

**A/E SUBMISSION INSTRUCTIONS FOR
MINOR AND NRM CONSTRUCTION PROGRAM
MEDICAL CENTER PROJECTS**

Table-of-Contents

I.	GENERAL	1
	A. INTRODUCTION	1
	B. A/E RESPONSIBILITIES	2
	C. SUBMISSION POLICY	3
	D. QUALITY ASSURANCE/QUALITY CONTROL	3
	E. ADDITIONAL SERVICES	4
	F. CRITICAL PATH METHOD	4
II.	SUBMISSIONS.....	5
	A. ARCHITECTURAL	7
	B. FIRE PROTECTION.....	11
	C. INTERIOR DESIGN.....	15
	D. PLUMBING	19
	E. ELECTRICAL	27
	F. ASBESTOS ABATEMENT.....	37
	G. CRITICAL PATH METHOD (CPM)	39
	H. SPECIFICATIONS	40
	I. FINAL BID DOCUMENTS.....	42
III.	DISTRIBUTION OF A/E MATERIAL	43
	A. SYMBOL IDENTIFICATION OF CONTRACT DRAWINGS	43
	B. GENERAL NOTES.....	43

**A/E SUBMISSION INSTRUCTIONS FOR
MINOR AND NRM CONSTRUCTION PROGRAM
MEDICAL CENTER PROJECTS**

I. GENERAL

A. INTRODUCTION

1. This document contains information and minimal submission requirements for contract documents specified in the A/E contract.
2. The Department of Veterans Affairs (VA) may contract with an Architect/Engineer (A/E) for any portion of a design: Schematics, Design Development, Construction Documents, or a combination of these.
 - a. For projects where the VA is contracting for Schematics Documents only, Schematics and Design Development Documents only, or Schematics, Design Development, and Construction Documents, the VA will provide the Design Program (if available), Facility Development Plans (if available), and VA design standards to accompany the Scope of Work for the project.
 - b. For projects where the VA is contracting for Design Development and Construction Documents only, the VA will provide the Schematics Plans and VA design standards to accompany the Scope of Work for the project.
 - c. For projects where the VA is contracting for Construction Documents only, the VA will provide the Design Development Plans and VA design standards to accompany the Scope of Work for the project.
3. Coordinate all activities with the VA Medical Center (VAMC). Hold informal meetings (upon mutual consent of the VA and the A/E) at the VAMC to discuss the design and related issues. Continue to expand contacts by telephone, rough sketch studies and other means of communication with the purpose of finalizing a general design approach to be followed.
4. Final approved Schematic documents shall be the basis for the development of the Design Development phase. Likewise, final approved Design Development documents shall be the basis for the development of the Construction Documents phase. The VAMC must approve any changes from each set of documents before the A/E proceeds to the next phase.

Director's Suite Relocation

5. VA will review all submittals for functional and aesthetic relationships. However, no further functional decisions are anticipated after the Design Development phase.
6. Provide a design narrative/analysis for each technical discipline (e.g., architectural, mechanical, fire protection, etc.) which describes the intent of each discipline with schematic and/or design development submission.
7. Provide computations and sizing calculations for electrical designs. For computerized calculations, submit complete and clear documentation of computer programs, interpretation of input/output, and description of program procedures.
8. Provide individually packaged drawings for each submission to each unit specified in the "Distribution of A/E Materials" section.
9. Submit a complete set of final approved drawings incorporating all revisions, within 15 days after completion of the Schematics and Design Development stages.
10. At each review stage, the VA's technical reviewer, a value-engineering consultant, or a construction manager will perform a value engineering review.
11. Submit final drawings (Bid Documents) in electronic format on a CD in AutoCAD 2012 format. Submit instructions on the use of the disks along with a complete listing of all layers that are used.

