

Compare Responses

Event #: 7065

Event Name: Five-Color Matrix Message Signs

Number Of Lines: 4

Status: Pending Award

Performance Evaluation Score	Safety Zone Specialists, Inc. David Vespa	Florida Transcor Inc. Anthony Robbins	Stripping Service and Supply Lori Tardif
Supplier Total Bid Amount	(Award All valid only when output is same for all lines) 31,250.20	(Award All valid only when output is same for all lines) 32,775.00	(Award All valid only when output is same for all lines) 32,901.00
Total Event Score			
Line 1: Open: WACO 5-COLOR MATRIX MESSAGE SIG Output: PO			
Award Quantity 0.0000	0.0000	0.0000	0.0000
Line Quantity 1.0000 EA	1.0000	1.0000	1.0000
Unit Price	27,150.20000	28,650.00000	29,176.00000
Extended Price	27,150.20	28,650.00	29,176.00
Total Line Score			
Delivery Date	05/31/2019	05/24/2019	06/30/2019
UOM Detail	Each		
Vendor Item	WVTM-5C	WVTM-5C	WVTM-5C
Vendor Item Description	5-Color Matrix Message Sign	WANCO 5-Color Matrix Msg Sign	WANCO 5-Color Matrix Message
Line 2: Open: OPTION ADD: RADAR Output: PO			
Award Quantity 0.0000	0.0000	0.0000	0.0000

Compare Responses continued...

Line Quantity 1.0000 EA	1.0000	1.0000	1.0000
UnitPrice	1,000.00000	1,000.00000	900.00000
ExtendedPrice	1,000.00	1,000.00	900.00
Total Line Score			
Delivery Date	05/31/2019	05/24/2019	06/30/2019
UOM Detail	each		
Vendor Item	RADAR	RADAR OPTION	RADAR OPTION
Vendor Item Description	Radar Option	Radar Option	Radar Option
Line 3:Open:OPTION ADD: MODERN PACKAGE WITH Output: PO			
Award Quantity 0.0000	0.0000	0.0000	0.0000
Line Quantity 1.0000 EA	1.0000	1.0000	1.0000
UnitPrice	1,100.00000	1,100.00000	1,000.00000
ExtendedPrice	1,100.00	1,100.00	1,000.00
Total Line Score			
Delivery Date	05/31/2019	05/24/2019	06/30/2019
UOM Detail	Each		
Vendor Item	MODEM	4G MODEM WITH GPS	4G MODEM W/ GPS
Vendor Item Description	Modem Package with GPS	4G Modem with GPS	4G Modem w/ GPS
Line 4:Open:OPTION ADD: TRAFFIC DATA CLASSIF Output: PO			
Award Quantity 0.0000	0.0000	0.0000	0.0000
Line Quantity 1.0000 EA	1.0000	1.0000	1.0000
UnitPrice	2,000.00000	2,025.00000	1,825.00000

Compare Responses continued...

Extended Price	2,000.00	2,025.00	1,825.00
Total Line Score			
Delivery Date	05/31/2019	05/24/2019	06/30/2019
UOM Detail	Each		
Vendor Item	TRDCS	WANCO TRAFFIC DATA CLASSIFIER	WANCO TRAFFIC DATA CLASSIFIER
Vendor Item Description	Traffic Data Classifier System	Wanco Traffic Data Classifier	Wanco Traffic Data Classifier

Response For Supplier: Safety Zone Specialists, Inc.

Event # : 7065-0

Name: Five-Color Matrix Message Signs

Reference: Savannah Hilton Head Airport

Description: The purpose of these specifications is to describe the minimum requirements for the purchase of, one new, five- color matrix message sign for the Savannah Airport Commission.

Preview Date:

Q & A Open Date: 04/03/2019 05:30:00 PM

Open Date: 04/03/2019 05:00:00 PM

Q & A Close Date: 04/22/2019 12:00:00 PM

Close Date: 04/30/2019 01:30:00 PM

Dispute Close Date:

Responded To: 4 out of 4 lines

Total Bid Amount: \$31,250.20 USD

Response Attachments

Attachment

Bid 7065.pdf

Line Responses

Line 1: WANCO 5-Color Matrix Message Signs Model MVTM-5C

Description: WANCO 5-Color Matrix Message Sign Model MVTM-5C

Item: WACO 5- COLOR MATRIX MESSAGE SIG WANCO 5-Color Matrix Message Sign Model MVTM- 5C

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Bid Quantity: 1.0000

Unit Price: 27,150.20000

Extended Price: 27,150.20

No Charge: No

No Bid: No

Delivery Date: 05/31/2019

Vendor Item: WVTM-5C 5-Color Matrix Message Sign

Event # 7065-0: Five-Color Matrix Message Signs

Line 2: Option Add: Radar

Description: Option Add: Radar

Item: OPTION ADD: RADAR Option Add: Radar

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 1,000.00000

Extended Price: 1,000.00

No Charge: No

No Bid: No

Delivery Date: 05/31/2019

Vendor Item: RADAR Radar Option

Line 3: Option Add: Modern Package with GPS

Description: Option Add: Modern Package with GPS

Item: OPTION ADD: MODERN PACKAGE WITH Option Add: Modern Package wit GPS

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 1,100.00000

Extended Price: 1,100.00

No Charge: No

No Bid: No

Delivery Date: 05/31/2019

Vendor Item: MODEM Modem Package with GPS

Line 4: Option Add: Traffic Data Classifier System

Description: Option Add: Traffic Data Classifier System

Item: OPTION ADD: TRAFFIC DATA CLASSIF Option Add: Traffic Data Classifier System

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 2,000.00000

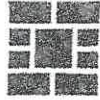
Extended Price: 2,000.00

No Charge: No

No Bid: No

Delivery Date: 05/31/2019

Vendor Item: TRDCS Traffic Data Classifier System



FIVE-COLOR MATRIX MESSAGE SIGN
FOR THE SAVANNAH AIRPORT COMMISSION
Event No. 7065

Bidder's Checklist – Envelope Requirements

This checklist shall be attached to the outside of the envelope of a bid. Failure to complete, sign, and attach this checklist may result in a bid being deemed nonresponsive.

Nonresponsive bids will be returned to the vendor unopened.

**Electronically submitted bids, if allowed, do not require this checklist. Please see event summary online to determine if electronic responses will be accepted. **

Firm name: Safety Zone Specialists, Inc
Contact person: David Vespa
Address: PO Box 90764 Lakeland, FL 33804
Phone number: 863-984-1385
Email address: david@safetyzonespecialists.com

Envelope must contain the following documents:

Initials	Document
✓	Bid Proposal Form, Including Acknowledgement of Any Addenda
✓	Exception Sheet
✓	Contractor Affidavit and Agreement (Employee Eligibility Verification)
✓	Affidavit Verifying Status for City of Savannah Benefit Application
✓	Any Other Requirements as Stated in the Specs

By signing below, bidder is attesting that all items listed in the checklist above have been included in the envelope.

Signature: [Signature]

Date: 4-25-19

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKE LAND, FLORIDA 33804

**FIVE-COLOR MATRIX MESSAGE SIGN
FOR THE SAVANNAH AIRPORT COMMISSION
EVENT NO. 7065**

SPECIFICATIONS AND SPECIAL CONDITIONS

- 4.0 The purpose of these specifications is to describe the minimum requirements for the purchase of one new, five-color matrix message sign for the Savannah Airport Commission.

To submit pricing electronically for this event, enter pricing for each line item shown under the lines tab on the event summary. To enter pricing manually, complete the attached bid proposal form. Manually submitted bids must be submitted on the bid proposal forms contained in these specifications in order to be considered.

- 4.1 **Five-color matrix message sign for the Savannah Airport Commission.** Five-color LED display that can present text, graphics, or a combination of both. Sign is portable and self-powered, requiring no permanent installation or wiring. Self-contained onboard computer and a touchscreen controller. Comes configured with preprogrammed standard messages, and capable of custom message creation with included computer software. Sign display panels designed to rotate independent of the trailer and its height is fully adjustable. Jack legs and optional outriggers installed to provide stability. Power is provided by maintenance free batteries, which are charged by an automated solar charging system.

Material brand identified is used merely as a specification and not as a statement of a preference for the specific product identified. Unless otherwise stated, items equal to the identified brand name will be acceptable, considering quality, workmanship, economy of operation, and suitability for the purpose intended. Items must meet these minimum requirements.

4.1.1 **WANCO 5-Color Matrix Message Signs Model MVTM-5C**

4.1.2 **Display**

- Large, five-color, full-matrix display for text and graphics, size 104"W x 59"H x 6"D. Coated, oven baked, flat black powder-coat finished weather-resistant cabinet.
- Window is anti-glare Lexan solar-grade polycarbonate with bulb-type weather seal to ensure tight fit and seal between window and door frame.
- Wiring service loop from computer bot to display cabinet is routed inside liquid-tight loom and P-clamped to trailer frame. Service loop length is designed to all sign rotation.
- Ventilation – cooling fans installed to circulate air through, and out of the cabinet to cool electrical components. Duct installed to ensure even airflow. Temperature sensors mounted on the photocell PC board inside the cabinet to control fan operation. Each fan has its own thermal settings, adjustable with the onboard computer, to optimize battery power usage.
- Storage – when lowered for storage and transport, the display cabinet rests in tow support cradles, parallel to the trailer length, no locking pins required.

