

REF	MANUFACTURER	MODEL	DESCRIPTION	QTY	UNIT	EXTENDED
SPORTS LIGHTING LUMINARIES WITH RGB						
1						\$ -
2						\$ -
3						\$ -
4						\$ -
5						\$ -
6						\$ -
7						\$ -
8						\$ -
9						\$ -
10						\$ -
SPORTS LIGHTING LUMINARIES WITH RGB						\$ -
HOUSE LIGHTING LUMINARIES W RGB						
11						\$ -
12						\$ -
13						\$ -
14						\$ -
15						\$ -
16						\$ -
HOUSE LIGHTING LUMINARIES W RGB						\$ -
EVENT FLOOR AND HOUSE WORK LIGHT LUMINARIES						
17						\$ -
18						\$ -
19						\$ -
20						\$ -
21						\$ -
22						\$ -
EVENT FLOOR AND HOUSE WORK LIGHT LUMINARIES						\$ -
DMX CONTROL, PRODUCTION INTERFACE, TOUCHPANELS, BAS INTERFACE						
28						\$ -
29						\$ -
30						\$ -
31						\$ -
32						\$ -
DMX CONTROL, PRODUCTION INTERFACE, TOUCHPANELS, BAS INTERFACE						\$ -
INTEGRATION AND MATERIALS						
16	INTEGRATION	MATERIAL	Cables, Connectors, Lift Rental, Etc.	1		\$ -
17	INTEGRATION	LABOR	Design and Integration Labor	1		\$ -
18	INTEGRATION	TRAVEL	Travel & Expenses	1		\$ -
Integration and Materials Subtotal						\$ -
LED LIGHTING SYSTEM TOTALS						\$ -

**PENSACOLA BAY CENTER
ICE ARENA
LED LIGHTING UPGRADE**

DATE OF ISSUE: June 16, 2025

ITB # PBC25-1548

**TITLE: Pensacola Bay Center, Ice Arena LED Lighting Upgrades
ISSUED BY: Anthony James Partners**

Proposals Will Be Received Until: 2pm Eastern Time, July 11, 2025 for Furnishing the Products and Services Described Herein.

All inquiries for information should be directed to: Michael Martin, Anthony James Partners, LLC., as acting representative for Owner. Phone 863.559.4977 or Email mmartin@anthonyjamespartners.com

The undersigned offers and agrees to furnish the goods/services in accordance with the attached proposal and as mutually agreed upon by subsequent negotiation.

Proposer: _____

Title: _____

Fed ID No: _____

Phone: _____

Address: _____

Fax: _____

Email: _____

Zip Code: _____

Signature: _____

Representative Name: _____

Date: _____

1.0 SECTION 00 1000 – ITB INSTRUCTIONS AND GENERAL CONDITIONS

1.1 INTRODUCTION

The Request for Proposal represents the minimum requirements to furnish complete turnkey system(s) as described in this ITB.

The Contractor will provide the Work described in the ITB Documents on a 'turnkey basis'. Work covered by this Agreement includes, unless otherwise indicated, the manufacture, installation, supply, delivery, labor, testing and documentation of all structure, equipment, and materials necessary to operate the system(s) as described in the Contract Documents and the specifications to the Agreement.

Proposers responding to this ITB must provide pricing for a complete turnkey installation, including pricing for the provision and installation of all items necessary to provide finished and fully operational systems. Materials or equipment required for the provision and installation of such systems, not expressly addressed in this ITB, is understood to be the responsibility of the Proposer.

1.2 GENERAL DESCRIPTION

The Contractor shall provide complete, working, and operational system(s) including all labor, equipment, tools, material, engineering, supervision, licenses, insurance, permits and bonds to engineer, manufacture, and install fully integrated and operational system(s), including all noted peripheral elements highlighted by the following system(s) categories:

- A. Arena LED Lighting Upgrades

1.3 DEFINITIONS

- A. "Proposer" shall mean each vendor that has received the ITB and will be providing a proposal for the project.
- B. "Contractor" shall mean the vendor that has been selected to provide products or services or both to Owner.
- C. "Owner" and "Purchaser" shall mean "Pensacola Bay Center".
- D. "Contract" shall mean any written contract entered between the Owner and Contractor following the award of proposal with respect to this project as set forth in Section 1.11.
- E. "Code Authority Having Jurisdiction" shall mean the office or Agency responsible for assuring the work's compliance with the State Building Code.
- F. "Substantial Completion" – shall be defined as all work under the Contract has been completed and the provided system(s) are fully operational, meet all required performance specifications outlined in the technical specifications and are ready for the intended use. The project is ready for final punch list by the Owner and/or Owner's designated representative.
- G. "Guaranteed Completion" – shall be defined as all Substantial Completion punch list items have been completed and all work under the Contract all system(s) are ready for acceptance events.
- H. "Final Acceptance" – shall be defined as all requirements for Guaranteed Completion have been completed and three (3) consecutive problem free major events approved by the owner have been completed as defined by Section 3.6.E of the Technical Specifications.

1.4 SITE VISITS

- A. The Proposer shall, during the scheduled mandatory pre-bid site visit, have access to the site to examine the site and take note of all conditions affecting the conduct and completion of the work.
- B. Submission of a Proposal will be deemed confirmation that the Proposer has complied with these requirements.

- C. Proposers are clearly advised that any drawings, plans and work-product describing aspects of the site provided as part of this document are not to be considered as definitive or as a substitute for any information which would otherwise be obtained by the Proposer during the formal Site inspection.

1.5 PROPOSALS SHALL BE SENT TO:

Electronic copy to:
Terry Whitman, Director of Operations
procurement@pcolabaycenter.com
Electronic copy to:
Michael Martin
mmartin@anthonyjamespartners.com

1.6 GENERAL

- A. Proposals must be received at the above address by 2 pm Eastern Time on July 11, 2025.
- B. Proposal Validity - Proposals must be valid through September 25, 2025.
- C. Proprietary Information - All material submitted becomes the property of the Purchaser and Owner and will be returned only at their option. Proposals submitted become the property of the Purchaser and Owner and may be reviewed and evaluated by any person at the discretion of the Purchaser and Owner. The Purchaser and Owner have the right to use any or all concepts presented in any response to the ITB. Selection or rejection of the proposal does not affect this right. Information provided by the Purchaser and Owner to the requesting vendor for the purpose of providing a response to the ITB is the property of the Purchaser and Owner.
- D. Vendor's response to this ITB and this ITB shall become part of the final Contract with the Owner.
- E. Vendors must provide proposal on the complete package including all required structure, equipment, installation, and functional connection of all equipment as described in this document. A proposal submitted in response to this ITB signifies the Proposer agrees to sell to Purchaser the indicated products, in whole or in part, at the sole discretion of Purchaser.
- F. It shall be the Vendor's responsibility to research the facility's event schedule to ensure there are no scheduling conflicts regarding installation of the system(s). Vendors are required to provide a proposed project schedule to determine if work will be required on weekends or if extended shifts will be required. The vendor will not be allowed to increase their costs because of the vendor's failure to research this aspect of their proposal.
- G. Change orders will not be accepted for errors in estimating the cost of the project. It is the responsibility of the Proposer to confirm the existing and new structural, electrical and data conditions. Vendors are required to view on-site conditions, where applicable, prior to submitting a proposal.
- H. The ITB shall act as a description of the minimum system(s) desired by the Purchaser and Owner. Proposers are required to provide a solution for the base proposal. Proposers are encouraged to offer viable alternatives.