B. A/E RESPONSIBILITIES:

1. Contract documents shall meet or exceed the requirements of this document.
2. The A/E is responsible for producing a complete set of drawings, design narrative/analysis, calculations, sample boards, and specifications in accordance with professional standard practices and VA criteria. Each A/E discipline shall receive a copy of their respective VA design manuals, standard details, construction standards, and VA National CAD Standard Application Guide. The AE is responsible for obtaining the NCS.
3. A/E shall conduct coordination meetings between A/E technical disciplines before submitting material for each VA review and provide minutes of the meetings to VAMC.
4. A/E shall adhere to the approved Memorandum of Agreement (MOA).

Director's Suite Relocation

5. A/E shall provide a checklist of all submittals, certifications, tests, and inspections required per drawing and specification section.

6. In addition, the A/E shall conduct interim fire protection installation inspections and witness final fire protection equipment testing.

C. SUBMISSION POLICY:

1. There is a Schematic* submission, a Design Development (DD**) submission, and a Construction Document (CD***) submission indicated in this guide. The VAMC may alter the submission requirements depending upon the complexity of the project by adding or deleting certain reviews. Where additional reviews might be required, the VAMC will issue, at their discretion, a detailed "Statement of Task" or supplemental instructions to the A/E, which would be provided at the time of solicitation for a fee proposal.

2. At each submission, the A/E shall date all material and present the designs on VA standard size drawings that are appropriately labeled, "SCHEMATIC SUBMISSION", "DESIGN DEVELOPMENT SUBMISSION", OR "CONSTRUCTION DOCUMENT SUBMISSION", in large block letters above or beside the VA standard drawing title block. In each submission, the A/E shall incorporate the corrections, adjustments, and changes made by VA at the previous review.

D. QUALITY ASSURANCE/QUALITY CONTROL (QA/QC):

In an effort to reduce construction change orders due to design errors and omissions, the Office of Facilities Management has initiated a Quality Assurance/Quality Control program. The A/E shall develop, execute, and demonstrate that the project plans and specifications have gone through a rigorous review and coordination effort. The requirements are as follows:

1. Fee Proposal: Provide an outline of the actions that your firm will take during the design process along with an associated fee.

2. Two Weeks after Receipt of the Notice To Proceed: Submit a detailed QA/QC Plan describing each step that will be taken during the development of the various phases of design. Each step should have an appropriate space where a senior member of the firm can initial and date when the action has been completed.

3. 100% Submittal: Submit the completed QA/QC Plan along with the latest marked-up documents (plans, specifications, etc.) necessary to ensure that a thorough review and coordination have been completed.

E. ADDITIONAL SERVICES:

If additional services (i.e. surveys, soil borings, asbestos surveys, water flow testing, or lead surveys), are necessary to be performed by consultants, submit criteria for the work to be performed to the VAMC Contracting Officer as soon as possible. Upon approval of the criteria, submit proposals and qualifications of at least three firms being considered for the work in accordance with the contract procedures (CP1) of the contract, together with a proposal from the recommended firm and a brief justification for its selection, for VA approval. A/E should submit survey information for the Schematic Review.

F. CRITICAL PATH METHOD PHASING MEETINGS

A. If required and prior to submission of Schematic material, the A/E shall meet with the VAMC's Project Manager to discuss and outline phasing requirements for the project. These phasing requirements shall describe the general sequence of the project work, estimated project duration, and what Government constraints will exist that will influence the Contractor's approach to the construction project. The A/E shall be responsible for recording the phasing requirements.

B. Submit a phasing narrative and phasing plans (on reduced size plans) within two weeks after each phasing meeting to the VAMC Project Manager. VA will review these submission(s) and return comments to the A/E within two weeks of receipt. The A/E will then use this information in preparing their schematic, design development, and construction document submissions.

