

**Department of Veterans Affairs
TVHS, Murfreesboro Campus
Requirements for A/E Services
Project 626A4-18-502
Repair Structural Damage**

I. GENERAL SCOPE OF WORK:

The consultant shall provide all necessary architectural and engineering services as required to prepare complete contract drawings, specifications, technical reports, and cost estimates, including services throughout construction for "**Repair Structural Damage**" at the historic Alvin C. York Campus of the VA Tennessee Valley Healthcare System, 3400 Lebanon Pike, Murfreesboro, TN 37129. This project will make structural repairs to floors and foundations and any resulting damage, such as wall cracking and finishes buildings 4, 5, 11, 107, 112, 116 and connecting corridors. Project addresses FCA deficiency record numbers 60969, 195436, 57446, and 60551.

Work includes professional design services of Structural Engineers, Architects, Mechanical, Electrical and Plumbing Engineers. Design includes but is not limited to demolition, structural, architectural, mechanical, plumbing, electrical, fire protection, life safety, Industrial Hygiene and estimating.

II. STATEMENT OF PROJECT OBJECTIVES:

It is the intent of the Department of Veterans Affairs to have the A/E fully survey, investigate, and document the existing spaces and utility systems, affected by renovations, to gain the knowledge and insight necessary to prepare quality, accurate documents to accomplish the following:

- A. This project will identify and correct structural failures and deficiencies in buildings 4, 5, 11, 107, 112, 116 and connecting corridors to those buildings.
- B. This project will identify and construct any appurtenances necessary in prevention of future structural failures within scope.
- C. This project will repair the structurally damaged components, correct secondary effects resulting in damage to walls, floors and other affected systems and prevent further structural deterioration.
- D. This project will move or address plumbing, storm water, mechanical, electrical, data, or utility issues affecting this project.
- E. Energy efficiency and cost savings shall be considered in all design decisions.
- F. This project will abate asbestos within the confines of the project. The goal is to be 100% asbestos free.

III. STATEMENT OF A/E TASKS:

- A. The A/E shall furnish all services for a complete design development including construction documents, and construction period services as specified in the subject contract.
 - 1. Necessary site survey work and evaluation such as verifying existing conditions, verifying record drawings, and verifying and analyzing utility systems shall be accomplished in conjunction with preparation of Design Development documents. A/E shall furnish documentation and drawings of these findings, and address deficiencies in the design process.
 - 2. The complete site survey work shall include a thorough investigation of existing conditions, affected by renovations, to accurately document and convey space dimensions for measured drawings, all utilities for affected areas, and utilities that traverse through affected areas, typical construction type and variations, and finishes. This information provides the necessary base drawings for the Schematic Development phase of Design Development.

3. Utility system verification shall include, but not be limited to, the necessary testing, adjusting, and/or balancing the design and construction process. Systems that are insufficient in capacity or are no longer supported by affected systems to ascertain the existing operating and performance conditions that will impact OEM (original equipment) parts shall be considered for expansion and/or replacement. A/E will place in construction documents that all HVAC will have T.A.B. performed by construction contractor if HVAC is modified.

- B. The A/E shall provide cost estimation, project scheduling & phasing, bid period and construction period services as further described in the contract.
- C. The A/E shall place in bid documents that contractor provide color boards for VA review, discussion and selection. Brick and mortar is to match existing.
- D. The A/E shall provide bid document preparation in quantities as specified in the contract.
- E. The A/E shall provide design and construction period services utilizing individuals who are adequately knowledgeable of the various design disciplines required by the project. Changes in personnel from those who are proposed must be approved in writing by Contracting Officer. The registered individuals who will stamp the completed documents shall accomplish engineering design work.
- F. Design shall include applicable regulations and established VA standards, guidelines, criteria and design alerts and all applicable regulations and established standards for the proper procedures during abatement practices of asbestos containing material (ACM).
- G. The A/E shall form a design team consisting of key designers and VA personnel, including affected users and services, and conduct meetings to accomplish a cohesive design that addresses facility issues and concerns. Design team meetings shall be held on site in conjunction with each phase of design and each submission. Additional meetings with individual user groups will be necessary to gather information and produce an effective design.
- H. The A/E is to incorporate into design all adjacent spaces that are impacted by this projects. It is in the scope to investigate all existing utilities that must be moved/ mitigated to accomplish the restroom renovations to include all affected structure/finishes.
- I. Design must insure proper life safety, including egress, proper fire/smoke compartmentation, fire alarm, sprinkler system, etc. The AE shall provide a separate Life Safety Sheet for the entire area within the submitted drawings.
- J. A/E will coordinate with leading industry equipment manufacturers/vendor(s) to insure proper layout and support of equipment per manufacturer's requirements. However, design drawings and specifications shall be generic to promote fair and open competition.
- K. Design shall be energy efficient. Refer to attachment. TVHS Energy Conservation Project Requirements and Design Guide.
- L. A/E shall develop and execute a Quality Assurance (QA) plan that demonstrates the team approach and methodology for design review and improvements, including well documented comments / issues and resulting corrections. The QA plan shall be submitted to the VA along with the project schedule and shall describe each QA task that will be taken during the development of the various design submission packages. The design QA effort shall be led by a senior AE designer and the QA team shall include (at a minimum) an architect and a senior engineer that is not performing actual design work on the project. Completion of each QA task shall be initialed and dated by the responsible QA team member. A 100% completed QA review shall be submitted with each AE design submission, including the final construction document package submission.
- M. A/E shall refer to Program Guide, PG 18-15, Volume C when preparing information to be included in each submittal. <https://www.cfm.va.gov/til/aeDesSubReq.asp>

