

Lebanon VA Medical Center
Lebanon, Pennsylvania

ARCHITECT/ENGINEER SCOPE OF WORK
FOR
Construct Medical/Surgical Addition
595-336

Construction Budget: The construction cost estimate is between \$5,000,000 and \$10,000,000.

Bid Documents ready by: 280 DAYS AFTER Notice to Proceed

Contracting Officer: Angelamarie Scott

Contracting Officer's Representative (COR): David Scharf

-- Services --

Provide professional Architect/Engineer (A/E) services to include:

- Site investigation - architectural, structural, mechanical, electrical, plumbing, site surveys, etc.
- Construction drawings and specifications
- 3rd Party cost estimates
- Cost estimate of expected construction cost at the end of each phase
- Construction period services - review of submissions, provide recommendations regarding contractor change proposals, visit site per VA's request and add to drawings as-built conditions from contractor's record drawings and VA correspondence during construction. A/E shall review all construction change orders and provide an independent cost estimate on each change order request. A/E shall respond on site within a two-hour period when requested and shall provide site visits as requested during construction.
- Infection Control Risk Assessment (ICRA) including a drawing and specification
- A pre-construction risk assessment (PCRA) (Attachment G)

-- Project Scope --

GENERAL:

Provide a full set of construction documents for a project that will finish the 3rd floor of Building 104, creating a 16 bed medical and surgical acute care unit. The project shall include a bridge connection to Building 1. All patient rooms shall be private and shall include their own bathroom with a shower.

SPECIFICS:

This project consists of construction of the second half of the 3rd story of Building 104 as a new 16 bed medical and surgical acute care unit. The area shall be approximately 13,000 square feet. This

project shall also construct an enclosed hallway/bridge into Building 1-2C. Major elements of work shall include, but are not limited to:

- Site Investigation: Architectural, structural, mechanical, electrical, and plumbing site surveys to verify existing conditions as-built under previous projects. Determine the capacity of the utility systems (e.g. medical gas, chilled water, steam, domestic water, electrical, emergency power, information technology, Nurse Call, etc.), conveyance systems, structure architecture and life safety systems to support this addition and the future addition of a 4th story over the entire building.
- Design corrections for any deficiencies uncovered during the site investigation.
- Provide a full set of construction documents for the 16 bed medical and surgical acute care unit and enclosed hallway/bridge into Building 1-2C.
- Design provisions to allow for future expansion to four stories, including, but not limited to, utilities, conveyance systems, structure, architecture and life safety systems.
- Develop construction and phasing plan identifying what work can and cannot be performed over occupied spaces. Minimize disruption to adjacent intensive care unit (ICU) and lower spaces (Surgery and Emergency Department). The plan shall be signed by a third-party Certified Safety Professional.
- Provide heating, ventilation, and air conditioning (HVAC) and controls that meet current American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) and VA standards. Design shall provide variable air volume (VAV) systems with direct digital control (DDC) and individual room controls. New control system shall be compatible with current facility HVAC control system.
- All patient rooms shall be single occupancy (private) with their own bathroom, including a shower.

REQUIREMENTS:

- Perform all services in accordance with the current VA Building Information Modeling (BIM) Manual and current VA Drawing Deliverable Requirements:
<https://www.cfm.va.gov/til/projREq.asp>
- All designs shall be compliant with space criteria referenced in VA space planning criteria: <http://www.cfm.va.gov/til/space.asp> and the VA design guide for Medical/Surgical Inpatient Units and Intensive Care Nursing Units:
<https://www.cfm.va.gov/til/dGuide/dgInpatientNU.pdf>.
- Ensure patient privacy criteria are met (e.g. computerized information, patient privacy, Health Insurance Portability and Accountability Act).
- The design shall meet all VA Physical Security Standards. The area in this design is considered “Mission Critical” and the appropriate guide shall be followed. If a section of the manual cannot be met, the A/E shall notify the VA immediately, and assist the VA in the security waiver process. The Physical Security Guidelines can be found at this link:
<http://www.cfm.va.gov/til/PhysicalSecurity/dmPhySecMC.pdf>

