

REQUEST FOR BID - N00051526C
FOR
ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY
(AURA)

“HVAC Replace & Install, Tucson Main Facility”

Operating the
National Optical-Infrared Astronomy Research Laboratory
(NOIRLab)
Tucson, Arizona

BIDS MUST BE RECEIVED BY

Friday, 9/19/2025, 3:00 p.m. MST

Prepared by:

AURA/CAS
Procurement Office
950 N. Cherry Avenue
P. O. Box 26732
Tucson, AZ 85726-6732

25 July, 2025

TABLE OF CONTENTS

RFB Schedule

- I. INSTRUCTIONS TO BIDDERS**
- II. MANDATORY PRE-BID MEETING/SITE VISIT INFORMATION**
- III. SCOPE OF WORK/TECHNICAL SPECIFICATIONS**
- IV. CONTRACTOR'S BID DOCUMENTS (All documents listed below along with the additional information requested in Section I, Article 3, Sub-section 3.1 below must be returned to AURA with Contractor's Bid).**

BID Proposal Form

The following items are found on the **AURA/NOIRLab Bid Opportunities webpage**:
<https://auracas.aura-astronomy.org/?q=bids>, procurement tab, click procurement opportunities.

- V. SAMPLE PROFESSIONAL SERVICES/CONSTRUCTION CONTRACT**
- IV. CONSTRUCTION DOCUMENTS**

(Remainder of this page is left intentionally blank)

HVAC Replace/Install, Tucson Main Facilities Project

RFB SCHEDULE

RFB released/posted: Friday, 7/25/2025

Communication of interest in attending site visit to CO:
Friday, 8/8/25, noon MST

Site Visit, MANDATORY: **Friday, 8/15/25 1:00 p.m. MST**

Pre-bid questions due: Friday, 8/22/25, noon MST

Answers distributed: Friday, 8/29/25, 4:00 p.m. MST

Bids Due: **Friday, 9/19/25, 3:00 p.m. MST**

Decision made: Friday, 10/17/25, 4:00 p.m. MST

Project start date: January 2026 (tentative) **TBD**

SECTION I.

INSTRUCTIONS TO BIDDERS

ARTICLE 1. DEFINITIONS

1.1 All terms and conditions set forth in the Fixed Price Professional Services Contract template and attachments will be applicable to the final bid.

1.2 Bidding documents include: Request to Bid, Instructions to Bidders, proposed Professional Services Contract, and Scope of Work/Technical Specifications with support documentation, any amendments issued prior to receipt of bids and Vendor's Bid Form.

1.3 Any amendments as issued prior to bid award will become part of the documents when the Fixed Price Professional Services Contract is issued.

1.4 The "Vendor Contract Documents" will consist of the following: Request for Bid, Instructions to Bidders, Vendor's Bid, the written Professional Services Contract between AURA and the Vendor, the Scope of Work/Technical Specifications with the support documentation, and all amendments and/or modifications incorporated into the documents before their execution.

1.5 The Association of Universities for Research in Astronomy, Inc. is an Arizona non-profit corporation, hereinafter referred to as AURA. The term "AURA" includes its authorized representatives. AURA manages and/or operates astronomy "Centers" under cooperative agreements with the National Science Foundation (NSF). One such "Center" is the National Optical-Infrared Astronomy Research Laboratory ("NOIRLab").

1.6 The National Optical-Infrared Astronomy Research Laboratory (hereinafter "NOIRLab") has main facilities located at 950 North Cherry Ave., Tucson, AZ 85719.

1.7 The National Science Foundation, hereinafter referred to as the "NSF", is an agency of the United States of America created under the National Science Foundation Act of 1950. The term "NSF" includes its authorized representatives.

1.8 The "Bidder" is the person or organization who/that submits a Bid in accordance with these Bid Instructions and Procedures and proposes to perform the work described in the Statement of Work and/or specifications, and who/that proposes to perform the work described in the Fixed Price Professional Services Contract. The term "Bidder" may be used in lieu of the term "Contractor" or "Vendor" throughout these Bid documents.

1.9 The term "Subcontractor" means a person or organization, who/that has a direct agreement with the Vendor to furnish labor, or labor and materials, at the site of the work. The term also includes lower tier Contractors of a Subcontractor, but it does not include suppliers who/that furnish materials not worked to a special design according to the drawings and specifications. Nothing contained in the Fixed Price Professional Services Contract Documents shall be deemed or construed to create any contractual relationship between AURA and any Subcontractor as defined above.

ARTICLE 2. DESCRIPTION OF PROJECT

AURA/NOIRLab is releasing a Request for Bid (RFB) for the replacement and installation of Hydronic AHU to DX Coil AHU HVAC system at our main facilities located at 950 N Cherry Ave, Tucson, AZ 85719.

ARTICLE 3. BIDDING PROCEDURES

3.1 Bids shall be prepared on the forms provided in Section IV and include the following:

a. **Completed “Contractor’s Bid for Professional Services Contract”:** Bidder must complete in its entirety the contractor bid form labeled, “Section IV, Contractor’s Bid Documents, A. Contractor’s Bid for Professional Services Contract which will set forth Contractor’s bid on the provided “Bid Proposal” sheet for this project.

b. **Completed “Qualification Package”:** Bidder shall fully complete the “Qualification Package” forms which follow Section VI titled, “Contractor’s Bid Documents.” It is very important that Bidder complete in detail the references form included in the Qualification Package. Bidder may include a more detailed written description of the references provided and the work performed for each referenced firm highlighting significant accomplishments, if desired. An overview of the company and its history is requested, including information on prior similar projects.

c. **License Numbers and Resolution.** The Bidder shall submit with its Bid, the Services Vendor’s License number(s) applicable to the work to be performed, and a copy of a corporate or LLC resolution certified either by the Secretary of the Corporation or by a Member of the LLC that the resolution passed at a meeting of the board of directors of the corporation or by the members of the LLC, validly called, at which a quorum of board members or LLC members were present, indicating who within the Bidder’s organization has legal authority to bind the organization on a contract. The Bidder shall include the information for their organization’s registrations with the Arizona Board of Technical Registration.

3.2 a. Prices quoted in the Bid(s) are to INCLUDE all applicable federal, state and local taxes.

b. Prices are to include the cost of all transportation, materials, equipment, tools, supplies, labor and services necessary or proper for the performance and completion of the work, except such as may be otherwise expressly provided for in the Bid documents.

c. Total bid should include any bid/performance/payment bonds (if applicable).

3.3 In the event of a discrepancy between the prices quoted in the Bid in words and those quoted in figures, the words shall control.

3.4 Submission of the Bid. Subject to the following procedures and requirements, Bids may be submitted electronically or via delivery of a hard copy of the Bid Documents to AURA.

a. **Electronic Submission.** Bidder shall submit the documents described in Article 2.1 above electronically, in PDF format to the issuing Contracts Officer at sabney@aura-astronomy.org. **The date/time signature-marked no later than the due date and time for receipt of bids for this RFB.** The failure to timely submit these documents to AURA in accordance with these rules shall result in the elimination of Bidder's Bid from consideration.

b. **In case of technical difficulties, a hand delivered copy may be sent to the following address:**

AURA
950 N. Cherry Avenue
Tucson, AZ 85719
Attention: Sherri Abney

3.5 No other forms of submission of Bids will be considered. No other forms of submission for modifications to Bids will be considered. Modifications to Bids submitted may be made electronically or via the delivery of a hard-copy of the modified Bid Documents, if the modified Bid Documents are delivered to AURA in accordance with the rules set forth in 3.4 above on or before the 3:00 o'clock P.M. Mountain Standard Time on the Bid due date.

