

**DEPARTMENT OF
VETERAN AFFAIRS**

Greater Los Angeles Healthcare System

PROJECT NO. 691-18-111WL

(DESIGN / BUILD CONTRACT)

**FOR: REPLACE OPERATING ROOMS (OR) LIGHTS AND
BOOMS**

**AT: DEPARTMENT OF VETERANS AFFAIRS
MEDICAL CENTER
11301 WILSHIRE BOULEVARD
WEST LOS ANGELES, CALIFORNIA 90073
ATTN: ENGINEERING SERVICES 138E**

Design / Build

Table-of-Contents

I.	SCOPE OF WORK	5
A.	THE SCOPE OF WORK FOR THIS PROJECT:	5
B.	Offers:	10
C.	Technical Requirements.....	10
D.	DESIGN RESPONSIBILITIES OF THE A/E:	11
E.	Construction Documents	12
F.	Construction Period Submittals	14
II.	DESIGN SUBMITTAL SCHEDULE	16
III.	SUBMISSION OF A/E MATERIAL	17
IV.	A/E SUBMISSION INSTRUCTIONS FOR NRM CONSTRUCTION PROGRAM	19
V.	GENERAL.....	21
A.	INTRODUCTION.....	21
B.	A/E RESPONSIBILITIES:.....	22
C.	SUBMISSION POLICY:.....	22
D.	QUALITY ASSURANCE/QUALITY CONTROL (QA/QC).....	23
E.	ADDITIONAL SERVICES	23
F.	CRITICAL PATH METHOD - PHASING MEETINGS	23
VI.	SUBMISSIONS	25
A.	ARCHITECTURAL.....	25
B.	STRUCTURAL.....	27
C.	PLUMBING	28
D.	ELECTRICAL.....	29
E.	EQUIPMENT.....	30
F.	CRITICAL PATH METHOD (CPM).....	30
G.	ESTIMATING	Error! Bookmark not defined.
H.	SPECIFICATIONS	30
VII.	GENERAL REQUIREMENTS (SPECIFICATION).....	32
1.1	GENERAL INTENTION.....	32
1.2	STATEMENT OF BID ITEM(S).....	32
1.3	SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR.....	32
1.4	construction security requirements.....	32
1.5	FIRE SAFETY.....	33

1.6 OPERATIONS AND STORAGE AREAS.....	37
1.7 ALTERATIONS	41
1.8 INFECTION PREVENTION MEASURES	42
1.9 DISPOSAL AND RETENTION	45
1.10 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS.....	45
1.11 RESTORATION.....	47
1.12 PHYSICAL DATA.....	47
1.13 PROFESSIONAL SURVEYING SERVICES: Not used.....	47
1.14 LAYOUT OF WORK	47
1.15 As-Built Drawings.....	49
1.16 USE OF ROADWAYS	49
1.17 TEMPORARY USE OF MECHANICAL AND ELECTRICAL EQUIPMENT.....	50
1.18 TEMPORARY USE OF EXISTING ELEVATORS	51
1.19 TEMPORARY USE OF NEW ELEVATORS: Not used.....	51
1.20 TEMPORARY TOILETS.....	51
1.21 AVAILABILITY AND USE OF UTILITY SERVICES.....	51
1.22 NEW TELEPHONE and IT EQUIPMENT.....	52
1.23 TESTS.....	52
1.24 INSTRUCTIONS.....	53
1.25 GOVERNMENT-FURNISHED PROPERTY: not used.....	54
1.26 RELOCATED EQUIPMENT and ITEMS	54
1.27 STORAGE SPACE FOR DEPARTMENT OF VA EQUIPMENT: not used.....	55
1.28 HISTORIC PRESERVATION	55
VIII. PROJECT SCHEDULES	56

I. SCOPE OF WORK

A. THE SCOPE OF WORK FOR THIS PROJECT:

1. Definition:

Design-Build (DB) as defined by the Department of Veterans Affairs (VA) is the procurement by the Government, under one contract, with one firm (which may be a joint venture) for both design and construction services for a specific project.

2. Scope of Work:

The intent of this project is to provide contractor services necessary for a Design/Build Construction Project. Design-Build Contractor Team is to provide design, labor, materials, equipment, technical skills, and transportation necessary to perform work for project No. 691-18-111WL, Replace Operating Rooms (OR) Lights and Booms. The Design-Build Contractor Team shall provide all necessary due diligences work including survey evaluation, calculations, working drawings, cost estimates, and construction period services necessary for this project at the Greater Los Angeles Healthcare System - West LA, in accordance with items herein specified. Design-Build Architect Engineer (DB A/E) is to provide complete set of construction documents, drawings and specifications reflecting work that the Design-Build contractor is to provide with all labor, material and technical expertise to install four surgical lights for OR 1, 2, 4, and 8 and replace and install dual light with anesthesia boom, light with equipment boom and service boom for OR 3, 5, 6, and 7, and perfusion boom for OR 5.

General scope of work is to include:

- Furnishing of equipment and complete OR Design and Renovation services for ORs 1 to 8. Remove existing equipment, dispose and prep for new equipment. Including infection control for eight rooms.
- Noisy/Vibration inducing work must happen between 7 PM and 7 AM or Saturday and Sunday. This will also be the time that debris can be hauled out, and tools brought in through the OR corridors.
- On the last day of a phase, the final touch-ups must be completed before 5 AM, so that terminal cleaning and infection control sign off can happen before procedures start.
- Air handlers will be shut down per room, through coordination with Engineering Services (Siemens contractor)
- Deep/Terminal cleaning happens on normal schedule on weekends and at night. If additional cleaning is needed, EMS will need a few days heads up to plan for having staff on site for cleaning.
- Pest Control will have to review and sign off on each room, as they are being worked on and as they are completed.

- The contractor must be reminded to wipe down and cover any and all debris being hauled out of the OR area.
- Walkthroughs of the interstitial space must happen intermittently during the phases (if not continuously). This will ensure a clean environment during construction.
- Accepting of the rooms on the VA side (after contractor completion and surface cleaning) must happen before the VA performs terminal cleaning
- Phased work will be performed one after another, no holidays will be “off,” night and weekend work will be expected from the contractor
- All design and certification work shall be provided by California licensed engineer/architect.

Work Includes:

1. Project Management

- Provide complete detailed schedule no later than two (2) weeks after notice to proceed (NTP).
- Schedule all deliveries
- Provide onsite superintendent/competent person during renovation phase.
- All Engineering and Architectural drawings developed and signed by California licensed engineers/architects.
- Attend site walks necessary to provide 30%, 60%, 90% and 100% drawing packages.
- Attend meetings for 30%, 60%, 90% and 100% drawing reviews.
- Provide updates and drive project to completion.
- Meet all VA West LA requirements for construction, Interim Life Safety Measures, and infection control.
- Competent person must be OSHA 30 certified.
- All other contractor and subcontractor employees OSHA 10 certified.
- Complete all inspections and certifications.

2. Infection Control –

- Provide infection control measures per VA West LA regulations.
- The ICRA level for this project is IV
- Obtain infection control permit before construction begins.
- Isolate HVAC system in area where work is being done to prevent contamination of duct system.

- Complete all critical barriers or implement Infection Control measures before construction begins.
- Maintain negative air pressure within work site utilizing HEPA equipped air filtration units.
- Seal holes, pipes, conduits, and punctures appropriately.
- Construct anteroom and require all personnel to pass through this room so they can be vacuumed using a HEPA vacuum cleaner before leaving work site or they can wear cloth or paper coveralls that are removed each time they leave the work site.
- All personnel entering work site are required to wear shoe covers.
- Contain construction waste before and during transport in tightly covered containers. Cover transport receptacles or carts. Tape covering.
- Do not remove barriers from work area until completed phase is inspected by Safety and Epidemiology Depts. and thoroughly cleaned.

After each phase is completed:

- Vacuum work area with HEPA filtered vacuums.
- Wet mop with disinfectant.
- Remove barrier materials carefully to minimize spreading of dirt and debris associated with construction.
- Remove isolation of HVAC system.
- Adjacent occupied areas must always be clean and clear of any dust or dirt.
- Contain work areas outside of construction barriers, including spaces above ceilings, with full height polyethylene sheet barrier, tightly taped. No work of any sort may be started without the barriers in place.
- Clean up dust tracked outside of construction area immediately.
- Temporary construction barriers and closures above ceiling must be dust tight.
- Removal of debris must be in covered containers.

3. Structural

- Engineering on current structures.
- Reinforcing plan for current structures.

- Onsite site checks and structural review by licensed structural engineer.
 - Remove existing mounting plates.
 - Reinforce existing structures that are to be reused.
 - Install appropriate mounting plates.
 - Licensed structural engineer to field verify and certify that the entire system is safe to use per phase before releasing to customer.
4. Electrical – Reuse existing power. Contractor shall investigate if additional power requirements are needed. If needed, contractor shall provide the necessary upgrade for the new equipment.
5. Plumbing/Medical (Med) gas – All Med Gas types are currently in the OR. No additional med gas types are being brought into the rooms.
- Disconnect med gas hoses to existing anesthesia boom and equipment boom.
 - Remove existing risers to install appropriate risers in proper orientation.
 - Reroute existing med gas to new structure as needed.
 - Install med gas risers.
 - Tap into and relocate Nitrogen from center mount to foot mount.
 - Make all final med gas DISS connections.
 - Certify med gas system 24 hour standing pressure test. Test to be completed by a third -party med gas certifier. Completed after each phase, once per each OR.
6. Mechanical/HVAC
- No mechanical services affected by this project.
 - If mechanical services are affected in this project the cost falls on the contractor.
 - Moving of diffusers to accommodate new structure location responsibility of the contractor.
7. Finish Work
- Patch and paint ceiling and walls where work will be completed, after completion and acceptance by VA.
 - Prepare room for terminal clean. Hospital to complete final terminal clean.
 - Remove all debris from project site.

- Replace or repair any firestops that were affected during renovation.

8. Miscellaneous

- Dumpsters are provided by contractor for general waste.
- Haul all waste to dumpsters.
- General housekeeping to be complete at the end of each day. Rooms to be left clean of debris.
- Install all equipment per manufacturer's requirements, e.g., certified installers.
- Pull low voltage cabling for equipment.
- Data/Phone – pull existing data/phone cable out of existing booms and pull into new booms.

9. General labor for additional Surgical lights in ORs 1, 2, 4, and 8

- Prepare room for renovation
- Back pull all cable out of existing booms
- Remove existing booms
- Structural
 - i. Engineering certification that current mount can handle additional weights and moments for additional surgical lights suspension. Provide required certification for existing mounts from licensed structural engineer. Contractor shall provide additional structural reinforcement if needed. Contractor shall provide the certification from licensed structural engineer that the entire system is safe to use after the addition of more surgical lights.
- Install new dual suspension VPA/Surgical lights
- Patch and paint walls where conduit added for light control.
- Pull cabling back into VPA.
- Replace any firestops that were affected during renovation.