- Design and construction work shall be coordinated with other construction projects on-going at the hospital. A list of current projects will be provided upon approval of the 35% submission.
- This project will be done in phases, as required, in order to maintain the operation of adjacent spaces, including the ICU, Surgery Department and Emergency Department. A phasing plan shall be submitted at the 35% submission. Phasing must work within budget and allow the VA to continue operations at minimal interference. The A/E shall build activation time into the construction schedule and documents.
- A/E shall use most current healthcare delivery processes and the VA design criteria as a guide. The direction that fits the situation the best will be used in the design.
- If shutdowns are required during construction, a full shutdown plan shall be included in the design. Shutdown plans shall include the particular energy source to shut off (e.g. breaker, valve, etc.) and what area, outlets, utilities and/or equipment the shutdown affects. The specific name of the energy source to be shut off shall be identified, for example: “panel H1L1, breaker 2” for electric, or “Valve 3-f” for a water source, etc. Drawings and a written narrative shall be required.
- A Leadership in Energy and Environmental Design (LEED) Silver Rating is desired with the construction. A rating will not be sought, but practices will reflect LEED Silver requirements. Proof of possible LEED credits shall be provided.
- Bid Alternates/Deducts shall be designed into the project to decrease the price of the project 20%.

A/E shall be responsible for providing certified industrial hygiene services to perform asbestos survey investigations, bulk sampling, development of specifications and drawings, and construction period services. All designs shall be accomplished in accordance with VA guidelines and specifications, and program guides PG-18-1 thru PG-18-17, which are available on the Internet at <http://www.cfm.va.gov/til/>. A/E shall pay particular attention to Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), International Building Code (IBC), Environmental Protection Agency (EPA), VA guidance, and VA space criteria - <http://www.cfm.va.gov/til/space.asp>. **SPECIAL NOTE:** Be reminded that the VA guidelines are just a guide, and the project is not bound by them. If current healthcare trends dictate a different design approach is needed, we will follow that approach.

A/E shall be responsible for providing all services necessary for design of this project, e.g. structural, industrial hygiene, mechanical, electrical, etc.

-- Site Investigations --

EXPECTATION: A/E shall make site visits as necessary to survey existing conditions.

Make site visits as required to determine existing as-built conditions affecting this project. **Note:** Information including drawings and other documentation provided to the A/E is used as reference only. All additional references and specifications are available in VHA’s Technical Information Library at address <http://www.cfm.va.gov/til/>. A/E shall field verify every aspect that relates to the

project, including all dimensions, wall layouts, capacities, etc. A/E shall coordinate visits with the Project Manager as assigned after award. The A/E shall arrange for and oversee the performance of such investigations as required for the proper design of the project. AutoCAD background drawings will be provided by the VA upon request.

-- Design Review Schedule --

EXPECTATION: *Submit review package so they are received on or before the noted day. All days below are calendar days.*

Initial Project Design Team (PDT) Meeting	Day 0
Schematic Submission	28 Days after Initial PDT meeting
Design Development (DD) – 35% Design	98 Days after Initial PDT meeting
Construction Documents (CD) 1 - 65% Design	168 Days after Initial PDT meeting
Construction Documents 2 - 95% Design	238 Days after Initial PDT meeting
Bid documents	280 Days after Initial PDT meeting
(4 sets of drawings and 2 sets of specifications shall be furnished by the A/E)	

Completed bid documents are expected within 280 calendar days of Initial PDT meeting. The A/E shall provide a submission schedule at the PDT meeting.

Note: The issue of the Notice to Proceed (NTP) shall be the first PDT Meeting. A/E shall be required to attend and take minutes of each Project Design Team (PDT) Meeting. Minutes shall be submitted electronically to the Project Manager and Contracting Officer within three business days of each meeting.

