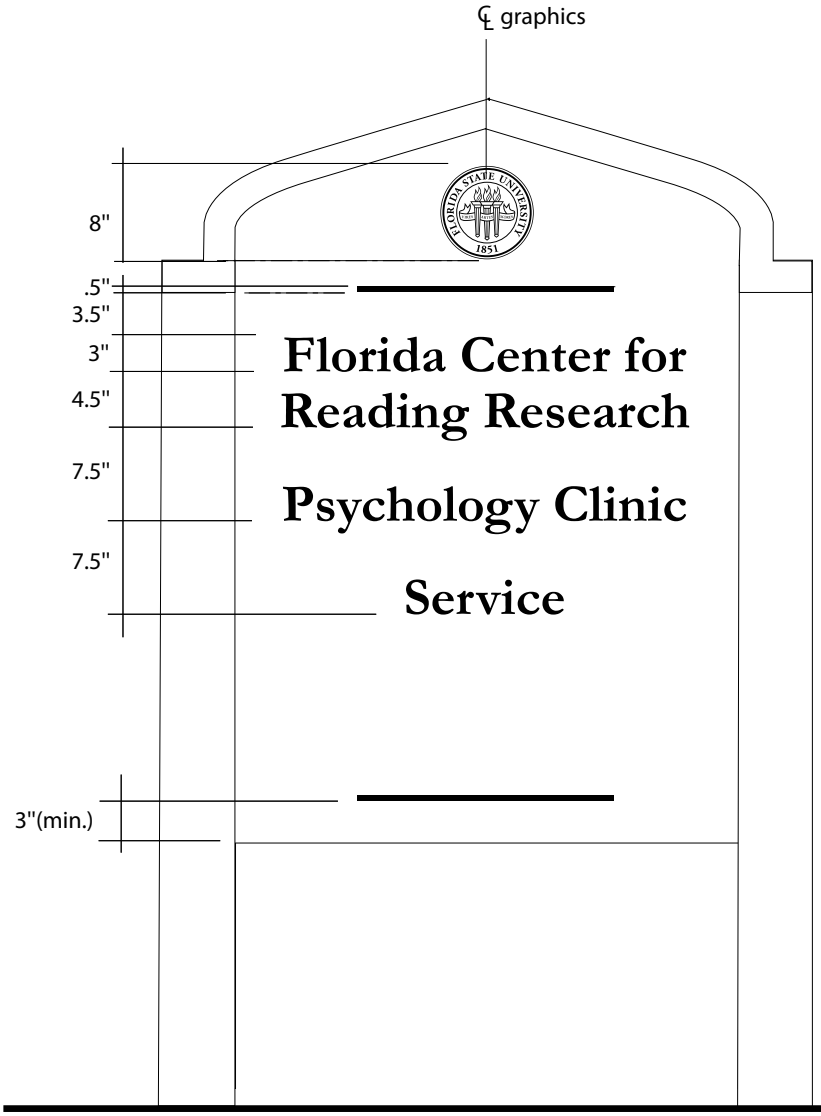


Elevation with Elevation with Accessible Route Map
Scale: 3/4" = 1'-0"



Elevation with Elevation with Accessible Route Map

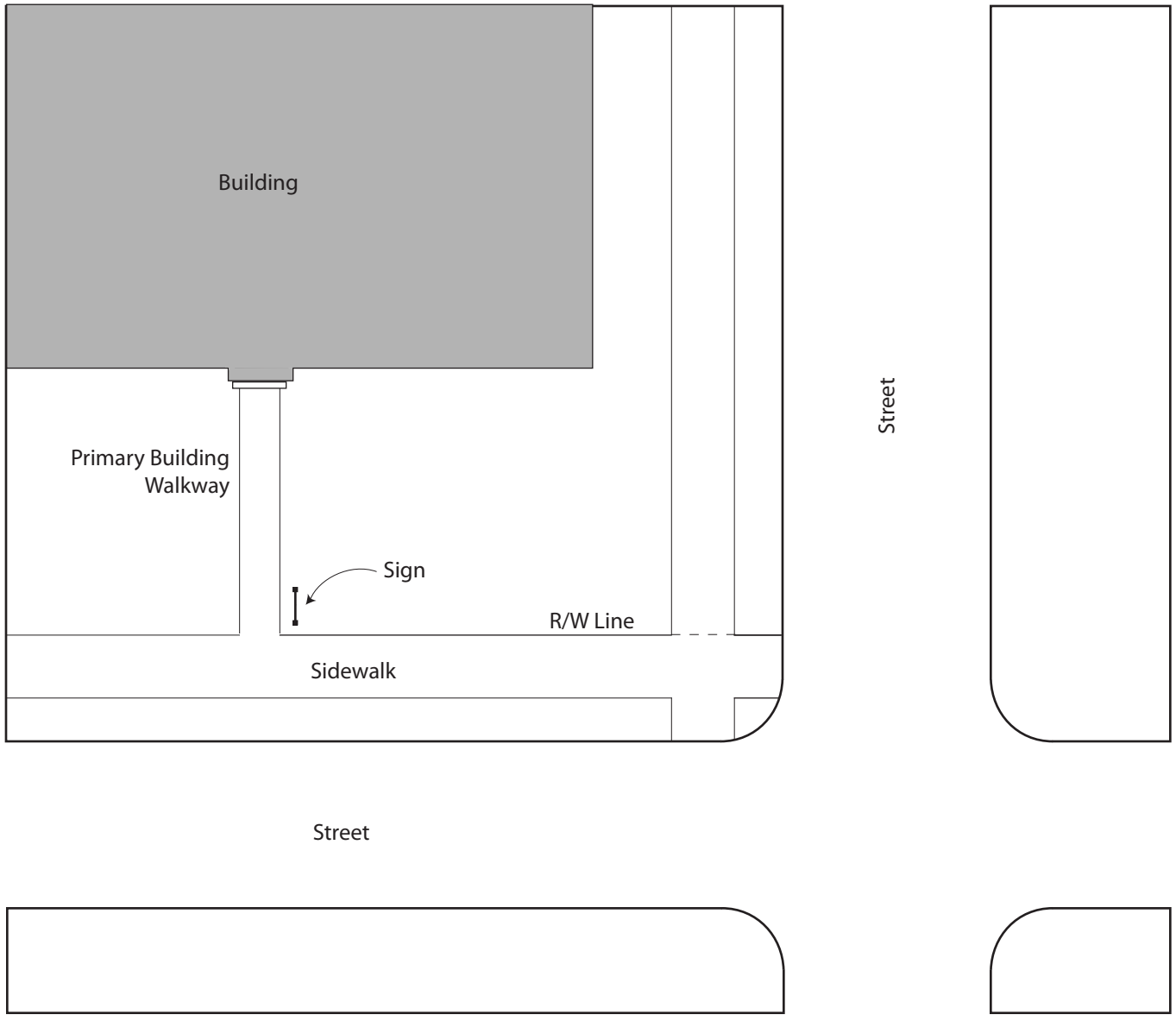
Scale: 3/4" = 1'-0"



Elevation with Multiple Destination Listings
Scale: 3/4" = 1'-0"

Signs are to be positioned perpendicular to street next to the primary building walkway and behind property right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.



Typical Plan

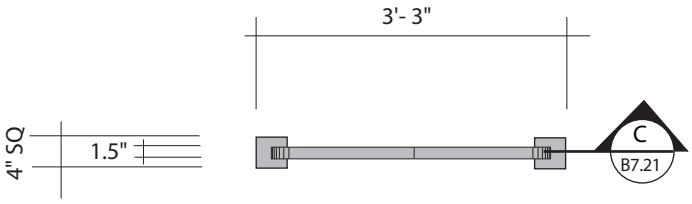
Scale: NTS

Small Building Identification Signs are scaled for pedestrian viewing and are recommended for placement along walk-ways.

Two graphics panel sizes are provided. The shorter panel is recommended for displaying the building name only, as shown below. The taller panel is for displaying the building name, plus a listing of the building's interior major colleges, schools, and departments.

Fabrication Guidelines: Posts, Extruded solid plastic set into packed sand footings, burgundy color; Graphics Panel, solid plastic-burgundy color; Cornice; formed solid plastic shape with caps, canyon granite color; Graphics, reflective sheeting, gold university symbol and rules, white message.

Refer to manual pages B 15.01 for graphic dimensions, B 15.02 for layout variations, B 15.10 for placement guidelines, and B 7.20 and B 7.21 for design intent drawings.

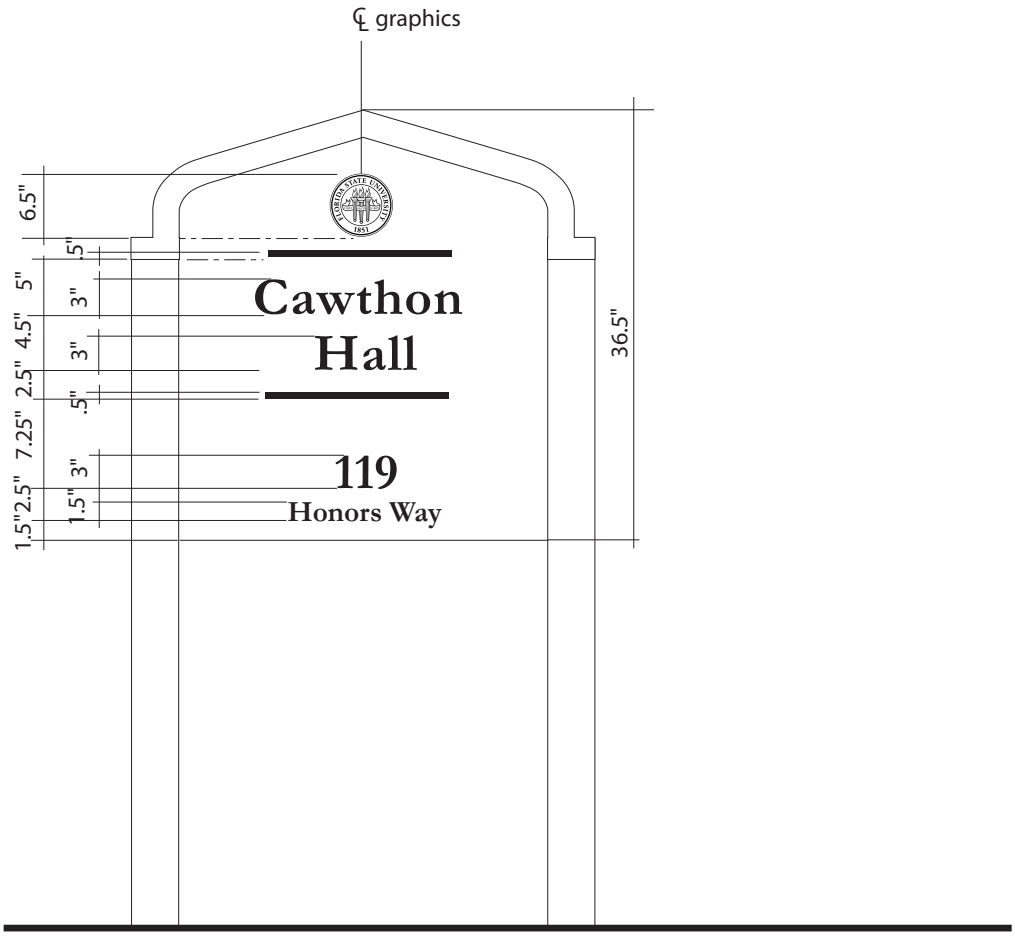


Plan

Elevation displaying Building Name
Opposite side similar

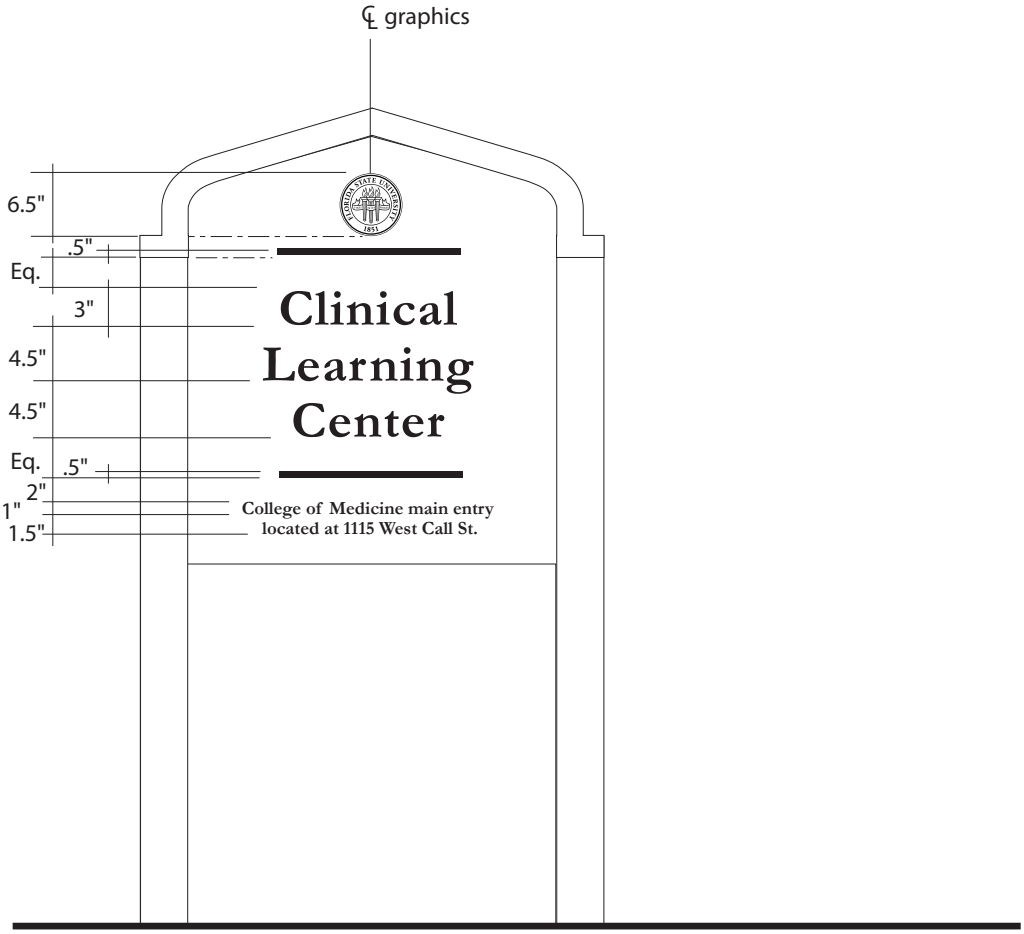
Profile
Number faces street

Scale: 1/2" = 1'-0"



Elevation displaying Building Name
Opposite side similar

Scale: 3/4" = 1'-0"



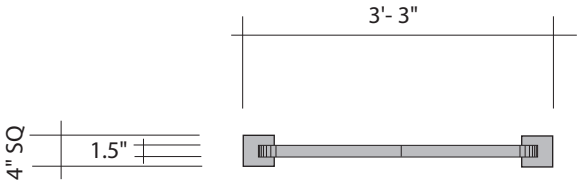
Elevation with Building Name and Secondary Message
Opposite side similar

Scale: 3/4" = 1'-0"

When the building name does not clearly indicate its academic function or functions, or if the entrance being signed requires an accessibility map, then the taller panel is to be used. The taller graphics panel permits the additional display of individual listing of colleges, schools, and major campus departments that are located within the building being identified.

Buildings, having inaccessible entrances, must display a route map to an accessible entrance on both sides of the graphics panel.

See manual pages B 15.06 for graphics measurements and B 15.10 for sign placement guidelines.



Plan

Elevation with Building Name and Internal Destinations

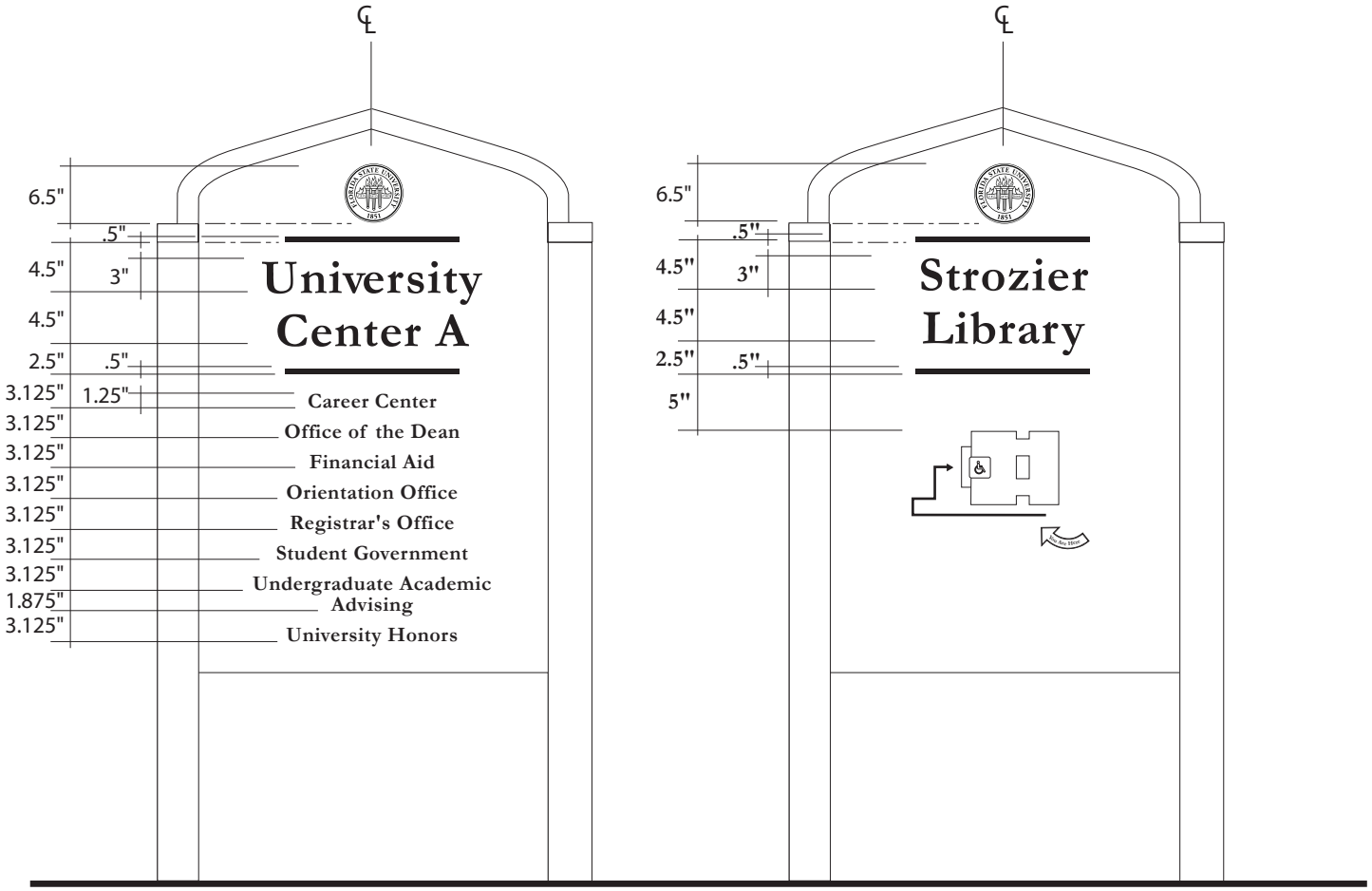
Scale: 1/2" = 1'-0"

Elevation with Accessible Route Map

When the building name does not clearly indicate its academic function or functions, or if the entrance being signed requires an accessibility map, then the taller panel is to be used. The taller graphics panel permits the additional display of individual listing of colleges, schools, and major campus departments that are located within the building being identified.