10. General Labor for ORs 3, 5, 6, and 7

- Remove existing equipment OR 3, 6, and 7 and dispose
 - i. (Head Mount) – Dual Light with Anesthesia Boom
 - ii. (Mid Mount) – Light with Equipment Boom
 - iii. (Foot Mount) – Service Boom
- Remove existing equipment OR 5 and dispose

- i. (Head Mount) – Dual Light with Anesthesia Boom
- ii. (Mid Mount) – Light with Equipment Boom
- iii. (Foot Mount) – Service Boom
- iv. (Shoulder Mount) – Perfusion Boom
- Prep OR for Pre-installation work.
 - i. Remove section of ceiling to access structure installation, plate installation, medical gas work, data and electrical work.
 - ii. Haul off all debris.

B. Period of Performance:

- Completion Time: **63** calendar days for design and **52** Calendar Days for construction.
- There will be a total of 5 phases. Contractor can only have one phase at a time. Please see table below for phasing details. The phases could be rearranged with approval of the Contracting Officer, as long as the rooms stay grouped as indicated due to their physical location. In some phases, one OR will be completed and made available to the Government sooner than the other OR in that phase.

Phase	OR	Number of calendar days for construction
I	3	9
I	4	4
II	1	4
II	2	4
III	7	9
III	8	4
IV	6	9
V	5	9

C. Technical Requirements

1. Construction Management - Design-Build Team engineering/technical consultants shall be the subcontractor of the Design-Build Architect/Engineer (DB A/E), not the Design-Build contractor or sub contractors, assuming that the DB A/E and DB contractor are not one and the same firm. The Offeror shall have the relevant experience of key personnel to be involved in this procurement and shall include:

- a) Project Manager;
 - b) Architect;
 - c) Mechanical (Plumbing) Engineer;
 - d) Electrical Engineer
 - f) Construction Superintendent; and
2. Schedule - The Offeror shall provide a detailed schedule with narrative.
 3. Design Period:
 - a) A list of drawings to be included with each design submittal for VA reviews; and
 - b) A phasing plan for coordination of interruptions to the utility service due to relocation site utility work.

D. DESIGN RESPONSIBILITIES OF THE A/E:

1. The design responsibilities are listed in A/E Submission Instruction.
2. A/E services to furnish the following tasks:
 - a) Technical Specifications.
 - b) Field & Site Survey Verification.
 - c) Comply with Local, State and Federal Codes/Regulations.
 - d) Methodology of Construction Procedures, Phasing Schedule.
 - e) Working Drawings.
 - f) Construction Completion Time in calendar days.
 - g) Attend design review meetings and take minutes to be submitted to VA.
 - h) Provide a checklist of all submittals, certifications, tests and inspections required per drawing and specification section (submittal registry).
 - i) Construction period services shall include but not be limited to submittal review, and as-built drawings from contractor's marked-up field drawing, including updating applicable VA Master CAD Drawings.
3. All designs shall comply with the VA Office of Construction & Facilities Management Technical Information Library (TIL) (Standards) which can be found at the web site:
<http://www.cfm.va.gov/TIL/>
4. The A/E shall apply all applicable VA Design Manuals found at TIL web site.
5. Seismic design requirements of the project shall conform to VA Seismic design handbook, H-18-8.

6. Applicable chapters of VA master construction specifications shall be prepared by the A/E including any necessary adaptation. Electronic format for specifications shall be in Microsoft Word document files. VA Construction Standards shall apply to specific design requirements. All design guides, manuals and handbooks shall be utilized to the greatest extent practicable, i.e., Equipment symbols shall be in accordance with Equipment Guide List, "Standard Drawing Details"; Room Finishes shall be in accordance, "Room Finishes, Door and Hardware Schedule" etc.

7. Drawings and CAD files shall be in accordance to the US National CAD Standard (NCS):

<http://www.cfm.va.gov/TIL/sDetail.asp>

8. The A/E shall carefully review all requirements of the latest edition of the Accreditation Manual for Hospitals of the Joint Commission of Accreditation of Hospitals, with respect to design and operating requirements and report all conflicting conditions in writing.

E. Construction Documents

1. General:

a) The RFP documents are intended to provide the basic materials, and systems to be installed in the project. It is the DB team's responsibility to provide and construction in a manner consistent with the intent of the solicitation documents;

b) The Design-Build Team A/E (DB A/E) shall prepare and submit complete construction documents for review and approval by the VA in accordance with standard professional practice, the Department of Veterans Affairs Request for Proposal (VA RFP), and prevailing codes. The DB A/E shall submit the construction documents for review according to Section II. Submittal Schedule.

c) The DB team shall allow seven (7) working days for each review cycle. A cycle commences with the VA's receipt of the review documents and concludes with the DB team receipt of comments either by email or by hard copy delivery. The DB Team shall allow for up to one (1) full day meeting with the staff of VA Medical Center West Los Angeles to review each submission and resolve design issues;

d) Each submission shall comply with section III Submission of A/E materials.

e) Each submittal shall be made to the VA Project Manager for coordination with the VA Medical Center.

f) Mandatory schedules and details may be indicated either on the drawings or in the specifications, at the option of the DB team;

g) After the award of the contract, we will provide as-built drawings in hard copy for reference only. However, these plans are not accurate and field investigation is required to complete the design. The hard copy drawing files are provided without warranty or obligation to accuracy or information contained in the files. All information in the files shall be independently verified by the user. The specifications not included in the VA RFP shall be provided by DB A/E in electronic format in (Microsoft Office 2003 Word) for use in preparing the construction specifications.

h) The DB A/E who prepares the construction documents shall be professional architect/engineers licensed in the state in which the project is completed. The professional seal indicating such license by the state shall appear on the documents. The architect whose seal is shown will be known as the architect of record. The DB A/E shall certify compliance with the VA RFP; and

i) The construction drawings shall comply with the VA RFP and be prepared to include such details that the project can be constructed. The construction record drawings shall be completed in AutoCAD. Construction shop drawings are not required to be completed in AutoCAD. Drawings shall be plotted at scales no smaller than those used for equivalent information in the RFP (solicitation) documents.

2. Construction Drawings: The construction drawings shall include a coordinated set of:

a) Architectural drawings including floor plans, building elevations, building sections, wall sections, reflected ceiling plans, stair details, toilet and bath details, cabinetry elevations, door schedules and details, window schedules and details, room finish schedules, loading dock details, auto transport and pneumatic tube details, and other details;

b) Fire protection drawings as applicable including floor and roof plans, riser diagrams, equipment schedules, plumbing fixture schedules, and details, including general notes and all related calculations;

c) Plumbing drawings including floor and roof plans, riser diagrams, equipment schedules, plumbing fixture schedules, and details, including general notes and all related calculations;

d) HVAC drawings including floor and roof plans, one-line flow diagrams, equipment schedules, and details, including general notes and all related calculations. Also provide sections for mechanical equipment rooms and sequence of operation for all HVAC equipment;

e) Electrical drawings including floor and roof plans (power, lighting, and other systems), one-line diagrams, panel schedules, equipment schedules, light fixture schedules and details.

3. Construction Specifications: Project Specifications shall include specifications for all products, materials, equipment, methods, and systems shown on the construction drawings and to be incorporated in the project.
 - a) The DB Team shall prepare and submit 100 per cent complete construction specifications in accordance with standard professional practice and the VA RFP;
 - b) The construction specifications shall be at a comparable level of detail and demonstrate compliance with the VA RFP. The specification submitted for review shall be a “redline and strikeout” version of the VA RFP Specifications that clearly indicate the locations of deletions, revisions, and additions to the VA RFP Specifications; and
 - c) The construction specifications 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 of the project.
4. Approved Construction Documents:
 - a) The final construction document submission package will be submitted by the DB team for approval by the VA after completion of the 65% review cycle for the final package to be submitted by the DB team. The VA will have 7 days to take approval action.
 - b) The final construction documents submission package will include a full set of construction documents including all disciplines/packages.
5. Design Requirements - Compliance with codes and standards.
 - a) Project design shall be in compliance with applicable standards and codes described in VA Program Guides and design materials located at the VA Facility Management web site:

<http://www.cfm.va.gov/TIL/>

F. Construction Period Submittals

1. The DB Contractor shall prepare and submit shop drawings, product data, and samples during construction as required by the VA RFP documents. The shop drawings, product data, and samples shall bear the stamp of the licensed architect or engineer of record certifying compliance with this Design/Build Contract.
2. Other Submittals: The DB team shall submit test results, certificates, manufacturer’s instructions, manufacturers field reports, etc. as required by the VA RFP specifications; and
3. Project Record Drawings: The DB team will maintain a set of construction documents (field as-built drawings) to record actual construction changes during the construction process as required by the RFP specifications. The project

record drawings will be available for review by the VA Project Engineer at all times.

4. Project Close-out

The DB team shall comply with the requirements in the "General Requirements", 01 00 00, for submission of final RFP as-built drawings, shop drawings, manuals, and other documents as noted.

II. DESIGN SUBMITTAL SCHEDULE

Submission Events	Performance period
First Submittal Due (35% i.e. Schematics/Part A)	14 calendar days after notice to proceed.
VAMC Review of First Submittal	7 calendar days after receipt of 35% submittal.
Second Submittal Due (65% i.e. Design Development)	14 calendar days after VA approval of 35% submittal.
VAMC Review of Second Submittal	7 calendar days after receipt of 65% submittal.
A/E Final Submission (100% stamped CD)	7 calendar days after VA approval of 65% submittal.
VAMC Review of Final Submittal	7 calendar days after receipt of 100% submittal.
Any errors shall be corrected and complete sets resubmitted.	7 calendar days
Total Calendar Days:	63
As Built Submittal (after contractor markup are delivered)	10 calendar days

Note: The percentages indicate the approximate value of Part A Schematics and Part 1 Construction Documents combined.

