



SESA CONFIDENTIAL INFORMATION

## PEDESTAL MOUNT VMS

09-TN-0017



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## Document History

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	Name	Company / Qualification	Date	Initials
<b>Written by</b>	Neil Tozier	SESA Engineering Manager	03/20/2009	
<b>Approved by</b>	Phil Perut	SESA Business Manager	04/13/2009	

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-	04/13/2009	Initial Release



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**Purpose of This Document:**

The purpose of this document is to describe the **VMS PEDESTAL MOUNT configuration provided by SESA**. The document also focuses on the design benefits and describes several standard designs.

**1. INTRODUCTION / GENERAL SPECIFICATION:**

The Pedestal Mount solution from SES America is comprised of the following major components:

1. The Pole
2. The Walkway
3. The VMS
4. Optional Access ladder

Several combinations can be provided to suit most needs.

	8 inch characters	12 inch characters	18 inch characters	Optional Ladder	Horizontal Walkway
<b>Rear Access</b>	Any configuration	Any configuration	Available with DMS models with at least 3 rows of text	Yes	Yes
<b>Front Access</b>	Available for all DMS models	Available for all DMS models	Available with all DMS models	No	No
<b>Canopy Doors</b>	NA	4 rows of text minimum	Available for DMS with at least 3 rows of text.	Yes	Yes
<b>Walk-In</b>				No	No, but side access platform is possible
<b>Dual-face</b>				No	

***This table represents Pedestal Mount design Possibilities  
Other custom sizes are available upon request***

**Note:** VMS height requirements preclude certain configurations, since a minimum height is required for Walk-In or Canopy door signs.

## **2. OVERVIEW:**

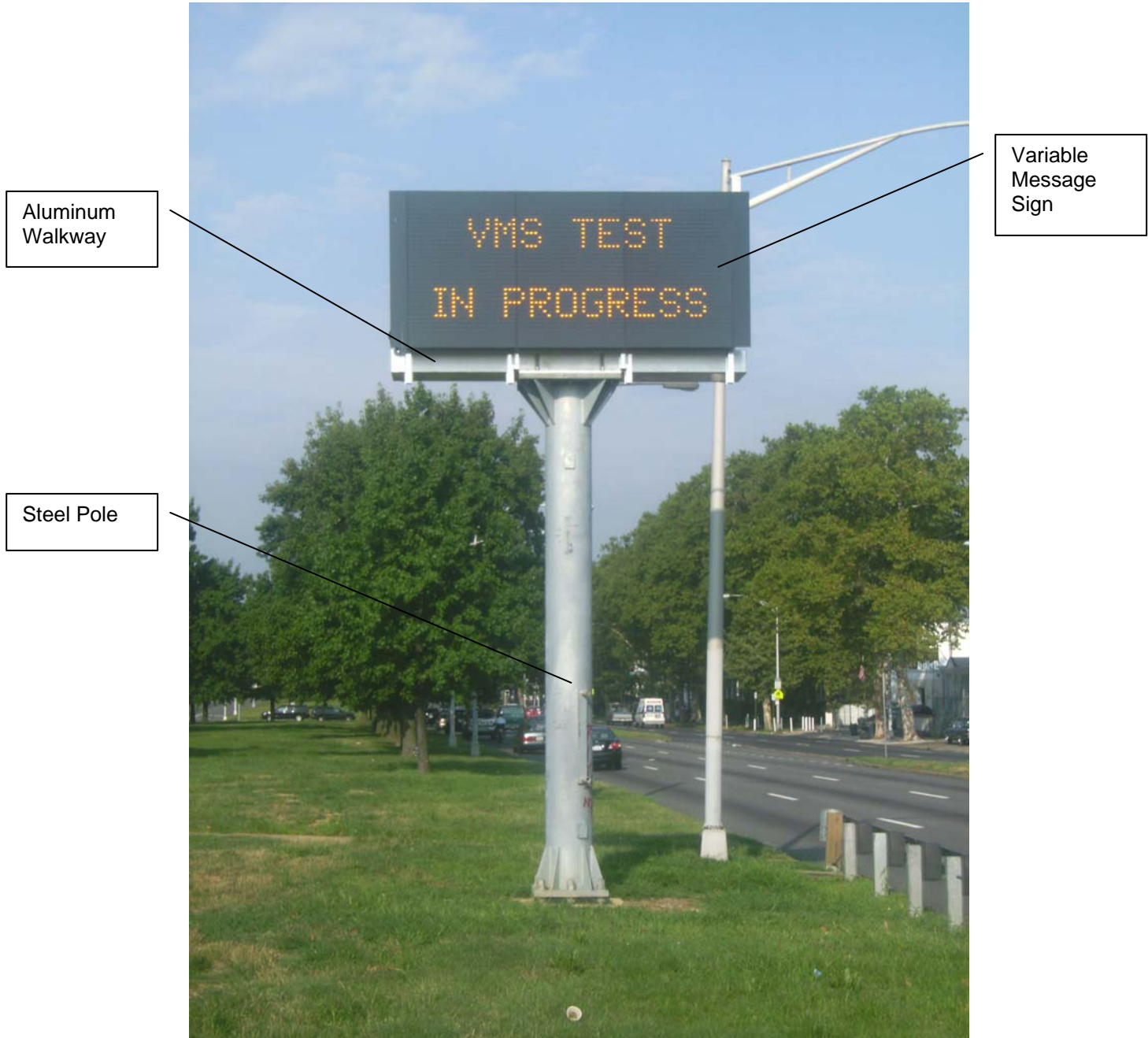
The pole is made of steel and complies with AASHTO and other DOT requirements.

