# **Exhibit D: Site Signage Specifications**

# Site Signage

Attached are the specifications prepared by Anderson Krygier, Inc. dated January 31, 2018. Selected Vendor will be provided with all graphic vector files. Specifications include digital monument signage.

## **Digital Signage Supplemental Specification Information:**

#### **General Comments:**

- Based on pre-wired electrical and data outlets (if applicable) per installation location. Wired or wireless capabilities of EMC
- Based on CCC working with local municipalities on any zoning or restrictions.
- Traffic Study- Viewing Distance, Vehicle Speed of viewers or Stopped

#### **Monitors:**

- Qty: (2) Two LED EMC (Electronic Messaging Center) Outdoor All Weather Rated displays.
- Full color graphics and text.
- Standard EMC Size would be best for cost effective purchase
- Wired connectivity of EMC
- Some standard sizes: 63" x 41" / 75" x 41" for example depending on mfg.
- Recommended minimum 6000 NIT Brightness Subject to zoning laws/local codes.
- 10mm pitch = 36' or greater this would be top of line in picture quality.
- 12mm pitch = 75' or greater viewing distance.
- 16mm pitch = 110" or greater viewing distance.

#### **Signal Processor:**

- Qty: (1) Signal Processor (Common Content to Play on each EMC)
- EMC will have HDMI connectivity.
- Installation Services for EMC only.
- Exterior signage structure to have mounting tabs or mount bar for EMC installation.
- Production of custom EMC bezel enclosure or painting of EMC bezel, side panels in Silver color per Architectural specs.
- Must be compatible with BrightSign Media player XD233.

#### **Transmission/Receiver Kit:**

- Qty: (1set) Transmitter / Receiver Kit. Kits come in 70m or 100m (330 yards) transmission length from content source to EMC (HDMI transmission from content source **BrightSign** (or equal substitution) to EMC)
- Must be compatible with BrightSign Media Player XD233.

#### **Media Player:**

• Qty: (1) **BrightSign** (or equal substitution) Media Player XD 233 (3 series) using BA 4.6 software.



# Harmony Community Campus | Clackamas Community College

Exterior Signage | Final Bid Document

January 31, 2018



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Location Plan Page 3

Specifications Pages 4 through 6

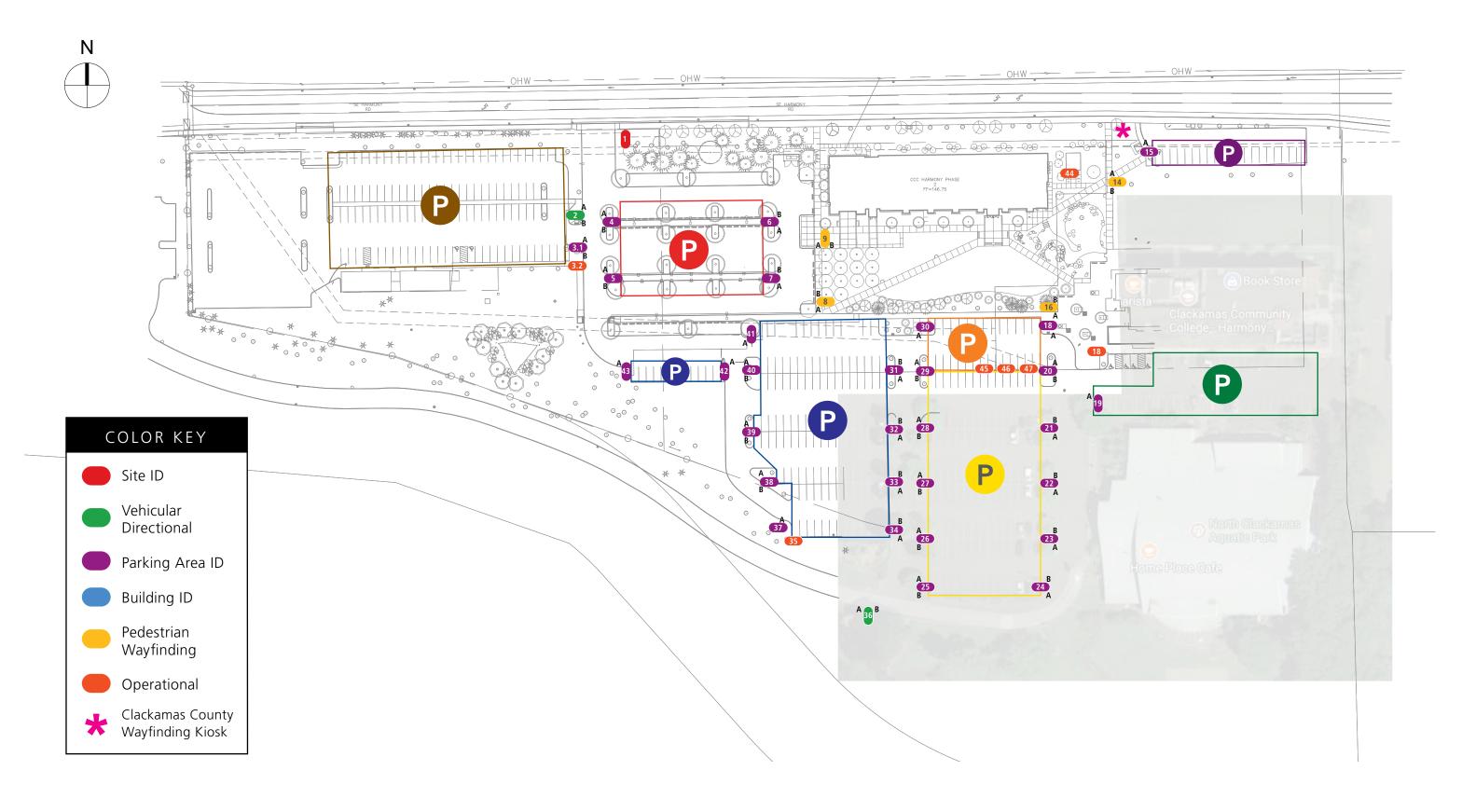
Detail Drawings Pages 7 through 20



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# ANDERSON KRYGIER, INC.

308 SW 1st Ave, Suite 400 Portland, OR 97204-3417 503.243.2060 This drawing and other drawings produced for this project are considered intent drawings. Some interpretation may be necessary in order to fabricate a finished product. Refer to specifications. Fabricator accepts the responsibility for materials, fabrication, engineering and installation. Colors are shown for reference only, and are subject to the limitations of the printing process. Locations shown are approximate. Final location to be determined in the field. Messages shown in drawings are for reference only. Refer to Message Schedule for actual messages. All drawings copyright Anderson Krygier, Inc.



LOCATION PLAN Site	SCALE <b>NTS</b>
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#### **Sign Contractor Qualifications**

- 1. Selected Sign Contractor must be experienced with the sign types, materials and technologies specified in this package. Sign Contractor must have completed fabrication and installation of sign programs similar to this one in terms of project scale and design complexity, and which have resulted in construction with a record of successful in-service performance.
- 2. Sign Contractor's bid must include references for three (3) similar projects successfully completed within the last five (5) years. Submit project names, locations and contact information including addresses and phone numbers.