III. SUBMISSION OF A/E MATERIAL

<p>Black/White Prints:</p>	<p>Three (3) complete bound sets of half-size prints and one full-size (42x30 inch) for each for SD (if applicable) and DD submissions.</p> <p>For CD Final Submission, stamped and signed, provide three (3) bound half-size and two (2) full-size (42x30 inch), one unbound. (note velum requirement for unbound cover sheet only)</p> <p>Bind all drawings into sets in the order of their NCS classification symbol.</p> <p>Material provided unbound will be returned to the A/E. All resubmission costs will be the responsibility of the A/E.</p>
<p>Estimates:</p>	<p>One electronic copy sent via email in PDF format for each 65% and final submittal, and to be included on the CD Rom disk.</p>
<p>Velum:</p>	<p>(For As-Built submission only) One (1) complete set of velum prints shall be full size positive type with lines printed on the face of the print. Reversed printing is not acceptable.</p> <p>Note: The Final submission velum cover sheet prepared for signatures should be submitted at the Final submission, not with the As-Built.</p>
<p>Specifications:</p>	<p>One (1) set in accordance to the submission instructions for DD. All submitted specifications shall be original, unbound, and marked-up VA Master Specifications. Where no VA Master Specification is available, submit a developed specification.</p> <p>At Final submission: Two (2) complete sets of all documents – one set in a 3-ringed binder, and one unbound. Final Submission correction sheets.</p>
<p>Computer Disks:</p>	<p>At 100% submission: Two (2) CD-Rom with drawings in both in PDF and AutoCAD format and Specifications in MS Word format and include the cost estimate for the final submittal. This is for the VA Project Record archive.</p> <p>Two (2) CD-Rom with drawings and Specifications in PDF files for the prospective contractor(s). The PDF drawings shall be a</p>

	<p>42x30 inch size sheet and the specification 8.5x11 inch for printing purposes. This is for the Bid Document.</p> <p>At As-Built submittal:</p> <p>Two (2) CD-Rom with drawings in both in PDF and AutoCAD format. This also shall include updated Building Master background in AutoCAD.</p> <p>The disks shall have printed labels with</p> <ul style="list-style-type: none">• VA Project Number• Project Title• Date submitted• Contract Bid Document or VA Project Record or As Built as applicable.
--	--

IV. A/E SUBMISSION INSTRUCTIONS FOR NRM CONSTRUCTION PROGRAM

Department of Veterans Affairs

VA Medical Center Projects

A/E Submission Instructions For Minor and NRM Construction Program:

- **Schematics**
- **Design Development**
- **Construction Documents**

Department of Veterans Affairs
Washington, DC 20420

FOREWORD

This document states the minimum requirements for each submission in the production of VA Schematics, Design Development, and Construction Documents for Minor and NRM Construction Program for Medical Center Projects. It will give VA reviewers and the A/E a clear understanding of what is required of the A/E at each stage of design.

This document does not relieve the A/E firms of their professional responsibility to produce a correct, complete, and fully coordinated set of construction documents.

Lloyd H. Siegel
Director, Facilities Quality Office

Management and

William W. Graham
(Acting) Director,
Engineering
Field Support Office

V. 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.
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, mechanical (HVAC, plumbing, and steam), sanitary, structural and fire protection 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 21 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) on CD Rom disks to be used with the AutoCAD version at the VAMC. 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 obtain 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 all of the above at the VA Office of Construction & Facilities Management Technical Information Library (TIL) (Standards) which can be found at the web site: <http://www.va.gov/facmgt/standard/>.

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).

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

1. 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.

2. 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.

VI. SUBMISSIONS

A. ARCHITECTURAL

Submit the following:

Architectural:	Schematics*	DD**	CD***
Location of:			
• Rooms ¹	✓	✓	✓
• Doors ²	✓	✓	✓
• Corridor(s) ³	✓	✓	✓
• Basic column grid/sizes	✓	✓	✓
• Equipment rooms	✓	✓	✓
• Signal and telephone closets	✓	✓	✓
Floor Plans/Drawings:			
• All floors (new and renovated)	✓	✓	✓
• Reflected ceiling ⁴		✓	✓
• Equipment floor plans 1:50 (1/4 inch) scale ⁵		✓	✓
• Demolition plans ⁶		✓	✓
Room names and numbers ⁷		✓	✓
Fixed equipment		✓	✓
Construction details ¹⁵		✓	✓
Drafting symbols, abbreviations, and general notes		✓	✓
Finish schedule ¹⁶		✓	✓
Specifications		✓	✓

* 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) 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.

ARCHITECTUAL 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.
5. Identify all equipment for each room. Indicate and coordinate all equipment with the Equipment Guide List and Activated Equipment List. Use VA standard symbols and notation to distinguish between contractor-furnished and installed (CC), VA-furnished contractor-installed (VC), VA-furnished and installed (VV), VA-furnished with construction funds [VC(CF) and VV(CF)], and relocated (R) equipment. Equipment floor plans are not required for the offices, consultation rooms, classrooms, conference rooms, and waiting rooms within the above departments. Draw equipment details which are necessary for major decisions, though complete detailing is not required for this submittal.
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.
10. If the project requires exterior work, show all facades indicating massing, proposed fenestration and the building relationship to adjacent structures and the finish grade. Show all significant building materials, including their colors, any proposed roof top mechanical equipment, architectural screens, skylights, and stacks on the elevation drawings. If building is designed for future expansion (vertical and/or horizontal), delineate elevations with and without the future expansion. If project is an addition, show elevations of the existing building in sufficient detail to illustrate the relationship between the new and existing in terms of scale, material, and detail.
11. Define the relationship of the finish ground floor to finish grade at major entrances and docks.
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.
13. Define building configuration. Draw sections at the same scale as floor plans, normally 1:100 (1/8 inch). If the building abuts an existing structure, indicate in the section how the new floor elevations align with existing.
14. Identify psychiatric areas where special considerations are required to ensure the safety of patients (e.g. hard ceilings, safety glazing, etc.).

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.

18. Provide square meters (feet) of lead paint and x-ray shielding to be removed.

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. STRUCTURAL

Submit the following:

Structural:	Schematics*	DD**	CD***
Supporting calculations ²	✓	✓	✓
Recommend preferred system	✓		
Shear load resisting elements ⁴	✓		
Structural plans ⁶		✓	✓
Sections		✓	✓
Details		✓	✓
Size/location of:			
• Columns		✓	✓
Lateral load resisting elements		✓	✓
Load bearing walls		✓	✓
Schedules			✓
General notes			✓
Specifications			✓

* 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.

STRUCTURAL NOTES

1. When only one structural system is possible due to other project requirements, include an explanatory statement and submit only that structural system.

2. Include vertical and lateral load design for CD submission.

3. Include foundation and fireproofing.

4. Indicate existing utilities and structures within, adjacent, or contiguous to the new construction.

5. If there is only a CD submission, provide a Structural Engineering Analysis Submission within six weeks from the notice to proceed including sketches, calculations, and cost estimates of three alternative structural systems for typical bays, boring location plan for subsurface investigation, and consultant qualifications. For vertical expansion projects, analyze existing structure for structural feasibility.

C. PLUMBING

Submit the following:

Plumbing:	Schematics*	DD**	CD***
Narrative:			
• Existing plumbing systems to be used and necessary modifications	✓	✓	✓
Floor Plans/Drawings:			
• Room names	✓	✓	✓
• Identify			
Existing plumbing fixtures w/VA numbering system	✓	✓	✓
Existing equipment	✓	✓	✓
New equipment	✓	✓	✓
Plumbing piping	✓	✓	✓
• Size of pipe		✓	✓
• Equipment schedule		✓	✓
• Fire & smoke partitions	✓	✓	✓
• Demolition plans		✓	✓
• Legend, notes, and details			✓
Contract Specifications			✓

* 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).

D. ELECTRICAL

Submit the following:

Electrical:	Schematics*	DD**	CD***
Narratives:			
• Design ¹	✓		
Drawings showing:			
• Proposed electrical system ⁴	✓	✓	✓
• Electric symbols	✓	✓	✓
• Symbols, note, abbreviations		✓	✓
Drawings:			
• Power layouts		✓	✓
• Signal layouts		✓	✓
• Specialty area layouts		✓	✓
• Demolition plans		✓	✓
Branch circuit wiring (typ.)		✓	✓
Location and size of:			
Phasing scheme		✓	✓
Electrical details			✓
Specifications			✓

* 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.

ELECTRICAL 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.

E. EQUIPMENT

Submit the following:

Equipment:	Schematics*	DD**	CD***
Equipment (on architectural drawing)	✓	✓	✓
Activation Equipment List (Excel format)		✓	✓
Specifications			✓

* 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. CRITICAL PATH METHOD (CPM)

Submit the following:

Critical Path Method (CPM)j:	Schematics	DD	CD
Phasing Narrative	✓	✓	✓
Phasing Plans (on reduced site plans)	✓		
Phases (marked on full size drawing)	✓		
Phasing Diagram (drawn on Phasing Plan) ¹		✓	✓
CPM Phasing Plans (full size contract drawings) ²		✓	✓

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

G. SPECIFICATIONS

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

1. Comply with the requirements of the VA Manual for Preparation and Issuance of Construction Solicitation and Contract Documents.
2. 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.
3. 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.

VII. GENERAL REQUIREMENTS (SPECIFICATION)

SECTION 01 00 00 GENERAL REQUIREMENTS

1.1 GENERAL INTENTION

- A. Contractor shall completely prepare site for building operations, including demolition and removal of existing structures, and furnish labor and materials and perform work for project 691-18-111WL, Replace OR Lights and Booms as required by this RFP.
- B. Visits to the site by Bidders may be made only by appointment with the Contracting Officer.
- C. All employees of general contractor and subcontractors shall comply with VA security management program and obtain permission of the VA police, be identified by project and employer, and restricted from unauthorized access.
- D. Prior to commencing work, general contractor shall provide proof that a OSHA certified "competent person" (CP) (29 CFR 1926.20(b)(2) will maintain a presence at the work site whenever the general or subcontractors are present.
- E. Training:
 - 1. All employees of general contractor or subcontractors shall have the 10-hour OSHA certified Construction Safety course. 30-hour OSHA certified construction safety for superintendent and project manager.
 - 2. Submit training records of all such employees for approval before the start of work.

1.2 STATEMENT OF BID ITEM(S)

- Main Bid: Please see above Scope of Work

1.3 SPECIFICATIONS AND DRAWINGS FOR CONTRACTOR

- A. Specifications and Drawings are to be developed and produced by the contractor as specified in the A/E Submission Instructions.

1.4 CONSTRUCTION SECURITY REQUIREMENTS

- A. Security Plan:
 - 1. The security plan defines both physical and administrative security procedures that will remain effective for the entire duration of the project.

2. The General Contractor is responsible for assuring that all sub-contractors working on the project and their employees also comply with these regulations.
- B. Security Procedures:
1. General Contractor's employees shall not enter the project site without appropriate badge. They may also be subject to inspection of their personal effects when entering or leaving the project site.
 2. For working outside the "regular hours" as defined in the contract, The General Contractor shall give 3 days notice to the Contracting Officer. This notice is separate from any notices required for utility shutdown described later in this section.
 3. No photography of VA premises is allowed without written permission of the Contracting Officer.
 4. VA reserves the right to close down or shut down the project site and order General Contractor's employees off the premises in the event of a national emergency. The General Contractor may return to the site only with the written approval of the Contracting Officer.
- C. Guards: Not required
- D. Key Control:
1. The General Contractor shall provide duplicate keys and lock combinations to the Project Engineer for the purpose of security inspections of every area of project including tool boxes and parked machines and take any emergency action.
 2. The General Contractor shall turn over all permanent lock cylinders to the VA locksmith for permanent installation.
- E. Document Control: not used
- F. Motor Vehicle Restrictions
1. Vehicle authorization request shall be required for any vehicle entering the site and such request shall be submitted 24 hours before the date and time of access. Access shall be restricted to picking up and dropping off materials and supplies.
 2. Separate permits shall be issued for General Contractor and its employees for parking in designated areas only.