The Walkway is made of aluminum and is mounted on top of the pole.

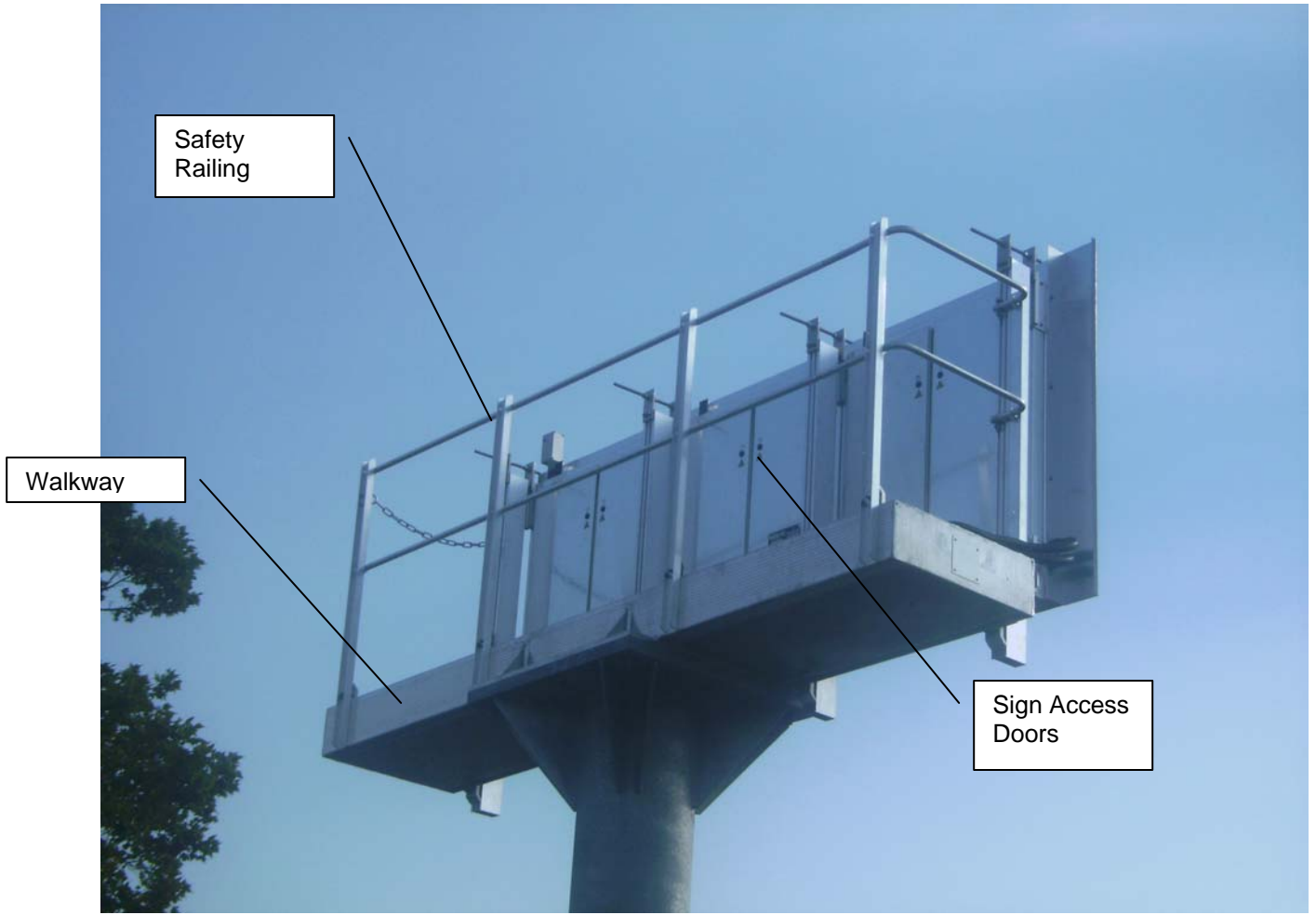
Safety railings are mounted around the perimeter of the walkway.

