



Procurement Department

2 Space Drive • Taylors, SC 29687-6072 • (864) 355-1279 •

The School District of Greenville County

Addendum No. 1

Date: **April 3, 2023**

Re: **Digital Sign – Southside High School**

IFB No.: **523-18-4-12**

The following information becomes part and parcel of Invitation for Bid (IFB) #523-18-4-12 effective this date. Firms must acknowledge receipt of this addendum in their solicitation response.

The listed items add to, modify, or otherwise alter the specifications and become part of the solicitation documents. Where a portion of the original specifications are added to, modified, or also altered, the portion not so affected shall remain. Firms may have the right to protest this addendum.

*****Enclosed with this addendum, please find Revised Specifications*****

Inquiries/ District Responses

Before the solicitation inquiry deadline, the District received an inquiry regarding this solicitation. The District's response to the question follows in **bold** font.

1.) They seem to be a mix of two different sizes/specs and there are also some discrepancies with regards to the 'virtual pixels', which most manufacturers have moved away from. An active viewing area of 2'-1" x 7'-10" should have a much lower vertical pixel count than 75.

See attached revised specifications.

2.) Physical Pitch – 19.8mm- The 20mm pitch (20mm is obsolete by industry standards). Would the buyer accept bids for 10mm resolution?

Per acceptable manufacturer Daktronics, 19.8 mm is an acceptable specification.

3.) Physical Matrix – 75 x 135 – The 20mm pitch comes in multiples of 16 pixels, so your published matrix does not appear to match the published size. The correct matrix for a 20mm 2x8 should be 32 x 128 pixels. A 10mm resolution 2x8 would provide 64x256 pixels (multiples of 32). 8mm resolution would provide 80x320 pixels (multiples of 40).

The physical matrix should be revised to 32x120.

4.) Virtual Pitch – 8mm Virtual Matrix – a50 x 270 LEDs Per Pixel – Virtual pixel configuration has been obsoleted for over 10 years, furthermore, when virtual configuration was around, it gave the option of “optically” create the appearance of a resolution that was half the nominal through a process called “pixel sharing” (i.e., 20mm physical would have been 10mm virtual).

This requirement is removed.

5.) R1G1B1-Also known as “RGB” refers to a normal pixel resolution. A virtual arrangement would be “2RGB”.

This requirement is removed.

6.) Will the sign install inside or outside of school?

The sign is located outside of the school.

End of Section – Inquiries/District Responses

All other terms and conditions remain unchanged and in force.

Thank you for your interest in the District.

Tonya A. Stroud

Tonya A. Stroud
Senior Buyer

Revised Digital Sign Scope and Specifications

Invitation for Bid Number 523-18-4-12

Southside High School

Note: Modified Specifications are restated below: Please pay special attention to acceptable manufacturers.

The scope is to replace the existing **outdoor** digital display board with a full color two sided digital display board in existing sign structure.

Price shall include all materials, equipment, taxes and permits necessary to make sign functional and satisfy all local ordinances. Connectivity to electrical source shall be included in price. Price shall also include all related software and training.

New Sign shall conform to the enclosed Greenville County School District Digital Sign Specifications.

Electricity supply to the sign shall be the responsibility of others.

Communication to sign using wireless antennae.

Removal and disposal of old copy board responsibility of the contractor.

The following specifications are acceptable. We invite you to submit price on comparable equipment.

Sign Specifications

Physical Pitch – 19.8mm

Physical Matrix – 32 x 120

Character Height – 5.5” (7 pixel font)

Cabinet Dimensions – 2ft. 7in. x 8ft. 1”

Active Display Area – 2ft. 1” x 7ft. 10 in.

Est. Weight per Face 320.85 lbs.

Sq. Ft. per Face 27.9

Cabinet vented on top and bottom for optimal air flow.

Service Access – Front and Rear Service

Display Capabilities

Color Capability – 281 Trillion Colors

Horizontal Viewing Angle – 140 Degrees; 160 Degree Readability Angle

Vertical Viewing Angle - 70 degrees, 90 Degree Readability Angle

Minimum Viewing distance 45’

Brightness - >=11,000 NITS; Lifetime (.5 brightness) 100,000+hours

Contrast Enhancement: Non-reflective black louvers and module face grooves disperse light

Graphic Capability: Text, graphics, logos, basic animation, video clips, multiple font styles and sizes

Control Software: Venus Control Suite

Electrical Specifications

Max. Load 120 – 7.3 Amps per Face

Typical Load 120 – 2.2Amps per Face

Max Load 240 – 3.7 Amps per Face

Typical Load 240 – 1.1 Amps per Face

Default Input Voltage 120V AC

Single Phase Input Power Only

Display Dimming: 64 levels (automatic, scheduled or manual control)

Operating Temperature: -40 degree F to 120 degree F with 99% RH non-condensing

Compliance Information: UL and cUL Listed, UL-Energy Verified, FCC compliance

Warranty Coverages

Parts Warranty Period 5 years

On-Site Service Period 5 years

Continued on next page.

COUNTY SCHOOL SCOREBOARDS AND DISTRICT DIGITAL SIGN SPECIFICATION

PART 1 GENERAL

1.01 SECTION INCLUDES

Single-sided, Double-sided LED Digital Signs and Scoreboards

1.02 REFERENCES

- A. Standard for Electric Signs, UL-48, 13th Edition
- B. Standard for Control Centers for Changing Message Type Signs, UL-1433, 1st Edition
- C. Standard for CAN/CSA C22.2
- D. Federal Communications Commission Regulation Part 15
- E. National Electric Code

1.03 SUBMITTALS

- A. Product data: Submit manufacturer's product illustrations, data and literature that fully describe the scoreboards and accessories proposed for installation.
- B. Shop drawings: Submit mechanical and electrical drawings.
- C. Maintenance data: Submit manufacturer's installation, operation, and maintenance manuals.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Product delivered on site.
- B. Sign and equipment to be housed in a clean, dry environment.