Buildings, having inaccessible entrances, must display a route map to an accessible entrance on both sides of the graphics panel.

Refer to manual pages B 15.06 for graphics measurements and B 15.10 for sign placement guidelines.



Elevation with Building Name and Internal Destinations

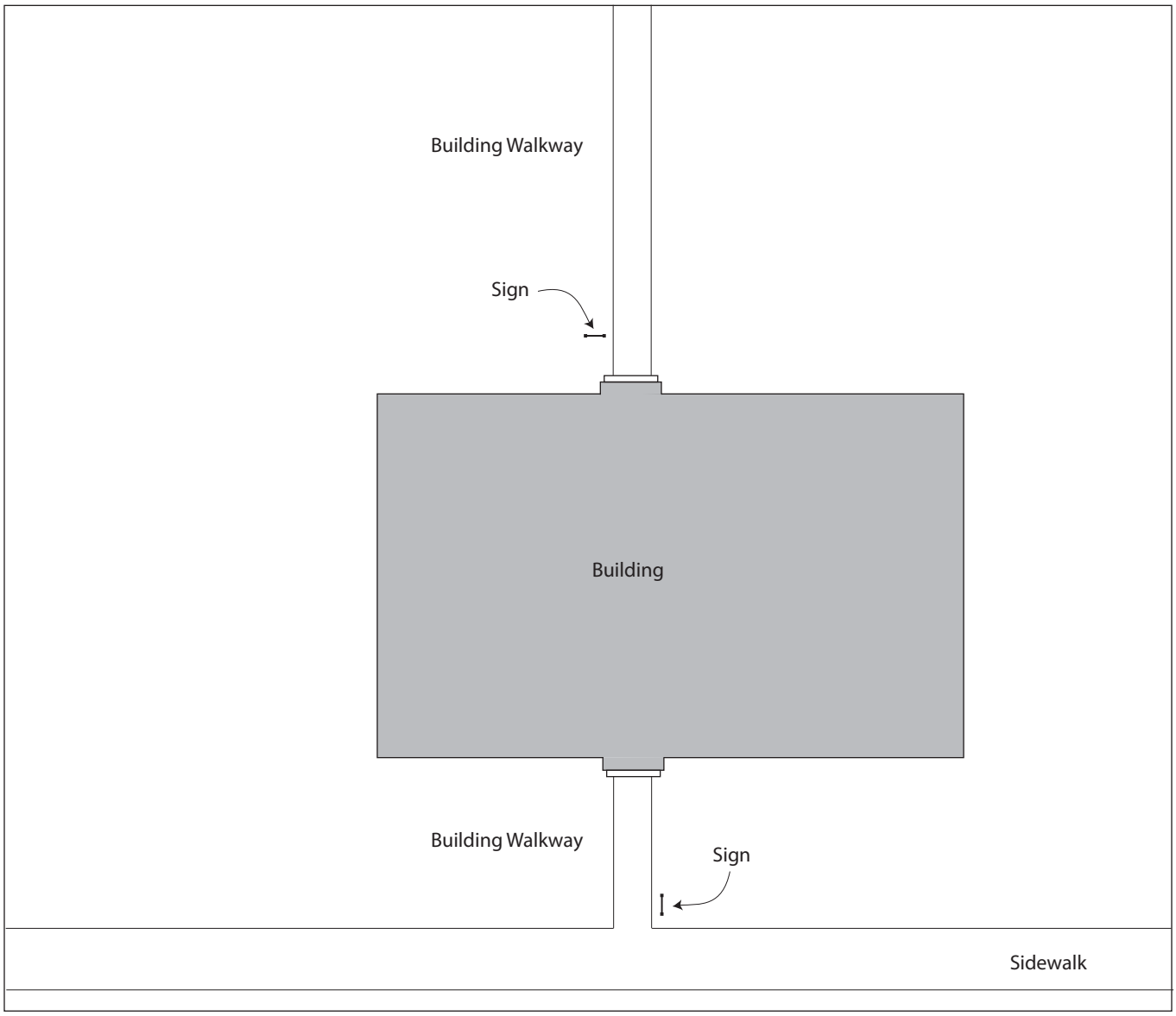
Scale: 3/4" = 1'-0"

Elevation with Accessible Route Map

Signs are to be positioned perpendicular to primary building walkway. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

Since the location, quantity, and size of the signs may exceed local zoning ordinances, approval from the appropriate regulatory agency is recommended prior to fabrication.

It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximity prior to digging foundations.



Typical Plan

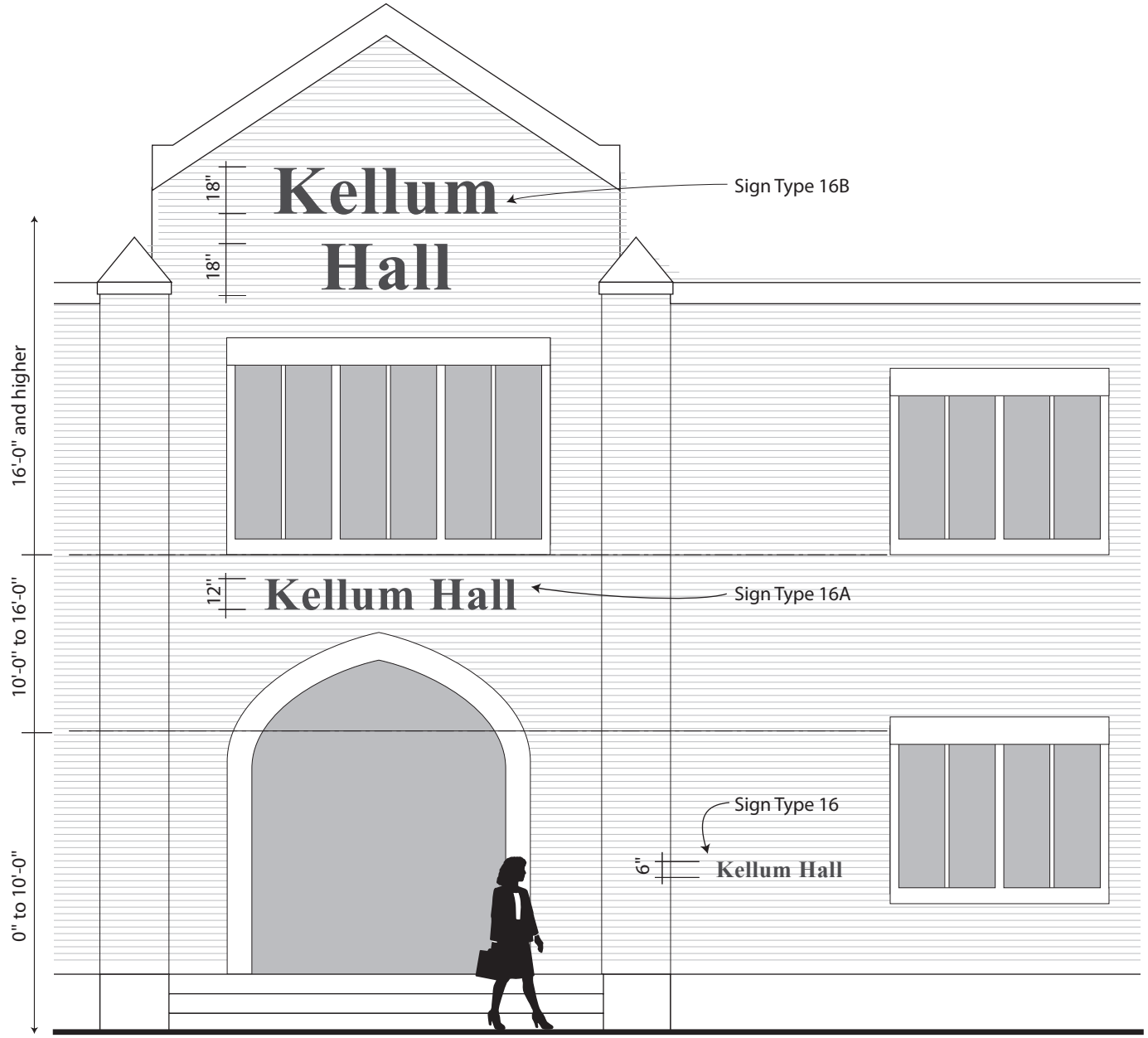
Scale: NTS

These sign types are recommended for buildings that do not have available space to locate a free-standing sign or do not have the need to list internal destinations.

These signs are non-illuminated and consist of individually mounted letters and symbols. Since the graphics will be read against the building fascia, care must be taken to locate the sign in an isolated area free of any strong architectural statements. The color of the graphics must provide sufficient contrast with the building color. When available, refer to the building's program and/or construction documents for proposed signage location and related requirements.

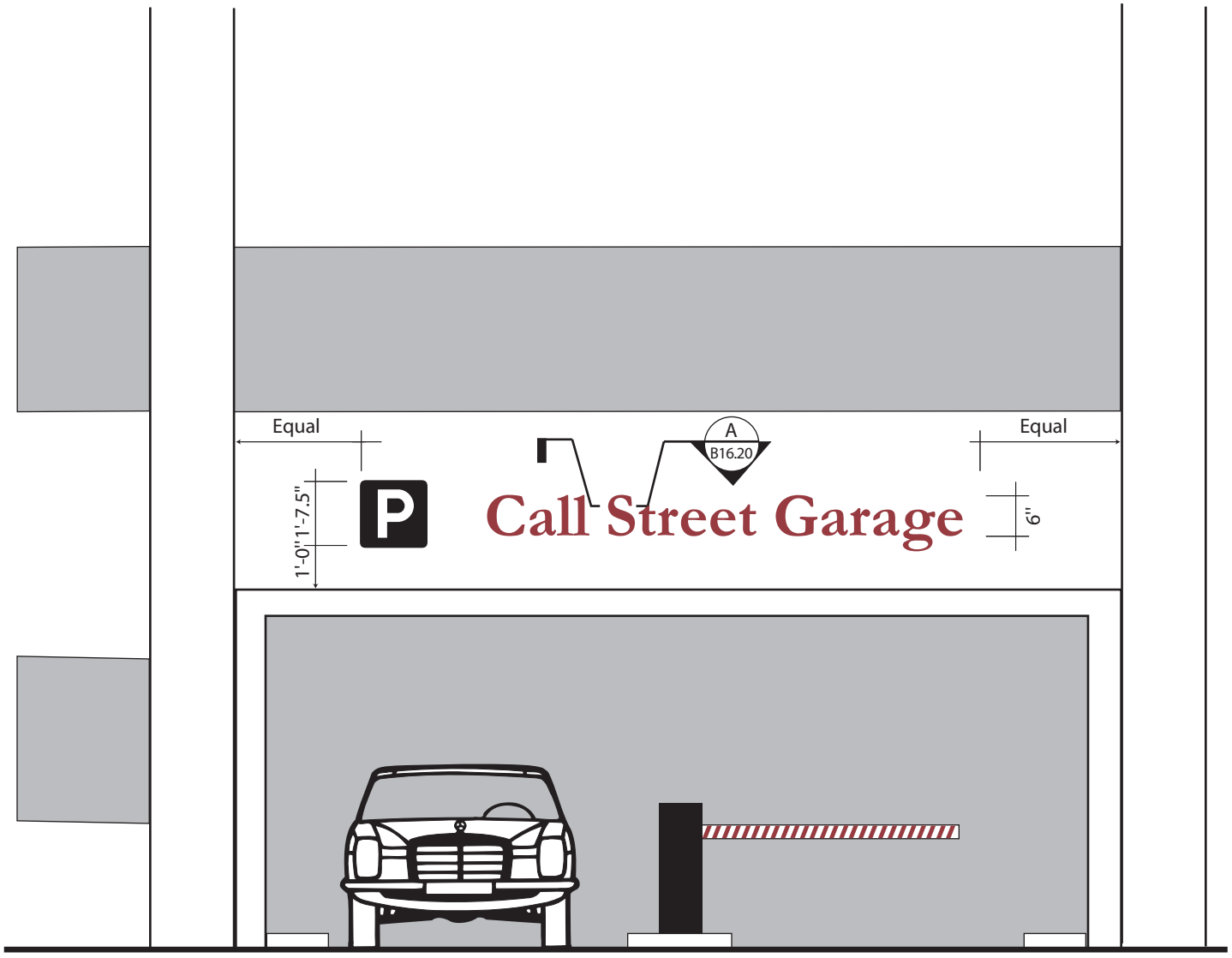
Fabrication Guidelines: Letters and symbols, cast aluminum with black returns with clear polyurethane finish on brick surfaces, or anodized dark bronze cast aluminum with clear polyurethane finish on precast concrete or stucco surfaces; Mount: blind s.s. threaded studs and spacers. Letters are provided at capital letter heights of 6" (Type 16), 12" (Type 16 A), and 18" (Type 16 B).

Refer to manual pages B 16.01 for layout examples and B 16.20 for installation details. Refer to page A 2.03 for alphabet requirements.



Typical Elevation

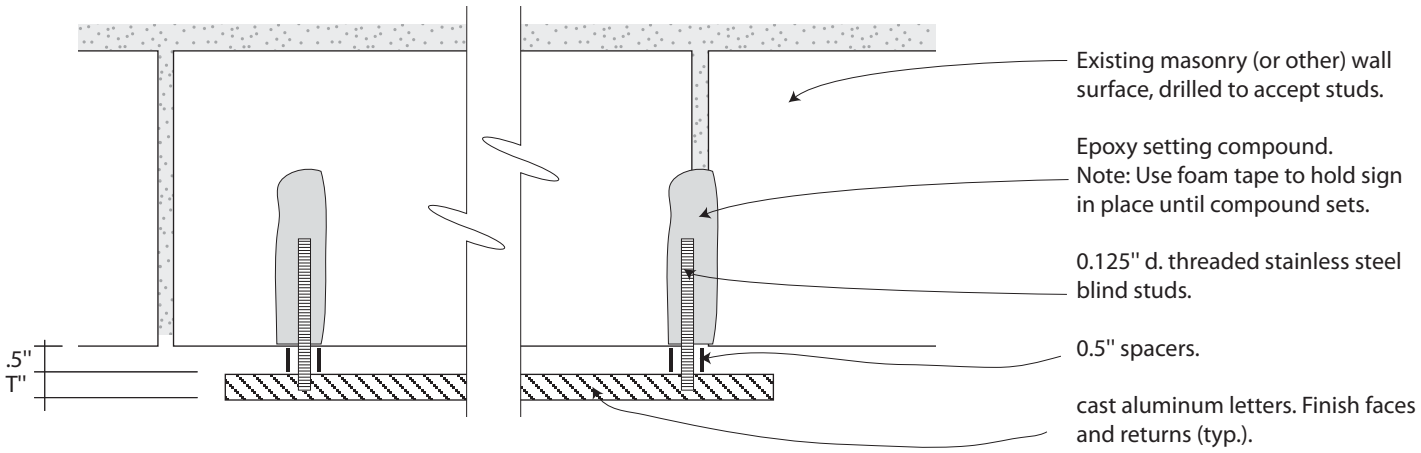
Scale: 3/16" = 1'-0"



Typical Elevation

Scale: 1/4" = 1'-0"

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: Half Size

T	Letter height
3/4"	6"
1"	12"
1-1/4"	18"

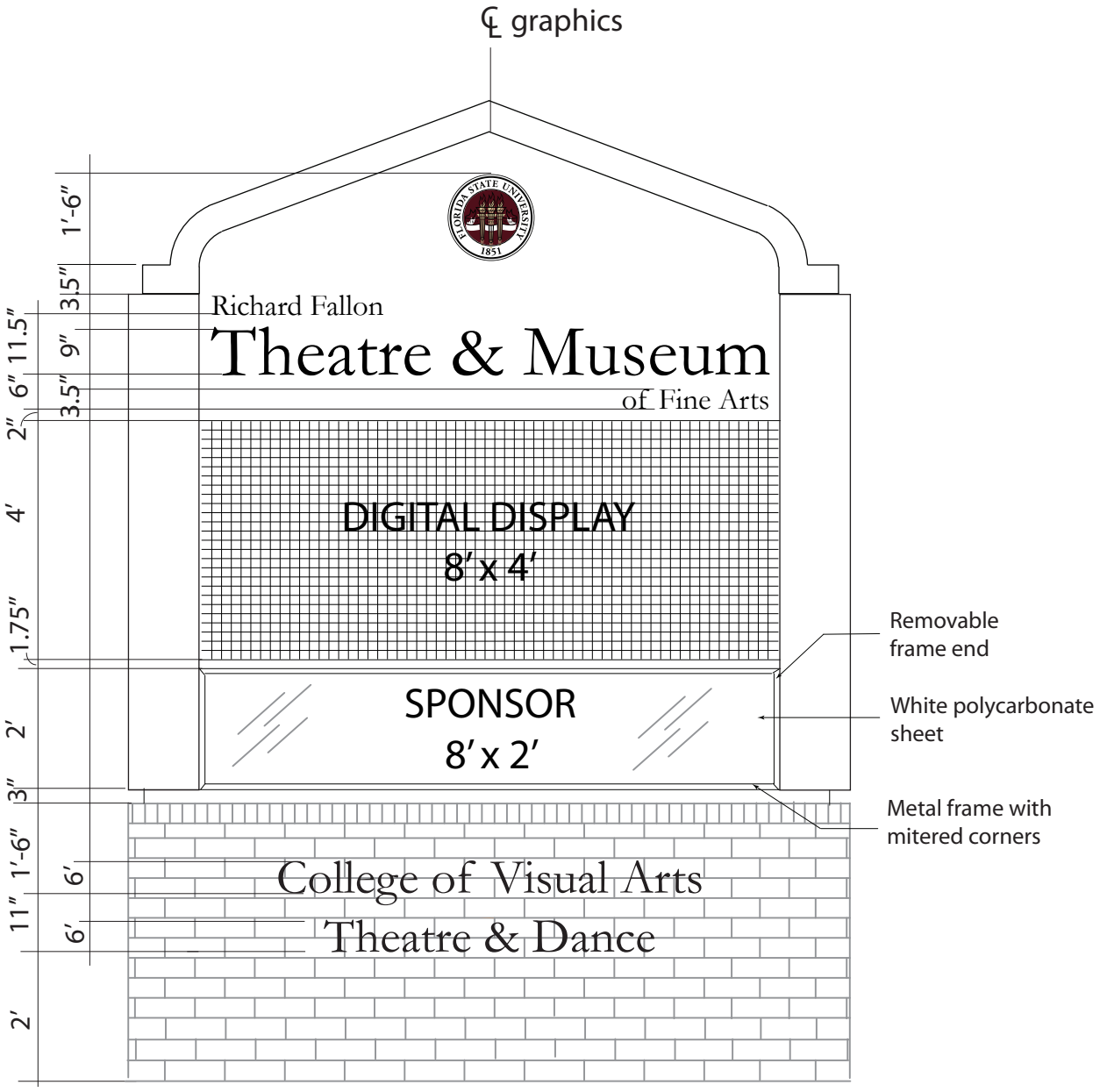
Marguee Signs are double sided internally illuminated signs that are intended for areas where programmable messages are desired. Signs display the building or area name, plus a changeable electronic message panel which can be programmed from a remote location.