The sign is attached to the walkway.

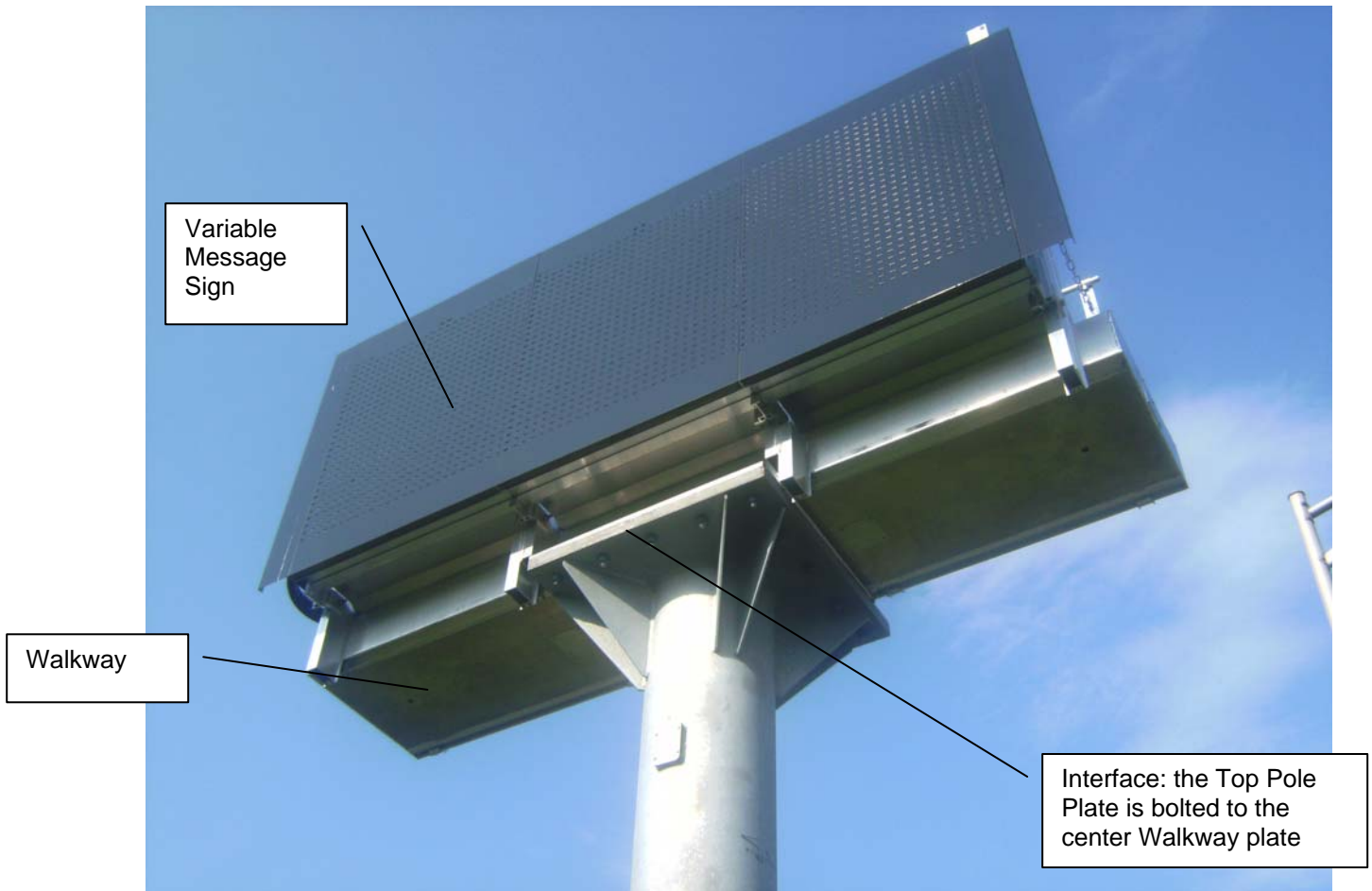
The following photos depict a typical mounting arrangement:



**Example of Pedestal Mount – Front View**



**Example of Pedestal Mount – Rear View**



**Example of Pedestal Mount – The interface between the pole and the walkway.**

### **2.1. The Pole:**

In most of the cases, SES America does not provide the steel pole directly. However, we can partner with pole providers and can also recommend suppliers.

In any case, the pole interface plate design needs to be coordinated very carefully between SESA and the pole provider. This interface is very easy to design and complies with most of the DOT recommendations.

As an alternative, SES America can provide an aluminum pole. An aluminum solution has numerous advantages:

- Cheaper than steel,
- Lighter and therefore requires a less expensive foundation,
- No maintenance is required no painting, galvanizing, etc...



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## **2.2. The Walkway:**

The Walkway has two main purposes. First, it holds the sign, second it allows a very easy and safe access to the DMS components. The Walkway is designed to fit each sign and customized for each model, with a length at least equal to the sign length. It provides a 2 foot wide minimum platform surrounded by a safety railing. The top is equipped with a slip-resistant aluminum surface.

## **2.3. The DMS:**

The pedestal design is very versatile and can accommodate any type of SESA Messenger 6000 DMS:

- Front Access,
- Rear doors,
- Canopy doors,
- Walk-In.

Note on Front Access design: In the case of front access, the “Walkway” is used to support the sign and can be used to access the internal components. The sign is attached at the front of the “walkway”.

## **2.4. Optional Access Ladder DMS:**

The Access Ladder offers added value to the pedestal mount design, because it decreases the cost of regular access for maintenance. It literally eliminates the cost of an expensive bucket truck. It also reduces the response time, since maintenance crews can access the sign components without prior notice or arrangements.

The SESA design includes ladder, safety mesh and a lockable access door.

*\* Note: Our access ladders have been used in the state of Pennsylvania for more than 15 years.*



Rear Walkway

Ladder with Access Door shown in closed position



Access ladder with safety mesh



Safety Railing



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### **3. STANDARD SOLUTIONS:**

#### ***3.1. Canopy Doors DMS:***

Each design has its own benefits, but the best solution in most cases is a **Canopy Door Pedestal Mount DMS:**

**The benefits of a Canopy doors signs are:**

- ✓ Protects maintenance personnel from weather,
- ✓ Prevents any tools from falling onto the highway,
- ✓ Eliminates the need of ventilation devices and the associated maintenance burden,
- ✓ Provides fully water-tight enclosure when doors are closed,
- ✓ Improves covered working environment for high-temperature climates,
- ✓ Eliminates distraction to motorists during maintenance operations.

#### ***3.2. Rear Access DMS:***

Rear-Access Sign is also an ideal solution for a pedestal-mount DMS.

The benefits are:

- ✓ Easy access to all components without having to remove any sign components,
- ✓ Eliminates distraction to motorists during maintenance operations,
- ✓ Easy mounting on poles or cantilevers,
- ✓ Available for all sign dimensions (from 8 inch to 18 inch).