4.1.3 **Display Modules**

- Display matrix is comprised of a series of display modules laid out in a grid across the inside of the display cabinet. Each module has a matrix of LEDs installed on its face, which light up to show a portion of the configured message. Each module features the necessary electronics and coatings to ensure performance and durability.
- Display module to be installed in any position in the matrix without repositioning the DIP switches
- Modules have quick-connect electrical connectors for easy servicing. All wiring terminates at a single terminal strip inside the display cabinet.
- Module replacement – designed to all exchange in less than two minutes with a 5/16" nut driver socket or slotted screwdriver. Once new module is installed, a one-step initialization

**SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804**

process causes each module to sense its position in the full matrix display. Initialization is accomplished using the sign's controller.

- Module size: 16.0" w x 13.15" high, nominal
- Material: FR4 glass-reinforced epoxy laminate, double sided, black solder mask with white silkscreen.
- Coating: 5-mil military spec, low-VOC, silicone conformal coating provides long-term protection against moisture and atmospheric contaminants, resist corrosion and shorts due to high humidity.
- Vibration Mounts: all display modules to be mounted on rubber vibration-isolation mounts
- Minimum temp limits -40 to 176-degree F

4.1.4 Pixels

- A cluster of 15 LEDs form a "pixel"
- Each pixel has 3 LEDs of each color (amber, blue, green, red, white)
- Pixel size 1.0625" diameter
- Full matrix 60 pixels wide, 32 pixels height, 1920 pixels total
- Pixel pitch 42mm, horizontal and vertical

4.1.5 LED's

- Color range
 - Amber 589.5 to 592.0nm
 - Blue 470 to 475nm
 - Green 525 to 530nm
 - Red 620 to 625nm
 - White not applicable
- Current 10mA peak-pulsed forward current
- LED Shields: each LED is shielded from the other LED's in each pixel, preventing "phantom" lighting of unlit LEDs by lit LEDs reducing reflected light, improving angularity, and enhancing the clarity of display.

4.1.6 Font

- 12 fonts
- Default size 5x7 pixels, 8.66" x 11.97", 4 lines of 10 characters per line, maximum

4.1.7 Software design

- Driver: LED's controlled through 10mA pulse-width modulation design
- Addressing: Each display module address is selected through a software command; no DIP switches are used. The address does not change until reprogrammed, preventing the message from shifting due to and individual module fault.
- Pixel test: Each module is equipped with individual pixel failure notification.

4.1.8 Control System

- Computer: Self-contained onboard computer, located inside battery box, comprises main motherboard and power control board, controls sign functions.
- Wiring: one CPC connector for wiring cable from message sign, once CPC connector for wiring cable from power supply
- Ports: one USB power/communication port for connection to controller. One Ethernet communications port for optional connection to laptop computer or modem. Two DB9 serial ports for connection to auxiliary devices.
- Controller: touchscreen interface, connected to computer for programming and running sign display. No laptop computer required, but a laptop with Wanco software can be connected in place of controller if desired.

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

- Display: full color, backlit, 7" display 800x480 pixels, automatic shut off after inactivity
- Interface: menu-based structure, accessed with virtual buttons on the touchscreen display, provides access to all sign functions including programming messages. Virtual keyboard appears when required for text entry. Multi-level password protection restricts access. Day/night virtual button. Message on sign is always shown while interface is active.

4.1.9 PC Boards

- Data ports: 1 serial port, 2 USB ports, 1 Ethernet port

4.1.10 Message Design/Type

- Message Graphics computer software shall be included for creating custom messages
- Able to create, import and edit graphics
- Add and format text
- Export messages to sign and save files for copying and editing
- Message types
 - Quick-messages: Easy quick message activation
 - Permanent: Over 90 preprogrammed permanent messages, including arrows and FHWA standards
 - Changeable: 250 changeable messages stored in NV Flash
 - Temporary: 10 temporary or volatile messages, for ITS systems
 - Blank: easy sign blanking/power off
- Interface display: WYSIWYG (What You See Is What You Get) while programming
- Text alignment: Selectable: left, center, or right; and top, middle or bottom
- Blinking: each character can individually blink, individual lines of a multi-line message can blink, the entire message can blink, and adjustable timing and duty cycle.
- Message pages: Maximum 10 sequential "pages" per message, sequencing speed from 0.1 to 25.5 sec.
- Scheduling: Real-time clock and calendar with DST control

4.1.11 Setup

- Hydraulic lift for raising sign display on tower
- Tower rotation 360 degrees for optimal positioning
- Single disk brake holds tower in place during operation, while a cradle supports and holds board in travel position.

4.1.12 Power System

- Battery powered with automatic solar panel charging
- Charging system shuts down when batteries are fully charged, preventing damage
- Power system to allow battery charging with solar panels or commercial power
- Cooling fans to protect battery charger from overheating
- Locked battery box to prevent unauthorized access

4.1.13 Maintenance

- Maintenance-free batteries
- Easily replaceable individual display modules in case of damage
- Standard trailer tires
- Heavy-duty bolt-on steel fenders which can be easily replaced if damaged
- Durable powder-coat finish to resist elements
- Nema Type 7H x 6V
- Driver On/Off
- Warranty 5-Year No Compromise Warranty

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

4.2 **Optional Add: provide pricing for each of the following optional additions.**

4.2.1 **Radar**

- Approach-only K-band radar
- RS232 serial port for connection to message sign control console
- Stationary mount
- Measures speeds from 5 to 138mph
- Distance range of 1000ft
- FCC tested and registered
- Detection range 1000ft @ 5 to 85 mph
- Accuracy plus/minus 1mph from 5-40mph, 2mph from 40-100mph
- Frequency 24.15 plus/minus 0.05 GHz
- Antenna Planar array
- Beam width 12 degrees
- Supply voltage 6 to 304V
- Protection fused, and reverse polarity protected
- Baud rate 1200 baud, 8 bits, no parity
- Interface RS232, DB-9 connector pinout

4.2.2 **Modem Package with GPS**

- Remote access to Wanco message sign using internet-connected computer, tablet or smartphone.
- Ability to monitor, program and run diagnostics from office.
- Includes Wanco's remote NTCIP central control software and Wanco Fleet Manager service.
- Includes Wanco provided modem and Wanco Cellular Service.
- LTE with fallbacks
- Multiple I/O for message sign telematics
- Precision GPS built in
- Programmable alarms

4.2.3 **Traffic Data Classifier System**

- Collects and classifies traffic data
- Nonintrusive- no wires, loops or hoses
- Analytic software for data analysis and graphing
- Remote access with optional modem

5.0 **General Conditions**

The bid response shall include all documents required in the bidder's checklist.

All referenced documents must be completed and returned in their entirety to constitute a complete bid.

5.2 **Original invoices should be sent to:**

Savannah Airport Commission
Accounts Payable
400 Airways Avenue
Savannah, Georgia 31408

5.3 **The vendor is responsible for determining and acknowledging any addenda issued in connection with this bid solicitation. All addenda issued for this event must be acknowledged in order for a bid to be considered.**

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

- 5.4 To be awarded bids, vendors must be registered as suppliers on the City of Savannah's website at www.savannahga.gov.
- 5.5 This contract will be awarded to the vendor offering the lowest net price to the City, and meeting or exceeding all specifications herein.

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

EXCEPTION SHEET

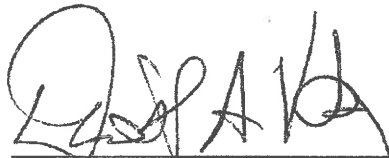
Event #7065

If the commodity(ies) and/or services proposed in the response to this bid is in anyway different from that contained in this proposal or bid, the bidder is responsible to clearly identify by specification section number, all such differences in the space provided below. Otherwise, it will be assumed that bidder's offer is in total compliance with all aspects of the proposal or bid.

Below are the exceptions to the stated specifications:

NONE

4/25/19
Date



Signature
Safety Zone Specialists, Inc.

Company
President

Title

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

BID PROPOSAL FORM

(SUBMIT AS THE COVER SHEET)

City of Savannah Purchasing Department
301 W. Oglethorpe Avenue
2nd floor
Savannah, Georgia 31401
ATTN: Purchasing Director

EVENT NUMBER: 7065

Business Location: (Check One)

☐ Chatham County
☒ City of Savannah
☐ Other

ALL BIDDERS MUST BE REGISTERED VENDORS ON THE CITY'S WEBSITE TO BE AWARDED AN EVENT. PLEASE REGISTER AT WWW.SAVANNAHGA.GOV.

MANUALLY SUBMITTED BIDS MUST BE SUBMITTED ON THIS BID PROPOSAL FORM IN ORDER TO BE CONSIDERED.

Name of Bidder: Safety Zone Specialists, Inc

Street Address: PO Box 90764

City, State, Zip Code: Lakeland, FL 33804-0764

Phone: 863-984-1385 Fax: _____

Email: cbuid@safetyzonespecialists.com

DO YOU HAVE A BUSINESS TAX CERTIFICATE ISSUED IN THE STATE OF GEORGIA? (CHECK ONE) YES: _____ NO: ☒

FROM WHAT CITY/COUNTY _____
TAX CERTIFICATE #: _____ FED TAX ID #: 59-3122879

INDICATE LEGAL FORM OF OWNERSHIP OF BIDDER (STATISTICAL PURPOSES ONLY):
CHECK ONE: ☒ CORPORATION ☐ PARTNERSHIP
☐ INDIVIDUAL ☐ OTHER (SPECIFY: _____)

Do you plan to subcontract any portion of this project? Yes _____ No ☒
If yes, please complete the attached schedule of DBE participation. Also complete the schedule if you will be using any DBE suppliers.

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

ADDENDA ACKNOWLEDGEMENT

My signature below confirms my receipt of all addenda issued for this proposal.


Signature

*This acknowledgement is separate from my signature on the fee proposal form. My signature on the fee proposal form will not be deemed as an acknowledgement of addenda.