Fabrication Guidelines: Base, CMU substrate with brick veneer; Foundation, formed concrete footing; Sign Cabinet, formed aluminum with garnet polyurethane finish and internal structure with internal light track behind routed graphics area (above Reader Board); Cornice, formed aluminum with light gray textured coating; Interior Illumination, 120 v., white message; Lamps, H.O. fluorescent daylight; Reader Board, change-able matrix with internal modem; Sponsor message (below Reader Board), white polycarbonate sheet.

Refer to manual pages B 17.01 for graphics measurements, B 17.10 for placement guidelines and B 17.20 for design intent drawings .

Elevation
Scale: 3/8″ = 1′-0″

Profile

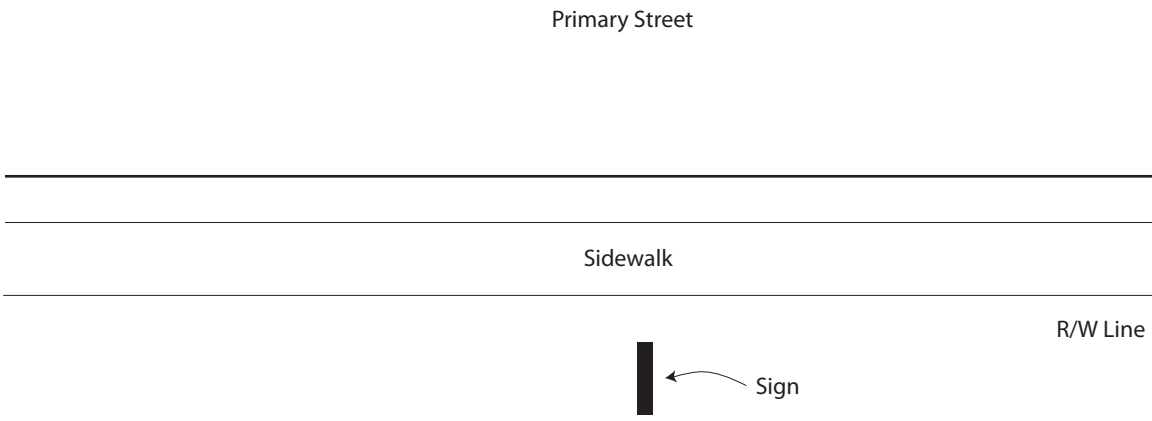


Elevation
Scale: 3/8"=1'-0"

Signs are to be positioned perpendicular to street from which they are to be viewed and behind street right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.

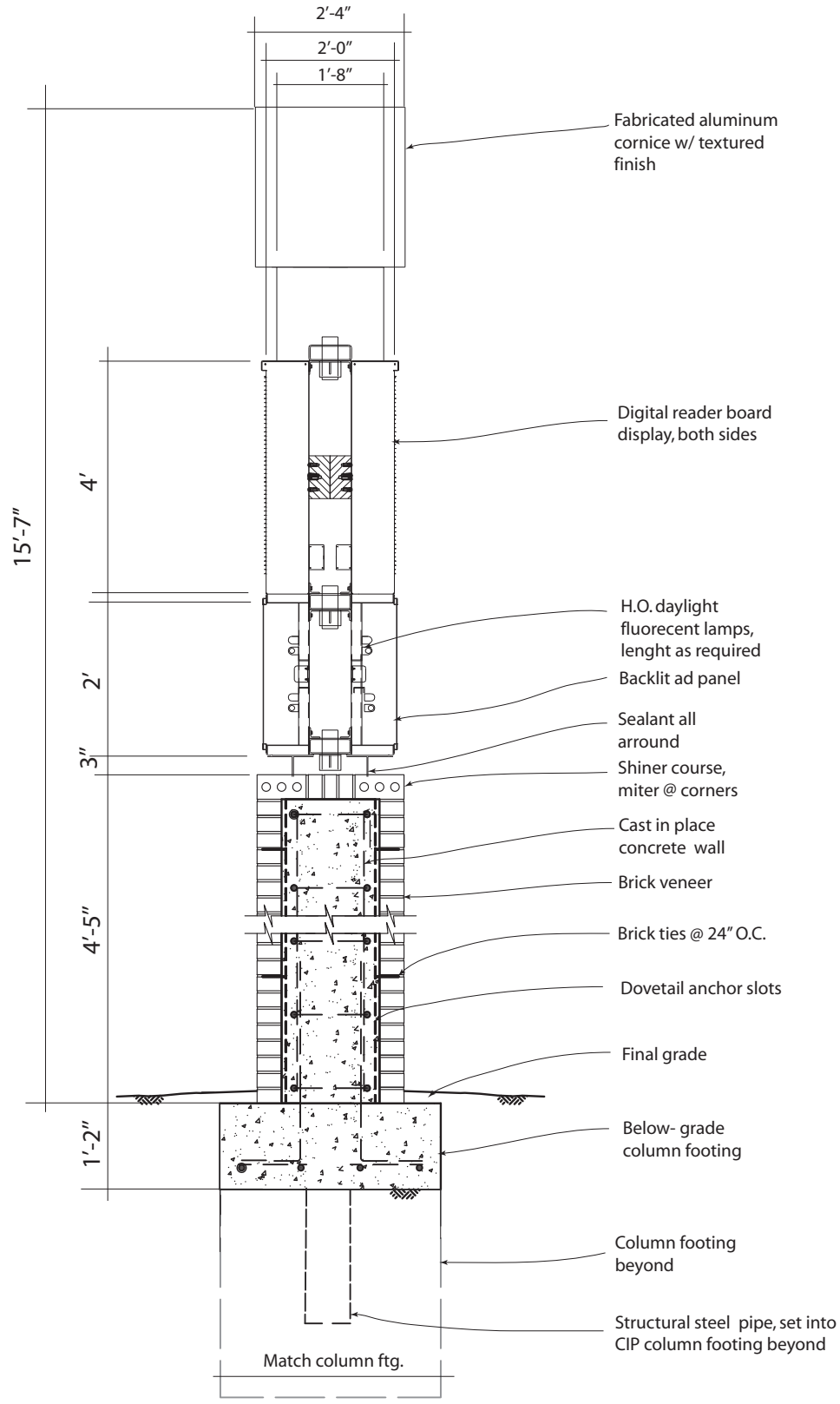
It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximity prior to digging foundations.



Typical Plan

Scale: NTS

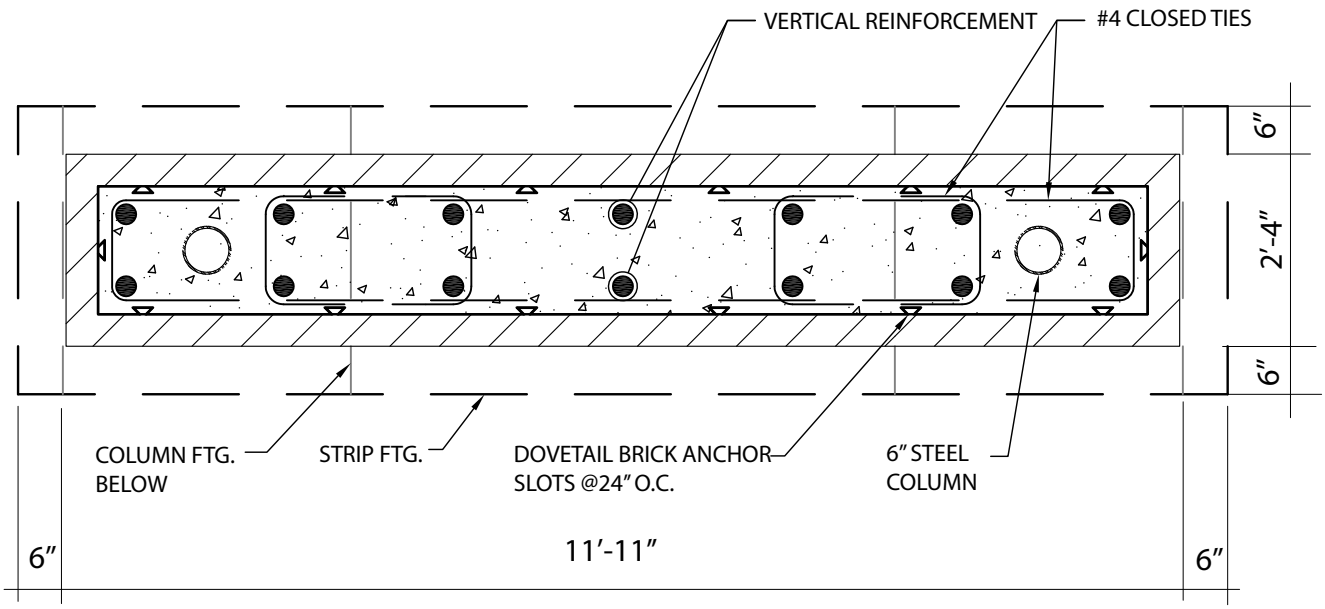
Note: Material dimentions and configurations shown are for design intent only. All materials, dimentions, configurations and specificstions must be signed and stamped by a registered engineer licened in the Stete of Florida.



Section A

Scale: 3/8"=1'-0"

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.

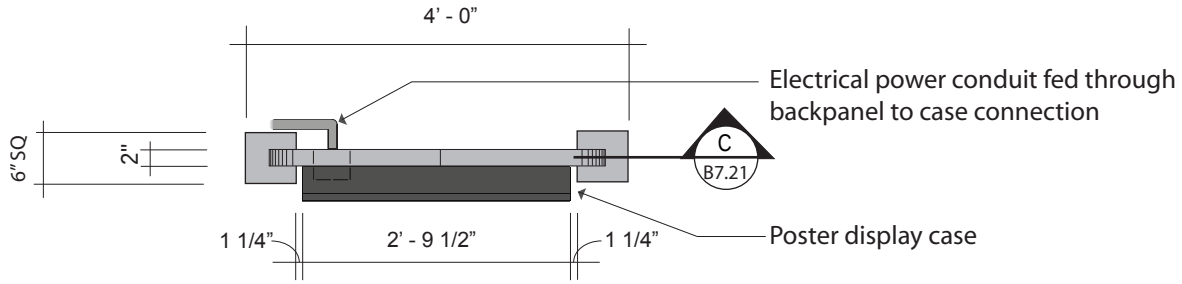


Section B
Scale: 1/2"=1'-0"

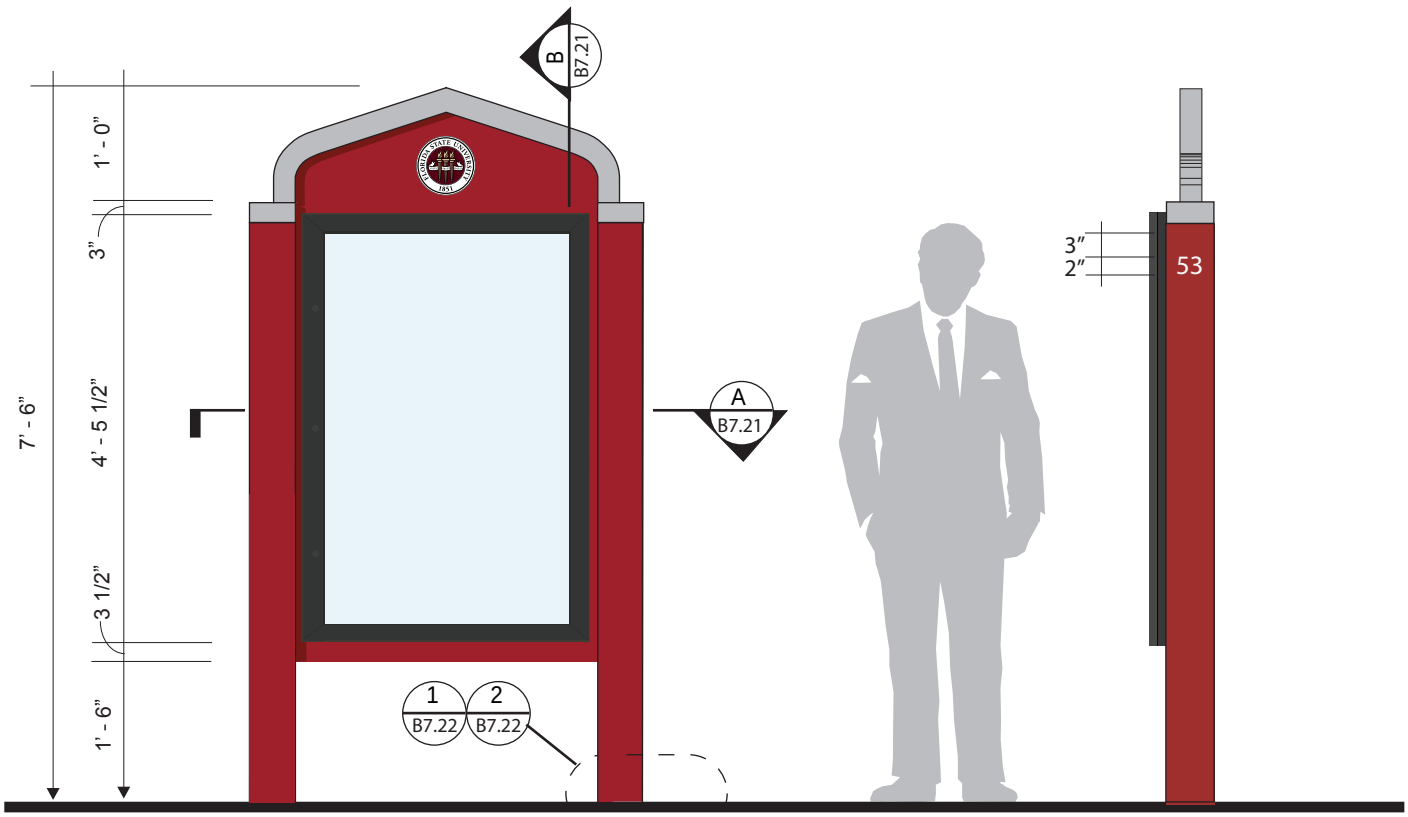
Posting Display Signs are intended for the display and protection of printed media related to campus activities.

Fabrication Guidelines: Posts, formed from extruded solid plastic into packed sand footings, burgundy posts and canyon granite caps; Graphics Panel, solid plastic-burgundy color; Cornice; formed solid plastic shape with caps, canyon granite color; Graphics, full color university seal; Poster Display Case: internal illumination, satin black frame and door, black backing.

Refer to manual page B 7.20 for design intent drawing.



Plan



Elevation with Posting Display Case
Scale: 1/2" = 1'-0"

Profile

Entrance Identification Plaques can be used to label selected public entrances. They can display the building name, floor identification, regulatory messages, an historical brief about the building, or other information as needed.

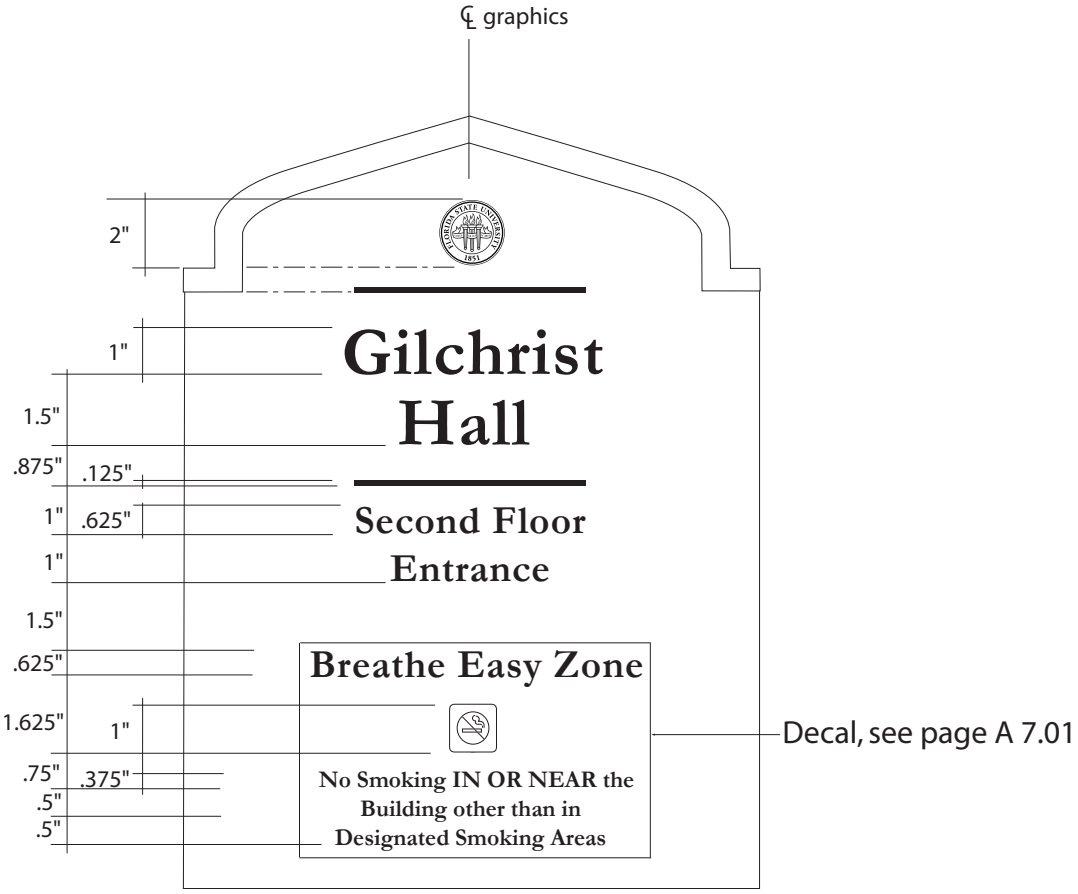
Current ADA Accessibility Guidelines (1990), do not require that building entrance signs be tactile. However, it is recommended that they meet ADAAG requirements for character proportion, sign finish, color contrast, and placement.

