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|-----------------------|------------|-----------------|
| Buyer | Amount | Contract Number |
| V. M. Costanzo | TBD | 391774 |

BROOKHAVEN NATIONAL LABORATORY

Brookhaven Science Associates

P.O. Box 5000

UPTON, L.I., N.Y. 11973-5000

Contractor Name (TBD)

CONTRACT

This Contract (the "Contract") is between the party named above (the "Contractor"), and Brookhaven Science Associates, LLC. ("BSA"), the latter acting under a Prime Contract with the United States of America (the "Government") represented by the United States Department of Energy ("DOE").

I. SCOPE OF WORK

The Contractor shall furnish all personnel, labor, equipment, materials and supplies to design, fabricate, deliver and supervise the installation of One (1) Custom Configured Walischmiller A1000 Power Manipulator, Bridge, and Hoist at Building No.801, Brookhaven National Laboratory, Upton, New York (BNL).

All work shall be conducted in strict accordance with the attached BSA Statement of Work, entitled "Manipulator/Bridge/Hoist Building 801 Renovate Hot Cells Project" dated June 30, 2020 incorporated herein as Attachment (A).

- A. Deliverables:** The Contractor shall provide the following deliverable(s) to and as directed by BSA's Technical Representative:

| <u>Item and Description</u> | <u>Due Date</u> |
|--|------------------------|
| Submittal of Design and Fabrication Documents | TBD |
| Electronic Submittals | TBD |
| Submittal of Completed Factory Acceptance Test (FAT) | TBD |
| Equipment Delivery, Installation Supervision, Training & Acceptance | TBD |

II. PERIOD OF PERFORMANCE:

This Contract shall be effective as of the date executed by BSA provided that the Contractor executes the Contract without exception or alteration. It shall remain in effect through (TBD)

III. FIRM FIXED PRICE AND PAYMENT

- A. Firm Fixed Price:** In full consideration of the Contractor's performance hereunder BSA shall pay the Contractor the firm fixed price of ____ (TBD) ____ U.S. Dollars (\$TBD). The said sum shall constitute full compensation for all services and materials furnished hereunder.

- B. Payment:** Payment will be made upon receipt and approval of properly certified invoices. Payment will be in accordance with the following milestone payment schedule:

| <u>Item/Description</u> | <u>Amount</u> | <u>Cumulative Amount</u> |
|--|---------------|--------------------------|
| Submittal of Design and Fabrication Documents | TBD | TBD |
| Electronic Submittals | TBD | TBD |
| Submittal of Completed Factory Acceptance Test | TBD | TBD |
| Equipment Delivery, Installation, Supervision, Training and Acceptance | TBD | TBD |

Payment terms are Net 30.

Invoices shall be directed to BSA's Accounts Payable Section via electronic or regular mail.

Electronic invoice submittal is preferred by BSA. The Contractor shall make every effort to have systems in place that allow for electronic invoice transmittal. Invoices shall be submitted in PDF format, via e-mail, to apinvoices@bnl.gov.

Hard copy invoices, in duplicate, shall be directed to BSA's Accounts Payable Section, Contracts Division, Bldg. No. 400d.

The Contractor shall indicate the final invoice by clearly marking such invoice as "FINAL". A copy of the final invoice must be submitted to BSA's Contractual Representative.