3.6 A Bidder may withdraw its Bid(s), either personally or by written request, at any time prior to the scheduled closing time for receipt of Bids.

3.7 A person, firm or organization who/that have submitted a sub-Bid to a Bidder, or who has quoted on materials to a Bidder, is not disqualified from submitting a sub-Bid or quoting to other Bidders.

3.8 Unless otherwise provided for in any addendum to these Bid Instructions, no Bidder may withdraw, modify or cancel its Bid(s) for a period of one hundred twenty (120) days after the time designated for receipt of Bids.

ARTICLE 4 COMMUNICATION AND QUESTIONS

Any questions or requests for clarification of this proposal should be directed to:

Sherri Abney, Contracts Officer
Association of Universities for Research in Astronomy, Inc.
950 N. Cherry Avenue
Tucson, AZ 85719
Ph: 520-318-8103
Email: sabney@aura-astronomy.org

Clarification or direction by other persons at AURA is not permitted during the RFB process.

General or procedural questions can be addressed by telephone. Technical or scientific questions must be submitted by email, and must be received at least three (3) business days before the due date for the proposals. All questions and responses will be provided to all parties present at the site visits.

ARTICLE 5. EXAMINATION OF DOCUMENTS

5.1 AURA reserves the right to make additions, deletions, or modifications to the Bid documents in writing by amendment at any time prior to the closing date. If, in the opinion of the Contracts Officer (hereinafter CO), any such change causes an increase in the time required for submission of Bids, the CO may, at her sole discretion, adjust the closing date and time accordingly.

5.2 The Bidder shall examine the Bid documents carefully and, not later than three (3) days prior to the date for receipt of Bids, make a request for interpretation or correction of any ambiguity, inconsistency, or error which it may discover. All requests shall be made in writing, including postal services, next day services and via email, addressed to the AURA CO.

5.3 All interpretations and corrections shall be issued in writing by the AURA CO in the form of an Amendment. The Bidder shall not rely on any interpretation or correction given by any other method.

5.4 Prior to receipt of Bids, addenda, if required, will be mailed to each Bidder who has requested and/or has been sent the Bid documents.

5.5 The failure of any Bidder to receive or examine any form, instrument, amendment or other document, or failure to acquaint itself with existing conditions shall not relieve the Bidder from obligations and responsibilities with respect to its Bid or to the Fixed Price Professional Services Contract. The submission of a Bid shall be taken as prima facie evidence of compliance with this section.

ARTICLE 6. REPRESENTATIONS

6.1 Each Bidder **must attend** the mandatory pre-bid/site visit meeting that is scheduled and visit the site of work prior to submitting a bid. Information about the location, date and time of the mandatory pre-bid/site visit meeting is set forth Section II of this RFB.

6.2 By submitting a Bid, each Bidder represents that it is familiar with existing conditions under which the work will be performed.

6.3 a. The Bidder, by submitting its Bid, represents that it has read and understands the Bid documents, and by submitting a Bid acknowledges acceptance of all of the Terms and Conditions of the Bid Documents as defined in 1.2 of these Bid Instructions.

b. Any exceptions to the Professional Services Contract Documents shall be stated on the Vendor's Letterhead, if available, and submitted with its Bid. Exceptions shall be stated clearly and concisely. If the Bidder has exceptions, alternative wording shall be provided for consideration by Bidder to the AURA CO.

c. The Bidder, by submitting a Bid, certifies that the Professional Services Contract Documents, have been reviewed and accepted by the Bidder, or that the Bidder has noted its exceptions to the Professional Services Contract Bid Documents with its Bid.

6.4 The Bidder shall submit with its Bid, the Bidder's License number(s), if applicable to the work to be performed, and a resolution indicating who within the Bidder's organization has authority to bind the organization.

ARTICLE 7. SUBSTITUTIONS

7.1 Each Bidder represents that its Bid is based upon the specifications, materials and equipment described in the Bid documents, unless substitutions have been permitted in advance.

7.2 All Bids containing substitutions shall be accompanied by full and complete technical specifications for approval purposes. The AURA Technical Representative may request such other information as may be required for approval either before or after receipt of bids.

ARTICLE 8. COMPLETION TIME

The Bidder shall specify in its Bid the number of calendar days required to complete the work described. All costs included in the Bid shall be for the work to be completed within that period.

ARTICLE 9. EVALUATION OF BIDS

9.1 Bids will be opened and evaluated privately after the deadline for receipt of Bids.

9.2 Bids will be evaluated based on the following factors:

- Cost to AURA
- Ability to meet technical specifications and scope of work
- Warranties provided by Contractor
- Contractor's qualifications, references, and experience in this type of project
- Ability and history of successful completion of contracts of this type, meeting projected schedules, and overall experience performing similar work
- Material Vendors or Sub-Contractors used
- Exceptions to terms set forth in Vendor Agreement provided by Bidder

9.3 All bidding documents received are considered confidential and will not be released.

9.4 The award of the Fixed Price Professional Services Contract for the work described in the Scope of Work/Technical Specifications, if made by AURA, will be made to the responsible and qualified bidder. However, AURA shall determine, in its own discretion, which Bid best meets the requirements and qualifications of the Scope of Work/Technical Specifications and Professional Services Contract and whether it is in the best interests of AURA to accept the Bid. Therefore, Bidder should ensure that all information requested is included in its Bid.

ARTICLE 10. TIME PERIOD FOR EVALUATION OF BIDS; REJECTION OF BIDS; IRREGULARITIES

10.1 AURA reserves the right to hold any or all Bids for a period of up to one hundred twenty (120) calendar days.

10.2 AURA shall have the right to take up to one hundred twenty (120) calendar days to evaluate the Bids submitted and to make a decision.

10.3 AURA reserves the right to accept or reject any or all Bids or any combination thereof, to withhold an award for any reason it may determine, or to waive any irregularities or informalities in the Bids or in the submission of Bids.

ARTICLE 11. FORM OF AGREEMENT

The form of agreement that will be used shall be a "Fixed Price Professional Services Agreement." A template of the above mentioned contract and the terms and conditions incorporated by reference into said agreement may be found at AURA/NOIRLab Bid Opportunities webpage: <http://auracas.aura-astronomy.org/?q=node/103>. The final form of agreement presented to the Contractor selected to perform the work may vary from the template format attached hereto, depending on the Bid documents submitted by Contractor and other facts and circumstances deemed relevant by AURA.

ARTICLE 12. LAW

The laws of the state of Arizona shall govern the interpretation of these Bid Documents and the interpretation of the Fixed Price Professional Services Contract.