Fabrication Guidelines: Type 19 - Graphics Panel, solid plastic plaque- burgundy color ; Graphics, PSV, light gray cornice, gold university symbol and rules, white message. Type 19A - Graphics Panel, PSV decal applied to first glass surface; Graphics, photoscreened, colors same as Type 19 plaque.

Refer to manual pages B 19.01 for graphics measurements, B 19.02 for layout variations, B 19.10 for placement guide-lines, and B 19.20 for design intent drawings.

Elevation with Building Name, Entrance ID, and Regulatory Message

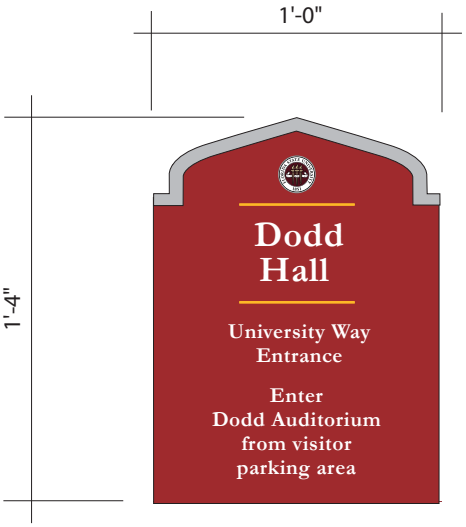
Scale: 1/4 Full



Elevation with Building Name,
Entrance ID, and Regulatory Message

Scale: 1/4 Full

The following layouts illustrate selected message options available. Other messages can be displayed, providing the building name, University Symbol, and horizontal rules are displayed as shown.

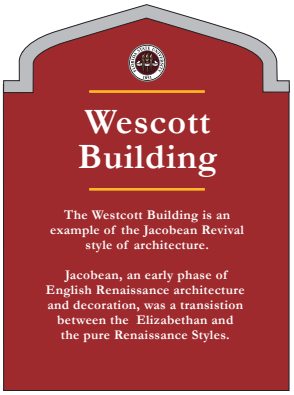


Elevation with Building Name and Information Message

Scale: 1/8 Full

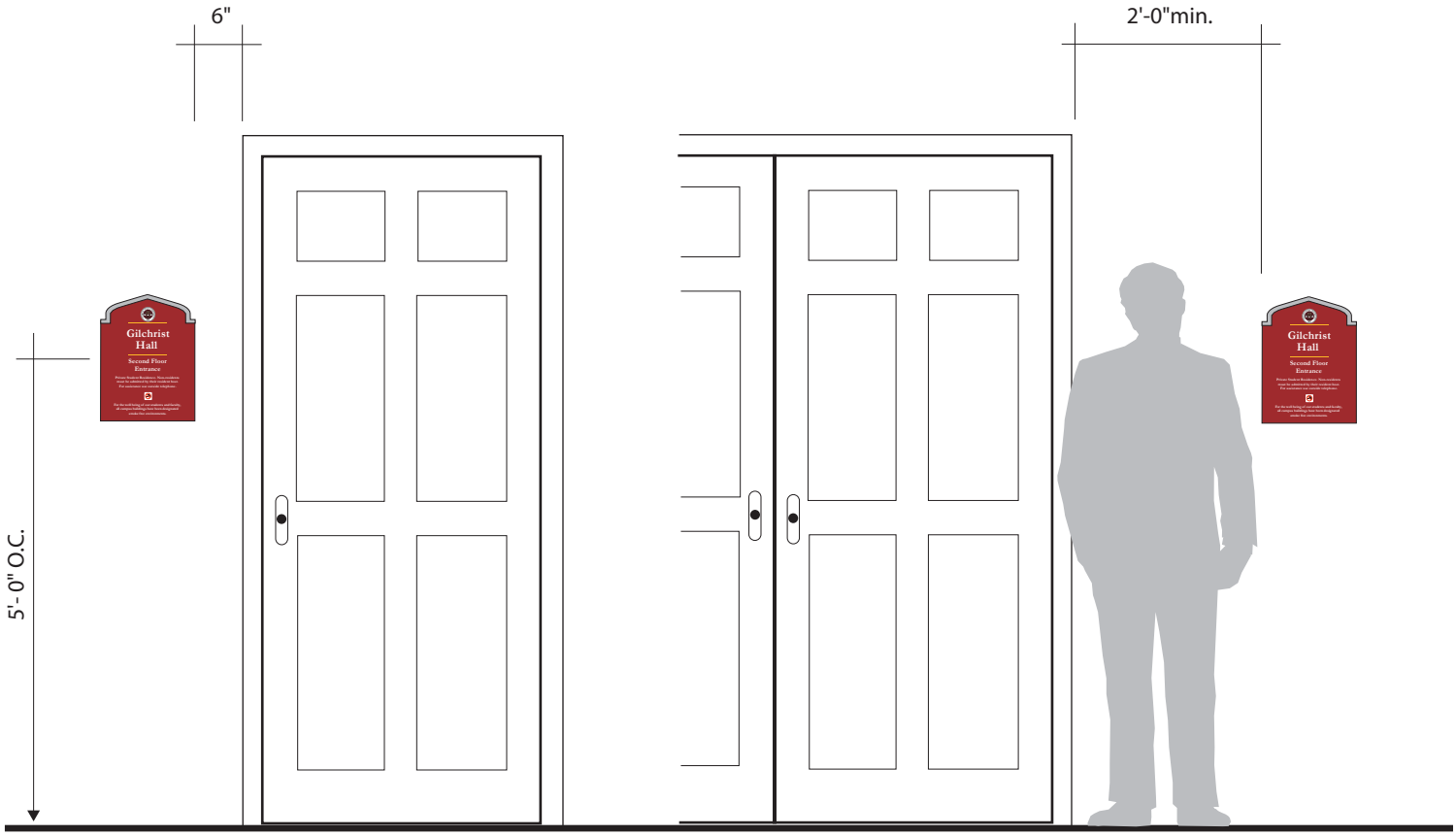
Elevation with Building Name and Accessible Entrance ID

Elevation with Building Name and Regulatory Message



Elevation with Building Name and Historical Brief

These signs should be located on the nearest wall surface adjacent to the latch side of the door, or in the case of double doors, on the nearest wall surface to the right side. Signs must be positioned to avoid door swing and protruding objects.

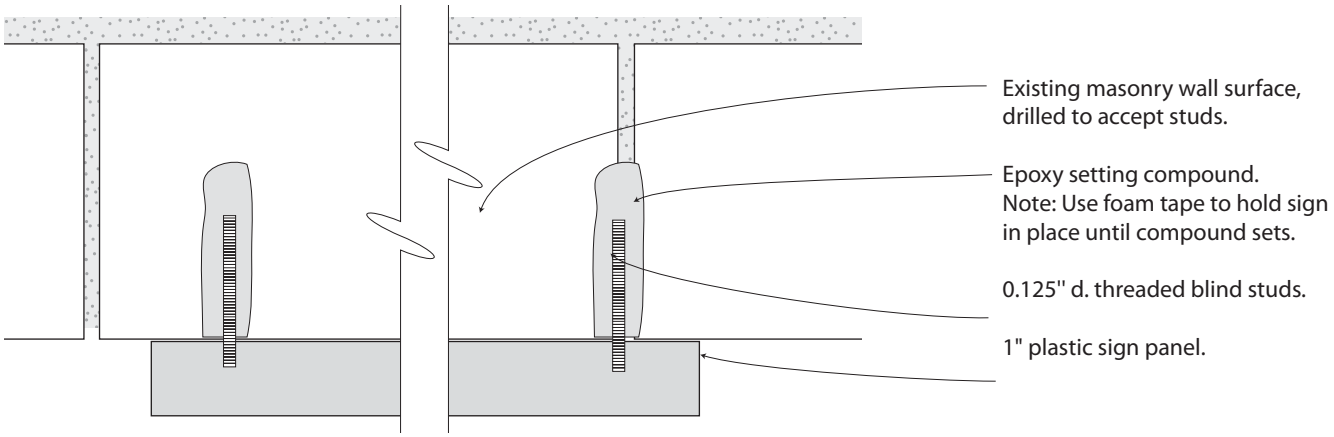


Placement Elevation for Single Door

Scale: 1/2"=1'-0"

Placement Elevation for Double Doors

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



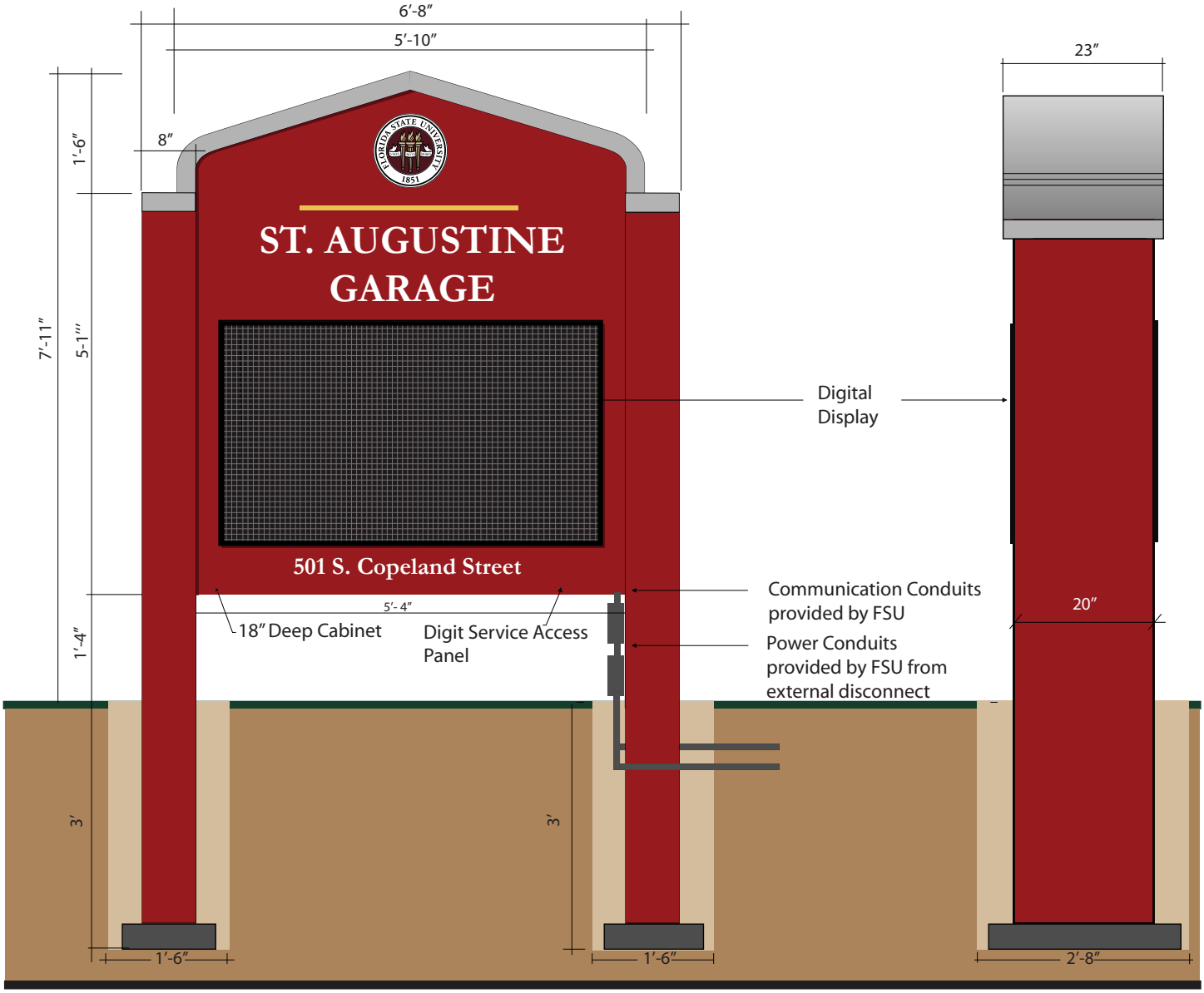
Section A
Scale: Half Size

Parking Garage Signs are intended to identify the building name, and to display the number of avaliable parking spaces for students, faculty, and staff. Sign may be two-sided or single-sided.

Electronic digital displays are provided in the sign and interfaced with vehicle monitor systems located in the garage structure.

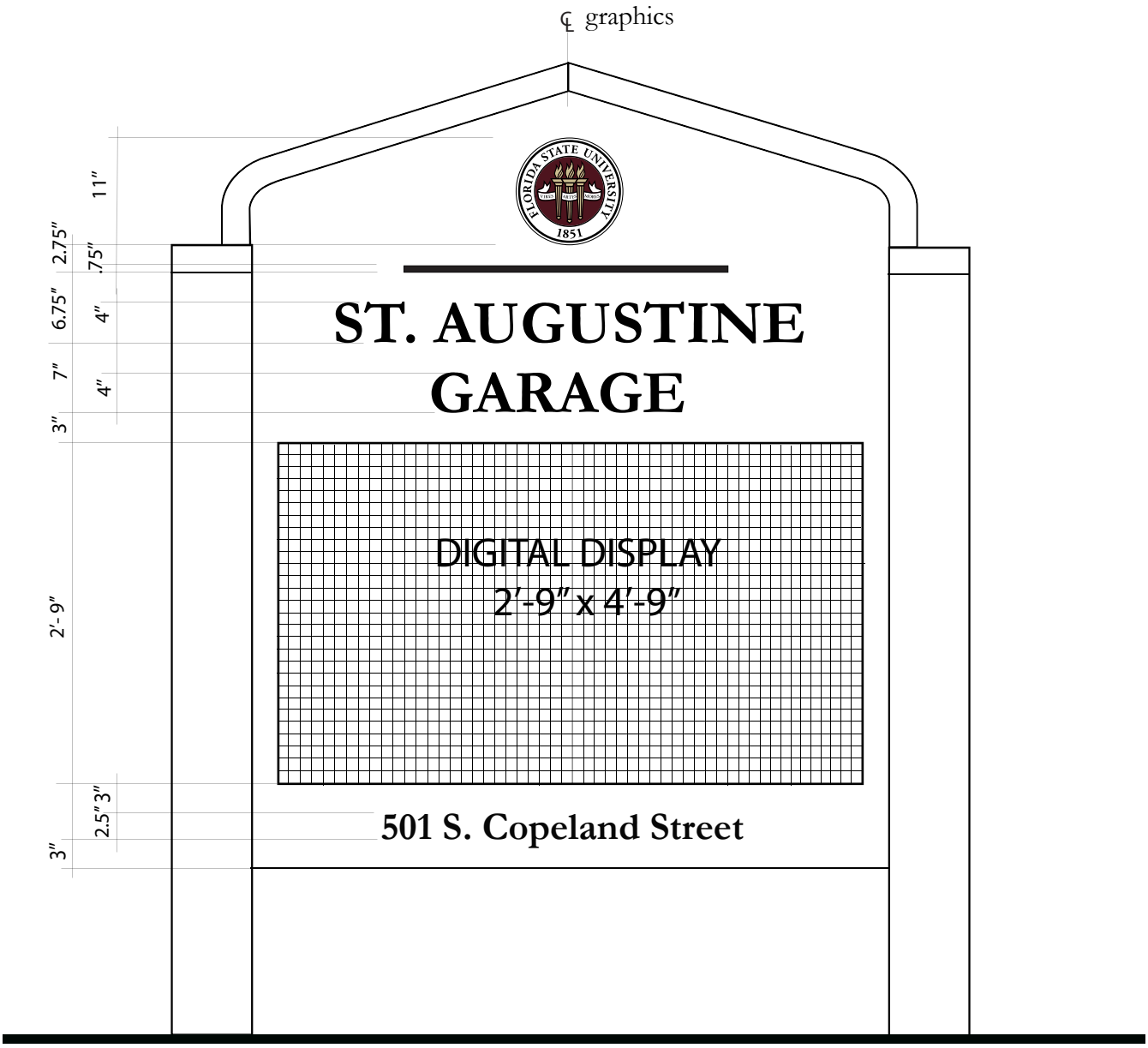
Fabrication Guidelines: Sign cabinet and posts, formed .125'' aluminum with garnet acrylic polyurethane finish set into packed sand footings; Cornice, formed aluminum with light gray textured coating. Graphics, reflective sheeting, white messages, gold rules,digital printed FSU Seal; Digital numbers display.

Refer to manual pages B 20.01 for graphics measurements, manual page B 7.22 Detail 2 for post footing construction.



Elevation
Opposite side similar
Scale: 1/2″ = 1′-0″

Profile



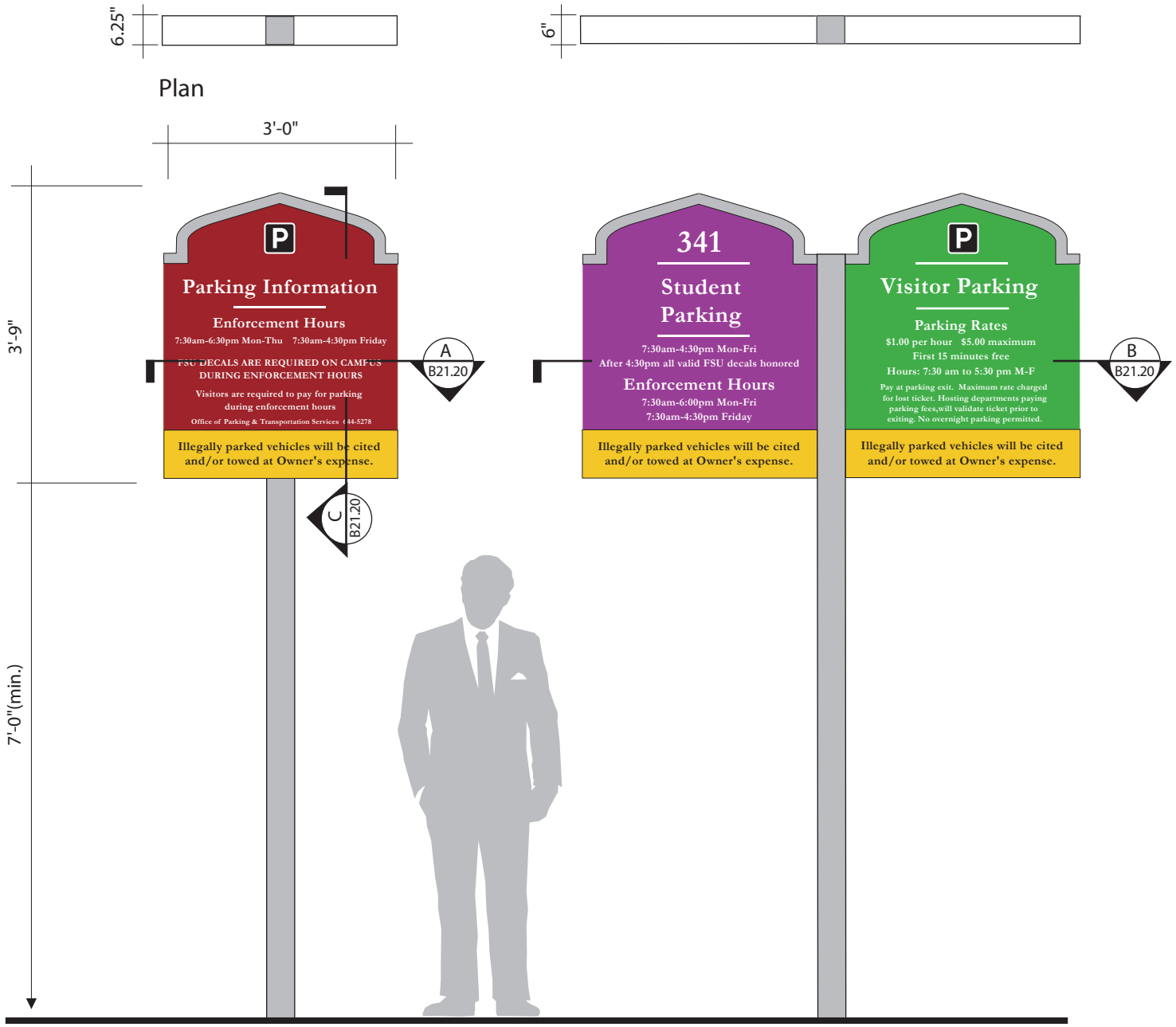
Elevation
Scale: 3/4"=1'-0"

These signs are used to identify contolled or designated parking areas throughout the campus. They may be single or double sided.

