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Board Members
Mr. Randy McKinney, President
Dr. Nelson Bauer, Vice President
Mrs. Lisa Nix
Mrs. Shannon Robinson

REQUEST FOR PROPOSALS (RFP)

Planetarium Projection and Sound System

24-Foot Domed Facility

Issuing Authority

Orange Beach City Schools Board of Education
4544 Orange Beach Boulevard
Orange Beach, Alabama

Attention: Superintendent, William R. Wilkes

1. Purpose

Orange Beach City Schools (OBCS) is soliciting sealed proposals from qualified vendors for the design, furnishing, delivery, installation, configuration, and training of a planetarium-grade projection and sound system for a 24-foot-diameter dome.

The selected system shall be suitable for PreK–12 instructional use, public presentations, and immersive science education, with emphasis on astronomy, Earth science, space science, and interdisciplinary instruction.

2. Proposal Deadline and Submission Instructions

- **Proposal Due Date:** March 19, 2026
- **Time:** 10:00 AM (Central Time)
- **Submission Method:** Sealed envelope

Delivery Address:

Orange Beach City Schools Board Office
4544 Orange Beach Boulevard
Orange Beach, AL

Envelope Labeling:

"Planetarium Projection & Sound System Proposal"

Late submissions will not be accepted.

3. Procurement Method

This procurement shall be awarded on a Best Value basis. The lowest price proposal will not necessarily be accepted. OBCS reserves the right to:

- Accept or reject any or all proposals
 - Waive informalities or irregularities
 - Request clarifications or additional information
 - Negotiate with one or more proposers
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4. Project Overview

The intent of this RFP is to acquire a turnkey, professional-grade full-dome planetarium system, including:

- High-resolution laser projection
- All-sky, deep-space, and deep-water visualization software
- Professional audio system
- Control and production workstation

- Fulldome educational content
- Installation, calibration, and training

The system must be designed without projector elevation, placing the projection unit directly on the floor, while eliminating blocked sightlines and maintaining maximum native resolution.

5. Minimum Technical Specifications

Vendors shall propose a system that meets or exceeds the following specifications or offers equivalent or superior alternatives.

A. Projection System

- Laser-based projection system
- Minimum 2.4K native resolution
- Minimum 4.5 million pixel full-dome output
- Minimum 13,000 ANSI lumens (native)
- Ultra-wide, all-sky projection capability
- High contrast ratio (target 1:100,000 or greater)
- Laser phosphor light source
- Professional-grade optics designed for fulldome projection
- Internal high-performance media server with a minimum 2TB storage

B. Optical Configuration & Placement

- **No projector elevation required**
- The system must be floor-mounted with a maximum height of 51 inches.
- Optical solution must eliminate blocked sightlines
- Designed to remain below the dome spring line
- Approximately 15-degree projection angle flexibility (final measurements to be site-verified post-award)
- No software-based resolution reduction or geometric compromise

C. Control & Production Station

- Dedicated professional control workstation
- Two (2) 27-inch 4K monitors
- Keyboard (backlit), mouse, and mouse pad

- Xbox-style game controller for navigation
 - External connectivity ports for a laptop or mobile device mirroring
 - Microphone and stand for narration and recording
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6. Software & Content Requirements

A. Planetarium Software

- Professional edition planetarium software
- Real-time navigation through:
 - Solar System
 - Milky Way
 - Deep space and the known universe
- Ability to fly beyond the Solar System
- Intuitive user interface suitable for educators
- Drag-and-drop scripting and slide-based presentation tools
- Built-in 3D rendering engine
- PowerPoint-style presentation capability adapted for fulldome

B. Data & Databases

- Ultra-high-definition datasets for:
 - Earth
 - Solar System bodies
 - Deep-space objects
- Extended astronomical database including:
 - Celestial bodies
 - Constellation artwork
 - Deep-space targets

C. Educational Content

- Minimum 48 pre-built narrated planetarium tours
 - Minimum 52 full-dome narrated shows
 - Content must be suitable for K–12 audiences
 - Licensing terms must be clearly defined
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7. Audio System

- Professional-grade sound system suitable for a 24' dome
 - Speakers and amplifiers designed for immersive audio
 - All required adapters and cabling included
 - The system must integrate seamlessly with the planetarium software and media server
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8. Power Protection & Reliability

- Two (2) independent power failure protection and stabilization systems
 - Designed to protect the projection, server, and control equipment
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9. Installation, Training, and Support

A. Installation

- On-site installation included
- Full system calibration and testing
- Dome-specific optical alignment

B. Training

- Up to two (2) consecutive days of on-site training are included
- Training to cover:
 - System operation
 - Software navigation
 - Content playback
 - Basic content creation
- Optional additional training sessions to be priced separately

C. Documentation

- User manuals
- System diagrams
- Licensing documentation

10. Shipping & Delivery

- Air shipment, insured
 - The vendor must clearly identify the estimated shipping costs
 - Delivery coordination with OBCS is required
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11. Licensing Requirements

Proposals must clearly identify licensing terms, including but not limited to:

- Long-term or perpetual licenses for core planetarium software
- Content licenses (e.g., multi-year or extended-term educational shows)
- Any renewal or maintenance costs

Example acceptable licensing structures include:

- Long-term (e.g., 50-year) educational show licenses
 - Multi-year content licenses
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12. Vendor Qualifications

Vendors shall include:

- Company background and experience
 - Prior planetarium or fulldome installations (education preferred)
 - References (minimum of three)
 - Warranty and support information
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13. Proposal Format

Proposals should include the following sections:

1. Executive Summary

2. Technical Description of Proposed System
 3. Compliance with Specifications
 4. Software and Content Description
 5. Installation & Training Plan
 6. Pricing (itemized)
 7. Licensing Details
 8. Warranty & Support
 9. Vendor Qualifications & References
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14. Evaluation Criteria

Proposals will be evaluated using, but not limited to, the following criteria:

- Technical quality and performance
 - Educational suitability
 - System reliability and longevity
 - Ease of use for educators
 - Quality of training and support
 - Vendor experience and references
 - Total value to the school system
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15. Point of Contact

All questions regarding this RFP must be submitted in writing to the Superintendent's Office at Orange Beach City Schools.

Orange Beach City Schools reserves the right to accept the proposal deemed in the best interest of the school system.