1.7 PROPOSAL SUBMISSIONS

- A. The following items must be submitted in the proposal
1. Introductory letter with contact information clearly labeled.
 2. Completed Excel Bid Form submitted as an Excel file. Base Excel document provided. Price and associated data must be provided on Bid Form supplied with this ITB.
 3. Fully executed copy of the first page of this ITB.
 4. Proposer's Qualifications.
 5. A complete list of references for similar installations performed in the **past 3 years** with name of facility, photo of installation, scope of work provided, contact name, title, address, and direct phone number.
 6. Project team and resumes of key personal including project manager.

7. Product cut sheets and technical data for each item proposed.
8. Warranty information for each application.
9. Services provided as part of the required two (2) year parts and labor warranty.
10. Spare Parts Lists: List to include spare parts provided.
11. Letter of Surety from their bonding agent, stating their ability to provide a 100% payment and performance bond if they are the successful Proposer.
12. Proposed timeline for completing the work (Gantt chart format).

1.8 PROJECT SCHEDULE SUMMARY:

ID	Task	Date	Time
1	Issue ITB	Tuesday, June 17, 2025	
2	Mandatory Prebid Site Meeting	Friday, June 27, 2025	10 AM EDT
4	Inquiry Deadline - RFIs	Wednesday, July 2, 2025	2 PM EDT
5	Issue Responses to RFIs	Tuesday, July 8, 2025	4 PM EDT
6	ITB Response Due	Friday, July 11, 2025	2 PM EDT
7	Bidder Interviews	Tuesday, July 15, 2025	TBD
8	Best and Final Solicitation	Friday, July 18, 2025	2 PM EDT
9	Anticipated Award	Wednesday, July 23, 2025	4 PM EDT
10	Integration Commence	Monday, July 28, 2025	8 AM EDT
11	Substantial Completion	Friday, September 26, 2025	5 PM EDT
12	Guaranteed Completion	Friday, October 3, 2025	5 PM EDT

- A. Should Contractor fail to achieve Substantial Completion by September 26, 2025, as that Contract Substantial Completion Date may be revised by Change Order pursuant to the terms of the Contract, the Contractor shall pay to Owner, as liquidated damages, Five Thousand Dollars (\$5,000) per day for each calendar day between the Contract Substantial Completion Date and the date Contractor achieves Substantial Completion as defined herein or until the Contract Guaranteed Completion Date, whichever is earlier. In addition, should Contractor fail to achieve Contract Guaranteed Completion by October 03, 2025, the Contract Guaranteed Completion Date as that date may be revised by Change Order pursuant to the terms of the Contract, the Contractor shall pay the Owner, as liquidated delay damages, Ten Thousand Dollars (\$10,000) per day for each calendar day between the Contract Guaranteed Completion Date and the date Contractor achieves Guaranteed Completion as defined herein.

1.9 PROPOSAL EVALUATION

- A. The Proposer's proposals will be evaluated using the following criteria in no specific order:
1. Ability of contractor to supply all equipment and or structure as described in ITB.
 2. Quality of the individual products.
 3. Contractor's capacity, capability, and overall competency to perform the specified work.
 4. Contractors' Sub-Contractors' capacity, capability and overall competency to perform the specified work.
 5. Work history and references.
 6. Level of integration between all system(s) components.
 7. Ability to meet specified timelines.

8. Pricing and terms.
9. Non-Compliance document on Proposer's letterhead per Section 1.13.B
10. Warranty and service provisions.

1.10 PROPOSAL REJECTION

- A. Purchaser and Owner reserve the right to reject and/or negotiate any or all proposals on a non-exclusive basis.
- B. The lowest proposal price will not necessarily be accepted as the "winning" proposal.
- C. Purchaser and Owner may reject or accept, at its sole option, any incomplete or incorrect proposal.
- D. Due to the unique nature of the equipment and work described herein, objective comparisons may not be possible. Purchaser and Owner reserves the right, at its sole and absolute discretion to determine the compliance of any Proposal with the requirements set out herein or any accompanying documents or the merits of one Proposal over another.
- E. Purchaser and Owner may, at its option, disclose all or some of the contents of the Proposals or other information provided by any Proposer to some or all Proposers as part of Purchaser and Owner's evaluation of the merits of the Proposals submitted and any related negotiations.
- F. Purchaser and Owner reserve the right to:
 1. Cancel this process at any time prior to execution of a definitive contract and such cancellation will be without any Purchaser and Owner liability.
 2. Negotiate with companies not solicited in the ITB process.
 3. Make all decisions regarding this proposal, including, without limitation, the right to accept, reject, or negotiate changes to any of the products or terms outlined herein.
 4. Award the proposal as a whole or in part based on unit pricing provided on the proposal bid form.
 5. Award sections of the proposal to separate vendors.
 6. To reject any or all proposals received.

1.11 CONTRACT FORM

- A. The Proposer is advised that this ITB is made-up of information that will be incorporated in whole or part, into the Contract, which will be executed between Purchaser and the selected Proposer.
- B. This ITB document, in its entirety, may be superseded by such Contract.
- C. The terms of any Contract will be subject to the approval of Owner, in its sole discretion.
- D. The Contract, when fully executed, shall comprise a set of General Conditions with Supplementary Conditions, General Terms and Conditions, Functional Specifications and a complete Scope of Work, a Maintenance Agreement and any other Schedules as may be required to fully describe the work under the Contract.

1.12 PROPOSAL OF ALTERNATE SOLUTIONS

- A. In addition to proposing exactly what is specified in this ITB, the Proposer is encouraged to furnish alternate solutions that shall satisfy, complement and/or reduce the overall cost without hindering the performance of the system(s) or deviating from its intended use. Proposer must follow the procedure for furnishing additional alternate solutions described within the project specification document.

1.13 COMPLIANCE

- A. The Proposer is required to carefully review all components of this ITB in its entirety.
- B. Unless the Proposer specifically cites in writing, where specified devices, systems, and/or related tasks are "Not Compliant" it shall be deemed that the Proposer understands, agrees to, and accepts all specified devices, systems, and/or related tasks. All "Non-Compliant" devices, systems, related tasks, and exclusions shall be clearly identified in a separate Non-Compliance document on Proposer's letterhead and submitted

with the proposal. Any statements of non-compliance or exclusions listed in the body of the proposal narrative shall be considered un-recognized by the review committee, unless clearly identified in the Non-Compliance document.

- C. In a case of non-compliance, the Proposer is to indicate all relevant qualifications or alternatives, which Proposer wishes Owner to consider.