#### Standards of Quality

- 1. Comply with applicable standards of sign products industry and construction industry for selection of materials, fabrication of components, assembly, and installation of the system, except to the extent more explicit or stringent requirements are indicated.
- 2. Use only personnel thoroughly skilled and experienced with the products and method for fabrication and installation of signage specified.
- 3. The owner shall reserve the right to reject any shop drawings, samples or other submittals, as well as any finished product or installation that does not meet the standard of quality established. Any such decision will be considered final and not subject to recourse.

#### **Written Warranty**

If requested by Owner, provide a written warranty indicating all work of this Bid Lot will be free from defects in material and workmanship for a period of (1) one year after Owner acceptance, and that for a period of (1) one year after Owner acceptance repairs and replacements of said defects shall be performed in a timely manner at no expense to the Owner.

#### Submittals

- 1. Shop Drawings: produce and submit a digital set of shop drawings (PDF) for review and comment by Project Team. Drawings must include necessary product data, layouts, messages, dimensions and details for each sign type.
  - a. All drawings submitted by Anderson Krygier are considered intent drawings; no part has been engineered. All descriptions of materials and their uses are included to describe intent and best estimate of how to proceed. Some interpretation may be required of Sign Contractor in order to produce a finished product. Any changes made to the original Bid Documents must be distinctly indicated on each page. Color or bold type, or bubbled areas are acceptable indicators. If submitted shop drawings include changes which were not clearly indicated, the drawings may be rejected, and/or final product may be rejected.
  - Sign location numbers and Sign Type designations shown on shop drawings must match those shown in the 100% Bid Document.
- 2. Color Samples: produce and submit color samples for all paint, powdercoat and ink colors used in the sign program. Provide (3) three sets for review.
- 3. Sign Samples: upon shop drawing and color approval, fabricate and provide the following sign samples to the Project Team for review. Provide (1) one set of samples unless otherwise directed. The Project Team reserves the right to disassemble any item and to submit items to any test necessary to determine its strength or character without being responsible for any damage to the item caused thereby. Samples will be retained by Graphics Consultant and cannot be used as part of the project.
  - a. Type A: 18" x 18" section, including all digitally-printed and vinyl colors
  - o. Type C: Digitally-printed circles all colors
  - c. Type D: 12" x 12" section with digital print of North Clackamas Parks & Rec Logo and vinyl, with Orange Lot strip
  - d. Type E: 12" x 12" section of map at full scale



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Clackamas Community College Harmony Campus Exterior Site Signage

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SPECIFICATIONS

#### **Typography**

Four (4) weights of Avenir LT std typeface are used in the exterior wayfinding sign program. Sign Contractor is responsible for purchasing all required typefaces. For details on font weight, size, capitalization, color and layout follow the individual detail drawings and specifications.

- 1. Copy on detail drawings is generic and intended for layout and spacing only. Actual copy for all signs is listed in the message layouts or otherwise provided by Owner.
- 2. Stated dimensions on the drawings shall take precedence over scaled dimensions. Dimensions stated on drawings are based on a capital letter "I" in the specified typeface. Conflicts between stated and scaled dimensions must be resolved prior to fabrication.
- 3. Letter spacing shall be as shown in specifications or will be provided as outlined artwork by graphic consultant.
- 4. Correct use of the apostrophe is required. Any signs displaying a foot mark instead of an apostrophe will be rejected.

**Avenir LT Std Light** 

1234567890 ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

**Avenir LT Std Medium** 

1234567890 ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

Avenir LT Std Heavy

1234567890 ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz

**Avenir LT Std Black** 

1234567890 ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz



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#### **Anodized Aluminum**

1. Material shall have an anodized finish on all visible surfaces. Finish and material shall be clean, free of scratches, markings and imperfections.

#### **Paint**

- 1. All paints shall be compatible with the surface on which they are applied and recommended by the manufacturer of the paint. All paints shall be of a type containing ultraviolet inhibitor to protect against fading and discoloration. All paints shall be evenly applied in a clean environment and finished products must not have roughness, pinholes, scratches, orange peeling, dust or application marks.
- 2. Workmanship shall conform to the highest standards of the trade and be acceptable to the Owner.
- 3. Unless otherwise indicated, painted surfaces shall have a non-glare or "Eggshell" finish.
- 4. All paint is Matthews Brand. The following colors are used in this sign program:



#### Vinvl

Clackamas Community College

Harmony Campus

**Exterior Site Signage** 

- 1. All vinyl shall be exterior-grade and appropriate for exterior conditions. All vinyl cutting shall be executed in such a manner that all edges and orners of finished forms are true and clean. All surfaces shall be without pinholes.
- 2. Laminated vinyl shall be smooth, consistent and free of bubbles, bulging, and foreign matter, and guaranteed not to delaminate nor cause discoloration or deterioration of any materials used in fabrication. Vinyl shall be allowed to offgas before lamination.
- Vinyl is pressure-sensitive vinyl as follows:
   3M 7725-120 "Silver"; 3M 7725-10 "White; 3M 7725-20 "Matte White";
   3M 180C-211 "Charcoal Metallic"; 3M 7725-23"Cardinal Red"; Oracal® 951-518
   "Steel Blue"; Oracal® 951-065 "Cobalt Blue"; Oracal® 951-555 "Glacier Blue"
- 4. Digital print on vinyl with an exterior-grade protective finish. All colors are embedded in digital file and provided by Graphic Consultant.

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### **Fabrication & Engineering**

All signs require verification of all site conditions and permitting requirements before fabrication can commence.

All drawings and specifications in this section, no matter how detailed, are for design intent purposes only and no part has been engineered. The Sign Contractor must carefully review and interpret the drawings provided and then develop and submit complete shop drawings, with Structural Engineer's stamp as necessary, for approval by Graphic Consultant before any part is fabricated.

Engineering and shop drawings shall include footer details for each sign location. Fabrication shall not commence and no materials may be ordered until shop drawings have been approved. Alterations, if required, must be included on submitted shop drawings.

# **Quality Assurance**

#### Welding:

All exposed metal surfaces shall be ground and finished flush and free of weld marks. Welding on finished surfaces shall be indistinguishable from parent metal.

#### Waterjet / Laser Cutting or Routing:

Dimensional letters can be laser-cut, water jet-cut or routed; materials and finishes as specified. Letters shall have square outside corners. Rounded inside corners as a result of cutting shall have a diameter no greater than 1/16". Letter face and edges shall be straight, smooth and free of cutting marks and other imperfections. Dimensional letters shall match specified font. Distorted fonts will not be accepted. Dimensional letters shall be flush-mounted unless otherwise specified.

#### Adhesive:

For all applications adhesive layers shall be as thin as reasonably possible, and only adhesive products approved for exterior conditions shall be used. Adhesive products must never be visible on finished, installed signs. Adhesive products for exterior conditions shall be used; recommended products are 3M VHB or Lords Adhesive.

#### Hardware:

Use hardware in sizes, types and finishes shown and specified. Where hardware is necessary, regardless of whether it's indicated or explicitly specified, submit hardware sizes, types and finishes for review by Graphic Consultant.



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Clackamas Community College Harmony Campus Exterior Site Signage

**Permits** 

Staking

obtaining all necessary sign permits.

