

## **SECTION 010111 – MEDICAL CENTER REQUIREMENTS**

### **PART 1 GENERAL**

#### **1.1 GENERAL INTENTION**

- A. This section pertains to station policy for construction projects performed at the Veterans Affairs Medical Center, Lebanon, Pennsylvania. Safety and health concerns are taken seriously at this facility. Both our staff and yours are expected to adhere to the strictest requirements. This is exceedingly important, since we must be primarily concerned for the safety of our patients. In this regard, OSHA Standards may protect worker safety and health, but they have minimal benefit for protecting the safety and health of our patients, due primarily to their differing medical conditions. Please review this information as orientation with your personnel performing work on site.
  
- B. Our medical center is committed to addressing those construction, protection and occupancy features necessary to minimize danger to life from fire, smoke, fumes and panic. The level of safety is achieved by the combination of prevention, protection, egress and other features. The level of life safety from fire is defined through requirements directed at: prevention, detection, control of development, confinement of effects, extinguishment, provision of refuge/evacuation and staff reaction. This medical center provides its minimum level of life safety by extensively applying the aforementioned measures using a defense in place strategy. This strategy recognizes that our patients are both incapable of self-preservation and difficult to move, particularly vertically to other floors or to the exterior of the buildings. When any of the life safety measures are compromised by construction, an alternate or interim life safety measure must be put in place to maintain the level of safety required by NFPA 101, Life Safety Code.

#### **1.2 REQUIREMENTS**

- A. Site Security:
  - 1. Secure all areas of work including, but not limited to construction sites, attics, crawl spaces, mechanical and electrical rooms against entry of unauthorized individuals including patients. Erection of a non-flammable partition to secure the job site may be required. Close all windows at the end of each workday.
  - 2. Notify the Contracting Officer's Representative (COR) for permission to work after hours and weekends.
  - 3. All contractor and subcontractor employees shall obtain from the VA Police Department an ID badge, and shall always prominently wear it.

**B. Key Security:**

1. The contractor will not be issued more than required sets of keys to complete this project.
2. The contractor's set(s) of keys will contain only those keys that the COR can issue without breaching the security of other areas of the medical center.
3. If the contractor loses a key, all areas that are keyed to that key will be rekeyed at the contractor's expense and all new keys required to be issued will be completed at the contractor's expense.

**C. General Safety:**

1. Follow all safety, fire safety and health requirements as per CFR 29, Subtitle B, Chapter XVII (OSHA), Part 1926 including the submission of a Safety/Fire Safety Plan.
2. Maintain safety in the construction site/area in accordance with the provisions of the contract, which includes the OSHA Regulations, National Electrical Code NFPA 70, and NFPA 101, Life Safety Code.
3. Work in a safe manner and take all proper precautions while performing your work. Extra precautions shall be taken when working around persons occupying the building during construction. Submit a Coredrilling & Firestopping Permit, supplied by the government for all penetrations. Take precautions when coredrilling to protect persons and structural integrity of the building. Firestop all penetrations before the end of the workday. All Firestop material shall be **RED** in color.
4. All ceiling tile must be replaced whenever the work site is left unattended. If tiles are broken, the broken tile must be replaced before the end of the day. This applies to all areas outside of areas closed and labeled as a construction area.
5. Make safety inspections and submit weekly, on government supplied form, directly to Project Coordinator.
6. Provide Personal Preventive Equipment (PPE) for your employees.
7. Post appropriate signs in specific hazardous areas.
8. Keep tools, ladders, etc. away from patients to prevent injuries.

**D. Safety Inspections:**

Safety inspections of all contract operations will be performed on a regular frequency by the professional Occupational Safety & Health Staff at this facility. Written reports of unsafe practices or conditions will be reported to the Contracting Officer,s Representative (COR) and Contracting Officer for immediate attention and resolution.