1.14 CONSTRUCTION SAFETY

- A. The Contractor shall comply with applicable laws and the rules and regulations established by the Owner, regarding the conduct of work at the site, including, without limitation the policies regarding workplace safety.
- B. Contractor agrees to defend, indemnify, and hold harmless the Owner and its directors, officers, employees, agents, successors and assigns against any claims, causes of action, costs, expenses (including reasonable attorneys' fees), liabilities, or damages (collectively "Losses"), arising out of or in connection with any act, omission, or intentional misconduct on the part of Contractor or any of its employees or agents.
- C. Contractor acknowledges that neither it nor any person under its employ is covered by the Owner's workers' compensation insurance and represents to Owner that it has in effect and will continue to carry its own such insurance.
- D. Contractor agrees to indemnify and hold Owner harmless from all claims, demands, damages, actions, suits, liabilities, and losses of any kind or character (including attorney fees) arising out of or connected in any way with its failure to carry such insurance.
- E. Contractor shall be responsible for day-to-day premises and facilities clean-up, including temporary storage, removal and disposal of debris, trash, and rubbish caused by its employees, subcontractors, or installation forces. All tools, equipment and materials shall be secured upon completion of the day's work. Surplus materials shall be removed from the work site and stored in their appropriate location.
- F. Contractor shall not drive nor operate a vehicle, equipment, or machinery upon any of Owner's, grounds, pathways or interbuilding walkways without having first obtained concurrence of the activity and approval for operating the vehicle, equipment, or machinery from Owner. Requests for approval will be submitted through Owner's assigned Project Coordinator.
- G. Contractor's personnel will follow Owner's standards and personal conduct codes while on Owner's premises. A copy of those standards and codes will be provided to Contractor upon request. Personnel found violating these standards or regulations will be asked to leave the work site and shall not be allowed to return.
- H. OSHA Regulations: It is Contractor's responsibility to guarantee that all items of hardware, services rendered or working environments meet or exceed those requirements and guidelines established by the Occupational Safety and Health Act (OSHA). Questions regarding such requirements as pertaining to Owner may be referred to the Owners' Compliance Office.
- I. Safety: Contractor shall give all required notices and comply with all applicable laws, ordinances, rules, regulations, and lawful orders of any public authority bearing on the safety of persons or property and their protection from damage, injury, or loss.
- J. Emergencies: In any project related emergency affecting the safety of persons or property, Contractor shall act with all due haste to prevent further threatened damage, injury, or loss, and will immediately notify Owners' Safety Office.
- K. Protection of Owner's Facilities: Contractor shall be responsible for replacing, restoring, or bringing to original condition any campus property or facilities damaged by Contractor's personnel or operations. Any damage or disfigurement must be reported promptly to Owner and restored by Contractor at its own expense.

1.15 DELIVERY, STORAGE AND SECURITY

- A. The Contractor shall deliver all system(s) components and related materials to the Site at their own expense.
- B. The Contractor shall receive, unload, uncrate, assemble, and transport each component to its designated location for installation, and install the system(s) on-site in accordance with Site regulations.
- C. The Owner will not accept or receive any Contractor equipment or materials delivered to the Site.
- D. The Contractor will be responsible for the clean-up and disposal of all packaging materials and debris.
- E. The Contractor is responsible for providing any temporary on-site storage for equipment and materials.
- F. Owner is not responsible for security or insurance related to equipment or materials stored at the Site.
- G. Any temporary storage requirements must be coordinated with the Owner.

1.16 NO PROMOTION OR ADVERTISING BY CONTRACTOR.

- A. The Contractor shall not display its trademarks or insignia upon any equipment.
- B. The Contractor shall not name the equipment or the fact that the equipment is installed at the Site in any part of its promotion or advertising of the Contractor's business (including, without limitation, any statement that it has supplied the Equipment or maintains same) without the consent of the Owner, which consent may be withheld by the Owner at its sole and absolute discretion.

1.17 INSURANCE

- A. The Owners insurance requirements will be furnished prior to contract award.

1.18 TAXES

- A. Payment of applicable sales taxes shall be the responsibility of Contractor and identified on each Proposer's Bid Form.

1.19 TERMS & CONDITIONS

- A. At no time, including without limitation, upon substantial performance and when title to the equipment passes to Owner, will the Owner be liable for the payment of any royalties, licenses, or other fees to the Contractor or third parties as a result of the ownership by the Owner, use or enjoyment of the equipment, or replacement of broken or worn-out parts of the equipment.

1.20 RELATIONSHIP OF THE PARTIES

- A. The relationship between Contractor and Owner is strictly that of an independent contractor. Contractor shall have no authority to enter contracts or incur any obligations binding upon Owner.
- B. Contractor shall employ only competent foremen and experienced laborers on the project. Contractor shall discharge or remove immediately, whenever requested to do so by Owner, any employee considered by Owner to be incompetent, disorderly, or who is found in violation of the Owners' personal conduct codes.
- C. Contractor shall ensure their sub-contractors, suppliers, manufacturers, sub-consultants, and anyone associated with or related to the Project, is subject to and complies with the provisions of this ITB, the Proposal, and the Contract, as applicable.

1.21 NO RELIANCE ON INFORMATION

- A. Unless stated otherwise, the Owner does not represent or warrant the accuracy or completeness of any information set out in the ITB Documents, their appendices, schedules or other background or reference information, or documents prepared by the Owner or by third parties which may be made available to Proposers by or through the Owner. Proposers shall make such independent assessments as they consider necessary to verify and confirm the accuracy and completeness of all such information as any use of or reliance by Proposers on any and all of such information shall be at the Proposer's sole risk and without

ITB INSTRUCTIONS AND GENERAL CONDITIONS

recourse against the Released Parties. Without limiting the generality of the foregoing, any use of or reliance upon any information by Proposers shall be and is subject to all express disclaimers of liability provided with the information, as well as all disclaimers of liability in the Contract.

- B. By submitting a Proposal, each Proposer acknowledges, represents and warrants that its proposal is based on and relies solely upon the Proposer's own examination, knowledge, information, judgment and investigations and not upon any statement, representation, or information made, furnished or given by or on behalf of any of the Owners, its directors, officers, employees, consultants or agents, except where expressly made in the body of the ITB (excluding the appendices to the ITB) and warranted in the body of the ITB to be accurate by the Owner for purposes of reliance by the Proposer.

1.22 WARRANTIES

- A. A Contractor shall warrant and guarantee that title to all work, materials, and equipment covered by a request for payment, whether originally incorporated in the project or not, will pass to Owner upon receipt of full payment by Contractor, free and clear of all liens, claims, security interests or encumbrances, and that no work, material, or equipment covered by a request for payment will have been acquired by Contractor, or by any person performing work at the site, or furnishing materials and equipment for the project, subject to an agreement under which an interest therein or an encumbrance thereon is retained or otherwise imposed by Contractor or any other third person.
- B. Contractor shall warrant and guarantee to Owner, without limitations or qualification, that all equipment, components, materials, workmanship, and the system(s) as an entity shall conform to and perform in accordance with local building codes.
- C. Contractor shall be fully responsible for any work knowingly performed contrary to said laws, codes and/or regulations, and shall fully indemnify Owner against loss and bear all costs and penalties arising therefrom.

1.23 THE OWNER RIGHT TO AMEND OR CANCEL ITB

- A. The Owner reserves the right at its sole discretion at any time without reason, and without liability to the Proposers or anyone else, by addenda to modify, amend or otherwise change, to extend any schedule or time periods specified within, and to suspend, postpone or cancel, the ITB. All such addenda shall be issued by the Owner in writing and shall be expressly identified as an addendum to this ITB.
- B. The Owner reserves the right to cancel this ITB and issue a new request for proposals for any or all parts of the provision of the Services at its discretion. In such case, the Owner may proceed in such manner as the Owner, at its sole discretion, considers appropriate to obtain the best overall value for the Owner.

