

**Architect/Engineer (A-E) Statement of Work**  
**Project 596A4-18-102: UPGRADE PUBLIC ELEVATORS P1, P2, & P3**  
**Department of Veterans Affairs Medical Center**  
**Lexington, Kentucky - Cooper Drive Division (CD)**

This document includes technical and administrative requirements for completion of technical design work at the Department of Veterans Affairs Medical Center (VAMC) Lexington, KY. This document identifies requirements for various stages of technical design and construction period services. These requirements must be met in order for the Contracting Officer's Representative (COR), typically the Engineering Service Project Manager, to consider the work of the contract acceptable. If any point following contract award there is conflicting language between the contract document and Statement of Work (SOW), the contract document will take precedence. The following is contained within this document;

Part 1 – Project Description

1. Project Description and Schedule
2. Design Analysis

Part 2 – Design Period

1. General
2. Investigation and Schematic Design (SD)
3. Construction Documents (CD)
4. Bid Documents

Part 3 – Design and Construction Standards

1. General
2. Access to VA Standards

Part 4 – Construction Contract Award Period

Part 5 – Construction Period

Part 6 – A-E Contract Close-out

**PART 1 – PROJECT DESCRIPTION**

Design and construction period services for upgrading the following three (3) elevators at the Lexington VA Medical Center, Cooper Drive Division (CD):

1. Building 1 (Tower Building) : Upgrade and Renovation of three (3) traction elevators operating over 7 floors (G, 1, 2, 3, 4, 5, and 6). These elevators are currently referred to as **P1, P2, and P3.**

The project requires detailed investigation, and designs for the upgrades, modernize, and current code compliances for the public elevator systems, including life cycle analysis and energy efficiency analysis. This project is expected to review all components, motors, controllers, drives, brake systems, controls, shaft, complete shaft components, and all ancillaries. Anticipated replacements or upgrades includes: cab controls , control systems, call lights and systems, initiating devices and controls , interior and exterior cab doors, wiring, cables, rail conditions, synchronization software, and any other components as required to provide state of the art elevators with optimum functional capability for a medical center environment.

This project requires review of call stations to determine if changes are required to meet current ADA standards such as: accessibility height, Braille requirements, floor indicator systems, etc. Also, evaluation and possible replacement or upgrade of machine room cooling requirements if deficiencies exist that could cause service or shortened service life of any components, and any indicators or sensors for efficient floor level and travel direction, is required. The initial study should identify what systems or parts are no longer available or supported by any manufacturer. A list of recommended spare parts should be developed along with their approximate cost.

Project design shall clearly show work required, phasing of work required, and instructions to construction contractor regarding how to accomplish the necessary renovations in a 24/7 medical environment taking into consideration demolition, dust control, infection control, and specialized facility requirements as discussed with VA staff. Also included will be limitations, e.g. work required to be completed outside of standard administrative hours, work limited to periods shorter than a single shift, etc., for specific locations in the project. Bid deductions will be built into the scope of work of the project to allow for flexibility in construction award. Subject matter expert and other sub-consultants should have a documented minimum of three years' experience in personnel elevator projects.

## **PART 2 – DESIGN PERIOD**

### **SUBMISSION AND COMPLETION SCHEDULE**

DATE

**NOTICE TO PROCEED (NTP).....To Be Determined (TBD)**  
(target date is Jan 02, 2018)

**INVESTIGATION RESULTS & SCHEMATICS (SD) .....02-23-2018**

**CONSTRUCTION DOCUMENT (CD) SUBMISSION.....165 DAYS after NTP**

**BID DOCUMENT SUBMISSION.....180 DAYS after NTP**

**ESTIMATED BID OPENING DATE.....Above + 60 DAYS**

**ESTIMATED CONSTRUCTION COMPLETION.....T.B.D.**

## **PART 2- DESIGN PERIOD**

### **1. GENERAL**

The A-E shall provide design period services to include drawings and specifications reflecting specific tasks identified in this statement of work document and as identified during project discussion meetings. A-E shall provide competent design period services using staff and consultants adequately knowledgeable of the various subordinate design disciplines including but not limited to: Elevator Inspections , Life Safety, and other building/utility systems as required for the project.

