

STATEMENT OF WORK

A. GENERAL INFORMATION

1. Title of Project: 603-16-701 Replace TIP Units

2. Scope of Work: The contractor shall provide all resources necessary to accomplish the deliverables described in this statement of work (SOW), except as may otherwise be specified. This project will provide design services for a cooling system to 24 communication closets/cabinets in 6 buildings at the Robley Rex VAMC, Louisville, KY. Nineteen of the closets/cabinets are on all floors in Building 1, the main hospital building. The cooling systems will replace the existing McLean domestic water cooled A/C units. The design shall also include heat loads of new Cisco Systems switch gear, Cisco Systems Catalyst 4500 Series Switches. Most of the closets are interior rooms without an adjacent exterior building wall. In addition, design an upgrade to the electrical service to the closets from 120V normal power to 208V emergency power for the new Cisco Systems Catalyst 4500 Series switch gear operating at maximum power configuration. This is a Telecommunications Infrastructure Project (TIP).

This project shall include the following:

- Field work necessary for the following:
 - To size and appropriately place A/C units in IT closets and cabinets
 - Locate electrical source and appropriate path for electrical conduit
 - Locate maintenance switch locations
- The design for the installation of A/C units and power circuits in all IT closets and cabinets on campus shall include but not be limited to:
 - Room numbers and locations
 - Locations of power sources for A/C units and circuits
 - Locations of A/C units and power outlets in IT closets/cabinets and supporting equipment outside IT closets/cabinets
 - Equipment Schedule that details A/C units and supporting equipment used for each IT closet/cabinet
 - Electrical panel locations
 - Electrical circuit homeruns
 - Specifications for A/C units, conduit, wire, switches, safety signs, etc.
 - Cost estimates at each stage of design

AE shall use VA specifications and shall modify them to fit the project.

AE shall provide 3 full-size drawings sets and three digital copies (AutoCAD 16 and PDF) on DVD.

AE shall provide as many sites visits as are necessary for design and at least 6 site visits during construction. The AE shall also provide support during the construction bidding process.

3. Background: The existing A/C units cooling the Information Technology (IT) communications closets need to be replaced. They have exceeded their design life and the IT

service has purchased replacement Cisco System switches increasing heat loads. The power in the IT closets needs upgrading to meet the requirements of the new Cisco Systems switches.

4. **Performance Period:** The contractor shall complete the work required under this SOW in **160 calendar days** or less from date of notice to proceed, unless otherwise directed by the Contracting Officer (CO). If the contractor proposes an earlier completion date, and the Government accepts the contractor's proposal, the contractor's proposed completion date shall prevail.

B. CONTRACT AWARD MEETING

The contractor shall not commence performance on the tasks in this SOW until the CO has conducted a kick off meeting that the A/E shall attend, or has advised the contractor that a kick off meeting is waived. The A/E will include a thorough site inspection of existing systems and verify their capacities. A/E will not depend on original construction drawings for information.

C. GENERAL REQUIREMENTS

1. All written deliverables shall be phrased in layperson language. Statistical and other technical terminology shall not be used without providing a glossary of terms.

2. A complete set of construction specifications and drawings is required.

a. The A/E shall provide all drawings and specifications necessary for a contractor to complete construction, including direction to the contractor for staging areas, utility shutdowns, security, parking, and any required phasing. A/E shall attend design review meetings to go over VA comments and discuss any issues (see schedule below).

b. A/E shall provide construction period services.

c. A/E shall provide record drawings of all work in AutoCAD format after the project is complete.

d. All contract drawings shall be provided to the VAMC in AutoCAD 2016 (.dwg) format for all design submissions and for final construction documents. It is the responsibility of the A/E to require that ALL of their consultants follow these guidelines to ensure ALL contract drawings are clearly legible.

e. The drawings shall be produced using industry standard details, on a VA title block. All drawings will be standard, scaled, e-size (30" x 42") drawings. A/E to stamp drawings as to which review (35%, 95% or Construction). Also, note on review drawings "NOT FOR CONSTRUCTION."