ARTICLE 13. CONTRACTING WITH SMALL BUSINESSES, MINORITY-OWNED FIRMS AND WOMEN'S BUSINESS ENTERPRISES

AURA encourages small businesses, minority owned firms and women's business enterprises to bid on AURA jobs that they are qualified to bid on. Contractors seeking to bid on "AURA/NOIRLab LANDSCAPE/GROUNDS MAINTENANCE" project are encouraged to utilize, as much as possible, small businesses, minority owned firms and women's business enterprises as subcontractors.

ARTICLE 14. AURA/NOIRLab BID OPPORTUNITIES WEB PAGE DISPLAYING BID OPPORTUNITIES; DUTY OF BIDDER TO CHECK WEB PAGE; PARTICIPATION IN PRE-BID MEETING AND PUBLICATION OF NAMES OF ATTENDEES WHO ATTENDED PRE-BID MEETINGS ON AURA/CAS BID OPPORTUNITIES WEB PAGE

AURA has established a Web page to display AURA bid opportunities. The link to the webpage is: <http://auracas.aura-astronomy.org/?q=node/103>

The AURA/CAS Bid Opportunities Web page will display all pending RFB, RFPs, etc., issued by the AURA/CAS as well as any amendments issued to such RFBs, RFP's, etc. In addition, AURA shall display the name and contact information for any company which attends an AURA/NOIRLab pre-bid meeting on the AURA/CAS Bid Opportunities Web page for the purpose of apprising prospective subcontractors and the public which firms attended the pre-bid meeting(s). This will enable interested subcontractors to contact such firms for purposes of supplying subcontract prices. It shall be the Bidder's obligation to check the AURA/CAS Bid Opportunities Web page to view and obtain copies of amendments and announcements related to the RFB they seek to bid on.

SECTION II

MANDATORY PRE-BID MEETING/SITE VISIT INFORMATION

Project:

**Replacement and installation of the HVAC system at the
Tucson Headquarters building**

There is one **MANDATORY** pre-bid/site visit meeting scheduled for this project. The meeting will be held onsite at the NOIRLab main facility located at **950 N. Cherry Ave.**, Tucson, AZ 85712 (Southeast corner of N. Cherry Ave. and 2nd St.) on **Friday, August 15, 2025 at 1:00 p.m.**

Bidders attending the meeting are asked to assemble in the lobby of the NOIRLab headquarters, checking in with the receptionist upon arrival. Parking is available for visitors in the parking area on the South side of the building. Attendees will meet with NOIRLab personnel and the AURA Contracts Officer for a sit-down meeting to discuss the scope of work and technical specifications. Attendees will then walk the property with the staff.

Please notify the AURA Contracts Officer, Sherri Abney by Friday, 8/8/25, noon MST of your plan to attend and the approximated number of attendees.
Phone: 520-318-8103 or Email sabney@aura-astronomy.org.

ONLY firms attending the mandatory pre-bid meeting will be eligible to bid on the work covered by the attached Statement of Work.

[The remainder of this page is intentionally left blank.]



Section III

Statement of Work Hydronic AHU to DX Coil AHU Replacement & Installation Services

Authors: Benjamin White, Mei Starns

NOIR-01-MSS-SOW-0001248-MNGT

Version and Revision: 1.0

Creation Date: 2025-04-01

Release Date: To be provided by DMG

Distribution Type: **Official Use**

Scope: **Site Specific - Tucson**

Revision Timeframe: **Single Version**

Language: English

Status: To be provided by DMG

Effective Date: To be provided by DMG

Approval Information	
Latest Version and Revision	DMG input
Approved by	Approval Date
[Name and Surname] and Position Title	DMG input
[Name and Surname] and Position Title	DMG Input



Document Registration

Document/Process Owner	Benjamin White
Issuing Area	Provided by the DMG
Document Type	Provided by the DMG
CS Code	Provided by the DMG
Reviewers	Brittany McClinton
Review Closure Date	YYYY-MM-DD (If applicable, please insert date)
Approval Closure Date	Provided by the DMG

Change Record, Access, and Distribution

Once approved, any changes to this document must be requested through the [DMG](#). Authors or Document/Process owners should provide document access and permissions through the [DMG](#).

Document Content Change Record

Version and Revision	Change Date	Description	Change Owner
To be entered by DMG	To be entered by DMG	To be entered by DMG	To be entered by DMG
To be entered by DMG	To be entered by DMG	To be entered by DMG	To be entered by DMG
To be entered by DMG	To be entered by DMG	To be entered by DMG	To be entered by DMG
To be entered by DMG	To be entered by DMG	To be entered by DMG	To be entered by DMG

Table of Contents

1.0 Project Introduction and Summary	4
General Site Conditions	5
Codes and Standards – Safety	5
2.0 Project Management	5
2.1 Reporting and Meeting Requirements	5
3.0 Scope of Work	7
3.1 Demolition and Removal	7
3.2 Product Procurement, Installation, and Setup	8
3.3 Control System Integration	9
3.4 Delivery, Storage, and Handling	9
3.5 Submittal Review	9
3.6 Ongoing Operations	9
3.7 Quality Control	9
3.8 Change Orders	10
3.9 Inspections, Testing, and Commissioning	10
3.10 Punch List and Final Inspections	10
3.11 Training	10
3.12 Certificates	10
3.13 Closeout	10
3.14 Contractor use of Premises	11
3.15 Final Cleaning	11
3.16 Applications for Payment	11
4.0 Submittals	11
5.0 Acceptance	13
6.0 Bid Breakdown	13
7.0 Document Delivery Requirements	13
8.0 Confidentiality	14
Appendix A. Applicable Reference Documents	15
Appendix B. List of Acronyms	16

1.0 Project Introduction and Summary

Welcome to the NOIRLab Tucson Headquarters, situated at 950 N Cherry St. Our facility, spanning five buildings totaling 92,000 sq ft, serves as a vital hub for national astronomy laboratories. With specialized areas including clean rooms, optical testing and fabrication shops, machine shops, detector development labs, archival storage rooms, and computer/data storage rooms, we are at the forefront of cutting-edge astronomical research.

To further our commitment to sustainability and reduce our environmental footprint, we are embarking on an exciting project to replace our outdated HVAC System from the 1950s. This project aims to replace the existing hydronic 4-pipe chilled water and heating water air handling units with DX refrigerant-based units. The replacement of the existing AHU pneumatic controls to direct digital controls (DDC) shall be implemented in this project. The scope of work for this project encompasses procurement, provision, installation, and setup of new HVAC equipment per the construction drawings provided by our engineering contractor. The new HVAC system will support the entire Main Building and Engineering Services building. This initiative aligns with our core values of environmental stewardship and innovation, reflecting our dedication to becoming more energy efficient and reducing our carbon footprint.

Through the installation of a new and improved HVAC system, we aim to not only reduce our carbon emissions, but also to demonstrate leadership in sustainable practices within the scientific community. By decreasing energy usage on-site, we will contribute to a more sustainable future while inspiring others to follow suit.

NOIRLab has obtained funding to replace our HVAC system at our Tucson Headquarters building. This Statement of Work (SOW) describes contractor services necessary for the full duration of the proposed project including, but not limited to:

- Project Management
- Procurement and Provision
- Product Installation and Setup
- Product Testing, Balancing, and Commissioning
- Construction Closeout and Certification

The SOW includes but is not limited to necessary construction services and project administration services to successfully meet performance requirements on schedule and on budget with the least amount of project risk and disruption to normal operations. Architectural, structural, mechanical, and electrical designs are not included in this scope, as these services have already been completed. Construction drawings will be provided.