-- Design Requirements/Submissions --

EXPECTATIONS: *Submit complete review package in accordance with the following requirements and guidelines outlined in <http://www.cfm.va.gov/til/aeDesSubReq.asp> and the current VA BIM Manual. Please pay specific attention to the schematic, design and construction submission requirements.*

Deliver all design packages in person directly or by traceable carrier to the Project Manager on the established dates to allow the VA Project Design Teams to meet as scheduled. A transmittal letter is required to go to the Contracting Officer on the same day as delivery.

Include all information as follows and as outlined in the attachments for each submission. Information required for each submittal is outlined in Program Guide PG-18-15 Volume C November 2008. The manual is available from the COR or at the following address:
<http://www.cfm.va.gov/contract/ae/aesubmin.doc>

Schematic Submission: See Attachment B Schematic Submission Requirements

- All items required by PG-18-15 Volume C Schematic Submission.
- Provide at least three proposed layouts for areas shown in Attachment A and as outlined at the initial PDT meeting. More layouts may be needed if the provided layouts do not meet the needs of the medical center.
- Budget estimates for each proposed layout.
- Recommendation of advantages and disadvantages of each layout and preferred A/E layout with reasoning. Achieve a consensus on design approach before proceeding to 35% design.

Design Development 35%: See Attachment C, 35% Submission Requirements.

- All items required by PG-18-15 Volume C Design Development and the current VA BIM Manual.
- Identify Working Drawings scope within the construction budget.
- Develop plans and marked up specifications to meet all applicable federal and state codes/requirements, including but not limited to OSHA, EPA, National Electrical Code (NEC), NFPA 101 Life Safety Code
- Prepare design calculations.
- Identify potential bid deduct alternatives
- Initial draft of shutdown plan.
- Initial draft of flushing plan.
- Identification of potential LEED points.
- Identify phasing requirements for construction and their implications to the VA. Construction of project to be performed in a manner that makes phasing to be a minimal impact to the VA.
- Address all comments from the Schematic review.
- Identify scope within the construction budget.
- Identify applicable alternative energy sources.
- Provide two high resolution renderings showing interior and exterior spaces. Location shown on the high resolution renderings must be approved by the COR.

Construction Documents 65%: See Attachment D, 65% Submission Requirements

- All items required by PG-18-15 Volume C Construction Documents and the current VA BIM Manual.
- Complete all discrepancies found during 35% PDT meeting into plans and specifications.
- Revise and update cost estimate.
- Preparation of project scope for Federal Business Opportunities (FBO)/negotiated advertisement and account for any bid deduct alternatives developed in the 35% design submission.
- Finalize phasing plan for construction
- Design all finishes, required submittals.
- Updated draft of shutdown plan.
- Updated draft of flushing plan.
- Updated Identification of potential LEED points.
- Submit exterior and interior board and include labels with manufacturer, color choice, etc. for an easy cross-reference during construction submittal review. The board should include all finishes.

- Provide one set of life safety drawings for review by VA Safety and Fire Protection reviewer. (Electronic)
- Consolidate all necessary submittals by specification section on an Excel spreadsheet. Checklist to be utilized to track/monitor submittal process.
- Provide 5 high resolution renderings showing interior and exterior spaces. Location shown on the high resolution renderings must be approved by the COR.

Construction Documents 95%: See Attachment E, 95% Submission Requirements

- All items required by PG-18-15 Volume C Construction Documents and the current VA BIM Manual.
- Complete all discrepancies found during 65% PDT meeting into plans and specifications.
- Revise and update cost estimate.
- Preparation of project scope for Federal Business Opportunities (FBO)/negotiated advertisement and account for any bid deduct alternatives developed in the 65% design submission.
- Finalize phasing plan for construction.
- Final submission of shutdown plan for review.
- Final submission of flushing plan for review.
- Identification of potential LEED points.
- Address all comments from the VISN Safety & Fire Protection Review and forward to VA COR electronically within 5 days of receipt.
- Exterior and Interior board to be finalized/revise as necessary and include labels with manufacturer, color choice, etc. for an easy cross-reference during construction submittal review. The board should include all finishes.
- Provide five final high resolution renderings showing interior and exterior spaces. Location shown on the high resolution renderings must be approved by the COR.