THE UNDERSIGNED PROPOSES TO FURNISH THE FOLLOWING ITEMS IN STRICT CONFORMANCE TO THE BID SPECIFICATIONS AND BID INVITATION ISSUED BY THE CITY OF SAVANNAH FOR THIS BID. ANY EXCEPTIONS ARE CLEARLY MARKED IN THE ATTACHED COPY OF BID SPECIFICATIONS.

ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT PRICE	TOTAL
1	WANCO 5-Color Matrix Message Signs Model MVTM-5C	1 each	27150.20	27150.20
2	Option Add: Radar	1 each	1000.00	1000.00
3	Option Add: Modem Package with GPS	1 each	1100.00	1100.00
4	Option Add: Traffic Data Classifier System	1 each	2000.00	2000.00

TOTAL BID \$ 31250.20

PAYMENT TERMS: PLEASE CHECK ONE AND FILL IN BLANKS

(Minimum of 10 working days must be allowed for discount to be considered in bid award)

☐ Less ☐ % ☐ Days Prompt Payment Discount (if offered)

()

☒ Net - 30 Days

(no discount offered)

- 0 -

TOTAL NET BID

\$

=====

TIME REQUIRED FOR DELIVERY AFTER RECEIPT OF ORDER: 28 DAYS

I certify this bid complies with the General and Specific Specifications and Conditions issued by the City except as clearly marked in the attached copy.

David A Vespa
Please Print Name


Authorization Signature

4-25-19
Date

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

NON-DISCRIMINATION STATEMENT

The prime contractor / bidder certifies that:

- (1) No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any bid submitted to the City of Savannah or the performance of any contract resulting therefrom;
- (2) That it is and shall be the policy of this Company to provide equal opportunity to all business persons seeking to contract or otherwise interested in contracting with this Company, including those companies owned and controlled by racial minorities, cultural minorities, women, and individuals belonging to other socially and economically disadvantaged groups;
- (3) In connection herewith, we acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this Company;
- (4) That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption;
- (5) That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made as part of and incorporated by reference into any contract or portion thereof which this Company may hereafter obtain and;
- (6) That the failure of this Company to satisfactorily discharge any of the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling the City of Savannah to declare the contract in default and to exercise any and all applicable rights and remedies including but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and or forfeiture of compensation due and owing on a contract.


Signature

President
Title

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKE LAND, FLORIDA 33804

CONTRACTOR AFFIDAVIT AND AGREEMENT
Employment Eligibility Verification

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the City of Savannah has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the City of Savannah, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the City of Savannah at the time the subcontractor(s) is retained to perform such service.

93576

EEV / Basic Pilot Program* User Identification Number

BY:

Safety Zone Specialists, Inc
Contractor Name

[Signature]
Signature of Authorized Officer or Agent

President
Title of Authorized Officer or Agent of Contractor

4-25-19

Date David A Vespa

Printed Name of Authorized Officer or Agent

*As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV / Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

Instructions for Completing Contractor Affidavit and Agreement Form

As required under Senate Bill 529 – “Georgia Security and Immigration Compliance Act” of 2006, O.C.G.A. Section 2, Article 3 13-10-91, public employers, their contractors and subcontractors are required to verify the work eligibility of all newly hired employees through an electronic federal work authorization program. The Georgia Department of Labor has added a new Chapter 300-10-1, entitled “Public Employers, Their Contractors and Subcontractors Required to Verify New Employee Work Eligibility Through a Federal Work Authorization Program,” to the Rules and Regulations of the State of Georgia. (See website: http://www.dol.state.ga.us/pdf/rules/300_10_1.pdf.) The new rules designate the “Employment Eligibility Verification (EEV) Basic Pilot Program” operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security as the electronic federal work authorization program to be utilized for these purposes. The EEV/Basic Pilot Program can be accessed at: <https://everify.uscis.gov/enroll/StartPage.aspx?JS=YES>. Bidders shall comply with this new rule and submit with your bid the attached “Contractor Affidavit and Agreement.”

Affidavit Verifying Status for City of Savannah Benefit Application

By executing this affidavit under oath, as an applicant for a City of Savannah, Georgia Business License or Occupation Tax Certificate, Alcohol License, Taxi Permit, Contract or other public benefit as reference in O.C.G.A. Section 50-36-1, I am stating the following with respect to my bid for a City of Savannah contract for 5-Color Matrix Message Boards. [Name of natural person applying on behalf of individual, business, corporation, partnership, or other private entity]

1.) ✓ I am a citizen of the United States.

OR

2.) _____ I am a legal permanent resident 18 years of age or older.

OR

3.) _____ I am an otherwise qualified alien (8 § USC 1641) or nonimmigrant under the Federal Immigration and Nationality Act (8 USC 1101 *et seq.*) 18 years of age or older and lawfully present in the United States. *

In making the above representation under oath, I understand that any person who knowingly and willfully makes a false, fictitious, or fraudulent statement or representation in an affidavit shall be guilty of a violation of Code Section 16-10-20 of the Official Code of Georgia.

Signature of Applicant: [Signature]

Date

4-25-19

Printed Name:

David A Vespa

SUBSCRIBED AND SWORN
BEFORE ME ON THIS THE

25th DAY OF April, 20 19

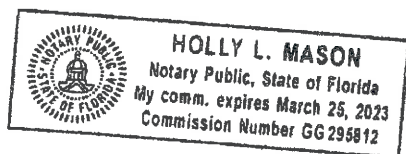
Notary Public

My Commission Expires:

Holly L. Mason

*

Alien Registration number for non-citizens.



SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

***Instruction for Completing Systematic Alien Verification
for Entitlement (SAVE) Form***

O.C.G.A. § 50-36-1, requires Georgia's cities to comply with the federal **Systematic Alien Verification for Entitlements (SAVE) Program**. SAVE is a federal program used to verify that applicants for certain "public benefits" are legally present in the United States. Contracts with the City are considered "public benefits." Therefore, the successful bidder will be required to provide the Affidavit Verifying Status for City of Savannah Benefit Application prior to receiving any City contract. The affidavit is included as part of this bid package but is only required of the successful bidder.

SAFETY ZONE SPECIALISTS INC.
P.O. BOX 90764
LAKELAND, FLORIDA 33804

This Page Intentionally Left Blank

Response For Supplier: Florida Transcor Inc.

Event # : 7065-0

Name: Five-Color Matrix Message Signs

Reference: Savannah Hilton Head Airport

Description: The purpose of these specifications is to describe the minimum requirements for the purchase of, one new, five- color matrix message sign for the Savannah Airport Commission.

Preview Date:

Q & A Open Date: 04/03/2019 05:30:00 PM

Open Date: 04/03/2019 05:00:00 PM

Q & A Close Date: 04/22/2019 12:00:00 PM

Close Date: 04/30/2019 01:30:00 PM

Dispute Close Date:

Responded To: 4 out of 4 lines

Total Bid Amount: \$32,775.00 USD

Response Attachments

Attachment

brochure_WancoColorMessageSigns.pdf

specs_MessageSignsColorMini_WVTM5C.pdf

Line Responses

Line 1: WANCO 5-Color Matrix Message Signs Model MVTM-5C

Description: WANCO 5-Color Matrix Message Sign Model MVTM-5C

Item: WACO 5- COLOR MATRIX MESSAGE SIG WANCO 5-Color Matrix Message Sign Model MVTM- 5C

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 28,650.00000

Extended Price: 28,650.00

No Charge: No

No Bid: No

Delivery Date: 05/24/2019

Vendor Item: WVTM-5C WANCO 5-Color Matrix Msg Sign

Event # 7065-0: Five-Color Matrix Message Signs

Line 2: Option Add: Radar

Description: Option Add: Radar

Item: OPTION ADD: RADAR Option Add: Radar

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Bid Quantity: 1.0000

Unit Price: 1,000.00000

Extended Price: 1,000.00

No Charge: No

No Bid: No

Delivery Date: 05/24/2019

Vendor Item: RADAR OPTION Radar Option

Line 3: Option Add: Modern Package with GPS

Description: Option Add: Modern Package with GPS

Item: OPTION ADD: MODERN PACKAGE WITH Option Add: Modern Package wit GPS

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Bid Quantity: 1.0000

Unit Price: 1,100.00000

Extended Price: 1,100.00

No Charge: No

No Bid: No

Delivery Date: 05/24/2019

Vendor Item: 4G MODEM WITH GPS 4G Modem with GPS

Comments: 4G Modem with GPS (requires user supplied cellular service)

Line 4: Option Add: Traffic Data Classifier System

Description: Option Add: Traffic Data Classifier System

Item: OPTION ADD: TRAFFIC DATA CLASSIF Option Add: Traffic Data Classifier System