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DATE	PAGE

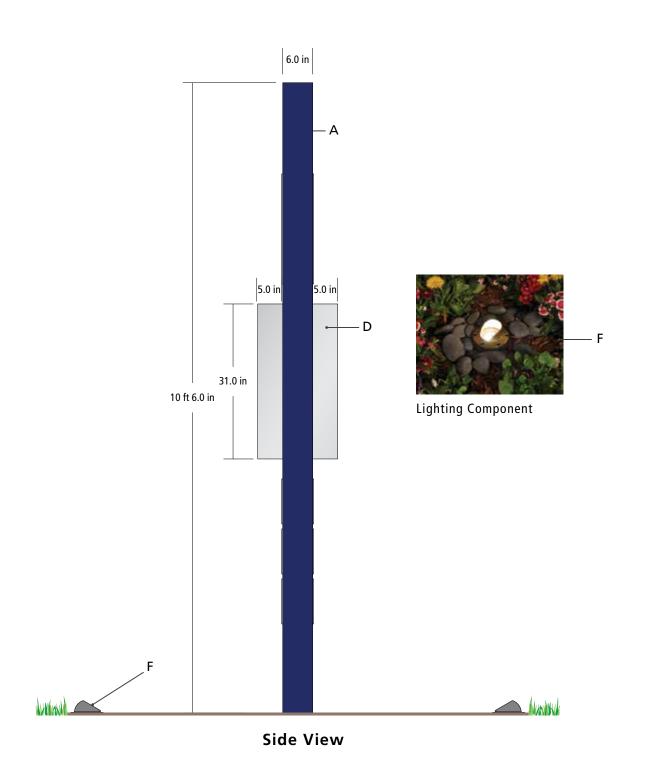
January 2018

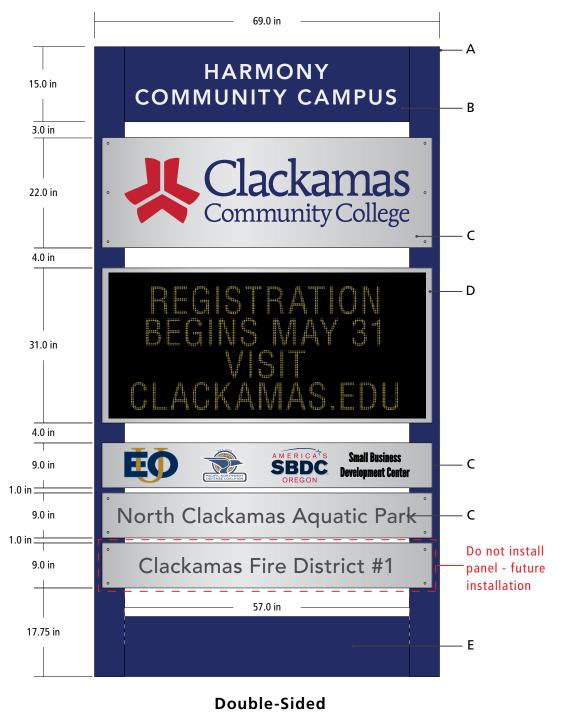
6

Sign Contractor to site-verify and stake all sign locations with Owner.

These signs have not been permitted. Sign drawings have been shared with the City

of Milwaukie to confirm that they are allowable. Sign Contractor is responsible for





6 inch square extruded aluminum tube posts 6063-T52 painted "Blue" on all visible surfaces. Top of tube posts are sealed.

Aluminum panel is welded to both interior sides of posts and sealed at the top and bottom. All visible surfaces are painted "Blue". Letters are cut pressure-sensitive vinyl in Metallic Silver.

1/8 inch thick anodized aluminum panels with applied vinyl graphics. 22-inch panel has logo applied in 3M #7725-23 "Cardinal Red" and Oracal® 951-518 "Steel Blue". Top 9 inch panel graphics are digitally-printed (colors embedded in digital files). Bottom two 9 inch panels have vinyl text applied in 3M #180C-211 "Charcoal Metallic". Panels are mechanically-fastened to posts with tamper-resistant screwheads, silver finish.

Sign Fabricator to coordinate with Owner for Direct View LED 12.0mm (Outdoor) Digital Display https://www.necdisplay.com/p/displays/l120e. Frame painted "Silver". Back of cabinets are fastened to 3x6 inch aluminum tubes with welded and bolted brackets.

Aluminum panel is welded to both interior sides of posts and sealed at the top. All visible surfaces are painted "Blue".

External illumination with FX Luminaire DX150M lighting control panel: www.fxl.com/product/transformers/standard/px FX Luminaire FC-6LED-CW-BZ miniture above-ground uplight. MR-16 lamp type, 10-15V input voltage. (2) Two on each side. www.fxl.com/product/in-grade-and-well-lights/standard/fc





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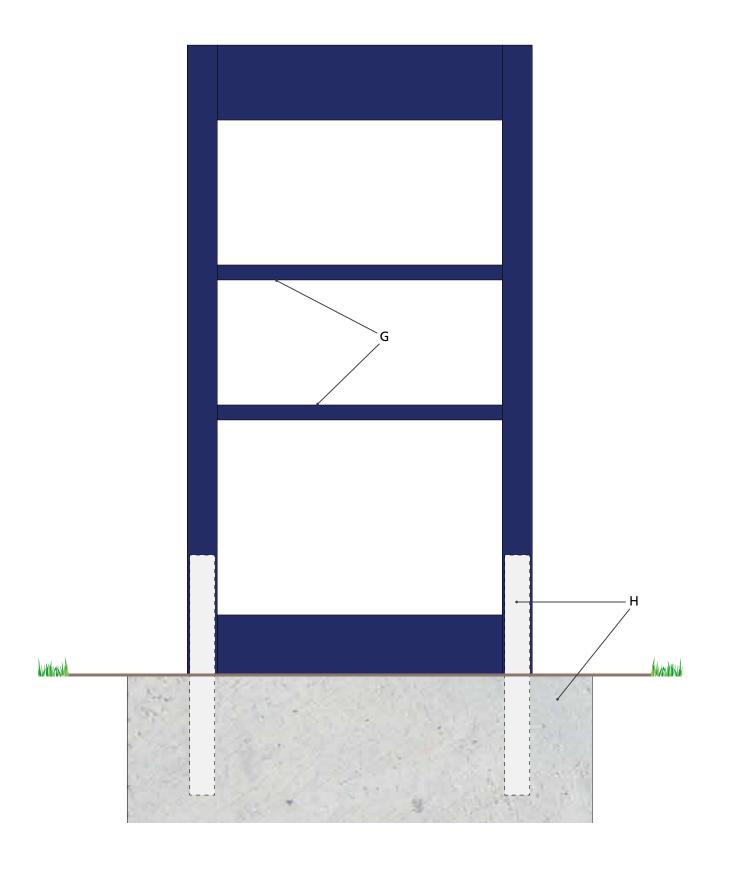


Clackamas Community College Harmony Campus Exterior Site Signage

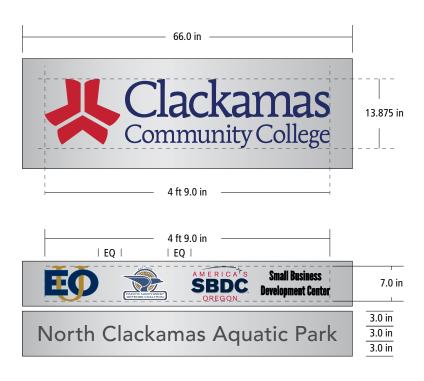
- 10			SCALE
5/8	inch	= 1	foot

DETAIL DRAWING Type A

DATE January 2018 PAGE







- G 3x6 inch aluminum tubes with welded and bolted brackets for attaching EMC. Sign Contractor to determine need for ventilation caps, perforated side panels, and coordinate with Owner to confirm voltage service, data and/or location of wireless antenna.
- Aluminum tube embeds into concrete foundation;
  Sign Contractor to determine exact length of
  embeds to support sign. Aluminum posts are
  bolted to embeds; paint exposed bolt heads
  "Blue". Concrete foundation to be engineered by
  a licensed professional.