1.5 FIRE SAFETY

- A. Applicable Publications: Publications listed below form part of this Article to extent referenced. Publications are referenced in text by basic designations only.

1. American Society for Testing and Materials (ASTM):
E84-2008.....Surface Burning Characteristics of
Building Materials
 2. National Fire Protection Association (NFPA):
10-2006.....Standard for Portable Fire Extinguishers
30-2007.....Flammable and Combustible Liquids Code
51B-2003.....Standard for Fire Prevention During
Welding, Cutting and Other Hot Work
70-2007.....National Electrical Code
241-2004.....Standard for Safeguarding Construction,
Alteration, and Demolition Operations
 3. Occupational Safety and Health Administration (OSHA):
29 CFR 1926.....Safety and Health Regulations for
Construction
- B. Fire Safety Plan: Establish and maintain a fire protection program in accordance with 29 CFR 1926. Prior to start of work, prepare a plan detailing project-specific fire safety measures, including periodic status reports, and submit to Project Engineer and Facility Safety Officer for review for compliance with contract requirements in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES Prior to any worker for the contractor or subcontractors beginning work, they shall undergo a safety briefing provided by the general contractor's competent person per OSHA requirements. This briefing shall include information on the construction limits, VAMC safety guidelines, means of egress, break areas, work hours, locations of restrooms, use of VAMC equipment, etc. Documentation shall be provided to the Project Engineer that individuals have undergone contractor's safety briefing.
- C. Site and Building Access: Maintain free and unobstructed access to facility emergency services and for fire, police and other emergency response forces in accordance with NFPA 241.
- D. Separate temporary facilities, such as trailers, storage sheds, and dumpsters, from existing buildings and new construction by distances in accordance with NFPA 241. For small facilities with less than 6 m (20 feet) exposing overall length, separate by 3m (10 feet).
- E. Temporary Construction Partitions:
1. Install and maintain temporary construction partitions to provide smoke-tight separations between construction areas and adjoining areas. Construct partitions of gypsum board or

- treated plywood (flame spread rating of 25 or less in accordance with ASTM E84) on both sides of fire retardant treated wood or metal steel studs. Extend the partitions through suspended ceilings to floor slab deck or roof. Seal joints and penetrations. At door openings, install Class C, ¾ hour fire/smoke rated doors with self-closing devices.
2. Install two-hour fire-rated temporary construction partitions as shown on drawings to maintain integrity of existing exit stair enclosures, exit passageways, fire-rated enclosures of hazardous areas, horizontal exits, smoke barriers, vertical shafts and openings enclosures.
 3. Close openings in smoke barriers and fire-rated construction to maintain fire ratings. Seal penetrations with listed through-penetration firestop materials in accordance with Section 07 84 00, FIRESTOPPING.
- F. Temporary Heating and Electrical: Install, use and maintain installations in accordance with 29 CFR 1926, NFPA 241 and NFPA 70.
- G. Means of Egress: Do not block exiting for occupied buildings, including paths from exits to roads. Minimize disruptions and coordinate with Project Engineer and facility Safety Officer.
- H. Egress Routes for Construction Workers: Maintain free and unobstructed egress. Inspect daily. Report findings and corrective actions weekly to Project Engineer and facility Safety Officer.
- I. Fire Extinguishers: Provide and maintain extinguishers in construction areas and temporary storage areas in accordance with 29 CFR 1926, NFPA 241 and NFPA 10.
- J. Flammable and Combustible Liquids: Store, dispense and use liquids in accordance with 29 CFR 1926, NFPA 241 and NFPA 30.
- L. Sprinklers: Not used
- M. Existing Fire Protection: Do not impair automatic sprinklers, smoke and heat detection, and fire alarm systems, except for portions immediately under construction, and temporarily for connections. Provide fire watch for impairments more than 4 hours in a 24-hour period. Request interruptions in accordance with Article, OPERATIONS AND STORAGE AREAS, and coordinate with Project Engineer and facility Safety Officer. All existing or temporary fire protection systems (fire alarms, sprinklers) located in construction areas shall be tested as coordinated with the medical center. Parameters for the testing and results of any tests

- performed shall be recorded by the medical center and copies provided to the Project Engineer.
- N. Smoke Detectors: Prevent accidental operation. Remove temporary covers at end of work operations each day. Coordinate with Project Engineer and facility Safety Officer.
 - O. Hot Work: Perform and safeguard hot work operations in accordance with NFPA 241 and NFPA 51B. Coordinate with Project Engineer. Obtain permits from facility Safety Officer at least __24__ hours in advance. Designate contractor's responsible project-site fire prevention program manager to permit hot work.
 - P. Fire Hazard Prevention and Safety Inspections: Inspect entire construction areas weekly. Coordinate with, and report findings and corrective actions weekly to Project Engineer and facility Safety Officer.
 - Q. Smoking: Smoking is prohibited in and adjacent to construction areas inside existing buildings and additions under construction. In separate and detached buildings under construction, smoking is prohibited except in designated smoking rest areas.
 - R. Dispose of waste and debris in accordance with NFPA 241. Remove from buildings daily.
 - S. Perform other construction, alteration and demolition operations in accordance with 29 CFR 1926.
 - T. Fines for violations of Fire Safety Requirements.
 - 1. Smoking: Smoking is prohibited in and adjacent to construction areas inside existing buildings and additions under construction. In separate and detached buildings under construction, smoking is prohibited except in designated smoking rest areas.
 - 2. Disposed of waste and debris in accordance with NFPA 241. Remove from buildings daily.
 - 3. Tripping, setting off, of fire alarms and /or flow switches, without proper notification is a violation fineable at the minimum of \$2,500 per offense plus expenses.
 - 4. Smoke detectors that were bagged, covered, or any way rendered inoperable during work shift must be made operable at the end of said work shift. This offense is fineable at the minimum of \$2,500 per offense plus expenses.
 - 5. Any false alarms that causes a visit by the fire department is fineable at the minimum of \$2,500 per offense plus expenses.
 - 6. Hot Work: The following offenses are a violation fineable at a minimum of \$2,500 per offense plus expenses: a) Failure to

obtain a hot work permit prior to work, b) Failure to maintain Fire Watch, as required during Hot Work, and c) Failure to remove smoke detector cover after said Hot Work is completed at the end of the work shift for the day, whichever is sooner.

7. Fines for Open Fire Doors: Fire doors at all times shall be kept closed, where required. These doors shall not be left open in any manner; they shall not be propped or tied open. Violations are fineable at no less than \$2,500 per violation plus expenses. These fines will be imposed due to contractor's fault, negligence or failure to comply with NFPA codes and VA Policies.

U. If required, submit documentation to the Project Engineer that personnel have been trained in the fire safety aspects of working in areas with impaired structural or compartmentalization features.

1.6 OPERATIONS AND STORAGE AREAS

A. The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

B. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

C. The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall

- repair or pay for the repair of any damaged curbs, sidewalks, or roads.
- D. Working space and space available for storing materials shall be as shown on the drawings. as determined by the project Engineer.
 - E. Workmen are subject to rules of Medical Center applicable to their conduct.
 - F. Execute work so as to interfere as little as possible with normal functioning of Medical Center as a whole, including operations of utility services, fire protection systems and any existing equipment, and with work being done by others. Use of equipment and tools that transmit vibrations and noises through the building structure, are not permitted in buildings that are occupied, during construction, jointly by patients or medical personnel, and Contractor's personnel, except as permitted by Project Engineer where required by limited working space.
 - 1. Do not store materials and equipment in other than assigned areas.
 - 2. Schedule delivery of materials and equipment to immediate construction working areas within buildings in use by Department of Veterans Affairs in quantities sufficient for not more than two work days. Provide unobstructed access to Medical Center areas required to remain in operation.
 - 3. Where access by Medical Center personnel to vacated portions of buildings is not required, storage of Contractor's materials and equipment will be permitted subject to fire and safety requirements.
 - F. Utilities Services: Where necessary to cut existing pipes, electrical wires, conduits, cables, etc., of utility services, or of fire protection systems or communications systems (except telephone), they shall be cut and capped at suitable places where shown; or, in absence of such indication, where directed by Project Engineer. All such actions shall be coordinated with the Utility Company involved:
 - G. Phasing: To insure such executions, Contractor shall furnish the Project Engineer with a schedule of approximate phasing dates on which the Contractor intends to accomplish work in each specific area of site, building or portion thereof. In addition, Contractor shall notify the Project Engineer one week in advance of the proposed date of starting work in each specific area of site, building or portion thereof. Arrange such phasing dates to insure

accomplishment of this work in successive phases as stated in "Period of Performance" under the Scope of Work.

- H. Building(s) No.(s) __500__ will be occupied during performance of work but immediate areas of alterations will be vacated.
- I. Construction Fence: Before construction operations begin, Contractor shall provide a chain link construction fence, 2.1m (seven feet) minimum height, around the construction area indicated on the drawings. Provide gates as required for access with necessary hardware, including hasps and padlocks. Fasten fence fabric to terminal posts with tension bands and to line posts and top and bottom rails with tie wires spaced at maximum 375mm (15 inches). Bottom of fences shall extend to 25mm (one inch) above grade. Remove the fence when directed by Project Engineer.
- J. When a building is turned over to Contractor, Contractor shall accept entire responsibility therefore.
 - 1. Contractor shall maintain a minimum temperature of 4 degrees C (40 degrees F) at all times, except as otherwise specified.
 - 2. Contractor shall maintain in operating condition existing fire protection and alarm equipment. In connection with fire alarm equipment, Contractor shall make arrangements for pre-inspection of site with Fire Department or Company (Department of Veterans Affairs or municipal) whichever will be required to respond to an alarm from Contractor's employee or watchman.
- K. Utilities Services: Maintain existing utility services for Medical Center at all times. Provide temporary facilities, labor, materials, equipment, connections, and utilities to assure uninterrupted services. Where necessary to cut existing water, steam, gases, sewer or air pipes, or conduits, wires, cables, etc. of utility services or of fire protection systems and communications systems (including telephone), they shall be cut and capped at suitable places where shown; or, in absence of such indication, where directed by Project Engineer.
 - 1. No utility service such as water, gas, steam, sewers or electricity, or fire protection systems and communications systems may be interrupted without prior approval of Project Engineer. Electrical work shall be accomplished with all affected circuits or equipment de-energized. When an electrical outage cannot be accomplished, work on any energized circuits

or equipment shall not commence without the Medical Center Director's prior knowledge and written approval

2. Contractor shall submit a request to interrupt any such services to Project Engineer, in writing, 48 hours in advance of proposed interruption. Request shall state reason, date, exact time of, and approximate duration of such interruption.
 3. Contractor will be advised (in writing) of approval of request, or of which other date and/or time such interruption will cause least inconvenience to operations of Medical Center. Interruption time approved by Medical Center may occur at other than Contractor's normal working hours.
 4. Major interruptions of any system must be requested, in writing, at least 15 calendar days prior to the desired time and shall be performed as directed by the Project Engineer.
 5. In case of a contract construction emergency, service will be interrupted on approval of Project Engineer. Such approval will be confirmed in writing as soon as practical.
 6. Whenever it is required that a connection fee be paid to a public utility provider for new permanent service to the construction project, for such items as water, sewer, electricity, gas or steam, payment of such fee shall be the responsibility of the Government and not the Contractor.
- L. Abandoned Lines: All service lines such as wires, cables, conduits, ducts, pipes and the like, and their hangers or supports, which are to be abandoned but are not required to be entirely removed, shall be sealed, capped or plugged. The lines shall not be capped in finished areas, but shall be removed and sealed, capped or plugged in ceilings, within furred spaces, in unfinished areas, or within walls or partitions; so that they are completely behind the finished surfaces.
- M. To minimize interference of construction activities with flow of Medical Center traffic, comply with the following:
1. Keep roads, walks and entrances to grounds, to parking and to occupied areas of buildings clear of construction materials, debris and standing construction equipment and vehicles. Wherever excavation for new utility lines cross existing roads, at least one lane must be open to traffic at all times.
 2. Method and scheduling of required cutting, altering and removal of existing roads, walks and entrances must be approved by the Project Engineer.