Sign fields are color coded to identify designated parking areas as follows: Green, visitors and metered spaces; Purple, student and freshman; Brown, faculty and staff; and Gray, motorcycles.

Fabrication Guidelines: Posts, formed from extruded aluminum sections with caps; Graphics Panel, solid plastic (various colors); Graphics, reflective sheeting, white messages on top panel section, PSV white and black pictograms and PSV black message on bottom panel section.

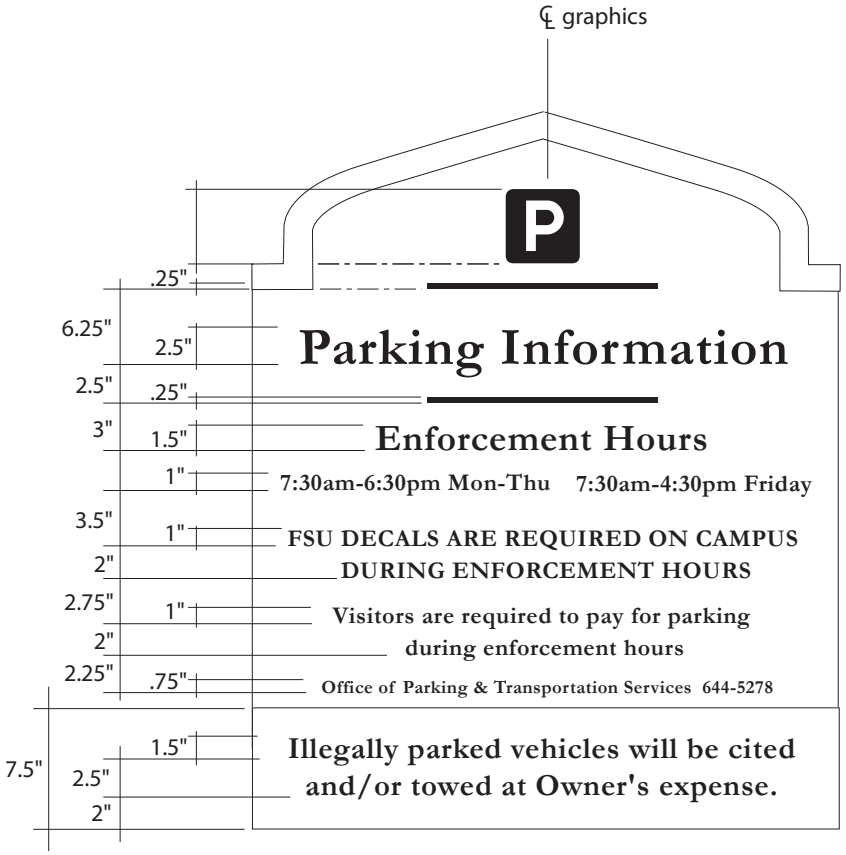
Refer to manual pages B 21.01 for graphics measurements, B 21.04 for layout variations, B 21.10 for placement guide-lines, and B 21.20 for design intent drawings.



Elevation of Reserved Parking Area
Single Sign Mount

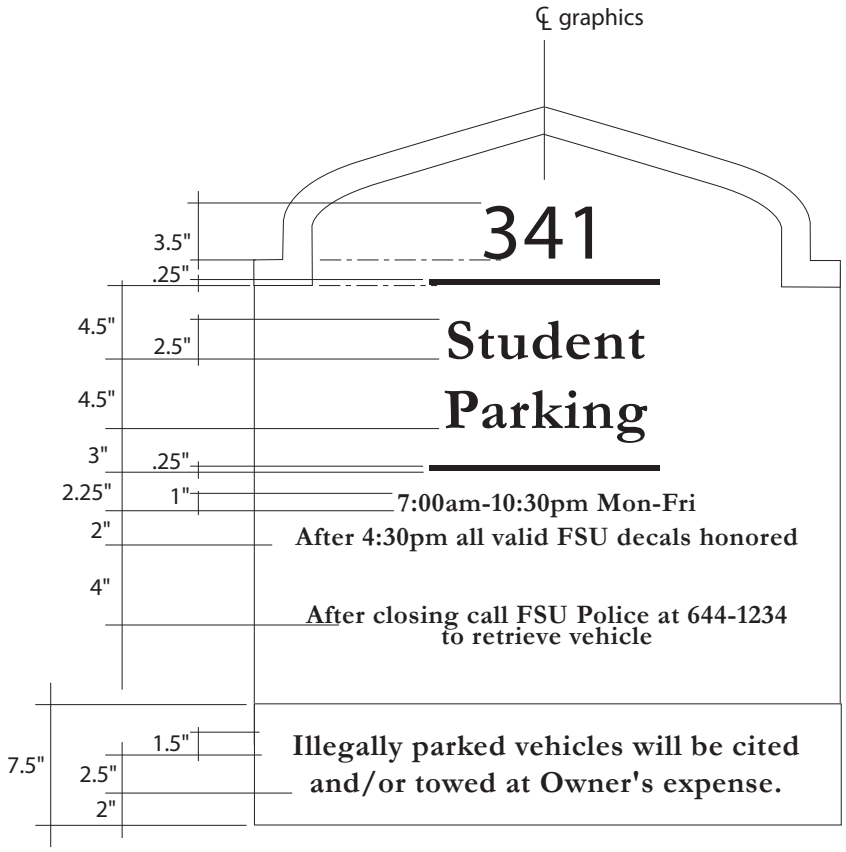
Scale: 1/2"=1'-0"

Double Sign Mount



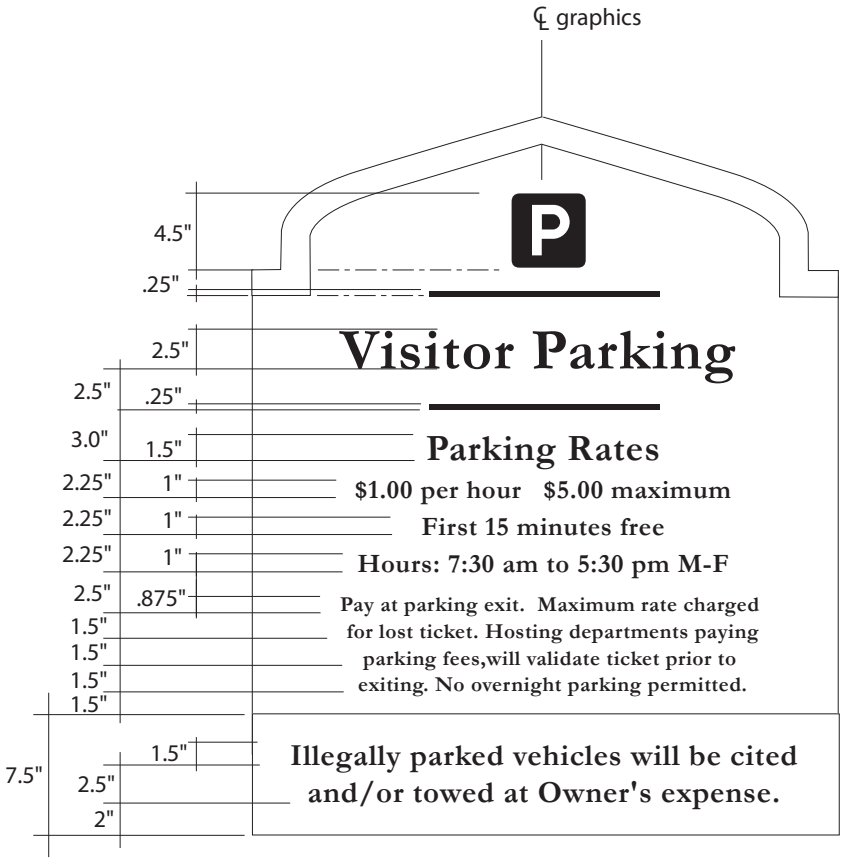
Reserved Parking Area Identification

Scale: 1"=1'-0"



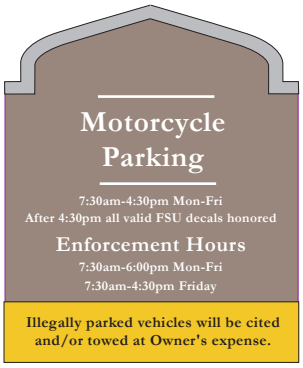
Reserved Parking Area Identification

Scale: 1"=1'-0"



Reserved Parking Area Identification

Scale: 1"=1'-0"

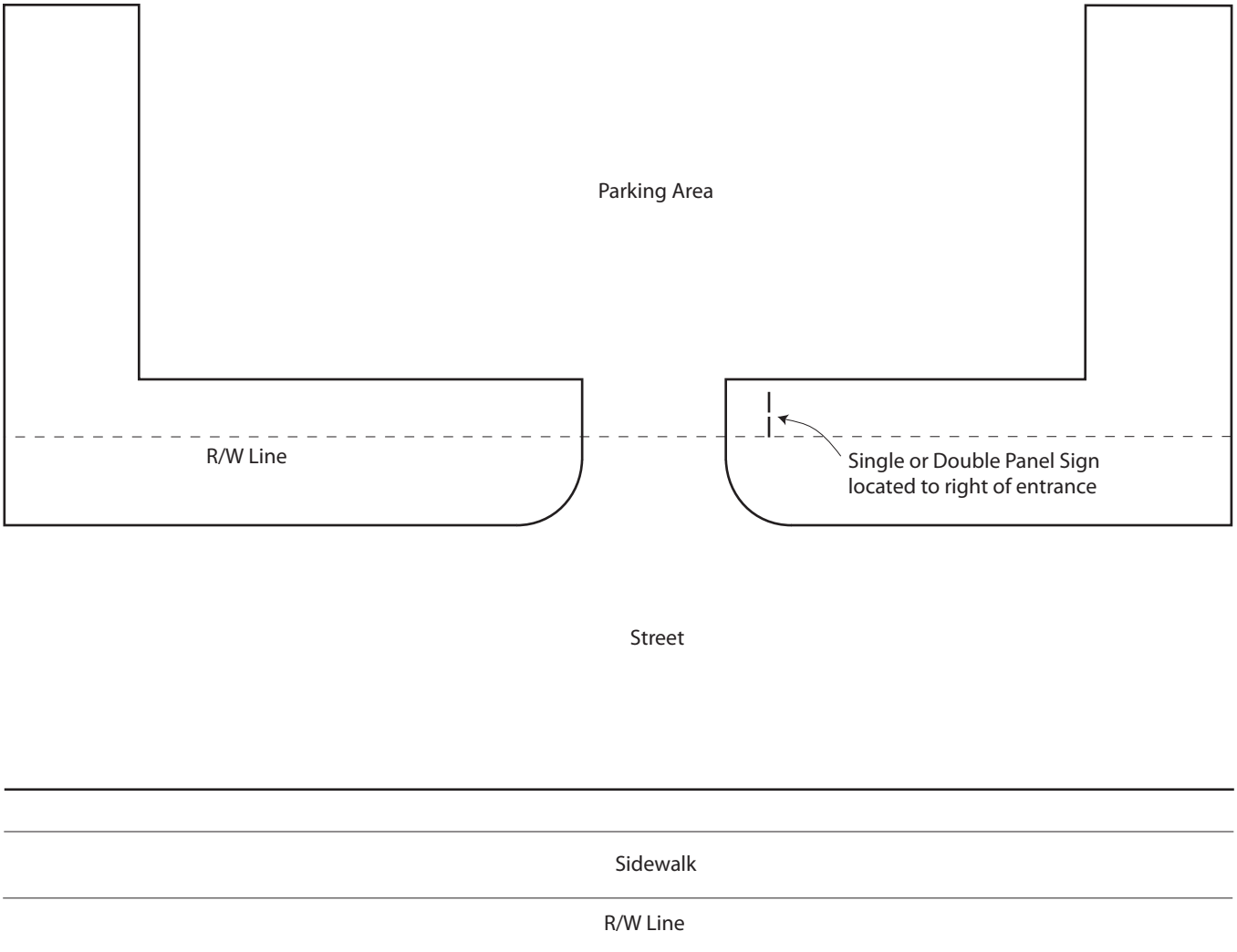


Typical Elevations

Scale: 1/2"=1'-0"

Signs are to be positioned perpendicular to street from which they are to be viewed and behind street right-of-way lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

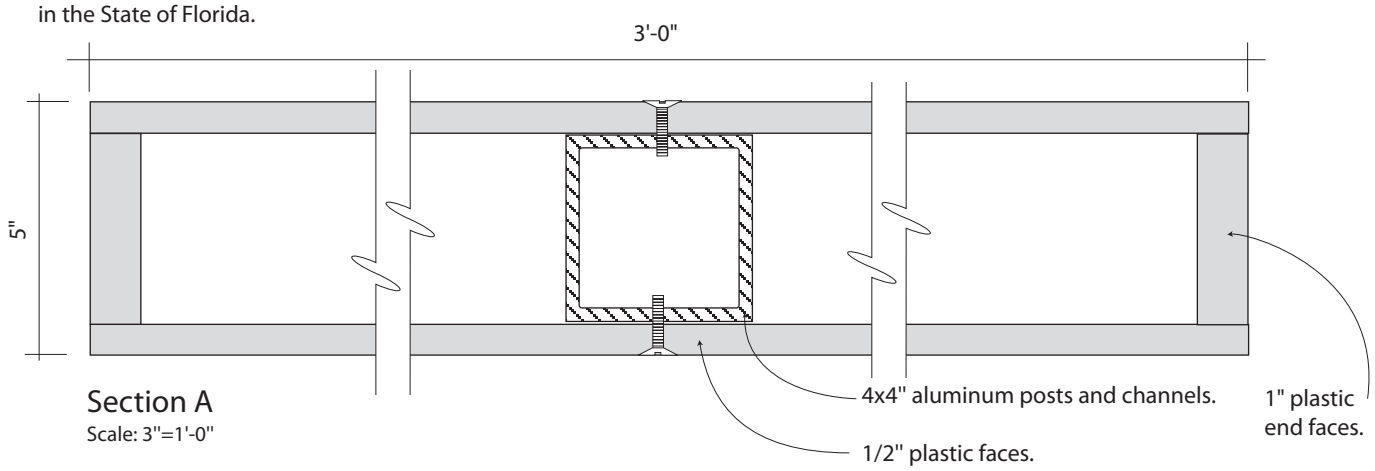
Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.



