National Institutes of Health
Turning Discovery Into Health

Office of Research Facilities
Division of Design and Construction Management
Bldg 13, Rm. 2W48, 9000 Rockville Pike, Bethesda, MD 20892

CONSTRUCTION SERVICES
STATEMENT OF WORK

PROJECT TITLE: C112354 – Bldg. 4 Replace AHUs 3, 4 and 4A

LOCATION OF WORK: NIH Bldg 4, Bethesda MD

1. BACKGROUND

The National Institute of Allergy and Infectious Diseases (NIAID) is the sole occupant of Building 4 on the NIH Bethesda Campus. This building was originally constructed in 1938 and has undergone several renovations over the years, the most significant being a major building renovation in 1985. This seven-story story building is fully occupied with active research laboratories and includes an animal vivarium. The building will remain fully occupied throughout the construction period. Air Handling Unit (AHU) 3 serves the cage wash area and AHU 4/4A serves the animal holding areas. Both supply AHUs are in extremely poor condition and are beyond their useful life. This project is designed to replace the identified AHUs and upgrade their associated controls.

2. SCOPE OF CONSTRUCTION SERVICES –

This project consists of providing all labor, supervision, materials, equipment, tools, transportation, temporary facilities, permits, parking and other incidentals necessary to complete the construction project. The General Contractor (GC) shall perform all work necessary to establish a complete and operational project in accordance with this statement of work, the contract documents, applicable Federal and State regulations, NIH policies and referenced industry standards. In general, this project consists of performing construction services as indicated below:

2.1. Construction Services: Construction will entail the replacement of air handling units AHU-3, 4A, 4B located in the basement (B2 level) mechanical spaces at the east and west tunnels of building 4. AHU-3 serves the Cage wash area and AHU-4A/4B serves the animal holding rooms at the B2 level.

2.2. The contractor shall perform the work required by the final design documents prepared by Global Engineering Solutions, the Architect/Engineer (A/E), and included in Enclosure 6.1. These documents consist of th design drawings, specifications, and Basis of Design.

a. Design Drawings
b. Specifications
c. Basis of Design

2.3. Construction Duration: This project is to be completed within **330 calendar days** after award.

3. CONSTRUCTION SERVICES

The contractor shall provide all material, labor, equipment, and supervision as necessary to complete the construction of this project. The project scope as defined above must be accomplished in the following tasks:

3.1. **Construction**: Perform all work as indicated in the construction documents.

3.2. **Safety:** The contractor shall comply with all applicable safety requirements listed on the Division of Occupational Health and Safety (DOHS) website. Construction work shall not begin until the

Accident Prevention Plan has been approved by the Government. The DOHS website for safety information is https://www.ors.od.nih.gov/sr/dohs/YourRole/Pages/Contractor-Safety-Materials.aspx#deliver

3.3. Noisy Work Hours: Typical noisy work hours are prior to 8:00am but may vary. Coordinate actual noisy work hours with the Project Officer. The Contractor may have to schedule noisy work during the early morning hours, evening hours or weekend hours.

3.4. Project Management: The contractor shall appoint a Project Manager (PM) to manage this project and be the Government's single point of contact for the duration of the project.

3.4.1. Construction Schedule: The Contractor shall submit a baseline construction schedule to the Government for review and approval within ten (10) calendar days of award. The construction schedule shall contain, as a minimum, the work breakdown structure (WBS) numbers, definable features of work (DFOW), activity description, major milestones, duration, predecessors, float, critical path, cost, and percent complete. The schedule shall be delivered in PDF and Microsoft Project format.

3.4.2. Meetings: The contractor shall provide for and conduct meetings to be held on campus or web conference. Prepare and submit meeting minutes in accordance with construction specifications.

3.4.2.1. Pre-Construction Meeting: Attend a pre-construction meeting within 3 weeks after award. The purpose of this meeting is to discuss and develop a mutual understanding concerning the schedule and administrative work. Assume the duration of the pre-construction meeting will be 1 hour.