General Site Conditions

NOIRLab Tucson Headquarters – 950 N Cherry St. Tucson, AZ 85719

1. The facility is owned by the National Science Foundation (NSF) and is located on the University of Arizona campus. NOIRLab is the national center for ground-based nighttime astronomy in the United States and manages several internationally-renowned observatories, including Kitt Peak National Observatory. NOIRLab is operated by the Association of Universities for Research in Astronomy (AURA) under cooperative agreement with the NSF.
2. Regular working hours are from 8:00 AM to 5:00 PM. In order to reduce disruption to NOIRLab employees, noisy activities and heavy vehicular traffic must be coordinated with the facilities team as much as possible.

Codes and Standards – Safety

1. Contractor(s) shall comply with the requirements of all applicable provisions of the latest edition of the International Code Council publications (IBC, IMC, IPC, IECC, NEC, ADA, etc.), as well as all other applicable State and National Codes, local jurisdiction and requirements, electrical and utility codes, safety regulations, and industry standards.
2. Contractor(s) shall be aware of and comply with all OSHA requirements and regulations. Contractor(s) shall take all measures necessary to protect their employees, NOIRLab personnel, and visitors in adjacent areas from injury related to the work. Appropriate barricades and signage shall be utilized. Facilities will be in use during the performance of this contract.
3. Contractor(s) and personnel shall be licensed/certified in the State of Arizona in the disciplines of any work to be performed (i.e. electrical, etc.).
4. As a federally-owned facility located in Tucson, the City of Tucson is the Authority Having Jurisdiction (AHJ) for any work done at NOIRLab Headquarters.
5. Contractor(s) shall be responsible for the proper protection of their materials and equipment until the completion of the project, including protection from inclement weather.

2.0 Project Management

Contractor shall provide project management for the duration of the project. This will include regular communication and meetings with the project stakeholders, scheduling of site visits and assessments, and coordination of all project activities.

2.1 Reporting and Meeting Requirements

- **Milestone Meetings:** Contractor at a minimum shall prepare, present, and perform the following milestone reviews and walkthroughs:
 - Pre-Construction

1. Occurs within 10 business days of Notice to Proceed (NTP).
 2. Required attendees: Contractor's PM, superintendent, major subcontractors, and Owner representatives.
Topics include project schedule, submittals, site logistics, safety protocols, communication flow, and utility coordination.
 3. Contractor shall provide a draft submittal log and preliminary construction schedule.
- Site Mobilization Walkthrough
 1. Prior to the start of demolition or construction.
 2. Reviews laydown areas, temporary utility connections, hours of work, site access, and protection of adjacent operations.
 3. Final approval of safety signage and barricading plan.
 - Construction On-site Observation
 1. The Contractor shall participate in regularly scheduled Construction Observation Meetings throughout the duration of the project. These meetings serve as a platform for field-level coordination, issue resolution, quality assurance, and verification of schedule progress. They are distinct from milestone meetings and shall occur at intervals sufficient to support successful project delivery.
 2. Meeting Frequency Meetings shall be held weekly on a consistent day and time, unless otherwise directed by the Owner's Representative.
 3. Additional site meetings may be scheduled by the Owner, Project Manager, or Technical Representative to address emergent issues.
 4. Required Attendees Contractor's Superintendent and/or Project Manager (required) Mechanical and Controls Subcontractor representatives (as applicable), Owner's Representative or designee Site Facilities Manager, Commissioning Agent (if applicable during functional testing or startup), Other stakeholders as identified by the Owner
 5. Documentation: Meeting minutes shall be prepared by the Contractor and distributed to all participants within 48 hours.
Outstanding action items shall be carried forward and tracked until closed. Observations and Non-Conformance The Owner reserves the right to issue Field Observation Reports (FORs) or Non-Conformance Reports (NCRs) during or following site meetings. Contractor shall respond in writing within five (5) calendar days with corrective actions.
 - Substantial Completion Walkthrough
 1. Scheduled when the Contractor considers the project ready for substantial completion declaration.
 2. Generates punch list and determines readiness for Owner occupancy.
 3. Includes verification of system startup, O&M manual submission, and training delivery.
 - Final Inspection

- Staff Training
- Construction On-site Closeout. Occurs after punch list completion. Confirms receipt of as-builts, warranty documents, testing reports, and all closeout deliverables.
- **Job Site Meetings:** Contractor, in consultation with NOIRLab, subcontractors, and consultants, shall organize and conduct meetings as necessary at the job site to discuss job progress, problem resolution, code compliance, and decision-making. Contractor shall prepare and distribute accurate meeting minutes within three (3) business days after the meeting, or sooner if time-critical.

3.0 Scope of Work

The scope of work includes the following tasks:

3.1 Demolition and Removal

Contractor shall safely demolish and remove existing chilled water and heated water system components, including piping, pumps, and air handlers according to the construction documents and manufacturer guidelines. Contractor must properly handle and dispose of equipment and hazardous materials in compliance with applicable regulations. Include the removal of obsolete or abandoned systems that may conflict with new installations.

Hazardous Materials and Environmental Considerations

- If suspect materials (e.g., asbestos-containing materials, lead-based paint, refrigerants) are encountered, the Contractor shall immediately halt work in the affected area and notify the Owner.
- No hazardous materials shall be disturbed until proper testing, notification, and abatement procedures are completed in accordance with EPA, OSHA, and local AHJ requirements.
- All refrigerants must be recovered by certified personnel and disposed of in accordance with EPA Clean Air Act regulations.

Protection of Existing Facilities

- Protect all adjacent surfaces, finishes, and building components that are to remain.
- Use dust barriers, negative air machines, and floor protection as needed to isolate the work zone.
- Coordinate with Owner's IT, fire alarm, and building controls systems prior to disturbing any existing infrastructure.
- Maintain fire-rated barriers and exits during demolition at all times.

Utility Disconnection and Coordination

- Coordinate all utility disconnections (mechanical, electrical, controls, fire protection) with the Owner's Representative and Facilities Manager.

- Provide written notice of planned shutdowns at least fourteen (14) calendar days in advance.
- Perform lockout/tagout (LOTO) procedures per OSHA and Owner policy before working on energized systems.

Waste Management and Recycling

- Demolition debris shall be removed from the site daily and disposed of in a lawful manner.
- Salvage and recycling of materials is encouraged where feasible; coordinate with Owner if items (e.g., VFDs, actuators) are to be retained for reuse.
- Submit waste haul receipts or manifests upon request.

Documentation and Verification

- Prior to demolition, conduct a joint site verification walkthrough with the Facilities Manager to confirm limits of removal and identify protection needs.
- Contractor shall maintain updated redline drawings throughout demolition showing all removed elements, utilities capped or rerouted, and discoveries in field conditions.
- All penetrations in walls, ceilings, or roofs made during demolition shall be properly fire- and weather-sealed.

Temporary Systems During Demolition

- Provide temporary HVAC solutions for any critical spaces affected by equipment shutdowns, as approved by the Owner.
- Temporary systems shall be maintained in safe working condition and shall not introduce additional noise, fire, or safety hazards.