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Bid Quantity: 1.0000

Unit Price: 2,025.00000

Extended Price: 2,025.00

No Charge: No

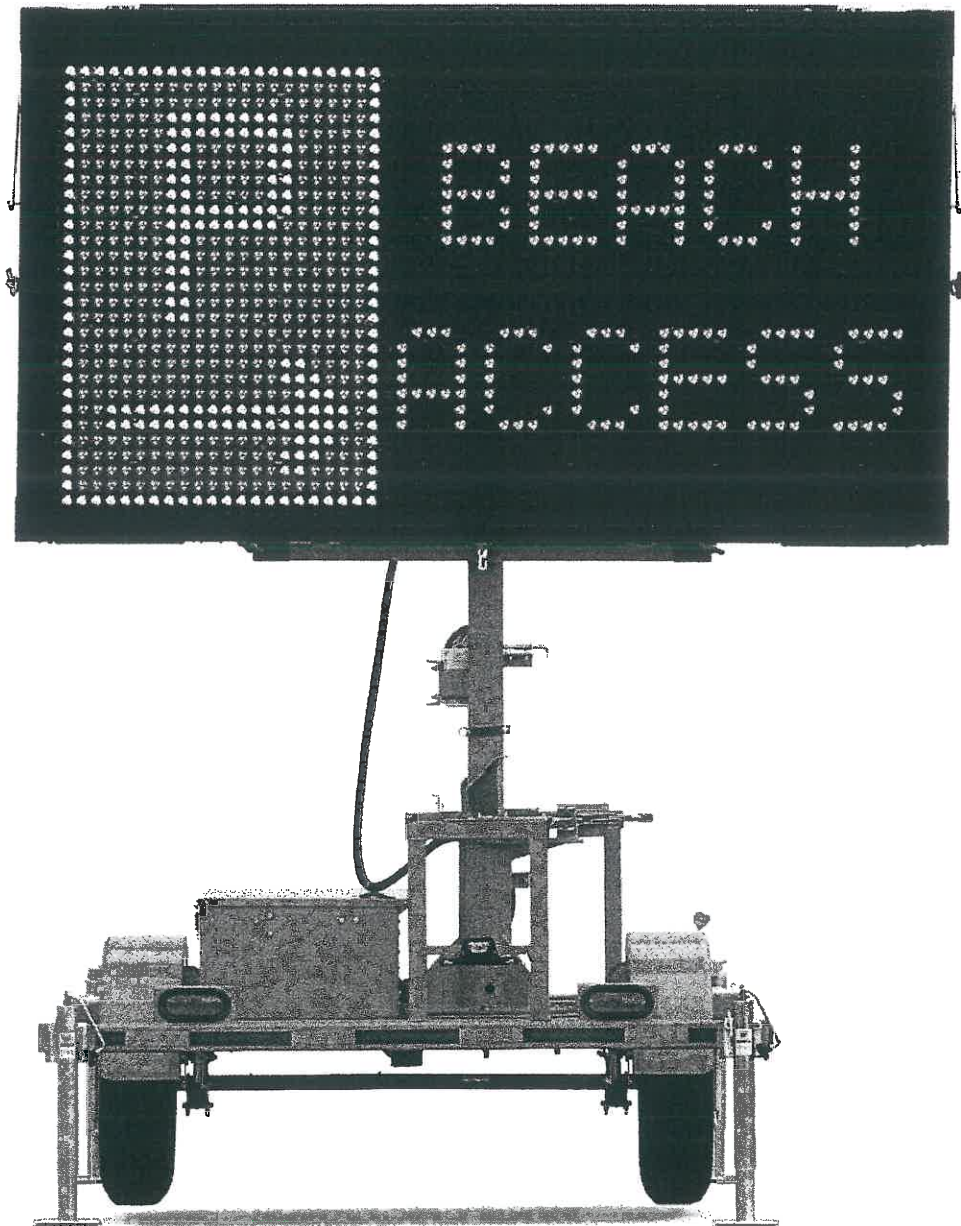
No Bid: No

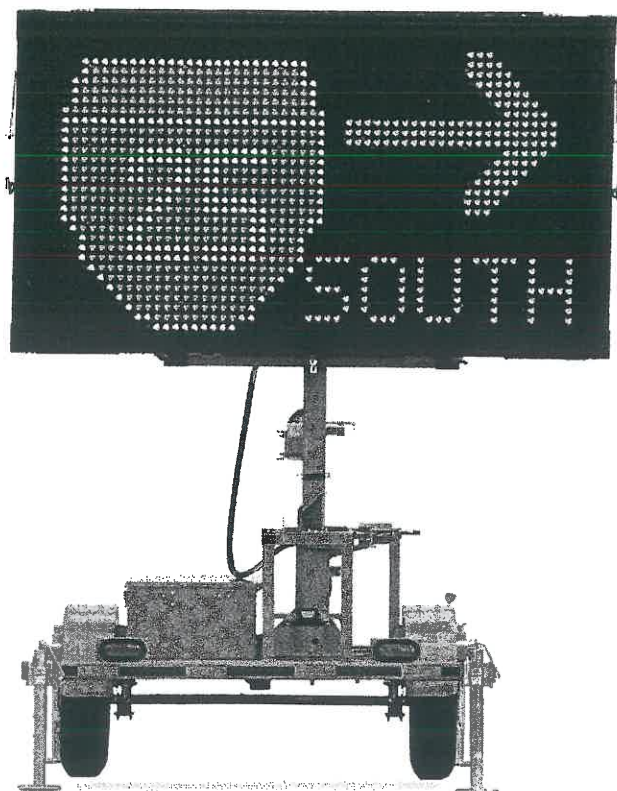
Delivery Date: 05/24/2019

Vendor Item: WANCO TRAFFIC DATA CLASSIFIER Wanco Traffic Data Classifier

5-Color Message Signs

for fully customizable graphic and text messages





- Five-color full-matrix display
- Create custom messages with Wanco software
- Combine colored text and graphics
- Touchscreen controller with intuitive interface

With a full matrix of five-color LED pixels, the Wanco® Color Message Sign lets you create messages like you never could before.

Using Wanco computer software, you can create and combine graphic symbols with text to make bright, colorful messages that stand out. Design your own symbols, import your corporate logo and more. Add text, make multiple message screens and even create simple animations.

To see or order the new Wanco Color Message Sign, call **800.972.0755** or visit **wanco.com**.



Brief specifications

Display	60 x 32 pixels
Colors	Red, Blue, Green, Amber, White
Sign cabinet size	104 x 59 in. (263 x 150 cm)
Deployed footprint	138 x 76 in. (350 x 193 cm)
Deployed height	145 in. (367 cm)
Travel height	102 in. (259 cm)
Weight, approx.	1763 lbs. (800 kg)
Tires	15-inch

Maintenance-free batteries
 Solar charging system with standard 15-amp charger
 Computer software for designing messages
 Handheld touchscreen controller
 Up to 12 built-in fonts
 Preprogrammed and MUTCD-standard graphics
 Custom graphics of your own creation
 NTICP compliant

Due to Wanco's commitment to continuous improvement of our products, all information is subject to change without notice. Wanco and the Wanco logo are registered trademarks of Wanco Inc. All other trademarks are property of their respective owners.



WANCO INC.
 5870 Tennyson Street
 Arvada, Colorado 80003
 800-972-0755
 303-427-5700
 303-427-5725 fax
 www.wanco.com

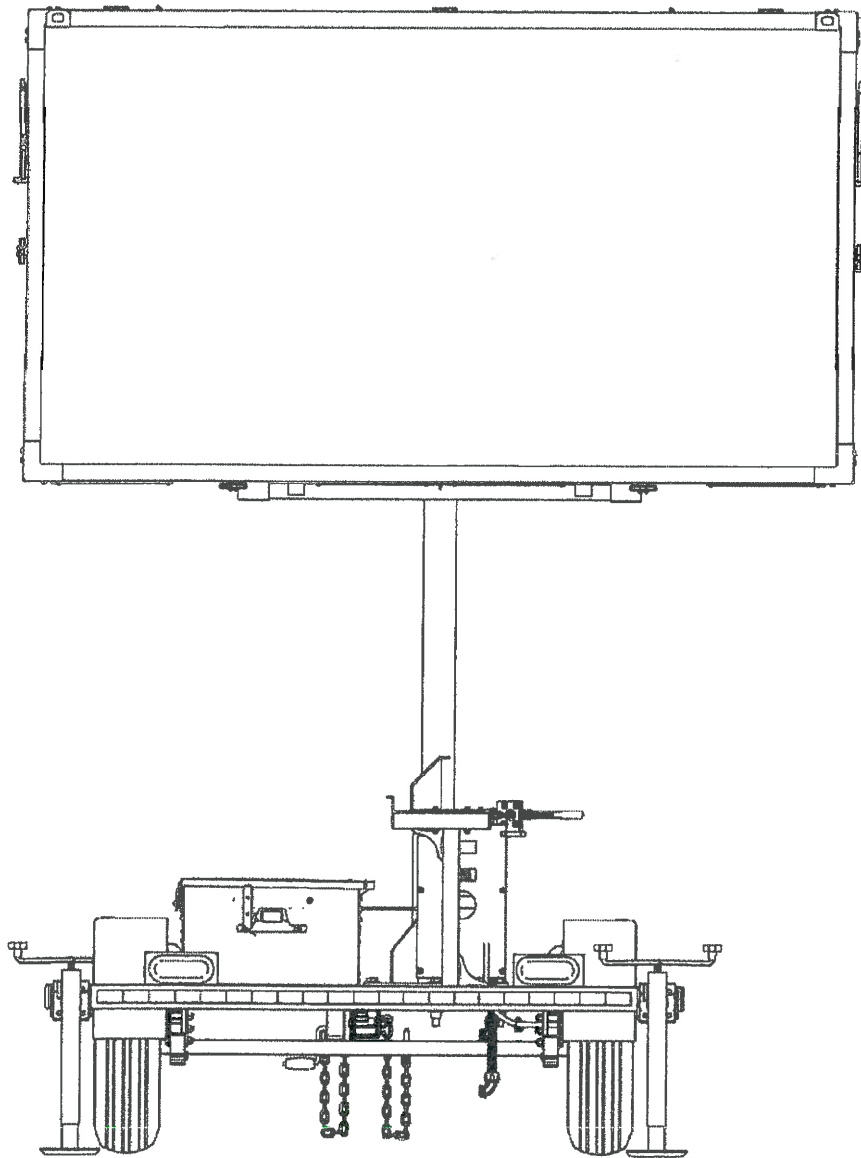


WSD-1006
07 2015

5-COLOR MATRIX MESSAGE SIGN

MODEL WVTM-5C

PRODUCT SPECIFICATIONS | JULY 2015



1. DESCRIPTION

- 1.1. Description** Wanco® color message signs provide information to the public on a five-color LED display that can present text, graphics, or a combination of both. The color display uses state-of-the-art technology to achieve excellent visibility with the least power consumption of any available portable color message sign. The sign is portable and self-powered, requiring no permanent installation or wiring.
- The sign has a self-contained onboard computer and a touchscreen controller, making a laptop or external controller unnecessary. A laptop can be connected if desired. The sign comes configured with preprogrammed standard messages, and users can create custom messages using computer software that is included with the message sign.
- For optimal positioning, the message sign display panel rotates independent of the trailer and its height is fully adjustable. Jack-legs and optional outriggers provide added stability. The small trailer is easy to maneuver and deploy, and can be towed by most vehicles.
- Power is provided by maintenance-free batteries, which are charged by an automated solar charging system.
- 1.2. Model** WVTM-5C five-color matrix message sign