- N. Coordinate the work for this contract with other construction operations as directed by Project Engineer. This includes the scheduling of traffic and the use of roadways, as specified in Article, USE OF ROADWAYS.
- O. Coordination of Construction with Cemetery Director: Not used

1.7 ALTERATIONS

- A. Survey: Before any work is started, the Contractor shall make a thorough survey with the Project Engineer and a representative of VA Supply Service, of areas of buildings in which alterations occur and areas which are anticipated routes of access, and furnish a report, signed by all three to the Contracting Officer. This report shall list by rooms and spaces:
 - 1. Not used
 - 2. Existence and conditions of items such as plumbing fixtures and accessories, electrical fixtures, equipment, venetian blinds, shades, etc., required by drawings to be either reused or relocated, or both.
 - 3. Shall note any discrepancies between drawings and existing conditions at site.
 - 4. Shall designate areas for working space, materials storage and routes of access to areas within buildings where alterations occur and which have been agreed upon by Contractor and Project Engineer.
- B. Any items required by drawings to be either reused or relocated or both, found during this survey to be nonexistent, or in opinion of project Engineer and/or Supply Representative, to be in such condition that their use is impossible or impractical, shall be furnished and/or replaced by Contractor with new items in accordance with specifications which will be furnished by Government. Provided the contract work is changed by reason of this subparagraph B, the contract will be modified accordingly, under provisions of clause entitled "DIFFERING SITE CONDITIONS" (FAR 52.236-2) and "CHANGES" (FAR 52.243-4 and VAAR 852.236-88).
- C. Re-Survey: Thirty days before expected partial or final inspection date, the Contractor and Project Engineer together shall make a thorough re-survey of the areas of buildings involved. They shall furnish a report on conditions then existing, of resilient flooring, doors, windows, walls and other surfaces as compared with conditions of same as noted in first condition survey report:
 - 1. Re-survey report shall also list any damage caused by Contractor to such flooring and other surfaces, despite

protection measures; and, will form basis for determining extent of repair work required of Contractor to restore damage caused by Contractor's workmen in executing work of this contract.

- D. Protection: Provide the following protective measures:
1. Wherever existing roof surfaces are disturbed they shall be protected against water infiltration. In case of leaks, they shall be repaired immediately upon discovery.
 2. Temporary protection against damage for portions of existing structures and grounds where work is to be done, materials handled and equipment moved and/or relocated.
 3. Protection of interior of existing structures at all times, from damage, dust and weather inclemency. Wherever work is performed, floor surfaces that are to remain in place shall be adequately protected prior to starting work, and this protection shall be maintained intact until all work in the area is completed.

1.8 INFECTION PREVENTION MEASURES

- A. Implement the requirements of VAMC's Infection Control Risk Assessment (ICRA) team. ICRA Group may monitor dust in the vicinity of the construction work and require the Contractor to take corrective action immediately if the safe levels are exceeded.
- B. Establish and maintain a dust control program as part of the contractor's infection preventive measures in accordance with the guidelines provided by ICRA Group as specified here. Prior to start of work, prepare a plan detailing project-specific dust protection measures, including periodic status reports, and submit to Project Engineer and Facility ICRA team for review for compliance with contract requirements.
1. All personnel involved in the construction or renovation activity shall be educated and trained in infection prevention measures established by the medical center.
- C. Medical center Infection Control personnel shall monitor for airborne disease (e.g. aspergillosis) as appropriate during construction. A baseline of conditions may be established by the medical center prior to the start of work and periodically during the construction stage to determine impact of construction activities on indoor air quality. In addition:

1. The PE and VAMC Infection Control personnel shall review pressure differential monitoring documentation to verify that pressure differentials in the construction zone and in the patient-care rooms are appropriate for their settings. The requirement for negative air pressure in the construction zone shall depend on the location and type of activity. Upon notification, the contractor shall implement corrective measures to restore proper pressure differentials as needed.
 2. In case of any problem, the medical center, along with assistance from the contractor, shall conduct an environmental assessment to find and eliminate the source.
- D. In general, following preventive measures shall be adopted during construction to keep down dust and prevent mold.
1. Dampen debris to keep down dust and provide temporary construction partitions in existing structures where directed by Project Engineer. Blank off ducts and diffusers to prevent circulation of dust into occupied areas during construction.
 2. Do not perform dust producing tasks within occupied areas without the approval of the Project Engineer. For construction in any areas that will remain jointly occupied by the medical Center and Contractor's workers, the Contractor shall:
 - a. Provide dust proof two-hour fire-rated temporary drywall construction barriers to completely separate construction from the operational areas of the hospital in order to contain dirt debris and dust. Barriers shall be sealed and made presentable on hospital occupied side. Install a self-closing rated door in a metal frame, commensurate with the partition, to allow worker access. Maintain negative air at all times. A fire retardant polystyrene, 6-mil thick or greater plastic barrier meeting local fire codes may be used where dust control is the only hazard, and an agreement is reached with the Project Engineer and Medical Center.
 - b. HEPA filtration is required where the exhaust dust may reenter the breathing zone. Contractor shall verify that construction exhaust to exterior is not reintroduced to the medical center through intake vents, or building openings. Install HEPA (High Efficiency Particulate Accumulator) filter vacuum system rated at 95% capture of 0.3 microns including pollen, mold spores and dust particles. Insure continuous negative air pressures occurring within the work area. HEPA filters should have ASHRAE 85 or other prefilter

to extend the useful life of the HEPA. Provide both primary and secondary filtrations units. Exhaust hoses shall be heavy duty, flexible steel reinforced and exhausted so that dust is not reintroduced to the medical center.

- c. Adhesive Walk-off/Carpet Walk-off Mats, minimum 600mm x 900mm (24" x 36"), shall be used at all interior transitions from the construction area to occupied medical center area. These mats shall be changed as often as required to maintain clean work areas directly outside construction area at all times.
- d. Vacuum and wet mop all transition areas from construction to the occupied medical center at the end of each workday. Vacuum shall utilize HEPA filtration. Maintain surrounding area frequently. Remove debris as they are created. Transport these outside the construction area in containers with tightly fitting lids.
- e. The contractor shall not haul debris through patient-care areas without prior approval of the Project Engineer and the Medical Center. When, approved, debris shall be hauled in enclosed dust proof containers or wrapped in plastic and sealed with duct tape. No sharp objects should be allowed to cut through the plastic. Wipe down the exterior of the containers with a damp rag to remove dust. All equipment, tools, material, etc. transported through occupied areas shall be made free from dust and moisture by vacuuming and wipe down.
- f. Using a HEPA vacuum, clean inside the barrier and vacuum ceiling tile prior to replacement. Any ceiling access panels opened for investigation beyond sealed areas shall be sealed immediately when unattended.
- g. There shall be no standing water during construction. This includes water in equipment drip pans and open containers within the construction areas. All accidental spills must be cleaned up and dried within 12 hours. Remove and dispose of porous materials that remain damp for more than 72 hours.
- h. At completion, remove construction barriers and ceiling protection carefully, outside of normal work hours. Vacuum and clean all surfaces free of dust after the removal.

E. Final Cleanup:

1. Upon completion of project, or as work progresses, remove all construction debris from above ceiling, vertical shafts and utility chases that have been part of the construction.
2. Perform HEPA vacuum cleaning of all surfaces in the construction area. This includes walls, ceilings, cabinets, furniture (built-in or free standing), partitions, flooring, etc.
3. All new air ducts shall be cleaned prior to final inspection.

1.9 DISPOSAL AND RETENTION

- A. Materials and equipment accruing from work removed and from demolition of buildings or structures, or parts thereof, shall be disposed of as follows:
 1. Reserved items which are to remain property of the Government are identified by attached tags noted on drawings or in specifications as items to be stored. Items that remain property of the Government shall be removed or dislodged from present locations in such a manner as to prevent damage which would be detrimental to re-installation and reuse. Store such items where directed by Project Engineer.
 2. Items not reserved shall become property of the Contractor and be removed by Contractor from Medical Center.
 3. Items of portable equipment and furnishings located in rooms and spaces in which work is to be done under this contract shall remain the property of the Government. When rooms and spaces are vacated by the Department of Veterans Affairs during the alteration period, such items which are NOT required by drawings and specifications to be either relocated or reused will be removed by the Government in advance of work to avoid interfering with Contractor's operation.

1.10 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS

- A. The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or

branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

- B. The Contractor shall protect from damage all existing improvements and utilities at or near the work site and on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

(FAR 52.236-9)

- C. Refer to Articles, "Alterations", "Restoration", and "Operations and Storage Areas" for additional instructions concerning repair of damage to structures and site improvements.
- D. Refer to FAR clause 52.236-7, "Permits and Responsibilities," which is included in General Conditions. A National Pollutant Discharge Elimination System (NPDES) permit is required for this project. The Contractor is considered an "operator" under the permit and has extensive responsibility for compliance with permit requirements. VA will make the permit application available at the (appropriate medical center) office. The apparent low bidder, contractor and affected subcontractors shall furnish all information and certifications that are required to comply with the permit process and permit requirements. Many of the permit requirements will be satisfied by completing construction as shown and specified. Some requirements involve the Contractor's method of operations and operations planning and the Contractor is responsible for employing best management practices. The affected activities often include, but are not limited to the following:
- Designating areas for equipment maintenance and repair;
 - Providing waste receptacles at convenient locations and provide regular collection of wastes;
 - Locating equipment wash down areas on site, and provide appropriate control of wash-waters;
 - Providing protected storage areas for chemicals, paints, solvents, fertilizers, and other potentially toxic materials;
 - and
 - Providing adequately maintained sanitary facilities.