The A-E shall develop plans and system schematics for actual in-place components from VA-provided drawings and from field verification on site. Verify existing conditions affecting design. Information provided by VA on record drawings shall be verified for critical dimensions and critical components that may affect the design. A-E shall consider adjacent systems and components (architectural as well as utility systems) so as to avoid unforeseen site condition change orders to the construction contract. The A-E shall verify necessary building architectural and utility system components to provide for a full and complete design of replacement architectural elements and utility system components.

During the course of the project the A-E shall attend project meetings (number of meetings to be determined prior to contract). The A-E shall record meeting minutes and furnish meeting minutes and sketches as required to reach concurrence and approval by the design team members. Minutes shall be forwarded to all attendees within 36 hours of the meeting for review and comment. The A-E shall incorporate appropriate comments, finalize the meeting minutes and send out the final meeting minutes within one week of the meeting.

VA is contracting design period services to include Schematic Design (SD) Development, Construction Documents (CD), and Bid Documents. All submissions and related work for each design phase shall conform to the requirements in this document and Program Guide (PG)-18-15, Volume C A-E Submission Instructions as modified in this document. See the Access to VA Standards section of Part 3 for webpage to obtain PG-18-15.

## **2. INVESTIGATION RESULTS AND SCHEMATICS (SD)**

Investigation and Schematic Design reflects the research and feasibility required to define the design options and scope of the project; includes options , priority's, and what-if scenarios to allow VA to consider feasible alternates for final design; and ensures arrangement of space complements the design scope as opposed to contradicting the design scope.

The A-E shall submit the following in a single package and at one time per date identified in contract Special Provisions:

- ☐ SD submittal package (NOTE: PG-18-15 Volume C requirements)
- ☐ Assembled minutes of meetings
- ☐ Completed A-E Review Checklists for each applicable discipline
- ☐ Cost estimates for various (individual) material upgrade options
- ☐ Cost estimate for combined Construction Options
- ☐ Spreadsheet describing summary of all inspected items and Code compliance status
- ☐ Spreadsheet of all deficiencies and recommended repairs, upgrades , or replacements
- ☐ Priorities and risks associated with each change or upgrade
- ☐ Schedule impact of each change or upgrade
- ☐ Construction schedules – for various construction alternates
- ☐ Two full size sets of schematic grade drawings and specifications: three half size sets of drawings, and two hard copy sets of specifications unless specified differently from the COR

## **3. CONSTRUCTION DOCUMENTS (CD)**

The Construction Documents submission shall combine updates of all earlier sets of specifications and drawings and any other relevant project information (meetings, other discussions, etc) making up a complete set of project documents; typically considered to be a 90% to 95% level of design completion. The quality of and level of detail of the CD submission should be such that only minimal changes are needed. The CD submission shall incorporate all changes needed from earlier reviews and that a quick review shall show all information is presented in clear and concise format. Discussion of Contractor staging/parking/exterior space usage, management of phasing activities such as control of dust and debris (infection control), etc. shall occur during development of the CD submission. The A-E shall submit the following in a single package and at one time per date identified in contract Special Provisions:

- ☐ CD submittal package
- ☐ Assembled minutes of meetings for work up to CD submission
- ☐ Completed A-E Review Checklist for each applicable design discipline

- ❑ Include summary of staff participating in final drawing and specification quality review and date when check set review was completed.
- ❑ Two full size sets of drawings, three half size sets of drawings, and two hard copy sets of specifications unless specified differently from the COR

#### **4. BID DOCUMENTS (BD)**

The bid documents (BD) submission shall combine all updates of all earlier sets of specifications and drawings and any other relevant project information (meeting, discussions, etc.) making up the entire set of project documents.