Director's Suite Relocation

A. ARCHITECTURAL: Submit or show the following:

Architectural:	Schematics*	DD**	CD***
Location of:			
• Rooms ¹	✓	✓	✓
• Doors	✓	✓	✓
• Corridor(s) ³	✓	✓	✓
• Basic column grid/sizes	✓	✓	✓
• Electrical closets	✓	✓	✓
• Equipment rooms	✓	✓	✓
• Signal and telephone closets	✓	✓	✓
• Mechanical shafts and space	✓	✓	✓
Floor Plans/Drawings:			
• All floors (new and renovated)	✓	✓	✓
• Roof plan	✓	✓	✓
• Reflected ceiling ⁴		✓	✓
• Equipment floor plans 1:50 (1/4 inch) scale ⁵		✓	✓
• Demolition plans ⁶		✓	✓
Room names and numbers ⁷		✓	✓
Finish floor elevations ¹¹	✓	✓	✓
Door locations, sizes, and swings		✓	✓
Wall thickness and chase walls		✓	✓
Plumbing fixtures		✓	✓
Wheelchair accessible facilities		✓	✓
Construction details ¹⁵		✓	✓
Drafting symbols, abbreviations, and general notes		✓	✓
Door, and window, and schedules			✓
Interior details, elevations, sections			✓
Finish schedule ¹⁶		✓	✓
Graphics and signage ¹⁷			✓
Color rendering			✓
Specifications		✓	✓
Asbestos abatement ¹⁸	✓		
Asbestos abatement specification ¹⁹			✓

* Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch). A scale of 1:200 (1/16 inch) is acceptable for architectural floor layout if an entire floor cannot be shown on one sheet. Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch) .

Director's Suite Relocation

****** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics.

******* Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase.

A. NOTES:

1. Use lines between spaces to indicate the centerline of the partition (for schematics only).
2. Indicate doors with a slash mark.
3. Along the corridor, the line shall represent the corridor side of the partition.
4. Indicate ceiling mounted equipment, lighting fixtures, air diffusers, registers, tracks, and other significant elements.
6. Indicate existing finish schedule and notes on plan.
7. Label as required for schematic drawings. Coordinate new room numbering with medical center.
8. Use the same names on drawings as those used in the space program. Provide area figures in fractional form, e.g., 400/390. Indicate space provided, but not called for in the space program, as: -/390.
9. Label each service or activity listed in the Project Scope Data of the Design Program and indicate boundaries with a distinctive line. Include the activity code number (see Handbook 7610).
12. Indicate construction including fire resistance rating, building materials and systems, and proposed sill and head heights of openings. Indicate both new and renovated areas on form provided by VA.
15. Indicate new building components and systems, such as window design, roofing system, special entryways, building "skin", and any special architectural elements for the project. Complete detailing of miscellaneous items is not required for this submission.
16. Indicate all building systems, materials, and future expansion, if applicable.
17. Submit a drawing for all which is part of the construction contract.

Director's Suite Relocation

19. Format provided in SPECIFICATIONS. If there is no VA master specification, develop contract specification that is in compliance with regulations of the Environmental Protection Agency.

B. FIRE PROTECTION: Submit the following:

Fire Protection:	Schematics*	DD**	CD***
Fire protection narrative: ¹			
• Fire alarm systems ²	✓		
Base loop system for interface of new construction	✓		
• Exit paths from each zone	✓		
• Distances to stairs	✓		
• Occupancy of each area	✓		
• Exit calculations for each floor	✓		
• Smoke control features	✓		
Floor Plans/Drawings: ^{3 & 4}			
• Sprinkler zones	✓		
• Building water supply	✓		
• Standpipes	✓		
• Termination of sprinkler main and inspector test drains		✓	✓
• Waterflow and tamper switches		✓	✓
• Sprinkler design hazards per NFPA 13		✓	✓
• Exit signs and emergency lighting		✓	✓
Location of:			
• Fire alarm system		✓	✓
• Annunciator panels		✓	✓
• Pull stations		✓	✓
• Flow switches		✓	✓
• Audio-visual devices		✓	✓
• Smoke detectors		✓	✓
• Exit signs		✓	✓
• Fire sprinklers		✓	✓
• Electromagnetic door hold open devices		✓	✓
Zoning of each fire alarm initiating device			✓
Interconnection of fire alarm system with:			
• Card access doors			

Director's Suite Relocation

- * Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch). Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch) including equipment.
- ** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics.
- *** Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase.