**Rear Access DMS mounted on Aluminum pole**



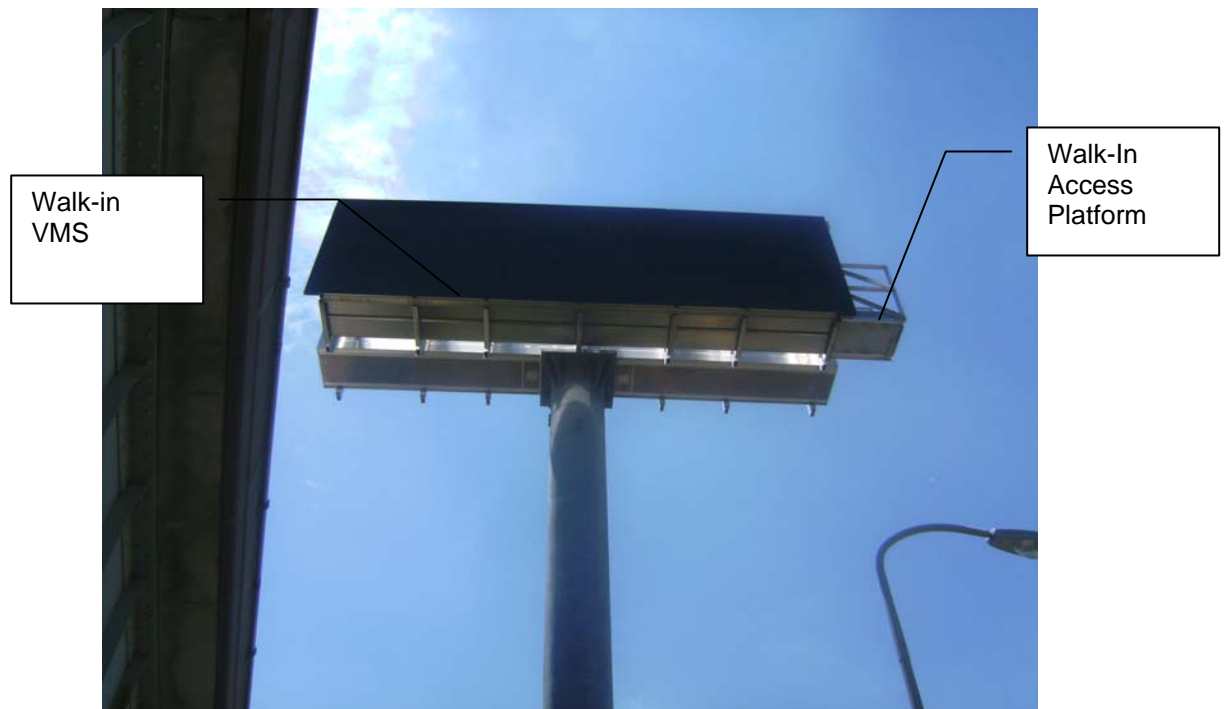
**Rear Access DMS mounted on Steel pole**