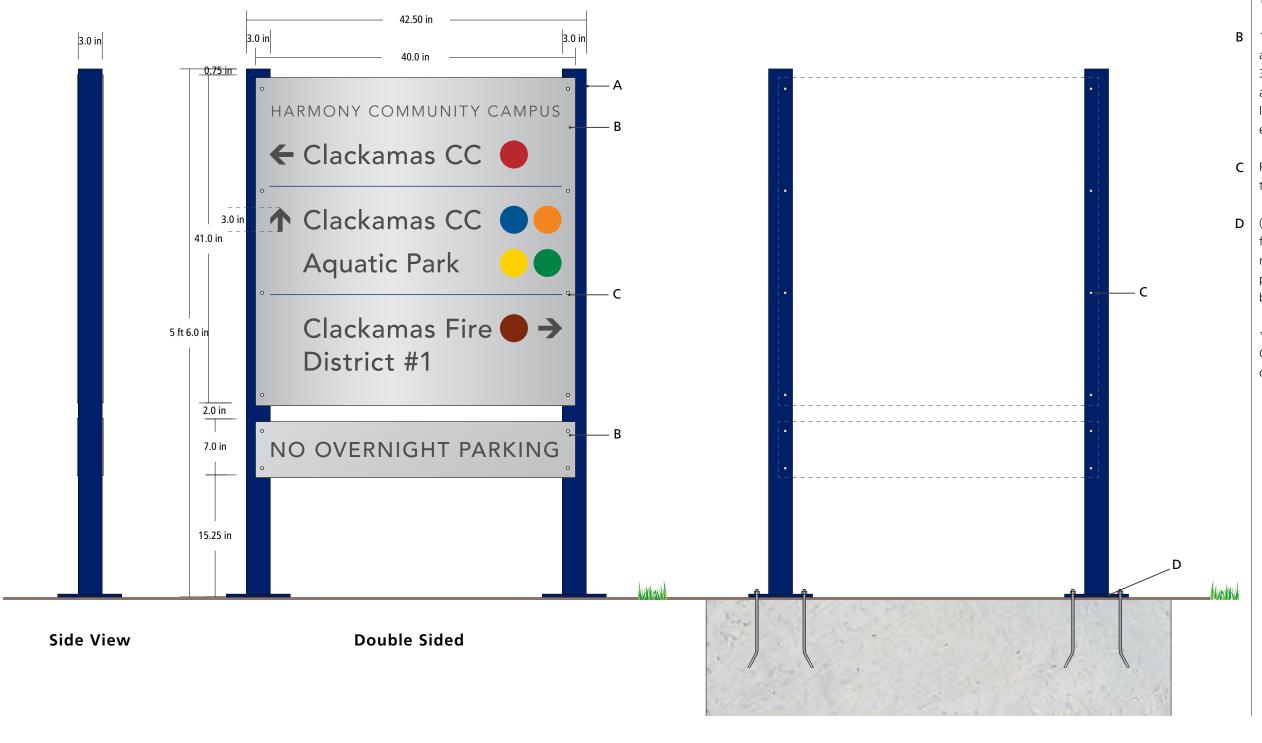
Clackamas Community College Harmony Campus Exterior Site Signage

				SCALE
5/8	inch	=	1	foot

Type A

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A 3 inch square extruded aluminum tube posts 6063-T52 painted "Blue" on all visible surfaces. Top of tube posts are sealed.

1/8 inch thick anodized aluminum panels with applied vinyl graphics. Vinyl text applied in 3M #180C-211 "Charcoal Metallic". Vinyl rule lines applied in Oracal® 951-518 "Steel Blue". Parking lot circles are digitally-printed on vinyl (colors embedded in digital files).

C Panels are mechanically-fastened to posts with tamper-resistant screwheads, silver finish.

(4) Threaded rods are embedded into concrete footing\*. Posts are welded to 8x8x3/8 inch thick mounting plates. Mounting plate is drilled in four places to align with embedded rods and plate is bolted to concrete footing.

\*Concrete footings to be engineered by Sign Contractor; details to be included in shop drawings for review and approval by Owner.

ANDERSON KRYGIER, INC.
308 SW 1st Ave, Suite 400
Portland, OR 97204-3417
503.243.2060

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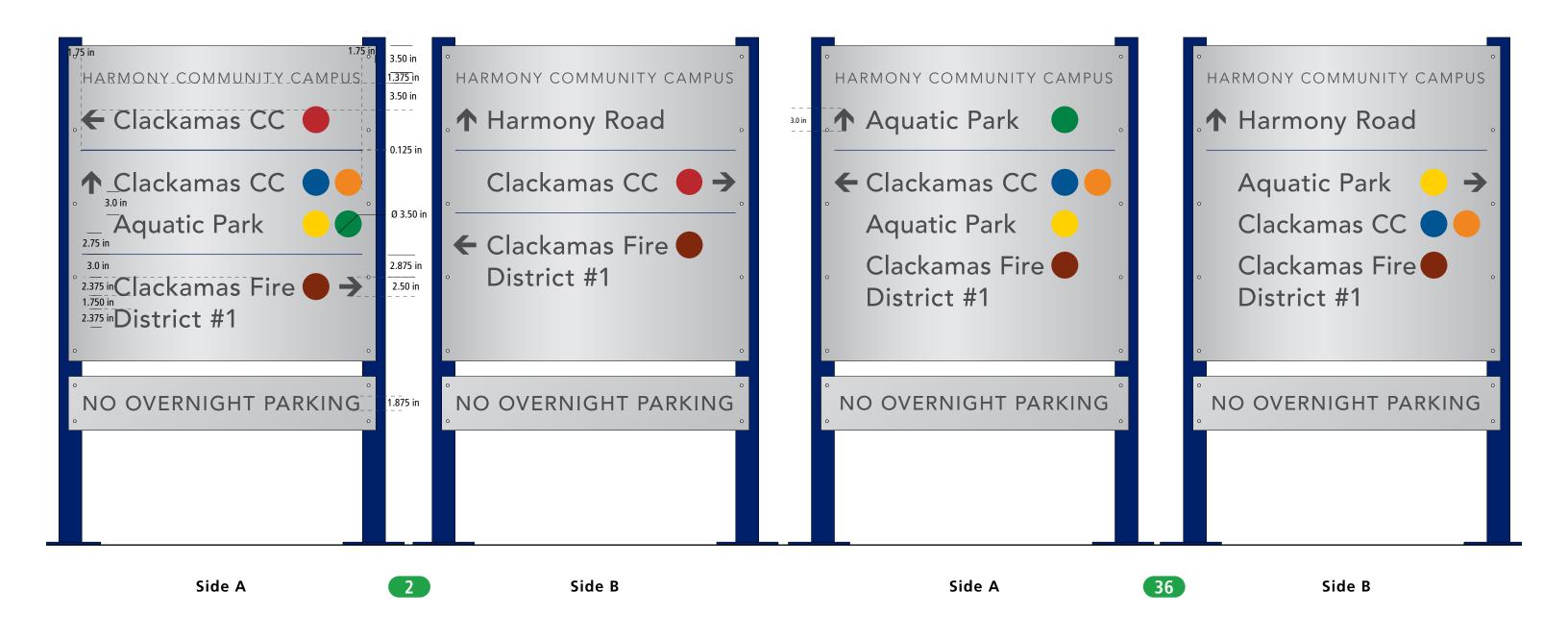