3. A construction cost estimate is required at 35%, 65%, 95% and 100% submission.

4. All work shall be designed in accordance with the following criteria:

- a. VA PG-18-1, Master Construction Specifications (<http://www.cfm.va.gov/TIL/spec.asp>)
- b. A PG-18-3, Design and Construction Procedures
- c. VA PG-18-4, Standard Details
- d. VA PG-18-10, Design Manuals
- e. VA PG-18-12, Design Guides
- f. VA PG-18-13 Accessibility
- g. VA PG-18-14 Room Finishes, Door & Hardware Schedule
- h. VA PG-18-15 Volume C, A/E Submission Instructions
- i. VA PG-18-17 Environmental Compliance Manual
- j. VA Technical Summaries
- k. VA Space Planning criteria
- l. VA Signage Design Guide
- m. HVAC Design Manual
- n. Physical Design Manual
- o. VA Fire Protection Manual
- p. National Fire Protection Association Codes and Standards (most recent editions)
- q. International Building Code, (most recent edition)
- r. OSHA Standards
- s. National Electric Code, (most recent edition)
- t. All other applicable industry codes
- u. The Joint Commission Criteria
- v. Uniform Federal Accessibility Standards

5. Renewable Energy: Renewable (geothermal, heat recovery, wind, PV solar, solar hot water, etc.) shall be evaluated for life-cycle cost effectiveness.

6. Where a written milestone deliverable is required in draft form, the VA will complete their review of the draft deliverable within 10 business days from the date of receipt. The contractor shall have 10 business days to deliver the final deliverable from date of receipt of the Government's comments.

7. If for any reason any written milestone deliverable cannot be reviewed by the COR and delivered back to the contractor within the scheduled time frame, the COR is required to explain why in writing to the CO, including a firm commitment of when the work shall be completed. If deliverable cannot be delivered within the scheduled time frame, compensation may be due to the contractor.

D. SPECIFIC MANDATORY TASKS AND ASSOCIATED DELIVERABLES

Description of Tasks and Associated Deliverables: The contractor shall provide the specific deliverables described below within the performance period stated in Section A.4 of this SOW.

Task One: The contractor shall provide a minimum of three design alternatives and briefing for the VA project team, which presents the contractor's plan for accomplishing the Scope of Work. The contractor's design alternatives shall be responsive with this SOW and describe the approach to be used for each design alternative. The VA project team shall select one alternative.

Deliverable One: Three (3) design alternatives and briefing. 3 sets of design alternatives briefing materials and one electronic copy (PDF).

Task Two: Develop 35% design and 35% design review meeting.

Deliverable Two: 35% - One set of full-size drawings and electronic copy (PDF). Electronic Specification Table of Contents and preliminary construction cost estimate (PDF).

Task Three: 65% design and 65% design review meeting.

Deliverable Three: 65% - One set of full-size working drawings and electronic copy (PDF). Electronic specifications and detailed cost estimate (PDF).

Task Four: 95% design and 95% design review meeting.

Deliverable Four: 95% - One (1) set of full-size working drawings and 1 electronic copy (PDF). One (1) set of 8-1/2" x 11" specifications and 1 electronic copy specifications (PDF). One (1) paper copy of detailed cost estimate and 1 electronic copy (PDF) detailed cost estimate.

Task Five: 100% design drawings.

Deliverable Five: 100% - Two (2) sets of full-size working drawings and 1 electronic copy (PDF) and 1 electronic copy AutoCAD. One (1) set of C-size drawings. One (1) set of 8-1/2" x 11" specifications, 1 electronic copy specifications (PDF) and 1 electronic copy specifications in Microsoft Word. One (1) paper copy of detailed cost estimate and 1 electronic copy (PDF) detailed cost estimate. All 100% design deliverables shall be stamped by the A/E with the appropriate professional architect and engineering stamps.

Task Six: "For Construction" documents and addendums. The 100% A/E stamped documents shall be the construction documents and be revised by addendum as necessary.

Deliverable Six: Two (2) sets of full-size addendum sheets and 1 electronic copy (PDF) and 1 electronic copy AutoCAD. One (1) set of C-size drawings addendum sheets. One (1) set of 8-1/2" x 11" addendum specifications, 1 electronic copy addendum specifications (PDF) and 1 electronic copy addendum specifications in Microsoft Word.

Task Seven: Construction Period Services. Review and comment on submittals and samples. Attend construction progress meetings. Conduct construction progress inspections.

Deliverable Seven: Reviewed submittals and samples with comments in media appropriate to the submittals and samples. Our preference is electronic media to receive, review, and comment on submittals and samples but understand this is not practical for all submittals and samples. Electronic copy (PDF) of construction progress inspection reports.

Task Eight: Record Drawings. At completion of construction project, the VA will provide the A/E with a marked up set of “as-built” construction drawings. The A/E shall provide the VA with the following deliverables within 21 days of receipt of marked up “as-built” drawings.