END – ITB INSTRUCTIONS AND GENERAL CONDITIONS

PENSACOLA BAY CENTER LED LIGHTING UPGRADE PBC25-1548

TECHNICAL PERFORMANC SPECIFICATIONS HOUSE AND GAME LIGHTING

PART 1 GENERAL

1.1 DESCRIPTION

- A. The Contractor is responsible for delivering a fully integrated and comprehensive design solution for the sports lighting fixtures at Pensacola Bay Center. This design must incorporate high-quality, energy-efficient LED fixtures that are capable of operating reliably at a supply voltage of 277 volts. The selected fixtures and overall lighting application must adhere strictly to the standards established by NCAA Championship Regulations, ensuring that the lighting quality and performance meet all competitive and regulatory requirements. Furthermore, the system must be designed to support the demanding visual requirements of modern UHD and HDTV broadcasts, which necessitate a flicker uniformity of better than 2% to prevent camera artifacts and ensure broadcast-quality image clarity. The lighting system should also be capable of supporting high-speed filming, with specific accommodation for high frame rate cameras operating up to 300 frames per second. In addition to these technical standards, the lighting control system must be versatile and advanced, providing a minimum of 16 distinct dimming steps to enable precise brightness adjustments. It should also offer flexible control options, including both individual fixture control for targeted lighting adjustments and group control for coordinated lighting management across multiple fixtures. The overall design must incorporate user-friendly controls, robust energy efficiency features, and the ability to adapt to various event requirements, ensuring optimal lighting performance for the arena's sports activities and broadcast needs.
- B. The primary objectives of this sports lighting project are as follows:
 - 1. **Guaranteed Light Levels:** The selected lighting system must ensure that light levels do not fall below the specified target values throughout a period of 10 years. Maintaining consistent illumination is essential for player safety and enhancing the spectator experience, and this guarantee will provide confidence in the system's long-term performance.
 - 2. **Environmental Light Control:** A key goal is to minimize glare experienced by both players and spectators. The LED lighting design should offer superior glare control compared to high-intensity discharge (HID) lighting systems, thereby improving visual comfort and reducing light pollution within the venue.
 - 3. **Life-cycle Cost:** To minimize operational expenses, the chosen lighting solution must be energy-efficient and cost-effective to operate over its lifespan. Additionally, the system should be designed to eliminate all maintenance costs during the warranty period, ensuring economic efficiency and reduced ongoing expenditures.
 - 4. **Control and Monitoring:** To optimize labor resources and prevent unnecessary usage of the lighting system, the venue requires a remote on/off control system, allowing facility operators to manage lighting remotely as needed. Furthermore, the system should be capable of monitoring luminaire functionality, detecting outages throughout the 10-year lifecycle. All costs associated with communication, control, and monitoring for this period shall be included in the bid, providing a comprehensive, end-to-end solution for managing the arena's lighting effectively.
- C. The Contractor shall be responsible for supplying all necessary lighting equipment, including procurement, installation, configuration, and tuning of the systems. Additionally, the Contractor shall manage the demolition and removal of existing legacy lighting equipment, ensuring a seamless transition to the new system. It is important to note that under no circumstances should the Contractor utilize or assume responsibility for the Owner's waste removal mechanisms or procedures. All disposal of old equipment must be handled solely by the Contractor through appropriate methods, conforming to relevant regulations and environmental standards.
- D. The Contractor shall be responsible for supplying and installing all secondary structural steel components, mounting brackets, and hardware necessary to securely attach the lighting fixtures to the existing catwalk pipe railing structures. This scope includes ensuring proper support and stability for the entire lighting system. The Contractor shall provide all labor, materials, equipment, tools, transportation, and project management required to complete the installation process. The goal is to deliver a fully operational and safe lighting system, integrated seamlessly with the existing infrastructure, thereby ensuring reliability and compliance with all applicable standards.

- E. The Owner will supply primary power at designated demarcation points as specified in the provided electrical drawings. The Contractor is responsible for field verification of these power demarcations and must identify and include any additional electrical service requirements necessary for the project within their proposal. The Contractor shall be responsible for all electrical distribution beyond the demarcation point, including the installation, connection, and termination of secondary power to supply the new lighting system(s). This includes ensuring that all electrical connections are compliant with relevant codes and standards and are capable of reliably powering the entire lighting system.
- F. The Contractor is responsible for inspecting the site prior to commencing work and including all necessary tasks within their proposal. All work must be performed in strict accordance with applicable electrical codes, including the National Electrical Code (NEC), state, and local electrical regulations. In cases where multiple codes apply, the most stringent requirements shall take precedence to ensure safety, compliance, and proper installation standards. The Contractor must ensure that all work meets or exceeds these standards throughout the project.
- G. Upon obtaining approval from the Owner, the Contractor may utilize existing conduits or raceways installed in the arena for low-voltage, video signal, and/or data communication lines needed for the new system(s). If existing conduits or raceways are used for running new wiring, all fill ratios must comply with applicable codes, ensuring proper conductor capacity and safety. Any additional conduits or raceways necessary to establish a complete wiring route to each lighting fixture shall be furnished, installed, and secured by the Contractor. The Contractor is also responsible for providing, installing, and terminating all cabling required to ensure the new system(s) are fully operational, reliable, and meet all relevant standards and specifications.
- H. The Contractor shall be responsible for the final engineering design of all structural and electrical components necessary for the new system. This includes preparing detailed engineering plans and specifications, which must be reviewed and stamped by a licensed and registered professional engineer authorized to practice in the State of Florida. The stamped plans shall demonstrate compliance with all applicable building codes, safety standards, and engineering best practices, ensuring that the structural and electrical aspects of the installation are both safe and reliable.
- I. The Contractor is responsible for supplying a complete, fully operational, and turnkey lighting system as outlined in the ITB documents and any subsequent addenda. Prior to finalizing the contract, the Contractor must notify the Owner of any equipment omissions or discrepancies within the ITB that could hinder the completion of a fully functional system compliant with NCAA standards. If the Contractor fails to report such omissions, they shall assume full responsibility for providing all necessary equipment to ensure the system's completeness and compliance at no additional cost to the Owner.
- J. The Contractor shall conduct a thorough field verification of all work site conditions, including measurements, dimensions, and sightlines, prior to submitting shop drawings. This ensures that all proposed designs and components are accurate and compliant with the site-specific conditions, minimizing potential conflicts or issues during installation.
- K. The Contractor shall grant the Owner a non-exclusive, perpetual license to use all proprietary software provided with this bid package for the entire lifespan of the system. This license shall include the right to operate, maintain, and modify the software as necessary to ensure the proper functioning and management of the installed system.

1.2 VENDOR QUALIFICATIONS

- A. Owner intends to contract with a vendor capable of performing all work outlined in this ITB and providing long-term service and support for all supplied equipment. To ensure the selected vendor aligns with the Owner's long-term interests, submission of a comprehensive proposal addressing the following requirements is mandatory. Failure to provide acceptable responses to all listed items will result in elimination from consideration. The Owner reserves the right, at its sole discretion, to waive any or all of these requirements.
 - 1. Vendor shall submit a list of at least five (5) professional or collegiate arenas (including facility name, contact person, title, address, and current phone number) where the vendor has supplied equipment and services of similar size and scope within the past three (3) years.

2. Vendor shall demonstrate that it has a dedicated service employee or certified contractor capable of providing maintenance response within two (2) hours of a service call.
3. Vendor shall provide a complete list of all subcontractors involved in this project, including electrical and mechanical contractors, labor providers, and any other personnel not directly employed by the Vendor. Subcontractors may be required to submit proof of insurance and relevant licenses to operate within the City of Pensacola and the State of Florida.