**E. Fire Alarms:**

1. The fire alarm system connects all buildings at this facility, and is activated by various heat, duct, manual pull stations and smoke sensors. Manual pull stations are provided on each ward. Please survey the area in which you are working to locate the manual pull stations.
2. If in the event of a fire alarm sounding, you are instructed to remain in your area, unless medical center personnel (Safety, Nursing or Engineering) instruct otherwise, or unless a fire situation is in your area, in which case you should immediately evacuate.
3. The medical center operates an extensive patient evacuation program. A total of approximately 15-20 personnel initially respond to all alarms. Historically, false alarms are caused by contractors generating dust or other disturbances of sensors. When working in an area producing dust, you will cover all alarms with covers provided by Engineering Service. These covers will be removed at the end of the work shift, upon leaving the area after dust has settled.
4. If an alarm is determined by the COR to have been activated by contractor's work other than from or resulting in a fire situation, the contractor will be charged \$300 per occurrence.
5. Any work involving the fire protection systems will require written permission to proceed from the COR.

**DO NOT tamper with or otherwise disturb any fire alarm system components without prior written permission.**

#### F. Hazardous Materials:

1. Many of the operations you are scheduled to perform may involve the use of hazardous materials. Prior to locating hazardous materials on site, all Material Safety Data Sheets will be submitted through the COR for evaluation by the Facility Industrial Hygienist.
2. Storage of hazardous materials within buildings will be minimal with only enough on hand to perform daily work tasks. Flammable materials will either be removed from buildings at the end of the work shift or stored in approved flammable storage containers.
3. Care must be taken to assure adequate ventilation to remove vapors from hazardous materials in use. Many of the patients being cared for in the facility are susceptible to environmental contaminants, even when odors seem minimal. The more effective method to reduce complaints is to close the work area and use adequate ventilation.

#### G. Airborne Dust and Fume Control During Construction:

1. Generation of dust is of major concern within staff and especially patient-occupied areas. Dust can be generated by either manual or mechanical cutting, sanding or drilling on surfaces. Where operations involve techniques, which may generate dust, all efforts will be directed at reducing airborne generated dust to the lowest level feasible. This may be accomplished by a number of methods. These include misting the area with water or use of tools attached to high efficiency particulate air (HEPA) filtering vacuums. Where large amounts of materials may be disturbed resulting in airborne dust, establishment of full ceiling to floor plastic barriers may be required.
2. Generation of metal fumes is also a concern to hospital patients and staff. Fumes generated as a result of welding, brazing, soldering and cutting must be controlled through the use of spot ventilation or fume extractors. If fumes are captured and filtered through HEPA filtered fume extractors, exhaust can be returned directly into the work area. Unfiltered fume, like those collected by spot ventilators, shall be exhausted directly to the outside through exterior building openings. In addition to ventilation requirements, arc welding operations shall be shielded by noncombustible or flameproof screens to protect employees and patients from the direct rays of the arc.
3. If waste chutes are used to facilitate disposal of construction debris from upper building floors, cover all waste receptacles and dumpsters to help contain dust. Additionally, cover all waste receptacles during brisk wind conditions to prevent debris from littering the medical center grounds.

4. Classification of Jobs.
  - a. All jobs shall be classified and carried out per the Infection Control Risk Assessment (ICRA), Section 01012 of these specifications.
  - b. Prior to the start of construction, the contractor shall require all employees and subcontractors to view a training video entitled “Infection Control During Construction” by HCPro ([www.hcmarketplace.com](http://www.hcmarketplace.com)) or an approved equal training video. Contractor shall provide written documentation to COR that all construction personnel have viewed the training video. The written documentation shall include the names of all personnel, their signatures and dates when the training video was offered and viewed.
5. All major areas of construction are to be kept under negative pressure at all times during construction as required by the ICRA. The contractor shall supply, maintain and keep in operation, as many negative air machines as required to keep the construction area under 0.010 inch water column negative pressure. A gauge to monitor and record the negative pressure in the construction area at all times during the construction period including non-working hours will be required to be installed by the contractor. The contractor is to supply the COR with the Negative pressure records from the gauge on a weekly basis. The contractor will document the visual inspection of negative pressure on a negative air pressure verification located directly outside the construction area at the start of each work shift.