1.11 RESTORATION

- A. Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Except as otherwise shown or specified, do not cut, alter or remove any structural work, and do not disturb any ducts, plumbing, steam, gas, or electric work without approval of the Project Engineer. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to the Project Engineer before it is disturbed. Materials and workmanship used in restoring work, shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
- B. Upon completion of contract, deliver work complete and undamaged. Existing work (walls, ceilings, partitions, floors, mechanical and electrical work, lawns, paving, roads, walks, etc.) disturbed or removed as a result of performing required new work, shall be patched, repaired, reinstalled, or replaced with new work, and refinished and left in as good condition as existed before commencing work.
- C. At Contractor's own expense, Contractor shall immediately restore to service and repair any damage caused by Contractor's workmen to existing piping and conduits, wires, cables, etc., of utility services or of fire protection systems and communications systems (including telephone) which are indicated on drawings and which are not scheduled for discontinuance or abandonment.
- D. Expense of repairs to such utilities and systems not shown on drawings or locations of which are unknown will be covered by adjustment to contract time and price in accordance with clause entitled "CHANGES" (FAR 52.243-4 and VAAR 852.236-88) and "DIFFERING SITE CONDITIONS" (FAR 52.236-2) of Section 00 72 00, GENERAL CONDITIONS.

1.12 PHYSICAL DATA: NOT USED

1.13 PROFESSIONAL SURVEYING SERVICES: NOT USED

1.14 LAYOUT OF WORK

- A. The Contractor shall lay out the work from Government established base lines and bench marks, indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at Contractor's own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and

grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through Contractor's negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

(FAR 52.236-17)

- B. Following completion of general mass excavation and before any other permanent work is performed, establish and plainly mark (through use of appropriate batter boards or other means) sufficient additional survey control points or system of points as may be necessary to assure proper alignment, orientation, and grade of all major features of work. Survey shall include, but not be limited to, location of lines and grades of footings, exterior walls, center lines of columns in both directions, major utilities and elevations of floor slabs:
1. Such additional survey control points or system of points thus established shall be checked and certified by a registered land surveyor or registered civil engineer. Furnish such certification to the Project Engineer before any work (such as footings, floor slabs, columns, walls, utilities and other major controlling features) is placed.
- C. During progress of work, and particularly as work progresses from floor to floor, Contractor shall have line grades and plumbness of all major form work checked and certified by a registered land surveyor or registered civil engineer as meeting requirements of contract drawings. Furnish such certification to the Project Engineer before any major items of concrete work are placed. In addition, Contractor shall also furnish to the Project Engineer certificates from a registered land surveyor or registered civil engineer that the following work is complete in every respect as required by contract drawings.
1. Lines of each building and/or addition.
 2. Elevations of bottoms of footings and tops of floors of each building and/or addition.
 3. Lines and elevations of sewers and of all outside distribution systems.
 5. Lines of elevations of all swales and interment areas.
 6. Lines and elevations of roads, streets, and parking lots.

- D. Whenever changes from contract drawings are made in line or grading requiring certificates, record such changes on a reproducible drawing bearing the registered land surveyor or registered civil engineer seal, and forward these drawings upon completion of work to Project Engineer.
- E. The Contractor shall perform the surveying and layout work of this and other articles and specifications in accordance with the provisions of Article "Professional Surveying Services".

1.15 AS-BUILT DRAWINGS

- A. The contractor shall maintain two full size sets of as-built drawings which will be kept current during construction of the project, to include all contract changes, modifications and clarifications.
- B. All variations shall be shown in the same general detail as used in the contract drawings. To insure compliance, as-built drawings shall be made available for the Project Engineer's review, as often as requested.
- C. Contractor shall deliver two approved completed sets of as-built drawings to the Project Engineer within 15 calendar days after each completed phase and after the acceptance of the project by the Project Engineer.
- D. Paragraphs A, B, & C shall also apply to all shop drawings.

1.16 USE OF ROADWAYS

- A. For hauling, use only established public roads and roads on Medical Center property and, when authorized by the Project Engineer, such temporary roads which are necessary in the performance of contract work. Temporary roads shall be constructed by the Contractor at Contractor's expense. When necessary to cross curbing, sidewalks, or similar construction, they must be protected by well-constructed bridges.
- B. When new permanent roads are to be a part of this contract, Contractor may construct them immediately for use to facilitate building operations. These roads may be used by all who have business thereon within zone of building operations.
- C. When certain buildings (or parts of certain buildings) are required to be completed in advance of general date of completion, all roads leading thereto must be completed and available for use at time set for completion of such buildings or parts thereof.

1.17 TEMPORARY USE OF MECHANICAL AND ELECTRICAL EQUIPMENT

- A. Use of new installed mechanical and electrical equipment to provide heat, ventilation, plumbing, light and power will be permitted subject to compliance with the following provisions:
1. Permission to use each unit or system must be given by Project Engineer. If the equipment is not installed and maintained in accordance with the following provisions, the Project Engineer will withdraw permission for use of the equipment.
 2. Electrical installations used by the equipment shall be completed in accordance with the drawings and specifications to prevent damage to the equipment and the electrical systems, i.e. transformers, relays, circuit breakers, fuses, conductors, motor controllers and their overload elements shall be properly sized, coordinated and adjusted. Voltage supplied to each item of equipment shall be verified to be correct and it shall be determined that motors are not overloaded. The electrical equipment shall be thoroughly cleaned before using it and again immediately before final inspection including vacuum cleaning and wiping clean interior and exterior surfaces.
 3. Units shall be properly lubricated, balanced, and aligned. Vibrations must be eliminated.
 4. Automatic temperature control systems for preheat coils shall function properly and all safety controls shall function to prevent coil freeze-up damage.
 5. The air filtering system utilized shall be that which is designed for the system when complete, and all filter elements shall be replaced at completion of construction and prior to testing and balancing of system.
 6. All components of heat production and distribution system, metering equipment, condensate returns, and other auxiliary facilities used in temporary service shall be cleaned prior to use; maintained to prevent corrosion internally and externally during use; and cleaned, maintained and inspected prior to acceptance by the Government.
- B. Prior to final inspection, the equipment or parts used which show wear and tear beyond normal, shall be replaced with identical replacements, at no additional cost to the Government.
- C. This paragraph shall not reduce the requirements of the mechanical and electrical specifications sections.

1.18 TEMPORARY USE OF EXISTING ELEVATORS

- A. Contractor will be allowed the use of existing service elevators only. Outside type hoist shall be used by Contractor for transporting materials and equipment.

1.19 TEMPORARY USE OF NEW ELEVATORS: NOT USED

1.20 TEMPORARY TOILETS

- A. Contractor may have for use of Contractor's workmen, such toilet accommodations as may be assigned to Contractor by Medical Center. Contractor shall keep such places clean and be responsible for any damage done thereto by Contractor's workmen. Failure to maintain satisfactory condition in toilets will deprive Contractor of the privilege to use such toilets.

1.21 AVAILABILITY AND USE OF UTILITY SERVICES

- A. The Government shall make all reasonably required amounts of utilities available to the Contractor from existing outlets and supplies, as specified in the contract. The amount to be paid by the Contractor for chargeable electrical services shall be the prevailing rates charged to the Government. The Contractor shall carefully conserve any utilities furnished without charge.
- B. The Contractor, at Contractor's expense and in a workmanlike manner satisfactory to the Contracting Officer, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of electricity used for the purpose of determining charges. Before final acceptance of the work by the Government, the Contractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.
- C. Contractor shall install meters at Contractor's expense and furnish the Medical Center a monthly record of the Contractor's usage of electricity as hereinafter specified.
- D. Heat: Furnish temporary heat necessary to prevent injury to work and materials through dampness and cold. Use of open salamanders or any temporary heating devices which may be fire hazards or may smoke and damage finished work, will not be permitted. Maintain minimum temperatures as specified for various materials:
- E. Electricity (for Construction and Testing): Furnish all temporary electric services.
 - 1. Obtain electricity by connecting to the Medical Center electrical distribution system. The Contractor shall meter and pay for electricity required for electric cranes and hoisting

devices, electrical welding devices and any electrical heating devices providing temporary heat. Electricity for all other uses is available at no cost to the Contractor.

- F. Water (for Construction and Testing): Furnish temporary water service.
 - 1. Obtain water by connecting to the Medical Center water distribution system. Provide reduced pressure backflow preventer at each connection. Water is available at no cost to the Contractor.
 - 2. Maintain connections, pipe, fittings and fixtures and conserve water-use so none is wasted. Failure to stop leakage or other wastes will be cause for revocation (at Project Engineer's discretion) of use of water from Medical Center's system.
- G. Steam: Furnish steam system for testing required in various sections of specifications.
 - 1. Obtain steam for testing by connecting to the Medical Center steam distribution system. Steam is available at no cost to the Contractor.
 - 2. Maintain connections, pipe, fittings and fixtures and conserve steam-use so none is wasted. Failure to stop leakage or other waste will be cause for revocation (at Project Engineer's discretion), of use of steam from the Medical Center's system.
- H. Fuel: Natural and LP gas and burner fuel oil required for boiler cleaning, normal initial boiler-burner setup and adjusting, and for performing the specified boiler tests will be furnished by the Government. Fuel required for prolonged boiler-burner setup, adjustments, or modifications due to improper design or operation of boiler, burner, or control devices shall be furnished by the Contractor at Contractor's expense.

1.22 NEW TELEPHONE AND IT EQUIPMENT

The contractor shall provide wiring, termination and jack outlets per VA Master Specifications. The contractor shall coordinate with the work of installation of telephone equipment by others. This work shall be completed before the building is turned over to VA.

1.23 TESTS

- A. Pre-test mechanical and electrical equipment and systems and make corrections required for proper operation of such systems before requesting final tests. Final test will not be conducted unless pre-tested.

- B. Conduct final tests required in various sections of specifications in presence of an authorized representative of the Contracting Officer. Contractor shall furnish all labor, materials, equipment, instruments, and forms, to conduct and record such tests.
- C. Mechanical and electrical systems shall be balanced, controlled and coordinated. A system is defined as the entire complex which must be coordinated to work together during normal operation to produce results for which the system is designed. For example, air conditioning supply air is only one part of entire system which provides comfort conditions for a building. Other related components are return air, exhaust air, steam, chilled water, refrigerant, hot water, controls and electricity, etc. Another example of a complex which involves several components of different disciplines is a boiler installation. Efficient and acceptable boiler operation depends upon the coordination and proper operation of fuel, combustion air, controls, steam, feedwater, condensate and other related components.
- D. All related components as defined above shall be functioning when any system component is tested. Tests shall be completed within a reasonably short period of time during which operating and environmental conditions remain reasonably constant.
- E. Individual test result of any component, where required, will only be accepted when submitted with the test results of related components and of the entire system.