3.2 Product Procurement, Installation, and Setup

Contractor shall procure, install, and set up the following items according to the construction documents and manufacturer guidelines. Contractor shall review existing field conditions and validate with the proposed design. All equipment and materials must meet the **Build America, Buy America (BABA) Act Compliant**.

- **DX Coil HVAC Equipment:** Product requirements and specifications of the proposed HVAC system solution are provided on Specifications Sheets MH002 and Equipment Schedules M6 Series Sheets of the construction documents.
- **HVAC Ductwork:** All necessary ductwork, connections, and associated materials as specified in the construction documents.
- **Electrical Infrastructure:** All necessary electrical connections, conduits, equipment, and wiring as specified in the construction documents.
- **Control System:** All necessary controls as specified in the construction documents.

- **System Integration:** Integration of the new system with the building's existing mechanical and electrical infrastructure.

3.3 Control System Integration

Contractor shall implement an upgraded Building Management System (BMS) interface for optimal performance and coordinate with the organization's IT and facilities teams for seamless system monitoring and control.

3.4 Delivery, Storage, and Handling

Contractor shall deliver materials to the site in the manufacturer's original, unopened containers and packaging, with labels identifying the product name and manufacturer. Materials shall be stored in a clean, dry area indoors per manufacturer's instructions and protected from damage during handling and installation.

3.5 Submittal Review

Contractor, in consultation with NOIRLab, shall establish and implement procedures for processing and approving shop drawings, product data, samples, and other submittals from the contractors (e.g. including contracts, specifications, schedules, correspondence, meeting minutes, catalog data, directives, change orders, etc.). NOIRLab will coordinate the processing and approval of all submittals. The Contractor, in consultation with NOIRLab, will establish and maintain a submittal log to ensure compliance with the contract documents.

3.6 Ongoing Operations

Contractor shall provide administration, management, and related services necessary to coordinate the construction activities of the subcontractors with each other and with the occupants to allow ongoing operations to proceed with minimum disruption and risk. Contractor shall submit to NOIRLab a detailed construction schedule and strategic plans to limit downtime to existing operations. Contractor shall notify NOIRLab a minimum of five (5) business days prior to any service shutdowns, including deenergizing the main service.

3.7 Quality Control

Contractor shall observe all work in progress to ensure quality of work and compliance with contract, construction documents, and manufacturer requirements. Contractor shall keep NOIRLab informed about the progress and quality of the portion of work completed and report to NOIRLab in a timely fashion any defects, deficiencies, or known deviations from the contract and/or construction documents that may negatively impact the most recent construction schedule submitted by the Contractor.

3.8 Change Orders

All change orders shall be reviewed by NOIRLab for approval. NOIRLab Contracts Officer (CO), TR, and the Contractor shall develop and implement a system for the review and processing of change orders. All change orders require written approval from the CO and TR.

3.9 Inspections, Testing, and Commissioning

Contractor, in coordination with the TR, shall coordinate the selection of independent inspection and testing agencies, review inspection and testing reports, and make recommendations regarding the results of inspections and testing activities. Contractor shall perform system testing to verify compliance with design specifications and performance criteria. Coordinate with third-party testing & balancing and commissioning agents to validate system functionality.

3.10 Punch List and Final Inspections

Contractor, with input from The Design Firm and NOIRlab, shall prepare a list of deficiencies (punch list) and coordinate all correction actions of contractor(s). Contractor, in consultation with NOIRLab, shall verify substantial completion, final inspections, and sign-off from relevant authorities.

3.11 Training

Contractor shall provide on-site training to NOIRLab facilities staff upon system startup. Training must include the following:

- An overview of equipment operation and sequence of controls.
- Maintenance procedures and inspection requirements.
- Location of all access panels and system shutoffs.
- Use of the BMS system

The training must be documented and a copy provided as part of the closeout process.

3.12 Certificates

Contractor, upon completion of the project, shall certify to the best of their professional knowledge that the installation conforms to the approved plans, specifications, and shop drawings.

3.13 Closeout

Contractor, in consultation with NOIRLab, shall develop a detailed plan of closeout activities in compliance with the contract documents. The plan shall include a closeout schedule, inspections, testing, start-up procedures, warranty processing, and training. Contractor shall assist NOIRLab in coordinating these closeout activities, as well as the completion of

correction of deficiencies, receipt of final submittals, and resolution of all change orders prior to the application for payment of retainage. Once these have all been completed to the satisfaction of the Owner, Contractor shall coordinate the handover of the operational system to NOIRLab. The Contractor shall maintain a complete set of red-line as-built drawings and submit them electronically in PDF and native CAD format. Final payment will not be issued until approved Record Documents, O&M manuals, training, and the completed punch list are received and accepted.

3.14 Contractor use of Premises

The Contractor shall coordinate site access, storage areas, staging, and work hours with the Facilities Manager. Work hours are generally 7:00 AM – 5:00 PM. After-hours work, shutdowns, or access to secured areas requires written approval at least 7 days in advance. Contractor shall not use University facilities for storage or meetings without prior approval. Reference the attached Tucson Headquarters Contractor Guidelines document.

3.15 Final Cleaning

The Contractor shall perform final cleaning of all areas impacted by the work, including vacuuming ducts, wiping mechanical equipment, and removal of construction debris.

3.16 Applications for Payment

Monthly applications for payment shall be submitted using AIA G702 and G703 forms or an approved equivalent. Payment for off-site stored materials will be permitted only upon submission of documentation showing proof of ownership, insurance, detailed inventory, and bonding of the storage facility. The Owner reserves the right to reject any unsupported claim for payment.

4.0 Submittals

The following submittals will be provided by the Contractor in addition to the Scope of Work above: The contractor shall prepare a submittal log within (14) fourteen calendar days of the notice to proceed and shall keep and maintain this submittal log throughout the course of the project.

1. Compliance Strategy Plan ensuring compliance with all regulatory requirements.
2. Waste Disposal Plan ensuring proper mitigation and disposal of all construction materials and/or waste collected or produced throughout the project.
3. Health and Safety Plan, including PPE requirements and safety procedures, ensuring

compliance with all applicable codes and standards, OSHA requirements, and NOIRLab Safety Guidelines.