IV. BASIS FOR DESIGN:

- A. Department of Veterans Affairs standards may be obtained from the Internet at <http://www.cfm.va.gov/TIL/> and referencing VA Office of Construction & Facilities Management Design Guides and Design Safety Alert - <http://www.cfm.va.gov/TIL/dAlert/dAlert142.pdf>.
- B. Design shall conform to the latest 003C2B-DA-142
- C. Comply with VA HVAC Design Guidelines at www.cfm.va.gov/til/dGuide/dgMH.pdf. Indoor air quality requirements must be met / maintained, such as outside air percentages, air changes / CFM, and humidity. Design shall maintain building envelopes to prevent moisture infiltration and possible mold growth.
- D. Comply with VHA National Center for Patient Safety. <http://www.patientsafety.va.gov/>
- E. Comply with VA TIL, PG-18-3, Design and Construction Procedures <http://www.cfm.va.gov/TIL/cPro.asp>
- F. Comply with VA TIL, PG-18-15, AE Design Submissions and Review. <http://www.cfm.va.gov/til/aeDesSubReq.asp> (Click Minor and NRM Projects).
- G. Any deviation from project requirements, standards or specifications shall be requested in writing and approved by VA. The deviation request shall include item for which deviation is requested and the reason or justification for deviation.
- H. Comply with TVHS Energy Requirements and Design Guide (revision September 2014, attached). See ASHRAE 90.1-2010 for energy requirements.
- I. Insure proper life safety and VA accessibility requirements. Code Analysis will be clearly defined on the Index Sheet of the Construction Documents. There shall be a stamped life safety sheet.
- J. The awardee shall design within the construction budget provided at the time of contract award. The A/E design and estimate shall identify **20** percent of the total construction budget as viable deductive construction alternates by areas of work and/or phases. This will require individual estimates by clearly defined easily deductible areas or work.
- K. Comply with the Physical Security design manuals for VA Facilities. <http://www.cfm.va.gov/til/spclRqmts.asp#PHS>.
- L. Comply with current applicable state, local, & federal building codes as well as codes from other recognized authoritative bodies; including but not limited to Associated Air Balance Council (AABC), American Concrete Institute (ACI), Acoustical and Insulating Materials Association (AIMA), American National Standards Institute (ANSI), American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE), American Society of Mechanical Engineers (ASME), American Society for Testing and Materials (ASTM), The Building Officials and Code Administrators International (BOCA), Gypsum Association (GA), International Building Code (IBC), NEC, NFPA, National Environmental Balancing Bureau (NEBB), National Standard Plumbing Code (NSPC), OSHA, Standard Building Code (SBC), Sheet Metal and Air Conditioning Contractors' National Association (SMACNA), The Uniform Building Code (UBC), and Uniform Federal Accessibility Standard (UFAS), & Architectural Barriers Act Accessibility Standard (ABAAS), and other applicable codes.

V. DETAILED SUBMISSION REQUIREMENTS:

Program Guide PG-18-15, establishes the guidelines for the A/E submissions. Design shall be performed and submitted in accordance with VA AE Submission Instructions for Minor and NRM Construction Program. Refer to (<http://www.cfm.va.gov/til/aeDesSubReq.asp>). These guidelines indicate a minimum level for submission compliance, which may not be adequate for certain, types of design. In some

instances, in which critical decisions need to be made, sufficient and relevant information must be provided timely for the design to progress to meet certain milestone dates. The level of applicability of the program guide depends upon the scope of work and the exclusions, which are herein specified. Questions in regards to the applicability of specific requirements shall be resolved with the medical center staff prior to any submission deadline. Where “days” are stated, this refers to “calendar” not “work” days.