1.24 INSTRUCTIONS

- A. Contractor shall furnish Maintenance and Operating manuals and verbal instructions when required by the various sections of the specifications and as hereinafter specified.
- B. Manuals: Maintenance and operating manuals (four copies each) for each separate piece of equipment shall be delivered to the Project Engineer coincidental with the delivery of the equipment to the job site. Manuals shall be complete, detailed guides for the maintenance and operation of equipment. They shall include complete information necessary for starting, adjusting, maintaining in continuous operation for long periods of time and dismantling and reassembling of the complete units and sub-assembly components. Manuals shall include an index covering all component parts clearly cross-referenced to diagrams and illustrations. Illustrations shall include "exploded" views showing and identifying each separate item. Emphasis shall be placed on the use of special tools and instruments. The function

of each piece of equipment, component, accessory and control shall be clearly and thoroughly explained. All necessary precautions for the operation of the equipment and the reason for each precaution shall be clearly set forth. Manuals must reference the exact model, style and size of the piece of equipment and system being furnished. Manuals referencing equipment similar to but of a different model, style, and size than that furnished will not be accepted.

- C. Instructions: Contractor shall provide qualified, factory-trained manufacturers' representatives to give detailed instructions to assigned Department of Veterans Affairs personnel in the operation and complete maintenance for each piece of equipment. All such training will be at the job site. These requirements are more specifically detailed in the various technical sections. Instructions for different items of equipment that are component parts of a complete system, shall be given in an integrated, progressive manner. All instructors for every piece of component equipment in a system shall be available until instructions for all items included in the system have been completed. This is to assure proper instruction in the operation of inter-related systems. All instruction periods shall be at such times as scheduled by the Project Engineer and shall be considered concluded only when the Project Engineer is satisfied in regard to complete and thorough coverage. The Department of Veterans Affairs reserves the right to request the removal of, and substitution for, any instructor who, in the opinion of the Project Engineer, does not demonstrate sufficient qualifications in accordance with requirements for instructors above.

1.25 GOVERNMENT-FURNISHED PROPERTY: NOT USED

1.26 RELOCATED EQUIPMENT AND ITEMS

- A. Contractor shall disconnect, dismantle as necessary, remove and reinstall in new location, all existing equipment and items shown to be relocated by the Contractor.
- B. Perform relocation of such equipment or items at such times and in such a manner as directed by the Project Engineer.
- C. Suitably cap existing service lines, such as steam, condensate return, water, drain, gas, air, vacuum and/or electrical, whenever such lines are disconnected from equipment to be relocated. Remove abandoned lines in finished areas and cap as specified herein before under paragraph "Abandoned Lines".

- D. Provide all mechanical and electrical service connections, fittings, fastenings and any other materials necessary for assembly and installation of relocated equipment; and leave such equipment in proper operating condition.
- E. Contractor shall employ services of an installation engineer, who is an authorized representative of the manufacturer of this equipment to supervise assembly and installation
- F. All service lines such as noted above for relocated equipment shall be in place at point of relocation ready for use before any existing equipment is disconnected. Make relocated existing equipment ready for operation or use immediately after reinstallation.

1.27 STORAGE SPACE FOR DEPARTMENT OF VA EQUIPMENT: NOT USED

1.28 HISTORIC PRESERVATION

Where the Contractor or any of the Contractor's employees, prior to, or during the construction work, are advised of or discover any possible archeological, historical and/or cultural resources, the Contractor shall immediately notify the Project Engineer verbally, and then with a written follow up.

- - - E N D - - -

VIII. PROJECT SCHEDULES

SECTION 01 32 16.17
PROJECT SCHEDULES
(SMALL PROJECTS - DESIGN/BUILD)

PART 1- GENERAL

1.1 DESCRIPTION:

- A. The Contractor shall develop a Critical Path Method (CPM) plan and schedule demonstrating fulfillment of the contract requirements (Project Schedule), and shall keep the Project Schedule up-to-date in accordance with the requirements of this section and shall utilize the plan for scheduling, coordinating and monitoring work under this contract (including all activities of subcontractors, equipment vendors and suppliers). Conventional Critical Path Method (CPM) technique shall be utilized to satisfy both time and cost applications.

1.2 CONTRACTOR'S REPRESENTATIVE:

- A. The Contractor shall designate an authorized representative responsible for the Project Schedule including preparation, review and progress reporting with and to the Contracting Officer's Representative (COR).
- B. The Contractor's representative shall have direct project control and complete authority to act on behalf of the Contractor in fulfilling the requirements of this specification section.
- C. The Contractor's representative shall have the option of developing the project schedule within their organization or to engage the services of an outside consultant. If an outside scheduling consultant is utilized, Section 1.3 of this specification will apply.

1.3 CONTRACTOR'S CONSULTANT:

- A. The Contractor shall submit a qualification proposal to the COR, within 10 days of bid acceptance. The qualification proposal shall include:
1. The name and address of the proposed consultant.
 2. Information to show that the proposed consultant has the qualifications to meet the requirements specified in the preceding paragraph.

3. A representative sample of prior construction projects, which the proposed consultant has performed complete project scheduling services. These representative samples shall be of similar size and scope.
- B. The Contracting Officer has the right to approve or disapprove the proposed consultant, and will notify the Contractor of the VA decision within seven calendar days from receipt of the qualification proposal. In case of disapproval, the Contractor shall resubmit another consultant within 10 calendar days for renewed consideration. The Contractor shall have their scheduling consultant approved prior to submitting any schedule for approval.

1.4 COMPUTER PRODUCED SCHEDULES

- A. The contractor shall provide monthly, to the Department of Veterans Affairs (VA), all computer-produced time/cost schedules and reports generated from monthly project updates. This monthly computer service will include: three copies of up to five different reports (inclusive of all pages) available within the user defined reports of the scheduling software approved by the Contracting Officer; a hard copy listing of all project schedule changes, and associated data, made at the update and an electronic file of this data; and the resulting monthly updated schedule in PDM format. These must be submitted with and substantively support the contractor's monthly payment request and the signed look ahead report. The COTR shall identify the five different report formats that the contractor shall provide.
- B. The contractor shall be responsible for the correctness and timeliness of the computer-produced reports. The Contractor shall also responsible for the accurate and timely submittal of the updated project schedule and all CPM data necessary to produce the computer reports and payment request that is specified.
- C. The VA will report errors in computer-produced reports to the Contractor's representative within ten calendar days from receipt of reports. The Contractor shall reprocess the computer-produced reports and associated diskette(s), when requested by the Contracting Officer's representative, to correct errors which affect the payment and schedule for the project.

1.5 THE INTERIM AND FINAL PROJECT SCHEDULE SUBMITTAL

- A. Interim Schedule Submittal: Within 21 calendar days after receipt of Notice to Proceed, the Contractor shall submit for the

Contracting Officer's review; three blue line copies of the interim schedule on sheets of paper 765 x 1070 mm (30 x 42 inches) and an electronic file in the previously approved CPM schedule program. Each activity/event on the computer-produced schedule shall contain as a minimum, but not limited to, activity/event ID, activity/event description, duration, budget amount, early start date, early finish date, late start date, late finish date and total float. Work activity/event relationships shall be restricted to finish-to-start and start-to-start without lead or lag constraints. Activity/event date constraints, not required by the contract, will not be accepted unless submitted to and approved by the Contracting Officer. The contractor shall make a separate written detailed request to the Contracting Officer identifying these date constraints and secure the Contracting Officer's written approval before incorporating them into the Project Schedule. The Contracting Officer's separate approval of the interim schedule shall not excuse the contractor of this requirement. Logic events (non-work) will be permitted where necessary to reflect proper logic among work events, but must have zero duration. The complete working interim Project Schedule shall reflect the Contractor's approach to scheduling the complete project and shall include at a minimum, the following activities:

1. All phasing described in Section 01 00 00, GENERAL REQUIREMENTS-OPERATIONS AND STORAGE AREAS- Paragraph "Phasing"
2. Procurement- Submittals, review and approvals, fabrication and delivery, of all key and long lead time procurement items.
3. Design- All design submissions listed in the RFP solicitation, including the specified meeting and review activities.
4. Detailed design and construction activities for the first 120 calendar days after Notice to Proceed.
5. Summary activities which are necessary (and are not included above) to properly show:
 - a. The approach to scheduling the remaining work. The work for each major trade must be represented by at least one summary activity, so that the work cumulatively shows the entire project schedule.
 - b. Summary activities shall have the trade code of SUM

B. The interim schedule shall describe the activities to be accomplished and their interdependencies. All work activities (including design), other than procurement activities, shall be cost loaded as specified and will be the basis for progress

- payments during the period prior to acceptance of the schedule. The interim schedule in its original form shall contain no contract changes or delays which may have been incurred during the interim schedule development period and shall reflect the Contractors schedule as submitted with his RFP solicitation package, or as negotiated prior to Notice to Proceed. All CPM data supporting any time extension requests, in accordance with Article ADJUSTMENT OF CONTRACT COMPLETION, will be derived from the approved final schedule.
- C. Final Diagram Submittal: Within 45 calendar days prior to the start of construction, the Contractor shall submit for the Contracting Officer's review; three blue line copies of the interim schedule on sheets of paper 765 x 1070 mm (30 x 42 inches) and an electronic file in the previously approved CPM schedule program. The submittal shall also include three copies of a computer-produced activity/event ID schedule showing project duration; phase completion dates; and other data, including event cost. Each activity/event on the computer-produced schedule shall contain as a minimum, but not limited to, activity/event ID, activity/event description, duration, budget amount, early start date, early finish date, late start date, late finish date and total float. Work activity/event relationships shall be restricted to finish-to-start or start-to-start without lead or lag constraints. Activity/event date constraints, not required by the contract, will not be accepted unless submitted to and approved by the Contracting Officer. The contractor shall make a separate written detailed request to the Contracting Officer identifying these date constraints and secure the Contracting Officer's written approval before incorporating them into the network diagram. The Contracting Officer's separate approval of the Project Schedule shall not excuse the contractor of this requirement. Logic events (non-work) will be permitted where necessary to reflect proper logic among work events, but must have zero duration. The complete working schedule shall reflect the Contractor's approach to scheduling the complete project. The final Project Schedule in its original form shall contain no contract changes or delays which may have been incurred during the final schedule development period and shall reflect the Contractors as bid schedule. These changes/delays shall be entered at the first update after the final Project Schedule has been approved. The Contractor should provide their requests for time

and supporting time extension analysis for contract time as a result of contract changes/delays, after this update, and in accordance with Article, ADJUSTMENT OF CONTRACT COMPLETION.

- D. Within 30 calendar days after receipt of the complete project interim Project Schedule and the complete final Project Schedule, the Contracting Officer or his representative, will do one or both of the following:
 - 1. Notify the Contractor concerning his actions, opinions, and objections.
 - 2. A meeting with the Contractor at or near the job site for joint review, correction or adjustment of the proposed plan will be scheduled if required. Within 14 calendar days after the joint review, the Contractor shall revise and shall submit three blue line copies of the revised Project Schedule, three copies of the revised computer-produced activity/event ID schedule and a revised electronic file as specified by the Contracting Officer. The revised submission will be reviewed by the Contracting Officer and, if found to be as previously agreed upon, will be approved.
- E. The approved baseline schedule and the computer-produced schedule(s) generated there from shall constitute the approved baseline schedule until subsequently revised in accordance with the requirements of this section.