B. NOTES:

1. Indicate NFPA 220 and UBC fire resistive rating of the building, NFPA 101 occupancy type, and fire protection code analysis to access compliance with NFPA 101.
2. Provide information to meet JCAHO requirements; e.g. location of all fire rated barriers, smoke barriers, exit signs, fire extinguishers, manual pull stations, smoke detectors, and sprinkler flow switches. Show all interim life safety measures such as temporary systems Fire Alarm, Sprinkler, and Smoke.
3. At DD Submission, add room names, room numbers, door locations and swings, smoke and fire rated partitions, sprinkler/standpipe risers to floor plans.
4. Show new equipment and/or the necessary changes involved if modification to the existing system is required. Include any recommendations where certain requirements of VA criteria might be waived, in order to allow the existing equipment to be reused.

Director's Suite Relocation

C. INTERIOR DESIGN: Submit the following:

Interior Design:	Schematics*	DD**	CD***
Written interior design concept ¹	✓		
Illustrate overall design solution ²	✓		
Material and finish samples	✓		
Sketches	✓		
Design solution for interior spaces:			
• Perspectives		✓	✓
• Plans		✓	✓
• Details		✓	✓
• Elevations		✓	✓
• Sections		✓	✓
• Wayfinding		✓	✓
• Floor patterns		✓	✓
• Wall patterns		✓	✓
• Lighting		✓	✓
• Signage		✓	✓
• Bumper guards		✓	✓
Specification section 09050		✓	✓
Finish schedule		✓	✓
Exterior colors and materials		✓	✓
Sample boards for interior and exterior materials, products, and finishes		✓	✓
Edited carpet and wallcovering specifications		✓	✓
Specifications			✓
Keyed Finnish plans			✓
Interior design details, elevations, and sections			✓

* Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch). Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch) including equipment.

** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics.

*** Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase.

C. NOTES:

1. Provide a document of data collected in interior design programming. Include collection and analysis of data from the VAMC project coordinator and interior designer. Data includes, but is not limited to the following: existing interior and exterior design and materials, light, safety, patient profile, customer's "vision" or desired image, public vs. private spaces, complete signage package, goals of customer, relationship to existing facilities, future expansion/renovation plans, regional influences, etc.
2. Discuss and illustrate the overall design solution for the primary areas of the project using marked-up floor plans, loose sketches, and material and finish samples. Use broad categories of materials, finishes, color palettes, patterns, textures, and scales. Separately group all major neutral background materials and finishes that will be used and discuss how they will be integrated with all other materials and finishes on the project. Include all primary and secondary corridors, typical patient and toilet rooms, lobbies, atriums, eating spaces, chapels, waiting rooms, and exam rooms. Show the relationship among departments and functions, and between public and private spaces.

Director's Suite Relocation

D. PLUMBING: Submit the following:

Plumbing:	Schematics*	DD**	CD***
Narrative:			
• Existing plumbing systems to be used and necessary modifications	✓	✓	✓
• New plumbing systems	✓	✓	✓
• New or modified water treatment	✓	✓	✓
Floor Plans/Drawings:			
• Room names	✓	✓	✓
• Identify			
Existing plumbing fixtures w/VA numbering system	✓	✓	✓
New plumbing fixtures w/VA numbering system	✓	✓	✓
Existing equipment	✓	✓	✓
New equipment	✓	✓	✓
Plumbing piping	✓	✓	✓
• Size of pipe		✓	✓
• Equipment schedule		✓	✓
• Demolition plans		✓	✓
• Riser diagrams			✓
• Legend, notes, and details			✓
Calculations (equipment & piping)		✓	✓
List of Required Contract Specifications		✓	
Contract Specifications			✓

D. PLUMBING (cont.):

* Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch).

** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics phase.

*** Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase. Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch).

Director's Suite Relocation

E. ELECTRICAL: Submit the following:

Electrical:	Schematics*	DD**	CD***
Narratives:			
• Design ¹	✓		
Location and size of:			
• Electrical equipment ²	✓		
• Electric closets ³	✓		
• Telephone closets ³	✓		
• Signal closets ³	✓		
• Electrical distribution equipment			
Drawings showing:			
• Telephone systems	✓	✓	✓
• Proposed electrical system ⁴	✓	✓	✓
• Electric symbols	✓	✓	✓
• Lighting fixture schedule	✓	✓	✓
• Emergency Life Safety Equipment (see fire protection)			
• Symbols, note, abbreviations		✓	✓
Drawings:			
• Lighting layouts		✓	✓
• Power layouts		✓	✓
• Signal layouts		✓	✓
• Specialty area layouts		✓	✓
• Demolition plans		✓	✓
Riser diagrams		✓	✓
Branch circuit wiring (typ.)		✓	✓

* Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch). Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch) including equipment.

** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics.

*** Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase.

Director's Suite Relocation

E. NOTES:

1. Include basic assumptions, points of interconnection, impact of new construction to existing electrical distribution system, current demand loading (high voltage switchgear and primary feeder), and projected load of new construction. Propose various feasible electrical systems for project and provide advantages/disadvantages.
2. Include means and clearances for installation, maintenance, and removal/replacement of equipment.
3. Electrical, signal and telephone closets must stack vertically.
4. Include high voltage and low voltage switchgear, transformers and low voltage main and/or distribution panels, branch panels and methods of feeding 277/480 volt and 120/208 volt normal and emergency panels.

F. ASBESTOS ABATEMENT: Submit the following:

Asbestos Abatement:	Schematics*	DD**	CD***
Asbestos abatement report including: 1. Summary results of building records 2. Summary results of station personnel interview 3. determination of materials known to contain asbestos 4. visual inspection of building to determine location and condition of asbestos 5. sample strategy on the extent of asbestos present	✓		
Name and location of qualified laboratory for sample analysis	✓		
Asbestos abatement drawing		✓	
Major Decontamination Areas showing: 1. Limits of sealing off the location 2. Quantities of asbestos material 3. Arrangements for auxiliary rooms 4. Engineering of negative air systems 5. Path of asbestos to loading platform 6. Location and connection to required utilities		✓	

Director's Suite Relocation

Asbestos Abatement:	Schematics*	DD**	CD***
Minor Decontamination Areas showing: 1. location, type, and length of pipe element to be abated by "Glove and Bag" approach 2. Other abatement features		✓	
Summary of: ¹			
• Square meter (feet) of floor space for abatement		✓	✓
• Total linear and square meter (feet) of asbestos to be abated		✓	✓
• Total cost of abatement ²		✓	✓
Asbestos abatement drawings including: 1. restoration of impacted building sub-systems 2. integrated phasing on execution of abatement			✓

* Submit, as a minimum, a single line layout for at a scale not less than 1:100 (1/8 inch). Submit a complete double line layout of areas of critical importance, at a scale of 1:50 (1/4 inch) including equipment.

** Submit minimum 1:100 (1/8 inch) scale floor plans, new and renovated, incorporating all of the revisions required by comments from schematics.

*** Submit fully dimensioned, complete, and coordinated 1:100 (1/8 inch) scale floor plans, incorporating all revisions required by comments from the design development phase.

F. NOTES:

1. Provide a copy of the summary to the construction cost estimator for inclusion as a separate bid item in the project estimate.