Final Bid Documents Submission, Compact Disc (CD): See Attachment F, Bid Documents Submission Requirements Submit a complete document of all contract requirements for approval signatures as required in PG-18-15 Volume C for Bid Documents and the current VA BIM Manual. Continue to update and submit until approved.

-- Construction Period Services --

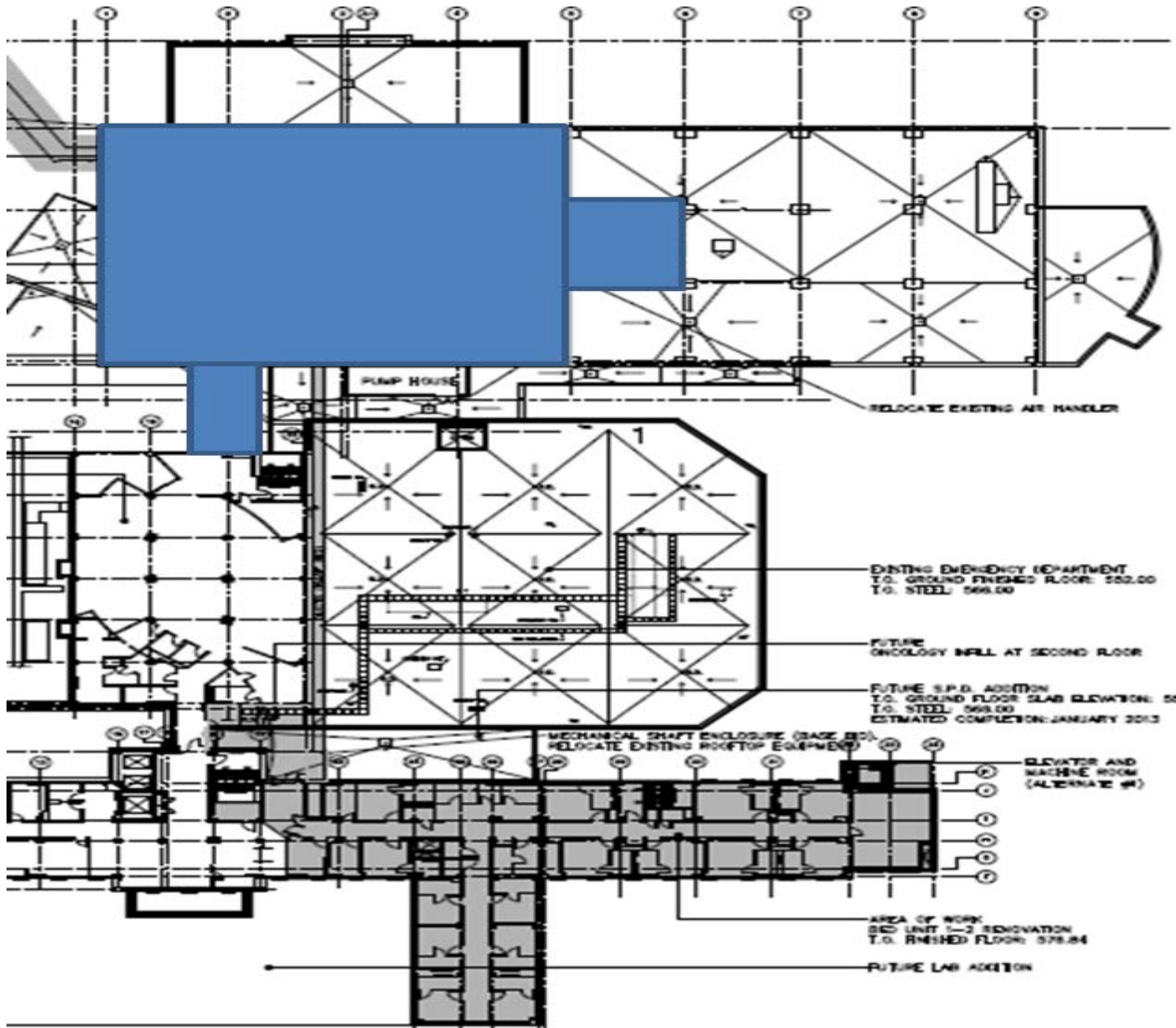
Expectations: Respond to submittals and other requests in a timely manner.