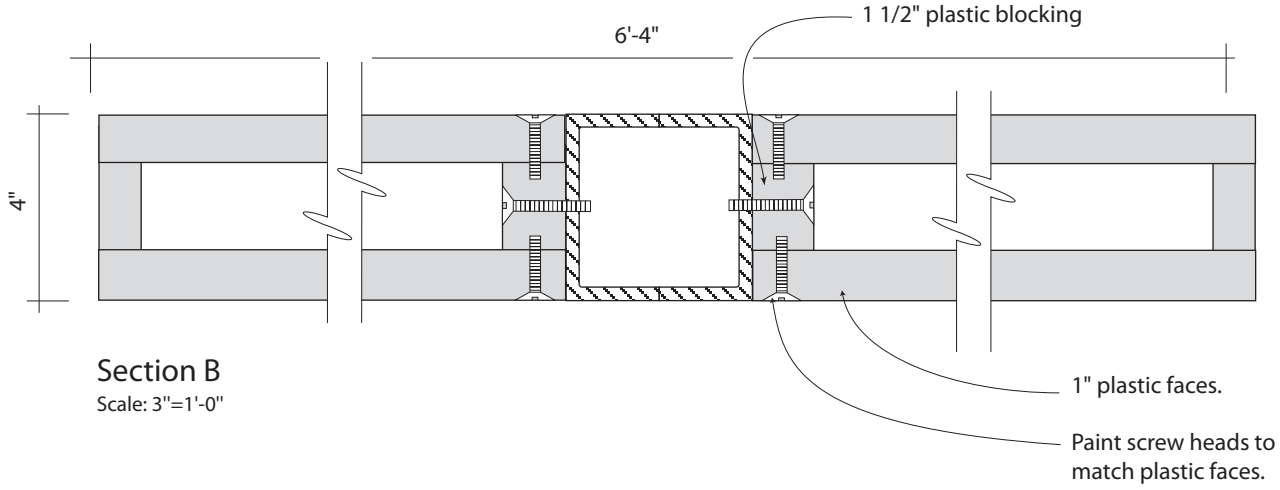
Typical Plan

Scale: NTS

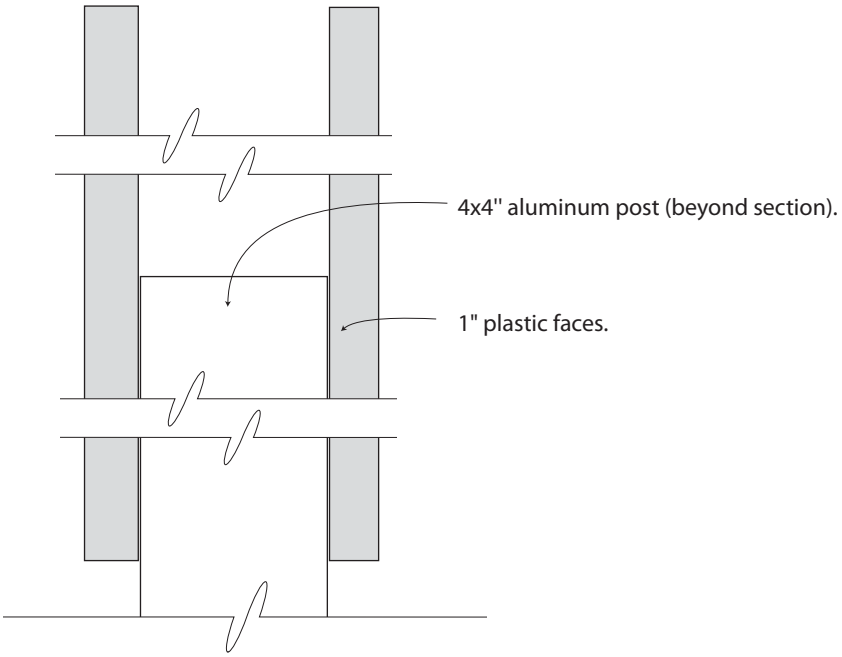
Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: 3"=1'-0"



Section B
Scale: 3"=1'-0"



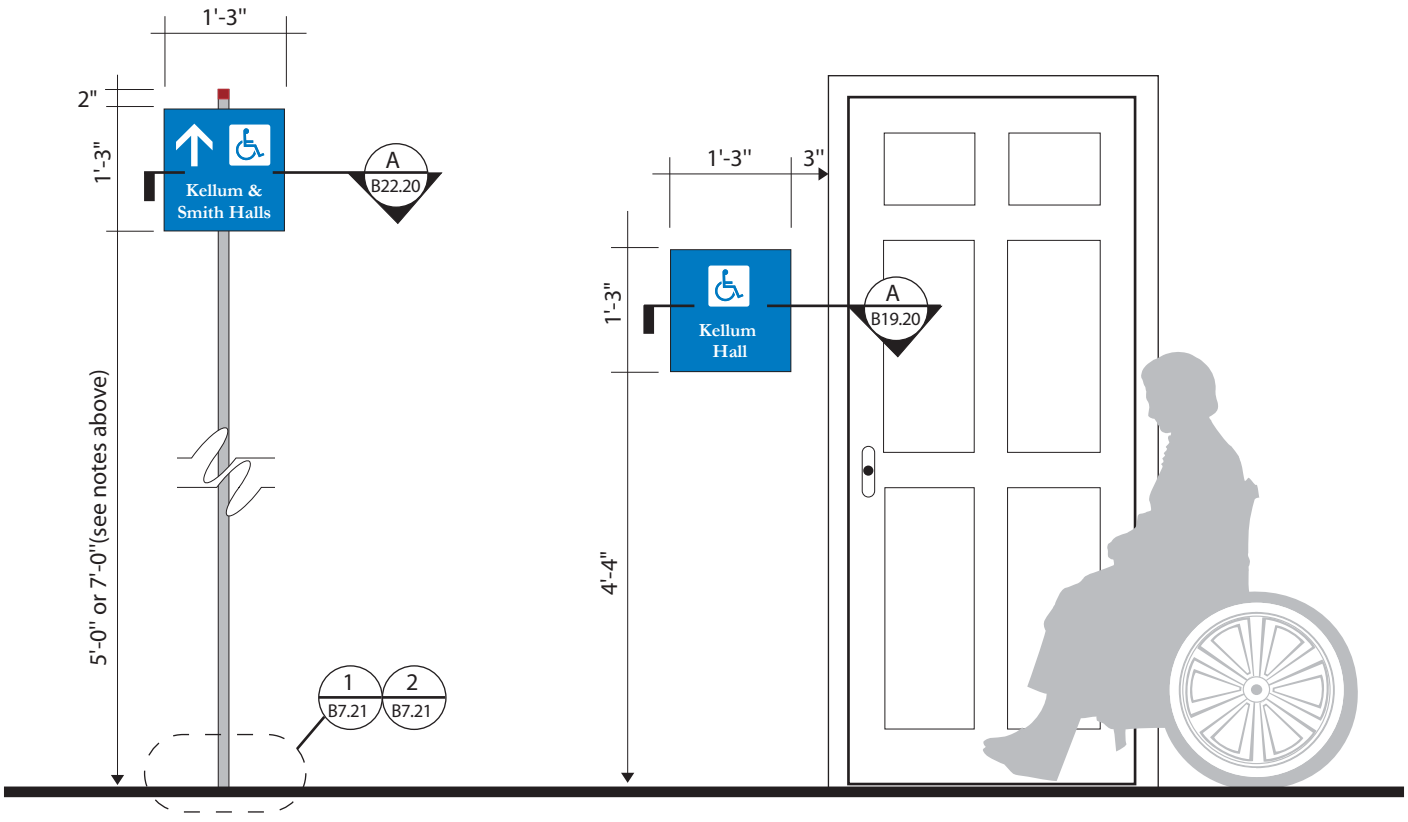
Section C
Scale: 3"=1'-0"

These signs can be used to identify and direct to handicapped accessible entrances, and provide other general information messages that may be required.

Sign clearances will vary for general information messages. Signs displaying general information that are located adjacent to pedestrian walkways are to be mounted with a clearance of 7'-0"; others may be located with a 5'-0" clearance.

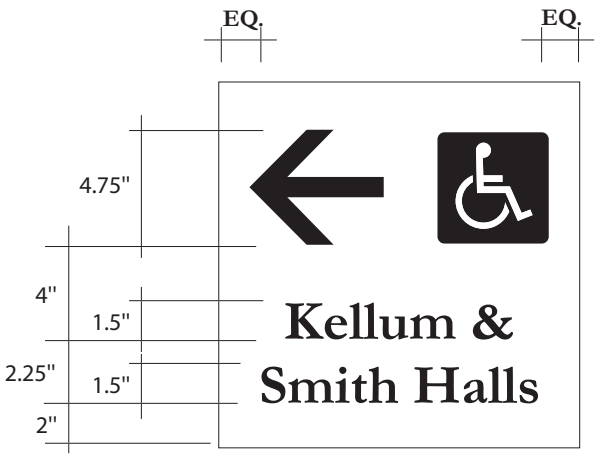
Fabrication Guidelines: Type 23 Posts, formed from extruded aluminum tubes with caps light gray polyurethane finish; Types 23 and 24 Graphics Panel, solid plastic- blue color ; Graphics, reflective sheeting, white message, pictogram field, and arrow.

Refer to manual pages B 23.01 for graphics measurements, B 23.10 for placement guidelines, and B 19.20 and B 22.20 for design intent drawings.



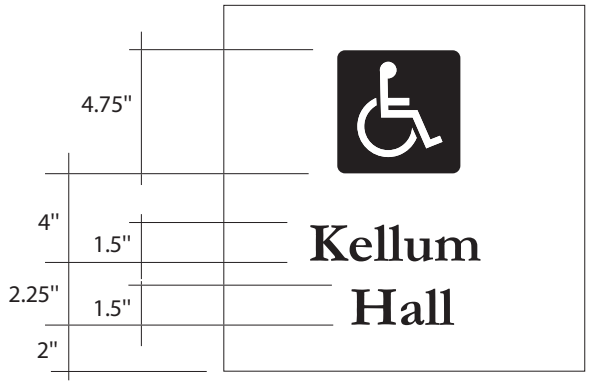
Elevation
Sign Type 23
Scale: 1/2"=1'-0"

Elevation
Sign Type 24
Scale: 1/2"=1'-0"



Elevation
Sign Type 23
Scale: 1 1/2"=1'-0"

Center all graphics horizontally.

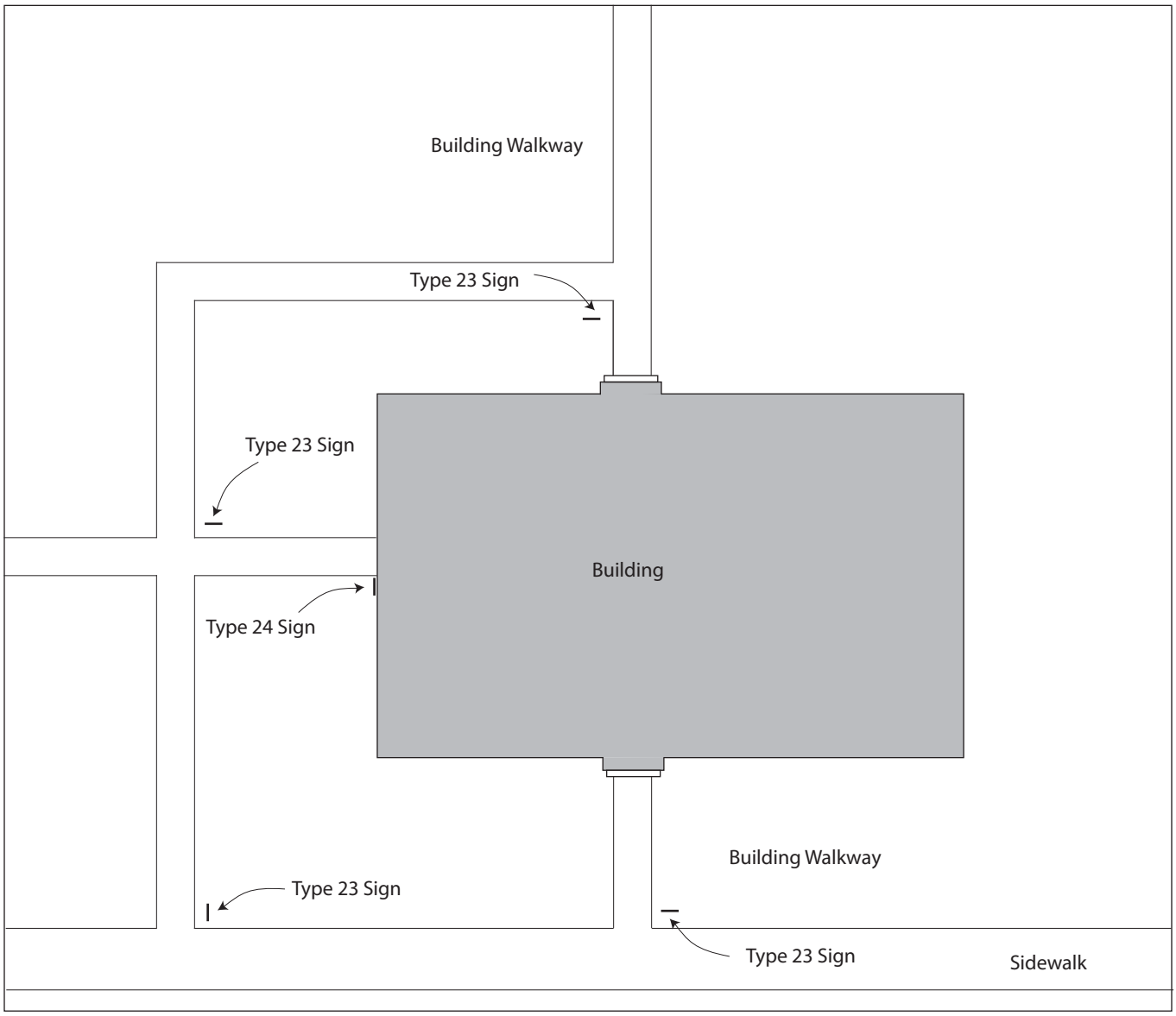


Elevation
Sign Type 24
Scale: 1 1/2"=1'-0"

Type 23 signs are to be positioned where they can be easily seen by a pedestrian from an unaccessible building entrance and along the accessible walkway. Type 24 signs are only to be used to identify accessible entrances, if all of that building's entrances are not accessible.

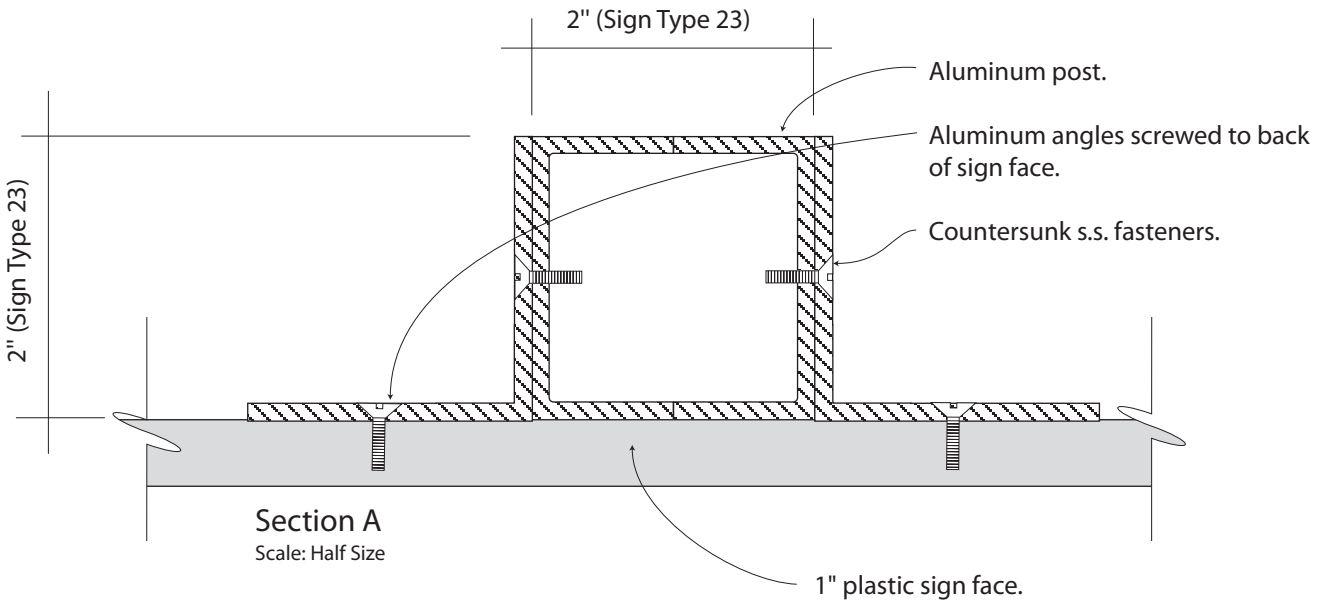
Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the signs from viewers.

It shall be the responsibility of the installer to obtain the locations of all underground utilities in the sign proximity prior to digging foundations.



Typical Plan

Scale: NTS



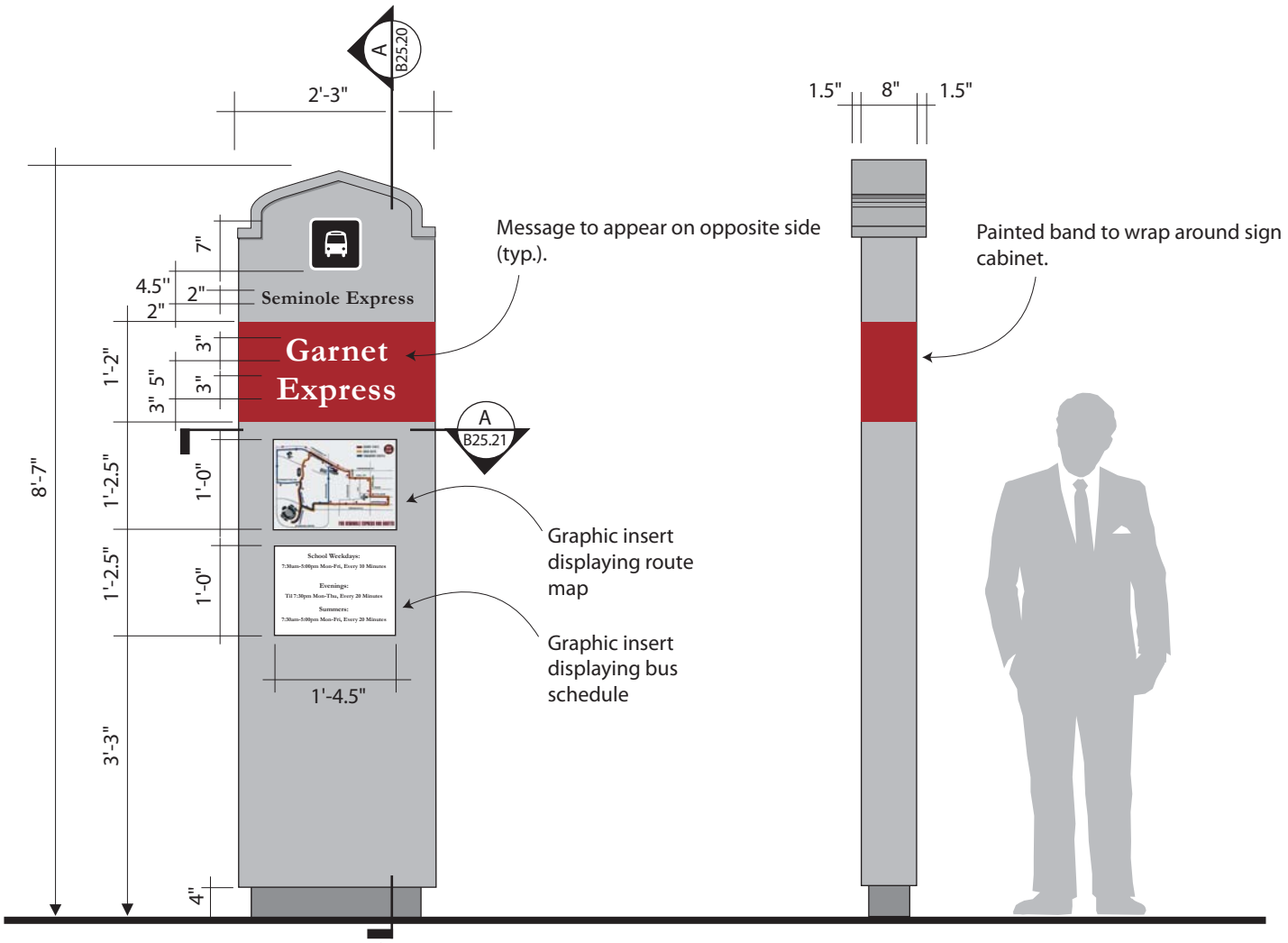
Section A
Scale: Half Size

These single sided signs are used to identify bus stops on campus. Route identification panels are color coded to identify Garnet, Gold, or Blue (Tomahawk Shuttle Routes).

Route name is to appear on both sides. Color band is to wrap around sign cabinet.