4. Master Schedule Within twenty (20) days of NTP, Contractor shall submit an interim Master project schedule. The final cost-loaded schedule is due no later than sixty (60) days from NTP and shall reflect all critical activities, including long-lead items, phasing, utility coordination, and commissioning. Updates are required monthly or as directed by the Owner.
5. Schedule of Values (SOV) for review and approval by the project owner and design firm. The SOV shall include the following.
 - Be structured to correspond to the activity breakdown included in the cost loaded master schedule.
 - Assign a dollar value, an estimated manpower count, and crew size to each activity in the construction master schedule.
 - Ensure the activity costs match the actual subcontract pricing or the contractor's internal costs.
 - Include bonds and insurance as a separate line item.
 - Identify the following as distinct line items:
 - Preparation and delivery of Operations and Maintenance manuals.
 - Record Documents
 - Punch List completion
 - Training

Ensure the sum of all activities equals the total contract sum.
6. Step-by-step Work Plan outlining the construction process and how Contractor proposes to limit downtime to existing operations.
7. Product Submittals for review by the owner to include the following:
 - a. Product Data on all materials and equipment
 - b. Shop drawings on HVAC system and system layout
 - c. Letter of certification from the HVAC equipment manufacturer to be submitted with equipment submittals and shop drawings. This letter shall indicate that the installer is an authorized representative of said manufacturer.
 - d. Complete as-built drawings to be submitted within 14 calendar days after acceptance test. Drawings shall be similar to shop drawings, but revised to reflect changes made during construction.
 - e. Documentation of electrical work, including schematics, diagrams, and manuals
 - f. Operation and Maintenance Manuals to be submitted within 14 calendar days after acceptance test. Include the factory's standard installation and operating instructions.
 - g. User guides for employees
8. Warranties for all products and workmanship
9. Ongoing maintenance and support plan for equipment

5.0 Acceptance

Acceptance of the work will be based on the following criteria:

- Completion of all tasks outlined in the Scope of Work and construction documents
- Delivery of all specified submittals
- Verification that the installed products meet all performance requirements
- Successful inclusion of training requirements for personnel responsible for operating and maintaining the new systems

6.0 Bid Breakdown

Please break the bids down into the following line items:

- **Overall Construction Cost Estimate:** Any costs and/or fees associated with demolition and construction, broken down into the following phases:
 - East Wing Level 1
 - East Wing Basement
 - Main Building Level 1
 - Main Building Basement
 - Shop/Engineering Building Level 2
 - Shop/Engineering Building Level 1
 - Shop/Engineering Building Basement
- **Add Alternates:** Any costs and/or fees associated with add alternates.
- **Labor Costs:** Detailed listing of labor costs required for the project.
- **Material Costs:** Detailed listing of materials required for the project and their costs, including any necessary testing and analysis to be conducted.
- **Equipment Costs:** Any specialized equipment or tools necessary for the project and their costs.
- **Change Order Costs:** Any costs and/or fees associated with implementing a change order.
- **Administrative Costs:** Any overhead costs and administrative fees associated with the project.
- **Timeline:** Proposed timeline for the project, including any phases or milestones.
- **Payment Schedule:** Contractor's proposed payment schedule, outlining when and how payments will be made throughout the project.

7.0 Document Delivery Requirements

Contractor shall provide NOIRLab with all documents generated in support of the project including meeting minutes, review meetings, submittals, submittal comments, RFIs, construction documentation, contractor site meetings, as-built drawings, and calculations performed in support of the project. Contractor shall upload all project digital files to an agreed cloud storage space. Documentation shall be provided in the following formats:

- PDF File Format
- Native File Format (MS Office, Google Doc, AutoCAD 2D, etc.)

8.0 Confidentiality

All information and data related to this project shall be treated as confidential and shall not be disclosed to any third parties without prior written consent.

Appendix A. Applicable Reference Documents

Document Number / Link / Identifiers	Document Title
 1. Construction Documents	Construction Documents Folder (currently only 60% Design Development Construction Drawings)
 NOIRLab Tucson Base Facility Map ...	NOIRLab Tucson Base Facility Map
 TUC-02-3200-40_Tucson Facility Fl...	Tucson Facility Floor Plans
 TUC-8010-40_ONE LINE ELECTRIC...	Tucson Facility Electrical One Line Diagram
 build-america-buy-america-factsh...	Build America, Buy America Fact Sheet and FAQs
 Tucson Headquarters Main Buildin...	Tucson Office Contractor Guidelines

Appendix B. List of Acronyms

Acronym	Full Form
AHJ	Authority Having Jurisdiction
AURA	Association of Universities for Research in Astronomy
BABA	Build America, Buy America Act
BMS	Building Management System
CO	Contracts Officer
DDC	Direct Digital Controls
NOIRLab	National Optical-Infrared Astronomy Research Laboratory
NSF	National Science Foundation
PM	Project Management, Project Manager
RFP or RfP	Request for Proposal
SOW	Statement of Work
TR	Technical Representative

SECTION IV.

**VENDOR'S/CONTRACTOR'S BID DOCUMENTS
FIXED PRICE PROFESSIONAL SERVICES CONTRACT**

DATE: _____

Project: HVAC Replace/Install, N00051526C

TO: Procurement Office
AURA/CAS
Attn: Sherri Abney
950 N. Cherry Avenue
Tucson, AZ 85719
Email: sabney@aura-astronomy.org

Via mail:

AURA/CAS
Procurement Office
950 N. Cherry Ave.
Tucson, AZ 85719

1. By submitting this Bid, the Undersigned accepts all of the terms and conditions of the Bidding Documents as defined in 1.2 of the Instructions to Bidders.
2. In compliance with AURA's Request for Bid No. N00051526C and Instructions to Bidders, the Undersigned hereby proposes to furnish all labor, materials, equipment and supplies to perform the work for AURA's Project, titled, "HVAC Replace/Install, Tucson Facility" in accordance with the Scope of Work/Technical Specifications, and pertinent Fixed Price Professional Services Contract Documents.
3. The Undersigned hereby specifies, in accordance with Article 8, Completion Time, of Instructions to Bidders, that the work shall be begin within _____ **calendar days** after signing the Fixed Price Construction Services Agreement and receiving a written notice to proceed.
4. In accordance with the above completion schedule (Paragraph 3) and attached scope of work and technical specifications, the Undersigned hereby proposes to accomplish the work described above ANNUALLY for the TOTAL of:

Title of Project: HVAC Engineering Design 2024

_____ DOLLARS (\$ _____)
Total cost

5. To facilitate the bid review process, please provide a general cost breakdown of the bid total in Paragraph 4 above using the included "Bid Proposal" document. If an item that is listed is not included in this project, please enter a value of zero for this category. Be sure to include any costs associated with procuring bonds, etc... in the total bid amount.

If more room is needed, a separate page may be used for the cost breakdown.

(Legal Name of individual, firm or Corporation Bidding)

(Complete Business Address)

(Signature of Authorized Representative)

(Title)

(Remainder of this page left intentionally blank)

Qualification Package

ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

CONTRACTOR/CONSULTANT QUALIFICATIONS

This form is used to obtain information from Contractors/Consultants about their qualifications. The information that is used to evaluate them is taken from this form as well as from other sources, including but not limited to the proposal submitted by Contractor/Consultant, performance evaluations, any additional data requested by the Association of Universities for Research in Astronomy, Inc., outside research and interviews with the most highly qualified Contractors/Consultants and their references.

GENERAL INSTRUCTIONS

This form presents the qualifications for a specific contract. Carefully comply with instructions when preparing and submitting this form. Be as concise as possible and provide all information pertaining to this project and contract.

DEFINITIONS

Association of Universities for Research in Astronomy, Inc. (AURA): AURA is a consortium of universities, and educational and other non-profit institutions that operates world-class astronomical observatories that AURA terms "centers." AURA's members are 42 U.S. institutions and 5 international affiliates. AURA views itself as acting on behalf of the science communities that are served by its centers, and as a trustee and advocate for the centers' missions.

Contractor/Consultant: (Contractor): A company or individual providing goods and/or services required for a program or project.

Discipline: Primary technical capabilities of key personnel, as evidenced by academic degree, professional registration, certification, and/or extensive experience.