2. Include any cost for decontamination of equipment and fixtures.

G. CRITICAL PATH METHOD (CPM): Submit the following:

Critical Path Method (CPM) ^j :	Schematics	DD	CD
Phasing Narrative	✓	✓	✓
Phasing Plans (on reduced site plans)	✓		
Phasing Diagram	✓		
Phases (marked on full size drawing)	✓		
Written list of systems ¹	✓	✓	✓

Director's Suite Relocation

Critical Path Method (CPM)j:	Schematics	DD	CD
Phasing Diagram (drawn on Phasing Plan) ¹		✓	✓
CPM Phasing Plans (full size contract drawings) ²		✓	✓

G. NOTES:

1. Include temporary system by phase, and separate by technical discipline.
2. One drawing may reflect several reduced site plans.

H. SPECIFICATIONS

	Schematics	DD	CD
Specifications (All Disciplines)		✓ ^{1, 2, & 3}	✓ ^{4 & 5}

1. Submit for all technical disciplines the original VA Master Specification section drafts marked-up with pencil showing the editing for the project. Clearly identify modifications, deletions and insertions. Assure the specification drafts have been edited and tailored in their application to represent accurate coordination between drawings and specifications.
2. When no VA Master Construction Specification exists for a "unit of work", prepare the specification section consistent with VA Master Construction Specifications format.
 - a. Use generic or non-proprietary specifications describing the minimal acceptable product criteria level where no "Standard" exists to define quality and workmanship levels.
 - b. Use applicable "Standards" to define quality and workmanship when these publications exist. List complete designation and title of each publication used in Part 1; follow format in VA Master Construction Specifications for Applicable Publications.
 - c. Do not use proprietary specifications or systems that restrict competition unless authorization in writing has been received from the VA Project Manager for such proprietary specification. See the Federal Acquisition Regulation (FAR) Part 10, Part 14, and Part 36.
 - d. Do not use trade names or manufacturers brand names, except as previously noted.
 - e. When a deviation is requested, define and specify the minimum acceptable levels of essential criteria in descriptive, physical, functional, or performance requirements.
4. Type specifications in final format and content including any desk copy changes made by the VAMC staff at the previous review. Submit a complete set of the typed specifications for review. Include one set of full size final drawings of all disciplines, fully coordinated.
5. Return all draft specifications reviewed at DD review to aid the final bid document review. These draft specifications will later be returned to the A/E.

Director's Suite Relocation

I. FINAL BID DOCUMENTS

- a. Place the seal of the Registered Architect, Registered Landscape Architect, and Professional Engineer responsible for the design and the VAMC Project Director's signature on the Construction Documents. A stamp of the VAMC Project Director's signature will be furnished.
- b. Submit updated Department Ratio Chart of Final Bid stage to the VAMC Project Manager.

III. DISTRIBUTION OF A/E MATERIAL

A. SYMBOL IDENTIFICATION OF CONTRACT DRAWINGS

- AS** - Architectural Drawings (Numbered Only)
- HA** - Asbestos Removal Drawings
- ES** - Electrical Drawings
- FA** - Fire Protection Drawings
- MH** - Heating, Ventilating, and Air Conditioning Drawings
- PL** - Plumbing Drawings

B. GENERAL NOTES

1. Bond prints shall be full-sized.
2. Bind all drawings into sets in the order of their above classification symbol.
3. All submitted specifications shall be original, unbound, and marked-up VA Master Specifications. Where no VA Master Specification is available, submit a developed specification.
4. Submit all materials, packaged and clearly marked by discipline, to the VA's Contracting Officer. However, where a small amount of material is submitted, the drawings may be packaged together for all disciplines as long as the drawings are separated and tagged with the discipline name. Other material may also be consolidated provided they are labeled and can easily be identified and separated.
5. Material provided unbound will be returned to the A/E. All resubmission costs will be the responsibility of the A/E

Distribution of A/E Material

Schematic Submission:

VA Medical Center (VAMC)	Appropriate Network Office*
3 complete sets	1 complete set

Design Development Submission:

VA Medical Center (VAMC)	Appropriate Network Office*
3 complete sets	1 complete set

Construction Documents Submission:

VA Medical Center (VAMC)	Appropriate Network Office*
3 complete sets	1 complete set

*Network Office will coordinate the necessary review with the responsible safety and fire protection person in their network.