### 3.3. Walk-In DMS:

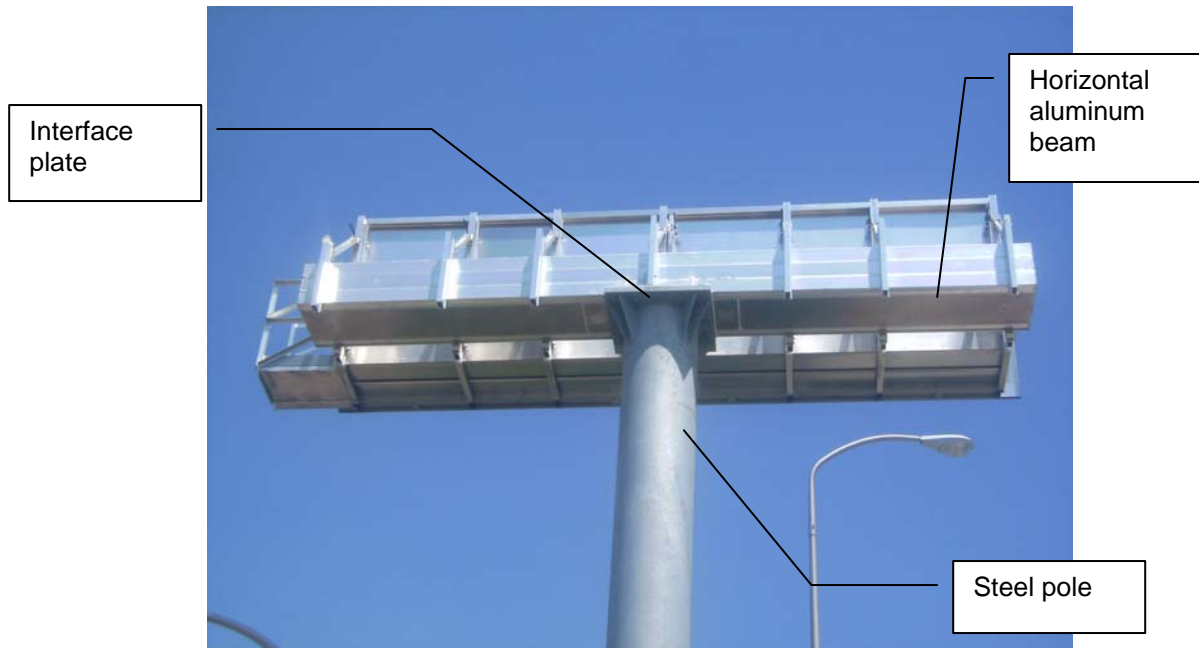
Despite the fact that Walk-In DMS are usually designed to be mounted on overhead structures, it is also possible to have them mounted on a pedestal. SESA has installed pedestal mount Walk-In signs on poles as tall as 40 feet!

Benefits of Walk-In DMS are:

- ✓ Guaranteed easy access to all components without having to remove sign components,
- ✓ Non-skid 24 inch wide aluminum floor for the use of maintenance personnel,
- ✓ No difficult-to-maintain ductwork or heavy ventilation systems,
- ✓ Compensating tilted floor: Since the VMS can be tilted to optimize its optical axis, the floor of the walk-in area has a fixed slope of 4-degrees toward the rear of the sign to minimize worker fatigue,



**Pedestal Mount Walk-In – Front view**



**Pedestal Mount Walk-In – Rear view**

### **3.4. Front Access DMS:**

When a front access DMS is mounted on a pedestal, it is mounted in front of the horizontal beam. There is no walkway, as shown in the attached drawing number 0390882.

For increases benefits and to guarantee easier access, a front-access DMS can easily be replaced by a rear-access design.

### **3.5. Dual-face DMS:**

The Dual-face DMS is a unique approach proposed by SESA. It combines advantages of a pedestal mount with a Walk-In or Rear Access DMS.

The principle is very easy: two DMS are mounted back-to-back on a horizontal walkway, using the exact same principle as the other pedestal-mount DMS designs. The Walkway in between the two DMS is used to access the internal components of either sign.

Please refer to drawing number 0129300.