Key Personnel: Individuals who will have major contract responsibilities demonstrated through unusual or unique expertise, e.g. architects, engineers.

(The remainder of this page is left intentionally blank)

SPECIFIC INSTRUCTIONS

Contract-Specific Qualifications

Section A. Contract Information.

Contractor Point of Contact.

1 - 5. Name, Title, Name of Contractor, Telephone Number, and E-mail (Electronic Mail) Address. Provide information for a representative of the contractor that AURA may contact for additional information.

Section B. Sub-Contractor Information.

6 - 8. List any sub-contractors (if applicable). Provide Company name, address, and role in this contract. Then provide the firm's name, full mailing address, and a brief description of the role of each firm's performance activities in this contract. The named subcontractors and outside associates or consultants must be used. Any changes warrant approval by the AURA/NOIRLab contracting officer. If needed, attach an additional sheet in the same format as Section C.

Section C. Business References

Section D. Representations and Certifications

The Contractor is requested to check the appropriate boxes making the Representations and Certifications of the project a formal part of its pre-qualification. Failure to provide this information will prevent your company from being pre-qualified.

9. Small Business and Small Disadvantaged Business Contracting Program. AURA/NOIRLab maintains a Small Business and Small Disadvantaged Business Contracting Program. Check Business Size as Small or Large as defined. Check as many that apply under the Business Classification. Check one under Business Status, for IRS reporting requirements.

10. Identification Numbers. Enter appropriate D-U-N-S Number and Federal Employee Identification Number and (Central Contractor Registration Number) (or Social Security Number, if appropriate).

Section E. Debarment/Suspension Status

The Contractor is required to read and certify the understanding of the debarment procedure and process.

11-12. Signature and Date: Signature and Date of an authorized representative attests that the information provided is current and factual.

13-14. Name, Title, and Address.

Section F. Byrd Anti-Lobbying Amendment Certification

The Contractor is required to read and certify that it has not used federal appropriated funds to pay anyone for influencing an agency or a member or employee of Congress in connection with the award of any federal contracts, grants, loans or agreements.

15-17. Signature, Date and Title: Signature and title of an authorized representative who certifies to the truthfulness of the statements set forth therein.

Section G. Qualification of Corporate Signature

Signature of the qualified person authorized, empowered, and directed on behalf of the Contractor to make and execute bids, offers, and contracts is required.

18-19. Signature and Date: Signature and Date of Contractor's officer to attest that the officer signing the Bid Documents is authorized to make and execute bids, offers, and contracts binding upon this corporation for the offer and sale of goods and/or services by this corporation in the course of its business in an amount specified in the Contractor's Bid Document.

20-21. Name, Title, and Address.

Section H. Qualification of Limited Liability Company Signature

Signature of the qualified person authorized, empowered, and directed on behalf of the Contractor to make and execute bids, offers, and contracts is required.

22-23. Signature and Date: Signature and Date: Signature and Date of Contractor's member/manager/officer to attest that the individual signing the Bid Documents is authorized to make and execute bids, offers, and contracts binding upon this limited liability company for the offer and sale of goods and/or services by this limited liability company in the course of its business in an amount specified in the Contractor's Bid Document.

24-25. Name, Title, and Address.

Section I. Certification that no Conflict of Interest Exists.

The Contractor is required to read and certify that no organizational conflict of interest exists as defined in the certification form.

26-28 Signature of authorized representative, date and printed name of authorized representative and title of authorized representative.

Section J. Additional Information

Use this section to provide additional information specifically requested or to address selection criteria not covered by the information provided.

Section K. Declarations

29. Signature and Date: Signature and Date of Contractor's officer to attest that the information contained in the Bid Documents is true and correct and to confirm that the Contractor understands its statements in the Bid Documents are subject to investigation and that dishonest answers may be grounds for disqualification and may subject the Contractor and its representative to criminal and civil liability.

(The remainder of this page is left intentionally blank)

Section A. Contract Information

Contractor Point of Contact

1. Name and Title: _____
 2. Name of company: _____
 3. Telephone number: _____
 4. Fax number: _____
 5. E-mail address: _____
-

For this specific project, please provide a list of planned project team members/key personnel, their roles and responsibilities, including years of experience and any applicable information (i.e. special skills, certifications, etc...).

Section B. Sub-contractor (ONLY if applicable)

6. Company Name: _____
 7. Address: _____
 8. Role in this contract: _____
-

Section C. BUSINESS REFERENCES:

Please provide a company Overview and History, including previous experience with this specific type of project.

On a separate sheet of paper, list five customers for whom your business is currently providing the same or similar services as those covered in the scope of work/technical specifications described in Section III of this RFB. Include all information requested below.

Please provide: the name of the business, the point of contact name and email contact information, the address, their phone and fax numbers and the type of project completed for the references.

You may include any other information or documentation that may assist AURA in evaluating your qualifications.

D. REPRESENTATIONS AND CERTIFICATIONS

The contractor, by checking the appropriate boxes makes the following Representations and Certifications as a part of its bid (proposal). Submitted in response to the request identified above:

9. Small Business/Small Disadvantaged Business Contracting Program

AURA/NOIRLab maintains a "Small Business" and a "Small Disadvantaged Business" Contracting Program. Please check the appropriate circles below.

Business Size (check one)

- ☐ Small A domestic concern that is independently owned and operated, is not dominant in the field of its operations, qualifies under the criteria covering annual receipts set forth in Section 3 of the Small Business Act and does not employ more than 500 employees.
- ☐ Large A domestic concern which, including domestic and foreign divisions and affiliates, normally employs 500 or more persons, is independently or publicly owned or controlled and operated, and which may be division of another domestic or foreign concern.

Business Classification (check as many as are applicable)

- ☐ Minority 51% of business is owned by one or more socially and economically-disadvantaged individuals and whose management and daily business operations are controlled by one or more of such individuals.
- Socially and economically disadvantaged individuals including, Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Asian-Indian Americans, and other minorities, or any other individual found to be disadvantages pursuant to Section 8(a) of the Small Business Act.
- Native Americans include American Indians, Eskimos, Aleuts, and Native Hawaiians. Asian-Pacific Americans include United States citizens whose origins are Guam, the U.S. Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, and Taiwan.
- For assistance in determining your business size and socially and economically disadvantaged status, contact the nearest office of the Small Business Administration.
- ☐ Women-Owned A business that is at least 51% owned, controlled and operated by a woman or women.
- Note:** "Controlled" is defined as exercising the power to make policy decisions. "Operated" is defined as actively involved in the day-to-day management.

- ☐ Non-Profit A business or organization that has received non-profit status under IRS Regulation 501(c)(3).
- ☐ Public An agency of the Federal or State Government Sector or a municipality.
- ☐ Sheltered A sheltered workshop or other equivalent business basically employing the handicapped.
- ☐ Handicapped A business that is owned, controlled, and operated by a handicapped person(s).
- ☐ Foreign A concern which is not incorporated in the United States or an unincorporated concern having its principal place of business outside the United States.

Business Status (check one) – For IRS Reporting Requirements

- ☐ Corporation A business entity that is registered with a state in the United States as a corporation, including non-profit corporations but excluding professional corporations.
- ☐ Other An individual , or other business entity, that is not a registered corporation. This includes limited liability companies, partnerships, limited partnerships, limited liability partnerships, independent contractors, and the like.