#### H. Asbestos Containing Materials:

1. Due to the age of many of our buildings, many still contain asbestos containing materials (ACM). Primary ACM uses in the medical center include floor tile, mastic, piping and HVAC insulation. The medical center has performed comprehensive asbestos surveys and has identified accessible ACM. Some areas contain damaged asbestos and should not be accessed without prior abatement.
2. The most common type of ACM insulation you may encounter includes thermal system insulation (TSI) and floor tile. ACM TSI is generally covered with a cloth wrap or lagging, and the asbestos substrate generally appears white in color. **DO NOT SAND, DRILL, GOUGE OR OTHERWISE DISTURB THIS TYPE OF INSULATION.** Contractors disturbing or releasing asbestos containing materials will be liable for all damages and clean up costs.
3. In most cases where disturbance of asbestos is likely or necessary, it has been addressed in the contract. If not, please contact the COR or Industrial Hygienist to make necessary arrangements for removal.

4. Asbestos insulation has been identified on elbows between fiberglass piping insulation as patching materials among the fiberglass insulation. Fiberglass insulation used in this facility is usually yellow or pink in color, wrapped either by cloth or paper lagging.
5. To protect and ensure all your employees are aware that asbestos containing materials have been used in the construction of this facility, you are required to have them review this section and complete the awareness statement included as Attachment A. Once this document has been signed by all employees, forward to the COR for documentation.
6. A complete assessment of asbestos materials and conditions are available for viewing by contacting the facility Industrial Hygienist at extension 4008. Prior to performing work above any ceiling or starting in a new area, consult with the COR concerning existing conditions of ACM.
7. Some of the areas in the facility are identified as restricted areas due to condition of ACM. These are readily labeled. **DO NOT ENTER THESE AREAS** unless first contacting the COR. Entry requirements to these areas are awareness of the hazards, proper protective clothing (coveralls and respirators) and personal monitoring in accordance with OSHA requirements.
8. All contractor and subcontractor employees shall read and sign the Notification of Asbestos (attachment A) kept by the project Superintendent.

I. Environmental Protection:

1. It may help you to be aware of the seriousness, which the environmental protection requirements of each contract are regarded. Adherence to these requirements are subject to continuing scrutiny from the community and backed by severe penalties, such as fines and incarceration. These environmental requirements will be strictly enforced.
2. **NO** hazardous materials will be disposed of on government property. All waste will be hauled off-site or disposed in contractor owned and operated waste removal containers.
3. A copy of all waste manifests for special or hazardous wastes will be forwarded to the COR. Environmental requirements will be strictly enforced.

J. Permit Required Confined Spaces:

1. Contractors performing work on this facility will follow all requirements outlined in OSHA Standards for working in confined spaces. There are numerous permits required for confined spaces on this facility. These spaces have been identified. Some spaces have been posted, but the majority have not due to their configuration. A complete listing of these areas is located in the Engineering Service and Safety Office.
2. Confined spaces are areas which are large enough to be entered, but have limited egress/exit potential and are not designed for permanent human occupancy. If you encounter any space which meets this definition or if it is a suspected confined space, please contact the COR for a listing of these spaces.
3. Contractors performing work in confined spaces are responsible for compliance with all applicable standards and regulations.

K. Housekeeping:

1. Protect patients and VA personnel in occupied areas from the hazards of dust, noise, construction debris and material associated with a construction environment.
2. Keep work area clear, clean and free of loose debris, construction materials and partially installed work, which would create a safety hazard or interfere with VA personnel duties and traffic.
3. Wet mop occupied areas and remove any accumulation of dust/debris from cutting or drilling from any surface at the end of each work day.
4. Make every effort to keep dust and noise to a minimum at all times. Take special precautions to protect VA equipment from damage, including excessive dust.
5. Access to mechanical and electrical devices and equipment should be free of debris and material at all times. This is required to ensure access to existing systems in the event of an emergency.
6. Clean area free of all construction debris and dust upon completion of demolition and/or renovation.
7. During construction operations, keep existing finishes protected from damage. Cover and protect all carpets during construction. Any carpets or surfaces damaged, as a result of construction activities, will be replaced at the contractor's expense.