2. FEATURES

- 2.1. Message design**
- Message Graphics computer software included for creating custom messages
 - Create, import and edit graphics
 - Add and format text
 - Export messages to sign and save files for copying and editing
- 2.2. Setup**
- Hydraulic lift raises sign display on tower
 - Tower rotates 360 degrees for optimal positioning
 - Single disk brake holds tower in place during operation, while a cradle supports and holds board in travel position
- 2.3. Operation**
- Large, five-color, full-matrix display for text and graphics
 - Self-contained onboard computer
 - Full-color touchscreen controller with high-resolution display
 - User-supplied laptop with Wanco software is optional
 - Multi-level password protection restricts access to control software
 - Preprogrammed text messages, symbols and graphics
 - Internal clock facilitates built-in schedule programming
 - Optional outriggers widen footprint for added stability
 - Cooling fans protect sign cabinet from overheating
 - NTCIP compliant

- 2.4. Power system**
- Battery powered and solar charging
 - Energy-efficient operation results in long run times
 - Solar panels charge batteries automatically without intervention
 - Charging system shuts down when batteries are fully charged, preventing damage
 - Power system allows battery charging with solar panels or commercial power
 - Cooling fan protects battery charger from overheating
 - Battery box can be locked to prevent unauthorized access
- 2.5. Maintenance**
- Maintenance-free batteries
 - Individual display modules can be replaced easily
 - Standard trailer tires
 - Heavy-duty bolt-on steel fenders can be replaced if damaged
 - Durable powder-coat finish resists the elements
- 2.6. Application**
- Common applications include:
- Special events
 - Traffic calming
 - Emergency response
 - Public notices
 - Corporate functions
- 3. DISPLAY**
- 3.1. Cabinet**
- 3.1.1. Description**
- Weather-resistant cabinet contains display modules and related electronics. Hinged door with full-size display window protects electronics and provides access for maintenance. Clasps hold door closed during operation and the door can be locked with user-supplied padlock.
- 3.1.2. Size**
- 104" x 59" x 6" (264 x 150 x 15cm) W x H x D
- 3.1.3. Material**
- Aluminum sheet, 5052-H32, 0.062" (1.575mm) thick
- 3.1.4. Construction**
- Panels are riveted together, with internal ribs to add lateral strength
- 3.1.5. Door**
- Cabinet door is aluminum extruded frame with sheet metal corner brackets. Stainless steel butt hinges are bolted to top of cabinet and door.
- Window is anti-glare Lexan® solar-grade polycarbonate, 0.150" (3.81mm) thick. Bulb-type weather seal ensures tight fit and seal between window and door frame.
- When sign is in stored position, door fully opens to service the sign cabinet interior. Telescoping prop-slides, one on each side of the cabinet, hold door open.
- 3.1.6. Finish**
- Cabinet and door are coated with oven-baked, flat-black, powder-coat finish to ensure durability and corrosion protection. Assemblies are high-pressure phosphate-washed prior to finish coat.

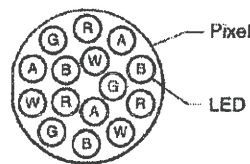
- 3.1.7. Wiring** Wiring service loop from computer box to display cabinet is routed inside liquid-tight loom and P-clamped to trailer frame. Service loop length is designed to allow sign rotation. All wiring connectors and procedures are per CSA standards.
- 3.1.8. Ventilation** Two cooling fans located at the top of the display cabinet circulate air into, through, and out of the cabinet to cool electrical components. A duct is located at the top of the cabinet to ensure even airflow.
- It is proven that electronic components, including LEDs, degrade in conditions of extreme heat. Without the cooling fans the display cabinet can reach over 200 degrees Fahrenheit.
- A temperature sensor is mounted on the photocell PC board inside the cabinet to control fan operation. Each fan has its own thermal settings, adjustable with the onboard computer, to optimize battery power usage.
- 3.1.9. Storage** When lowered for storage and transport, the display cabinet rests in two support cradles, parallel to the trailer length, no locking pins required
- 3.2. Display matrix**
- 3.2.1. Description** The display matrix is comprised of a series of display modules laid out in a grid across the inside of the display cabinet. Each module has a matrix of LEDs installed on its face, which light up to show a portion of the configured message. Each module features the necessary electronics and coatings to ensure outstanding performance and durability.
- 3.2.2. Display modules**
- | | |
|-----------------------|---|
| Modular design | Allows any display module to be installed in any position in the matrix without repositioning DIP switches |
| Wiring | Modules have quick-connect electrical connectors for easy servicing. All wiring terminates at a single terminal strip inside the display cabinet. |
| Replacement | Each module can be exchanged in less than two minutes. The only tool needed is a 5/16-inch nut driver socket or slotted screwdriver |
| | After a new module is installed, a one-step initialization process causes each module to sense its position in the full-matrix display. Initialization is accomplished using the sign's controller. |
| Size | 16.0" (40.6cm) wide by 13.15" (33.4cm) high, nominal |
| Material | FR4 glass-reinforced epoxy laminate, double-sided, black solder mask with white silkscreen |
| | Board thickness, 0.094" (2.388mm) |
| | Copper size, 1 oz. (28.4g) |

Coating	5-mil, military-spec, low-VOC, silicone conformal coating (Dow Corning 1-2577) provides long-term protection against moisture and other atmospheric contaminants, resists corrosion and shorts due to high humidity
Vibration mounts	All display modules are mounted on rubber vibration-isolation mounts, decreasing risk of physical shock during transport and isolating characters from chassis ground
Temperature limits	–40 to 176°F (–40 to 80°C)
Humidity limits	Conformal coating rated to 95% relative humidity

3.2.3. Pixels

A cluster of 15 LEDs form a “pixel”

Each pixel has 3 LEDs of each color (amber, blue, green, red, white):



Pixel size	1.0625" (27mm) diameter
Full matrix	60 pixels wide, 32 pixels high, 1920 pixels total
Display module	10 pixels wide by 8 high, 80 pixels total
Pixel pitch	42mm, horizontal and vertical

3.2.4. LEDs

Technology	AlInGaP II (aluminum indium gallium phosphide) technology, T-1½ size, through-hole auto-insertion	
Color range	Amber	589.5 to 592.0 nm
	Blue	470 to 475 nm
	Green	525 to 530 nm
	Red	620 to 625 nm
	White	Not applicable
Current	10 mA peak-pulsed forward current	
Temperature limits	Operating temperature, –40 to 212°F (–40 to 100°C)	

3.2.5. LED shields Each individual LED is shielded from the other LEDs in each pixel, preventing “phantom” lighting of unlit LEDs by lit LEDs, reducing reflected light, improving angularity, and enhancing the clarity of the display

3.2.6. Viewing angle Total viewing area, 25 degrees nominal

3.2.7. Brightness Factory preset for optimal viewing and power consumption

3.2.8.	Auto dimming	Two photocells detect ambient light on the message sign; the message sign computer adjusts the brightness of the LEDs accordingly, dimming display brightness in darkness, increasing to full brightness in daylight	
		Photocells are mounted inside the sign cabinet, one facing rear and one facing front	
3.2.9.	Software design	Driver	LEDs controlled through 10mA pulse-width modulation design
		Addressing	Each display module address is selected through a software command; no DIP switches are used. The address does not change until reprogrammed, preventing the message from shifting due to an individual module failure.
		Pixel test	Each module is equipped with individual pixel failure notification
3.2.10.	Fonts	12 fonts	
		See Exhibit A for font samples and additional font information	
		Default size	5 x 7 pixels (W x H), 8.66" x 11.97" (220 x 304mm) 4 lines of 10 characters per line, maximum
		Smallest size	4 x 5 pixels (W x H)
		Largest size	11 x 23 pixels (W x H)
		Other sizes	See Exhibit A

4. CONTROL SYSTEM

4.1. Computer

4.1.1.	Description	Self-contained onboard computer, located inside battery box, comprises main motherboard and power control board, controls sign functions	
4.1.2.	Housing	Material	18ga steel
		Size	11.5" x 9.50" x 3.75" (29.1 x 24.1 x 9.5cm) W x H x D
		Finish	Oven-baked, flat-black, powder-coat finish to ensure durability and corrosion protection; high-pressure phosphate-washed prior to finish coat. All parts powder-coated before assembly.
		Mounting	Welded mounting flanges; bolted to bottom of battery box
		Internal access	Top panel is bolted in place and can be removed for access to internal components
4.1.3.	Wiring	One CPC connector for wiring cable from message sign	
		One CPC connector for wiring cable from power supply	