3.4.2.2. Progress Meetings: Provide for and conduct coordination meetings every two-weeks to be held on campus or web-conference. As a minimum, provide an agenda, a three-week look-ahead schedule, a list of outstanding and upcoming RFIs, a list of outstanding and upcoming submittals, and the approved meeting minutes from the previous meeting before each progress meeting. Assume the duration of each progress meeting will be 1 hour.

3.4.3. Utility Shutdowns: The Contractor shall endeavor to provide a list of necessary utility outages needed at the beginning of the construction project in order to tie in new utilities during the project. This will provide the Division of Facilities Operations and Maintenance (DFOM) sufficient time to assess the impact of the outages, locate and test shutoff valves and other fixtures, and allow affected building occupants to plan their research around the shutdown schedule. The further advance the shutdown request the better, but **shall be no less than four (4) weeks from the desired shutdown date**. There is no guarantee that the requested date will be approved, and the Contractor shall work with the Project Officer and DFOM to negotiate another date.

3.4.4. Request for Information (RFI): Unless an existing RFI form is already part of a Government or Contractor provided construction management software, use the RFI form listed in paragraph 6.2 of this statement of work when formally seeking information or clarification after award.

3.4.5. Submittals: Provide submittals in accordance with construction specifications. The Government reserves the right to accept submittals transmitted electronically in lieu of paper or digital storage devices (such as CD-ROM or USB flash drives).

- Submittal Schedule: Unless an existing Submittal Schedule form is already part of a Government or Contractor provided construction management software, use the Government provided template listed in 6.3 to create and develop the submittal schedule.
- Submittal Approval: No payment will be made for any billable construction until the associated submittals have been provided, reviewed and are satisfactory to the Government.

- Transmittal Form: Unless an existing Transmittal Form is already part of a Government or Contractor provided construction management software, use the Government provided transmittal form listed in 6.4 to transmit submittals.
- Warranty Form: If applicable, use the Government-provided warranty form listed in 6.5 to create and develop the warranty schedule.
- Asset Turnover Form: If applicable, Complete the remaining Contractor-assigned fields in the Asset Turnover Form provided by the IWMS Team (Enclosure 6.6).
- ORF Project Turnover Form: Complete those project turnover and closeout items on the provided ORF Project Turnover Form that are the responsibility of the Contractor and provide to the Project Officer.

3.4.6. Asset Tagging & Labeling: Utilize the prefilled Asset Turnover Form provided by the Government to obtain the asset tag and barcode number for each new asset and affix the physical tag and barcode to each asset in accordance with the construction specifications (see Enclosure 6.6).

3.4.7. Close-Out

3.4.7.1. Punch List: The final punch list will be developed at a date to be determined by the Project Officer, after the Contractor submits a written notice of substantial completion, indicating all major work has been completed. The Project Officer may accept this notice, or reject it, pending further work to be completed.

3.4.7.2. Redline Drawings: Provide redline mark-up drawings indicating actual installed conditions that deviate from construction drawings.

3.4.7.3. Operation and Maintenance Manuals: Operation and Maintenance Manuals, including Preventive Maintenance, Special Tools, Repair Requirements, Parts List, Spare Parts List, and Operating Instructions shall be delivered to the Project Officer in PDF format as a submittal.

3.4.7.4. Video Training: The contractor shall submit video training for major assets in MP4 format. Coordinate with the COR to identify which assets require video training.

3.4.7.5. Warranties: Complete the Warranty Form included with this Scope of Work and transmit as a submittal to the Project Officer.

4. GENERAL REQUIREMENTS

This project shall comply with the following requirements, as applicable:

4.1. Procedures

The NIH Division of the Fire Marshal, the fire safety "authority having jurisdiction" (AHJ), as well as the Project Officer will monitor renovation and construction areas for compliance.

4.1.1. The NIH AHJ shall approve all completed work for compliance with provisions of the National Fire Codes prior to acceptance and beneficial occupancy of the space.

4.1.2. Non-compliance with checklist is sufficient cause for a “Stop Work Order”.

4.1.3. Refer to the NIH Policy Manual *1370 - Fire Protection and Life Safety Building Permit Process* (https://policymanual.nih.gov/1370).