1.05 PROJECT CONDITIONS

- A. Environmental limitations: Do not install digital sign equipment until mounting structure is secure and concrete has ample time to cure.
- B. Field measurements: Verify position and elevation of structure and its layout for digital sign equipment. Verify dimensions by field measurements.
- C. Verify mounting structure is capable of supporting the digital sign's weight and windload (if applicable in addition to the auxiliary equipment).
- D. Installation may proceed within acceptable weather conditions.
- E. All installations shall provide adequate space in front and rear to allow service and maintenance personnel access to all areas of the sign. This will include, but not be limited to, extension ladders, step ladders, and lifts where necessary.

1.06 QUALITY ASSURANCE

- A. For indoor or outdoor use
- B. Source Limitations: Obtain each type of digital sign or related equipment through one source from a single manufacturer.
- C. ETL listed to UL Standards 48 and 1433
- E. NEC compliant
- F. FCC compliant
- G. ETLC listed to CAN/CSA 22.2

1.07 WARRANTY

- A. Provide five (5) years of parts coverage.
- B. Provide toll-free service coordination.
- C. Provide technical phone support during normal business hours.
- D. Vendor will release Owner to provide maintenance on all equipment.
- E. Parts shall be available for equipment a minimum of ten (10) years.

GREENVILLE COUNTY SCHOOL SCOREBOARDS AND DISTRICT DIGITAL SIGN SPECIFICATION

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Daktronics, Inc.
- B. Electro-Mech
- C. Nevco

- D. Vantage
- E. Optec
- F. LED Sign Supply
- G. Watchfire Signs

H. Other manufacturers/vendor will be entertained who have achieved prior approval through our Audio Visual Department. Contact Crew Chief Technology, Maintenance, 2 Space Drive, Taylors, SC, 864-355-7789. Vendors will be entertained who have installers that are located within a 100 mile (maximum) radius of the installation site and has been in business for five (5) years (minimum). Manufacturers/Vendors must provide two (2) letters of recommendation from previous customers with photos of various stages of completion, along with photos of the completed installation at the time of bid submittal. Manufacture must supply letter indicating subsequent support to purchaser for after–installation service and repair (i.e. parts, tech support, service manuals, support phone numbers) at the time of bid submittal. See section 1.03 and 3.06.

2.02 PRODUCT

- A. As noted on drawings.

2.03 SCOREBOARDS AND DIGITAL SIGN DISPLAYS

- A. General information

1. Dimensions: Provided with proposed sign.
2. Weight: Provided with proposed sign.
3. Mounting/Erection: Installation instructions of sign shall be designed by a structural engineer licensed in the State of South Carolina.
4. Power requirement: Provided with proposed sign.
5. Color: To be selected by Facility.
6. All digital signs must conform to all local sign ordinances where applicable.

- B. Construction

1. Alcoa aluminum alloy 5052 construction minimum.

- C. Color

1. Monochrome or Color according to GCSD request/requirement.

- D. Optional Equipment

1. Logo
2. 2.4 GHz spread spectrum radio control

2.04 SIGN/MESSAGE CONTROL

- A. Control shall be wireless or fiber connections only. NO COPPER WIRING WILL BE ALLOWED.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that mounting structure is ready to receive scoreboard. Verify that placement of conduit and junction boxes are as specified and indicated in plans and shop drawings. Verify concrete has cured adequately according to specifications.

3.02 INSTALLATION

- A. All power and fiber to digital signs and displays will be routed in conduit, power to the scoreboards/displays as well as raceways shown on electrical plans by the Electrical Contractor. Digital Sign control wiring will be the responsibility of the contractor assigned the digital sign equipment.

- B. Install digital signs and exterior displays to supports in location detailed and in accordance with manufacturer's instructions. Verify unit is plumb and level.

3.03 INSTALLATION—CONTROL CENTER

- A. Install all control software on computer designated by GCSD. Provide training to all personnel designated by GCSD.

- B. Provide boxes, cover plates and jacks in locations per plans.

C. Test and check for proper operation of control unit, digital sign and all features.

D. Verify earth ground does not exceed 15 ohms.

3.04 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to evaluate scoreboard and perform tests and inspections. A Greenville County School District A/V Technician must be present for all final testing and approvals.

B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.

C. Perform the following tests and inspections with the assistance of a factory-authorized service representative:

1. Operational Test: After installing digital sign, and after electrical circuitry has been energized, start units to confirm proper unit operation.

2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Digital Signs will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports. A copy of all test and inspection reports must be submitted to the GCSD's Audio/Video Dept. at 2 Space Drive, Taylors, SC, 29687.

3.05 ADJUSTING

A. Adjustments: When requested within twenty-four (24) months from date of Substantial Completion, provide on-site assistance in adjusting digital signs at owner discretion. Provide up to five visits to Project during other-than-normal occupancy hours for this purpose.

B. Remove temporary protective coverings and strippable films as digital sign is installed.

C. On completion of installation, clean exposed surfaces of sign according to manufacturer's written instructions, and touch up minor nicks and abrasions in finish. Maintain sign in a clean condition during construction and protect from damage until acceptance by Owner.

3.06 SUPPORT

A. Owner will be provided with technician level support.

B. A vendor provided technician will be available to the owner within twenty-four (24) hours of request.

C. Vendor will provide owner with complete set of schematics and block diagrams of sign.

D. All special tools required to provide maintenance and troubleshooting on sign will be provided by vendor to the Owner's A/V service department at the time equipment is installed.

3.07 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain digital sign.

END OF SECTION

Rev. 1, Dec 04, 2019