Deliverable Eight: Two complete sets of original full-size sets of final record construction drawings, with VA filing number in the lower right hand corner on all sheets. Filing number TBD and provided by the VA. One CD-ROM of final record construction drawings in AutoCAD 2016 format and PDF format. Record drawings shall include addendums. The A/E shall update the VA’s existing six copies of Robley Rex’s HVAC manuals to reflect all changes as a result of this project. Updates will be submitted on appropriate paper and in electronic format, AutoCAD 2016 and PDF on CD or DVD.

E. SCHEDULE FOR DELIVERABLES

1. The contractor shall complete the Delivery Date column in Attachment A for each deliverable specified.
2. Unless otherwise specified, the number of draft copies and the number of final copies shall be the same.
3. If for any reason any deliverable cannot be delivered within the scheduled time frame, the contractor is required to explain why in writing to the CO, including a firm commitment of when the work shall be completed. If deliverable cannot be delivered within the scheduled time frame, compensation may be taken from the contractor.
4. If for any reason any cannot be delivered within the scheduled time frame, the contractor is required to explain why in writing to the CO, including a firm commitment of when the work shall be completed. This notice to the CO shall cite the reasons for the delay, and the impact on the overall project. The CO will then review the facts and issue a response, in accordance with applicable regulations. If deliverable cannot be delivered within the scheduled time frame, compensation may be taken from the contractor.
5. Schedule: Design time allotted to be as follows (Weeks are in calendar days):

a. Kick-off meetings and A/E Site visits. Begin Schematic/Preliminary Drawings	Notice to Proceed
b. Receive schematic design narrative	4 weeks
c. Comments by VA back to A/E. VA needs two weeks minimum to review	2 weeks

and provide comments.

d.	Receive 35% CD Drawings, Specification Table of Contents, preliminary construction estimate.	3 weeks
e.	Comments by VA back to A/E 35% design review meeting with VA. VA needs two weeks minimum to review submission and provide comments.	2 weeks
f.	Receive 65% working drawings, specifications, and detailed cost estimate.	3 weeks
g.	Comments by VA back to A/E 65% design review meeting with VA. VA needs two weeks minimum to review submission and provide comments.	2 weeks
h.	Receive 95% working drawings, specifications, and detailed cost estimate.	3 weeks
i.	Comments by VA back to A/E 95% design review meeting with VA. VA needs two weeks minimum to review submission and provide comments.	2 weeks
j.	Receive 100% working drawings, specifications, and detailed cost estimate.	2 weeks
k.	Receive complete construction documents and specifications.	1 week
j.	Construction Period Services	Duration of Construction Contract

G. CHANGES TO STATEMENT OF WORK

Any changes to this SOW shall be authorized and approved only through written modifications to the contract by the CO. A copy of each modification will be kept in a project folder along with all other products of the project. Costs incurred by the contractor through the actions of parties other than the CO shall be borne by the contractor.

H. REPORTING REQUIREMENTS

1. The contractor shall provide the COR with monthly written progress reports in electronic form. These are due to the COR by the second workday following the end of each calendar month, throughout the project's duration. The COR is required to provide monthly progress reports to the Contracting Officer by the fifth workday of the new calendar month.

2. The progress report shall cover all work completed during the preceding month and shall present the work to be accomplished during the subsequent month. This report shall also identify any problems that arose, along with a statement explaining how the problem was resolved. This report shall also identify any problems that have arisen but have not been completely resolved, with an explanation.

I. TRAVEL

Travel is not anticipated to complete this contract.

J. GOVERNMENT RESPONSIBILITIES

The government will not be providing any supplies, materials or services on this contract.

K. CONTRACTOR EXPERIENCE REQUIREMENTS

1. The contractor must inform the VHA COR when personnel are removed from the contract for any reason.
2. If a key person becomes unavailable to complete the contract, proposed substitutions of key personnel shall be made to the COR and CO.

L. CONFIDENTIALITY AND NONDISCLOSURE

It is agreed that:

1. The preliminary and final deliverables, and all associated working papers, application source code, and other material deemed relevant by VA which have been generated by the contractor in the performance of this contract, are the exclusive property of the U.S. Government and shall be submitted to the CO at the conclusion of the contract.
2. The CO will be the sole authorized official to release, verbally or in writing, any data, draft deliverables, final deliverables, or any other written or printed materials pertaining to this contract. No information shall be released by the contractor. Any request for information relating to this contract, presented to the contractor, shall be submitted to the CO for response.
3. Press releases, marketing material, or any other printed or electronic documentation related to this project, shall not be publicized without the written approval of the CO.