1.6 WORK ACTIVITY/EVENT COST DATA

- A. The Contractor shall cost load all work activities/events except procurement activities. The cumulative amount of all cost loaded work activities/events (including alternates) shall equal the total contract price. Prorate overhead, profit and general conditions on all work activities/events for the entire project length. The contractor shall generate from this information cash flow curves indicating graphically the total percentage of work activity/event dollar value scheduled to be in place on early finish, late finish. These cash flow curves will be used by the Contracting Officer to assist him in determining approval or disapproval of the cost loading. Negative work activity/event cost data will not be acceptable, except on VA issued contract changes.
- B. The Contractor shall cost load work activities/events for guarantee period services, test, balance and adjust various systems in accordance with the provisions in Article, FAR 52.232 - 5 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS) and VAAR 852.236 - 83 (PAYMENT UNDER FIXED-PRICE CONSTRUCTION CONTRACTS).

- C. In accordance with FAR 52.236 - 1 (PERFORMANCE OF WORK BY THE CONTRACTOR) and VAAR 852.236 - 72 (PERFORMANCE OF WORK BY THE CONTRACTOR), the Contractor shall submit, simultaneously with the cost per work activity/event of the construction schedule required by this Section, a responsibility code for all activities/events of the project for which the Contractor's forces will perform the work.
- D. The Contractor shall cost load work activities/events for all BID ITEMS including ASBESTOS ABATEMENT. The sum of each BID ITEM work shall equal the value of the bid item in the Contractors' bid.

1.7 PROJECT SCHEDULE REQUIREMENTS

- A. Show on the project schedule the sequence of work activities/events required for complete performance of all items of work. The Contractor Shall:
 - 1. Show activities/events as:
 - a. Contractor's time required for submittal of shop drawings, templates, fabrication, delivery and similar pre-construction work.
 - b. Contracting Officer's and Architect-Engineer's review and approval of shop drawings, equipment schedules, samples, template, or similar items.
 - c. Interruption of VA Facilities utilities, delivery of Government furnished equipment, and rough-in drawings, project phasing and any other specification requirements.
 - d. Test, balance and adjust various systems and pieces of equipment, maintenance and operation manuals, instructions and preventive maintenance tasks.
 - e. VA inspection and acceptance activity/event with a minimum duration of five work days at the end of each phase and immediately preceding any VA move activity/event required by the contract phasing for that phase.
 - 2. Show not only the activities/events for actual construction work for each trade category of the project, but also trade relationships to indicate the movement of trades from one area, floor, or building, to another area, floor, or building, for at least five trades who are performing major work under this contract.
 - 3. Break up the work into activities/events of a duration no longer than 20 work days each or one reporting period, except as to non-construction activities/events (i.e., procurement of

materials, delivery of equipment, concrete and asphalt curing) and any other activities/events for which the COR may approve the showing of a longer duration. The duration for VA approval of any required submittal, shop drawing, or other submittals will not be less than 20 work days.

4. Describe work activities/events clearly, so the work is readily identifiable for assessment of completion. Activities/events labeled "start," "continue," or "completion," are not specific and will not be allowed. Lead and lag time activities will not be acceptable.
 5. The schedule shall be generally numbered in such a way to reflect either discipline, phase or location of the work.
- B. The Contractor shall submit the following supporting data in addition to the project schedule:
1. The appropriate project calendar including working days and holidays.
 2. The planned number of shifts per day.
 3. The number of hours per shift.
- Failure of the Contractor to include this data shall delay the review of the submittal until the Contracting Officer is in receipt of the missing data.
- C. To the extent that the Project Schedule or any revised Project Schedule shows anything not jointly agreed upon, it shall not be deemed to have been approved by the COR. Failure to include any element of work required for the performance of this contract shall not excuse the Contractor from completing all work required within any applicable completion date of each phase regardless of the COTR's approval of the Project Schedule.
- D. Compact Disk Requirements and CPM Activity/Event Record
- Specifications: Submit to the VA an electronic file(s) containing one file of the data required to produce a schedule, reflecting all the activities/events of the complete project schedule being submitted.

1.8 PAYMENT TO THE CONTRACTOR:

- A. Approval of the Contractor's monthly Application for Payment shall be contingent, among other factors, on the submittal of a satisfactory monthly update of the project schedule.

1.9 PAYMENT AND PROGRESS REPORTING

- A. Weekly schedule update meetings will be held on dates mutually agreed to by the COR and the Contractor. Contractor and their CPM consultant (if applicable) shall attend all weekly schedule update meetings. The Contractor shall accurately update the Project Schedule and all other data required and provide this information to the COR three work days in advance of the schedule update meeting. Job progress will be reviewed to verify:
1. Actual start and/or finish dates for updated/completed activities/events.
 2. Remaining duration for each activity/event started, or scheduled to start, but not completed.
 3. Logic, time and cost data for change orders, and supplemental agreements that are to be incorporated into the Project Schedule.
 4. Changes in activity/event sequence and/or duration which have been made, pursuant to the provisions of following Article, ADJUSTMENT OF CONTRACT COMPLETION.
 5. Completion percentage for all completed and partially completed activities/events.
 6. Logic and duration revisions required by this section of the specifications.
 7. Activity/event duration and percent complete shall be updated independently.
- B. After completion of the joint review, the contractor shall generate an updated computer-produced calendar-dated schedule and supply the Contracting Officer's representative with reports in accordance with the Article, COMPUTER PRODUCED SCHEDULES, specified.
- C. After completing the monthly schedule update, the contractor's representative or scheduling consultant shall rerun all current period contract change(s) against the prior approved monthly project schedule. The analysis shall only include original workday durations and schedule logic agreed upon by the contractor and Project engineer for the contract change(s). When there is a disagreement on logic and/or durations, the Contractor shall use the schedule logic and/or durations provided and approved by the Project engineer. After each rerun update, the resulting electronic project schedule data file shall be appropriately identified and submitted to the VA in accordance to the

requirements listed in articles 1.4 and 1.7. This electronic submission is separate from the regular monthly project schedule update requirements and shall be submitted to the Project engineer within fourteen (14) calendar days of completing the regular schedule update. **Before inserting the contract changes durations, care must be taken to ensure that only the original durations will be used for the analysis, not the reported durations after progress. In addition, once the final network diagram is approved, the contractor must recreate all manual progress payment updates on this approved network diagram and associated reruns for contract changes in each of these update periods as outlined above for regular update periods. This will require detailed record keeping for each of the manual progress payment updates.**

- D. Following approval of the CPM schedule, the VA, the General Contractor, its approved CPM Consultant, PE office representatives, and all subcontractors needed, as determined by the PE, shall meet to discuss the monthly updated schedule. The main emphasis shall be to address work activities to avoid slippage of project schedule and to identify any necessary actions required to maintain project schedule during the reporting period. The Government representatives and the Contractor should conclude the meeting with a clear understanding of those work and administrative actions necessary to maintain project schedule status during the reporting period. This schedule coordination meeting will occur after each monthly project schedule update meeting utilizing the resulting schedule reports from that schedule update. If the project is behind schedule, discussions should include ways to prevent further slippage as well as ways to improve the project schedule status, when appropriate.

1.10 RESPONSIBILITY FOR COMPLETION

- A. If it becomes apparent from the current revised monthly progress schedule that phasing or contract completion dates will not be met, the Contractor shall execute some or all of the following remedial actions:
1. Increase construction manpower in such quantities and crafts as necessary to eliminate the backlog of work.
 2. Increase the number of working hours per shift, shifts per working day, working days per week, the amount of construction

equipment, or any combination of the foregoing to eliminate the backlog of work.

3. Reschedule the work in conformance with the specification requirements.
- B. Prior to proceeding with any of the above actions, the Contractor shall notify and obtain approval from the COTR for the proposed schedule changes. If such actions are approved, the representative schedule revisions shall be incorporated by the Contractor into the Project Schedule before the next update, at no additional cost to the Government.

1.11 CHANGES TO THE SCHEDULE

- A. Within 30 calendar days after VA acceptance and approval of any updated project schedule, the Contractor shall submit a revised electronic file (s) and a list of any activity/event changes for any of the following reasons:
1. Delay in completion of any activity/event or group of activities/events, which may be involved with contract changes, strikes, unusual weather, and other delays will not relieve the Contractor from the requirements specified unless the conditions are shown on the CPM as the direct cause for delaying the project beyond the acceptable limits.
 2. Delays in submittals, or deliveries, or work stoppage are encountered which make rescheduling of the work necessary.
 3. The schedule does not represent the actual prosecution and progress of the project.
 4. When there is, or has been, a substantial revision to the activity/event costs regardless of the cause for these revisions.
- B. CPM revisions made under this paragraph which affect the previously approved computer-produced schedules for Government furnished equipment, vacating of areas by the VA Facility, contract phase(s) and sub phase(s), utilities furnished by the Government to the Contractor, or any other previously contracted item, shall be furnished in writing to the Contracting Officer for approval.
- C. Contracting Officer's approval for the revised project schedule and all relevant data is contingent upon compliance with all other paragraphs of this section and any other previous agreements by the Contracting Officer or the VA representative.

- D. The cost of revisions to the project schedule resulting from contract changes will be included in the proposal for changes in work as specified in FAR 52.243 - 4 (Changes) and VAAR 852.236 - 88 (Changes - Supplemental), and will be based on the complexity of the revision or contract change, man hours expended in analyzing the change, and the total cost of the change.
- E. The cost of revisions to the Project Schedule not resulting from contract changes is the responsibility of the Contractor.

1.12 ADJUSTMENT OF CONTRACT COMPLETION

- A. The contract completion time will be adjusted only for causes specified in this contract. Request for an extension of the contract completion date by the Contractor shall be supported with a justification, CPM data and supporting evidence as the COTR may deem necessary for determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract. Submission of proof based on revised activity/event logic, durations (in work days) and costs is obligatory to any approvals. The schedule must clearly display that the Contractor has used, in full, all the float time available for the work involved in this request. The Contracting Officer's determination as to the total number of days of contract extension will be based upon the current computer-produced calendar-dated schedule for the time period in question and all other relevant information.
- B. Actual delays in activities/events which, according to the computer- produced calendar-dated schedule, do not affect the extended and predicted contract completion dates shown by the critical path in the network, will not be the basis for a change to the contract completion date. The Contracting Officer will within a reasonable time after receipt of such justification and supporting evidence, review the facts and advise the Contractor in writing of the Contracting Officer's decision.
- C. The Contractor shall submit each request for a change in the contract completion date to the Contracting Officer in accordance with the provisions specified under FAR 52.243 - 4 (Changes) and VAAR 852.236 - 88 (Changes - Supplemental). The Contractor shall include, as a part of each change order proposal, a sketch showing all CPM logic revisions, duration (in work days) changes, and cost changes, for work in question and its relationship to other activities on the approved network diagram.

- D. All delays due to non-work activities/events such as RFI's, WEATHER, STRIKES, and similar non-work activities/events shall be analyzed on a month by month basis.

- - - E N D - - -