Clackamas Community College Harmony Campus Exterior Site Signage

1 inch = 1 foot	
1 inch = 1 100t	
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DETAIL DRAWING **Type C** 

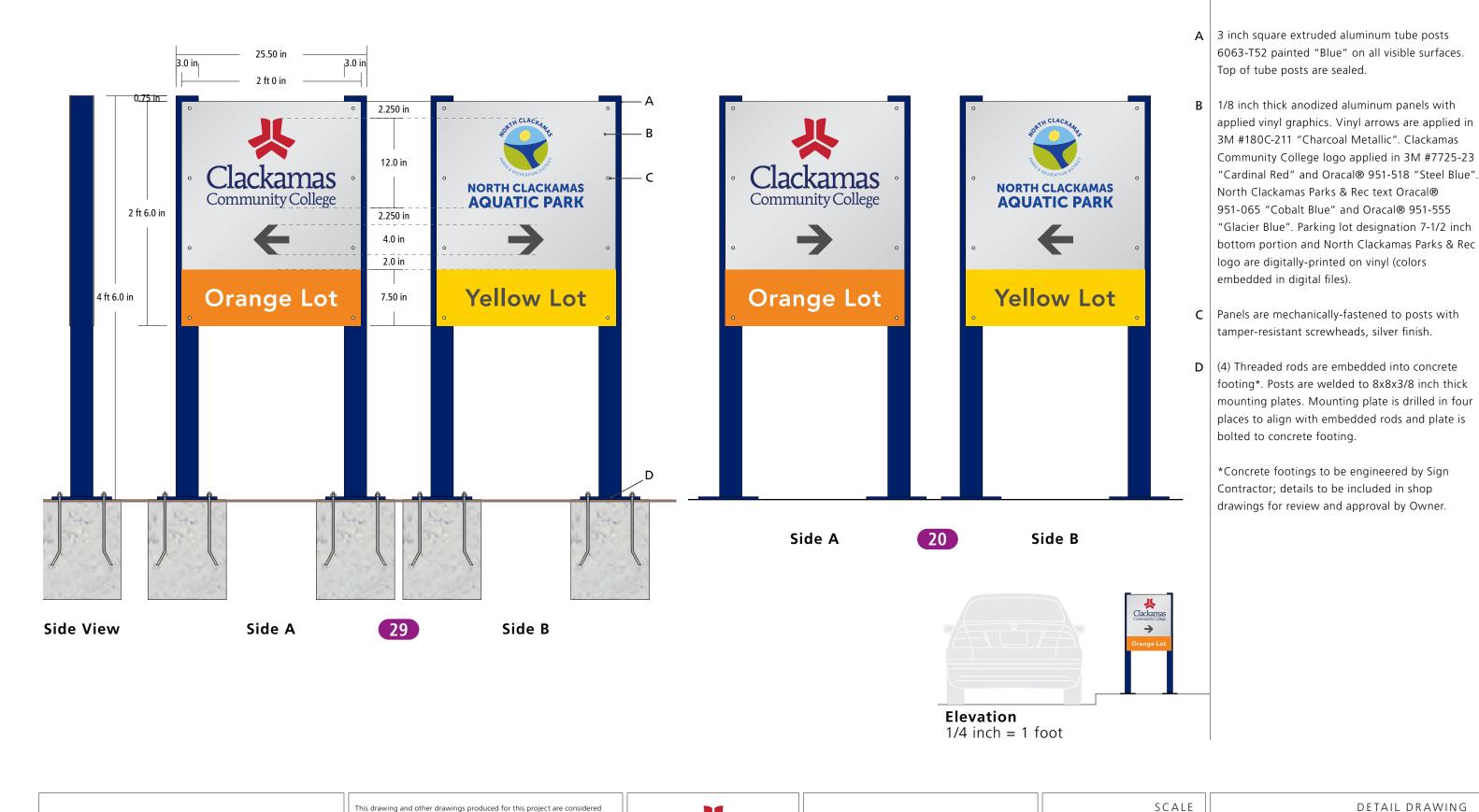
January 2018







DETAIL DRAWING <b>Type C</b>	1 inch = 1 foot
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1 inch = 1 foot	

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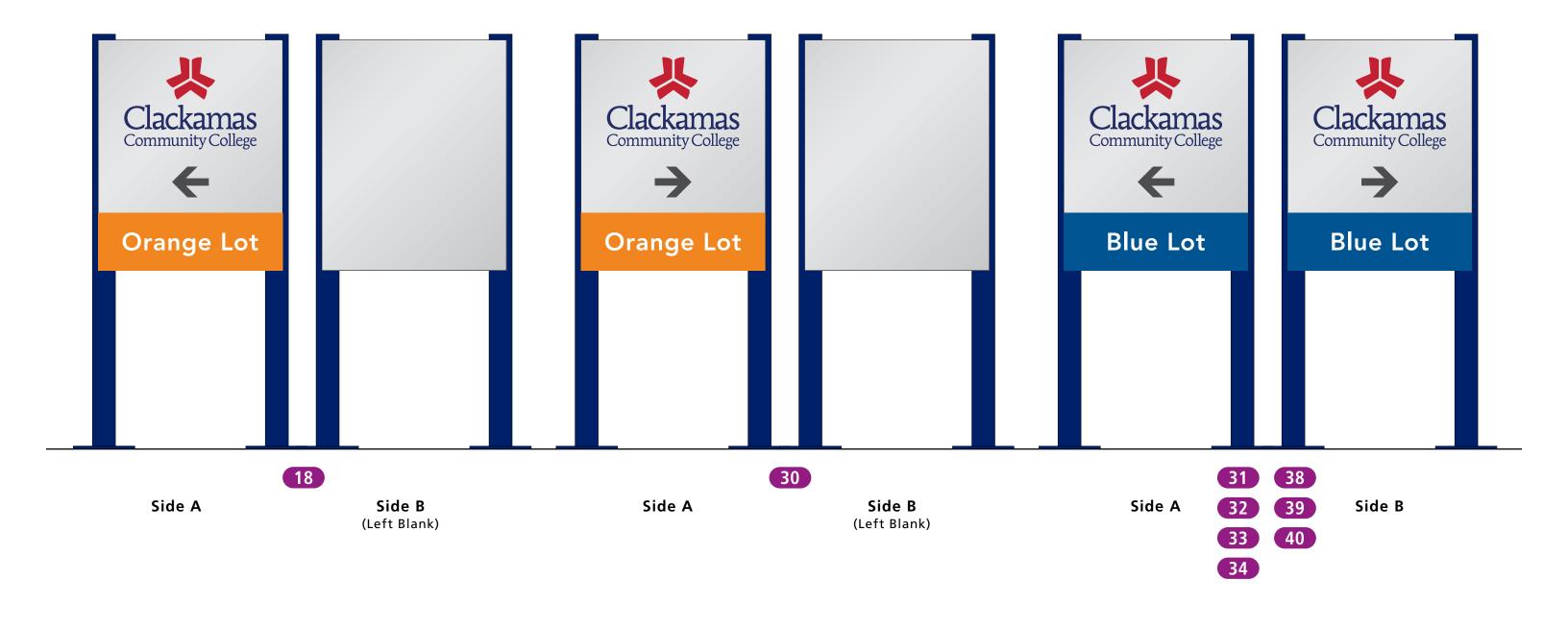
Type D