L. Utilities:

1. Maintain existing utility services for this Medical Center at all times in accordance with the contract provisions.

**M. Hot Work Permits:**

1. Any hot work operations including cutting, welding, thermal welding, brazing, soldering, grinding, thermal spraying, thawing pipes or any other similar activity will require a Hot Work Permit to be obtained by the contractor from the Facility Safety Manager. The contractor will be responsible for conforming to all Medical Center regulations, policies and procedures concerning Hot Work Permits as outlined below:
  - a. Prior to the performance of hot work in patient-occupied buildings, a request for a Hot Work Permit will be made to the Facility Safety Manager.
  - b. The Facility Safety Manager will inspect the area and ensure that the requirements of NFPA 241 and OSHA Standards have been satisfied. The Hot Work Permit will be granted and will be posted in the immediate area of the work.
  - c. The Hot Work Permit will apply only to the location identified on the permit. If additional areas involve hot work, additional permits must be requested.
  - d. Upon completion of all hot work, the Facility Safety Manager will be notified by the responsible individual to perform a re-inspection of the area.
  - e. In all other areas not occupied by patients, the supervisor will inspect the hot work area for compliance with NFPA 241 and OSHA Standards. Copies of the request form and permit are available from the Facility Safety Manager.
2. Do not use any of the extinguishers in the medical center for standby purpose while conducting hot work. Contractors are required to supply their own Class ABC extinguishers. Medical center extinguishers are only to be used in the event of a fire.

**N. Emergency Medical Services:**

Emergency medical services are available for contractors at this facility. For medical emergencies, dial 4999 when inside any building. Report the nature of the emergency and location. The operator will determine whether to dispatch in-house personnel or outside emergency assistance based on the nature of the emergency.

**O. Use of Government Owned Material and Equipment:**

Use of government owned material and equipment is PROHIBITED.

**P. Superintendent Communications and Responsibilities:**

1. At all times during the performance of this contract, the Contractor's Superintendent is to be available by telephone (portable cellular phone). At the beginning of the contract



and prior to beginning any construction, provide the Contracting Officer with the telephone number for the superintendent.

2. The Contractor's Superintendent shall post pertinent information at each job site for the benefit of the construction workers and for communicating with Medical Center Staff. A 2'x 4' construction board shall be placed at the job site entrance in accordance with recommendations set forth by The Joint Commission, as illustrated on the sample Attachment D.
3. Prior to the start of work of any contractor or subcontractor employee, they shall read, review with the superintendent, and sign the Orientation of Construction Workers (attachment C.)
4. The Contractors Superintendent shall inspect and document on the Interim Life Safety Measures daily monitoring form the requested data.
5. The Contractors Superintendent shall maintain copies of all forms required by this specification section at the job site and shall be provide to the COR on request.

Q. Parking:

1. Contractor employees shall be assigned parking spaces by COR. Spaces may not be in the immediate area of the construction site.
2. It is the responsibility of the contractor to barricade parking spaces when not in use.

R. Traffic:

1. Traffic hazards are minimal at this facility. Drivers should be particularly concerned with pedestrian traffic.
2. Seat belt use is mandatory on the station.
3. Federal police officers maintain a 24 hour patrol of the area and have state and federal enforcement authority.
4. Contractor is to have all deliveries made via the State Drive Entrance to the medical center. No deliveries will be allowed from the Lincoln Avenue Entrance (Main Entrance).

S. Contractor's Trailers:

Contractor's trailers shall be located within the lay down area assigned. All utility connections to the trailer shall be located underground and installed at the contractor's expense. Their removal is required upon completion of the contract, unless approved by

the COR to leave in place.