Fabrication Guidelines: Sign Cabinet, formed aluminum pylon, light gray polyurethane finish; Cornice, formed aluminum with light gray textured finish, Identification Band, polyurethane finish (various colors); Graphics, reflective sheeting, PSV black and white pictogram, PSV black message and white reflective sheeting message, Graphic Inserts; full color digital prints on PSV adhered to second surface of clear polycarbonate.

Refer to manual pages B 25.01 for layout variations, B 25.10 for placement guidelines, and B 25.20 for design intent drawings.

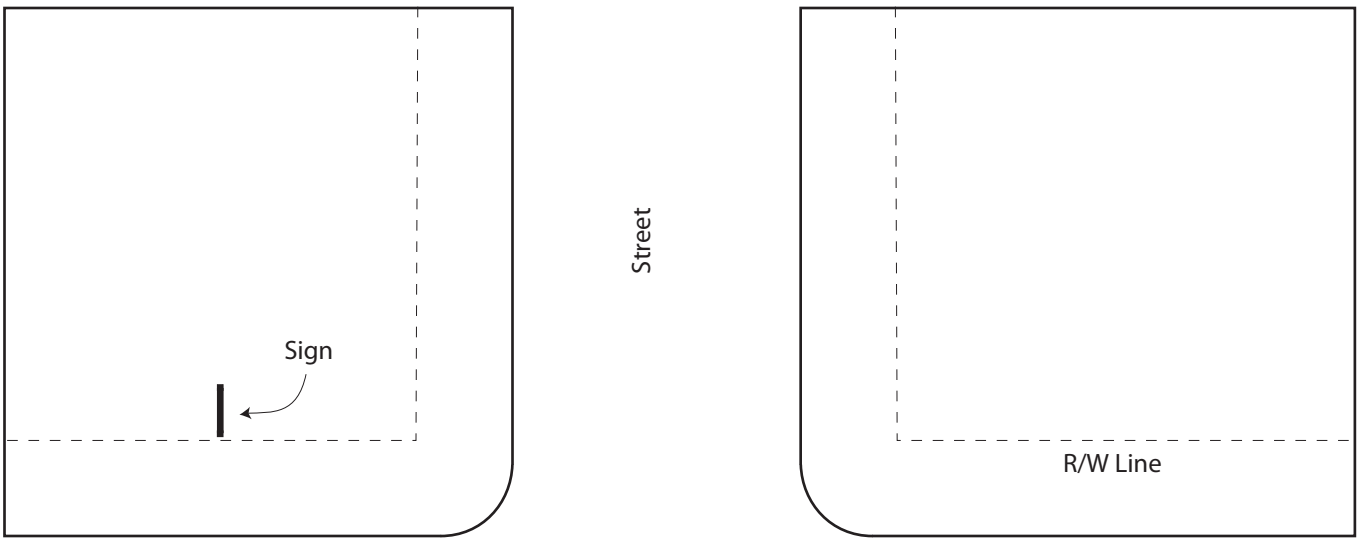


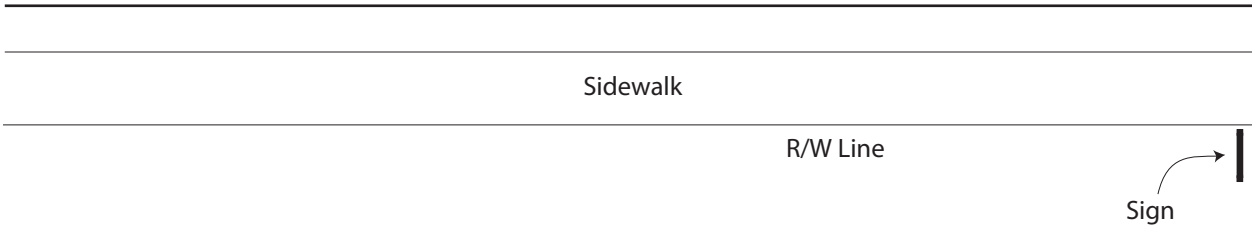
Elevation of Garnet Route Sign (Layout A)
Scale: 1/2"=1'-0"

End View

Signs are to be positioned perpendicular to street from which they are to be viewed and behind street right-of-way and setback lines. Sign locations are site specific; therefore, care must be taken to place the signs in locations free from obstructions that would block the them from viewers.

Since the location, quantity, and size of the signs may exceed the local zoning ordinance, approval from the appropriate regulatory agency is recommended prior to fabrication.

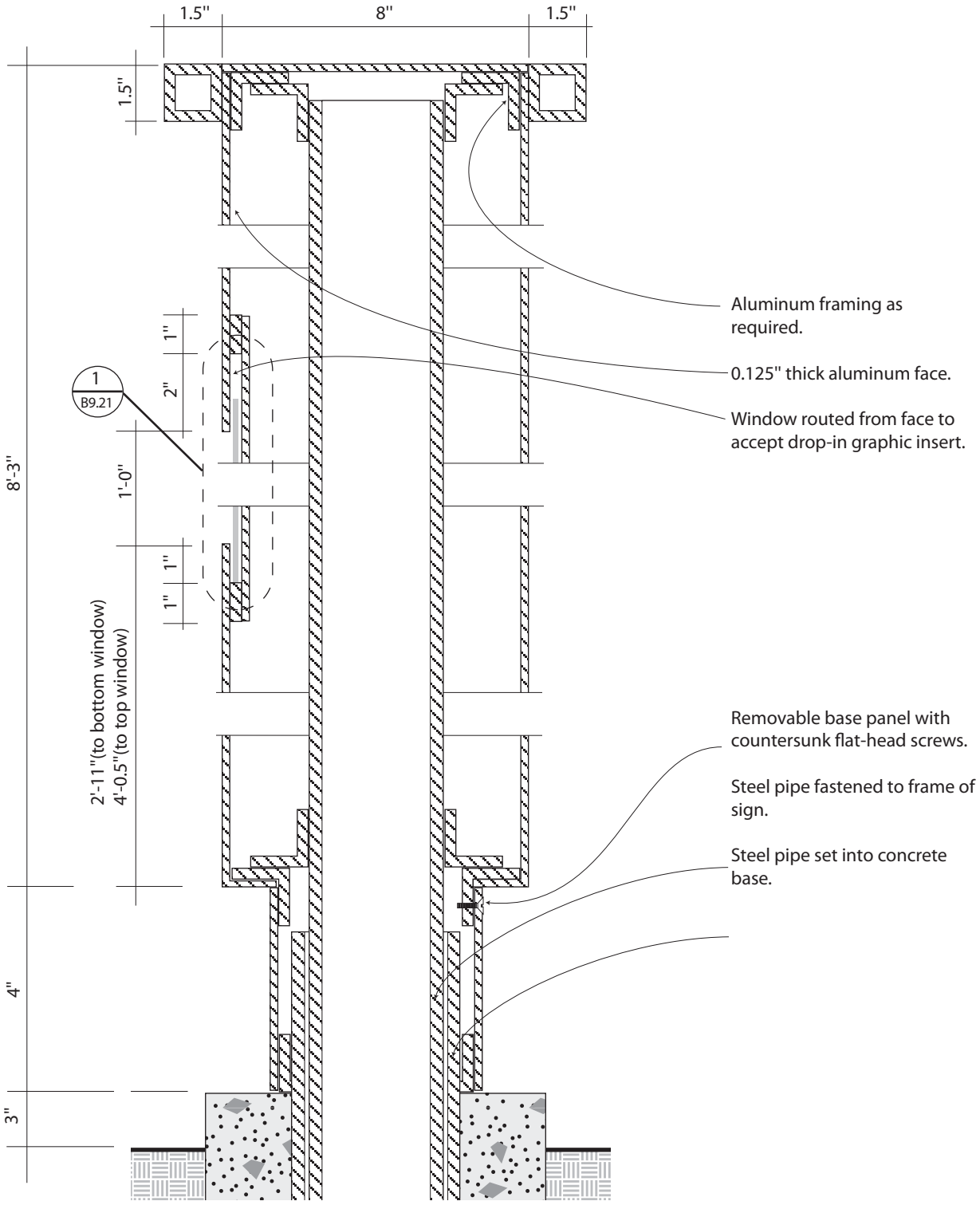




Typical Plan

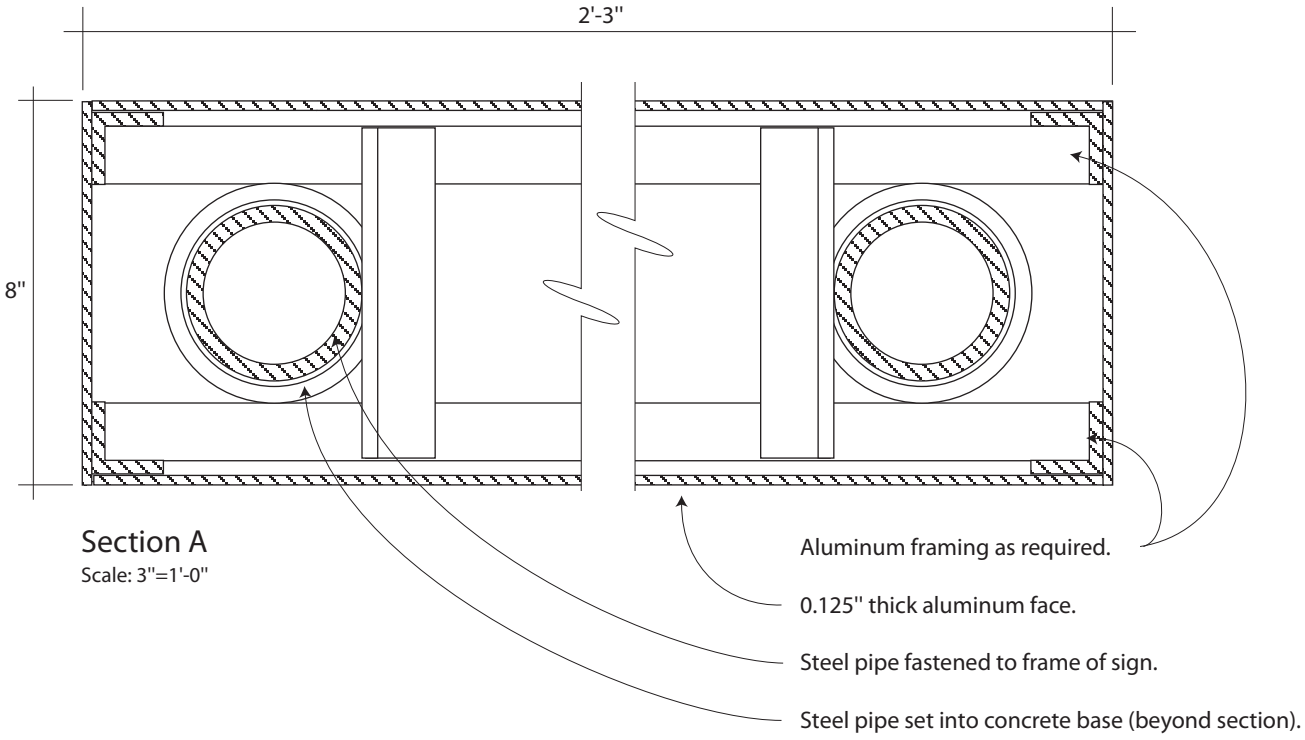
Scale: NTS

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



Section A
Scale: 3"=1'-0"

Note: Material dimensions and configurations shown are for design intent only. All materials,dimensions, configurations and specifications must be signed and stamped by a registered structural engineer licensed in the State of Florida.



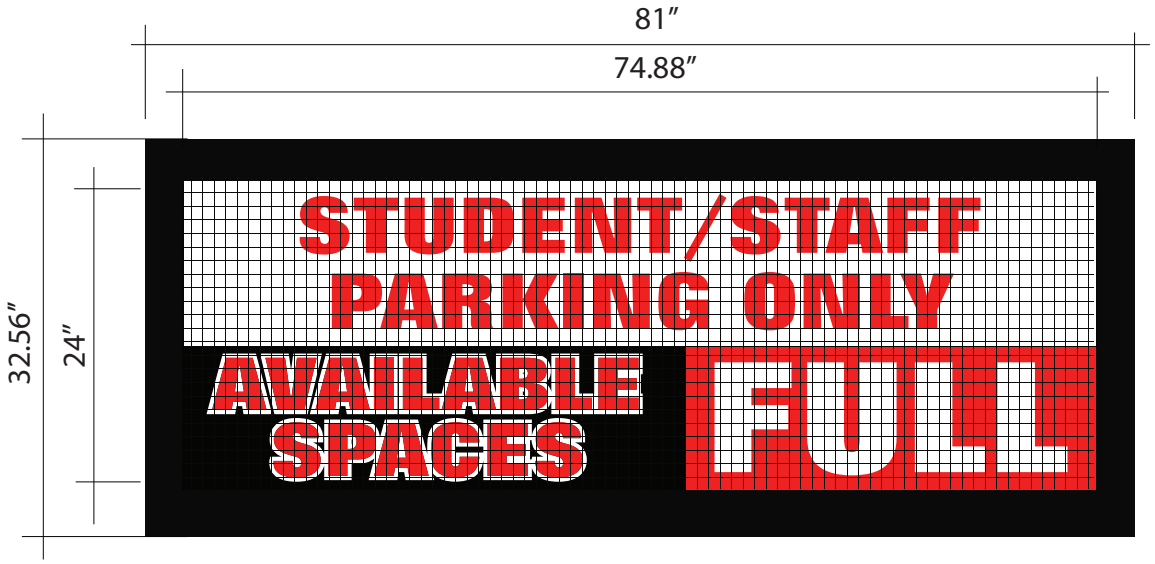
Section A
Scale: 3"=1'-0"

Parking Garage Digital signs are intended to inform students and staff about availiable parking spaces.

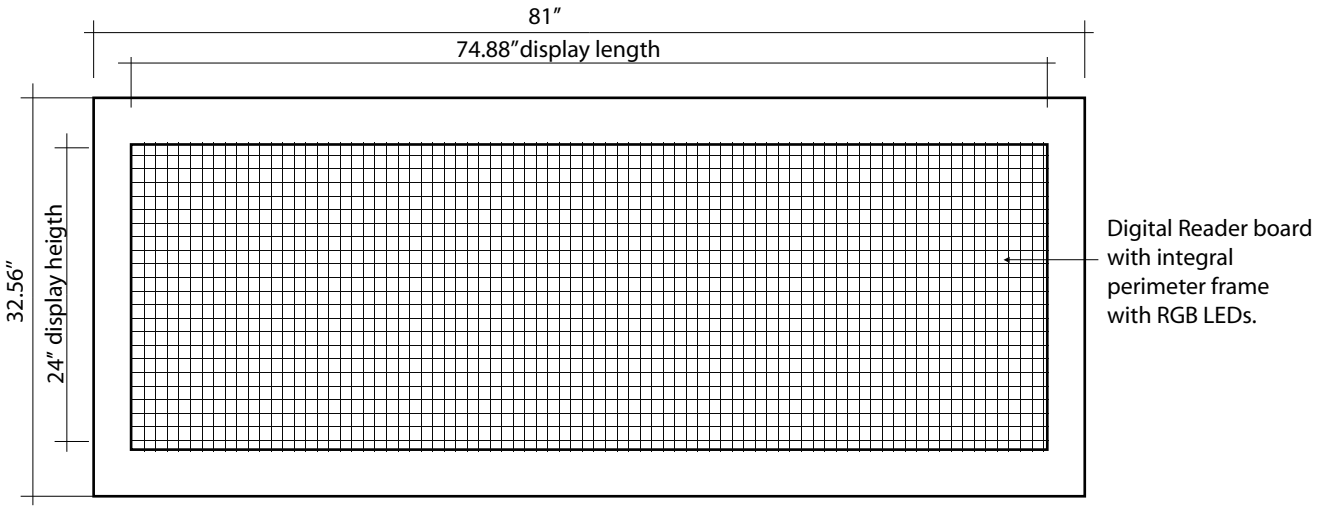
The display is interfaced with a vehicle monitor systems in the garage structure.

Fabrication Guidelines: All aluminum digital display with satin black polyurethane finish. All welded steel receiver frame wall mounted with expantion bolts to concrete substrate.

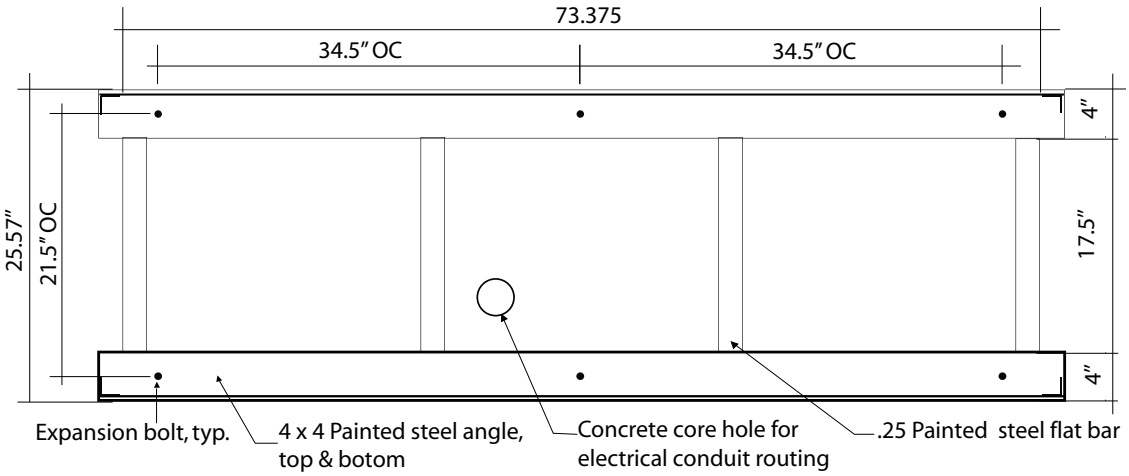
Refer to manual pages B 27.01 for graphics measurements, and fabrication details.



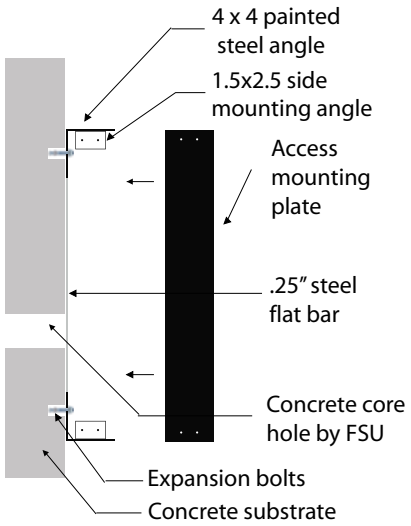
Elevation
Scale: 3/4″ = 1′-0″



Display Front View



Receiver Frame Elevation



End Frame Detail

Scale: 3/4"=1'-0"

Part 1 - General

1.0 Related Documents:

A. General provisions of the Contract, including General Conditions, applies to Work in this section.

B. FSU Signage Style Manual containing; Section A, Basic Design Components; Section B, Sign Type Drawings; Section C, Sign Location Drawings; Section D, Sign Message Schedules; and Section E, Specifications applies to Work in this section.