1.3 SUBMITTAL REQUIREMENTS

A. Initial Submittals and Shop Drawings

1. Contractor shall be required to provide submittals and shop drawings to Owner within twenty (20) calendar days of date shown on award notice, acknowledged with a binding letter of intent. Contractor shall advise the Owner of any discrepancy that could affect installation. If Contractor fails to notify Owner of any discrepancies, Contractor shall assume responsibility for providing the required equipment or correcting such discrepancies at no additional cost to Owner.
 - a. Submit (1) electronic copy, product data photometric studies and samples together in one package within thirty (30) calendar days of date shown on award notice to Contract and prior to ordering equipment.
 - b. Submit catalog data sheets electronically in a collaboration folder between the vendor, client and consultant.
 - c. Submit method of attachment for lighting fixtures required for this scope of work. A licensed/registered engineer in the State of Florida shall stamp all structural drawings.
 - d. Submit sectional and longitudinal section drawings showing relation of the proposed light fixture positions in relation to all obstructions including the structure, scoreboard, team banners, all entertainment and audio equipment, and flags.
 - e. Submit point-to-point wiring diagrams and typed wire lists identifying every connection. Include electronic devices such as switches, transformers and terminal blocks. Indicate locations of all components. Identify cables by type, color, and wire numbers.
 - f. Submit conduit riser diagrams showing required conduits and junction boxes along with types of quantities of cables to be contained in each conduit. Show details of grounding, strain relief and cable support, fire stop protection, and wall penetrations through all rated partitions.
 - g. Submit rack layouts indicating the proposed arrangement of mounted equipment including power junction box location. Rack layouts shall include front and rear views.
 - h. Submittal drawings shall indicate proposed color selections and finishes for all exposed surfaces and custom fabricated items. Submit actual color/finish samples, wall plates, and custom labels.
 - i. Submit a list of all lower tier subcontractors and suppliers. List shall include lower tier subcontractor's qualifications indicating performance of similar work on past projects of this type and scope.
 - j. Submit a project schedule in Gantt Chart format outlining equipment delivery dates and installation start and finish dates. Project schedule shall be broken down into sufficient detail (work task and duration) to permit Owner to monitor installation progress daily. Coordinate submittal review requirements and order dates for long lead items in critical path of submitted schedule.
 - k. Copies of all required business and contractor licenses.
 - l. Copies of proof of insurance.
 - m. Approval of submitted items indicates only the acceptance of the manufacturer and quality. Specific requirements, arrangements, and quantities shall comply with the intent of the Contract Documents as interpreted by the Owner unless specifically approved in writing.
 - n. Submittals that are incomplete, deviate significantly from the requirements of the Contract Documents, or contain numerous errors will be returned without review for rework and re-submittal, and may result in back charges to the contractor.

B. Contract Closeout Submittal:

1. When the installation is substantially complete including the Testing Reports in Part 3 of this Section, Contractor shall submit two (2) complete initial hard copy sets of contract closeout submittals to the Owner for review. After review and approval of initial set, Owner shall return one (1) initial hard copy to Contractor with comments for updating. Contractor shall provide two (2) final sets of closeout submittals to Owner and one (1) electronic copy in searchable PDF format to Owner and Consultant. Closeout submittals shall include, but not be limited to:
 - a. Project Record Drawings (As-Built Drawings).
 - b. A list of all equipment provided and its location within the facility. List shall include manufacturer name, model identifier, serial number, and any other pertinent information needed to obtain service, maintenance, and/or replacement.
 - c. A list of all Subcontractors who performed work for Contractor during installation. List shall include company name, short description of work performed by contractor, physical company address, phone number, and contact person(s).
 - d. All testing reports as specified in Section 3 – Testing and Acceptance.

C. Operation and Maintenance Manual

1. Upon substantial completion and prior to conducting on-site training with the Owner, the Contractor shall supply one (1) electronic (soft) copy of the Operation & Maintenance (O&M) Manuals to both the Owner and the Consultant. The O&M Manuals must be organized with folder dividers and structured logically to facilitate easy access to all necessary information, eliminating the need for extensive searching through the entire manual. All documents included within the O&M Manual shall be written in English and presented with sufficient detail to be easily understood by individuals with no prior knowledge of LED lighting systems, control equipment, or operational procedures. The contents of the O&M Manual shall include, but are not limited to, the following:
 - a. Table of Contents
 - b. Contractor/subcontractor/supplier list including all items from 1.3.B.1.d
 - c. Warranty certificates for each component
 - d. Description / overview of system(s) including key features and operational procedures.
 - e. Full start up procedure for all control room rack equipment and LED lighting equipment written under the assumption that all equipment was in full powered off mode.
 - f. As simplified as possible step by step Operation sequences and procedures for operators of each system.
 - g. Full shutdown procedure for all control room rack equipment and LED lighting equipment written under the assumption that the facility is in an extended power failure situation.
 - h. Troubleshooting procedures for all equipment provided by Contractor. Troubleshooting procedures shall have included demonstration photos and/or diagrams as required.
 - i. Maintenance procedures for all equipment provided by Contractor. Maintenance procedures shall include demonstration photos and/or diagrams as required. Contractor shall indicate whether maintenance procedures should be performed monthly, bi-annually, or annually.
 - j. Owner's Manuals for all third party and/or "off the shelf" type equipment provided by Contractor, e.g., KVM's, fiber modems, network switches/routers, and UPS battery back ups.
 - k. All third-party equipment and/or "off the shelf" equipment warranties and a notarized System Warranty.

1.4 EQUIPMENT GENERAL SPECIFICATIONS

- A. All equipment and materials, except owner furnished, shall be new and the latest version at the time of bid and shall conform to applicable UL, ULC, or ANSI provisions. Re-manufactured or "B" stock equipment will not be accepted without prior written consent from the Owner. Evidence of unauthorized re-manufactured

- or "B" stock equipment on the project site will be deemed evidence of the contractor's failure to perform the work.
- B. Contractor shall take care during installation to prevent scratches, dents, chips or disfiguration of equipment and materials supplied. All damaged equipment and/or materials shall be repaired or replaced at Owner's discretion. Contractor shall perform either option selected by Owner at no additional cost to the Owner.
 - C. All power and data cabling are to be labeled at each end of the cable with a description in English OR with a reference to a wire designation on a wiring diagram. This includes all cables internal to the displays, all cables between displays and control room, and all cables internal to the control room. These diagrams must be part of the Project documentation submitted to the Owner at time of acceptance.
 - D. Each device shall meet all its published manufacturer's specifications. Verify performance as required.
 - E. Provide engraved, self-adhesive phenolic labels for all rack-mounted signal processing, control, and graphics equipment, placing them at both the front and rear of each piece. Labels should be mounted directly on the equipment chassis in a neat, permanent manner. Handwritten or embossed labels will not be accepted. Each label must include a schematic enumeration reference and a description of the equipment's function or the area it serves. Additionally, for equipment mounted within furniture consoles, only engraved labels at the rear are required. All labels must be durable, clearly legible, and professionally applied to ensure long-term readability and organization.
 - F. All engraving shall be 1/8" block lettering unless noted otherwise. On dark panels or pushbuttons, letters shall be white. Letters shall be black on stainless steel, brushed natural aluminum plates or light-colored pushbuttons.
 - G. Per IEC-268 standard, all XLR connectors not mounted on equipment shall be wired pin 2 hot (high), pin 3 low, and pin 1 screen (shield).
 - H. Contractor shall exercise care when wiring racks to avoid damaging cables and equipment. Contractor shall install grommets around cut-outs and knock-outs where conduit or chase nipples are not installed.