T. Smoking:

1. No smoking is permitted at the Lebanon VAMC except inside designated smoking shelters
2. If any contractor's or subcontractor's employee is found smoking in an unauthorized area, the contractor will be charged \$200 for the first occurrence and \$500 for every occurrence thereafter. The employee is subject to a \$50 fine.
3. All contractor and subcontractor employees shall read and sign the Notification of Smoking Policy (attachment B) kept by the project Superintendent

U. Contractor shall comply with all applicable elements of the National Fire Protection Association (NFPA) Standard 241. This standard addresses:

1. Temporary Construction, Equipment and Storage
  - a. Temporary offices and sheds
  - b. Temporary enclosures
  - c. Equipment
2. Processes and Hazards
  - a. Hot work operations including thermic welding
  - b. Temporary heating equipment
  - c. Smoking
  - d. Waste disposal
  - e. Flammable and combustible liquids
  - f. Explosive materials
3. Utilities
  - a. Electrical - temporary wiring (branch circuits, lighting and removal)
4. Fire Protection
  - a. VA's responsibility for fire protection
  - b. Site security
  - c. Fire alarm reporting
  - d. Access for fire fighting
  - e. Stand pipes
  - f. First-aid fire equipment
5. Construction Safeguards
  - a. Scaffolding, shoring and forms
  - b. Construction material and equipment storage
  - c. Roofing operations
  - d. Permanent heating equipment

- e. Utilities
  - f. Fire cutoffs
  - g. Fire protection during construction - water supply, sprinkler protection and stand pipes
6. Demolition Safeguards
- a. Special precautions
  - b. Temporary heating equipment
  - c. Smoking
  - d. Demolition using explosives
  - e. Utilities
  - f. Fire cutoffs
  - g. Fire protection during demolition
7. Underground Operations
- a. Special precautions
  - b. Equipment and storage requirements
  - c. Electrical

V. Construction or Demolition Fire Safety Program:

- 1. A program shall be developed with the following elements addressed:
  - a. Good housekeeping
  - b. On-site security
  - c. Preservation of existing systems during demolition
  - d. Rapid communication

W. Contractor Life Safety Smoke Barrier Responsibilities:

The contractor shall assume full responsibility for compliance to all applicable regulations pertaining to NFPA 101 with respect to medical center building smoke barriers and corridor walls. Maintain the integrity of floor slabs and fire/smoke walls by fire stopping all holes and penetrations before the end of each workday.

X. Enforcement:

The COR on this project is designated as the person responsible for ensuring that the Safety/Fire Safety Plan is carried out to the completion of the project and has the authority to enforce the provisions of this specification section and other applicable fire protection standards.

Y. Submittals:

- 1. Within ten working days after the Notice to Proceed, submit a Safety/Fire Safety Plan for Architect-Engineer and VA review.

2. Submit Material Safety Data Sheets for all chemicals and hazardous materials to be used on the project prior to location and use on the job site.
4. Submit Contractor Asbestos Awareness Statements and Notification of Smoking Policy for all persons working on the site prior to commencing work.
5. Submit Weekly Construction Site Inspection Report. The contractor must submit along with each Wednesday's daily log, a completed and signed, government supplied, Construction Site Inspection Report.
6. To expedite project actions, the use of certain government forms is required. During the pre-construction conference, the following forms, but not limited to, will be supplied to the contractor: Daily Logs, Weekly Safety Inspection Report, Hot Work Permit, Excavation Permit, Variance Request, Coredrilling and Firestopping Permit, Construction Progress Graph, Submittal Transmittal Letter, Proposal Cost Breakdown Summary, Construction Contractor Invoice, Construction Payment Worksheet, Project Specified Training Log, Contract Progress Report, WH-347 Payroll and Request for Information(RFI).
7. Submit a signed and dated "Orientation of Construction Workers" (Attachment C) for each worker on the project.
8. Prior to final inspection of the project, submit a master list of equipment installed as part of this project. Provide information (model number, serial number, item description and manufacturer) for the following: fan coil units, HVAC roof top units, ice machines, pumps, fire alarm systems, energy management system and nurse call system.

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**Attachment A**

**CONTRACTOR/SUBCONTRACTOR/EMPLOYEE  
NOTIFICATION OF ASBESTOS**

THE DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER LOCATED IN LEBANON, PENNSYLVANIA WAS CONSTRUCTED DURING A PERIOD WHEN ASBESTOS WAS COMMONLY USED IN BUILDING MATERIALS.