Provide services:

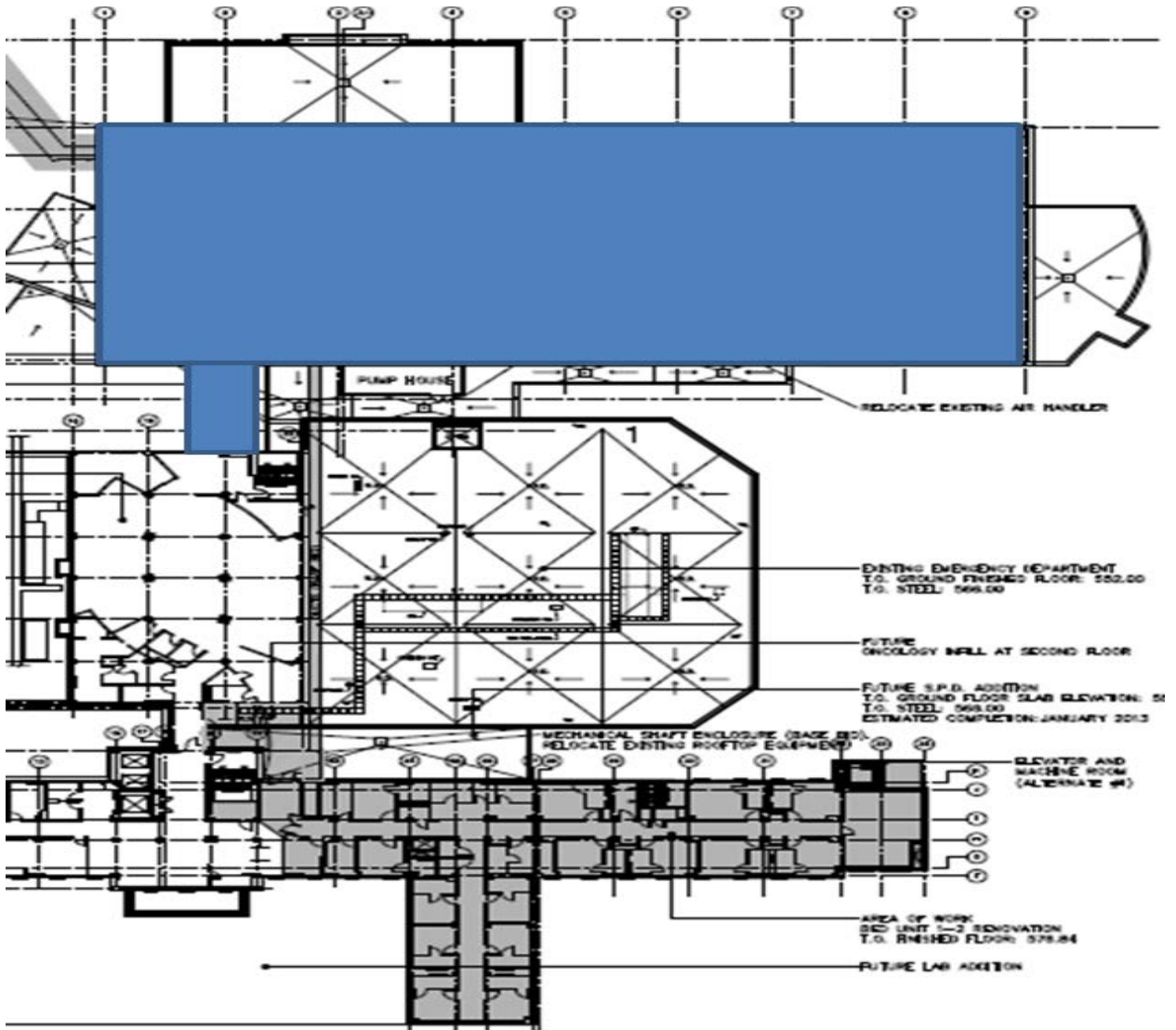
- Assist the VA to determine whether the contractor or subcontractor meets qualification requirements, support by written recommendations of any problems or litigation encountered in past based on first-hand knowledge.
- Review all submissions and provide recommendations to the VA within five calendar days upon request.
- Review and provide replies to contractor generated Requests for Information (RFI) when required by the project manager within 5 days.