1.5 QUALITY ASSURANCE

- A. All requirements of the latest published editions of the following standards shall apply, unless otherwise noted. In the event of conflict between cited or referenced standards, the more stringent shall govern.
 - 1. NCAA - LED Lighting Requirements
 - 2. National Electric Code (NEC).
 - 3. National Electrical Manufacturers Association (NEMA)
 - 4. American National Safety Institute (ANSI)
 - 5. Occupational Safety and Health Administration (OSHA)
 - 6. American Iron and Steel Institute (AISI)
 - 7. Underwriters Laboratories (UL)
 - 8. Federal Communications Commission (F.C.C.) Rules and Regulations, Part 76.
 - 9. Society of Cable Television Engineers (S.C.T.E.)
 - 10. Society of Motion Picture and Television Engineers (S.M.P.T.E.)
 - 11. American Society of Testing Materials (A.S.T.M.)
 - 12. National Cable Television Association (N.C.T.A)
 - 13. Electronic Industries Association (E.I.A.)
 - 14. Telecommunications Industries Association (T.I.A.)
- B. Review all available architectural, civil, structural, mechanical, electrical, and other project documents relative to this work.
- C. Verify all dimensions and site conditions prior to starting work.

- D. Contractor to provide a plot of measured lighting levels per the NCAA Specifications.
- E. Coordinate the specified work with all other trades.
- F. Maintain a competent supervisor and supporting technical personnel, acceptable to the Owner during the entire installation. Change of supervisor during the project shall not be permitted without prior written approval from the Owner.
- G. Provide all items not indicated on the drawings or mentioned in the specifications that are necessary, required or appropriate for this work to realize a complete and fully operational system that performs in stable and safe manner.
- H. Review project documentation and continuously make known any conflicts discovered and provide all items necessary to complete this work to the satisfaction of the Owner without additional expense. In all cases where a device or item or equipment is referred to in singular number or without quantity, each such reference shall apply to as many such devices or items as are required to complete the work.
- I. Provide additional support or positioning members as required for the proper installation and operation of equipment, materials and devices provided as part of this work as approved by the Owner, without additional cost to the Owner.
- J. Regularly examine all construction, and the work of others, which may affect Contractor's work to ensure proper conditions exist at site for the equipment and devices before their manufacture, fabrication, or installation. Contractor shall be responsible for the proper fitting of the systems, equipment, materials, and devices provided as part of this work.
- K. Promptly notify the Owner in writing of any difficulties that may prevent proper coordination or timely completion of this work. Failure to do so shall constitute acceptance of construction as suitable in all ways to receive this work, except for defects that may develop in the work of others after its execution.
- L. All Lifts and Crane's (Mechanical, Electric, Gas or Diesel) must meet all OSHA Regulations, City and State Code and have current inspection licenses with all equipment.
- M. MSDS Sheets shall be organized in a binder, available at site at all times and comply with all OSHA and Local and State Codes.
- N. All Hazardous materials shall be stored in an OSHA compliant storage container and placed in area directed by client.
- O. After installation, submit photographs showing cable entries and terminations within equipment racks, enclosures and pedestals at the job site

1.6 WARRANTY AND SERVICE

- A. Contractor shall warrant labor and materials for ten years following the date of Final Acceptance.
- B. During the warranty period the system shall be free of defects and deficiencies and conform to the drawings and specifications with respect to the performance, quality, function, and characteristics stated.
- C. Contractor shall repair or replace defects that occur in labor or materials within the warranty period. If repair is affected using Owners spare parts allotment, Contractor shall replenish all parts used to keep Owner's inventory at the amount required by the contract.
- D. On-site labor shall be included at any time during the warranty period:
 - 1. When 10% or more of the fixtures are out or light levels fall 10% below the design criteria values.
 - 2. When color balance and uniformity exceed a 10% variation of the initial TLCI or CRI readings.
 - 3. When system is out of NCAA Standards compliance for any reason.
- E. Failed parts shall be returned to the Contractor at the Contractor's expense for repair at a service facility located in the United States. Contractor shall identify the location of its service facility in the documentation provided when submitting a bid for this work.
- F. The Contractor shall replace failed parts that cannot be repaired.

- G. Upon receipt of a failed part, Contractor shall return a repaired or replacement part to the Owner within fifteen (15) business days from receipt of failed part.
- H. Contractor shall supply at least one local service employee or local authorized service agent for servicing and repair of all equipment during the warranty period. Local service employee or local authorized service agent shall be located within 100 miles of Owner's facility. Individual or firm intended to meet this requirement shall be submitted with responsibility review materials.
- I. The local service employee or local authorized service agent shall be entity responsible for providing the following emergency response availability:
 - 1. Telephone service assistance and technical support 24 hours a day at Owner's facility, 7-days per week.
 - 2. Answer all service calls and requests for information within one (1) hour during the warranty period.
 - 3. A parts exchange program, including same day shipment of exchange parts. The manufacturer shall keep a ready stock of key assemblies available to ship out upon notice of a parts failure if part is not available in spare parts inventory at Owner's facility.
 - 4. The advance replacement should contain all the shipping information and packaging necessary to return the defective part or assembly back to Contractor at no cost to the Owner.
- J. Warranty shall cover all equipment, including controllers, operating systems, and software.
- K. Warranty shall include 2 annual on-site system check-ups per warranty year by a qualified technician who is a full-time employee of the Contractor. Visit to occur approximately 2-3 weeks prior to the start of the season or as determined by Owner.
- L. Check-up shall include a complete service and maintenance of the system; including module or fixture replacement as needed.
- M. Warranty shall include any and all necessary assistance required by the Owner to demonstrate compliance with NCAA Standards.

1.7 SPARE PARTS

- A. Contractor shall supply a spare parts inventory containing 2% spare drivers (minimum of one (1)) and 2% spare power supplies (minimum of one (1)) whichever is greater, and a minimum of one (1) of every critical component not listed above. Spare parts inventory shall be based on quantity of components used to complete the system. Contractor shall provide proposed spare parts inventory as part of the bid submission.
- B. At the time of final completion, Contractor shall supply the specified spare parts inventory regardless of spare parts used during initial "shake out", "burn in" and/or testing of newly installed LED Fixtures.
- C. The manufacturer of the LED lighting system components shall ensure the continued availability of all parts necessary for the proper functioning, maintenance, and repair of the system for a minimum period of ten (10) years following the acceptance of the project. This requirement is critical to guarantee that the Owner can sustain system performance and address any operational issues that may arise after project completion. Furthermore, once any component within the LED lighting fixtures reaches its end-of-life, and if that component is not replaceable with a "backwards compatible" equivalent, the manufacturer shall be obligated to notify the Owner immediately of the component's end-of-life status. This notification must be provided in a timely manner to enable the Owner to plan for potential replacements or upgrades. In addition to notification, the manufacturer shall offer the Owner the opportunity to purchase any remaining stock of spare parts or last-generation production runs at prices that are fair and commercially viable, ensuring the Owner has access to necessary replacement parts for ongoing maintenance. This commitment aims to support the long-term operability, sustainability, and cost-effectiveness of the lighting system, preventing obsolescence and ensuring that the Owner can maintain system integrity without undue expense or difficulty over the system's lifespan.

END OF PART 1 GENERAL

PART 2 PRODUCTS

2.1 LED SPORTS LIGHTING SYSTEM – PERFORMANCE REQUIREMENTS

A. Illumination Levels and Design Factors

1. Playing surfaces shall be illuminated to achieve the specified average target illumination levels and uniformity ratios as detailed in the provided chart below. Lighting calculations must be thoroughly developed using appropriate software, and field measurements should be taken on the grid spacing prescribed by NCAA standards, with the minimum number of measurement points specified below for both Work and House Lighting scenes. All calculations should incorporate suitable light loss factors, which must be documented and submitted as part of the basis of design.
2. The average illumination level shall be measured in strict accordance with the procedures outlined in the IESNA LM-5-04 (IESNA Guide for Photometric Measurements of Area and Sports Lighting Installations). The illumination levels shall be maintained at or above the desired target values throughout the operational period, in compliance with IES RP-6-15, which specifies requirements for Maintained Average Illuminance. The lighting system's ability to sustain these illumination levels over the course of the warranty period shall be explicitly guaranteed, ensuring consistent lighting quality and performance during the system's full operational life

B. Obstruction Compensation

1. To attain the required illumination levels and uniformity as specified, the manufacturer's design calculations and fixture aiming positions must account for and compensate for all potential obstructions. These obstructions include, but are not limited to, existing equipment, sound system speakers, center-hung video boards, mechanical ducts, roof support cross bracing, and other structural or equipment-related elements within the lighting zone. Proper compensation ensures that obstructions do not adversely affect light distribution, maintaining the desired illumination levels and uniformity across the entire playing surface and viewing areas. The design must incorporate adjustments in fixture placement and aiming angles to mitigate the impact of these obstructions, ensuring optimal lighting performance as intended in the project specifications.