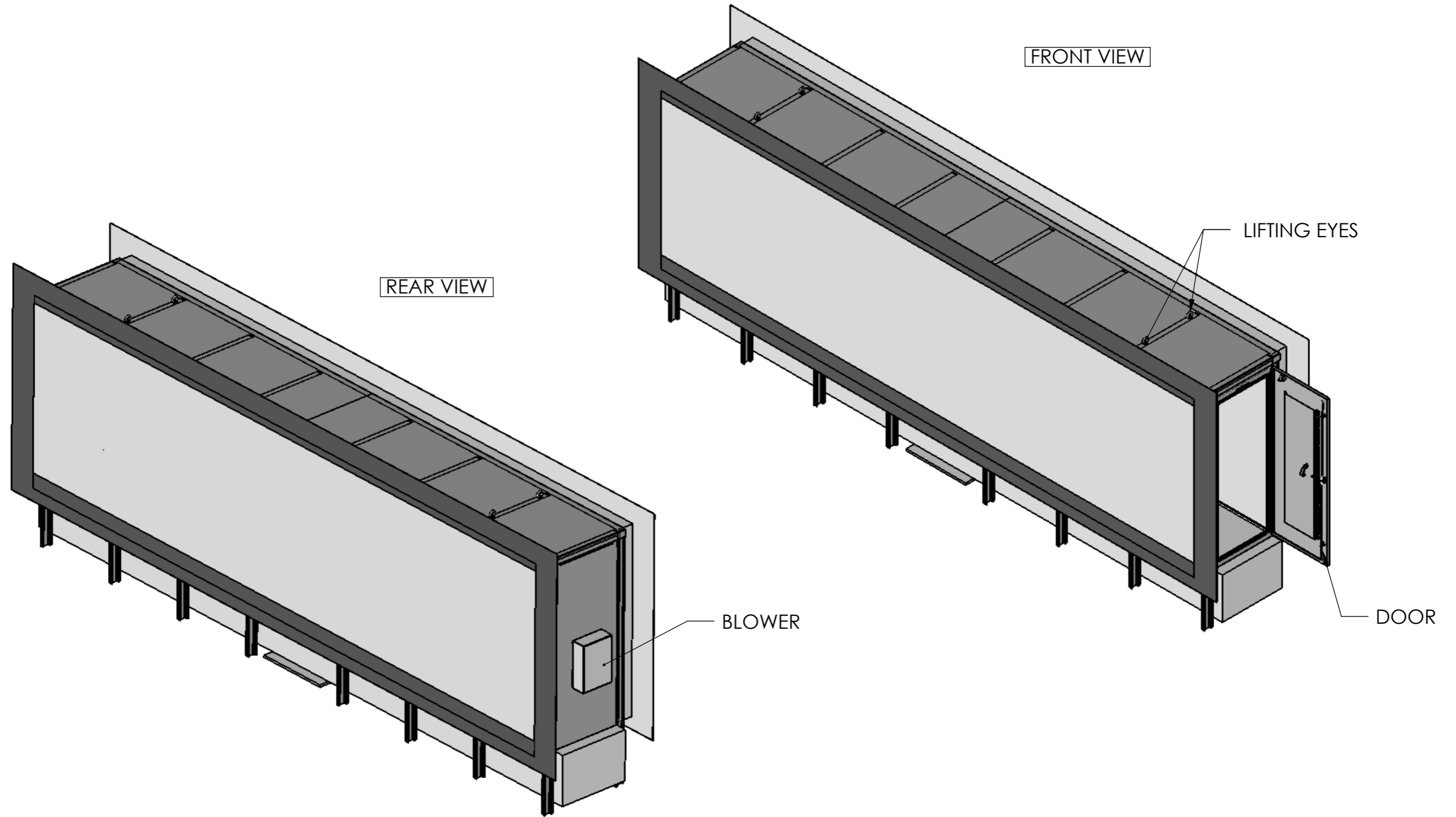



#### **4. References:**

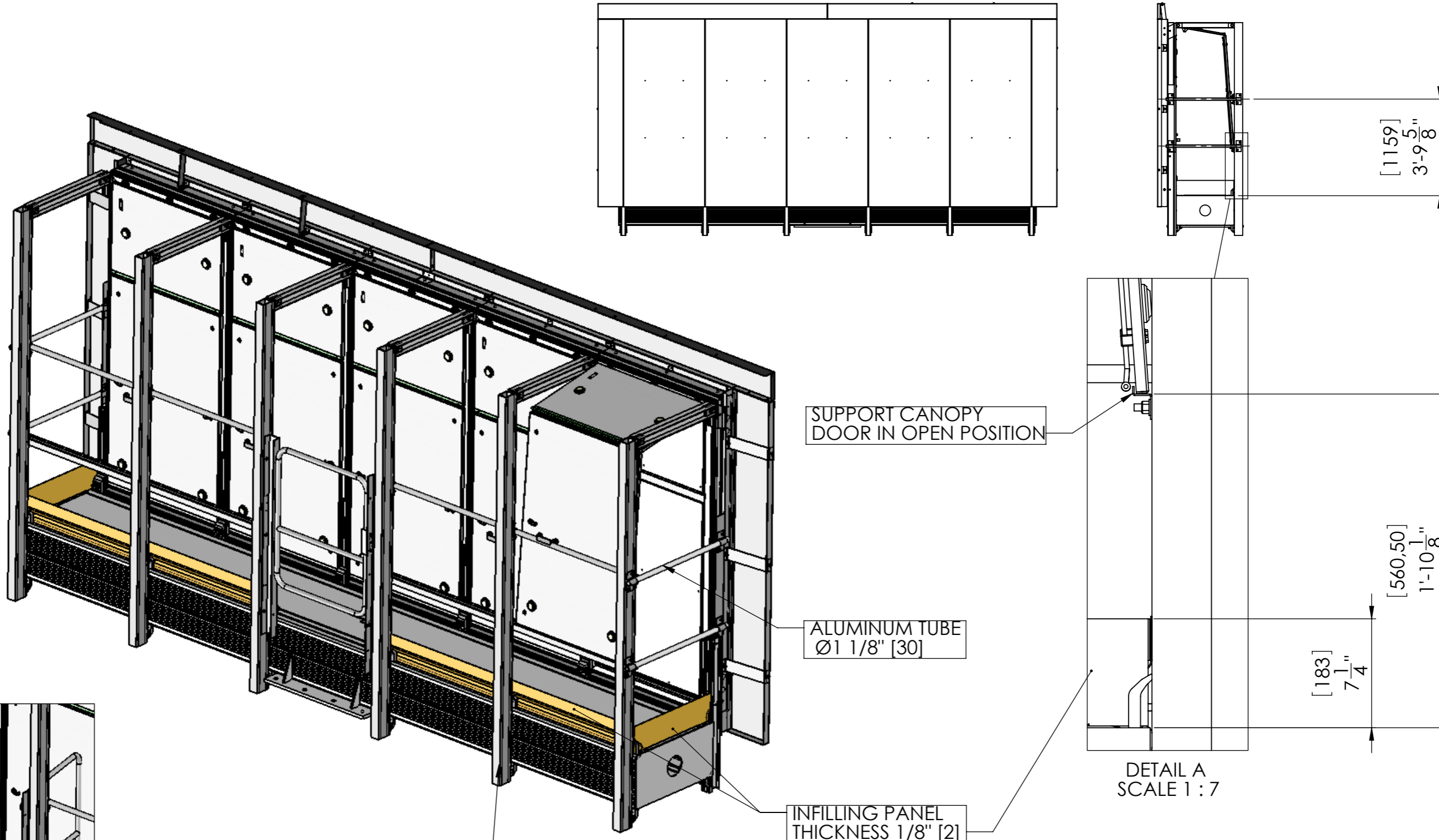
SES America has many years of experience in designing and manufacturing pedestal mount VMS signs. Pedestal supports are currently in use in several States, including Rhode Island, Washington and Pennsylvania, some of which were installed 20 years ago and are still in use.

#### **5. Appendices:**

- Canopy doors drawing #01293200
- Dual Face DMS drawing #01291300



A	12/03/08	BONNEAU	GIRAULT	ORIGINAL ISSUE
REV	DATE	DRAWN	CHECKED	MODIFICATION
TITLE				JOB NAME:
DOUBLE FULLMATRIX 28 x 110 PIXELS 18"				
BACK TO BACK				
				JOB CODE N° :
				JOB N° :
				SCALE : 1:40
				SIZE A3
			S.E.S AMERICA 90 Douglas Pike, Smithfield, RI 02917 TEL : (401) 232-3370	
			DRAWING N° <b>01291300</b>	



SCALE 1 : 25



GATE IN OPEN POSITION

SLOT EXTRUSION TUBE 60x100  
N°0000952300

SUPPORT CANOPY  
DOOR IN OPEN POSITION

ALUMINUM TUBE  
Ø1 1/8" [30]

INFILLING PANEL  
THICKNESS 1/8" [2]

DETAIL A  
SCALE 1 : 7

[1159]  
3'-9 5/8"

[560,50]  
1'-10 1/8"

[183]  
7 1/4"

A	12/05/08	BONNEAU	GIRAULT	ORIGINAL ISSUE
REV	DATE	DRAWN	CHECKED	MODIFICATION
TITLE				JOB NAME:
M6320				
FULLMATRIX 28 x 75 PIXELS 18"				
				JOB CODE N° :
				JOB N° :
				SCALE : 1:50
				SIZE A3
DRAWING N°				
01293200				



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