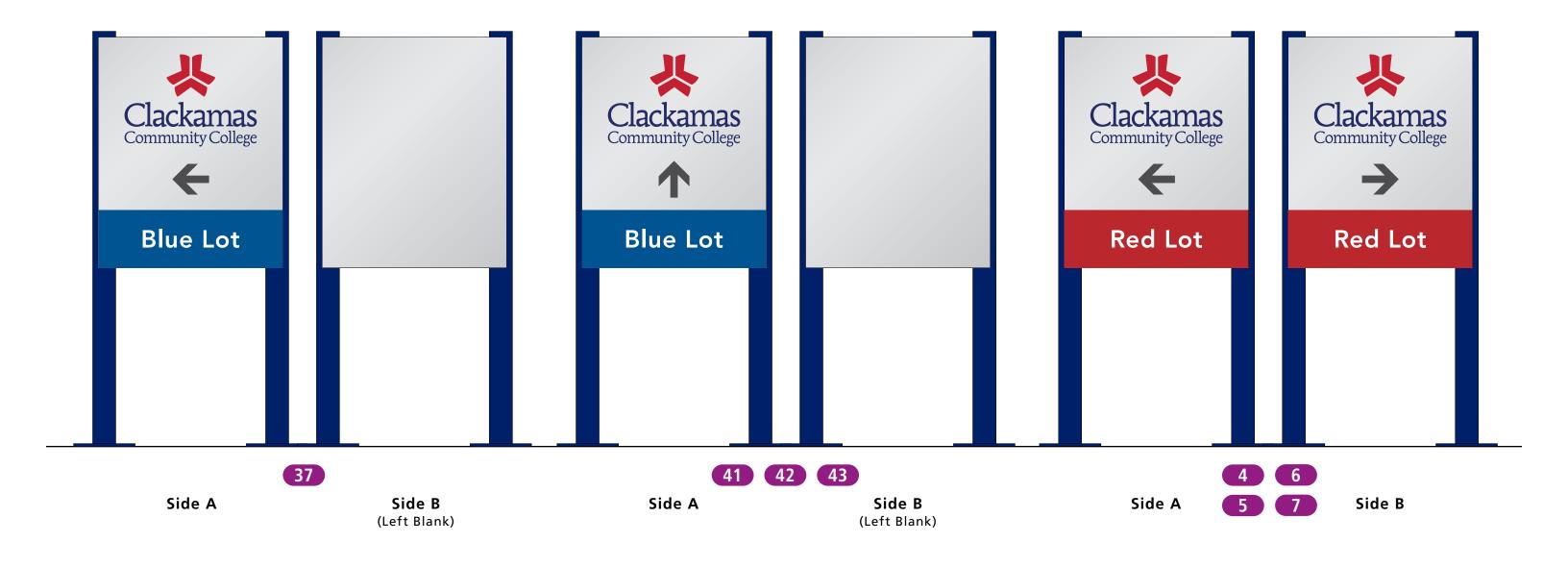
DETAIL DRAWING <b>Type D</b>	1 inch = 1 foot
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SCALE <b>1 inch = 1 foot</b>	DETAIL DRAWING <b>Type D</b>
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Clackamas Community College
Harmony Campus
Exterior Site Signage

DETAIL DRAWING	SCALE
Type D	1 inch = 1 foot
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3.1

Side A

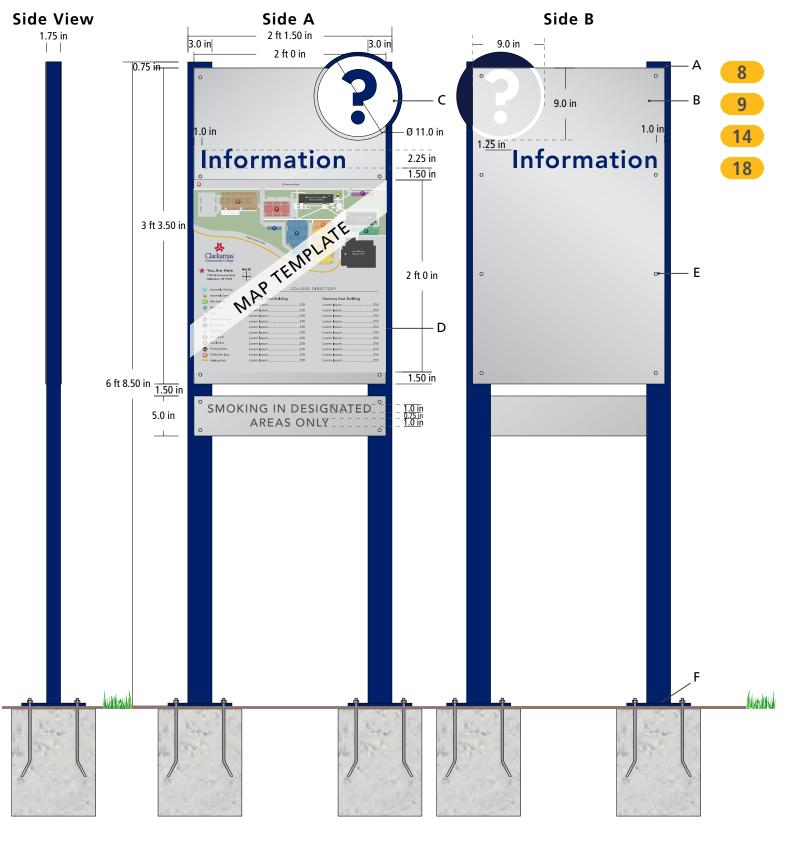
Side B

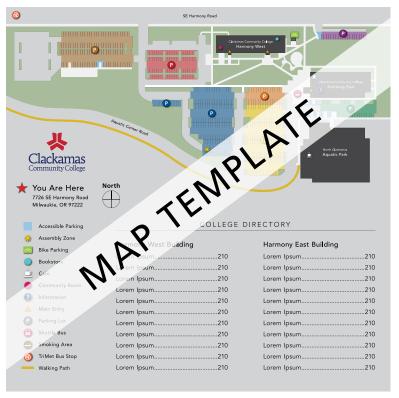


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DETAIL DRAWING <b>Type D</b>	SCALE  1 inch = 1 foot
PAGE	DATE
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# **Map Template**