2.2 ENVIRONMENTAL LIGHT CONTROL

- A. Light Control Luminaires: All luminaires shall utilize spill light and glare control devices including, but not limited to, internal shields, louvers, and external shields. No symmetrical beam patterns are accepted.
- B. A photometric report for all luminaire types proposed showing horizontal and vertical axial candle power shall be provided to demonstrate the capability of achieving the specified performance. Reports shall be certified by a qualified independent testing laboratory with a minimum of five years experience or by a manufacturer's laboratory with a current accreditation under the National Voluntary Laboratory Accreditation Program for Energy Efficient Lighting Products. A summary of the horizontal and vertical aiming angles for each luminaire shall be included with the photometric report.

2.3 PRODUCTS

- A. Reference accompanying Excel Bid Sheet documents for template to provide pricing. Note that Bidders may provide their pricing in their native format but must also be provided in the Excel template provided.
- B. It is the responsibility of the Contractor to propose a system that meets or exceeds NCAA Championship lighting standards. Contractor is responsible for any and all expenses incurred to make the system(s) compliant. Contractor is responsible for any re-engineering or re-design and associated expenses if the system is determined not in compliance.
- C. Flicker uniformity of better than 2% as viewed by high frame rate cameras up to 300 frames per second
- D. System must have the ability to dim all fixtures a minimum of 16 steps from 0 to 100%.
- E. System must have the ability to control fixtures in groups of fixtures, banks and individual fixtures, allowing for special effects.
- F. System must be FCC compliant for Electro Magnetic Interference (EMI) and Radio Frequency Interference (RFI) emissions.

2.4 SPORTS LIGHTING SYSTEM CONSTRUCTION

- A. Manufacturing Requirements: All components shall be designed and manufactured as a system. All luminaires, drivers, and other enclosures shall be factory assembled, aimed, wired and tested.
- B. Durability: The lighting system, including all mounting brackets, shall be powder-coat painted for protection. All mounting brackets are to be made of steel construction. Only stainless steel or zinc plated steel hardware is allowed.
- C. System Description: Lighting system shall consist of the following:
 - 1. LED Lamp Technology Sports Lighting Fixtures. Instant on/off capabilities and DMX Dimming Capabilities. Dimming interface shall be via a hard wire connection. Wireless controls not permitted.
 - 2. Fixtures must have external visors to minimize glare in the seats and on the event floor. Output of the LED fixtures to meet NCAA standards
 - 3. To ensure proper color saturation of the RBBW fixtures a minimum of 480,000 lumens of Green, 192,000 lumens of Blue, and 192,000 lumens of Red shall be provided for this project
 - 4. Fixtures must come standard with a 10-year full coverage warranty, parts and labor warranty with guaranteed light levels to meet NCAA for all 10 years.
 - 5. Color Temperature/CRI and TLCI to meet NCAA standards
 - 6. Fixture Operating Temperature Range of -30 Degrees C to 40 Degrees C. Maximum Junction Temperature of the diodes shall be 90 Degrees C.
 - 7. Fixtures shall use remote electronic drivers with an efficiency of 95% or greater. Integral driver fixtures are not acceptable. Remote driver enclosures shall be mounted on the catwalk. Each enclosure shall house drivers, fusing, and associated wiring.
 - 8. Secondary Wiring: Wiring from the remote driver to the fixture shall be 1000V rated and meet all local electrical codes.
 - 9. Custom Mounting Hardware: Manufacturer shall provide all design work, brackets, and hardware for mounting the lighting system to the facility's structural steel. Fixture mounting brackets must be customized to the structure to ensure a clean appearance and quick installation. Existing mounts must be replaced with new mounting hardware. Yoke mounts are not acceptable.

2.5 ELECTRICAL

- A. Electric Power Requirements for the Sports Lighting Equipment:
 - 1. Per voltage and phasing on site
 - 2. Maximum total voltage drop: Voltage drop to the remote enclosures shall not exceed three (3) percent of the rated voltage.

2.6 CONTROL

- A. Instant On/Off Capabilities: System shall provide for instant on/off of luminaires.
- B. Dimming: Advanced control for a full range of theatrical effects and dimming. System shall provide trouble-free communication interface to allow DMX control provided by others.
- C. Remote Lighting Control System: Trained staff shall be available 24/7 to provide support and assist with reporting needs.
- D. Remote Monitoring System: System shall have capability to remotely diagnosis any individual driver outage and detect remotely power loss to the fixtures.
- E. Management Tools: Manufacturer shall provide a web-based database and dashboard tool of actual field usage and provide reports by facility and user group. Dashboard shall also show current status of luminaire outages, control operation and service. Mobile application will be provided suitable for IOS, Android and Blackberry devices.

1. Hours of Usage: Manufacturer shall provide a means of tracking actual hours of usage for the lighting system that is readily accessible to the owner.
 - a. Cumulative hours: shall be tracked to show the total hours used by the facility
 - b. Report hours saved by using early off and push buttons by users.

END OF PART 2 PRODUCTS

PART 3 EXECUTION

3.1 SCOPE OF WORK

- A. The following outlines the turnkey delivery and installation responsibilities that define the project scope of work. Any and all work outlined in this section is the responsibility of the Contractor unless otherwise noted. Any and all dates referenced in this document are approximate projected dates and are subject to change.
- B. Contractor is required to provide all labor, materials, tools, supervision and equipment to perform the following:
 - 1. Remove and dispose of all existing equipment that is being replaced in this package, as well as all packaging, scrap, and trash from new fixtures and materials.
 - 2. Provide and install all equipment required to conform to NCAA Standards, including any and all equipment not specifically listed that is required to provide a completely functional system.
 - a. The system included in this ITB are
 - i NCAA Sports Lighting Package
 - ii Arena House Lighting (RGBW)
 - iii Arena Work Lights
 - iv Event Floor Work Lights
 - v Connections to main DMX Systems
 - 3. Ensure all component's above occupied areas are secondarily secured by manufacturer approved affixation e.g., safety cables and compliant with all relevant local, state, national codes.
 - 4. Meet all design and commissioning requirements as established by the NCAA Standards and performance criteria.
 - 5. Primary control of system will be via the Building Automation System, with existing stations at Building Electrician, Building Engineer, and Security Office as well as interfacing with the productions lighting console.
 - 6. Contractor to provide all necessary precautions for protection of all facility components, including playing surface and arena seating, if necessary. Contractor is responsible for repair or replacement of any damaged facility components caused by the Contractor and/or any subcontractors hired by Contractor to perform work on site.
 - 7. Contractor to provide all required new conduit for signal cable to each fixture back to DMX control system.
 - 8. Provide required electrical and data cable: connect all equipment with power, signal and control wiring.
 - 9. Coordinate with Owner regarding placement of new equipment rack(s) and electrical components.
 - 10. Provide all required permits and licenses.
 - 11. Provide a competent on-site installation supervisor
 - 12. Deliver all Equipment to site and convey to appropriate locations within site as directed by Owner.
 - 13. Store all Equipment in a safe and secure manner until installed, or otherwise directed by Owner.