4.1.4.	Ports	One USB power/communication port for connection to controller	
		One Ethernet communications port for optional connection to laptop computer or modem	
		Two DB9 serial ports for connection to auxiliary devices	
4.1.5.	Temperature limits	-40 to 176°F (-40 to 80°C)	
4.2.	Controller		
4.2.1.	Description	Touchscreen interface, connected to computer for programming and running sign display.	
		No laptop computer required, but a laptop with Wanco software can be connected in place of controller if desired.	
4.2.2.	Touchscreen	Display	Full color, backlit, 7-inch display
			800 x 480 pixels
			Display automatically shuts off after 10 minutes of inactivity
		Interface	Menu-based structure, accessed with virtual buttons on the touchscreen display, provides access to all sign functions including programming messages
			Virtual keyboard appears when required for text entry
			Multi-level password protection restricts access
			Day/night virtual button, changes contrast for use in bright or dim lighting conditions
			Message on sign is always shown while interface is active
4.2.3.	Housing	Backplate	Internal components mounted to aluminum backplate for rigidity
		Cover	Injection-molded PC/ABS
		Size	8.0" x 5.5" x 1.6" (20.3 x 14.0 x 4.1cm) W x H x D
4.2.4.	Storage and removal	Stored in cradle inside battery box. Can be lifted out of cradle and is designed to be handheld. Can be disconnected and removed.	
4.2.5.	Wiring	Connected to computer with USB cable	
4.2.6.	Power	Power supplied from computer	
		Push-button on bottom of housing provides manual on/off control and interface activation after timeout	
		Electronics automatically shut down after 20 minutes of inactivity	
4.2.7.	Weight	1.6 lbs. (0.73kg)	
4.2.8.	Temperature limits	-4 to 158°F (-20 to 70°C)	

4.3.	PC boards	
4.3.1.	Data ports	1 serial port, 2 USB ports, 1 Ethernet port
4.3.2.	Coating	100% coated with military-spec, low-VOC, silicone conformal coating to provide long-term protection against moisture and other atmospheric contaminants. Resists corrosion and shorts due to high humidity.
4.3.3.	Temperature limits	–4 to 176°F (–20 to 80°C)
4.3.4.	Humidity limits	Conformal coating rated to 95% relative humidity
4.4.	Controller software	
4.4.1.	Standards	Fully NTCIP-compliant
4.4.2.	Security	Three levels of password protection
4.4.3.	Message programming	Instant access to program new messages Extremely easy to program
4.4.4.	Message types	Quick-messages Easy quick-message activation Permanent Over 90 preprogrammed permanent messages, including arrows and FHWA standards Changeable 250 changeable messages stored in NV flash Temporary 10 temporary or volatile messages, for ITS systems Blank Easy sign blanking/power off
4.4.5.	Interface display	WYSIWYG (What You See Is What You Get) while programming
4.4.6.	Text alignment	Selectable: left, center, or right; and top, middle, or bottom
4.4.7.	Fonts	Selectable: see Exhibit A
4.4.8.	Blinking	Each character can individually blink Individual lines of a multi-line message can blink The entire message can blink Adjustable timing and duty cycle
4.4.9.	Message pages	Maximum 10 sequential “pages” per message, sequencing speed from 0.1 to 25.5 sec.
4.4.10.	Scheduling	Real-time clock and calendar with DST control

4.4.11. Arrow board functions	Sign can display any of the following 12 full-size arrow functions	
	Modes	Flashing left or right arrow Flashing double arrow Flashing four-corner warning Flashing caution-bar warning Sequencing left or right stem arrow Sequencing left or right walking arrow Sequencing left or right chevron arrows Alternating diamonds (for samples, see Exhibit B)
	Bold graphics	Each arrow and bar is 5 pixels wide
4.4.12. Configuration	Menus provide access to all message sign configuration settings	
4.4.13. Troubleshooting	Status and diagnostic menus provide message sign information to assist in troubleshooting	

5. GRAPHICS SOFTWARE

5.1. Description	Computer software provides the tools necessary for creating custom messages. Create new messages in five colors. Create messages from scratch using text, graphics or a combination of both; or edit previously created messages. Import graphic images, such as logos and digital photos.
5.2. System requirements	Any computer running Microsoft® Windows® XP, Vista, 7, 8, or 10
5.3. File formats	Save files in proprietary format that the program can open for editing
	Save objects created in a message for re-use when creating new messages
	Export files in the NTCIP MULTI format for uploading to a message sign
	Import MULTI files for bitmap editing
5.4. Message transfer	Transfer messages to sign directly from the graphics program when the computer is connected to the sign via a wireless modem or a wired Ethernet connection
	Transfer messages to the sign using the Wanco NTCIP Central software after export in the MULTI file format
	Transfer messages to the sign using a USB flash drive after export in the MULTI file format

6. TRAILER

- 6.1. Frame All welded structural steel
- 6.2. Fenders Round full wheel coverage fenders with inner splash panel on each fender. Fenders are bolted to the trailer frame.
Material: 16ga steel
- 6.3. Tie-downs One on each corner of frame
- 6.4. Finish Frame is coated with oven-baked, safety-orange powder-coat finish to ensure durability and corrosion protection. Assemblies are run through a five-stage, high-pressure phosphate-wash prior to finish coat.
See "Options and Optional Equipment" for color options.
- 6.5. Axle assembly 2000 lb. (907kg) capacity, 5 on 4.5" B.C. idler hub
- 6.6. Springs Double-eye leaf springs
- 6.7. Tires ST205/75D15 steel-belted trailer tires, load rating B
- 6.8. Drawbar
- 6.8.1. Construction Telescopes inside receiver sleeve welded under trailer frame. Removable for shipping and for added theft protection if needed. Secures with two 1/2-inch (12mm) diameter bolts.
- 6.8.2. Material Square tubing, 3" x 3/16" wall (7.62cm x 0.476cm wall)
- 6.8.3. Jack Top-wind swivel, 800-lb. (363kg) capacity with caster wheel to make moving trailer easier
- 6.8.4. Tow hitch Standard 2-inch ball coupler tow-hitch, SAE Class 2, 3500-lb. (1588kg) capacity. Bolts to drawbar, removable and replaceable.
See "Options and Optional Equipment" for tow-hitch options.
- 6.8.5. Tow chains Two high-test proof coil chain assemblies, with "latching" S-hooks for towing. Chains attached to drawbar with quick connectors.
Material diameter 0.406" (10.3mm)
Working load limit 5400 lbs. (2450kg)
Breaking force 16,200 lbs. (72kN)
- 6.9. Stabilizer jacks Four swivel jacks, each with 2000-lb. (907kg) capacity, mounted on corners of trailer frame
See "Options and Optional Equipment" for outriggers
- 6.10. Wind resistance In the deployed position, the maximum sustainable wind speed before overturning, when supported by the standard jack stands with tires off the ground, is 72 mph (115km/h)

- 6.11. Taillights** Two oval-shaped, sealed, combination stop, turn and taillights
No screws used for mounting; bracket is welded to trailer frame; each light held in place and sealed with snap-in rubber grommet
- 6.12. Wiring**
- 6.12.1. Description** Wiring to connect tow vehicle and trailer for trailer taillights is installed inside drawbar, with pigtails and connectors at both ends; no crimping required
- 6.12.2. Trailer plug** A sealed, molded, 4-square connector plugs into harness under trailer
- 6.12.3. Tow-vehicle plug** Two-piece assembly with 4-flat molded connector on harness plugs into tow vehicle
Meets SAE J1239
See "Options and Optional Equipment" for tow-vehicle plug options
- 6.12.4. Protection** All trailer wiring encased in UV protective loom, and attached with P-clamp riveted to trailer frame; no exposed wires
- 6.13. License plate** Lighted license plate light holder
- 6.14. Reflectors** Sides of trailer have amber reflectors near front and red reflectors near rear
See "Options and Optional Equipment" for reflective tape
- 6.15. Tower assembly**
- 6.15.1. Function** Sign cabinet is raised and lowered on a telescoping tower
- 6.15.2. Tower construction** Two sections of square steel tubing with the inner section telescoping inside the outer section. The inner section is zinc plated to prevent corrosion.
Nylon guide blocks keep the sections tight, eliminating the need for greasing the tower and preventing dirt from building up on the inner tower section. Dirt would cause performance problems and maintenance issues.
- 6.15.3. Swivel base** A steel tubular weldment is bolted to the trailer frame. The outer tower section rotates on a thrust bearing and washers inside the swivel base, reducing rotating friction.
- 6.15.4. Height** At fully deployed height, 84" (213cm) from ground to bottom of display cabinet
- 6.15.5. Height lock** Locking pin inserted through the tower in the up position prevents the tower from falling if the hydraulics were to fail
- 6.15.6. Hydraulic lift**
- | | |
|--------------------|--|
| Function | Tower is raised by a hydraulic power unit that pressurizes a cylinder, and lowered by controlled gravity return. Control switch for hydraulic lift is located next to controller inside battery box. |
| Hydraulic cylinder | Single stage hydraulic, rated to 1500 psi, bottom end cap is keyed to prevent cylinder from rotating |

	Hydraulic power unit	Type	Electric motor driven See "Options and Optional Equipment" for hand pump
		Voltage	12Vdc
		Flow rate	1.5 gpm
		Pressure rating	Factory set to 950 psi
		Mounting	Installed vertically on bracket that is mounted to swivel base
		Fluid	AW-32 hydraulic oil
		Tank capacity	1.2 gal. total, 0.766 gal. usable capacity
		Cover	Sheet metal cover protects power unit from vandalism and environmental contaminants. Security screws fasten cover to power unit.
6.15.7.	Rotation	Sign rotates by hand, pivoting 360 degrees on tower	
6.15.8.	Rotation lock	Sign rotation is locked with an adjustable lever that operates a mechanical friction caliper and disk brake. The ½-inch thick, round, zinc-plated brake disk is bolted to the outer tower section.	
6.15.9.	Sight tube	A sight tube for aiming the message sign in desired direction is mounted to the underside of the display cabinet frame	
7.	POWER SYSTEM		
7.1.	Description	Electronics powered by batteries, which are charged automatically with integrated solar charging system	
7.2.	Battery box		
7.2.1.	Function	Holds batteries and remote charger See "Options and Optional Equipment" for heavy-duty secure battery box	
7.2.2.	Construction	Riveted all-steel construction All parts powder-coated before assembly Divider panel inside box separates batteries from electronics Louvers provide ventilation Latches keep cover closed and can accept user-supplied padlocks	
7.2.3.	Location	Centered over axle on left side of trailer, bolted to trailer frame	