1/2 inch = 1 foot

\* Final map and directory listing will be provided to sign fabricator by Owner

- A 3x 1-3/4 inch extruded aluminum tube posts 6063-T52 painted "Blue" on all visible surfaces. Top of tube posts are sealed.
- 1/8 inch thick anodized aluminum panels with applied vinyl graphics. Text is applied in Oracal® 951-518 "Steel Blue" and Side B symbol applied in 3M #7725-20 "Matte White".
- Information symbol (Side A) is 1/16 inch thick aluminum panel painted "Silver" on face and returns; masked and painted "Blue" on face, back and returns; adhered flush to face of sign panel with exterior-grade adhesive (as thin as possible). Symbol applied digitally-printed vinyl (colors embedded in digital files).
- Map applied digitally-printed clear vinyl (colors embedded in digital files). Final map and directory listing to be provided by Owner.
- Panels are mechanically-fastened to posts with tamper-resistant screwheads, silver finish.
- (4) Threaded rods are embedded into concrete footing\*. Posts are welded to 8x8x3/8 inch thick mounting plates. Mounting plate is drilled in four places to align with embedded rods and plate is bolted to concrete footing.
- \*Concrete footings to be engineered by Sign Contractor; details to be included in shop drawings for review and approval by Owner.





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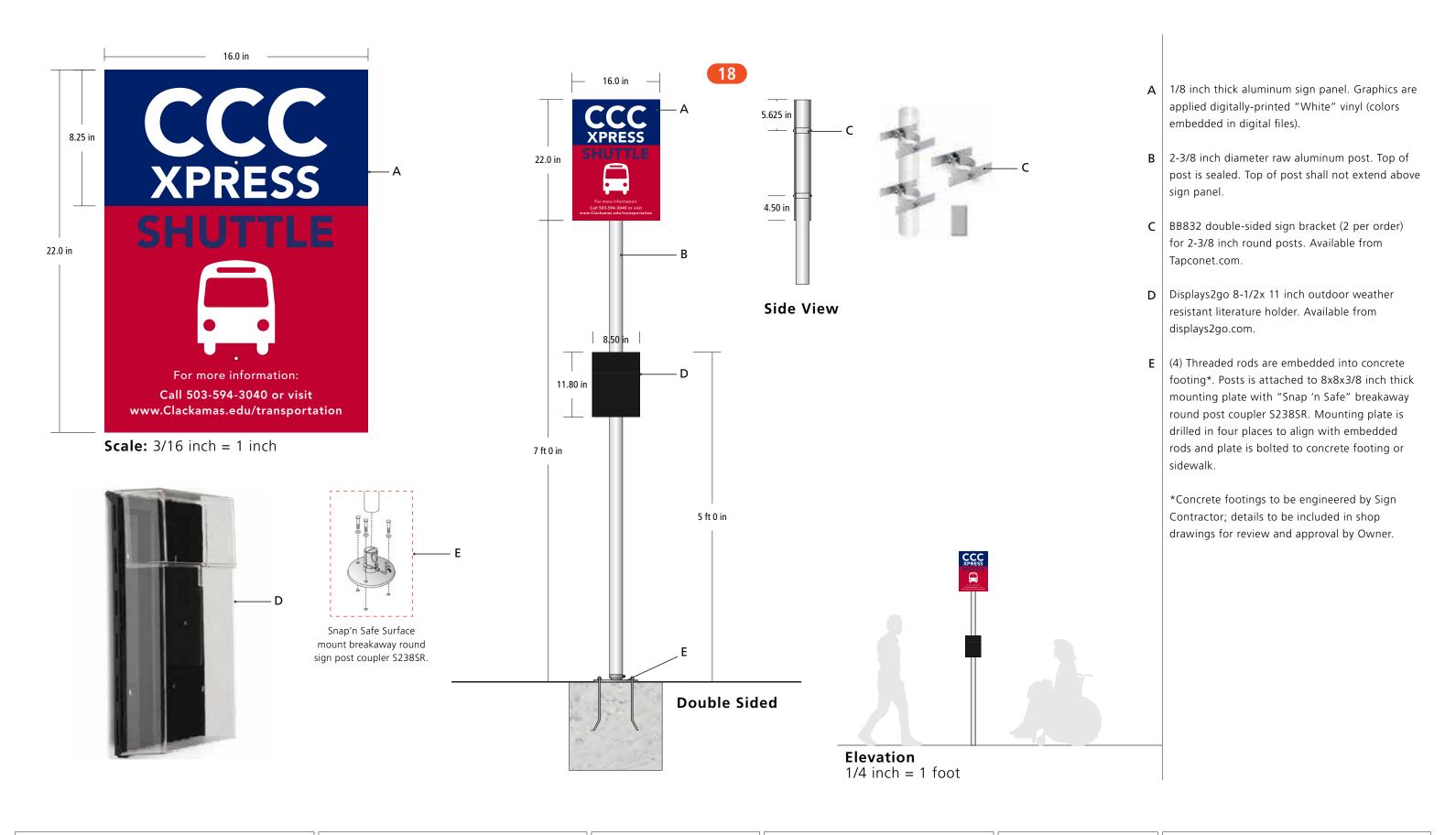