3.2 DELIVERY TIMING

- A. Delivery Timing Equipment On-Site: The equipment must be on-site 16 weeks from receipt of approved submittals and receipt of complete order information.

3.3 FIELD QUALITY CONTROL

- A. Manufacturer shall provide a factory trained project manager to be on-site during delivery and installation of equipment.
- B. Illumination Measurements: Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, Owner's Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA LM-5-04.
- C. Field Light Level Accountability
- D. Light levels are guaranteed not to fall below the target maintained light levels for the entire warranty period of 10 Years.
- E. Correcting Non-Conformance: If, in the opinion of the Owner or his appointed Representative, the actual performance levels including footcandles and uniformity ratios are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer shall be required to adjust to meet specifications and satisfy Owner.

3.4 WARRANTY AND GUARANTEE

- A. 10-Year Warranty: Each manufacturer shall supply a signed warranty covering the entire system for 10 years from the date of shipment. Warranty shall guarantee specified light levels. Manufacturer shall maintain specifically funded financial reserves to assure fulfillment of the warranty for the full term. Warranty does not cover weather conditions events such as lightning or hail damage, improper installation, vandalism or abuse, unauthorized repairs or alterations.
- B. Maintenance: Manufacturer shall monitor the performance of the lighting system, including on/off status, hours of usage and luminaire outage for 10 years from the date of equipment shipment. Parts and labor shall be covered such that individual luminaire outages will be repaired when the usage of any field is materially impacted. Owner agrees to check fuses in the event of a luminaire outage.

3.5 ENGINEERING

- A. The Contractor shall submit drawings and calculations stamped by a professional engineer who shall be licensed/registered in the State of Florida.
- B. Contractor is responsible for taking all seismic, and environmental considerations into account and making structural provisions for any such requirements.
- C. Owner and/or Architect/Engineer must approve all drawings in writing prior to the fabrication and installation of any equipment.
- D. Engineered drawings are to include both structural and electrical.
- E. The Contractor is solely responsible for verification the integrity of all engineering calculations. Contractor is responsible for verification of all information provided or implied.

3.6 STRUCTURAL CONSIDERATIONS

- A. Bolted and/or field welded connections shall be subject to special inspection by an independent testing & inspection agency certifying that bolted and/or welded connections meet the minimum requirements of the engineered structural drawings, the governing building code, or as required by the building official; whichever is more restrictive. Inspections shall take place prior to painting any connection.
- B. Safety cables, and or secondary fasteners are required for any and all overhead apparatus.
- C. Documentation shall be provided to Owner verifying acceptable results from all required inspections. All items failing inspection shall be repaired or replaced and re-inspected at no additional cost to the Owner.
- D. All components to be painted and otherwise finished for exterior service conditions shall be warranted to be free of rust or other defects for a period of ten years.
- E. All welders must be certified, and certificates must be on site and available for inspection as requested.

3.7 ELECTRICAL AND DATA

- A. The electrical design and installation of all branch circuits by the Contractor shall comply with NEC, state and local codes, as well as Owner regulations and guidelines.
- B. The Contractor shall provide electrical and data one-line diagrams.
- C. Electrical design and engineering must be reviewed and approved by the Owner prior to any electrical work by the Contractor.
- D. The Contractor will be responsible for power distribution from the demarcation. Any additional electrical components required for a complete and fully operational system shall be the responsibility of the Contractor.
- E. Any additional raceway (conduit, cable tray, J hooks) required to provide a complete system for both power and signal/data shall be furnished and installed by Contractor. Any additional raceway required shall have routing of raceway approved by Owner prior to installation.
- F. The Contractor shall be responsible for termination and final connect of power to all elements. All secondary electrical panels must be clearly marked with names of the branch circuits controlled by each breaker to aid in troubleshooting or isolating problems. All electrical services, disconnects, and breaker panels are to be labeled with what they control and where they are fed from.
- G. Contractor shall not use wire nuts or electrical tape for any power or signal connection or any part of the work including internal LED display power jumpers or power connections to signage elements. All connections shall use a proper terminal block and spade terminal, or terminal block and direct connection as required. Covers shall be provided over all high-power terminal blocks to prevent electrical shock.
- H. Permanent power distribution from Owner provided primary power source shall use rigid metal conduit and wire or metal clad (MC) cable. The use of SO cord or rubber jacket type power cables shall not be permitted for permanent installations. Strain relief on all connections shall be per manufacturers recommendations. Contractor shall submit manufacturers strain relief recommendations for all connectors during the submittal process.
- I. The Contractor will be responsible for providing stamped electrical drawings. A licensed/registered engineer in the State of Florida where this project is located shall stamp all electrical drawings.
- J. Any equipment not certified as required in Section 1.4 shall require on site certification by a listed testing agency. All cost associated with obtaining on site certification shall be the responsibility of the Contractor. Written proof of certification or equivalent will be required prior to any work being performed on site.

3.8 TRAINING

- A. The Contractor at its own expense will provide designated Owner employees' operator and maintenance training.
- B. Training will be performed at the site by a qualified technician and shall occur immediately following substantial completion. Operation and Maintenance Manuals per Section 1.3 shall be provided to Owner prior to training.
- C. The training shall cover the operation, routine maintenance and troubleshooting of the system and control equipment.
- D. Training shall consist of at least 24 hours (over the course of 3-5 days) of instruction.
- E. Contractor to provide programming of a minimum of twelve (12) DMX Scenes per design concepts provided by Owner.
- F. Contractor will be required to have a technician on site for the first event and continue to be on site for three (3) consecutive problem free events. "Problem-free" constitutes an event where the control system, and any other components installed by the Contractor are without failure during an event. Each successful event will need to be signed off by the Owner until three (3) consecutive events are achieved.
- G. Warranty period will commence at conclusion of the third consecutive successful event and Final Acceptance

3.9 TESTING AND ACCEPTANCE

- A. Contractor must demonstrate the full capabilities of the provided systems and prove performance meets contractual specifications.
- B. Contractor must provide all necessary testing equipment for acceptance.
- C. Upon notice from the Contractor of substantial completion and at a time to be mutually agreed upon, the Contractor will arrange for the testing of all operations of the systems comprised in scope of work at the time of substantial completion.
- D. Upon completion of initial tests and adjustments, submit written report of tests to the Owner along with all documents, diagrams, and recorded drawings required herein.
- E. Close out Procedures
 - 1. Perform any and all "punch-list" work to correct inadequate performance or unacceptable conditions, as determined by the Owner, at no additional expense to the Owner.
 - 2. Furnish all portable (includes spare parts) equipment to the Owner along with complete inventory documentation. All portable equipment shall be presented in the original manufacturers packing, complete with all included instructions, miscellaneous manuals, and additional documents.
 - 3. Provide new acceptance testing in the same format as initial test reports.
 - 4. Check, inspect, and if necessary, adjust all systems, equipment, devices and components specified, at the Owner's convenience, approximately thirty (30) days after the Owners acceptance.
 - 5. Upon completion of the Work, the Owner may elect to verify test data as part of acceptance procedure. Provide personnel and equipment, at the convenience of the Owner, to reasonably demonstrate system performance and to assist with such tests without additional cost to the Owner.

END OF PART 3 EXECUTION