- Review contractor's change order request and provide an independent cost estimate for each change order request.
- Review contractor's cost estimates and provide recommendations to the VA.
- Make 50 site visits at the request of the VA and prepare written reports to include agreed upon changes in design as determined necessary during the construction. Visits made based on errors and omissions in design will be at no cost to the VA.
- Participate in partial/final acceptance inspections as scheduled and generate punch list items for completion.
- Prepare as-built drawings on original set with A/E's stamp, based on record drawings that the contractor kept during construction and with correspondence performed during construction. Transpose contractor's as-builts to AutoCAD 2013 and provide a set of updated as-builts and specifications on CD within 30 days to the COR. Update the BIM model as outlined in the current VA BIM Manual and provide to the COR within 30 days.

Project Areas



Third story work area.



2nd Story Mechanical Space

Attachment B

Schematic Design Development Submission Requirements

Deliver the following (labeled with Schematic submission) and **include** this attachment as a checklist with your submission:

- 3 copies** of narrative report forwarding the schematic submission addressing items listed in the design requirements and any additional A/E recommendations

- 3 sets** of architectural floor layouts for each option being considered based on space required and VA space criteria. Make a recommendation on the most efficient and effective floor layout and the reasons for the preference. Show equipment to be used in each room/area. All drawings shall be 1/8" scale.

- 1 set** of architectural renderings of the proposed area for each option.

- 2 copies** of the preliminary cost estimate for each option being considered.

- 1 CD containing**
 - All drawings in AutoCAD 2013 and in Portable Document Format (PDF).
 - All specifications in Microsoft Word 2010 or higher

Attachment C

35% Design Development Submission Requirements

Deliver the following (labeled with 35% submission) and **include** this attachment as a checklist with your submission:

- 3 copies** of a narrative report forwarding the design develop 35% submission addressing items listed in the design requirements and any additional A/E recommendations. The report shall include identifying potential bid deduct alternatives, recommended construction phasing based upon discussions with the program manager, and any design calculations or analysis.

- 3 sets** of all drawings (bluelined copies) required by project.

- 3 copies** each of the draft shutdown and flushing plans.

- 1 set** of architectural renderings showing the look of the exterior and interior spaces of the building.

- 2 copies** of updated itemized cost estimate by specification section or trade (labor, material and equipment)

- 2 copies** of VA Master Specifications list of specification sections (Index) to be used for this project and a master submittal list identifying all the submittals required to be submitted by the contractor for review. The list shall be organized by division and specification.

- 1 CD containing**
 - All drawings in AutoCAD 2013 and in PDF form.
 - All specifications in Microsoft Word 2010 or higher
 - Architectural Renderings of internal and external spaces

Attachment D

65% Construction Documents Submission Requirements

Deliver the following (labeled with 65% submission) and **include** this attachment as a checklist with your submission:

- 3 copies** of a narrative report forwarding the design develop 65% submission addressing items listed in the design requirements and any additional A/E recommendations. The report shall include identifying potential bid deduct alternatives, recommended construction phasing based upon discussions with the program manager, and any design calculations or analysis.
- 3 sets** of all drawings (bluelined copies) updating all previous comments required by project.
- 2 copies** of updated itemized cost estimate by specification section or trade (labor, material and equipment)
- 3 copies** of custom edited VA Master Specifications of sections to be used for this project and a master submittal list identifying all the submittals required to be submitted by the contractor for review.
- 3 copies** each of the shutdown and flushing plans.
- 1 additional electronic copy** each of the custom edited VA Master Specifications and drawing as specified above are to be delivered to the project manager so that it can be sent to an independent Fire Protection Engineer. A letter of transmittal signifying delivery shall be forwarded to the Project Manager. Also include the agreed upon, by the A/E and COR, 35% comments with replies to the Fire Safety Professional Engineer.
- 1 copy of each color board** showing the interior design scheme (fabrics, finishes, furniture layout and plans) for each area, east west and center, include an inventory of materials/manufactures recommended for use for approval and prepared for order by the VA Interior Designer. This information shall also be submitted on a spreadsheet for use during submittals (color, manufacturer, item number, etc.). The color, name and all applicable identifying numbers shall be placed on the board and be easily read without removing the physical samples.
- 1 CD containing**
 - All drawings in AutoCAD 2013 and in PDF form.
 - All specifications in Microsoft Word 2010 or higher