Clackamas Community College Harmony Campus Exterior Site Signage

	SCALE			
1	inch	=	1 foot	

Type E

January 2018





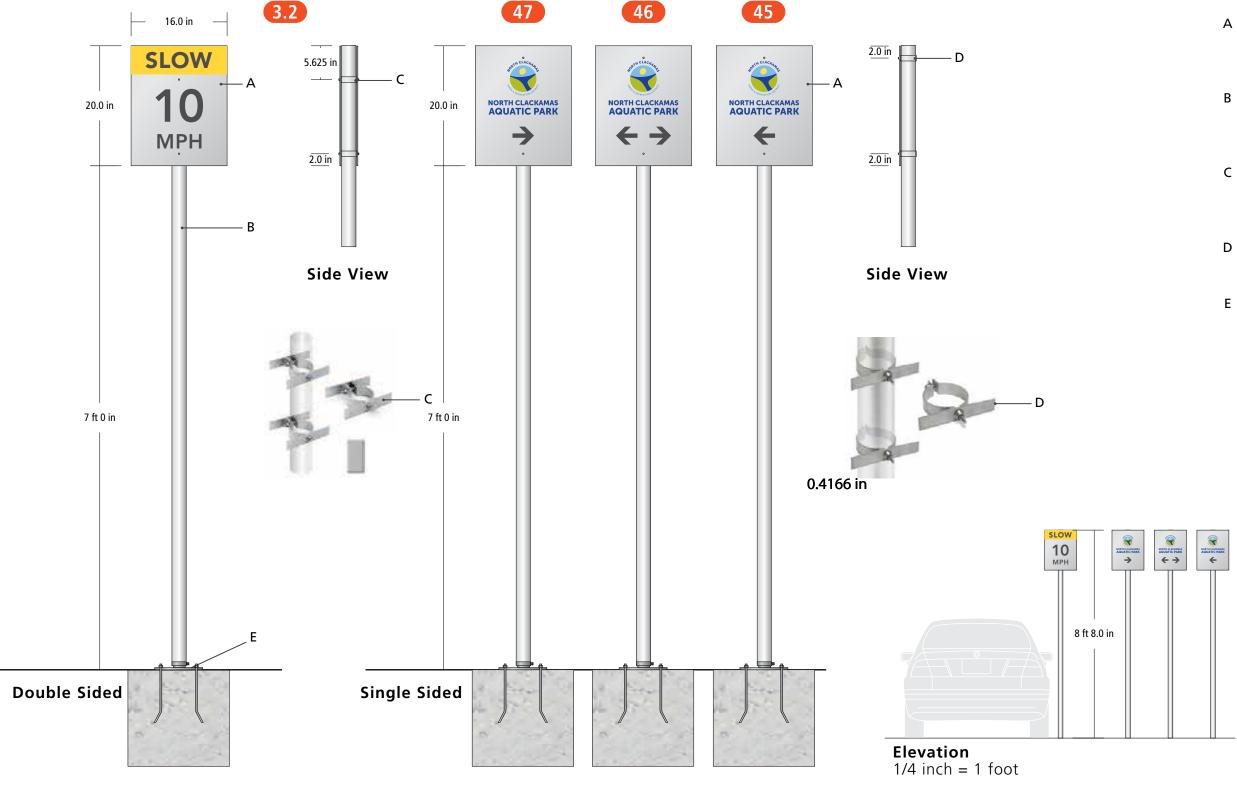


Clackamas Community College Harmony Campus Exterior Site Signage

			SCALE
/16	inch	=	1 inch

Type F.1

January 2018



- 1/8 inch thick aluminum sign panel. Graphics are applied digitally-printed "Silver" vinyl (colors embedded in digital files).
- B 2-3/8 inch diameter raw aluminum post. Top of post is sealed. Top of post shall not extend above sign panel.
  - BB832 double-sided sign bracket (2 per order) for 2-3/8 inch round posts. Available from Tapconet.com.
- Bracket single-sided sign bracket (1 per order) for 3" round posts. Available from Tapconet.com.
- (4) Threaded rods are embedded into concrete footing\*. Posts are attached to 8x8x3/8 inch thick mounting plate with "Snap 'n Safe" breakaway round post coupler S238SR. Mounting plate is drilled in four places to align with embedded rods and plate is bolted to concrete footing or sidewalk.
- \*Concrete footings to be engineered by Sign Contractor; details to be included in shop drawings for review and approval by Owner.



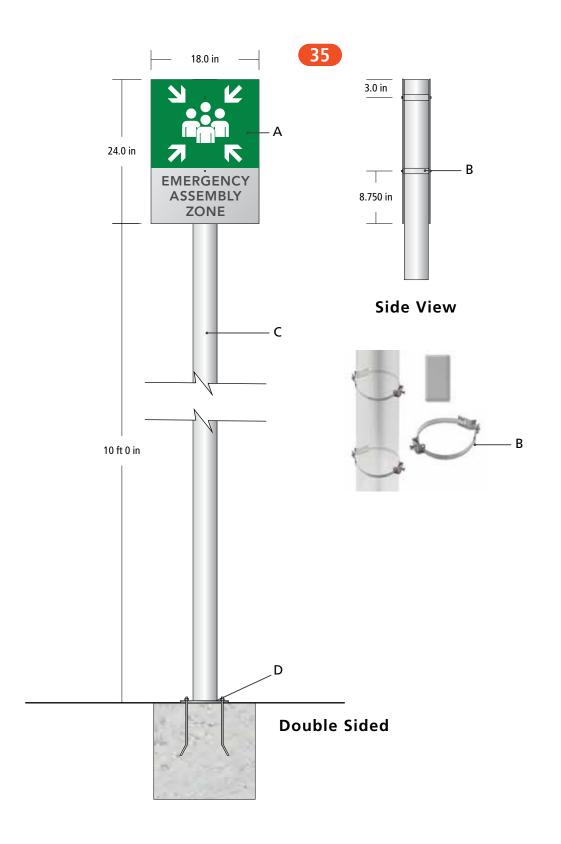


Clackamas Community College Harmony Campus Exterior Site Signage

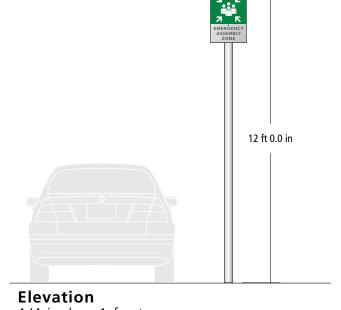
				SCALE
/16	inch	=	1	inch

Type F.2

January 2018



- 1/8 inch thick aluminum sign panel. Graphics are applied digitally-printed "Silver" vinyl (colors embedded in digital files).
- B BB7 Round Pole Bucket Bracket, double-sided. Brackets fit on 4" - 12" diameter posts. Brackets available from Tapconet.com.
- C 4 inch diameter raw aluminum post. Top of post is sealed. Top of post shall not extend above sign panel.
  - (4) Threaded rods are embedded into concrete footing\*. Posts are attached to 8x8x3/8 inch thick mounting plate. For type F.2 plate is mounted to post with "Snap 'n Safe" breakaway round post coupler S238SR. Mounting plate is drilled in four places to align with embedded rods and plate is bolted to concrete footing or sidewalk.
  - \*Concrete footings to be engineered by Sign Contractor; details to be included in shop drawings for review and approval by Owner.



1/4 inch = 1 foot

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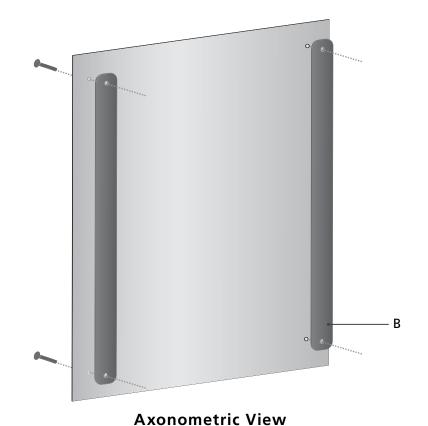
Clackamas Community College Harmony Campus Exterior Site Signage

SC		SCALE		
1/16	inch	=	1	inch

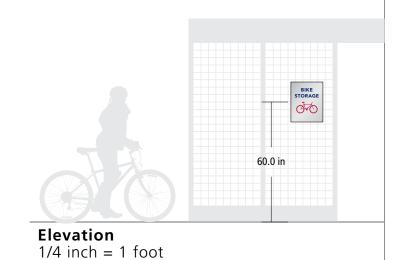
DETAIL DRAWING Type F.3

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A 1/8 inch thick aluminum sign panel. Graphics are applied digitally-printed "Silver" vinyl (colors embedded in digital files). B | Brackets are 2-1/2x 18x 1/8 inch thick aluminum.

Brackets are placed on opposite side of fence from sign panel; panel is bolted through brackets. Sign Contractor to site-verify fence conditions prior to fabrication.

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Clackamas Community College Harmony Campus Exterior Site Signage

				SCALE
3/16	inch	=	1	inch

DETAIL DRAWING Type F.4

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January 2018