IV. AUTHORIZED REPRESENTATIVES

- A. BSA's Technical Representative:** Brian McCaffrey of the Modernization Project Office, located in Building 555 is BSA's Technical Representative, hereunder. He shall act as liaison between BSA and the Contractor in technical matters only. He can be reached at (631) 344-8240 (phone), bmccaffrey@bnl.gov (e-mail).
- B. BSA's Contractual Representative:** Vincent M. Costanzo, located in Building 902B, telephone no. (631) 344-5539, vcostanzo@bnl.gov (e-mail), is BSA's Contractual Representative. Any change or modification in the terms and conditions of this contract shall require the written approval of BSA's Procurement and Property Management Division's Manager, or his designee.
- C. Contractor's Technical Representative:** TBD is the Contractor's authorized Technical Representative, hereunder. He/She shall act as point of contact between BSA and the Contractor in technical matters only. He/She can be reached at (XXX) XXX-XXXX (phone), _____(e-mail).
- D. Contractor's Contractual Representative:** TBD is the Contractor's authorized Contractual Representative, hereunder. He/She shall act as liaison between BSA and the Contractor in contractual matters only. He/She can be reached at (XXX) XXX-XXXX (phone), _____(e-mail).

IV. ADDITIONAL TERMS

The provisions of Brookhaven Science Associates, LLC General Terms and Conditions for Non-Commercial Items, Rev.20.0 (Dec 2020) are incorporated herein and made a part hereof.

The provisions of Brookhaven Science Associates, LLC Supplemental Terms and Conditions for Work by Contractors on Site at Brookhaven National Laboratory, Rev.20.0 (Dec 2020) are incorporated herein and made a part hereof.

As noted in this Contract, Supplemental Terms and Conditions for Work by Contractors on Site at Brookhaven National Laboratory are incorporated herein. In accordance with Article 8 of these Supplemental Terms and Conditions, the Contractor is required to provide a Phase Hazard Analysis (PHA).

The provisions of Brookhaven Science Associates, LLC Supplemental Terms and Conditions for Price-Anderson Act Rev.20.0 (Dec 2020) are incorporated herein and made a part hereof.

This Contract is issued pursuant to Brookhaven Science Associates General and/or Supplemental terms and conditions listed above which are incorporated herein by reference. The complete text of these terms and conditions can be viewed via the internet at: <http://www.bnl.gov/ppm/T-Cs/t-c.asp>. Should the Contractor have any questions and/or not have access to these terms and conditions, contact the buyer or contracts specialist immediately.

The following documents attached hereto and made a part hereof, contain additional provisions of this Contract:

Attachment (A) - BSA Statement of Work, "Manipulator/Bridge/Hoist Building 801 Renovate Hot Cells Project" dated June 30, 2020

This Contract does not bind nor purport to bind the Government of the United States.

ACCEPTED:

CONTRACTOR NAME (TBD)

**BROOKHAVENSCIENCE
ASSOCIATES, LLC.**

By: _____

By: _____

Name: _____

Name: Vincent M. Costanzo

Title: _____

Title: Contracts Specialist

Date: _____

Date: _____

Should you accept this Contract without exception or alteration, one copy of the Contract executed by both parties shall be returned to BSA's Contractual Representative. Should you take any exceptions or attempt to alter the Contract in any manner, BSA's execution thereof shall be null and void. Should you wish to take exception(s)/alteration(s), you shall notify BSA's Contractual Representative. BSA will consider the requested exception(s)/alteration(s) and notify you accordingly. No Contract shall exist unless and until such differences are resolved.

Attachment (A)

BROOKHAVEN SCIENCE ASSOCIATES, LLC

Statement of Work

for

Manipulator / Bridge / Hoist

Building 801 Renovate Hot Cells Project

June 30, 2020

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1.0 PROJECT OVERVIEW

1.1 Synopsis

The Building 801 MEL Hot Cells are being renovated to expand Brookhaven National Laboratory's (BNL) Medical Isotope Research & Production (MIRP) program for research and feasibility studies in cancer diagnostics and radio-immunotherapies.

As part of the renovation, remote material handling capabilities within the south ready room are being incorporated for open-air transfer of irradiated targets from vertical casks (received from BNL Building 931 (BLIP) and Los Alamos National Lab) into hot cell 1. The scope of work is for a qualified contractor to design, fabricate and oversee the installation of a power manipulator, bridge, and hoist for remote material handling of irradiated targets.

2.0 DESIGN REQUIREMENTS, STANDARDS, AND SUBMITTALS

2.1 Design Requirements

The initial design of the power manipulator, bridge, and hoist was completed by Merrick & Company, the Engineer-of-Record for the project.