7.3. Batteries

- 7.3.1. Description** Three 4D AGM 12Vdc batteries
See “Options and Optional Equipment” for battery options
- 7.3.2. Features** 100% maintenance-free
Sealed and spill-proof
Faster recharge and greater freeze resistance than conventional batteries
Contains less lead than conventional batteries
- 7.3.3. Voltage** 12Vdc each
- 7.3.4. Weight** Approx. 160 lbs. (72kg) each
- 7.3.5. Capacity** 600 Ah total

7.4. Remote charger

- 7.5. Function** Plugs into a standard commercial power source to recharge batteries if battery voltage drops due to lack of sun for automated solar charging system

- 7.5.1. Type** 12-volt battery charger

- 7.5.2. Location** Inside battery box, mounted to divider panel on opposite side from batteries

- 7.5.3. Output capacity** 45A

- 7.5.4. Output voltage** 13.4Vdc @ full load
13.6Vdc standard float voltage
14.2Vdc with dual-voltage jack installed

- 7.5.5. Input voltage** 108 to 132Vac, standard three-prong plug

- 7.5.6. Input frequency** 50 to 60 Hz

- 7.5.7. Cooling** Automatic fan cooling

7.6. Solar

- 7.6.1. Panels** Two high-efficiency multi-crystal photovoltaic solar modules

- 7.6.2. Location** Behind message sign, over tower. Solar panel array lies flat; rises and rotates with message sign. No shadowing effect on any trailer component.

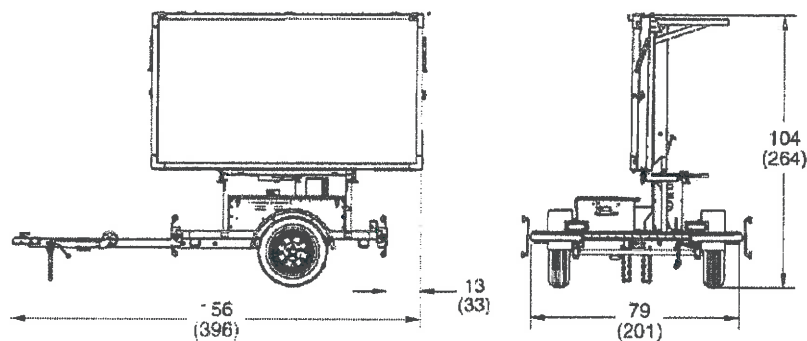
- 7.6.3. Power output** 130W each
260W total
See “Options and Optional Equipment” for solar power options

7.6.4. Current	9.5A max. system current 10.3A open short-circuit current
7.6.5. Voltage	17.9Vdc max. 21.8Vdc open short-circuit voltage
7.6.6. Regulation	Solar panels regulated by computer power board
7.6.7. Security	Solar panel array bolted to message sign frame with security screws and special security nut. Tool for security screws mounted inside battery box.

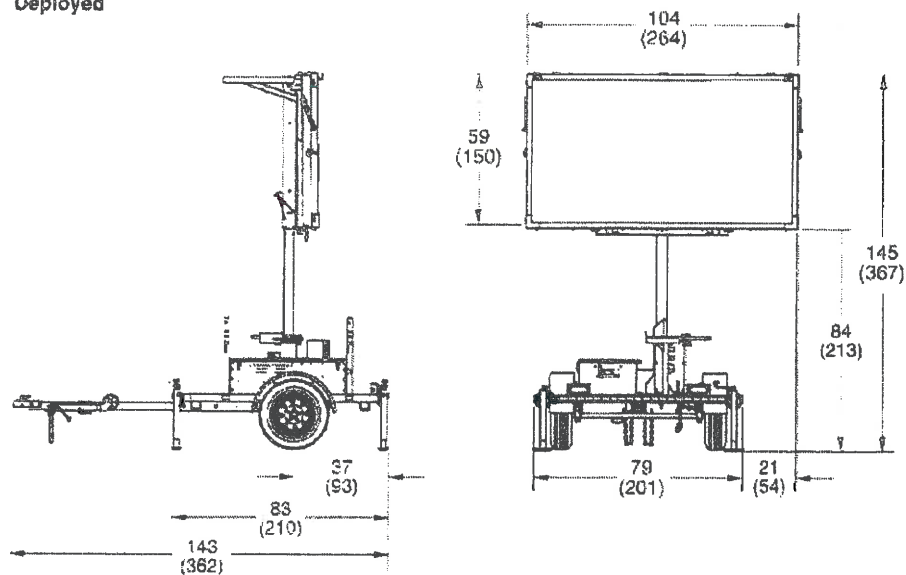
8. DIMENSIONS & WEIGHT

8.1. Dimensions

Travel position



Deployed



8.2. Weight

Approx. 1763 lbs. (800 kg)

9. OPTIONS AND OPTIONAL EQUIPMENT

- 9.1. Tow hitch** Combo-hitch for pintle hook and 2-inch ball hitch
Heavy-duty lunette ring, 2½" ID x 1½" cross-section
- 9.2. Tow-vehicle plug** Many types of plugs available, prewired at the factory; contact factory for details
- 9.3. Outriggers** Telescoping outriggers (jack extensions), one at each corner of the trailer, expand trailer width when deployed, for extra wind-load resistance
Width of trailer with outriggers extended: 131" (333cm)
- 9.4. Hand pump** A mechanical hand pump can raise and lower the sign if batteries go dead and hydraulic lift fails to operate. Pump handle is stored inside battery box.
- 9.5. Power**
- 9.5.1. Additional batteries** For geographic locations with less solar charging potential or colder weather, and for applications that require year-round charging, add batteries for greater capacity
Options One additional 4D AGM 12Vdc battery, 200Ah additional capacity
- 9.5.2. 6-volt batteries** Replace standard batteries with lighter-weight 6Vdc batteries, wired in parallel and series for a 12-volt system
Options Six Group 24 AGM 6Vdc batteries, 645Ah total capacity
Eight Group 24 AGM 6Vdc batteries, 860Ah total capacity
Weight Approx. 60 lbs. (26kg) each
- 9.5.3. Remote charger** When required for added battery charging capacity, replace standard remote charger with 75-amp charger
- 9.5.4. Solar** For geographic locations with less solar charging potential or colder weather, and for applications that require year-round charging, additional solar power is available
Option 390W solar array; contact factory for details
- 9.6. Secure battery box** High-security battery box features heavy-gauge steel lid, hidden hinges, and heavy-duty hidden-shackle padlocks. Replaces standard battery box.
- 9.7. Taillights**
- 9.7.1. Dual sealed-bulb** Dual sealed-bulb taillights replace standard sealed-bulb taillights
Requires SAE J560 7-pole round-pin trailer plug to replace standard trailer plug
- 9.7.2. Single LED** Single LED taillights replace standard sealed-bulb taillights
- 9.7.3. Dual LED** Dual LED taillights replace standard sealed-bulb taillights
Requires SAE J560 7-pole round-pin trailer plug to replace standard trailer plug

9.8.	Reflective tape	Reflective red-and-white conspicuity tape across rear trailer frame for increased visibility	
9.9.	Finish color	Specify power-coat color and, if applicable, color scheme	
9.10.	Radar-based speed monitoring system		
9.10.1.	Description	Radar senses the largest, nearest mass moving toward it. The message sign conveys a user-selected message to the motorist.	
9.10.2.	Sensor	Microwave K-band, approach-only	
9.10.3.	Location	Radar head located on the bottom of the message sign display cabinet, just off-center, for maximum effectiveness regardless of which side of the road the trailer is being used	
9.10.4.	Enclosure	Radar head is sealed to withstand the elements, while an aluminum cover goes over the head unit for impact resistance	
9.10.5.	Standards compliance	FCC approved CE compliant	
9.10.6.	Distance range	1000 ft. (305 m)	
9.10.7.	Speed range	5 to 138 mph (8 to 222 km/h)	
9.10.8.	Accuracy	mph	±1 mph from 5 to 40 mph ±2 mph from >40 to 100 mph
		km/h	±1.6 km/h from 8 to 64 km/h ±3.2 km/h from >64 to 161 km/h
9.10.9.	Temperature limits	−40 to 185 °F (−40 to 85 °C)	
9.10.10.	Electrical protection	Fused and reverse-polarity protected	
9.10.11.	Calibration	Radar is factory calibrated; a tuning fork for verifying radar is operating correctly is attached inside the control cabinet door; when struck and held in front of the radar head, the tuning fork vibrations simulate 55 mph	
9.11.	Cellular modem package		
9.11.1.	Purpose	The remote communications package enables the message sign to be controlled from remote locations away from the message sign, using an Internet-connected computer, tablet, or smartphone. Includes all of the items described below.	
9.11.2.	Remote NTCIP central control software	Description	Easy-to-use program connects a computer to an individual message sign via an Internet connection. Used for changing messages, checking on trailer health status (such as battery voltages), viewing GPS locations, and setting message schedules.