10. Indicate your: D-U-N-S No. _____ and
Federal Emp. ID No. _____ - _____ and
SAM Registration (Yes or No) _____

WARNING: Failure to provide this information will prevent Contractor from being qualified and being considered for the work covered by this RFB.

E. DEBARMENT/SUSPENSION STATUS –

Contractor certifies to the best of its knowledge and belief that it and its principals:

(a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from a covered transaction by any Federal department or agency;

(b) have not within a three year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state or local) transaction or contract under a public transaction; violation of Federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, State or local) with commission of any of the offenses enumerated in paragraph b of this certification; and

(d) have not within a three year period preceding this proposal for bid had one or more public transactions (Federal, state or local) terminated for cause or default.

The Contractor agrees to provide immediate notice to the AURA/NOIRLab Contracting Officer in the event of being suspended, debarred, or declared ineligible by any department or Federal Agency, or upon receipt of a notice of proposed debarment that is received after the submission of the bid or offer, but prior to the award of the purchase order or contract.

CERTIFICATION

The Contractor hereby certifies that he or she has read the above Debarment/Suspension Status requirements and that he or she understands and will comply with these requirements.

Please advise this facility as soon as possible when the status of your company changes from that indicated above.

11. SIGNATURE OF AUTHORIZED REPRESENTATIVE:

12. DATE SIGNED: _____

13. NAME AND TITLE OF SIGNER (PRINT OR TYPE):

14. ADDRESS: _____

F. BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION (31 U.S.C. §1352)

(To be signed with each bid or offer exceeding \$100,000.00)

Contractor certifies, to the best of its knowledge and belief that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form LLL, "Disclosure of Lobbying Activities," in accordance with its instructions to the [as amended by "Government wide Guidance for New Restrictions on Lobbying, "61 Fed. Reg. 1413 (1/19/96). Note Language in paragraph (2) herein has been modified in accordance with Section 10 of the lobbying disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S. C. 1601 *et seq.*)].

(3) Contractor shall require that the language of this certification be included in the award documents for all sub-awards at all tiers including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such expenditure or failure.

CERTIFICATION

Contractor certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, contractor understands and agrees that the provisions of 31 U.S.C. A 3801 *et seq.*, apply to this certification and disclosure, if any.

15. SIGNATURE OF AUTHORIZED REPRESENTATIVE:

16. DATE SIGNED:

17. NAME AND TITLE OF SIGNER (PRINT OR TYPE):

G. QUALIFICATION OF CORPORATE SIGNATURE

(To be completed if Contractor is a corporation.)

_____, incorporated in the
(Name of Corporation)

State of _____.

RESOLVED THAT:

_____, _____
(Name) (Title)

of this corporation is hereby authorized, empowered, and directed, for and on behalf of this corporation and its corporate name, to make and execute bids, offers, and contracts binding upon this corporation for the offer and sale of goods and/or services by this corporation in the course of its business in an amount up to:

_____ DOLLARS (\$_____)

CERTIFICATION

I hereby certify that I am a/the duly elected and qualified _____, of the above named corporation, that the forgoing is a true and correct statement of a resolution adopted at a meeting of the Board of Directors of said corporation, and that the foregoing resolution is in full force and effect, and has not been withdrawn, repealed, amended, or canceled.

IN WITNESS WHEREOF I have hereto set my hand on behalf of said corporation.

18. SIGNATURE OF OFFICER: _____

19. DATE SIGNED: _____

20. NAME AND TITLE OF SIGNER (PRINT OR TYPE):

21. ADDRESS: _____

H. QUALIFICATION OF LIMITED LIABILITY COMPANY SIGNATURE

(To be completed if Contractor is a limited liability company.)

_____, organized in the
(Name of Limited Liability Company)

State of _____.

RESOLVED THAT:

_____, _____
(Name) (Title)

of this limited liability company is hereby authorized, empowered, and directed, for and on behalf of this limited liability company and its limited liability name, to make and execute bids, offers, and contracts binding upon this limited liability company for the offer and sale of goods and/or services by this limited liability company in the course of its business in an amount up to:

_____ DOLLARS (\$_____)

CERTIFICATION

I hereby certify that I am (i) a member or (ii) a/the duly elected and qualified/appointed _____, of the above named limited liability company, that the forgoing is a true and correct statement of a resolution adopted at a meeting of the members/managers of said limited liability company, and that the foregoing resolution is in full force and effect, and has not been withdrawn, repealed, amended, or canceled.

IN WITNESS WHEREOF, I have hereto set my hand on behalf of said limited liability company.

22. SIGNATURE OF MEMBER/MANAGER/OFFICER: _____

23. DATE SIGNED: _____

24. NAME AND TITLE OF SIGNER (PRINT OR TYPE):

25. ADDRESS: _____

I. CONFLICTS OF INTEREST CERTIFICATION

(a) Contractor warrants that to the best of its knowledge and belief, and except as otherwise disclosed, it does not have any organizational conflict of interest which is defined as a situation in which the nature of work under a proposed contract and the prospective contractor's organizational, financial, contractual or other interest are such that:

- (i) award of the contract may result in or be the result of an unfair competitive advantage;
- (ii) the Contractor's objectivity in performing the contract work may be impaired; or
- (iii) that the Contractor has disclosed all relevant information and requested AURA to make a determination with respect to this Contract.

(b) Contractor agrees that if, after award, it discovers an organizational conflict of interest with respect to this Contract, it shall make an immediate and full disclosure in writing to the AURA Contracts Officer which shall include a description of the action which the Contractor has taken or intends to take to eliminate or neutralize the conflict. The AURA Contracts Officer may, however, terminate the contract for the convenience of AURA, if it would be in the best interests of AURA to do so.

(c) In the event the Contractor was aware of an organizational conflict of interest before the award of this contract and intentionally did not disclose the conflict to the AURA Contracts Officer, the Contracts Officer may terminate the Contract for default.

(d) Contractor shall require a conflict of interest disclosure or representation from subcontractors and consultants who may be in a position to influence the advice or assistance rendered to AURA and shall include any necessary provisions to eliminate or neutralize conflicts of interest in such consultant agreements or subcontracts involving performance or work under this Contract.

I declare under penalty of perjury that all statements and information contained in this document and any accompanying documents are true and correct, with full knowledge that all statements made in this document and any accompanying documents are subject to investigation and that any false or dishonest answer to any question may be grounds for disqualification from this solicitation or termination of any award and expose me and the represented organization to both civil and criminal liability.

26. _____
Signature of Authorized Officer/Member/Representative

27. _____
Printed Name and Title

28. Date: _____

J. ADDITIONAL INFORMATION

PROVIDE ANY ADDITIONAL INFORMATION AS REQUESTED. ATTACH ADDITIONAL SHEETS AS NEEDED.

K. DECLARATION

29. I declare under penalty of perjury that all statements and information contained in this document and any accompanying documents are true and correct, with full knowledge that all statements made in this document any accompanying documents are subject to investigation and that any false or dishonest answer to any question may be grounds for disqualification from this solicitation and expose me and the represented organization to both civil and criminal liability.

SIGNATURE OF AUTHORIZED REPRESENTATIVE

Date

Print Name