The power manipulator shall have a lifting capacity of at least three-hundred thirty (330) pounds and the hoist shall have a lifting capacity of 3.5 tons. The powered bridge will support the independently controlled manipulator carriage and the underhung trolley hoist.

The design requirements are described in the following Exhibits:

Exhibit 1: 9999-EQ-DS-001 – Manipulator Crane

Exhibit 2: 9999-EQ-DS-007 – South Ready Room Bridge Crane

2.2 Standards

The Contractor will design, build, deliver, supervise the installation and test in accordance with ISO 9001 Quality Requirements.

2.3 Submittals

The Contractor shall provide the following information to BSA:

- Drawings – Conceptual Phase, 50%, 100%
- Interface Drawing.
- Installation and setting to work information.
- Certificate of Conformity.
- Circuit Diagram and Terminal Plan.
- Factory Acceptance Test (FAT) Protocol
- Installation Manual
- Operation and Maintenance Manual
- List of Spare Parts
- Design Electrical Minimum Circuit Ampacity (MCA)
- Design Electrical Maximum Overcurrent Protection (MOP)
- Maximum Roller Load (lbs.) Applied to the Bridge Girder and Rail

3.0 SCHEDULE

The following key project dates are presented to enable the Contractor to properly plan for document reviews and project completion.

Project Schedule

| <u>No.</u> | <u>Task</u> | <u>Dates</u> |
|------------|-------------------------------------|------------------|
| 0 | Contract Award Date | Time 0 (T0) |
| 1 | Complete 50% Design Review | T0 plus 3 months |
| 2 | 100% Design Complete | T1 plus 2 months |
| 3 | Fabrication Notice to Proceed | T2 plus 0 days |
| 4 | Fabrication Completed | T3 plus 9 months |
| 5 | Packaging and Shipment to BNL | T4 plus 1 month |
| 6 | Installation and Training Completed | T5 plus 1 month |

4.0 PROJECT ADMINISTRATION

4.1 General

The purpose of this section is to outline specific requirements for the project coordination process and for interaction between BSA and the Contractor.

4.2 Project Team Directory

Brookhaven Science Associates, LLC (BSA):

- BNL Technical Representative (TR): Brian McCaffrey
- BNL Contracts Specialist: Vincent M. Costanzo

4.3 Coordination and Communication

4.3.1 Contractor Contact

For contractual issues, the Contractor is to contact the authorized BSA Contracts Specialist. For technical issues, the Contractor is to contact the BSA Technical Representative.

4.3.2 Coordination

The Contractor shall coordinate design and technical issues with the BSA Technical Representative. All decisions shall be documented by the Contractor and copied to the BSA Technical Representative.

4.3.3 Meetings / Conference Calls

The Contractor shall be responsible for participating in scheduled conference calls for biweekly project progress reports.

4.3.4 Transmittals

All correspondence and submittals shall be routed through the BSA Technical Representative and shall be accompanied by a written and dated transmittal that describes the information submitted and action required. Each transmittal shall include BNL subcontract and job numbers.

5.0 PROJECT DELIVERABLES

5.1 Design and Fabrication Documents

All submittals listed in Section 2.3 shall be submitted electronically. Hard copies will not be required.

5.2 Electronic Submittals

All electronic files shall be submitted via e-mail, Dropbox, SharePoint, or similar method depending upon file size.

Submittal reviews shall be submitted in PDF format.

RFIs, FCRs, and DRNs shall be resolved via e-mail and any supporting documentation shall be in PDF format.

Drawings shall be submitted in PDF format and the latest AutoCAD (.DWG) format. X-refs shall be bound to the drawing file.

5.3 Equipment Delivery

Upon completion of the design and fabrication of the power manipulator, bridge, and hoist, the equipment will be delivered to BNL in accordance with the schedule listed in Section 3.0.