The drawings shall be stamped and signed by architects and engineers according to the drawing type. The A/E shall submit the following in a single package and at one time per date identified in contract Special Provisions:

- ❑ BD submittal package
- ❑ Cost Estimate
- ❑ Assembled minutes of meetings for work up to BD submission
- ❑ Submittal register in Microsoft Excel
- ❑ Include summary of staff participating in final drawing and specification quality review and date when check set review was completed.
- ❑ A/E Provided Project Checklists: A/E shall provide a checklist of all required submittals, certifications, tests, and inspections required per drawing and specification section. This checklist will show all products requiring submittals in the form of shop drawings, data sheets, manufacturer cut sheets, samples, etc. as well as all other items shown as required submittal items including, but not limited to, reports, system evaluations, testing, operating and maintenance manuals, etc.
- ❑ Submission Requirements: The A/E shall date all material and present the designs on VA standard size drawings that are appropriately labeled, "BID DOCUMENTS", in large block letters above or beside the VA standard drawing title block.

The A/E shall submit 2 specification books, 2 full size, and 3 half size drawing sets of reproduced project packages to VAMC – Lexington Engineering. The Contractor shall provide Electronic bid sets on two (2) separate CD's.

### **PART 3 – DESIGN AND CONSTRUCTION STANDARDS**

#### **1. GENERAL**

In the development of submissions the A-E firm shall utilize certain VA and other design and construction criteria, examples of which can be found below. The design is not limited to these items and should be the result of compliance with applicable codes and standards, the user requests, and A-E creativity:

- VA Design and Construction criteria in the Technical Information Library (TIL), including planning, design, and construction items such as: Design Alerts, Design and Construction Procedures, Design Guides, Design Manuals, Equipment Guide List, Master Construction Specifications, Room Finish and Door Hardware Schedule, Space Planning Criteria, etc.
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO) elements shall be considered.
- NFPA Codes including, but not limited to: NFPA 101, Life Safety Code; NFPA 99, Healthcare Facilities; NFPA 70, National Electrical Code (NEC)
- Final design shall be in compliance with ASME A17.1 "Safety Code for Elevators and Escalators" and ASME A17.2 "Inspectors Manual for Elevators and Escalators".
- Compliance to all known applicable codes shall be reflected in the completed design and construction contract documents.

VA continually updates information in the Technical Information Library (TIL) used in project design. The A-E will be responsible for reviewing the guidelines in the TIL and incorporating the applicable criteria into the design and construction documents.

#### **PART 4 – CONSTRUCTION CONTRACT AWARD PERIOD**

The A-E shall provide VA with technical design services during the period of Construction Contract award. These services shall include, but is not limited to:

1. Attendance at pre-bid meetings
2. Review of construction contractor's price proposal
3. Providing technical information needed to answer questions
4. Providing technical information needed to issue amendments.

#### **PART 5 – CONSTRUCTION PERIOD**

The A-E shall provide competent construction period services using staff and consultants adequately knowledgeable of the various subordinate design disciplines included in development of the project.

Construction period services shall include:

1. Review of shop drawings and submittals
2. Review of change order proposals
3. On-site construction inspection visits and progress meetings including A-E's written report of visit or meeting
4. Pre-final and final inspections and preparation of itemized punch-list for project completion requirements

#### **PART 6 – A-E CONTRACT CLOSE-OUT**

The construction contractor shall keep a set of hard copy drawings updated to reflect all changes in the field from the bid documents. These hard copy drawings are turned over to VA at the conclusion of the construction contract. VA will provide these drawings to the A-E in order for the A-E to update the Bid Documents to reflect actual completed project conditions.

The A-E shall submit the record drawings showing any changes or modifications to the Bid Documents reflected on the hard-copy set of "as-builts" provided by VA; Drawings shall be individually marked "Record Drawing" and submitted in a single package as follows;

- ❑ Drawings in AutoCAD (DWG) format of the entire project:
  1. All drawing objects shall be removed. (e.g. Revit, Desktop, etc.)
  2. All drawings must plot properly using the NCS.ctb plot file.
  3. Provide a copy of the A-E firms typical CTB file and user information.
  4. Drawings shall represent final project with all demolished and/or removed items deleted from the .dwg files
  5. Provide to VA on compact disc
  6. All drawings must be on the VA Cad Standard Layering convention.
- ❑ Drawings in an Adobe Reader (PDF) format of the entire project.
- ❑ Printed Copies of the drawing set as follows:
  1. 2 sets (Full Size) and 2 sets (Half Size)
  2. CD with PDF, ACad, and Revit Files