4.2. National Institutes of Health - Facility Development Manual (FDM)

The FDM is available online at: https://www.orf.od.nih.gov/Pages/default.aspx.

4.3. NIH Security Requirements

Coordinate with the NIH Division of Police (DP), Division of Physical Security Management (DPSM), and Division of Personnel Security and Access Control (DPSAC) as needed to clarify and implement NIH security requirements, which include but are not limited to those listed below:

4.3.1. NIH Policy Manual 1381 Physical Security Project Requirements for NIH Owned and Leased Facilities are found here: https://policymanual.nih.gov/1381.

4.3.2. After Hours access requirements: Contractors must coordinate with the Contracting Officer's Representative (COR) and NIH Police to obtain a stamped/signed "Police Permit" for work that is required outside of NIH Staff General Working Hours of 6 a.m. to 6 p.m. See the NIH Division 1 Specifications Work Restrictions section for more information on work hours.

4.3.3. DPSM Physical Security Policy and Design Requirements (PDR**)** including:

4.3.3.1.1. PDR Appendix B, Electronic Locking Devices (**Card Readers**)
4.3.3.1.2. PDR Appendix C, **Security Wiring**
4.3.3.1.3. PDR Appendix J, **Use of Powder Actuated Tools**
4.3.3.1.4. PDR Appendix G, **Photographing Filming and Video Recording** at NIH.

4.4. Construction and Demolition Waste Contract Requirement

The Contractor shall comply with the NIH Division of Environmental Protection's requirements pertaining to dumpsters, recycling, chemical and hazardous waste, and universal waste as described in the following link:
https://orf.od.nih.gov/EnvironmentalProtection/WasteDisposal/Documents/Construction%20and%20Demolition%20Waste%20Contract%20Requirements_508.pdf

4.5. Building Codes

This project shall be constructed to meet or exceed the applicable building code(s) for the location of the facility. The construction contractor shall use other appropriate codes and industry standards such as: the Life Safety Code (NFPA 101), Fire Protection for Laboratories Using Chemicals (NFPA 45), Standard for the Installation of Sprinkler Systems (NFPA 13), and Healthcare Facilities (NFPA 99), and Guidelines for Design and Construction of Health Care Facilities, The American Institute of Architects Academy of Architecture for Health with the assistance from the U.S. Department of Health and Human Services (Note: The Department of Health and Human Services (DHHS) as an agency of the Government of the United States of America, derives its authority from the Congress of the United States, and is not subject to laws, ordinances, regulations established by state and local governments or authorities of a lesser jurisdiction).

4.6. Federal Regulations

This project shall be constructed in compliance with all applicable Federal Regulations including but not necessarily limited to the following: Uniform Federal Accessibility Standards, OSHA 29CFR 1910; The National Environmental Policy Act of 1969 (NEPA); The Endangered Species Act; The National Historic Preservation Act of 1966; The Archeological and Historic Preservation Act; The Wild and Scenic Rivers Act; 40CFR Environmental which includes: Safe Drinking Water Act, Clean Air Act, Clean Water Act, Toxic Substance Control Act, Solid Waste Disposal Act, and RCRA; Executive Order 11990 (Wetlands); Executive Order 11988 (Floodplains); Executive Order 12088 (Compliance with State environmental laws);

National Capital Planning Commission (NCPC) "Master Planning Regulations"; Energy Policy Act of 1992; etc.

5. GOVERNMENT FURNISHED INFORMATION

5.1. Building Information Model (Revit and IFC versions).

Note: Building models are available for information only (FIO). The models are expressly NOT warranted to be entirely complete, accurate, or up-to-date. It is the contractor's responsibility to field verify all existing conditions necessary to accomplish this project.

6. ENCLOSURES:

6.1. Construction Drawings and Specifications provided by Global Engineering Solutions (A/E)
6.2. Request for Information (RFI) Form
6.3. Submittal Schedule
6.4. Transmittal Form
6.5. Warranty Form
6.6. Asset Turnover Form
6.7. Contractor's Guide to BIM and the Asset Turnover Form
6.8. Design model for the Contractor's reference only