Attachment E

Construction Documents 95% Submission Requirements

Expectation: *Submit complete bid document for final review prior to solicitation*

Deliver the following (labeled with 95% submission) and **include** this Attachment as a checklist with your submission:

- 3 copies** of a narrative report forwarding the design develop 95% submission addressing items listed in the design requirements and any additional A/E recommendations. The report shall include finalizing bid deduct alternatives, recommended construction phasing based upon discussions with the program manager, and any design calculations or analysis.
- 3 sets** of all drawings (bluelined copies) updating all changes required by project.
- 2 copies** of final itemized cost estimate organized by specification section (labor, materials and equipment). Include dollar amounts for each bid deduct alternative.
- 2 copies** of final project specification prepared on "Microsoft Word" software. Include a master submittal list in the specifications.
- 3 copies** each of the final shutdown and flushing plans.
- 3 copies** each of the edited VA Master Specifications for sections to be used for project, Index and a master submittal list under Spec Section 01340 of all the submittals required by the specifications.
- 1 additional electronic copy** each of the custom edited VA Master Specifications and drawings as specified above shall be delivered to the project manager so that it can be delivered to the Independent Fire Safety Professional Engineer. A letter of transmittal signifying delivery shall be forwarded to the Project Manager. Also include the agreed upon, by the A/E and COR, 65% comments with replies to the Fire Safety Professional Engineer.
- 1 copy of final color board** showing the finalized interior design scheme (fabrics, finishes, furniture layout and plans) for each area, include an inventory of materials/manufacturers recommended for use for approval and prepared for order by the VA Interior Designer. The color, name and all applicable identifying numbers shall be placed on the board and be easily read without removing the physical samples.

1 set of HIGH RESOLUTION Architectural Renderings. These shall be presented to the Project Manager on poster board as individual pieces, 36" x 24"

1 CD containing

All drawings in AutoCAD 2013 and in PDF form.

All specifications in Microsoft Word 2010 or higher

All High Resolution Architectural Renderings

Attachment F

Bid Document Submission Requirements

Expectation: *Continue to submit until all changes are incorporated by the A/E for final signature prior to solicitation. Upon approval duplicate copies as required.*

1 set of all drawings (bluelined copies) required by project, produced on AutoCAD 2013 software for final markup of any changes prior to signature.

3 copies of final project specification (2 bound) prepared on Microsoft Word software. Include a master submittal list in the specifications.

1 CD containing

All drawings in AutoCAD 2013 and in PDF form combined into a single document.

All specifications in Microsoft Word 2010 or higher and in PDF form combined into one document.

Submittal Spreadsheet – identifying all the submittals required to be submitted by the contractor for review. The list shall be organized by division and specification.

Interior Design finish summary containing the approved submittal information. This at a minimum shall include sufficient information to order/make repairs, i.e. color, manufacturer, item number, etc.

All High Resolution Architectural Renderings.

Shutdown Plan

Flushing Plan

The Revit file for the project.

All requirements outlined in the current VA BIM Manual

Upon signature approval, provide 5 sets of final Contract Documents on a CD (complete with VA signed Cover Sheet). Provide three- 1/2 size set of final drawings. The documents on the CD shall contain two files, one full drawing file and one full specification file.

Attachment G

Pre-Construction Risk Assessment Form (PCRA) – attached separately.