THE MEDICAL CENTER HAS COMPLETED A SURVEY FOR ASBESTOS. ALL BUILDINGS CONTAIN SOME TYPE OF ASBESTOS (I.E., STEAM LINES, FLOOR TILES, CRAWLSPACES, ETC.).

IF YOU OR YOUR EMPLOYEE ENCOUNTERS SUSPECTED FRIABLE ASBESTOS OR CONDITIONS THAT MAY CAUSE SUSPECTED ASBESTOS TO BECOME FRIABLE, NOTIFY THE COR IMMEDIATELY.

WHEN WORKING IN AREAS THAT ARE SUSPECTED OF HAVING ASBESTOS, RELOCATE EMPLOYEES AND PATIENTS FROM THE AREA UNTIL WORK IS COMPLETED.

IF THERE ARE ANY QUESTIONS, PLEASE FEEL FREE TO CONTACT THE PROJECT COORDINATOR AT EXT. 4720.

THANK YOU FOR YOUR ASSISTANCE.

PLEASE SIGN AND DATE AS ACKNOWLEDGEMENT OF THE ABOVE INFORMATION.

CONTRACTOR/SUBCONTRACTOR EMPLOYEE SIGNATURE:

EMPLOYEE NAME

CONTRACTOR/SUBCONTRACTOR

DATE:

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**VA Medical Center  
Lebanon, PA**

**Attachment C**

**Orientation of Construction Workers**

**Objective:** To ensure a safe and healthful environment in the worksite and the adjacent areas.

Expectations (areas within and outside construction sites):

- Acquire and wear ID badge at all times.
- Read and sign asbestos and prohibit smoking attachments.
- Keep access points (doors, etc.) secured to prevent injury of patients, staff or visitors and/or theft of property.
- When working outside the primary construction site, keep tools and materials under control. No tools/material shall be left unattended.
- Firestop/seal all penetrations of fire/smoke walls and floor slabs with approved material. No penetrations shall be left overnight for next shift or some time in future.
- Use pilot-hole technique or another absolute method in determining location of coredrilling. No coredrilling through webs, beams, columns, etc.
- In finished areas, close ceilings (reset tile in grid) before leaving area for more than 15 minutes. No ceiling shall be left open overnight.
- Prevent dust and odors from migrating into adjacent areas.
- Keep unattended carts out of stairwells and corridors to prevent obstruction of evacuation in the event of an emergency.
- Request Hot Work Permit in advance of soldering, welding, etc.
- Smoke only beyond the limits marked on sidewalk outside buildings. No smoking in the construction worksites indoors.
- Maintain integrity of fire doors to ensure closing and latching of doors for controlling spread of smoke. No propping, chocking or tying doors open.
- Know where the Material Safety Data Sheets are kept for access of information regarding the hazards of substances being used.
- Know the locations of local shutoff valves of water systems (domestic & sprinkler) to ensure quick response in the event of a pipe break. Prime contractor will determine who has a need to know.
- Secure compressed gas cylinders to adjacent structure using chain or other stabilizing methods.
- Secure equipment by using lockout / tagout method. Note: No equipment shall be shutdown without the VA Electrical Foreman’s okay.

**Dust Generating Activities**

- **Follow** the Infection Control Risk Assessment (ICRA) protocol.
- **Keep** space under negative pressure.
- **Use** sticky mats at point of exit.
- **Protect** property from damage (dirt, grime, breakage).
  - **Remove** items from space.
  - **Cover** remaining items to protect from dust, i.e. protecting carpeting.

<b>Contractor / Sub</b>	<b>Employee Name</b>	<b>Date</b>

**Prime Contractor: Have employee sign and give a copy of this page to employee and to the VA to attached to Daily log**

**Attachment D**

Construction Board 2'x 4' plywood posted at each contracted construction site.

*.... a comprehensive method of organizing information for construction workers and for communicating with staff and patients*