	System requirements	Microsoft® Windows® (most versions) .NET framework Internet connection
9.11.3. Web-based remote control	Description	Using a standard Web browser, allows connection to an individual message sign without software. Ideal for smartphone users.
	System requirements	Modern standards-compliant Web browser (such as Mozilla® Firefox®, Microsoft Internet Explorer® 10, Chrome™, or Safari®) with JavaScript enabled A platform that supports one of these browsers (smartphone, laptop computer, or desktop computer) Internet connection
9.11.4. Wanco Fleet Manager	Description	Web-based application for managing even the most diverse message sign fleets
	Features	Add or remove equipment to groups for quick access, ideal for managing contractor rentals or entire projects all at once Map GPS locations of entire message sign fleet simultaneously Record vital information from signs, such as message changed by user and date, battery and solar voltages, and equipment alarms Mass broadcast capability, perfect for Amber Alerts and emergencies
	System requirements	Modern standards-compliant Web browser (such as Mozilla Firefox, Microsoft Internet Explorer 10, Chrome, or Safari) A platform that supports one of these browsers (laptop or desktop computer) Internet connection
9.11.5. Cellular plans	User provided	User obtains cellular data plan from, and makes monthly payments to, service provider. Wanco programs modem according to user-provided specifications at time of modem purchase. Wanco tests modem setup.
	Wanco cellular service	Wanco provides Verizon® cellular service without activation charges, monthly payments, or overage charges. User makes a single payment annually to Wanco. For increased security, Wanco hosts the service on a virtual private network (VPN).
9.11.6. Modem	Compact industrial 3G cellular gateway with GPS Variety of models; contact factory for details	

9.12. Traffic Data Classifier System

9.12.1. Design	Radar-based, nonintrusive, does not require loops or hoses, no disturbance of traffic flow during installation or use
9.12.2. Direction	Registers both approaching and receding vehicles
9.12.3. Traffic lanes	Most effective for 2-lane roads
9.12.4. Traffic count	Can record data for more than 1 million vehicles in internal memory
9.12.5. Data format	Speed, date, time, direction, length for each vehicle
9.12.6. Units	English or metric
9.12.7. Time stamp	Yr,Mo,Dy,Hr,Min,Sec.
9.12.8. Speed range	5 to 138 mph (8 to 222 km/h)
9.12.9. Sensor	Microwave K-band 24.125 GHz
9.12.10. Power	Uses radar-speed sign power supply
9.12.11. Power output	20 dbm (EIRP)
9.12.12. Current	110 mA
9.12.13. Temperature	Operating limits: -40 to 185 °F (-40 to 85 °C)
9.12.14. Internal memory	1MB (1,048,576 bytes)
9.12.15. Baud rate	9600, 8 bit, no parity
9.12.16. Calibration	Calibration not required
9.12.17. Installation	Automatically positioned horizontally when trailer is level; adjustable bracket allows user to point toward traffic at a 45-degree angle

9.13. RemoteUI control software

9.13.1. Description	The Wanco RemoteUI program allows operators to control the message board using a laptop computer or touchscreen device. The computer must be connected to the message sign; wireless access is not recommended.
9.13.2. Fleet limits	Connects to one sign at a time; maximum number of signs is unlimited
9.13.3. Security	Multi-level password protection
9.13.4. System requirements	Microsoft Windows (most versions) or Unix® operating system

EXHIBIT A: MESSAGE FONTS



Font 1

5 x 7 pixels

Equivalent size: 8.66" x 11.97" (220 x 304mm)

Physical size: 7.68" x 10.98" (195 x 279mm)

Standard fixed-width font with lower-case letters

4 lines of 10 characters, maximum



Font 2

5 x 8 pixels

Equivalent size: 8.66" x 13.62" (220 x 346mm)

Physical size: 7.68" x 12.64" (195 x 321mm)

Tall fixed-width font with lower-case letters

3 lines of 10 characters, maximum



Font 3

6 x 9 pixels

Equivalent size: 10.32" x 15.28" (262 x 388mm)

Physical size: 9.33" x 14.29" (237 x 363mm)

Bold proportional font with 4x9-pixel capitals for lower-case letters

3 lines of 8 characters, typical



Font 4

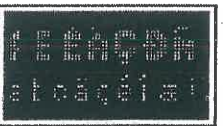
6 x 11 pixels

Equivalent size: 10.32" x 18.58" (262 x 472mm)

Physical size: 9.33" x 17.60" (237 x 447mm)

Bold proportional font with lower-case letters and accented characters

2 lines of 8 characters, typical



Font 5

6 x 11 pixels

Equivalent size: 10.32" x 18.58" (262 x 472mm)

Physical size: 9.33" x 17.60" (237 x 447mm)

Bold proportional font with lower-case letters, accented characters, and increased spacing

2 lines of 7 characters, typical



Font 6

5 x 12 pixels

Equivalent size: 8.66" x 20.24" (220 x 514mm)

Physical size: 7.68" x 19.25" (195 x 489mm)

Tall fixed-width font with 5x8-pixel capitals for lower-case letters

2 lines of 10 characters, maximum



Font 7

7 x 12 pixels

Equivalent size: 11.97" x 20.24" (304 x 514mm)

Physical size: 10.98" x 19.25" (279 x 489mm)

Bold fixed-width font with 6x8-pixel capitals for lower-case letters

2 lines of 7 characters, maximum



Font 8

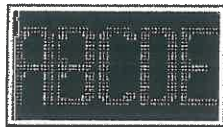
7 x 23 pixels

Equivalent size: 11.97" x 38.43" (304 x 976mm)

Physical size: 10.98" x 37.44" (279 x 951mm)

Large fixed-width font with 6x14-pixel capitals for lower-case letters

1 line of 7 characters, maximum



Font 9

11 x 23 pixels

Equivalent size: 18.58" x 38.43" (472 x 976mm)

Physical size: 17.60" x 37.44" (447 x 951mm)

Large bold fixed-width font, capitals only (no lower-case letters)

1 line of 5 characters, maximum



Font 10

4 x 5 pixels

Equivalent size: 7.01" x 8.66" (178 x 220mm)

Physical size: 6.02" x 7.68" (153 x 195mm)

Mini proportional font with limited lower-case

5 lines of 12 characters, typical



Font 11

7 x 10 pixels

Equivalent size: 11.97" x 16.93" (178 x 220mm)

Physical size: 10.98" x 15.94" (279 x 405mm)

Large fixed-width font, capitals only (no lower-case letters)

2 lines of 6 characters, maximum



Font 12

9 x 14 pixels

Equivalent size: 15.28" x 23.55" (388 x 598mm)

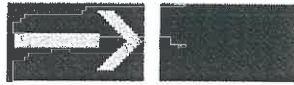
Physical size: 14.29" x 22.56" (363 x 573mm)

Large bold fixed-width font, capitals only (no lower-case letters)

2 lines of 4 characters, maximum

EXHIBIT B: ARROW BOARD FUNCTIONS

Flashing patterns



Flashing left or right arrow



Flashing double arrow



Flashing four-corner warning



Flashing caution-bar warning

Sequential patterns



Sequencing left or right stem arrow



Sequencing left or right walking arrow



Sequencing left or right chevron arrows



Alternating diamonds

This Page Intentionally Left Blank

Response For Supplier: Striping Service and Supply

Event # : 7065-0

Name: Five-Color Matrix Message Signs

Reference: Savannah Hilton Head Airport

Description: The purpose of these specifications is to describe the minimum requirements for the purchase of, one new, five- color matrix message sign for the Savannah Airport Commission.

Preview Date:

Q & A Open Date: 04/03/2019 05:30:00 PM

Open Date: 04/03/2019 05:00:00 PM

Q & A Close Date: 04/22/2019 12:00:00 PM

Close Date: 04/30/2019 01:30:00 PM

Dispute Close Date:

Responded To: 4 out of 4 lines

Total Bid Amount: \$32,901.00 USD

Line Responses

Line 1: WANCO 5-Color Matrix Message Signs Model MVTM-5C

Description: WANCO 5-Color Matrix Message Sign Model MVTM-5C

Item: WACO 5- COLOR MATRIX MESSAGE SIG WANCO 5-Color Matrix Message Sign Model MVTM- 5C

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Bid Quantity: 1.0000

Unit Price: 29,176.00000

Extended Price: 29,176.00

No Charge: No

No Bid: No

Delivery Date: 06/30/2019

Vendor Item: WVTM-5C WANCO 5-Color Matrix Message

Line 2: Option Add: Radar

Description: Option Add: Radar

Item: OPTION ADD: RADAR Option Add: Radar

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery 06/30/2019
Date:

Event # 7065-0: Five-Color Matrix Message Signs

Bid Quantity: 1.0000

Unit Price: 900.00000

Extended Price: 900.00

No Charge: No

No Bid: No

Delivery Date: 06/30/2019

Vendor Item: RADAR OPTION Radar Option

Line 3: Option Add: Modern Package with GPS

Description: Option Add: Modern Package with GPS

Item: OPTION ADD: MODERN PACKAGE WITH Option Add: Modern Package wit GPS

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 1,000.00000

Extended Price: 1,000.00

No Charge: No

No Bid: No

Delivery Date: 06/30/2019

Vendor Item: 4G MODEM W/ GPS 4G Modem w/ GPS

Comments: 4G Modem w/ GPS (requires user supplied cellular service)

Line 4: Option Add: Traffic Data Classifier System

Description: Option Add: Traffic Data Classifier System

Item: OPTION ADD: TRAFFIC DATA CLASSIF Option Add: Traffic Data Classifier System

Commodity Code: 801-94 Signs, Runway and Taxiway

Quantity: 1.0000

UOM: EA

Requested Delivery Date: 06/30/2019

Bid Quantity: 1.0000

Unit Price: 1,825.00000

Extended Price: 1,825.00

No Charge: No

No Bid: No

Delivery Date: 06/30/2019

Vendor Item: WANCO TRAFFIC DATA CLASSIFIER Wanco Traffic Data Classifier