- A. At each submission, all drawings and support material shall be dated and appropriately labeled above the title block (the number of submission shall be adjusted according to the project size and scope):

Work Element	Copies	Duration
Design Kick-off Meeting		1 Day
Schematic 1	2	28 Days
Government Review		7 Days
Design Development 1	2	28 Days
Government Review		7 Days
Design Development 2	2	28 Days
Government Review		7 Days
Construction Document 1	2	28 Days
Government Review		7 Days
Construction Document 2	2	21 Days
Government Review		7 Days
100% Final	2	7 Days
Government Review		7 Days

- B. VA submission review comments may be verbal, noted directly on review sets, or written list. The AE shall be responsible for compiling & addressing review comments. AE shall produce & distribute meeting notes or minutes for VA review immediately after each submission review meeting. The AE is responsible for running the meetings in person at the VA Campus where work is being performed, reproduction of all meeting materials for review and producing the agenda, attendance and full meeting minutes.
- C. A/E shall furnish with drawings a separate stamped Life Safety sheet.
- D. For each submission, furnish electronic files in the latest version of Microsoft Office and Microsoft Word and/or AutoCAD 2016. Also, submit 2 hardcopies of all drawings. Construction shop drawings are not required to be completed in AutoCAD. Also, submit one half size hard copy of

A/E DD and CD submittals for energy review.

- E. The 100% construction documents submission will include a full set of construction documents including all disciplines/packages and will be sealed and signed by the Architects and Engineers of Record.
- F. The final construction documents submission package will incorporate all VA supplied comments from the earlier submission package reviews.
- G. If the final construction documents submission package is not complete, the A/E must resubmit the package in its entirety.
- H. Construction Specifications - Project specifications shall include specifications for all products, materials, equipment, methods and systems shown on the construction drawings in accordance with standard professional practice and the resulting contract. The specification submitted for review shall include: The name of the manufacturer, the product name, model number, or other identification as appropriate to clearly identify the product that will be used in the construction and three (3) interior design color boards.
- I. Final bid documents shall be reproduced as part of the contract. To 2 full sets and 2 half set of the Construction Bid Documents are to be delivered to the COR. Electronic files of the Construction Bid Documents will be provided to the COR and Contracting Officer.
- J. The required stamp of the licensed architect or engineer of record will be considered as certification of compliance with the contract requirements.
- K. Total time to accomplish Schematics, DDs, and CDs through final reproduced bid documents shall be 183 calendar days from the issuance of the Notice to Proceed. Each submission will require maximum 5 calendar days for VA review. A/E shall prepare a submission schedule based upon their understanding of the design and their staffing workload. The schedule is negotiable so that the timeframes are mutually agreeable to the A/E and VA.

VII. CONSTRUCTION PERIOD SERVICE REQUIREMENTS:

- A. Review of Submittals: A/E shall review all material submittals, shop drawings, test reports (as applicable), etc. Reviews shall be completed and submittals returned to the VA Project Engineer within 7 days of the A/E's receipt of the submittal.
- B. Review Analysis of Requests for Information, Change Orders, and Costs: A/E shall provide prompt response when contacted by the Contracting Officer, or COR, to review and provide analysis of construction contractor requests for information; change orders; and resulting cost adjustments due to omissions, errors, ambiguities, etc.
- C. The A/E, when requested, shall assist the Contracting Officer and COR to interpret the construction documents and shall: (1) recommend any action(s) deemed suitable for the satisfactory prosecution of the construction work; (2) prepare any supplemental drawings, specifications or other documents that may be required to clarify or supplement the construction documents; and (3) assess the preparation of Construction Contract Modifications initiated by or through VA to be executed in accordance with the Construction Documents.
- D. Site Visits: A/E shall provide 48 site visits (1 person for 3 hours) during the construction period, in addition to pre-bid conferences, in-wall inspection, above ceiling inspections and final inspection. A site visit "unit" is defined as a visit to the site by one individual for any part of a day when requested by the Contracting Officer or an authorized representative. On this job, a site visit should last 3 hours and may require the use of multiple "units" when more than one individual or an extended period is needed to inspect an area of work. Only registered architects and engineers familiar with the project may make these site visits. The Contracting Officer Representative has the prerogative to determine the professional discipline(s) required for each site visit. The A/E shall notify the COR of their presence on site, before any work is performed, to

document the number of individuals who are making the site visit. The A/E shall observe the construction, advise the COR of any deviations or deficiencies, and recommend appropriate corrective actions.

- E. "Record Drawings" Requirement: A/E shall revise the solicitation documents if necessary and provide a complete set of all drawings showing actual, completed construction and reflecting any changes incorporated in the work on hard copy and on electronic media. Electronic media drawings shall be in PDF, AutoCAD 2016, and REVIT Architecture 2012 and always electronically stamped. Compatibility means that data can be accessed directly by target system without translation or processing of data files. Final electronic media specifications shall be in Microsoft Word 2016 Format and PDF format.

VIII. MATERIALS TO BE FURNISHED TO THE A/E BY VA:

The following items will be furnished to the selected A/E (if available):

- A. Prints and available electronic media of the station utility drawings, site plans, and building floor plans). Station does not have electronic versions of utilities (mechanical, electrical, plumbing, etc). The accuracy of drawings is not guaranteed and shall be used for general information only. Actual conditions shall be field verified by the A/E.
- B. Prints are made available to A/E at Projects Section. A/E is to view drawings needed and may remove (same business day) to make copies at an offsite location.

IX. Geographical Location of Project:

- A. Alvin C. York VAMC Campus, Murfreesboro, TN, 37129.