C. Architectural, civil, electrical, and landscape campus drawings filed with FSU Facilities Design and Construction Department, 109 Mendenhall, Building A, Tallahassee, FL 32306

1.1 Summary:

A. Section E includes the production and installation of new exterior signage.

B. Section E includes preparation of structural and electrical engineering drawings where required.

C. Section E includes the acquisition of permits and inspections.

D. Section E includes the removal of existing exterior signage, the repair of damaged substrates, and the cleanup of debris.

1.2 Description:

A. Provide the fabrication and installation of Exterior Signage identified in the Project Scope. The description of each Sign Type that composes this program is defined in the FSU Signage Style Manual.

B. By service contract agreement Florida State University (the Owner) will assume responsibility for providing electrical power leads, communication cables and related conduits to within ± 6 feet of proposed sign locations requiring such services; alternately, this work may be provided by a licensed electrical subcontractor. Under contract to the sign manufacturer the sign manufacture shall make all final connections.

1.3 Quality Assurance:

A. Sign Manufacturer must have been regularly engaged for the past two years in the fabrication and installation of exterior sign programs exceeding $150,000. in value.

B. Substitutions: all products specified may be substituted with an approved equal unless specifically noted otherwise. Approval must be in writing prior to bid submittal after review of submittal providing complete documentation of attesting to product equivalency.

C. Prequalified Manufacturers:

1. Cummings Inc.; Nashville, TN

2. Identities; Alpharetta, GA
3. Integrated Sign & Graphics, Louisville, KY
4. Apogee Signs, Tallahassee, FL
5. Advanced Signs, Panama City, FL

D. Prequalified Subcontractors for Digital Sign Components:

1. Daktronics, Inc.,Brookings, SD

2. Computerized Directory Systems; TTSS Interactive Products, Rockville, MD

1.4 Manufacturer Responsibilities:

A. The Manufacturer and his Subcontractor(s) shall hereby agree to read carefully all instructions to bidders, agreements, and specifications and any other attachments included in these contract documents and be bound by their conditions.

B. These contract documents are for design intent compliance and should only be used as a guide to produce the finished size, appearance, and function shown. Nothing contained in these contract documents shall be construed as a design for any engineered element. The Manufacturer and his Sub-contractor(s) shall be responsible for all structural and electrical engineering, and final electrical hookup.

C. All structural and electrical engineering drawings are to be stamped and signed by the respective engineers currently registered in the State of Florida.

D. In all cases, any and all national, state and local codes, ordinances and safety standards shall take precedence over these contract documents and it is the responsibility of the Manufacturer and his Subcontractor(s) to make certain that these codes, ordinances and safety standards are complied with.

E. Manufacturer agrees to apply for and secure all necessary permits at his cost. Manufacturer shall inform the Owner in writing prior to beginning any sign construction whether sign variance(s) or easements are required.

F. Before digging or coring sign foundations manufacturer shall be responsible for locating and identifying all underground utilities within the project area with the assistance of the FSU Central Utilities and Engineering stuff.

G. For all signs incorporating digital number displays or digital reader boards, the sign manufacturer shall provide all related hardware and software products required for proper operation by the Owner.

1.5 References:

A. Conform to latest edition of the following standards and specifications as adopted by the state of Florida:

1. ADA The American with Disabilities Act
2. ANSI American National Standards Institute
3. ASTM American Society for Testing and Materials
4. AWS American Welding Society

5. MAAMM National Association of Architectural Metal Manufacturers, Alum. Finish Manual
6. BOCA Building Officials and Code Administrators International, Inc.
7. NFPA National Fire Protection Association, National Electrical Code
8 . MUTCD Manual of Uniform Traffic Control Devices
9. FDOT Florida Department of Transportation, Roadway and Traffic Design Standards
10. UL Underwriters Laboratories
11. City of Tallahassee, Zoning Ordinance

1.6 Submittals:

A. Shop Drawings:

1. Submit to the Owner's Representative in PDF electronic format scaled reproducible shop drawings and sign face layouts for all sign types required.

2. All submittals requiring structural and/or engineering design shall be stamped and signed by a licensed professional engineer currently registered in the State of Florida.

3. All submittals from Subcontractors and suppliers must be reviewed by the Manufacturer before submittal to the Owner's Representative.

4. Approval of drawings, samples or data by the Owner's Representative shall not relieve the Manufacturer from responsibility for deviation from the design intent drawings or specifications unless the Manufacturer has in writing calling the attention to such deviation at the time of submission.

B. Materials and Colors, submit where applicable to the project scope:

1. Submit two 6" x 6" samples of each required material and paint color.

2. Submit two 1'-0" x 1'-0" samples of Scotchprint maps adhered to clear polycarbonate covers.

3. Submit 2" high project alphabet displays in PDF electronic format.

4. Submit applicable brochure data in PDF electronic format.

C. Field Samples:

1. Provide one full size operational field sample prototype of selected sign types to be determined by the Owner's Representative for review at the Owner's site prior to proceeding into production.

2. Upon acceptance, field samples may be incorporated within the Work.

1.7 Schedule:

Substantial Completion to be determined by the Owner's Representative.

1.8 Project/Site Conditions:

A. Field Conditions: Where the work of this Section interfaces with in-place construction, verify existing conditions. Obtain field dimension to ensure proper coordination. Notify the Owner's Representative in writing of conflicts before proceeding into production.

1.9 Artwork:

A. Artwork required by the Manufacturer to execute the sign work will be provided by the Owner in agreed-upon digital format.

Part 2 - Products

2.0 Concrete:

A. Scope:

1. Work included in this division includes manufacturing and materials for all cast-in place concrete, concrete sealing, and finishing for sign support foundations and platforms.

2. Configuration of foundation(s) to be determined by Manufacturer based on available space, location of underground utilities, wind loads, soil content, and related engineering design.

B. Materials:

1. Form materials shall conform to HC1 301.

2. Reinforcing steel shall conform to ASTM A-615, grade 60.

3. Steel wire shall confirm to ASTM A-82, plain, cold-drawn, steel.

4. Cement shall confirm to ASTM C-150, normal-type I, II or V, low alkali portland, gray color. Use type V when concrete is in contact with soil only.

5. Water shall be clean and not detrimental to concrete.

6. Admixtures shall be batch plant added with controlled metering devices to comply with ASTM C-94.

7. Grout, non-shrink type, shall not contain expansion cement or metallic particles.

8. Provide exposed surfaces for platforms to match adjacent surfaces in finish and color, or as directed by the Owner's Representative.

2.1 Unit Masonry:

A. Scope:

1. Work included in this division includes manufacturing and materials for all concrete
masonry units (CMU) and brick veneer for sign support bases and their supporting structures.

B. Materials:

1. Lightweight hollow load-bearing concrete masonry units complying with ASTM C-90, grade N, type I, natural color.

2. Provide CMU units having nominal face dimensions of 16 inches long by 8 inches high by the depth shown or otherwise required.

3. Provide accessory shapes as indicated or otherwise required.

4. Face brick units having nominal dimensions of 8 inches long by 2-2/3 inches high by 4 inches deep, equal to Cherokee Red Flash

5. Mortar, type M or type S as directed by the Owner's Representative, to comply with ASTM C-207. Color TBD.

6. Reinforcing steel pipe shall conform to ASTM A-53.

2.2 Metals:

A. Scope:

1. Work included in this division includes manufacturing and materials for all steel and aluminum components of the specified signs and their supporting structures.

B. Materials:

1. Steel angles, flats, plate, channels, rounds and squares shall conform to ASTM A-36.

2. Steel pipe shall conform to ASTM A-53.

3. High strength steel bolts, nuts and washers for structural joints shall conform to ASTM designation A-325.

4. Other bolts shall conform to ASTM designation A-307.

5. Aluminum shall be 60637 T5 or 6061 T6 as recommended to comply with required service and finish

6. Sheet aluminum shall conform to ASTM B209-65.

7. Aluminum bolts and aluminum rivets shall conform to ASTM B316-64.

8. Recycled aluminum or steel shall not be used.

9. Manufacturer is responsible to specify all materials to meet or exceed all safety requirements and to uphold the Manufacturer's Warranty as indicated in the Agreement. If the Manufacturer requires deviation from the materials to meet these requirements, then he should submit a request in writing to the Owner's Representative prior to proceeding into production.

C. Welding:

1. Certification: Shop and field welders must be certified by a qualified testing laboratory and meet all national and local requirements. Certification must be current for all work performed on the project.

2. All welds to meet or exceed the structural requirements of the signs as set forth in the shop drawings prepared and engineered by the Manufacturer.

3. All welds to be continuous, ground smooth and finished to match.

D. Dissimilar Metals:

1. Aluminum shall be isolated from steel by means of a shop applied minimum 10 mil vinyl with electrolytic corrosion factor of 1.0 and temperature resistance range of -20 degrees F to +200 degrees F.

E. Routed Face Graphics:

1. The Manufacturer shall utilize digitally controlled machinery to cut the openings required in the aluminum faces as shown on the drawings.

2. All cutting must be within a tolerance of plus or minus 0.1 inches of the reproducible artwork.

F. Preparation and Painting: see Painting Section 2.5

G. Formed Aluminum Cabinets and Retainers:

1. The maximum allowable inside radius of any (90) ninety degree break formed edge shall be no greater than the thickness of the metal sheet.

2. All breakformed edges must be smooth, straight and free of any malformations.

3. All sign faces are to be fabricated flat without seams, except as noted on Design Intent Drawings.

2.3 Vinyl Applications:

A. Scope:

1. Work specified under this division includes the manufacturing and materials for acrylic, and all vinyl applications for signs and sign faces.

B. Vinyls and Reflective Sheeting:

1. All pressure sensitive vinyl (PSV) as manufactured by 3M® Company Scotchal. Colors to be as noted in Manual Sections A and B.

2. All reflective sheeting products as manufactured by 3M® Company Scotchlite. Colors to be as noted in Manual Sections A and B.

3. Digital map prints to utilize 600x600 dpi heat-transfer foil process on clear 3M Scotchcal self-adhering vinyl applied to second surface of 1/8" clear polycarbonate with UV-resistant Marguard coating. Other equivalent methods and materials may be approved upon submittal. Provide 3-year minimum warranty against fading for printed products.

4. Directory prints shall consist of Scotchcal reverse printed text applied to second surface of 1/8" clear polycarbonate with UV-resistant Marguard coating followed by a full sheet of Scotchcal premium grade PSV matching the existing "garnet" backgrounf color.

5. All project symbols and graphics produced in vinyl and/or reflective sheeting must match digital art provided by the Owner, within a tolerance of plus or minus 0.1%.

6. Manufacturer to produce all vinyl/reflective sheeting graphics on digitally controlled cutting equipment.

2.4 Hardware and Compounds:

A. Scope:

1. Manufacturer is responsible for providing all necessary hardware, compounds and fastening devices, whether or not they are specifically shown in the Design Intent Drawings, to provide a first class sign product.

B. Fasteners:

1. Generic types and locations of fasteners have been indicated on the drawings. Manufacturer is responsible for the final engineering design of all attachments. All fasteners to be non-corrosive and all exposed fasteners shall be finished to match adjacent surfaces.

C. Water Seal:

1. Manufacturer to provide silicone or other approved equal weather sealing as required for all internally illuminated signs or components, which are part of this sign work.

D. Structural Adhesives:

1. Structural adhesives shall not be used in the manufacture of signs.

E. Studs for Acrylic Mounting:

1. Three-sixteenth (.187") inch diameter threaded aluminum studs shall be welded to the reverse side of the aluminum face as shown on the drawings for mounting of the acrylic "back-up" panels. A flat washer, lock washer and nut shall be used on each stud as shown on the drawings.

2. Where aluminum islands are created due to face cutting, a minimum of one stud shall be used on islands having a greatest dimension less than two inches and a minimum of two studs shall be used for larger islands.

2.5 Painting:

A. Scope:

1. Work under this division includes the painting of all steel, aluminum, plastic and other surfaces.

B. Finish and Colors:

1. Single Source Responsibility: Provide primer, sealer, and finished coat material from same manufacturer.

2. Paint system shall be provided by PPG Industries, Matthews Ultra Low VOC with separate gloss clear coat applied before vinyl graphics are applied.

3. Preparation: Clean surfaces from oil, dirt and foreign matter.

4. Drying time to be as per the paint manufacturer's specifications.

5. Quality Controls:

   a. Drips, runs, orange peeling, streaks, etc., will not be acceptable in any finish coats.

   b. Manufacturer shall make efforts to prevent the painted surface from being scratched or marred in the shipping and installation process.

   c. Field Touch-Up: Scratched paint surfaced may be touched up in the field provided that the scratch is no wider than 1/8" and no longer than 1 1/2". Any damage that extends under the paint such as dents must be replaced with a new part that is factory finished.

6. Painted colors shall match color matching codes indicated in Manual Section A. Where work scope involves existing signs, field verify and match existing colors or as directed by the Owner's representative.

C. Textured Finish:

1. Dryvit, acrylic coating, fine texture, to match light gray color indicated in Manual Section A.

D. Sign Faces:

1. Finish to be applied to faces, returns and backs as per the Paint/Polyurethane Coat Manufacturers specifications.

2. One-part touch-up paint for each color shall be shipped with each sign for touch-up during installation.

E. Formed Sign Cabinets:

1. Paint preparation shall be as specified in Paragraph 2.5 B above.

2. The interior of illuminated sign cabinets to be sprayed white gloss enamel or white gloss polyurethane for maximum light transmission.

3. Non-illuminated sign cabinets do not require that interior surfaces be painted.

F. Cast aluminum letters:

1. Returns for each letter to receive 2 coats black polyurethane , clear finish to be applied to faces and returns as per the Paint/Polyurethane Coat Manufacturers specifications.

G. Steel:

1. All steel components of the sign structure shall be clean, free of oil, grease, mill scale, dust, shop debris, etc., then primed with one coat of iron oxide primer.

H. Hardware:

1. All exposed fasteners to be painted to match adjacent surfaces.

2.6 Electrical Components:

A. Owner's Representative will provide required electrical leads to ± 6 feet of electrical sign locations.

B. Manufacturer to provide final hookup and testing.

C. All electrical components; lamps, ballasts, wiring etc., shall be masked from painting.

D. Components shall be compatible with available circuitry, comply with UL standards, and be easily accessible for servicing and maintenance.

E. T-8 daylight rapid start fluorescent lamps or equivalent LEDs as required to provide an even illumination across sign face without hot spots or shadows. Provide 1000 lumens per square foot behind copy areas.

F. Manufacturer shall provide exterior service disconnects for illuminated components for use by the Owners' maintenance personnel. The switches must meet or exceed all N.E.C., U.L. and all local safety ordinances and laws.

G. Workmanship, Materials, UL Label:

1. All work shall be performed in a good workmanlike manner and shall present a neat mechanical appearance. All work and materials must comply with United Laboratories (UL) standards for safety for electrical signs. All electrical sign cabinets shall bear the "UL Label".

H. Ballast Mount and Raceway Access:

1. All ballasts and raceways to be mounted to comply with UL standards and must be
easily accessible for servicing and maintenance.

I. Testing:

1. All illuminated signs and components shall be tested upon installation and must be fully functioning.

J. Light Leaks:

1. Weep holes and sign cabinet seams shall have internal baffles to prohibit light leaks.

2.7 Plastics:

1. Cast acrylic sheet, white 7328 Plexiglas® by Rohm & Haas, in thickness specified.

2. Polycarbonate sheet, clear Lexan® by General Electric in thickness specified.

3. Solid plastic panels, UV stabilized polymer sheets as manufactured by Laminations, Inc. Manufacturer's rep: Carmen Stambone, Stambone & Assocs. (863) 646-6445.
4. Solid plastic posts, UV stabilized reinforced extruded shapes as manufactured by MAX-R. Manufacturer's rep: Kari Lyles, regional sales manager.(888)868-6297 Ext.1232

2.8 Special Sign Components:

A. Digital Reader Boards:

1. Daktronics Datamaster DF- 2053 Drop-In.

2. Pixel: non-reflective white and red on black base.

3. Communication; Transition Networks SBFTF Series Bridging Media Converter.

4. Software: Easy Writer 2/0 for Windows.

5. Electrical Requirement ; 277 v. lead.

B. Computerized Directory System:

1. Touchscreen; FTP 15-2 flat panel LCD monitor with .250'' thick clear tempered glass cover.

2. CPU; SB 500XX controller, internally mounted.

3. Temperature control: internal exhaust fan by supplier.

4. Software; Selfinform® by TTSS, customized application for Windows.

5. Speakers and microphones; by supplier.

6. Electrical requirement; 110v. lead.

C. Graphics Inserts:

1. Opaque ScotchPrint® applied to second surface of clear polycarbonate, trimmed to sizes specified.

2. CMYK images produced at 200ppi.

Part 3 - Execution

3.0 Examination:

A. Verification of Conditions: Examine conditions and substrates where products specified in this section are installed; notify the Owner's Representative within three (3) business days of any unacceptable condition(s) encountered.

3.1 Delivery, Handling, and Warranty:

A. Delivery: Deliver materials to job in protective wrapping, labeled for identification as needed for daily installation.

B. Handling: Protect all sign components; if components are damaged during handling- restore affected components to the original condition.

C. Warrant shop applied finishes to withstand effects of weather, heat, tarnishing and aging for five (5) years.

3.2 Installation:

A. Coordinate times for sign installation with Owner's Representative to minimize disruption to the activities of other trades.

B. If required, provide safety barricades and signed notification to protect the public during installation.

C. If required, repair and refinish surfaces damaged during sign installation.

D. Whenever possible, provide concealed fasteners. Flush exposed fasteners with surrounding surface. Match color and finish of exposed fasteners with adjacent surfaces.

E. On exposed surfaces, provide continuous welds, grind smooth, and finish to match.

F. Provide an adequate number and size of anchorage devices and fasteners for securing sign faces to in-place construction.

G. Perform cutting, drilling and fitting for installation of signs. Set work in location, in alignment and in elevation, plumb, level, true and free of rack, measured from established lines and levels.

3.3 Adjusting:

A. Touch-up: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with same paint used for shop painting. Apply by brush or spray to provide a minimum dry film thickness of 2.0 mils.

3.4 Cleaning:

A. Clean sign faces and supports as recommended by manufacturers of proprietary materials. Clean installation area of dirt and debris.

B. All sign installation sites, shall be cleaned of debris and restored to their pre-existing condition at no cost to the Owner.

C. Old signs shall be removed from the site by the Manufacturer. Scrap aluminum and plastics are to be recycled.

3.5 Protection:

A. Protect installed work during construction period to prevent damage to finish surfaces.